CITY OF DUPONT

Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
www.dupontwa.gov

NOTICE OF DECISION

Northwest Logistics II Parking Expansion

Decision: **Approved Subject to Conditions**

DuPont File No: PLNG2020-012 (Major Site Plan Amendment), -013 (Administrative Variance), -014 (Lot Line Elimination) and SEPA2020-001 (SEPA Determination)

Date of Decision: September 18, 2020

PROPOSAL: A proposed modification to a previously approved and constructed development to modify building space, construct a new guard house, expand and reconfigure parking, and add the 5.3-acre lot adjacent to the north of the Northwest Logistics Center II site to the project. The changes require approval of a Type II Major Site Plan Amendment (PLNG2020-012), administrative variance (PLNG2020-013), a boundary line adjustment to eliminate a lot line (PLNG2020-014), and SEPA Environmental Review (SEPA2020-001). Only the changed aspects of the proposal are up for review. The lot line elimination would add 5.3 acres to the existing 32-acre site for a total of 37.3 acres. The parking reconfiguration and expansion of the north parking area will add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. The proposal will also include clearing and grading, storm drainage facilities, and the addition of a 277 square foot guard shack to be located in the southeast corner of the site. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Roadway improvements will be provided along the frontage of International Place North.

LOCATION: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

CITY CONTACT: Janet Howald | Community Development Administrative Specialist | City of DuPont | 1700 Civic Drive, DuPont | WA 98327-9603 | Office: (253) 964-8121|Email: jhowald@dupontwa.gov

Based on the Findings and Analysis, the City finds that the proposal for the three permit applications, **as conditioned**, is consistent with City development regulations DMC Chapters DMC Chapters 25.75 through 25.95; 25.105 through 25.125; 25.150; and DMC 24.07, and therefore the three applications should be approved, as conditioned. A SEPA Mitigated Determination of Nonsignificance (MDNS) has also been issued.

For further information regarding the proposal see the city's website at: https://dupontwa.gov/451/Notices-Decisions or contact Janet Howald at City Hall.

APPEALS: Consistent with DMC 25.175.060(4), this decision by the director may be appealed to the City hearing examiner. Only parties of record may file an administrative appeal. **An appeal must be filed within 14 days after issuance of this decision (by 5:00 p.m. on October 2, 2020)**. The instructions for filing an appeal are found in DMC 25.175.060(4). Appeals shall be in writing, be accompanied by the required appeal fee ($1,000), and contain the information detailed in DMC 25.175.060(4)(d).

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PLANNING DIVISION
REPORT AND RECOMMENDATION TO THE DIRECTOR

Project: Northwest Logistics II Parking Expansion

Requests: Type II Major Site Plan Amendment (PLNG 2020-012), Type II Administrative Variance (PLNG 2020-013), and Type I Lot Line Elimination (PLNG 2020-014)

Date of Report: September 18, 2020

From: Lisa Klein, AICP, AHBL, Inc. (Planning Consultant to the City)

SUMMARY OF REQUEST: City approval is required for Type II Major Site Plan Amendment (PLNG 2020-012), Type II Administrative Variance (PLNG 2020-013), and Type I Lot Line Elimination (PLNG 2020-014) Northwest Logistics II Parking Expansion.

PROJECT DESCRIPTION: A proposed modification to a previously approved and constructed development to modify building space, construct a new guard house, expand and reconfigure parking, and add the 5.3-acre lot adjacent to the north of the Northwest Logistics Center II site to the project. The changes require approval of a Type II Major Site Plan Amendment (PLNG2020-012), administrative variance (PLNG2020-013), a boundary line adjustment to eliminate a lot line (PLNG2020-014), and SEPA Environmental Review (SEPA2020-001). Only the changed aspects of the proposal are up for review. The lot line elimination would add 5.3 acres to the existing 32-acre site for a total of 37.3 acres. The parking reconfiguration and expansion of the north parking area will add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. The proposal will also include clearing and grading, storm drainage facilities, and the addition of a 277 square foot guard shack to be located in the southeast corner of the site. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Roadway improvements will be provided along the frontage of International Place North.

LOCATION: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

APPLICANT: Panattoni Development Company, Inc.
900 SW 16th Street, Suite 330
Renton, WA 98057

APPLICANT'S AGENT: Dan Balmelli, PE, Barghausen Consulting Engineers

CITY CONTACT: Janet Howald
Community Development
Administrative Specialist
City of DuPont
1700 Civic Drive
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SUMMARY OF RECOMMENDATION: Staff recommends **Approval** of the Major Site Plan Amendment (PLNG 2020-012), **Approval** of the Administrative Variance (PLNG 2020-013), and **Approval** of the Boundary Line Adjustment (PLNG 2020-014) applications subject to conditions listed in Section F.

A. SUMMARY OF RECORD

See the list of attachments provided in Section I, which includes the submittal plans and documents received for processing the application, comments received on the application during the City review process and historical background information (Attachments 1 - 4).

B. FINDINGS OF FACT

1. Background

a. Northwest Logistics Center II History, aka "main parcel" (Tax Parcel 3000390011):

i. On March 13, 2015 the City issued Site Plan Approval for the Northwest Logistics Center II proposal (ADM 13-01). On May 25, 2018 the City issued approval for a Site Plan Amendment (PLNG2018-012). On February 4, 2019, the city issued approval for a Site Plan Amendment (PLNG2018-063) with 57 conditions of approval. These approvals were approved when the property was subject to the Industrial zoning district regulations.

ii. The City issued a SEPA Mitigated Determination of Nonsignficance (SEPA MDNS) on Feb 10, 2015 that included 13 mitigation measures. On May 4, 2018, the City adopted the prior SEPA Determination for the May 2018 Site Plan Amendment proposal (PLNG2018-012). On January 8, 2019 the City SEPA Official adopted the February 2015 SEPA document.

iii. The previous PLNG2018-063 proposal is largely constructed with the exception of building interior tenant improvements. The building has not received a Certificate of Occupancy.

b. Steilacoom Historical School District Property History, aka "north parcel" (Tax Parcel 3000390282):

i. This property is a vacant land that was previously cleared and graded.

c. In 2018, the City rezoned 10 properties from Industrial to Community Business, including both the main and north parcel.

2. **Proposal and Property Details**

a. The proposal is in the Community Business (CB) zoning district. The City's Comprehensive Plan Land Use Map Designates the property's future land use as Industry with Community Commercial Opportunity Area Overlay.

b. The proposal is located on tax parcels 3000390011 and 3000390282, comprising 37.3 acres. Parcel 3000390011 ("main parcel") has recently been developed as part of the Northwest Logistics Center II project. Parcel 3000390282 ("north parcel") is vacant land with a 25-foot wide sewer easement for the benefit of Joint Base Lewis-McChord (JBLM) and a 30-foot wide private access and utility easement that runs east-west through the property.

c. Adjacent uses include:

North: Mini Storage
East: DuPont Steilacoom Road and Joint Base Lewis McChord
South: Center Drive and Commercial and light industrial uses
West: International Place and Warehouse Distribution uses

d. The main parcel has two driveways from International Place. The proposal seeks to construct one additional driveway off International Place on the north parcel for trucks and service vehicles. This will remove truck and service vehicles from accessing the other driveways. The driveways on the main parcel would be utilized by passenger vehicles or delivery vans.

e. Stormwater runoff from the new impervious surfaces in the north parcel parking lot will be collected and conveyed via storm pipe and catch basins to a retention infiltration facility prior to discharging to the ground. The stormwater facilities will be designed according to the City's Stormwater Manual (2012 Department of Ecology Stormwater Management Manual with 2014 amendments).

3. **Procedural Requirements**

a. A pre-application meeting is required for all Type II projects per DMC 25.175.020. The pre-application meeting was held on March 18, 2020 (PLNG2020-002).

b. A Notice of Complete Application was issued on August 11, 2020. (Attachment I.2.a)

c. A Notice of Application with Optional DNS was issued on August 17, 2020 (Attachment I.2.b). The Notice was published in the News Tribune (Attachment I.2.e) and posted at City Hall and on the City's website. The end of the comment period was August 31, 2020. To correct a procedural error the Notice was emailed to the SEPA agencies on August 27, 2020 with an extended comment deadline of September 10, 2020 (Attachment I.2.c). No comments were received.

d. On September 18, 2020 the City SEPA Official issued a SEPA Mitigated Determination of Nonsignificance for the proposal. (Attachment I.2.f)

e. DMC 25.10.190(S) defines Site Plan Amendments as follows (emphasis bolded):

"Site plan amendment, major" means an amendment to an approved site plan that substantially changes the site design, increases density by more than 5 percent or increases building area by greater than 10 percent, reduces open space or landscape area by more than 10 percent, **requires a modification to a condition of approval** or other requirements and conditions of the approved site plan, or **includes new requests to deviate from the standards of the applicable district**.

"Site plan amendment, minor" means an amendment to an approved site plan for modifications to the dimensions or footprint location of a building(s) but does not substantially modify the arrangement or increase the number of buildings approved in the plan. Increases in density shall be less than 5 percent and building size/area shall be less than 10 percent. The amount and

quality of landscaping may be increased but may not be reduced more than 10 percent, provided it complies with the minimum landscaping requirements of the zone in which the property is located. Proposed amendments shall not deviate from the standards of the applicable district.

Staff Analysis: The proposal meets the definition of a major amendment because the changes to parking requires a change to Condition No. 35 of the PLNG2018-063 Site Plan Amendment, which states the following:

> *35. Each application for building permit will be required to identify the uses, details and employee forecast to ensure compliance with DMC 25.95.030 (number of parking spaces). No more than 414 employees at maximum shift shall be allowed without additional parking added. The addition of parking beyond which is approved herein, may require additional land use and/or SEPA environmental review and approval.*

In addition, the proposal requires an administrative variance to deviate from the landscape area standards of the Community Business district.

Major site plan amendments are processed in accordance with DMC 25.150.050 and are processed as a Type II procedure as set forth in DMC 25.175.010.

f. DMC Chapter 25.150 Site Plan Review states that in order to obtain site plan approval, all of the development regulations and criteria specified in the district applicable to the property must be satisfied in addition to any general development requirements in DMC Chapters 25.75 through 25.95 and 25.105 through 254.125.

The previous Type I Minor Site Plan Amendment process approved in February 2019 (PLNG 2019-063) included review of the project to ensure it is carried out in a manner consistent with the DMC and site plan review criteria. Only the changed aspects of the proposal are up for review with this site plan amendment. The changed aspects of the proposal to be reviewed are regulated by the following chapters shown in bold type:

- **Chapter 25.27 Community Business District**
- Chapter 25.75 Commute Trip Reduction
- **Chapter 25.80 Cultural, Historical and Archaeological Resources**
- Chapter 25.85 Affordable Housing Incentives Program
- **Chapter 25.90 Landscaping**
- **Chapter 25.95 Off-Street Parking**
- **Chapter 25.105 Sensitive Areas**
- Chapter 25.110 Setbacks – Street corners
- **Chapter 25.115 Transportation Concurrency Review**
- Chapter 25.116 Sign Code
- **Chapter 25.120 Tree Retention**
- Chapter 25.125 Wireless Communication Facilities

The original Northwest Logistics Center II project, including the February 2019 minor site plan amendment, was reviewed under the Industrial Zoning District standards. As such, only the proposed changes to the site plan is subject to the Community Business Zoning District standards.

C. WITH CITY OF DUPONT COMPREHENSIVE PLAN

Chapter 25.175.040, Consistency with Development Regulations, requires evaluation of consistency with the Comprehensive Plan ***in the absence of development regulations*** (emphasis added). The City's Comprehensive Plan Land Use Map Designates the property's future land use as Industry with Community Commercial Opportunity Area Overlay (CCOA). The Community Business zoning district is the primary implementing zone for the CCOA.

The Industry land use designation is described in the Comprehensive Plan as follows (emphasis added):

> *"**The purpose of this district is to provide for the location and grouping of industrial uses, and similar uses involving manufacturing, assembly, fabrication, processing, bulk handling, storage, research, and heavy trucking**. This purpose is accomplished by permitting a wide range of industrial uses, establishing appropriate development standards."*

The Industry land use designation permits warehouse and distribution uses.

The CCOA is described in the Comprehensive Plan as follows (emphasis added):

*The purpose of this designation is to allow for commercial services as a development option at strategic locations within the City. The Community Commercial Opportunity Area (CCOA) is an overlay designation; **the underlying future land use designation(s) shall remain applicable to the properties**. In addition to the allowable uses for the underlying future land use designation(s), the CCOA allows for retail trade, service businesses and similar uses. Multifamily may be allowed when ground level commercial uses are provided; densities shall be limited to 12 dwelling units per acre. **The Community Business (CB) District is the primary implementing zone for the CCOA and may be applied to all or portions of the CCOA.** Other consistent zoning districts may be assigned to implement CCOA in terms of allowable uses, urban design, and neighborhood compatibility.*

The CB zoning district permits warehouse and distribution uses.

1. **Land Use Goals and Policies**

   a. LU-9.4: Limit heavy industrial uses to the two existing industrial areas (west of JBLM and between Intel and DuPont Steilacoom Road) as they are likely to attract uses that require more material inputs, processes, and finished products and therefore likely to produce a greater volume of truck traffic.

   <u>Staff Analysis and Conclusion</u>: The proposal is consistent with the land use goals and policies of the DuPont Comprehensive Plan. The subject property is in the existing industrial area between Intel (now the Cubes) and DuPont Steilacoom Road. The plan clearly intended for warehouse and distribution use of the subject property and anticipated uses that generated higher traffic volumes. The proposed guard house and parking area expansion are accessory uses to the main warehouse and distribution use. Additionally, the CCOA and CB designations were established to allow for commercial services in strategic locations within the City. The original warehouse and distribution approval occurred in 2015 and was later amended in 2018. As conditioned, the project will be consistent with the Land Use Chapter of the Comprehensive Plan.

2. **Economic Development Goals and Policies**

   a. ED-2.2: Recognize and balance the long-term interests of the citizens with the fiscal benefits of business growth.

   <u>Staff Analysis and Conclusion</u>: The proposal will provide significant additional employment for the City by providing warehouse and distribution use that will service the greater South Puget Sound region, while also being placed away from residential areas and limiting environmental impacts. The project is consistent with the Economic Development Chapter of the Comprehensive Plan.

3. **Natural Environment Goals and Policies**

a. NE-2.3: Protect and retain significant trees and vegetation in public and privately dedicated areas.

b. NE-2.4: Landscaping in public places and Rights of Way should consist of species that are drought resistant and low maintenance such as native plant species.

c. NE-4: Minimize adverse effects of development on the environment.

d. NE-4.3: Site preparation activities should be designed to minimize extensive grading and to retain a portion of significant trees and vegetation. Development standards should implement guidelines and define extensive grading to clarify the circumstances when extensive grading may be appropriate.

Staff Analysis and Conclusion: The existing Northwest Logistics property (located on the main parcel) has been previously cleared and developed. The north parcel has been previously cleared and graded. A preliminary Landscape Plan has been prepared and includes native plant use. The proposal exceeds the code required tree retention standards. The project is requesting a 3 percent reduction in the Community Business zoning district landscape area requirement, which is further reviewed by staff in Section D.2. As conditioned, the project will be consistent with the natural environment goals and policies of the DuPont Comprehensive Plan.

D. ANALYSIS AND CONCLUSIONS OF CONSISTENCY WITH DEVELOPMENT REGULATIONS

As described in Finding B.3.f, the, proposed Major Site Plan Amendment is to be reviewed for consistency with Chapters 25.27 Community Business District; Chapter 25.27 Community Business District, Chapter 25.27 Landscaping; Chapter 25.80 Cultural, Historical Archaeological Resources, Chapter 25.95 Off-Street Parking, Chapter 25.105 Sensitive Areas, Chapter 25.115 Transportation Concurrency Review, and Chapter 25.120 Tree Retention. Consistency with DMC Chapter 25.160, Variance is provided in the Administrative Variance Review Analysis, Section D.2. and Consistency with Lot Line Elimination is provided in the Lot Line Elimination Analysis, Section D.3.

1. PLANNING DEPARTMENT – MAJOR SITE PLAN AMENDMENT (PLNG 2020-012)

a. DMC Chapter 25.25 - Community Business (CB) District

1) Permitted Uses - The property is in the CB zoning district. DMC 25.27.020-040 establishes permitted and conditional uses within the CB zoning district.

Staff Analysis and Conclusion: The main warehouse and distribution use is a permitted use. The proposal is compliant.

2) Building Height - DMC 25.27.050(1) establishes that building height shall not exceed 65 feet within 100 feet of a public street and no taller than 70 feet when set back 100 feet or more from a public street.

Staff Analysis and Conclusions: The applicant is proposing to modify the roof and add an interior mezzanine. The building changes will remain under the maximum building height. The proposed guard shack is located within 100 feet from DuPont-Steilacoom Road, therefore the maximum allowed building height for the guard shack is 65 feet. The proposed guard shack has a height that is less than 12 feet. The proposal is compliant.

3) Front Yard Setbacks - DMC 25.27.050(2)(a) establishes a minimum front yard setback of 10 feet.

   <u>Staff Analysis and Conclusions</u>: The subject property has frontage along Center Drive, International Place and DuPont Steilacoom Road, therefore there are three front yards. Dupont Steilacoom Road is the closest front property line to the guard shack. Per DMC 25.10.195.165, the proposed 8-foot CMU screening wall is a structure subject to setback standards. The proposed screening wall is approximately 24 feet from this property line. The proposal is compliant.

4) Side Yard Setbacks - DMC 25.27.050(2)(b) establishes a minimum side yard setback of 15 feet.

   <u>Staff Analysis and Conclusions</u>: Per DMC 25.10.160.110 the north lot line is subject to the side yard setback standards. Per DMC 25.10.195.165, a retaining wall greater than 6 feet in height is considered a structure. The proposed 8-foot CMU screening wall is subject to the setback standards. The civil construction plans state that the maximum wall height will be 8-feet. The proposed screening wall is located approximately 5 feet from the north property line, which is 10 feet closer than allowed if the wall is greater than 6 feet in this location. Prior to issuance of site development permits, the applicant shall either revise site plans to demonstrate that the portion of the screening wall within the side yard setback is below 6-feet or shall submit a setback variance application. (Condition 17)

5) Loading and Service Area Screening - DMC 25.27.050(4) establishes that loading and service areas shall be screen from public right-of-way with an opaque wall, fence, or other similar architecture feature.

   <u>Staff Analysis and Conclusions</u>: Screening of DuPont Steilacoom Road is provided from the existing Northwest Logistics Center II building loading and service area by a vegetated berm. The project proposes to extend the screening with an 8-foot high CMU screening wall between the end of the existing vegetated berm and the north property line, adjacent to the Dupont Steilacoom Road frontage. The proposal is compliant.

b. DMC Chapter 25.75 Commute Trip Reduction (CTR) is applicable to new businesses that employ more than 100 persons.

   <u>Staff Analysis and Conclusions</u>: The application materials state that new business will employ approximately 912 persons and is subject to CTR standards. The employer will need to adhere to the requirements of Chapter 25.75. (see condition 4)

c. DMC Chapter 25.80 - Cultural, Historical, and Archaeological Resources regulates construction within areas of potential historical or cultural resources and allows for conditions to be imposed on any plat, site plan, or permit to assure that such resources are protected, preserved, or collected.

   <u>Staff Analysis and Conclusion</u>: A Cultural Resources Assessment was previously completed for the Northwest Logistics Center II property by Aqua Terra Cultural Resource Consultants (ATCRC) in October 2015. This property has since been cleared, graded, and constructed and complied with all conditions and SEPA mitigation measures for the protection of cultural resources.

   A Cultural Resources Assessment for the north parcel was completed by ATCRC in June 2020. ATCRC reviewed available project and site cultural and historic information and conducted field investigations. No cultural resources were identified. Background research determined that the project area is in an area considered to have a "low" to "moderately low" probability of cultural resources. ATCRC recommends no further cultural resources investigations and that the site work be completed following the requirements of the Inadvertent Discovery Plan.

During the SEPA Environmental review process comment letters were received from the Nisqually Tribe and Washington Department of Historic and Archaeologic Preservation concurring with the report findings.

A Memorandum of Agreement (MOA) dated August 7, 1989, was executed between Weyerhaeuser Real Estate Company (WRECO) (the previous landowner), the City of DuPont, and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws. Implementation of the MOA requires archaeological monitoring during soil disturbing activities, including extending an invitation to the Nisqually Tribe to be present during such activities, and preparation of a closing report. The SEPA MDNS issued for the proposal (see Attachment I.2.f) includes mitigation measures for the protection of cultural, historical, and archaeological resources. (Condition 1)

d. Landscaping, DMC Chapter 25.90

1) DMC 25.90.020(2)(c) requires that the proposed use provide a minimum of 20 percent of the total lot area as landscaped area.

   Staff Analysis and Conclusion: The project proposes providing 19.4 percent landscape area across the overall 37.5-acre property, which requires review and approval of a variance. Refer to Section D.2 below for the review and analysis of the applicant's variance request. The landscape area calculation shall be provided on the face of the civil and landscape plans. (Condition 15)

2) DMC 25.90.030(1) requires that street trees be provided at least one per 40 to 50 feet of frontage, depending on the tree species and other circumstances.

   Staff Analysis and Conclusion: Street trees are already in place along the main parcel frontages with Center Drive, DuPont Steilacoom Road, and International Place. The section of International Place along the north parcel is subject to these street tree standards. The Landscape Plans indicate a street tree spaced every 40-feet along International Place north parcel frontage. The proposal is compliant.

3) Per DMC 25.90.030(2), the interior of parking lots with more than 10 stalls are to be landscaped with at least one tree per six stalls.

   Staff Analysis and Conclusion: The project proposes a total of 912 parking spaces, which will require a total of 152 trees in the parking lot areas. The Landscape Plan indicates that the proposal will plant 154 new trees plus the 27 existing trees for a total of 181 trees within the parking areas. The proposal is compliant.

4) DMC 25.90.030(3)(a) requires a moderate buffer be provided between parking lots and any adjacent public right-of-way. DMC 25.90.030(b) also provides the City to require full, moderate or light buffers as necessary to mitigate incompatibility. DMC 25.10.020 defines a moderate buffer as having a minimum visual screening of 50 percent. Berms, grade separations, walls, and fences may be incorporated to achieve up to 50 percent of the minimum screening.

   Staff Analysis and Conclusion: Moderate buffers are already in place for the main parcel, including along Center Drive, DuPont Steilacoom Road and along International Place. Moderate buffers are required to be provided along the north parcel frontage with International Place and along the eastern property line adjacent to DuPont Steilacoom Road in accordance with DMC 25.90.030(3)(a).

   International Place Moderate Buffer: The landscape plans indicate a 10-foot wide row of shrubs and groundcover between the new parking lot and International Place. The requirement for a moderate buffer on International Place is met.

Dupont Steilacoom Road Moderate Buffer: The landscape plans indicate an 8-foot tall CMU wall will be constructed between the end of the existing vegetated berm and the north property line together with additional plantings. The requirement for screening along DuPont Steilacoom Road is met.

The north parcel provides truck access via a drive aisle to the new guard shack. The drive aisle is located between the new north property line and the proposed parking lot. The proposal provides 5-feet of groundcover landscaping between the drive aisle and the north property line with the adjacent mini-storage use. Between the drive aisle and the parking lot a minimum of 14-feet of trees, shrubs and groundcover is provided. The combination of the two landscape areas meets the City requirements for a moderate buffer along the north property line.

5) DMC 25.90.040 regulates water conservative landscaping, irrigation systems and demonstration of compliance with water conservation techniques. Landscape plans are to include water conservation methods. DMC 25.90.050 states that, "to the extent necessary to remain healthy and attractive, all nonnative landscaping shall be watered, weeded, pruned, freed of pests, and replaced if necessary." This is consistent with the purpose statement of Chapter 25.90, which includes the following in DMC 25.90.010(2)(d): "requiring that landscapes be adequately maintained and irrigated".

   <u>Staff Analysis and Conclusion</u>: The applicant did not provide irrigation plans. The applicant shall provide irrigation plans and calculations show compliance with DMC 25.90.040 prior to issuance of site development permit. (Condition 16)

e. DMC Chapter 25.95 - Off-Street Parking requires the following:

1) DMC 25.95.030 provides the minimum and maximum number of parking spaces based on the type of use. For warehouse uses, DMC 25.95.030 requires a minimum of 0.3 and a maximum of 1 parking space per worker at maximum shift.

   <u>Staff Analysis and Conclusion</u>: The project is providing a total of 912 vehicle parking spaces and the SEPA checklist indicates a total of 972 employees (486 per shift) are anticipated. The City's traffic study indicates that there will be some overlap of employees between shifts, therefore the maximum of 972 employees should be used for the parking analysis. City code therefore allows for a range of parking spaces between 292 and 972 spaces. In addition, the proposal includes 77 trailer parking spaces. The City does not include trailer parking spaces in determining if a site meets the code requirements. The reason is because trailers are often driven by the same driver using a vehicle parking space. The parking quantity requirement is met.

2) Per DMC 25.95.040, parking spaces are to be located within 500 feet of the building served and shall not be located within any required vision clearance triangle.

   <u>Staff Analysis and Conclusion</u>: The farthest parking stall is approximately 450 feet from a building door. The proposed parking is not located within any required vision clearance triangles. The proposal is compliant with DMC 25.95.040.

3) DMC 25.95.060 requires disabled parking per state law and locational priority for disabled parking and high-occupancy vehicles. This standard requires one of every 20 employee parking spaces be reserved for high-occupancy vehicles if the land use requires a minimum number of parking spaces per employee.

<u>Staff Analysis and Conclusions</u>: The warehouse land use requires a minimum number of parking spaces per employee. As such, 912 parking spaces would require 46 high-occupancy vehicles. High-occupancy vehicle spaces are not noted on the civil site plan. Quantities and locations of high-occupancy vehicles will be reviewed for compliance with the site development permit. (Condition 18)

4) DMC 25.95.070 provides the loading area dimensional requirements.

<u>Staff Analysis and Conclusions</u>: The proposal will remove the loading spaces along the Northwest Logistics Center II western building façade and does not propose any new loading spaces. DMC 25.95.070 is not applicable to the proposed project.

f. DMC Chapter 25.105 - Critical Areas.

Chapter 25.105 provides standards when a critical area or associated buffer is within or adjacent to the proposed development. The applicant submitted a Non-Wetland and Fish and Wildlife Habitat Assessment ("Habitat Assessment") prepared by Soundview Consultants (Attachment I.1.bb). The report concluded that there are no potentially regulated wetlands, fish and wildlife habitat, or other regulated critical areas identified on the subject property. However, one Type F stream was identified within 95 feet of the property located offsite to the northeast. The stream is recognized by Department of Fish and Wildlife as containing cutthroat trout and Coho salmon. The stream has a 100-foot regulatory buffer and 15-foot building setback from the buffer, which partially extend onsite.

The following bat species are shown on Priority Habitat Species (PHS) maps as having habitat in the same township as the property: big brown bat (Eptesicus fuscus), Yuma myotis (Myotis umanensis), and little brown bat (Myotis lucifugus).

<u>Staff Analysis and Conclusion</u>: Staff forwarded the Habitat Assessment for peer review and comment, which concluded it was prepared in accordance with code requirements (Attachments I.2.bb and I.4.e). The location of the buffer is depicted with the site plan on the Habitat Assessment's Figure 2; however, it is not depicted on the civil or landscape plans. Figure 2 shows no disturbance within the stream buffer and no buildings or structures located within the 15-foot structural setback from the buffer. No further review or mitigation is required. The landscape plans and civil plans shall depict the stream buffer and 15-foot structural setback on the plan submitted for development permits and demonstrate that no grading or development will occur in the buffer and that no structures will be placed within the 15-foot setback. (Condition 14)

Per DMC 25.105.050(2)(e), a habitat management plan is required for any development within or adjacent to areas identified as breeding or nesting habitat of priority species. The site has been previously cleared and contains sparse vegetation that would not likely be used by bats for hibernation, roosting or nursery sites. There are no specific management recommendations provided by WDFW for protection of the bat species. Therefore, no impact to animals are anticipated and no construction-related protection measures are required.

g. DMC Chapter 25.115 - Transportation Concurrency Review requires a concurrency test for projects requiring site plan and design review. Per DMC 25.115.040, the finding of concurrency may occur at the building permit application phase.

<u>Staff Analysis and Conclusion</u>: The applicant has not submitted for a Transportation Concurrency Review. The project will be required to be in full compliance with the Transportation Concurrency requirements prior to building permit issuance. (Condition 28)

h. DMC Chapter 25.120 Tree Retention requires the following:

1) Tree Retention applies to all new development projects that require site plan approval. The City regulates trees based on type and size and defines trees as either Landmark Tree or Specimen Tree. DMC 25.120.030(2) requires all landmark Oregon white oak trees be retained and at least half of all other (non-oak) landmark trees be retained.

   Staff Analysis and Conclusion: The main parcel has a recorded Oak Woodland Protection Area conservation easement and tree protection plan that meets the requirements of Chapter 25.120 and the site plan amendment does not modify or impact the Oak Woodland Protection Area. The north parcel is devoid of trees and therefore not subject to tree retention. The proposal is compliant

2) DMC 25.120.030(3) requires a minimum of one- and one-half trees per acre be retained, but nothing shall require the retention of more than half of the existing non-oak trees.

   Staff Analysis and Conclusion: The proposed changes to the main parcel include changes to developed areas and minor changes to the southeast and northeast landscaping areas but no changes or impacts within the Oak Woodland Protection Area/Conservation Easement Area. A small portion of trees recently planted along the east boundary adjacent to DuPont Steilacoom Road may be impacted by construction of the proposed wall and are required to be replaced at a 1:1 ratio. The landscape plans indicate the tree replacement at the required ratio. The north parcel is devoid of trees and not subject to tree retention requirement. The proposal is compliant.

3) DMC 25.120.030(5) requires that no clearing, grading, trenching, cutting, impervious surfacing, or other construction shall be allowed within the drip line of any tree to be retained, or within one and one-half times the radius of the canopy in the case of oak trees to be retained, nor shall grades be lowered or raised so near as to jeopardize said trees; unless there is no other alternative and the intrusion is the minimum possible as determined by the administrator.

   Staff Analysis and Conclusion: The Grading Plan and the Preliminary Landscape Plan do not provide a drip line for any of the retained trees. Prior to site development permit approval, the applicant is required to provide the drip lines for all retained trees and demonstrate that no new clearing, grading, trenching, cutting, or impervious surface, or other construction is within the drip line. (Condition 19)

4) Per DMC 25.120.030(7), the Oak Woodland Protection Areas are to be retained for life with specific notations provided on the plans: "this plan is also subject to an approved tree retention plan which requires that certain trees be preserved. That plan, which is binding on all owners, is on file with the City Planning Department."

   Staff Analysis and Conclusion: The property is subject to a recorded Oak Woodland Protection Areas conservation easement that protects the areas in perpetuity. The submitted lot line elimination plan does not impact or modify the easement. Prior to recording the Lot Line Elimination with Pierce County, the Conservation Easement shall be added to the Lot Line Elimination plan. (Condition 20 and 21)

2. PLANNING DEPARTMENT REVIEW – ADMINISTRATIVE VARIANCE (PLNG2020-014)

The proposal seeks approval to deviate from DMC 25.90.020(2)(c) that requires a minimum of 20 percent landscape area to be provided. Landscape Area is defined in DMC 25.10.120.010 as "land with permeable soils covered with plantings, grasses, or vegetation native to the area."

The application proposes the following landscape area:

Table 1 – Proposed Landscape Area		
Parcel	**Total Site Area**	**Proposed Landscape Area**
Main Parcel	32.15 acres	19.3 percent
North Parcel	5.34 acres	20.3 percent
Total	**37.49 acres**	**19.4 percent**
Deficit		**0.6 percent**
Percent reduction		**3 percent**

The applicant submitted the following to support the Variance request:

- Land Use Application signed July 2, 2020 (Attachment I.1.h)
- Cover Letter with administrative variance criteria for approval prepared by Nelson dated June 29, 2020 (Attachment I.1.n)
- Preliminary Landscape Plans prepared WBLA dated August 5, 2020 (Attachment I.1.u)

a. DMC 25.160, Administrative vs. General Variance

Per DMC 25.160.010, a variance is a mechanism by which the City may grant relief from the provisions of the land use code where practical difficulty renders compliance with the provisions of that code an unnecessary hardship, where the hardship is a result of the physical characteristics of the subject property and where the purpose of that code and of the comprehensive plan cannot be fulfilled. Variances are not intended to be used as a means of circumventing individually inconvenient regulations, as a means to change the allowable uses in a land use district, or as a means to rezone property.

DMC Chapter 25.160 describes two types of variances with different review procedures, "administrative" (per DMC 25.160.030) and "general" (per DMC 25.160.040). Administrative variances may be granted if the applicant demonstrates that approval would result in (emphasis added):

(1) A decrease of not more than 20 percent of the required width of a side, front or rear yard or yard between buildings;

(2) An increase of <u>not more than 10 percent</u> of the permitted projection of cornices, sills, eave projections, fences or structures, <u>maximum permitted lot coverage</u>, unenclosed awnings and unenclosed and uncovered decks into a required front, side or rear yard;

(3) An increase of not more than 10 percent in the maximum permitted height of a building.

Per DMC 25.10.120.060, lot coverage is defined as "that portion of a lot occupied by the principal buildings and its accessory buildings, including all structures greater than three feet in

height". Lot coverage controls the extent to which buildings (impervious areas) cover a lot. The landscape area definition, provided at the beginning of this section, controls the extent to which vegetation (pervious areas) cover a lot. Staff finds that these two terms have the same intent, to limit the deviation of impervious surface requirements by no more than 10 percent. Since the proposal is requesting a reduction of three (3) percent landscape area, which is less than 10 percent allowed by the administrative variance, staff finds that the proposal is consistence with administrative variance item two (2).

Per DMC 25.160.020, an administrative variance is processed as a Type II procedure. In order to approve a variance, the Director shall make written findings demonstrating that all the criteria in DMC 25.160.050 have been met. The following provides a description of the requested variance together with staff analyses and conclusions, followed by a response to the criteria for approval.

b. DMC 25.160.050 Consistency with Criterion for Approval of Administrative Variances. In order to approve administrative variances, the decision maker shall make written findings demonstrating that all the criteria in DMC 25.160.050 have been met. The following provides the criteria followed by staff's response and recommendation. The numbering of each criterion is consistent with DMC 25.160.050.

1) The proposed variance will not amount to a rezone nor authorize any use not allowed in the land use district.

   Staff Analysis and Conclusion: The proposed parking and guard house are accessory uses to the existing warehouse and distribution use. Per DMC 25.27, these accessory uses are permitted within the Community Business (CB) District. The proposal does not amount to a rezone or a authorize a use not allowed in the CB District. This criterion is met for the requested variance.

2) Special conditions and circumstances exist which are peculiar to the land such as size, shape, topography or location, not applicable to other land in the same land use district, demonstrating that literal interpretation of this title would deprive the property owner of rights commonly enjoyed by other properties similarly situated in the same zoning district under the terms of this title.

   Staff Analysis and Conclusion: There are special conditions and circumstances which exist that are related to the change in zoning designation and regulations that occurred after the NW Logistics Center II proposal (located on the main parcel) was approved and construction had started.

   The original NW Logistics Center II warehouse and distribution land use approval for the main parcel received approval for a Minor Site plan Amendment on February 4, 2019 (PLNG2018-063). The development of the NW Logistics Center II parcel was subject to the regulations in place at the time of the application was deemed complete, which at the time located in the Industrial zoning district. The approved site plan provided 17.2 percent landscape area, which exceeded the Industrial zone landscape area requirement of ten (10) percent.

   In March 2018, the City adopted Ordinance 18-1031 which rezoned the property from Industrial to Community Business. This rezone increased the minimum landscape area requirement of the subject parcels from 10 to 20 percent. While the main parcel was approved to provide 17.2 percent of landscape area, which is greater than the 10 percent required at the time the application was approved, the approved landscape area is less than the 20 percent required by the newly designated Community Business zoning district.

This site plan amendment proposal includes revising the main parcel and combining it with the north parcel. The north parcel will provide 20.2 percent landscape area and has increased the main parcel from 17.2 to 19.3 percent landscape area. The total overall landscape coverage will be 19.4 percent, an overall reduction in the 20 percent requirement of three (3) percent.

Staff concludes that special conditions and circumstance exists that are related to the location of the property in the Community Business rezoned area together with the main parcel being fully constructed. This criterion is met for the requested variance.

3) The special conditions and circumstances noted in subsection (2) are not the result from the actions of the applicant or property owner.

   Staff Analysis and Conclusion: The rezone and subsequent change to the minimum landscape area percentage requirement is the result of a city-initiated action, not the applicant. This criterion is met for the requested variance.

4) Granting of the variance requested will not confer a special privilege that is denied other properties in the same land use district;

   Staff Analysis and Conclusion: Granting the variance will not confer a special privilege to the owner or property that is denied others in the same land use district. The proposal is unique in that a portion of the property received land use approval under a different zoning designation with a different landscape area percentage requirement. A total of 10 properties were rezoned to Community Business in 2018, including the two properties that are included in this proposal. The other properties are all fully developed sites. If these rezoned parcels should choose to redevelop or expand, they would not be denied the same alternatives for a variance as the subject proposal. This criterion is met for the requested variance.

5) The granting of the variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity and district in which the subject property is situated; and

   Staff Analysis and Conclusion: As conditioned, the granting of the minimum landscape area variance will not be detrimental to the public welfare or injurious to the property or improvements in the vicinity and district in which the property is situated. Staff finds that granting approval of the variance will be in the public interest as it will allow for an increase in landscaping of the existing NW Logistics II parcel and will provide further visual screening along DuPont Steilacoom Road. This criterion is met for the requested variance.

6) The requested variance does not go beyond the minimum necessary to afford relief.

   Staff Analysis and Conclusion: The requested variance is the minimum necessary to afford relief. Per DMC 25.160.030(2), the administrative variance process would allow a reduction of 10 percent of the total landscape area. This would allow the applicant to reduce the total landscape area from 20 percent to 18 percent. The applicant is only requesting a three (3) percent reduction in landscape are for a combined total of 19.4 percent landscape area. This variance request is, therefore, the minimum necessary. This criterion is met for the requested variance.

It is staff's conclusion based on review of the proposal and justification provided, that the variance criterion has been met. Therefore, staff recommends approval of the landscape area variance. As a condition of approval, the applicant shall include the total landscape area (acres) and percent landscape area on the civil and landscape plans upon submitted for site development permit. (Condition 15)

3. **PLANNING DEPARTMENT REVIEW – LOT LINE ELIMINATION (PLNG 2020-014)**

The proposal includes an application to combine tax parcel 3000390011 (32.16 acres) with tax parcel 3000390282 (5.34 acres) into a single lot through a lot line elimination, which is regulated through DMC Chapter 24.08. Tax parcel 3000390011 is home to the existing Northwest Logistics Center II building and tax parcel 3000390282 is currently vacant. After recording, the project will be located within one 37.2-acre lot. The proposed lot line elimination is subject to the lot line elimination review criteria provide in DMC 24.08.050. Below is an analysis of the lot line elimination approval review criteria.

a. Per DMC 24.08.050(a), the departments shall review the proposed lot line elimination for compliance with applicable adopted plans, policies, and regulations

   Staff Analysis and Conclusions: City staff has reviewed the proposed short subdivision against the City's Comprehensive Plan and Municipal Code. The proposed lot line elimination complies with the DuPont Comprehensive Plan as provided in Section C, above. The new parcel configuration and boundaries do not preclude the property from meeting the required setbacks or other bulk regulations for development as described in Section D.1, above. The proposed lot line elimination is consistent with all applicable city plans, policies, and regulations.

b. Per DMC 24.08.050(c), the applicant shall record the declaration of lot combination within 30 days of approval. If not, the lot line elimination shall be null and void.

   Staff Analysis and Conclusions: The Major Site Plan Amendment and Administrative Variance is conditioned upon the lot line elimination being recorded. Accordingly, prior to issuance of site development permits the applicant shall provide the recorded lot line elimination. (Condition 13)

4. **ENGINEERING DEPARTMENT REVIEW**

The City Engineer has submitted comments regarding review of the application dated August 24, 2020 and September 17, 2020. The comments have been made conditions of approval where warranted. See Attachment I.4.c.

The City's Traffic and Transportation Engineering Consultant, Geralyn Reinart, P.E., reviewed the proposal and provided a comment memorandum dated August 4, 2020 and email dated September 4, 2020. See Attachment I.4.d. The comments have been made conditions of approval, where warranted.

5. **FIRE DEPARTMENT REVIEW**

The City Fire Department submitted comment memorandum dated September 2, 2020 and September 17, 2020, which have been made conditions of approval, where warranted. (Attachment I.4.a)

6. **BUILDING DEPARTMENT REVIEW**

The City Building Department submitted comments regarding review of the application dated September 1, 2020 and September 17, 2020, which have been made conditions of approval, where warranted. (Attachment I.4.b)

E. CONCLUSIONS

In accordance with the criteria in DMC 25.175.040, staff has evaluated the proposal and finds that, subject to the recommended conditions below, the proposal is consistent the DMC and existing ordinances concerning public utilities, traffic, facilities, and services, and provides access, landscaping, screening, building placement, parking lot layout, and protection of sensitive areas, subject to the recommended conditions of approval provided in Section F, below. As demonstrated in the Consistency Analysis, the proposal meets the criteria for approval.

- The proposal has been reviewed for compliance with the requirements of DMC 25.150 (Major Site Plan Amendment, PLNG2020-012) and staff has concluded that it meets the requirements and should be approved subject to the recommended conditions of approval.
- The proposed administrative variance has been reviewed for compliance with the requirements of DMC 25.160 (Administrative Variance, PLNG2020-013) and staff has concluded that it meets the requirements and should be approved subject to the recommended conditions of approval.
- The proposed lot line elimination has been reviewed for compliance with the requirements of DMC 24.08 (Lot Line Elimination, PLNG2020-014) and staff has concluded that it meets the requirements and should be approved subject to the recommended conditions of approval.

F. RECOMMENDATION

Based on the findings, analysis and conclusions in this report, DuPont staff recommends approval of the NW Logistics II Parking Expansion proposal (City File Nos. PLNG2020-012, -013, and -014), subject to the following conditions.

1. The City issued a Modified SEPA Mitigated Determination of Non-significance dated September 18, 2020. All mitigation measures are incorporated herein by reference as conditions of approval.
2. The developer shall demonstrate compliance with any conditions or mitigations stated in any previously issued official documents associated with the parcel and project referenced above, except as otherwise modified herein, including the previous site plan amendment (PLNG2018-063) and SEPA Determination dated Feb. 10, 2015. Copies are included in the Attachments.
3. A sign permit is required for any building or other signage in accordance with the requirements of DMC 25.116.
4. Per DMC 25.75, at the time an individual business meets or exceeds 100 employees, the County Commute Trip Reduction (CTR) Department is to be notified within 30 days. The employer shall make a good faith effort, as defined in RCW 70.94.534(2) and DMC Chapter 25.75, to develop and implement a CTR program that will encourage their employees to reduce vehicle miles traveled per employee and single occupancy vehicle trips. The requirements of the CTR program are provided in DMC Chapter 25.75.
5. Proposed site improvements within the easements on the project site shall comply with the conditions of said easement.
6. The project activities shall comply with the requirements of the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges associated with construction activity.
7. Recommendations from the Geotechnical Report and any subsequent amendments to the Geotechnical Report shall be incorporated into the design.

Prior to issuance of Site Development Permit:

8. All applicable Fire Impact and Storm System Development Charge fees assessed for the proposed development will be required to be paid prior to the issuance of a Civil or Grading permit(s) associated with the proposed project.
9. Per DMC 13.05.100, Emergency Vehicle Access Standards Section I. (Gates) Number one thru six shall be followed if gates are installed.
10. All easements identified in the Title Reports shall be delineated and labeled on the Plans (i.e. width, type, and recording number).
11. Turning movement drawings will be required to allow the City to determine the feasibility of the site layout. The site plan shall include supplemental exhibits to demonstrate that the City Fire Department's large apparatus can navigate the site (lane, width, radius0, including access to FDCs and hydrants. The Fire Department will confirm the adequacy of vehicle access points.
12. All Stormwater, water and landscape plan-related comments provided in the Gray & Osborne review comment letter dated August 24, 2020 shall be addressed.
13. The Lot Line Elimination shall be recorded within 30 days of final approval (per DMC 24.08.050(c)) and prior to issuance of Site Development permits.
14. The landscape plans and civil plans shall depict the stream buffer and 15-foot structural setback on the plans and demonstrate that no grading or development will occur in the buffer and that no structures will be placed within the 15-foot setback.
15. The total landscape area and percent landscape area shall be provided on the civil and landscape plans.
16. Irrigation plans shall be provided meeting the requirements of DMC 25.90.040.
17. The civil and landscape plans shall provide the height of the screening wall along DuPont Steilacoom Road. The wall can be no greater than 6 feet for the portion that is located within the side or front yard setback.
18. DMC 25.95.060 requires high-occupancy vehicle parking be provided at a ratio of one space for every 20 employee parking spaces. The proposal is providing 912 parking spaces, which requires 46 high-occupancy vehicles. Quantities and locations of high-occupancy vehicles shall be provided on the civil plans in compliance with DMC 25.95.060.
19. Per DMC 25.120.030(5), the Grading Plan and the Preliminary Landscape Plan shall provide the drip line for trees to be retained. The plans shall demonstrate that no new clearing, grading, trenching, cutting, or impervious surface, or other construction is within the drip line.
20. Per DMC 25.120.030(7), the Oak Woodland Protection Areas are to be retained for life. The following specific notations shall be provided on the plans: "this plan is also subject to an approved tree retention plan which requires that certain trees be preserved. That plan, which is binding on all owners, is on file with the City Planning Department."
21. Prior to submitting the Lot Line Elimination for recording with Pierce County, the Conservation Easement shall be added to the Lot Line Elimination plan.

Prior to issuance of Building Permits:

22. Any proposed modifications to the structure must be designed to meet the requirements of the building construction codes in effect at the time of building permit submittal. The following codes are currently enforced by the City of DuPont: the 2015 International Building Code, the 2015 International Residential Code, the 2015 International Fire Code, the 2015 International Mechanical Code, the 2015 International Fuel Gas Code, the 2015 Uniform Plumbing Code (each as amended and adopted by the State of Washington); the 2015 Washington State Energy Code.

23. Also prior to issuance of a building permit for any structure modifications, the applicant shall provide a copy of Pierce County Sewer Service Permits for City record. This permit (and authorization to connect to sewer service) is/may be independent from any sewer system extension that may also apply to the project. All sewer connection and permitting requirements must be coordinated with the utility purveyor. (Please note that Pierce County Sewer Utility requires a pre-treatment review and approval be completed prior to their issuance of sewer extension or sewer service connection permit(s). Each subsequent tenant, for multi-tenant buildings, must also complete a separate pre-treatment review and provide copy of sewer service permitting, where applicable, prior to obtaining a building permit for associated improvements.)
24. An automatic fire sprinkler system shall be installed. The system shall comply with NFPA 13 Standard for Automatic Fire Sprinkler System. Three (3) sets of plans, hydraulic calculations and material specification sheets for all equipment used in the system shall be submitted by a State of Washington Licensed Contractor for review, approval and permits issued prior to commencing work
25. If a fire pump is required. The system shall comply with NFPA 20. Three (3) sets of plans and material specification sheets for all equipment used in the system shall be submitted by a State of Washington Licensed Contractor for review, approval and permits issued prior to commencing work.
26. An automatic fire alarm system shall be installed. The system shall comply with NFPA 72 Standard for Fire Alarm System. Three (3) sets of plans, material specifications sheet for all equipment used in the system shall be submitted by a State of Washington Licensed Contractor for review, approval and permits issued prior to commencing work.
27. If an emergency generator is installed. The system shall comply with NFPA 110 and 111. The generator shall be listed in accordance with UL 220. Three (3) sets of plans and material specification sheets for all equipment used in the system shall be submitted for review, approval and permits used prior to commencing work.
28. Per DMC 25.115.040, Transportation Concurrency Review is required for projects requiring site plan and design review. The finding of concurrency may occur at the building permit application phase. The applicant shall receive a Transportation Concurrency Certificate prior to issuance of a building permit.

During construction:

29. Chapter 33 of the 2015 International Fire Code (Fire safety during construction and demolition) shall be followed.

Prior to issuance of Certificate of Occupancy:

30. Fire extinguishers are required to be installed as directed by City of DuPont Fire Department. Prior to installation the client is directed to request a fire inspection to confirm the locations of the fire extinguishers.
31. All new building shall have approved emergency responder radio coverage per section 510 of the 2015 International Fire Code.
32. Execute an Agreement for Inspection and Maintenance of Privately Maintained Storm Drainage Facilities. The Agreement should be provided after construction of the storm drainage system to reflect “as-built” conditions. A copy of the form of the agreement is included in the City Public Works Standards.
33. The site is located within the boundary of LID No. 88-1. Prior to finalization of the proposed project, the Applicant will need to document payment of the costs associated with City LID No. 88-1.
34. The project is subject to the Geographic Information Systems (GIS) requirements as stated in the City of DuPont Municipal Code, Chapter 24.09, and Ordinance No. 97-559.

G. DECISION

Based on the Findings and Analysis summarized above, the City finds that the proposal, as conditioned, is consistent with the Comprehensive Plan and DMC Title 24.08, 25.75 through 25.95, 25.105 through 25.125, 25.150, and 25.160. The City has determined that the proposal meets the standards and criteria necessary to obtain approval by the City. All conditions included in the Recommendation are incorporated herein with this Approval.

_____ ***September 18, 2020***

Andy Takata
City Administrator, City of DuPont

Date

H. APPEALS

Consistent with DMC 25.175.060(4), this decision by the director may be appealed to the City hearing examiner. Only parties of record may file an administrative appeal. **An appeal must be filed within 14 days after issuance of this decision (by 5:00 p.m. on October 2, 2020)**. The instructions for filing an appeal are found in DMC 25.175.060(4). Appeals shall be in writing, be accompanied by the required appeal fee ($1,000), and contain the information detailed in DMC 25.175.060(4)(d).

I. ATTACHMENTS (SUMMARY OF RECORD)

The following attachments to the Staff Report constitute the administrative record for the application:

1. Land Use Application Plans and Documents:

    a. Preliminary Stormwater Site Plan prepared by Barghausen Consulting Engineers dated June 30, 2020
    b. Cultural Resources Report prepared by AquaTerra dated June 3, 2020
    c. Ltd Subsurface Investigation Report prepared by ATC dated June 30, 2020
    d. Cover Letter prepared by Barghausen Consulting Engineers dated July 2, 2020
    e. Geotechnical Study prepared by Terra Associates dated May 12, 2020
    f. Steilacoom Historical District Authorization to Act as Agent dated February 24, 2020
    g. BLA/LLE Application Form signed July 1, 2020
    h. Land Use Application signed July 2, 2020
    i. Vicinity Map prepared by Barghausen Consulting Engineers dated June 1, 2020
    j. Architectural Site Plan prepared by Nelson dated June 22, 2020

G. DECISION

Based on the Findings and Analysis summarized above, the City finds that the proposal, as conditioned, is consistent with the Comprehensive Plan and DMC Title 24.08, 25.75 through 25.95, 25.105 through 25.125, 25.150, and 25.160. The City has determined that the proposal meets the standards and criteria necessary to obtain approval by the City. All conditions included in the Recommendation are incorporated herein with this Approval.

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BARGHAUSEN

PRELIMINARY STORMWATER SITE PLAN

Proposed Northwest Logistics Center No. 2 – Parking Expansion

NEC – Center Drive and International Place
DuPont, Washington

Prepared for:
Panattoni Development Company, Inc.
1821 Dock Street, Suite 100
Tacoma, WA 98402

June 30, 2020
Our Job No. 21227

Attachment 1.a. Preliminary Stormwater Site Plan prepared by Barghausen Consulting Engineers dated June 30, 2020

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE SOUTH KENT, WA 98032 P) 425-251-6222 F) 425-251-8782
BRANCH OFFICES: TUMWATER, WA KLAMATH FALLS, OR LONG BEACH, CA ROSEVILLE, CA
barghausen.com

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1.0 PROJECT OVERVIEW

1.0 PROJECT OVERVIEW

The proposed Northwest Logistics Center No. 2 – Parking Expansion development is located on two parcels totaling approximately 37.50 acres, located at the northwest corner of International Place and Center Drive in the City of DuPont, Washington.

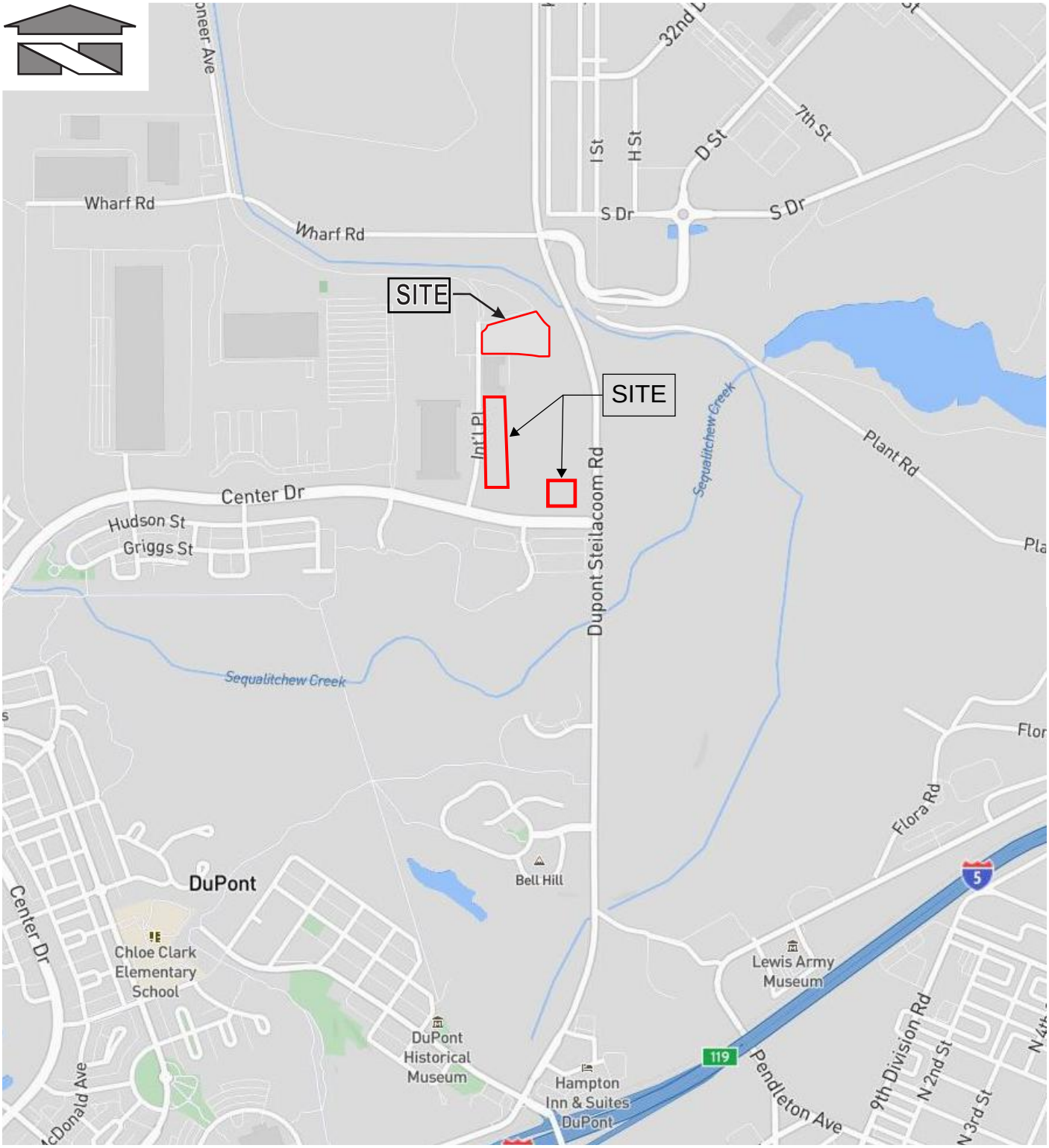
Please see the attached Vicinity Map for the exact location of the project site. The site developments lie across two parcels; Tax Parcel No. 300039-0011 of 32.16 acres, and Tax Parcel No. 300039-0282 of 5.34 acres. The larger parcel is to the south and was previously developed as a 628,640 square foot warehouse building with associated dock-high loading, parking, drive aisles and landscaping. The smaller parcel is to the north, and is currently a sparsely vegetated lot that was previously cleared and graded.

The proposal for this development is to construct a new passenger vehicle parking area on the northern lot as well as a truck and trailer access road with guard house to check in deliveries. The improvements total approximately 5.43 acres of new and replaced impervious surfaces which includes both asphalt and concrete paving.

Based on zoning requirements of the site, the disturbed areas of the site are required to provide 20% landscaping. The project is requesting a variance to allow for 19.4% landscaping as provided with the current site plan.

Infiltration is the proposed method of flow control for this project with basic water quality required for pretreatment prior to infiltration.

VICINITY MAP



REFERENCE: Rand McNally (2020)

Scale:
Horizontal: **N.T.S.** Vertical: **N/A**

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 **barghausen.com**

For:
NW Logistics 2 - Parking Expansion
Dupont, Washington

Title:
VICINITY MAP

Job Number
21227

DATE: 06/01/20

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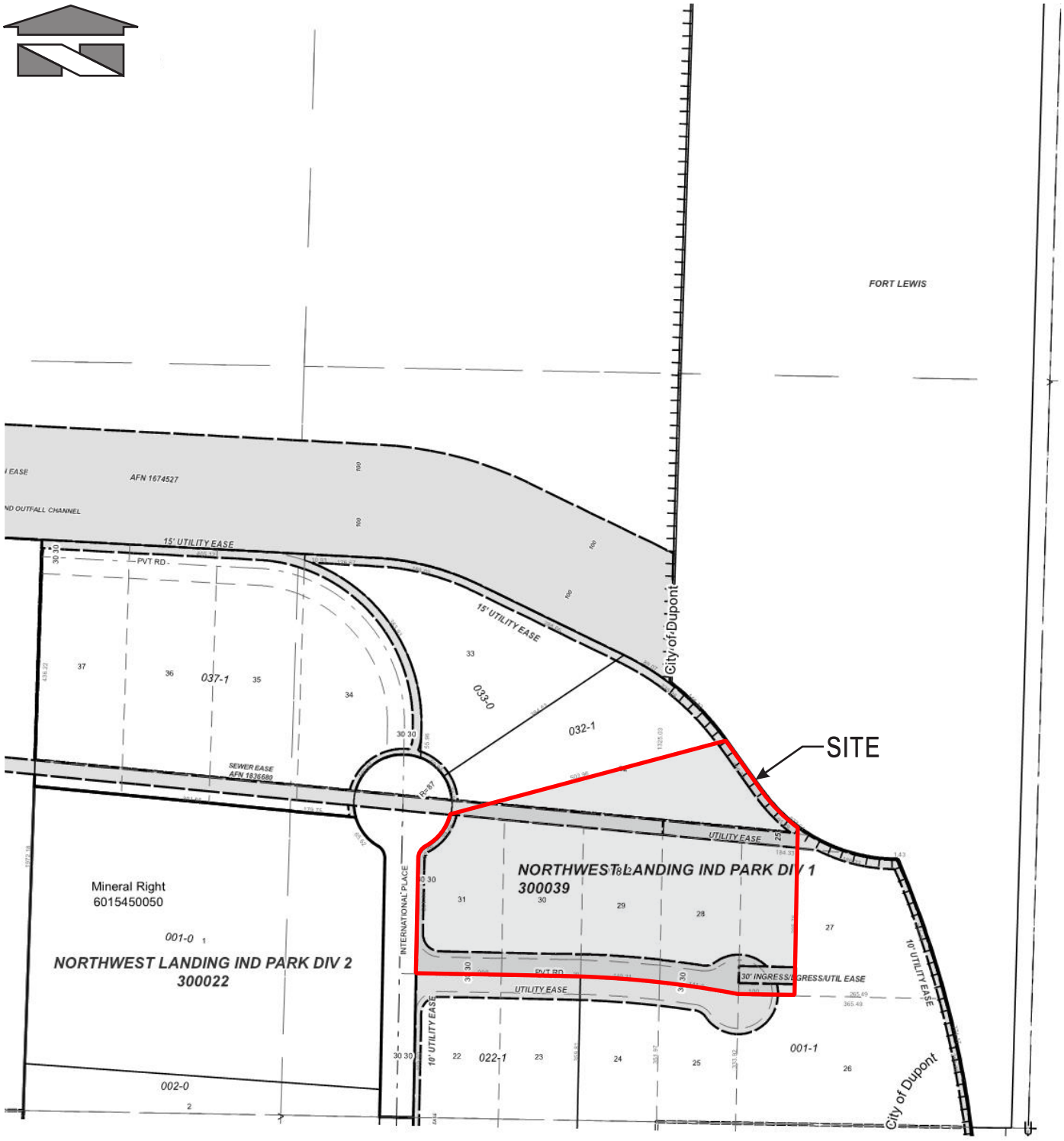
ASSESSOR MAP



REFERENCE: Pierce County Department of Assessments (Jan. 2019)

Scale: Horizontal: **N.T.S.** Vertical: **N/A**	*For:* NW Logistics 2 - Parking Expansion Dupont, Washington	Job Number 21227
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 **barghausen.com**	*Title:* ASSESSOR MAP	DATE: 06/01/20

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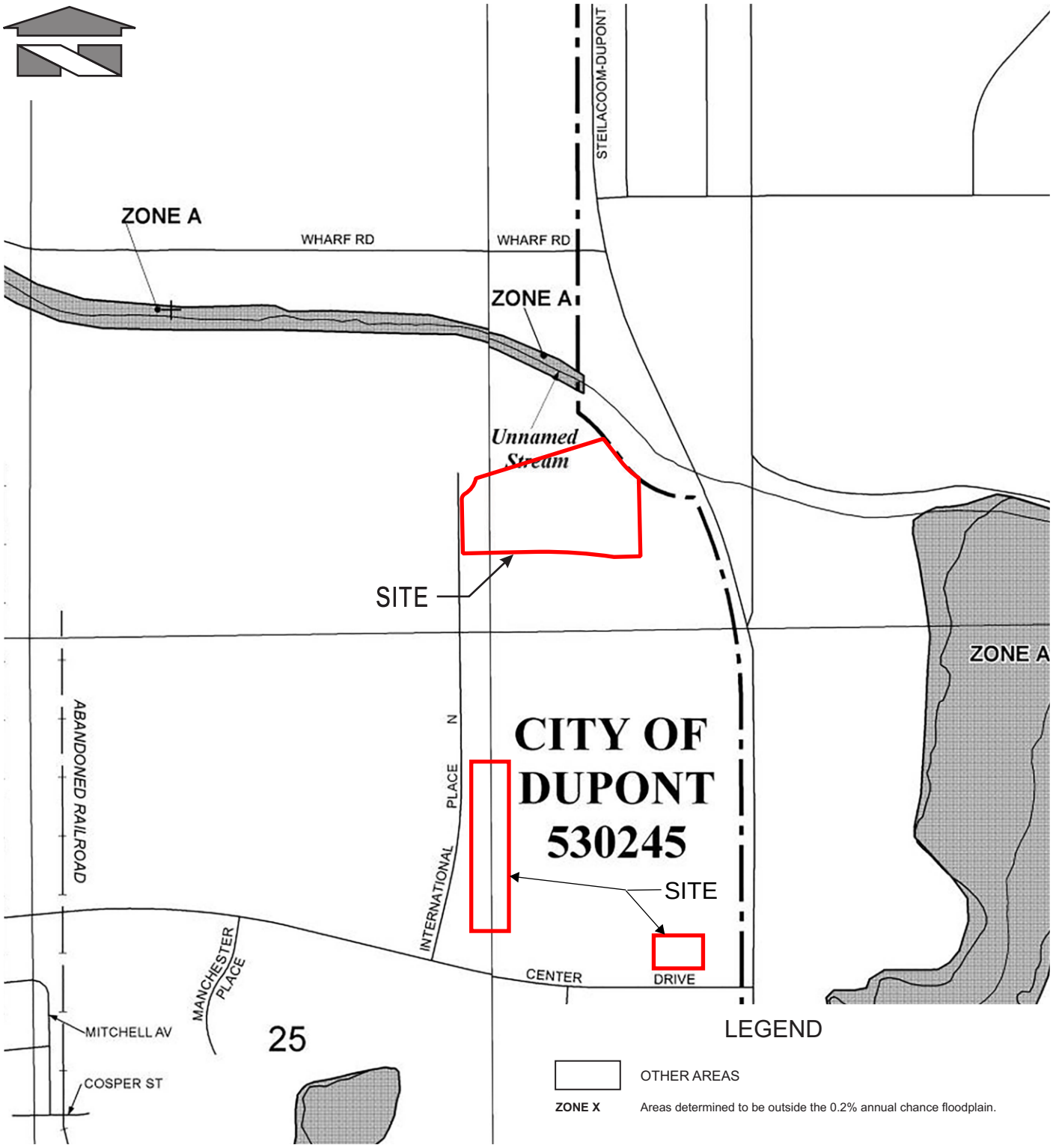
FEMA MAP



REFERENCE: Federal Emergency Management Agency (Portion of Map 53053C0507E, March 2017)

Scale:
Horizontal: **N.T.S.** Vertical: **N/A**

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For:
NW Logistics 2 - Parking Expansion
Dupont, Washington

Title:
FEMA MAP

Job Number
21227

DATE: 06/01/20

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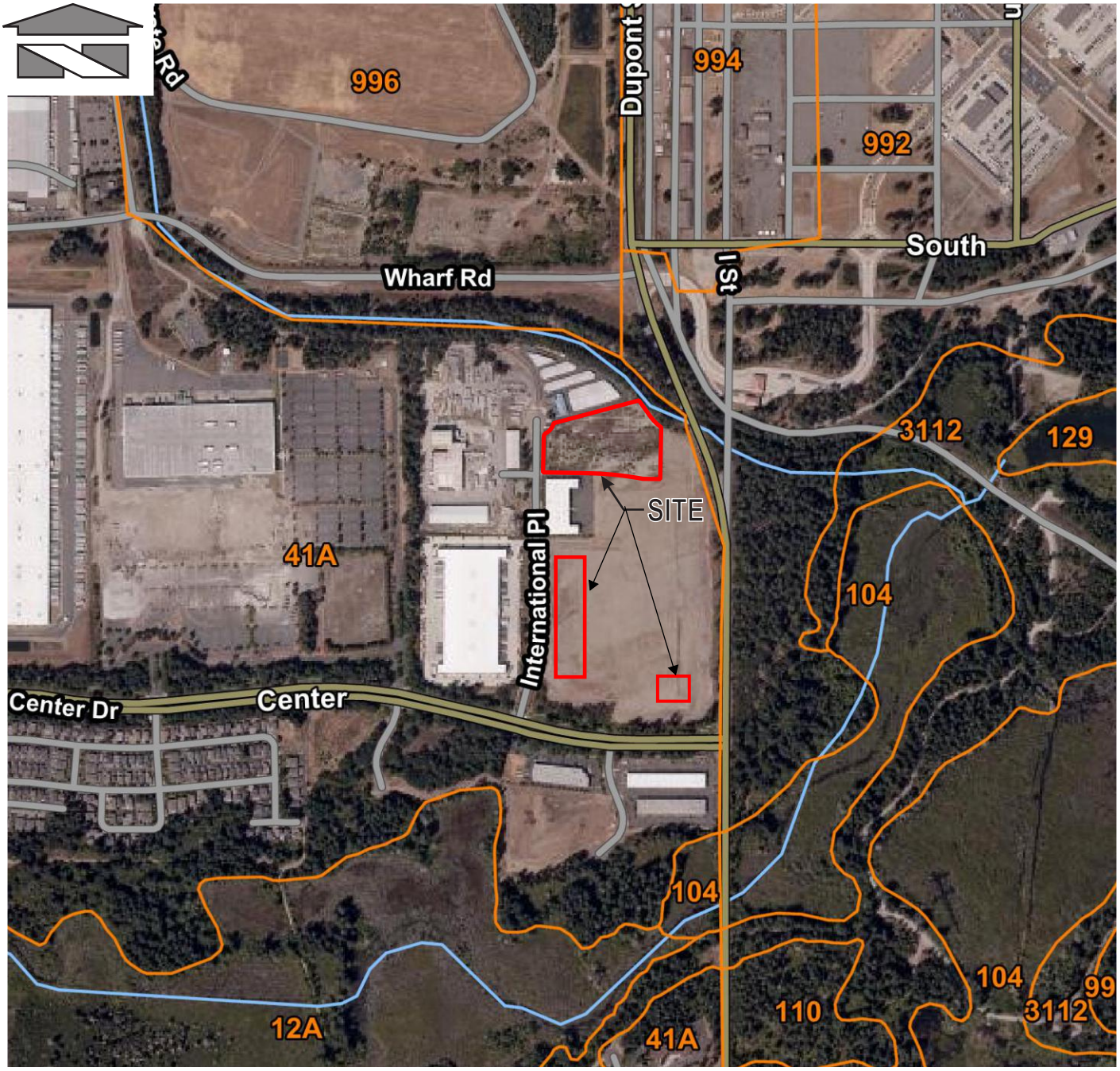
SOIL SURVEY MAP



REFERENCE: USDA, Natural Resources Conservation Service

LEGEND:	HSG
41A = Spanaway gravelly sandy loam	A

Scale:
Horizontal: **N.T.S.** Vertical: **N/A**

Barghausen
Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

For:
NW Logistics 2 - Parking Expansion
Dupont, Washington

Job Number
21227

Title:
SOIL SURVEY MAP

DATE: 06/01/20

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SENSITIVE AREAS MAP

REFERENCE: Pierce County PublicGIS

Scale:
Horizontal: **N.T.S.** Vertical: **N/A**

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For:
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Title:
SENSITIVE AREAS MAP

Job Number
21227

DATE: 06/01/20

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2.0 ANALYSIS OF THE MINIMUM REQUIREMENTS

2.0 ANALYSIS OF THE MINIMUM REQUIREMENTS

Minimum Requirement No. 1 – Preparation of Stormwater Site Plan:

This document fulfills the requirements of a Stormwater Site Plan.

Minimum Requirement No. 2 – Construction Stormwater Pollution Prevention:

The Construction Stormwater Pollution Prevention Plan is included in section 6.0 of this report.

Minimum Requirement No. 3 – Source Control Prevention:

Source control will be provided on site in the form of regular sweeping of the parking areas, as well as educating the owner about the proper use of fertilizers and pesticides on the landscaping areas.

Minimum Requirement No. 4 – Preservation of Natural Drainage Systems and Outfalls:

This area consists of gravelly, sandy type soils that infiltrate over the entire site. The infiltration rate utilized was 12 inches per hour as allowed by the geotechnical report for long-term infiltration.

Minimum Requirement No. 5 – On-Site Stormwater Management:

This project achieves the Low Impact Development Performance Standard due to full infiltration of runoff from all impervious areas on-site.

Minimum Requirement No. 6 – Runoff Treatment:

All areas requiring runoff treatment will have runoff from those areas routed to a basic water quality facility prior to draining to infiltrating.

Minimum Requirement No. 7 – Flow Control:

Flow control for this development will be provided through the use of infiltration galleries designed to infiltrate 100% of the runoff for historical storm events using the Western Washington Hydrology Model (WWHM) 2012.

Minimum Requirement No. 8 – Wetland Protection:

There are no wetlands on this project site.

Minimum Requirement No. 9 – Operations and Maintenance:

An Operations and Maintenance Manual will be prepared and included in the final stormwater site plan prepared for this development.

3.0 EXISTING CONDITIONS SUMMARY

3.0 EXISTING CONDITIONS SUMMARY

The on-site soils are Spanaway gravelly sandy loam type, which is an "A" type soil and exhibits infiltration rates 12 inches per hour. The existing condition of the site consists of previously cleared and graded land that is currently covered in small brush with no significant trees. The site is bound on the north by a rental storage facility, west by International Place, on the south by Center Drive, and on the east by DuPont-Steilacoom Road S.W.

4.0 OFF-SITE ANALYSIS REPORT

4.0 OFF-SITE ANALYSIS REPORT

The project site is surrounding by Dupont-Steilacoom Road to the East, Center Drive to the South, International Place and a warehouse building to the West and a rental storage facility on the North.

The storm water from southeast and west parking lots is collected and discharged to an existing infiltration gallery. Due to the nature of the work in these two areas there will no change in the way the storm water is collected or discharged. The storm water from the proposed northeast parking lot area will be collected by several on-site catch basins and piped to a proposed infiltration gallery at the northeastern end of the parking lot. No storm water runs onto the site from off-site areas.

Since infiltration is proposed as the flow control method for the entire project site, and there are very minimal if any off-site areas contributing to this site, no further off-site analysis has been prepared for this development.

5.0 PERMANENT STORMWATER CONTROL PLAN

5.0 PERMANENT STORMWATER CONTROL PLAN

A. **Existing Site Hydrology**: The existing project site consists of land that has been previously cleared and graded that is now covered in small deciduous trees and brush, driveways and asphalt parking areas. The existing driveways and asphalt parking areas are being discharged to existing roadside ditches or infiltration galleries. The on-site soil type is considered Spanaway type soil. This creates a pre-developed condition of no runoff from the site, even in peak storm events. All runoff infiltrates into the ground or evaporates. This will be matched in the developed condition through the use of infiltration.

B. **Developed Site Hydrology**: Under developed conditions, all runoff from the on-site improvements will be routed through water quality features prior to infiltration on-site. An infiltration rate of 12 inches per hour was utilized based on the soils report.

C. **Performance Standards and Goals**: These conveyance facilities will be sized using the modified rational method as each contributing basin is less than 10 acres. The infiltration facilities were sized using the Western Washington Hydrology Model (WWHM), utilizing an infiltration rate of 12 inches per hour and providing 100% infiltration for up to the 100-year storm event for historic rainfall data. Basic water quality is provided for 91% of the historic runoff volume as required for this development.

D. **Flow Control System:** Flow control will be provided by an infiltration gallery on-site. The system has been designed based off the geotechnical engineer's preliminary infiltration rate of 12 inches per hour. Conceptual design is provided within this preliminary storm report, with a final design to be provided for site development permitting.

E. **Water Quality System**: Basic water quality will be provided for treatment of pollution generating runoff prior to infiltration. Please refer to the following pages of this report for the grading and drainage plan for this development. Conceptual design is provided within this preliminary storm report, with a final design to be provided for site development permitting.

F. **Conveyance System Analysis and Design**: The conveyance system for this project will be sized using the rational method and will be completed during final engineering design for site development permitting.

FLOW CONTROL AND WATER QUALITY SIZING CRITERIA

Project: **NW Logistics 2 - Parking Expansion**
BCE #: 21227

Total Disturbed Area	sf	ac	%
Total Impervious	255,740	5.87	85%
Total Pervious	46,045	1.06	15%
Total Pavement	255,740	5.87	48%
Total Area	301,785	6.93	100%

WQ Area Totals	sf	ac
Impervious to WQ	226,100	5.19
Pervious to WQ	38,810	0.89
Area to WQ	264,910	6.08
Offline WQ Flowrate (cfs)		0.4577
100 Year Flowrate (cfs)		4.6464

INFILTRATION AND WATER QUALITY SIZING CALCULATIONS

WWHM2012

PROJECT REPORT

NW Logistics 2 - Parking Expansion
BCE#21227
FC & WQ Calculations
6/29/2020

General Model Information

Project Name:	21227-FC
Site Name:	NW Logistics 2 - Parking Expansion
Site Address:	3330 International Place
City:	DuPont
Report Date:	6/29/2020
Gage:	40 IN EAST
Data Start:	10/01/1901
Data End:	09/30/2059
Timestep:	15 Minute
Precip Scale:	0.000 (adjusted)
Version Date:	2019/09/13
Version:	4.2.17

POC Thresholds

Low Flow Threshold for POC1:	50 Percent of the 2 Year
High Flow Threshold for POC1:	50 Year

Landuse Basin Data
Predeveloped Land Use

Basin 1

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
A B, Forest, Flat	4.86
Pervious Total	4.86
Impervious Land Use	acre
ROADS FLAT	1.22
Impervious Total	1.22
Basin Total	6.08

Element Flows To:

Surface	Interflow	Groundwater

Mitigated Land Use

Basin 1

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
A B, Lawn, Flat	0.89
Pervious Total	0.89
Impervious Land Use	acre
ROADS FLAT	5.19
Impervious Total	5.19
Basin Total	6.08

Element Flows To:

Surface	Interflow	Groundwater
Gravel Trench Bed 1	Gravel Trench Bed 1	

Mitigated Routing

Gravel Trench Bed 1

Bottom Length:	218.00 ft.
Bottom Width:	30.00 ft.
Trench bottom slope 1:	0 To 1
Trench Left side slope 0:	0 To 1
Trench right side slope 2:	0 To 1
Material thickness of first layer:	1.75
Pour Space of material for first layer:	0.3
Material thickness of second layer:	1.5
Pour Space of material for second layer:	0.3825
Material thickness of third layer:	1.75
Pour Space of material for third layer:	0.3
Infiltration On	
Infiltration rate:	12
Infiltration safety factor:	1
Total Volume Infiltrated (ac-ft.):	2219.1
Total Volume Through Riser (ac-ft.):	0
Total Volume Through Facility (ac-ft.):	2219.1
Percent Infiltrated:	100
Total Precip Applied to Facility:	0
Total Evap From Facility:	0
Discharge Structure	
Riser Height:	5 ft.
Riser Diameter:	18 in.
Element Flows To:	
Outlet 1	Outlet 2

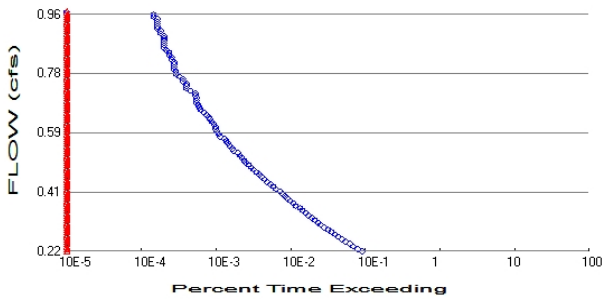
Gravel Trench Bed Hydraulic Table

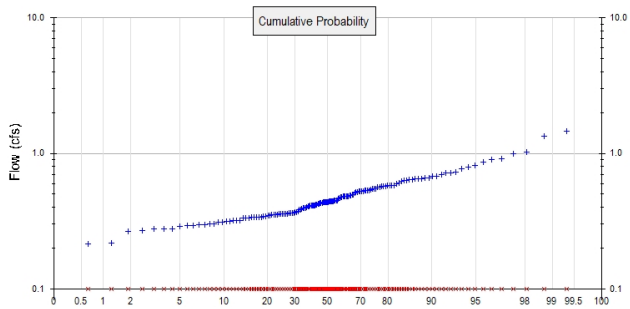
Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.150	0.000	0.000	0.000
0.0667	0.150	0.003	0.000	1.816
0.1333	0.150	0.006	0.000	1.816
0.2000	0.150	0.009	0.000	1.816
0.2667	0.150	0.012	0.000	1.816
0.3333	0.150	0.015	0.000	1.816
0.4000	0.150	0.018	0.000	1.816
0.4667	0.150	0.021	0.000	1.816
0.5333	0.150	0.024	0.000	1.816
0.6000	0.150	0.027	0.000	1.816
0.6667	0.150	0.030	0.000	1.816
0.7333	0.150	0.033	0.000	1.816
0.8000	0.150	0.036	0.000	1.816
0.8667	0.150	0.039	0.000	1.816
0.9333	0.150	0.042	0.000	1.816
1.0000	0.150	0.045	0.000	1.816
1.0667	0.150	0.048	0.000	1.816
1.1333	0.150	0.051	0.000	1.816
1.2000	0.150	0.054	0.000	1.816
1.2667	0.150	0.057	0.000	1.816
1.3333	0.150	0.060	0.000	1.816
1.4000	0.150	0.063	0.000	1.816
1.4667	0.150	0.066	0.000	1.816
1.5333	0.150	0.069	0.000	1.816

1.6000	0.150	0.072	0.000	1.816
1.6667	0.150	0.075	0.000	1.816
1.7333	0.150	0.078	0.000	1.816
1.8000	0.150	0.081	0.000	1.816
1.8667	0.150	0.085	0.000	1.816
1.9333	0.150	0.089	0.000	1.816
2.0000	0.150	0.093	0.000	1.816
2.0667	0.150	0.097	0.000	1.816
2.1333	0.150	0.101	0.000	1.816
2.2000	0.150	0.104	0.000	1.816
2.2667	0.150	0.108	0.000	1.816
2.3333	0.150	0.112	0.000	1.816
2.4000	0.150	0.116	0.000	1.816
2.4667	0.150	0.120	0.000	1.816
2.5333	0.150	0.124	0.000	1.816
2.6000	0.150	0.127	0.000	1.816
2.6667	0.150	0.131	0.000	1.816
2.7333	0.150	0.135	0.000	1.816
2.8000	0.150	0.139	0.000	1.816
2.8667	0.150	0.143	0.000	1.816
2.9333	0.150	0.147	0.000	1.816
3.0000	0.150	0.150	0.000	1.816
3.0667	0.150	0.154	0.000	1.816
3.1333	0.150	0.158	0.000	1.816
3.2000	0.150	0.162	0.000	1.816
3.2667	0.150	0.165	0.000	1.816
3.3333	0.150	0.168	0.000	1.816
3.4000	0.150	0.171	0.000	1.816
3.4667	0.150	0.174	0.000	1.816
3.5333	0.150	0.177	0.000	1.816
3.6000	0.150	0.180	0.000	1.816
3.6667	0.150	0.183	0.000	1.816
3.7333	0.150	0.186	0.000	1.816
3.8000	0.150	0.189	0.000	1.816
3.8667	0.150	0.192	0.000	1.816
3.9333	0.150	0.195	0.000	1.816
4.0000	0.150	0.198	0.000	1.816
4.0667	0.150	0.201	0.000	1.816
4.1333	0.150	0.204	0.000	1.816
4.2000	0.150	0.207	0.000	1.816
4.2667	0.150	0.210	0.000	1.816
4.3333	0.150	0.213	0.000	1.816
4.4000	0.150	0.216	0.000	1.816
4.4667	0.150	0.219	0.000	1.816
4.5333	0.150	0.222	0.000	1.816
4.6000	0.150	0.225	0.000	1.816
4.6667	0.150	0.228	0.000	1.816
4.7333	0.150	0.231	0.000	1.816
4.8000	0.150	0.234	0.000	1.816
4.8667	0.150	0.237	0.000	1.816
4.9333	0.150	0.240	0.000	1.816
5.0000	0.150	0.250	0.000	1.816
5.0667	0.150	0.260	0.273	1.816
5.1333	0.150	0.270	0.771	1.816
5.2000	0.150	0.280	1.404	1.816
5.2667	0.150	0.290	2.123	1.816
5.3333	0.150	0.300	2.882	1.816
5.4000	0.150	0.310	3.632	1.816

5.4667	0.150	0.320	4.326	1.816
5.5333	0.150	0.330	4.924	1.816
5.6000	0.150	0.340	5.401	1.816
5.6667	0.150	0.350	5.754	1.816
5.7333	0.150	0.360	6.014	1.816
5.8000	0.150	0.370	6.338	1.816
5.8667	0.150	0.380	6.597	1.816
5.9333	0.150	0.390	6.846	1.816
6.0000	0.150	0.400	7.086	1.816

Analysis Results
POC 1





+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #1
Total Pervious Area: 4.86
Total Impervious Area: 1.22

Mitigated Landuse Totals for POC #1
Total Pervious Area: 0.89
Total Impervious Area: 5.19

Flow Frequency Method: Log Pearson Type III 17B

Flow Frequency Return Periods for Predeveloped. POC #1

Return Period	**Flow(cfs)**
2 year	0.438721
5 year	0.587968
10 year	0.696309
25 year	0.844441
50 year	0.963224
100 year	1.089463

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	**Flow(cfs)**
2 year	0
5 year	0
10 year	0
25 year	0
50 year	0
100 year	0

Annual Peaks

Annual Peaks for Predeveloped and Mitigated. POC #1

Year	**Predeveloped**	**Mitigated**
1902	0.520	0.000
1903	0.574	0.000
1904	0.648	0.000
1905	0.292	0.000
1906	0.331	0.000
1907	0.435	0.000
1908	0.361	0.000
1909	0.441	0.000
1910	0.423	0.000
1911	0.477	0.000

1912	0.787	0.000
1913	0.340	0.000
1914	1.459	0.000
1915	0.297	0.000
1916	0.550	0.000
1917	0.218	0.000
1918	0.438	0.000
1919	0.277	0.000
1920	0.361	0.000
1921	0.311	0.000
1922	0.483	0.000
1923	0.340	0.000
1924	0.636	0.000
1925	0.269	0.000
1926	0.517	0.000
1927	0.442	0.000
1928	0.316	0.000
1929	0.627	0.000
1930	0.661	0.000
1931	0.321	0.000
1932	0.341	0.000
1933	0.339	0.000
1934	0.548	0.000
1935	0.299	0.000
1936	0.407	0.000
1937	0.531	0.000
1938	0.301	0.000
1939	0.367	0.000
1940	0.662	0.000
1941	0.723	0.000
1942	0.487	0.000
1943	0.485	0.000
1944	0.700	0.000
1945	0.526	0.000
1946	0.414	0.000
1947	0.319	0.000
1948	0.439	0.000
1949	0.676	0.000
1950	0.375	0.000
1951	0.577	0.000
1952	0.648	0.000
1953	0.599	0.000
1954	0.357	0.000
1955	0.333	0.000
1956	0.308	0.000
1957	0.354	0.000
1958	0.442	0.000
1959	0.441	0.000
1960	0.358	0.000
1961	0.991	0.000
1962	0.428	0.000
1963	0.317	0.000
1964	0.913	0.000
1965	0.429	0.000
1966	0.346	0.000
1967	0.484	0.000
1968	0.411	0.000
1969	0.369	0.000

1970	0.412	0.000
1971	0.404	0.000
1972	1.335	0.000
1973	0.772	0.000
1974	0.568	0.000
1975	0.580	0.000
1976	0.618	0.000
1977	0.266	0.000
1978	0.447	0.000
1979	0.489	0.000
1980	0.464	0.000
1981	0.445	0.000
1982	0.359	0.000
1983	0.485	0.000
1984	0.482	0.000
1985	0.546	0.000
1986	0.278	0.000
1987	0.497	0.000
1988	0.292	0.000
1989	0.290	0.000
1990	0.352	0.000
1991	0.533	0.000
1992	0.511	0.000
1993	0.566	0.000
1994	0.390	0.000
1995	0.303	0.000
1996	0.409	0.000
1997	0.364	0.000
1998	0.437	0.000
1999	0.496	0.000
2000	0.413	0.000
2001	0.338	0.000
2002	0.602	0.000
2003	0.350	0.000
2004	0.528	0.000
2005	1.026	0.000
2006	0.473	0.000
2007	0.532	0.000
2008	0.435	0.000
2009	0.332	0.000
2010	0.427	0.000
2011	0.443	0.000
2012	0.418	0.000
2013	0.396	0.000
2014	0.385	0.000
2015	0.628	0.000
2016	0.416	0.000
2017	0.641	0.000
2018	0.382	0.000
2019	0.569	0.000
2020	0.466	0.000
2021	0.394	0.000
2022	0.653	0.000
2023	0.818	0.000
2024	0.856	0.000
2025	0.430	0.000
2026	0.485	0.000
2027	0.528	0.000

2028	0.205	0.000
2029	0.340	0.000
2030	0.716	0.000
2031	0.215	0.000
2032	0.358	0.000
2033	0.452	0.000
2034	0.343	0.000
2035	0.438	0.000
2036	0.355	0.000
2037	0.476	0.000
2038	0.449	0.000
2039	0.902	0.000
2040	0.356	0.000
2041	0.451	0.000
2042	0.527	0.000
2043	0.576	0.000
2044	0.397	0.000
2045	0.320	0.000
2046	0.355	0.000
2047	0.438	0.000
2048	0.360	0.000
2049	0.533	0.000
2050	0.402	0.000
2051	0.560	0.000
2052	0.432	0.000
2053	0.365	0.000
2054	0.717	0.000
2055	0.412	0.000
2056	0.576	0.000
2057	0.275	0.000
2058	0.539	0.000
2059	0.681	0.000

Ranked Annual Peaks

Ranked Annual Peaks for Predeveloped and Mitigated. POC #1

Rank	**Predeveloped**	**Mitigated**
1	1.4586	0.0000
2	1.3352	0.0000
3	1.0258	0.0000
4	0.9911	0.0000
5	0.9131	0.0000
6	0.9017	0.0000
7	0.8563	0.0000
8	0.8184	0.0000
9	0.7870	0.0000
10	0.7717	0.0000
11	0.7230	0.0000
12	0.7165	0.0000
13	0.7156	0.0000
14	0.7000	0.0000
15	0.6810	0.0000
16	0.6760	0.0000
17	0.6615	0.0000
18	0.6608	0.0000
19	0.6526	0.0000
20	0.6481	0.0000
21	0.6479	0.0000
22	0.6415	0.0000

23	0.6364	0.0000
24	0.6279	0.0000
25	0.6269	0.0000
26	0.6180	0.0000
27	0.6017	0.0000
28	0.5992	0.0000
29	0.5795	0.0000
30	0.5767	0.0000
31	0.5763	0.0000
32	0.5758	0.0000
33	0.5736	0.0000
34	0.5686	0.0000
35	0.5682	0.0000
36	0.5660	0.0000
37	0.5597	0.0000
38	0.5498	0.0000
39	0.5480	0.0000
40	0.5458	0.0000
41	0.5385	0.0000
42	0.5333	0.0000
43	0.5326	0.0000
44	0.5319	0.0000
45	0.5309	0.0000
46	0.5283	0.0000
47	0.5279	0.0000
48	0.5270	0.0000
49	0.5262	0.0000
50	0.5196	0.0000
51	0.5166	0.0000
52	0.5111	0.0000
53	0.4966	0.0000
54	0.4961	0.0000
55	0.4888	0.0000
56	0.4874	0.0000
57	0.4851	0.0000
58	0.4850	0.0000
59	0.4847	0.0000
60	0.4843	0.0000
61	0.4831	0.0000
62	0.4823	0.0000
63	0.4773	0.0000
64	0.4765	0.0000
65	0.4729	0.0000
66	0.4665	0.0000
67	0.4644	0.0000
68	0.4518	0.0000
69	0.4509	0.0000
70	0.4488	0.0000
71	0.4472	0.0000
72	0.4455	0.0000
73	0.4426	0.0000
74	0.4419	0.0000
75	0.4415	0.0000
76	0.4410	0.0000
77	0.4406	0.0000
78	0.4386	0.0000
79	0.4383	0.0000
80	0.4378	0.0000

81	0.4377	0.0000
82	0.4368	0.0000
83	0.4351	0.0000
84	0.4347	0.0000
85	0.4323	0.0000
86	0.4296	0.0000
87	0.4293	0.0000
88	0.4279	0.0000
89	0.4268	0.0000
90	0.4226	0.0000
91	0.4181	0.0000
92	0.4156	0.0000
93	0.4144	0.0000
94	0.4128	0.0000
95	0.4124	0.0000
96	0.4122	0.0000
97	0.4107	0.0000
98	0.4093	0.0000
99	0.4068	0.0000
100	0.4037	0.0000
101	0.4021	0.0000
102	0.3970	0.0000
103	0.3962	0.0000
104	0.3942	0.0000
105	0.3901	0.0000
106	0.3849	0.0000
107	0.3821	0.0000
108	0.3750	0.0000
109	0.3693	0.0000
110	0.3672	0.0000
111	0.3645	0.0000
112	0.3644	0.0000
113	0.3614	0.0000
114	0.3607	0.0000
115	0.3595	0.0000
116	0.3589	0.0000
117	0.3581	0.0000
118	0.3580	0.0000
119	0.3574	0.0000
120	0.3561	0.0000
121	0.3551	0.0000
122	0.3547	0.0000
123	0.3540	0.0000
124	0.3524	0.0000
125	0.3500	0.0000
126	0.3463	0.0000
127	0.3430	0.0000
128	0.3407	0.0000
129	0.3401	0.0000
130	0.3399	0.0000
131	0.3396	0.0000
132	0.3391	0.0000
133	0.3376	0.0000
134	0.3332	0.0000
135	0.3316	0.0000
136	0.3313	0.0000
137	0.3206	0.0000
138	0.3196	0.0000

139	0.3192	0.0000
140	0.3165	0.0000
141	0.3158	0.0000
142	0.3112	0.0000
143	0.3083	0.0000
144	0.3034	0.0000
145	0.3006	0.0000
146	0.2987	0.0000
147	0.2966	0.0000
148	0.2922	0.0000
149	0.2919	0.0000
150	0.2898	0.0000
151	0.2779	0.0000
152	0.2771	0.0000
153	0.2754	0.0000
154	0.2691	0.0000
155	0.2664	0.0000
156	0.2181	0.0000
157	0.2149	0.0000
158	0.2046	0.0000

Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.2194	4981	0	0	Pass
0.2269	4422	0	0	Pass
0.2344	3851	0	0	Pass
0.2419	3435	0	0	Pass
0.2494	3012	0	0	Pass
0.2569	2715	0	0	Pass
0.2644	2401	0	0	Pass
0.2720	2171	0	0	Pass
0.2795	1942	0	0	Pass
0.2870	1756	0	0	Pass
0.2945	1565	0	0	Pass
0.3020	1404	0	0	Pass
0.3095	1283	0	0	Pass
0.3170	1152	0	0	Pass
0.3246	1058	0	0	Pass
0.3321	965	0	0	Pass
0.3396	879	0	0	Pass
0.3471	796	0	0	Pass
0.3546	739	0	0	Pass
0.3621	647	0	0	Pass
0.3696	602	0	0	Pass
0.3771	545	0	0	Pass
0.3847	502	0	0	Pass
0.3922	468	0	0	Pass
0.3997	433	0	0	Pass
0.4072	395	0	0	Pass
0.4147	352	0	0	Pass
0.4222	322	0	0	Pass
0.4297	296	0	0	Pass
0.4373	267	0	0	Pass
0.4448	247	0	0	Pass
0.4523	222	0	0	Pass
0.4598	209	0	0	Pass
0.4673	192	0	0	Pass
0.4748	178	0	0	Pass
0.4823	166	0	0	Pass
0.4899	150	0	0	Pass
0.4974	137	0	0	Pass
0.5049	131	0	0	Pass
0.5124	123	0	0	Pass
0.5199	116	0	0	Pass
0.5274	108	0	0	Pass
0.5349	94	0	0	Pass
0.5425	91	0	0	Pass
0.5500	84	0	0	Pass
0.5575	80	0	0	Pass
0.5650	76	0	0	Pass
0.5725	71	0	0	Pass
0.5800	62	0	0	Pass
0.5875	61	0	0	Pass
0.5950	56	0	0	Pass
0.6026	54	0	0	Pass
0.6101	54	0	0	Pass

0.6176	52	0	0	Pass
0.6251	49	0	0	Pass
0.6326	46	0	0	Pass
0.6401	44	0	0	Pass
0.6476	41	0	0	Pass
0.6552	38	0	0	Pass
0.6627	34	0	0	Pass
0.6702	33	0	0	Pass
0.6777	32	0	0	Pass
0.6852	30	0	0	Pass
0.6927	30	0	0	Pass
0.7002	30	0	0	Pass
0.7078	29	0	0	Pass
0.7153	29	0	0	Pass
0.7228	25	0	0	Pass
0.7303	22	0	0	Pass
0.7378	22	0	0	Pass
0.7453	22	0	0	Pass
0.7528	20	0	0	Pass
0.7604	20	0	0	Pass
0.7679	18	0	0	Pass
0.7754	16	0	0	Pass
0.7829	16	0	0	Pass
0.7904	15	0	0	Pass
0.7979	15	0	0	Pass
0.8054	15	0	0	Pass
0.8129	15	0	0	Pass
0.8205	14	0	0	Pass
0.8280	14	0	0	Pass
0.8355	13	0	0	Pass
0.8430	13	0	0	Pass
0.8505	12	0	0	Pass
0.8580	11	0	0	Pass
0.8655	11	0	0	Pass
0.8731	11	0	0	Pass
0.8806	11	0	0	Pass
0.8881	11	0	0	Pass
0.8956	11	0	0	Pass
0.9031	10	0	0	Pass
0.9106	10	0	0	Pass
0.9181	9	0	0	Pass
0.9257	9	0	0	Pass
0.9332	9	0	0	Pass
0.9407	9	0	0	Pass
0.9482	9	0	0	Pass
0.9557	8	0	0	Pass
0.9632	8	0	0	Pass

Water Quality

Water Quality BMP Flow and Volume for POC #1

On-line facility volume:	0.5677 acre-feet
On-line facility target flow:	0.7879 cfs.
Adjusted for 15 min:	0.7879 cfs.
Off-line facility target flow:	0.4577 cfs.
Adjusted for 15 min:	0.4577 cfs.

LID Report

LID Technique	Used for Treatment ?	Total Volume Needs Treatment (ac-ft)	Volume Through Facility (ac-ft)	Infiltration Volume (ac-ft)	Cumulative Volume Infiltration Credit	Percent Volume Infiltrated	Water Quality	Percent Water Quality Treated	Comment
Gravel Trench Bed 1 POC	☐	2019.38			☐	100.00			
Total Volume Infiltrated		2019.38	0.00	0.00		100.00	0.00	0%	No Treat. Credit
Compliance with LID Standard 8% of 2-yr to 50% of 2-yr									Duration Analysis Result = Passed

Model Default Modifications

Total of 0 changes have been made.

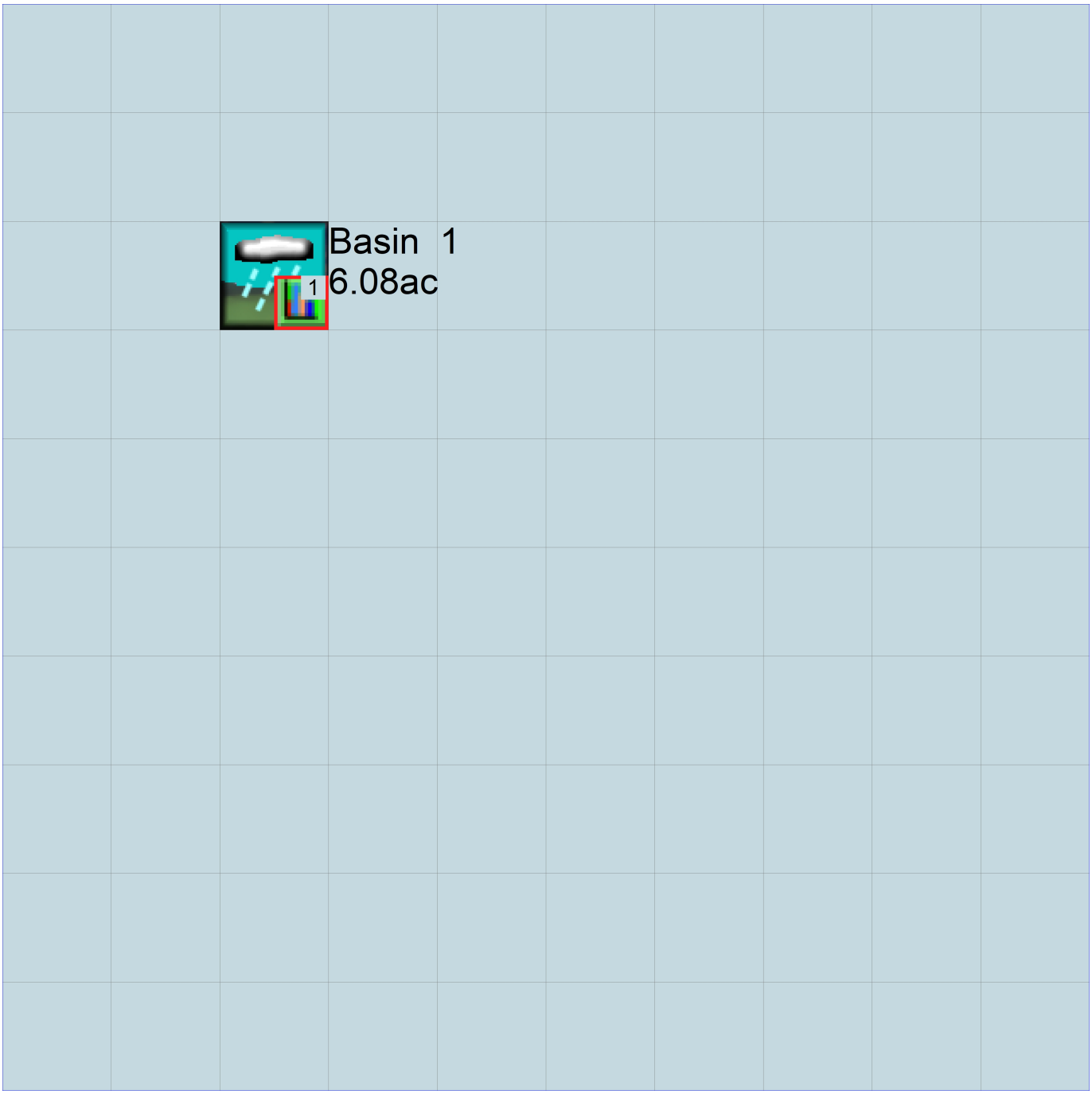
PERLND Changes

No PERLND changes have been made.

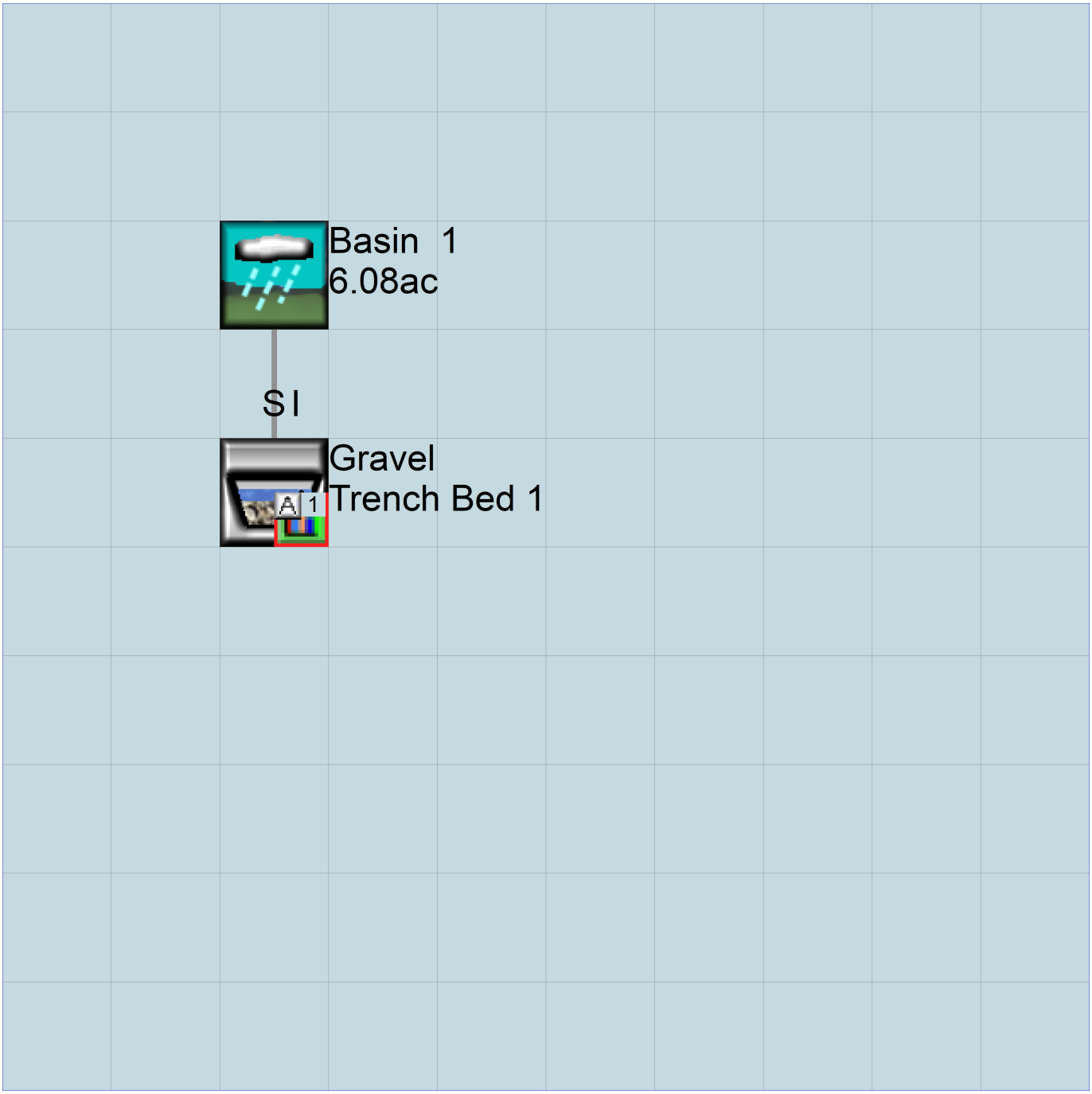
IMPLND Changes

No IMPLND changes have been made.

Appendix
Predeveloped Schematic



Mitigated Schematic



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6.0 CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

6.0 CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

The site has been previous cleared and graded. The erosion control measures proposed under this plan include a sediment trap, v-ditches with rock check dams, silt fence, inlet protection and construction entrances. For further detail please see the attached SWPPP and design plans.

Construction Stormwater General Permit

Stormwater Pollution Prevention Plan (SWPPP)

for

Northwest Logistics Center Phase 2 – Parking Lot Expansion

Prepared for:

The Washington State Department of Ecology

Southwest Regional Office

Permittee / Owner	Developer	Operator / Contractor
Panattoni Development Company, Inc. 1821 Dock St, Suite 100 Tacoma, WA 98402	Panattoni Development Company, Inc. 1821 Dock St, Suite 100 Tacoma, WA 98402	Sierra Construction 14800 NE Woodinville Way Woodinville, WA 98072

NEC – Center Drive and International Place, DuPont WA

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
	Sierra Construction	

SWPPP Prepared By

Name	Organization	Contact Phone Number
Dan Balmelli	Barghausen Consulting Engineers, Inc.	(425) 251-6222

SWPPP Preparation Date

June 30, 2020

Project Construction Dates

Start Date	End Date
October 2020	July 2021

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List of Acronyms and Abbreviations

Acronym / Abbreviation	Explanation
303(d)	Section of the Clean Water Act pertaining to Impaired Waterbodies
BFO	Bellingham Field Office of the Department of Ecology
BMP(s)	Best Management Practice(s)
CESCL	Certified Erosion and Sediment Control Lead
CO_2	Carbon Dioxide
CRO	Central Regional Office of the Department of Ecology
CSWGP	Construction Stormwater General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ERO	Eastern Regional Office of the Department of Ecology
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
GULD	General Use Level Designation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
NWRO	Northwest Regional Office of the Department of Ecology
pH	Power of Hydrogen
RCW	Revised Code of Washington
SPCC	Spill Prevention, Control, and Countermeasure
su	Standard Units
SWMMEW	Stormwater Management Manual for Eastern Washington
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
SWRO	Southwest Regional Office of the Department of Ecology
TMDL	Total Maximum Daily Load
VFO	Vancouver Field Office of the Department of Ecology
WAC	Washington Administrative Code
WSDOT	Washington Department of Transportation
WWHM	Western Washington Hydrology Model

1 Project Information

Project/Site Name: Northwest Logistics Center 2 – Parking Lot Expansion
Street/Location: NEC – Center Drive and International Place
City: DuPont **State:** WA **Zip code:** 98327
Subdivision: Northwest Landing
Receiving waterbody: (infiltration)_

1.1 Existing Conditions

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage: 37.50 ac
Disturbed acreage: 6.93 ac
Existing structures: The southern parcel has an existing warehouse building that will remain with the site construction.
Landscape topography: The existing southern parcel is fully developed with existing landscaping at the perimeter. The smaller northern parcel is undeveloped and has been previously cleared and graded. The only vegetation is small brush and shrubs. The sites are relatively flat in grade
Drainage patterns: The site currently infiltrates on-site through outwash soils.
Existing Vegetation: The existing site has grasses and other small shrubs.
Critical Areas: The site is located within a critical aquifer recharge area. There is also an Oak Tree Protection Area within the larger site to the south which will remain undisturbed during construction.

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody: No impairments for 303(d) are known for the receiving waterbody.

Table 1 – Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Max. Concentration Detected (mg/kg)

1.2 Proposed Construction Activities

Description of site development (example: subdivision):
The proposed conditions for this site include vehicular parking and drive aisles, a guard house, sidewalks, landscape area, and an underground infiltration trench for stormwater management.

Description of construction activities (example: site preparation, demolition, excavation):
The construction activities covered under this SWPPP for this project will include demolition, site preparation, TESC installation, site grading, utility installation, guard house footprint construction and site paving.

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

The sites and roadways surrounding this project have conveyance systems in place, so there is no runoff expected to enter this site from off site properties. The soils on site are outwash soils with high infiltration rates, therefore any potential site runoff is assumed to infiltrate into these soils.

Description of final stabilization (example: extent of revegetation, paving, landscaping):
With the completion of construction, the entire site area of 37.50 acres will be approximately 80.6% impervious surfaces and 19.4% will be landscape areas or existing vegetation.

Contaminated Site Information:

Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):
The site is not expected to encounter any contaminated soils or groundwater.

2 Construction Stormwater Best Management Practices (BMPs)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e., hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

2.1 The 13 Elements

2.1.1 Element 1: Preserve Vegetation / Mark Clearing Limits

To protect adjacent properties and to reduce the area of soil exposed to construction, the limits of construction will be clearly marked before land-disturbing activities begin. Areas that are to be preserved, as well as all sensitive areas and their buffers, shall be clearly delineated, both in the field and on the plans. A silt fence will be installed around the perimeter of the project site to mark the limits of construction as well as protect surrounding properties from any possible sediment laden runoff and grading will occur around the perimeter the site to insure there is no runoff of any ponded stormwater.

List and describe BMPs:

BMP C233: Silt Fence

Installation Schedules: TBD

Inspection and Maintenance plan:

Silt Fence Maintenance

- Repair any damage immediately.
- Intercept and convey all evident concentrated flows uphill of the silt fence to a sediment pond.
- Check the uphill side of the fence for signs of the fence clogging and acting as a barrier to flow and then causing channelization of flows parallel to the fence. If this occurs, replace the fence or remove the trapped sediment.
- Remove sediment deposits when the deposit reaches approximately one-third the height of the silt fence, or install a second silt fence.
- Replace filter fabric that has deteriorated due to ultraviolet breakdown.

Responsible Staff: Contractor/CESL

2.1.2 Element 2: Establish Construction Access

Access points shall be stabilized to prevent the tracking of sediment onto public roads. Street sweeping, and street cleaning shall be employed to prevent sediment from entering state waters. One stabilized construction entrance will be installed to the southwest entrance to the project site. The roads shall be swept daily should sediment collect on them.

List and describe BMPs:

BMP C105: Stabilized Construction Entrance

Installation Schedules: TBD

Inspection and Maintenance plan:

Stabilized Construction Entrance Maintenance

- Quarry spalls shall be added if the pad is no longer in accordance with the specifications.
- If the entrance is not preventing sediment from being tracked onto pavement, then alternative measures to keep the streets free of sediment shall be used. This may include replacement/cleaning of the existing quarry spalls, street sweeping, and an increase in the dimensions of the entrance.
- Any sediment that is tracked onto pavement shall be removed by shoveling or street sweeping. The sediment collected by sweeping shall be removed or stabilized on site. The pavement shall not be cleaned by washing down the street, except when high efficiency sweeping is ineffective and there is a threat to public safety. If it is necessary to wash the streets, the construction of a small sump to contain the wash water shall be considered. The sediment would then be washed into the sump where it can be controlled.
- Perform street sweeping by hand or with a high efficiency sweeper. Do not use a non-high efficiency mechanical sweeper because this creates dust and throws soils into storm systems or conveyance ditches.
- Any quarry spalls that are loosened from the pad, which end up on the roadway shall be removed immediately.
- If vehicles are entering or exiting the site at points other than the construction entrance(s), fencing (see BMP C103) shall be installed to control traffic.
- Upon project completion and site stabilization, all construction accesses intended as permanent access for maintenance shall be permanently stabilized.

Responsible Staff: Contractor/CESL

2.1.3 Element 3: Control Flow Rates

In order to protect the properties and waterways downstream of the project site, stormwater from the site will be controlled by construction of temporary sediment trap as one of the first items of construction along with installation of silt fence around the downstream property boundary areas. Once the trap is constructed, stormwater during construction will be captured through v-ditches with rock check dams in order to control the flow of stormwater runoff before reaching the temporary sediment trap. The temporary trap has been located at a low point on site with adequate surface area for sediment settlement per the DOE requirements from BMP C240 and also outside the limits of permanent infiltration facilities. The sediment trap discharge will infiltrate onsite. The facilities must be functioning properly before construction of site improvements.

Will you construct stormwater retention and/or detention facilities?
☒ Yes ☐ No

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?
☐ Yes ☒ No

List and describe BMPs:
BMP C240: Sediment Trap

BMP C207: Check Dams

Installation Schedules: TBD

Inspection and Maintenance plan:

Sediment Trap Maintenance

- Sediment shall be removed from the trap when it reaches 1-foot in depth.
- Any damage to the pond embankments or slopes shall be repaired.

Check Dam Maintenance

- Check dams shall be monitored for performance and sediment accumulation during and after each runoff producing rainfall.
- Sediment shall be removed when it reaches one half the sump depth.
- Anticipate submergence and deposition above the check dam and erosion from high flows around the edges of the dam.
- If significant erosion occurs between dams, install a protective riprap liner in that portion of the channel.

Responsible Staff: Contractor/CESCL

2.1.4 Element 4: Install Sediment Controls

Constructing the silt fence and sediment trap are the first steps to create the necessary gradients to prevent off-site discharge of sediment. Rock check dams and v-ditches will be used to convey stormwater runoff into the sediment trap to collect out sediment. The sediment trap is expected to be adequate for sediment control for the site. The surface area requirements for the sediment trap is met with the designed TESC plan and it is not expected that further treatment or other sediment controlling measures are necessary.

However, if the proposed sediment controls are ineffective as determined by the CESCL, they will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B.

List and describe BMPs:

BMP C233: Silt Fence

BMP C240: Sediment Trap

Installation Schedules: TBD

Inspection and Maintenance plan:

Silt Fence Maintenance

- Repair any damage immediately.
- Intercept and convey all evident concentrated flows uphill of the silt fence to a sediment pond.
- Check the uphill side of the fence for signs of the fence clogging and acting as a barrier to flow and then causing channelization of flows parallel to the fence. If this occurs, replace the fence or remove the trapped sediment.
- Remove sediment deposits when the deposit reaches approximately one-third the height of the silt fence, or install a second silt fence.
- Replace filter fabric that has deteriorated due to ultraviolet breakdown.

Sediment Trap Maintenance

- Sediment shall be removed from the trap when it reaches 1-foot in depth.
- Any damage to the pond embankments or slopes shall be repaired.

Responsible Staff: Contractor/CESL

2.1.5 Element 5: Stabilize Soils

Exposed and unworked soils shall be stabilized with the application of effective BMPs to prevent erosion throughout the life of the project. In general, cut and fill slopes will be stabilized as soon as possible and soil stockpiles will be stabilized through hydroseeding. All stockpiled soils shall be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels. To minimize the amount of soil exposed through the life of the project, grading will be completed within a reasonable time frame after the preloading of the building footprints is completed. To minimize soil compaction, a construction entrance will be used as well as keeping heavy equipment and machinery off unpaved areas as much as possible.

West of the Cascade Mountains Crest

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	May 1 – September 30	7 days
During the Wet Season	October 1 – April 30	2 days
Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.		

Anticipated project dates: Start date: May 2018 **End date:** May 2019

Will you construct during the wet season?
☒ Yes ☐ No

List and describe BMPs:

BMP C121: Mulching

BMP C140: Dust Control

Installation Schedules: TBD

Inspection and Maintenance plan:

Dust Control Maintenance

- Respray area as necessary to keep dust to a minimum.

Mulching Maintenance

- The thickness of the cover must be maintained.
- Any areas that experience erosion shall be remulched and/or protected with a net or blanket. If the erosion problem is drainage related, then the problem shall be fixed and the eroded area remulched.

Responsible Staff: Contractor/CESL

2.1.6 Element 6: Protect Slopes

All cut and fill slopes will be designed, constructed, and protected in a manner that minimizes erosion. It is required that any temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. For modeling the condition with the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas have been modeled as "landscaped area". Scouring will be reduced by using v-ditches to convey stormwater to the sediment trap on site. However, if the proposed BMPs to protect slopes are ineffective as determined by the CESCL, they will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B.

Will steep slopes be present at the site during construction?
☐ Yes ☒ No

List and describe BMPs:

BMP C120: Temporary and Permanent Seeding

Installation Schedules: TBD

Inspection and Maintenance plan:

Temporary and Permanent Seeding Maintenance

- Reseed any seeded areas that fail to establish at least 80 percent cover (100 percent cover for areas that receive sheet or concentrated flows). If reseeding is ineffective, use an alternate method such as sodding, mulching, or nets/blankets. If winter weather prevents adequate grass growth, this time limit may be relaxed at the discretion of the local authority when sensitive areas would otherwise be protected.
- Reseed and protect by mulch any areas that experience erosion after achieving adequate cover. Reseed and protect by mulch any eroded area.
- Supply seeded areas with adequate moisture, but do not water to the extent that it causes runoff.

Responsible Staff: Contractor/CESL

2.1.7 Element 7: Protect Drain Inlets

All storm drain inlets and culverts made operable during construction shall be protected to prevent unfiltered or untreated water from entering the drainage conveyance system. However, the first priority is to keep all access roads clean of sediment and keep wash water separate from entering storm drains until treatment can be provided. Storm Drain Inlet Protection (BMP C220) will be implemented for all drainage inlets and culverts that could potentially be impacted by sediment-laden runoff on and near the project site. If this is deemed ineffective by the CESCL, additional BMPs may be necessary, as listed in Appendix B. Inlet protection is the last component of a treatment train and protection of drain inlets include additional sediment and erosion control measures. Inlet protection devices will be cleaned (or removed and replaced), when sediment has filled the device by one third (1/3) or as specified by the manufacturer.

List and describe BMPs:

BMP C220: Storm Drain Inlet Protection

Installation Schedules: TBD

Inspection and Maintenance plan:

Storm Drain Inlet Protection Maintenance

- Inspect catch basin filters frequently, especially after storm events. Clean and replace clogged inserts. For systems with clogged stone filters: pull away the stones from the inlet and clean or replace. An alternative approach would be to use the clogged stone as fill and put fresh stone around the inlet.
- Do not wash sediment into storm drains while cleaning. Spread all excavated material evenly over the surrounding land area or stockpile and stabilize as appropriate.
- Inlets to be inspected weekly and a minimum of daily during storm events

Responsible Staff: Contractor/CESL

2.1.8 Element 8: Stabilize Channels and Outlets

For construction stormwater conveyance, v-ditches with rock check dams will be installed to stabilize channels. Stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent streambanks, slopes, and downstream reaches shall be provided at the outlets of all conveyance systems. The project site is located west of the Cascade Mountain Crest. As such, all temporary on-site conveyance channels shall be designed, constructed, and stabilized to prevent erosion from the expected peak 10 minute velocity of flow from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as “landscaped area”.

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs:

BMP C207: Check Dams

Installation Schedules: TBD

Inspection and Maintenance plan:

Check Dam Maintenance

- Check dams shall be monitored for performance and sediment accumulation during and after each runoff producing rainfall. Sediment shall be removed when it reaches one half the sump depth.
- Anticipate submergence and deposition above the check dam and erosion from high flows around the edges of the dam.
- If significant erosion occurs between dams, install a protective riprap liner in that portion of the channel.

Responsible Staff: Contractor/CESCL

2.1.9 Element 9: Control Pollutants

The following pollutants are anticipated to be present on-site:

Table 2 – Pollutants

Pollutant (List pollutants and source, if applicable)
Hydraulic fluid - May be present on site with construction equipment.
Diesel - May be present on site with construction equipment.
Motor Oil - May be present on site with construction equipment.

All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well-organized, and free of debris. Chemicals, liquid products, petroleum products, and other polluting materials will be kept covered, stored appropriately, and locked when not in use to prevent vandalism or misuse of these materials that may pollute state waters.

If required, BMPs to be implemented to control specific sources of pollutants are discussed below. Vehicles, construction equipment, and/or petroleum product storage/dispensing:

All vehicles, equipment, and petroleum product storage/dispensing areas will be inspected regularly to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.

On-site fueling tanks and petroleum product storage containers shall include secondary containment.

Spill prevention measures, such as drip pans, will be used when conducting maintenance and repair of vehicles or equipment.

In order to perform emergency repairs on site, temporary plastic will be placed beneath and, if raining, over the vehicle.

Contaminated surfaces shall be cleaned immediately following any discharge or spill incident.

Storm drain inlets vulnerable to stormwater discharge carrying dust, soil, or debris will be protected using Storm Drain Inlet Protection (BMP C220 as described above for Element 7).

Process water and slurry resulting from sawcutting and surfacing operations will be prevented from entering the waters of the State by implementing Sawcutting and Surfacing Pollution Prevention measures (BMP C152).

Concrete and grout:

Process water and slurry resulting from concrete work will be prevented from entering the waters of the State by implementing Concrete Handling measures (BMP C151).

List and describe BMPs:

BMP C151: Concrete Handling

BMP C152: Sawcutting and Surfacing Pollution Prevention

Installation Schedules: TBD

Inspection and Maintenance plan:

Concrete Handling Maintenance

- Check containers for holes in the liner daily during concrete pours and repair the same day.

Sawcutting and Surfacing Pollution Prevention

- Continually monitor operations to determine whether slurry, cuttings, or process water could enter waters of the state. If inspections show that a violation of water quality standards could occur, stop operations and immediately implement preventive measures such as berms, barriers, secondary containment, and vacuum trucks.

Responsible Staff: Contractor/CESL

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?
☐ Yes ☒ No

Will wheel wash or tire bath system BMPs be used during construction?
☐ Yes ☒ No

Will pH-modifying sources be present on-site?
☐ Yes ☒ No

Table 3 – pH-Modifying Sources

☒	None
☐	Bulk cement
☐	Cement kiln dust
☐	Fly ash
☐	Other cementitious materials
☐	New concrete washing or curing waters
☐	Waste streams generated from concrete grinding and sawing
☐	Exposed aggregate processes
☐	Dewatering concrete vaults

☐	Concrete pumping and mixer washout waters
☐	Recycled concrete
☐	Recycled concrete stockpiles
☐	Other (i.e., calcium lignosulfate) [please describe:]

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed.

Will uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters?

☐ Yes ☒ No

2.1.10 Element 10: Control Dewatering

All dewatering water from open cut excavation, tunneling, foundation work, trench, or underground vaults will be collected into a controlled holding tank prior to discharge to the sanitary sewer. Highly turbid dewatering water from soils known or suspected to be contaminated, or from use of construction equipment, may require additional monitoring and treatment as required for the specific pollutants based on the sanitary sewer permit conditions. Such monitoring is the responsibility of the contractor. It is not anticipated that any dewatering will be needed however BMPs from Appendix B may be implemented by the CESCL if needed.

Table 4 – Dewatering BMPs

☒	Infiltration
☐	Transport off-site in a vehicle (vacuum truck for legal disposal)
☐	Ecology-approved on-site chemical treatment or other suitable treatment technologies
☐	Sanitary or combined sewer discharge with local sewer district approval (last resort)
☐	Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

List and describe BMPs: N/A

Installation Schedules: N/A

Inspection and Maintenance plan: N/A

Responsible Staff: N/A

2.1.11 Element 11: Maintain BMPs

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW or Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

2.1.12 Element 12: Manage the Project

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
  - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
  - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the Site Map. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
  - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Table 5 – Management

☒	Design the project to fit the existing topography, soils, and drainage patterns
☒	Emphasize erosion control rather than sediment control
☒	Minimize the extent and duration of the area exposed
☒	Keep runoff velocities low
☒	Retain sediment on-site
☒	Thoroughly monitor site and maintain all ESC measures
☒	Schedule major earthwork during the dry season
☐	Other (please describe)

Table 6 – BMP Implementation Schedule

Phase of Construction Project	Stormwater BMPs	Date	Wet/Dry Season
TBD			

2.1.13 Element 13: Protect Low Impact Development (LID) BMPS

In order to protect LID BMPs during the construction process, many steps can be taken through proper erosion and sedimentation control. For this project, an infiltration trench is proposed for the flow control. In order to protect this BMP care should be taken not to compact the area for the trench during construction. To ensure the high infiltration rate of the soil is maintained, the site should be swept before the stormwater facility goes online as well. Care should also be taken not to discharge sediment laden water to the existing infiltration galleries for the southern developed sites.

3 Pollution Prevention Team

Table 7 – Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	TBD	
Resident Engineer	Dan Balmelli	(425) 251-6222
Emergency Ecology Contact	Southwest Regional Office: WA Emergency Management Division	1-800-258-5990
Emergency Permittee/ Owner Contact	Brian Mattson	(206) 422-1871
Non-Emergency Owner Contact	Bjorn Brynestad	(253) 444-8747
Monitoring Personnel	TBD	
Ecology Regional Office	Southwest Regional Office	(360) 407-6300

4 Monitoring and Sampling Requirements

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

File a blank form under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

4.1 Site Inspection

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The discharge point(s) to the sanitary sewer are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

5 Reporting and Record Keeping

5.1 Record Keeping

5.1.1 Site Log Book

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

5.1.2 Records Retention

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

5.1.3 Updating the SWPPP

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

5.2 Reporting

5.2.1 Discharge Monitoring Reports

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting “No Discharge”. The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology’s WQWebDMR System.

5.2.2 Notification of Noncompliance

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- **Central Region** at (509) 575-2490 for Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, or Yakima County
- **Eastern Region** at (509) 329-3400 for Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, or Whitman County
- **Northwest Region** at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County
- **Southwest Region** at (360) 407-6300 for Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, or Wahkiakum

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results

5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO_2 sparging is planned for adjustment of high pH water.

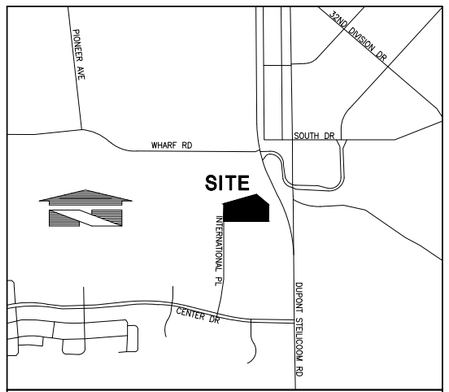
A. Site Map

PRELIMINARY COVER SHEET
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1/4 OF THE SW1/4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 50' 100' 200'
SCALE: 1"=100'

811 Know what's **below.** **Call** before you dig.



VICINITY MAP DUPONT, WASHINGTON

SURVEY INFORMATION

LEGAL DESCRIPTIONS:
(PER FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. NCS-921048-WA1, DATED AUGUST 31, 2018 8:00AM)

PARCEL A:
RESULTANT PARCEL, CITY OF DUPONT LOT COMBINATION NO. LLE 15-01, RECORDED MARCH 13, 2015 UNDER RECORDING NO. 201503130126, RECORDS OF PIERCE COUNTY, WASHINGTON.

PARCEL B:
A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS CREATED BY INSTRUMENT RECORDED MAY 17, 2006 UNDER RECORDING NO. 200605170142 AND AS DELINEATED ON SAID BOUNDARY LINE ADJUSTMENT RECORDED MARCH 21, 2007 UNDER RECORDING NO. 200703215009, IN PIERCE COUNTY, WASHINGTON.

HORIZONTAL DATUM – BASIS OF BEARINGS:
THE BASIS OF BEARINGS IS THE BEARING BETWEEN WCCS POINTS 413 (GPS 031) AND 1130 (LEWIS GP 809), TAKEN AS SOUTH 02° 28' 12" EAST, BASED UPON THE NORTH AMERICAN DATUM OF 1983-NAD 83 (91) – WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.

VERTICAL DATUM:
NATIONAL GEODETIC VERTICAL DATUM OF 1929 – NGVD 29
FROM DATA PROVIDED BY THE CITY OF DUPONT PLANNING DEPARTMENT – THE BENCHMARK IS THE SURFACE MON AT THE CENTERLINE OF THE INTERNATIONAL PLACE CUL-DE-SAC, TAKEN AS 221.82 FEET

PROCEDURE / NARRATIVE:
A FIELD TRAVERSE USING A TOPCON GT 1000 AND DELL TABLET WITH MAGNET FEILD WITH FIELD NOTES WAS PERFORMED, ESTABLISHING THE ANGULAR, DISTANCE, AND VERTICAL RELATIONSHIPS BETWEEN THE MONUMENTS, PROPERTY LINES AND IMPROVEMENTS. THE RESULTING DATA MEETS OR EXCEEDS THE STANDARDS FOR LAND BOUNDARY SURVEYS AS SET FORTH IN WAC 332-130-090.

LOT AREA:
232,834 SQ. FT.± (5.35 ACRES±)

SITE ADDRESS:
3330 INTERNATIONAL PL, DUPONT, WA 98327

TITLE INFORMATION:
FIDELITY NATIONAL TITLE OF WASHINGTON, INC ESCROW NO. 14255634-410-CFS, DATED MAY 16, 2012 WAS RELIED UPON FOR TITLE INFORMATION AND SUPPORTING DOCUMENTS. PLEASE REFER TO THAT REPORT FOR FURTHER INFORMATION REGARDING FINANCIAL MATTERS BEYOND THE SCOPE OF THIS SURVEY. DUE TO THE AGE OF THIS REPORT, THIS SURVEY DOESN'T PURPORT TO SHOW ALL EASEMENTS OF RECORD.

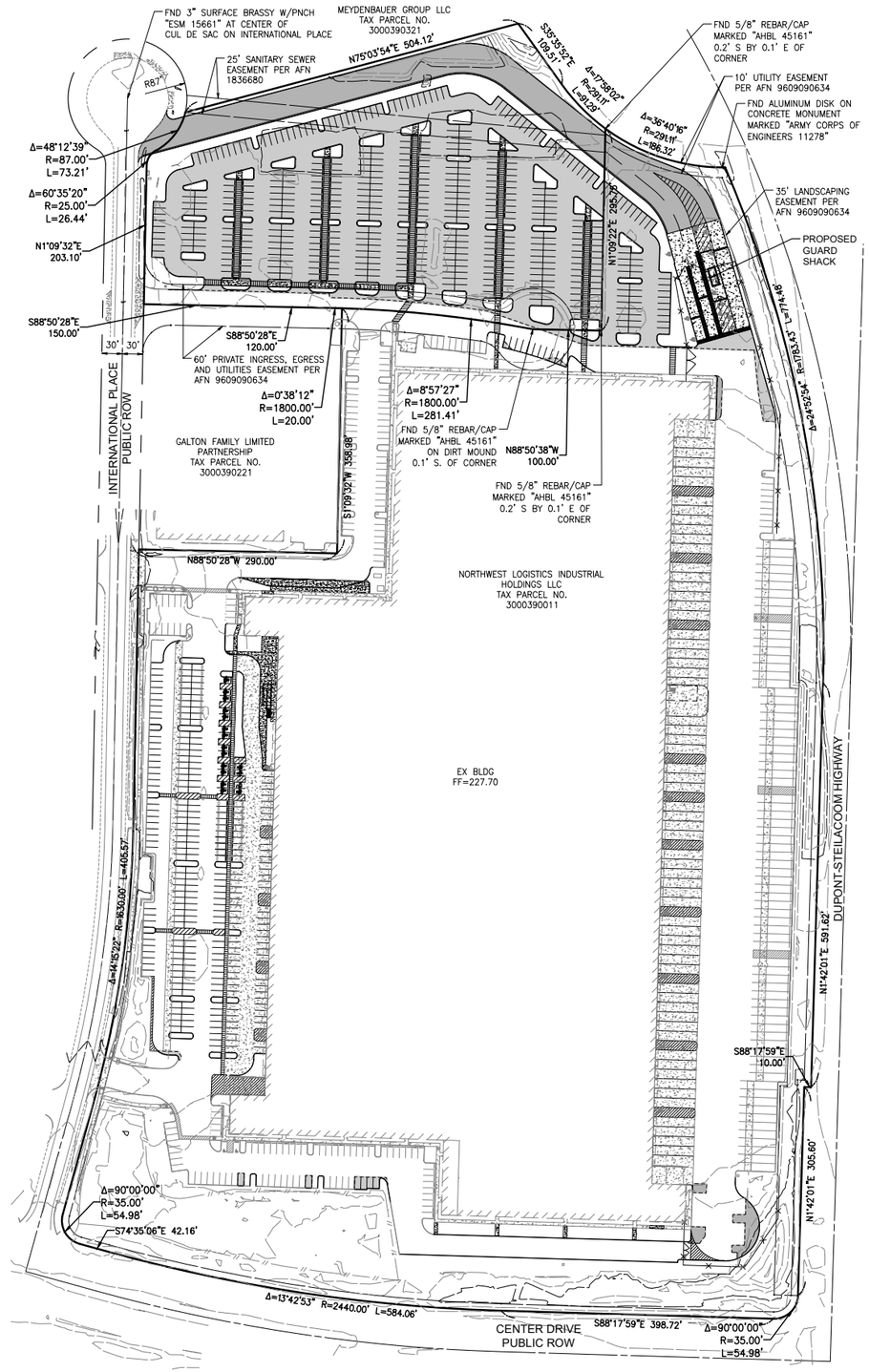
DATES OF SURVEYS:
THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON MAY 4, 2020. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN MAYL OF 2020.

TAX ACCOUNT NUMBERS:
APN 300039-0282

SURVEYORS NOTES:
- ALL DISTANCES SHOWN HEREON ARE GROUND MEASUREMENTS IN U.S. SURVEY FEET.
- UNDERGROUND UTILITIES AND FEATURES DEPICTED HEREON ARE BASED ON FIELD OBSERVATION ONLY. THE TRUE LOCATION, NATURE AND/OR EXISTENCE OF BELOW GROUND FEATURES, DETECTED OR UNDETECTED, SHOULD BE VERIFIED. THERE IS NO EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS. THERE IS NO EVIDENCE OF ANY CHANGES IN THE STREET RIGHT-OF-WAYS OR STREET/SIDEWALK REPAIRS OR ANY USE AS A LANDFILL.
- THIS SURVEY WAS PERFORMED WITHOUT A CURRENT TITLE REPORT AND DOESN'T PURPORT TO SHOW ALL EASEMENTS OF RECORD.

GENERAL SITE NOTES:

1. THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
2. CONTRACTOR SHALL ASSURE THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE OR SHOWN ON RECORD DRAWING PROVIDED BY OTHERS ARE SHOWN HEREON. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. BARGHAUSEN CONSULTING ENGINEERS, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS OR RECORDS OF OTHERS. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
6. INSPECTION OF SITE WORK WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE GOVERNING JURISDICTION. INSPECTION OF PRIVATE FACILITIES WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
7. PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY THE CONTRACTOR SHALL CONTACT THE AGENCY AND/OR UTILITY INSPECTION PERSONNEL AND ARRANGE ANY REQUIRED PRE-CONSTRUCTION MEETING(S). CONTRACTOR SHALL PROVIDE ONE WEEK MINIMUM ADVANCE NOTIFICATION TO OWNER, FIELD ENGINEER AND ENGINEER OF PRE-CONSTRUCTION MEETINGS.
8. THE CONTRACTOR IS RESPONSIBLE FOR WORKER AND SITE SAFETY AND SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED.
10. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ALL ADJACENT PUBLIC AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITY SERVICES THAT ARE TO REMAIN OPERATIONAL WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
11. TWO (2) COPIES OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. ONE (1) SET WITH RECORDS OF AS-BUILT INFORMATION SHALL BE SUBMITTED TO BARGHAUSEN CONSULTING ENGINEERS, INC. AT COMPLETION OF PROJECT.
12. CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL CONTROL FOR ALL NEW IMPROVEMENTS. STAKING CONTROL SHALL BE TAKEN FROM ELECTRONIC PLAN FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC.
13. CONTRACTOR SHALL REQUEST FROM BARGHAUSEN CONSULTING ENGINEERS, INC., PRIOR TO ANY CONSTRUCTION STAKING OR CONSTRUCTION WORK, A FORMAL CONSTRUCTION RELEASE PLAN SET OR SPECIFIC RELEASE IN WRITING. THE APPROVED AGENCY PERMIT DRAWINGS WILL NOT BE CONSIDERED CONSTRUCTION RELEASE PLANS BY BARGHAUSEN CONSULTING ENGINEERS, INC. UNLESS BARGHAUSEN CONSULTING ENGINEERS, INC. HAS GIVEN A FORMAL WRITTEN RELEASE OR ISSUED A CONSTRUCTION RELEASE PLAN SET.



APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

GEOTECHNICAL REPORT NOTES:

1. THE FOLLOWING GEOTECHNICAL REPORTS FOR THE SITE SHALL BE CONSIDERED PART OF THESE CONSTRUCTION DOCUMENTS:

   SOILS REPORTS: GEOTECHNICAL ENGINEERING STUDY
   DUPONT TRAILER YARD
   PROJECT NO: T-6897-3
   DATE: MAY 12, 2020

   PREPARED BY: TERRA ASSOCIATES
   12220 113TH AVE NE, SUITE 130
   KIRKLAND, WA 98034
   (425) 821-777

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PROVISIONS OF THE SOILS REPORT FOR THE SITE BE OBSERVED AND COMPLIED WITH DURING ALL PHASES OF THE SITE PREPARATION, GRADING OPERATIONS, FOUNDATION, SLAB, AND PAVING CONSTRUCTION.
3. ANY PROVISIONS OF THE SOILS REPORT WHICH CONFLICT WITH INFORMATION SHOWN ELSEWHERE ON THESE DRAWINGS, OR WHICH REQUIRE FURTHER CLARIFICATION, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR DETERMINATION.
4. A REPRESENTATIVE OF THE SOILS ENGINEER SHALL BE AVAILABLE TO OBSERVE AND APPROVE THE EARTHWORK OPERATIONS AND TO VERIFY FIELD CONDITIONS AS WORK PROCEEDS. THE SOILS ENGINEER SHALL SUBMIT FIELD REPORTS CERTIFYING THAT THE METHODS AND MATERIALS OF THE EARTHWORK OPERATIONS WERE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS INVESTIGATION AND THAT THE WORK WAS PERFORMED TO HIS/HER SATISFACTION.
5. THE SOILS ENGINEER SHOULD BE NOTIFIED AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY SITE CLEARING OR GRADING.

SHEET INDEX

C1 OF 12 PRELIMINARY COVER SHEET
C2 OF 12 PRELIMINARY OVERALL CIVIL SITE PLAN
C3 OF 12 PRELIMINARY EXISTING CONDITIONS AND DEMO PLAN NORTH
C4 OF 12 PREILIMINARY EXISTING CONDITIONS AND DEMO PLAN SOUTH
C5 OF 12 PRELIMINARY TESC PLAN NORTH
C6 OF 12 PRELIMINARY TESC PLAN SOUTH
C7 OF 12 PRELIMINARY TESC DETAILS
C8 OF 12 PRELIMINARY TESC NOTES AND DETAILS
C□ OF 12 PRELIMINARY GRADING PLAN NORTH
C10 OF 12 PRELIMINARY GRADING PLAN SOUTH
C11 OF 12 PRELIMINARY UTILITY PLAN
C12 OF 12 PRELIMINARY CONSTRUCTION NOTES AND DETAILS

LEGEND:

SURVEY MONUMENT	PROPOSED TYPE II CATCH BASIN
EX. POWER VAULT	PROPOSED TYPE I CATCH BASIN
EX. LUMINAIRE (LUM.)	PROPOSED STORM DRAIN FLOW ARROW
EX. LOT LIGHT	PROPOSED STORM DRAINAGE LINE
EX. POWER POLE	PROPOSED TRENCH DRAIN
EX. JUNCTION BOX	PROPOSED SANITARY SEWER LINE
EX. CATCH BASIN (CB)	PROPOSED SANITARY SEWER CLEANOUT
EX. CATCH BASIN (CB) TYPE 2	PROPOSED WATERMAIN
EX. SANITARY SEWER MANHOLE (SSMH)	PROPOSED FIRE HYDRANT
EX. GAS METER	PROPOSED WATER VALVE
EX. GAS VALVE	PROPOSED CONCRETE BLOCKING
EX. WATER VALVE (WV)	PROPOSED 90° BEND
EX. FIRE HYDRANT (FH)	PROPOSED SPOT ELEVATIONS
MAIL BOX	EXISTING SPOT ELEVATIONS
EX. WATER METER	EXISTING CONTOURS
EX. SIGN	PROPOSED CONTOURS
EX. WATER LINE	
EX. SANITARY SEWER LINE	
EX. STORM DRAINAGE LINE	EXISTING PAVEMENT
EX. POWER UNDERGROUND	
EX. POWER OVERHEAD	PROPOSED PAVEMENT
EX. METAL FENCE	
EX. WOOD FENCE	PROPOSED CONCRETE

ESTIMATED EARTHWORK □UANTITIES

CUT □7,000 CY

FILL □8,000 CY

NET □ □1,000 CY

AREA TO BE DISTURBED □6.□3 AC

CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORTS DATED MAY 12, 2020 FOR THIS SITE PREPARED BY TERRA ASSOCIATES FOR GRADING RECOMMENDATIONS. EARTHWORK QUANTITIES ARE FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR BIDDING PURPOSES. CONTRACTOR SHALL PERFORM AN INDEPENDENT ANALYSIS FOR THE PURPOSES OF PREPARING THEIR BID.

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AT LEAST 48 HOURS PRIOR TO POTHOLING. ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS ARE TO BE POTHOLED TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

MONUMENT DEMOLITION NOTE

CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM ANY JURISDICTIONS HAVING AUTHORITY FOR REMOVING AND REPLACING ALL SURVEY MONUMENTATION THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITY. UPON COMPLETION OF CONSTRUCTION, ALL MONUMENTS DISPLACED, REMOVED, OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR, AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

DEVELOPER
PANATTONI DEVELOPMENT COMPANY
CONTACT: BRIAN MATTSON
ADDRESS: 1821 DOCK ST. SUITE 100
TACOMA, WA 98402
PHONE: (206) 838-6182
EMAIL: BMATTSON@PANATTONI.COM

CIVIL ENGINEER
BARGHAUSEN CONSULTING ENGINEERS
CONTACT: DANIEL K. BALMELLI, P.E.
ADDRESS: 18215 72ND AVENUE SOUTH
KENT, WA 98032
PHONE: (425) 251-6222
EMAIL: DBALMELLI@BARGHAUSEN.COM

ARCHITECT
NELSON ARCHITECTS
CONTACT: MIKE SNYDER
ADDRESS: 1200 5TH AVE SUITE 1300
SEATTLE, WA 98101
PHONE: (206) 408-8500M
EMAIL: SNYDER@NELSONWW.COM

GEOTECHNICAL ENGINEER
TERRA ASSOCIATES
CONTACT: TED SCHEPPER
ADDRESS: 12220 113TH AVE NE, SUITE 130
KIRKLAND, WA 98034
PHONE: (425) 821-7777
EMAIL: TSCHEPPER@TERRA-ASSOCIATES.COM

SURVEYOR
BARGHAUSEN CONSULTING ENGINEERS
CONTACT: BRIAN GILLOOLY, P.L.S.
ADDRESS: 18215 72ND AVENUE SOUTH
KENT, WA 98032
PHONE: (425) 251-6222
EMAIL: BGILLOOLY@BARGHAUSEN.COM

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY COVER SHEET FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI — STATE OF WASHINGTON — 25672 — REGISTERED PROFESSIONAL ENGINEER — 5/26/2020

Scale: Horizontal 1"=100' Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C1 of 12

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PRELIMINARY OVERALL CIVIL SITE PLAN
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1/4 OF THE SW1/4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 30' 60' 120'
SCALE: 1"=60'

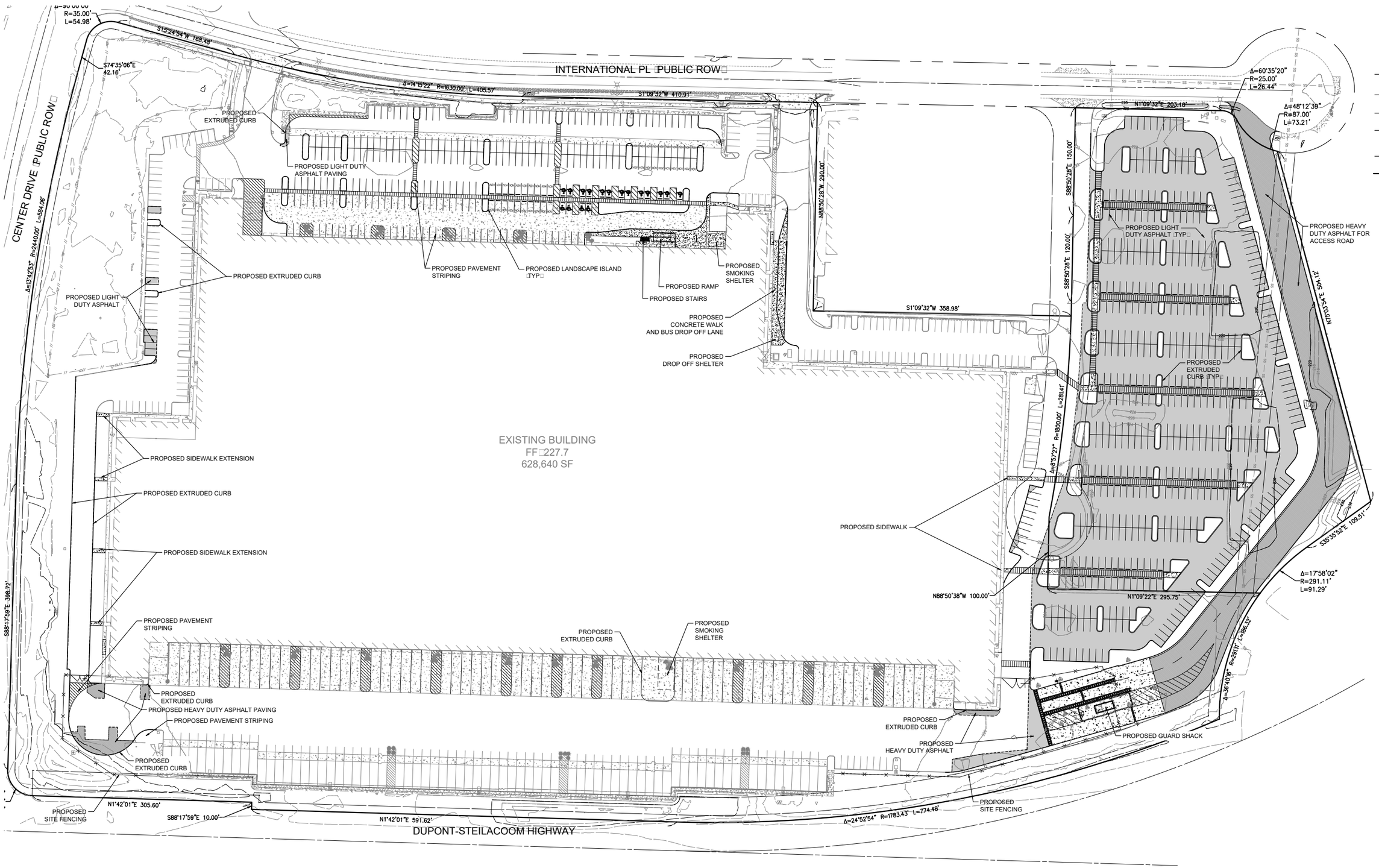
811 Know what's **below.** **Call** before you dig.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.



No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY OVERALL CIVIL SITE PLAN FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALDWIN, STATE OF WASHINGTON, 25672, REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=60' Vertical -

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Drawn WED
Checked LD
Approved DKB
Date 6/10/20

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Job Number 21227

Sheet C2 of 12

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PRELIMINARY EXISTING CONDITIONS AND DEMO PLAN NORTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

811 Know what's **below.** **Call** before you dig.

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BY: _____
CITY OF DUPONT

DATE: _____

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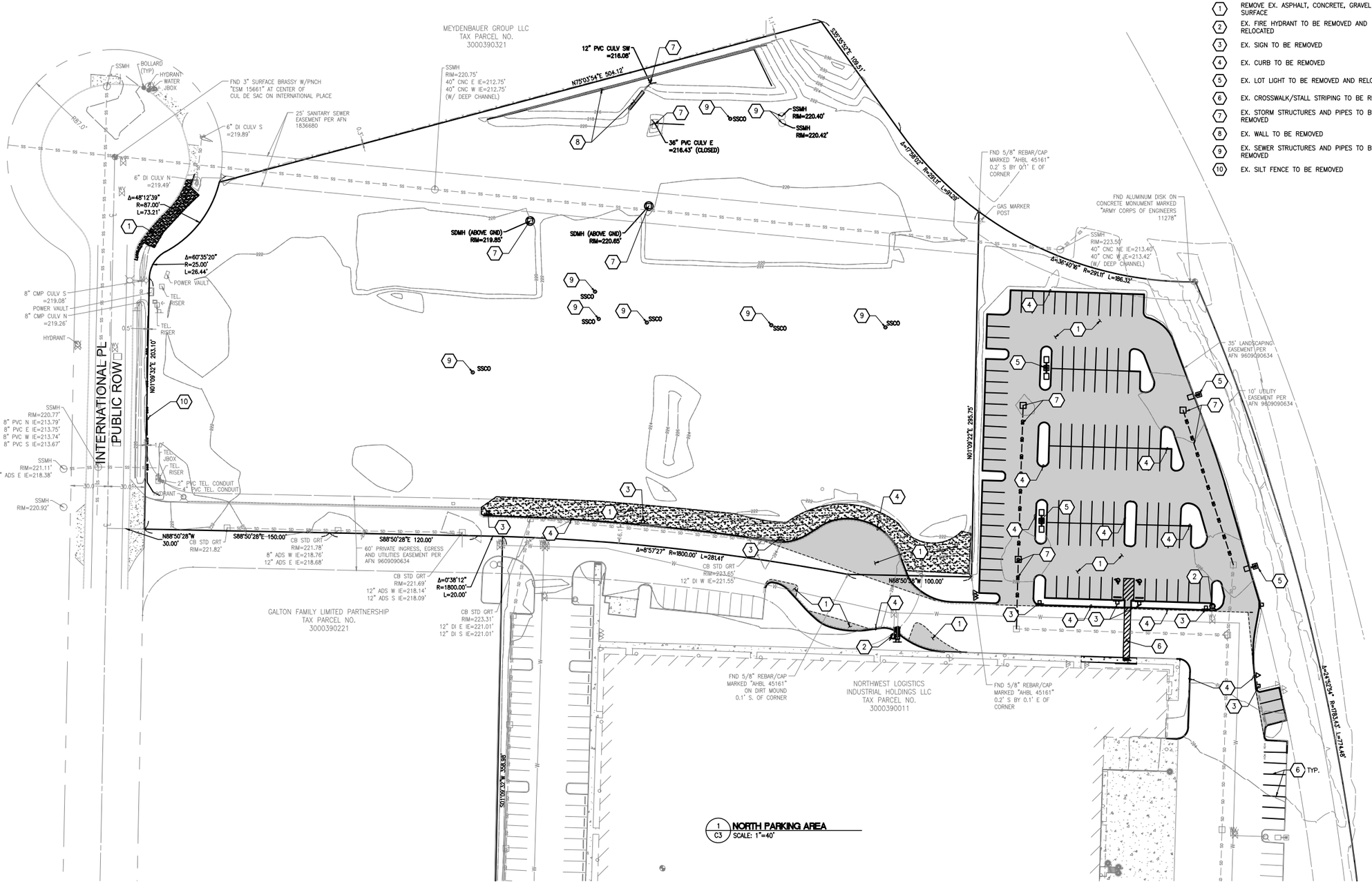

1 / C3 **NORTH PARKING AREA**
SCALE: 1"=40'

DEMOLITION SCHEDULE

1. REMOVE EX. ASPHALT, CONCRETE, GRAVEL SURFACE
2. EX. FIRE HYDRANT TO BE REMOVED AND RELOCATED
3. EX. SIGN TO BE REMOVED
4. EX. CURB TO BE REMOVED
5. EX. LOT LIGHT TO BE REMOVED AND RELOCATED
6. EX. CROSSWALK/STALL STRIPING TO BE REMOVED
7. EX. STORM STRUCTURES AND PIPES TO BE REMOVED
8. EX. WALL TO BE REMOVED
9. EX. SEWER STRUCTURES AND PIPES TO BE REMOVED
10. EX. SILT FENCE TO BE REMOVED

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY EXISTING CONDITIONS AND DEMO PLAN NORTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMANNO — STATE OF WASHINGTON — 25672 — REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C3 of 12

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PREILIMINARY EXISTING CONDITIONS AND DEMO PLAN SOUTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1□4 OF THE SW1□4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

811 Know what's **below.** **Call** before you dig.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

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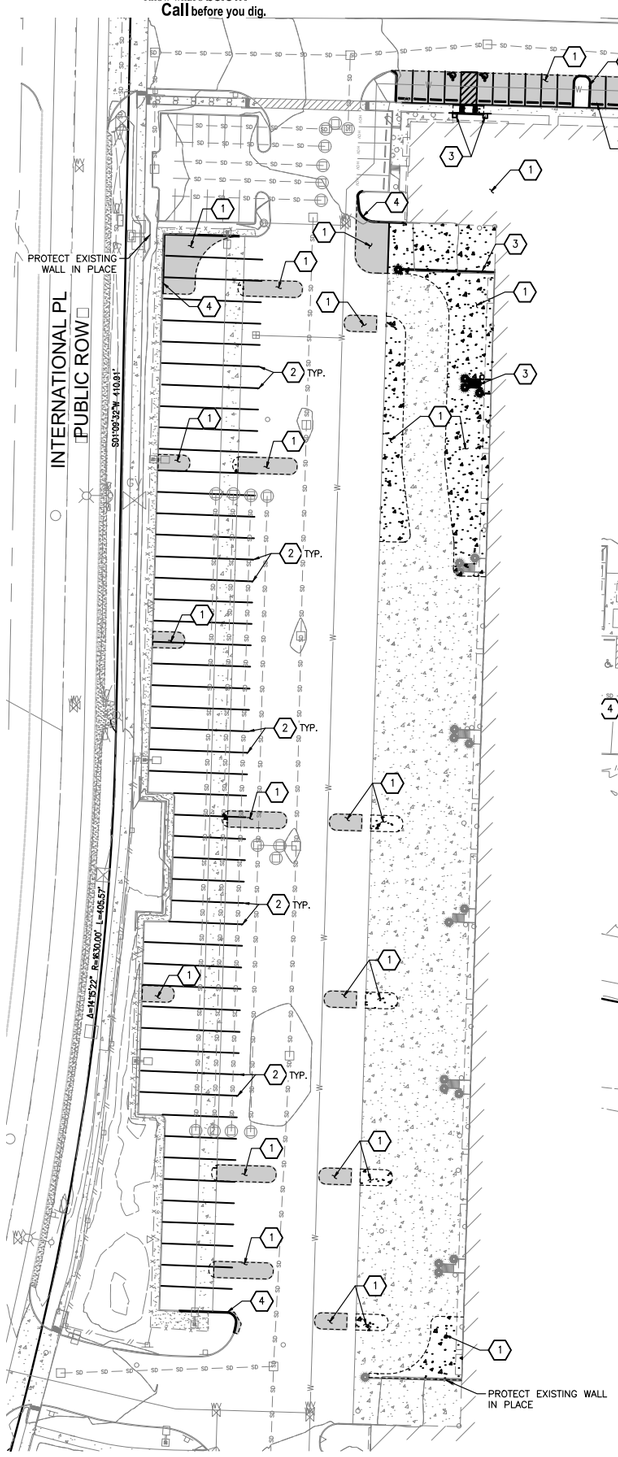
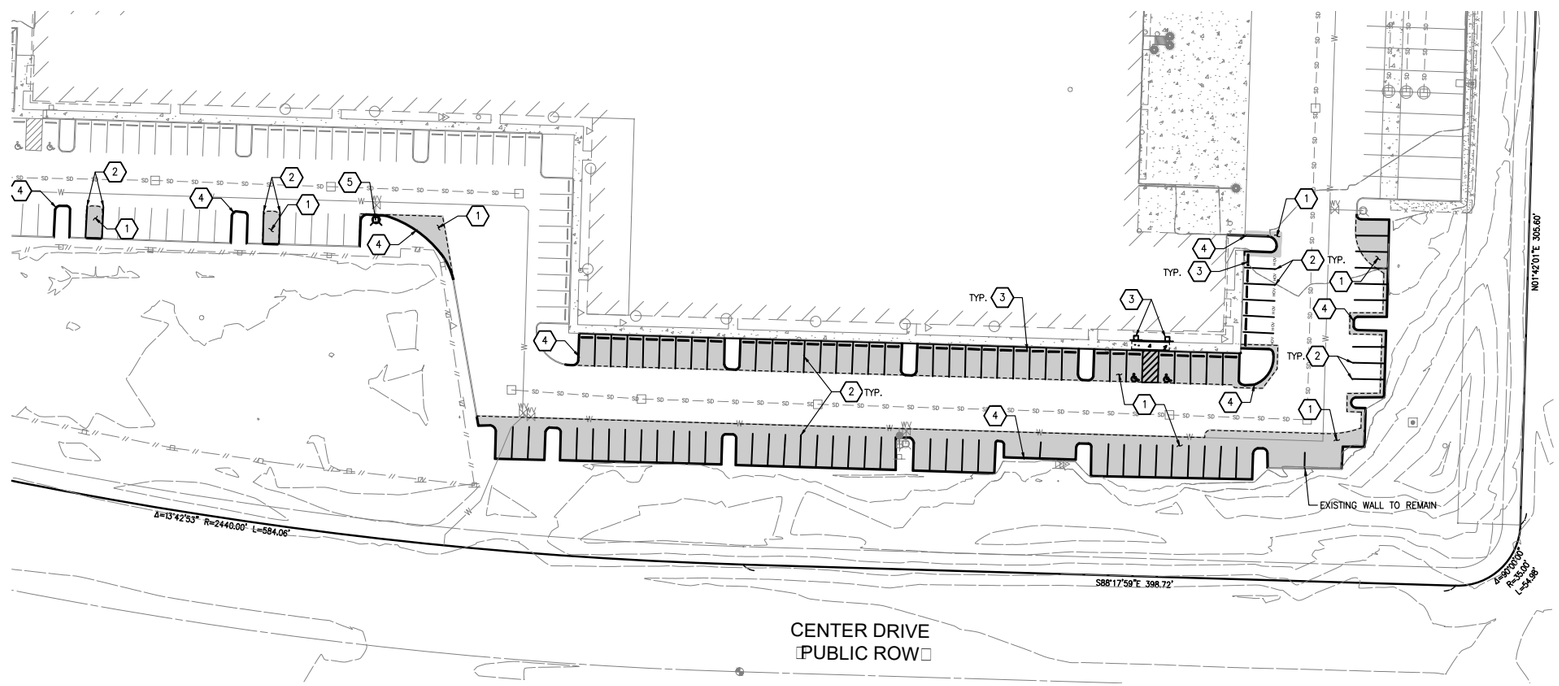
DEMOLITION SCHEDULE

1. REMOVE EX. ASPHALT, CONCRETE, GRAVEL SURFACE
2. EX. STRIPING TO BE REMOVED
3. EX. CURB STOP TO BE REMOVED
4. EX. CURB TO BE REMOVED
5. EX. FIRE HYDRANT TO BE RELOCATED



1 / C4 **WEST PARKING AREA**
SCALE: 1"=40'



2 / C4 **SOUTH PARKING AREA**
SCALE: 1"=40'

No.	Date	By	Ckd.	Appr.	Revision

Title: PREILIMINARY EXISTING CONDITIONS AND DEMO PLAN SOUTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALDERSON
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

Job Number 21227

Sheet C4 of 12

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PRELIMINARY TESC PLAN NORTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

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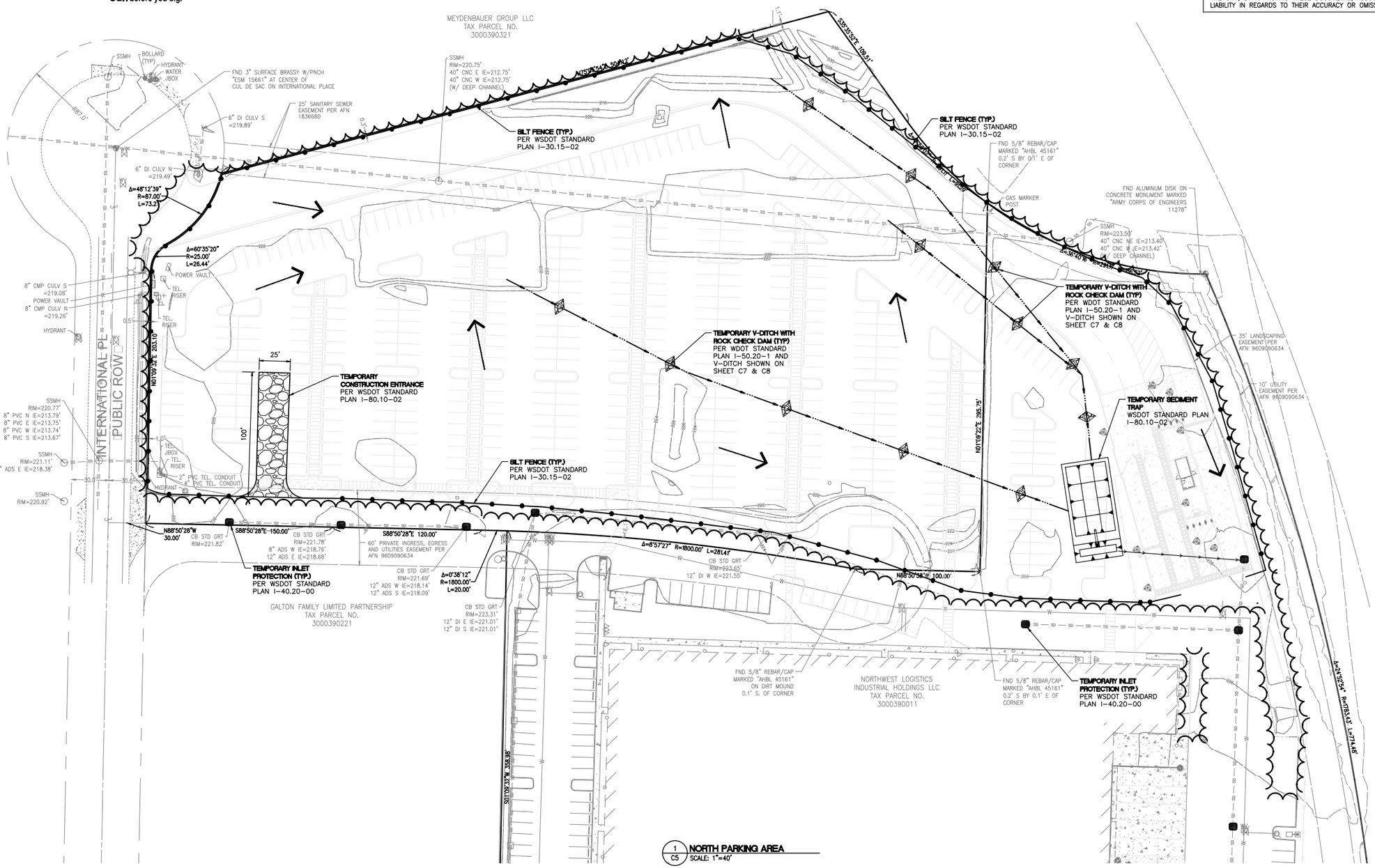

1 / C5 **NORTH PARKING AREA**
SCALE: 1"=40'

T.E.S.C. LEGEND

- FLOW ARROW
- CHECK DAM
- CLEARING LIMITS
- SILT FENCE
- INTERCEPTOR DITCH
- INLET PROTECTION

SEDIMENT TRAP SIZING:
AREA DRAINING TO TRAP = 6.05 AC
REQUIRED VOLUME = 6.05 AC * 35 CY/AC = 212 CY = 5,724 CF
NORTH SEDIMENT TRAP DIMENSIONS:
WIDTH = 50 FT
LENGTH = 115 FT
SIDE SLOPES = 3:1
PROVIDED VOLUME = 5,750 CF

NOTE:
CLEARING LIMITS ARE APPROXIMATE
LIMITS OF DISTURBANCE

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY TESC PLAN NORTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=40' Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

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Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227
Sheet C5 of 12

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PRELIMINARY TESC PLAN SOUTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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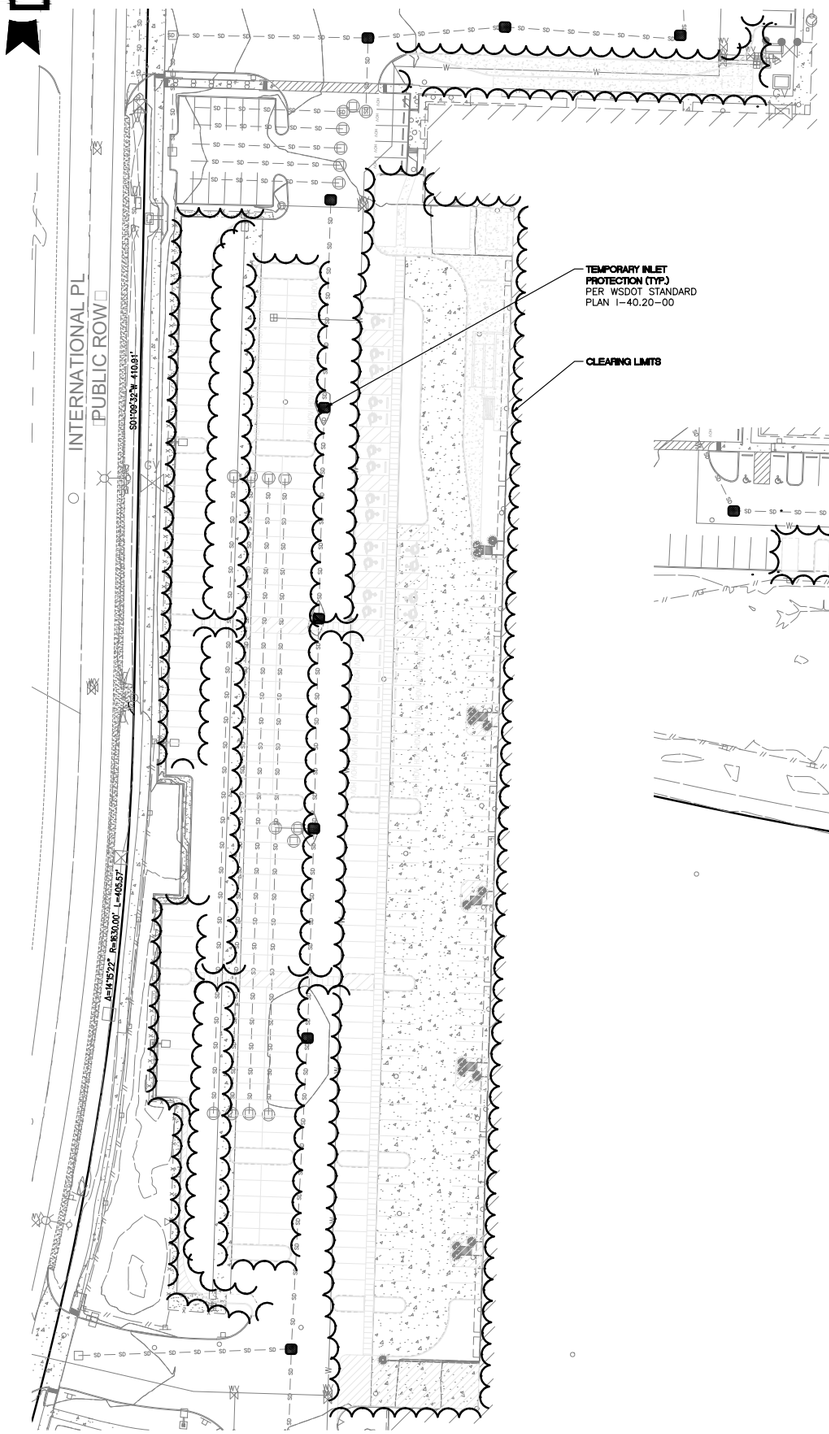
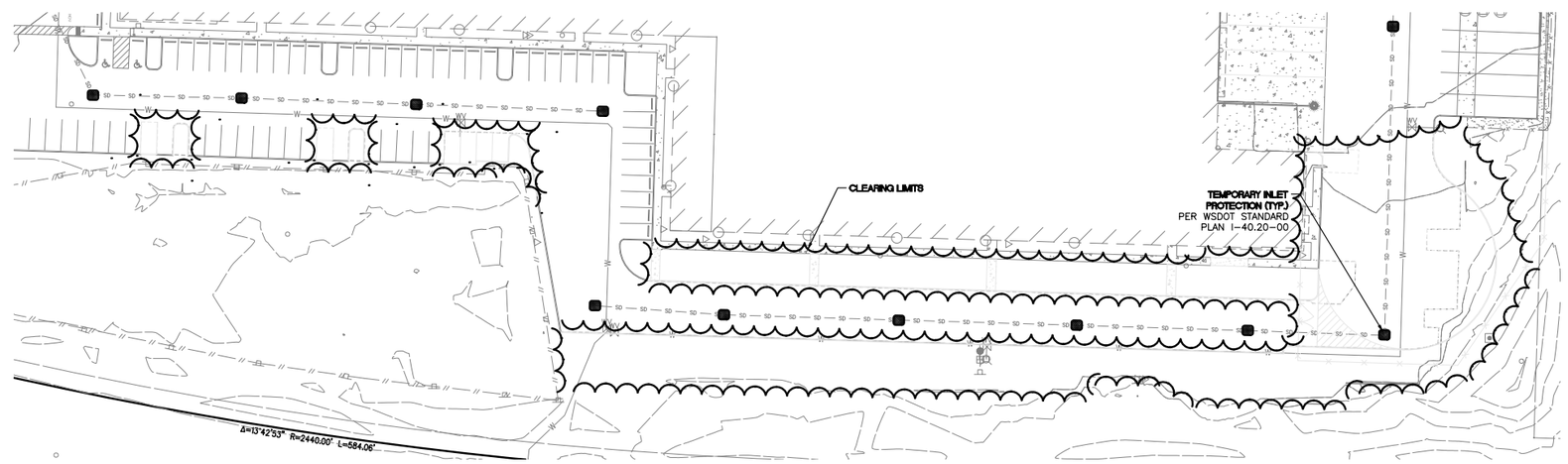


1 / C6 **WEST PARKING AREA**
SCALE: 1"=40'



2 / C6 **SOUTH PARKING AREA**
SCALE: 1"=40'

T.E.S.C. LEGEND

FLOW ARROW	→
CHECK DAM	
CLEARING LIMITS	
SILT FENCE	
INTERCEPTOR DITCH	
INLET PROTECTION	

NOTE:
CLEARING LIMITS ARE APPROXIMATE LIMITS OF DISTURBANCE

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY TESC PLAN SOUTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER, STATE OF WASHINGTON, 25672, REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C6 of 12

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PRELIMINARY TESC DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

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APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

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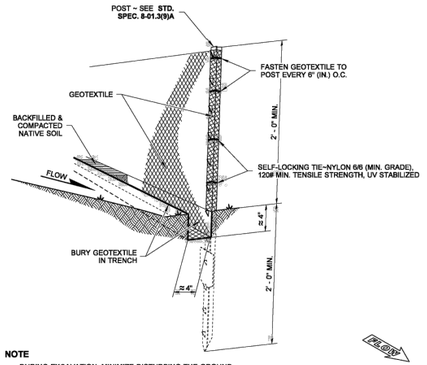
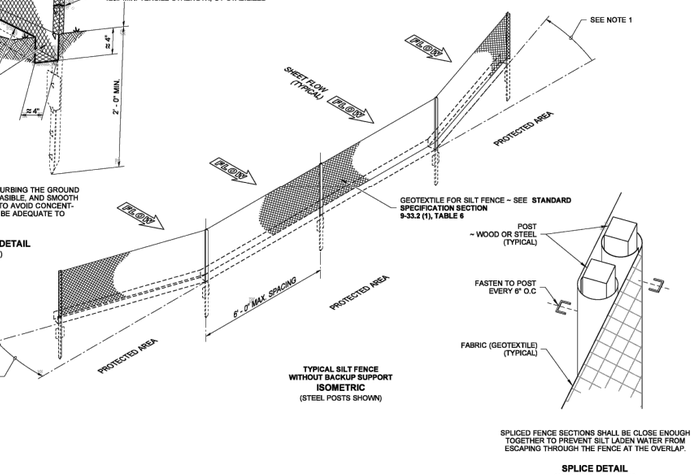
DRAWN BY: BILL BERENS



NOTE

DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

TYPICAL INSTALLATION DETAIL
(STEEL POSTS SHOWN)



TYPICAL SILT FENCE WITHOUT BACKUP SUPPORT ISOMETRIC
(STEEL POSTS SHOWN)

SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP.

SPLICE DETAIL
(WOOD POSTS SHOWN)

NOTES

1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(15)**.
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
4. Install silt fencing parallel to mapped contour lines.

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
SANDRA L. SALISBURY
CERTIFICATE NO. 000860
NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

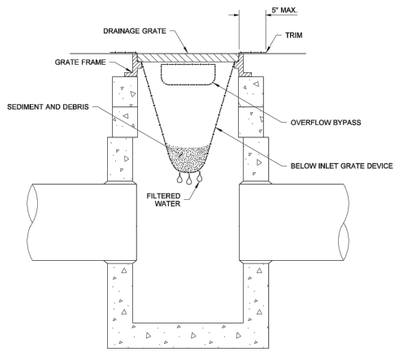
SILT FENCE

STANDARD PLAN I-30.15-02

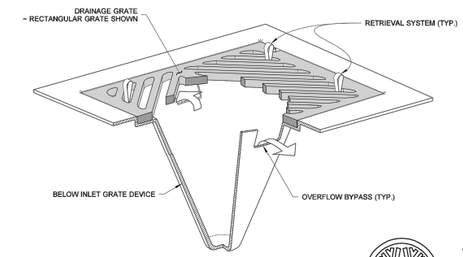
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 3/22/13
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: LISA CYFORD



SECTION VIEW
NOT TO SCALE



ISOMETRIC VIEW

NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
MARK W. MAURER
CERTIFICATE NO. 000598
NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

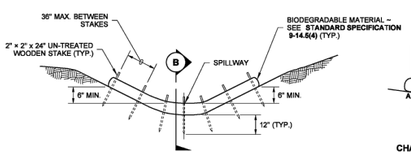
STORM DRAIN INLET PROTECTION

STANDARD PLAN I-40.20-00

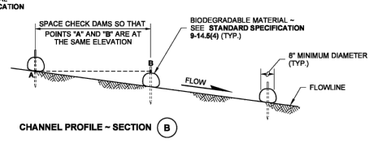
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 09-20-07
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



TYPICAL CHANNEL SECTION



CHANNEL PROFILE ~ SECTION (B)

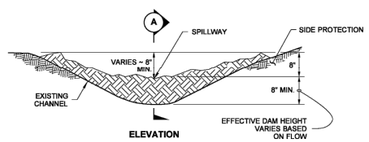
BIODEGRADABLE CHECK DAM

BIODEGRADABLE CHECK DAM NOTE

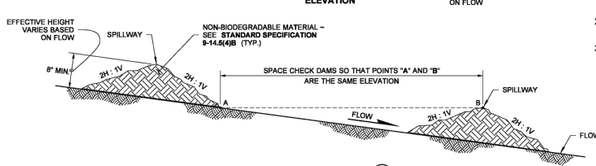
1. Biodegradable Check Dams may need additional or modified staking to prevent undercutting or scouring.

GENERAL NOTES

1. Check Dams shall meet the requirements of **Standard Specifications 8-01.3(6) and 9-14.6(4).**
2. In channels, install the sloped ends of the Check Dam a minimum of 8" higher than the spillway to ensure water flows over the dam and not around it.
3. Perform maintenance in accordance with **Standard Specification 8-01.3(15).**
4. Remove Check Dams in accordance with **Standard Specification 8-01.3(16).**



ELEVATION



EXTENDED SECTION (A)

NON-BIODEGRADABLE CHECK DAM

NON-BIODEGRADABLE CHECK DAM NOTES

1. Non-Biodegradable Manufactured Check Dam devices approved for use under **Standard Specification 9-14.6(4)** shall be installed per manufacturer's recommendations and shall perform in accordance with **Standard Specification 8-01.3(6).**
2. Rock Check Dams shall be placed outside of the clear zone or behind traffic barrier.
3. To ensure adequate damming time, Rock Check Dams used as sediment control may need to be enhanced with plastic that meets the requirements of **Standard Specification 9-14.6(3)** or fabric that meets the geotextile requirements of **Standard Specification 9-33.2(1), Table 6.**

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
Sandra L. Salisbury
LICENSE NO. 860
DATE: June 6, 2013
NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

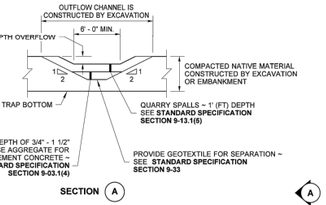
CHECK DAMS ON CHANNELS

STANDARD PLAN I-50.20-01

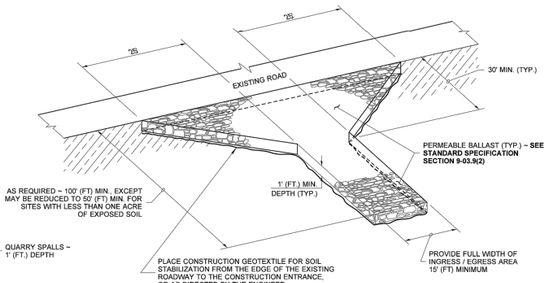
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 6/10/13
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



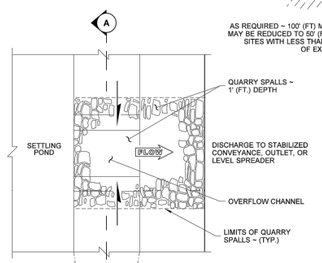
SECTION (A)



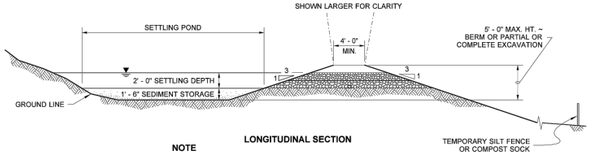
ISOMETRIC VIEW

STABILIZED CONSTRUCTION ENTRANCE

STABILIZED CONSTRUCTION ENTRANCE SHALL MEET THE REQUIREMENTS OF **STANDARD SPECIFICATION SECTION 9-01.3(7).**



PARTIAL PLAN VIEW OF BERM
SHOWN LARGER FOR CLARITY

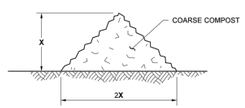


LONGITUDINAL SECTION

NOTE

PLACE GEOTEXTILE UNDER THE SPILLWAY AND SIDE SLOPES. PROVIDE A CONTINUOUS LAYER BETWEEN THE GRAVEL/ROCK AND THE NATIVE EARTHEN MATERIAL.

TEMPORARY SEDIMENT TRAP



X = 1' - 0" FOR SLOPES 4H:1V OR FLATTER
X = 1' - 6" FOR SLOPES STEEPER THAN 4H:1V

TYPICAL SECTION
COMPOST BERM DETAIL

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
Barbara Ann Lynn Jull
Barbara Ann Lynn Jull
LICENSE NO. 1422
DATE: 06-21-17

MISCELLANEOUS EROSION CONTROL DETAILS

STANDARD PLAN I-80.10-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Carpenter, Jeff
Jul 13 2016 2:28 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY TESC DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER — STATE OF WASHINGTON — 25672 — REGISTERED PROFESSIONAL ENGINEER — 5/26/2020

Scale: Horizontal –; Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C7 of 12

P:\21000s\21227\preliminary\21227-E.dwg 6/30/2020 11:31 AM WDUNLAP

PRELIMINARY TESC NOTES AND DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1□4 OF THE SW1□4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

Know what's **below.**
Call before you dig.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

GRADING, EROSION AND SEDIMENTATION CONTROL NOTES:

1. ON-SITE INSPECTIONS ARE REQUIRED AT THE FOLLOWING CONSTRUCTION STAGES:

   INSPECTION NO. 1: INSTALLATION OF EROSION CONTROL FACILITIES PRIOR TO CLEARING
   INSPECTION NO. 2: COMPLETION OF CLEARING
   INSPECTION NO. 3: UPON COMPLETION OF EXCAVATION, FILLING, AND EARTHWORK
   INSPECTION NO. 4: COMPLETION OF PROJECT
   INSPECTION NO. 5: AS NEEDED TO DETERMINE COMPLIANCE WITH APPROVED PLANS AND/OR SPECIFICATIONS

2. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

3. ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

4. ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER ANY EXISTING DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ONSITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.

5. THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY THEIR ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.

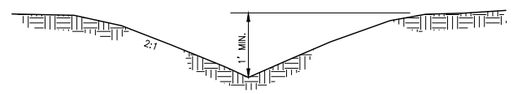
6. ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 7 DAYS OR MORE DURING THE DRY SEASON (MAY 1 – SEPT 30) OR 2 DAYS OR MORE IN THE WET SEASON (OCT 1 –APR 30), SHALL BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF MAY THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITTEE BUT SHALL BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.

7. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR SHALL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.

8. NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.

CONSTRUCTION SEQUENCE:

1. SCHEDULE AND ATTEND PRE-CONSTRUCTION MEETING WITH CITY OF LAKEWOOD OFFICIALS.
2. FLAG CLEARING AND GRADING LIMITS FOR PROJECT AS SHOWN ON THE PLANS PER THIS SHEET.
3. POST SIGN WITH NAME AND PHONE NUMBER OF THE CESCL.
4. INSTALL TEMPORARY FILTER FABRIC FENCE AND CB PROTECTION AS SHOWN ON PLANS TO PROTECT ADJACENT PROPERTIES AND STORMWATER SYSTEM.
5. GRADE AND INSTALL CONSTRUCTION ENTRANCE PER PLAN.
6. REMOVE ALL EXISTING SITE IMPROVEMENTS AND DEMO EXISTING BUILDINGS AS INDICATED ON PLANS.
7. INSTALL TEMPORARY SEDIMENT POND.
8. CONSTRUCT INTERCEPTOR DITCHES WHERE SHOWN.
9. CITY REPRESENTATIVE TO INSPECT AND APPROVE INSTALLATION OF T.E.S.C. MEASURES BEFORE SITE CLEARING AND GRADING.
10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY AND NPDES PERMIT REQUIREMENTS.
11. PROTECT ALL PROPERTIES ADJACENT TO THE PROJECT FROM SEDIMENT DEPOSITION.
12. NO RUNOFF IS TO LEAVE SITE WITHOUT TREATMENT.
13. CLEAR AND GRADE SITE, AMEND T.E.S.C. FACILITIES AS REQUIRED.
14. ONCE INFILTRATION GALLERY IS OPEN TO BOTTOM ELEVATION, PERFORM INFILTRATION TEST(S) IN ACCORDANCE WITH PIERCE COUNTY STANDARDS TO CONFIRM INFILTRATION RATE OF 10 IN/HR.
15. COVER ALL AREAS THAT WILL REMAIN UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
16. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
17. WHEREVER CONSTRUCTION VEHICLES ACCESS ROUTE CROSSES PAVED ROADS, CARE MUST BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD. IF SEDIMENT IS TRANSPORTED ONTO PAVED SURFACE, THE ROAD SHALL BE CLEANED IMMEDIATELY.
18. WITH EACH LAYER OF FILL MATERIAL, INTERCEPTOR DITCHES AND T.E.S.C. FACILITIES MUST BE GRADED AND MAINTAINED TO PROVIDE POSITIVE SLOPE FOR DRAINAGE TO DISCHARGE POINT.
19. MAINTAIN T.E.S.C. FACILITIES UNTIL ALL RISK OF EROSION/SEDIMENTATION DRAINAGE HAS PASSED AND PERMANENT STORM DRAINAGE SYSTEM IS INSTALLED AND FUNCTIONAL. DO NOT CONVEY SEDIMENT-LADEN WATER INTO STORM DRAINAGE SYSTEM. REMOVE TEMPORARY EROSION & SEDIMENTATION CONTROL MEASURES UPON FINAL SITE STABILIZATION AND APPROVAL FROM THE CITY INSPECTOR.
20. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE REVEGETATED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.
21. COMPLETE INSPECTION/ PUNCHLIST



TEMPORARY "V" DITCH

NOT TO SCALE

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY TESC NOTES AND DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER
STATE OF WASHINGTON
25672
REGISTERED
PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal –
Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C8 of 12

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PRELIMINARY GRADING PLAN NORTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1□4 OF THE SW1□4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

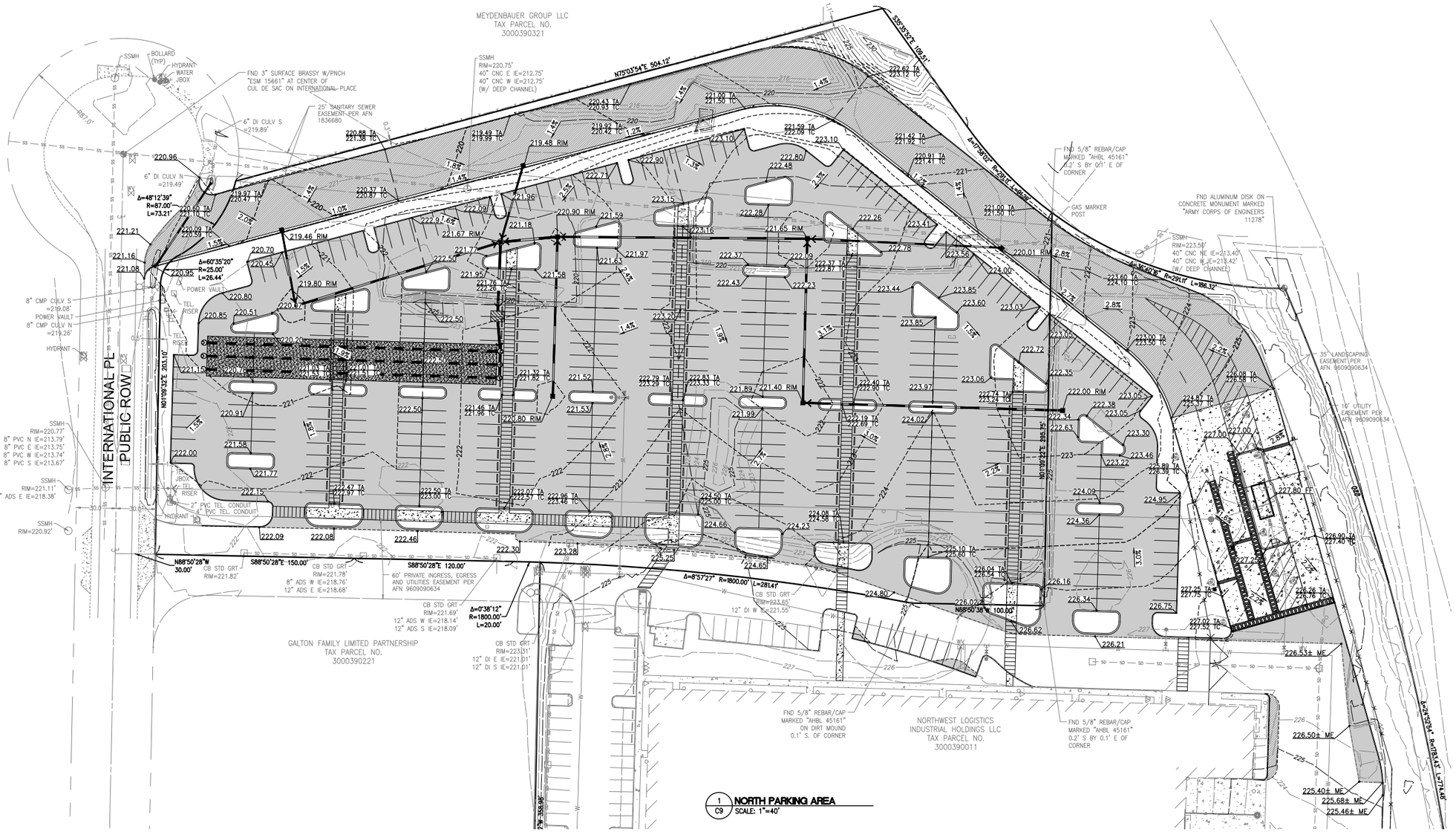
811 Know what's **below.** **Call** before you dig.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.



1 C9 **NORTH PARKING AREA**
SCALE: 1"=40'

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY GRADING PLAN NORTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALLINGER
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=40' Vertical -

Designed MED
Drawn MED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

Job Number 21227

Sheet C□ of 12

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PRELIMINARY GRADING PLAN SOUTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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CITY OF DUPONT

DATE: _____

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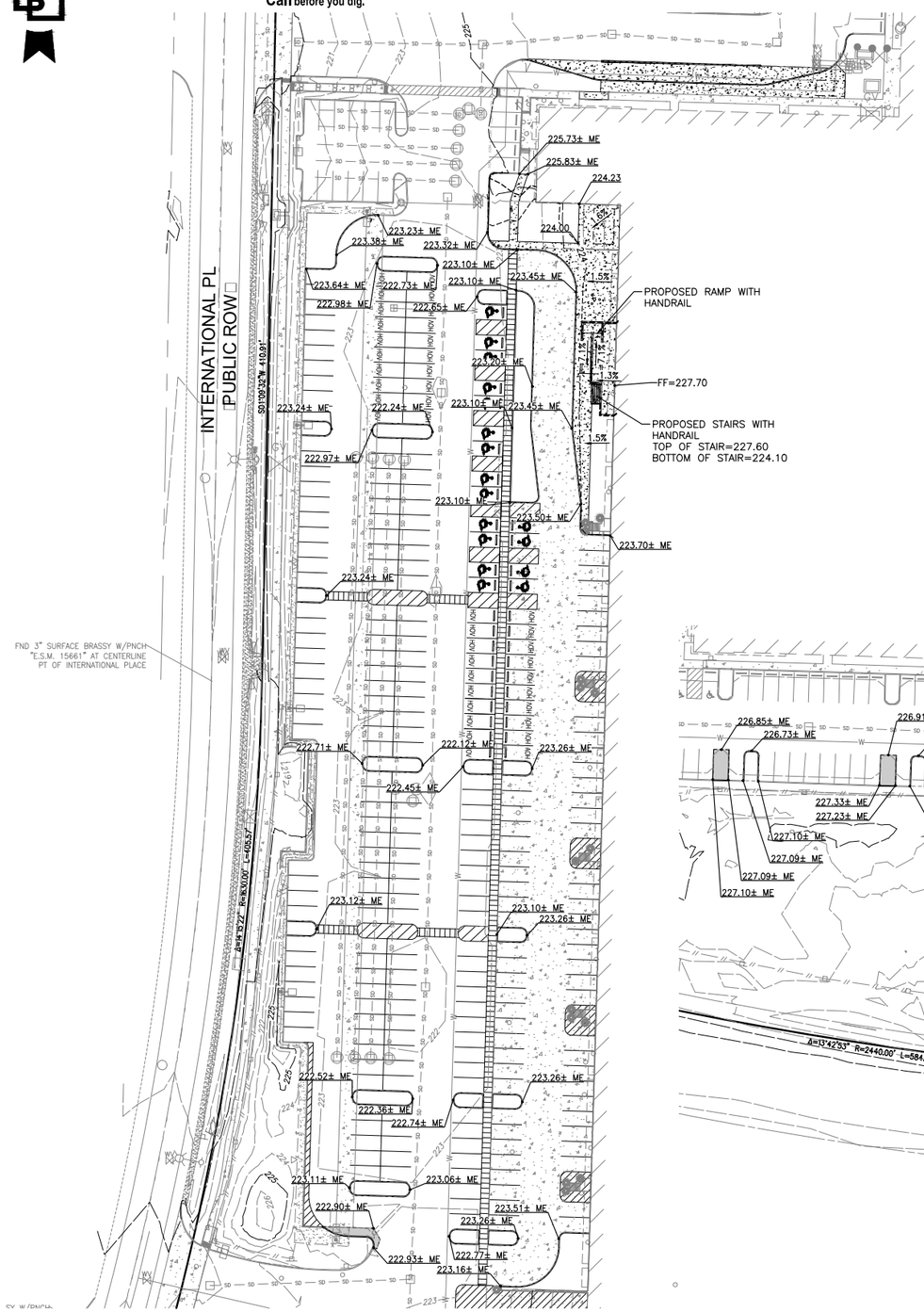
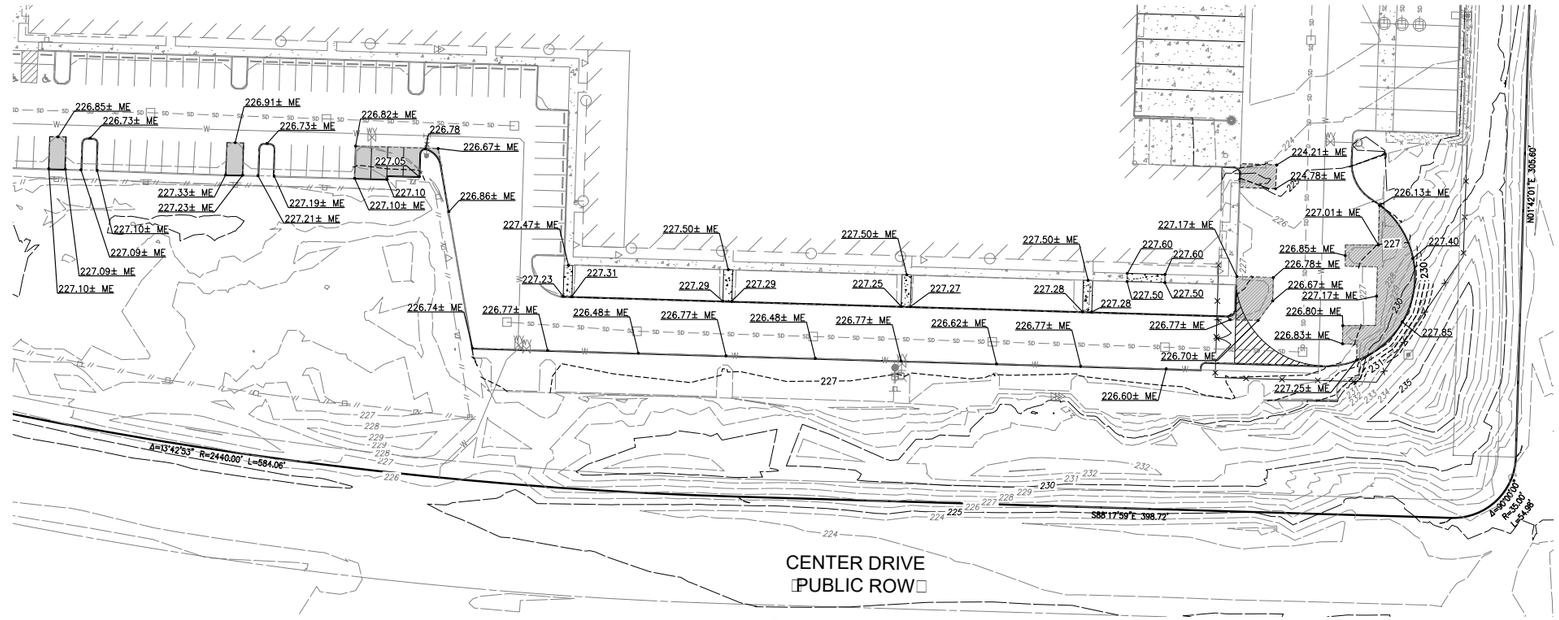


1 C10 **WEST PARKING AREA**
SCALE: 1"=40'



2 C10 **SOUTH PARKING AREA**
SCALE: 1"=40'

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY GRADING PLAN SOUTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER, STATE OF WASHINGTON, 25672, REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

Job Number 21227

Sheet C10 of 12

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PRELIMINARY UTILITY PLAN
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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CITY OF DUPONT

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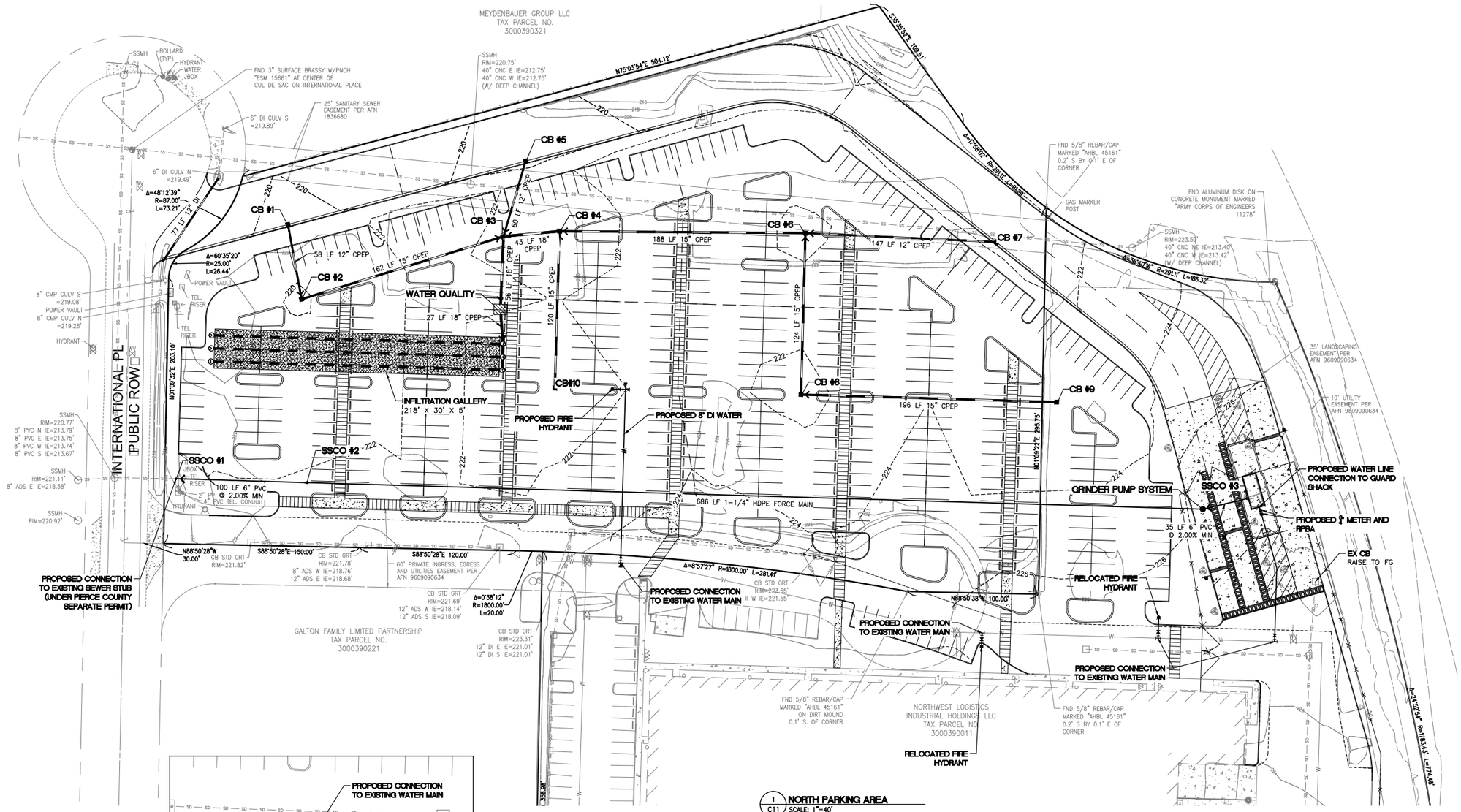
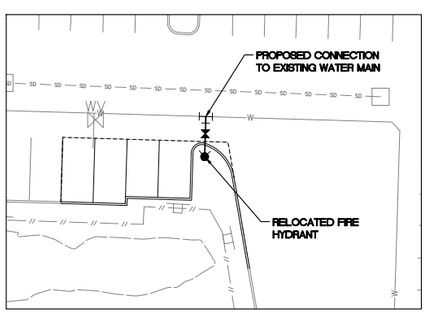


1 C11 NORTH PARKING AREA
SCALE: 1"=40'



2 C11 SOUTH HYDRANT BLOW UP
SCALE: 1"=20'

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY UTILITY PLAN FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
5/26/2020

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Job Number 21227

Sheet C11 of 12

P:\21000s\21227\preliminary\21227-U.dwg 6/30/2020 12:35 PM WDUNLAP

PRELIMINARY CONSTRUCTION NOTES AND DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

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GENERAL NOTES

10. GENERAL NOTES AND DRAWINGS

10.1 GENERAL NOTES (STREET CONSTRUCTION)

1. THESE DRAWINGS ARE APPROVED UNTIL _____ _____, _____ [EXPIRATION OF PRELIMINARY PLAT OR SITE PLAN APPROVAL]. THE CITY RESERVES THE RIGHT TO MAKE MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMIT. THE CITY, BY APPROVING THESE DOCUMENTS, IN NO WAY WARRANTS THEIR ACCURACY OR ACKNOWLEDGES ANY OMISSIONS.

2. A PRECONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

A COPY OF THE APPROVED ROADWAY PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DUPONT'S STREET STANDARDS AND STORM WATER MANAGEMENT MANUAL AND THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY TRAFFIC CONTROL TO ENSURE TRAFFIC SAFETY DURING CONSTRUCTION ACTIVITIES. THEREFORE, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE PUBLIC WORKS DEPARTMENT AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK IN THE RIGHT-OF-WAY. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).

ALL CURB AND GUTTER, STREET GRADES, SIDEWALK GRADES, AND ANY OTHER VERTICAL AND/OR HORIZONTAL ALIGNMENT SHALL BE STAKED BY A PROFESSIONAL ENGINEER OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK.

ANY ROADWAY SIGNAGE OR STRIPING REMOVED OR TEMPORARILY MOVED BY THE CONTRACTOR SHALL BE RESTORED SO AS TO MEET THE CURRENT MUTCD STANDARDS.

WHERE NEW ASPHALT JOINS EXISTING, THE EXISTING ASPHALT SHALL BE CUT TO A NEAT VERTICAL EDGE AND TACKED WITH ASPHALT EMULSION TYPE CSS-1 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE JOINT SHALL BE SEALED WITH GRADE AR-4000W PAVING ASPHALT.

COMPACTION OF SUBGRADE, ROCK, AND ASPHALT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. SEE CITY OF DUPONT STREET STANDARDS FOR TESTING AND SAMPLING FREQUENCIES. DENSITY TEST REPORTS WILL BE REQUIRED FOR ALL PUBLIC ROADWAYS.

FORM AND SUBGRADE INSPECTION BY THE CITY IS REQUIRED BEFORE PLACING CONCRETE. TWENTY-FOUR HOURS ADVANCE NOTICE IS REQUIRED FOR THE SCHEDULING OF INSPECTION.

CALL UNDERGROUND UTILITY LOCATE LINE, 1-800-424-5555 OR 811, PRIOR TO ANY EXCAVATION.

DEAD-END STREETS SHALL BE APPROPRIATELY SIGNED AND BARRICADED.

WHERE A SIDEWALK IS TO BE CONSTRUCTED ABOVE A SLOPE OR ADJACENT TO A ROCKERY OR RETAINING WALL, WHERE THE LOWEST FINISHED ELEVATION OF THE SLOPE, ROCKERY, OR RETAINING WALL IS TO BE THIRTY INCHES (30") OR MORE BELOW THE FINISHED ELEVATION OF THE SIDEWALK, A SAFETY RAILING SHALL BE REQUIRED WHEN:

THE PLANE OF THE WALL IS LESS THAN 4' IN HORIZONTAL DISTANCE FROM THE OUTSIDE EDGE OF THE SIDEWALK.

THE PLANS OF THE WALL FACE IS GREATER THAN 4' HORIZONTAL DISTANCE TO THE OUTSIDE EDGE OF THE SIDEWALK, BUT THE SLOPE DOWN TO THE WALL TOP EXCEEDS THREE TO ONE.

THE SLOPES ADJACENT TO THE SIDEWALK AVERAGE GREATER THAN TWO TO ONE.

ANY VAULT CONSTRUCTION SHALL HAVE EITHER;

(A.) PROVIDED WITH WATER STOPS AT CAST-IN-PLACE CONSTRUCTION JOINTS.

(B.) PRE-CAST VAULT SHALL HAVE APPROVED RUBBER GASKET SYSTEM.

10.2 EROSION/SEDIMENTATION CONTROL NOTES.

THE CONTRACTOR SHALL PROVIDE EROSION CONTROL METHODS ACCORDING TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY'S (WDOE) "STORMWATER MANAGEMENT MANUAL FOR THE PUGET SOUND BASIN". THE FOLLOWING NOTES ARE ONLY A FEW OF THE MINIMUM REQUIREMENTS AND SHOULD NOT BE INTERPRETED TO EXCLUDE ANY EROSION CONTROL PRACTICES AS SPECIFIED IN THE WDOE STORMWATER MANUAL.

1. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLAN SHALL BE CLEARLY FLAGGED BY THE ENGINEER IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

2. ALL REQUIRED SEDIMENTATION/EROSION CONTROL FACILITIES MUST BE IN OPERATION PRIOR TO LAND CLEARING AND/OR OTHER CONSTRUCTION TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT AND ADDITIONS TO EROSION/SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3. THE EROSION AND SEDIMENTATION CONTROL SYSTEMS DEPICTED ON THIS DRAWING ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND AS UNEXPECTED OR SEASONAL CONDITIONS DICTATE, THE CONTRACTOR SHOULD ANTICIPATE THAT MORE EROSION AND SEDIMENTATION CONTROL FACILITIES WILL BE NECESSARY TO INSURE COMPLETE SILTATION CONTROL ON THE PROPOSED SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES AND WATER QUALITY OF THE RECEIVING DRAINAGE

4. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF THE SEDIMENT. ALL CATCH BASINS, CONVEYANCE LINES AND DITCHES ALONG INTERNATIONAL PLACE AND CENTER DRIVE SHALL BE CLEANED PRIOR TO PAVING.

5. THE CONTRACTOR SHALL REMOVE MATERIAL DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO THE CITY RIGHT-OF-WAY OR INTO THE STORM DRAINAGE SYSTEM ON INTERNATIONAL PLACE, CENTER DRIVE AND DUPONT-STEILACOOM HIGHWAY. DEBRIS SHALL NOT BE WASHED INTO THE STORM DRAINAGE SYSTEM.

6. TEMPORARY EROSION CONTROL FACILITIES SHALL BE INSPECTED WEEKLY AND MAINTAINED WITH 24 HOURS FOLLOWING A STORM EVENT. SEDIMENT SHALL BE REMOVED TO ENSURE THE FACILITIES WILL FUNCTION PROPERLY. THE FACILITIES SHALL BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED.

7. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT STORMWATER RUNOFF SHALL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

NO DISTURBED SOIL SHALL REMAIN UNSTABILIZED FOR MOR THAN TWO DAYS.

GENERAL NOTES (WATER SYSTEM CONSTRUCTION)

1. ALL IRRIGATION CROSSINGS SHALL HAVE SCHEDULE 80 SLEEVES AND THE SIZE SHALL BE PER THE APPROVED IRRIGATION DRAWINGS.

2. LIGHT POLES SHALL BE LOCATED A MINIMUM OF 3 FEET FROM ALL UNDERGROUND UTILITIES, INCLUDING WATER METERS. LIGHT POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM FIRE HYDRANTS.

3. WATER MAINS AND FITTINGS TO BE INSTALLED SHALL BE DUCTILE IRON FOR ALL SIZES, UNLESS SPECIFICALLY NOTED OTHERWISE. THE CLASS OF THE DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 52 FOR ALL DIAMETERS.

4. WATER MAINS SHALL MAINTAIN A MINIMUM OF 3 FEET AND A MAXIMUM OF 5 FEET OF COVER.

5. UTILITY CROSSINGS HAVING LESS THAN 1 FOOT OF VERTICAL SEPARATION SHALL BE CONSTRUCTED WITH CONTROLLED DENSITY FILL (CDF) TO PREVENT POSSIBLE DAMAGE TO EITHER UTILITY.

6. WATER MAIN DEFLECTIONS AT JOINTS ARE NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS PLUS AN ADDITIONAL FACTOR OF SAFETY OF 50 PERCENT.

7. IDENTIFY A MINIMUM HORIZONTAL SEPARATION OF 10 FEET BETWEEN SANITARY SEWER MAINS AND WATER MAINS, BOTH EXISTING AND PROPOSED.

8. FOR PROPOSED WATER MAINS, IDENTIFY RESTRAINED JOINT FITTINGS AND PUSH-ON JOINTS AT LOCATIONS WHERE THRUST BLOCKS WILL NOT HAVE SUFFICIENT UNDISTURBED ADJACENT AREA FOR BEARING.

9. WATER SERVICE CONNECTIONS SHALL BE MADE PERPENDICULAR TO THE MAIN.

10. THE WATER MAIN PIPES SHALL BE DISINFECTED AND TESTED BEFORE BEING PLACE IN SERVICE. ALL WATER MAIN TESTING AND DISINFECTION SHALL BE PER CITY OF DUPONT PUBLIC WORKS STANDARDS.

11. WATER MAIN STUBOUTS THAT ARE NOT USED SHALL BE DISCONNECTED AT THE MAIN, WITH A BLIND FLANGE INSTALLED AT THE TEE.

12. TEE CONNECTIONS TO EXISTING WATER MAINS SHALL BE WET TAPS.

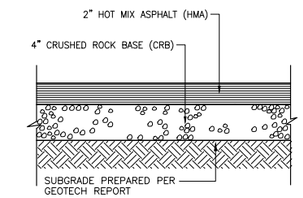
13. SEPARATE WATER CONNECTIONS WILL BE REQUIRED FOR DOMESTIC, FIRE, AND IRRIGATION. ALL SERVICES SHALL INCLUDE BACKFLOW PREVENTION DEVICES LOCATED OUTSIDE OF ANY PROPOSED BUILDINGS.

14. ALL FIRE PROTECTION SYSTEM INSTALLATIONS, INCLUDING PIPELINES AND DOUBLE DETECTOR CHECK ASSEMBLIES, ARE SUBJECT TO THE CONSTRUCTION STANDARDS OF NFPA 24 AND TO THE INSPECTION AND TESTING REQUIREMENTS OF THE CITY OF DUPONT FIRE DEPARTMENT.

15. THE FIRE PROTECTION SYSTEMS, INCLUDING THE BACKFLOW PREVENTION DEVICES, UNDERGROUND FIRE SERVICE LINES, AND FIRE DEPARTMENT CONNECTIONS, ARE SUBJECT TO SEPARATE REVIEW, PERMITTING, AND APPROVAL BY THE CITY OF DUPONT FIRE DEPARTMENT.

16. RELOCATE THE FIRE DEPARTMENT CONNECTIONS (FDCS) TO PLANTER ISLANDS OR OTHER LOCATIONS, AS FEASIBLE, TO BE OUTSIDE OF THE BUILDING COLLAPSE ZONES.

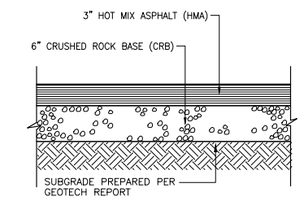
17. THE APPLICANT SHALL FURNISH METER SIZING CALCULATIONS FOR DOMESTIC AND FIRE WATER SERVICES. THE SPRINKLER SYSTEM DESIGN, INCLUDING CONFIRMATION OF THE PROVIDED SIZING FOR THE FIRE LINE COMPONENTS SHALL BE REVIEWED AND APPROVED BY THE CITY BUILDING DEPARTMENT AND FIRE DEPARTMENT AS PART OF THE BUILDING PERMIT PROCESS. EACH FIRE LINE CONNECTION TO A CITY WATER MAIN WILL REQUIRE A DOUBLE DETECTOR CHECK VALVE ASSEMBLY (DDCVA) IN AN UNDERGROUND VAULT AND A FIRE DEPARTMENT CONNECTION (FDC) WITHIN 50 FEET OF A FIRE HYDRANT.



NOTE:
REFER TO SOIL ENGINEER'S RECOMMENDATIONS FOR SITE PREPARATION & ALTERNATE PAVEMENT SECTIONS

TYPICAL LIGHT DUTY ON-SITE PAVEMENT SECTION

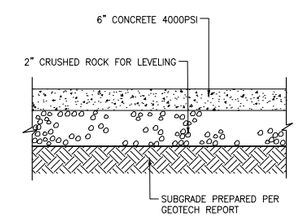
NOT TO SCALE



NOTE:
REFER TO SOIL ENGINEER'S RECOMMENDATIONS FOR SITE PREPARATION & ALTERNATE PAVEMENT SECTIONS

TYPICAL HEAVY DUTY ON-SITE PAVEMENT SECTION

NOT TO SCALE



TYPICAL CONCRETE PAVEMENT SECTION

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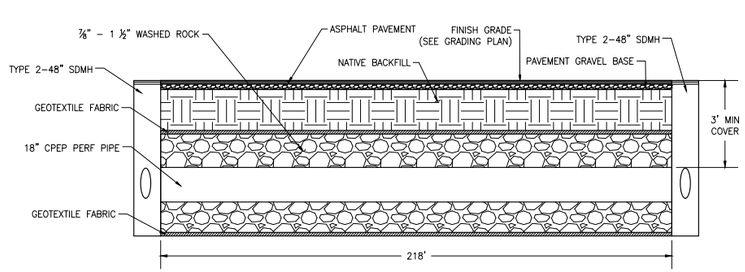
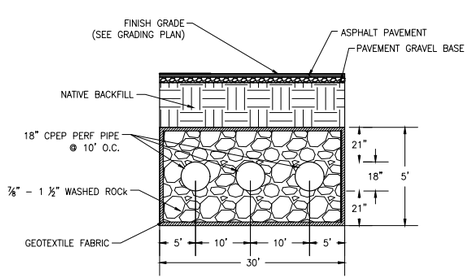
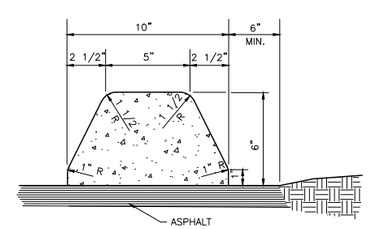


INFILTRATION GALLERY SECTION VIEW

NTS



INFILTRATION GALLERY CROSS-SECTION



EXTRUDED CONCRETE CURB DETAIL

NOT TO SCALE

No.	Date	By	Ckd.	Appr.	Revision

Title: PRELIMINARY CONSTRUCTION NOTES AND DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER, STATE OF WASHINGTON, 25672, REGISTERED PROFESSIONAL ENGINEER
5/26/2020

Scale: Horizontal 1 Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 6/10/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C12 of 12

P:\21000s\21227\preliminary\21227-D.dwg 6/30/2020 12:24 PM WDUNLAP

B. BMP Detail

Please see following pages for appropriate BMP details.
Below is a list of Alternative BMPs to be used if the BMPs listed in the body of this document are deemed ineffective by the CESCL.

Element #1 - Mark Clearing Limits
BMP C101: Preserving Natural Vegetation
BMP C102: Buffer Zones
BMP C103: High Visibility Fence

Element #2 - Establish Construction Access
BMP C107: Construction Road/Parking Area Stabilization

Element #3 - Control Flow Rates
BMP C203: Water Bars
BMP C209: Outlet Protection
BMP C235: Wattles

Element #4 - Install Sediment Controls
BMP C231: Brush Barrier
BMP C232: Gravel Filter Berm
BMP C234: Vegetated Strip
BMP C235: Wattles
BMP C250: Construction Stormwater Chemical Treatment
BMP C251: Construction Stormwater Filtration
Other Proprietary Sediment Control Technologies

Element #5 - Stabilize Soils
BMP C122: Nets and Blankets
BMP C124: Sodding
BMP C125 Compost
BMP C126: Topsoiling
BMP C127: Polyacrylamide for Soil Erosion Protection
BMP C130: Surface Roughening
BMP C131: Gradient Terraces

Element #6 - Protect Slopes
BMP C121: Mulching
BMP C122: Nets and Blankets
BMP C131: Gradient Terraces
BMP C200: Interceptor Dike and Swale
BMP C201: Grass-Lined Channels
BMP C203: Water Bars
BMP C204: Pipe Slope Drains
BMP C205: Subsurface Drains
BMP C206: Level Spreader
BMP C208: Triangular Silt Dike (Geotextile-Encased Check Dam)

Element #7 - Protect Drain Inlets
BMP C220: Storm Drain Inlet Protection

Element #8 - Stabilize Channels and Outlets
BMP C122: Nets and Blankets
BMP C202: Channel Lining
BMP C209: Outlet Protection

Element #9 - Control Pollutants
BMP C152: Sawcutting and Surface Pollution Prevention
BMP C153: Material Delivery, Storage, Containment
BMP C154: Concrete Washout Area
BMP C250: Construction Stormwater Chemical Treatment
BMP C251: Construction Stormwater Filtration
BMP C252: High pH Neutralization Using Co_2
BMP C253: pH Control for High pH Water
Source Control BMPs As Appropriate

Element #10 - Control Dewatering
BMP C203: Water Bars
BMP C226: Vegetative Filtration

Element #11 - Maintain BMPs
BMP C150: Materials on Hand
BMP C160 Erosion and Sedimentation Control Lead

Element #12 - Manage the Project
BMP C150: Materials on Hand
BMP C160: Erosion and Sediment Control Lead
BMP C162: Scheduling

Element #13: Protect Low Impact Development
BMP C102: Buffer Zone
BMP C103: High Visibility Fence
BMP C200: Interceptor Dike and Swale
BMP C201: Grass-Lined Channels
BMP C207: Check Dams
BMP C208: Triangular Silt Dike (TSD) (Geotextile-Encased Check Dam)
BMP C231: Brush Barrier
BMP C233: Silt Fence
BMP C234: Vegetated Strip

C. Correspondence

Please see following for any pertinent correspondence regarding this project.

Applicable information to be inserted here as needed.

D. Site Inspection Form

Please see following pages for the site inspection form.

Construction Stormwater Site Inspection Form

Project Name _____ Permit # _____ Inspection Date _____ Time _____

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*
Print Name: _____

Approximate rainfall amount since the last inspection (in inches): _____

Approximate rainfall amount in the last 24 hours (in inches): _____

Current Weather Clear ☐ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☐ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (*check all that apply*):

Pre Construction/installation of erosion/sediment controls	☐	Clearing/Demo/Grading	☐	Infrastructure/storm/roads	☐
Concrete pours	☐	Vertical Construction/buildings	☐	Utilities	☐
Offsite improvements	☐	Site temporary stabilized	☐	Final stabilization	☐

C. Questions:

1. Were all areas of construction and discharge points inspected? Yes ___ No ___
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen Yes ___ No ___
3. Was a water quality sample taken during inspection? (*refer to permit conditions S4 & S5*) Yes ___ No ___
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* Yes ___ No ___
5. If yes to #4 was it reported to Ecology? Yes ___ No ___
6. Is pH sampling required? pH range required is 6.5 to 8.5. Yes ___ No ___

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

_____

_____

_____

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				
pH	Paper, kit, meter				

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)						
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?						
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.						
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?						
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?						
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).						
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.						
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.						
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?						
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?						
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?						
	Is off-site storm water managed separately from stormwater generated on the site?						
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?						
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?						
7 Drain Inlets	Storm drain inlets made operable during construction are protected.						
	Are existing storm drains within the influence of the project protected?						
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?						
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?						
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?						
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?						
	Has secondary containment been provided capable of containing 110% of the volume?						
	Were contaminated surfaces cleaned immediately after a spill incident?						
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.						
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.						
	Dewatering has been done to an approved source and in compliance with the SWPPP.						
	Were there any clean non turbid dewatering discharges?						
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?						
12 Manage the Project	Has the project been phased to the maximum degree practicable?						
	Has regular inspection, monitoring and maintenance been performed as required by the permit?						
	Has the SWPPP been updated, implemented and records maintained?						
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?						
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?						
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.						
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?						
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.						

E. Check all areas that have been inspected. ✔

All in place BMPs ☐ All disturbed soils ☐ All concrete wash out area ☐ All material storage areas ☐
All discharge locations ☐ All equipment storage areas ☐ All construction entrances/exits ☐

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) _____ (Signature) _____ Date: _____

Title/Qualification of Inspector: _____

E. Construction Stormwater General Permit (CSWGP)

Please see following attachment for the CSWGP

TO BE INCLUDED IN FINAL REPORT

F. Engineering Calculations

Please see following for calculations.

TO BE INCLUDED IN FINAL REPORT

7.0 SPECIAL REPORTS AND STUDIES

7.0 SPECIAL REPORTS AND STUDIES

Special reports for this project include:

- Geotechnical Report prepared by Terra Associates – May 12, 2020

8.0 OTHER PERMITS

8.0 OTHER PERMITS

Other permits for this project include:

- Site Development Permit
- Building Permit
- Sanitary Sewer Connection Permit
- Right-of-Way Use Permit
- Construction Stormwater General Permit (NPDES)

9.0 OPERATION AND MAINTENANCE MANUAL

9.0 OPERATION AND MAINTENANCE MANUAL

The Operation and Maintenance Manual will be provided with the Final Stormwater Site Plan during final site development permitting.

10.0 BOND QUANTITIES WORKSHEET

10.0 BOND QUANTITIES WORKSHEET

Performance bonding or other appropriate financial instruments shall be provided as determined necessary by the City of Dupont.

CULTURAL RESOURCES REPORT COVER SHEET

Author: Andrew Viloudaki and Sarah Amell

Title of Report: Cultural Resource Survey for the Steilacoom School Parking Project, City of DuPont, Pierce County, Washington

Date of Report: June 3, 2020

County(ies): Pierce Section: 24 Township: 19N Range: 01E

Quad: Nisqually, WA Acres: 5.34

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☐ Yes ☒ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

_____
_____
_____
_____
_____
_____

- Submission of PDFs is required.
- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.

Attachment 1.b. Cultural Resources Report prepared by AquaTerra dated June 3, 2020

Cultural Resource Survey for the NW Logistics Steilacoom School Site Parking Area

Prepared for:

Panattoni Development Company, Inc.

Prepared by:

Nicholas de Vry, Cultural Resource Technician
Andrew Viloudaki, Project Archaeologist
Sarah J. Amell, Principal Investigator

Aqua Terra Cultural Resource Consultants
8525 Stoney Creek Lane SW
Olympia, WA 98512
www.AquaTerraCRC.com

Report #PI-04-20
June 2, 2020

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Cultural Resource Survey for the NW Logistics Steilacoom School Site Parking Area Project, DuPont, Pierce County, Washington

Executive Summary

Aqua Terra Cultural Resource Consultants (ATCRC) has been contracted by Panattoni Development Company, Inc. to complete a cultural resources survey for the NW Logistics Steilacoom School Site Parking Area Project, located at International Place N. within the City of DuPont, Pierce County, Washington. The project proposes to level and construct parking on undeveloped Pierce County tax parcel no. 3000390282. The Area of Potential Impacts (API) encompasses 5.34 acres of previous leveled, cleared, and partially improved land currently overgrown with low shrubs.

The project requires permitting from the City of DuPont (City) and compliance with the Washington State Environmental Policy Act (SEPA). SEPA requires that impacts to cultural resources be considered during the public environmental review process. The City of DuPont responded to the project applicant requesting completion of a cultural resource assessment, and cultural resource monitoring services during the proposed construction.

In accordance with SEPA, ATCRC completed a cultural resource assessment that included background research, field investigation, and preparation of this report. The project area has been designated as "low" to "moderately low" for pre-contact or historic archaeological resources, based on the DAHP statewide predictive model and due to the API's distance to other archaeological sites or water sources, and previous regional soil disturbance.

Field investigations consisted of pedestrian survey and subsurface testing within the project API. Nineteen shovel probes (SP) were excavated and no cultural resources were identified during the surface and subsurface investigations. ATCRC recommends no further work, however will provide cultural resource monitoring services during construction in order to comply with the City of DuPont's request for cultural resource monitoring. ATCRC also recommends preparation and compliance with an Inadvertent Discovery Plan for reference during any future construction activities on the parcel. An Inadvertent Discovery Plan is attached in Appendix B.

Regulatory Compliance

This project was conducted, in part, to satisfy the regulatory requirements of the SEPA. SEPA requires that impacts to cultural resources be considered during the public environmental review process. Under SEPA, the Washington State DAHP is the sole agency with technical expertise in regards to cultural resources and provides formal opinions to local governments and other state agencies regarding a property's significance and the impact of proposed projects upon such properties.

In addition, the State of Washington requires compliance with the cultural resources management laws and regulations under the Revised Code of Washington (RCW) 27.53 Archaeological Sites and Resources, RCW 27.44 Indian Graves and Records, and RCW 68.50.645 Skeletal Human Remains—Duty to Notify. The latter regulation provides a strict process for notification of law enforcement and other interested parties in the event of the discovery of any human remains, regardless of inferred cultural affiliation.

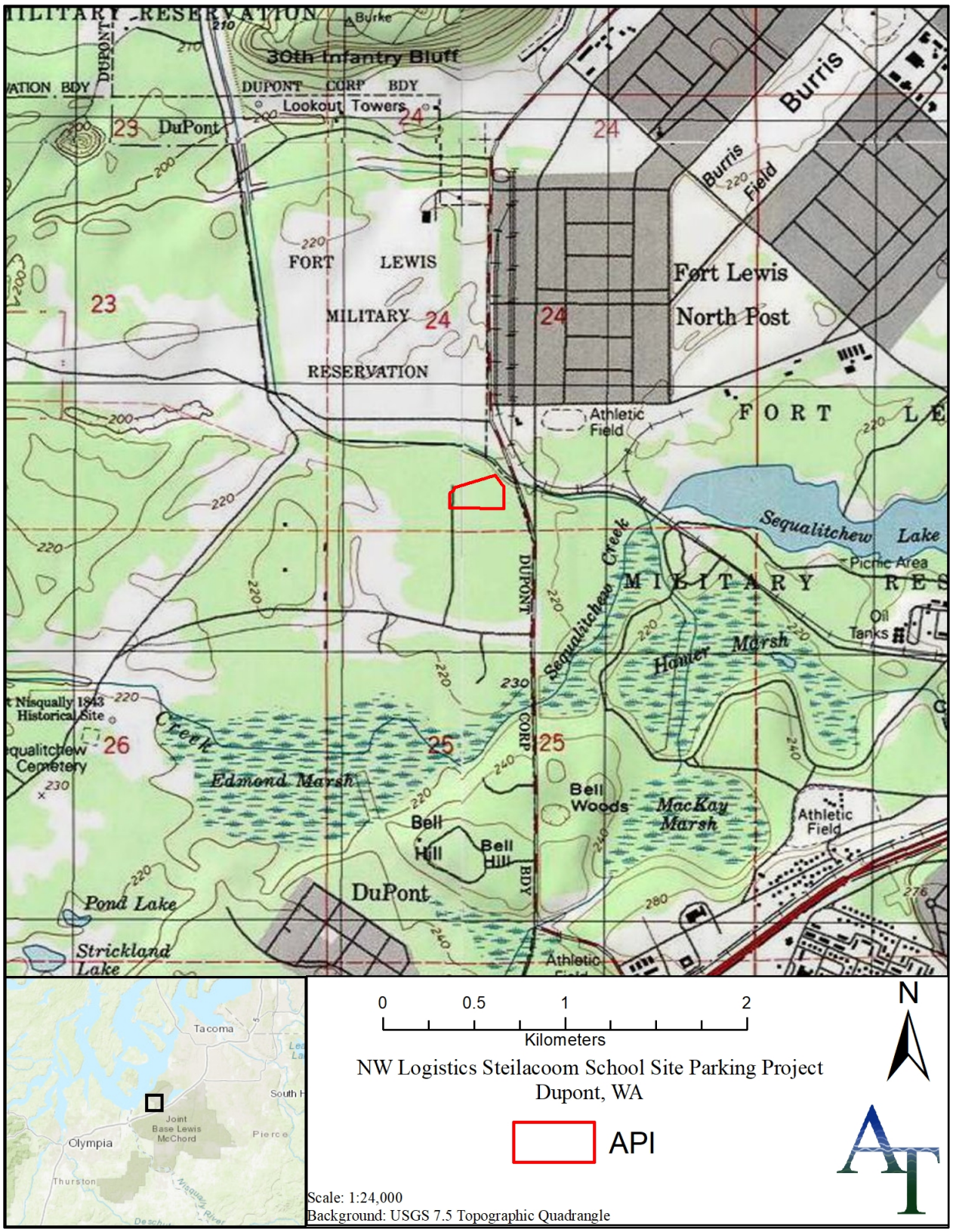

Figure 1. Steilacoom School Parking Project, USGS 7.5 min. Nisqually Quadrangle.

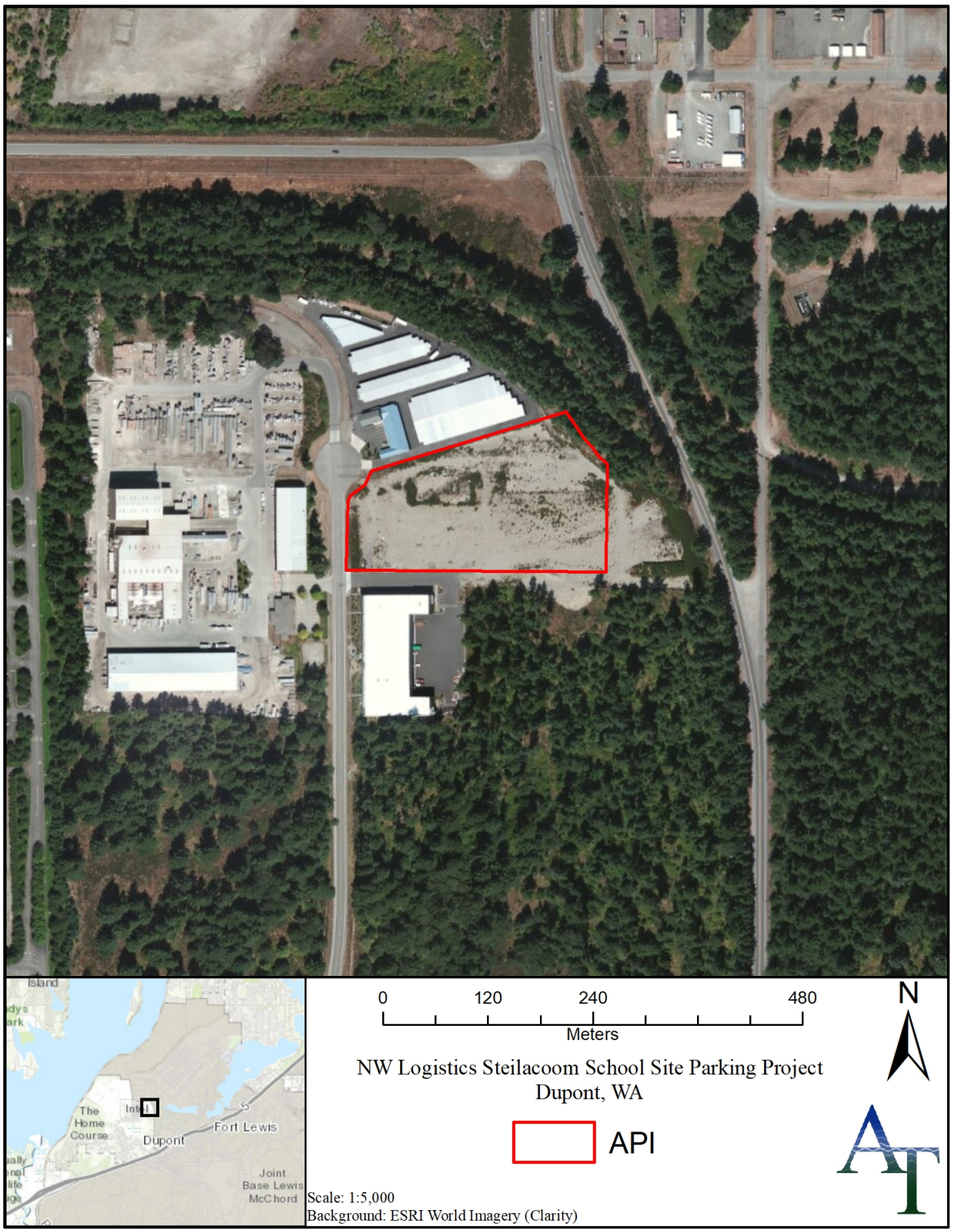

Figure 2. Aerial map of the Steilacoom School Parking Project.

Consultation

As part of the SEPA process, affiliated tribes were contacted by the City of DuPont regarding the project. ATCRC also completed a technical notification on May 19, 2020, to the Nisqually Indian Tribe Historic Preservation Office to request information related to cultural resource concerns within the project API and provide notification of the field survey schedule.

Project Area and Description

The Area of Potential Impacts (API) consists of approximately 5.34 acres of unimproved land covered with shrubs and previously cleared and partially leveled sometime before 2005 (USGS Satellite 2005) located in the city of DuPont, Washington, within Township 19, Range 01E, Section 24 (Figure 1).

The project proposes to develop the Steilacoom School vacant property into a parking lot that will serve the adjacent parcels Northwest Logistics industrial building complex. According to project plans, proposed ground disturbance includes underground electrical utilities 1 to 3-feet below ground surface, level grading of the surface, and paving. No other utilities or structures are being added to the property. Aerial maps from 1981 (USGS NHAP 1981) show that the parcel was undeveloped and covered in forest and remained so until 2005 (USGS 2005). By 2009 the property had been cleared of trees but has remained undeveloped (USGS 2009) (Figure 3).

The soils of the API are Spanaway gravelly sandy loam (Table 1), which is comprised of up of 60 inches of gravelly sandy loam or gravelly sand outwash over glacial deposits (USDA NRCS). Due to the previous land clearing and grading on the parcel, much of the original topsoil has been removed.

Background Research

In May 2020, ATCRC conducted an electronic record search and literature review for the project area using the DAHP Washington State System for Architectural and Archaeological Records Database (WISAARD). This record search was completed to determine the presence or absence of previously documented architectural, archaeological, and historical period resources within or near the API, to establish the historical and cultural contexts for resource identification and to evaluate the significance and the NRHP eligibility of cultural resources that may be present. Archaeological site forms, cultural resource assessments, historic property inventory forms, General Land Office maps, and National Register of Historic Places nomination forms were reviewed. Additionally, historic area maps, tax parcel records, and other public records were consulted to develop a better understanding of the land-use patterns of the area.

Environmental Setting

The API is located on the uplands terrace, northeast of the Nisqually River delta. The topography and geology were formed during the Late Pleistocene, following the advance of several glaciations that originated from Canada and extended between the Cascade and Olympic mountain ranges into the Puget Lowlands (Kruckeberg 1991:12, Lasmanis 1991).

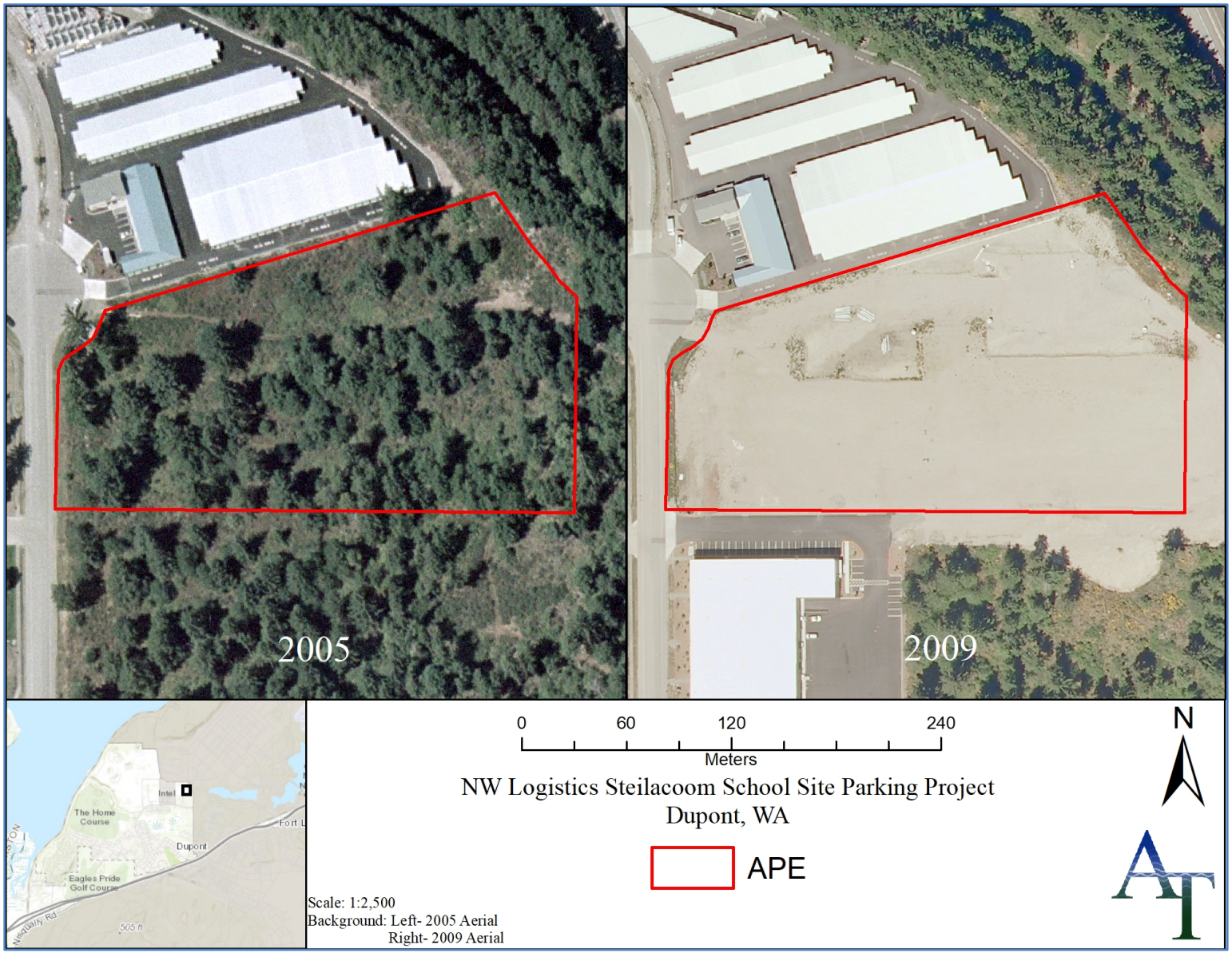

Figure 3. Development history of the API: 2005 and 2009.

Table 1: Soil types and Surface Geology within the API.

Name	Slope %	Typical Profile
Everett-Spanaway-Spana complex	0 to 30	Oi- 0 to 1 inch: slightly decomposed plant material A- 1 to 3 inches: very gravelly sandy loam Bw- 3 to 24 inches: very gravelly sandy loam C1- 24 to 35 inches: very gravelly loamy sand C2- 35 to 60 inches: extremely cobbly coarse sand
Semiahmoo muck	0 to 1	Oap 0 to 6 inches: muck Oa1 6 to 25 inches: muck Oa2 25 to 60 inches: muck
Spanaway gravelly sandy loam	0 to 3	H1 0 to 14 inches: gravelly medial sandy loam H2 14 to 18 inches: very gravelly medial sandy loam H3 18 to 60 inches: extremely gravelly sand

The Vashon Stade of the Fraser Glaciation began around 18,000 BP with an advance of the Cordilleran ice sheet into the lowlands (Porter and Swanson 1998). The Puget Lobe of the ice sheet flowed down into the Puget Lowland and reached its terminus just south of Olympia between 14,500 and 14,000 BP (Clague and James 2002). The Puget Lobe began to retreat shortly after reaching its terminus. Marine waters entered the lowlands that had been carved out by the glacier and filled Puget Sound. The remaining ice floated and wasted away rapidly. Glaciomarine drift deposits were released from the melting glacial ice and deposited on the seafloor across the northern and central Puget Lowland, causing the land to rebound and relative sea levels to fall and expose glacial outwash deposits (Clague and James 2002).

About 11,600 to 10,000 BP, the Cordilleran ice sheet advanced once again, leaving glacial till and outwash deposits in much of northwestern Washington (Easterbrook 2003). Following the rising temperatures, the glacier retreated rapidly to the north and left the regional landscape ice-free and suitable for inhabitants by approximately 11,000 years ago (Kruckeberg 1991:22).

Cultural Setting

Pre-contact Setting

Pre-contact occupation of the Puget Sound lowland can be subdivided into three phases that include Early (end of the last ice age to 5,000 years before present (BP), Middle (5,000 to 1,000 BP), and Late stages of development (1,000 to 250 BP). The Early period is characterized by an emphasis on the use of flaked stone tools, including fluted projectile points, leaf-shaped points, and cobble-derived tools. Camps were frequently established along river terraces or outwash channels and exist today as near-surface scatters or shallowly buried sites. The Middle period coincides with a stabilization of the environment to something similar to today. The broad cultural patterns include a more extensive suite of tools, including smaller notched points and groundstone, and bone or antler implements used for working wood. Shell midden sites first appear during this period indicating a transition to a more maritime-based subsistence pattern. The Late period is dominated by settlement along the coastline, streams and rivers and far greater specialization of technology. Trade goods also appear, indicating extensive trade networks up and down the coast as well as with inland plateau neighbors. Salmon became a primary food source at this time as sea levels had risen, and riparian environments supported large runs of salmon and provided plentiful food.

Ethnohistoric Setting

The API is located in the traditional territory of the Nisqually Indian Tribe, which is documented as extending along both sides of the Nisqually River from its delta at the southern end of the Puget Sound to nearly 30-miles upstream (Ruby and Brown 1986:150; Suttles and Lane 1990:486). Coastal Salish groups typically maintained strong social ties to neighboring groups in the pre-contact period. Ethnographic and archaeological information indicates that local bands established permanent villages near the convergence of protective marine shoreline and freshwater drainage outlets, while temporary camps were established during the warmer months during seasonal food source gathering times. In the ethnographic period, the Nisqually occupied at least 40 villages on the Nisqually River, where resources were plentiful. There was a village located on McAllister Creek, one at Sequalitchew Creek, one at the south end of Nisqually Lake, one near Roy, and the villages at South Bay and Olympia were called "associated villages," because of intermarriages between neighboring villages (Carpenter et al 2008). Temporary camps were also utilized while traveling for seasonal food sources, typically during the warmer summer months.

Reviewed ethnographic records (Hilbert et al. 2001; Smith 1940) do not indicate any Nisqually villages located in the immediate API. The nearest ethnographic village site appears to have been located west of the API on the mouth of the Nisqually River, "*^{tw}sqwE'le*". A second village site is located east of the API and near the junction of the Sequalitchew Creek and the river, "*stgwáletcabe*" (Smith 1940).

Historical Period Setting

Non-native settlement of the Puget Sound region followed soon after the establishment of Hudson Bay Company (HBC) fur trading posts. The HBC capitalized on the high demand for beaver pelts and enlisted the services of local Native American trappers. Two HBC forts and one associated village were stationed on the Nisqually delta. Fort Nisqually was a pastoral and agricultural branch of the Puget Sound Agricultural Company (a subsidiary of the Hudson Bay Company) and shipped supplies to England and other fort establishments (Stilson 2003). Further regional non-native settlement was encouraged by the Treaty of Washington in 1846, the Donation Land Claim Act of 1850, and the creation of the Territory of Washington in 1853.

Non-native settlement in Puget Sound drastically affected Indian people and their traditions. In 1854, following negotiations between the Nisqually, Squaxin, and Puyallup, and the United States government during the Medicine Creek Treaty, three reservations were to be established. Chief Leschi and Quiemuth refused to sign the treaty after learning that the Nisqually reserve was to be established west of the delta, and not on the river where people could fish (Carpenter et al 2008). This initiated the Treaty War of 1855. During this time, internment camps were established on Fox Island and Squaxin Island. The war ended when territorial Governor Isaac Stevens agreed to establish reservation lands along the rivers of both the Nisqually and Puyallup and requested that Indian warriors return to the area, which resulted in the hanging of Chief Leschi and murder of Quiemuth. Soon after, a large portion of the reservation was condemned by Pierce County and transferred to the US Army for development of military installations (later to become Fort Lewis), and many displaced Nisqually were forced to relocate to foreign lands on the Quinault River and the Puyallup, Skokomish, and Chehalis reservations, as much of the reservation land remaining had already been divided and allotted into family units (Carpenter et al 2008).

The project API lies within land claims of the Hudson Bay Company (HBC) and the associated Puget Sound Agricultural Company (PSAC). These land claims were sold to the United States following the 1864 Treaty between the United States and Great Britain that effectively removed the HBC and the PSAC from the Washington Territory (United States 1864, Kennedy et al. 1983, and Kaehler 2008).

Review of historic General Land Office maps (GLO) indicate that the project API is in close proximity to Fort Nisqually (GLO 1854), and was the homestead of James Vergon in 1862 (GLO 1862); however, the only mapped structure located near the API was owned by H. Williamson and is located less than a quarter-mile to the south (GLO 1871). This structure has been recorded as site 45PI00454.

Few European Americans lived in the immediate area at the turn of the 20th Century. In 1906 the E.I. DuPont de Nemours & Company purchased large tracts of land in the DuPont area and opened an explosives manufacturing facility called the DuPont Powder Works (Munyan 1972), on top of the site of a Nisqually Indian Tribe village site, "*Lach-ah-Lett's",* (Carpenter et al 2008:13). The City of DuPont was built around the DuPont Powder Works industry, and the City, as an example of a Pacific Northwest company town, is now listed on the National Register of Historic Places.

Previous Cultural Resource Studies, Archaeological Sites and Historic Properties

A review of the Washington State System for Architectural and Archaeological Records Database revealed that no cultural resource surveys, archaeological sites, or historic structures are located within the API. A total of 26 previous cultural resources studies have been completed within a 1-mile radius of the API. The majority of these studies were conducted for other residential or industrial-use development projects.

Within one mile of the API, there are a total of 25 recorded archaeological sites. These include pre-contact and historic refuse concentrations and scatters, domestic features, historic public works, and a historic railroad grade. There is also one recorded historic district, the DuPont Village Historic District, and one potentially eligible historic structure. None of these resources identified will be impacted by the proposed project.

Table 2. Previous cultural resource investigations within one mile of the API.

NADB No.	Author	Title (Date)	Findings	Distance from API
1693467	Amell, Sarah J.	Cultural Resources Survey for the DuPont-Steilacoom Road Improvement Project, DuPont, Pierce County, Washington (2020)	No further action required.	470 feet
1692193	Schultze, Carol	Cultural Resources Inventory, Phase II Development Northwest Logistics Center, City of DuPont, Pierce County, Washington (2015)	Monitoring recommended near 45PI1358	Adjacent to API
1691684	de Vry Nicholas	Cultural Resource Monitoring of the Intel Site Redevelopment Project, DuPont (2018)	No further action required.	0.20 miles
1687447	Taylor, Allie Rae	Assessment of Site 45PI01358 for the Northwest Logistics Building 2 Project, City of DuPont (2015)	No further action required.	0.25 miles
1686701	Wessen, Gary	Revised Cultural Resources Assessment for the Glacier Northwest North Sequalitchew Creek SEIS Project, City of DuPont (2008)	No further action required.	0.87 miles
168446	Gilpin, Jennifer	Memo to Gretchen Kaehler RE: NRHP Evaluation of Site 2245-1, Historic Period Stormwater System (2014)	No further action required.	0.20 miles
1685283	Cooper, Jason	Archaeological Survey, Evaluation, and National Register Eligibility Testing at Joint Base Lewis-McChord (2013)	Recommended further assessment or that sites were not eligible.	1 mile
1682888	Sikes, Nancy	Cultural Resources Monitoring Compliance Report for Creekside DuPont Partners, LLC/Creekside Village Development Project (2012)	No further action required.	0.90 miles
1682550	Falkner, Michael	Archaeological Site Verification of 55 Sites and Isolate on Fort Lewis (2012)	No further action required.	0.70 miles
1680626	Sikes, Nancy	Cultural Resources Assessment Creekside DuPont Partners, LLC/Creekside Village Development Project DuPont (2011)	No further action required.	0.90 miles
1353157	Thompson, Gail	Archaeological Monitoring at the Western Washington Sheet Metal Site, City of DuPont (2009)	No further action required.	1 mile

NADB No.	Author	Title (Date)	Findings	Distance from API
1352855	Dampf, Steven	An Archaeological Inventory Survey of 100 Acres at Fort Lewis (2008)	No further action required.	0.40 miles
1352607	Dampf, Steven	Archaeological Site Testing for National Register of Historic Places Eligibility of Five Archaeological Site at Fort Lewis, Fiscal Year 2006 (2006)	No further action required.	0.80 miles
1351410	Sadler, Dale	Fort Lewis Cultural Resources Office Assessment of Project Effects to Construct a POV (Personal Vehicle) RV Storage Lot and Fence Horse Stables, Fort Lewis Cantonment (2008)	No further action required.	1 mile
1351304	Thompson, Gail	Archaeological Resource Assessment of Community Park Site at the Centex Homes Bell Hill Development, City of DuPont (2008)	No further action required.	0.86 miles
1350484	Schumacher, James	Archaeological Monitoring for Basalite Office Facility, DuPont (2007)	No further action required.	
1349489	Sadler, Dale L.	Cultural Resources Survey for the New 110th Chemical Battalion Complex at North Fort Lewis (2007)	No further action required.	0.64 miles
1348810	Bialas, Catherine M.	Cultural Resources Assessment for the Glacier Northwest North Sequalitchew Creek SEIS Project, City of DuPont (2005)	Recommended monitoring.	0.86 miles
1348341	Forrest, James	Memo Re: Archaeological Survey of the Recondo Site Training Facility (1995)	Recommended monitoring.	0.76 miles
1348081	Sadler, Dale L.	Survey of Cultural Resources for the 5-5 Air Defense Artillery (ADA) Barracks Complex and Vehicle Maintenance Shops Construction at North Fort Lewis (2006)	No further action required.	0.89 miles
1346852	Sadler, Dale L.	Cultural Resources for the Whole Barracks Renewal Project at Fort Lewis (2006)	No further action required.	0.91 miles
1340385	Solimano, Paul S.	Intel DuPont Campus Project Cultural Resource Assessment and Monitoring (1996)	No further action required.	0.53 miles

NADB No.	Author	Title (Date)	Findings	Distance from API
1340358	Larson, Lynn L.	To Mr. Mike Wright, re: Cultural resource assessment of a soil storage location in the southwest corner of the Intel DuPont Campus (1996)	No further action required.	0.53 miles
1340325	Daughtery, Richard D.	Archaeological and Historical Investigations, Divisions Six and Seven Northwest Landing, DuPont (2000)	No further action required.	0.94 miles
1340322	Madson, Michael J.	Cultural Resource (Archaeological Site) Inventory 1997-1998, Fort Lewis Military Reservation (2000)	No further action required.	1 mile

Table 3. Archaeological sites within one mile of the API.

Author	Smithsonian Number	Site Name (Date)	Findings	Eligibility	Distance from API
Cooper, Jason	45PI01316	Greene Park Landing (2015)	Historic military properties, concrete pedestrian bridge, foundations, depressions, roadway elements, water line, metal, glass, earthenware, pre-contact lithic material, historic component ca. 1917-1922.	Eligible.	0.98 miles
Taylor, Allie Rae	45PI01358	Historic Debris Scatter (2015)	Historic scatter metal, glass, porcelain, copper, ca. 1915-1960.	Eligible.	0.31 miles
Gebhardt, Jennifer	45PI01359	Historic-period street lamp (2014)	Historic- period street lamp isolate, ca. early 20th century.	Unknown	0.31 miles
Gebhardt, Jennifer	45PI01333	Historic public works (2014)	Historic public works, utility vaults, concrete pipe, ca. 1944.	Not Eligible	0.21 miles
Olander, Jennifer	45PI01242	HRA 1721-2H (2011)	In ruin historic railroad bed, ca. 1941.	Eligible.	700 feet
Arrington, C.	45PI01229	Isolate #3 (2010)	Milled lumber, ca. 1906-1920s.	Eligible.	0.94 miles
Falkner, Michael	45PI01169	O.H. White Homestead (2009)	Ca. 1850s-1910.	Eligible.	0.74 miles

Author	Smithsonian Number	Site Name (Date)	Findings	Eligibility	Distance from API
Baumgartner, Joey	45PI00922	Historic scatter (2008)	Historic scatter, glass, ceramic, ca. early 20th Century.	Eligible.	0.40 miles
Thompson, Gail	45PI00969	Isolate 1456-1 (2008)	Historic glass druggist bottle isolate, ca. 1900.	Unknown.	0.33 miles
Dampf, Steven	45PI00791	1378-ISO-02 (2008)	Historic isolate, amber glass, ca. 1939-1937	Not eligible.	0.76 miles
Daughtery, Richard D.	45PI00454	Henry Williamson Homestead (1998)	Homestead, mid to late 1800's.	Eligible.	0.33 miles
Dampf, Steven	45PI00516	FLI-LAAS-8 (1998)	Possible historic homestead site with orchard & historic debris scatter.	Not eligible.	0.82 miles
Solimano, Paul S.	45PI00441	(1995)	Unimproved dirt road, road bed completed in 1852 with help of laborers lent by Hudson Bay Co.	Eligible.	0.71 miles
Solimano, Paul S.	45PI00440	Intel Railroad Dump No. 1 (1995)	---	Eligible.	0.66 miles
Welch, Jeanne	45PI00074	(1977)	Reported site of historic Indian camp or lodges outside Fort Nisqually.	Eligible.	0.84 miles
Welch, Jeanne	45PI00057	Old Town Men's Borading House Site (1993)	---	Not Eligible	0.91 miles
Welch, Jeanne	45PI00058	Brickyard Dump (1989)	---	Not Eligible	0.84 miles
Welch, Jeanne	45PI00060	Edmond Marsh Dump (1989)	---	Not Eligible	0.92 miles
Welch, Jeanne	45PI00061	Railroad Dump #1 (1989)	---	Not Eligible	0.82 miles

Author	Smithsonian Number	Site Name (Date)	Findings	Eligibility	Distance from API
Welch, Jeanne	45PI00062	(1989)	---	Not Eligible	0.88 miles
Welch, Jeanne	45PI00065	(1989)	---	Not Eligible	0.87 miles
Welch, Jeanne	45PI00069	(1989)	---	Not Eligible	0.97 miles
Welch, Jeanne	45PI00070	(1989)	---	Not Eligible	0.85 miles

Table 4. Potential and listed historic properties within one mile of the API.

Property ID	Name	Address	Building Type	Build Date	Eligibility
719218	Rail bridge RRoND, JBLM	Intersection of Plant Road and Lake Sequalitchew, JBLM, 98433	Bridge	1941	Not assessed
45DT00151	Dupont Village Historic District	Roughly bounded by Santa Cruz, Brandywine, Dupont and Penniman, DuPont, WA.	Historic District	1906-1915	NRHP

Cultural Resources Expectations

Based on ATCRC's background review of environmental and cultural contexts, and previously recorded cultural resources studies and sites, the project area is considered to be located in an area of moderately low to low probability for archaeological sites as indicated in the DAHP WISAARD site predictive model. Review of aerial photographs indicate that the API has been previously cleared of trees and graded (USGS NHAP 1981, USGS 2005, USGS 2009). However, due to the fact that that the API was part of former PSAC lands, there is potential for archaeological sites and features related to this historic use of the area. If any pre-contact or historical archaeological sites, features, or cultural deposits are present in the project area they are likely to exist in subsurface contexts and would be identified during archaeological survey.

Field Investigations

Field investigations were conducted on May 20, 2020, by Andrew Viloudaki (Project Archaeologist) and Colin Higashi (Cultural Resource Technician) during partly cloudy weather conditions.

The field investigations consisted of a pedestrian survey and subsurface testing. Pedestrian survey consisted of walking 10-meter transects across the API and photographing existing conditions including tree clearing, utilities, earthworks, and grading (Photo 1 and Figure 4). Subsurface testing consisted of excavating 19 SPs (Figure 4). SPs were strategically placed on transects with intervals based on environmental and modern cultural features identified during the pedestrian survey.

The pedestrian survey identified many of the landscape modifications identified in the background research that occurred between 2005 and 2009. These include earthworks, utility infrastructure, and construction and clearance debris (Figure 4). The earthwork areas identified on Figure 4 include areas of man-made burms, drainage pond, and a paved roundabout. The utility locations identified on Figure 4 include multiple water/sewer manholes, storm drain outlets, and natural gas pipeline markers.

Each SP measured approximately 40-centimeters (cm) in diameter and was excavated to a minimum 40 cm below the ground surface or impasse. Sediments were screened through ¼-inch mesh and backfilled upon completion. Photo 2 provides an example of the subsurface conditions encountered during the survey. Soils found across the API were representative of graded and redeposited glacial soils overlying glacial till. Based on aerial and satellite photos, the API was cleared between 2005 and 2009, which resulted in the removal of all topsoils. No cultural resources were observed. The soil strata encountered during excavations are presented in Appendix A.

Photo 1. View of weathered and reworked glacial till on the surface of API facing North.

Photo 2. View of SP1. Lighter soils at the bottom are representative of glacial soils across the API.

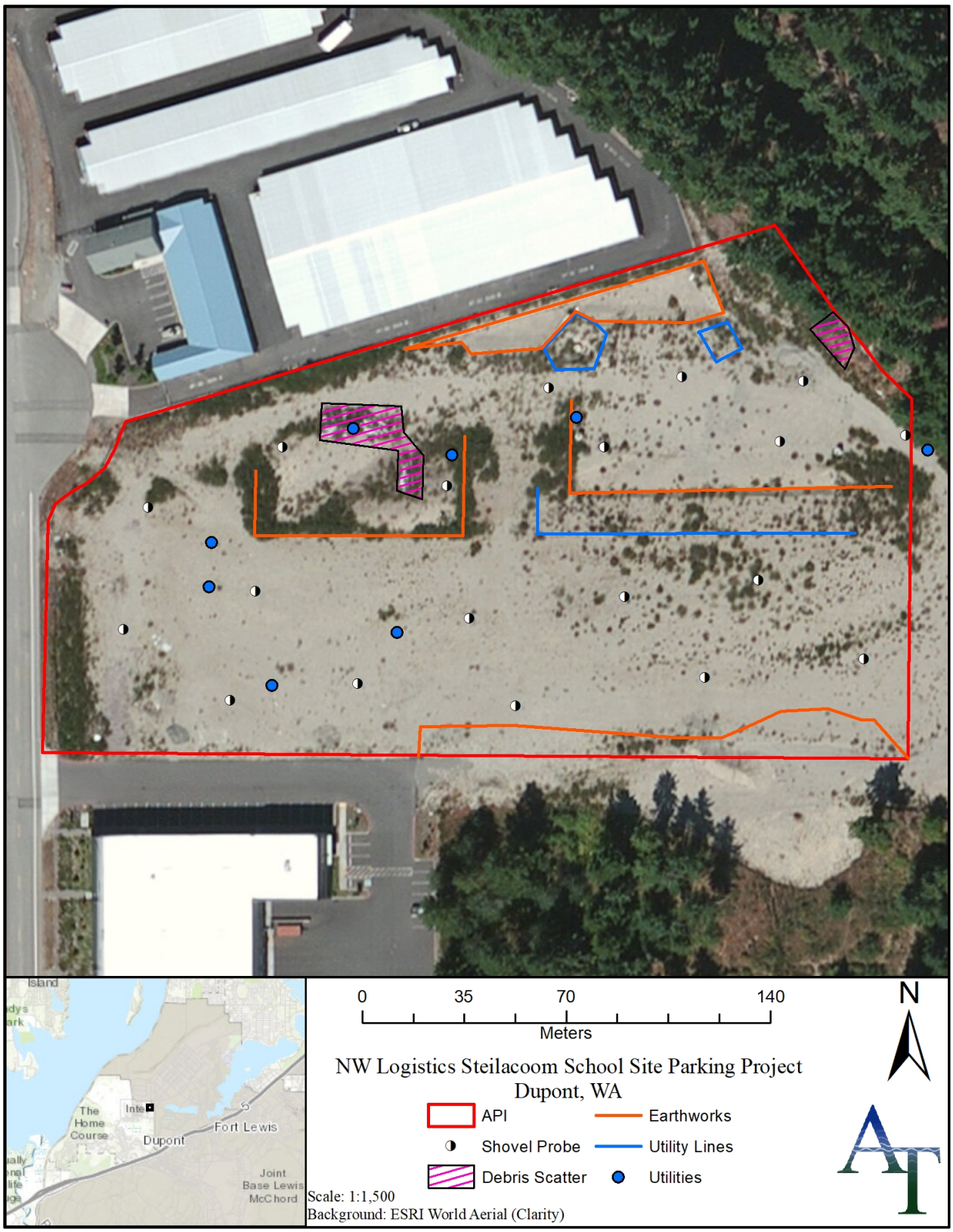

Figure 4. Results of the cultural resources survey.

Results and Recommendations

ATCRC's cultural resources assessment for the Steilacoom School Parking Project included background research, field investigation, and preparation of this report. Background review determined that the project area is located in an area considered to have a "low" to "moderately low" probability for cultural resources.

Field investigations consisted of pedestrian survey and subsurface testing within the project API. Nineteen shovel probes (SP) were excavated and no cultural resources were identified during the surface and subsurface investigations. The API is comprised of highly disturbed soils overlying glacial sediments. ATCRC recommends no further work, however will provide cultural resource monitoring services during construction in order to comply with the City of DuPont's request for cultural resource monitoring. ATCRC also recommends preparation and compliance with an Inadvertent Discovery Plan for reference during any future construction activities on the parcel. An Inadvertent Discovery Plan is attached in Appendix B.

No cultural resources study can wholly eliminate uncertainty regarding the potential for prehistoric sites, historic properties, or TCPs associated with a project. The information presented in this report is based on professional opinions derived from our analysis and interpretation of available documents, records, literature, and information identified in this report, and on our reconnaissance-level field investigation and observations as described herein. Conclusions and recommendations presented apply to project conditions existing at the time of our study and those reasonably foreseeable. The data, conclusions, and interpretations in this report should not be construed as a warranty of subsurface conditions described in this report. They cannot necessarily apply to site changes of which ATCRC is not aware and has not had the opportunity to evaluate.

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Appendix A: Shovel Probe Log

SP	Strata #	To depth (cm)	Basal Transition	Description	Cultural Materials	Notes
C1	1	2	Clear	100% Gravel and cobbles	None	Artificial resurfacing
	2	8	Gradual	Dark brown sandy gravelly loam	None	
	3	20		Buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C2	1	2	Clear	100% Gravel and cobbles	None	Artificial resurfacing
	2	40		Orange-brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C3	1	34	Mixed	Black silty loam with moderate gravel	None	Disturbed surface
	2	37		Dark buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C4	1	20	Gradual	Dark brown sandy loam with abundant gravel	None	
	2	32		Dark buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C5	1	16	Clear	Loose buff sand	None	Artificial resurfacing
	2	26		Light beige compact sand with abundant unsorted gravel	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C6	1	2	Clear	100% Gravel and cobbles	None	Artificial resurfacing
	2	18	Clear	Buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	3	40		Gray-buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C7	1	10	Gradual	Loose dark brown sandy loam with abundant unsorted gravel	None	
	2	30	Clear	Loose light brown sandy silt with abundant gravel	None	

SP	Strata #	To depth (cm)	Basal Transition	Description	Cultural Materials	Notes
	3	34		Buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C8	1	2	Clear	100% Gravel and cobbles	None	Artificial resurfacing
	2	30	Gradual	Dark beige compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	3	48		Orange-gray compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C9	1	8	Gradual	Gray sandy loam with abundant gravel	None	
	2	25	Clear	Orange-brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	3	29		Dark brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
C10	1	2	Clear	100% Gravel and cobbles	None	Artificial resurfacing
	2	30	Indistinct	Dark beige compact sand with abundant unsorted gravel, cobbles	None	Possibly reworked?
	3	38		Dark gray compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A1	1	20	Clear	Olive Grey sand with abundant unsorted gravel	None	Glacial till
	2	30		Gray-buff compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A2	1	30		Olive Grey compact sand with abundant unsorted gravel	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A3	1	15	Clear	Olive Grey compact sand with abundant unsorted gravel	None	Glacial till
	2	20		Orange-brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		

SP	Strata #	To depth (cm)	Basal Transition	Description	Cultural Materials	Notes
A4	1	25	Gradual	Light beige compact sand with abundant unsorted gravel	None	Glacial till
	2	30		Orange-brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A5	1	35	Gradual	Light beige compact sand with abundant unsorted gravel	None	Glacial till
	2	40		Dark brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A6	1	5	Clear	Brown Sandy gravel with abundant unsorted gravel	None	Artificial resurfacing
	2	20		Orange-brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A7	1	5	Clear	Light Brown sandy gravel with abundant unsorted gravel	None	Artificial resurfacing
	2	30		Reddish-brown compact sand with abundant unsorted gravel, cobbles	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A8	1	5	Clear	Light Brown sandy gravel with abundant unsorted gravel	None	Artificial resurfacing
	2	30		Light beige compact sand with abundant unsorted gravel	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		
A9	1	5	Clear	Light Brown sandy gravel with abundant unsorted gravel	None	Artificial resurfacing
	2	30		Light beige compact sand with abundant unsorted gravel	None	Glacial till
	Termination:			Termination in glacial till at inhibitive cobble layer		

Appendix B: Inadvertent Discovery Plan (IDP)

Plans and Procedures for the Inadvertent Discovery of Cultural Resources and Human Skeletal Remains

1. Introduction

The following Inadvertent Discovery Plan (IDP) outlines procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

2. Recognizing Cultural Resources

A cultural resource discovery could be prehistoric or historic. Examples include:

- An accumulation of shell, burned rocks, or other food-related materials;
- Bones or small pieces of bone,
- An area of charcoal or very dark stained soil with artifacts,
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips),
- Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years,
- Buried railroad tracks, decking, or other industrial materials. When in doubt, assume the material is a cultural resource.

3. On-Site Responsibilities

STEP 1: STOP WORK. If any employee, contractor, or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work in the immediate area of the discovery must stop (typically a 10-foot radius but depends on site conditions). The discovery location should be secured at all times.

STEP 2: NOTIFY MONITOR. If there is an archaeological monitor for the project, notify that person. If there is a monitoring plan in place, the monitor will follow its provisions.

STEP 3: NOTIFY PROJECT MANAGEMENT. Contact the Project Manager. If you cannot reach the Project Manager, contact the project's alternate point of contact. The Project Manager or the designated Alternate Contact will make all other calls and notifications.

Project Manager	**Alternate Contact**
Bjorn Brynestad, DM	Sarah Amell
234-444-8478	360-359-6701
bjorn@panattoni.com	Sarah@AquaTerraCRC.com

If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call or speak with the media about the remains specifically.

4. Further Contacts and Consultation

A. Project Manager's Responsibilities

- Protect Find: The Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.
- Direct Construction Elsewhere On-site: The Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.
- Identify Find: The Project Manager will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological. This will either be an archaeological consultant hired by the Project or staff from DAHP.
- If the discovery is determined not archaeological, work may proceed with no further delay.
- If the discovery is determined to be archaeological, the Project Manager will continue with notification.
- If the discovery is human remains or funerary objects, the Project Manager will ensure that the DAHP State Physical Anthropologist examines the find. If the discovery is determined to be human remains, the procedure described in Section 5 will be followed.
- Notify DAHP if DAHP has not yet been contacted, the Project Manager will do so. The Project Manager will also contact the involved agencies (if any) and interested and affected Tribes.

B. Further Activities

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

C. Contacts

Department of Archaeology and Historic Preservation	
Lance Wollwage, Ph.D. Assistant State Archaeologist, DAHP (360) 586-3536	Rob Whitlam, Ph.D. State Archaeologist, DAHP (360) 586-3080
Tribes	
Nisqually Indian Tribe Annette Bullchild Tribal Historic Preservation Officer (360) 456-5221 ext. 1106	

5. Special Procedures for the Discovery of Human Skeletal Material

If ground-disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible.

The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Thomas B. Clark, Coroner Pierce County Medical Examiner's Office 3619 Pacific Ave. Tacoma, WA 98418 (253) 798-6494	DuPont City Police Department (253) 964-7060

6. Documentation of Archaeological Materials

Archaeological deposits discovered during construction will be assumed eligible for the Washington Heritage until a formal Determination of Eligibility is made. Contact the Project Manager or DAHP regarding the possible need for an Emergency Excavation Permit per RCW27.53. DAHP will make all decisions regarding procedures for evaluation of features and eligibility determinations.

All prehistoric and historic cultural material discovered during project construction will be recorded by a professional archaeologist on State of Washington cultural resource site or isolate form using standard techniques. Site overviews, features, and artifacts will be photographed; stratigraphic profiles and soil/sediment descriptions will be prepared for subsurface exposures. Discovery locations will be documented on scaled site plans and site location maps.

If assessment activity exposes human remains (burials, isolated teeth, or bones), the process described in Section 5 above will be followed.

7. Proceeding with Construction

Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A Cultural Resources Specialist (either from DAHP, a consulting Tribe, or a professional consultant) must determine the boundaries of the discovery location. In consultation with DAHP and affected tribes, the Project Manager will determine the appropriate level of documentation and treatment of the resource. If federal agencies are involved, the agencies will make the final determinations about treatment and documentation.

Construction may continue at the discovery location only after the process outlined in this plan is followed and DAHP determines that compliance with state and federal laws is complete.

State Archaeologist **Rob Whitlam, Ph.D.** Rob.Whitlam@dahp.wa.gov (360) 586-3080 (360) 890-2615 – Cell

The DAHP will review the eligibility criteria above, make a recommendation to the artifact or deposits potential eligibility, and will proceed with agency and tribal notification as necessary (so long as the artifact or deposit is determined eligible).

Prepared for:

Panattoni Development Company, Inc.
7887 E. Belleview Avenue, Suite 475
Denver, Colorado 80111

DRAFT

LIMITED SUBSURFACE INVESTIGATION REPORT

NORTHWEST LOGISTICS CENTER PARKING
EAST OF INTERNATIONAL PLACE NORTH
DUPONT, WASHINGTON 98327

June 30, 2020

ATC Project No. NPPAN20023

Prepared by:

ATC Group Services LLC.
6347 Seaview Avenue Northwest
Seattle, Washington 98107
Phone: (206) 781-1449

Attachment 1.c. Ltd Subsurface Investigation Report prepared by ATC dated June 30, 2020

6347 Seaview Avenue Northwest
Seattle, Washington 98107
www.atcgroupservices.com
Telephone 206-781-1449
Fax 206-781-1543

June 30, 2020

Ms. Kristen Dickey
Sent via email: kdickey@panattoni.com

Panattoni Development Company, Inc.
7887 East Belleview Avenue, Suite 475
Denver, Colorado 80111

RE: DRAFT Limited Subsurface Investigation
Northwest Logistics Center Parking
East of International Place North
DuPont, Washington 98327
ATC Project No. NPPAN20023

Dear Ms. Dickey:

On behalf of Panattoni Development Company, Inc. (Panattoni), ATC Group Services LLC (ATC) has prepared this report describing soil investigation activities performed at the Northwest Logistics Center Parking property, located east of International Place North in DuPont, Pierce County, Washington 98327 (Site).

The assessment activities were conducted to characterize the subsurface conditions in accordance with the Model Toxics Control Act (MTCA) and its implementation regulations defined in Chapter 70.105D of the Revised Code of Washington (RCW), Chapter 173-340 of the Washington Administrative Code (WAC), and Ecology's *Tacoma Smelter Plume Model Remedies Guidance*.

If you have questions, regarding the information presented in this report, or if you need additional information, please do not hesitate to contact us at (206) 781-1449.

Sincerely,
ATC Group Services LLC

Elisabeth Silver, LG
State of Washington Licensed Geologist
Senior Project Manager

Hillary R. Williams
National Client Manager

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1.0 INTRODUCTION

On May 28 and 29, 2020, ATC Group Services LLC (ATC) conducted subsurface investigation activities at the Northwest Logistics Center Parking property, located east of International Place North in DuPont, Washington (Site). The Site is currently vacant land with varied terrain (graded south to north with dropping elevations) and areas with overgrown vegetation and brush. The Site Vicinity Map is shown on **Figure 1**.

The purpose of the investigation was to further investigate recognized environmental conditions identified in a Phase I Environmental Site Assessment (ESA) prepared by ATC dated May 22, 2020, which were to evaluate the fill materials placed on the property in circa 2007 and the native soil below the fill material for arsenic and lead from potential smelter plume impacts.

2.0 BACKGROUND

Based on the information provided for the Site, the property consists of 5.34-acre parcel of vacant land located east of International Place North in DuPont, Washington. According to information obtained from the Pierce County Assessor-Treasurer, the property is identified as Parcel Number 3000390282 with no physical address.

Prior reports (*Subsurface Exploration, Geologic Hazard, and Preliminary Geotechnical Engineering Report, International Place, DuPont, Washington,* prepared by Associated Earth Sciences, Inc. (AES), dated March 1, 2012; *Soil Sampling and Analyses, Steilacoom Property Purchase, International Place, DuPont, Washington*, prepared by AES, dated March 15, 2012; *Phase I Environmental Site Assessment, Steilacoom Property Purchase, International Place, DuPont, Washington*, prepared by AES, dated March 15, 2012) indicated that the property is covered with fill ranging in thickness from about 0.25 feet to 5 feet below ground surface (bgs). Based on information presented in the Phase I report, the fill was likely emplaced after 2006 but before 2012. In addition, the property was identified in an area that may have elevated levels of arsenic and lead in near surface soils from air pollution caused by regional emissions from the former Asarco Company Tacoma copper smelting plant.

According to the State of Washington Department of Ecology (Ecology) Tacoma Smelter Plume map, the property is in an area that could have arsenic concentrations in soil ranging from 40.1 milligrams per kilogram (mg/kg) to 100 mg/kg. However, the Tacoma Smelter Plume map does not map the lead concentrations, lead concentrations in soil could also be present related to the former smelter operations. The current Ecology Model Toxics Control Act (MTCA) Method A cleanup level for arsenic is 20 mg/kg and the current cleanup level for lead is 250 mg/kg.

In February 2012, AES completed shallow soil sampling that generally followed Ecology's *Draft Tacoma Smelter Plume Sampling Guidance* (no date reported) at 40 locations across the property using hand-operated equipment. Samples were collected at a depth interval of approximately zero to 6 inches, or 6 to 12 inches bgs. Sample locations were sited based on a regularly spaced grid. The results of the 2012 shallow soil sampling indicated that all samples submitted for analysis had detections of arsenic and/or lead at concentrations below the applicable MTCA Method A cleanup criteria for unrestricted site use of 20 mg/kg and 250 mg/kg, respectively. Petroleum hydrocarbons

were not detected in the two representative soil samples. The soil samples were collected at depths ranging between 6 and 12 inches bgs as recommended in Ecology's guidance document.

ATC prepared a Phase I ESA (dated May 22, 2020), which noted that 1) the fill material was from an unknown source, and 2) while the fill material was previously sampled for smelter plume impacts (arsenic and lead) as discussed above, only two samples were analyzed for total petroleum hydrocarbons. Therefore, ATC concluded that two samples of fill for analysis of total petroleum hydrocarbons was insufficient for fill characterization. The fill materials on the property from an unknown source represented a recognized environmental condition (REC) based on the potential for the fill material from an unknown source to be impacted and the lack of sufficient analytical data to support that the fill material is not impacted.

Based on information collected from the Phase I ESA, ATC recommended conducting a limited subsurface investigation to evaluate the fill materials placed on the property in circa 2007 and the native soil below the fill material for arsenic and lead from potential smelter plume impacts.

3.0 SITE INVESTIGATION

Based on a review of previous environmental reports, site soils that were previously sampled by AES in 2012 at depths of 6 to 12 inches bgs may not be representative of native, smelter-impacted soil, but instead be representative of the on-site fill material, as the material was reportedly emplaced after 1986, when the smelter ceased operation. Therefore, it is possible that native soil impacted by smelter air-fall is located below the site fill soils and based on the documentation provided to ATC, had not yet been evaluated. Additionally, prior analysis of fill was incomplete, as the fill source was unknown and not all required analyses were included previously.

As a result, in May 2020, ATC conducted a limited subsurface assessment to further evaluate the fill materials identified in 2012, and to investigate the native soil below the fill material for arsenic and lead. Fill materials required additional analyses to confirm compliance with MTCA cleanup levels. In order to evaluate for smelter impact, because the Northwest Logistics Center Parking Site is approximately 5.34 acres, per Ecology's 2019 *Tacoma Smelter Plume Model Remedies Guidance,* sites that are 10 acres or less, but greater than 5 acres, require at least 33 sampling locations be collected across the property. Samples collected previously at the property met the Smelter Plume Guidance, but were only collected from fill soils, which may have been emplaced between 2006 and 2012. Therefore, although these sample results were below cleanup levels, additional characterization was required for the native soil beneath the fill material.

3.1 Subsurface Utility Clearance/GPR Survey and Site Health and Safety

Prior to initiating investigation activities, ATC evaluated the areas to be investigated for the presence of subsurface structures and utilities by contacting Washington One-Call (811), the public utility notification center. Additionally, ATC subcontracted CNI Locates, Ltd. (CNI) of Bonney Lake, Washington to perform onsite utility location. ATC did not encounter any subsurface anomalies during the subsurface utility clearance activities.

A site specific health and safety plan was developed for this project in accordance with Occupational Safety and Health Administration (OSHA) and state regulations and adhered to during the field investigation.

3.2 Soil Sampling Procedures

Oversight of the drilling and sampling activities was performed by qualified ATC field geologists. All reusable soil sampling equipment was cleaned with a Liquinox wash, tap water rinse, and a distilled water rinse between each sampling attempt.

Soil samples were collected from the borings advanced using a direct push Geoprobe drill rig using 5 foot long samplers through the desired sample interval. After each sample interval was retrieved, the sampler was removed and cut to access soil for lithologic evaluation, field screening, and sample collection and preservation.

Soil recovery was generally good with a maximum recovery of nine feet from the borings. Some of the borings had poor recovery in the bottom several feet due to gravel in the native material. The soils were classified in general accordance with the Unified Soil Classification System (USCS). Field volatile organic compounds (VOCs) monitoring was performed by placing a portion of the sample in a sealable plastic bag and then mixing the contents to encourage volatilization of organic compounds present. A photoionization detector (PID) was inserted into the bag to measure the organic vapor level, which was then recorded on the boring logs (**Appendix A**).

The soil samples were named as follows; Boring type (i.e. Soil Boring [SB] followed by location designation number, followed by the depth of the collected soil sample, (ex; SB-1-1.0').

3.3 Limited Subsurface Investigation

ATC collected soil samples at 33 locations to further evaluate potential impacted fill materials, and to characterize the native soils beneath the fill for potential impact from the smelter plume. Soil samples were collected from the fill material, from the shallow horizon of the native material below the fill, and from the deeper zone ranging from 6 inches to 1 foot in depth into the native material at select locations.

In the samples adjacent to former exploration pits EP-1 through EP-5 advanced by others, samples were collected from the fill material, from the top 6 inches of the native material beneath the fill, and from the 6 to 12 inch interval of the native material beneath the fill. These samples were identified as SB-EP-1 through SB-EP-5, followed by the corresponding sample depth, i.e., SB-EP-1-2'.

Another 28 sample locations were sampled in a gridded pattern across the Site. All of the borings had soil samples collected from the top 6 inches of the native material beneath the fill. These sample locations were identified as SB-6 through SB-33, followed by the corresponding sample depth, i.e., SB-17-5'.

At 5 of the 28 grid soil borings, ATC also collected samples from the fill material. These samples were collected at borings SB-8, SB-16, SB-20, SB-24, and SB-25.

At 3 of the 28 grid soil borings, ATC also collected samples from the 6-12 inch interval of the native material beneath the fill material. These samples were collected at borings SB-16, SB-20, and SB-24.

4.0 SOIL ANALYTICAL METHODS

4.1 Soil Analysis

Select soil samples were submitted for analyses to Fremont Analytical of Seattle, Washington, an Ecology accredited laboratory for one or more of the following laboratory analyses:

- Total petroleum hydrocarbon identification (TPH-HCID),
- If present in HCID, for TPH as Gasoline by Northwest TPH Method NWTPH-Gx,
- If present in HCID, for TPH as Diesel/Oil by NWTPH-Dx,
- (VOCs by Environmental Protection Agency (EPA) Method 8260,
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270,
- Organochlorine and organophosphorus pesticides by EPA Methods 8081 and 8270, respectively,
- Chlorinated herbicides by EPA Method 8151/8270 SIM,
- RCRA 8 Metals by EPA Method 6020/200.8/7471/7470,
- Hexavalent Chromium by EPA Method 7196, and
- Polychlorinated biphenyls (PCBs) (if TPH is detected) by EPA Method 8270.

Soil samples collected for VOC and gasoline analysis were field collected in accordance with EPA Method 5035A using a 5 gram soil core sampler inserted into a T-handle plunger. Each core sample was placed into laboratory provided 40 milliliter (ml) glass VOA vials. Each sample consisted of at least 2 vials containing methanol as preservative.

Soil samples collected for all other analyses, which included diesel and heavy oil-range petroleum hydrocarbons, cPAHs, RCRA 8 metals, PCBs, and Nitrate/Nitrite/Ammonia were submitted in laboratory prepared unpreserved capped glass jars.

Each sample jar or VOA vial was labeled, bagged, placed in an iced cooler and entered onto a chain of custody pending delivery to the analytical laboratory.

5.0 SUBSURFACE CHARACTERISTICS

5.1 Soil Lithology

Subsurface soils encountered during the advancement of the soil borings dominantly consisted of a layer of fill underlain by native material (Vashon Recessional Outwash). The fill material was encountered at depths of 0.5 to 6 feet bgs, and consisted primarily of silty fine to medium sand, with some gravel, and occasional organic materials. In three of the borings, a silt lens was encountered at the base of the fill interval. The fill was underlain by native material that extended to the maximum depth explored of 9 feet bgs. The native material consisted primarily of fine to coarse sand with gravel with occasional cobbles and silt. Boring logs are presented in **Appendix A**.

6.0 INVESTIGATION RESULTS AND FINDINGS

Sample results indicated that one of the native soil samples (SB-30-2.5'), contained an arsenic concentration of 65.7 mg/kg, which is above the MTCA Method A Cleanup Level for arsenic of 20 mg/kg. The site-wide average concentrations of arsenic and lead were calculated for the native material sample results. Averages were calculated for both the 0 to 6 inch and the 6 to 12 inch intervals using simple arithmetic averaging. The arithmetic average for arsenic in soil was 5.69 mg/kg for the 0 to 6 inch interval, and 3.46 mg/kg for the 6 to 12 inch interval. The arithmatic average for lead in soil was 2.24 mg/kg for the 0 to 6 inch interval, and 2.23 mg/kg for the 6 to 12 inch interval. These averages are all below the associated cleanup levels. Per Ecology's Smelter Guidance, averaged concentrations for each interval are compared to the associated MTCA cleanup level, and are considered elevated if they exceed it, and would require cleanup. Additionally, if any samples are greater than twice the cleanup level, averaging cannot be used. Metals analytical sample results and averaging data are summarized on **Table 1.**

Other analytical results indicated that one of the VOCs, butyl benzylphthalate, was detected in soil sample SB-EP-2-1' at a concentration of 133 µg/kg, which is below the MTCA Method B Cleanup Level of 530 mg/kg**.** No other compounds were detected above laboratory reporting limits in any of the remaining samples.

Sample locations are shown on the **Figure 2**. The laboratory analytical reports for the soil analyses is included in **Appendix B.**

7.0 CONCLUSIONS AND RECOMMENDATIONS

In May 2020, ATC conducted a limited subsurface investigation to evaluate the fill materials at the Site and to characterize the native soil below the fill material for arsenic and lead. Delineation was conducted in accordance with Ecology's July 2019 guidance document, *Tacoma Smelter Plume Model Remedies Guidance*. Sample results indicated that the site-wide averages for arsenic and lead in each horizon are below the respective 20 mg/kg and 250 mg/kg cleanup levels. However, one of the native soil samples (SB-30-2.5'), contained an arsenic concentration of 65.7 mg/kg, which is above the Tacoma Smelter Plume Model Remedy individual soil sample concentration of 40 mg/kg. Several other metals were also detected in the samples, but below associated cleanup levels. With the exception of butyl benzylphthalate in soil sample SB-EP-2-1, which was detected' at a concentration well below the MTCA Method B Cleanup Level, no other compounds were detected above laboratory reporting limits in any of the remaining samples.

In order to vertically and horizontally delineate the area in the vicinity of sample SB-30-2.5' to determine the extent of arsenic above the cleanup level, ATC recommends conducting additional soil sampling at the Northwest Logistics Center Parking Site to delineate the extent of the arsenic exceedance. Half of the soil samples should be collected from the top 6 inches of native material, and the other half from 6 inch to 1 foot into the native material. This work is scheduled to occur June 26, 2020, and will be reported following receipt of results.

8.0 LIMITATIONS AND RELIANCE

This report was prepared in accordance with the scope of work outlined in ATC's contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Panattoni Development Company, Inc. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to ATC. To the extent this report is based on information provided to ATC by third parties, ATC may have made efforts to verify this third party information, but ATC cannot guarantee the completeness or accuracy of this third party information. The opinions expressed and data collected are based on the conditions of the Site existing at the time of the field investigation. No other warranties, expressed or implied are made by ATC.

9.0 CERTIFICATION

The information provided in this Limited Subsurface Assessment, for Northwest Logistics Center Parking, in DuPont, Pierce County, Washington 98327 was prepared under the supervision of a State of Washington Licensed Geologist.

A professional geologist's certification of conditions comprises a declaration of his or her professional judgement. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations and ordinances.

We appreciate the opportunity to be of service in this matter. If you have questions regarding this report, please contact us at (206) 781-1449.

Sincerely,
ATC Group Services LLC

Elisabeth Silver, LG
State of Washington Licensed Geologist
Senior Project Manager

Hillary R. Williams
National Client Manager

TABLE

Table 1 - Summary of Soil Analytical Results - Total Metals
Northwest Logistics Center Parking
East of International Place North
DuPont, Washington
ATC Project No. NPPAN20023

Boring ID	Sample ID	Sample Depth Interval (feet below ground surface)	Sample Matrix	Sample Date	Total Metals[1] in mg/kg							
					Arsenic	Lead	Mercury	Barium	Cadmium	Total Chromium*	Selenium	Silver
SB-EP-1	SB-EP-1-2'	2.0	Fill	5/28/2020	**4.38**	**3.19**	<0.265	**75.6**	<0.180	**19.7**	**1.020**	<0.0901
	SB-EP-1-6'	6.0	Native	5/28/2020	**3.64**	**2.66**	NA	NA	NA	NA	NA	NA
	SB-EP-1-6.5'	6.5	Native	5/28/2020	**3.27**	**2.03**	NA	NA	NA	NA	NA	NA
SB-EP-2	SB-EP-2-1'	1.0	Fill	5/28/2020	**4.15**	**2.99**	<0.255	**71.7**	<0.158	**22.6**	**0.804**	<0.0790
	SB-EP-2-3'	3.0	Native	5/28/2020	**3.30**	**2.05**	NA	NA	NA	NA	NA	NA
	SB-EP-2-3.5'	3.5	Native	5/28/2020	**4.12**	**2.34**	NA	NA	NA	NA	NA	NA
SB-EP-3	SB-EP-3-0.5'	1.0	Fill	5/28/2020	**4.19**	**2.54**	<0.237	**60.1**	<0.157	**23.7**	**0.861**	<0.0787
	SB-EP-3-6'	3.0	Native	5/28/2020	**2.88**	**1.53**	NA	NA	NA	NA	NA	NA
	SB-EP-3-6.5'	3.5	Native	5/28/2020	**3.56**	**2.32**	NA	NA	NA	NA	NA	NA
SB-EP-4	SB-EP-4-1'	1.0	Fill	5/28/2020	**4.12**	**3.48**	<0.242	**80.1**	<0.177	**19.9**	**0.932**	<0.0885
	SB-EP-4-2'	2.0	Native	5/28/2020	**3.69**	**2.00**	NA	NA	NA	NA	NA	NA
	SB-EP-4-2.5'	2.5	Native	5/28/2020	**3.60**	**2.33**	NA	NA	NA	NA	NA	NA
SB-EP-5	SB-EP-5-1'	1.0	Fill	5/28/2020	**4.51**	**3.77**	<0.288	**72.6**	<0.179	**20.0**	**1.020**	<0.0897
	SB-EP-5-5'	5.0	Native	5/28/2020	**3.49**	**2.39**	NA	NA	NA	NA	NA	NA
	SB-EP-5-5.5'	5.5	Native	5/28/2020	**3.15**	**2.11**	NA	NA	NA	NA	NA	NA
SB-6	SB-6-1'	1.0	Native	5/28/2020	**2.70**	**1.62**	NA	NA	NA	NA	NA	NA
SB-7	SB-7-1.5'	1.5	Native	5/28/2020	**3.79**	**2.25**	NA	NA	NA	NA	NA	NA
SB-8	SB-8-0.5'	0.5	Fill	5/28/2020	**5.82**	**5.90**	<0.250	**63.7**	<0.159	**16.5**	**1.35**	<0.0795
	SB-8-3'	3.0	Native	5/28/2020	**3.97**	**2.47**	NA	NA	NA	NA	NA	NA
SB-9	SB-9-1'	1.0	Native	5/28/2020	**5.12**	**2.71**	NA	NA	NA	NA	NA	NA
SB-10	SB-10-1.5'	1.5	Native	5/28/2020	**3.70**	**2.06**	NA	NA	NA	NA	NA	NA
SB-11	SB-11-2'	2.0	Native	5/28/2020	**4.11**	**3.14**	NA	NA	NA	NA	NA	NA
SB-12	SB-12-2.5'	2.5	Native	5/28/2020	**4.11**	**2.99**	NA	NA	NA	NA	NA	NA
SB-13	SB-13-1.5'	1.5	Native	5/28/2020	**3.64**	**2.00**	NA	NA	NA	NA	NA	NA
SB-14	SB-14-6'	6.0	Native	5/29/2020	**3.85**	**2.19**	NA	NA	NA	NA	NA	NA
SB-15	SB-15-5'	5.0	Native	5/29/2020	**4.94**	**3.19**	NA	NA	NA	NA	NA	NA
SB-16	SB-16-1'	1.0	Fill	5/29/2020	**4.59**	**3.57**	<0.243	**75.5**	<0.160	**25.0/<0.497**	**1.30**	<0.0798
	SB-16-3'	3.0	Native	5/29/2020	**2.98**	**2.27**	NA	NA	NA	NA	NA	NA
	SB-16-3.5'	3.5	Native	5/29/2020	**2.79**	**1.62**	NA	NA	NA	NA	NA	NA
SB-17	SB-17-5'	5.0	Native	5/29/2020	**9.03**	**3.35**	NA	NA	NA	NA	NA	NA
SB-18	SB-18-3.5	3.5	Native	5/29/2020	**2.96**	**2.31**	NA	NA	NA	NA	NA	NA
SB-19	SB-19-3'	3.0	Native	5/29/2020	**4.92**	**2.10**	NA	NA	NA	NA	NA	NA
SB-20	SB-20-2'	2.0	Fill	5/29/2020	**4.21**	**2.81**	<0.221	**68**	<0.158	**21.4/<0.503**	**1.24**	<0.0789
	SB-20-3'	3.0	Native	5/29/2020	**3.97**	**2.26**	NA	NA	NA	NA	NA	NA
	SB-20-3.5	3.5	Native	5/29/2020	**3.71**	**3.04**	NA	NA	NA	NA	NA	NA
SB-21	SB-21-4'	4.0	Native	5/29/2020	**3.29**	**2.18**	NA	NA	NA	NA	NA	NA
SB-22	SB-22-3.5'	3.5	Native	5/29/2020	**3.37**	**2.37**	NA	NA	NA	NA	NA	NA
SB-23	SB-23-3'	3.0	Native	5/29/2020	**4.96**	**2.04**	NA	NA	NA	NA	NA	NA
SB-24	SB-24-1.5'	1.5	Fill	5/29/2020	**7.08**	**5.52**	<0.245	**65.5**	<0.171	**22.0/<0.508**	**1.11**	<0.0855
	SB-24-3.5'	3.5	Native	5/29/2020	**3.78**	**2.46**	NA	NA	NA	NA	NA	NA
	SB-24-4'	4.0	Native	5/29/2020	**3.49**	**2.08**	NA	NA	NA	NA	NA	NA
SB-25	SB-25-0.5'	0.5	Fill	5/29/2020	**5.75**	**2.46**	<0.229	**76**	<0.152	**26.0/<0.492**	**1.29**	<0.0761
	SB-25-1'	1.0	Native	5/29/2020	**3.07**	**1.82**	NA	NA	NA	NA	NA	NA
SB-26	SB-26-0.5'	0.5	Native	5/29/2020	**3.74**	**1.68**	NA	NA	NA	NA	NA	NA
SB-27	SB-27-1'	1.0	Native	5/29/2020	**3.12**	**1.78**	NA	NA	NA	NA	NA	NA
SB-28	SB-28-2.5'	2.5	Native	5/29/2020	**3.52**	**1.96**	NA	NA	NA	NA	NA	NA
SB-29	SB-29-2.5'	2.5	Native	5/29/2020	**3.36**	**2.04**	NA	NA	NA	NA	NA	NA
SB-30	SB-30-2.5'	2.5	Native	5/29/2020	**65.7**	**1.85**	NA	NA	NA	NA	NA	NA
SB-31	SB-31-3.5'	3.5	Native	5/29/2020	**3.29**	**2.36**	NA	NA	NA	NA	NA	NA
SB-32	SB-32-3'	3.0	Native	5/29/2020	**2.59**	**1.57**	NA	NA	NA	NA	NA	NA
SB-33	SB-33-4'	4.0	Native	5/29/2020	**3.16**	**2.24**	NA	NA	NA	NA	NA	NA
MTCA - Method A Cleanup Levels for Unrestricted Land Uses					**20**	**250**	**2**	**NAV**	**2**	**2,000/19[2]**	**NAV**	**NAV**
MTCA-Method B Cleanup Levels, Non Carcinogen for Unrestricted Land Uses					**24**	**NAV**	**NAV**	**16,000**	**80**	**120,000/240[3]**	**400**	**400**
Arithmetic Average (0.0' to 0.5')					**5.69**	**2.24**						
Arithmetic Average (0.5' to 1.0')					**3.46**	**2.23**						

Notes:
mg/kg = millgram per kilogram
BOLD = detected above laboratory reporting limits
SHADED = detected above associated cleanup level
NAV = Not Available
MTCA - Washington State Department of Ecology Model Toxics Control Act
< = Less than Laboratory Reporting Limit
NA=Not Analyzed
1 = Analytical results by inductively coupled plasma and mass spectrometry by United States Environmental Protection Agency (EPA) Method 6020 or cold-vapor atomic absorbtion by EPA Method 7471
2 = 2,000 mg/kg cleanup level for Chromium III and 19 mg/kg cleanup level for Chromium VI
3 = 120,000 mg/kg cleanup level for Chromium III and 240 mg/kg cleanup level for Chromium VI
* When two values are present, the first is total chromium and the second is hexavelent chromium.

FIGURES

SOURCE: USGS Topographic Map, Fort Lewis/Steilacoom, WA Quadrangle, 7.5 Minute Series, dated 2014

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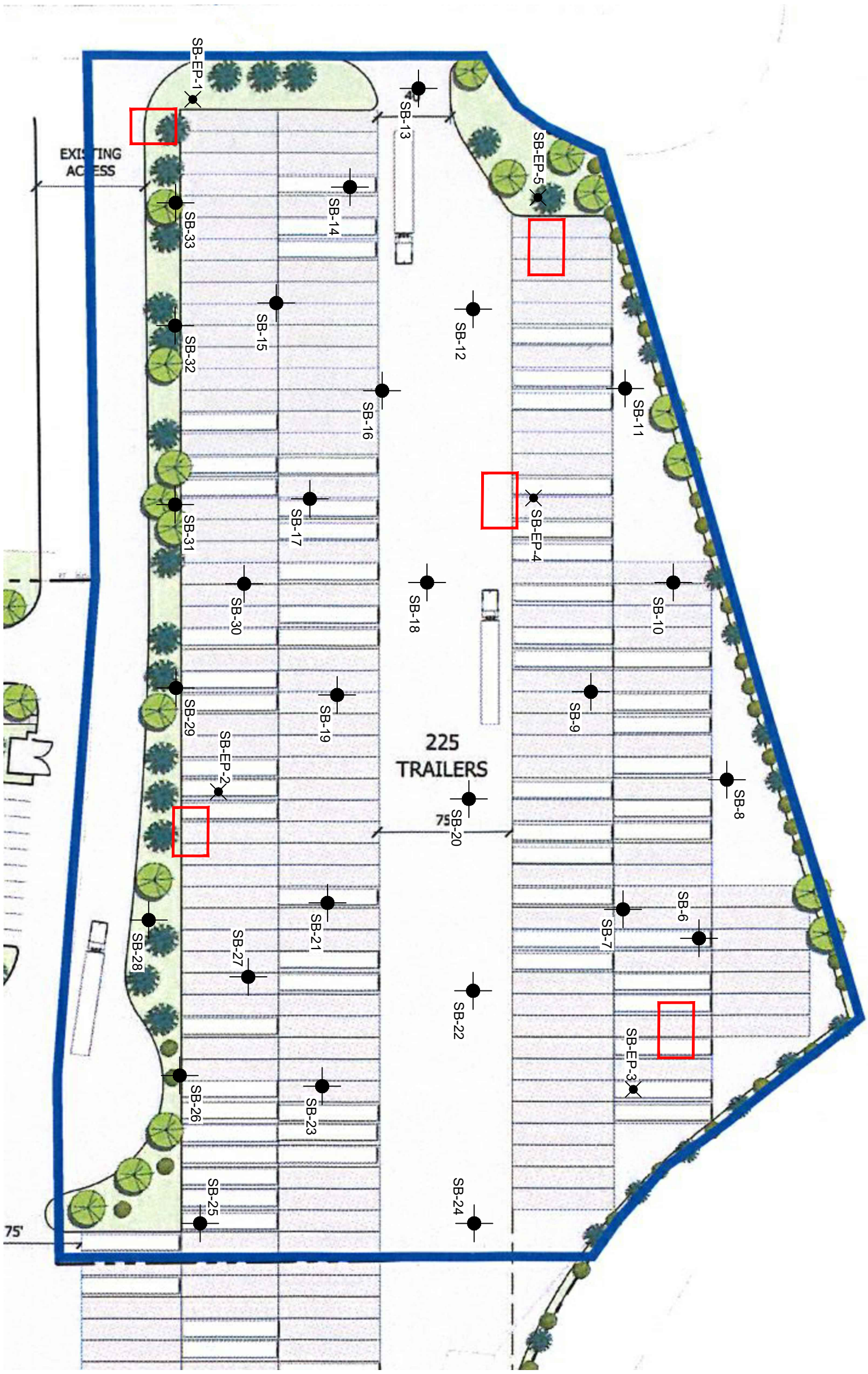
PROJECT NO.: NPPAN20023

FIGURE 1	SCALE:N/A	REVIEWED BY: NB
DRAWN BY: N/A	DATE: 05/2020	FILE: FIGURE 1

SITE VICINITY MAP

NORTHWEST LOGISTICS CENTER PARKING
EAST OF INTERNATIONAL PLACE NORTH
DUPONT, WASHINGTON 980327

S:\Projects-BST\PANATTONI DEVELOPMENT\NPPAN20023 NORTHWEST LOGISTICS\SAMPLOCS.dwg



SAMPLE LOCATION MAP

NORTHWEST LOGISTICS CENTER PARKING
DUPONT, WA

PROJECT NUMBER: NPPAN20023		DATE: 6/24/20	FIGURE 2
APPROVED BY: ES		DRAWN BY: BK	

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APPENDIX A

Boring Logs

LOG OF SB-EP-01

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 7
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						(FILL) SILTY FINE-MEDIUM SAND, dark brown, loose to medium dense, moist. No petroleum odor.	
2	SB-EP-1-2'		0.5				2
				SM			
	CT						
4							4
6	SB-EP-1-6'		0.5				6
	SB-EP-1-6.5'		0.6	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, loose, moist. No petroleum odor.	
						Bottom of hole at 7 feet	
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-EP-02

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 7
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SB-EP-2-1'		0.4	SM		(FILL) SILTY FINESAND, dark brown, medium dense, moist. No petroleum odor.	
2	CT						2
	SB-EP-2-3'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, loose, moist. No petroleum odor.	
	SB-EP-2-3.5'		0.3				
4						NO RECOVERY	4
	NR						
				SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, loose, moist. No petroleum odor.	
6	CT						6
						Bottom of hole at 7 feet	
8							8

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See key sheet for symbols and abbreviations used above.

LOG OF SB-EP-03

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 9
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SB-EP-3-0.5'		0.5	SM		(FILL) SILTY FINESAND, dark brown to gray-brown, medium dense, moist. No petroleum odor.	
2							2
4	CT						4
				SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown to brown, medium dense, damp. No petroleum odor.	
6	SB-EP-3-6'		0.3				6
	SB-EP-3-6.5'		0.4				
8							8
						Bottom of hole at 9 feet	

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-EP-04

Project: Northwest Logisitics Center Phase II
Location: East of International Place North, DuPont, WA
Client: Panattoni
Drill Method: Direct-push
Elevation (ft amsl): --
Prj. No.: NPPAN20023
Drilling Started: 5/28/20 Ended: 5/28/20
Total Depth (ft): 7
Logged By: B. Goulet
Drill Contractor: Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SB-EP-4-1'		1.9	SM		(FILL) SILTY FINE-MEDIUM SAND, dark brown, loose, moist. No petroleum odor.	
	CT						
2	SB-EP-4-2'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	2
	SB-EP-4-2.5'		0.2				
4	NR					NO RECOVERY.	4
6	CT			SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, loose. No petroleum odor.	6
						Bottom of hole at 7 feet	
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-EP-05

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 7
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
2	SB-EP-5-2'		0.4	SW		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, loose to medium dense, moist. No petroleum odor.	2
	CT						
4							4
	SB-EP-5-5'		0.1	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, loose, moist. No petroleum odor.	
6	SB-EP-5-6'		0.2				6
	NR					NO RECOVERY.	
						Bottom of hole at 7 feet	
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-06

Project: Northwest Logisitics Center Phase II
Location: East of International Place North, DuPont, WA
Client: Panattoni
Drill Method: Direct-push
Elevation (ft amsl): --
Prj. No.: NPPAN20023
Drilling Started: 5/28/20 Ended: 5/28/20
Total Depth (ft): 5
Logged By: B. Goulet
Drill Contractor: Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ ORGANICS, dark brown, loose, moist. No petroleum odor.	
	SB-6-1'		0.1	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL & COBBLES, yellow-brown, loose, moist. No petroleum odor.	
2	CT						2
4	NR					NO RECOVERY.	4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-07

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND, dark brown to brown, loose, moist. No petroleum odor.	
2	SB-7-1.5' CT		0.6	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown to brown, medium dense, moist. No petroleum odor.	2
4	NR					NO RECOVERY.	4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-08

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SB-8-0.5'		0.9	SM		(FILL) SILTY FINE-MEDIUM SAND W/ ORGANICS, dark brown to brown, loose, moist. No petroleum odor.	
2	CT						2
	SB-8-3'		0.5	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
4							4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-09

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
			SM		(FILL) SILTY FINE SAND W/ ORGANICS, dark brown, loose, dry. No petroleum odor.	
2	SB-9-1' CT		SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	2
4	NR				NO RECOVERY.	4
6					Bottom of hole at 5 feet	6
8						8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-10

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT SB-10-1.5'		0.7	SM		(FILL) SILTY FINE SAND W/ ORGANICS, dark brown, loose to medium dense, moist. No petroleum odor.	
2				SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL & COBBLES, yellow-brown, loose, moist. No petroleum odor.	2
4	NR					NO RECOVERY.	4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-11

SHEET 1 OF 1

Project: Northwest Logisitics Center Phase II
Location: East of International Place North, DuPont, WA
Client: Panattoni
Drill Method: Direct-push
Elevation (ft amsl): --
Prj. No.: NPPAN20023
Drilling Started: 5/28/20 Ended: 5/28/20
Total Depth (ft): 5
Logged By: B. Goulet
Drill Contractor: Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT			SM		(FILL) SILTY FINE SAND W/ ORGANICS, dark brown, medium dense, moist. No petroleum odor.	
2	SB-11-2'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ SILT & GRAVEL, brown, loose, moist. No petroleum odor.	2
						NO RECOVERY.	
4	NR						4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-12

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT			SM		(FILL) SILTY FINE SAND W/ ORGANICS, dark brown, medium dense, moist. No petroleum odor.	
2							2
	SB-12-2.5'		0.5	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, moist. No petroleum odor.	
						NO RECOVERY.	
4	NR						4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-13

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/28/20 Ended 5/28/20
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE SAND W/ ORGANICS, dark brown, medium dense, moist. No petroleum odor.	
	SB-13-1.5'		0.4	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, dry. No petroleum odor.	
2						NO RECOVERY.	2
4	NR						4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-14

Project: Northwest Logisitics Center Phase II
Location: East of International Place North, DuPont, WA
Client: Panattoni
Drill Method: Direct-push
Elevation (ft amsl): --
Prj. No.: NPPAN20023
Drilling Started: 5/29/30 Ended: 5/29/30
Total Depth (ft): 9
Logged By: B. Goulet
Drill Contractor: Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT			SM		(FILL) SILTY FINE-MEDIUM SAND W/ ORGANICS, dark brown, loose, moist. No petroleum odor.	
2							2
						NO RECOVERY.	
4	NR						4
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ ORGANICS, dark brown, medium dense, moist. No petroleum odor.	
6	SB-14-6'		0.0	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	6
8							8
	CT					Bottom of hole at 9 feet	

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-15

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 7
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						(FILL) SILTY FINE SAND W/ ORGANICS, dark brown, loose, moist. No petroleum odor.	
2	CT			SM			2
4							4
	NR					NO RECOVERY.	
6	CT SB-15-5'		0.0	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, dry. No petroleum odor.	6
						Bottom of hole at 7 feet	
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-16

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SB-16-1'		0.1	SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor. Silt lense at bottom of section.	
2	CT						2
	SB-16-3'		0.7	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown to brown, medium dense, moist. No petroleum odor.	
	SB-16-3.5'		0.5				
4	NR					NO RECOVERY.	4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-17

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 9
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
2	CT			SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor. Silt lense at bottom of section.	2
4	NR					NO RECOVERY.	4
6	CT SB-17-5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, dry. No petroleum odor.	6
8							8
						Bottom of hole at 9 feet	

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG A EWNN76 PANATONNI NW LOGISTICS CTR BORING LOGS.GPJ LOG A EWNN05.GDT 6/3/20

LOG OF SB-18

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
2	CT			SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor. Silt lense at bottom of section.	2
	SB-18-3.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
4	NR					NO RECOVERY.	4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-19

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT			SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, loose to medium dense, moist. No petroleum odor.	
2							2
	SB-19-3'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
						NO RECOVERY.	
4	NR						4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-20

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2	SB-20-2' CT		0.3				2
	SB-20-3'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
	SB-20-3.5'		0.3				
4							4
	NR					NO RECOVERY.	
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-21

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist to wet. No petroleum odor.	
2	CT			SM			2
4	SB-21-4'		0.5	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	4
	NR					NO RECOVERY.	
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-22

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor. Silt lense at contact with native soil (VRO).	
2	CT						2
	SB-22-3.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown to brown, medium dense, dry. No petroleum odor.	
4							4
						NO RECOVERY.	
						Bottom of hole at 5 feet	
6							6
	NR						
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-23

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT			SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2							2
	SB-23-3'		0.4	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
4							4
	NR					NO RECOVERY.	
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-24

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2	CT						2
	SB-24-2.5'		0.3				
	SB-24-3.5'		0.3				
				SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown to brown, medium dense, moist. No petroleum odor.	
4	SB-24-4'		0.3				4
	NR					NO RECOVERY.	
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-25

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
	SB-25-0.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown to brown, medium dense, moist. No petroleum odor.	
	SB-25-1'		0.4				
2							2
	CT						
4							4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-26

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT SB-26-0.5'		0.3	SM		(FILL) SILTY FINE-MEDIUM SAND, dark brown, loose, dry. No petroleum odor.	
				SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, moist. No petroleum odor.	
						NO RECOVERY.	
2							2
	NR						
4							4
						Bottom of hole at 5 feet	
6							6
8							8

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Phone: 206-781-1449
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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-27

SHEET 1 OF 1

Project: Northwest Logisitics Center Phase II
Location: East of International Place North, DuPont, WA
Client: Panattoni
Drill Method: Direct-push
Elevation (ft amsl): --
Prj. No.: NPPAN20023
Drilling Started: 5/29/30 Ended: 5/29/30
Total Depth (ft): 5
Logged By: B. Goulet
Drill Contractor: Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND, dark brown, loose, dry. No petroleum odor.	
	SB-27-1'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
2	CT						2
4						NO RECOVERY.	4
	NR						
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-28

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, dry. No petroleum odor. Sil.t lense at contact with native soil (VRO).	
2	CT SB-28-2.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	2
4							4
	NR					NO RECOVERY.	
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-29

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2	CT						2
	SB-29-2.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, moist. No petroleum odor.	
4						NO RECOVERY.	4
	NR						
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-30

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	CT			SM		(FILL) SILTY FINE-MEDIUM SAND, dark brown, medium dense, moist. No petroleum odor.	
2							2
	SB-30-2.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, yellow-brown, medium dense, moist. No petroleum odor.	
						NO RECOVERY.	
4	NR						4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-31

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2	CT						2
	SB-31-3.5'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, moist. No petroleum odor.	
4							4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-32

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
				SM		(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2	CT						2
	SB-32-3'		0.3	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, moist. No petroleum odor.	
4						NO RECOVERY.	4
	NR						
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

LOG OF SB-33

SHEET 1 OF 1

Project Northwest Logisitics Center Phase II
Location East of International Place North, DuPont, WA
Client Panattoni
Drill Method Direct-push
Elevation (ft amsl) --
Prj. No. NPPAN20023
Drilling Started 5/29/30 Ended 5/29/30
Total Depth (ft) 5
Logged By B. Goulet
Drill Contractor Cascade Drilling Inc.
Depth To Water (ft)

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						(FILL) SILTY FINE-MEDIUM SAND W/ GRAVEL, dark brown, medium dense, moist. No petroleum odor.	
2	CT			SM			2
4	SB-33-4'		0.4	SW		(VASHON RECESSIONAL OUTWASH) FINE-COARSE SAND W/ GRAVEL, brown, medium dense, moist. No petroleum odor.	4
						Bottom of hole at 5 feet	
6							6
8							8

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Remarks: Groundwater not encountered.

See key sheet for symbols and abbreviations used above.

APPENDIX B

Laboratory Analytical Reports and Chain of Custody Documentation

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

ATC Group Services, Inc.
Elisabeth Silver
6347 Seaview Ave NW
Seattle, WA 98107

RE: Panattoni, NW Logistics Ctr
Work Order Number: 2005395

June 18, 2020

Attention Elisabeth Silver:

Fremont Analytical, Inc. received 25 sample(s) on 5/28/2020 for the analyses presented in the following report.

Herbicides by EPA Method 8151A (Mod)
Hydrocarbon Identification by NWTPH-HCID
Mercury by EPA Method 7471
Organochlorine Pesticides by EPA Method 8081
Organophosphorus Pesticides by EPA Method 8270-SIM
Sample Moisture (Percent Moisture)
Semi-Volatile Organic Compounds by EPA Method 8270
Total Metals by EPA Method 6020B
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

Date: *06/18/2020*

CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Work Order: 2005395

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2005395-001	SB-EP-5-1'	05/28/2020 10:05 AM	05/28/2020 5:51 PM
2005395-002	SB-EP-5-5'	05/28/2020 10:10 AM	05/28/2020 5:51 PM
2005395-003	SB-EP-5-5.5'	05/28/2020 10:15 AM	05/28/2020 5:51 PM
2005395-004	SB-EP-4-1'	05/28/2020 10:55 AM	05/28/2020 5:51 PM
2005395-005	SB-EP-4-2'	05/28/2020 11:05 AM	05/28/2020 5:51 PM
2005395-006	SB-EP-4-2.5'	05/28/2020 11:10 AM	05/28/2020 5:51 PM
2005395-007	SB-EP-1-2'	05/28/2020 11:50 AM	05/28/2020 5:51 PM
2005395-008	SB-EP-2-1'	05/28/2020 12:00 PM	05/28/2020 5:51 PM
2005395-009	SB-EP-2-3'	05/28/2020 12:05 PM	05/28/2020 5:51 PM
2005395-010	SB-EP-2-3.5'	05/28/2020 12:10 PM	05/28/2020 5:51 PM
2005395-011	SB-EP-1-6'	05/28/2020 1:05 PM	05/28/2020 5:51 PM
2005395-012	SB-EP-1-6.5'	05/28/2020 1:10 PM	05/28/2020 5:51 PM
2005395-013	SB-EP-3-0.5'	05/28/2020 1:30 PM	05/28/2020 5:51 PM
2005395-014	SB-EP-3-6'	05/28/2020 1:55 PM	05/28/2020 5:51 PM
2005395-015	SB-EP-3-6.5'	05/28/2020 1:40 PM	05/28/2020 5:51 PM
2005395-016	SB-6-1'	05/28/2020 2:30 PM	05/28/2020 5:51 PM
2005395-017	SB-7-1.5'	05/28/2020 2:40 PM	05/28/2020 5:51 PM
2005395-018	SB-8-0.5'	05/28/2020 3:00 PM	05/28/2020 5:51 PM
2005395-019	SB-8-3'	05/28/2020 3:10 PM	05/28/2020 5:51 PM
2005395-020	SB-9-1'	05/28/2020 3:15 PM	05/28/2020 5:51 PM
2005395-021	SB-10-1.5'	05/28/2020 3:25 PM	05/28/2020 5:51 PM
2005395-022	SB-11-2'	05/28/2020 3:40 PM	05/28/2020 5:51 PM
2005395-023	SB-12-2.5'	05/28/2020 3:55 PM	05/28/2020 5:51 PM
2005395-024	SB-13-1.5'	05/28/2020 4:10 PM	05/28/2020 5:51 PM
2005395-025	Trip Blank	05/16/2020 11:00 AM	05/28/2020 5:51 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2005395**

Date: **6/18/2020**

CLIENT: ATC Group Services, Inc.

Project: Panattoni, NW Logistics Ctr

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

6/18/2020: Revision 1 includes a sample ID change requested by client.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Client Sample ID: SB-EP-5-1'

Collection Date: 5/28/2020 10:05:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Alpha BHC	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Beta BHC	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Gamma BHC (Lindane)	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Delta BHC	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Heptachlor	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Aldrin	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Heptachlor epoxide	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
gamma-Chlordane	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Endosulfan I	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
alpha-Chlordane	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Dieldrin	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
4,4´-DDE	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Endrin	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Endosulfan II	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
4,4´-DDD	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Endrin aldehyde	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Endosulfan sulfate	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
4,4´-DDT	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Endrin ketone	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Methoxychlor	ND	0.0106		mg/Kg-dry	1	6/5/2020 1:26:42 PM
Surr: Decachlorobiphenyl	103	27 - 166		%Rec	1	6/5/2020 1:26:42 PM
Surr: Tetrachloro-m-xylene	91.4	28.1 - 171		%Rec	1	6/5/2020 1:26:42 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	22.2		mg/Kg-dry	1	6/3/2020 4:31:54 PM
Mineral Spirits	ND	33.4		mg/Kg-dry	1	6/3/2020 4:31:54 PM
Kerosene	ND	55.6		mg/Kg-dry	1	6/3/2020 4:31:54 PM
Diesel (Fuel Oil)	ND	55.6		mg/Kg-dry	1	6/3/2020 4:31:54 PM
Heavy Oil	ND	111		mg/Kg-dry	1	6/3/2020 4:31:54 PM
Mineral Oil	ND	111		mg/Kg-dry	1	6/3/2020 4:31:54 PM
Surr: 2-Fluorobiphenyl	73.0	50 - 150		%Rec	1	6/3/2020 4:31:54 PM
Surr: o-Terphenyl	86.7	50 - 150		%Rec	1	6/3/2020 4:31:54 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	40.6		µg/Kg-dry	1	6/12/2020 3:41:57 PM
2,4-D	ND	34.8		µg/Kg-dry	1	6/12/2020 3:41:57 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Client Sample ID: SB-EP-5-1'

Collection Date: 5/28/2020 10:05:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	29.0		µg/Kg-dry	1	6/12/2020 3:41:57 PM
2,4,5-TP (Silvex)	ND	23.2		µg/Kg-dry	1	6/12/2020 3:41:57 PM
2,4,5-T	ND	58.0		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Dinoseb	ND	34.8		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Dalapon	ND	232		µg/Kg-dry	1	6/12/2020 3:41:57 PM
2,4-DB	ND	29.0		µg/Kg-dry	1	6/12/2020 3:41:57 PM
MCPP	ND	5,110		µg/Kg-dry	1	6/12/2020 3:41:57 PM
MCPA	ND	3,250		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Picloram	ND	58.0	Q	µg/Kg-dry	1	6/12/2020 3:41:57 PM
Bentazon	ND	40.6		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Chloramben	ND	23.2		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Acifluorfen	ND	92.9		µg/Kg-dry	1	6/12/2020 3:41:57 PM
3,5-Dichlorobenzoic acid	ND	46.4		µg/Kg-dry	1	6/12/2020 3:41:57 PM
4-Nitrophenol	ND	34.8		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Dacthal (DCPA)	ND	34.8		µg/Kg-dry	1	6/12/2020 3:41:57 PM
Surr: 2,4-Dichlorophenylacetic acid	61.5	15.3 - 163		%Rec	1	6/12/2020 3:41:57 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Mevinphos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
TEPP	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Demeton, Total	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Ethoprophos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Naled	ND	54.6	Q	µg/Kg-dry	1	6/10/2020 12:19:51 AM
Sulfotepp	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Monocrotophos	ND	54.6	Q	µg/Kg-dry	1	6/10/2020 12:19:51 AM
Phorate	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Dimethoate	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Diazinon	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Disulfoton	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Parathion, methyl	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Fenchorphos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Malathion	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Dursban	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Fenthion	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Parathion	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Client Sample ID: SB-EP-5-1'

Collection Date: 5/28/2020 10:05:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
Trichloronate	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Merphos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Stirophos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Prothiofos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Fensulfothion	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Sulprofos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
EPN	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Guthion	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Coumaphos	ND	54.6		µg/Kg-dry	1	6/10/2020 12:19:51 AM
Surr: Triphenylphosphate	69.4	10.7 - 154		%Rec	1	6/10/2020 12:19:51 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Phenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Bis(2-chloroethyl) ether	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2-Chlorophenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
1,3-Dichlorobenzene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
1,4-Dichlorobenzene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
1,2-Dichlorobenzene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Benzyl alcohol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2-Methylphenol (o-cresol)	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Hexachloroethane	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
N-Nitrosodi-n-propylamine	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
3&4-Methylphenol (m, p-cresol)	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Nitrobenzene	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Isophorone	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2-Nitrophenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,4-Dimethylphenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Bis(2-chloroethoxy)methane	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,4-Dichlorophenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
1,2,4-Trichlorobenzene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Naphthalene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
4-Chloroaniline	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Hexachlorobutadiene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
4-Chloro-3-methylphenol	ND	227		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2-Methylnaphthalene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
1-Methylnaphthalene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 10:05:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Matrix: Soil
Client Sample ID: SB-EP-5-1'

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 28538 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Hexachlorocyclopentadiene	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,4,6-Trichlorophenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,4,5-Trichlorophenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2-Chloronaphthalene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2-Nitroaniline	ND	113	Q	µg/Kg-dry	1	6/5/2020 5:58:05 AM
Acenaphthene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Dimethylphthalate	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,6-Dinitrotoluene	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Acenaphthylene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,4-Dinitrophenol	ND	595		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Dibenzofuran	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
2,4-Dinitrotoluene	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
4-Nitrophenol	ND	567		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Fluorene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
4-Chlorophenyl phenyl ether	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Diethylphthalate	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
4,6-Dinitro-2-methylphenol	ND	227		µg/Kg-dry	1	6/5/2020 5:58:05 AM
4-Bromophenyl phenyl ether	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Hexachlorobenzene	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Pentachlorophenol	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Phenanthrene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Anthracene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Carbazole	ND	85.0		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Di-n-butylphthalate	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Fluoranthene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Pyrene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Butyl Benzylphthalate	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
bis(2-Ethylhexyl)adipate	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Benz(a)anthracene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Chrysene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
bis (2-Ethylhexyl) phthalate	ND	113		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Di-n-octyl phthalate	ND	113	Q	µg/Kg-dry	1	6/5/2020 5:58:05 AM
Benzo(b)fluoranthene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Benzo(k)fluoranthene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Benzo(a)pyrene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Indeno(1,2,3-cd)pyrene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Dibenz(a,h)anthracene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Benzo(g,h,i)perylene	ND	56.7		µg/Kg-dry	1	6/5/2020 5:58:05 AM
Surr: 2,4,6-Tribromophenol	43.8	5 - 139		%Rec	1	6/5/2020 5:58:05 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Client Sample ID: SB-EP-5-1'

Collection Date: 5/28/2020 10:05:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	47.3	5 - 131		%Rec	1	6/5/2020 5:58:05 AM
Surr: Nitrobenzene-d5	44.6	5 - 123		%Rec	1	6/5/2020 5:58:05 AM
Surr: Phenol-d6	49.0	5 - 129		%Rec	1	6/5/2020 5:58:05 AM
Surr: p-Terphenyl	45.1	13.8 - 140		%Rec	1	6/5/2020 5:58:05 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28529		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Chloromethane	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Vinyl chloride	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Bromomethane	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Trichlorofluoromethane (CFC-11)	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Chloroethane	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1-Dichloroethene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Methylene chloride	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
trans-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1-Dichloroethane	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
cis-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Chloroform	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1,1-Trichloroethane (TCA)	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1-Dichloropropene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Carbon tetrachloride	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2-Dichloroethane (EDC)	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Benzene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Trichloroethene (TCE)	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2-Dichloropropane	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Bromodichloromethane	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Dibromomethane	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
cis-1,3-Dichloropropene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Toluene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
trans-1,3-Dichloropropylene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1,2-Trichloroethane	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,3-Dichloropropane	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Tetrachloroethene (PCE)	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Dibromochloromethane	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2-Dibromoethane (EDB)	ND	0.00594		mg/Kg-dry	1	6/3/2020 8:58:16 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Client Sample ID: SB-EP-5-1'

Collection Date: 5/28/2020 10:05:00 AM
Matrix: Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28529 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1,1,2-Tetrachloroethane	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Ethylbenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
m,p-Xylene	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
o-Xylene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Styrene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Isopropylbenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Bromoform	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,1,2,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
n-Propylbenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Bromobenzene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,3,5-Trimethylbenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
2-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
4-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
tert-Butylbenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2,3-Trichloropropane	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2,4-Trichlorobenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
sec-Butylbenzene	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
4-Isopropyltoluene	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,3-Dichlorobenzene	ND	0.0237	*	mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,4-Dichlorobenzene	ND	0.0237	*	mg/Kg-dry	1	6/3/2020 8:58:16 PM
n-Butylbenzene	ND	0.0297		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2-Dichlorobenzene	ND	0.0237	*	mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2-Dibromo-3-chloropropane	ND	0.594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2,4-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Hexachloro-1,3-butadiene	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Naphthalene	ND	0.0594		mg/Kg-dry	1	6/3/2020 8:58:16 PM
1,2,3-Trichlorobenzene	ND	0.0237		mg/Kg-dry	1	6/3/2020 8:58:16 PM
Surr: Dibromofluoromethane	96.8	83.3 - 111		%Rec	1	6/3/2020 8:58:16 PM
Surr: Toluene-d8	92.8	87.9 - 111		%Rec	1	6/3/2020 8:58:16 PM
Surr: 1-Bromo-4-fluorobenzene	97.5	85.1 - 111		%Rec	1	6/3/2020 8:58:16 PM

NOTES:
* - Flagged value is not within established control limits.

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.288		mg/Kg-dry	1	6/3/2020 1:19:11 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 10:05:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-001
Matrix: Soil
Client Sample ID: SB-EP-5-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	4.51	0.224		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Barium	72.6	0.448		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Cadmium	ND	0.179		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Chromium	20.0	0.0897		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Lead	3.77	0.179		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Selenium	1.02	0.448		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Silver	ND	0.0897		mg/Kg-dry	1	6/3/2020 4:36:34 PM
Sample Moisture (Percent Moisture)				Batch ID: R59547		Analyst: CJ
Percent Moisture	14.9			wt%	1	6/3/2020 12:09:22 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 10:10:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-002
Matrix: Soil
Client Sample ID: SB-EP-5-5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.49	0.203		mg/Kg-dry	1	6/3/2020 4:42:08 PM
Lead	2.39	0.162		mg/Kg-dry	1	6/3/2020 4:42:08 PM
Sample Moisture (Percent Moisture)				Batch ID: R59547		Analyst: CJ
Percent Moisture	2.09	0.500		wt%	1	6/3/2020 12:09:22 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-003
Client Sample ID: SB-EP-5-5.5'

Collection Date: 5/28/2020 10:15:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.15	0.211		mg/Kg-dry	1	6/3/2020 4:47:42 PM
Lead	2.11	0.169		mg/Kg-dry	1	6/3/2020 4:47:42 PM
Sample Moisture (Percent Moisture)				Batch ID: R59547		Analyst: CJ
Percent Moisture	5.92	0.500		wt%	1	6/3/2020 12:09:22 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Client Sample ID: SB-EP-4-1'

Collection Date: 5/28/2020 10:55:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Alpha BHC	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Beta BHC	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Gamma BHC (Lindane)	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Delta BHC	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Heptachlor	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Aldrin	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Heptachlor epoxide	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
gamma-Chlordane	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Endosulfan I	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
alpha-Chlordane	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Dieldrin	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
4,4´-DDE	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Endrin	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Endosulfan II	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
4,4´-DDD	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Endrin aldehyde	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Endosulfan sulfate	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
4,4´-DDT	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Endrin ketone	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Methoxychlor	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:36:19 PM
Surr: Decachlorobiphenyl	84.1	27 - 166		%Rec	1	6/5/2020 1:36:19 PM
Surr: Tetrachloro-m-xylene	74.7	28.1 - 171		%Rec	1	6/5/2020 1:36:19 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	19.2		mg/Kg-dry	1	6/3/2020 5:01:47 PM
Mineral Spirits	ND	28.8		mg/Kg-dry	1	6/3/2020 5:01:47 PM
Kerosene	ND	48.1		mg/Kg-dry	1	6/3/2020 5:01:47 PM
Diesel (Fuel Oil)	ND	48.1		mg/Kg-dry	1	6/3/2020 5:01:47 PM
Heavy Oil	ND	96.1		mg/Kg-dry	1	6/3/2020 5:01:47 PM
Mineral Oil	ND	96.1		mg/Kg-dry	1	6/3/2020 5:01:47 PM
Surr: 2-Fluorobiphenyl	74.2	50 - 150		%Rec	1	6/3/2020 5:01:47 PM
Surr: o-Terphenyl	86.8	50 - 150		%Rec	1	6/3/2020 5:01:47 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	37.0		µg/Kg-dry	1	6/12/2020 4:02:20 PM
2,4-D	ND	31.7		µg/Kg-dry	1	6/12/2020 4:02:20 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Client Sample ID: SB-EP-4-1'

Collection Date: 5/28/2020 10:55:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	26.5		µg/Kg-dry	1	6/12/2020 4:02:20 PM
2,4,5-TP (Silvex)	ND	21.2		µg/Kg-dry	1	6/12/2020 4:02:20 PM
2,4,5-T	ND	52.9		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Dinoseb	ND	31.7		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Dalapon	ND	212		µg/Kg-dry	1	6/12/2020 4:02:20 PM
2,4-DB	ND	26.5		µg/Kg-dry	1	6/12/2020 4:02:20 PM
MCPP	ND	4,660		µg/Kg-dry	1	6/12/2020 4:02:20 PM
MCPA	ND	2,960		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Picloram	ND	52.9	Q	µg/Kg-dry	1	6/12/2020 4:02:20 PM
Bentazon	ND	37.0		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Chloramben	ND	21.2		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Acifluorfen	ND	84.6		µg/Kg-dry	1	6/12/2020 4:02:20 PM
3,5-Dichlorobenzoic acid	ND	42.3		µg/Kg-dry	1	6/12/2020 4:02:20 PM
4-Nitrophenol	ND	31.7		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Dacthal (DCPA)	ND	31.7		µg/Kg-dry	1	6/12/2020 4:02:20 PM
Surr: 2,4-Dichlorophenylacetic acid	67.4	15.3 - 163		%Rec	1	6/12/2020 4:02:20 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Mevinphos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
TEPP	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Demeton, Total	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Ethoprophos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Naled	ND	55.7	Q	µg/Kg-dry	1	6/10/2020 1:49:41 AM
Sulfotepp	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Monocrotophos	ND	55.7	Q	µg/Kg-dry	1	6/10/2020 1:49:41 AM
Phorate	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Dimethoate	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Diazinon	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Disulfoton	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Parathion, methyl	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Fenchorphos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Malathion	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Dursban	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Fenthion	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Parathion	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 10:55:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Matrix: Soil
Client Sample ID: SB-EP-4-1'

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 28540 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Trichloronate	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Merphos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Stirophos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Prothiofos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Fensulfothion	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Sulprofos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
EPN	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Guthion	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Coumaphos	ND	55.7		µg/Kg-dry	1	6/10/2020 1:49:41 AM
Surr: Triphenylphosphate	89.5	10.7 - 154		%Rec	1	6/10/2020 1:49:41 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 28538 Analyst: SB

Phenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Bis(2-chloroethyl) ether	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2-Chlorophenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
1,3-Dichlorobenzene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
1,4-Dichlorobenzene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
1,2-Dichlorobenzene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Benzyl alcohol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2-Methylphenol (o-cresol)	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Hexachloroethane	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
N-Nitrosodi-n-propylamine	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
3&4-Methylphenol (m, p-cresol)	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Nitrobenzene	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Isophorone	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2-Nitrophenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,4-Dimethylphenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Bis(2-chloroethoxy)methane	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,4-Dichlorophenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
1,2,4-Trichlorobenzene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Naphthalene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
4-Chloroaniline	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Hexachlorobutadiene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
4-Chloro-3-methylphenol	ND	195		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2-Methylnaphthalene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
1-Methylnaphthalene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Client Sample ID: SB-EP-4-1'

Collection Date: 5/28/2020 10:55:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,4,6-Trichlorophenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,4,5-Trichlorophenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2-Chloronaphthalene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2-Nitroaniline	ND	97.7	Q	µg/Kg-dry	1	6/5/2020 6:20:22 AM
Acenaphthene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Dimethylphthalate	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,6-Dinitrotoluene	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Acenaphthylene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,4-Dinitrophenol	ND	513		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Dibenzofuran	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
2,4-Dinitrotoluene	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
4-Nitrophenol	ND	489		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Fluorene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
4-Chlorophenyl phenyl ether	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Diethylphthalate	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
4,6-Dinitro-2-methylphenol	ND	195		µg/Kg-dry	1	6/5/2020 6:20:22 AM
4-Bromophenyl phenyl ether	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Hexachlorobenzene	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Pentachlorophenol	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Phenanthrene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Anthracene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Carbazole	ND	73.3		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Di-n-butylphthalate	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Fluoranthene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Pyrene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Butyl Benzylphthalate	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
bis(2-Ethylhexyl)adipate	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Benz(a)anthracene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Chrysene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
bis (2-Ethylhexyl) phthalate	ND	97.7		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Di-n-octyl phthalate	ND	97.7	Q	µg/Kg-dry	1	6/5/2020 6:20:22 AM
Benzo(b)fluoranthene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Benzo(k)fluoranthene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Benzo(a)pyrene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Indeno(1,2,3-cd)pyrene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Dibenz(a,h)anthracene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Benzo(g,h,i)perylene	ND	48.9		µg/Kg-dry	1	6/5/2020 6:20:22 AM
Surr: 2,4,6-Tribromophenol	56.2	5 - 139		%Rec	1	6/5/2020 6:20:22 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Client Sample ID: SB-EP-4-1'

Collection Date: 5/28/2020 10:55:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	57.6	5 - 131		%Rec	1	6/5/2020 6:20:22 AM
Surr: Nitrobenzene-d5	55.3	5 - 123		%Rec	1	6/5/2020 6:20:22 AM
Surr: Phenol-d6	59.0	5 - 129		%Rec	1	6/5/2020 6:20:22 AM
Surr: p-Terphenyl	59.6	13.8 - 140		%Rec	1	6/5/2020 6:20:22 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28529		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Chloromethane	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Vinyl chloride	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Bromomethane	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Trichlorofluoromethane (CFC-11)	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Chloroethane	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1-Dichloroethene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Methylene chloride	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
trans-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1-Dichloroethane	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
cis-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Chloroform	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1,1-Trichloroethane (TCA)	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1-Dichloropropene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Carbon tetrachloride	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2-Dichloroethane (EDC)	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Benzene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Trichloroethene (TCE)	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2-Dichloropropane	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Bromodichloromethane	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Dibromomethane	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
cis-1,3-Dichloropropene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Toluene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
trans-1,3-Dichloropropylene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1,2-Trichloroethane	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,3-Dichloropropane	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Tetrachloroethene (PCE)	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Dibromochloromethane	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2-Dibromoethane (EDB)	ND	0.00631		mg/Kg-dry	1	6/3/2020 9:58:32 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 10:55:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Matrix: Soil
Client Sample ID: SB-EP-4-1'

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28529 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1,1,2-Tetrachloroethane	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Ethylbenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
m,p-Xylene	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
o-Xylene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Styrene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Isopropylbenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Bromoform	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,1,2,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
n-Propylbenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Bromobenzene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,3,5-Trimethylbenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
2-Chlorotoluene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
4-Chlorotoluene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
tert-Butylbenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2,3-Trichloropropane	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2,4-Trichlorobenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
sec-Butylbenzene	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
4-Isopropyltoluene	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,3-Dichlorobenzene	ND	0.0252	*	mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,4-Dichlorobenzene	ND	0.0252	*	mg/Kg-dry	1	6/3/2020 9:58:32 PM
n-Butylbenzene	ND	0.0316		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2-Dichlorobenzene	ND	0.0252	*	mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2-Dibromo-3-chloropropane	ND	0.631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2,4-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Hexachloro-1,3-butadiene	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Naphthalene	ND	0.0631		mg/Kg-dry	1	6/3/2020 9:58:32 PM
1,2,3-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	6/3/2020 9:58:32 PM
Surr: Dibromofluoromethane	97.3	83.3 - 111		%Rec	1	6/3/2020 9:58:32 PM
Surr: Toluene-d8	92.1	87.9 - 111		%Rec	1	6/3/2020 9:58:32 PM
Surr: 1-Bromo-4-fluorobenzene	97.7	85.1 - 111		%Rec	1	6/3/2020 9:58:32 PM

NOTES:
* - Flagged value is not within established control limits.

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.242		mg/Kg-dry	1	6/3/2020 1:20:49 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-004
Client Sample ID: SB-EP-4-1'

Collection Date: 5/28/2020 10:55:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	4.12	0.221		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Barium	80.1	0.442		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Cadmium	ND	0.177		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Chromium	19.9	0.0885		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Lead	3.48	0.177		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Selenium	0.932	0.442		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Silver	ND	0.0885		mg/Kg-dry	1	6/3/2020 4:53:16 PM
Sample Moisture (Percent Moisture)				Batch ID: R59547		Analyst: CJ
Percent Moisture	11.0			wt%	1	6/3/2020 12:09:22 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-005
Client Sample ID: SB-EP-4-2'

Collection Date: 5/28/2020 11:05:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.69	0.187		mg/Kg-dry	1	6/3/2020 4:58:49 PM
Lead	2.00	0.150		mg/Kg-dry	1	6/3/2020 4:58:49 PM
Sample Moisture (Percent Moisture)				Batch ID: R59569		Analyst: MM
Percent Moisture	2.45	0.500		wt%	1	6/4/2020 9:12:08 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 11:10:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-006
Matrix: Soil
Client Sample ID: SB-EP-4-2.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.60	0.187		mg/Kg-dry	1	6/3/2020 5:04:23 PM
Lead	2.33	0.150		mg/Kg-dry	1	6/3/2020 5:04:23 PM
Sample Moisture (Percent Moisture)				Batch ID: R59569		Analyst: MM
Percent Moisture	3.18	0.500		wt%	1	6/4/2020 9:12:08 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Client Sample ID: SB-EP-1-2'

Collection Date: 5/28/2020 11:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Alpha BHC	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Beta BHC	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Gamma BHC (Lindane)	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Delta BHC	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Heptachlor	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Aldrin	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Heptachlor epoxide	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
gamma-Chlordane	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Endosulfan I	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
alpha-Chlordane	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Dieldrin	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
4,4´-DDE	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Endrin	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Endosulfan II	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
4,4´-DDD	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Endrin aldehyde	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Endosulfan sulfate	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
4,4´-DDT	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Endrin ketone	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Methoxychlor	ND	0.0108		mg/Kg-dry	1	6/5/2020 1:46:03 PM
Surr: Decachlorobiphenyl	106	27 - 166		%Rec	1	6/5/2020 1:46:03 PM
Surr: Tetrachloro-m-xylene	85.1	28.1 - 171		%Rec	1	6/5/2020 1:46:03 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	22.1		mg/Kg-dry	1	6/3/2020 5:31:45 PM
Mineral Spirits	ND	33.1		mg/Kg-dry	1	6/3/2020 5:31:45 PM
Kerosene	ND	55.1		mg/Kg-dry	1	6/3/2020 5:31:45 PM
Diesel (Fuel Oil)	ND	55.1		mg/Kg-dry	1	6/3/2020 5:31:45 PM
Heavy Oil	ND	110		mg/Kg-dry	1	6/3/2020 5:31:45 PM
Mineral Oil	ND	110		mg/Kg-dry	1	6/3/2020 5:31:45 PM
Surr: 2-Fluorobiphenyl	76.5	50 - 150		%Rec	1	6/3/2020 5:31:45 PM
Surr: o-Terphenyl	90.6	50 - 150		%Rec	1	6/3/2020 5:31:45 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	39.0		µg/Kg-dry	1	6/12/2020 4:22:41 PM
2,4-D	ND	33.4		µg/Kg-dry	1	6/12/2020 4:22:41 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Client Sample ID: SB-EP-1-2'

Collection Date: 5/28/2020 11:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	27.9		µg/Kg-dry	1	6/12/2020 4:22:41 PM
2,4,5-TP (Silvex)	ND	22.3		µg/Kg-dry	1	6/12/2020 4:22:41 PM
2,4,5-T	ND	55.7		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Dinoseb	ND	33.4		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Dalapon	ND	223		µg/Kg-dry	1	6/12/2020 4:22:41 PM
2,4-DB	ND	27.9		µg/Kg-dry	1	6/12/2020 4:22:41 PM
MCPP	ND	4,900		µg/Kg-dry	1	6/12/2020 4:22:41 PM
MCPA	ND	3,120		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Picloram	ND	55.7	Q	µg/Kg-dry	1	6/12/2020 4:22:41 PM
Bentazon	ND	39.0		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Chloramben	ND	22.3		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Acifluorfen	ND	89.2		µg/Kg-dry	1	6/12/2020 4:22:41 PM
3,5-Dichlorobenzoic acid	ND	44.6		µg/Kg-dry	1	6/12/2020 4:22:41 PM
4-Nitrophenol	ND	33.4		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Dacthal (DCPA)	ND	33.4		µg/Kg-dry	1	6/12/2020 4:22:41 PM
Surr: 2,4-Dichlorophenylacetic acid	69.2	15.3 - 163		%Rec	1	6/12/2020 4:22:41 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Mevinphos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
TEPP	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Demeton, Total	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Ethoprophos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Naled	ND	56.0	Q	µg/Kg-dry	1	6/10/2020 2:12:12 AM
Sulfotepp	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Monocrotophos	ND	56.0	Q	µg/Kg-dry	1	6/10/2020 2:12:12 AM
Phorate	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Dimethoate	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Diazinon	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Disulfoton	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Parathion, methyl	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Fenchorphos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Malathion	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Dursban	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Fenthion	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Parathion	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 11:50:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Matrix: Soil
Client Sample ID: SB-EP-1-2'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
Trichloronate	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Merphos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Stirophos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Prothiofos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Fensulfothion	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Sulprofos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
EPN	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Guthion	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Coumaphos	ND	56.0		µg/Kg-dry	1	6/10/2020 2:12:12 AM
Surr: Triphenylphosphate	86.7	10.7 - 154		%Rec	1	6/10/2020 2:12:12 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Phenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Bis(2-chloroethyl) ether	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2-Chlorophenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
1,3-Dichlorobenzene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
1,4-Dichlorobenzene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
1,2-Dichlorobenzene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Benzyl alcohol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2-Methylphenol (o-cresol)	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Hexachloroethane	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
N-Nitrosodi-n-propylamine	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
3&4-Methylphenol (m, p-cresol)	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Nitrobenzene	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Isophorone	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2-Nitrophenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,4-Dimethylphenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Bis(2-chloroethoxy)methane	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,4-Dichlorophenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
1,2,4-Trichlorobenzene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Naphthalene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
4-Chloroaniline	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Hexachlorobutadiene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
4-Chloro-3-methylphenol	ND	197		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2-Methylnaphthalene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
1-Methylnaphthalene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Client Sample ID: SB-EP-1-2'

Collection Date: 5/28/2020 11:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,4,6-Trichlorophenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,4,5-Trichlorophenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2-Chloronaphthalene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2-Nitroaniline	ND	98.4	Q	µg/Kg-dry	1	6/5/2020 6:42:44 AM
Acenaphthene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Dimethylphthalate	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,6-Dinitrotoluene	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Acenaphthylene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,4-Dinitrophenol	ND	517		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Dibenzofuran	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
2,4-Dinitrotoluene	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
4-Nitrophenol	ND	492		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Fluorene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
4-Chlorophenyl phenyl ether	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Diethylphthalate	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
4,6-Dinitro-2-methylphenol	ND	197		µg/Kg-dry	1	6/5/2020 6:42:44 AM
4-Bromophenyl phenyl ether	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Hexachlorobenzene	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Pentachlorophenol	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Phenanthrene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Anthracene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Carbazole	ND	73.8		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Di-n-butylphthalate	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Fluoranthene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Pyrene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Butyl Benzylphthalate	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
bis(2-Ethylhexyl)adipate	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Benz(a)anthracene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Chrysene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
bis (2-Ethylhexyl) phthalate	ND	98.4		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Di-n-octyl phthalate	ND	98.4	Q	µg/Kg-dry	1	6/5/2020 6:42:44 AM
Benzo(b)fluoranthene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Benzo(k)fluoranthene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Benzo(a)pyrene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Indeno(1,2,3-cd)pyrene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Dibenz(a,h)anthracene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Benzo(g,h,i)perylene	ND	49.2		µg/Kg-dry	1	6/5/2020 6:42:44 AM
Surr: 2,4,6-Tribromophenol	54.7	5 - 139		%Rec	1	6/5/2020 6:42:44 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Client Sample ID: SB-EP-1-2'

Collection Date: 5/28/2020 11:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	50.6	5 - 131		%Rec	1	6/5/2020 6:42:44 AM
Surr: Nitrobenzene-d5	46.9	5 - 123		%Rec	1	6/5/2020 6:42:44 AM
Surr: Phenol-d6	52.0	5 - 129		%Rec	1	6/5/2020 6:42:44 AM
Surr: p-Terphenyl	62.3	13.8 - 140		%Rec	1	6/5/2020 6:42:44 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28529		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Chloromethane	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Vinyl chloride	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Bromomethane	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Trichlorofluoromethane (CFC-11)	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Chloroethane	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1-Dichloroethene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Methylene chloride	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
trans-1,2-Dichloroethene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Methyl tert-butyl ether (MTBE)	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1-Dichloroethane	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
cis-1,2-Dichloroethene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Chloroform	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1,1-Trichloroethane (TCA)	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1-Dichloropropene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Carbon tetrachloride	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2-Dichloroethane (EDC)	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Benzene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Trichloroethene (TCE)	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2-Dichloropropane	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Bromodichloromethane	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Dibromomethane	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
cis-1,3-Dichloropropene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Toluene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
trans-1,3-Dichloropropylene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1,2-Trichloroethane	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,3-Dichloropropane	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Tetrachloroethene (PCE)	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Dibromochloromethane	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2-Dibromoethane (EDB)	ND	0.00644		mg/Kg-dry	1	6/3/2020 10:28:40 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 11:50:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Matrix: Soil
Client Sample ID: SB-EP-1-2'

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28529 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1,1,2-Tetrachloroethane	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Ethylbenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
m,p-Xylene	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
o-Xylene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Styrene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Isopropylbenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Bromoform	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,1,2,2-Tetrachloroethane	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
n-Propylbenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Bromobenzene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,3,5-Trimethylbenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
2-Chlorotoluene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
4-Chlorotoluene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
tert-Butylbenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2,3-Trichloropropane	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2,4-Trichlorobenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
sec-Butylbenzene	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
4-Isopropyltoluene	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,3-Dichlorobenzene	ND	0.0258	*	mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,4-Dichlorobenzene	ND	0.0258	*	mg/Kg-dry	1	6/3/2020 10:28:40 PM
n-Butylbenzene	ND	0.0322		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2-Dichlorobenzene	ND	0.0258	*	mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2-Dibromo-3-chloropropane	ND	0.644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2,4-Trimethylbenzene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Hexachloro-1,3-butadiene	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Naphthalene	ND	0.0644		mg/Kg-dry	1	6/3/2020 10:28:40 PM
1,2,3-Trichlorobenzene	ND	0.0258		mg/Kg-dry	1	6/3/2020 10:28:40 PM
Surr: Dibromofluoromethane	95.5	83.3 - 111		%Rec	1	6/3/2020 10:28:40 PM
Surr: Toluene-d8	92.4	87.9 - 111		%Rec	1	6/3/2020 10:28:40 PM
Surr: 1-Bromo-4-fluorobenzene	97.2	85.1 - 111		%Rec	1	6/3/2020 10:28:40 PM

NOTES:
* - Flagged value is not within established control limits.

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.265		mg/Kg-dry	1	6/3/2020 1:22:25 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-007
Client Sample ID: SB-EP-1-2'

Collection Date: 5/28/2020 11:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	4.38	0.225		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Barium	75.6	0.450		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Cadmium	ND	0.180		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Chromium	19.7	0.0901		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Lead	3.19	0.180		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Selenium	1.02	0.450		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Silver	ND	0.0901		mg/Kg-dry	1	6/3/2020 5:09:57 PM
Sample Moisture (Percent Moisture)				Batch ID: R59569		Analyst: MM
Percent Moisture	12.6			wt%	1	6/4/2020 9:12:08 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Matrix: Soil
Client Sample ID: SB-EP-2-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Alpha BHC	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Beta BHC	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Gamma BHC (Lindane)	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Delta BHC	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Heptachlor	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Aldrin	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Heptachlor epoxide	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
gamma-Chlordane	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Endosulfan I	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
alpha-Chlordane	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Dieldrin	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
4,4´-DDE	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Endrin	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Endosulfan II	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
4,4´-DDD	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Endrin aldehyde	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Endosulfan sulfate	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
4,4´-DDT	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Endrin ketone	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Methoxychlor	ND	0.0103		mg/Kg-dry	1	6/5/2020 1:55:39 PM
Surr: Decachlorobiphenyl	94.6	27 - 166		%Rec	1	6/5/2020 1:55:39 PM
Surr: Tetrachloro-m-xylene	84.5	28.1 - 171		%Rec	1	6/5/2020 1:55:39 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	18.7		mg/Kg-dry	1	6/3/2020 6:01:33 PM
Mineral Spirits	ND	28.0		mg/Kg-dry	1	6/3/2020 6:01:33 PM
Kerosene	ND	46.7		mg/Kg-dry	1	6/3/2020 6:01:33 PM
Diesel (Fuel Oil)	ND	46.7		mg/Kg-dry	1	6/3/2020 6:01:33 PM
Heavy Oil	ND	93.4		mg/Kg-dry	1	6/3/2020 6:01:33 PM
Mineral Oil	ND	93.4		mg/Kg-dry	1	6/3/2020 6:01:33 PM
Surr: 2-Fluorobiphenyl	75.0	50 - 150		%Rec	1	6/3/2020 6:01:33 PM
Surr: o-Terphenyl	86.7	50 - 150		%Rec	1	6/3/2020 6:01:33 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	37.0		µg/Kg-dry	1	6/12/2020 4:43:07 PM
2,4-D	ND	31.7		µg/Kg-dry	1	6/12/2020 4:43:07 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Matrix: Soil
Client Sample ID: SB-EP-2-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	26.4		µg/Kg-dry	1	6/12/2020 4:43:07 PM
2,4,5-TP (Silvex)	ND	21.1		µg/Kg-dry	1	6/12/2020 4:43:07 PM
2,4,5-T	ND	52.8		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Dinoseb	ND	31.7		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Dalapon	ND	211		µg/Kg-dry	1	6/12/2020 4:43:07 PM
2,4-DB	ND	26.4		µg/Kg-dry	1	6/12/2020 4:43:07 PM
MCPP	ND	4,650		µg/Kg-dry	1	6/12/2020 4:43:07 PM
MCPA	ND	2,960		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Picloram	ND	52.8	Q	µg/Kg-dry	1	6/12/2020 4:43:07 PM
Bentazon	ND	37.0		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Chloramben	ND	21.1		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Acifluorfen	ND	84.5		µg/Kg-dry	1	6/12/2020 4:43:07 PM
3,5-Dichlorobenzoic acid	ND	42.3		µg/Kg-dry	1	6/12/2020 4:43:07 PM
4-Nitrophenol	ND	31.7		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Dacthal (DCPA)	ND	31.7		µg/Kg-dry	1	6/12/2020 4:43:07 PM
Surr: 2,4-Dichlorophenylacetic acid	112	15.3 - 163		%Rec	1	6/12/2020 4:43:07 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Mevinphos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
TEPP	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Demeton, Total	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Ethoprophos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Naled	ND	51.3	Q	µg/Kg-dry	1	6/10/2020 2:34:40 AM
Sulfotepp	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Monocrotophos	ND	51.3	Q	µg/Kg-dry	1	6/10/2020 2:34:40 AM
Phorate	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Dimethoate	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Diazinon	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Disulfoton	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Parathion, methyl	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Fenchorphos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Malathion	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Dursban	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Fenthion	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Parathion	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Client Sample ID: SB-EP-2-1'

Collection Date: 5/28/2020 12:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
Trichloronate	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Merphos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Stirophos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Prothiofos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Fensulfothion	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Sulprofos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
EPN	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Guthion	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Coumaphos	ND	51.3		µg/Kg-dry	1	6/10/2020 2:34:40 AM
Surr: Triphenylphosphate	94.0	10.7 - 154		%Rec	1	6/10/2020 2:34:40 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Phenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Bis(2-chloroethyl) ether	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2-Chlorophenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
1,3-Dichlorobenzene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
1,4-Dichlorobenzene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
1,2-Dichlorobenzene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Benzyl alcohol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2-Methylphenol (o-cresol)	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Hexachloroethane	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
N-Nitrosodi-n-propylamine	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
3&4-Methylphenol (m, p-cresol)	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Nitrobenzene	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Isophorone	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2-Nitrophenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,4-Dimethylphenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Bis(2-chloroethoxy)methane	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,4-Dichlorophenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
1,2,4-Trichlorobenzene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Naphthalene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
4-Chloroaniline	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Hexachlorobutadiene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
4-Chloro-3-methylphenol	ND	196		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2-Methylnaphthalene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
1-Methylnaphthalene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Matrix: Soil
Client Sample ID: SB-EP-2-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,4,6-Trichlorophenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,4,5-Trichlorophenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2-Chloronaphthalene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2-Nitroaniline	ND	98.2	Q	µg/Kg-dry	1	6/5/2020 8:12:06 AM
Acenaphthene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Dimethylphthalate	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,6-Dinitrotoluene	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Acenaphthylene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,4-Dinitrophenol	ND	515		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Dibenzofuran	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
2,4-Dinitrotoluene	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
4-Nitrophenol	ND	491		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Fluorene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
4-Chlorophenyl phenyl ether	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Diethylphthalate	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
4,6-Dinitro-2-methylphenol	ND	196		µg/Kg-dry	1	6/5/2020 8:12:06 AM
4-Bromophenyl phenyl ether	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Hexachlorobenzene	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Pentachlorophenol	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Phenanthrene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Anthracene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Carbazole	ND	73.6		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Di-n-butylphthalate	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Fluoranthene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Pyrene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Butyl Benzylphthalate	133	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
bis(2-Ethylhexyl)adipate	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Benz(a)anthracene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Chrysene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
bis (2-Ethylhexyl) phthalate	ND	98.2		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Di-n-octyl phthalate	ND	98.2	Q	µg/Kg-dry	1	6/5/2020 8:12:06 AM
Benzo(b)fluoranthene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Benzo(k)fluoranthene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Benzo(a)pyrene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Indeno(1,2,3-cd)pyrene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Dibenz(a,h)anthracene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Benzo(g,h,i)perylene	ND	49.1		µg/Kg-dry	1	6/5/2020 8:12:06 AM
Surr: 2,4,6-Tribromophenol	62.0	5 - 139		%Rec	1	6/5/2020 8:12:06 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Matrix: Soil
Client Sample ID: SB-EP-2-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	61.9	5 - 131		%Rec	1	6/5/2020 8:12:06 AM
Surr: Nitrobenzene-d5	54.4	5 - 123		%Rec	1	6/5/2020 8:12:06 AM
Surr: Phenol-d6	62.1	5 - 129		%Rec	1	6/5/2020 8:12:06 AM
Surr: p-Terphenyl	71.5	13.8 - 140		%Rec	1	6/5/2020 8:12:06 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28529		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Chloromethane	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Vinyl chloride	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Bromomethane	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Trichlorofluoromethane (CFC-11)	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Chloroethane	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1-Dichloroethene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Methylene chloride	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
trans-1,2-Dichloroethene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1-Dichloroethane	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
cis-1,2-Dichloroethene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Chloroform	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1,1-Trichloroethane (TCA)	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1-Dichloropropene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Carbon tetrachloride	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2-Dichloroethane (EDC)	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Benzene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Trichloroethene (TCE)	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2-Dichloropropane	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Bromodichloromethane	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Dibromomethane	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
cis-1,3-Dichloropropene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Toluene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
trans-1,3-Dichloropropylene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1,2-Trichloroethane	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,3-Dichloropropane	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Tetrachloroethene (PCE)	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Dibromochloromethane	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2-Dibromoethane (EDB)	ND	0.00800		mg/Kg-dry	1	6/3/2020 10:58:46 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Client Sample ID: SB-EP-2-1'

Collection Date: 5/28/2020 12:00:00 PM
Matrix: Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28529 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1,1,2-Tetrachloroethane	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Ethylbenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
m,p-Xylene	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
o-Xylene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Styrene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Isopropylbenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Bromoform	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,1,2,2-Tetrachloroethane	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
n-Propylbenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Bromobenzene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,3,5-Trimethylbenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
2-Chlorotoluene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
4-Chlorotoluene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
tert-Butylbenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2,3-Trichloropropane	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2,4-Trichlorobenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
sec-Butylbenzene	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
4-Isopropyltoluene	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,3-Dichlorobenzene	ND	0.0320	*	mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,4-Dichlorobenzene	ND	0.0320	*	mg/Kg-dry	1	6/3/2020 10:58:46 PM
n-Butylbenzene	ND	0.0400		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2-Dichlorobenzene	ND	0.0320	*	mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2-Dibromo-3-chloropropane	ND	0.800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2,4-Trimethylbenzene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Hexachloro-1,3-butadiene	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Naphthalene	ND	0.0800		mg/Kg-dry	1	6/3/2020 10:58:46 PM
1,2,3-Trichlorobenzene	ND	0.0320		mg/Kg-dry	1	6/3/2020 10:58:46 PM
Surr: Dibromofluoromethane	98.8	83.3 - 111		%Rec	1	6/3/2020 10:58:46 PM
Surr: Toluene-d8	91.8	87.9 - 111		%Rec	1	6/3/2020 10:58:46 PM
Surr: 1-Bromo-4-fluorobenzene	98.0	85.1 - 111		%Rec	1	6/3/2020 10:58:46 PM

NOTES:
* - Flagged value is not within established control limits.

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.255		mg/Kg-dry	1	6/3/2020 1:24:02 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-008
Matrix: Soil
Client Sample ID: SB-EP-2-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	4.15	0.198		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Barium	71.7	0.395		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Cadmium	ND	0.158		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Chromium	22.6	0.0790		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Lead	2.99	0.158		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Selenium	0.804	0.395		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Silver	ND	0.0790		mg/Kg-dry	1	6/3/2020 5:15:31 PM
Sample Moisture (Percent Moisture)				Batch ID: R59569		Analyst: MM
Percent Moisture	7.64			wt%	1	6/4/2020 9:12:08 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:05:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-009
Matrix: Soil
Client Sample ID: SB-EP-2-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.30	0.196		mg/Kg-dry	1	6/3/2020 5:21:05 PM
Lead	2.05	0.157		mg/Kg-dry	1	6/3/2020 5:21:05 PM
Sample Moisture (Percent Moisture)				Batch ID: R59569		Analyst: MM
Percent Moisture	1.74	0.500		wt%	1	6/4/2020 9:12:08 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 12:10:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-010
Matrix: Soil
Client Sample ID: SB-EP-2-3.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	4.12	0.202		mg/Kg-dry	1	6/3/2020 5:26:39 PM
Lead	2.34	0.162		mg/Kg-dry	1	6/3/2020 5:26:39 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	1.74	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:05:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-011
Matrix: Soil
Client Sample ID: SB-EP-1-6'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.64	0.195		mg/Kg-dry	1	6/3/2020 5:40:23 PM
Lead	2.66	0.156		mg/Kg-dry	1	6/3/2020 5:40:23 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	4.34	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:10:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-012
Matrix: Soil
Client Sample ID: SB-EP-1-6.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.27	0.208		mg/Kg-dry	1	6/3/2020 5:44:57 PM
Lead	2.03	0.166		mg/Kg-dry	1	6/3/2020 5:44:57 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	5.24	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Client Sample ID: SB-EP-3-0.5'

Collection Date: 5/28/2020 1:30:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.0996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Alpha BHC	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Beta BHC	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Gamma BHC (Lindane)	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Delta BHC	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Heptachlor	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Aldrin	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Heptachlor epoxide	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
gamma-Chlordane	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Endosulfan I	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
alpha-Chlordane	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Dieldrin	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
4,4´-DDE	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Endrin	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Endosulfan II	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
4,4´-DDD	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Endrin aldehyde	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Endosulfan sulfate	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
4,4´-DDT	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Endrin ketone	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Methoxychlor	ND	0.00996		mg/Kg-dry	1	6/5/2020 2:05:17 PM
Surr: Decachlorobiphenyl	96.4	27 - 166		%Rec	1	6/5/2020 2:05:17 PM
Surr: Tetrachloro-m-xylene	87.7	28.1 - 171		%Rec	1	6/5/2020 2:05:17 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	18.3		mg/Kg-dry	1	6/3/2020 6:31:26 PM
Mineral Spirits	ND	27.4		mg/Kg-dry	1	6/3/2020 6:31:26 PM
Kerosene	ND	45.7		mg/Kg-dry	1	6/3/2020 6:31:26 PM
Diesel (Fuel Oil)	ND	45.7		mg/Kg-dry	1	6/3/2020 6:31:26 PM
Heavy Oil	ND	91.5		mg/Kg-dry	1	6/3/2020 6:31:26 PM
Mineral Oil	ND	91.5		mg/Kg-dry	1	6/3/2020 6:31:26 PM
Surr: 2-Fluorobiphenyl	79.1	50 - 150		%Rec	1	6/3/2020 6:31:26 PM
Surr: o-Terphenyl	92.1	50 - 150		%Rec	1	6/3/2020 6:31:26 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	34.3		µg/Kg-dry	1	6/12/2020 5:03:34 PM
2,4-D	ND	29.4		µg/Kg-dry	1	6/12/2020 5:03:34 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:30:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Matrix: Soil
Client Sample ID: SB-EP-3-0.5'

Herbicides by EPA Method 8151A (Mod)

Batch ID: 28601 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
2,4-DP	ND	24.5		µg/Kg-dry	1	6/12/2020 5:03:34 PM
2,4,5-TP (Silvex)	ND	19.6		µg/Kg-dry	1	6/12/2020 5:03:34 PM
2,4,5-T	ND	49.1		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Dinoseb	ND	29.4		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Dalapon	ND	196		µg/Kg-dry	1	6/12/2020 5:03:34 PM
2,4-DB	ND	24.5		µg/Kg-dry	1	6/12/2020 5:03:34 PM
MCPP	ND	4,320		µg/Kg-dry	1	6/12/2020 5:03:34 PM
MCPA	ND	2,750		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Picloram	ND	49.1	Q	µg/Kg-dry	1	6/12/2020 5:03:34 PM
Bentazon	ND	34.3		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Chloramben	ND	19.6		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Acifluorfen	ND	78.5		µg/Kg-dry	1	6/12/2020 5:03:34 PM
3,5-Dichlorobenzoic acid	ND	39.2		µg/Kg-dry	1	6/12/2020 5:03:34 PM
4-Nitrophenol	ND	29.4		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Dacthal (DCPA)	ND	29.4		µg/Kg-dry	1	6/12/2020 5:03:34 PM
Surr: 2,4-Dichlorophenylacetic acid	114	15.3 - 163		%Rec	1	6/12/2020 5:03:34 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 28540 Analyst: SB

DDVP	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Mevinphos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
TEPP	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Demeton, Total	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Ethoprophos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Naled	ND	49.5	Q	µg/Kg-dry	1	6/10/2020 2:57:07 AM
Sulfotepp	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Monocrotophos	ND	49.5	Q	µg/Kg-dry	1	6/10/2020 2:57:07 AM
Phorate	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Dimethoate	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Diazinon	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Disulfoton	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Parathion, methyl	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Fenchorphos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Malathion	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Dursban	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Fenthion	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Parathion	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:30:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Matrix: Soil
Client Sample ID: SB-EP-3-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
Trichloronate	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Merphos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Stirophos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Prothiofos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Fensulfothion	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Sulprofos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
EPN	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Guthion	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Coumaphos	ND	49.5		µg/Kg-dry	1	6/10/2020 2:57:07 AM
Surr: Triphenylphosphate	94.5	10.7 - 154		%Rec	1	6/10/2020 2:57:07 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Phenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Bis(2-chloroethyl) ether	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2-Chlorophenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
1,3-Dichlorobenzene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
1,4-Dichlorobenzene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
1,2-Dichlorobenzene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Benzyl alcohol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2-Methylphenol (o-cresol)	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Hexachloroethane	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
N-Nitrosodi-n-propylamine	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
3&4-Methylphenol (m, p-cresol)	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Nitrobenzene	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Isophorone	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2-Nitrophenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,4-Dimethylphenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Bis(2-chloroethoxy)methane	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,4-Dichlorophenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
1,2,4-Trichlorobenzene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Naphthalene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
4-Chloroaniline	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Hexachlorobutadiene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
4-Chloro-3-methylphenol	ND	194		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2-Methylnaphthalene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
1-Methylnaphthalene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Client Sample ID: SB-EP-3-0.5'

Collection Date: 5/28/2020 1:30:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,4,6-Trichlorophenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,4,5-Trichlorophenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2-Chloronaphthalene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2-Nitroaniline	ND	97.1	Q	µg/Kg-dry	1	6/5/2020 8:34:27 AM
Acenaphthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Dimethylphthalate	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,6-Dinitrotoluene	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Acenaphthylene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,4-Dinitrophenol	ND	510		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Dibenzofuran	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
2,4-Dinitrotoluene	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
4-Nitrophenol	ND	485		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Fluorene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
4-Chlorophenyl phenyl ether	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Diethylphthalate	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
4,6-Dinitro-2-methylphenol	ND	194		µg/Kg-dry	1	6/5/2020 8:34:27 AM
4-Bromophenyl phenyl ether	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Hexachlorobenzene	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Pentachlorophenol	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Phenanthrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Anthracene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Carbazole	ND	72.8		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Di-n-butylphthalate	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Fluoranthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Pyrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Butyl Benzylphthalate	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
bis(2-Ethylhexyl)adipate	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Benz(a)anthracene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Chrysene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
bis (2-Ethylhexyl) phthalate	ND	97.1		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Di-n-octyl phthalate	ND	97.1	Q	µg/Kg-dry	1	6/5/2020 8:34:27 AM
Benzo(b)fluoranthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Benzo(k)fluoranthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Benzo(a)pyrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Indeno(1,2,3-cd)pyrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Dibenz(a,h)anthracene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Benzo(g,h,i)perylene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:34:27 AM
Surr: 2,4,6-Tribromophenol	72.3	5 - 139		%Rec	1	6/5/2020 8:34:27 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:30:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Matrix: Soil
Client Sample ID: SB-EP-3-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	81.7	5 - 131		%Rec	1	6/5/2020 8:34:27 AM
Surr: Nitrobenzene-d5	70.9	5 - 123		%Rec	1	6/5/2020 8:34:27 AM
Surr: Phenol-d6	78.7	5 - 129		%Rec	1	6/5/2020 8:34:27 AM
Surr: p-Terphenyl	86.0	13.8 - 140		%Rec	1	6/5/2020 8:34:27 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28529		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Chloromethane	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Vinyl chloride	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Bromomethane	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Trichlorofluoromethane (CFC-11)	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Chloroethane	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1-Dichloroethene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Methyl tert-butyl ether (MTBE)	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Chloroform	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1,1-Trichloroethane (TCA)	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Carbon tetrachloride	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Benzene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Dibromomethane	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
cis-1,3-Dichloropropene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Toluene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,3-Dichloropropane	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Tetrachloroethene (PCE)	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Dibromochloromethane	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2-Dibromoethane (EDB)	ND	0.00600		mg/Kg-dry	1	6/3/2020 11:28:53 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Client Sample ID: SB-EP-3-0.5'

Collection Date: 5/28/2020 1:30:00 PM
Matrix: Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28529 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1,1,2-Tetrachloroethane	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
m,p-Xylene	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
o-Xylene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Styrene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Isopropylbenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Bromoform	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
n-Propylbenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Bromobenzene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,3,5-Trimethylbenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
4-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
tert-Butylbenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2,4-Trichlorobenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
sec-Butylbenzene	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
4-Isopropyltoluene	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,3-Dichlorobenzene	ND	0.0240	*	mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,4-Dichlorobenzene	ND	0.0240	*	mg/Kg-dry	1	6/3/2020 11:28:53 PM
n-Butylbenzene	ND	0.0300		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2-Dichlorobenzene	ND	0.0240	*	mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2-Dibromo-3-chloropropane	ND	0.600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2,4-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Hexachloro-1,3-butadiene	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Naphthalene	ND	0.0600		mg/Kg-dry	1	6/3/2020 11:28:53 PM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	6/3/2020 11:28:53 PM
Surr: Dibromofluoromethane	94.7	83.3 - 111		%Rec	1	6/3/2020 11:28:53 PM
Surr: Toluene-d8	92.7	87.9 - 111		%Rec	1	6/3/2020 11:28:53 PM
Surr: 1-Bromo-4-fluorobenzene	98.7	85.1 - 111		%Rec	1	6/3/2020 11:28:53 PM

NOTES:
* - Flagged value is not within established control limits.

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.237		mg/Kg-dry	1	6/3/2020 1:25:38 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:30:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-013
Matrix: Soil
Client Sample ID: SB-EP-3-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	4.19	0.197		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Barium	60.1	0.394		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Cadmium	ND	0.157		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Chromium	23.7	0.0787		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Lead	2.54	0.157		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Selenium	0.861	0.394		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Silver	ND	0.0787		mg/Kg-dry	1	6/3/2020 5:49:31 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	2.29			wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:55:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-014
Matrix: Soil
Client Sample ID: SB-EP-3-6'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	2.88	0.207		mg/Kg-dry	1	6/3/2020 5:54:05 PM
Lead	1.53	0.166		mg/Kg-dry	1	6/3/2020 5:54:05 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	4.85	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 1:40:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-015
Matrix: Soil
Client Sample ID: SB-EP-3-6.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.56	0.197		mg/Kg-dry	1	6/3/2020 5:58:39 PM
Lead	2.32	0.157		mg/Kg-dry	1	6/3/2020 5:58:39 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	4.40	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 2:30:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-016
Matrix: Soil
Client Sample ID: SB-6-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	2.70	0.191		mg/Kg-dry	1	6/3/2020 6:03:14 PM
Lead	1.62	0.153		mg/Kg-dry	1	6/3/2020 6:03:14 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	2.56	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 2:40:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-017
Matrix: Soil
Client Sample ID: SB-7-1.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28534		Analyst: CO
Arsenic	3.79	0.209		mg/Kg-dry	1	6/3/2020 6:08:48 PM
Lead	2.25	0.167		mg/Kg-dry	1	6/3/2020 6:08:48 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	5.73	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Client Sample ID: SB-8-0.5'

Collection Date: 5/28/2020 3:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Alpha BHC	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Beta BHC	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Gamma BHC (Lindane)	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Delta BHC	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Heptachlor	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Aldrin	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Heptachlor epoxide	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
gamma-Chlordane	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Endosulfan I	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
alpha-Chlordane	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Dieldrin	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
4,4´-DDE	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Endrin	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Endosulfan II	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
4,4´-DDD	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Endrin aldehyde	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Endosulfan sulfate	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
4,4´-DDT	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Endrin ketone	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Methoxychlor	ND	0.0100		mg/Kg-dry	1	6/5/2020 2:15:00 PM
Surr: Decachlorobiphenyl	126	27 - 166		%Rec	1	6/5/2020 2:15:00 PM
Surr: Tetrachloro-m-xylene	81.8	28.1 - 171		%Rec	1	6/5/2020 2:15:00 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	21.1		mg/Kg-dry	1	6/3/2020 7:01:11 PM
Mineral Spirits	ND	31.6		mg/Kg-dry	1	6/3/2020 7:01:11 PM
Kerosene	ND	52.6		mg/Kg-dry	1	6/3/2020 7:01:11 PM
Diesel (Fuel Oil)	ND	52.6		mg/Kg-dry	1	6/3/2020 7:01:11 PM
Heavy Oil	ND	105		mg/Kg-dry	1	6/3/2020 7:01:11 PM
Mineral Oil	ND	105		mg/Kg-dry	1	6/3/2020 7:01:11 PM
Surr: 2-Fluorobiphenyl	78.8	50 - 150		%Rec	1	6/3/2020 7:01:11 PM
Surr: o-Terphenyl	91.5	50 - 150		%Rec	1	6/3/2020 7:01:11 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	36.8		µg/Kg-dry	1	6/12/2020 5:23:59 PM
2,4-D	ND	31.5		µg/Kg-dry	1	6/12/2020 5:23:59 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Client Sample ID: SB-8-0.5'

Collection Date: 5/28/2020 3:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	26.3		µg/Kg-dry	1	6/12/2020 5:23:59 PM
2,4,5-TP (Silvex)	ND	21.0		µg/Kg-dry	1	6/12/2020 5:23:59 PM
2,4,5-T	ND	52.5		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Dinoseb	ND	31.5		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Dalapon	ND	210		µg/Kg-dry	1	6/12/2020 5:23:59 PM
2,4-DB	ND	26.3		µg/Kg-dry	1	6/12/2020 5:23:59 PM
MCPP	ND	4,620		µg/Kg-dry	1	6/12/2020 5:23:59 PM
MCPA	ND	2,940		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Picloram	ND	52.5	Q	µg/Kg-dry	1	6/12/2020 5:23:59 PM
Bentazon	ND	36.8		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Chloramben	ND	21.0		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Acifluorfen	ND	84.0		µg/Kg-dry	1	6/12/2020 5:23:59 PM
3,5-Dichlorobenzoic acid	ND	42.0		µg/Kg-dry	1	6/12/2020 5:23:59 PM
4-Nitrophenol	ND	31.5		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Dacthal (DCPA)	ND	31.5		µg/Kg-dry	1	6/12/2020 5:23:59 PM
Surr: 2,4-Dichlorophenylacetic acid	76.8	15.3 - 163		%Rec	1	6/12/2020 5:23:59 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Mevinphos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
TEPP	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Demeton, Total	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Ethoprophos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Naled	ND	48.4	Q	µg/Kg-dry	1	6/10/2020 3:19:38 AM
Sulfotepp	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Monocrotophos	ND	48.4	Q	µg/Kg-dry	1	6/10/2020 3:19:38 AM
Phorate	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Dimethoate	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Diazinon	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Disulfoton	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Parathion, methyl	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Fenchorphos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Malathion	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Dursban	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Fenthion	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Parathion	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Client Sample ID: SB-8-0.5'

Collection Date: 5/28/2020 3:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
Trichloronate	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Merphos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Stirophos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Prothiofos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Fensulfothion	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Sulprofos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
EPN	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Guthion	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Coumaphos	ND	48.4		µg/Kg-dry	1	6/10/2020 3:19:38 AM
Surr: Triphenylphosphate	90.4	10.7 - 154		%Rec	1	6/10/2020 3:19:38 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Phenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Bis(2-chloroethyl) ether	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2-Chlorophenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
1,3-Dichlorobenzene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
1,4-Dichlorobenzene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
1,2-Dichlorobenzene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Benzyl alcohol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2-Methylphenol (o-cresol)	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Hexachloroethane	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
N-Nitrosodi-n-propylamine	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
3&4-Methylphenol (m, p-cresol)	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Nitrobenzene	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Isophorone	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2-Nitrophenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,4-Dimethylphenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Bis(2-chloroethoxy)methane	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,4-Dichlorophenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
1,2,4-Trichlorobenzene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Naphthalene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
4-Chloroaniline	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Hexachlorobutadiene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
4-Chloro-3-methylphenol	ND	194		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2-Methylnaphthalene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
1-Methylnaphthalene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Matrix: Soil
Client Sample ID: SB-8-0.5'

Semi-Volatile Organic Compounds by EPA Method 8270 Batch ID: 28538 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Hexachlorocyclopentadiene	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,4,6-Trichlorophenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,4,5-Trichlorophenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2-Chloronaphthalene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2-Nitroaniline	ND	96.9	Q	µg/Kg-dry	1	6/5/2020 8:56:56 AM
Acenaphthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Dimethylphthalate	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,6-Dinitrotoluene	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Acenaphthylene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,4-Dinitrophenol	ND	509		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Dibenzofuran	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
2,4-Dinitrotoluene	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
4-Nitrophenol	ND	485		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Fluorene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
4-Chlorophenyl phenyl ether	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Diethylphthalate	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
4,6-Dinitro-2-methylphenol	ND	194		µg/Kg-dry	1	6/5/2020 8:56:56 AM
4-Bromophenyl phenyl ether	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Hexachlorobenzene	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Pentachlorophenol	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Phenanthrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Anthracene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Carbazole	ND	72.7		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Di-n-butylphthalate	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Fluoranthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Pyrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Butyl Benzylphthalate	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
bis(2-Ethylhexyl)adipate	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Benz(a)anthracene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Chrysene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
bis (2-Ethylhexyl) phthalate	ND	96.9		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Di-n-octyl phthalate	ND	96.9	Q	µg/Kg-dry	1	6/5/2020 8:56:56 AM
Benzo(b)fluoranthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Benzo(k)fluoranthene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Benzo(a)pyrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Indeno(1,2,3-cd)pyrene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Dibenz(a,h)anthracene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Benzo(g,h,i)perylene	ND	48.5		µg/Kg-dry	1	6/5/2020 8:56:56 AM
Surr: 2,4,6-Tribromophenol	62.5	5 - 139		%Rec	1	6/5/2020 8:56:56 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Matrix: Soil
Client Sample ID: SB-8-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	71.1	5 - 131		%Rec	1	6/5/2020 8:56:56 AM
Surr: Nitrobenzene-d5	67.7	5 - 123		%Rec	1	6/5/2020 8:56:56 AM
Surr: Phenol-d6	69.9	5 - 129		%Rec	1	6/5/2020 8:56:56 AM
Surr: p-Terphenyl	75.2	13.8 - 140		%Rec	1	6/5/2020 8:56:56 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28529		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Chloromethane	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Vinyl chloride	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Bromomethane	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Trichlorofluoromethane (CFC-11)	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Chloroethane	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1-Dichloroethene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Methylene chloride	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
trans-1,2-Dichloroethene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Methyl tert-butyl ether (MTBE)	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1-Dichloroethane	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
cis-1,2-Dichloroethene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Chloroform	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1,1-Trichloroethane (TCA)	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1-Dichloropropene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Carbon tetrachloride	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2-Dichloroethane (EDC)	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Benzene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Trichloroethene (TCE)	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2-Dichloropropane	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Bromodichloromethane	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Dibromomethane	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
cis-1,3-Dichloropropene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Toluene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
trans-1,3-Dichloropropylene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1,2-Trichloroethane	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,3-Dichloropropane	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Tetrachloroethene (PCE)	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Dibromochloromethane	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2-Dibromoethane (EDB)	ND	0.00386		mg/Kg-dry	1	6/3/2020 11:59:03 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Matrix: Soil
Client Sample ID: SB-8-0.5'

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28529 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1,1,2-Tetrachloroethane	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Ethylbenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
m,p-Xylene	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
o-Xylene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Styrene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Isopropylbenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Bromoform	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,1,2,2-Tetrachloroethane	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
n-Propylbenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Bromobenzene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,3,5-Trimethylbenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
2-Chlorotoluene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
4-Chlorotoluene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
tert-Butylbenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2,3-Trichloropropane	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2,4-Trichlorobenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
sec-Butylbenzene	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
4-Isopropyltoluene	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,3-Dichlorobenzene	ND	0.0155	*	mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,4-Dichlorobenzene	ND	0.0155	*	mg/Kg-dry	1	6/3/2020 11:59:03 PM
n-Butylbenzene	ND	0.0193		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2-Dichlorobenzene	ND	0.0155	*	mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2-Dibromo-3-chloropropane	ND	0.386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2,4-Trimethylbenzene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Hexachloro-1,3-butadiene	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Naphthalene	ND	0.0386		mg/Kg-dry	1	6/3/2020 11:59:03 PM
1,2,3-Trichlorobenzene	ND	0.0155		mg/Kg-dry	1	6/3/2020 11:59:03 PM
Surr: Dibromofluoromethane	95.5	83.3 - 111		%Rec	1	6/3/2020 11:59:03 PM
Surr: Toluene-d8	91.4	87.9 - 111		%Rec	1	6/3/2020 11:59:03 PM
Surr: 1-Bromo-4-fluorobenzene	96.4	85.1 - 111		%Rec	1	6/3/2020 11:59:03 PM

NOTES:
* - Flagged value is not within established control limits.

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.250		mg/Kg-dry	1	6/3/2020 1:27:15 PM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-018
Matrix: Soil
Client Sample ID: SB-8-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	5.82	0.199		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Barium	63.7	0.397		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Cadmium	ND	0.159		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Chromium	16.5	0.0795		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Lead	5.90	0.159		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Selenium	1.35	0.397		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Silver	ND	0.0795		mg/Kg-dry	1	6/4/2020 2:57:11 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	7.49			wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:10:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-019
Matrix: Soil
Client Sample ID: SB-8-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	3.97	0.186		mg/Kg-dry	1	6/4/2020 3:02:45 PM
Lead	2.47	0.148		mg/Kg-dry	1	6/4/2020 3:02:45 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	2.38	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:15:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-020
Matrix: Soil
Client Sample ID: SB-9-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	5.12	0.202		mg/Kg-dry	1	6/4/2020 3:08:19 PM
Lead	2.71	0.162		mg/Kg-dry	1	6/4/2020 3:08:19 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	2.71	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:25:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-021
Matrix: Soil
Client Sample ID: SB-10-1.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	3.70	0.200		mg/Kg-dry	1	6/4/2020 3:13:53 PM
Lead	2.06	0.160		mg/Kg-dry	1	6/4/2020 3:13:53 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	2.18	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:40:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-022
Matrix: Soil
Client Sample ID: SB-11-2'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	4.11	0.203		mg/Kg-dry	1	6/4/2020 3:19:27 PM
Lead	3.14	0.162		mg/Kg-dry	1	6/4/2020 3:19:27 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	4.33	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 3:55:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-023
Matrix: Soil
Client Sample ID: SB-12-2.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	4.11	0.211		mg/Kg-dry	1	6/4/2020 3:25:01 PM
Lead	2.99	0.169		mg/Kg-dry	1	6/4/2020 3:25:01 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	5.96	0.500		wt%	1	6/5/2020 8:42:20 AM

Analytical Report

Work Order: **2005395**
Date Reported: **6/18/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/28/2020 4:10:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2005395-024
Matrix: Soil
Client Sample ID: SB-13-1.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28552		Analyst: CO
Arsenic	3.64	0.200		mg/Kg-dry	1	6/4/2020 3:41:45 PM
Lead	2.00	0.160		mg/Kg-dry	1	6/4/2020 3:41:45 PM
Sample Moisture (Percent Moisture)				Batch ID: R59609		Analyst: EH
Percent Moisture	2.88	0.500		wt%	1	6/5/2020 8:42:20 AM

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **MB-28601** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **MBLKS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196966**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	ND	35.0									
2,4-D	ND	30.0									
2,4-DP	ND	25.0									
2,4,5-TP (Silvex)	ND	20.0									
2,4,5-T	ND	50.0									
Dinoseb	ND	30.0									
Dalapon	ND	200									
2,4-DB	ND	25.0									
MCPP	ND	4,400									
MCPA	ND	2,800									
Picloram	ND	50.0									Q
Bentazon	ND	35.0									
Chloramben	ND	20.0									
Acifluorfen	ND	80.0									
3,5-Dichlorobenzoic acid	ND	40.0									
4-Nitrophenol	ND	30.0									
Dacthal (DCPA)	ND	30.0									
Surr: 2,4-Dichlorophenylacetic acid	1,500		1,000		150	15.3	163				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **LCS-28601** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **LCSS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196967**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	185	35.0	200.0	0	92.7	21.2	167				
2,4-D	204	30.0	200.0	0	102	32	176				
2,4-DP	191	25.0	200.0	0	95.4	25.8	171				
2,4,5-TP (Silvex)	197	20.0	200.0	0	98.7	23.6	164				
2,4,5-T	200	50.0	200.0	0	99.8	25	166				
Dinoseb	27.9	30.0	200.0	0	13.9	5	168				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **LCS-28601** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **LCSS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196967**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dalapon	866	200	1,000	0	86.6	29.2	195				
2,4-DB	189	25.0	200.0	0	94.3	8.11	184				
MCPP	977	4,400	1,000	0	97.7	17.3	191				
MCPA	973	2,800	1,000	0	97.3	13.6	192				
Picloram	166	50.0	200.0	0	82.8	5	175				
Bentazon	198	35.0	200.0	0	99.2	21.5	170				
Chloramben	133	20.0	200.0	0	66.3	5	114				
Acifluorfen	94.3	80.0	200.0	0	47.1	5	168				
3,5-Dichlorobenzoic acid	190	40.0	200.0	0	94.9	26.2	174				
4-Nitrophenol	145	30.0	200.0	0	72.6	5.02	160				
Dacthal (DCPA)	211	30.0	200.0	0	105	18	168				
Surr: 2,4-Dichlorophenylacetic acid	1,020		1,000		102	15.3	163				

Sample ID: **2006001-018BMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **BATCH** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	158	35.7	204.0	0	77.4	5	136				
2,4-D	177	30.6	204.0	0	86.8	5	151				
2,4-DP	174	25.5	204.0	0	85.2	5	149				
2,4,5-TP (Silvex)	186	20.4	204.0	0	91.4	5.43	140				
2,4,5-T	173	51.0	204.0	0	84.9	6.68	133				
Dinoseb	87.8	30.6	204.0	0	43.0	5	141				
Dalapon	766	204	1,020	0	75.1	5	179				
2,4-DB	215	25.5	204.0	0	106	5.57	160				
MCPP	893	452	1,020	0	87.5	5	174				
MCPA	865	291	1,020	0	84.8	5	154				
Picloram	109	51.0	204.0	0	53.6	5	139				
Bentazon	201	35.7	204.0	0	98.3	5.31	146				
Chloramben	139	20.4	204.0	0	68.1	5	134				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **2006001-018BMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **BATCH** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acifluorfen	106	81.6	204.0	0	52.1	5	168				
3,5-Dichlorobenzoic acid	177	40.8	204.0	0	86.9	6.99	144				
4-Nitrophenol	160	30.6	204.0	0	78.5	10.2	139				
Dacthal (DCPA)	58.1	30.6	204.0	0	28.5	5	156				
Surr: 2,4-Dichlorophenylacetic acid	999		1,020		97.9	15.3	163				

Sample ID: **2006001-018BMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **BATCH** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196983**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	128	33.4	190.8	0	67.2	5	136	158.0	20.8	30	
2,4-D	140	28.6	190.8	0	73.2	5	151	177.1	23.7	30	
2,4-DP	137	23.8	190.8	0	71.6	5	149	173.9	24.1	30	
2,4,5-TP (Silvex)	141	19.1	190.8	0	74.0	5.43	140	186.4	27.6	30	
2,4,5-T	129	47.7	190.8	0	67.4	6.68	133	173.3	29.6	30	
Dinoseb	81.0	28.6	190.8	0	42.4	5	141	87.81	8.11	30	
Dalapon	626	191	953.9	0	65.6	5	179	765.9	20.1	30	
2,4-DB	154	23.8	190.8	0	80.7	5.57	160	215.4	33.2	30	R
MCPP	721	422	953.9	0	75.6	5	174	892.9	21.3	30	
MCPA	691	272	953.9	0	72.5	5	154	865.5	22.4	30	
Picloram	77.8	47.7	190.8	0	40.8	5	139	109.3	33.6	30	R
Bentazon	154	33.4	190.8	0	80.6	5.31	146	200.5	26.4	30	
Chloramben	111	19.1	190.8	0	58.4	5	134	138.9	21.9	30	
Acifluorfen	94.0	76.3	190.8	0	49.3	5	168	106.3	12.3	30	
3,5-Dichlorobenzoic acid	143	38.2	190.8	0	74.8	6.99	144	177.4	21.7	30	
4-Nitrophenol	133	28.6	190.8	0	69.9	10.2	139	160.1	18.2	30	
Dacthal (DCPA)	51.6	28.6	190.8	0	27.1	5	156	58.14	11.9	30	
Surr: 2,4-Dichlorophenylacetic acid	797		953.9		83.6	15.3	163		0		

NOTES:
R - High RPD observed, spike recovery is within range.

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Hydrocarbon Identification by NWTPH-HCID

Sample ID: **MB-28524** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59562**
Client ID: **MBLKS** Batch ID: **28524** Analysis Date: **6/3/2020** SeqNo: **1191100**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	20.0									
Mineral Spirits	ND	30.0									
Kerosene	ND	50.0									
Diesel (Fuel Oil)	ND	50.0									
Heavy Oil	ND	100									
Mineral Oil	ND	100									
Surr: 2-Fluorobiphenyl	13.7		20.00		68.6	50	150				
Surr: o-Terphenyl	15.6		20.00		77.9	50	150				

Sample ID: **LCS-28524** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59562**
Client ID: **LCSS** Batch ID: **28524** Analysis Date: **6/3/2020** SeqNo: **1191101**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	454	50.0	500.0	0	90.7	65	135				
Surr: 2-Fluorobiphenyl	16.4		20.00		82.2	50	150				
Surr: o-Terphenyl	16.4		20.00		82.1	50	150				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-28516** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **MBLKS** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190963**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.250									

Sample ID: **LCS-28516** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **LCSS** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190964**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.500	0.250	0.5000	0	100	80	120				

Sample ID: **2005384-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **BATCH** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190925**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.132						0		20	

Sample ID: **2005384-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **BATCH** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190926**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.297	0.131	0.2623	0.03709	99.1	70	130				

Sample ID: **2005384-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **BATCH** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190927**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.294	0.139	0.2780	0.03709	92.3	70	130	0.2969	1.15	20	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **MB-28547** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **MBLKS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192831**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.100									
Alpha BHC	ND	0.0100									
Beta BHC	ND	0.0100									
Gamma BHC (Lindane)	ND	0.0100									
Delta BHC	ND	0.0100									
Heptachlor	ND	0.0100									
Aldrin	ND	0.0100									
Heptachlor epoxide	ND	0.0100									
gamma-Chlordane	ND	0.0100									
Endosulfan I	ND	0.0100									
alpha-Chlordane	ND	0.0100									
Dieldrin	ND	0.0100									
4,4´-DDE	ND	0.0100									
Endrin	ND	0.0100									
Endosulfan II	ND	0.0100									
4,4´-DDD	ND	0.0100									
Endrin aldehyde	ND	0.0100									
Endosulfan sulfate	ND	0.0100									
4,4´-DDT	ND	0.0100									
Endrin ketone	ND	0.0100									
Methoxychlor	ND	0.0100									
Surr: Decachlorobiphenyl	0.0483		0.05000		96.7	27	166				
Surr: Tetrachloro-m-xylene	0.0428		0.05000		85.7	28.1	171				

Sample ID: **LCS1-28547** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **LCSS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192832**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.182	0.0100	0.2000	0	90.8	70.8	143				
Beta BHC	0.193	0.0100	0.2000	0	96.3	70.5	143				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **LCS1-28547** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **LCSS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192832**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gamma BHC (Lindane)	0.186	0.0100	0.2000	0	92.9	70.8	144				
Delta BHC	0.192	0.0100	0.2000	0	96.2	67.8	143				
Heptachlor	0.197	0.0100	0.2000	0	98.5	70.7	151				
Aldrin	0.188	0.0100	0.2000	0	94.1	68.5	149				
Heptachlor epoxide	0.195	0.0100	0.2000	0	97.6	67.8	152				
gamma-Chlordane	0.198	0.0100	0.2000	0	98.8	63.8	150				
Endosulfan I	0.196	0.0100	0.2000	0	97.9	73.3	151				
alpha-Chlordane	0.197	0.0100	0.2000	0	98.6	63.5	150				
Dieldrin	0.200	0.0100	0.2000	0	100	72.8	149				
4,4´-DDE	0.204	0.0100	0.2000	0	102	71.1	146				
Endrin	0.208	0.0100	0.2000	0	104	62.7	158				
Endosulfan II	0.206	0.0100	0.2000	0	103	53.5	154				
4,4´-DDD	0.197	0.0100	0.2000	0	98.4	66.3	154				
Endrin aldehyde	0.212	0.0100	0.2000	0	106	43.8	133				
Endosulfan sulfate	0.210	0.0100	0.2000	0	105	59.5	149				
4,4´-DDT	0.262	0.0100	0.2000	0	131	70.5	149				
Endrin ketone	0.217	0.0100	0.2000	0	109	58	157				
Methoxychlor	0.255	0.0100	0.2000	0	128	52	159				
Surr: Decachlorobiphenyl	0.0505		0.05000		101	27	166				
Surr: Tetrachloro-m-xylene	0.0445		0.05000		89.1	28.1	171				

Sample ID: **LCS2-28547** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **LCSS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192833**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	1.10	0.100	1.000	0	110	57.3	134				
Surr: Decachlorobiphenyl	0.0487		0.05000		97.4	27	166				
Surr: Tetrachloro-m-xylene	0.0420		0.05000		84.0	28.1	171				

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **2006001-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **BATCH** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192841**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.0918						0		30	
Alpha BHC	ND	0.00918						0		30	
Beta BHC	ND	0.00918						0		30	
Gamma BHC (Lindane)	ND	0.00918						0		30	
Delta BHC	ND	0.00918						0		30	
Heptachlor	ND	0.00918						0		30	
Aldrin	ND	0.00918						0		30	
Heptachlor epoxide	ND	0.00918						0		30	
gamma-Chlordane	ND	0.00918						0		30	
Endosulfan I	ND	0.00918						0		30	
alpha-Chlordane	ND	0.00918						0		30	
Dieldrin	ND	0.00918						0		30	
4,4´-DDE	ND	0.00918						0		30	
Endrin	ND	0.00918						0		30	
Endosulfan II	ND	0.00918						0		30	
4,4´-DDD	ND	0.00918						0		30	
Endrin aldehyde	ND	0.00918						0		30	
Endosulfan sulfate	ND	0.00918						0		30	
4,4´-DDT	ND	0.00918						0		30	
Endrin ketone	ND	0.00918						0		30	
Methoxychlor	ND	0.00918						0		30	
Surr: Decachlorobiphenyl	0.0383		0.04591		83.5	27	166		0		
Surr: Tetrachloro-m-xylene	0.0357		0.04591		77.7	28.1	171		0		

Sample ID: **2006001-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **BATCH** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192842**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.200	0.0101	0.2010	0	99.5	76.1	143				
Beta BHC	0.208	0.0101	0.2010	0	104	70.1	143				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **2006001-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **BATCH** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192842**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gamma BHC (Lindane)	0.204	0.0101	0.2010	0	102	76.1	145				
Delta BHC	0.209	0.0101	0.2010	0	104	61.1	142				
Heptachlor	0.217	0.0101	0.2010	0	108	76.3	157				
Aldrin	0.204	0.0101	0.2010	0	102	73.9	152				
Heptachlor epoxide	0.210	0.0101	0.2010	0	104	75.1	154				
gamma-Chlordane	0.205	0.0101	0.2010	0	102	69.4	152				
Endosulfan I	0.209	0.0101	0.2010	0	104	75.3	153				
alpha-Chlordane	0.207	0.0101	0.2010	0	103	68.7	155				
Dieldrin	0.210	0.0101	0.2010	0	104	74	152				
4,4´-DDE	0.214	0.0101	0.2010	0	107	70.7	152				
Endrin	0.221	0.0101	0.2010	0	110	80.4	152				
Endosulfan II	0.212	0.0101	0.2010	0	106	67.2	144				
4,4´-DDD	0.211	0.0101	0.2010	0	105	71.1	155				
Endrin aldehyde	0.215	0.0101	0.2010	0	107	22.5	147				
Endosulfan sulfate	0.213	0.0101	0.2010	0	106	49.5	145				
4,4´-DDT	0.253	0.0101	0.2010	0	126	61.5	169				
Endrin ketone	0.216	0.0101	0.2010	0	108	67.1	144				
Methoxychlor	0.256	0.0101	0.2010	0	127	58	170				
Surr: Decachlorobiphenyl	0.0446		0.05026		88.8	27	166				
Surr: Tetrachloro-m-xylene	0.0428		0.05026		85.1	28.1	171				

Sample ID: **2006001-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **BATCH** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192843**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.197	0.00911	0.1822	0	108	76.1	143	0.2000	1.62	30	
Beta BHC	0.211	0.00911	0.1822	0	116	70.1	143	0.2084	1.44	30	
Gamma BHC (Lindane)	0.203	0.00911	0.1822	0	112	76.1	145	0.2041	0.374	30	
Delta BHC	0.212	0.00911	0.1822	0	116	61.1	142	0.2088	1.42	30	
Heptachlor	0.215	0.00911	0.1822	0	118	76.3	157	0.2171	0.971	30	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **2006001-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **BATCH** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192843**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	0.203	0.00911	0.1822	0	112	73.9	152	0.2043	0.518	30	
Heptachlor epoxide	0.212	0.00911	0.1822	0	117	75.1	154	0.2097	1.24	30	
gamma-Chlordane	0.209	0.00911	0.1822	0	115	69.4	152	0.2052	1.69	30	
Endosulfan I	0.212	0.00911	0.1822	0	116	75.3	153	0.2085	1.63	30	
alpha-Chlordane	0.212	0.00911	0.1822	0	116	68.7	155	0.2069	2.24	30	
Dieldrin	0.215	0.00911	0.1822	0	118	74	152	0.2100	2.54	30	
4,4´-DDE	0.222	0.00911	0.1822	0	122	70.7	152	0.2143	3.37	30	
Endrin	0.226	0.00911	0.1822	0	124	80.4	152	0.2205	2.61	30	
Endosulfan II	0.221	0.00911	0.1822	0	121	67.2	144	0.2123	3.91	30	
4,4´-DDD	0.222	0.00911	0.1822	0	122	71.1	155	0.2115	4.87	30	
Endrin aldehyde	0.223	0.00911	0.1822	0	122	22.5	147	0.2152	3.46	30	
Endosulfan sulfate	0.224	0.00911	0.1822	0	123	49.5	145	0.2132	4.75	30	
4,4´-DDT	0.261	0.00911	0.1822	0	143	61.5	169	0.2528	3.26	30	
Endrin ketone	0.227	0.00911	0.1822	0	124	67.1	144	0.2164	4.56	30	
Methoxychlor	0.263	0.00911	0.1822	0	144	58	170	0.2560	2.51	30	
Surr: Decachlorobiphenyl	0.0478		0.04555		105	27	166		0		
Surr: Tetrachloro-m-xylene	0.0411		0.04555		90.2	28.1	171		0		

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-28538** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **MBLKS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	100									
Bis(2-chloroethyl) ether	ND	100									
2-Chlorophenol	ND	100									
1,3-Dichlorobenzene	ND	75.0									
1,4-Dichlorobenzene	ND	75.0									
1,2-Dichlorobenzene	ND	75.0									
Benzyl alcohol	ND	100									
2-Methylphenol (o-cresol)	ND	100									
Hexachloroethane	ND	100									
N-Nitrosodi-n-propylamine	ND	100									
3&4-Methylphenol (m, p-cresol)	ND	100									
Nitrobenzene	ND	100									
Isophorone	ND	100									
2-Nitrophenol	ND	100									
2,4-Dimethylphenol	ND	100									
Bis(2-chloroethoxy)methane	ND	75.0									
2,4-Dichlorophenol	ND	100									
1,2,4-Trichlorobenzene	ND	75.0									
Naphthalene	ND	50.0									
4-Chloroaniline	ND	75.0									
Hexachlorobutadiene	ND	75.0									
4-Chloro-3-methylphenol	ND	200									
2-Methylnaphthalene	ND	50.0									
1-Methylnaphthalene	ND	50.0									
Hexachlorocyclopentadiene	ND	100									
2,4,6-Trichlorophenol	ND	100									
2,4,5-Trichlorophenol	ND	100									
2-Chloronaphthalene	ND	75.0									
2-Nitroaniline	ND	100									Q
Acenaphthene	ND	50.0									
Dimethylphthalate	ND	100									

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-28538**	SampType: **MBLK**	Units: **µg/Kg**	Prep Date: **6/3/2020**	RunNo: **59620**
Client ID: **MBLKS**	Batch ID: **28538**		Analysis Date: **6/5/2020**	SeqNo: **1192611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	100									
Acenaphthylene	ND	50.0									
2,4-Dinitrophenol	ND	525									
Dibenzofuran	ND	75.0									
2,4-Dinitrotoluene	ND	100									
4-Nitrophenol	ND	500									
Fluorene	ND	50.0									
4-Chlorophenyl phenyl ether	ND	75.0									
Diethylphthalate	ND	100									
4,6-Dinitro-2-methylphenol	ND	200									
4-Bromophenyl phenyl ether	ND	75.0									
Hexachlorobenzene	ND	75.0									
Pentachlorophenol	ND	100									
Phenanthrene	ND	50.0									
Anthracene	ND	50.0									
Carbazole	ND	75.0									
Di-n-butylphthalate	ND	100									
Fluoranthene	ND	50.0									
Pyrene	ND	50.0									
Butyl Benzylphthalate	ND	100									
bis(2-Ethylhexyl)adipate	ND	100									
Benz(a)anthracene	ND	50.0									
Chrysene	ND	50.0									
bis (2-Ethylhexyl) phthalate	ND	100									
Di-n-octyl phthalate	ND	100									Q
Benzo(b)fluoranthene	ND	50.0									
Benzo(k)fluoranthene	ND	50.0									
Benzo(a)pyrene	ND	50.0									
Indeno(1,2,3-cd)pyrene	ND	50.0									
Dibenz(a,h)anthracene	ND	50.0									
Benzo(g,h,i)perylene	ND	50.0									

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-28538** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **MBLKS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	524		1,000		52.4	5	139				
Surr: 2-Fluorobiphenyl	458		500.0		91.5	5	131				
Surr: Nitrobenzene-d5	259		500.0		51.8	5	123				
Surr: Phenol-d6	855		1,000		85.5	5	129				
Surr: p-Terphenyl	540		500.0		108	13.8	140				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **LCS-28538** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **LCSS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192612**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1,120	100	1,000	0	112	36	137				
Bis(2-chloroethyl) ether	918	100	1,000	0	91.8	39	132				
2-Chlorophenol	1,000	100	1,000	0	100	44.1	138				
1,3-Dichlorobenzene	748	75.0	1,000	0	74.8	43.9	123				
1,4-Dichlorobenzene	736	75.0	1,000	0	73.6	48	120				
1,2-Dichlorobenzene	829	75.0	1,000	0	82.9	44.9	124				
Benzyl alcohol	1,090	100	1,000	0	109	5	190				
2-Methylphenol (o-cresol)	1,100	100	1,000	0	110	39.8	136				
Hexachloroethane	788	100	1,000	0	78.8	37.2	129				
N-Nitrosodi-n-propylamine	1,110	100	1,000	0	111	37.6	146				
3&4-Methylphenol (m, p-cresol)	1,160	100	1,000	0	116	45.4	133				
Nitrobenzene	989	100	1,000	0	98.9	36.4	135				
Isophorone	1,080	100	1,000	0	108	42.2	138				
2-Nitrophenol	1,030	100	1,000	0	103	57.6	133				
2,4-Dimethylphenol	1,140	100	1,000	0	114	45.5	129				
Bis(2-chloroethoxy)methane	1,100	75.0	1,000	0	110	44.7	135				
2,4-Dichlorophenol	1,080	100	1,000	0	108	50.2	140				
1,2,4-Trichlorobenzene	1,050	75.0	1,000	0	105	47.6	136				
Naphthalene	1,030	50.0	1,000	0	103	48	138				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-28538** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **LCSS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192612**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloroaniline	1,020	75.0	1,000	0	102	48.5	127				
Hexachlorobutadiene	951	75.0	1,000	0	95.1	44.6	137				
4-Chloro-3-methylphenol	1,120	200	1,000	0	112	44.1	149				
2-Methylnaphthalene	1,050	50.0	1,000	0	105	50.1	137				
1-Methylnaphthalene	1,080	50.0	1,000	0	108	53.8	129				
Hexachlorocyclopentadiene	1,120	100	1,000	0	112	6.89	161				
2,4,6-Trichlorophenol	940	100	1,000	0	94.0	48.1	137				
2,4,5-Trichlorophenol	1,050	100	1,000	0	105	45.8	146				
2-Chloronaphthalene	1,170	75.0	1,000	0	117	49.7	140				
2-Nitroaniline	1,070	100	1,000	0	107	46.3	141				
Acenaphthene	1,110	50.0	1,000	0	111	51.1	139				
Dimethylphthalate	1,150	100	1,000	0	115	56	129				
2,6-Dinitrotoluene	1,070	100	1,000	0	107	61	137				
Acenaphthylene	1,120	50.0	1,000	0	112	49.6	134				
2,4-Dinitrophenol	632	525	2,000	0	31.6	5	80.3				
Dibenzofuran	1,120	75.0	1,000	0	112	50.4	141				
2,4-Dinitrotoluene	1,200	100	1,000	0	120	61.8	134				
4-Nitrophenol	1,250	500	1,000	0	125	23	137				
Fluorene	1,160	50.0	1,000	0	116	49.6	142				
4-Chlorophenyl phenyl ether	1,100	75.0	1,000	0	110	52.5	137				
Diethylphthalate	1,150	100	1,000	0	115	57.7	135				
4,6-Dinitro-2-methylphenol	662	200	1,000	0	66.2	5	103				
4-Bromophenyl phenyl ether	1,080	75.0	1,000	0	108	48.2	141				
Hexachlorobenzene	1,160	75.0	1,000	0	116	54.1	136				
Pentachlorophenol	328	100	1,000	0	32.8	5	140				
Phenanthrene	1,200	50.0	1,000	0	120	51.5	135				
Anthracene	1,210	50.0	1,000	0	121	46.6	137				
Carbazole	1,210	75.0	1,000	0	121	48.2	136				
Di-n-butylphthalate	1,120	100	1,000	0	112	58.6	131				
Fluoranthene	1,250	50.0	1,000	0	125	48.7	133				
Pyrene	1,200	50.0	1,000	0	120	48.8	134				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-28538** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **LCSS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192612**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butyl Benzylphthalate	1,130	100	1,000	0	113	49.4	147				
bis(2-Ethylhexyl)adipate	1,070	100	1,000	0	107	45.5	151				
Benz(a)anthracene	1,150	50.0	1,000	0	115	55.6	134				
Chrysene	1,230	50.0	1,000	0	123	47.4	144				
bis (2-Ethylhexyl) phthalate	1,080	100	1,000	0	108	49.4	152				
Di-n-octyl phthalate	997	100	1,000	0	99.7	45.5	148				
Benzo(b)fluoranthene	1,120	50.0	1,000	0	112	44.7	150				
Benzo(k)fluoranthene	1,200	50.0	1,000	0	120	44.3	143				
Benzo(a)pyrene	1,170	50.0	1,000	0	117	60.5	136				
Indeno(1,2,3-cd)pyrene	1,210	50.0	1,000	0	121	49.5	141				
Dibenz(a,h)anthracene	1,290	50.0	1,000	0	129	48.7	138				
Benzo(g,h,i)perylene	1,210	50.0	1,000	0	121	51.4	137				
Surr: 2,4,6-Tribromophenol	837		1,000		83.7	5	139				
Surr: 2-Fluorobiphenyl	475		500.0		95.0	5	131				
Surr: Nitrobenzene-d5	436		500.0		87.1	5	123				
Surr: Phenol-d6	926		1,000		92.6	5	129				
Surr: p-Terphenyl	537		500.0		107	13.8	140				

Sample ID: **2005395-007AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192616**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	936	110	1,095	0	85.5	27	113				
Bis(2-chloroethyl) ether	859	110	1,095	0	78.4	19.7	113				
2-Chlorophenol	948	110	1,095	0	86.6	24.7	118				
1,3-Dichlorobenzene	768	82.2	1,095	0	70.1	20.6	99.9				
1,4-Dichlorobenzene	752	82.2	1,095	0	68.6	22.6	101				
1,2-Dichlorobenzene	807	82.2	1,095	0	73.6	26.2	103				
Benzyl alcohol	956	110	1,095	0	87.3	5	169				
2-Methylphenol (o-cresol)	1,000	110	1,095	0	91.7	23.3	122				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192616**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	753	110	1,095	0	68.8	16.9	100				
N-Nitrosodi-n-propylamine	990	110	1,095	0	90.4	25.6	131				
3&4-Methylphenol (m, p-cresol)	963	110	1,095	0	87.9	27.9	118				
Nitrobenzene	957	110	1,095	0	87.3	23	121				
Isophorone	924	110	1,095	0	84.4	26.8	128				
2-Nitrophenol	975	110	1,095	0	89.0	34.6	130				
2,4-Dimethylphenol	956	110	1,095	0	87.3	13.4	129				
Bis(2-chloroethoxy)methane	1,010	82.2	1,095	0	92.6	30.3	119				
2,4-Dichlorophenol	978	110	1,095	0	89.3	27	133				
1,2,4-Trichlorobenzene	974	82.2	1,095	0	88.9	32.1	120				
Naphthalene	936	54.8	1,095	0	85.4	24.7	126				
4-Chloroaniline	643	82.2	1,095	0	58.7	10.9	114				
Hexachlorobutadiene	876	82.2	1,095	0	80.0	32.4	113				
4-Chloro-3-methylphenol	956	219	1,095	0	87.2	28.7	135				
2-Methylnaphthalene	962	54.8	1,095	0	87.9	31.1	125				
1-Methylnaphthalene	944	54.8	1,095	0	86.1	29.6	125				
Hexachlorocyclopentadiene	945	110	1,095	0	86.3	5	117				
2,4,6-Trichlorophenol	906	110	1,095	0	82.7	31	125				
2,4,5-Trichlorophenol	1,040	110	1,095	0	94.7	28.7	130				
2-Chloronaphthalene	1,030	82.2	1,095	0	94.3	37.2	121				
2-Nitroaniline	880	110	1,095	0	80.3	19.5	145				
Acenaphthene	1,000	54.8	1,095	0	91.5	34.2	128				
Dimethylphthalate	1,010	110	1,095	0	92.6	25.5	125				
2,6-Dinitrotoluene	986	110	1,095	0	90.0	41.4	127				
Acenaphthylene	997	54.8	1,095	0	91.0	34.5	121				
2,4-Dinitrophenol	1,490	575	2,191	0	68.2	5	74.3				
Dibenzofuran	1,010	82.2	1,095	0	92.3	30.8	128				
2,4-Dinitrotoluene	977	110	1,095	0	89.2	35.8	132				
4-Nitrophenol	821	548	1,095	0	74.9	5	152				
Fluorene	1,040	54.8	1,095	0	95.4	34.4	127				
4-Chlorophenyl phenyl ether	966	82.2	1,095	0	88.2	37.4	121				

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Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192616**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diethylphthalate	1,000	110	1,095	0	91.4	36	131				
4,6-Dinitro-2-methylphenol	1,070	219	1,095	0	97.6	5	109				
4-Bromophenyl phenyl ether	982	82.2	1,095	0	89.6	36.7	121				
Hexachlorobenzene	986	82.2	1,095	0	90.0	34.4	127				
Pentachlorophenol	950	110	1,095	0	86.7	5	149				
Phenanthrene	1,010	54.8	1,095	0	92.5	30.6	128				
Anthracene	978	54.8	1,095	0	89.3	30.5	124				
Carbazole	1,030	82.2	1,095	0	93.8	28.8	128				
Di-n-butylphthalate	977	110	1,095	0	89.1	36.1	132				
Fluoranthene	1,040	54.8	1,095	0	94.7	30.9	125				
Pyrene	1,040	54.8	1,095	0	94.9	31	125				
Butyl Benzylphthalate	943	110	1,095	0	86.1	35.1	138				
bis(2-Ethylhexyl)adipate	885	110	1,095	0	80.8	36.5	136				
Benz(a)anthracene	969	54.8	1,095	0	88.5	18.4	142				
Chrysene	1,080	54.8	1,095	0	98.8	27.4	134				
bis (2-Ethylhexyl) phthalate	999	110	1,095	0	91.2	38.6	144				
Di-n-octyl phthalate	993	110	1,095	0	90.6	37.1	145				
Benzo(b)fluoranthene	1,130	54.8	1,095	0	103	33.5	134				
Benzo(k)fluoranthene	1,180	54.8	1,095	0	107	14	133				
Benzo(a)pyrene	1,020	54.8	1,095	0	93.0	28.9	142				
Indeno(1,2,3-cd)pyrene	1,020	54.8	1,095	0	93.3	25.6	130				
Dibenz(a,h)anthracene	1,060	54.8	1,095	0	96.8	27.9	126				
Benzo(g,h,i)perylene	1,020	54.8	1,095	0	93.0	23.9	125				
Surr: 2,4,6-Tribromophenol	796		1,095		72.7	5	139				
Surr: 2-Fluorobiphenyl	432		547.7		78.8	5	131				
Surr: Nitrobenzene-d5	393		547.7		71.7	5	123				
Surr: Phenol-d6	780		1,095		71.2	5	129				
Surr: p-Terphenyl	441		547.7		80.5	13.8	140				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192617**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	889	113	1,126	0	79.0	27	113	936.5	5.19	50	
Bis(2-chloroethyl) ether	715	113	1,126	0	63.5	19.7	113	858.6	18.3	50	
2-Chlorophenol	838	113	1,126	0	74.4	24.7	118	948.4	12.4	50	
1,3-Dichlorobenzene	640	84.4	1,126	0	56.9	20.6	99.9	768.0	18.1	50	
1,4-Dichlorobenzene	644	84.4	1,126	0	57.2	22.6	101	751.6	15.4	50	
1,2-Dichlorobenzene	622	84.4	1,126	0	55.3	26.2	103	806.6	25.8	50	
Benzyl alcohol	904	113	1,126	0	80.3	5	169	956.4	5.66	50	
2-Methylphenol (o-cresol)	938	113	1,126	0	83.3	23.3	122	1,004	6.83	50	
Hexachloroethane	623	113	1,126	0	55.3	16.9	100	753.4	19.0	50	
N-Nitrosodi-n-propylamine	912	113	1,126	0	81.1	25.6	131	989.7	8.13	50	
3&4-Methylphenol (m, p-cresol)	963	113	1,126	0	85.5	27.9	118	962.7	0.0102	50	
Nitrobenzene	817	113	1,126	0	72.6	23	121	956.6	15.7	50	
Isophorone	969	113	1,126	0	86.1	26.8	128	924.4	4.70	50	
2-Nitrophenol	817	113	1,126	0	72.6	34.6	130	974.8	17.6	50	
2,4-Dimethylphenol	901	113	1,126	0	80.1	13.4	129	956.2	5.90	50	
Bis(2-chloroethoxy)methane	907	84.4	1,126	0	80.6	30.3	119	1,015	11.2	50	
2,4-Dichlorophenol	930	113	1,126	0	82.6	27	133	978.4	5.11	50	
1,2,4-Trichlorobenzene	856	84.4	1,126	0	76.1	32.1	120	974.0	12.9	50	
Naphthalene	820	56.3	1,126	0	72.9	24.7	126	935.7	13.1	50	
4-Chloroaniline	637	84.4	1,126	0	56.6	10.9	114	642.6	0.904	50	
Hexachlorobutadiene	658	84.4	1,126	0	58.4	32.4	113	875.9	28.4	50	
4-Chloro-3-methylphenol	917	225	1,126	0	81.4	28.7	135	955.7	4.16	50	
2-Methylnaphthalene	902	56.3	1,126	0	80.1	31.1	125	962.5	6.47	50	
1-Methylnaphthalene	897	56.3	1,126	0	79.6	29.6	125	943.6	5.12	50	
Hexachlorocyclopentadiene	843	113	1,126	0	74.9	5	117	945.2	11.4	50	
2,4,6-Trichlorophenol	883	113	1,126	0	78.5	31	125	906.4	2.58	50	
2,4,5-Trichlorophenol	978	113	1,126	0	86.9	28.7	130	1,037	5.82	50	
2-Chloronaphthalene	971	84.4	1,126	0	86.3	37.2	121	1,033	6.12	50	
2-Nitroaniline	893	113	1,126	0	79.3	19.5	145	880.1	1.40	50	
Acenaphthene	927	56.3	1,126	0	82.3	34.2	128	1,002	7.83	50	
Dimethylphthalate	974	113	1,126	0	86.5	25.5	125	1,014	4.11	50	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192617**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	1,030	113	1,126	0	91.3	41.4	127	986.4	4.14	50	
Acenaphthylene	997	56.3	1,126	0	88.5	34.5	121	996.6	0.00372	50	
2,4-Dinitrophenol	1,570	591	2,251	0	69.5	5	74.3	1,495	4.61	50	
Dibenzofuran	911	84.4	1,126	0	81.0	30.8	128	1,011	10.4	50	
2,4-Dinitrotoluene	985	113	1,126	0	87.5	35.8	132	977.3	0.759	50	
4-Nitrophenol	917	563	1,126	0	81.4	5	152	820.6	11.1	50	
Fluorene	954	56.3	1,126	0	84.7	34.4	127	1,045	9.11	50	
4-Chlorophenyl phenyl ether	915	84.4	1,126	0	81.3	37.4	121	966.3	5.43	50	
Diethylphthalate	959	113	1,126	0	85.2	36	131	1,001	4.24	50	
4,6-Dinitro-2-methylphenol	1,050	225	1,126	0	93.4	5	109	1,069	1.75	50	
4-Bromophenyl phenyl ether	927	84.4	1,126	0	82.4	36.7	121	981.8	5.69	50	
Hexachlorobenzene	935	84.4	1,126	0	83.1	34.4	127	985.9	5.29	50	
Pentachlorophenol	891	113	1,126	0	79.1	5	149	949.6	6.42	50	
Phenanthrene	999	56.3	1,126	0	88.7	30.6	128	1,013	1.41	50	
Anthracene	1,010	56.3	1,126	0	89.3	30.5	124	978.5	2.71	50	
Carbazole	956	84.4	1,126	0	84.9	28.8	128	1,028	7.29	50	
Di-n-butylphthalate	962	113	1,126	0	85.5	36.1	132	976.6	1.49	50	
Fluoranthene	987	56.3	1,126	0	87.7	30.9	125	1,037	4.95	50	
Pyrene	1,000	56.3	1,126	0	89.0	31	125	1,040	3.73	50	
Butyl Benzylphthalate	974	113	1,126	0	86.5	35.1	138	942.9	3.25	50	
bis(2-Ethylhexyl)adipate	915	113	1,126	0	81.3	36.5	136	885.0	3.33	50	
Benz(a)anthracene	1,010	56.3	1,126	0	89.6	18.4	142	969.2	3.92	50	
Chrysene	1,000	56.3	1,126	0	89.3	27.4	134	1,082	7.44	50	
bis (2-Ethylhexyl) phthalate	895	113	1,126	0	79.5	38.6	144	999.3	11.0	50	
Di-n-octyl phthalate	872	113	1,126	0	77.5	37.1	145	992.7	12.9	50	
Benzo(b)fluoranthene	995	56.3	1,126	0	88.4	33.5	134	1,133	13.0	50	
Benzo(k)fluoranthene	936	56.3	1,126	0	83.2	14	133	1,175	22.6	50	
Benzo(a)pyrene	952	56.3	1,126	0	84.6	28.9	142	1,019	6.75	50	
Indeno(1,2,3-cd)pyrene	994	56.3	1,126	0	88.3	25.6	130	1,022	2.82	50	
Dibenz(a,h)anthracene	1,010	56.3	1,126	0	89.3	27.9	126	1,060	5.31	50	
Benzo(g,h,i)perylene	1,070	56.3	1,126	0	95.1	23.9	125	1,019	4.91	50	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192617**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	902		1,126		80.2	5	139		0		
Surr: 2-Fluorobiphenyl	464		562.8		82.4	5	131		0		
Surr: Nitrobenzene-d5	447		562.8		79.4	5	123		0		
Surr: Phenol-d6	875		1,126		77.8	5	129		0		
Surr: p-Terphenyl	467		562.8		83.0	13.8	140		0		

Sample ID: **2005395-007ADUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	106						0		50	
Bis(2-chloroethyl) ether	ND	106						0		50	
2-Chlorophenol	ND	106						0		50	
1,3-Dichlorobenzene	ND	79.8						0		50	
1,4-Dichlorobenzene	ND	79.8						0		50	
1,2-Dichlorobenzene	ND	79.8						0		50	
Benzyl alcohol	ND	106						0		50	
2-Methylphenol (o-cresol)	ND	106						0		50	
Hexachloroethane	ND	106						0		50	
N-Nitrosodi-n-propylamine	ND	106						0		50	
3&4-Methylphenol (m, p-cresol)	ND	106						0		50	
Nitrobenzene	ND	106						0		50	
Isophorone	ND	106						0		50	
2-Nitrophenol	ND	106						0		50	
2,4-Dimethylphenol	ND	106						0		50	
Bis(2-chloroethoxy)methane	ND	79.8						0		50	
2,4-Dichlorophenol	ND	106						0		50	
1,2,4-Trichlorobenzene	ND	79.8						0		50	
Naphthalene	ND	53.2						0		50	
4-Chloroaniline	ND	79.8						0		50	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007ADUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	79.8						0		50	
4-Chloro-3-methylphenol	ND	213						0		50	
2-Methylnaphthalene	ND	53.2						0		50	
1-Methylnaphthalene	ND	53.2						0		50	
Hexachlorocyclopentadiene	ND	106						0		50	
2,4,6-Trichlorophenol	ND	106						0		50	
2,4,5-Trichlorophenol	ND	106						0		50	
2-Chloronaphthalene	ND	79.8						0		50	
2-Nitroaniline	ND	106						0		50	Q
Acenaphthene	ND	53.2						0		50	
Dimethylphthalate	ND	106						0		50	
2,6-Dinitrotoluene	ND	106						0		50	
Acenaphthylene	ND	53.2						0		50	
2,4-Dinitrophenol	ND	559						0		50	
Dibenzofuran	ND	79.8						0		50	
2,4-Dinitrotoluene	ND	106						0		50	
4-Nitrophenol	ND	532						0		50	
Fluorene	ND	53.2						0		50	
4-Chlorophenyl phenyl ether	ND	79.8						0		50	
Diethylphthalate	ND	106						0		50	
4,6-Dinitro-2-methylphenol	ND	213						0		50	
4-Bromophenyl phenyl ether	ND	79.8						0		50	
Hexachlorobenzene	ND	79.8						0		50	
Pentachlorophenol	ND	106						0		50	
Phenanthrene	ND	53.2						0		50	
Anthracene	ND	53.2						0		50	
Carbazole	ND	79.8						0		50	
Di-n-butylphthalate	ND	106						0		50	
Fluoranthene	ND	53.2						0		50	
Pyrene	ND	53.2						0		50	
Butyl Benzylphthalate	ND	106						0		50	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007ADUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **SB-EP-1-2'** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
bis(2-Ethylhexyl)adipate	ND	106						0		50	
Benz(a)anthracene	ND	53.2						0		50	
Chrysene	ND	53.2						0		50	
bis (2-Ethylhexyl) phthalate	ND	106						0		50	
Di-n-octyl phthalate	ND	106						0		50	Q
Benzo(b)fluoranthene	ND	53.2						0		50	
Benzo(k)fluoranthene	ND	53.2						0		50	
Benzo(a)pyrene	ND	53.2						0		50	
Indeno(1,2,3-cd)pyrene	ND	53.2						0		50	
Dibenz(a,h)anthracene	ND	53.2						0		50	
Benzo(g,h,i)perylene	ND	53.2						0		50	
Surr: 2,4,6-Tribromophenol	582		1,064		54.7	5	139		0		
Surr: 2-Fluorobiphenyl	337		531.9		63.4	5	131		0		
Surr: Nitrobenzene-d5	277		531.9		52.1	5	123		0		
Surr: Phenol-d6	648		1,064		60.9	5	129		0		
Surr: p-Terphenyl	354		531.9		66.6	13.8	140		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-28552** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59601**
Client ID: **MBLKS** Batch ID: **28552** Analysis Date: **6/4/2020** SeqNo: **1192009**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.185									
Barium	ND	0.370									
Cadmium	ND	0.148									
Chromium	ND	0.0741									
Lead	ND	0.148									
Selenium	ND	0.370									
Silver	ND	0.0741									

Sample ID: **LCS-28552** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59601**
Client ID: **LCSS** Batch ID: **28552** Analysis Date: **6/4/2020** SeqNo: **1192010**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	37.1	0.188	37.59	0	98.7	80	120				
Barium	40.7	0.376	37.59	0	108	80	120				
Cadmium	1.94	0.150	1.880	0	103	80	120				
Chromium	38.0	0.0752	37.59	0	101	80	120				
Lead	19.6	0.150	18.80	0	104	80	120				
Selenium	3.58	0.376	3.759	0	95.1	80	120				
Silver	8.62	0.0752	9.398	0	91.7	80	120				

Sample ID: **2006026-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59601**
Client ID: **BATCH** Batch ID: **28552** Analysis Date: **6/4/2020** SeqNo: **1192012**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	3.05	0.215						3.000	1.72	20	
Barium	45.0	0.430						59.05	27.1	20	R
Cadmium	ND	0.172						0		20	
Chromium	28.4	0.0860						23.07	20.6	20	R
Lead	3.03	0.172						2.742	10.0	20	
Selenium	0.856	0.430						0.7543	12.6	20	

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Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2006026-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59601**
Client ID: **BATCH** Batch ID: **28552** Analysis Date: **6/4/2020** SeqNo: **1192012**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	0.0860						0		20	

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID: **2006026-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59601**
Client ID: **BATCH** Batch ID: **28552** Analysis Date: **6/4/2020** SeqNo: **1192014**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	46.1	0.213	42.64	3.000	101	75	125				
Barium	96.4	0.426	42.64	59.05	87.6	75	125				
Cadmium	2.41	0.171	2.132	0.06700	110	75	125				
Chromium	72.5	0.0853	42.64	23.07	116	75	125				
Lead	22.3	0.171	21.32	2.742	91.8	75	125				
Selenium	5.18	0.426	4.264	0.7543	104	75	125				
Silver	9.20	0.0853	10.66	0.05634	85.7	75	125				

Sample ID: **2006026-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59601**
Client ID: **BATCH** Batch ID: **28552** Analysis Date: **6/4/2020** SeqNo: **1192015**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	45.3	0.213	42.64	3.000	99.3	75	125	46.07	1.62	20	
Barium	91.8	0.426	42.64	59.05	76.9	75	125	96.39	4.83	20	
Cadmium	2.25	0.171	2.132	0.06700	102	75	125	2.412	7.10	20	
Chromium	70.4	0.0853	42.64	23.07	111	75	125	72.54	3.05	20	
Lead	22.0	0.171	21.32	2.742	90.1	75	125	22.32	1.59	20	
Selenium	4.84	0.426	4.264	0.7543	95.8	75	125	5.184	6.90	20	
Silver	9.16	0.0853	10.66	0.05634	85.4	75	125	9.196	0.419	20	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-28534** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **MBLKS** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191470**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.192									
Barium	ND	0.385									
Cadmium	ND	0.154									
Chromium	ND	0.0769									
Lead	ND	0.154									
Selenium	ND	0.385									
Silver	ND	0.0769									

Sample ID: **LCS-28534** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **LCSS** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191471**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	40.2	0.197	39.37	0	102	80	120				
Barium	41.3	0.394	39.37	0	105	80	120				
Cadmium	2.05	0.157	1.969	0	104	80	120				
Chromium	41.5	0.0787	39.37	0	106	80	120				
Lead	19.8	0.157	19.69	0	101	80	120				
Selenium	3.84	0.394	3.937	0	97.6	80	120				
Silver	8.54	0.0787	9.843	0	86.7	80	120				

Sample ID: **2006041-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **BATCH** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191473**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.36	0.215						2.686	13.0	20	
Barium	61.2	0.430						76.59	22.4	20	R
Cadmium	ND	0.172						0		20	
Chromium	22.7	0.0859						31.92	33.8	20	R
Lead	4.50	0.172						5.334	16.9	20	
Selenium	0.652	0.430						0.7398	12.7	20	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2006041-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **BATCH** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191473**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	0.0859						0		20	

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID: **2006041-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **BATCH** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	43.2	0.207	41.41	2.686	97.7	75	125				
Barium	152	0.414	41.41	76.59	182	75	125				S
Cadmium	2.29	0.166	2.071	0.08164	106	75	125				
Chromium	85.8	0.0828	41.41	31.92	130	75	125				S
Lead	25.3	0.166	20.71	5.334	96.4	75	125				
Selenium	4.66	0.414	4.141	0.7398	94.7	75	125				
Silver	7.80	0.0828	10.35	0.05418	74.8	75	125				S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect (Ba).
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (Cr, Ag, Zn).

Sample ID: **2006041-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **BATCH** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191476**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	45.0	0.223	44.62	2.686	94.9	75	125	43.15	4.22	20	
Barium	134	0.446	44.62	76.59	129	75	125	151.8	12.2	20	S
Cadmium	2.34	0.178	2.231	0.08164	101	75	125	2.286	2.16	20	
Chromium	81.9	0.0892	44.62	31.92	112	75	125	85.77	4.58	20	
Lead	24.7	0.178	22.31	5.334	86.8	75	125	25.29	2.40	20	
Selenium	4.72	0.446	4.462	0.7398	89.2	75	125	4.660	1.24	20	
Silver	8.90	0.0892	11.16	0.05418	79.3	75	125	7.800	13.1	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2006041-001APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59570**
Client ID: **BATCH** Batch ID: **28534** Analysis Date: **6/3/2020** SeqNo: **1191477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	122	0.439	43.9	76.6	103	75	125				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28529** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **LCSS** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191448**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.802	0.0200	1.000	0	80.2	13.4	185				
Chloromethane	0.827	0.0500	1.000	0	82.7	38.5	158				
Vinyl chloride	0.804	0.0250	1.000	0	80.4	53.6	138				
Bromomethane	0.887	0.0500	1.000	0	88.7	56.6	151				
Trichlorofluoromethane (CFC-11)	0.955	0.0200	1.000	0	95.5	64.2	137				
Chloroethane	0.996	0.0500	1.000	0	99.6	54.1	134				
1,1-Dichloroethene	0.878	0.0200	1.000	0	87.8	66	133				
Methylene chloride	0.841	0.0200	1.000	0	84.1	74.3	117				
trans-1,2-Dichloroethene	0.873	0.0200	1.000	0	87.3	79.6	115				
Methyl tert-butyl ether (MTBE)	0.816	0.0500	1.000	0	81.6	73.1	119				
1,1-Dichloroethane	0.831	0.0200	1.000	0	83.1	75.8	117				
cis-1,2-Dichloroethene	0.919	0.0200	1.000	0	91.9	77.8	115				
Chloroform	0.918	0.0200	1.000	0	91.8	78.2	115				
1,1,1-Trichloroethane (TCA)	0.939	0.0250	1.000	0	93.9	76	121				
1,1-Dichloropropene	0.841	0.0200	1.000	0	84.1	77.2	120				
Carbon tetrachloride	0.953	0.0500	1.000	0	95.3	74	122				
1,2-Dichloroethane (EDC)	0.854	0.0200	1.000	0	85.4	74.7	115				
Benzene	0.871	0.0200	1.000	0	87.1	80.5	114				
Trichloroethene (TCE)	0.881	0.0200	1.000	0	88.1	79.6	118				
1,2-Dichloropropane	0.830	0.0200	1.000	0	83.0	78.2	115				
Bromodichloromethane	0.918	0.0200	1.000	0	91.8	76.6	116				
Dibromomethane	0.877	0.0200	1.000	0	87.7	77.9	115				
cis-1,3-Dichloropropene	0.851	0.0200	1.000	0	85.1	74.6	119				
Toluene	0.878	0.0200	1.000	0	87.8	79.6	116				
trans-1,3-Dichloropropylene	0.844	0.0200	1.000	0	84.4	70.6	124				
1,1,2-Trichloroethane	0.860	0.0200	1.000	0	86.0	75.6	116				
1,3-Dichloropropane	0.837	0.0250	1.000	0	83.7	75.3	116				
Tetrachloroethene (PCE)	0.960	0.0250	1.000	0	96.0	78.8	119				
Dibromochloromethane	0.943	0.0250	1.000	0	94.3	72.5	123				
1,2-Dibromoethane (EDB)	0.854	0.00500	1.000	0	85.4	75	116				
Chlorobenzene	0.914	0.0250	1.000	0	91.4	83.4	113				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28529** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **LCSS** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191448**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.918	0.0250	1.000	0	91.8	80.8	117				
Ethylbenzene	0.915	0.0250	1.000	0	91.5	81.6	116				
m,p-Xylene	1.88	0.0500	2.000	0	94.1	80.9	117				
o-Xylene	0.924	0.0250	1.000	0	92.4	80.8	114				
Styrene	0.921	0.0250	1.000	0	92.1	80.4	114				
Isopropylbenzene	0.937	0.0250	1.000	0	93.7	79.3	118				
Bromoform	0.942	0.0500	1.000	0	94.2	71	129				
1,1,2,2-Tetrachloroethane	0.766	0.0200	1.000	0	76.6	71.3	119				
n-Propylbenzene	0.929	0.0250	1.000	0	92.9	80.4	120				
Bromobenzene	0.980	0.0200	1.000	0	98.0	78.6	115				
1,3,5-Trimethylbenzene	0.955	0.0250	1.000	0	95.5	80	116				
2-Chlorotoluene	0.924	0.0250	1.000	0	92.4	78.6	116				
4-Chlorotoluene	0.934	0.0250	1.000	0	93.4	78.8	117				
tert-Butylbenzene	0.970	0.0250	1.000	0	97.0	77.8	118				
1,2,3-Trichloropropane	0.793	0.0250	1.000	0	79.3	67.5	129				
1,2,4-Trichlorobenzene	0.920	0.0250	1.000	0	92.0	79.6	124				
sec-Butylbenzene	0.956	0.0500	1.000	0	95.6	78.6	119				
4-Isopropyltoluene	0.994	0.0500	1.000	0	99.4	78	119				
1,3-Dichlorobenzene	0.859	0.0200	1.000	0	85.9	87.1	117				S
1,4-Dichlorobenzene	0.843	0.0200	1.000	0	84.3	87.6	115				S
n-Butylbenzene	0.889	0.0250	1.000	0	88.9	81.9	122				
1,2-Dichlorobenzene	0.846	0.0200	1.000	0	84.6	87.9	115				S
1,2-Dibromo-3-chloropropane	0.832	0.500	1.000	0	83.2	65.6	132				
1,2,4-Trimethylbenzene	0.970	0.0200	1.000	0	97.0	79.3	117				
Hexachloro-1,3-butadiene	1.08	0.0500	1.000	0	108	75	130				
Naphthalene	0.822	0.0500	1.000	0	82.2	71.7	132				
1,2,3-Trichlorobenzene	0.890	0.0200	1.000	0	89.0	74.3	128				
Surr: Dibromofluoromethane	1.33		1.250		107	83.3	111				
Surr: Toluene-d8	1.21		1.250		97.1	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.26		1.250		101	85.1	111				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28529** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **LCSS** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191448**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery observed (low bias). Samples will be qualified with a *.

Sample ID: **MB-28529** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **MBLKS** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191449**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0250									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0250									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0500									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28529** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **MBLKS** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191449**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0250									
Dibromochloromethane	ND	0.0250									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0250									
Isopropylbenzene	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0250									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0250									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0250									
tert-Butylbenzene	ND	0.0250									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0250									
sec-Butylbenzene	ND	0.0500									
4-Isopropyltoluene	ND	0.0500									
1,3-Dichlorobenzene	ND	0.0200									*
1,4-Dichlorobenzene	ND	0.0200									*
n-Butylbenzene	ND	0.0250									
1,2-Dichlorobenzene	ND	0.0200									*
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28529** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **MBLKS** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191449**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	ND	0.0500									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.16		1.250		93.0	83.3	111				
Surr: Toluene-d8	1.14		1.250		91.1	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.22		1.250		97.7	85.1	111				

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2005395-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-5-1'** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191435**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0237						0		30	
Chloromethane	ND	0.0594						0		30	
Vinyl chloride	ND	0.0297						0		30	
Bromomethane	ND	0.0594						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0237						0		30	
Chloroethane	ND	0.0594						0		30	
1,1-Dichloroethene	ND	0.0237						0		30	
Methylene chloride	ND	0.0237						0		30	
trans-1,2-Dichloroethene	ND	0.0237						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0594						0		30	
1,1-Dichloroethane	ND	0.0237						0		30	
cis-1,2-Dichloroethene	ND	0.0237						0		30	
Chloroform	ND	0.0237						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0297						0		30	
1,1-Dichloropropene	ND	0.0237						0		30	
Carbon tetrachloride	ND	0.0594						0		30	
1,2-Dichloroethane (EDC)	ND	0.0237						0		30	
Benzene	ND	0.0237						0		30	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005395-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-5-1'** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191435**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.0237						0		30	
1,2-Dichloropropane	ND	0.0237						0		30	
Bromodichloromethane	ND	0.0237						0		30	
Dibromomethane	ND	0.0237						0		30	
cis-1,3-Dichloropropene	ND	0.0237						0		30	
Toluene	ND	0.0237						0		30	
trans-1,3-Dichloropropylene	ND	0.0237						0		30	
1,1,2-Trichloroethane	ND	0.0237						0		30	
1,3-Dichloropropane	ND	0.0297						0		30	
Tetrachloroethene (PCE)	ND	0.0297						0		30	
Dibromochloromethane	ND	0.0297						0		30	
1,2-Dibromoethane (EDB)	ND	0.00594						0		30	
Chlorobenzene	ND	0.0297						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0297						0		30	
Ethylbenzene	ND	0.0297						0		30	
m,p-Xylene	ND	0.0594						0		30	
o-Xylene	ND	0.0297						0		30	
Styrene	ND	0.0297						0		30	
Isopropylbenzene	ND	0.0297						0		30	
Bromoform	ND	0.0594						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0237						0		30	
n-Propylbenzene	ND	0.0297						0		30	
Bromobenzene	ND	0.0237						0		30	
1,3,5-Trimethylbenzene	ND	0.0297						0		30	
2-Chlorotoluene	ND	0.0297						0		30	
4-Chlorotoluene	ND	0.0297						0		30	
tert-Butylbenzene	ND	0.0297						0		30	
1,2,3-Trichloropropane	ND	0.0297						0		30	
1,2,4-Trichlorobenzene	ND	0.0297						0		30	
sec-Butylbenzene	ND	0.0594						0		30	
4-Isopropyltoluene	ND	0.0594						0		30	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005395-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-5-1'** Batch ID: **28529** Analysis Date: **6/3/2020** SeqNo: **1191435**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.0237						0		30	*
1,4-Dichlorobenzene	ND	0.0237						0		30	*
n-Butylbenzene	ND	0.0297						0		30	
1,2-Dichlorobenzene	ND	0.0237						0		30	*
1,2-Dibromo-3-chloropropane	ND	0.594						0		30	
1,2,4-Trimethylbenzene	ND	0.0237						0		30	
Hexachloro-1,3-butadiene	ND	0.0594						0		30	
Naphthalene	ND	0.0594						0		30	
1,2,3-Trichlorobenzene	ND	0.0237						0		30	
Surr: Dibromofluoromethane	1.41		1.484		95.2	83.3	111		0		
Surr: Toluene-d8	1.36		1.484		91.9	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.45		1.484		97.7	85.1	111		0		

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2006041-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **BATCH** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191444**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0201						0		30	
Chloromethane	ND	0.0502						0		30	
Vinyl chloride	ND	0.0251						0		30	
Bromomethane	ND	0.0502						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0201						0		30	
Chloroethane	ND	0.0502						0		30	
1,1-Dichloroethene	ND	0.0201						0		30	
Methylene chloride	ND	0.0201						0		30	
trans-1,2-Dichloroethene	ND	0.0201						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0502						0		30	
1,1-Dichloroethane	ND	0.0201						0		30	
cis-1,2-Dichloroethene	ND	0.0201						0		30	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006041-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **BATCH** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191444**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.0201						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0251						0		30	
1,1-Dichloropropene	ND	0.0201						0		30	
Carbon tetrachloride	ND	0.0502						0		30	
1,2-Dichloroethane (EDC)	ND	0.0201						0		30	
Benzene	ND	0.0201						0		30	
Trichloroethene (TCE)	ND	0.0201						0		30	
1,2-Dichloropropane	ND	0.0201						0		30	
Bromodichloromethane	ND	0.0201						0		30	
Dibromomethane	ND	0.0201						0		30	
cis-1,3-Dichloropropene	ND	0.0201						0		30	
Toluene	ND	0.0201						0		30	
trans-1,3-Dichloropropylene	ND	0.0201						0		30	
1,1,2-Trichloroethane	ND	0.0201						0		30	
1,3-Dichloropropane	ND	0.0251						0		30	
Tetrachloroethene (PCE)	ND	0.0251						0		30	
Dibromochloromethane	ND	0.0251						0		30	
1,2-Dibromoethane (EDB)	ND	0.00502						0		30	
Chlorobenzene	ND	0.0251						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0251						0		30	
Ethylbenzene	ND	0.0251						0		30	
m,p-Xylene	ND	0.0502						0		30	
o-Xylene	ND	0.0251						0		30	
Styrene	ND	0.0251						0		30	
Isopropylbenzene	ND	0.0251						0		30	
Bromoform	ND	0.0502						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0201						0		30	
n-Propylbenzene	ND	0.0251						0		30	
Bromobenzene	ND	0.0201						0		30	
1,3,5-Trimethylbenzene	ND	0.0251						0		30	
2-Chlorotoluene	ND	0.0251						0		30	

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006041-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **BATCH** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191444**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	0.0251						0		30	
tert-Butylbenzene	ND	0.0251						0		30	
1,2,3-Trichloropropane	ND	0.0251						0		30	
1,2,4-Trichlorobenzene	ND	0.0251						0		30	
sec-Butylbenzene	ND	0.0502						0		30	
4-Isopropyltoluene	ND	0.0502						0		30	
1,3-Dichlorobenzene	ND	0.0201						0		30	*
1,4-Dichlorobenzene	ND	0.0201						0		30	*
n-Butylbenzene	ND	0.0251						0		30	
1,2-Dichlorobenzene	ND	0.0201						0		30	*
1,2-Dibromo-3-chloropropane	ND	0.502						0		30	
1,2,4-Trimethylbenzene	ND	0.0201						0		30	
Hexachloro-1,3-butadiene	ND	0.0502						0		30	
Naphthalene	ND	0.0502						0		30	
1,2,3-Trichlorobenzene	ND	0.0201						0		30	
Surr: Dibromofluoromethane	1.19		1.254		95.0	83.3	111		0		
Surr: Toluene-d8	1.16		1.254		92.5	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.21		1.254		96.4	85.1	111		0		

NOTES:
* - Flagged value is not within established control limits.

Sample ID: **2005395-004BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-4-1'** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191437**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.911	0.0252	1.262	0	72.2	5.73	173				
Chloromethane	0.969	0.0631	1.262	0	76.8	41.3	150				
Vinyl chloride	1.01	0.0316	1.262	0	80.4	49.5	138				
Bromomethane	1.14	0.0631	1.262	0	90.4	48.5	158				
Trichlorofluoromethane (CFC-11)	1.25	0.0252	1.262	0	99.1	40.6	159				
Chloroethane	1.31	0.0631	1.262	0	104	30.4	166				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005395-004BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-4-1'** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191437**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	1.13	0.0252	1.262	0	89.8	55	138				
Methylene chloride	1.04	0.0252	1.262	0	82.3	70.3	123				
trans-1,2-Dichloroethene	1.11	0.0252	1.262	0	88.1	73.1	121				
Methyl tert-butyl ether (MTBE)	1.02	0.0631	1.262	0	81.2	69.6	122				
1,1-Dichloroethane	1.06	0.0252	1.262	0	84.0	70.8	122				
cis-1,2-Dichloroethene	1.16	0.0252	1.262	0	91.9	71.8	122				
Chloroform	1.16	0.0252	1.262	0	92.2	72.9	122				
1,1,1-Trichloroethane (TCA)	1.23	0.0316	1.262	0	97.6	69.6	125				
1,1-Dichloropropene	1.12	0.0252	1.262	0	88.5	69.3	126				
Carbon tetrachloride	1.28	0.0631	1.262	0	101	65	127				
1,2-Dichloroethane (EDC)	1.10	0.0252	1.262	0	87.4	70.1	121				
Benzene	1.11	0.0252	1.262	0	87.6	76.7	119				
Trichloroethene (TCE)	1.16	0.0252	1.262	0	92.0	70.1	129				
1,2-Dichloropropane	1.04	0.0252	1.262	0	82.1	74.6	120				
Bromodichloromethane	1.15	0.0252	1.262	0	91.4	70.9	122				
Dibromomethane	1.14	0.0252	1.262	0	90.1	75.6	120				
cis-1,3-Dichloropropene	1.03	0.0252	1.262	0	81.6	68.3	120				
Toluene	1.14	0.0252	1.262	0	90.0	74.7	119				
trans-1,3-Dichloropropylene	1.04	0.0252	1.262	0	82.6	62.2	127				
1,1,2-Trichloroethane	1.10	0.0252	1.262	0	87.1	72.9	120				
1,3-Dichloropropane	1.07	0.0316	1.262	0	84.6	71.9	119				
Tetrachloroethene (PCE)	1.26	0.0316	1.262	0	99.7	71.1	122				
Dibromochloromethane	1.19	0.0316	1.262	0	94.6	65.9	126				
1,2-Dibromoethane (EDB)	1.09	0.00631	1.262	0	86.6	72	119				
Chlorobenzene	1.23	0.0316	1.262	0	97.3	81.4	116				
1,1,1,2-Tetrachloroethane	1.23	0.0316	1.262	0	97.8	72.9	125				
Ethylbenzene	1.22	0.0316	1.262	0	96.9	77.1	120				
m,p-Xylene	2.55	0.0631	2.524	0.01178	101	76.3	120				
o-Xylene	1.23	0.0316	1.262	0	97.7	76.6	119				
Styrene	1.21	0.0316	1.262	0	95.7	75.1	121				
Isopropylbenzene	1.28	0.0316	1.262	0	101	74.8	122				

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005395-004BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-4-1'** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191437**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	1.26	0.0631	1.262	0	100	63.4	133				
1,1,2,2-Tetrachloroethane	0.999	0.0252	1.262	0	79.1	61	128				
n-Propylbenzene	1.24	0.0316	1.262	0	98.2	73	128				
Bromobenzene	1.28	0.0252	1.262	0	102	77	120				
1,3,5-Trimethylbenzene	1.27	0.0316	1.262	0	100	72.1	126				
2-Chlorotoluene	1.21	0.0316	1.262	0	95.8	71.4	126				
4-Chlorotoluene	1.22	0.0316	1.262	0	97.1	73.6	124				
tert-Butylbenzene	1.31	0.0316	1.262	0	104	70.7	126				
1,2,3-Trichloropropane	1.13	0.0316	1.262	0	89.9	65.7	132				
1,2,4-Trichlorobenzene	1.19	0.0316	1.262	0	94.2	70.5	130				
sec-Butylbenzene	1.30	0.0631	1.262	0	103	68.8	129				
4-Isopropyltoluene	1.33	0.0631	1.262	0	106	69.2	128				
1,3-Dichlorobenzene	1.11	0.0252	1.262	0	88.3	83.8	121				
1,4-Dichlorobenzene	1.10	0.0252	1.262	0	87.2	85.7	117				
n-Butylbenzene	1.17	0.0316	1.262	0	92.6	67.4	133				
1,2-Dichlorobenzene	1.10	0.0252	1.262	0	87.0	81.8	120				
1,2-Dibromo-3-chloropropane	1.06	0.631	1.262	0	84.4	56.9	139				
1,2,4-Trimethylbenzene	1.26	0.0252	1.262	0	100	70.9	127				
Hexachloro-1,3-butadiene	1.44	0.0631	1.262	0	114	61.1	140				
Naphthalene	1.12	0.0631	1.262	0	89.1	63.3	143				
1,2,3-Trichlorobenzene	1.21	0.0252	1.262	0	95.9	67.8	132				
Surr: Dibromofluoromethane	1.60		1.578		101	83.3	111				
Surr: Toluene-d8	1.46		1.578		92.3	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.58		1.578		100	85.1	111				

Sample ID: **2005395-004BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-4-1'** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191438**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.911	0.0252	1.262	0	72.2	5.73	173	0.9110	0.0296	30	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005395-004BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-4-1'** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191438**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	1.03	0.0631	1.262	0	81.8	41.3	150	0.9689	6.30	30	
Vinyl chloride	1.04	0.0316	1.262	0	82.2	49.5	138	1.015	2.17	30	
Bromomethane	1.09	0.0631	1.262	0	86.6	48.5	158	1.141	4.37	30	
Trichlorofluoromethane (CFC-11)	1.25	0.0252	1.262	0	98.7	40.6	159	1.250	0.401	30	
Chloroethane	1.32	0.0631	1.262	0	104	30.4	166	1.310	0.383	30	
1,1-Dichloroethene	1.12	0.0252	1.262	0	88.8	55	138	1.133	1.10	30	
Methylene chloride	1.05	0.0252	1.262	0	83.2	70.3	123	1.038	1.17	30	
trans-1,2-Dichloroethene	1.11	0.0252	1.262	0	88.2	73.1	121	1.112	0.108	30	
Methyl tert-butyl ether (MTBE)	1.03	0.0631	1.262	0	81.8	69.6	122	1.025	0.685	30	
1,1-Dichloroethane	1.06	0.0252	1.262	0	83.7	70.8	122	1.060	0.358	30	
cis-1,2-Dichloroethene	1.15	0.0252	1.262	0	91.5	71.8	122	1.160	0.450	30	
Chloroform	1.17	0.0252	1.262	0	92.6	72.9	122	1.164	0.413	30	
1,1,1-Trichloroethane (TCA)	1.23	0.0316	1.262	0	97.8	69.6	125	1.232	0.153	30	
1,1-Dichloropropene	1.12	0.0252	1.262	0	88.4	69.3	126	1.117	0.130	30	
Carbon tetrachloride	1.27	0.0631	1.262	0	101	65	127	1.278	0.668	30	
1,2-Dichloroethane (EDC)	1.10	0.0252	1.262	0	87.5	70.1	121	1.103	0.0483	30	
Benzene	1.10	0.0252	1.262	0	87.4	76.7	119	1.106	0.230	30	
Trichloroethene (TCE)	1.16	0.0252	1.262	0	91.6	70.1	129	1.162	0.506	30	
1,2-Dichloropropane	1.04	0.0252	1.262	0	82.0	74.6	120	1.036	0.0887	30	
Bromodichloromethane	1.13	0.0252	1.262	0	89.9	70.9	122	1.154	1.66	30	
Dibromomethane	1.13	0.0252	1.262	0	89.5	75.6	120	1.137	0.673	30	
cis-1,3-Dichloropropene	1.03	0.0252	1.262	0	81.7	68.3	120	1.029	0.142	30	
Toluene	1.12	0.0252	1.262	0	89.1	74.7	119	1.135	1.00	30	
trans-1,3-Dichloropropylene	1.04	0.0252	1.262	0	82.6	62.2	127	1.042	0.100	30	
1,1,2-Trichloroethane	1.07	0.0252	1.262	0	84.7	72.9	120	1.099	2.79	30	
1,3-Dichloropropane	1.06	0.0316	1.262	0	83.9	71.9	119	1.068	0.781	30	
Tetrachloroethene (PCE)	1.25	0.0316	1.262	0	99.1	71.1	122	1.259	0.681	30	
Dibromochloromethane	1.20	0.0316	1.262	0	95.0	65.9	126	1.194	0.475	30	
1,2-Dibromoethane (EDB)	1.11	0.00631	1.262	0	87.6	72	119	1.093	1.17	30	
Chlorobenzene	1.22	0.0316	1.262	0	97.0	81.4	116	1.228	0.283	30	
1,1,1,2-Tetrachloroethane	1.24	0.0316	1.262	0	97.9	72.9	125	1.234	0.181	30	

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005395-004BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59571**
Client ID: **SB-EP-4-1'** Batch ID: **28529** Analysis Date: **6/4/2020** SeqNo: **1191438**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	1.22	0.0316	1.262	0	96.7	77.1	120	1.223	0.199	30	
m,p-Xylene	2.52	0.0631	2.524	0.01178	99.5	76.3	120	2.551	1.10	30	
o-Xylene	1.23	0.0316	1.262	0	97.3	76.6	119	1.234	0.410	30	
Styrene	1.22	0.0316	1.262	0	96.5	75.1	121	1.208	0.828	30	
Isopropylbenzene	1.26	0.0316	1.262	0	100	74.8	122	1.281	1.44	30	
Bromoform	1.29	0.0631	1.262	0	102	63.4	133	1.263	1.82	30	
1,1,2,2-Tetrachloroethane	1.02	0.0252	1.262	0	80.9	61	128	0.9989	2.19	30	
n-Propylbenzene	1.23	0.0316	1.262	0	97.6	73	128	1.239	0.565	30	
Bromobenzene	1.29	0.0252	1.262	0	102	77	120	1.282	0.545	30	
1,3,5-Trimethylbenzene	1.27	0.0316	1.262	0	101	72.1	126	1.267	0.206	30	
2-Chlorotoluene	1.20	0.0316	1.262	0	95.1	71.4	126	1.209	0.722	30	
4-Chlorotoluene	1.23	0.0316	1.262	0	97.5	73.6	124	1.225	0.426	30	
tert-Butylbenzene	1.30	0.0316	1.262	0	103	70.7	126	1.309	0.419	30	
1,2,3-Trichloropropane	1.11	0.0316	1.262	0	88.0	65.7	132	1.135	2.18	30	
1,2,4-Trichlorobenzene	1.23	0.0316	1.262	0	97.4	70.5	130	1.189	3.32	30	
sec-Butylbenzene	1.29	0.0631	1.262	0	102	68.8	129	1.297	0.570	30	
4-Isopropyltoluene	1.33	0.0631	1.262	0	105	69.2	128	1.333	0.336	30	
1,3-Dichlorobenzene	1.13	0.0252	1.262	0	89.4	83.8	121	1.115	1.21	30	
1,4-Dichlorobenzene	1.10	0.0252	1.262	0	87.1	85.7	117	1.101	0.0931	30	
n-Butylbenzene	1.17	0.0316	1.262	0	93.0	67.4	133	1.168	0.430	30	
1,2-Dichlorobenzene	1.10	0.0252	1.262	0	87.2	81.8	120	1.098	0.237	30	
1,2-Dibromo-3-chloropropane	1.05	0.631	1.262	0	83.4	56.9	139	1.065	1.10	30	
1,2,4-Trimethylbenzene	1.27	0.0252	1.262	0	101	70.9	127	1.263	0.759	30	
Hexachloro-1,3-butadiene	1.50	0.0631	1.262	0	118	61.1	140	1.437	4.01	30	
Naphthalene	1.15	0.0631	1.262	0	91.4	63.3	143	1.124	2.57	30	
1,2,3-Trichlorobenzene	1.26	0.0252	1.262	0	99.6	67.8	132	1.210	3.80	30	
Surr: Dibromofluoromethane	1.59		1.578		101	83.3	111		0		
Surr: Toluene-d8	1.46		1.578		92.5	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.58		1.578		100	85.1	111		0		

Fremont Analytical

Date: *6/15/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **MB-28601** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **MBLKS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196966**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	ND	35.0									
2,4-D	ND	30.0									
2,4-DP	ND	25.0									
2,4,5-TP (Silvex)	ND	20.0									
2,4,5-T	ND	50.0									
Dinoseb	ND	30.0									
Dalapon	ND	200									
2,4-DB	ND	25.0									
MCPP	ND	4,400									
MCPA	ND	2,800									
Picloram	ND	50.0									Q
Bentazon	ND	35.0									
Chloramben	ND	20.0									
Acifluorfen	ND	80.0									
3,5-Dichlorobenzoic acid	ND	40.0									
4-Nitrophenol	ND	30.0									
Dacthal (DCPA)	ND	30.0									
Surr: 2,4-Dichlorophenylacetic acid	1,500		1,000		150	15.3	163				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **LCS-28601** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **LCSS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196967**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	185	35.0	200.0	0	92.7	21.2	167				
2,4-D	204	30.0	200.0	0	102	32	176				
2,4-DP	191	25.0	200.0	0	95.4	25.8	171				
2,4,5-TP (Silvex)	197	20.0	200.0	0	98.7	23.6	164				
2,4,5-T	200	50.0	200.0	0	99.8	25	166				
Dinoseb	27.9	30.0	200.0	0	13.9	5	168				

Original

Date: *6/15/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **LCS-28601** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **LCSS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196967**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dalapon	866	200	1,000	0	86.6	29.2	195				
2,4-DB	189	25.0	200.0	0	94.3	8.11	184				
MCPP	977	4,400	1,000	0	97.7	17.3	191				
MCPA	973	2,800	1,000	0	97.3	13.6	192				
Picloram	166	50.0	200.0	0	82.8	5	175				
Bentazon	198	35.0	200.0	0	99.2	21.5	170				
Chloramben	133	20.0	200.0	0	66.3	5	114				
Acifluorfen	94.3	80.0	200.0	0	47.1	5	168				
3,5-Dichlorobenzoic acid	190	40.0	200.0	0	94.9	26.2	174				
4-Nitrophenol	145	30.0	200.0	0	72.6	5.02	160				
Dacthal (DCPA)	211	30.0	200.0	0	105	18	168				
Surr: 2,4-Dichlorophenylacetic acid	1,020		1,000		102	15.3	163				

Sample ID: **2006001-018BMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **BATCH** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	158	35.7	204.0	0	77.4	5	136				
2,4-D	177	30.6	204.0	0	86.8	5	151				
2,4-DP	174	25.5	204.0	0	85.2	5	149				
2,4,5-TP (Silvex)	186	20.4	204.0	0	91.4	5.43	140				
2,4,5-T	173	51.0	204.0	0	84.9	6.68	133				
Dinoseb	87.8	30.6	204.0	0	43.0	5	141				
Dalapon	766	204	1,020	0	75.1	5	179				
2,4-DB	215	25.5	204.0	0	106	5.57	160				
MCPP	893	4,490	1,020	0	87.5	5	174				
MCPA	865	2,860	1,020	0	84.8	5	154				
Picloram	109	51.0	204.0	0	53.6	5	139				
Bentazon	201	35.7	204.0	0	98.3	5.31	146				
Chloramben	139	20.4	204.0	0	68.1	5	134				

Original

Fremont Analytical

Date: *6/15/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **2006001-018BMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **BATCH** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acifluorfen	106	81.6	204.0	0	52.1	5	168				
3,5-Dichlorobenzoic acid	177	40.8	204.0	0	86.9	6.99	144				
4-Nitrophenol	160	30.6	204.0	0	78.5	10.2	139				
Dacthal (DCPA)	58.1	30.6	204.0	0	28.5	5	156				
Surr: 2,4-Dichlorophenylacetic acid	999		1,020		97.9	15.3	163				

Sample ID: **2006001-018BMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **BATCH** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196983**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	128	33.4	190.8	0	67.2	5	136	158.0	20.8	30	
2,4-D	140	28.6	190.8	0	73.2	5	151	177.1	23.7	30	R
2,4-DP	137	23.8	190.8	0	71.6	5	149	173.9	24.1	30	
2,4,5-TP (Silvex)	141	19.1	190.8	0	74.0	5.43	140	186.4	27.6	30	
2,4,5-T	129	47.7	190.8	0	67.4	6.68	133	173.3	29.6	30	
Dinoseb	81.0	28.6	190.8	0	42.4	5	141	87.81	8.11	30	
Dalapon	626	191	953.9	0	65.6	5	179	765.9	20.1	30	
2,4-DB	154	23.8	190.8	0	80.7	5.57	160	215.4	33.2	30	R
MCPP	721	4,200	953.9	0	75.6	5	174	892.9	21.3	30	
MCPA	691	2,670	953.9	0	72.5	5	154	865.5	22.4	30	
Picloram	77.8	47.7	190.8	0	40.8	5	139	109.3	33.6	30	
Bentazon	154	33.4	190.8	0	80.6	5.31	146	200.5	26.4	30	R
Chloramben	111	19.1	190.8	0	58.4	5	134	138.9	21.9	30	
Acifluorfen	94.0	76.3	190.8	0	49.3	5	168	106.3	12.3	30	
3,5-Dichlorobenzoic acid	143	38.2	190.8	0	74.8	6.99	144	177.4	21.7	30	
4-Nitrophenol	133	28.6	190.8	0	69.9	10.2	139	160.1	18.2	30	
Dacthal (DCPA)	51.6	28.6	190.8	0	27.1	5	156	58.14	11.9	30	
Surr: 2,4-Dichlorophenylacetic acid	797		953.9		83.6	15.3	163		0		

NOTES:
R - High RPD observed, spike recovery is within range.

Original

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **MB-28540** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **MBLKS** Batch ID: **28540** Analysis Date: **6/9/2020** SeqNo: **1195293**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	ND	50.0									
Mevinphos	ND	50.0									
TEPP	ND	50.0									
Demeton, Total	ND	50.0									
Ethoprophos	ND	50.0									
Naled	ND	50.0									Q
Sulfotepp	ND	50.0									
Monocrotophos	ND	50.0									Q
Phorate	ND	50.0									
Dimethoate	ND	50.0									
Diazinon	ND	50.0									
Disulfoton	ND	50.0									
Parathion, methyl	ND	50.0									
Fenchorphos	ND	50.0									
Malathion	ND	50.0									
Dursban	ND	50.0									
Fenthion	ND	50.0									
Parathion	ND	50.0									
Trichloronate	ND	50.0									
Merphos	ND	50.0									
Stirophos	ND	50.0									
Prothiofos	ND	50.0									
Fensulfothion	ND	50.0									
Sulprofos	ND	50.0									
EPN	ND	50.0									
Guthion	ND	50.0									
Coumaphos	ND	50.0									
Surr: Triphenylphosphate	78.8		100.0		78.8	10.7	154				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **LCS-28540** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **LCSS** Batch ID: **28540** Analysis Date: **6/9/2020** SeqNo: **1195294**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	9.93	50.0	20.00	0	49.7	7.85	133				
Mevinphos	126	50.0	20.00	0	63.0	28.7	131				
TEPP	87.0	50.0	20.00	0	43.5	5	119				
Demeton, Total	128	50.0	20.00	0	64.2	31.4	149				
Ethoprophos	112	50.0	20.00	0	56.2	31.9	144				
Naled	77.3	50.0	20.00	0	38.6	10	147				
Sulfotepp	142	50.0	20.00	0	71.1	26.9	144				
Monocrotophos	124	50.0	20.00	0	61.8	10	129				
Phorate	108	50.0	20.00	0	54.2	40.9	118				
Dimethoate	142	50.0	20.00	0	71.1	23.6	127				
Diazinon	120	50.0	20.00	0	59.9	37.1	132				
Disulfoton	115	50.0	20.00	0	57.4	37.9	122				
Parathion, methyl	121	50.0	20.00	0	60.7	16.8	143				
Fenchorphos	115	50.0	20.00	0	57.4	36.7	117				
Malathion	158	50.0	20.00	0	79.2	26.9	131				
Dursban	118	50.0	20.00	0	59.0	40.8	124				
Fenthion	124	50.0	20.00	0	62.2	36.6	127				
Parathion	156	50.0	20.00	0	77.8	37.6	129				
Trichloronate	120	50.0	20.00	0	60.3	41.5	123				
Merphos	87.0	50.0	20.00	0	43.5	10	122				
Stirophos	136	50.0	20.00	0	68.1	20.6	126				
Prothiofos	127	50.0	20.00	0	63.7	37.1	135				
Fensulfothion	147	50.0	20.00	0	73.6	14.6	152				
Sulprofos	128	50.0	20.00	0	64.0	34.6	137				
EPN	175	50.0	20.00	0	87.7	26.7	150				
Guthion	119	50.0	20.00	0	59.3	5	151				
Coumaphos	127	50.0	20.00	0	63.6	10	152				
Surr: Triphenylphosphate	84.6		100.0		84.6	10.7	154				

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **2005395-001CDUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **SB-EP-5-1'** Batch ID: **28540** Analysis Date: **6/10/2020** SeqNo: **1195296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	ND	51.3						0	0	30	
Mevinphos	ND	51.3						0	0	30	
TEPP	ND	51.3						0	0	30	
Demeton, Total	ND	51.3						0	0	30	
Ethoprophos	ND	51.3						0	0	30	
Naled	ND	51.3						0	0	30	Q
Sulfotepp	ND	51.3						0	0	30	
Monocrotophos	ND	51.3						0	0	30	Q
Phorate	ND	51.3						0	0	30	
Dimethoate	ND	51.3						0	0	30	
Diazinon	ND	51.3						0	0	30	
Disulfoton	ND	51.3						0	0	30	
Parathion, methyl	ND	51.3						5.601	200	30	
Fenchorphos	ND	51.3						0	0	30	
Malathion	ND	51.3						0	0	30	
Dursban	ND	51.3						0	0	30	
Fenthion	ND	51.3						0	0	30	
Parathion	ND	51.3						0	0	30	
Trichloronate	ND	51.3						0	0	30	
Merphos	ND	51.3						0	0	30	
Stirophos	ND	51.3						0	0	30	
Prothiofos	ND	51.3						0	0	30	
Fensulfothion	ND	51.3						0	0	30	
Sulprofos	ND	51.3						0	0	30	
EPN	ND	51.3						0	0	30	
Guthion	ND	51.3						0	0	30	
Coumaphos	ND	51.3						0	0	30	
Surr: Triphenylphosphate	75.4		102.7		73.4	10.7	154		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **2005395-001CMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **SB-EP-5-1'** Batch ID: **28540** Analysis Date: **6/10/2020** SeqNo: **1195297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	8.74	56.9	22.76	0	38.4	5	138				
Mevinphos	11.3	56.9	22.76	0	49.7	5	148				
TEPP	0.00	56.9	22.76	0	0	5	121				S
Demeton, Total	12.4	56.9	22.76	0	54.6	24.3	141				
Ethoprophos	11.8	56.9	22.76	0	52.0	13.2	145				
Naled	9.81	56.9	22.76	0	43.1	5	121				
Sulfotepp	12.2	56.9	22.76	0	53.6	26.8	120				
Monocrotophos	2.12	56.9	22.76	0	9.32	5	196				
Phorate	12.5	56.9	22.76	0	54.8	29.4	122				
Dimethoate	10.3	56.9	22.76	0	45.4	5	161				
Diazinon	12.0	56.9	22.76	0	52.6	9.74	142				
Disulfoton	12.5	56.9	22.76	0	54.8	23.9	137				
Parathion, methyl	13.1	56.9	22.76	5.601	33.0	5.64	177				
Fenchorphos	12.4	56.9	22.76	0	54.6	25.3	131				
Malathion	13.6	56.9	22.76	0	59.9	23.5	121				
Dursban	12.4	56.9	22.76	0	54.4	28.2	128				
Fenthion	12.9	56.9	22.76	0	56.7	24.2	136				
Parathion	14.3	56.9	22.76	0	63.0	5	173				
Trichloronate	12.9	56.9	22.76	0	56.6	28.5	122				
Merphos	0.00	56.9	22.76	0	0	5	90.1				S
Stirophos	19.0	56.9	22.76	0	83.4	9.46	152				
Prothiofos	13.6	56.9	22.76	0	59.7	23.7	157				
Fensulfothion	18.6	56.9	22.76	0	81.6	5	174				
Sulprofos	14.2	56.9	22.76	0	62.4	12	173				
EPN	17.6	56.9	22.76	0	77.4	13.8	157				
Guthion	26.9	56.9	22.76	0	118	5	177				
Coumaphos	26.4	56.9	22.76	0	116	5	232				
Surr: Triphenylphosphate	80.4		113.8		70.7	10.7	154				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Date: *6/18/2020*

Work Order: 2005395
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **2005395-001CMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **SB-EP-5-1'** Batch ID: **28540** Analysis Date: **6/10/2020** SeqNo: **1195298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	7.16	58.4	23.35	0	30.7	5	138	8.738	19.8	30	
Mevinphos	12.5	58.4	23.35	0	53.5	5	148	11.32	9.91	30	
TEPP	0.00	58.4	23.35	0	0	5	121	0	0	30	S
Demeton, Total	16.3	58.4	23.35	0	69.7	24.3	141	12.42	26.8	30	
Ethoprophos	17.4	58.4	23.35	0	74.4	13.2	145	11.84	37.9	30	
Naled	4.35	58.4	23.35	0	18.6	5	121	9.806	77.2	30	
Sulfotepp	15.9	58.4	23.35	0	68.0	26.8	120	12.20	26.2	30	
Monocrotophos	5.42	58.4	23.35	0	23.2	5	196	2.123	87.5	30	
Phorate	17.4	58.4	23.35	0	74.6	29.4	122	12.48	33.0	30	
Dimethoate	11.5	58.4	23.35	0	49.1	5	161	10.33	10.5	30	
Diazinon	18.7	58.4	23.35	0	80.1	9.74	142	11.97	44.0	30	
Disulfoton	17.1	58.4	23.35	0	73.5	23.9	137	12.46	31.8	30	
Parathion, methyl	19.3	58.4	23.35	5.601	58.6	5.64	177	13.11	38.1	30	
Fenchorphos	18.7	58.4	23.35	0	80.3	25.3	131	12.42	40.6	30	
Malathion	17.2	58.4	23.35	0	73.9	23.5	121	13.63	23.4	30	
Dursban	19.9	58.4	23.35	0	85.2	28.2	128	12.39	46.5	30	
Fenthion	19.5	58.4	23.35	0	83.5	24.2	136	12.91	40.6	30	
Parathion	19.4	58.4	23.35	0	82.9	5	173	14.33	29.9	30	
Trichloronate	20.4	58.4	23.35	0	87.5	28.5	122	12.89	45.2	30	
Merphos	0.00	58.4	23.35	0	0	5	90.1	0	0	30	S
Stirophos	26.3	58.4	23.35	0	112	9.46	152	18.97	32.2	30	
Prothiofos	21.9	58.4	23.35	0	93.8	23.7	157	13.60	46.8	30	
Fensulfothion	26.2	58.4	23.35	0	112	5	174	18.57	34.2	30	
Sulprofos	22.4	58.4	23.35	0	95.9	12	173	14.20	44.8	30	
EPN	24.0	58.4	23.35	0	103	13.8	157	17.61	30.8	30	
Guthion	37.2	58.4	23.35	0	159	5	177	26.90	32.2	30	
Coumaphos	39.4	58.4	23.35	0	169	5	232	26.41	39.4	30	
Surr: Triphenylphosphate	103		116.8		88.2	10.7	154		0		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample Log-In Check List

Client Name:	**ATC**	Work Order Number:	**2005395**
Logged by:	**Carissa True**	Date Received:	**5/28/2020 5:51:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	3.1
Sample 1	2.1
Temp Blank 1	4.8

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-28-20 Page: 1 of: 3

Laboratory Project No (internal): 205395

Project Name: Panattoni, NW Logistics Ctr. ~~Parking~~

Special Remarks: ~~If samples analyzed for~~

Client: ATC Group Services LLC

Project No: NPPAN20023

Address: 6347 Seaview Ave. NW

Collected by: B. Goulet / A. Degeta

City, State, Zip: Seattle, WA 98107

Location: DuPont, WA

Telephone: (206) 781-1449

Report To (PM): E. Silver

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: Elisabeth.Silver@atcgs.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Organochlorine Pest by 8081	Organophos. Pest by 8270	Chlorinated Herb. by 8151/8270 SIM	Comments
1	SB-EP-5-1'	05/28/20	1005	soil	X				X		X			X	T			X	X	X	(RCRA 8)
2	SB-EP-5-5'		1010											X	T						Pb + As
3	SB-EP-5-15.5'		1015											X	T						↓
4	SB-EP-4-1'		~~1005~~ 1055		X				X		X			X	T			X	X	X	(RCRA 8)
5	SB-EP-4-2'		1105											X	T						Pb + As
6	SB-EP-4-2.5'		1110											X	~~T~~						↓
7	SB-EP-1-2'		1150		X				X		X			X	T			X	X	X	(RCRA 8)
8	SB-EP-2-1'		1200		X				X		X			X	T			X	X	X	(RCRA 8)
9	SB-EP-2-3'		1205											X	T						Pb + As
10	SB-EP-2-3.5'	↓	1210	↓										X	T						↓

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Relinquished	Date/Time	Received	Date/Time
x [signature]	5-28-20	x [signature]	5/28/20 1751
Relinquished x	Date/Time 1730	Received x	Date/Time

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-28-2020 Page: 2 of: 3

Laboratory Project No (internal): 2005295

Project Name: Panattoni, NW Logistics Ctr.

Special Remarks:

Client: ATC

Project No: NPPAN20023

Address:

Collected by: B. Goulet / A. Degefa

City, State, Zip:

Location: DuPont, WA

Telephone:

Report To (PM): E. Silver

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	orgnochlor. Pest by 8081	organophos. Pest by 8270	Chlorinated Herb. by 8151/8270SIM	Comments
1	SB-EP-1-6'	5/28/20	1305	soil										X	T						Pb + As
2	SB-EP-1-6.5'		1310											X	T						↓
3	~~SB-6-1'~~ SB-EP-3-0.5'		~~1430~~ 1330		X				X		X			X	T		X	X	X		(RCRA 8)
4	SB-EP-3-6'		1335											X	T						Pb + As
5	SB-EP-3-6.5'		1340											X	T						↓
6	SB-6-1'		1430		~~X~~									X	T						
7	SB-7-1.5'		1440											X	T						↓
8	SB-8-0.5'		1500		X				X		X			X	T		X	X	X		(RCRA 8)
9	SB-8-3'		1510											X	T						Pb + As
10	SB-9-1'	↓	1515	↓										X	T						↓

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	5-28-20	x [signature]	5/28/20 1751
Relinquished	Date/Time	Received	Date/Time
x	1730	x	5/28/20

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-28-2020 Page: 3 of: 3

Laboratory Project No (internal): 2005345

Project Name: Panattoni, NW Logistics Ctr.

Special Remarks:

Client: ATC ~~Gro~~

Project No: NPPAN20023

Address:

Collected by: B. Goulet / A. Degefa

City, State, Zip:

Location:

Telephone:

Report To (PM): E. Silver

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB-10-1.5'	05/28/20	1525	soil										X	T			As + Pb
2	SB-11-2'	↓	1540	↓										X	T			↓
3	SB-12-2.5'	↓	1555	↓										X	T			↓
4	SB-13-1.5	↓	1610	↓										X	T			↓
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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Relinquished	Date/Time	Received	Date/Time
x [signature]	5-28-20	x [signature]	5/28/20 1751
Relinquished	Date/Time	Received	Date/Time
x	17:30	x	

Turn-around Time:

- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-28-20 Page: 1 of: 3

Laboratory Project No (internal): 205395

Project Name: Panattoni, NW Logistics Ctr. ~~Parking~~

Special Remarks: ~~If samples analyzed for~~

Sample ID revision per E.S. 6/16/2020 -BB

Client: ATC Group Services LLC

Address: 6347 Seaview Ave. NW

City, State, Zip: Seattle, WA 98107

Telephone: (206) 781-1449

Fax:

Project No: NPPAN20023

Collected by: B. Goulet / A. Degeta

Location: DuPont, WA

Report To (PM): E. Silver

PM Email: Elisabeth.Silver@atcgs.com

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Organochlorine Pest by 8081	Organophos. Pest by 8270	Chlorinated Herb. by 8151/8270 SIM	Comments
1	SB-EP-5-1'	05/28/20	1005	soil	X				X		X			X	T			X	X	X	(RCRA 8)
2	SB-EP-5-5~~.0~~'		1010											X	T						Pb + As
3	SB-EP-5-~~4.5~~' 5.5'		1015											X	T						↓
4	SB-EP-4-1'		~~1055~~ 1055		X				X		X			X	T			X	X	X	(RCRA 8)
5	SB-EP-4-2'		1105											X	T						Pb + As
6	SB-EP-4-2.5'		1110											X	~~T~~						↓
7	SB-EP-1-2'		1150		X				X		X			X	T			X	X	X	(RCRA 8)
8	SB-EP-2-1'		1200		X				X		X			X	T			X	X	X	(RCRA 8)
9	SB-EP-2-3'		1205											X	T						Pb + As
10	SB-EP-2-3.5'	↓	1210	↓										X	T						↓

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Relinquished	Date/Time	Received	Date/Time
x [signature]	5-28-20	x [signature]	5/28/20 1751
Relinquished x	Date/Time 1730	Received x	Date/Time

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-28-2020 Page: 2 of: 3

Laboratory Project No (internal): 2005295

Project Name: Panattoni, NW Logistics Ctr.

Special Remarks:

Client: ATC

Project No: NPPAN20023

Address:

Collected by: B. Goulet / A. Degefa

City, State, Zip:

Location: DuPont, WA

Telephone:

Report To (PM): E. Silver

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	orgnochlor. Pest by 8081	organophos. Pest by 8270	Chlorinated Herb. by 8151/8270SIM	Comments
1	SB-EP-1-6'	5/28/20	1305	soil										X	T						Pb + As
2	SB-EP-1-6.5'		1310											X	T						↓
3	~~SB-6-1'~~ SB-EP-3-0.5'		~~1430~~ 1330		X			X			X			X	T			X	X	X	(RCRA 8)
4	SB-EP-3-6'		1335											X	T						Pb + As
5	SB-EP-3-6.5'		1340											X	T						↓
6	SB-6-1'		1430		~~X~~									X	T						↓
7	SB-7-1.5'		1440											X	T						↓
8	SB-8-0.5'		1500		X			X			X			X	T			X	X	X	(RCRA 8)
9	SB-8-3'		1510											X	T						Pb + As
10	SB-9-1'	↓	1515	↓										X	T						↓

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	5-28-20	x [signature]	5/28/20 1751
Relinquished x	Date/Time 1730	Received x	Date/Time [signature] 5/28/20

Fremont Analytical
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Chain of Custody Record & Laboratory Services Agreement

Date: 05-28-2020 Page: 3 of: 3

Laboratory Project No (internal): 2005345

Project Name: Panattoni, NW Logistics Ctr.

Project No: NPPAN20023

Collected by: B. Goulet / A. Degefa

Location:

Report To (PM): E. Silver

PM Email:

Client: ATC ~~Geo~~

Address:

City, State, Zip:

Telephone:

Fax:

Special Remarks:

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)				Comments
1	SB-10-1.5'	05/28/20	1525	soil										X	T						As + Pb
2	SB-11-2'	↓	1540	↓										X	T						↓
3	SB-12-2.5'	↓	1555	↓										X	T						↓
4	SB-13-1.5	↓	1610	↓										X	T						↓
5																					
6																					
7																					
8																					
9																					
10																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	5-28-20	x [signature]	5/28/20 1751
Relinquished	Date/Time	Received	Date/Time
x	17:30	x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

ATC Group Services, Inc.
Elisabeth Silver
6347 Seaview Ave NW
Seattle, WA 98107

RE: Panattoni, NW Logistics Ctr
Work Order Number: 2006001

June 15, 2020

Attention Elisabeth Silver:

Fremont Analytical, Inc. received 29 sample(s) on 5/29/2020 for the analyses presented in the following report.

Herbicides by EPA Method 8151A (Mod)
Hexavalent Chromium by EPA Method 7196
Hydrocarbon Identification by NWTPH-HCID
Mercury by EPA Method 7471
Organochlorine Pesticides by EPA Method 8081
Organophosphorus Pesticides by EPA Method 8270-SIM
Sample Moisture (Percent Moisture)
Semi-Volatile Organic Compounds by EPA Method 8270
Total Metals by EPA Method 6020B
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

Brianna Barnes
Project Manager

Date: *06/15/2020*

CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Work Order: 2006001

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2006001-001	SB-14-6'	05/29/2020 8:45 AM	05/29/2020 6:15 PM
2006001-002	SB-16-1'	05/29/2020 9:50 AM	05/29/2020 6:15 PM
2006001-003	SB-16-5'	05/29/2020 9:55 AM	05/29/2020 6:15 PM
2006001-004	SB-16-5.5'	05/29/2020 9:55 AM	05/29/2020 6:15 PM
2006001-005	SB-17-5'	05/29/2020 9:50 AM	05/29/2020 6:15 PM
2006001-006	SB-15-5'	05/29/2020 9:00 AM	05/29/2020 6:15 PM
2006001-007	SB-18-3.5'	05/29/2020 10:50 AM	05/29/2020 6:15 PM
2006001-008	SB-19-3'	05/29/2020 10:10 AM	05/29/2020 6:15 PM
2006001-009	SB-20-2'	05/29/2020 10:40 AM	05/29/2020 6:15 PM
2006001-010	SB-20-3'	05/29/2020 10:40 AM	05/29/2020 6:15 PM
2006001-011	SB-20-3.5'	05/29/2020 10:40 AM	05/29/2020 6:15 PM
2006001-012	SB-21-4'	05/29/2020 10:50 AM	05/29/2020 6:15 PM
2006001-013	SB-22-3.5'	05/29/2020 11:00 AM	05/29/2020 6:15 PM
2006001-014	SB-23-3'	05/29/2020 11:15 AM	05/29/2020 6:15 PM
2006001-015	SB-24-1.5'	05/29/2020 11:35 AM	05/29/2020 6:15 PM
2006001-016	SB-24-3.5'	05/29/2020 11:35 AM	05/29/2020 6:15 PM
2006001-017	SB-24-4'	05/29/2020 11:35 AM	05/29/2020 6:15 PM
2006001-018	SB-25-0.5'	05/29/2020 12:40 PM	05/29/2020 6:15 PM
2006001-019	SB-25-1'	05/29/2020 12:40 PM	05/29/2020 6:15 PM
2006001-020	SB-26-0.5'	05/29/2020 12:55 PM	05/29/2020 6:15 PM
2006001-021	SB-27-1'	05/29/2020 1:00 PM	05/29/2020 6:15 PM
2006001-022	SB-28-2.5'	05/29/2020 1:15 PM	05/29/2020 6:15 PM
2006001-023	SB-29-2.5'	05/29/2020 1:30 PM	05/29/2020 6:15 PM
2006001-024	SB-30-2.5'	05/29/2020 1:35 PM	05/29/2020 6:15 PM
2006001-025	SB-31-3.5'	05/29/2020 2:00 PM	05/29/2020 6:15 PM
2006001-026	SB-32-3'	05/29/2020 2:10 PM	05/29/2020 6:15 PM
2006001-027	SB-33-4'	05/29/2020 2:20 PM	05/29/2020 6:15 PM
2006001-028	SB-16-3'	05/29/2020 2:25 PM	05/29/2020 6:15 PM
2006001-029	SB-16-3.5'	05/29/2020 2:25 PM	05/29/2020 6:15 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2006001**

Date: **6/15/2020**

CLIENT: ATC Group Services, Inc.

Project: Panattoni, NW Logistics Ctr

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-001
Client Sample ID: SB-14-6'

Collection Date: 5/29/2020 8:45:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.85	0.202		mg/Kg-dry	1	6/5/2020 3:31:26 PM
Lead	2.19	0.161		mg/Kg-dry	1	6/5/2020 3:31:26 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	3.19	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Client Sample ID: SB-16-1'

Collection Date: 5/29/2020 9:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.0945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Alpha BHC	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Beta BHC	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Gamma BHC (Lindane)	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Delta BHC	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Heptachlor	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Aldrin	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Heptachlor epoxide	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
gamma-Chlordane	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Endosulfan I	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
alpha-Chlordane	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Dieldrin	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
4,4´-DDE	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Endrin	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Endosulfan II	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
4,4´-DDD	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Endrin aldehyde	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Endosulfan sulfate	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
4,4´-DDT	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Endrin ketone	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Methoxychlor	ND	0.00945		mg/Kg-dry	1	6/5/2020 2:24:43 PM
Surr: Decachlorobiphenyl	118	27 - 166		%Rec	1	6/5/2020 2:24:43 PM
Surr: Tetrachloro-m-xylene	89.3	28.1 - 171		%Rec	1	6/5/2020 2:24:43 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	17.7		mg/Kg-dry	1	6/3/2020 7:30:56 PM
Mineral Spirits	ND	26.6		mg/Kg-dry	1	6/3/2020 7:30:56 PM
Kerosene	ND	44.3		mg/Kg-dry	1	6/3/2020 7:30:56 PM
Diesel (Fuel Oil)	ND	44.3		mg/Kg-dry	1	6/3/2020 7:30:56 PM
Heavy Oil	ND	88.7		mg/Kg-dry	1	6/3/2020 7:30:56 PM
Mineral Oil	ND	88.7		mg/Kg-dry	1	6/3/2020 7:30:56 PM
Surr: 2-Fluorobiphenyl	78.0	50 - 150		%Rec	1	6/3/2020 7:30:56 PM
Surr: o-Terphenyl	88.8	50 - 150		%Rec	1	6/3/2020 7:30:56 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	35.5		µg/Kg-dry	1	6/12/2020 6:45:39 PM
2,4-D	ND	30.4		µg/Kg-dry	1	6/12/2020 6:45:39 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Client Sample ID: SB-16-1'

Collection Date: 5/29/2020 9:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	25.4		µg/Kg-dry	1	6/12/2020 6:45:39 PM
2,4,5-TP (Silvex)	ND	20.3		µg/Kg-dry	1	6/12/2020 6:45:39 PM
2,4,5-T	ND	50.7		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Dinoseb	ND	30.4		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Dalapon	ND	203		µg/Kg-dry	1	6/12/2020 6:45:39 PM
2,4-DB	ND	25.4		µg/Kg-dry	1	6/12/2020 6:45:39 PM
MCPP	ND	4,460		µg/Kg-dry	1	6/12/2020 6:45:39 PM
MCPA	ND	2,840		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Picloram	ND	50.7	Q	µg/Kg-dry	1	6/12/2020 6:45:39 PM
Bentazon	ND	35.5		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Chloramben	ND	20.3		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Acifluorfen	ND	81.1		µg/Kg-dry	1	6/12/2020 6:45:39 PM
3,5-Dichlorobenzoic acid	ND	40.6		µg/Kg-dry	1	6/12/2020 6:45:39 PM
4-Nitrophenol	ND	30.4		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Dacthal (DCPA)	ND	30.4		µg/Kg-dry	1	6/12/2020 6:45:39 PM
Surr: 2,4-Dichlorophenylacetic acid	90.4	15.3 - 163		%Rec	1	6/12/2020 6:45:39 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Mevinphos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
TEPP	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Demeton, Total	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Ethoprophos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Naled	ND	49.9	Q	µg/Kg-dry	1	6/10/2020 3:42:06 AM
Sulfotepp	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Monocrotophos	ND	49.9	Q	µg/Kg-dry	1	6/10/2020 3:42:06 AM
Phorate	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Dimethoate	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Diazinon	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Disulfoton	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Parathion, methyl	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Fenchorphos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Malathion	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Dursban	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Fenthion	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Parathion	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Client Sample ID: SB-16-1'

Collection Date: 5/29/2020 9:50:00 AM
Matrix: Soil

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 28540 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Trichloronate	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Merphos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Stirophos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Prothiofos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Fensulfothion	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Sulprofos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
EPN	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Guthion	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Coumaphos	ND	49.9		µg/Kg-dry	1	6/10/2020 3:42:06 AM
Surr: Triphenylphosphate	96.2	10.7 - 154		%Rec	1	6/10/2020 3:42:06 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 28538 Analyst: SB

Phenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Bis(2-chloroethyl) ether	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2-Chlorophenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
1,3-Dichlorobenzene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
1,4-Dichlorobenzene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
1,2-Dichlorobenzene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Benzyl alcohol	ND	97.3	Q	µg/Kg-dry	1	6/5/2020 5:53:08 PM
2-Methylphenol (o-cresol)	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Hexachloroethane	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
N-Nitrosodi-n-propylamine	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
3&4-Methylphenol (m, p-cresol)	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Nitrobenzene	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Isophorone	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2-Nitrophenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,4-Dimethylphenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Bis(2-chloroethoxy)methane	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,4-Dichlorophenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
1,2,4-Trichlorobenzene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Naphthalene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
4-Chloroaniline	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Hexachlorobutadiene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
4-Chloro-3-methylphenol	ND	195		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2-Methylnaphthalene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
1-Methylnaphthalene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Client Sample ID: SB-16-1'

Collection Date: 5/29/2020 9:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	97.3	Q	µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,4,6-Trichlorophenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,4,5-Trichlorophenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2-Chloronaphthalene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2-Nitroaniline	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Acenaphthene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Dimethylphthalate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,6-Dinitrotoluene	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Acenaphthylene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,4-Dinitrophenol	ND	511	Q	µg/Kg-dry	1	6/5/2020 5:53:08 PM
Dibenzofuran	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
2,4-Dinitrotoluene	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
4-Nitrophenol	ND	486		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Fluorene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
4-Chlorophenyl phenyl ether	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Diethylphthalate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
4,6-Dinitro-2-methylphenol	ND	195	Q	µg/Kg-dry	1	6/5/2020 5:53:08 PM
4-Bromophenyl phenyl ether	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Hexachlorobenzene	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Pentachlorophenol	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Phenanthrene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Anthracene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Carbazole	ND	73.0		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Di-n-butylphthalate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Fluoranthene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Pyrene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Butyl Benzylphthalate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
bis(2-Ethylhexyl)adipate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Benz(a)anthracene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Chrysene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
bis (2-Ethylhexyl) phthalate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Di-n-octyl phthalate	ND	97.3		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Benzo(b)fluoranthene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Benzo(k)fluoranthene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Benzo(a)pyrene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Indeno(1,2,3-cd)pyrene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Dibenz(a,h)anthracene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Benzo(g,h,i)perylene	ND	48.6		µg/Kg-dry	1	6/5/2020 5:53:08 PM
Surr: 2,4,6-Tribromophenol	76.4	5 - 139		%Rec	1	6/5/2020 5:53:08 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 9:50:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Matrix: Soil
Client Sample ID: SB-16-1'

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 28538 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorobiphenyl	81.4	5 - 131		%Rec	1	6/5/2020 5:53:08 PM
Surr: Nitrobenzene-d5	72.8	5 - 123		%Rec	1	6/5/2020 5:53:08 PM
Surr: Phenol-d6	75.0	5 - 129		%Rec	1	6/5/2020 5:53:08 PM
Surr: p-Terphenyl	84.6	13.8 - 140		%Rec	1	6/5/2020 5:53:08 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28544 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Chloromethane	ND	0.0542	Q	mg/Kg-dry	1	6/6/2020 1:30:30 AM
Vinyl chloride	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Bromomethane	ND	0.0542	Q	mg/Kg-dry	1	6/6/2020 1:30:30 AM
Trichlorofluoromethane (CFC-11)	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Chloroethane	ND	0.0542	Q	mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1-Dichloroethene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Methylene chloride	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
trans-1,2-Dichloroethene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Methyl tert-butyl ether (MTBE)	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1-Dichloroethane	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
cis-1,2-Dichloroethene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Chloroform	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1,1-Trichloroethane (TCA)	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1-Dichloropropene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Carbon tetrachloride	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2-Dichloroethane (EDC)	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Benzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Trichloroethene (TCE)	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2-Dichloropropane	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Bromodichloromethane	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Dibromomethane	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
cis-1,3-Dichloropropene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Toluene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
trans-1,3-Dichloropropylene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1,2-Trichloroethane	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,3-Dichloropropane	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Tetrachloroethene (PCE)	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Dibromochloromethane	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2-Dibromoethane (EDB)	ND	0.00542		mg/Kg-dry	1	6/6/2020 1:30:30 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 9:50:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Matrix: Soil
Client Sample ID: SB-16-1'

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28544 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Chlorobenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1,1,2-Tetrachloroethane	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Ethylbenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
m,p-Xylene	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
o-Xylene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Styrene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Isopropylbenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Bromoform	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,1,2,2-Tetrachloroethane	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
n-Propylbenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Bromobenzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,3,5-Trimethylbenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
2-Chlorotoluene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
4-Chlorotoluene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
tert-Butylbenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2,3-Trichloropropane	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2,4-Trichlorobenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
sec-Butylbenzene	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
4-Isopropyltoluene	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,3-Dichlorobenzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,4-Dichlorobenzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
n-Butylbenzene	ND	0.0271		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2-Dichlorobenzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2-Dibromo-3-chloropropane	ND	0.542	Q	mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2,4-Trimethylbenzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Hexachloro-1,3-butadiene	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Naphthalene	ND	0.0542		mg/Kg-dry	1	6/6/2020 1:30:30 AM
1,2,3-Trichlorobenzene	ND	0.0217		mg/Kg-dry	1	6/6/2020 1:30:30 AM
Surr: Dibromofluoromethane	84.3	83.3 - 111		%Rec	1	6/6/2020 1:30:30 AM
Surr: Toluene-d8	92.9	87.9 - 111		%Rec	1	6/6/2020 1:30:30 AM
Surr: 1-Bromo-4-fluorobenzene	98.4	85.1 - 111		%Rec	1	6/6/2020 1:30:30 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Mercury by EPA Method 7471

Batch ID: 28516 Analyst: WF

Mercury	ND	0.243		mg/Kg-dry	1	6/3/2020 1:28:52 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-002
Client Sample ID: SB-16-1'

Collection Date: 5/29/2020 9:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	4.59	0.199		mg/Kg-dry	1	6/5/2020 3:37:00 PM
Barium	75.5	0.399		mg/Kg-dry	1	6/5/2020 3:37:00 PM
Cadmium	ND	0.160		mg/Kg-dry	1	6/5/2020 3:37:00 PM
Chromium	25.0	0.0798		mg/Kg-dry	1	6/5/2020 3:37:00 PM
Lead	3.57	0.798	D	mg/Kg-dry	5	6/8/2020 11:21:42 AM
Selenium	1.30	0.399		mg/Kg-dry	1	6/5/2020 3:37:00 PM
Silver	ND	0.0798		mg/Kg-dry	1	6/5/2020 3:37:00 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	2.85	0.500		wt%	1	6/5/2020 9:15:36 AM
Hexavalent Chromium by EPA Method 7196				Batch ID: 28617		Analyst: TN
Chromium, Hexavalent	ND	0.497		mg/Kg-dry	1	6/10/2020 1:17:00 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-005
Client Sample ID: SB-17-5'

Collection Date: 5/29/2020 9:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	9.03	0.205		mg/Kg-dry	1	6/5/2020 3:42:33 PM
Lead	3.35	0.164		mg/Kg-dry	1	6/5/2020 3:42:33 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	2.48	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-006
Client Sample ID: SB-15-5'

Collection Date: 5/29/2020 9:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	4.94	0.205		mg/Kg-dry	1	6/5/2020 3:48:07 PM
Lead	3.19	0.164		mg/Kg-dry	1	6/5/2020 3:48:07 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.15	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 10:50:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-007
Matrix: Soil
Client Sample ID: SB-18-3.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	2.96	0.187		mg/Kg-dry	1	6/5/2020 3:53:40 PM
Lead	2.31	0.149		mg/Kg-dry	1	6/5/2020 3:53:40 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	3.01	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 10:10:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-008
Matrix: Soil
Client Sample ID: SB-19-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	4.92	0.202		mg/Kg-dry	1	6/5/2020 3:59:13 PM
Lead	2.10	0.162		mg/Kg-dry	1	6/5/2020 3:59:13 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.94	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Alpha BHC	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Beta BHC	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Gamma BHC (Lindane)	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Delta BHC	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Heptachlor	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Aldrin	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Heptachlor epoxide	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
gamma-Chlordane	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Endosulfan I	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
alpha-Chlordane	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Dieldrin	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
4,4´-DDE	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Endrin	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Endosulfan II	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
4,4´-DDD	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Endrin aldehyde	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Endosulfan sulfate	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
4,4´-DDT	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Endrin ketone	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Methoxychlor	ND	0.0101		mg/Kg-dry	1	6/5/2020 5:29:02 PM
Surr: Decachlorobiphenyl	109	27 - 166		%Rec	1	6/5/2020 5:29:02 PM
Surr: Tetrachloro-m-xylene	95.1	28.1 - 171		%Rec	1	6/5/2020 5:29:02 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	20.0		mg/Kg-dry	1	6/3/2020 8:00:43 PM
Mineral Spirits	ND	30.0		mg/Kg-dry	1	6/3/2020 8:00:43 PM
Kerosene	ND	49.9		mg/Kg-dry	1	6/3/2020 8:00:43 PM
Diesel (Fuel Oil)	ND	49.9		mg/Kg-dry	1	6/3/2020 8:00:43 PM
Heavy Oil	ND	99.9		mg/Kg-dry	1	6/3/2020 8:00:43 PM
Mineral Oil	ND	99.9		mg/Kg-dry	1	6/3/2020 8:00:43 PM
Surr: 2-Fluorobiphenyl	76.7	50 - 150		%Rec	1	6/3/2020 8:00:43 PM
Surr: o-Terphenyl	86.5	50 - 150		%Rec	1	6/3/2020 8:00:43 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	34.5		µg/Kg-dry	1	6/12/2020 7:06:01 PM
2,4-D	ND	29.6		µg/Kg-dry	1	6/12/2020 7:06:01 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	24.7		µg/Kg-dry	1	6/12/2020 7:06:01 PM
2,4,5-TP (Silvex)	ND	19.7		µg/Kg-dry	1	6/12/2020 7:06:01 PM
2,4,5-T	ND	49.3		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Dinoseb	ND	29.6		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Dalapon	ND	197		µg/Kg-dry	1	6/12/2020 7:06:01 PM
2,4-DB	ND	24.7		µg/Kg-dry	1	6/12/2020 7:06:01 PM
MCPP	ND	4,340		µg/Kg-dry	1	6/12/2020 7:06:01 PM
MCPA	ND	2,760		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Picloram	ND	49.3	Q	µg/Kg-dry	1	6/12/2020 7:06:01 PM
Bentazon	ND	34.5		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Chloramben	ND	19.7		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Acifluorfen	ND	78.9		µg/Kg-dry	1	6/12/2020 7:06:01 PM
3,5-Dichlorobenzoic acid	ND	39.5		µg/Kg-dry	1	6/12/2020 7:06:01 PM
4-Nitrophenol	ND	29.6		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Dacthal (DCPA)	ND	29.6		µg/Kg-dry	1	6/12/2020 7:06:01 PM
Surr: 2,4-Dichlorophenylacetic acid	86.1	15.3 - 163		%Rec	1	6/12/2020 7:06:01 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Mevinphos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
TEPP	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Demeton, Total	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Ethoprophos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Naled	ND	43.5	Q	µg/Kg-dry	1	6/10/2020 4:04:34 AM
Sulfotepp	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Monocrotophos	ND	43.5	Q	µg/Kg-dry	1	6/10/2020 4:04:34 AM
Phorate	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Dimethoate	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Diazinon	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Disulfoton	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Parathion, methyl	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Fenchorphos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Malathion	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Dursban	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Fenthion	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Parathion	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 28540 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Trichloronate	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Merphos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Stirophos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Prothiofos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Fensulfothion	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Sulprofos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
EPN	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Guthion	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Coumaphos	ND	43.5		µg/Kg-dry	1	6/10/2020 4:04:34 AM
Surr: Triphenylphosphate	82.9	10.7 - 154		%Rec	1	6/10/2020 4:04:34 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 28538 Analyst: SB

Phenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Bis(2-chloroethyl) ether	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2-Chlorophenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
1,3-Dichlorobenzene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
1,4-Dichlorobenzene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
1,2-Dichlorobenzene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Benzyl alcohol	ND	96.6	Q	µg/Kg-dry	1	6/5/2020 6:15:38 PM
2-Methylphenol (o-cresol)	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Hexachloroethane	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
N-Nitrosodi-n-propylamine	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
3&4-Methylphenol (m, p-cresol)	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Nitrobenzene	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Isophorone	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2-Nitrophenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,4-Dimethylphenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Bis(2-chloroethoxy)methane	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,4-Dichlorophenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
1,2,4-Trichlorobenzene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Naphthalene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
4-Chloroaniline	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Hexachlorobutadiene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
4-Chloro-3-methylphenol	ND	193		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2-Methylnaphthalene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
1-Methylnaphthalene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	96.6	Q	µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,4,6-Trichlorophenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,4,5-Trichlorophenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2-Chloronaphthalene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2-Nitroaniline	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Acenaphthene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Dimethylphthalate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,6-Dinitrotoluene	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Acenaphthylene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,4-Dinitrophenol	ND	507	Q	µg/Kg-dry	1	6/5/2020 6:15:38 PM
Dibenzofuran	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
2,4-Dinitrotoluene	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
4-Nitrophenol	ND	483		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Fluorene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
4-Chlorophenyl phenyl ether	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Diethylphthalate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
4,6-Dinitro-2-methylphenol	ND	193	Q	µg/Kg-dry	1	6/5/2020 6:15:38 PM
4-Bromophenyl phenyl ether	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Hexachlorobenzene	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Pentachlorophenol	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Phenanthrene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Anthracene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Carbazole	ND	72.4		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Di-n-butylphthalate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Fluoranthene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Pyrene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Butyl Benzylphthalate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
bis(2-Ethylhexyl)adipate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Benz(a)anthracene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Chrysene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
bis (2-Ethylhexyl) phthalate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Di-n-octyl phthalate	ND	96.6		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Benzo(b)fluoranthene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Benzo(k)fluoranthene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Benzo(a)pyrene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Indeno(1,2,3-cd)pyrene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Dibenz(a,h)anthracene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Benzo(g,h,i)perylene	ND	48.3		µg/Kg-dry	1	6/5/2020 6:15:38 PM
Surr: 2,4,6-Tribromophenol	67.2	5 - 139		%Rec	1	6/5/2020 6:15:38 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	70.8	5 - 131		%Rec	1	6/5/2020 6:15:38 PM
Surr: Nitrobenzene-d5	66.6	5 - 123		%Rec	1	6/5/2020 6:15:38 PM
Surr: Phenol-d6	69.2	5 - 129		%Rec	1	6/5/2020 6:15:38 PM
Surr: p-Terphenyl	85.2	13.8 - 140		%Rec	1	6/5/2020 6:15:38 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28544		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Chloromethane	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Vinyl chloride	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Bromomethane	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Trichlorofluoromethane (CFC-11)	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Chloroethane	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1-Dichloroethene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Methylene chloride	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
trans-1,2-Dichloroethene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Methyl tert-butyl ether (MTBE)	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1-Dichloroethane	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
cis-1,2-Dichloroethene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Chloroform	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1,1-Trichloroethane (TCA)	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1-Dichloropropene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Carbon tetrachloride	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2-Dichloroethane (EDC)	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Benzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Trichloroethene (TCE)	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2-Dichloropropane	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Bromodichloromethane	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Dibromomethane	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
cis-1,3-Dichloropropene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Toluene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
trans-1,3-Dichloropropylene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1,2-Trichloroethane	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,3-Dichloropropane	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Tetrachloroethene (PCE)	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Dibromochloromethane	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2-Dibromoethane (EDB)	ND	0.00368		mg/Kg-dry	1	6/8/2020 4:18:02 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28544		Analyst: KT
Chlorobenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1,1,2-Tetrachloroethane	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Ethylbenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
m,p-Xylene	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
o-Xylene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Styrene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Isopropylbenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Bromoform	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,1,2,2-Tetrachloroethane	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
n-Propylbenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Bromobenzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,3,5-Trimethylbenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
2-Chlorotoluene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
4-Chlorotoluene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
tert-Butylbenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2,3-Trichloropropane	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2,4-Trichlorobenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
sec-Butylbenzene	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
4-Isopropyltoluene	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,3-Dichlorobenzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,4-Dichlorobenzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
n-Butylbenzene	ND	0.0184		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2-Dichlorobenzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2-Dibromo-3-chloropropane	ND	0.368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2,4-Trimethylbenzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Hexachloro-1,3-butadiene	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Naphthalene	ND	0.0368		mg/Kg-dry	1	6/8/2020 4:18:02 PM
1,2,3-Trichlorobenzene	ND	0.0147		mg/Kg-dry	1	6/8/2020 4:18:02 PM
Surr: Dibromofluoromethane	93.5	83.3 - 111		%Rec	1	6/8/2020 4:18:02 PM
Surr: Toluene-d8	92.7	87.9 - 111		%Rec	1	6/8/2020 4:18:02 PM
Surr: 1-Bromo-4-fluorobenzene	97.2	85.1 - 111		%Rec	1	6/8/2020 4:18:02 PM
Mercury by EPA Method 7471				Batch ID: 28516		Analyst: WF
Mercury	ND	0.221		mg/Kg-dry	1	6/3/2020 1:30:34 PM
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	4.21	0.197		mg/Kg-dry	1	6/5/2020 4:04:47 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-009
Client Sample ID: SB-20-2'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Barium	68.0	0.395		mg/Kg-dry	1	6/5/2020 4:04:47 PM
Cadmium	ND	0.158		mg/Kg-dry	1	6/5/2020 4:04:47 PM
Chromium	21.4	0.0789		mg/Kg-dry	1	6/5/2020 4:04:47 PM
Lead	2.81	0.158		mg/Kg-dry	1	6/5/2020 4:04:47 PM
Selenium	1.24	0.395		mg/Kg-dry	1	6/5/2020 4:04:47 PM
Silver	ND	0.0789		mg/Kg-dry	1	6/5/2020 4:04:47 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.03			wt%	1	6/5/2020 9:15:36 AM
Hexavalent Chromium by EPA Method 7196				Batch ID: 28617		Analyst: TN
Chromium, Hexavalent	ND	0.503		mg/Kg-dry	1	6/10/2020 1:46:00 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 10:40:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-010
Matrix: Soil
Client Sample ID: SB-20-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.97	0.202		mg/Kg-dry	1	6/5/2020 4:10:21 PM
Lead	2.26	0.162		mg/Kg-dry	1	6/5/2020 4:10:21 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.27	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-011
Client Sample ID: SB-20-3.5'

Collection Date: 5/29/2020 10:40:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.71	0.201		mg/Kg-dry	1	6/5/2020 4:15:55 PM
Lead	3.04	0.161		mg/Kg-dry	1	6/5/2020 4:15:55 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.30	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-012
Client Sample ID: SB-21-4'

Collection Date: 5/29/2020 10:50:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.29	0.195		mg/Kg-dry	1	6/5/2020 4:21:29 PM
Lead	2.18	0.156		mg/Kg-dry	1	6/5/2020 4:21:29 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.27	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 11:00:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-013
Matrix: Soil
Client Sample ID: SB-22-3.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.37	0.200		mg/Kg-dry	1	6/5/2020 4:41:43 PM
Lead	2.37	0.160		mg/Kg-dry	1	6/5/2020 4:41:43 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	3.99	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 11:15:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-014
Matrix: Soil
Client Sample ID: SB-23-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	4.96	0.207		mg/Kg-dry	1	6/5/2020 4:47:17 PM
Lead	2.04	0.165		mg/Kg-dry	1	6/5/2020 4:47:17 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	3.15	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Client Sample ID: SB-24-1.5'

Collection Date: 5/29/2020 11:35:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Alpha BHC	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Beta BHC	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Gamma BHC (Lindane)	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Delta BHC	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Heptachlor	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Aldrin	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Heptachlor epoxide	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
gamma-Chlordane	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Endosulfan I	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
alpha-Chlordane	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Dieldrin	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
4,4´-DDE	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Endrin	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Endosulfan II	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
4,4´-DDD	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Endrin aldehyde	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Endosulfan sulfate	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
4,4´-DDT	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Endrin ketone	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Methoxychlor	ND	0.0105		mg/Kg-dry	1	6/5/2020 5:38:44 PM
Surr: Decachlorobiphenyl	104	27 - 166		%Rec	1	6/5/2020 5:38:44 PM
Surr: Tetrachloro-m-xylene	81.0	28.1 - 171		%Rec	1	6/5/2020 5:38:44 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	19.5		mg/Kg-dry	1	6/3/2020 8:30:28 PM
Mineral Spirits	ND	29.2		mg/Kg-dry	1	6/3/2020 8:30:28 PM
Kerosene	ND	48.7		mg/Kg-dry	1	6/3/2020 8:30:28 PM
Diesel (Fuel Oil)	ND	48.7		mg/Kg-dry	1	6/3/2020 8:30:28 PM
Heavy Oil	ND	97.3		mg/Kg-dry	1	6/3/2020 8:30:28 PM
Mineral Oil	ND	97.3		mg/Kg-dry	1	6/3/2020 8:30:28 PM
Surr: 2-Fluorobiphenyl	77.7	50 - 150		%Rec	1	6/3/2020 8:30:28 PM
Surr: o-Terphenyl	90.3	50 - 150		%Rec	1	6/3/2020 8:30:28 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	36.0		µg/Kg-dry	1	6/12/2020 7:26:24 PM
2,4-D	ND	30.9		µg/Kg-dry	1	6/12/2020 7:26:24 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Client Sample ID: SB-24-1.5'

Collection Date: 5/29/2020 11:35:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	25.7		µg/Kg-dry	1	6/12/2020 7:26:24 PM
2,4,5-TP (Silvex)	ND	20.6		µg/Kg-dry	1	6/12/2020 7:26:24 PM
2,4,5-T	ND	51.5		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Dinoseb	ND	30.9		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Dalapon	ND	206		µg/Kg-dry	1	6/12/2020 7:26:24 PM
2,4-DB	ND	25.7		µg/Kg-dry	1	6/12/2020 7:26:24 PM
MCPP	ND	4,530		µg/Kg-dry	1	6/12/2020 7:26:24 PM
MCPA	ND	2,880		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Picloram	ND	51.5	Q	µg/Kg-dry	1	6/12/2020 7:26:24 PM
Bentazon	ND	36.0		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Chloramben	ND	20.6		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Acifluorfen	ND	82.3		µg/Kg-dry	1	6/12/2020 7:26:24 PM
3,5-Dichlorobenzoic acid	ND	41.2		µg/Kg-dry	1	6/12/2020 7:26:24 PM
4-Nitrophenol	ND	30.9		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Dacthal (DCPA)	ND	30.9		µg/Kg-dry	1	6/12/2020 7:26:24 PM
Surr: 2,4-Dichlorophenylacetic acid	75.0	15.3 - 163		%Rec	1	6/12/2020 7:26:24 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Mevinphos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
TEPP	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Demeton, Total	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Ethoprophos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Naled	ND	47.2	Q	µg/Kg-dry	1	6/10/2020 4:27:04 AM
Sulfotepp	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Monocrotophos	ND	47.2	Q	µg/Kg-dry	1	6/10/2020 4:27:04 AM
Phorate	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Dimethoate	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Diazinon	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Disulfoton	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Parathion, methyl	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Fenchorphos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Malathion	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Dursban	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Fenthion	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Parathion	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 11:35:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Matrix: Soil
Client Sample ID: SB-24-1.5'

Organophosphorus Pesticides by EPA Method 8270-SIM

Batch ID: 28540 Analyst: SB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Trichloronate	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Merphos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Stirophos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Prothiofos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Fensulfothion	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Sulprofos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
EPN	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Guthion	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Coumaphos	ND	47.2		µg/Kg-dry	1	6/10/2020 4:27:04 AM
Surr: Triphenylphosphate	78.5	10.7 - 154		%Rec	1	6/10/2020 4:27:04 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 28538 Analyst: SB

Phenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Bis(2-chloroethyl) ether	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2-Chlorophenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
1,3-Dichlorobenzene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
1,4-Dichlorobenzene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
1,2-Dichlorobenzene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Benzyl alcohol	ND	101	Q	µg/Kg-dry	1	6/5/2020 6:38:09 PM
2-Methylphenol (o-cresol)	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Hexachloroethane	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
N-Nitrosodi-n-propylamine	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
3&4-Methylphenol (m, p-cresol)	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Nitrobenzene	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Isophorone	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2-Nitrophenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,4-Dimethylphenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Bis(2-chloroethoxy)methane	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,4-Dichlorophenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
1,2,4-Trichlorobenzene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Naphthalene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
4-Chloroaniline	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Hexachlorobutadiene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
4-Chloro-3-methylphenol	ND	201		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2-Methylnaphthalene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
1-Methylnaphthalene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Client Sample ID: SB-24-1.5'

Collection Date: 5/29/2020 11:35:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	101	Q	µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,4,6-Trichlorophenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,4,5-Trichlorophenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2-Chloronaphthalene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2-Nitroaniline	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Acenaphthene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Dimethylphthalate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,6-Dinitrotoluene	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Acenaphthylene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,4-Dinitrophenol	ND	529	Q	µg/Kg-dry	1	6/5/2020 6:38:09 PM
Dibenzofuran	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
2,4-Dinitrotoluene	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
4-Nitrophenol	ND	504		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Fluorene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
4-Chlorophenyl phenyl ether	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Diethylphthalate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
4,6-Dinitro-2-methylphenol	ND	201	Q	µg/Kg-dry	1	6/5/2020 6:38:09 PM
4-Bromophenyl phenyl ether	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Hexachlorobenzene	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Pentachlorophenol	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Phenanthrene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Anthracene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Carbazole	ND	75.5		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Di-n-butylphthalate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Fluoranthene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Pyrene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Butyl Benzylphthalate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
bis(2-Ethylhexyl)adipate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Benz(a)anthracene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Chrysene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
bis (2-Ethylhexyl) phthalate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Di-n-octyl phthalate	ND	101		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Benzo(b)fluoranthene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Benzo(k)fluoranthene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Benzo(a)pyrene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Indeno(1,2,3-cd)pyrene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Dibenz(a,h)anthracene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Benzo(g,h,i)perylene	ND	50.4		µg/Kg-dry	1	6/5/2020 6:38:09 PM
Surr: 2,4,6-Tribromophenol	51.9	5 - 139		%Rec	1	6/5/2020 6:38:09 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Client Sample ID: SB-24-1.5'

Collection Date: 5/29/2020 11:35:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	56.1	5 - 131		%Rec	1	6/5/2020 6:38:09 PM
Surr: Nitrobenzene-d5	50.7	5 - 123		%Rec	1	6/5/2020 6:38:09 PM
Surr: Phenol-d6	55.9	5 - 129		%Rec	1	6/5/2020 6:38:09 PM
Surr: p-Terphenyl	62.1	13.8 - 140		%Rec	1	6/5/2020 6:38:09 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28544		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Chloromethane	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Vinyl chloride	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Bromomethane	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Trichlorofluoromethane (CFC-11)	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Chloroethane	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1-Dichloroethene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Methylene chloride	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
trans-1,2-Dichloroethene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Methyl tert-butyl ether (MTBE)	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1-Dichloroethane	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
cis-1,2-Dichloroethene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Chloroform	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1,1-Trichloroethane (TCA)	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1-Dichloropropene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Carbon tetrachloride	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2-Dichloroethane (EDC)	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Benzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Trichloroethene (TCE)	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2-Dichloropropane	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Bromodichloromethane	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Dibromomethane	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
cis-1,3-Dichloropropene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Toluene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
trans-1,3-Dichloropropylene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1,2-Trichloroethane	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,3-Dichloropropane	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Tetrachloroethene (PCE)	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Dibromochloromethane	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2-Dibromoethane (EDB)	ND	0.00357		mg/Kg-dry	1	6/8/2020 4:48:10 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Client Sample ID: SB-24-1.5'

Collection Date: 5/29/2020 11:35:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28544		Analyst: KT
Chlorobenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1,1,2-Tetrachloroethane	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Ethylbenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
m,p-Xylene	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
o-Xylene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Styrene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Isopropylbenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Bromoform	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,1,2,2-Tetrachloroethane	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
n-Propylbenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Bromobenzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,3,5-Trimethylbenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
2-Chlorotoluene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
4-Chlorotoluene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
tert-Butylbenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2,3-Trichloropropane	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2,4-Trichlorobenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
sec-Butylbenzene	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
4-Isopropyltoluene	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,3-Dichlorobenzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,4-Dichlorobenzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
n-Butylbenzene	ND	0.0179		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2-Dichlorobenzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2-Dibromo-3-chloropropane	ND	0.357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2,4-Trimethylbenzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Hexachloro-1,3-butadiene	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Naphthalene	ND	0.0357		mg/Kg-dry	1	6/8/2020 4:48:10 PM
1,2,3-Trichlorobenzene	ND	0.0143		mg/Kg-dry	1	6/8/2020 4:48:10 PM
Surr: Dibromofluoromethane	92.7	83.3 - 111		%Rec	1	6/8/2020 4:48:10 PM
Surr: Toluene-d8	93.0	87.9 - 111		%Rec	1	6/8/2020 4:48:10 PM
Surr: 1-Bromo-4-fluorobenzene	99.7	85.1 - 111		%Rec	1	6/8/2020 4:48:10 PM
Mercury by EPA Method 7471				Batch ID: 28516		Analyst: WF
Mercury	ND	0.245		mg/Kg-dry	1	6/3/2020 1:35:26 PM
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	7.08	0.214		mg/Kg-dry	1	6/5/2020 4:52:51 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-015
Client Sample ID: SB-24-1.5'

Collection Date: 5/29/2020 11:35:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Barium	65.5	0.427		mg/Kg-dry	1	6/5/2020 4:52:51 PM
Cadmium	ND	0.171		mg/Kg-dry	1	6/5/2020 4:52:51 PM
Chromium	22.0	0.0855		mg/Kg-dry	1	6/5/2020 4:52:51 PM
Lead	5.52	0.171		mg/Kg-dry	1	6/5/2020 4:52:51 PM
Selenium	1.11	0.427		mg/Kg-dry	1	6/5/2020 4:52:51 PM
Silver	ND	0.0855		mg/Kg-dry	1	6/5/2020 4:52:51 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	7.12			wt%	1	6/5/2020 9:15:36 AM
Hexavalent Chromium by EPA Method 7196				Batch ID: 28617		Analyst: TN
Chromium, Hexavalent	ND	0.508		mg/Kg-dry	1	6/10/2020 1:50:00 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 11:35:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-016
Matrix: Soil
Client Sample ID: SB-24-3.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.78	0.205		mg/Kg-dry	1	6/5/2020 4:58:24 PM
Lead	2.46	0.164		mg/Kg-dry	1	6/5/2020 4:58:24 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	2.99	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 11:35:00 AM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-017
Matrix: Soil
Client Sample ID: SB-24-4'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	3.49	0.204		mg/Kg-dry	1	6/5/2020 5:03:58 PM
Lead	2.08	0.163		mg/Kg-dry	1	6/5/2020 5:03:58 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	3.36	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Client Sample ID: SB-25-0.5'

Collection Date: 5/29/2020 12:40:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organochlorine Pesticides by EPA Method 8081				Batch ID: 28547		Analyst: DW
Toxaphene	ND	0.0892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Alpha BHC	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Beta BHC	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Gamma BHC (Lindane)	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Delta BHC	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Heptachlor	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Aldrin	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Heptachlor epoxide	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
gamma-Chlordane	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Endosulfan I	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
alpha-Chlordane	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Dieldrin	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
4,4´-DDE	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Endrin	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Endosulfan II	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
4,4´-DDD	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Endrin aldehyde	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Endosulfan sulfate	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
4,4´-DDT	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Endrin ketone	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Methoxychlor	ND	0.00892		mg/Kg-dry	1	6/5/2020 5:48:24 PM
Surr: Decachlorobiphenyl	102	27 - 166		%Rec	1	6/5/2020 5:48:24 PM
Surr: Tetrachloro-m-xylene	84.0	28.1 - 171		%Rec	1	6/5/2020 5:48:24 PM
Hydrocarbon Identification by NWTPH-HCID				Batch ID: 28524		Analyst: DW
Gasoline	ND	17.7		mg/Kg-dry	1	6/3/2020 9:00:12 PM
Mineral Spirits	ND	26.6		mg/Kg-dry	1	6/3/2020 9:00:12 PM
Kerosene	ND	44.4		mg/Kg-dry	1	6/3/2020 9:00:12 PM
Diesel (Fuel Oil)	ND	44.4		mg/Kg-dry	1	6/3/2020 9:00:12 PM
Heavy Oil	ND	88.7		mg/Kg-dry	1	6/3/2020 9:00:12 PM
Mineral Oil	ND	88.7		mg/Kg-dry	1	6/3/2020 9:00:12 PM
Surr: 2-Fluorobiphenyl	74.6	50 - 150		%Rec	1	6/3/2020 9:00:12 PM
Surr: o-Terphenyl	86.2	50 - 150		%Rec	1	6/3/2020 9:00:12 PM
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
Dicamba	ND	34.0		µg/Kg-dry	1	6/12/2020 7:46:50 PM
2,4-D	ND	29.1		µg/Kg-dry	1	6/12/2020 7:46:50 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Client Sample ID: SB-25-0.5'

Collection Date: 5/29/2020 12:40:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Herbicides by EPA Method 8151A (Mod)				Batch ID: 28601		Analyst: SB
2,4-DP	ND	24.3		µg/Kg-dry	1	6/12/2020 7:46:50 PM
2,4,5-TP (Silvex)	ND	19.4		µg/Kg-dry	1	6/12/2020 7:46:50 PM
2,4,5-T	ND	48.5		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Dinoseb	ND	29.1		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Dalapon	ND	194		µg/Kg-dry	1	6/12/2020 7:46:50 PM
2,4-DB	ND	24.3		µg/Kg-dry	1	6/12/2020 7:46:50 PM
MCPP	ND	4,270		µg/Kg-dry	1	6/12/2020 7:46:50 PM
MCPA	ND	2,720		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Picloram	ND	48.5	Q	µg/Kg-dry	1	6/12/2020 7:46:50 PM
Bentazon	ND	34.0		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Chloramben	ND	19.4		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Acifluorfen	ND	77.6		µg/Kg-dry	1	6/12/2020 7:46:50 PM
3,5-Dichlorobenzoic acid	ND	38.8		µg/Kg-dry	1	6/12/2020 7:46:50 PM
4-Nitrophenol	ND	29.1		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Dacthal (DCPA)	ND	29.1		µg/Kg-dry	1	6/12/2020 7:46:50 PM
Surr: 2,4-Dichlorophenylacetic acid	78.7	15.3 - 163		%Rec	1	6/12/2020 7:46:50 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
DDVP	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Mevinphos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
TEPP	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Demeton, Total	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Ethoprophos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Naled	ND	50.6	Q	µg/Kg-dry	1	6/10/2020 4:49:29 AM
Sulfotepp	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Monocrotophos	ND	50.6	Q	µg/Kg-dry	1	6/10/2020 4:49:29 AM
Phorate	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Dimethoate	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Diazinon	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Disulfoton	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Parathion, methyl	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Fenchorphos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Malathion	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Dursban	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Fenthion	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Parathion	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 12:40:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Matrix: Soil
Client Sample ID: SB-25-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Organophosphorus Pesticides by EPA Method 8270-SIM				Batch ID: 28540		Analyst: SB
Trichloronate	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Merphos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Stirophos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Prothiofos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Fensulfothion	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Sulprofos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
EPN	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Guthion	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Coumaphos	ND	50.6		µg/Kg-dry	1	6/10/2020 4:49:29 AM
Surr: Triphenylphosphate	114	10.7 - 154		%Rec	1	6/10/2020 4:49:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Phenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Bis(2-chloroethyl) ether	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2-Chlorophenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
1,3-Dichlorobenzene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
1,4-Dichlorobenzene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
1,2-Dichlorobenzene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Benzyl alcohol	ND	102	Q	µg/Kg-dry	1	6/5/2020 7:00:40 PM
2-Methylphenol (o-cresol)	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Hexachloroethane	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
N-Nitrosodi-n-propylamine	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
3&4-Methylphenol (m, p-cresol)	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Nitrobenzene	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Isophorone	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2-Nitrophenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,4-Dimethylphenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Bis(2-chloroethoxy)methane	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,4-Dichlorophenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
1,2,4-Trichlorobenzene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Naphthalene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
4-Chloroaniline	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Hexachlorobutadiene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
4-Chloro-3-methylphenol	ND	204		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2-Methylnaphthalene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
1-Methylnaphthalene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 12:40:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Matrix: Soil
Client Sample ID: SB-25-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Hexachlorocyclopentadiene	ND	102	Q	µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,4,6-Trichlorophenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,4,5-Trichlorophenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2-Chloronaphthalene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2-Nitroaniline	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Acenaphthene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Dimethylphthalate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,6-Dinitrotoluene	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Acenaphthylene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,4-Dinitrophenol	ND	537	Q	µg/Kg-dry	1	6/5/2020 7:00:40 PM
Dibenzofuran	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
2,4-Dinitrotoluene	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
4-Nitrophenol	ND	511		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Fluorene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
4-Chlorophenyl phenyl ether	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Diethylphthalate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
4,6-Dinitro-2-methylphenol	ND	204	Q	µg/Kg-dry	1	6/5/2020 7:00:40 PM
4-Bromophenyl phenyl ether	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Hexachlorobenzene	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Pentachlorophenol	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Phenanthrene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Anthracene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Carbazole	ND	76.7		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Di-n-butylphthalate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Fluoranthene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Pyrene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Butyl Benzylphthalate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
bis(2-Ethylhexyl)adipate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Benz(a)anthracene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Chrysene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
bis (2-Ethylhexyl) phthalate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Di-n-octyl phthalate	ND	102		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Benzo(b)fluoranthene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Benzo(k)fluoranthene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Benzo(a)pyrene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Indeno(1,2,3-cd)pyrene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Dibenz(a,h)anthracene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Benzo(g,h,i)perylene	ND	51.1		µg/Kg-dry	1	6/5/2020 7:00:40 PM
Surr: 2,4,6-Tribromophenol	81.6	5 - 139		%Rec	1	6/5/2020 7:00:40 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Client Sample ID: SB-25-0.5'

Collection Date: 5/29/2020 12:40:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Semi-Volatile Organic Compounds by EPA Method 8270				Batch ID: 28538		Analyst: SB
Surr: 2-Fluorobiphenyl	93.6	5 - 131		%Rec	1	6/5/2020 7:00:40 PM
Surr: Nitrobenzene-d5	94.1	5 - 123		%Rec	1	6/5/2020 7:00:40 PM
Surr: Phenol-d6	96.0	5 - 129		%Rec	1	6/5/2020 7:00:40 PM
Surr: p-Terphenyl	99.7	13.8 - 140		%Rec	1	6/5/2020 7:00:40 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28544		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Chloromethane	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Vinyl chloride	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Bromomethane	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Trichlorofluoromethane (CFC-11)	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Chloroethane	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1-Dichloroethene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Methylene chloride	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
trans-1,2-Dichloroethene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Methyl tert-butyl ether (MTBE)	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1-Dichloroethane	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
cis-1,2-Dichloroethene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Chloroform	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1,1-Trichloroethane (TCA)	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1-Dichloropropene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Carbon tetrachloride	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2-Dichloroethane (EDC)	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Benzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Trichloroethene (TCE)	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2-Dichloropropane	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Bromodichloromethane	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Dibromomethane	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
cis-1,3-Dichloropropene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Toluene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
trans-1,3-Dichloropropylene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1,2-Trichloroethane	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,3-Dichloropropane	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Tetrachloroethene (PCE)	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Dibromochloromethane	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2-Dibromoethane (EDB)	ND	0.00363		mg/Kg-dry	1	6/8/2020 5:18:26 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Client Sample ID: SB-25-0.5'

Collection Date: 5/29/2020 12:40:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28544		Analyst: KT
Chlorobenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1,1,2-Tetrachloroethane	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Ethylbenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
m,p-Xylene	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
o-Xylene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Styrene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Isopropylbenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Bromoform	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,1,2,2-Tetrachloroethane	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
n-Propylbenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Bromobenzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,3,5-Trimethylbenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
2-Chlorotoluene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
4-Chlorotoluene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
tert-Butylbenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2,3-Trichloropropane	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2,4-Trichlorobenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
sec-Butylbenzene	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
4-Isopropyltoluene	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,3-Dichlorobenzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,4-Dichlorobenzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
n-Butylbenzene	ND	0.0181		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2-Dichlorobenzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2-Dibromo-3-chloropropane	ND	0.363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2,4-Trimethylbenzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Hexachloro-1,3-butadiene	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Naphthalene	ND	0.0363		mg/Kg-dry	1	6/8/2020 5:18:26 PM
1,2,3-Trichlorobenzene	ND	0.0145		mg/Kg-dry	1	6/8/2020 5:18:26 PM
Surr: Dibromofluoromethane	93.7	83.3 - 111		%Rec	1	6/8/2020 5:18:26 PM
Surr: Toluene-d8	93.1	87.9 - 111		%Rec	1	6/8/2020 5:18:26 PM
Surr: 1-Bromo-4-fluorobenzene	98.3	85.1 - 111		%Rec	1	6/8/2020 5:18:26 PM
Mercury by EPA Method 7471				Batch ID: 28516		Analyst: WF
Mercury	ND	0.229		mg/Kg-dry	1	6/3/2020 1:37:02 PM
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Arsenic	5.75	0.190		mg/Kg-dry	1	6/5/2020 5:09:32 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-018
Client Sample ID: SB-25-0.5'

Collection Date: 5/29/2020 12:40:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28562		Analyst: CO
Barium	76.0	0.380		mg/Kg-dry	1	6/5/2020 5:09:32 PM
Cadmium	ND	0.152		mg/Kg-dry	1	6/5/2020 5:09:32 PM
Chromium	26.0	0.0761		mg/Kg-dry	1	6/5/2020 5:09:32 PM
Lead	2.46	0.152		mg/Kg-dry	1	6/5/2020 5:09:32 PM
Selenium	1.29	0.380		mg/Kg-dry	1	6/5/2020 5:09:32 PM
Silver	ND	0.0761		mg/Kg-dry	1	6/5/2020 5:09:32 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	2.66			wt%	1	6/5/2020 9:15:36 AM
Hexavalent Chromium by EPA Method 7196				Batch ID: 28617		Analyst: TN
Chromium, Hexavalent	ND	0.492		mg/Kg-dry	1	6/10/2020 1:53:00 PM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 12:40:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-019
Matrix: Soil
Client Sample ID: SB-25-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.07	0.202		mg/Kg-dry	1	6/5/2020 5:31:50 PM
Lead	1.82	0.162		mg/Kg-dry	1	6/5/2020 5:31:50 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.05	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 12:55:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-020
Matrix: Soil
Client Sample ID: SB-26-0.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.74	0.194		mg/Kg-dry	1	6/5/2020 6:16:23 PM
Lead	1.68	0.156		mg/Kg-dry	1	6/5/2020 6:16:23 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	4.04	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 1:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-021
Matrix: Soil
Client Sample ID: SB-27-1'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.12	0.201		mg/Kg-dry	1	6/5/2020 6:21:57 PM
Lead	1.78	0.161		mg/Kg-dry	1	6/5/2020 6:21:57 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	2.66	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 1:15:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-022
Matrix: Soil
Client Sample ID: SB-28-2.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.52	0.195		mg/Kg-dry	1	6/5/2020 6:27:30 PM
Lead	1.96	0.156		mg/Kg-dry	1	6/5/2020 6:27:30 PM
Sample Moisture (Percent Moisture)				Batch ID: R59611		Analyst: EH
Percent Moisture	3.65	0.500		wt%	1	6/5/2020 9:15:36 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-023
Client Sample ID: SB-29-2.5'

Collection Date: 5/29/2020 1:30:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.36	0.188		mg/Kg-dry	1	6/5/2020 6:33:04 PM
Lead	2.04	0.151		mg/Kg-dry	1	6/5/2020 6:33:04 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	3.00	0.500		wt%	1	6/5/2020 9:46:20 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 1:35:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-024
Matrix: Soil
Client Sample ID: SB-30-2.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	65.7	0.207		mg/Kg-dry	1	6/5/2020 6:38:38 PM
Lead	1.85	0.165		mg/Kg-dry	1	6/5/2020 6:38:38 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	4.68	0.500		wt%	1	6/5/2020 9:46:20 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 2:00:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-025
Matrix: Soil
Client Sample ID: SB-31-3.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.29	0.209		mg/Kg-dry	1	6/5/2020 6:55:22 PM
Lead	2.36	0.167		mg/Kg-dry	1	6/5/2020 6:55:22 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	6.55	0.500		wt%	1	6/5/2020 9:46:20 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 2:10:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-026
Matrix: Soil
Client Sample ID: SB-32-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	2.59	0.201		mg/Kg-dry	1	6/5/2020 7:00:56 PM
Lead	1.57	0.161		mg/Kg-dry	1	6/5/2020 7:00:56 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	3.71	0.500		wt%	1	6/5/2020 9:46:20 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 2:20:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-027
Matrix: Soil
Client Sample ID: SB-33-4'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	3.16	0.203		mg/Kg-dry	1	6/5/2020 7:06:30 PM
Lead	2.24	0.162		mg/Kg-dry	1	6/5/2020 7:06:30 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	3.76	0.500		wt%	1	6/5/2020 9:46:20 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 2:25:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-028
Matrix: Soil
Client Sample ID: SB-16-3'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	2.98	0.189		mg/Kg-dry	1	6/5/2020 7:12:04 PM
Lead	2.27	0.152		mg/Kg-dry	1	6/5/2020 7:12:04 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	4.34	0.500		wt%	1	6/5/2020 9:46:20 AM

Analytical Report

Work Order: **2006001**
Date Reported: **6/15/2020**

Client: ATC Group Services, Inc.
Collection Date: 5/29/2020 2:25:00 PM
Project: Panattoni, NW Logistics Ctr
Lab ID: 2006001-029
Matrix: Soil
Client Sample ID: SB-16-3.5'

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 28563		Analyst: CO
Arsenic	2.79	0.188		mg/Kg-dry	1	6/5/2020 7:17:37 PM
Lead	1.62	0.150		mg/Kg-dry	1	6/5/2020 7:17:37 PM
Sample Moisture (Percent Moisture)				Batch ID: R59614		Analyst: EH
Percent Moisture	2.69	0.500		wt%	1	6/5/2020 9:46:20 AM

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Hexavalent Chromium by EPA Method 7196

Sample ID: **MB-28617** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/10/2020** RunNo: **59732**
Client ID: **MBLKS** Batch ID: **28617** Analysis Date: **6/10/2020** SeqNo: **1195268**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.500									

Sample ID: **LCS-28617** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/10/2020** RunNo: **59732**
Client ID: **LCSS** Batch ID: **28617** Analysis Date: **6/10/2020** SeqNo: **1195269**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	2.26	0.500	2.500	0	90.2	70	130				

Sample ID: **2006001-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/10/2020** RunNo: **59732**
Client ID: **SB-16-1'** Batch ID: **28617** Analysis Date: **6/10/2020** SeqNo: **1195271**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.502						0		30	

Sample ID: **2006001-002AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/10/2020** RunNo: **59732**
Client ID: **SB-16-1'** Batch ID: **28617** Analysis Date: **6/10/2020** SeqNo: **1195272**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	1.83	0.513	2.563	0	71.4	70	130				

Sample ID: **2006001-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/10/2020** RunNo: **59732**
Client ID: **SB-16-1'** Batch ID: **28617** Analysis Date: **6/10/2020** SeqNo: **1195273**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	1.70	0.498	2.489	0	68.2	70	730	1.830	7.47	30	S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Hexavalent Chromium by EPA Method 7196

Sample ID: **2006137-008ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/10/2020** RunNo: **59732**
Client ID: **BATCH** Batch ID: **28617** Analysis Date: **6/10/2020** SeqNo: **1195288**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.664						0		30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Hydrocarbon Identification by NWTPH-HCID

Sample ID: **MB-28524** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59562**
Client ID: **MBLKS** Batch ID: **28524** Analysis Date: **6/3/2020** SeqNo: **1191100**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	20.0									
Mineral Spirits	ND	30.0									
Kerosene	ND	50.0									
Diesel (Fuel Oil)	ND	50.0									
Heavy Oil	ND	100									
Mineral Oil	ND	100									
Surr: 2-Fluorobiphenyl	13.7		20.00		68.6	50	150				
Surr: o-Terphenyl	15.6		20.00		77.9	50	150				

Sample ID: **LCS-28524** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/3/2020** RunNo: **59562**
Client ID: **LCSS** Batch ID: **28524** Analysis Date: **6/3/2020** SeqNo: **1191101**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	454	50.0	500.0	0	90.7	65	135				
Surr: 2-Fluorobiphenyl	16.4		20.00		82.2	50	150				
Surr: o-Terphenyl	16.4		20.00		82.1	50	150				

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-28516** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **MBLKS** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190963**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.250									

Sample ID: **LCS-28516** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **LCSS** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190964**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.500	0.250	0.5000	0	100	80	120				

Sample ID: **2005384-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **BATCH** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190925**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.132						0		20	

Sample ID: **2005384-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **BATCH** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190926**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.297	0.131	0.2623	0.03709	99.1	70	130				

Sample ID: **2005384-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/2/2020** RunNo: **59549**
Client ID: **BATCH** Batch ID: **28516** Analysis Date: **6/3/2020** SeqNo: **1190927**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.294	0.139	0.2780	0.03709	92.3	70	130	0.2969	1.15	20	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **MB-28547** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **MBLKS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192831**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.100									
Alpha BHC	ND	0.0100									
Beta BHC	ND	0.0100									
Gamma BHC (Lindane)	ND	0.0100									
Delta BHC	ND	0.0100									
Heptachlor	ND	0.0100									
Aldrin	ND	0.0100									
Heptachlor epoxide	ND	0.0100									
gamma-Chlordane	ND	0.0100									
Endosulfan I	ND	0.0100									
alpha-Chlordane	ND	0.0100									
Dieldrin	ND	0.0100									
4,4´-DDE	ND	0.0100									
Endrin	ND	0.0100									
Endosulfan II	ND	0.0100									
4,4´-DDD	ND	0.0100									
Endrin aldehyde	ND	0.0100									
Endosulfan sulfate	ND	0.0100									
4,4´-DDT	ND	0.0100									
Endrin ketone	ND	0.0100									
Methoxychlor	ND	0.0100									
Surr: Decachlorobiphenyl	0.0483		0.05000		96.7	27	166				
Surr: Tetrachloro-m-xylene	0.0428		0.05000		85.7	28.1	171				

Sample ID: **LCS1-28547** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **LCSS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192832**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.182	0.0100	0.2000	0	90.8	70.8	143				
Beta BHC	0.193	0.0100	0.2000	0	96.3	70.5	143				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **LCS1-28547** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **LCSS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192832**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gamma BHC (Lindane)	0.186	0.0100	0.2000	0	92.9	70.8	144				
Delta BHC	0.192	0.0100	0.2000	0	96.2	67.8	143				
Heptachlor	0.197	0.0100	0.2000	0	98.5	70.7	151				
Aldrin	0.188	0.0100	0.2000	0	94.1	68.5	149				
Heptachlor epoxide	0.195	0.0100	0.2000	0	97.6	67.8	152				
gamma-Chlordane	0.198	0.0100	0.2000	0	98.8	63.8	150				
Endosulfan I	0.196	0.0100	0.2000	0	97.9	73.3	151				
alpha-Chlordane	0.197	0.0100	0.2000	0	98.6	63.5	150				
Dieldrin	0.200	0.0100	0.2000	0	100	72.8	149				
4,4´-DDE	0.204	0.0100	0.2000	0	102	71.1	146				
Endrin	0.208	0.0100	0.2000	0	104	62.7	158				
Endosulfan II	0.206	0.0100	0.2000	0	103	53.5	154				
4,4´-DDD	0.197	0.0100	0.2000	0	98.4	66.3	154				
Endrin aldehyde	0.212	0.0100	0.2000	0	106	43.8	133				
Endosulfan sulfate	0.210	0.0100	0.2000	0	105	59.5	149				
4,4´-DDT	0.262	0.0100	0.2000	0	131	70.5	149				
Endrin ketone	0.217	0.0100	0.2000	0	109	58	157				
Methoxychlor	0.255	0.0100	0.2000	0	128	52	159				
Surr: Decachlorobiphenyl	0.0505		0.05000		101	27	166				
Surr: Tetrachloro-m-xylene	0.0445		0.05000		89.1	28.1	171				

Sample ID: **LCS2-28547** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **LCSS** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192833**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	1.10	0.100	1.000	0	110	57.3	134				
Surr: Decachlorobiphenyl	0.0487		0.05000		97.4	27	166				
Surr: Tetrachloro-m-xylene	0.0420		0.05000		84.0	28.1	171				

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **2006001-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **SB-16-1'** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192841**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toxaphene	ND	0.0918						0		30	
Alpha BHC	ND	0.00918						0		30	
Beta BHC	ND	0.00918						0		30	
Gamma BHC (Lindane)	ND	0.00918						0		30	
Delta BHC	ND	0.00918						0		30	
Heptachlor	ND	0.00918						0		30	
Aldrin	ND	0.00918						0		30	
Heptachlor epoxide	ND	0.00918						0		30	
gamma-Chlordane	ND	0.00918						0		30	
Endosulfan I	ND	0.00918						0		30	
alpha-Chlordane	ND	0.00918						0		30	
Dieldrin	ND	0.00918						0		30	
4,4´-DDE	ND	0.00918						0		30	
Endrin	ND	0.00918						0		30	
Endosulfan II	ND	0.00918						0		30	
4,4´-DDD	ND	0.00918						0		30	
Endrin aldehyde	ND	0.00918						0		30	
Endosulfan sulfate	ND	0.00918						0		30	
4,4´-DDT	ND	0.00918						0		30	
Endrin ketone	ND	0.00918						0		30	
Methoxychlor	ND	0.00918						0		30	
Surr: Decachlorobiphenyl	0.0383		0.04591		83.5	27	166		0		
Surr: Tetrachloro-m-xylene	0.0357		0.04591		77.7	28.1	171		0		

Sample ID: **2006001-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **SB-16-1'** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192842**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.200	0.0101	0.2010	0	99.5	76.1	143				
Beta BHC	0.208	0.0101	0.2010	0	104	70.1	143				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **2006001-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **SB-16-1'** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192842**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gamma BHC (Lindane)	0.204	0.0101	0.2010	0	102	76.1	145				
Delta BHC	0.209	0.0101	0.2010	0	104	61.1	142				
Heptachlor	0.217	0.0101	0.2010	0	108	76.3	157				
Aldrin	0.204	0.0101	0.2010	0	102	73.9	152				
Heptachlor epoxide	0.210	0.0101	0.2010	0	104	75.1	154				
gamma-Chlordane	0.205	0.0101	0.2010	0	102	69.4	152				
Endosulfan I	0.209	0.0101	0.2010	0	104	75.3	153				
alpha-Chlordane	0.207	0.0101	0.2010	0	103	68.7	155				
Dieldrin	0.210	0.0101	0.2010	0	104	74	152				
4,4´-DDE	0.214	0.0101	0.2010	0	107	70.7	152				
Endrin	0.221	0.0101	0.2010	0	110	80.4	152				
Endosulfan II	0.212	0.0101	0.2010	0	106	67.2	144				
4,4´-DDD	0.211	0.0101	0.2010	0	105	71.1	155				
Endrin aldehyde	0.215	0.0101	0.2010	0	107	22.5	147				
Endosulfan sulfate	0.213	0.0101	0.2010	0	106	49.5	145				
4,4´-DDT	0.253	0.0101	0.2010	0	126	61.5	169				
Endrin ketone	0.216	0.0101	0.2010	0	108	67.1	144				
Methoxychlor	0.256	0.0101	0.2010	0	127	58	170				
Surr: Decachlorobiphenyl	0.0446		0.05026		88.8	27	166				
Surr: Tetrachloro-m-xylene	0.0428		0.05026		85.1	28.1	171				

Sample ID: **2006001-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **SB-16-1'** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192843**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alpha BHC	0.197	0.00911	0.1822	0	108	76.1	143	0.2000	1.62	30	
Beta BHC	0.211	0.00911	0.1822	0	116	70.1	143	0.2084	1.44	30	
Gamma BHC (Lindane)	0.203	0.00911	0.1822	0	112	76.1	145	0.2041	0.374	30	
Delta BHC	0.212	0.00911	0.1822	0	116	61.1	142	0.2088	1.42	30	
Heptachlor	0.215	0.00911	0.1822	0	118	76.3	157	0.2171	0.971	30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organochlorine Pesticides by EPA Method 8081

Sample ID: **2006001-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59631**
Client ID: **SB-16-1'** Batch ID: **28547** Analysis Date: **6/5/2020** SeqNo: **1192843**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	0.203	0.00911	0.1822	0	112	73.9	152	0.2043	0.518	30	
Heptachlor epoxide	0.212	0.00911	0.1822	0	117	75.1	154	0.2097	1.24	30	
gamma-Chlordane	0.209	0.00911	0.1822	0	115	69.4	152	0.2052	1.69	30	
Endosulfan I	0.212	0.00911	0.1822	0	116	75.3	153	0.2085	1.63	30	
alpha-Chlordane	0.212	0.00911	0.1822	0	116	68.7	155	0.2069	2.24	30	
Dieldrin	0.215	0.00911	0.1822	0	118	74	152	0.2100	2.54	30	
4,4´-DDE	0.222	0.00911	0.1822	0	122	70.7	152	0.2143	3.37	30	
Endrin	0.226	0.00911	0.1822	0	124	80.4	152	0.2205	2.61	30	
Endosulfan II	0.221	0.00911	0.1822	0	121	67.2	144	0.2123	3.91	30	
4,4´-DDD	0.222	0.00911	0.1822	0	122	71.1	155	0.2115	4.87	30	
Endrin aldehyde	0.223	0.00911	0.1822	0	122	22.5	147	0.2152	3.46	30	
Endosulfan sulfate	0.224	0.00911	0.1822	0	123	49.5	145	0.2132	4.75	30	
4,4´-DDT	0.261	0.00911	0.1822	0	143	61.5	169	0.2528	3.26	30	
Endrin ketone	0.227	0.00911	0.1822	0	124	67.1	144	0.2164	4.56	30	
Methoxychlor	0.263	0.00911	0.1822	0	144	58	170	0.2560	2.51	30	
Surr: Decachlorobiphenyl	0.0478		0.04555		105	27	166		0		
Surr: Tetrachloro-m-xylene	0.0411		0.04555		90.2	28.1	171		0		

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-28538** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **MBLKS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	100									
Bis(2-chloroethyl) ether	ND	100									
2-Chlorophenol	ND	100									
1,3-Dichlorobenzene	ND	75.0									
1,4-Dichlorobenzene	ND	75.0									
1,2-Dichlorobenzene	ND	75.0									
Benzyl alcohol	ND	100									
2-Methylphenol (o-cresol)	ND	100									
Hexachloroethane	ND	100									
N-Nitrosodi-n-propylamine	ND	100									
3&4-Methylphenol (m, p-cresol)	ND	100									
Nitrobenzene	ND	100									
Isophorone	ND	100									
2-Nitrophenol	ND	100									
2,4-Dimethylphenol	ND	100									
Bis(2-chloroethoxy)methane	ND	75.0									
2,4-Dichlorophenol	ND	100									
1,2,4-Trichlorobenzene	ND	75.0									
Naphthalene	ND	50.0									
4-Chloroaniline	ND	75.0									
Hexachlorobutadiene	ND	75.0									
4-Chloro-3-methylphenol	ND	200									
2-Methylnaphthalene	ND	50.0									
1-Methylnaphthalene	ND	50.0									
Hexachlorocyclopentadiene	ND	100									
2,4,6-Trichlorophenol	ND	100									
2,4,5-Trichlorophenol	ND	100									
2-Chloronaphthalene	ND	75.0									
2-Nitroaniline	ND	100									Q
Acenaphthene	ND	50.0									
Dimethylphthalate	ND	100									

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-28538** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **MBLKS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	100									
Acenaphthylene	ND	50.0									
2,4-Dinitrophenol	ND	525									
Dibenzofuran	ND	75.0									
2,4-Dinitrotoluene	ND	100									
4-Nitrophenol	ND	500									
Fluorene	ND	50.0									
4-Chlorophenyl phenyl ether	ND	75.0									
Diethylphthalate	ND	100									
4,6-Dinitro-2-methylphenol	ND	200									
4-Bromophenyl phenyl ether	ND	75.0									
Hexachlorobenzene	ND	75.0									
Pentachlorophenol	ND	100									
Phenanthrene	ND	50.0									
Anthracene	ND	50.0									
Carbazole	ND	75.0									
Di-n-butylphthalate	ND	100									
Fluoranthene	ND	50.0									
Pyrene	ND	50.0									
Butyl Benzylphthalate	ND	100									
bis(2-Ethylhexyl)adipate	ND	100									
Benz(a)anthracene	ND	50.0									
Chrysene	ND	50.0									
bis (2-Ethylhexyl) phthalate	ND	100									
Di-n-octyl phthalate	ND	100									Q
Benzo(b)fluoranthene	ND	50.0									
Benzo(k)fluoranthene	ND	50.0									
Benzo(a)pyrene	ND	50.0									
Indeno(1,2,3-cd)pyrene	ND	50.0									
Dibenz(a,h)anthracene	ND	50.0									
Benzo(g,h,i)perylene	ND	50.0									

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **MB-28538** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **MBLKS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192611**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	524		1,000		52.4	5	139				
Surr: 2-Fluorobiphenyl	458		500.0		91.5	5	131				
Surr: Nitrobenzene-d5	259		500.0		51.8	5	123				
Surr: Phenol-d6	855		1,000		85.5	5	129				
Surr: p-Terphenyl	540		500.0		108	13.8	140				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **LCS-28538** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **LCSS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192612**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1,120	100	1,000	0	112	36	137				
Bis(2-chloroethyl) ether	918	100	1,000	0	91.8	39	132				
2-Chlorophenol	1,000	100	1,000	0	100	44.1	138				
1,3-Dichlorobenzene	748	75.0	1,000	0	74.8	43.9	123				
1,4-Dichlorobenzene	736	75.0	1,000	0	73.6	48	120				
1,2-Dichlorobenzene	829	75.0	1,000	0	82.9	44.9	124				
Benzyl alcohol	1,090	100	1,000	0	109	5	190				
2-Methylphenol (o-cresol)	1,100	100	1,000	0	110	39.8	136				
Hexachloroethane	788	100	1,000	0	78.8	37.2	129				
N-Nitrosodi-n-propylamine	1,110	100	1,000	0	111	37.6	146				
3&4-Methylphenol (m, p-cresol)	1,160	100	1,000	0	116	45.4	133				
Nitrobenzene	989	100	1,000	0	98.9	36.4	135				
Isophorone	1,080	100	1,000	0	108	42.2	138				
2-Nitrophenol	1,030	100	1,000	0	103	57.6	133				
2,4-Dimethylphenol	1,140	100	1,000	0	114	45.5	129				
Bis(2-chloroethoxy)methane	1,100	75.0	1,000	0	110	44.7	135				
2,4-Dichlorophenol	1,080	100	1,000	0	108	50.2	140				
1,2,4-Trichlorobenzene	1,050	75.0	1,000	0	105	47.6	136				
Naphthalene	1,030	50.0	1,000	0	103	48	138				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-28538** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **LCSS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192612**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloroaniline	1,020	75.0	1,000	0	102	48.5	127				
Hexachlorobutadiene	951	75.0	1,000	0	95.1	44.6	137				
4-Chloro-3-methylphenol	1,120	200	1,000	0	112	44.1	149				
2-Methylnaphthalene	1,050	50.0	1,000	0	105	50.1	137				
1-Methylnaphthalene	1,080	50.0	1,000	0	108	53.8	129				
Hexachlorocyclopentadiene	1,120	100	1,000	0	112	6.89	161				
2,4,6-Trichlorophenol	940	100	1,000	0	94.0	48.1	137				
2,4,5-Trichlorophenol	1,050	100	1,000	0	105	45.8	146				
2-Chloronaphthalene	1,170	75.0	1,000	0	117	49.7	140				
2-Nitroaniline	1,070	100	1,000	0	107	46.3	141				
Acenaphthene	1,110	50.0	1,000	0	111	51.1	139				
Dimethylphthalate	1,150	100	1,000	0	115	56	129				
2,6-Dinitrotoluene	1,070	100	1,000	0	107	61	137				
Acenaphthylene	1,120	50.0	1,000	0	112	49.6	134				
2,4-Dinitrophenol	632	525	2,000	0	31.6	5	80.3				
Dibenzofuran	1,120	75.0	1,000	0	112	50.4	141				
2,4-Dinitrotoluene	1,200	100	1,000	0	120	61.8	134				
4-Nitrophenol	1,250	500	1,000	0	125	23	137				
Fluorene	1,160	50.0	1,000	0	116	49.6	142				
4-Chlorophenyl phenyl ether	1,100	75.0	1,000	0	110	52.5	137				
Diethylphthalate	1,150	100	1,000	0	115	57.7	135				
4,6-Dinitro-2-methylphenol	662	200	1,000	0	66.2	5	103				
4-Bromophenyl phenyl ether	1,080	75.0	1,000	0	108	48.2	141				
Hexachlorobenzene	1,160	75.0	1,000	0	116	54.1	136				
Pentachlorophenol	328	100	1,000	0	32.8	5	140				
Phenanthrene	1,200	50.0	1,000	0	120	51.5	135				
Anthracene	1,210	50.0	1,000	0	121	46.6	137				
Carbazole	1,210	75.0	1,000	0	121	48.2	136				
Di-n-butylphthalate	1,120	100	1,000	0	112	58.6	131				
Fluoranthene	1,250	50.0	1,000	0	125	48.7	133				
Pyrene	1,200	50.0	1,000	0	120	48.8	134				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **LCS-28538** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **LCSS** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192612**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butyl Benzylphthalate	1,130	100	1,000	0	113	49.4	147				
bis(2-Ethylhexyl)adipate	1,070	100	1,000	0	107	45.5	151				
Benz(a)anthracene	1,150	50.0	1,000	0	115	55.6	134				
Chrysene	1,230	50.0	1,000	0	123	47.4	144				
bis (2-Ethylhexyl) phthalate	1,080	100	1,000	0	108	49.4	152				
Di-n-octyl phthalate	997	100	1,000	0	99.7	45.5	148				
Benzo(b)fluoranthene	1,120	50.0	1,000	0	112	44.7	150				
Benzo(k)fluoranthene	1,200	50.0	1,000	0	120	44.3	143				
Benzo(a)pyrene	1,170	50.0	1,000	0	117	60.5	136				
Indeno(1,2,3-cd)pyrene	1,210	50.0	1,000	0	121	49.5	141				
Dibenz(a,h)anthracene	1,290	50.0	1,000	0	129	48.7	138				
Benzo(g,h,i)perylene	1,210	50.0	1,000	0	121	51.4	137				
Surr: 2,4,6-Tribromophenol	837		1,000		83.7	5	139				
Surr: 2-Fluorobiphenyl	475		500.0		95.0	5	131				
Surr: Nitrobenzene-d5	436		500.0		87.1	5	123				
Surr: Phenol-d6	926		1,000		92.6	5	129				
Surr: p-Terphenyl	537		500.0		107	13.8	140				

Sample ID: **2005395-007AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192616**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	936	110	1,095	0	85.5	27	113				
Bis(2-chloroethyl) ether	859	110	1,095	0	78.4	19.7	113				
2-Chlorophenol	948	110	1,095	0	86.6	24.7	118				
1,3-Dichlorobenzene	768	82.2	1,095	0	70.1	20.6	99.9				
1,4-Dichlorobenzene	752	82.2	1,095	0	68.6	22.6	101				
1,2-Dichlorobenzene	807	82.2	1,095	0	73.6	26.2	103				
Benzyl alcohol	956	110	1,095	0	87.3	5	169				
2-Methylphenol (o-cresol)	1,000	110	1,095	0	91.7	23.3	122				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192616**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	753	110	1,095	0	68.8	16.9	100				
N-Nitrosodi-n-propylamine	990	110	1,095	0	90.4	25.6	131				
3&4-Methylphenol (m, p-cresol)	963	110	1,095	0	87.9	27.9	118				
Nitrobenzene	957	110	1,095	0	87.3	23	121				
Isophorone	924	110	1,095	0	84.4	26.8	128				
2-Nitrophenol	975	110	1,095	0	89.0	34.6	130				
2,4-Dimethylphenol	956	110	1,095	0	87.3	13.4	129				
Bis(2-chloroethoxy)methane	1,010	82.2	1,095	0	92.6	30.3	119				
2,4-Dichlorophenol	978	110	1,095	0	89.3	27	133				
1,2,4-Trichlorobenzene	974	82.2	1,095	0	88.9	32.1	120				
Naphthalene	936	54.8	1,095	0	85.4	24.7	126				
4-Chloroaniline	643	82.2	1,095	0	58.7	10.9	114				
Hexachlorobutadiene	876	82.2	1,095	0	80.0	32.4	113				
4-Chloro-3-methylphenol	956	219	1,095	0	87.2	28.7	135				
2-Methylnaphthalene	962	54.8	1,095	0	87.9	31.1	125				
1-Methylnaphthalene	944	54.8	1,095	0	86.1	29.6	125				
Hexachlorocyclopentadiene	945	110	1,095	0	86.3	5	117				
2,4,6-Trichlorophenol	906	110	1,095	0	82.7	31	125				
2,4,5-Trichlorophenol	1,040	110	1,095	0	94.7	28.7	130				
2-Chloronaphthalene	1,030	82.2	1,095	0	94.3	37.2	121				
2-Nitroaniline	880	110	1,095	0	80.3	19.5	145				
Acenaphthene	1,000	54.8	1,095	0	91.5	34.2	128				
Dimethylphthalate	1,010	110	1,095	0	92.6	25.5	125				
2,6-Dinitrotoluene	986	110	1,095	0	90.0	41.4	127				
Acenaphthylene	997	54.8	1,095	0	91.0	34.5	121				
2,4-Dinitrophenol	1,490	575	2,191	0	68.2	5	74.3				
Dibenzofuran	1,010	82.2	1,095	0	92.3	30.8	128				
2,4-Dinitrotoluene	977	110	1,095	0	89.2	35.8	132				
4-Nitrophenol	821	548	1,095	0	74.9	5	152				
Fluorene	1,040	54.8	1,095	0	95.4	34.4	127				
4-Chlorophenyl phenyl ether	966	82.2	1,095	0	88.2	37.4	121				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192616**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diethylphthalate	1,000	110	1,095	0	91.4	36	131				
4,6-Dinitro-2-methylphenol	1,070	219	1,095	0	97.6	5	109				
4-Bromophenyl phenyl ether	982	82.2	1,095	0	89.6	36.7	121				
Hexachlorobenzene	986	82.2	1,095	0	90.0	34.4	127				
Pentachlorophenol	950	110	1,095	0	86.7	5	149				
Phenanthrene	1,010	54.8	1,095	0	92.5	30.6	128				
Anthracene	978	54.8	1,095	0	89.3	30.5	124				
Carbazole	1,030	82.2	1,095	0	93.8	28.8	128				
Di-n-butylphthalate	977	110	1,095	0	89.1	36.1	132				
Fluoranthene	1,040	54.8	1,095	0	94.7	30.9	125				
Pyrene	1,040	54.8	1,095	0	94.9	31	125				
Butyl Benzylphthalate	943	110	1,095	0	86.1	35.1	138				
bis(2-Ethylhexyl)adipate	885	110	1,095	0	80.8	36.5	136				
Benz(a)anthracene	969	54.8	1,095	0	88.5	18.4	142				
Chrysene	1,080	54.8	1,095	0	98.8	27.4	134				
bis (2-Ethylhexyl) phthalate	999	110	1,095	0	91.2	38.6	144				
Di-n-octyl phthalate	993	110	1,095	0	90.6	37.1	145				
Benzo(b)fluoranthene	1,130	54.8	1,095	0	103	33.5	134				
Benzo(k)fluoranthene	1,180	54.8	1,095	0	107	14	133				
Benzo(a)pyrene	1,020	54.8	1,095	0	93.0	28.9	142				
Indeno(1,2,3-cd)pyrene	1,020	54.8	1,095	0	93.3	25.6	130				
Dibenz(a,h)anthracene	1,060	54.8	1,095	0	96.8	27.9	126				
Benzo(g,h,i)perylene	1,020	54.8	1,095	0	93.0	23.9	125				
Surr: 2,4,6-Tribromophenol	796		1,095		72.7	5	139				
Surr: 2-Fluorobiphenyl	432		547.7		78.8	5	131				
Surr: Nitrobenzene-d5	393		547.7		71.7	5	123				
Surr: Phenol-d6	780		1,095		71.2	5	129				
Surr: p-Terphenyl	441		547.7		80.5	13.8	140				

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192617**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	889	113	1,126	0	79.0	27	113	936.5	5.19	50	
Bis(2-chloroethyl) ether	715	113	1,126	0	63.5	19.7	113	858.6	18.3	50	
2-Chlorophenol	838	113	1,126	0	74.4	24.7	118	948.4	12.4	50	
1,3-Dichlorobenzene	640	84.4	1,126	0	56.9	20.6	99.9	768.0	18.1	50	
1,4-Dichlorobenzene	644	84.4	1,126	0	57.2	22.6	101	751.6	15.4	50	
1,2-Dichlorobenzene	622	84.4	1,126	0	55.3	26.2	103	806.6	25.8	50	
Benzyl alcohol	904	113	1,126	0	80.3	5	169	956.4	5.66	50	
2-Methylphenol (o-cresol)	938	113	1,126	0	83.3	23.3	122	1,004	6.83	50	
Hexachloroethane	623	113	1,126	0	55.3	16.9	100	753.4	19.0	50	
N-Nitrosodi-n-propylamine	912	113	1,126	0	81.1	25.6	131	989.7	8.13	50	
3&4-Methylphenol (m, p-cresol)	963	113	1,126	0	85.5	27.9	118	962.7	0.0102	50	
Nitrobenzene	817	113	1,126	0	72.6	23	121	956.6	15.7	50	
Isophorone	969	113	1,126	0	86.1	26.8	128	924.4	4.70	50	
2-Nitrophenol	817	113	1,126	0	72.6	34.6	130	974.8	17.6	50	
2,4-Dimethylphenol	901	113	1,126	0	80.1	13.4	129	956.2	5.90	50	
Bis(2-chloroethoxy)methane	907	84.4	1,126	0	80.6	30.3	119	1,015	11.2	50	
2,4-Dichlorophenol	930	113	1,126	0	82.6	27	133	978.4	5.11	50	
1,2,4-Trichlorobenzene	856	84.4	1,126	0	76.1	32.1	120	974.0	12.9	50	
Naphthalene	820	56.3	1,126	0	72.9	24.7	126	935.7	13.1	50	
4-Chloroaniline	637	84.4	1,126	0	56.6	10.9	114	642.6	0.904	50	
Hexachlorobutadiene	658	84.4	1,126	0	58.4	32.4	113	875.9	28.4	50	
4-Chloro-3-methylphenol	917	225	1,126	0	81.4	28.7	135	955.7	4.16	50	
2-Methylnaphthalene	902	56.3	1,126	0	80.1	31.1	125	962.5	6.47	50	
1-Methylnaphthalene	897	56.3	1,126	0	79.6	29.6	125	943.6	5.12	50	
Hexachlorocyclopentadiene	843	113	1,126	0	74.9	5	117	945.2	11.4	50	
2,4,6-Trichlorophenol	883	113	1,126	0	78.5	31	125	906.4	2.58	50	
2,4,5-Trichlorophenol	978	113	1,126	0	86.9	28.7	130	1,037	5.82	50	
2-Chloronaphthalene	971	84.4	1,126	0	86.3	37.2	121	1,033	6.12	50	
2-Nitroaniline	893	113	1,126	0	79.3	19.5	145	880.1	1.40	50	
Acenaphthene	927	56.3	1,126	0	82.3	34.2	128	1,002	7.83	50	
Dimethylphthalate	974	113	1,126	0	86.5	25.5	125	1,014	4.11	50	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192617**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	1,030	113	1,126	0	91.3	41.4	127	986.4	4.14	50	
Acenaphthylene	997	56.3	1,126	0	88.5	34.5	121	996.6	0.00372	50	
2,4-Dinitrophenol	1,570	591	2,251	0	69.5	5	74.3	1,495	4.61	50	
Dibenzofuran	911	84.4	1,126	0	81.0	30.8	128	1,011	10.4	50	
2,4-Dinitrotoluene	985	113	1,126	0	87.5	35.8	132	977.3	0.759	50	
4-Nitrophenol	917	563	1,126	0	81.4	5	152	820.6	11.1	50	
Fluorene	954	56.3	1,126	0	84.7	34.4	127	1,045	9.11	50	
4-Chlorophenyl phenyl ether	915	84.4	1,126	0	81.3	37.4	121	966.3	5.43	50	
Diethylphthalate	959	113	1,126	0	85.2	36	131	1,001	4.24	50	
4,6-Dinitro-2-methylphenol	1,050	225	1,126	0	93.4	5	109	1,069	1.75	50	
4-Bromophenyl phenyl ether	927	84.4	1,126	0	82.4	36.7	121	981.8	5.69	50	
Hexachlorobenzene	935	84.4	1,126	0	83.1	34.4	127	985.9	5.29	50	
Pentachlorophenol	891	113	1,126	0	79.1	5	149	949.6	6.42	50	
Phenanthrene	999	56.3	1,126	0	88.7	30.6	128	1,013	1.41	50	
Anthracene	1,010	56.3	1,126	0	89.3	30.5	124	978.5	2.71	50	
Carbazole	956	84.4	1,126	0	84.9	28.8	128	1,028	7.29	50	
Di-n-butylphthalate	962	113	1,126	0	85.5	36.1	132	976.6	1.49	50	
Fluoranthene	987	56.3	1,126	0	87.7	30.9	125	1,037	4.95	50	
Pyrene	1,000	56.3	1,126	0	89.0	31	125	1,040	3.73	50	
Butyl Benzylphthalate	974	113	1,126	0	86.5	35.1	138	942.9	3.25	50	
bis(2-Ethylhexyl)adipate	915	113	1,126	0	81.3	36.5	136	885.0	3.33	50	
Benz(a)anthracene	1,010	56.3	1,126	0	89.6	18.4	142	969.2	3.92	50	
Chrysene	1,000	56.3	1,126	0	89.3	27.4	134	1,082	7.44	50	
bis (2-Ethylhexyl) phthalate	895	113	1,126	0	79.5	38.6	144	999.3	11.0	50	
Di-n-octyl phthalate	872	113	1,126	0	77.5	37.1	145	992.7	12.9	50	
Benzo(b)fluoranthene	995	56.3	1,126	0	88.4	33.5	134	1,133	13.0	50	
Benzo(k)fluoranthene	936	56.3	1,126	0	83.2	14	133	1,175	22.6	50	
Benzo(a)pyrene	952	56.3	1,126	0	84.6	28.9	142	1,019	6.75	50	
Indeno(1,2,3-cd)pyrene	994	56.3	1,126	0	88.3	25.6	130	1,022	2.82	50	
Dibenz(a,h)anthracene	1,010	56.3	1,126	0	89.3	27.9	126	1,060	5.31	50	
Benzo(g,h,i)perylene	1,070	56.3	1,126	0	95.1	23.9	125	1,019	4.91	50	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192617**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	902		1,126		80.2	5	139		0		
Surr: 2-Fluorobiphenyl	464		562.8		82.4	5	131		0		
Surr: Nitrobenzene-d5	447		562.8		79.4	5	123		0		
Surr: Phenol-d6	875		1,126		77.8	5	129		0		
Surr: p-Terphenyl	467		562.8		83.0	13.8	140		0		

Sample ID: **2005395-007ADUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	106						0		50	
Bis(2-chloroethyl) ether	ND	106						0		50	
2-Chlorophenol	ND	106						0		50	
1,3-Dichlorobenzene	ND	79.8						0		50	
1,4-Dichlorobenzene	ND	79.8						0		50	
1,2-Dichlorobenzene	ND	79.8						0		50	
Benzyl alcohol	ND	106						0		50	
2-Methylphenol (o-cresol)	ND	106						0		50	
Hexachloroethane	ND	106						0		50	
N-Nitrosodi-n-propylamine	ND	106						0		50	
3&4-Methylphenol (m, p-cresol)	ND	106						0		50	
Nitrobenzene	ND	106						0		50	
Isophorone	ND	106						0		50	
2-Nitrophenol	ND	106						0		50	
2,4-Dimethylphenol	ND	106						0		50	
Bis(2-chloroethoxy)methane	ND	79.8						0		50	
2,4-Dichlorophenol	ND	106						0		50	
1,2,4-Trichlorobenzene	ND	79.8						0		50	
Naphthalene	ND	53.2						0		50	
4-Chloroaniline	ND	79.8						0		50	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007ADUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	79.8						0		50	
4-Chloro-3-methylphenol	ND	213						0		50	
2-Methylnaphthalene	ND	53.2						0		50	
1-Methylnaphthalene	ND	53.2						0		50	
Hexachlorocyclopentadiene	ND	106						0		50	
2,4,6-Trichlorophenol	ND	106						0		50	
2,4,5-Trichlorophenol	ND	106						0		50	
2-Chloronaphthalene	ND	79.8						0		50	
2-Nitroaniline	ND	106						0		50	Q
Acenaphthene	ND	53.2						0		50	
Dimethylphthalate	ND	106						0		50	
2,6-Dinitrotoluene	ND	106						0		50	
Acenaphthylene	ND	53.2						0		50	
2,4-Dinitrophenol	ND	559						0		50	
Dibenzofuran	ND	79.8						0		50	
2,4-Dinitrotoluene	ND	106						0		50	
4-Nitrophenol	ND	532						0		50	
Fluorene	ND	53.2						0		50	
4-Chlorophenyl phenyl ether	ND	79.8						0		50	
Diethylphthalate	ND	106						0		50	
4,6-Dinitro-2-methylphenol	ND	213						0		50	
4-Bromophenyl phenyl ether	ND	79.8						0		50	
Hexachlorobenzene	ND	79.8						0		50	
Pentachlorophenol	ND	106						0		50	
Phenanthrene	ND	53.2						0		50	
Anthracene	ND	53.2						0		50	
Carbazole	ND	79.8						0		50	
Di-n-butylphthalate	ND	106						0		50	
Fluoranthene	ND	53.2						0		50	
Pyrene	ND	53.2						0		50	
Butyl Benzylphthalate	ND	106						0		50	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID: **2005395-007ADUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59620**
Client ID: **BATCH** Batch ID: **28538** Analysis Date: **6/5/2020** SeqNo: **1192618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
bis(2-Ethylhexyl)adipate	ND	106						0		50	
Benz(a)anthracene	ND	53.2						0		50	
Chrysene	ND	53.2						0		50	
bis (2-Ethylhexyl) phthalate	ND	106						0		50	
Di-n-octyl phthalate	ND	106						0		50	Q
Benzo(b)fluoranthene	ND	53.2						0		50	
Benzo(k)fluoranthene	ND	53.2						0		50	
Benzo(a)pyrene	ND	53.2						0		50	
Indeno(1,2,3-cd)pyrene	ND	53.2						0		50	
Dibenz(a,h)anthracene	ND	53.2						0		50	
Benzo(g,h,i)perylene	ND	53.2						0		50	
Surr: 2,4,6-Tribromophenol	582		1,064		54.7	5	139		0		
Surr: 2-Fluorobiphenyl	337		531.9		63.4	5	131		0		
Surr: Nitrobenzene-d5	277		531.9		52.1	5	123		0		
Surr: Phenol-d6	648		1,064		60.9	5	129		0		
Surr: p-Terphenyl	354		531.9		66.6	13.8	140		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-28563** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/5/2020** RunNo: **59649**
Client ID: **MBLKS** Batch ID: **28563** Analysis Date: **6/5/2020** SeqNo: **1193278**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.195									
Lead	ND	0.156									

Sample ID: **LCS-28563** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/5/2020** RunNo: **59649**
Client ID: **LCSS** Batch ID: **28563** Analysis Date: **6/5/2020** SeqNo: **1193279**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.8	0.200	40.00	0	99.6	80	120				
Lead	20.2	0.160	20.00	0	101	80	120				

Sample ID: **2006001-019ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59649**
Client ID: **SB-25-1'** Batch ID: **28563** Analysis Date: **6/5/2020** SeqNo: **1193283**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	3.92	0.207						3.067	24.4	20	R
Lead	2.26	0.165						1.823	21.2	20	R

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID: **2006001-019AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59649**
Client ID: **SB-25-1'** Batch ID: **28563** Analysis Date: **6/5/2020** SeqNo: **1193285**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	41.6	0.197	39.48	3.067	97.6	75	125				
Lead	18.1	0.158	19.74	1.823	82.6	75	125				

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2006001-019AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59649**
Client ID: **SB-25-1'** Batch ID: **28563** Analysis Date: **6/5/2020** SeqNo: **1193286**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	42.7	0.208	41.69	3.067	95.1	75	125	41.60	2.64	20	
Lead	18.6	0.167	20.84	1.823	80.3	75	125	18.13	2.40	20	

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-28562** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **MBLKS** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192975**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.194									
Barium	ND	0.388									
Cadmium	ND	0.155									
Chromium	ND	0.0775									
Lead	ND	0.155									
Selenium	ND	0.388									
Silver	ND	0.0775									

Sample ID: **LCS-28562** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **LCSS** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192976**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	36.2	0.188	37.59	0	96.4	80	120				
Barium	40.3	0.376	37.59	0	107	80	120				
Cadmium	1.75	0.150	1.880	0	93.0	80	120				
Chromium	38.6	0.0752	37.59	0	103	80	120				
Selenium	3.56	0.376	3.759	0	94.7	80	120				
Silver	7.65	0.0752	9.398	0	81.4	80	120				

Sample ID: **2005160-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **BATCH** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192978**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	6.34	0.229						6.395	0.801	20	
Barium	118	0.459						110.5	6.43	20	
Cadmium	0.371	0.183						0.2849	26.4	20	
Chromium	29.4	0.0917						26.19	11.7	20	
Lead	29.6	0.183						36.67	21.4	20	R
Selenium	1.06	0.459						1.017	3.97	20	
Silver	0.166	0.0917						0.4528	92.6	20	RB

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2005160-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **BATCH** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192978**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.
B - Indicates a detection in the ICB or CCB.

Sample ID: **2005160-002AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **BATCH** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192980**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	51.3	0.231	46.24	6.395	97.0	75	125				
Barium	164	0.462	46.24	110.5	116	75	125				
Cadmium	2.66	0.185	2.312	0.2849	103	75	125				
Chromium	77.1	0.0925	46.24	26.19	110	75	125				
Lead	45.8	0.185	23.12	36.67	39.6	75	125				S
Selenium	5.58	0.462	4.624	1.017	98.6	75	125				
Silver	8.53	0.0925	11.56	0.4528	69.9	75	125				S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID: **2005160-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **BATCH** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192981**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	54.4	0.224	44.81	6.395	107	75	125	51.26	5.91	20	
Barium	162	0.448	44.81	110.5	116	75	125	164.0	0.916	20	
Cadmium	2.73	0.179	2.241	0.2849	109	75	125	2.657	2.53	20	
Chromium	81.7	0.0896	44.81	26.19	124	75	125	77.09	5.83	20	
Lead	40.3	0.179	22.41	36.67	16.3	75	125	45.83	12.8	20	S
Selenium	5.50	0.448	4.481	1.017	100	75	125	5.578	1.45	20	
Silver	9.48	0.0896	11.20	0.4528	80.6	75	125	8.530	10.5	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2005160-002APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **BATCH** Batch ID: **28562** Analysis Date: **6/5/2020** SeqNo: **1192982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	56.1	0.181	22.6	36.7	86.2	75	125				

Sample ID: **LCS-28562** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/5/2020** RunNo: **59636**
Client ID: **LCSS** Batch ID: **28562** Analysis Date: **6/8/2020** SeqNo: **1193441**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	19.3	0.150	18.80	0	103	80	120				

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28544** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **LCSS** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193512**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.93	0.0200	1.000	0	193	13.4	185				S
Chloromethane	1.03	0.0500	1.000	0	103	38.5	158				
Vinyl chloride	1.14	0.0250	1.000	0	114	53.6	138				
Bromomethane	0.696	0.0500	1.000	0	69.6	56.6	151				
Trichlorofluoromethane (CFC-11)	1.18	0.0200	1.000	0	118	64.2	137				
Chloroethane	0.582	0.0500	1.000	0	58.2	54.1	134				
1,1-Dichloroethene	1.12	0.0200	1.000	0	112	66	133				
Methylene chloride	1.02	0.0200	1.000	0	102	74.3	117				
trans-1,2-Dichloroethene	1.06	0.0200	1.000	0	106	79.6	115				
Methyl tert-butyl ether (MTBE)	0.995	0.0500	1.000	0	99.5	73.1	119				
1,1-Dichloroethane	0.991	0.0200	1.000	0	99.1	75.8	117				
cis-1,2-Dichloroethene	1.03	0.0200	1.000	0	103	77.8	115				
Chloroform	0.982	0.0200	1.000	0	98.2	78.2	115				
1,1,1-Trichloroethane (TCA)	1.02	0.0250	1.000	0	102	76	121				
1,1-Dichloropropene	1.01	0.0200	1.000	0	101	77.2	120				
Carbon tetrachloride	1.02	0.0500	1.000	0	102	74	122				
1,2-Dichloroethane (EDC)	0.942	0.0200	1.000	0	94.2	74.7	115				
Benzene	0.972	0.0200	1.000	0	97.2	80.5	114				
Trichloroethene (TCE)	1.01	0.0200	1.000	0	101	79.6	118				
1,2-Dichloropropane	0.907	0.0200	1.000	0	90.7	78.2	115				
Bromodichloromethane	0.909	0.0200	1.000	0	90.9	76.6	116				
Dibromomethane	0.928	0.0200	1.000	0	92.8	77.9	115				
cis-1,3-Dichloropropene	0.986	0.0200	1.000	0	98.6	74.6	119				
Toluene	1.00	0.0200	1.000	0	100	79.6	116				
trans-1,3-Dichloropropylene	0.951	0.0200	1.000	0	95.1	70.6	124				
1,1,2-Trichloroethane	0.904	0.0200	1.000	0	90.4	75.6	116				
1,3-Dichloropropane	0.882	0.0250	1.000	0	88.2	75.3	116				
Tetrachloroethene (PCE)	1.09	0.0250	1.000	0	109	78.8	119				
Dibromochloromethane	0.890	0.0250	1.000	0	89.0	72.5	123				
1,2-Dibromoethane (EDB)	0.901	0.00500	1.000	0	90.1	75	116				
Chlorobenzene	0.990	0.0250	1.000	0	99.0	83.4	113				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28544** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **LCSS** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193512**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.966	0.0250	1.000	0	96.6	80.8	117				
Ethylbenzene	0.971	0.0250	1.000	0	97.1	81.6	116				
m,p-Xylene	1.98	0.0500	2.000	0	99.0	80.9	117				
o-Xylene	0.989	0.0250	1.000	0	98.9	80.8	114				
Styrene	0.981	0.0250	1.000	0	98.1	80.4	114				
Isopropylbenzene	1.00	0.0250	1.000	0	100	79.3	118				
Bromoform	0.890	0.0500	1.000	0	89.0	71	129				
1,1,2,2-Tetrachloroethane	0.840	0.0200	1.000	0	84.0	71.3	119				
n-Propylbenzene	0.994	0.0250	1.000	0	99.4	80.4	120				
Bromobenzene	1.02	0.0200	1.000	0	102	78.6	115				
1,3,5-Trimethylbenzene	1.03	0.0250	1.000	0	103	80	116				
2-Chlorotoluene	0.981	0.0250	1.000	0	98.1	78.6	116				
4-Chlorotoluene	0.994	0.0250	1.000	0	99.4	78.8	117				
tert-Butylbenzene	1.09	0.0250	1.000	0	109	77.8	118				
1,2,3-Trichloropropane	0.894	0.0250	1.000	0	89.4	67.5	129				
1,2,4-Trichlorobenzene	1.03	0.0250	1.000	0	103	79.6	124				
sec-Butylbenzene	1.09	0.0500	1.000	0	109	78.6	119				
4-Isopropyltoluene	1.09	0.0500	1.000	0	109	78	119				
1,3-Dichlorobenzene	1.07	0.0200	1.000	0	107	87.1	117				
1,4-Dichlorobenzene	1.02	0.0200	1.000	0	102	87.6	115				
n-Butylbenzene	1.02	0.0250	1.000	0	102	81.9	122				
1,2-Dichlorobenzene	0.979	0.0200	1.000	0	97.9	87.9	115				
1,2-Dibromo-3-chloropropane	0.777	0.500	1.000	0	77.7	65.6	132				
1,2,4-Trimethylbenzene	1.09	0.0200	1.000	0	109	79.3	117				
Hexachloro-1,3-butadiene	1.18	0.0500	1.000	0	118	75	130				
Naphthalene	0.877	0.0500	1.000	0	87.7	71.7	132				
1,2,3-Trichlorobenzene	0.987	0.0200	1.000	0	98.7	74.3	128				
Surr: Dibromofluoromethane	1.29		1.250		103	83.3	111				
Surr: Toluene-d8	1.27		1.250		102	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.27		1.250		102	85.1	111				

Original

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28544** SampType: **LCS** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **LCSS** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193512**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **MB-28544** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **MBLKS** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193513**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									Q
Vinyl chloride	ND	0.0250									
Bromomethane	ND	0.0500									Q
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									Q
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0250									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0500									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28544** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **MBLKS** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193513**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0250									
Dibromochloromethane	ND	0.0250									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0250									
1,1,1,2-Tetrachloroethane	ND	0.0250									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0250									
Isopropylbenzene	ND	0.0250									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0250									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0250									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0250									
tert-Butylbenzene	ND	0.0250									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0250									
sec-Butylbenzene	ND	0.0500									
4-Isopropyltoluene	ND	0.0500									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0250									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									Q
1,2,4-Trimethylbenzene	ND	0.0200									

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28544** SampType: **MBLK** Units: **mg/Kg** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **MBLKS** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193513**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	ND	0.0500									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.13		1.250		90.5	83.3	111				
Surr: Toluene-d8	1.15		1.250		92.2	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.3	85.1	111				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2005085-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0306						0		30	H
Chloromethane	ND	0.0765						0		30	QH
Vinyl chloride	ND	0.0382						0		30	H
Bromomethane	ND	0.0765						0		30	QH
Trichlorofluoromethane (CFC-11)	ND	0.0306						0		30	H
Chloroethane	ND	0.0765						0		30	QH
1,1-Dichloroethene	ND	0.0306						0		30	H
Methylene chloride	ND	0.0306						0		30	H
trans-1,2-Dichloroethene	ND	0.0306						0		30	H
Methyl tert-butyl ether (MTBE)	ND	0.0765						0		30	H
1,1-Dichloroethane	ND	0.0306						0		30	H
cis-1,2-Dichloroethene	ND	0.0306						0		30	H
Chloroform	ND	0.0306						0		30	H
1,1,1-Trichloroethane (TCA)	ND	0.0382						0		30	H
1,1-Dichloropropene	ND	0.0306						0		30	H
Carbon tetrachloride	ND	0.0765						0		30	H
1,2-Dichloroethane (EDC)	ND	0.0306						0		30	H
Benzene	ND	0.0306						0		30	H

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.0306						0		30	H
1,2-Dichloropropane	ND	0.0306						0		30	H
Bromodichloromethane	ND	0.0306						0		30	H
Dibromomethane	ND	0.0306						0		30	H
cis-1,3-Dichloropropene	ND	0.0306						0		30	H
Toluene	ND	0.0306						0		30	H
trans-1,3-Dichloropropylene	ND	0.0306						0		30	H
1,1,2-Trichloroethane	ND	0.0306						0		30	H
1,3-Dichloropropane	ND	0.0382						0		30	H
Tetrachloroethene (PCE)	ND	0.0382						0		30	H
Dibromochloromethane	ND	0.0382						0		30	H
1,2-Dibromoethane (EDB)	ND	0.00765						0		30	H
Chlorobenzene	ND	0.0382						0		30	H
1,1,1,2-Tetrachloroethane	ND	0.0382						0		30	H
Ethylbenzene	ND	0.0382						0		30	H
m,p-Xylene	ND	0.0765						0		30	H
o-Xylene	ND	0.0382						0		30	H
Styrene	ND	0.0382						0		30	H
Isopropylbenzene	ND	0.0382						0		30	H
Bromoform	ND	0.0765						0		30	H
1,1,2,2-Tetrachloroethane	ND	0.0306						0		30	H
n-Propylbenzene	ND	0.0382						0		30	H
Bromobenzene	ND	0.0306						0		30	H
1,3,5-Trimethylbenzene	ND	0.0382						0		30	H
2-Chlorotoluene	ND	0.0382						0		30	H
4-Chlorotoluene	ND	0.0382						0		30	H
tert-Butylbenzene	ND	0.0382						0		30	H
1,2,3-Trichloropropane	ND	0.0382						0		30	H
1,2,4-Trichlorobenzene	ND	0.0382						0		30	H
sec-Butylbenzene	ND	0.0765						0		30	H
4-Isopropyltoluene	ND	0.0765						0		30	H

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005085-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/5/2020** SeqNo: **1193500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.0306						0		30	H
1,4-Dichlorobenzene	ND	0.0306						0		30	H
n-Butylbenzene	ND	0.0382						0		30	H
1,2-Dichlorobenzene	0.0882	0.0306						0.08726	1.02	30	H
1,2-Dibromo-3-chloropropane	ND	0.765						0		30	QH
1,2,4-Trimethylbenzene	ND	0.0306						0		30	H
Hexachloro-1,3-butadiene	ND	0.0765						0		30	H
Naphthalene	ND	0.0765						0		30	H
1,2,3-Trichlorobenzene	ND	0.0306						0		30	H
Surr: Dibromofluoromethane	1.75		1.912		91.3	83.3	111		0		H
Surr: Toluene-d8	1.78		1.912		93.1	87.9	111		0		H
Surr: 1-Bromo-4-fluorobenzene	1.87		1.912		97.8	85.1	111		0		H

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2005354-013BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193507**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0264						0		30	
Chloromethane	ND	0.0660						0		30	Q
Vinyl chloride	ND	0.0330						0		30	
Bromomethane	ND	0.0660						0		30	Q
Trichlorofluoromethane (CFC-11)	ND	0.0264						0		30	
Chloroethane	ND	0.0660						0		30	Q
1,1-Dichloroethene	ND	0.0264						0		30	
Methylene chloride	ND	0.0264						0		30	
trans-1,2-Dichloroethene	ND	0.0264						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0660						0		30	
1,1-Dichloroethane	ND	0.0264						0		30	
cis-1,2-Dichloroethene	ND	0.0264						0		30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005354-013BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193507**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.0264						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0330						0		30	
1,1-Dichloropropene	ND	0.0264						0		30	
Carbon tetrachloride	ND	0.0660						0		30	
1,2-Dichloroethane (EDC)	ND	0.0264						0		30	
Benzene	ND	0.0264						0		30	
Trichloroethene (TCE)	ND	0.0264						0		30	
1,2-Dichloropropane	ND	0.0264						0		30	
Bromodichloromethane	ND	0.0264						0		30	
Dibromomethane	ND	0.0264						0		30	
cis-1,3-Dichloropropene	ND	0.0264						0		30	
Toluene	ND	0.0264						0		30	
trans-1,3-Dichloropropylene	ND	0.0264						0		30	
1,1,2-Trichloroethane	ND	0.0264						0		30	
1,3-Dichloropropane	ND	0.0330						0		30	
Tetrachloroethene (PCE)	ND	0.0330						0		30	
Dibromochloromethane	ND	0.0330						0		30	
1,2-Dibromoethane (EDB)	ND	0.00660						0		30	
Chlorobenzene	ND	0.0330						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0330						0		30	
Ethylbenzene	ND	0.0330						0		30	
m,p-Xylene	ND	0.0660						0		30	
o-Xylene	ND	0.0330						0		30	
Styrene	ND	0.0330						0		30	
Isopropylbenzene	ND	0.0330						0		30	
Bromoform	ND	0.0660						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0264						0		30	
n-Propylbenzene	ND	0.0330						0		30	
Bromobenzene	ND	0.0264						0		30	
1,3,5-Trimethylbenzene	ND	0.0330						0		30	
2-Chlorotoluene	ND	0.0330						0		30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2005354-013BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193507**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	0.0330						0		30	
tert-Butylbenzene	ND	0.0330						0		30	
1,2,3-Trichloropropane	ND	0.0330						0		30	
1,2,4-Trichlorobenzene	ND	0.0330						0		30	
sec-Butylbenzene	ND	0.0660						0		30	
4-Isopropyltoluene	ND	0.0660						0		30	
1,3-Dichlorobenzene	ND	0.0264						0		30	
1,4-Dichlorobenzene	ND	0.0264						0		30	
n-Butylbenzene	ND	0.0330						0		30	
1,2-Dichlorobenzene	ND	0.0264						0		30	
1,2-Dibromo-3-chloropropane	ND	0.660						0		30	Q
1,2,4-Trimethylbenzene	ND	0.0264						0		30	
Hexachloro-1,3-butadiene	ND	0.0660						0		30	
Naphthalene	ND	0.0660						0		30	
1,2,3-Trichlorobenzene	ND	0.0264						0		30	
Surr: Dibromofluoromethane	1.50		1.649		90.7	83.3	111		0		
Surr: Toluene-d8	1.51		1.649		91.8	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.60		1.649		97.2	85.1	111		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2006001-002CMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **SB-16-1'** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193509**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.40	0.0217	1.083	0	129	5.73	173				
Chloromethane	0.674	0.0542	1.083	0	62.2	41.3	150				
Vinyl chloride	0.962	0.0271	1.083	0	88.9	49.5	138				
Bromomethane	0.594	0.0542	1.083	0	54.8	48.5	158				
Trichlorofluoromethane (CFC-11)	1.05	0.0217	1.083	0	96.6	40.6	159				
Chloroethane	0.545	0.0542	1.083	0	50.3	30.4	166				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006001-002CMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **SB-16-1'** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193509**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.993	0.0217	1.083	0	91.7	55	138				
Methylene chloride	0.964	0.0217	1.083	0	89.0	70.3	123				
trans-1,2-Dichloroethene	0.990	0.0217	1.083	0	91.4	73.1	121				
Methyl tert-butyl ether (MTBE)	1.05	0.0542	1.083	0	96.8	69.6	122				
1,1-Dichloroethane	0.933	0.0217	1.083	0	86.1	70.8	122				
cis-1,2-Dichloroethene	0.952	0.0217	1.083	0	87.9	71.8	122				
Chloroform	0.930	0.0217	1.083	0	85.9	72.9	122				
1,1,1-Trichloroethane (TCA)	0.934	0.0271	1.083	0	86.3	69.6	125				
1,1-Dichloropropene	0.902	0.0217	1.083	0	83.2	69.3	126				
Carbon tetrachloride	0.921	0.0542	1.083	0	85.0	65	127				
1,2-Dichloroethane (EDC)	0.926	0.0217	1.083	0	85.5	70.1	121				
Benzene	0.909	0.0217	1.083	0	83.9	76.7	119				
Trichloroethene (TCE)	0.948	0.0217	1.083	0	87.5	70.1	129				
1,2-Dichloropropane	0.871	0.0217	1.083	0	80.4	74.6	120				
Bromodichloromethane	0.861	0.0217	1.083	0	79.5	70.9	122				
Dibromomethane	0.913	0.0217	1.083	0	84.3	75.6	120				
cis-1,3-Dichloropropene	0.912	0.0217	1.083	0	84.2	68.3	120				
Toluene	0.942	0.0217	1.083	0	87.0	74.7	119				
trans-1,3-Dichloropropylene	0.900	0.0217	1.083	0	83.1	62.2	127				
1,1,2-Trichloroethane	0.923	0.0217	1.083	0	85.2	72.9	120				
1,3-Dichloropropane	0.891	0.0271	1.083	0	82.3	71.9	119				
Tetrachloroethene (PCE)	0.995	0.0271	1.083	0	91.9	71.1	122				
Dibromochloromethane	0.873	0.0271	1.083	0	80.6	65.9	126				
1,2-Dibromoethane (EDB)	0.914	0.00542	1.083	0	84.4	72	119				
Chlorobenzene	1.03	0.0271	1.083	0	94.8	81.4	116				
1,1,1,2-Tetrachloroethane	1.01	0.0271	1.083	0	93.0	72.9	125				
Ethylbenzene	0.985	0.0271	1.083	0	91.0	77.1	120				
m,p-Xylene	2.02	0.0542	2.166	0	93.3	76.3	120				
o-Xylene	1.02	0.0271	1.083	0	94.1	76.6	119				
Styrene	1.02	0.0271	1.083	0	94.2	75.1	121				
Isopropylbenzene	1.00	0.0271	1.083	0	92.6	74.8	122				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006001-002CMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **SB-16-1'** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193509**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.969	0.0542	1.083	0	89.4	63.4	133				
1,1,2,2-Tetrachloroethane	0.932	0.0217	1.083	0	86.0	61	128				
n-Propylbenzene	1.02	0.0271	1.083	0	93.7	73	128				
Bromobenzene	1.06	0.0217	1.083	0	98.2	77	120				
1,3,5-Trimethylbenzene	1.08	0.0271	1.083	0	100	72.1	126				
2-Chlorotoluene	1.07	0.0271	1.083	0	99.1	71.4	126				
4-Chlorotoluene	1.06	0.0271	1.083	0	97.9	73.6	124				
tert-Butylbenzene	1.12	0.0271	1.083	0	103	70.7	126				
1,2,3-Trichloropropane	0.967	0.0271	1.083	0	89.3	65.7	132				
1,2,4-Trichlorobenzene	1.05	0.0271	1.083	0	96.8	70.5	130				
sec-Butylbenzene	1.08	0.0542	1.083	0	99.5	68.8	129				
4-Isopropyltoluene	1.05	0.0542	1.083	0	96.6	69.2	128				
1,3-Dichlorobenzene	1.07	0.0217	1.083	0	98.9	83.8	121				
1,4-Dichlorobenzene	1.05	0.0217	1.083	0	97.1	85.7	117				
n-Butylbenzene	0.984	0.0271	1.083	0	90.8	67.4	133				
1,2-Dichlorobenzene	1.03	0.0217	1.083	0	95.4	81.8	120				
1,2-Dibromo-3-chloropropane	0.922	0.542	1.083	0	85.1	56.9	139				
1,2,4-Trimethylbenzene	1.12	0.0217	1.083	0	104	70.9	127				
Hexachloro-1,3-butadiene	1.17	0.0542	1.083	0	108	61.1	140				
Naphthalene	0.977	0.0542	1.083	0	90.2	63.3	143				
1,2,3-Trichlorobenzene	1.05	0.0217	1.083	0	96.6	67.8	132				
Surr: Dibromofluoromethane	1.27		1.354		93.8	83.3	111				
Surr: Toluene-d8	1.27		1.354		94.0	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.38		1.354		102	85.1	111				

Sample ID: **2006001-002CMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **SB-16-1'** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.28	0.0217	1.083	0	119	5.73	173	1.400	8.64	30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006001-002CMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **SB-16-1'** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	0.747	0.0542	1.083	0	69.0	41.3	150	0.6736	10.4	30	
Vinyl chloride	0.910	0.0271	1.083	0	84.1	49.5	138	0.9624	5.55	30	
Bromomethane	0.549	0.0542	1.083	0	50.7	48.5	158	0.5938	7.86	30	
Trichlorofluoromethane (CFC-11)	0.962	0.0217	1.083	0	88.8	40.6	159	1.047	8.48	30	
Chloroethane	0.506	0.0542	1.083	0	46.7	30.4	166	0.5446	7.43	30	
1,1-Dichloroethene	0.878	0.0217	1.083	0	81.0	55	138	0.9931	12.3	30	
Methylene chloride	0.935	0.0217	1.083	0	86.3	70.3	123	0.9638	3.07	30	
trans-1,2-Dichloroethene	0.970	0.0217	1.083	0	89.5	73.1	121	0.9897	2.03	30	
Methyl tert-butyl ether (MTBE)	1.08	0.0542	1.083	0	99.3	69.6	122	1.048	2.61	30	
1,1-Dichloroethane	0.885	0.0217	1.083	0	81.7	70.8	122	0.9331	5.24	30	
cis-1,2-Dichloroethene	0.933	0.0217	1.083	0	86.1	71.8	122	0.9518	2.01	30	
Chloroform	0.898	0.0217	1.083	0	83.0	72.9	122	0.9301	3.46	30	
1,1,1-Trichloroethane (TCA)	0.901	0.0271	1.083	0	83.2	69.6	125	0.9343	3.64	30	
1,1-Dichloropropene	0.860	0.0217	1.083	0	79.4	69.3	126	0.9016	4.77	30	
Carbon tetrachloride	0.879	0.0542	1.083	0	81.2	65	127	0.9210	4.66	30	
1,2-Dichloroethane (EDC)	0.922	0.0217	1.083	0	85.2	70.1	121	0.9255	0.345	30	
Benzene	0.891	0.0217	1.083	0	82.3	76.7	119	0.9092	1.97	30	
Trichloroethene (TCE)	0.912	0.0217	1.083	0	84.2	70.1	129	0.9477	3.82	30	
1,2-Dichloropropane	0.857	0.0217	1.083	0	79.1	74.6	120	0.8711	1.63	30	
Bromodichloromethane	0.856	0.0217	1.083	0	79.0	70.9	122	0.8614	0.648	30	
Dibromomethane	0.898	0.0217	1.083	0	82.9	75.6	120	0.9132	1.69	30	
cis-1,3-Dichloropropene	0.896	0.0217	1.083	0	82.7	68.3	120	0.9122	1.82	30	
Toluene	0.917	0.0217	1.083	0	84.7	74.7	119	0.9419	2.65	30	
trans-1,3-Dichloropropylene	0.897	0.0217	1.083	0	82.8	62.2	127	0.9002	0.373	30	
1,1,2-Trichloroethane	0.918	0.0217	1.083	0	84.8	72.9	120	0.9230	0.544	30	
1,3-Dichloropropane	0.872	0.0271	1.083	0	80.5	71.9	119	0.8911	2.21	30	
Tetrachloroethene (PCE)	0.946	0.0271	1.083	0	87.4	71.1	122	0.9951	5.02	30	
Dibromochloromethane	0.868	0.0271	1.083	0	80.1	65.9	126	0.8726	0.527	30	
1,2-Dibromoethane (EDB)	0.896	0.00542	1.083	0	82.7	72	119	0.9137	1.95	30	
Chlorobenzene	1.01	0.0271	1.083	0	92.9	81.4	116	1.027	2.00	30	
1,1,1,2-Tetrachloroethane	0.993	0.0271	1.083	0	91.6	72.9	125	1.007	1.42	30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006001-002CMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **SB-16-1'** Batch ID: **28544** Analysis Date: **6/6/2020** SeqNo: **1193510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	0.955	0.0271	1.083	0	88.2	77.1	120	0.9852	3.12	30	
m,p-Xylene	1.98	0.0542	2.166	0	91.2	76.3	120	2.022	2.26	30	
o-Xylene	0.992	0.0271	1.083	0	91.6	76.6	119	1.019	2.70	30	
Styrene	1.01	0.0271	1.083	0	93.5	75.1	121	1.020	0.735	30	
Isopropylbenzene	0.972	0.0271	1.083	0	89.7	74.8	122	1.003	3.21	30	
Bromoform	0.959	0.0542	1.083	0	88.6	63.4	133	0.9687	0.974	30	
1,1,2,2-Tetrachloroethane	0.918	0.0217	1.083	0	84.7	61	128	0.9318	1.54	30	
n-Propylbenzene	0.981	0.0271	1.083	0	90.5	73	128	1.015	3.47	30	
Bromobenzene	1.04	0.0217	1.083	0	96.2	77	120	1.064	2.13	30	
1,3,5-Trimethylbenzene	1.06	0.0271	1.083	0	97.6	72.1	126	1.084	2.53	30	
2-Chlorotoluene	1.04	0.0271	1.083	0	96.3	71.4	126	1.073	2.85	30	
4-Chlorotoluene	1.04	0.0271	1.083	0	96.4	73.6	124	1.061	1.56	30	
tert-Butylbenzene	1.07	0.0271	1.083	0	99.1	70.7	126	1.116	3.82	30	
1,2,3-Trichloropropane	0.955	0.0271	1.083	0	88.2	65.7	132	0.9670	1.20	30	
1,2,4-Trichlorobenzene	1.07	0.0271	1.083	0	99.2	70.5	130	1.049	2.44	30	
sec-Butylbenzene	1.04	0.0542	1.083	0	96.0	68.8	129	1.078	3.62	30	
4-Isopropyltoluene	1.03	0.0542	1.083	0	95.2	69.2	128	1.047	1.52	30	
1,3-Dichlorobenzene	1.08	0.0217	1.083	0	99.8	83.8	121	1.071	0.936	30	
1,4-Dichlorobenzene	1.05	0.0217	1.083	0	97.2	85.7	117	1.051	0.141	30	
n-Butylbenzene	0.966	0.0271	1.083	0	89.2	67.4	133	0.9837	1.82	30	
1,2-Dichlorobenzene	1.02	0.0217	1.083	0	94.6	81.8	120	1.033	0.767	30	
1,2-Dibromo-3-chloropropane	0.914	0.542	1.083	0	84.4	56.9	139	0.9220	0.816	30	
1,2,4-Trimethylbenzene	1.11	0.0217	1.083	0	102	70.9	127	1.124	1.62	30	
Hexachloro-1,3-butadiene	1.17	0.0542	1.083	0	108	61.1	140	1.174	0.705	30	
Naphthalene	1.03	0.0542	1.083	0	95.2	63.3	143	0.9774	5.39	30	
1,2,3-Trichlorobenzene	1.08	0.0217	1.083	0	100	67.8	132	1.046	3.56	30	
Surr: Dibromofluoromethane	1.27		1.354		94.1	83.3	111		0		
Surr: Toluene-d8	1.26		1.354		93.0	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.37		1.354		101	85.1	111		0		

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006006-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/8/2020** SeqNo: **1193886**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0250						0		30	
Chloromethane	ND	0.0626						0		30	Q
Vinyl chloride	ND	0.0313						0		30	
Bromomethane	ND	0.0626						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0250						0		30	
Chloroethane	ND	0.0626						0		30	
1,1-Dichloroethene	ND	0.0250						0		30	
Methylene chloride	ND	0.0250						0		30	
trans-1,2-Dichloroethene	ND	0.0250						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0626						0		30	
1,1-Dichloroethane	ND	0.0250						0		30	
cis-1,2-Dichloroethene	ND	0.0250						0		30	
Chloroform	ND	0.0250						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0313						0		30	
1,1-Dichloropropene	ND	0.0250						0		30	
Carbon tetrachloride	ND	0.0626						0		30	
1,2-Dichloroethane (EDC)	ND	0.0250						0		30	
Benzene	ND	0.0250						0		30	
Trichloroethene (TCE)	ND	0.0250						0		30	
1,2-Dichloropropane	ND	0.0250						0		30	
Bromodichloromethane	ND	0.0250						0		30	
Dibromomethane	ND	0.0250						0		30	
cis-1,3-Dichloropropene	ND	0.0250						0		30	
Toluene	ND	0.0250						0		30	
trans-1,3-Dichloropropylene	ND	0.0250						0		30	
1,1,2-Trichloroethane	ND	0.0250						0		30	
1,3-Dichloropropane	ND	0.0313						0		30	
Tetrachloroethene (PCE)	ND	0.0313						0		30	
Dibromochloromethane	ND	0.0313						0		30	
1,2-Dibromoethane (EDB)	ND	0.00626						0		30	
Chlorobenzene	ND	0.0313						0		30	

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006006-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/8/2020** SeqNo: **1193886**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.0313						0		30	
Ethylbenzene	ND	0.0313						0		30	
m,p-Xylene	ND	0.0626						0		30	
o-Xylene	ND	0.0313						0		30	
Styrene	ND	0.0313						0		30	
Isopropylbenzene	ND	0.0313						0		30	
Bromoform	ND	0.0626						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0250						0		30	
n-Propylbenzene	ND	0.0313						0		30	
Bromobenzene	ND	0.0250						0		30	
1,3,5-Trimethylbenzene	ND	0.0313						0		30	
2-Chlorotoluene	ND	0.0313						0		30	
4-Chlorotoluene	ND	0.0313						0		30	
tert-Butylbenzene	ND	0.0313						0		30	
1,2,3-Trichloropropane	ND	0.0313						0		30	
1,2,4-Trichlorobenzene	ND	0.0313						0		30	
sec-Butylbenzene	ND	0.0626						0		30	
4-Isopropyltoluene	ND	0.0626						0		30	
1,3-Dichlorobenzene	ND	0.0250						0		30	
1,4-Dichlorobenzene	ND	0.0250						0		30	
n-Butylbenzene	ND	0.0313						0		30	
1,2-Dichlorobenzene	ND	0.0250						0		30	
1,2-Dibromo-3-chloropropane	ND	0.626						0		30	
1,2,4-Trimethylbenzene	ND	0.0250						0		30	
Hexachloro-1,3-butadiene	ND	0.0626						0		30	
Naphthalene	ND	0.0626						0		30	
1,2,3-Trichlorobenzene	ND	0.0250						0		30	
Surr: Dibromofluoromethane	1.47		1.565		94.1	83.3	111		0		
Surr: Toluene-d8	1.48		1.565		94.6	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.55		1.565		99.0	85.1	111		0		

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006006-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **6/4/2020** RunNo: **59665**
Client ID: **BATCH** Batch ID: **28544** Analysis Date: **6/8/2020** SeqNo: **1193886**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Original

Fremont Analytical

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **MB-28601** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **MBLKS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196966**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	ND	35.0									
2,4-D	ND	30.0									
2,4-DP	ND	25.0									
2,4,5-TP (Silvex)	ND	20.0									
2,4,5-T	ND	50.0									
Dinoseb	ND	30.0									
Dalapon	ND	200									
2,4-DB	ND	25.0									
MCPP	ND	4,400									
MCPA	ND	2,800									
Picloram	ND	50.0									Q
Bentazon	ND	35.0									
Chloramben	ND	20.0									
Acifluorfen	ND	80.0									
3,5-Dichlorobenzoic acid	ND	40.0									
4-Nitrophenol	ND	30.0									
Dacthal (DCPA)	ND	30.0									
Surr: 2,4-Dichlorophenylacetic acid	1,500		1,000		150	15.3	163				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **LCS-28601** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **LCSS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196967**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	185	35.0	200.0	0	92.7	21.2	167				
2,4-D	204	30.0	200.0	0	102	32	176				
2,4-DP	191	25.0	200.0	0	95.4	25.8	171				
2,4,5-TP (Silvex)	197	20.0	200.0	0	98.7	23.6	164				
2,4,5-T	200	50.0	200.0	0	99.8	25	166				
Dinoseb	27.9	30.0	200.0	0	13.9	5	168				

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **LCS-28601** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **LCSS** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196967**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dalapon	866	200	1,000	0	86.6	29.2	195				
2,4-DB	189	25.0	200.0	0	94.3	8.11	184				
MCPP	977	4,400	1,000	0	97.7	17.3	191				
MCPA	973	2,800	1,000	0	97.3	13.6	192				
Picloram	166	50.0	200.0	0	82.8	5	175				
Bentazon	198	35.0	200.0	0	99.2	21.5	170				
Chloramben	133	20.0	200.0	0	66.3	5	114				
Acifluorfen	94.3	80.0	200.0	0	47.1	5	168				
3,5-Dichlorobenzoic acid	190	40.0	200.0	0	94.9	26.2	174				
4-Nitrophenol	145	30.0	200.0	0	72.6	5.02	160				
Dacthal (DCPA)	211	30.0	200.0	0	105	18	168				
Surr: 2,4-Dichlorophenylacetic acid	1,020		1,000		102	15.3	163				

Sample ID: **2006001-018BMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **SB-25-0.5'** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	158	35.7	204.0	0	77.4	5	136				
2,4-D	177	30.6	204.0	0	86.8	5	151				
2,4-DP	174	25.5	204.0	0	85.2	5	149				
2,4,5-TP (Silvex)	186	20.4	204.0	0	91.4	5.43	140				
2,4,5-T	173	51.0	204.0	0	84.9	6.68	133				
Dinoseb	87.8	30.6	204.0	0	43.0	5	141				
Dalapon	766	204	1,020	0	75.1	5	179				
2,4-DB	215	25.5	204.0	0	106	5.57	160				
MCPP	893	4,490	1,020	0	87.5	5	174				
MCPA	865	2,860	1,020	0	84.8	5	154				
Picloram	109	51.0	204.0	0	53.6	5	139				
Bentazon	201	35.7	204.0	0	98.3	5.31	146				
Chloramben	139	20.4	204.0	0	68.1	5	134				

Original

Fremont Analytical

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Herbicides by EPA Method 8151A (Mod)

Sample ID: **2006001-018BMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **SB-25-0.5'** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196982**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acifluorfen	106	81.6	204.0	0	52.1	5	168				
3,5-Dichlorobenzoic acid	177	40.8	204.0	0	86.9	6.99	144				
4-Nitrophenol	160	30.6	204.0	0	78.5	10.2	139				
Dacthal (DCPA)	58.1	30.6	204.0	0	28.5	5	156				
Surr: 2,4-Dichlorophenylacetic acid	999		1,020		97.9	15.3	163				

Sample ID: **2006001-018BMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/9/2020** RunNo: **59814**
Client ID: **SB-25-0.5'** Batch ID: **28601** Analysis Date: **6/12/2020** SeqNo: **1196983**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dicamba	128	33.4	190.8	0	67.2	5	136	158.0	20.8	30	
2,4-D	140	28.6	190.8	0	73.2	5	151	177.1	23.7	30	R
2,4-DP	137	23.8	190.8	0	71.6	5	149	173.9	24.1	30	
2,4,5-TP (Silvex)	141	19.1	190.8	0	74.0	5.43	140	186.4	27.6	30	
2,4,5-T	129	47.7	190.8	0	67.4	6.68	133	173.3	29.6	30	
Dinoseb	81.0	28.6	190.8	0	42.4	5	141	87.81	8.11	30	
Dalapon	626	191	953.9	0	65.6	5	179	765.9	20.1	30	
2,4-DB	154	23.8	190.8	0	80.7	5.57	160	215.4	33.2	30	R
MCPP	721	4,200	953.9	0	75.6	5	174	892.9	21.3	30	
MCPA	691	2,670	953.9	0	72.5	5	154	865.5	22.4	30	
Picloram	77.8	47.7	190.8	0	40.8	5	139	109.3	33.6	30	
Bentazon	154	33.4	190.8	0	80.6	5.31	146	200.5	26.4	30	R
Chloramben	111	19.1	190.8	0	58.4	5	134	138.9	21.9	30	
Acifluorfen	94.0	76.3	190.8	0	49.3	5	168	106.3	12.3	30	
3,5-Dichlorobenzoic acid	143	38.2	190.8	0	74.8	6.99	144	177.4	21.7	30	
4-Nitrophenol	133	28.6	190.8	0	69.9	10.2	139	160.1	18.2	30	
Dacthal (DCPA)	51.6	28.6	190.8	0	27.1	5	156	58.14	11.9	30	
Surr: 2,4-Dichlorophenylacetic acid	797		953.9		83.6	15.3	163		0		

NOTES:
R - High RPD observed, spike recovery is within range.

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **MB-28540** SampType: **MBLK** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **MBLKS** Batch ID: **28540** Analysis Date: **6/9/2020** SeqNo: **1195293**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	ND	50.0									
Mevinphos	ND	50.0									
TEPP	ND	50.0									
Demeton, Total	ND	50.0									
Ethoprophos	ND	50.0									
Naled	ND	50.0									Q
Sulfotepp	ND	50.0									
Monocrotophos	ND	50.0									Q
Phorate	ND	50.0									
Dimethoate	ND	50.0									
Diazinon	ND	50.0									
Disulfoton	ND	50.0									
Parathion, methyl	ND	50.0									
Fenchorphos	ND	50.0									
Malathion	ND	50.0									
Dursban	ND	50.0									
Fenthion	ND	50.0									
Parathion	ND	50.0									
Trichloronate	ND	50.0									
Merphos	ND	50.0									
Stirophos	ND	50.0									
Prothiofos	ND	50.0									
Fensulfothion	ND	50.0									
Sulprofos	ND	50.0									
EPN	ND	50.0									
Guthion	ND	50.0									
Coumaphos	ND	50.0									
Surr: Triphenylphosphate	78.8		100.0		78.8	10.7	154				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **LCS-28540** SampType: **LCS** Units: **µg/Kg** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **LCSS** Batch ID: **28540** Analysis Date: **6/9/2020** SeqNo: **1195294**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	9.93	50.0	20.00	0	49.7	7.85	133				
Mevinphos	126	50.0	20.00	0	63.0	28.7	131				
TEPP	87.0	50.0	20.00	0	43.5	5	119				
Demeton, Total	128	50.0	20.00	0	64.2	31.4	149				
Ethoprophos	112	50.0	20.00	0	56.2	31.9	144				
Naled	77.3	50.0	20.00	0	38.6	10	147				
Sulfotepp	142	50.0	20.00	0	71.1	26.9	144				
Monocrotophos	124	50.0	20.00	0	61.8	10	129				
Phorate	108	50.0	20.00	0	54.2	40.9	118				
Dimethoate	142	50.0	20.00	0	71.1	23.6	127				
Diazinon	120	50.0	20.00	0	59.9	37.1	132				
Disulfoton	115	50.0	20.00	0	57.4	37.9	122				
Parathion, methyl	121	50.0	20.00	0	60.7	16.8	143				
Fenchorphos	115	50.0	20.00	0	57.4	36.7	117				
Malathion	158	50.0	20.00	0	79.2	26.9	131				
Dursban	118	50.0	20.00	0	59.0	40.8	124				
Fenthion	124	50.0	20.00	0	62.2	36.6	127				
Parathion	156	50.0	20.00	0	77.8	37.6	129				
Trichloronate	120	50.0	20.00	0	60.3	41.5	123				
Merphos	87.0	50.0	20.00	0	43.5	10	122				
Stirophos	136	50.0	20.00	0	68.1	20.6	126				
Prothiofos	127	50.0	20.00	0	63.7	37.1	135				
Fensulfothion	147	50.0	20.00	0	73.6	14.6	152				
Sulprofos	128	50.0	20.00	0	64.0	34.6	137				
EPN	175	50.0	20.00	0	87.7	26.7	150				
Guthion	119	50.0	20.00	0	59.3	5	151				
Coumaphos	127	50.0	20.00	0	63.6	10	152				
Surr: Triphenylphosphate	84.6		100.0		84.6	10.7	154				

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **2005395-001CDUP** SampType: **DUP** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **BATCH** Batch ID: **28540** Analysis Date: **6/10/2020** SeqNo: **1195296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	ND	51.3						0	0	30	
Mevinphos	ND	51.3						0	0	30	
TEPP	ND	51.3						0	0	30	
Demeton, Total	ND	51.3						0	0	30	
Ethoprophos	ND	51.3						0	0	30	
Naled	ND	51.3						0	0	30	Q
Sulfotepp	ND	51.3						0	0	30	
Monocrotophos	ND	51.3						0	0	30	Q
Phorate	ND	51.3						0	0	30	
Dimethoate	ND	51.3						0	0	30	
Diazinon	ND	51.3						0	0	30	
Disulfoton	ND	51.3						0	0	30	
Parathion, methyl	ND	51.3						5.601	200	30	
Fenchorphos	ND	51.3						0	0	30	
Malathion	ND	51.3						0	0	30	
Dursban	ND	51.3						0	0	30	
Fenthion	ND	51.3						0	0	30	
Parathion	ND	51.3						0	0	30	
Trichloronate	ND	51.3						0	0	30	
Merphos	ND	51.3						0	0	30	
Stirophos	ND	51.3						0	0	30	
Prothiofos	ND	51.3						0	0	30	
Fensulfothion	ND	51.3						0	0	30	
Sulprofos	ND	51.3						0	0	30	
EPN	ND	51.3						0	0	30	
Guthion	ND	51.3						0	0	30	
Coumaphos	ND	51.3						0	0	30	
Surr: Triphenylphosphate	75.4		102.7		73.4	10.7	154		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **2005395-001CMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **BATCH** Batch ID: **28540** Analysis Date: **6/10/2020** SeqNo: **1195297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	8.74	56.9	22.76	0	38.4	5	138				
Mevinphos	11.3	56.9	22.76	0	49.7	5	148				
TEPP	0.00	56.9	22.76	0	0	5	121				S
Demeton, Total	12.4	56.9	22.76	0	54.6	24.3	141				
Ethoprophos	11.8	56.9	22.76	0	52.0	13.2	145				
Naled	9.81	56.9	22.76	0	43.1	5	121				
Sulfotepp	12.2	56.9	22.76	0	53.6	26.8	120				
Monocrotophos	2.12	56.9	22.76	0	9.32	5	196				
Phorate	12.5	56.9	22.76	0	54.8	29.4	122				
Dimethoate	10.3	56.9	22.76	0	45.4	5	161				
Diazinon	12.0	56.9	22.76	0	52.6	9.74	142				
Disulfoton	12.5	56.9	22.76	0	54.8	23.9	137				
Parathion, methyl	13.1	56.9	22.76	5.601	33.0	5.64	177				
Fenchorphos	12.4	56.9	22.76	0	54.6	25.3	131				
Malathion	13.6	56.9	22.76	0	59.9	23.5	121				
Dursban	12.4	56.9	22.76	0	54.4	28.2	128				
Fenthion	12.9	56.9	22.76	0	56.7	24.2	136				
Parathion	14.3	56.9	22.76	0	63.0	5	173				
Trichloronate	12.9	56.9	22.76	0	56.6	28.5	122				
Merphos	0.00	56.9	22.76	0	0	5	90.1				S
Stirophos	19.0	56.9	22.76	0	83.4	9.46	152				
Prothiofos	13.6	56.9	22.76	0	59.7	23.7	157				
Fensulfothion	18.6	56.9	22.76	0	81.6	5	174				
Sulprofos	14.2	56.9	22.76	0	62.4	12	173				
EPN	17.6	56.9	22.76	0	77.4	13.8	157				
Guthion	26.9	56.9	22.76	0	118	5	177				
Coumaphos	26.4	56.9	22.76	0	116	5	232				
Surr: Triphenylphosphate	80.4		113.8		70.7	10.7	154				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Original

Date: *6/15/2020*

Work Order: 2006001
CLIENT: ATC Group Services, Inc.
Project: Panattoni, NW Logistics Ctr

QC SUMMARY REPORT

Organophosphorus Pesticides by EPA Method 8270-SIM

Sample ID: **2005395-001CMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **6/3/2020** RunNo: **59731**
Client ID: **BATCH** Batch ID: **28540** Analysis Date: **6/10/2020** SeqNo: **1195298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DDVP	7.16	58.4	23.35	0	30.7	5	138	8.738	19.8	30	
Mevinphos	12.5	58.4	23.35	0	53.5	5	148	11.32	9.91	30	
TEPP	0.00	58.4	23.35	0	0	5	121	0	0	30	S
Demeton, Total	16.3	58.4	23.35	0	69.7	24.3	141	12.42	26.8	30	
Ethoprophos	17.4	58.4	23.35	0	74.4	13.2	145	11.84	37.9	30	
Naled	4.35	58.4	23.35	0	18.6	5	121	9.806	77.2	30	
Sulfotepp	15.9	58.4	23.35	0	68.0	26.8	120	12.20	26.2	30	
Monocrotophos	5.42	58.4	23.35	0	23.2	5	196	2.123	87.5	30	
Phorate	17.4	58.4	23.35	0	74.6	29.4	122	12.48	33.0	30	
Dimethoate	11.5	58.4	23.35	0	49.1	5	161	10.33	10.5	30	
Diazinon	18.7	58.4	23.35	0	80.1	9.74	142	11.97	44.0	30	
Disulfoton	17.1	58.4	23.35	0	73.5	23.9	137	12.46	31.8	30	
Parathion, methyl	19.3	58.4	23.35	5.601	58.6	5.64	177	13.11	38.1	30	
Fenchorphos	18.7	58.4	23.35	0	80.3	25.3	131	12.42	40.6	30	
Malathion	17.2	58.4	23.35	0	73.9	23.5	121	13.63	23.4	30	
Dursban	19.9	58.4	23.35	0	85.2	28.2	128	12.39	46.5	30	
Fenthion	19.5	58.4	23.35	0	83.5	24.2	136	12.91	40.6	30	
Parathion	19.4	58.4	23.35	0	82.9	5	173	14.33	29.9	30	
Trichloronate	20.4	58.4	23.35	0	87.5	28.5	122	12.89	45.2	30	
Merphos	0.00	58.4	23.35	0	0	5	90.1	0	0	30	S
Stirophos	26.3	58.4	23.35	0	112	9.46	152	18.97	32.2	30	
Prothiofos	21.9	58.4	23.35	0	93.8	23.7	157	13.60	46.8	30	
Fensulfothion	26.2	58.4	23.35	0	112	5	174	18.57	34.2	30	
Sulprofos	22.4	58.4	23.35	0	95.9	12	173	14.20	44.8	30	
EPN	24.0	58.4	23.35	0	103	13.8	157	17.61	30.8	30	
Guthion	37.2	58.4	23.35	0	159	5	177	26.90	32.2	30	
Coumaphos	39.4	58.4	23.35	0	169	5	232	26.41	39.4	30	
Surr: Triphenylphosphate	103		116.8		88.2	10.7	154		0		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Original

Sample Log-In Check List

Client Name:	**ATC**	Work Order Number:	**2006001**
Logged by:	**Carissa True**	Date Received:	**5/29/2020 6:15:00 PM**

Chain of Custody

		Yes	No	Not Present
1.	Is Chain of Custody complete?	☑	☐	☐
2.	How was the sample delivered?	Client		

Log In

		Yes	No	NA
3.	Coolers are present?	☑	☐	☐
4.	Shipping container/cooler in good condition?	☑	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	☐	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	☑	☐	☐
7.	Were all items received at a temperature of >2°C to 6°C *	☑	☐	☐
8.	Sample(s) in proper container(s)?	☑	☐	
9.	Sufficient sample volume for indicated test(s)?	☑	☐	
10.	Are samples properly preserved?	☑	☐	
11.	Was preservative added to bottles?	☐	☑	☐
12.	Is there headspace in the VOA vials?	☐	☐	☑
13.	Did all samples containers arrive in good condition(unbroken)?	☑	☐	
14.	Does paperwork match bottle labels?	☑	☐	
15.	Are matrices correctly identified on Chain of Custody?	☑	☐	
16.	Is it clear what analyses were requested?	☑	☐	
17.	Were all holding times able to be met?	☑	☐	

Special Handling (if applicable)

		Yes	No	NA
18.	Was client notified of all discrepancies with this order?	☑	☐	☐

Person Notified:	Elisabeth Silver	Date:	6/8/2020
By Whom:	Carissa True	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Confirmation of pesticide analysis.		
Client Instructions:	Run both organochlorine and organophosphorus pesticides.		

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	1.4
Sample 1	5.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-29-2020 Page: 1 of: 3

Laboratory Project No (internal): 2006001

Special Remarks:

Project Name: Panattoni, NW Logistics Ctr.

Project No: NPPAN20023

Client: ATC Group Services LLC

Address: 6347 Seaview Ave. NW

City, State, Zip: Seattle, WA

Telephone: (206) 781-1449

Fax:

Collected by: B. Goulet / A. Degefa

Location: DuPont, WA

Report To (PM): E. Silver

PM Email: Elisabeth.Silver@atcgs.com

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Pest by 8081	Herb by 8151	8270	8270SIM	Comments
1	SB-14-6'	05/29/20	0845	soil				~~X~~	B6				X	T								Pb + As
2	SB-16-1'		0950		X			X		X			X	T			X	X				(RCRA 8)
3	SB-16-5'		0955										~~X~~	~~T~~	B6							Hold
4	SB-16-5.5'		0955										~~X~~	~~T~~	B6							Hold
5	SB-17-5'	~~05/29/20~~	0950										X	T								Pb + As
6	SB-15-5'		0900										X	T								
7	SB-18-3.5'		1050										X	T								
8	SB-19-3'		1010										X	T								
9	SB-20-2'		1040		X			X		X			X	T			X	X				
10	SB-20-3'		1040										X	T								Pb + As

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x A. Degefa		x [signature]	5/29/20 @ 1815
Relinquished x ~~6:00~~	5/29/20 18:00	Received x	

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-29-2020 Page: 2 of: 3

Laboratory Project No (internal): 20060001

Project Name: Panattoni, NW Logistics Ctr

Project No: NPPAN20023

Collected by: B. Goulet / A. Degefa

Location:

Report To (PM): E. Silver

PM Email:

Client: ATC

Address:

City, State, Zip:

Telephone:

Fax:

Special Remarks:

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Pest by 8081/8270	Herb by 8151/8270SIM			Comments
1	SB-20-3.5'	5/29/20	1040	soil										X	T							Pb + As
2	SB-21-4'	~~5/29~~	1050	soil		BG								X	T							↓
3	SB-22-3.5'		1100	soil										X	T							
4	SB-23-3'		1115	soil										X	T							
5	SB-24-1.5'		1135	soil	X				X		X			X	T			X	X			(RCRA 8)
6	SB-24-3.5'		1135	soil										X	T							Pb + As
7	SB-24-4'		1135	soil										X	T							↓
8	SB-25-0.5'		1240	soil	X				X		X			X	T			X	X			(RCRA 8)
9	SB-25-1'		1240	soil										X	T							Pb + As
10	SB-26-0.5'	↓	1255	soil										X	T							↓

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	5/29/20	x [signature]	5/29/20 @ 1815
Relinquished	Date/Time	Received	Date/Time
x	1820	x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-29-20 | Page: 3 of: 3 | Laboratory Project No (internal): 20060001

Project Name: Panattoni, NW Logistics Ctr.

Project No: NPPAN20023

Collected by: B. Goulet / A. Degefa

Location:

Report To (PM): E. Silver

PM Email:

Client: ATC

Address:

City, State, Zip:

Telephone:

Fax:

Special Remarks:

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)					Comments
1	SB-27-1'	05/29/20	1300	soil										X	T							
2	SB-28-2.5'	↓	1315	↓										X	T							
3	SB-29-2.5'		1330											X	T							
4	SB-30-2.5'		1335											X	T							
5	SB-31-3.5'		1400											X	T							
6	SB-32-3'		1410											X	T							
7	SB-33-4'		1420											X	T							
8	SB-16-3'		1425											X	T							
9	SB-16-3.5'	↓	1425	↓										X	T							
10																						

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	5/29/20	x [signature]	5/29/20 @ 0815
Relinquished	Date/Time	Received	Date/Time
x	1800	x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 05-29-2020 Page: 1 of: 3

Laboratory Project No (internal): 2006001

Project Name: Panattoni, NW Logistics Ctr.

Project No: NPPAN20023

Collected by: B. Goulet / A. Degefa

Location: DuPont, WA

Report To (PM): E. Silver

PM Email: Elisabeth.Silver@atcgs.com

Client: ATC Group Services LLC

Address: 6347 Seaview Ave. NW

City, State, Zip: Seattle, WA

Telephone: (206) 781-1449

Fax:

Special Remarks:

X = Hex Cr add-on, 4 Day TAT per ES, 6/9/20 cg

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Pest by 8081	Herb by 8151	8270	8270SIM	Comments
1	SB-14-6'	05/29/20	0845	soil				~~X~~	B6				X	T								Pb + As
2	SB-16-1'		0950		X			X		X			X	T			X	X		X		(RCRA 8)
3	SB-16-5'		0955										~~X~~	~~T~~	B6							Hold
4	SB-16-5.5'		0955										~~X~~	~~T~~	B6							Hold
5	SB-17-5'	~~05/29/20~~	0950										X	T								Pb + As
6	SB-15-5'		0900										X	T								
7	SB-18-3.5'		1050										X	T								
8	SB-19-3'		1010										X	T								
9	SB-20-2'		1040		X			X		X			X	T			X	X		X		
10	SB-20-3'		1040										X	T								Pb + As

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

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***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard
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- ☐ Next Day
- Same Day ____ (specify)

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Relinquished	Date/Time	Received	Date/Time
x A. Degefa		x [signature]	5/29/20 @ 1815
Relinquished x ~~6:00~~	5/29/20 18:00	Received x	

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-29-2020 Page: 2 of: 3

Laboratory Project No (internal): 20060001

Project Name: Panattoni, NW Logistics Ctr

Special Remarks:

Client: ATC

Project No: NPPAN20023

Address:

Collected by: B. Goulet / A. Degefa

City, State, Zip:

Location:

Telephone:

Report To (PM): E. Silver

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Pest by 8081/8270	Herb by 8151/8270 SIM			Comments
1	SB-20-3.5'	5/29/20	1040	soil										X	T							Pb + As
2	SB-21-4'	~~5/29~~	1050	soil		BG								X	T							↓
3	SB-22-3.5'		1100	soil										X	T							
4	SB-23-3'		1115	soil										X	T							
5	SB-24-1.5'		1135	soil	X				X		X			X	T		X	X		X		(RCRA 8)
6	SB-24-3.5'		1135	soil										X	T							Pb + As
7	SB-24-4'		1135	soil										X	T							↓
8	SB-25-0.5'		1240	soil	X				X		X			X	T		X	X		X		(RCRA 8)
9	SB-25-1'		1240	soil										X	T							Pb + As
10	SB-26-0.5'	↓	1255	soil										X	T							↓

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Relinquished	Date/Time	Received	Date/Time
x	1820	x	

Turn-around Time:
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- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 05-29-20 | Page: 3 of: 3 | Laboratory Project No (internal): 20060001

Project Name: Panattoni, NW Logistics Ctr.

Project No: NPPAN20023

Collected by: B. Goulet / A. Degefa

Location:

Report To (PM): E. Silver

PM Email:

Client: ATC

Address:

City, State, Zip:

Telephone:

Fax:

Special Remarks:

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB-27-1'	05/29/20	1300	soil										X	T			
2	SB-28-2.5'	↓	1315	↓										X	T			
3	SB-29-2.5'		1330											X	T			
4	SB-30-2.5'		1335											X	T			
5	SB-31-3.5'		1400											X	T			
6	SB-32-3'		1410											X	T			
7	SB-33-4'		1420											X	T			
8	SB-16-3'		1425											X	T			
9	SB-16-3.5'	↓	1425	↓										X	T			
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

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Relinquished	Date/Time	Received	Date/Time
x	1800	x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

BARGHAUSEN

July 2, 2020

Jeff Wilson
City of DuPont
Planning Division
1700 Civic Drive
DuPont, WA 98327

RE: Major Site Plan Amendment Type II Application for
Northwest Logistics Center II – Trailer Lot Expansion located at
3230 International Place North, DuPont, Pierce County, Washington
Tax Parcel No: 300039-0011 and 300039-0282
Our Job No. 21227

On behalf of Panattoni Development Company, Barghausen Consulting Engineers, Inc. is submitting the Land Use application documents to process a Major Site Plan Amendment – Type II for the proposed Northwest Logistics Center II – Trailer Lot Expansion project. The proposal would construct a guard house and additional trailer parking on the undeveloped parcel adjacent to the site to the north and remove a portion of the existing parking from the site to accommodate the proposed parking expansion. There will also be modifications to the existing building site to serve the new tenant. A boundary line adjustment or lot combination will be processed to configure existing lots to proposed new site layout. Pre-application meeting information was provided by the city in a letter dated April 3, 2020 under Application No. PLNG202-002.

The following plans and documents are enclosed for review:

1. Four (4) each Vicinity Map
2. Four (4) each detailed Preliminary Site Plan with Site Data
3. Four (4) each Narrative Describing Site Plan Revisions and detailed summary of how project meets the City's Site Plan Review Criteria, Zoning requirements and Variance Review Criteria
4. Four (4) sets Preliminary Landscape Planting and Tree Retention Plans including Tree Per Acre Calculations
5. Four (4) sets Preliminary Civil Engineering Design Plans
6. Four (4) each Elevations for Guard House
7. Four (4) each Elevations for Covered Shelter Canopies
8. Four (4) each Plan Sheet Reductions to 8-1/2 x 11
9. Four (4) each Preliminary Stormwater Site Plan
10. Four (4) each revised Traffic Impact Analysis (will be submitted under separate cover)
11. Four (4) each Limited Subsurface Investigation
12. Four (4) each Geotechnical Engineering Report

Attachment 1.d. Cover Letter prepared by Barghausen Consulting Engineers dated July 2, 2020

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE SOUTH KENT, WA 98032 P) 425-251-6222 F) 425-251-8782
BRANCH OFFICES: TUMWATER, WA KLAMATH FALLS, OR LONG BEACH, CA ROSEVILLE, CA SAN DIEGO, CA
barghausen.com

13. Four (4) each Cultural Resources Report

14. Four (4) each Title Report for Parcel 300039-0011

15. Four (4) each Title Report for Parcel 300039-0282

16. Four (4) each updated SEPA Environmental Checklist

17. Four (4) each Land Use Application

18. Four (4) each Boundary Line Adjustment/Lot Line Elimination Application

19. Four (4) each Pre-Application Meeting Information

20. Four (4) each Authorization to Act as Agent Affidavit for tax parcel 300039-0282

21. Four (4) each Authorization to Act as Agent Affidavit for tax parcel 300039-0011

22. One (1) each electronic copy Application Plans and Documents

23. One (1) each check in the amount of $3,750 for Type II Application Fee for Major Site Plan Amendment ($1,500), Variance ($1,500) and SEPA Environmental Review ($750) to be mailed to City under separate cover.

We believe that the enclosed plans and documents compile a complete application package to begin the Major Site Plan Amendment – Type II review. Please review at your earliest convenience and please feel free to contact me if you have any questions or need any additional information. Thank you.

Sincerely,

Daniel K. Balmelli

Daniel K. Balmelli, P.E.
Executive Vice President

BSD/bd
21227c.001R.doc
enc: As Noted
cc: Brian Mattson, Panattoni Development Company
Bjorn Brynestad, Panattoni Development Company
Whitney Dunlap, Barghausen Consulting Engineers, Inc.
Betsy Dyer, Barghausen Consulting Engineers, Inc.

TERRA ASSOCIATES, Inc.
Consultants in Geotechnical Engineering, Geology
and
Environmental Earth Sciences

May 12, 2020
Project No. T-6897-3

Mr. Bjorn Brynestad
Panattoni Development Company
1821 Dock Street, Suite 100
Tacoma, Washington 98402

Subject: Geotechnical Engineering Study
DuPont Trailer Yard
International Place
DuPont, Washington

References:
1. Subsurface Exploration, Geologic Hazard and Preliminary Geotechnical Engineering Report, International Place, DuPont, Washington, Project No. KE120002B, prepared by Associated Earth Sciences, Inc., dated March 1, 2012
2. Geotechnical Report, International Place, DuPont, Washington, Project No. T-5853, prepared by Terra Associates, Inc., dated January 30, 2006

Dear Mr. Brynestad:

As requested, we have reviewed subsurface data contained in our files and developed geotechnical engineering recommendations for the subject site. This report presents our findings and provides geotechnical recommendations for the project.

PROJECT DESCRIPTION

We were provided a site plan titled "Northwest Logistics #2 (Trailer Diagram)" prepared by NELSON, dated January 28, 2020. The project consists of developing the site for semi-trailer parking and storage in support of the adjacent Northwest Logistics Phase 2 facility. Access to the trailer storage yard will be from entrances and driveways off International Place, and from loading dock areas at the southern perimeter of the adjacent Northwest Logistics Phase 2 building.

Site grades will match existing paved areas south and east of the site. Based on our observations, fill thicknesses approaching a maximum of about five feet will be required to match adjacent grade elevations. We understand project stormwater runoff will be directed to a retention/infiltration facility.

Attachment 1.e.Geotechnical Study prepared by Terra Associates dated May 12, 2020

12220 113th Avenue NE, Ste. 130, Kirkland, Washington 98034
Phone (425) 821-7777 • Fax (425) 821-4334

SCOPE OF WORK

Our work was completed in accordance with our authorized proposal, dated April 16, 20020. Specifically, this report addresses:

- Soil and groundwater conditions.
- Site preparation and grading.
- Infiltration feasibility.
- Utilities
- Pavements

SITE CONDITIONS

Surface

The project site consists of a single approximately 5.3 acre tax parcel located near the northern terminus of International Place in DuPont, Washington. It is bounded to the north by a rental storage facility and to the east by an asphalt-paved parking lot. A driveway accessing adjacent warehouse buildings bounds the site to the south. The location of the site is shown on the Vicinity Map, Figure 1.

The site has been cleared of primary vegetation and is currently covered with scattered brush and small deciduous trees. An approximately 4- to 5-foot tall slope rises from site grades to adjacent eastern parking lot elevations. At the southern property line, the slope continues along the driveway edge, flattens and is covered with quarry rock. An approximately 4- to 8-foot deep stormwater retention swale and associated concrete control structures are located at the northern margin of the site. No ponded water was observed in the facility at the time of our visit. Stacks of utility pipe and a stockpile of washed drain rock were also observed. A near-vertical 2- to 3-foot tall soil cut face extends across the central portion of the site.

Soils

Terra Associates explored subsurface conditions at the site on January 11, 2006 by excavating 10 test pits to depths of 10 to 20 feet below 2006 surface elevations. On February 27, 2012, AESI logged five test pits at the site to depths of 5 to 12 feet. The locations of the test pits are shown on Figure 2. The soils were classified in the field in accordance with procedures outlined in the Unified Soil Classification System attached as Figure 3. The Terra Associates and AESI test pit logs, as well as grain size distribution test results from our January 2006 geotechnical study are attached.

In 2006, our test pits found 12 to 24 inches of forest duff with gravel overlying Recessional outwash soils consisting of silty sand and silty gravel in Test Pits TP-6, TP-7, and TP-13 to depths ranging from 3.5 to 5 feet. Below these depths, and underlying the forest duff in the remaining test pits, we observed outwash deposits composed mainly of gravel with sand containing variable contents of cobbles and few boulders. Four of the test pits showed outwash soil layers consisting of sand with variable gravel contents. The outwash soils are generally in a medium dense to condition.

Four of the AESI test pits found fill consisting of loose to medium dense sand and silty sand with gravel to depths of 2 to 5 feet. Beneath the fill, AESI personnel observed Recessional outwash deposits composed of medium dense sandy gravel and sand with gravel. The test pits indicated varying degrees of stratification in the outwash soils.

The *Geologic Map of the Tacoma 1:100,000-scale Quadrangle, Washington,* by J.E. Schuster et al (2015) maps the site soils as Vashon Recessional outwash, Steilacoom gravel (Qgo_{sg}). The soils observed in the test pits correlate with the published description of this soil unit.

Groundwater

We observed groundwater at a depth of 16 feet in each of Test Pits TP-8 through TP-10. Observed seepage flow rates were slight to moderate. No groundwater was observed during excavation of the AESI test pits.

DISCUSSION AND RECOMMENDATIONS

Based on our study, there are no geotechnical conditions that would preclude the planned development. Pavements can be constructed on competent native soils, compacted existing inorganic fills, or on structural fill placed on these soils.

A review of historical aerial imagery indicates that in 2007, the site was cleared and stripped of vegetation, and rough grading was underway. By 2009, grading at the site included construction of a building pad with loading dock cuts. The site's grading activities were concurrent with construction of the neighboring 3250 International Place warehouse building. As indicated by the 2012 AESI test pits, grading at the site included removal of the forest duff layer identified in our 2006 test pits, as well as placement of relatively organic-free fills at the site. Existing fill subgrades prepared as recommended below will be suitable for support of new pavements.

Most of the native outwash sands and gravels observed below the surficial fills have a low percentage of soil fines and should be suitable for use as structural fill in most weather conditions. The upper silty sand fill and native silty gravel soils contain sufficient percentages of soil fines to make them difficult to compact as structural fill when too wet. The ability to use these soils from site excavations as structural fill will depend on their moisture content and the prevailing weather conditions at the time of construction. If soils need to be imported to the site, the contractor should be prepared to import free-draining granular material for use as structural fill and backfill during the wet season.

Detailed recommendations regarding these issues and other geotechnical design considerations are provided in the following sections. These recommendations should be incorporated into the final design drawings and construction specifications.

Site Preparation and Grading

To prepare the site for construction, all vegetation and organic soils should be removed from areas of new pavement construction. If the existing infiltration facility is abandoned, control structures should be removed and replaced with structural fill. Abandoned pipes can be left in place provided the ends are sealed to prevent migration of soil into the pipe.

We recommend supporting pavements on competent, inorganic subgrades consisting of native soils, existing inorganic fills or compacted structural fill. Terra Associates, Inc. should examine all surfaces to verify that conditions encountered are as anticipated and are suitable for placement of structural fill or direct support of pavements. Our representative may request proofrolling of exposed surfaces with a heavy rubber-tired vehicle to determine if any isolated soft and yielding areas are present. If unstable yielding areas are observed, they should be cut to firm bearing soil and filled to grade with structural fill. If the depth of excavation to remove unstable soils is excessive, use of geotextile fabric such as Mirafi 500X or equivalent in conjunction with clean granular structural fill can be considered in order to limit the depth of removal.

As discussed above, the silty sand fill and native silty gravel soils at the site contain a sufficient percentage of fines (silt and clay size particles) that will make them difficult to compact as structural fill if they are too wet or too dry. Accordingly, the ability to densify these soils in place or use the soils as structural fill will depend on their moisture content and the prevailing weather conditions when site grading activities take place. Soils that are too wet to properly compact could be dried by aeration during dry weather conditions, or mixed with an additive such as cement or lime to stabilize the soil and facilitate compaction. If an additive is used, additional Best Management Practices (BMPs) for its use will need to be incorporated into the Temporary Erosion and Sedimentation Control (TESC) plan for the project. Soils that are dry of optimum should be moisture conditioned by controlled addition of water and blending prior to material placement. The site's gravels containing relatively low percentages of fines should be suitable to reuse as structural fill in most weather conditions.

We recommend removing cobbles larger than six inches and boulders from the fill prior to placement and compaction.

If grading activities are planned during the wet winter months, or if they are initiated during the summer and extend into fall and winter, the owner should be prepared to import wet weather structural fill. For this purpose, we recommend importing a granular soil that meets the following grading requirements:

U.S. Sieve Size	Percent Passing
6 inches	100
No. 4	75 maximum
No. 200	5 maximum*

*Based on the 3/4-inch fraction.

Prior to use, Terra Associates, Inc. should examine and test all materials imported to the site for use as structural fill.

Structural fill should be placed in uniform loose layers not exceeding 12 inches and compacted to a minimum of 95 percent of the soil's maximum dry density, as determined by American Society for Testing and Materials (ASTM) Test Designation D-698 (Standard Proctor). The moisture content of the soil at the time of compaction should be within two percent of its optimum, as determined by this ASTM standard. In nonstructural areas, the degree of compaction can be reduced to 90 percent.

Infiltration Feasibility

Based on our observations, the outwash sands and gravels that contain relatively low fines contents will support infiltration of project stormwater. A stormwater infiltration facility located in the vicinity of Test Pits TP-8 through TP-10 will need to have its base constructed no lower than 11 feet below January 2006 surface grade elevations to establish the minimum required separation distance of 5 feet from the seasonal high groundwater level. In addition, relatively low permeability silty sand soils were identified in AESI EP-1 and Terra Associates' TP-13 to a depth of 5 feet. Accordingly, we recommend designing infiltration facilities at these locations with their bases no higher than 5 feet below surface elevations at their respective locations.

The City of DuPont has adopted the 2012 (amended 2014) Department of Ecology *Stormwater Management Manual for Western Washington* (SMMWW) for stormwater design. An average long-term design infiltration rate of 12 inches per hour can be used for preliminary design of the site's infiltration facilities. This infiltration rate was derived based on grain size distribution results for samples of outwash gravel obtained from Test Pits TP-8 and TP-10 using methods outlined in the SMMWW. In addition, as provided in Section 3.3.8 in Vol. III of the SMMWW, our calculation of the preliminary infiltration rate incorporates an assumed facility size and is based on an allowable minimum separation distance of five feet between the base of the infiltration facility and the expected seasonal high groundwater barrier layer. For preliminary purposes, the above infiltration rate assumes the facility will be 30 feet wide and 100 feet long. The preliminary design infiltration rate incorporates correction factors recommended in the SMMWW.

We should review the stormwater retention facility plans when available to confirm facility design is consistent with our analysis and ground conditions as observed at the site.

Utilities

All utility pipes and stormwater structures should be bedded and backfilled in accordance with American Public Works Association (APWA) or applicable jurisdictional requirements. At minimum, backfill should be placed and compacted as structural fill as described in the Site Preparation and Grading Section of this report. As noted, most of the soils are predominantly fine grained and moisture sensitive and will therefore require moisture conditioning to facilitate proper compaction. If utility construction takes place during the winter, it may be necessary to import suitable wet weather fill for utility backfilling.

Pavements

Pavement subgrades should be prepared as described in Site Preparation and Grading section of this report. Regardless of the degree of relative compaction achieved, the subgrade must be firm and relatively unyielding before paving. The subgrade should be proofrolled with heavy rubber-tired construction equipment such as a loaded 10-yard dump truck to verify this condition.

The pavement design section is dependent upon the supporting capability of the subgrade soils and the traffic conditions to which it will be subjected. New pavements for the project will consist of drive aisles and parking spaces for heavy traffic consisting of semi-tractor trailer rigs. For design considerations in heavy traffic pavement areas, we have assumed an ESAL of 300,000 would be representative of the expected loading. These ESALs represent loading approximately equivalent to 18, loaded (80,000-pound GVW) tractor-trailer rigs traversing the pavement daily.

With a stable subgrade prepared as recommended, we recommend the following options for pavement section options:

Heavy Traffic:

- Three inches of HMA over six inches of CRB
- Full depth HMA – 5 inches

The paving materials used should conform to the Washington State Department of Transportation (WSDOT) specifications for ½-inch class HMA and CRB.

Long-term pavement performance will depend on surface drainage. A poorly-drained pavement section will be subject to premature failure as a result of surface water infiltrating into the subgrade soils and reducing their supporting capability. For optimum pavement performance, we recommend surface drainage gradients of at least two percent. Some degree of longitudinal and transverse cracking of the pavement surface should be expected over time. Regular maintenance should be planned to seal cracks when they occur.

ADDITIONAL SERVICES

Terra Associates, Inc. should review the final designs and specifications in order to verify that earthwork and foundation recommendations have been properly interpreted and implemented in project design. We should also provide geotechnical services during construction in order to observe compliance with our design concepts, specifications, and recommendations. This will allow for design changes if subsurface conditions differ from those anticipated prior to the start of construction.

LIMITATIONS

This report has been prepared for the exclusive use of Panattoni Development Company and its authorized representatives, and was prepared in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made. This report is the copyrighted property of Terra Associates, Inc. and is intended for the specific application to the DuPont Trailer Yard project in DuPont, Washington.

The conclusions and recommendations presented in this report are based on published data and the subsurface observations accomplished for this study. Subsurface conditions can vary substantially with depth, distance, or due to unanticipated geologic conditions. If variations appear evident, Terra Associates, Inc. should be requested to reevaluate the recommendations in this report prior to proceeding with construction.

We trust the information presented is sufficient for your current needs. If you have any questions or require additional information, please call.

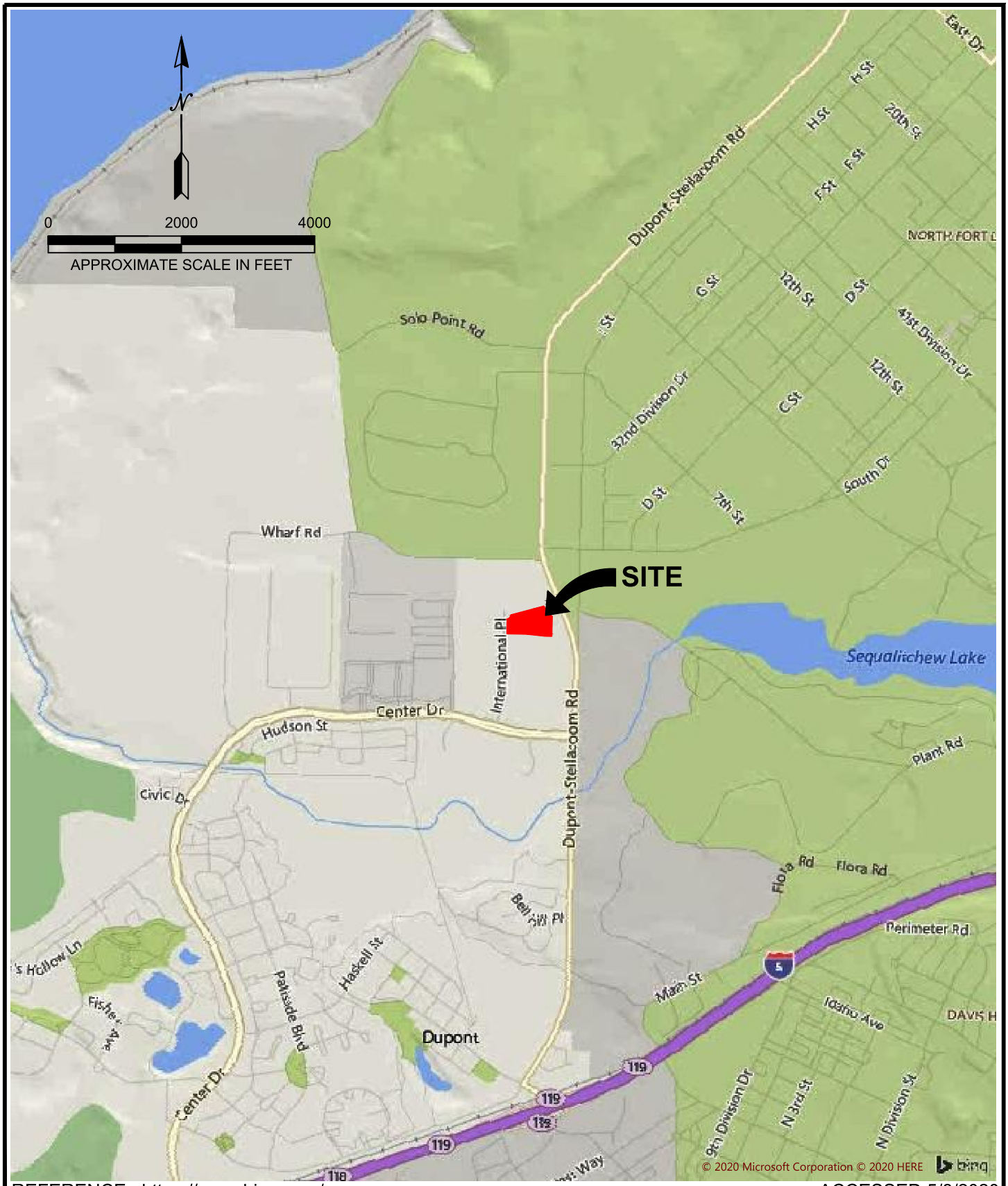
Sincerely yours,
TERRA ASSOCIATES, INC.

Kevin P. Roberts, P.E.
Geotechnical Engineer

5/12/2020

Theodore J. Schepper, P.E.
President

Encl: Figure 1 – Vicinity Map
Figure 2 – Exploration Location Plan
Figure 3 – Unified Soil Classification System
Terra Associates, Inc. Test Pit Logs and Grain Size Analysis Reports
AESI Test Pit Logs

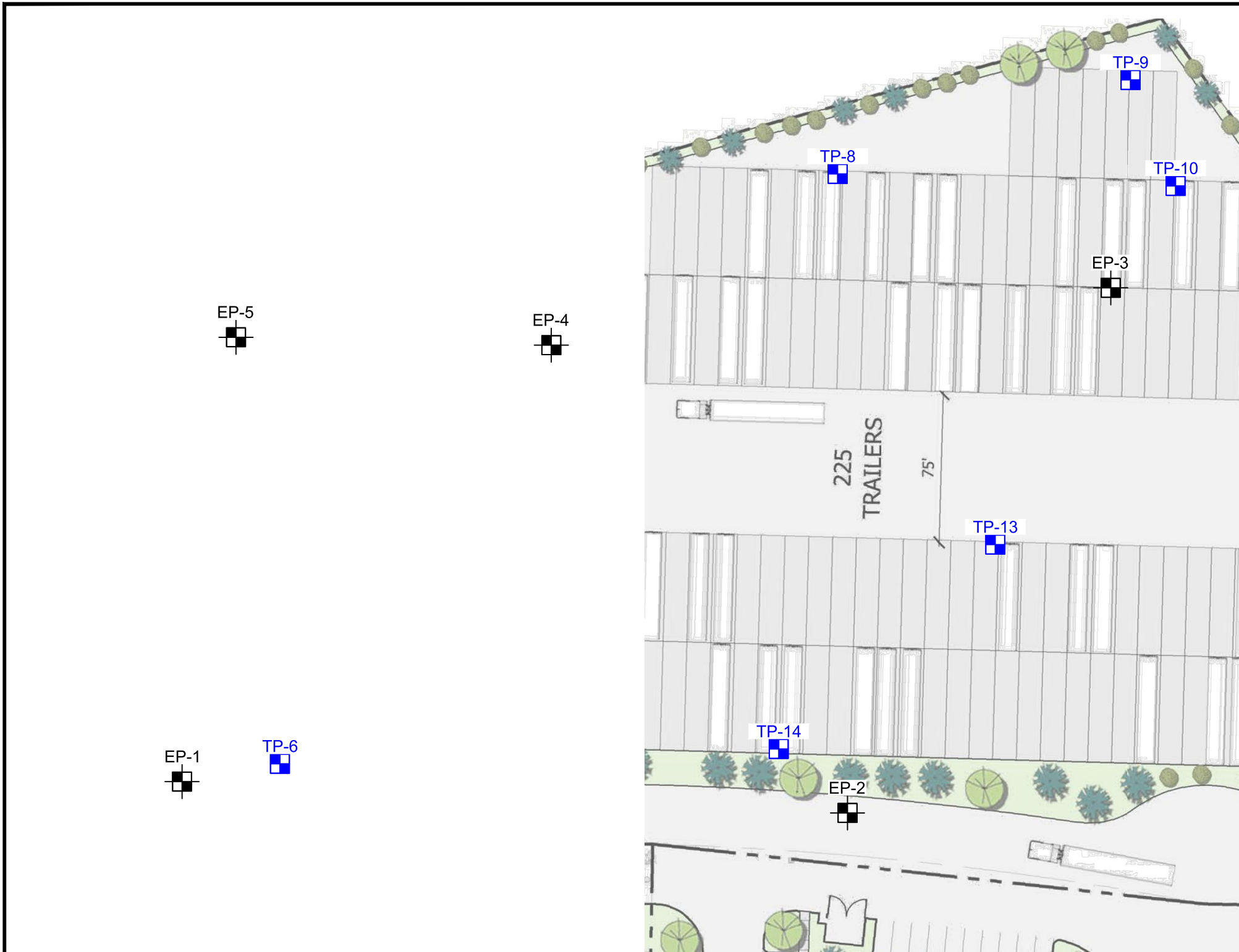


REFERENCE: https://www.bing.com/maps ACCESSED 5/8/2020

Terra Associates, Inc.
Consultants in Geotechnical Engineering
Geology and
Environmental Earth Sciences

VICINITY MAP
DUPONT TRAILER YARD
DUPONT, WASHINGTON

Proj.No.T-6897-3	Date: MAY 2020	Figure 1


TP-9
TP-8
TP-10
EP-3
EP-5
EP-4
225
TRAILERS
75'
TP-13
TP-14
EP-1
TP-6
EP-2

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTION
COARSE GRAINED SOILS More than 50% material larger than No. 200 sieve size	**GRAVELS** More than 50% of coarse fraction is larger than No. 4 sieve	Clean Gravels (less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines.
		Gravels with fines	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	SANDS More than 50% of coarse fraction is smaller than No. 4 sieve	Clean Sands (less than 5% fines)	SW	Well-graded sands, sands with gravel, little or no fines.
			SP	Poorly-graded sands, sands with gravel, little or no fines.
		Sands with fines	SM	Silty sands, sand-silt mixtures, non-plastic fines.
			SC	Clayey sands, sand-clay mixtures, plastic fines.
FINE GRAINED SOILS More than 50% material smaller than No. 200 sieve size	**SILTS AND CLAYS** Liquid Limit is less than 50%		ML	Inorganic silts, rock flour, clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity. (Lean clay)
			OL	Organic silts and organic clays of low plasticity.
	SILTS AND CLAYS Liquid Limit is greater than 50%		MH	Inorganic silts, elastic.
			CH	Inorganic clays of high plasticity. (Fat clay)
			OH	Organic clays of high plasticity.
HIGHLY ORGANIC SOILS			PT	Peat.

DEFINITION OF TERMS AND SYMBOLS

COHESIONLESS

Density	Standard Penetration Resistance in Blows/Foot
Very Loose	0-4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	>50

COHESIVE

Consistancy	Standard Penetration Resistance in Blows/Foot
Very Soft	0-2
Soft	2-4
Medium Stiff	4-8
Stiff	8-16
Very Stiff	16-32
Hard	>32

I	2" OUTSIDE DIAMETER SPILT SPOON SAMPLER
‖	2.4" INSIDE DIAMETER RING SAMPLER OR SHELBY TUBE SAMPLER
▼	WATER LEVEL (Date)
Tr	TORVANE READINGS, tsf
Pp	PENETROMETER READING, tsf
DD	DRY DENSITY, pounds per cubic foot
LL	LIQUID LIMIT, percent
PI	PLASTIC INDEX
N	STANDARD PENETRATION, blows per foot

Terra Associates, Inc.
Consultants in Geotechnical Engineering
Geology and
Environmental Earth Sciences

UNIFIED SOIL CLASSIFICATION SYSTEM
DUPONT TRAILER YARD
DUPONT, WASHINGTON

Proj.No.T-6897-3	Date: MAY 2020	Figure 3

Test Pit No. TP-5

Logged by: DPL
Date: 01/10/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)
0	18 inches FOREST DUFF with roots and gravel.	4.1
5	Brown to gray sandy GRAVEL, fine to coarse grained, some cobbles, medium dense to dense, moist. (GP)	3.9
10		6.3
15	Test pit terminated at 11.5 feet. No groundwater seepage observed. Some test pit sidewall caving.	
20		

Test Pit No. TP-6

Logged by: DPL
Date: 01/10/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)
0	18 to 24 inches FOREST DUFF with organics and roots, gravel, soft, wet.	
	Brown silty sandy GRAVEL, fine to coarse grained, cobbles, medium dense, wet. (GM)	14.1
5	Gray sandy GRAVEL, fine to coarse grained, some cobbles, dense, moist. (GP)	4.4
10		4.9
15	Test pit terminated at 12 feet. No groundwater seepage observed. Some test pit sidewall caving.	
20		

Test Pit No. TP-7

Logged by: DPL
Date: 01/10/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)	
0	18 to 24 inches FOREST DUFF with organics and roots, gravel, soft, wet.		
	Brown silty sandy GRAVEL, fine to coarse grained, some roots and cobbles, medium dense, wet. (GM)	8.8	
5	Gray SAND with gravel, fine to coarse grained, medium dense, moist. (SP)	7.5	
10	Gray sandy GRAVEL, fine to coarse grained, medium, moist. (GP)	5.3	
15	Test pit terminated at 12 feet. No groundwater seepage observed. Some test pit sidewall caving.		
20			

Test Pit No. TP-8

Logged by: DPL
Date: 01/10/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)	
0	12 inches FOREST DUFF with roots and gravel.		
	Brown to gray sandy GRAVEL, fine to coarse grained, some cobbles, medium dense, moist. (GP)	3.6 7.2	
5	Gray gravelly SAND, fine to coarse grained, medium dense, moist. (SP)	6.4	
10	Gray sandy GRAVEL, fine to coarse grained, some cobbles, medium dense to dense at 17 feet, moist to wet at 15 feet. (GP)	5.4	
15	Heavy iron staining at 15 to 19 feet.	4.4	▼
20	Test pit terminated at 19 feet. Slight to moderate groundwater seepage observed at 16 feet. Some test pit sidewall caving. 2-inch slotted PVC pipe installed. Water level measureed at 16.5 on 1/26/06.		

Terra Associates, Inc.
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TEST PIT LOGS
INTERNATIONAL PLACE
DUPONT, WASHINGTON

Proj. No. T-5853	Date JAN 2006	Figure A-5

Test Pit No. TP-9

Logged by:
Date:

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)
0	12 to 18 inches FOREST DUFF with roots and gravel.	
5	Brown to gray sandy GRAVEL, fine to coarse grained, cobbles, medium dense to dense at 16 feet, moist to wet at 16 feet. (GP)	4.1
10		5.2
15		▼
20	Test pit terminated at 20 feet. Slight to moderate groundwater seepage observed at 16 feet. Test pit sidewalls easily caved below 10 feet.	

Test Pit No. TP-10

Logged by:
Date:

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)
0	18 to 24 inches FOREST DUFF with organics and roots, gravel, soft, wet.	
	Grayish-brown SAND with gravel, fine to coarse grained, medium dense, moist. (SP)	4.0
5	Gray sandy GRAVEL, fine to coarse grained, medium dense to dense, cobbles to small boulders below 16 feet. (GP)	4.2
10		3.0 ▼
15	Heavy iron staining below 16 feet.	3.7
20	Test pit terminated at 18.5 feet. Slight to moderate groundwater seepage observed at 16 feet. Some test pit sidewall caving. 2-inch slotted PVC pipe installed. Water level measured at 16.25 feet on 1/26/06.	

Test Pit No. TP-11

Logged by: DPL
Date: 01/11/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)
0	18 inches FOREST DUFF with roots and gravel.	
	Brown to gray sandy GRAVEL, fine to coarse grained, trace cobbles, medium dense to dense, moist. (GP)	6.3
5		5.9
		3.6
10	Test pit terminated at 10 feet. No groundwater seepage observed. Some test pit sidewall caving.	
15		
20		

Test Pit No. TP-12

Logged by: DPL
Date: 01/11/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)
0	12 to 18 inches FOREST DUFF with roots and gravel.	
	Brown to gray sandy GRAVEL, fine to coarse grained, trace cobbles, medium dense to dense, moist to wet at 8 feet. (GP)	4.4
5		4.3
		4.7
10	Test pit terminated at 10 feet. No groundwater seepage observed. Some test pit sidewall caving.	
15		
20		

Terra Associates, Inc.
Consultants in Geotechnical Engineering
Geology and
Environmental Earth Sciences

TEST PIT LOGS
INTERNATIONAL PLACE
DUPONT, WASHINGTON

Proj. No. T-5853	Date JAN 2006	Figure A-7

Test Pit No. TP-13

Logged by: DPL
Date: 01/11/06

Approximate Elev.

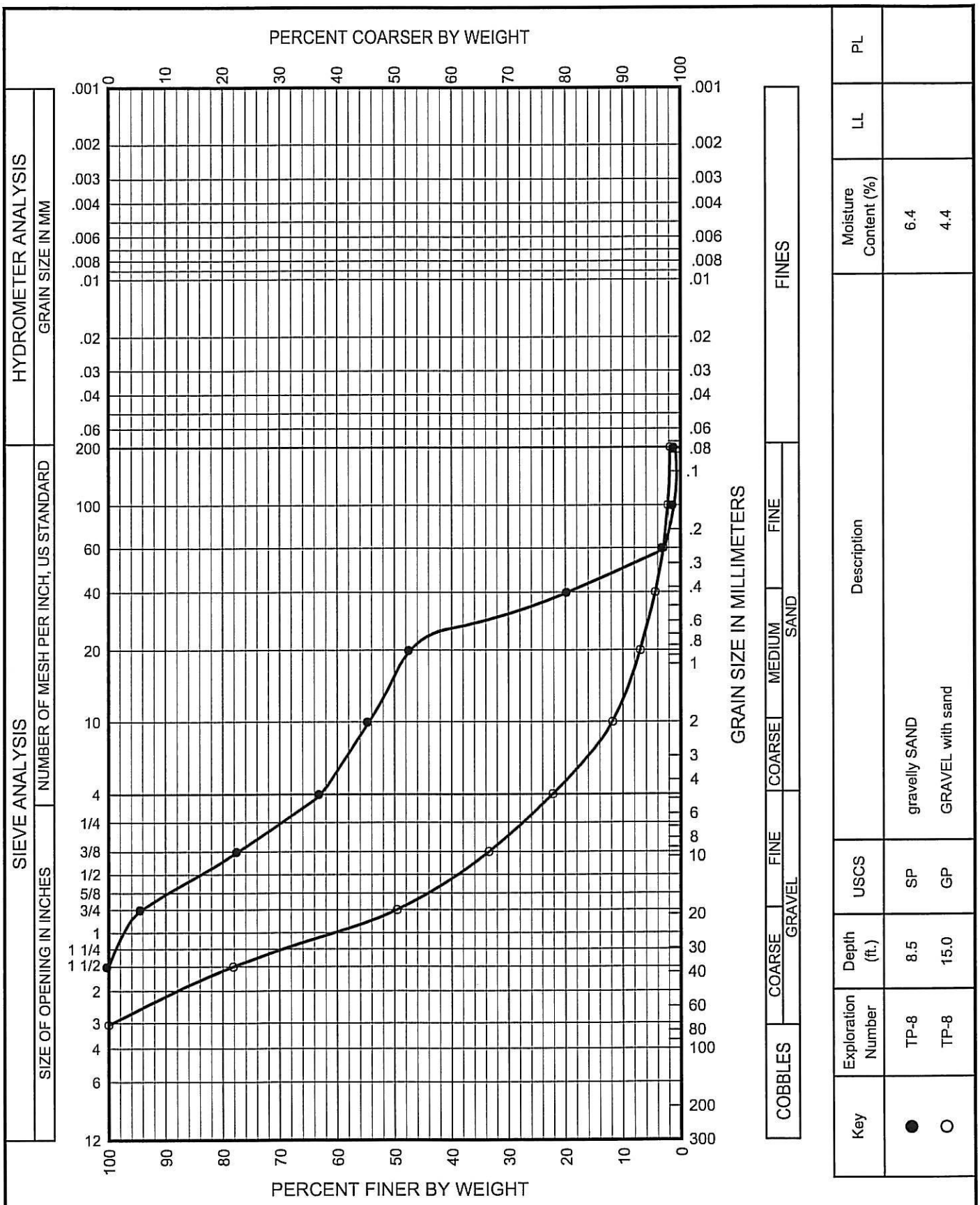
Depth (ft.)	Soil Description	Moisture Content (%)	
0	18 to 24 inches FOREST DUFF with organics and roots, gravel, soft, wet.		
	Grayish-brown silty SAND with gravel, fine to medium grained, medium dense, moist. (SM)	5.8	
5	Gray sandy GRAVEL to gravelly SAND, fine to coarse grained, trace cobbles, medium dense, moist to wet at 9 feet. (GP/SP)	4.3	
10		5.1	
	Test pit terminated at 11 feet. No groundwater seepage observed. Some test pit sidewall caving.		
15			
20			

Test Pit No. TP-14

Logged by: DPL
Date: 01/11/06

Approximate Elev.

Depth (ft.)	Soil Description	Moisture Content (%)	
0	18 to 24 inches FOREST DUFF with organics and roots, gravel, soft, wet.		
	Brown sandy GRAVEL, fine to coarse grained, medium dense, moist. (GP)	8.5	
5	Gray sandy GRAVEL, fine to coarse grained, some cobbles, medium dense, moist to wet. (GP)	4.6	
10			
	Test pit terminated at 11 feet. No groundwater seepage observed. Test pit sidewalls easily caved.		
15			
20			



Key	Exploration Number	Depth (ft.)	USCS	Description	Moisture Content (%)	LL	PL
●	TP-8	8.5	SP	gravelly SAND	6.4		
○	TP-8	15.0	GP	GRAVEL with sand	4.4		

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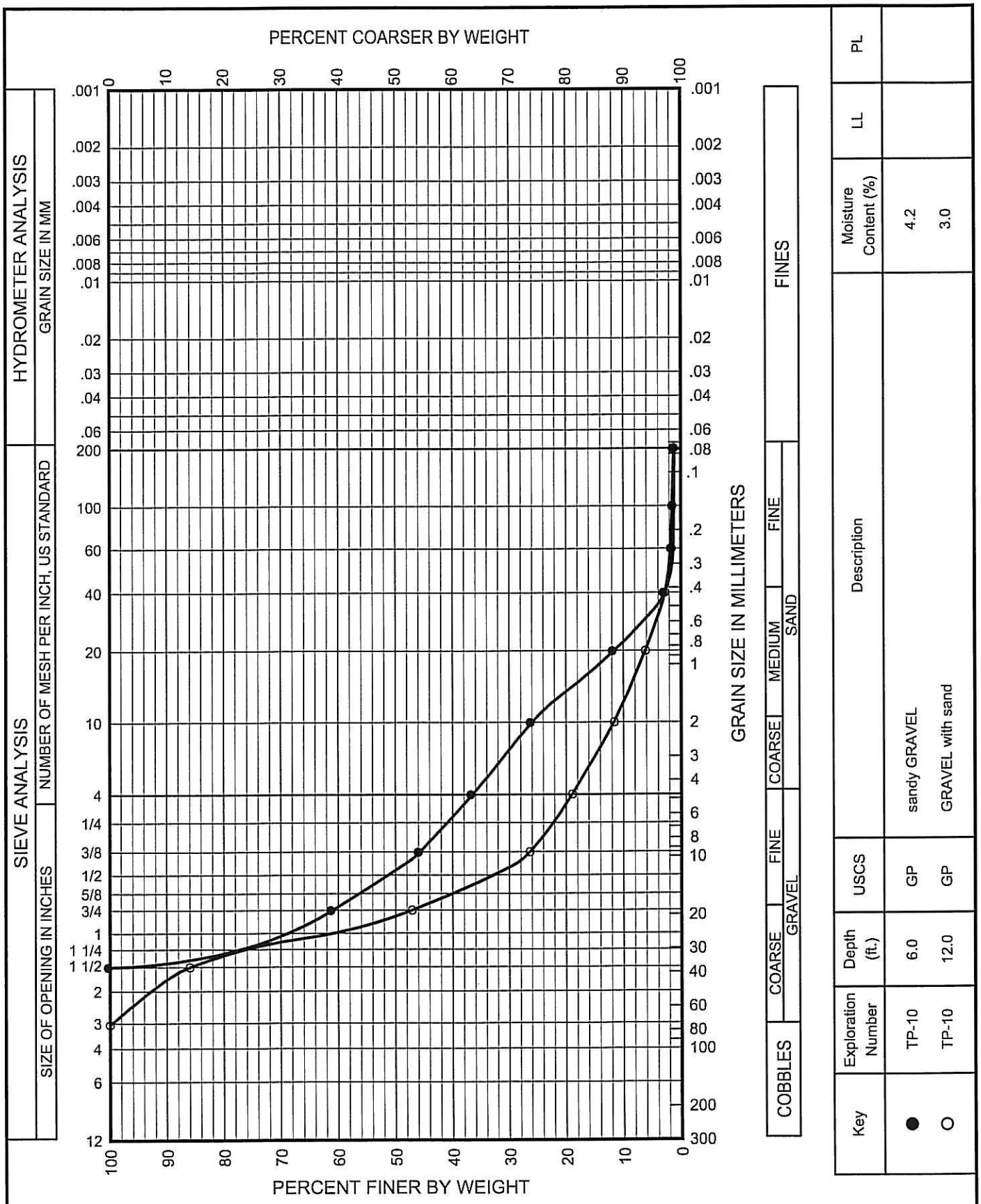
Consultants in Geotechnical Engineering
Geology and
Environmental Earth Sciences

GRAIN SIZE ANALYSIS
INTERNATIONAL PLACE
DUPONT, WASHINGTON

Proj. No. T-5853	Date JAN 2006	Figure A-11



Key	Exploration Number	Depth (ft.)	USCS	Description	Moisture Content (%)	LL	PL
●	TP-10	6.0	GP	sandy GRAVEL	4.2		
○	TP-10	12.0	GP	GRAVEL with sand	3.0		

Terra Associates, Inc.
Consultants in Geotechnical Engineering
Geology and
Environmental Earth Sciences

GRAIN SIZE ANALYSIS
INTERNATIONAL PLACE
DUPONT, WASHINGTON

Proj. No. T-5853	Date JAN 2006	Figure A-12

LOG OF EXPLORATION PIT NO. EP-1

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplification of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, dark brown, silty fine to medium SAND with gravel, minor organics.
2	
3	Roots from 2.5 to 4.5 feet.
4	
5	**Vashon Recessional Outwash**
6	Medium dense, moist, light brown, coarse SAND with gravel.
7	
8	
9	Medium dense, moist, gray, GRAVEL with medium to coarse sand.
10	Horizontal stratification.
11	
12	
13	Bottom of exploration pit at depth 12 feet No ground water. No seepage. Moderate caving.
14	
15	
16	
17	
18	
19	
20	

International Place
DuPont, WA

Associated Earth Sciences, Inc.

Logged by: MT

Approved by:

Project No. KE120002B

KCTP3 120002 B.GPJ February 27, 2012

LOG OF EXPLORATION PIT NO. EP-2

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplification of actual conditions encountered. **DESCRIPTION**
	Fill
1	Loose to medium dense, moist, dark brown, silty fine to medium SAND, minor organic content.
2	**Vashon Recessional Outwash**
3	Medium dense, moist, yellow brown, fine to medium sandy GRAVEL with cobbles, minor stratification.
4	
5	
6	More moist and trace silt below 6 feet.
7	
8	
9	
10	Medium dense, very moist, brown gray, sandy GRAVEL.
11	Trace silt at 12 feet.
12	
13	Bottom of exploration pit at depth 12 feet No ground water. No seepage. Caving below 4 feet.
14	
15	
16	
17	
18	
19	
20	

International Place
DuPont, WA

Logged by: MT

Approved by:

Associated Earth Sciences, Inc.

Project No. KE120002B

KCTP3 120002 B.GPJ February 27, 2012

LOG OF EXPLORATION PIT NO. EP-3

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplification of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, brown gray, fine to medium SAND with gravel, cobbles, minor organics.
2	
3	
4	Concrete pipe east-west through exploration pit.
5	
6	Bottom of exploration pit at depth 5 feet No ground water. No seepage. Moderate caving.
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

International Place
DuPont, WA

Associated Earth Sciences, Inc.

Logged by: MT

Approved by:

Project No. KE120002B

LOG OF EXPLORATION PIT NO. EP-4

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplification of actual conditions encountered. **DESCRIPTION**
	Fill - 3 inches pea gravel on surface.
	Vashon Recessional Outwash
1	
2	Medium dense, moist, brown gray, GRAVEL with fine to coarse SAND, with gravel and cobbles.
3	
4	Stratified with thin coarse sand lenses.
5	
6	
7	
8	
9	Bottom of exploration pit at depth 8 feet No ground water. No seepage. Moderate caving.
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

International Place
DuPont, WA

Associated Earth Sciences, Inc.

Logged by: MT

Approved by:

Project No. KE120002B

KCTP3 120002 B.GPJ February 27, 2012

LOG OF EXPLORATION PIT NO. EP-5

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplification of actual conditions encountered. **DESCRIPTION**
	Fill
1	Loose to medium dense, moist, dark brown, fine to medium SAND with gravel, trace silt, slightly organic.
2	
3	**Vashon Recessional Outwash**
4	Medium dense, moist, yellow brown, fine to coarse SAND with gravel, cobbles.
5	
6	
7	
8	
9	Bottom of exploration pit at depth 8 feet No ground water. No seepage. Moderate caving.
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

KCTP3 120002 B.GPJ February 27, 2012

International Place
DuPont, WA

Associated Earth Sciences, Inc.

Logged by: MT

Approved by:

Project No. KE120002B

City of DuPont
1700 Civic Drive • DuPont, WA 98327
Phone: (253) 964-8121 / Fax: (253) 964-1455

AUTHORIZATION TO ACT AS AGENT AFFIDAVIT

I, Steilacoom Historical School District 1, as property owner of the following described property

32xx International Place North
(Property Address)
300039-0282
(Parcel Number)

hereby authorize
Dan Balmelli / Betsy Dyer, Barghausen Consulting Engineers
(Name)
18215 - 72nd Avenue South, Kent, WA 98032
(Address)
425-251-6222 / dbalmelli@barghausen.com / bdyer@barghausen.com
(Phone/Email)

to act as agent on my behalf before the City of DuPont regarding the application to
Pre-Application Review, land use reviews and site development reviews as needed.

K. Weight
Property Owner Signature

2-24-2020
Date

Dr. Kathi Weight - Superintendent
Print Name

STATE OF WASHINGTON }
COUNTY OF PIERCE }

On this 24 day of FEBRUARY, 20 20, personally appeared before me KATHI WEIGHT known to be the individual(s) described in and who executed the within and foregoing instrument and acknowledged that he/she signed the same as given, as his/her free and voluntary act and deed, for the uses and purposes therein mentioned, and under oath stated that he/she was authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereto set my hand and affixed my official seal the day and year first above written.

RICHARD PAUL LOVELESS
COMMISSION EXPIRES
NOTARY
PUBLIC
05-13-20
STATE OF WASHINGTON

Notary Public
RICHARD PAUL LOVELESS
Print Name
NOTARY PUBLIC in and for the State of Washington
Residing at STEILACOOM, WA.
My Commission expires: 5/13/2020

Attachment 1.f. Steilacoom Historical District Authorization to Act as Agent dated February 24, 2020

City of DuPont
Planning Division
Boundary Line Adjustment
Lot Line Elimination Application

1700 Civic Drive
DuPont, WA 98327
www.dupontwa.gov

Phone: (253) 912-5393
Fax: (253) 964-1455

City File Number: _____

All information listed in this application, or by applicable ordinance, must be submitted in order for the application to be determined complete. Only complete applications will be processed for conformance with adopted policies and requirements.

General Information:

Applicant name: Brian Mattson, Panattoni Development

Address: 1821 Dock Street, Suite 100, Tacoma, WA 98402

Phone number: 206-838-6182

Fax number: bmattson@panattoni.com

Agent/Contact: Dan Balmelli, Barghausen Consulting Engineers

Address: 18215 - 72nd Avenue South, Kent, WA 98032

Phone number: 425-251-6222

Fax number: dbalmelli@barghausen.com

Description of proposal. Be specific.

Construction of additional vehicular parking, guard shack and associated site and utility improvements. A boundary line adjustment or lot combination will be processed to configure existing lots to meet the new site layout.

Site Information:

Parcel numbers of affected lots: 300039-0282 and 300039-0011

Area of each affected lot before and after adjustment: _____

Existing: 232,610.40 sf (5.34 ac) / 1,400,889.60 sf (32.16 ac) = 1,633,500.00 sf

Proposed: 1,633,500.00

Attachment 1.g. BLA/LLE Application Form signed July 1, 2020

Required Plans, Information and Fee:

Quantity of each item or drawing is indicated in parenthesis. Plans shall be no larger than 24 by 36 inch sheet size.

- [ ] Drawings showing all information required by DMC 24.7 for BLA or DMC 24.08 for LLE application (eight copies).
- [X] Title Report less than 30 days old (two copies).
- [X] Completed Agent Affidavit.
- [X] Filing fee.

Note:
Fill out and return this application with all material listed in the Required Plans, Information and Fee section. All plans must be folded to 8½ by 11 inch size. You will be contacted by the City within 28 days of formal application submittal regarding whether the application is complete. Site work may not start until all necessary permits have been obtained.

Daniel K. Balmelli, Agent 7/1/2020 Dan Balmelli
(Applicant Signature) (Date) (Print name)

City of DuPont
Planning Division
Land Use Application

1700 Civic Drive
DuPont, WA 98327
www.dupontwa.gov

Phone: (253) 912-5393
Fax: (253) 964-1455

City File Number: _____

All information listed in this application, or by applicable ordinance, must be submitted in order for a land use application to be determined complete. Only a complete land use application will be processed for conformance with adopted policies and requirements.

General Information:

Project name: Northwest Logistics Center II - Parking Lot Expansion

Applicant name: Brian Mattson, Panattoni Development Company

Address: 1821 Dock Street, Suite 100, Tacoma, WA 98402

Phone number: 206-838-6182 Fax number: bmattson@panattoni.com

Applicant's representative: Dan Balmelli, Barghausen Consulting Engineers

Address: 18215 - 72nd Avenue South, Kent, WA 98032

Phone number: 425-251-6222 Fax number: dbalmelli@barghausen.com

Description of proposal. Be specific.

Construction of additional auto vehicular parking and guard house for the associated building. Improvements will include asphalt and concrete pavement, storm drainage improvements, water system improvements, sanitary sewer improvements, and landscaping.

Site Information:

Assessor's Parcel Number(s): 300039-0282 & 300039-0011

Area of site in square feet: 1,633,531 sq. ft. total

Area of streets and alleys: N/A

Area of storm drainage improvements and conveyance lines: 8,000 sq.ft (new)

Area of open space and neighborhood green tracts: N/A

Area of critical areas and buffers: N/A

Area of building floors: 277 sq. ft. new [629,364 sq. ft. total for site]

Area of impervious surfaces: 236,328 sq. ft. new/replaced [1,316,189 sq. ft. total for site]

Area of landscaping: [317,342 sq. ft. total for site]

Building height: Guard House 12 feet max.

Number of dwelling units: N/A

Attachment 1.h. Land Use Application signed July 2, 2020

Number of employees: 912 total

Number of disabled, compact and standard parking stalls: ADA - 19 / Compact - 2 / HOV - 46 / Auto - 845 [passenger total = 912 stalls] & Trailer - 77

Description and area of all proposed tracts: N/A

Required Plans, Information and Fee:

(Quantity and minimum scale of each item or drawing is indicated in parenthesis. Plans shall be no larger than 24 by 36 inch sheet size)

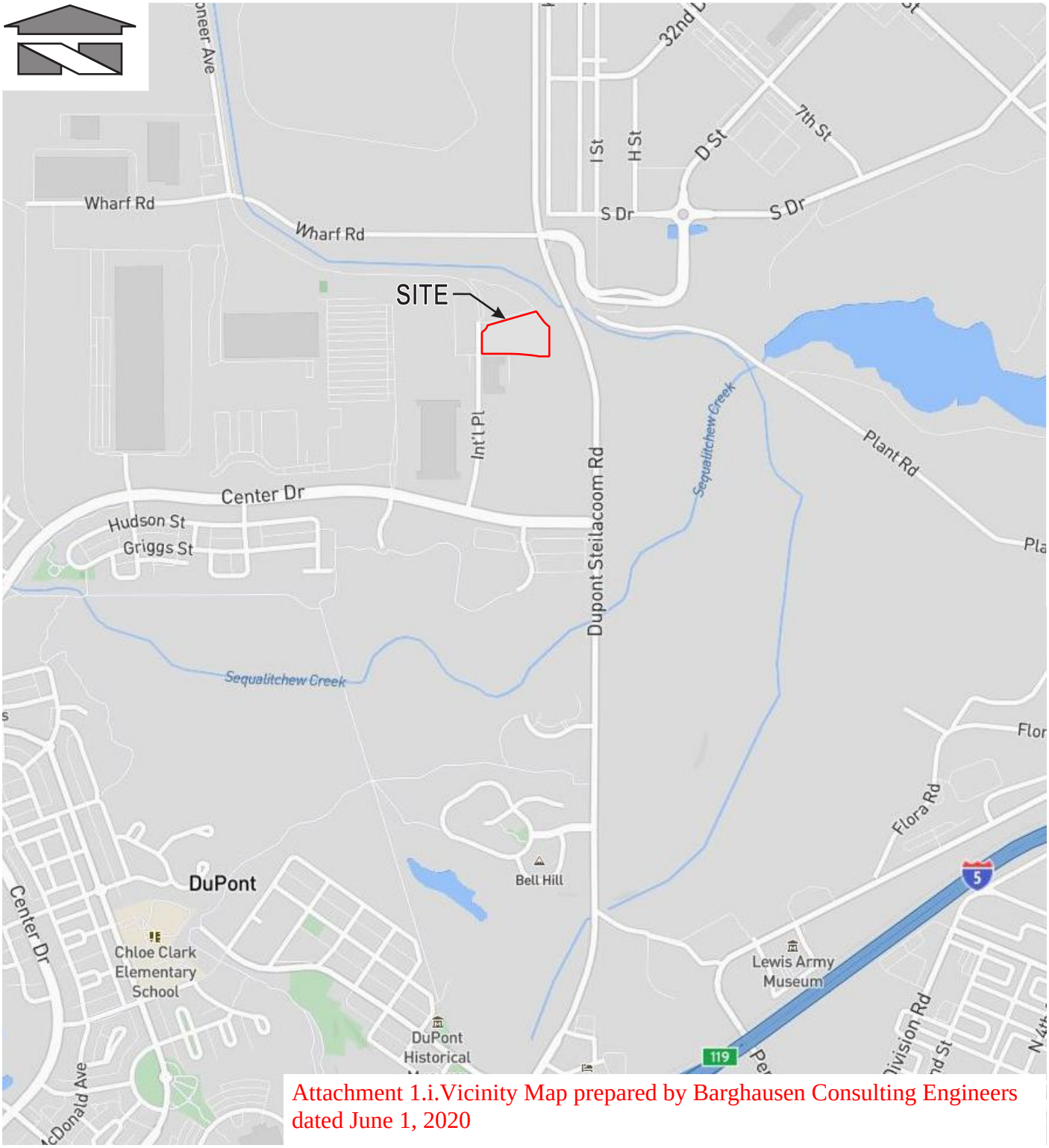
1. [X] Vicinity Map (include as part of site plan).
2. [X] Site Plan drawn at 1 inch = 20 feet extending 100 feet beyond the property lines (eight copies).
3. [X] Landscape Plans identifying: location, size and species of all landmark, historic and specimen trees; trees to be retained, specific tree protection measures drawn at 1 inch = 20 feet (seven copies).
4. [X] Grading Plan with estimated dimensions and quantities of work involved drawn at 1 inch = 20 feet horizontal with 2' contour intervals (seven copies).
5. [X] Storm Drainage and Utility Plan drawn at 1 inch = 20 feet (seven copies).
6. [X] Preliminary Stormwater Management Report and calculations (three copies).
7. [ ] Roadway cross sections, (seven copies of single line drawing with dimensions).
8. [X] One each 8 by 11 inch reduction of all drawings.
9. [X] Average daily trips generated by the proposal based on the International Transportation Engineers Trip Generation Manual (two copies).
10. [X] Building Elevations drawn at ¼ inch = 1 foot or larger. Identify building materials and colors (eight copies).
11. [X] Title report of subject lot that is less than 30 days old to identify all encumbrances (two copies).
12. [N/A] Draft of proposed covenants, conditions and restrictions related to the maintenance of open space or commonly owned improvements, if applicable (two copies).
13. [N/A] Letter of Sewer Availability from Pierce County (two copies).
14. [N/A] Letter of Water Availability from City of DuPont (two copies).
15. [N/A] One site drawing showing the refuse enclosure(s) that is approved via signature and date by LeMay, Inc. Contact person is Charlie Maxwell, Public Relations Director, 253-537-8687.
16. [X] Completed Environmental Checklist (two copies).
17. [X] Completed Land Use Application (one copy).
18. [X] Completed Agent Affidavit (one copy).
19. [X] Filing fee(s).

Note:

Fill out and return this application with all material listed in the Required Plans, Information and Fee section. Submittal of all required plans, information and fees constitutes a complete application. You will be contacted by the City within 28 days of formal application submittal regarding whether the application is complete. Site work may not start until all necessary permits have been obtained. Paper or electronic drawings of the proposal may be requested for presentation purposes.

Daniel K. Balmelli, Agent 7/2/2020 Dan Balmelli

(Applicant Signature) (Date) (Print name)



Attachment 1.i.Vicinity Map prepared by Barghausen Consulting Engineers dated June 1, 2020

REFERENCE: Rand McNally (2020)

Scale: Horizontal: N.T.S. Vertical: N/A	For: NW Logistics 2 - Parking Expansion Dupont, Washington	Job Number 21227
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com	Title: VICINITY MAP	DATE: 06/01/20

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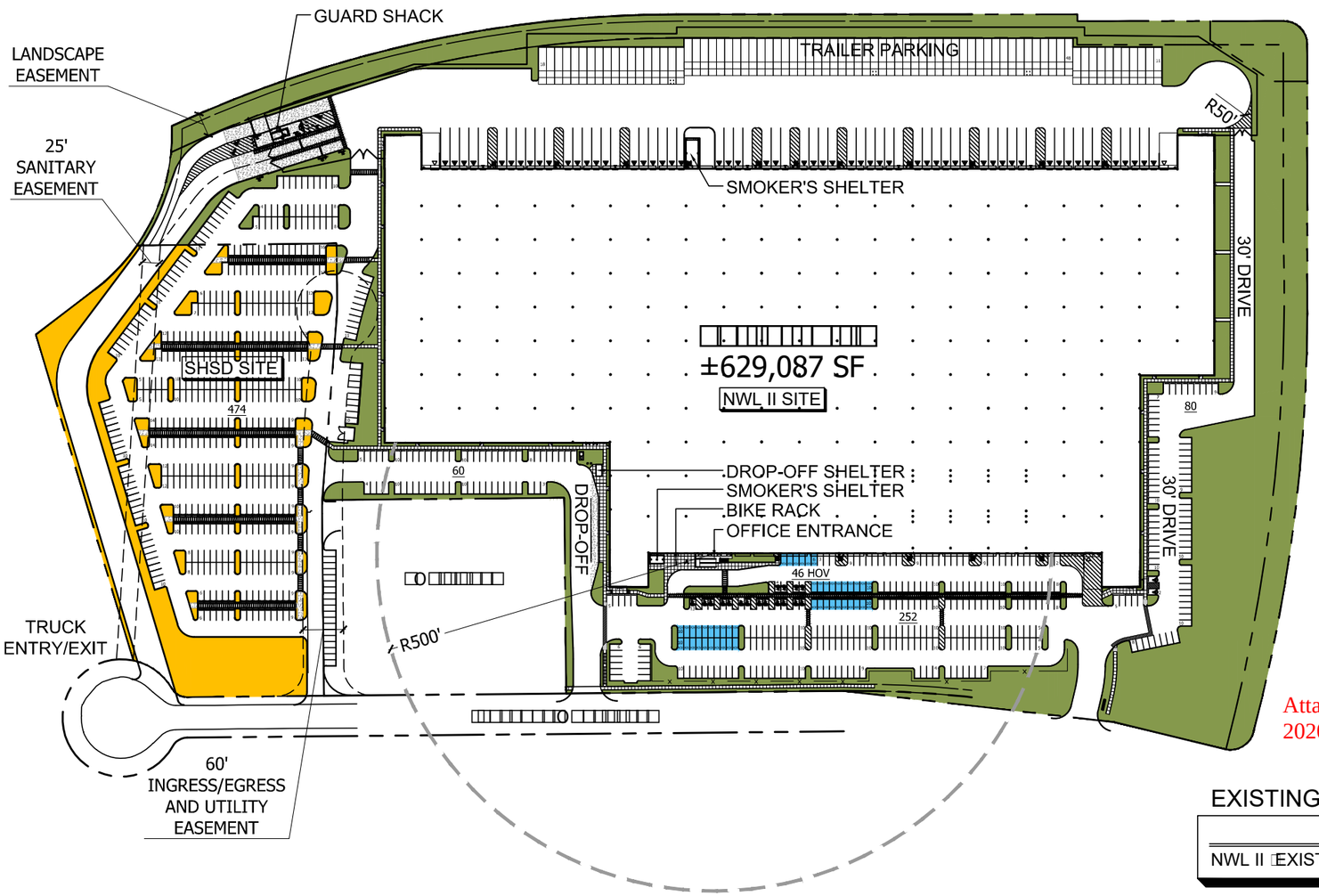


SITE INFORMATION

Attachment 1.j. Architectural Site Plan prepared by Nelson dated June 22, 2020

EXISTING LANDSCAPE INFORMATION

	SITE AREA	LANDSCAPE AREA	LANDSCAPE %
NWL II (EXISTING)	1,400,6[illegible]7 [illegible]	241,601 [illegible]	17.2%

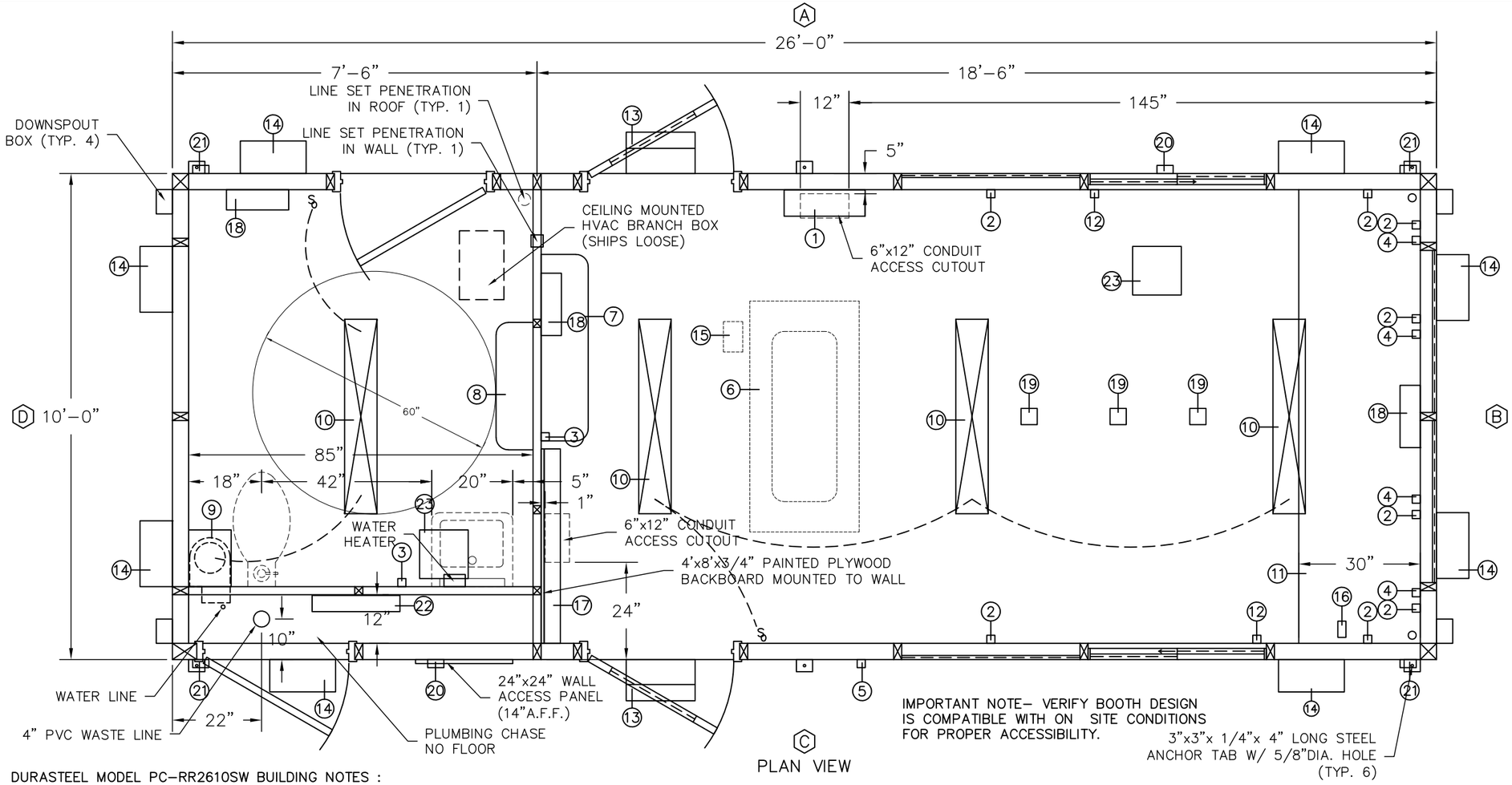
PROPOSED LANDSCAPE INFORMATION

	SITE AREA	LANDSCAPE AREA	LANDSCAPE %
NWL II (EXISTING AND MODIFIED)	1,400,6[illegible]7 [illegible]	26[illegible],[illegible]84 [illegible]	1[illegible].3%
SHSD (NEW)	232,834 [illegible]	47,358 [illegible]	20.3%
TOTAL:	1,633,5[illegible]1 [illegible]	317,342 [illegible]	1[illegible].4%

NELSON

N

PANATTONI®



DURASTEEL MODEL PC-RR2610SW BUILDING NOTES :

1. 100 AMP 3 PHASE, 30 SPACE, PANEL BOARD w/ 100A MAIN BREAKER, (SEE PANEL SCHEDULE)
2. 115V DUPLEX OUTLET
3. 115V GFI DUPLEX OUTLET
4. BLANK 2x4 J-BOX w/ RECESSED CONDUIT RUN & PULL WIRE TO ITEM #17
5. EXTERIOR 115V DUPLEX OUTLET w/ WEATHERPROOF COVER
6. EXTERIOR HVAC UNIT w/ MOUNTING PAD ON ROOF (SHIPS LOOSE) (MXZ5C42NAHZ)
7. WALL MOUNTED AIR HANDLER (SHIPS LOOSE) (MSZD30NA8)
8. WALL MOUNTED AIR HANDLER (SHIPS LOOSE) (MSZGL12NAU1)
9. 80 CFM EXHAUST FAN (WIRED TO LIGHT)
10. 4' SURFACE MOUNTED LED WRAPAROUND LIGHT w/ OCCUPANCY SENSOR SWITCH
11. 30" DEEP PAINTED STEEL SHELF
12. 4x4 J-BOX w/ RECESSED CONDUIT & PULL WIRE TO ITEM# 17
13. 115V EXTERIOR DOWN LIGHT w/ PHOTO CELL (WST LED-P3-40K-VF-120-PE-DDBXD)
14. 115V EXTERIOR WALL PACK LIGHT w/ PHOTO CELL (TWH LED-10C-1000-40K-T3M-120-PE-DDBXD)
15. EXTERIOR SWITCHED DISCONNECT w/ SERVICE GFI OUTLET FOR HVAC UNIT
16. 115V DUPLEX OUTLET, CEILING MOUNTED
17. 4"x4"x48" STEEL WIREWAY w/ SCREW COVER & KNOCKOUTS @ 90" A.F.F.
18. 240V, 4,000 WATT WALL MOUNTED HEATER (WIRED DIRECT)
19. CEILING MOUNTED 4X4 J-BOX w/ RECESSED CONDUIT RUN & PULL WIRE TO ITEM# 17
20. EXTERIOR 4X4 J-BOX w/ RECESSED 1" CONDUIT RUN & PULL WIRE TO ITEM# 23
21. EXTERIOR 4X4 J-BOX w/ RECESSED 1/2" CONDUIT RUN & PULL WIRE TO ITEM# 17
22. 115V, 500W PLUMBING CHASE HEATER (WIRED DIRECT)
23. 12"x12" J-BOX RECESSED IN CEILING w/ COVER & 3/4" CONDUIT RUN & PULL WIRE TO ITEM# 17

* EXTERIOR ROOF w/ NO OVERHANG, 20"H FASCIA, (4) LIFTING LUG PLATES & (4) DOWNSPOUTS
* 96" INTERIOR HEIGHT
* 4" THICK WALL CONSTRUCTION
* (2) 3070 STEEL SWING DOOR w/ 23"x29" VISION LITE, STEEL FRAME, SCHLAGE L9080EU-B8-06 LOCKSET, VON DUPRIN POWER TRANSFER & LCN DOOR CLOSER (SEE ACCESS CONTROL PREP DETAILS)
* (1) 3070 STEEL SWING DOOR w/ STEEL FRAME, LEVER LOCK AND LCN CLOSER (SEE ACCESS CONTROL PREP DETAILS)
* (1) 3070 STEEL SWING DOOR w/ STEEL FRAME, LEVER LOCK AND CHECK CHAIN (CHASE)
* SLIDING WINDOWS
* GLAZING: 5/8" GRAY, SOLARBAN 60 INSULATED TEMPERED
* INSULATION: WALLS R-19, CEILING R-38, FLOOR R-18
* ALUMINUM TREAD PLATE FLOOR
* 2-STANDARD FLOOR ACCESS CUTOUT
* BUILDING PAINTED, TWO PART POLYURETHANE PAINT: (ADVISE COLOR)
* 5LB ABC FIRE EXTINGUISHER (SHIP LOOSE)
* PLUMBING FIXTURES INSTALLED & PLUMBED TO INCLUDE:
  - KOHLER FLOOR MOUNTED REAR DISCHARGE TOILET w/ FLUSH VALVE
  - ADA SINK w/ FAUCET
  - TANKLESS WATER HEATER
  - PAPER TOWEL DISPENSER, LIQUID SOAP DISPENSER, TOILET PAPER HOLDER, & ADA MIRROR 16"x30"
  - ADA GRAB BARS (42", 36", 18")
  - FLOOR DRAIN (SHIPPED LOOSE, INSTALLED ON SITE BY OTHERS)

ELECTRICAL NOTES :
* ALL ELECTRICAL ITEMS TO BE UL LISTED
* J-BOXES TO BE SURFACE MOUNTED ON WALLS UNLESS NOTED
* CONDUIT TO BE MC CABLE, 3/4" max., AND RECESSED IN WALLS, CEILING, & FLOOR, UNLESS NOTED OTHERWISE
* WIRE TO BE COPPER, SIZE #12 MIN. W/THHN INSULATION

Attachment 1.k. Guard House Elevations prepared by Porta-King dated September 25, 2018

* NOTES :
-EXTERIOR SPLIT SYSTEM UNIT SHIPPED LOOSE. UNITS MUST BE INSTALLED ON SITE BY QUALIFIED HVAC TECHNICIAN.

-LINE SET PENETRATIONS TO BE WEATHER-PROOFED ON SITE BY OTHERS, AFTER LINE SET IS INSTALLED BY QUALIFIED HVAC TECHNICIAN.

THESE DRAWINGS & SPECIFICATIONS HAVE BEEN PRODUCED IN ACCORDANCE WITH PORTA-KING'S PROPOSAL & THE PROJECT DESIGN. THE PROJECT WILL BE MANUFACTURED IN ACCORDANCE TO THIS INFORMATION AS SUBMITTED. THE SECURING OF BUILDING PERMITS & COMPLIANCE WITH APPROPRIATE BUILDING CODES IS NOT THE RESPONSIBILITY OF PORTA-KING, BUT IS THE RESPONSIBILITY OF THE PURCHASER OF THE BUILDING.

☐APPROVED AS SUBMITTED, RELEASE FOR MANUFACTURING
☐APPROVED AS NOTED, RELEASE FOR MANUFACTURING
☐REVISE AND RESUBMIT

SIGN : DATE :

PROJECT: AMAZON GUARDHOUSE

CUSTOMER:

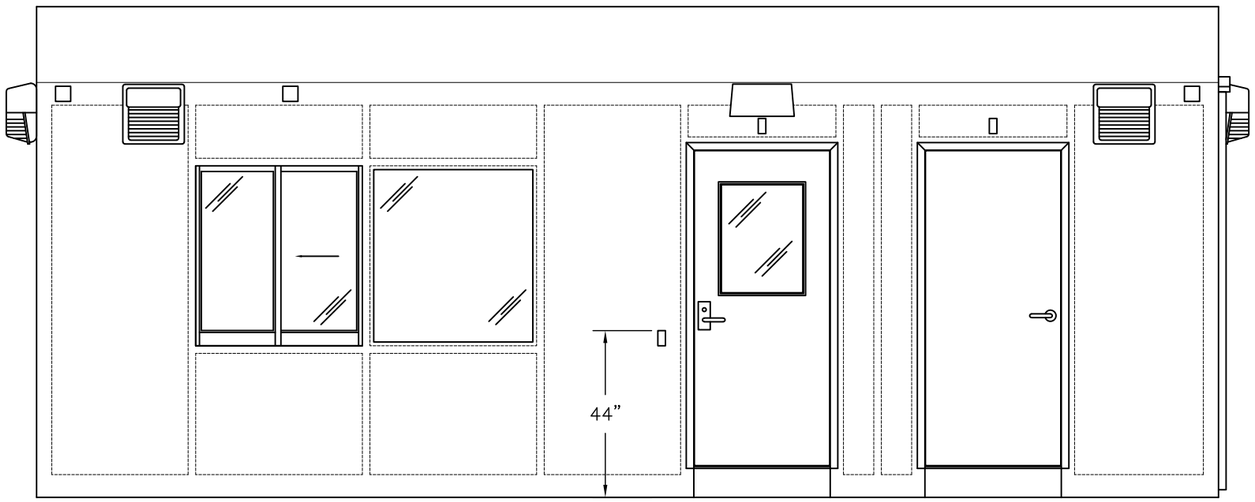
SYSTEM: DURASTEEL

MODEL: PC-RR2610SW

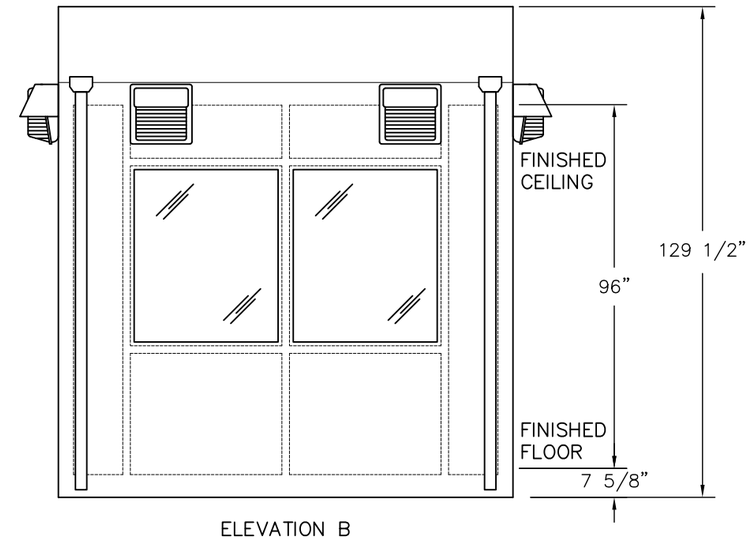
PORTA-KING BUILDING SYSTEMS
4133 SHORELINE DRIVE
EARTH CITY, MO 63045
1-800-456-5464
www.portaking.com

ESTIMATE:
ORDER:
JOB:

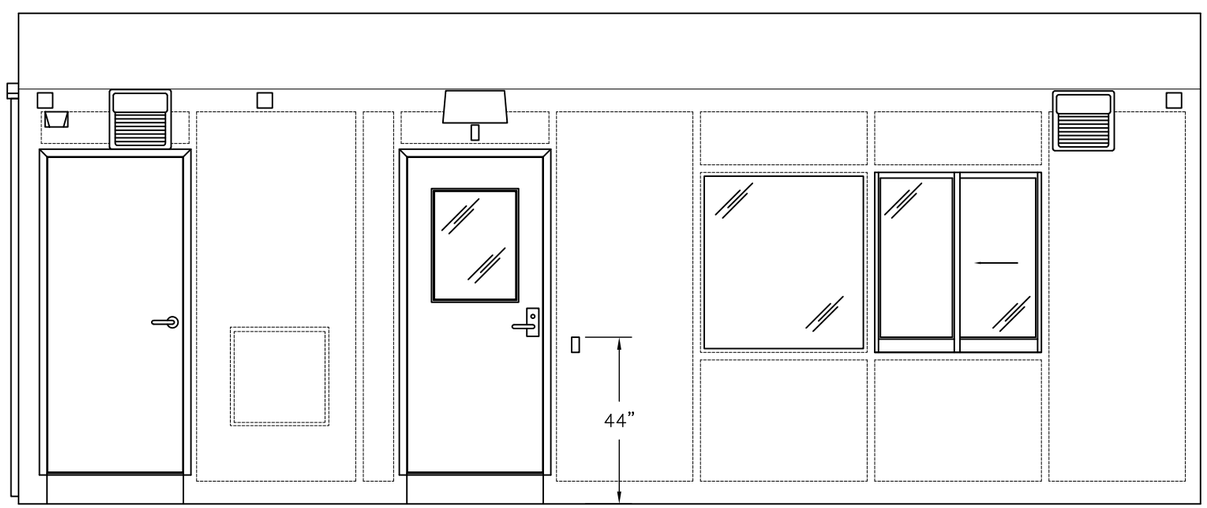
DATE: 9-11-18
REVISED: 9-25-18
DRAWN BY: DGR
SHEET 1 OF 5



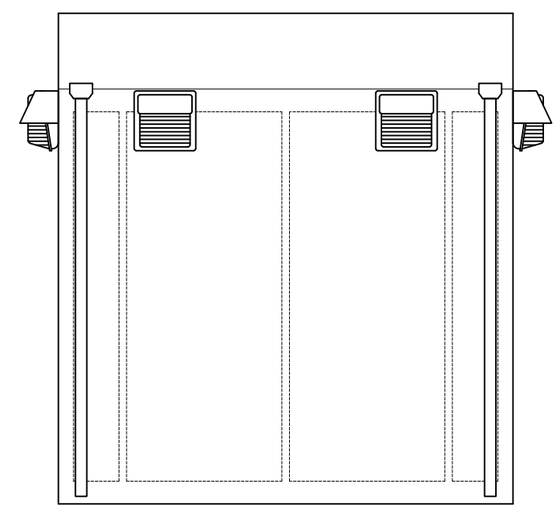
ELEVATION A



ELEVATION B



ELEVATION C



ELEVATION D

PROJECT: AMAZON GUARDHOUSE

CUSTOMER:

SYSTEM: DURASTEEL

MODEL: PC-RR2610SW

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REVISED: 9-25-18

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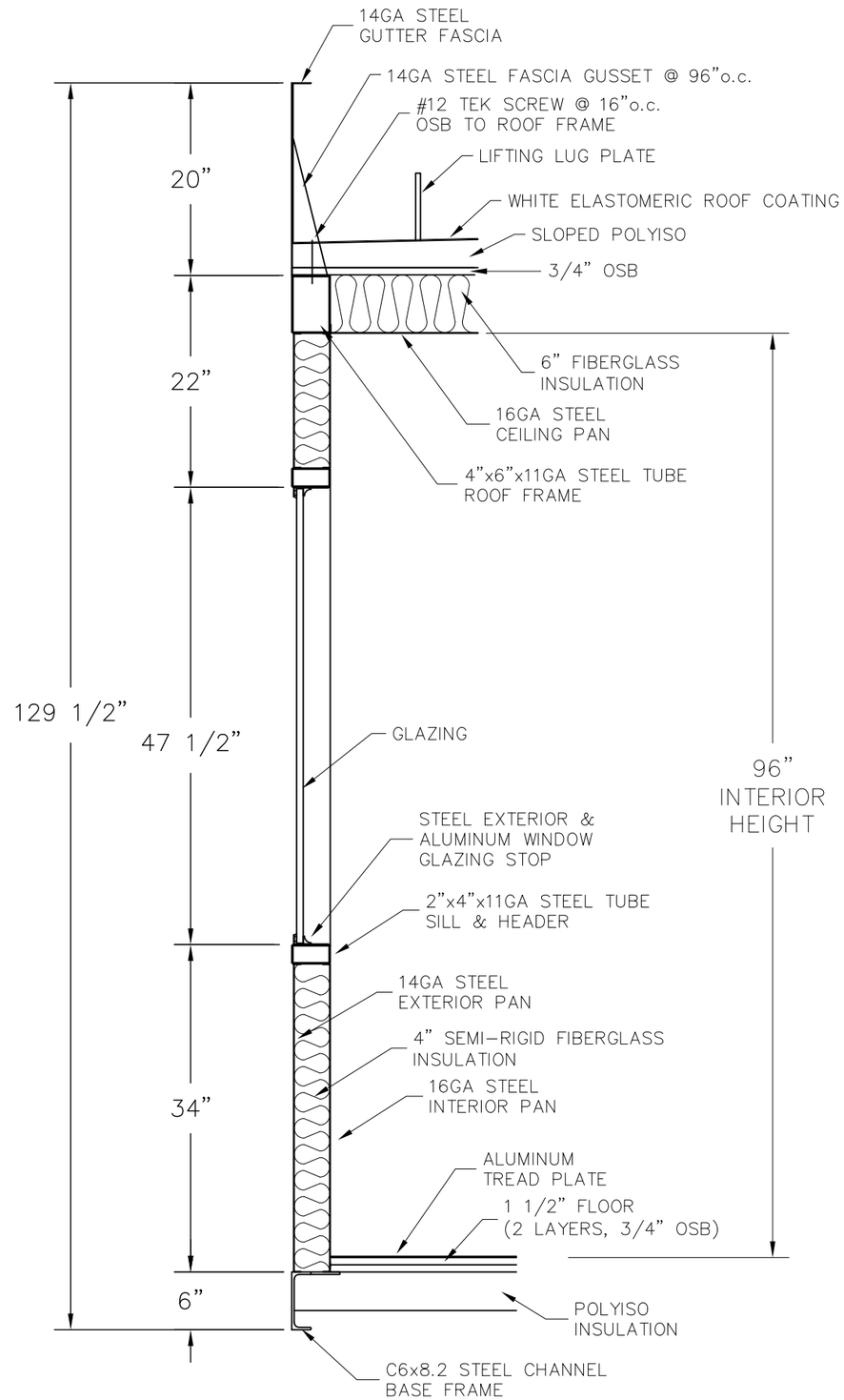
SHEET 2 OF 5



WALL SECTION DETAIL

PROJECT: AMAZON GUARDHOUSE

CUSTOMER:

SYSTEM: DURASTEEL

MODEL: PC-RR2610SW

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SHEET 3 OF 5

NOTE : PANEL TO BE WIRED
AS FEEDER, SUB PANEL.

PANEL
120/208V
THREE PHASE
4 WIRE

PANEL
100 A

NOTE : PANEL FEED TO BE DONE ON SITE BY OTHERS, FROM UNDER FLOOR OR THRU BUILDING WALL. IF AN ADDITIONAL OVERCURRENT DEVICE FOR THE SERVICE DISCONNECTING MEANS IS REQUIRED BASED ON THE LOCATION OF THE EQUIPMENT AND SITE REQUIREMENTS, IT SHALL BE PROVIDED AND INSTALLED ON–SITE BY THE ELECTRICAL CONTRACTOR AND SHALL BE SUBJECT TO REVIEW, INSPECTION, AND APPROVAL BY THE LOCAL INSPECTIONS DEPARTMENT.
IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR ON SITE TO FEED AND WIRE PANEL IN ACCORCANCE WITH THE CURRENT ELECTRICAL CODE AND LOCAL INSPECTIONS DEPARTMENT.

SITE WORK

ELECTRIC PANEL DIAGRAM

NOTE : GROUNDING ELECTRODE AND SERVICE BONDING TO BE DONE ON SITE BY OTHERS IN ACCORDANCE WITH THE CURRENT ELECTRICAL CODE AND LOCAL INSPECTIONS DEPARTMENT.

SITE WORK

COPPER WIRE SIZES

15 AMP #14 MIN. WITH GROUND
20 AMP #12 MIN. WITH GROUND
25 AMP #10 MIN. WITH GROUND
30 AMP #10 MIN. WITH GROUND
40 AMP #8 MIN. WITH GROUND
60 AMP #4 MIN. WITH GROUND
90 AMP #2 MIN. WITH GROUND

PANEL SCHEDULE

100A THREE PHASE 120/208V, 30 CIRCUIT PANEL BOARD

MAIN BREAKER

1	EXTRA	30A	A	40A	HVAC UNIT	2
3			B			4
5			C	20A	115V DUPLEX REC.'S	6
7	208V HEATER	25A	A	20A	115V DUPLEX REC.'S	8
9			B	20A	115V DUPLEX REC.'S	10
11	208V HEATER	25A	C	20A	115V DUPLEX GFI	12
13			A	20A	INTERIOR LIGHTING	14
15	208V HEATER	25A	B	20A	EXTERIOR LIGHTING	16
17			C	20A	115V DUPLEX GFI	18
19	WATER HEATER	20A	A	20A	SPARE	20
21			B	20A	SPARE	22
23	CHASE HEATER	20A	C	20A	SPARE	24
25	SPARE	20A	A	20A	SPARE	26
27	SPACE		B		SPACE	28
29	SPACE		C		SPACE	30

NOTE : THE CIRCUIT NUMBERS SHOWN DO NOT NECESSARILY DENOTE THE ACTUAL CIRCUIT NUMBERS, BUT ARE INTENDED TO DESIGNATE DIFFERENT CIRCUITS.

PROJECT: AMAZON GUARDHOUSE

CUSTOMER:

SYSTEM: DURASTEEL

MODEL: PC–RR2610SW

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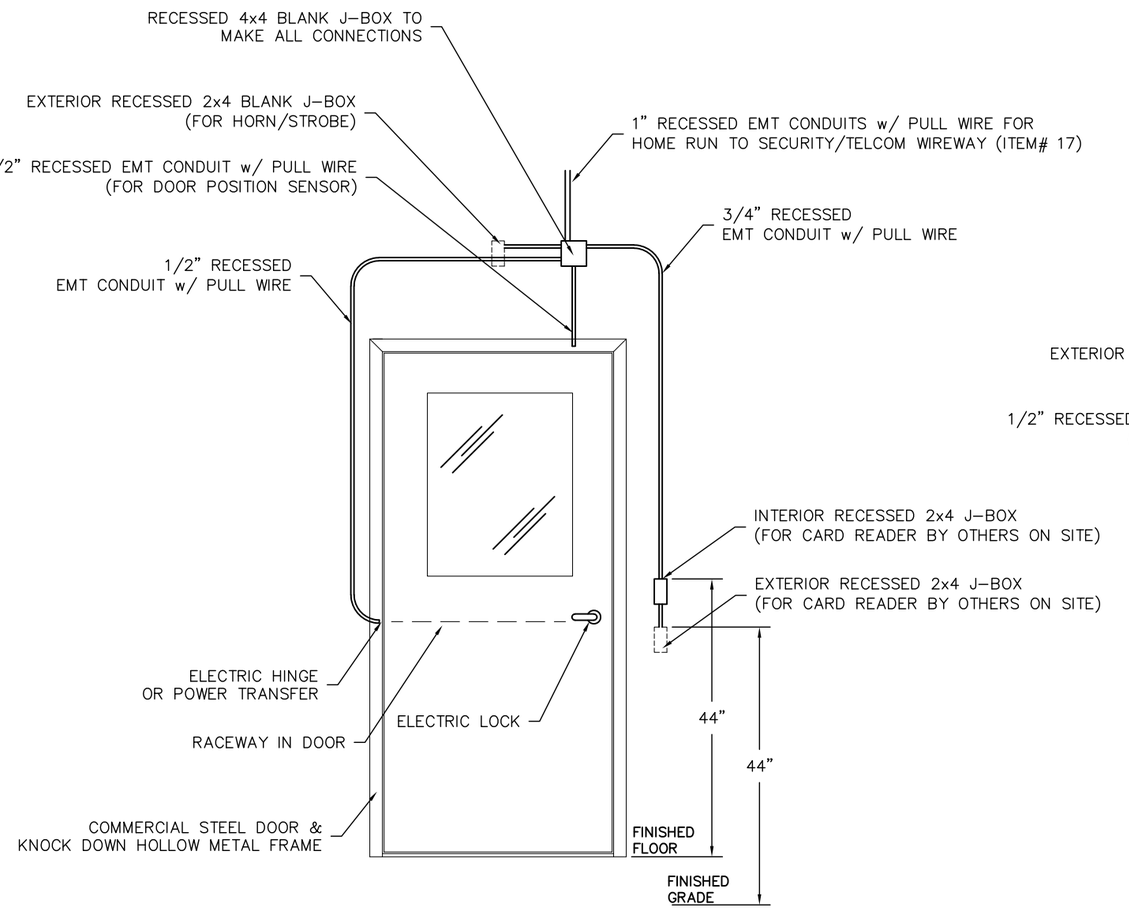
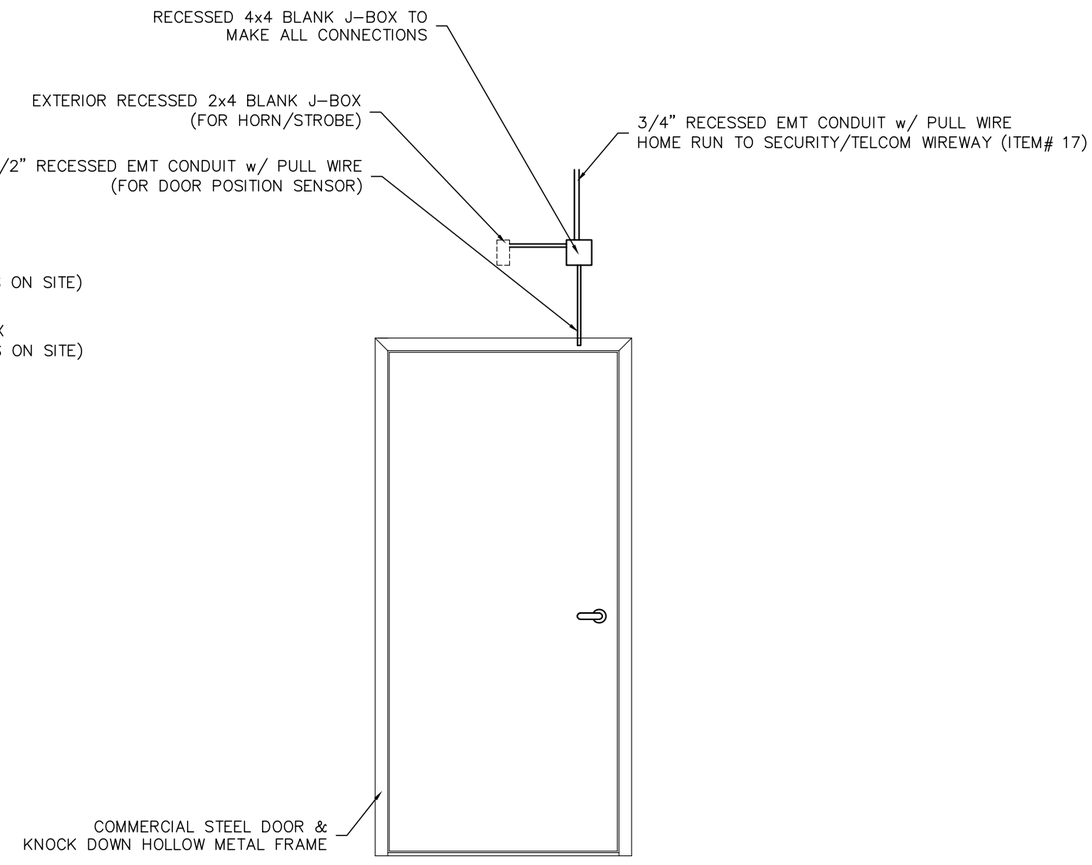
SHEET 4 OF 5



ACCESS CONTROL PREP. FOR ENTRANCE DOORS



ACCESS CONTROL PREP. FOR BATHROOM DOOR

PROJECT: AMAZON GUARDHOUSE

CUSTOMER:

SYSTEM: DURASTEEL

MODEL: PC–RR2610SW

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SHEET 5 OF 5

CITY OF DUPONT

Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
www.dupontwa.gov

April 3, 2020

Sent via email only to:

Dan Balmelli
Barghausen Consulting Engineers, Inc.
18215 72nd Ave South
Kent, WA 98032

Project: Northwest Logistics Trailer Parking Area
Subject: Planning Department Pre-Application Meeting Comments
City file number PLNG2020-002

Dear Mr. Balmelli:

The following letter summarizes the City's response to your request for a pre-application meeting to review City requirements for adding trailer parking capacity to the existing property. The materials submitted include the following:

- Pre-Application Form, undated
- Authorization to Act as Agent Affidavit, Dated February 2, 2020
- Architectural Site Plan, Dated January 28, 2020
- City of DuPont Boundary Line Adjustment dated June 3, 2008
- ALTA Survey dated May 17, 2008

The proposal is located on tax parcels 3000390011 (NW Logistics Center II) and 3000390282 (Steilacoom Historical School District property). The NW Logistics Center II property is 32.16-acres located at 3230 International Place. The Steilacoom Historical School District (SHSD) property is a 5.34-acre property located at the northern terminus of International Place off Center Drive, contiguous to the northwest of the NW Logistics II property.

According to the application form and associated site plan, the proposal is to add 225 trailer storage/parking spaces. It appears that approximately 185 trailer spaces are proposed on the SHSD property, which is currently vacant land, and another 50 trailer spaces are proposed on the NW Logistics II property, which was constructed in 2019. It would require the removal of 108 parking spaces and some landscaping from the NW Logistics II site. The pre-application form states that the project requires 204,891 square feet of impervious surfaces and 27,940 square feet of landscaping area.

In the pre-application meeting, you clarified that you intended to pursue a lot consolidation (Lot Line Elimination or "LLE"), and not the Boundary Line Adjustment shown on the submitted 2008 BLA drawings. Additionally, you clarified that you are looking at the following potential site plans options:

- Scenario 1: The proposal described in your pre-application package as described above.

- Scenario 2: Revise and expand the northern standard vehicle parking area from the NW Logistics II site on to the SHSD Site, including additional high occupancy vehicles/van parking. At this time, it is not known how many additional vehicle spaces would be proposed.

You submitted pre-application materials for Scenario 1. The City will provide comments regarding Scenario 2, but without a project narrative and site plan the comments will be limited.

Planning Department Comments, Contact Jeff Wilson at (253) 912-5393

The following comments are provided from the City's planning department regarding the proposed project.

A. Background and History

1. NW Logistics Center II History (Tax Parcel 3000390011):

   a. On March 13, 2015 the City issued Site Plan Approval for the Northwest Logistics Center II proposal (ADM 13-01), On May 25, 2018 the City issued approval for a Site Plan Amendment (PLNG2018-012). On February 4, 2019, the city issued approval for a Site Plan Amendment (PLNG2018-063) with 57 conditions of approval. These approvals were approved when the property was subject to the Industrial zoning district standards. The description of the PLNG2018-063 proposal was as follows:

   "Construct a warehouse totaling approximately 628,640 square feet on a 32 acre site with associated grading activities, asphalt parking, drive aisles and truck loading and maneuvering areas, landscaping, stormwater infiltration facilities, water and sanitary sewer extensions, franchise utility improvements and half-street frontage improvements along International Place. Approximately 414 parking spaces plus 124 truck trailer spaces are proposed."

   b. The City issued a SEPA Mitigated Determination of Nonsignficance (SEPA MDNS) on Feb 10, 2015 that included 13 mitigation measures. On May 4, 2018, the City adopted the prior SEPA Determination for the May 2018 Site Plan Amendment proposal (PLNG2018-012). On January 8, 2019 the City SEPA Official adopted the February 2015 SEPA document.

   c. The proposal is largely constructed with the exception of building interior tenant improvements.

2. Steilacoom Historical School District Property History (Tax Parcel 3000390282):

a. This property is a vacant land and appears to have been previously cleared and graded. At this point in time we have not been able to identify if there were previous land use approvals or specific conditions placed on the property associated with the clearing and grading.

3. Both properties were rezoned from Industrial to Community Business in 2018.

B. Lot Line Elimination and Site Plan Amendment Options

You may choose to submit an independent LLE/BLA application that proposes no uses or improvements to the SHSD or NW Logistics Center II property. This option would not trigger a requirement for a site plan amendment and would follow the Boundary Line Adjustment section of DMC Chapter 24.07; see Section E below. The moment you propose to improve the property as a part of the NW Logistics Center II project, a site plan amendment application would be required. The site plan amendment process will vary depending on the extent of the improvements as follows:

1. There are two types of site plan amendments, "major" and "minor", which are defined as follows:

   "Site plan amendment, major" means an amendment to an approved site plan that substantially changes the site design, increases density by more than five percent or increases building area by greater than 10 percent, reduces open space or landscape area by more than 10 percent, requires a modification to a condition of approval or other requirements and conditions of the approved and site plan, or includes new requests to deviate from the standards of the applicable district.

   "Site plan amendment, minor" means an amendment to an approved site plan for modifications to the dimensions or footprint location of a building(s) but does not substantially modify the arrangement or increase the number of buildings approved in the plan. Increases to density shall be less than five percent and building size/area shall be less than 10 percent. The amount and quality of landscaping may be increased but may not be reduced by more than 10 percent, provided it complies with the minimum landscaping requirements of the zone in with the property is located. Proposed amendments shall not deviate from standards of the applicable district.

   A minor site plan amendment is a Type I procedure and a major site plan amendment is a Type II procedure, both requiring approval by the Community Development Director.

2. The following briefly reviews the two proposed site plan amendment scenarios with the site plan amendment criteria in DMC 25.150.050:

   a. Scenario 1: Under this scenario, you are proposing to expand the boundaries of the site by adding in the SHSD property and reduce the number of available standard vehicle parking spaces (as approved on the site plan for PLNG2018-063) for the NW Logistics Center II project from 414 vehicle parking spaces to approximately 306 vehicle parking spaces. In addition you would add trailer parking and potentially outdoor storage to the SHSD property. The parking reduction would require a change to Condition No. 35 of the PLNG2018-063 Site Plan Amendment, which states the following:

      35. Each application for building permit will be required to identify the uses, details and employee forecast to ensure compliance with DMC 25.95.030 (number of parking spaces). No more than 414 employees at maximum shift shall be allowed without additional parking added. The addition of parking beyond which is approved herein, may require additional land use and/or SEPA environmental review and approval.

      The criteria for a major site plan amendment includes "*a modification to a condition of approval or other requirements and conditions of the approved and site plan";* therefore it is likely a major site plan amendment process will be required. If you decide to apply for a minor site plan amendment, provide a narrative that describes how the project meets the definition of a minor site plan amendment provided in DMC 25.10.190.055.

      Scenario 2: Under this scenario, you are proposing to expand the boundaries of the site by adding in the SHSD property and adding additional vehicle parking including van/high occupancy vehicle spaces. The change in parking would also require a revision to Condition #35; therefore it is likely a major site plan amendment would also be required for Scenario #2. If you decide to apply for a minor site plan amendment, provide a narrative that describes how the project meets the definition of a minor site plan amendment provided in DMC 25.10.190.055.

b. Alternatively, you may choose to include both scenarios in your site plan amendment application for City review. We anticipate a condition of approval that would require one option be selected upon submittal of site development and/or building permit and the other would be nullified.

c. Note that upon approval of the site plan amendment, the previous proposal (i.e. PLNG2018-063) would be nullified.

d. Site development permits may be submitted for review concurrent with the site plan amendment review process; however, changes to the plans may be a condition of site plan approval and could require revisions to the site development permit plans.

C. DuPont Municipal Code Chapter 25.27 Requirements

1. The property is located within the Community Business (CB) zoning district and is designated by the Comprehensive Plan as Manufacturing Research Park and Industry planning area. The zoning of the subject parcels changed from Industrial to CB after the Northwest Logistics 2 Minor Site Plan Amendment (PLNG2018-063) application was deemed complete. All new proposals shall be compliant with the CB zoning district. The following briefly reviews DMC 25.27 against the proposed scenarios:

   a. Scenario 1: The proposal includes rows of stacked trailer parking that appears more like outdoor storage. You confirmed during the pre-application meeting that that is your intent.

      i. Outdoor Storage is defined in DMC 25.10.150.070 as "the storage of fuel, raw materials, products, and equipment outside of an enclosed building".

      i. The portion of the trailer parking that doesn't have a drive aisle for access will be considered by the City as outdoor storage in terms of how it is regulated. The portion of trailer parking that does have direct access to a drive aisle will be considered trailer parking.

      ii. The proposed outdoor storage located on the SHSD property is intended to function as a part of the NW Logistics Center II project; therefore the City considers it as a permitted ancillary use in the CB zoning district. With the site plan amendment application provide a statement that the outdoor storage is associated with the primary use of the site.

      iii. If for any reason the outdoor storage should change to a stand-alone outdoor storage use, it would require a conditional use permit and would be limited to only 2% of the property. The City would also require additional buffering between the stand-alone outdoor storage and the NW Logistics Center II site. All references to outdoor storage contained in this letter are referring to is as a part of the NW Logistics Center II use.

      iv. Trailer parking is permitted in the CB zoning district as it is considered a necessary operational requirement for the industrial/warehouse use.

   b. Scenario 2: Vehicle/Van parking is allowed to serve the Northwest Logistics Center II project, subject to the minimum and maximum parking requirements and design standards of DMC 25.95.

2. Per DMC 25.27.05, the following standards apply to future development. According to the pre-application meeting application no new structures are proposed; therefore we are only commenting on the relevant aspects of the proposal:

a. Outdoor storage shall be screened from streets and adjoining properties by a 100 percent sight-obscuring wall or fence. This requirement applies to International Place, DuPont Steilacoom Road and the adjacent properties to the north and south of the SHSD parcel. See more detail under Landscaping in Section C.3.d, below.

b. Per25.27.070, Design review is required for commercial and mixed-use development projects pursuant to Chapter 25.70 DMC. DMC 25.70.010 states "all applications for site plans involving retail trade, service businesses, offices and mini-storage in the community business districts are subject to the regulations and guidelines in this chapter." The PLNG2018-063 proposal was approved for a warehouse use. The pre-application meeting materials did not indicate a change of use was part of the proposal. Therefore, if no change to the use is proposed it is assumed that design review is not required for the proposal to add vehicle or trailer parking/outdoor storage.

3. Compliance with DMC Chapter 25.90, Landscaping is required.

a. Per DMC 25.90.020(2)(c), a minimum of 20 percent of each lot must be landscaped area. As noted earlier, the approved NW Logistics Center II site plan (PLNG2018-063) received approvals when it was under the Industrial zoning district, which required 10 percent landscaping. You will need to provide 20 percent landscaping to the SHSD parcel that you are proposing to develop and 20 percent for the portion of the NW Logistics Center II property that is being impacted/modified. Provide the required landscape calculation with the site plan amendment application.

b. Per DMC 25.90.030, street trees are required at the time of development located within the street right-of-way. This requirement applies to International Place. Provide existing and proposed street trees on the plans at the spacing ratio of one per 40 to 50 feet of frontage.

c. Per DMC 25.90.030(2) the interior of surface parking lots with 10 or more stalls shall be landscaped with at least one tree per six stalls. The number of trees per parking space requirement also applies to the trailer parking that is accessed with a drive aisle. We will require strategically placed landscape islands to break up the large expanses of asphalt in the vehicle and trailer parking areas. We recommend consideration of a columnar shaped tree in the trailer parking area to avoid tree canopy conflicts with the trailers. Provide the tree calculations with the site plan amendment application.

d. DMC 25.90.030(3) requires a moderate landscape buffer be provided between parking lots and any adjacent public right-of-way. Subsection (b) allows the city to require full buffers as necessary to mitigate incompatibility or between outdoor storage and surrounding high –use areas. The following is a brief discussion on the buffer requirements based on the two proposed scenarios for all perimeters.

A landscape buffer is defined in DMC 25.110.020 as:

"a buffer strip of trees, shrubs, and ground cover of sufficient height, width, and density to screen, within three years of planting, an unsightly or nuisance-generating land use from a more sensitive land use, even in the winter months." The minimum visual screening for a moderate buffer is 50 percent and for a full buffer is 100 percent.

i. DuPont-Steilacoom Road buffers: The City will require extension of the constructed landscaping berm along DuPont-Steilacoom Road to the northern end of the property in order to fully screen the public right-of-way from the trailer parking and outdoor storage areas. For continuity purposes, the City requires a berm that is 4-5 feet high above the finished grade of the parking area and designed/constructed similar to the approved berm and tree/shrub plantings provided on the NW Logistics Center II site (PNG2018-063) along DuPont Steilacoom Road. This type of screening along DuPont Steilacoom Road is required for the proposed site revisions for trailer parking and

outdoor storage. If the existing parking north of the building should remain as it was approved on the original site plan, no modifications to the buffer in that location would be required. However, additional landscaping will be required wherever there is a transition from vehicle parking to trailer parking/outdoor storage.

ii. International Place buffers - A full buffer is required along International Place to screen the trailer parking and outdoor storage uses. The full buffer should wrap around the southern entrances of the SHSC property for a distance of approximately 50 feet to further screen from the right-of-way before transitioning to a moderate buffer.

A moderate buffer will be required along International Place to screen the standard vehicle parking.

iii. North and south property perimeters - A moderate screening buffer is required along the north and south perimeters of the SHSD property to screen the vehicle parking, outdoor storage and trailer parking areas from the adjacent uses.

iv. Security fencing is to be located on the interior side of the perimeter landscaping and should be hidden by the berm/buffer plantings.

The City encourages the applicant to work with City staff during design and before permit application on the extents of the landscaping.

4. The modified site plan will be reviewed for compliance with Chapter 25.95, On-site Parking. Per DMC 25.95.030, a minimum of 0.3 and a maximum or one parking space shall be provided per worker at maximum shift. The City does not include trailer parking spaces in determining if a site meets the minimum and maximum parking requirements. This is because the trailers are often driven by the same driver using a vehicle parking space. The site plan amendment application shall include the standard vehicle parking quantities and worker at maximum shift calculation with the application and a separate total for the trailer parking spaces. This applies to both Scenario 1 and Scenario 2. See DMC Chapter 95 for all parking design and dimensional requirements.

5. Chapter 25.105 regulates Critical Areas. There is a known manmade drainage course located adjacent to the northeast of the SHSD property that is on JBLM land and regulated by JBLM. The City will not require a critical area report or critical area review.

6. Per DMC 25.110, Setback – Street Corners. It appears that the proposed work for Scenario 1 and Scenario 2 would be located outside of the vision clearance triangle so this code section is not applicable.

7. Proposals for site plan review are required to meet the tree retention requirements stated in DMC 25.120. The SHSD appears to have been previously cleared and graded however and may not have any trees to retain. In addition, the following standards will apply to the proposal:

   a. Removal of Landmark Oregon white oak trees is prohibited (unless you apply for a Type III Tree Modification (see DMC 25.120.050)). At least half of all other (non-oak) landmark trees are also required to be retained.

   b. Per DMC 25.120.030(3) requires retention of one and one half trees per acre over the entire campus; however no more than half of the existing non-oak trees are required to be retained. The approved site plan (PLNG2018-063) for NW Logistics Center II included an approved Tree Retention Plan and Tree Mitigation Plan. The approved plans included the use the north landscaping area to meet the overall trees per acre requirement. As such, you shall submit a revised tree per acre calculations compliant with DMC 25.120.030.

c. For trees intended to remain provide the tree protection radius on the plans. It is one and one-half times the radius of the canopy (in the case of oak trees to be retained).

d. The Landscape plans shall include:

a. The location, size, and species of all landmark, historic, and specimen trees; including both intended to remain and intended to be removed;

b. How retained trees will be protected during development.

D. SEPA Environmental Review

1. The City issued a SEPA MDNS (SEPA 13-01) on February 10, 2015. The City adopted this SEPA MDNS on January 8, 2019 for the most recently approved Minor Site Plan Amendment application for this site (PLNG 2018-064). The City requires more detailed information than what was provided in the pre-application materials to determine if we will adopt the previous SEPA MDNS or issue an addendum, modification, or new MDNS. The following additional information is required:

a. A new or redlined SEPA Checklist is required that describes the proposed changes including change in property size, increase or decrease in parking, and updated cut/fill quantities. Be sure to include the quantities associated with the grading work completed to date for complete comparison purposes with the prior SEPA checklist.

b. The following Environmental Studies are required for work on the SSHD property, which is currently vacant land:

i. Documentation about soil contamination or lack thereof (a copy of the No Further Action letter from Department of Ecology shall also be provided prior to issuance of site development/grading permits);

ii. A geotechnical analysis;

iii. A Cultural Resources Survey that evaluates the proposed soil disturbance area shall be provided. Pursuant to a 1989 Memorandum of Agreement between Weyerhaeuser Real Estate Company, City of DuPont and the Washington State Historic Preservation Office, an archaeological consultant shall oversee all clearing and grading activity and provide a closing report to the City. This will be spelled out in the project's SEPA determination.

iv. An updated traffic study will be required to address the additional truck and/or vehicle trips. See the comments from the City's Traffic Engineering Consultant.

E. Lot Line Elimination Application Requirements

1. Submittal Requirements are stated on the Boundary Line Adjustment - Lot Line Elimination Application form. In addition, note the following is required:

a. Written narrative that address each review criteria stated in DMC 24.08.050.

b. Name and address of the financially responsible party.

c. PDF "writeable" application forms can be found at the following link: http://wa-dupont.civicplus.com/index.aspx?nid=140

d. The application fees are can be found on the City's website at the following link: http://www.dupontwa.gov/DocumentCenter/View/2696

As indicated in the City's fee ordinance, the City will invoice you for all consultant costs and fire department review fees, hearing examiner cost, and 10 percent overhead charges.

e. The City is currently accepting applications electronically. See the attached memorandum regarding permit procedures during the closure of City Hall.

2. Lot line elimination applications shall be reviewed according to the following per DMC 24.08.050:

a. The departments shall review the proposed lot line elimination for compliance with applicable adopted plans, policies and regulations and forward comments to the Department.

b. Following receipt of the comments of consulted departments the Director shall approve or deny the lot line elimination.

c. The applicant shall record the declaration of lot combination within 30 days of approval. If not, the lot line elimination shall be null and void.

F. Site Plan Amendment Application Requirements.

1. Submittal Requirements are stated on the Land Use Application. In addition, the following is required:

a. Written narrative / table that describes the proposed changes from the approved site plan.

b. Name and address of the financially responsible party.

c. A new and/or redlined SEPA checklist. Include the environmental studies listed above in Section D.1.b.

2. PDF "writeable" application forms can be found at the following link: http://wa-dupont.civicplus.com/index.aspx?nid=140

3. The application fees are can be found on the City's website at the following link: http://www.dupontwa.gov/DocumentCenter/View/2696

As indicated in the City's fee ordinance, the City will invoice you for all consultant costs and fire department review fees, hearing examiner cost, and 10 percent overhead charges.

4. The City is currently accepting applications electronically. See the attached memorandum regarding permit procedures during the closure of City Hall.

G. Type I Lot Line Elimination and Type I Minor Site Plan Amendment Approval Process

Lot Line Eliminations and Minor Site Plan Amendments are a Type I procedure with a decision by the Community Development Director.

1. The following are the typical procedures for the Type I approval process:

a. Staff will review the application for completeness and issue a Notice of Complete Application within 28 days. It is important that you provide each of the items identified above at the time of application.

b. Staff will publish a Notice of Application to all City departments and agencies with jurisdiction within 3 days from determination of completeness. The notice will be published in the News Tribune. The notice requires a 14-day public comment period.

c. Staff will review the application for consistency with the DMC and prepare a Staff Report and Decision. The decisions to approve, conditionally approve, or deny the proposal will be made by the Community Development Director.

d. The Community Development Director's decision may be appealed to the hearing examiner within 14 days.

H. Type I Lot Line Elimination and Type II Major Site Plan Amendment Approval Process

Lot Line Eliminations are processed as a Type I procedure and Major Site Plan Amendments are processed as a Type II procedure. Per DMC 25.175.010, the applications may be consolidated into the highest land use procedure. The Type II process requires a decision by the Community Development Director.

2. The following are the typical procedures for the Type II approval process:

a. Staff will review the application for completeness and issue a Notice of Complete Application within 28 days. It is important that you provide each of the items identified above at the time of application.

b. Staff will publish a Notice of Application to all City departments and agencies with jurisdiction within 3 days from determination of completeness. The notice will be published in the News Tribune. The notice requires a 14-day public comment period.

c. Depending on the type of SEPA determination issued (adoption, addendum, modification, or new MDNS) there may or may not be a comment and appeal period.

d. Staff will review the application for consistency with the DMC and prepare a Staff Report and Decision. The decisions to approve, conditionally approve, or deny the proposal will be made by the Community Development Director.

e. The Community Development Director's decision may be appealed to the hearing examiner within 14 days.

Building Department Comments. Contact Bill Anderson at (253) 912-5216 or banderson@dupontwa.gov.

Fire Department Comments. Contact Mike Turner at (253) 666-2760 or mturner@dupontwa.gov.

Engineering and Water Department Comments. Contact Dominic Miller of Gray & Osborne at (360) 292-7481, Ext 1504 or dmiller@g-o.com.

If you have any questions, please call me at 253.912.5393, or email me at jwilson@dupontwa.gov.

Sincerely,

Jeffrey S. Wilson

Jeffrey S. Wilson, AICP
Community Development Director
City of DuPont

Enclosure: Memorandum regarding City permit process during City Hall closure

Cc: File No. PLNG2020-002
Bill Anderson, City of DuPont Building Official
Mike Turner, City of DuPont Fire Marshal
Dominic Miller, Gray & Osborne, Inc. (representing the City of DuPont)
Lisa Klein, AHBL, Inc. (representing the City of DuPont)

Per DMC 25.175.020(1)e, neither the discussions at the pre-application meeting nor the information provided herein shall bind the director in any manner or prevent the director's future application or enforcement of all applicable codes, ordinances, and regulations.

City of DuPont

Permit and License Processes during City Hall Lobby Closure

A. Building/Fire Department Permit application process and Inspections:

- Applicant will need to submit the appropriate permit application via email, link to FTP site, or link to "Box" or similar large file transfer site to Sherri Ingles at singles@dupontwa.gov, FAX at 253-964-3554 or by mail at:
  City of DuPont
  ATTN: Permits
  1700 Civic Drive
  DuPont, WA 98327
- Staff will process applications as usual and create the applicable forms.
- To pick up any permit from the city, applicants will **schedule an appointment** by calling Sherri Ingles at 253-912-5217. City staff will follow appropriate hygiene and social distancing protocols when meeting with the public.
- Inspection appointments will be made as usual (telephone request) and inspections will be conducted with the use of PPE and maintaining social distancing (minimum of 6' for all persons).
  1. All exterior and in-garage inspections will be performed as usual or at the discretion of the inspector.
  2. ***"In home" inspections <u>will not</u> be conducted in any home where anyone in the residence is currently sick or has been recently ill***.
- **As public health conditions change, it may be necessary to suspend temporarily inspections for the protection of all parties involved. Should it become necessary to suspend inspections, the City will make every attempt to provide a minimum of one (1) week notice to contractors and the public.**

B. Planning: Land Use, Pre-Application Permit, Sign Permit (Temporary & Permanent) or Home Occupation Permits application process:

- Applications may only be submitted via one of the following methods:
  1. **Email**. Applications may be submitted by email, link to FTP site, or link to "Box" or similar large file transfer site to Janet Howald at jhowald@dupontwa.gov. If a permit application is emailed, all permit fees must be mailed in (see address below); and a copy of the check shall be included with the application email.
  2. **Mail**: This method may be used for all planning permit applications. Please mail to:
     City of DuPont
     ATTN: Janet Howald
     1700 Civic Drive

DuPont, WA 98327

3. **Courier Delivery**. Since the City Hall lobby is closed, applications materials to be delivered by courier must have a pre-arranged delivery appointment to accept the delivery. To schedule a delivery appointment, please contact Janet Howald at 253.912.5232 or via email at jhowald@dupontwa.gov

- **All applications submitted will receive an email confirming receipt of the application and a copy of the receipt for any fees paid.**
- **All** planning permit applications shall include at a minimum the following:
  1. 3 complete sets of all application forms and plans. Please ensure a phone # and email for the application contact person is included.
  2. Check for application fee(s). If application is emailed, the application fee must be mailed in.
  3. Provide an electronic copy of all application materials submitted on either a thumb drive or CD

C. Other Licenses & Permits (e.g.: Dog License, Temporary Parking permits, etc.)

- Applicant will need to submit the appropriate permit or license application via email, link to FTP site, or link to "Box" or similar large file transfer site to Sherri Ingles at singles@dupontwa.gov, FAX at 253-964-3554 or by mail at:

  City of DuPont
  ATTN: Permits & Licenses
  1700 Civic Drive
  DuPont, WA 98327
- Staff will process applications as usual and create the applicable forms.
- If possible, all items will be emailed or faxed back first prior to mailing or having face-to-face contact.
- To pick up your temporary parking permit or dog license tag from the city, applicants will **schedule an appointment** by calling City Hall at 253-964-8121. City staff will follow appropriate hygiene and social distancing protocols when meeting with the public.

From:	Bill Anderson
To:	Jeff Wilson; Janet Howald; Lisa Klein
Cc:	Mike Turner; Dominic Miller; Christopher Ortega; Valeska Silva; Gus Lim; Scott Hein
Subject:	NW Logistics trailer parking LU & proposed short plat PLNG2020-002
Date:	Tuesday, March 10, 2020 8:33:35 AM

Jeff & Lisa,

I have no comments for the subject Land Use & Short Plat submittal. Please contact me if you have questions. Thank you.

Bill Anderson

City of DuPont Fire Department

Proudly serving the community of DuPont

1780 Civic Drive, DuPont, WA, 98327

Phone 253.964.8414 ▪ Fax 253.912.5240 ▪ www.ci.dupont.wa.us

March 9, 2020

TO: Jeff Wilson

FROM: Mike Turner Fire Marshal

RE: Northwest Logistics Trailer Parking Area PLNG2020-002

The DuPont Fire Department Prevention Division reviewed the above project and has the following comments.

Site Plan Related Comments

1. Per DMC 13.05.100, Emergency Vehicle Access Standards Section I. (Gates) Number one thru six shall be followed if gates are installed.

If you have any questions, you may call Fire Marshal Mike Turner at (253) 666-2760 or e-mail mturner@dupontwa.gov.

Sincerely,

Fire Marshal

Mike Turner

Gray & Osborne, Inc.
CONSULTING ENGINEERS

April 3, 2020

Mr. Jeff Wilson
Community Development Director
City of DuPont
1700 Civic Drive
DuPont, Washington 98327

SUBJECT: PRE-APPLICATION COMMENTS, NW LOGISTICS 2 TRAILER PARKING AREA, CITY FILE NO. PLNG2020-002
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON
G&O #20201.00 TASK 02

Dear Mr. Wilson:

On February 26, 2020, Gray & Osborne, Inc. received a submittal packet regarding the above-subject project. The packet included the following:

- City of DuPont Pre-Application Review Form;
- Authorization to Act dated February 20, 2020;
- Boundary Line Adjustment; undrecorded (one sheet dated June 3, 2008);
- ALTA/ACSM Land Title Survey (one sheet dated May 7, 2008); and
- Architecture Plan by Nelson Architects (one sheet dated January 28, 2020).

The proposed development is a parking lot for 225 trailer stalls on Assessor's Parcel Number 300039-0282 east of International Place. The site is to the north of the Northwest Logistics 2 building.

We have reviewed this information for compliance with the current City of DuPont standards, codes, and policies, and have the following comments:

1. It appears the Boundary Line Adjustment is only signed by the Land Surveyor, yet Pierce County .

2. Per the City Street Standards, frontage improvements will be required along International Place. A right-of-way permit will be required for the construction of the improvements within the right-of-way. It appears an

existing streetlight and other utilities are at the site of the proposed driveway.

3. A traffic impact analysis (TIA) will be required. The scope of the traffic study shall be coordinated with the City's Transportation Engineer, Ms. Geri Reinart at (206) 285-9035.

4. The site plan shall include supplemental exhibits to demonstrate that the City Fire Department's large apparatus can navigate the site (lane width, radius), including access to FDCs and hydrants. The Fire Department will confirm the adequacy of vehicle access points.

5. A parking lot lighting plan, including a photometric exhibit showing the lighting levels within the parking lot, will be required for the proposed project. Lighting shall conform to the requirements of DuPont Municipal Code (DMC) Section 25.70.070 (12).

6. The Applicant shall submit a preliminary utility plan identifying the existing and proposed water, storm, and sewer systems, to allow the City to determine the feasibility of the lot layout. City GIS information for the City's water and stormwater system are available upon request.

7. It appears an 8-inch water main will need to be extended to the northeasterly area of the site. The water main will terminate with a fire hydrant. All water mains and appurtenances to be owned and operated by the City shall be located in 15-foot-wide easements dedicated to the City.

8. A Stormwater Site Plan, in accordance with the 2012 Department of Ecology Stormwater Management Manual for Western Washington with 2014 amendments, will be required for this project.

9. A Stormwater Pollution Prevention Plan (SWPPP) and a Temporary Erosion and Sediment Control (TESC) Plan shall be prepared for the project. The project activities shall comply with the requirements of the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges associated with construction activity.

Printed on recycled paper

10. The City's Stormwater System Development Charge (SDC) will apply to the proposed development. The SDC is $1,200 per 1,900 square feet of impervious surface.

11. Prior to final acceptance of this project, the applicant will be required to execute an Agreement for Inspection and Maintenance of Privately Maintained Storm Drainage Facilities. The Agreement should be provided after construction of the storm drainage system to reflect "as-built" conditions. A copy of the form of the agreement is included in the City Street Standards.

12. Prior to final approval of the project, as-builts and Geographic Information System (GIS) documentation will be required, in accordance with City of DuPont Municipal Code Chapter 24.10 and Ordinance No. 97-559.

Thank you for the opportunity to provide these comments. Please contact the undersigned if you have any questions or comments regarding this review.

Sincerely,

GRAY & OSBORNE, INC.

Dominic J. Miller, P.E.

DJM/sp

cc: Mr. Gus Lim, P.E., Public Works Director, City of DuPont
Mr. Bill Anderson, Building Official, City of DuPont
Mr. Scott Hein, Public Works Supervisor, City of DuPont
Mr. Mike Turner, Fire Marshal, City of DuPont
Ms. Lisa Klein, AICP, AHBL, Inc.

Printed on recycled paper

From: Geralyn Reinart
To: Janet Howald
Cc: Jeff Wilson; Lisa Klein; dmiller@g-o.com
Subject: Re: NW Logistics Trailer Parking Area, PLNG2020-002
Date: Tuesday, March 10, 2020 2:25:24 PM

I don't have many comments at this time pending more information in the pre-app meeting from the Applicant regarding the proposed action. Not sure if the additional truck parking is needed because of a change in use with the adjacent warehouse structure or if this is a separate independent user. If the additional parking is for the adjacent warehouse tenant, further information would be helpful as to why this parking wasn't provided initially. Pending more information, trip generation and traffic analysis **may** be requested.

That's all for now - thanks!

geri

Geralyn Reinart, P.E.
831 Sprague Street
Edmonds, WA. 98020
(206) 285-9035
(425) 530-0664 cell
greinart@msn.com

From: Janet Howald <JHowald@dupontwa.gov>
Sent: Wednesday, February 26, 2020 11:16 AM
To: Bill Anderson <BAnderson@dupontwa.gov>; Christopher Ortega <COrtega@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>; Geri Reinart <greinart@msn.com>; Gus Lim <GLim@dupontwa.gov>; Janet Howald <JHowald@dupontwa.gov>; Jeff Wilson <JWilson@dupontwa.gov>; Lisa Klein, AHBL <LKlein@AHBL.com>; Mike Turner <MTurner@dupontwa.gov>; Scott Hein <SHein@dupontwa.gov>; Valeska Silva <vsilva@dupontwa.gov>
Subject: NW Logistics Trailer Parking Area, PLNG2020-002

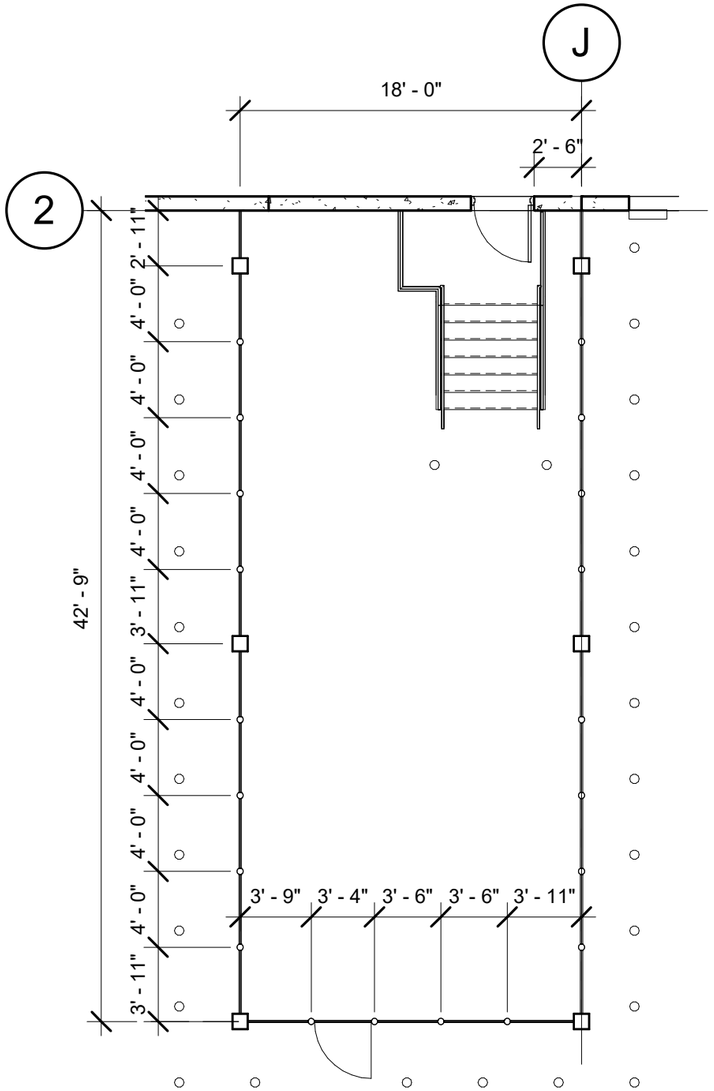
Attached are the pre-app materials for Northwest Logistics Trailer Parking Area, File No. PLNG2020-002.

Please provide comments by Friday, March 13, 2020.

Thanks much.

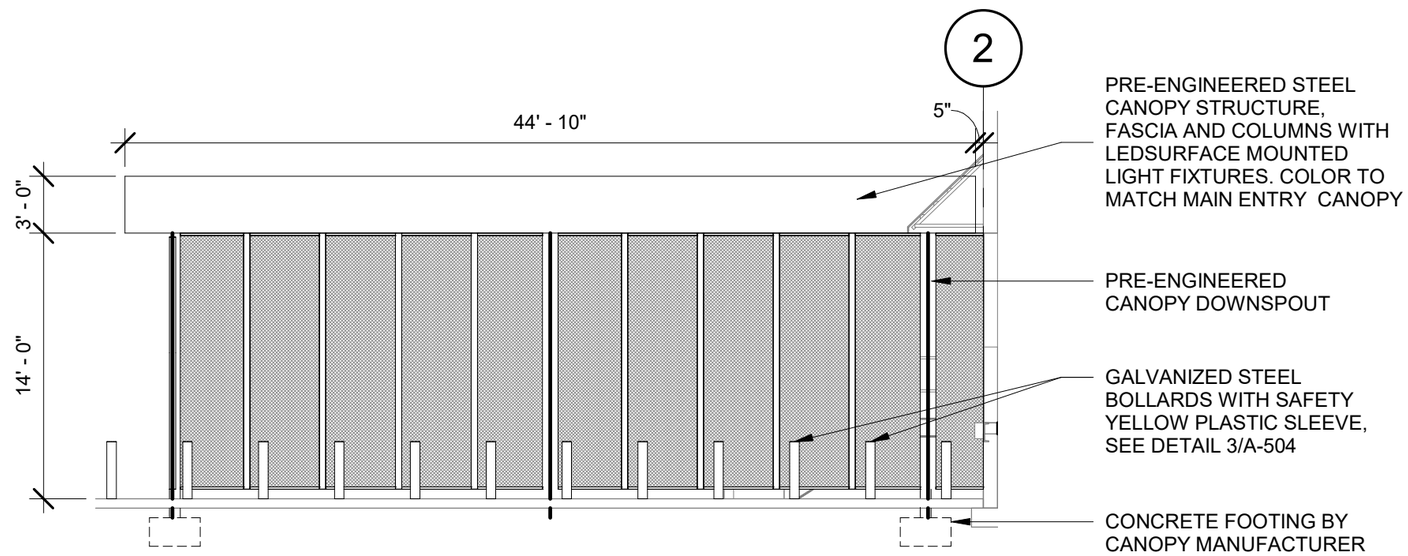
Janet Howald
Community Development
Administrative Specialist
City of DuPont
1700 Civic Drive, DuPont WA 98327

Direct - 253.912.5232
City Hall - 253.964.8121
Jhowald@dupontwa.gov



1 / 001 TRUCK COURT SMOKERS CANOPY PLAN

1/8" = 1'-0"



2 / 001 PREFABRICATED SMOKERS CANOPY - ELEVATION

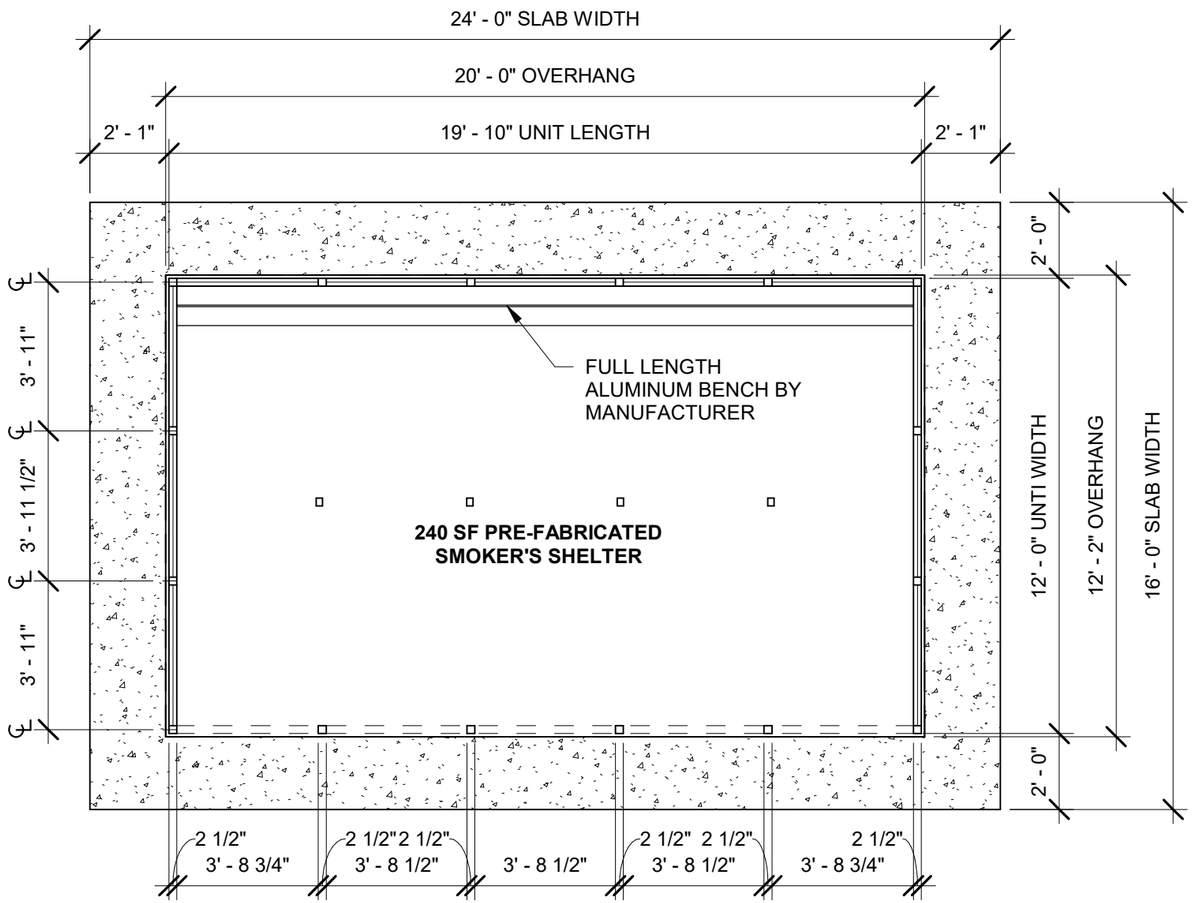
1/8" = 1'-0"

Attachment 1.m. Canopy Elevations prepared by "M" dated June 26, 2020

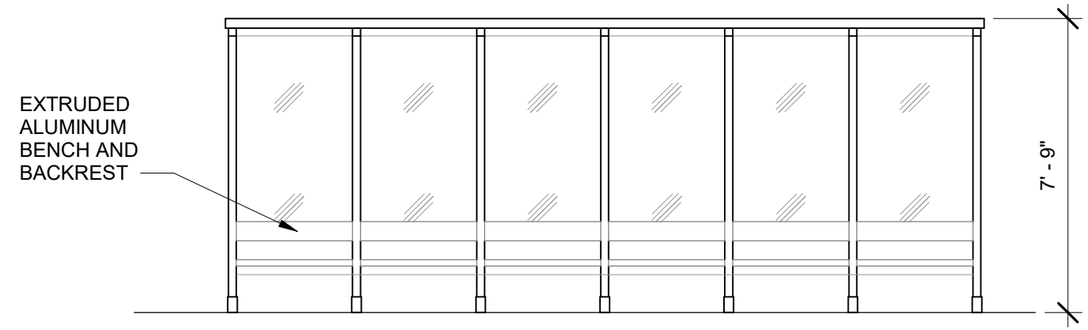
 © 2020 Mackenzie

NOTES:
-FINISH TO BE COORDINATED WITH TENANT'S REP
-WALL GLAZING IS 1/4" CLEAR TEMPERED GLASS
-COORDINATE FINAL DIMENSIONS WITH SHELTER MANUFACTURER AND TENANT REPRESENTATIVE PRIOR TO PROCUREMENT OF SHELTER

LARGE SIZE - 12-'-0" X 19-0" SHELTER
ON 16'-0" X 24'-0" CONCRETE PAD
6" THICK 4500 PSI CONCRETE



1 / 002 PREFABRICATED SMOKERS CANOPY PLAN
1/4" = 1'-0"

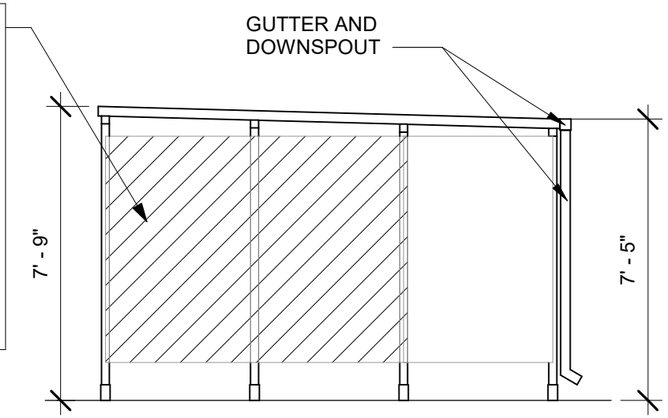


2 / 002 PREFABRICATED SMOKERS CANOPY ELEVATION - FRONT
1/4" = 1'-0"

HATCHED AREA INDICATES TEMPERATE CLIMATE ZONE OPTION

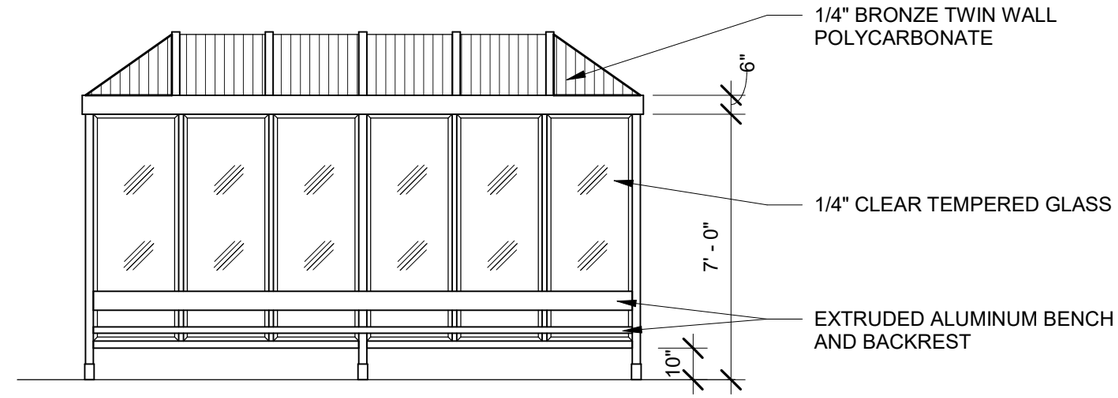
-REMOVE TWO GLAZED PANELS, BOTH SIDES OF SHELTER

-LOCATED SO THAT BACK WALL/BENCH FACES PREDOMINANT WINTER WINDS



3 / 002 PREFABRICATED SMOKERS CANOPY ELEVATION - SIDE
1/4" = 1'-0"

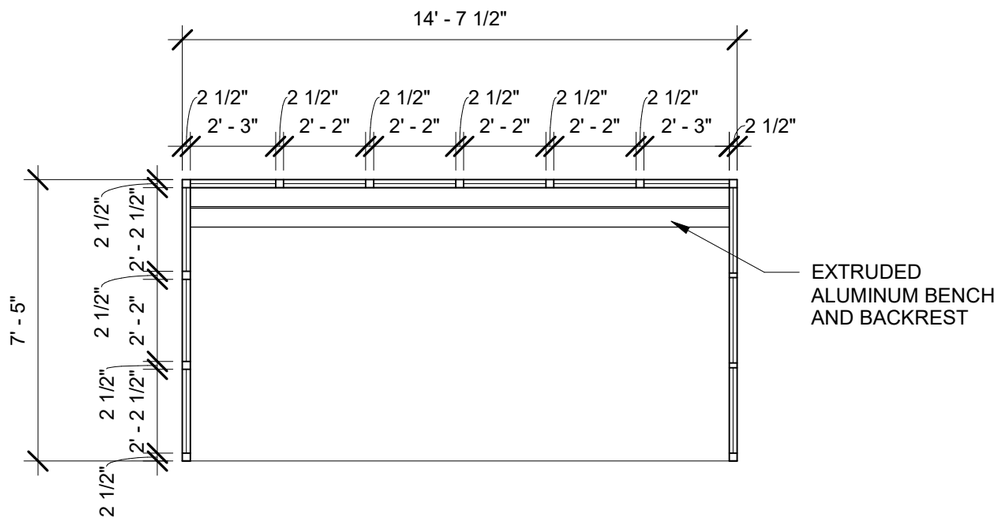
© 2020 Mackenzie



2 / 003

PREFABRICATED DROP-OFF CANOPY ELEVATION - FRONT

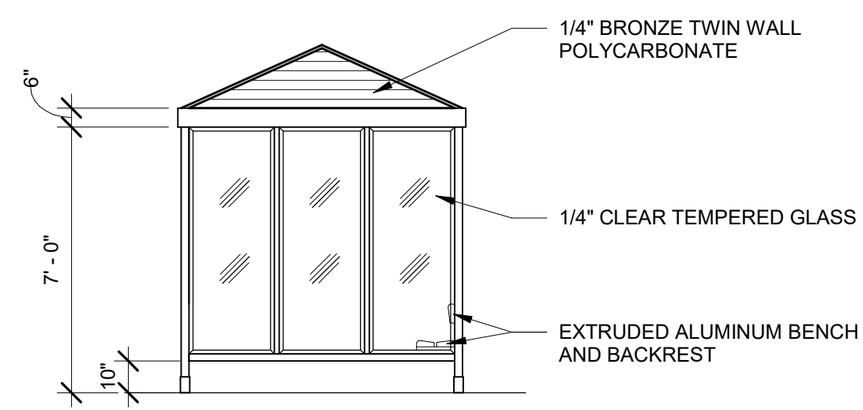
1/4" = 1'-0"



1 / 003

PREFABRICATED DROP-OFF CANOPY PLAN

1/4" = 1'-0"



3 / 003

PREFABRICATED DROP-OFF CANOPY ELEVATION - SIDE

1/4" = 1'-0"

 © 2020 Mackenzie

NELSON

June 29, 2020

Jeffrey S. Wilson, AICP
Community Development Director
City of DuPont
Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121

Re: **Major Site Plan Amendment Type II and Administrative Variance for reduction in required landscape coverage.**
Narrative Describing Site Plan Revisions and
Summary of how project meets the City's Site Plan Review Criteria and Zoning requirements
Project: Northwest Logistics Center II – Parking Lot Expansion
Location: 3230 International Place North, DuPont, Pierce County, Washington
Tax Parcel No: 300039-0011 and 300039-0282

Mr. Jeffrey S. Wilson:

Please refer to the following narrative describing site plan revisions and detailed summary of how project meets the City's Site Plan Review Criteria and Zoning requirements for your review and approval.

Description of the Project:

"The Project" entails a continued development within Pierce County Tax Parcel # 3000390282.

Existing Parcel	Additional Parcel ("The Project")
3000390011	3000390282
NW Logistics Center II	Steilacoom Historical School District property
32.16-acres	5.34-acre
3230 International Place	Northern end of International Place off Center Drive, (contiguous to the northwest of the NW Logistics II property)

Continued development within Pierce County Tax Parcel # 3000390282 (the Project). This parcel is located on International Place N., Dupont, WA, at Section 24 Township 19 Range 01. The 5.34-acre site is vacant and is refer as the Steilacoom Historical School District (SHSD) property

Attachment 1.n. Cover Letter with criteria for approval prepared by Nelson dated June 29, 2020

The existing NW Logistics Center II property is 32.16-acres located at 3230 International Place.

Site Plan Revisions:

Under this proposal, the existing parcel is expanding to the northern boundaries of the site by adding in the SHSD property vehicle parking for employee vehicle spaces. Please refer to Preliminary Site Plan with Site Data for detailed revisions.

The proposal entails to combine the parcels and add vehicle employee parking spaces to total 912 with code compliant landscape coverage. The breakdown is as follows:

a. 407 vehicle new parking spaces are proposed on the SHSD parcel, which is currently vacant land. The current landscape coverage for this parcel is 0%, and the proposed landscape coverage is 20.3%.

b. Another 91 parking stalls have been added to the existing 414 vehicle parking spaces are proposed on the NW Logistics II parcel, which was constructed in 2019. This brings to total parking on this parcel at 505 stalls. The total parking provided for the combined parcels is 912 which matches the maximum employee count on a shift. The original development had a landscape coverage requirement of 10% and was originally designed to have 17.2% landscape coverage. Based on the new zoning designation of the site, 20% landscape coverage is required. Additional landscape has been added to the site bringing the landscape coverage for this parcel to 19.3% and a combined parcel total of 19.4% landscape coverage. Since the individual parcel and the combined parcels do not meet the required 20% landscape coverage, we are requesting an Administrative Variance for a reduction in required landscape coverage.

c. Also, a new pre-manufacture guard shack, pre-manufactured ride share structure, and two (2) pre-manufactured smoker's shelter are proposed to be added to the existing NW logistics II parcel.

d. An administrative variance is being requested for the increase of impervious area/decrease in required landscape coverage. See section 25.90 and section 25.160.050 below.

25.95.030 Number of spaces.	**Proposed ("The Project")**
(1) The minimum required and maximum allowed number of parking spaces shall be as follows, computed to the nearest whole number: Industries, research facilities, print shops, bakeries, wholesales, and warehouses: Minimum #: 0.3, Maximum #: 1, Per: Working at maximum shift	In compliance. Addition of 414 vehicle parking spaces are proposed on the SHSD property, which is currently vacant land. 91 vehicle parking spaces are proposed to be added to the existing 414 parking stalls on the NW Logisitcs II parcel for a combined parcel total of 912.

	Per pre-app report: "Vehicle parking is allowed to serve the project, per minimum and maximum parking requirements and design standards of DMC 25.95"

Summary of how project meets the City's Site Plan Review Criteria and Zoning requirements

Site Plan Review Criteria

Pursuant of the City of DuPont Land Use code, the following site plan review criteria summary outlines compliance in order to ensure that the project is developed in a manner with present ordinances including site design, access, landscaping and parking lot layout. Per Land Use zoning code section 25.150.030 Review criteria:

"In order to obtain site plan approval, all of the development regulations and criteria specified in the district applicable to the property must be satisfied in addition to any general development requirements in Chapters 25.75 through 25.95 and 25.105 through 25.125 DMC."

The following chapters summary have been reviewed for compliance, please refer to application supporting documentation of Major Site Plan Amendment Type II for further review.

Land Use Code Chapters	**Proposed ("The Project")**
Division V. General Development Requirements	
25.75 Commute Trip Reduction	In compliance. Refer to revised Traffic Impact Analysis.
25.80 Cultural, Historical and Archaeological Resources	In compliance. Refer to Cultural Resources Report.
25.85 Affordable Housing Incentives Program	Not applicable. No housing component is this proposal.
25.90 Landscaping	Request Administrative Variance for reduction of required landscape coverage. The SHSD Parcel has a proposed landscape coverage of 20.3%. The Existing NW Logistics II Parcel has been increased from the existing 17.2% to 19.3% landscape coverage. The combined parcels landscape coverage is proposed at 19.4% Refer to Architectural site plan for tabulations. Per DMC 25.90.020(2)(c), a minimum of 20 percent of each lot must be landscaped area.

	Per pre-app report: "20 percent landscaping to the SHSD parcel and 20 percent for the portion of the NW Logistics Center II property that is being impacted/modified. b. Per DMC 25.90.030, street trees are required at the time of development located within the street right-of-way. This requirement applies to International Place. Provide existing and proposed street trees on the plans at the spacing ratio of one per 40 to 50 feet of frontage. c. Per DMC 25.90.030(2) the interior of surface parking lots with 10 or more stalls shall be landscaped with at least one tree per six stalls. The number of trees per parking space requirement also applies to the trailer parking that is accessed with a drive aisle. We will require strategically placed landscape islands to break up the large expanses of asphalt in the vehicle areas. Provide the tree calculations with the site plan amendment application." d. DMC 25.90.030(3) "requires a moderate landscape buffer be provided between parking lots and any adjacent public right-of-way. Subsection (b) allows the city to require full buffers as necessary to mitigate incompatibility or between outdoor storage and surrounding high –use areas."
25.95 Off-Street Parking	In compliance. Refer to Preliminary Site Plan with Site Data. Per DMC 25.95.030, a minimum of 0.3 and a maximum or one parking space shall be provided per worker at maximum shift. Per pre-app-report: "The City does not include trailer parking spaces in determining if a site meets the minimum and maximum parking requirements. This is because the trailers are often driven by the same driver using a vehicle parking space. The site plan amendment application shall include the standard vehicle parking quantities and worker at maximum shift calculation with the application and a separate total for the trailer parking spaces."

25.100 Recycling	In compliance. No facility is this proposal. Refer to Preliminary Site Plan with Site Data.
25.105 Critical Areas	In compliance. Refer to Preliminary Civil Engineering Design Plans. Per The pre-app report: "Existing manmade drainage course located adjacent to the northeast of the SHSD property. City will not require a critical area report or critical area review."
25.110 Setback – Street Corners	Not applicable. Refer to Preliminary Civil Engineering Design Plans, proposed work to be located outside of the vision clearance triangle
25.115 Transportation Concurrency Review	In compliance. Refer to revised Traffic Impact Analysis
25.116 Sign Code	In compliance. Refer to Preliminary Civil Engineering Design Plans
25.120 Tree Retention	In compliance. Refer to Preliminary Tree Retention Plan and preliminary landscape plans. Per pre-app report: "Proposals for site plan review to meet the tree retention requirements stated in DMC 25.120. The SHSD parcel have been previously cleared and graded and no trees to retain. In addition, the following standards apply to the proposal: a. Removal of Landmark Oregon white oak trees is prohibited. At least half of all other (non-oak) landmark trees are also required to be retained. b. Per DMC 25.120.030(3) requires retention of one and one half trees per acre over the entire campus; however no more than half of the existing non-oak trees are required to be retained. Per pre-app report: "The approved site plan (PLNG2018-063) for NW Logistics Center II included an approved Tree Retention Plan and Tree Mitigation Plan. The approved plans included the use the north landscaping area to meet the overall trees per acre requirement. As such, refer to submittal of revised tree per acre calculations compliant with DMC 25.120.030. For trees intended to remain refer to the tree protection radius on the plans. d. The Landscape plans include:

	a. The location, size, and species of all landmark, historic, and specimen trees; including both intended to remain and intended to be removed; b. How retained trees will be protected during development."
25.125 Wireless Communication Facilities	Not applicable. No facility is this proposal.
25.160.050 Review Criteria In order to approve an administrative variance or a general variance, the decision maker shall make written findings demonstrating that all of the following criteria have been met: (1) The proposed variance will not amount to a rezone nor authorize any use not allowed in the land use district. (2) Special conditions and circumstances exist which are peculiar to the land such as size, shape, topography or location, not applicable to other land in the same in the same land use district, demonstrating the literal interpretation of this title would deprive the property owner rights commonly enjoyed by other properties similarly situated in the same zoning district under the terms of title. (3) The special conditions and circumstances notes in subsection (2) of this section are not the result from the actions of the applicant or property owner.	1. Response: A rezone is not being requested as the proposed use matches the existing use is allowed within the zone. 2. Response: The administrative variance being requested for reduction in required landscape coverage is for the existing NW Logistics parcel where the zoning changed from Industrial (10% landscape coverage) to Community Business (20% landscape coverage). Modifications to the existing site have been made and the overall landscape caver age has been increased from the existing 17.2% to 19.3%. The added SHSD parcel meets the landscape coverage requirement with 20.2%, but the combined parcels have a landscape coverage of 19.4%. 3. Response: The special conditions are a result of the zone change for the existing site. 4. Response: The added SHSD parcel meets the landscape coverage

(4) Granting of the variance will not confer a special privilege that is denied other properties in the same land use district. (5) The granting of the variance will not materially detrimental to the public welfare or injurious to the property or improvements in the vicinity and district in which the subject property is situated; (6) The requested variance does not go beyond the minimum necessary to afford relief.	requirement per the CB zone. The existing parcel that had a zone change is the portion that the variance is being requested. If the City would look at "rounding-up" the landscape percentage of 19.4%, then an administrative variance would not be required. 5. Response: The requested variance is only related to on-site landscaping requirements. 6. Response: The request does not go beyond the minimum necessary to afford relief. The project can request up to a 10% reduction in the maximum 80% impervious area allowed.

Zoning requirements

Per DMC 25.27.05, the following standards apply to future development. No new structures are proposed; therefore these are the only relevant aspects of the proposal:

Code Requirements	**Proposed ("The Project")**
Division II. Land Use District Requirements Chapter 25.27 COMMUNITY BUSINESS DISTRICT 25.27.010. The purpose of this district is to create business districts that include a mix of commercial services, office, manufacturing, and industry. The community business (CB) district is intended to accommodate quality employment and commercial services to serve the DuPont community and immediate vicinity; the district also allows complementing multifamily when built with ground level commercial uses. The CB is intended to implement the community commercial opportunity area (CCOA) as	In compliance. Proposal complies with the CB zoning district. Vehicle parking can serve the project, subject to the minimum and maximum parking requirements and design standards of DMC 25.95.

defined in the DuPont comprehensive plan and future land use map. (Ord. 18-1031 § 2 (Exh. 6)	
25.27.020 Permitted uses.	
(1) All forms of retail trade, such as stores, shops, and sales offices except those listed in DMC 25.27.030;	Not applicable
(2) All forms of service businesses, other than adult entertainment, such as hotels, entertainment facilities, restaurants, fitness centers, family day care and child day care centers, vehicle service stations, and banks, except those listed in DMC 25.27.030;	Not applicable
(3) Offices, including medical clinics and veterinary clinics;	Not applicable
(4) Public uses and quasi-public uses;	Not applicable
(5) Open-air vending;	Not applicable
(6) Drive-through window; provided, however, that restaurants with a drive-through window must also provide seating inside the restaurant in an area equal to at least 15 percent of the restaurant's total floor area;	Not applicable
(7) Underground utilities;	Not applicable
(8) Above-ground utility structures under 50 square feet in area and under seven feet in height;	Not applicable
(9) Wireless communication facilities, attached;	Not applicable
(10) Wireless communication facilities, public;	Not applicable

(11) Manufacturing or repair of: (a) Furniture and fixtures; (b) Food and beverages; (c) Textiles, apparel, and leather goods; (d) Building materials other than asphalt, batch concrete when in an unenclosed facility, lumber and wood products; (e) Products made from light stone, clay, and glass; (f) Hand-crafted products; (g) Electrical and electronic equipment and appliances; (h) Fabricated metal products, containers, hand tools, and heating equipment; (i) Measuring, analyzing, and control instruments; (j) Photographic, medical, audio, and optical equipment; (k) Signs; and (l) Automobiles, trucks, boats, and recreational equipment;	Not applicable
(12) Miscellaneous light fabrication and assembly;	Not applicable
(13) Industrial equipment sales, service, and rental;	Not applicable
(14) Industrial laundry and upholstery services;	Not applicable
(15) Building construction, well drilling, and general contractor services;	Not applicable
(16) Warehouse and distribution uses;	Applicable. Proposed use parking lot for employee vehicles.
(17) Mini-storage and indoor storage;	Not applicable
(18) Other similar uses as determined by the community development director. (Ord. 18-1031 § 2 (Exh. 6))	Not applicable
25.27.025 Accessory uses.	
(1) Electric vehicle charging and battery exchange facilities.	Not applicable
(2) A single on-site security dwelling. The sole purpose of the dwelling is to furnish housing for an employee, including family, engaged in on-site security. (Ord. 18-1031 § 2 (Exh. 6))	Not applicable
25.27.030 Exceptions to DMC.	
Service businesses such as wrecking yards and bulk fuel distributors are prohibited. (Ord. 18-1031 § 2 (Exh. 6))	Not applicable
25.27.040 Conditional uses.	

(1) Above-ground utility structures over 50 square feet in area or over seven feet in height.	Not applicable
(2) Outside storage when not associated with another use on the property.	Not applicable
(3) Multifamily.	Not applicable
(a) Multifamily development shall provide ground level retail trade, service businesses, office, and/or live-work units.	Not applicable
(b) Multifamily developments shall be designed to buffer residential units from adjacent industrial and manufacturing uses; this may include landscaping and/or opaque walls.	Not applicable
(c) Multifamily may be permitted a residential density up to 12 dwelling units per acre. For the purposes of determining allowable density, only the portions of the site used for multifamily and its ancillary uses (e.g., open space and parking) may be used in the density calculation. (Ord. 18-1031 § 2 (Exh. 6))	Not applicable
25.27.050 Building bulk restrictions.	
(1) Building height shall not exceed 65 feet within 100 feet of a public street and no taller than 70 feet when set back 100 feet or more from a public street. Mechanical equipment and its minimum screening shall not be included in the height measurement.	In compliance. Building is existing.
(2) Building Setbacks.	
(a) Front. No structure shall be closer than 10 feet from any front property line.	In compliance
(b) Side. No structure shall be closer than 15 feet to any side property line.	In compliance
(3) Outdoor storage (supplies, materials, or products not contained in a structure) shall not cover more than two percent of the total site area and shall be screened from streets and adjoining properties by a 100 percent sight-obscuring wall or fence.	In compliance. Per application of Major Site Plan Amendment Type II
(4) Loading and service areas shall be screened from the public rights-of-way with an opaque wall, fence, or other similar architectural feature. (Ord. 18-1031 § 2 (Exh. 6))	In compliance
25.27.060 Site plan approval.	

Site plan approval is required for all development projects. Projects within the community business district shall be reviewed as set forth in DMC 25.175.010. (Ord. 18-1031 § 2 (Exh. 6))	Applicable. Refer to application of Major Site Plan Amendment Type II
25.27.070 Design review.	
Design review is required for commercial and mixed use development projects pursuant to Chapter 25.70 DMC. Design review is required for multifamily projects pursuant to Chapter 25.65 DMC. Design review shall be processed with a Type I procedure as set forth in DMC 25.175.010. (Ord. 18-1031 § 2 (Exh. 6))	Not required. No new structures are proposed. No change of use is part of the proposal. Therefore, design review is not required for the proposal to add vehicle parking.

Should you have any questions, please do not hesitate to contact me.

Kind Regards,

Mike Snyder
Director

NELSON
FORMERLY CRAFT ARCHITECTS

1200 Fifth Avenue
Suite 1300
Seattle, WA 98101

Document2/er

TRAFFIC IMPACT ANALYSIS SCOPING INFORMATION

Project Title: **Amazon Dupont**

Project Description: Existing unoccupied 612,412 square foot (per GIS records) warehouse building to be occupied by an Amazon hazmat fulfillment center.

Address: 3230 International Place N

Parcel(s): 3000390011; -0282

Trip Generation: Trip generation values were provided by Amazon staff via an internal trip study that was performed at similar sites to that of the proposal. Vehicles were broken down by hour and vehicle type (e.g., passenger vehicle or heavy vehicle). An excel spreadsheet tabulating the average trip rates from similar facilities is attached. A trip reduction rate of 19% is typically what is found from transit, carpooling and other TDM measures according to their study. However, as transit is not readily available to/from the proposed Dupont site, the trip reduction factor has been reduced to 5% to account for carpooling and other miscellaneous measures. Also, the values reflect regular fulfillment operations (non-peak season volumes) as these volumes would be representative of typical daily activity for most of the year. PM peak season values may increase by roughly 50%, or over 900 PM peak hour trips, but would only persist for a short duration of a given year (i.e., holiday season).

Peak hour trips from the provided data set are summarized in the table below and are proposed to be utilized in the traffic study.

Land Use	Trip Type	AWDT	Weekday AM P.H. Trips			Weekday PM P.H. Trips		
			In	Out	Total	In	Out	Total
Amazon Hazmat Fulfillment Center	Passenger Vehicles	1845	336	13	**339**	296	302	**598**
	Heavy Vehicles	225	7	7	**14**	3	3	**6**
	Total	**2070**	343	20	**363**	299	305	**604**

AWDT: Average Weekday Daily Trips; P.H.: Peak-Hour

Time Period to Evaluate: **Weekday: 4:00 PM - 6:00 PM**

As the project generates significantly more vehicular demand during the PM peak period, analysis is recommended to focus on this timeframe.

Attachment 1.o.Traffic Impact Analysis Scoping Memorandum prepared by Heath & Associates dated July 7, 2020

Baseline Intersection Volumes: **See Figure 2A**

Figure 2A illustrates all intersection data received from the City. Counts were performed either in September/October of 2017 or October of 2019. Where data were available for both time periods, Figure 2B was presented to identify annual growth estimates. All intersections near the I-5 interchanges indicted no growth between 2017-2019 while intersections further north realized between 3-5% annual growth, likely influenced by recent development.

For this reason, intersections with only 2017 data available are proposed to be grossed up via 2% to establish baseline volumes. Any study intersections with current 2019 data will be used for baseline assumptions.

Intersection to Study: **See Figure 2C**

Figure 2C identifies all intersections proposed for Level of Service analysis.

Horizon Year: **2022**

The subject 612,412 square foot building is currently constructed and is intended for occupancy late 2021 to early 2022.

Background Growth: **To Be Discussed with City**

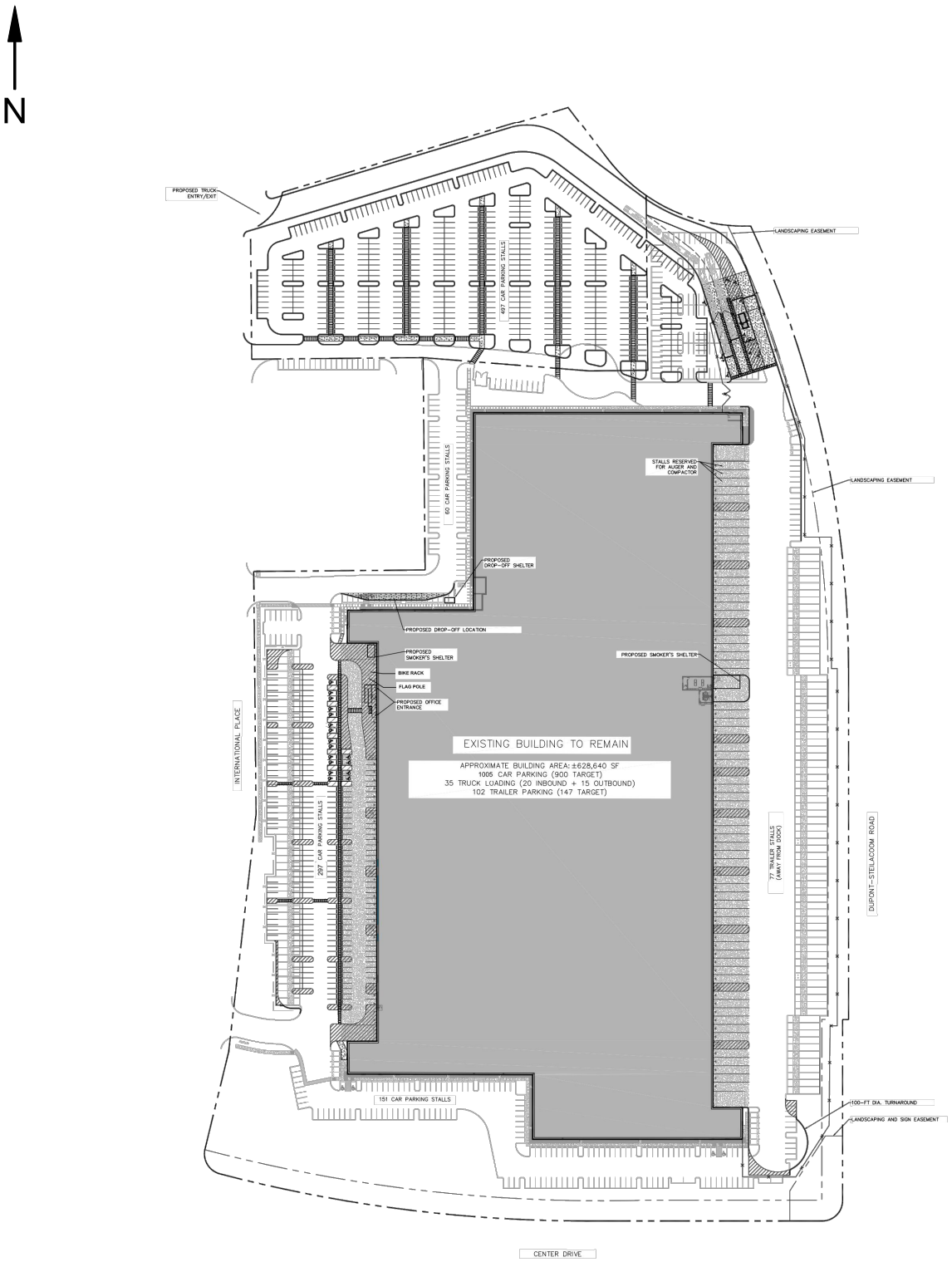
A background growth rate and/or specific pipeline volumes to be obtained by the City and applied to the horizon year analysis.

Trip Distribution: **See Figures 3A, 3B, 4A and 4B**

Trip distribution assumptions were based on the approved *DuPont Corporate Center* TIA (December 2017), which were similarly based on the *DuPont Corporate Park* TIA (October 2012). Also included are trip distribution figures in relation to WSDOT's Steilacoom-Dupont Interchange Exit 119 project. The project proposes to eliminate a portion of Barksdale Ave and construct a new grade-separated exit (see attached WSDOT exhibits). This project is not anticipated to be completed until 2025 and was therefore not considered in the LOS analysis. However, estimated trip distribution figures are provided in Figures 5A, 5B, 6A and 6B.

AMAZON DUPONT
SCOPING

APPENDIX



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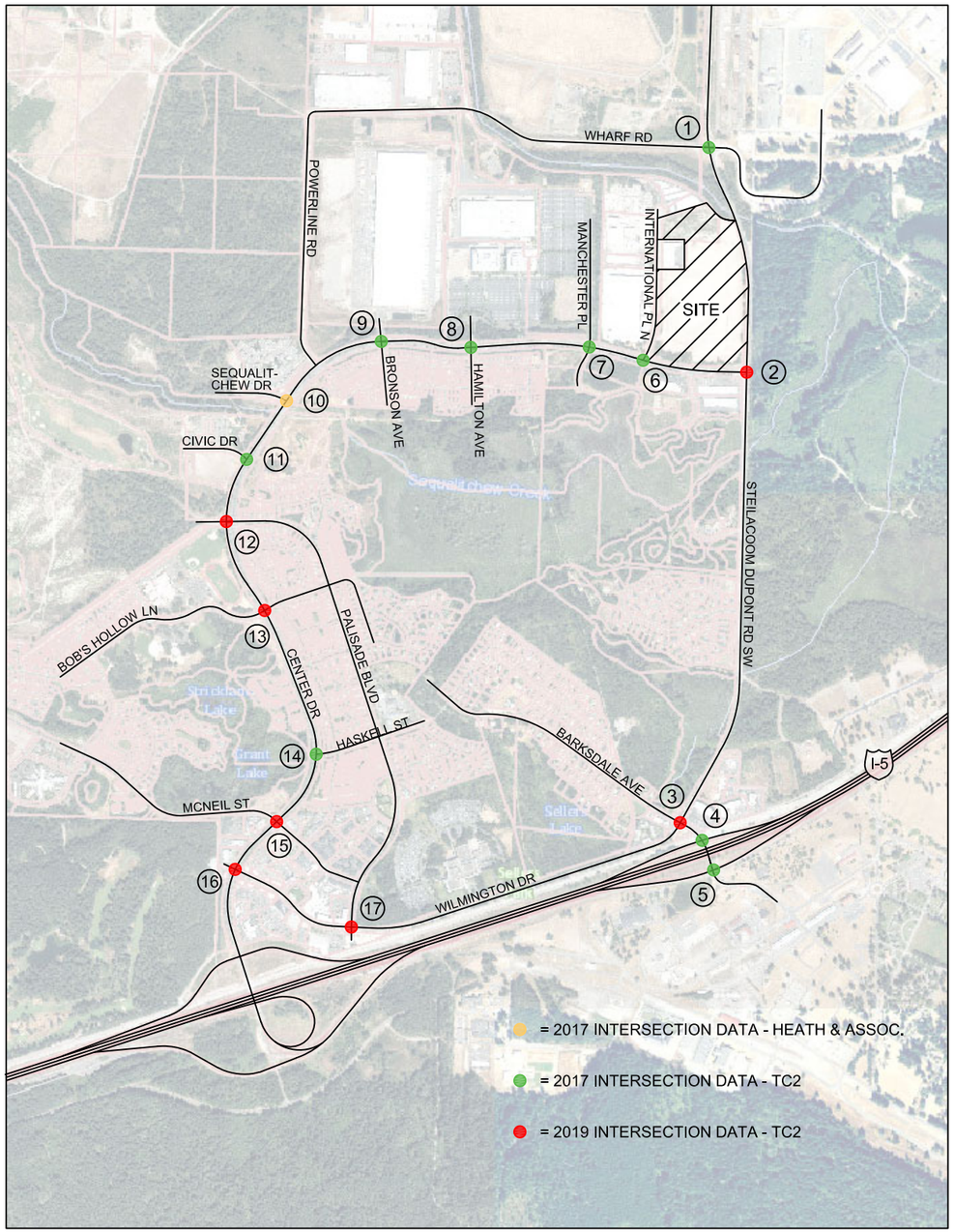
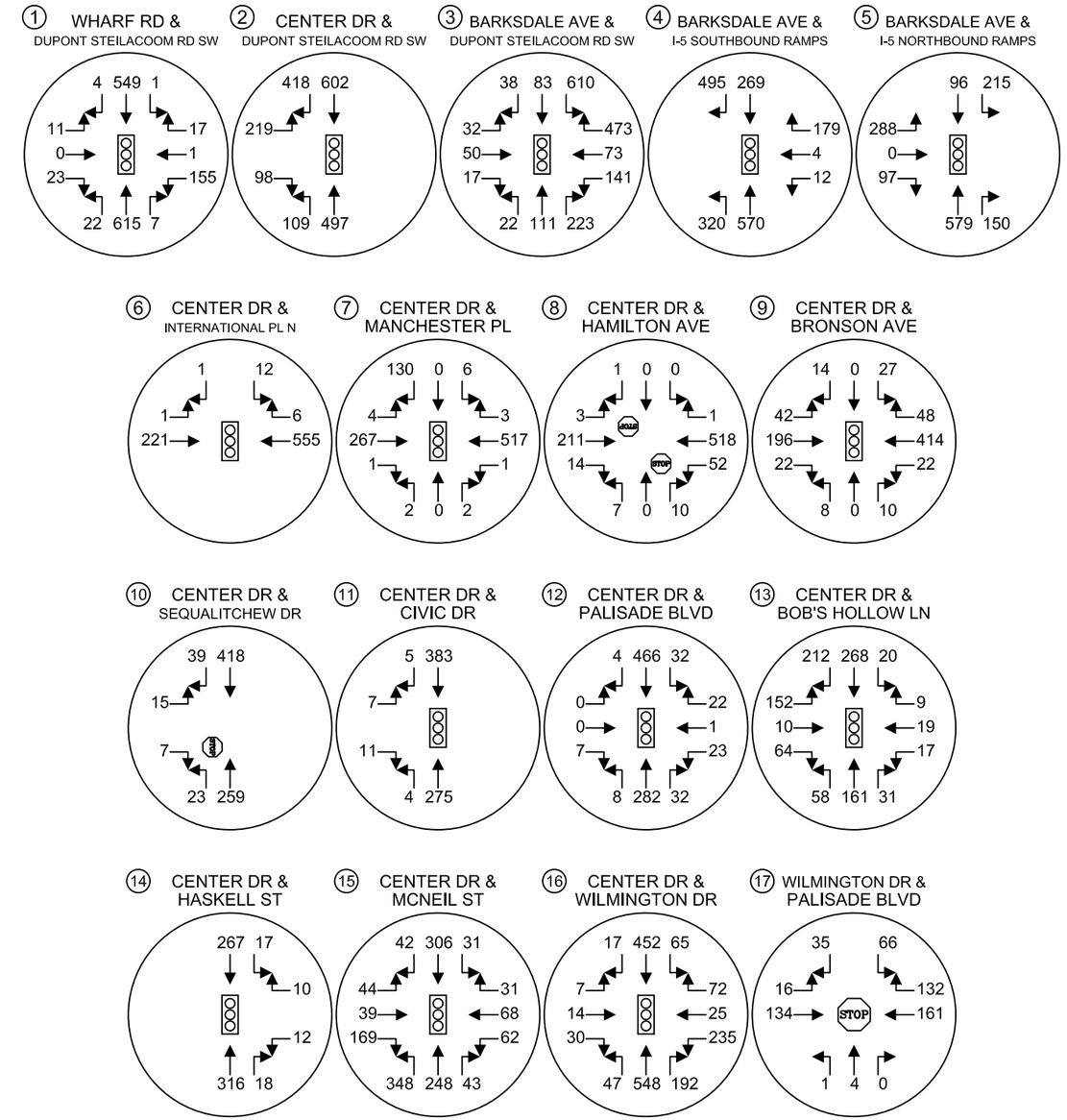
AMAZON DUPONT

SITE PLAN
FIGURE 1





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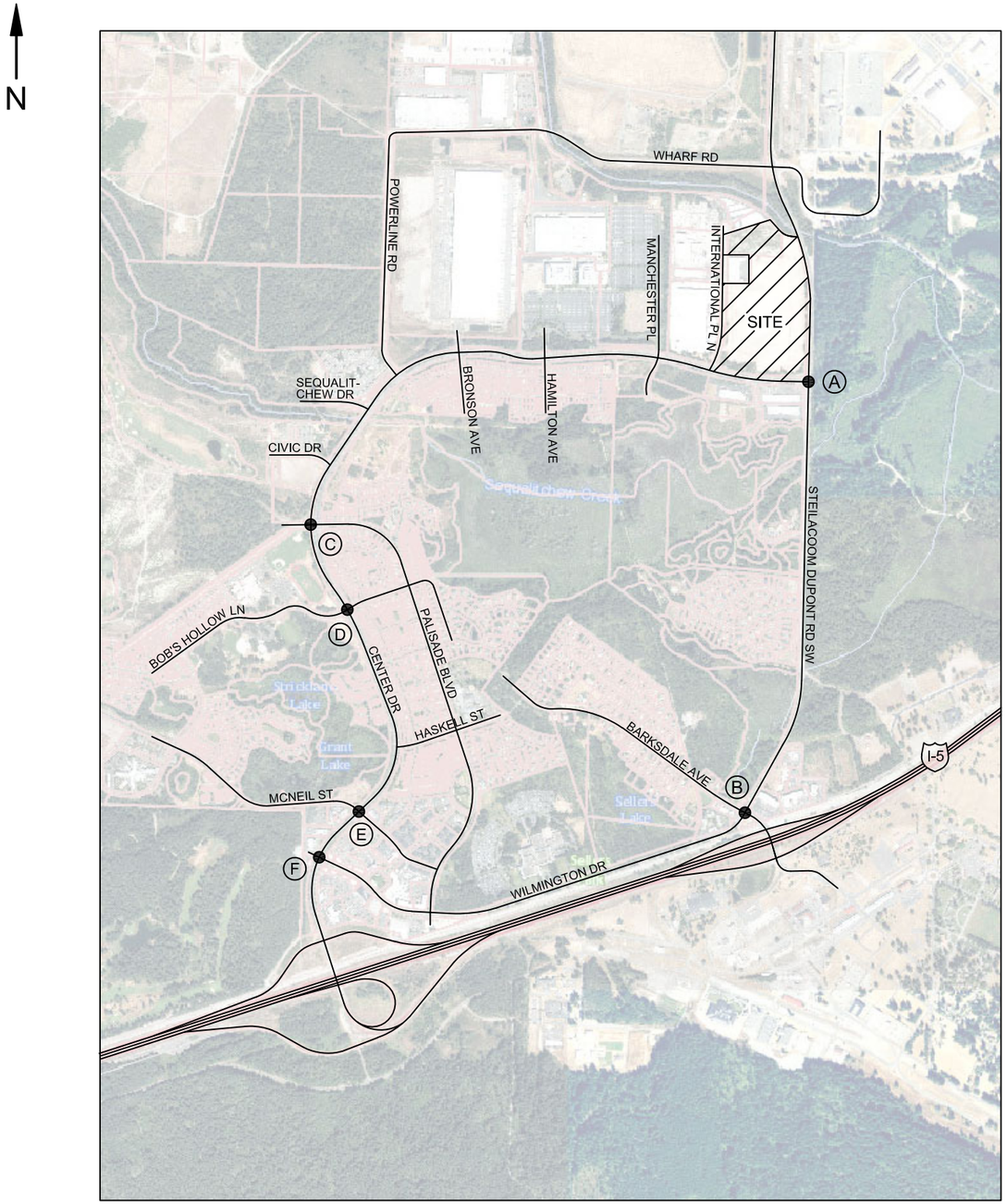
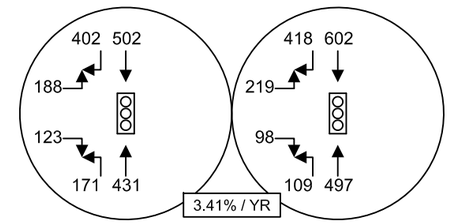
BASELINE PM PEAK HOUR INTERSECTION DATA
FIGURE 2A



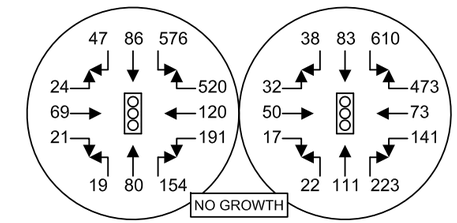
Ⓐ CENTER DR & DUPONT STEILACOOM RD SW



2017 VOLUMES
TOTAL VOL.: 1817

2019 VOLUMES
TOTAL VOL.: 1943

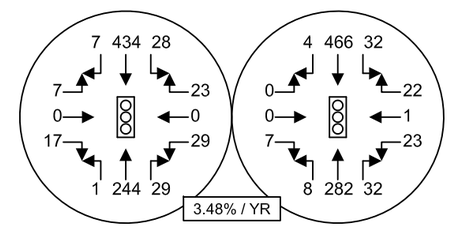
Ⓑ BARKSDALE AVE & WILMINGTON DR/ DUPONT STEILACOOM RD SW



2017 VOLUMES
TOTAL VOL.: 1907

2019 VOLUMES
TOTAL VOL.: 1873

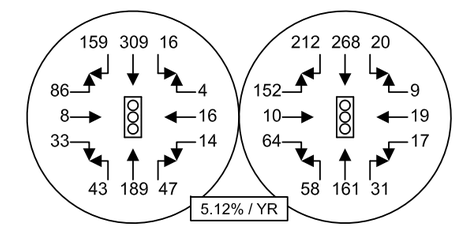
Ⓒ CENTER DR & PALISADE BLVD



2017 VOLUMES
TOTAL VOL.: 819

2019 VOLUMES
TOTAL VOL.: 877

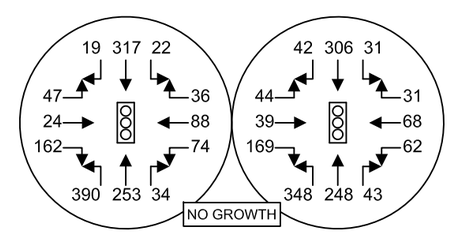
Ⓓ CENTER DR & BOB'S HOLLOW LN



2017 VOLUMES
TOTAL VOL.: 924

2019 VOLUMES
TOTAL VOL.: 1021

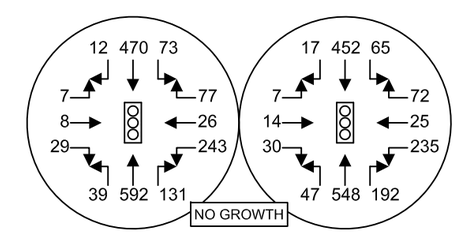
Ⓔ CENTER DR & MCNEIL ST



2017 VOLUMES
TOTAL VOL.: 1466

2019 VOLUMES
TOTAL VOL.: 1431

Ⓕ CENTER DR & WILMINGTON DR



2017 VOLUMES
TOTAL VOL.: 1707

2019 VOLUMES
TOTAL VOL.: 1704

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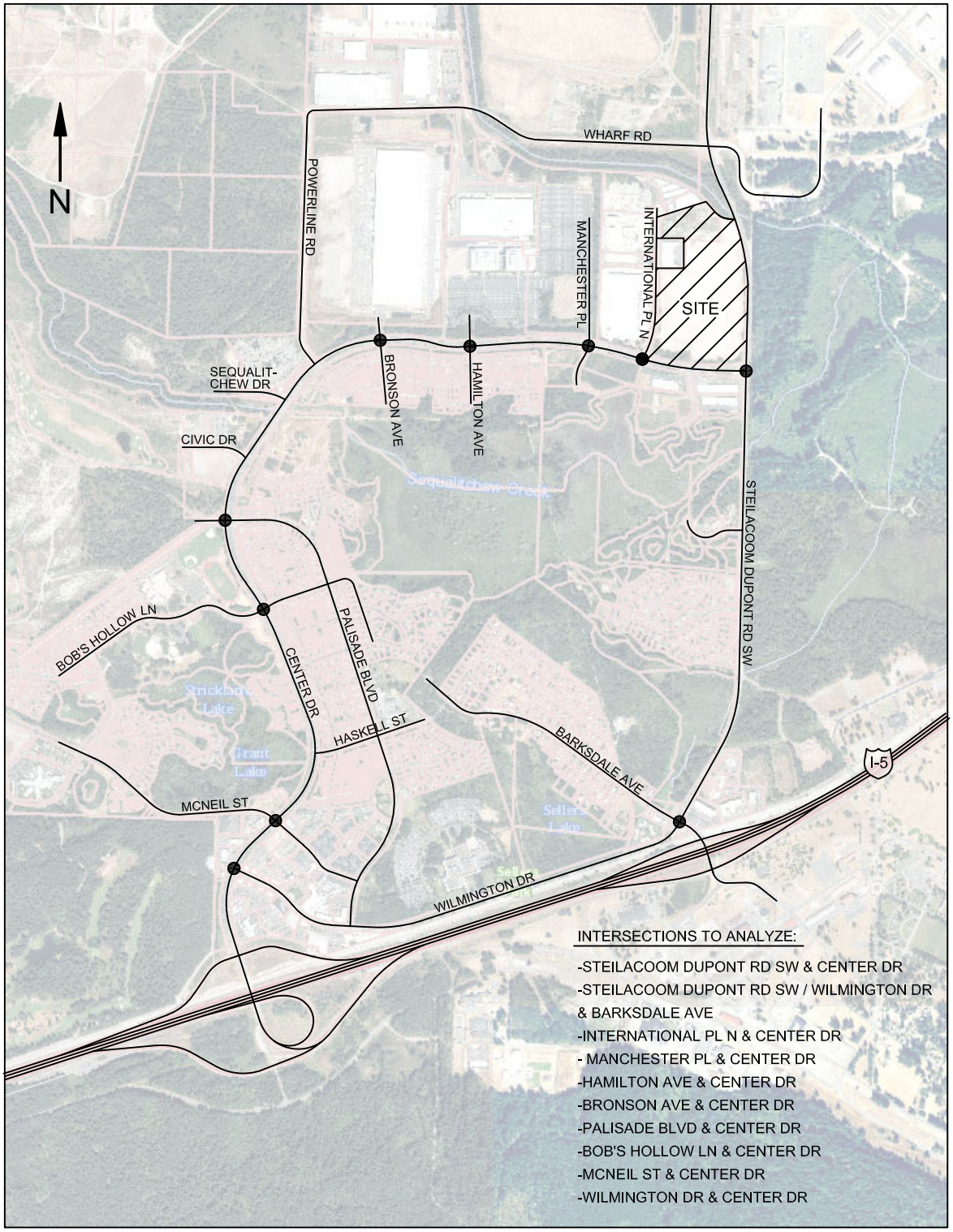
2017-2019 PM PEAK HOUR INTERSECTION VOLUME COMPARISON
FIGURE 2B



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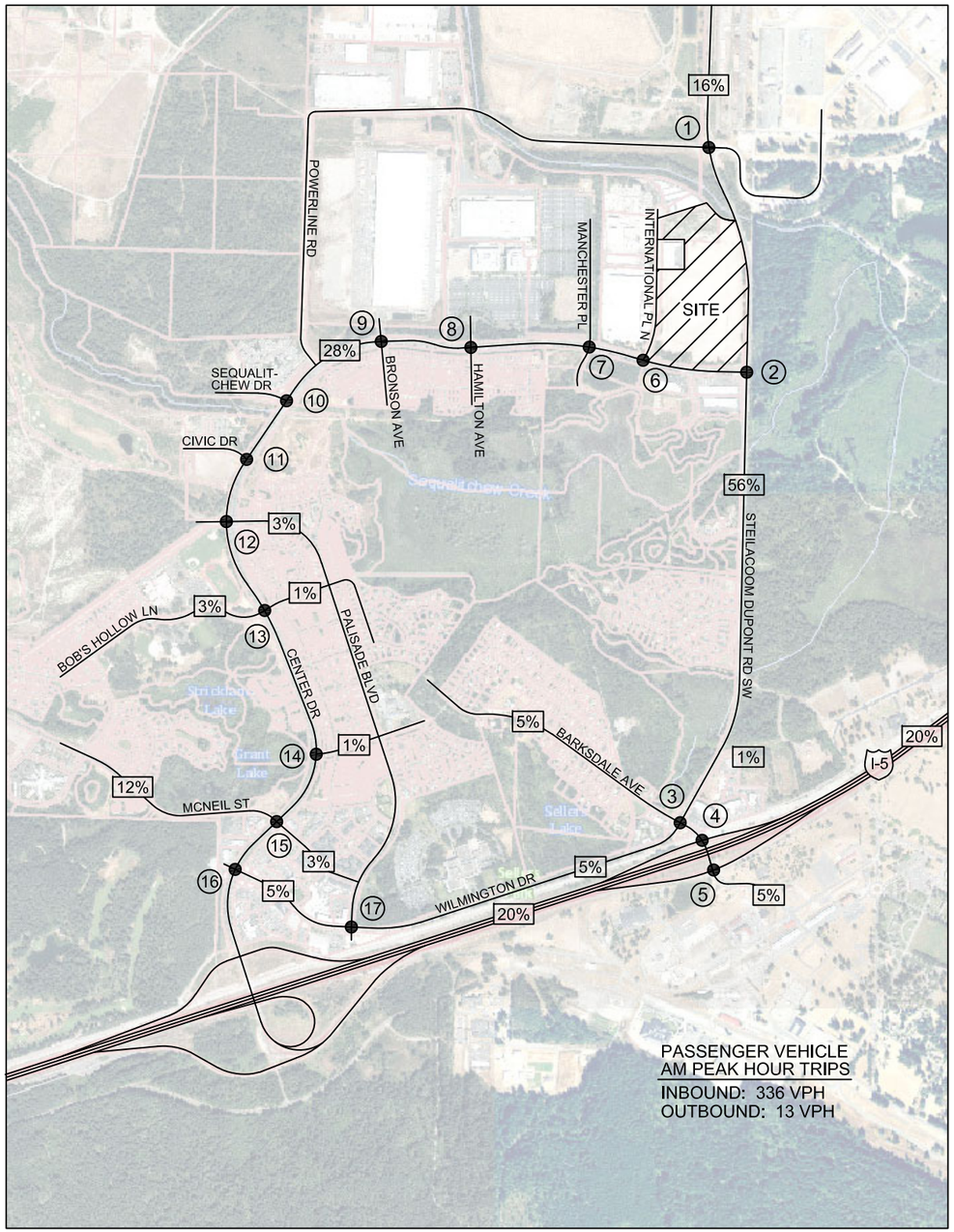
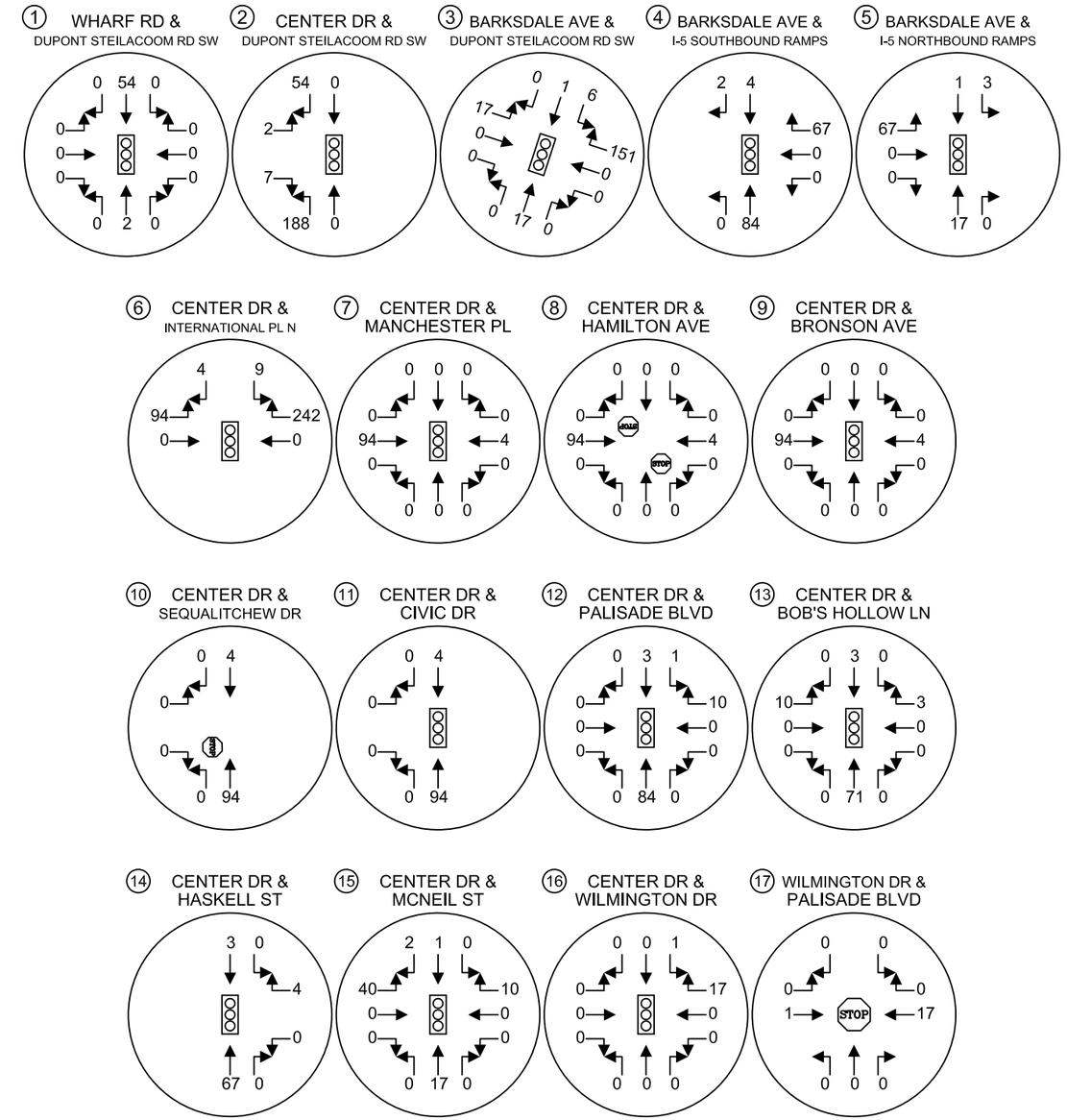
AMAZON DUPONT

INTERSECTIONS TO ANALYZE
FIGURE 2C

APPENDIX

TRIP DISTRIBUTION & ASSIGNMENT FIGURES
SCENARIO 1: CURRENT ROADWAY CONFIGURATION





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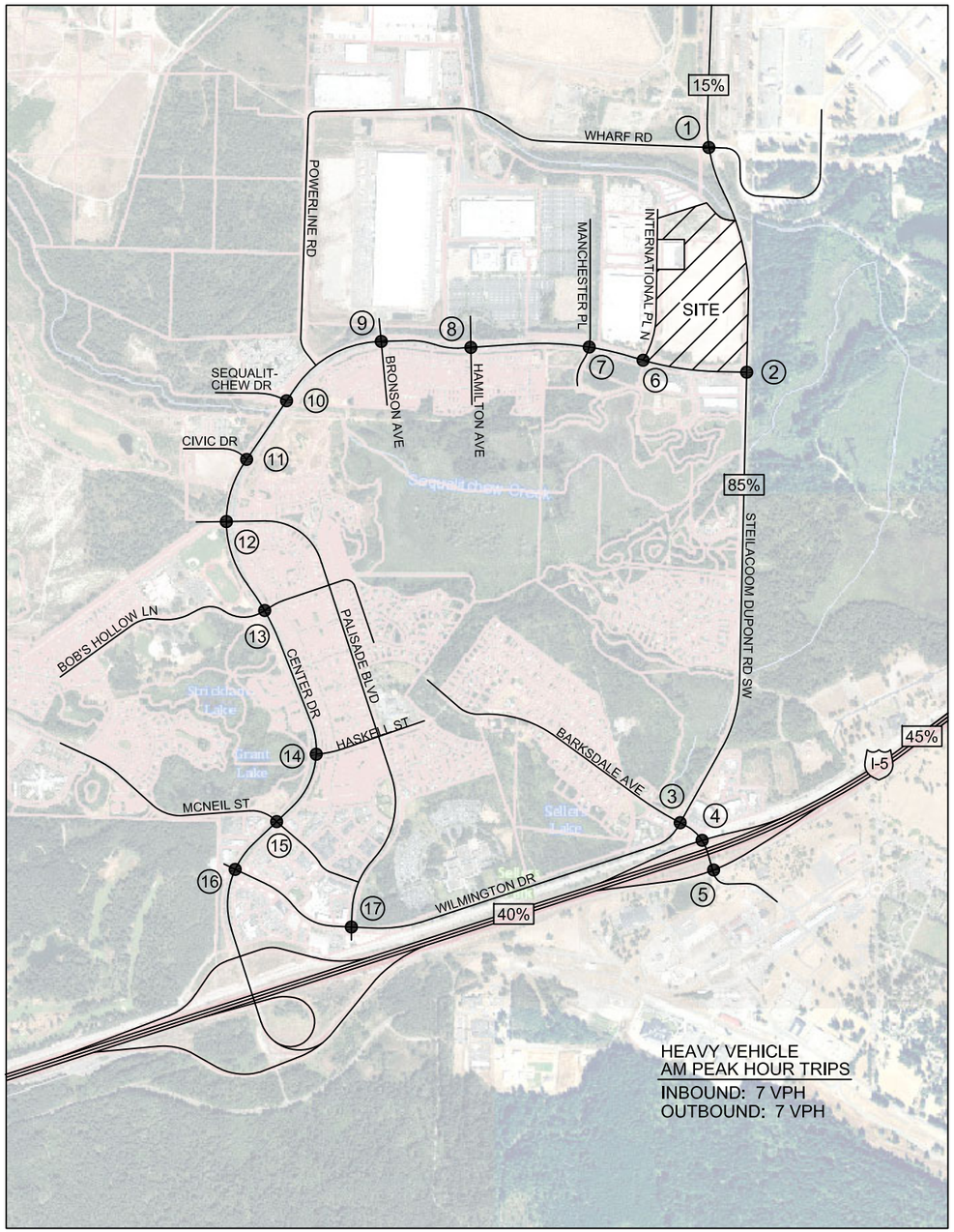
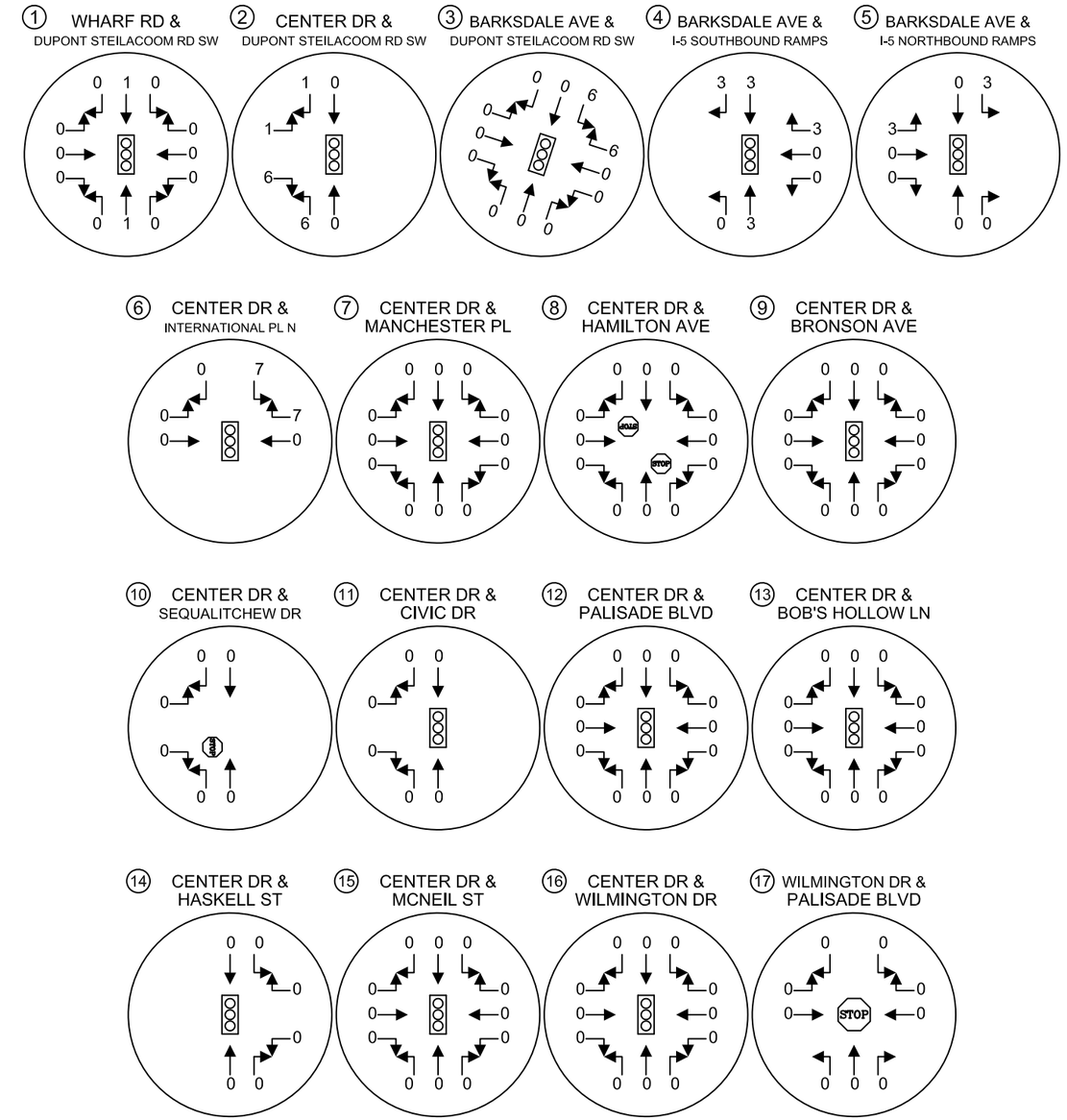
AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 1: CURRENT ROADWAY CONFIGURATION
FIGURE 3A





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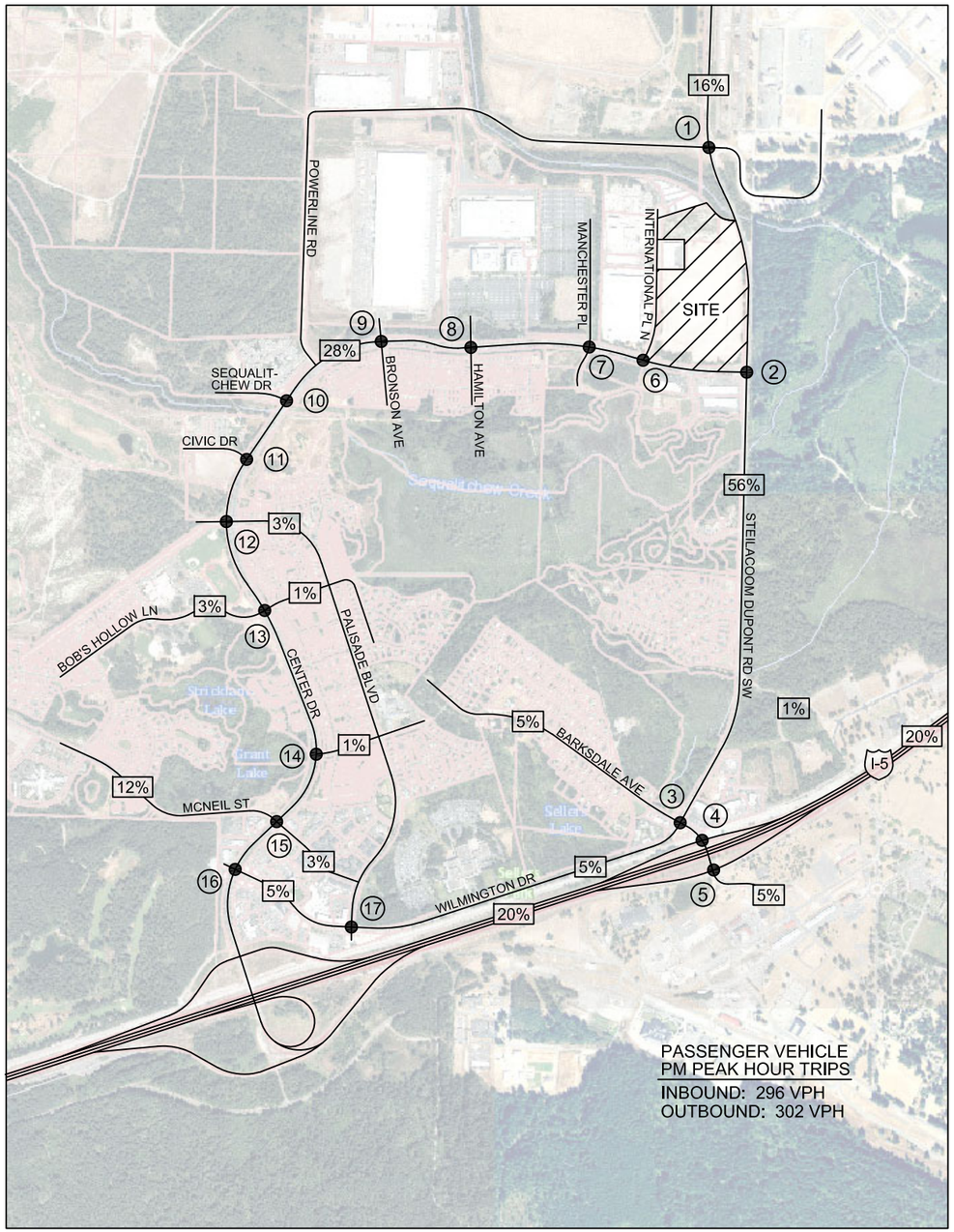
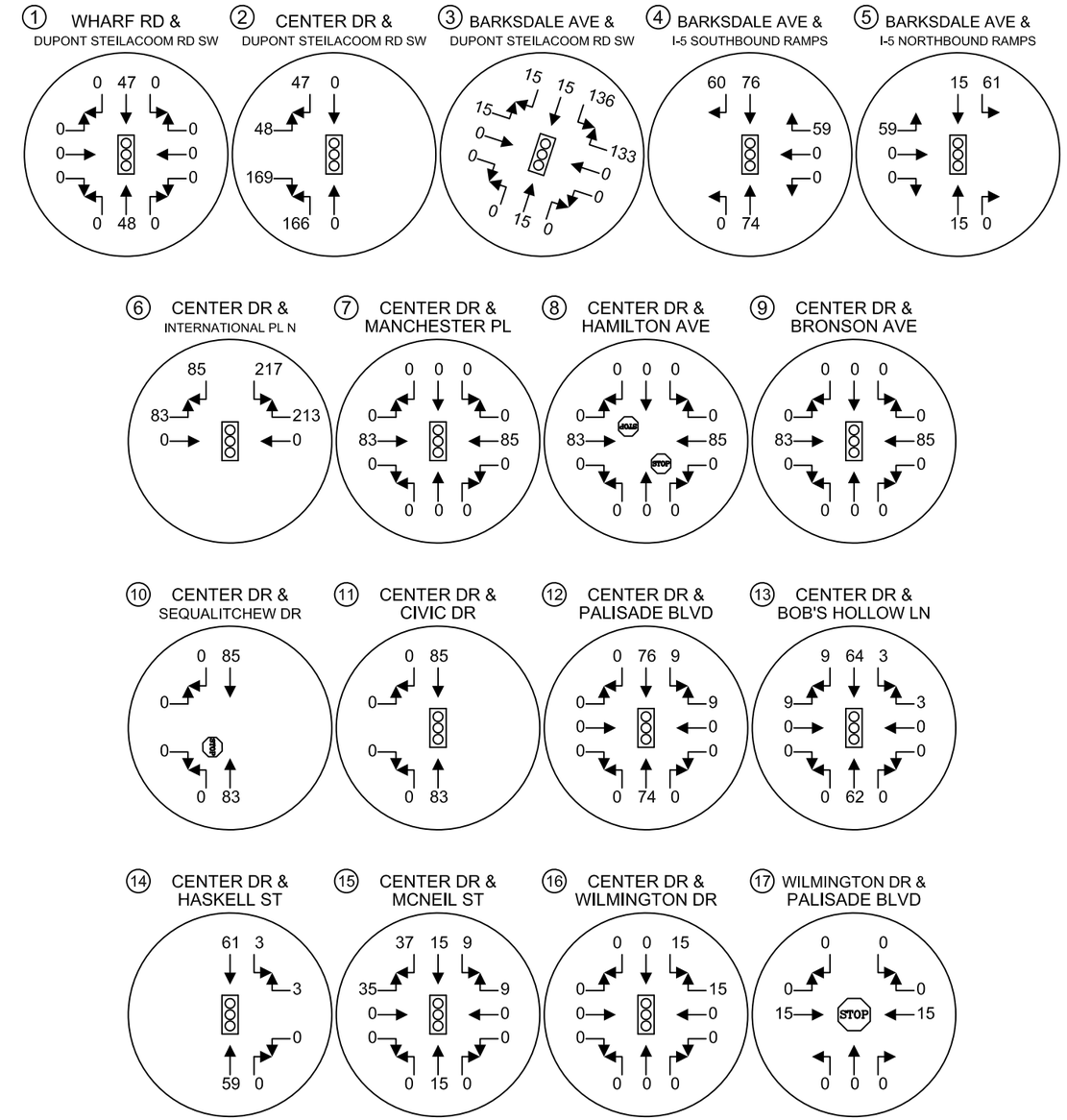
AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 1: CURRENT ROADWAY CONFIGURATION
FIGURE 3B





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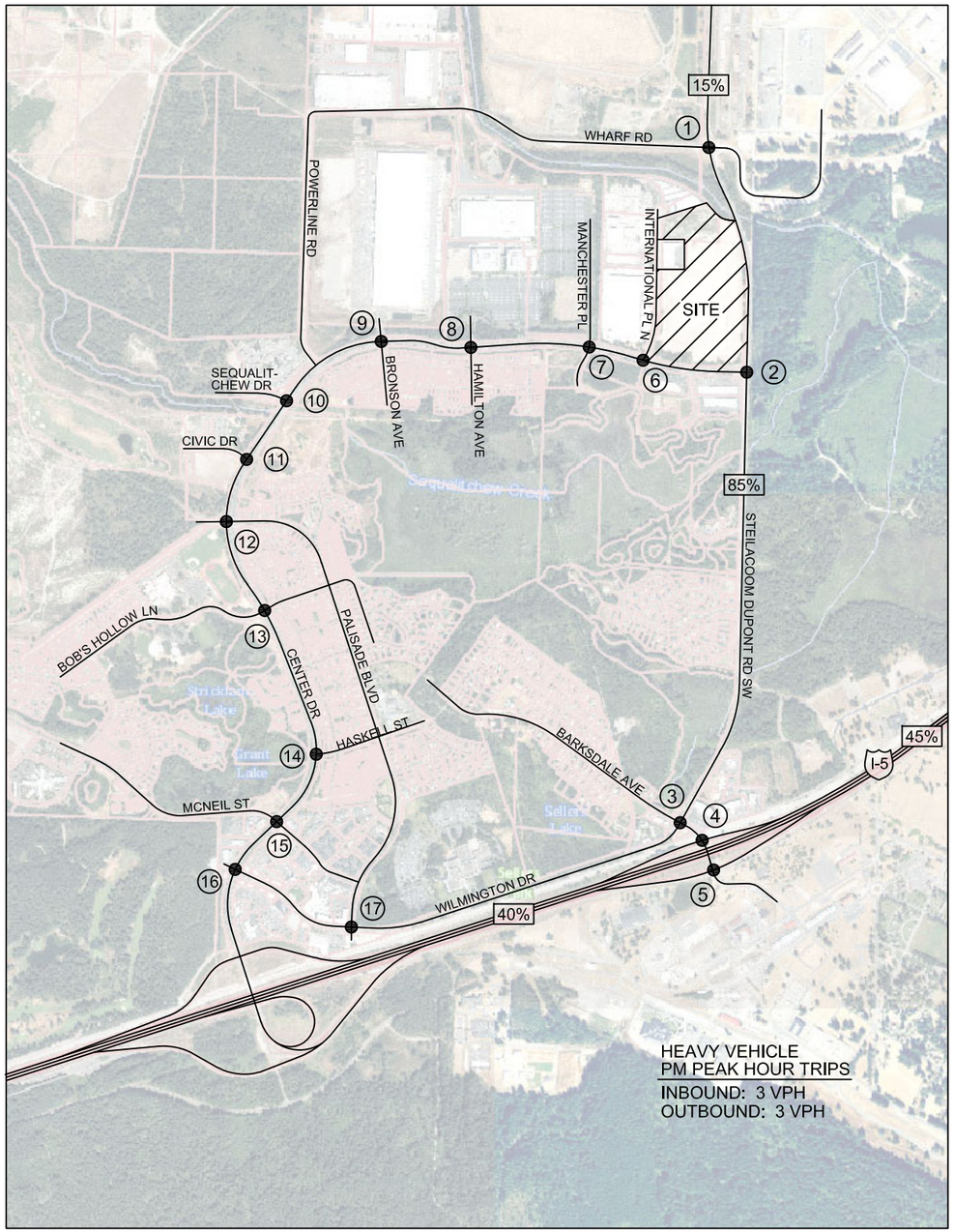
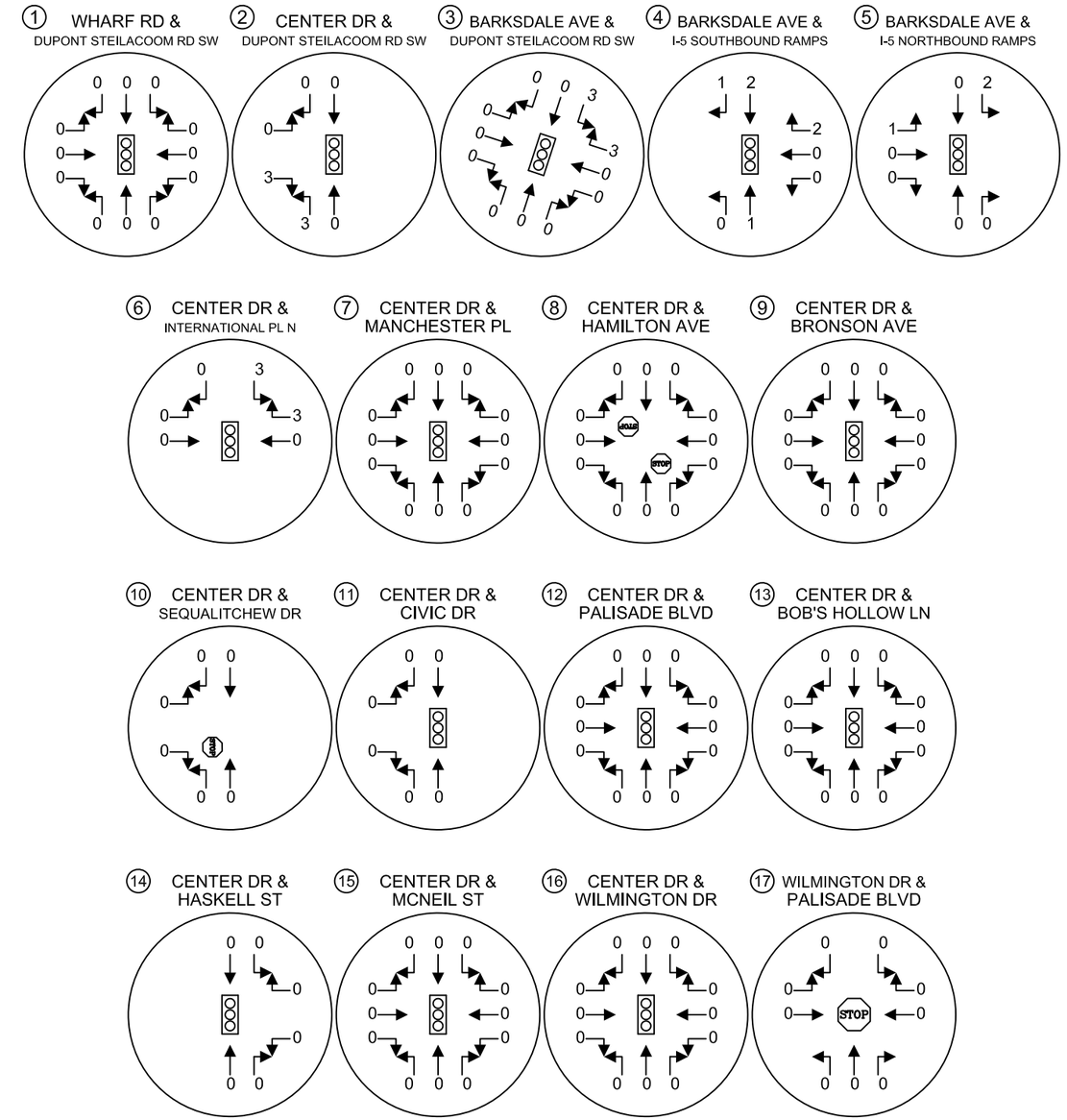
PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 1: CURRENT ROADWAY CONFIGURATION
FIGURE 4A





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TRAFFIC AND CIVIL ENGINEERING

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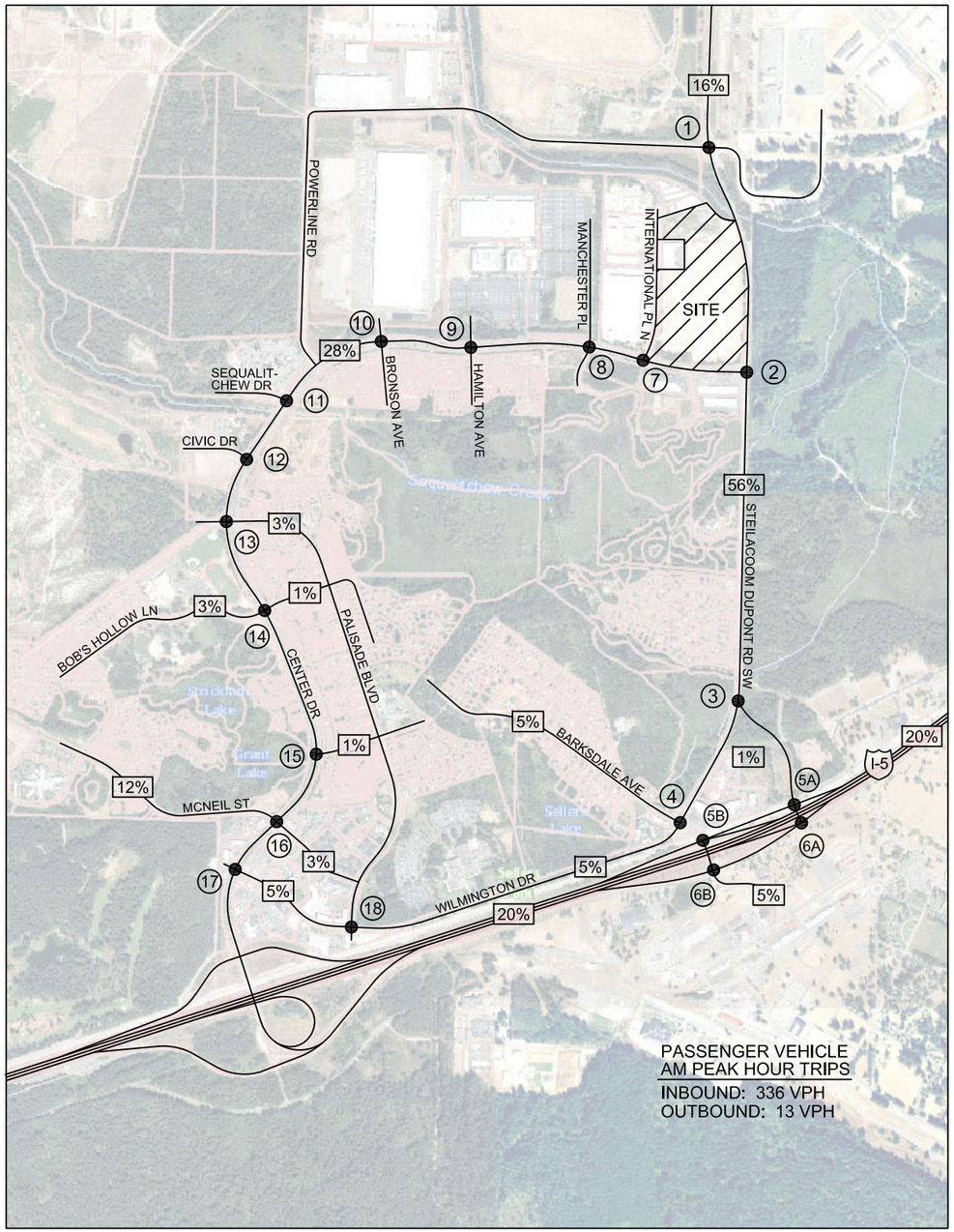
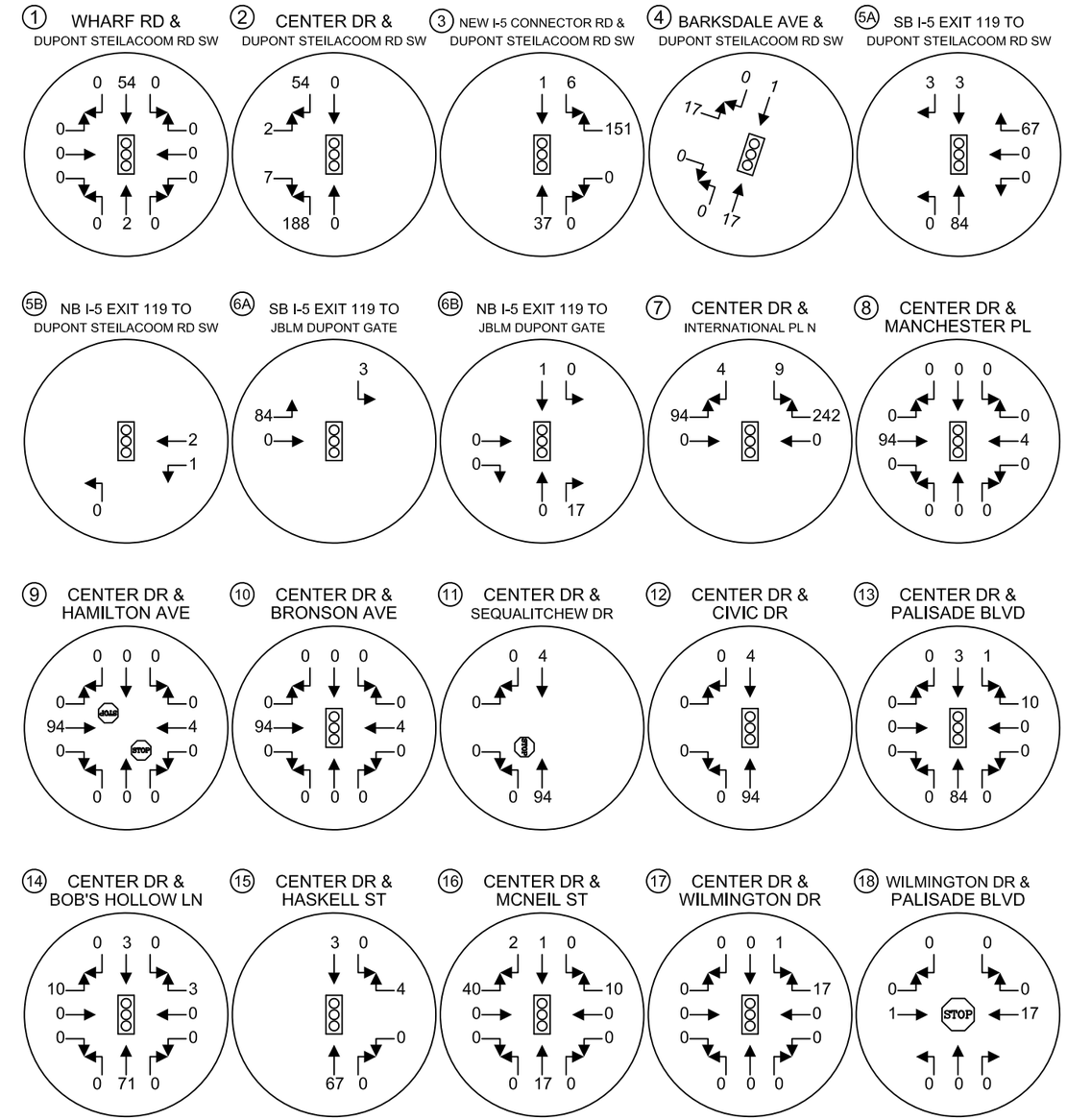
PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 1: CURRENT ROADWAY CONFIGURATION
FIGURE 4B

APPENDIX

TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT





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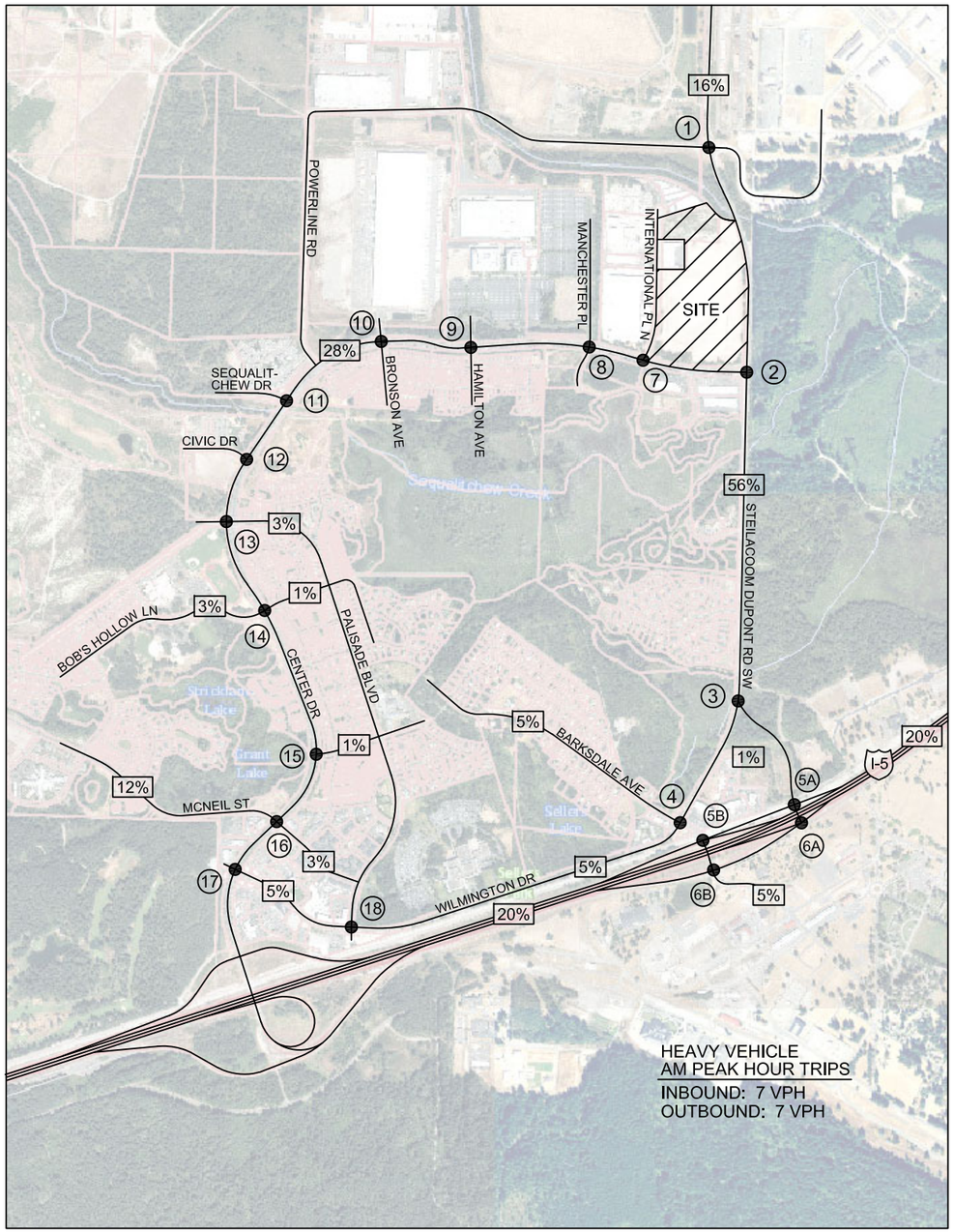
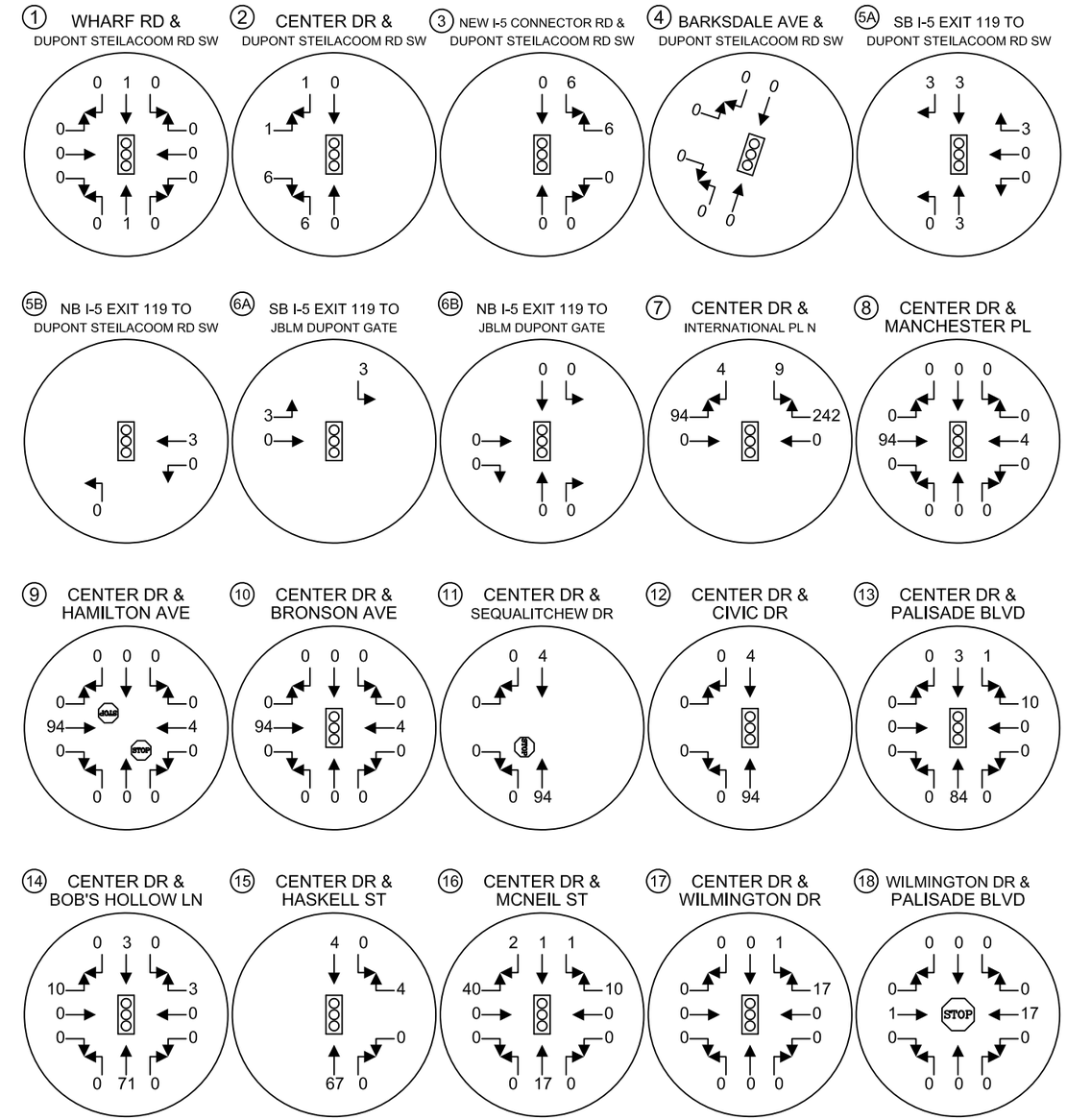
TRAFFIC AND CIVIL ENGINEERING

AMAZON DUPONT

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE 5A

Heath & Associates, Inc. (253) 770 1401 Fax (253) 770 1473 heathtraffic.com



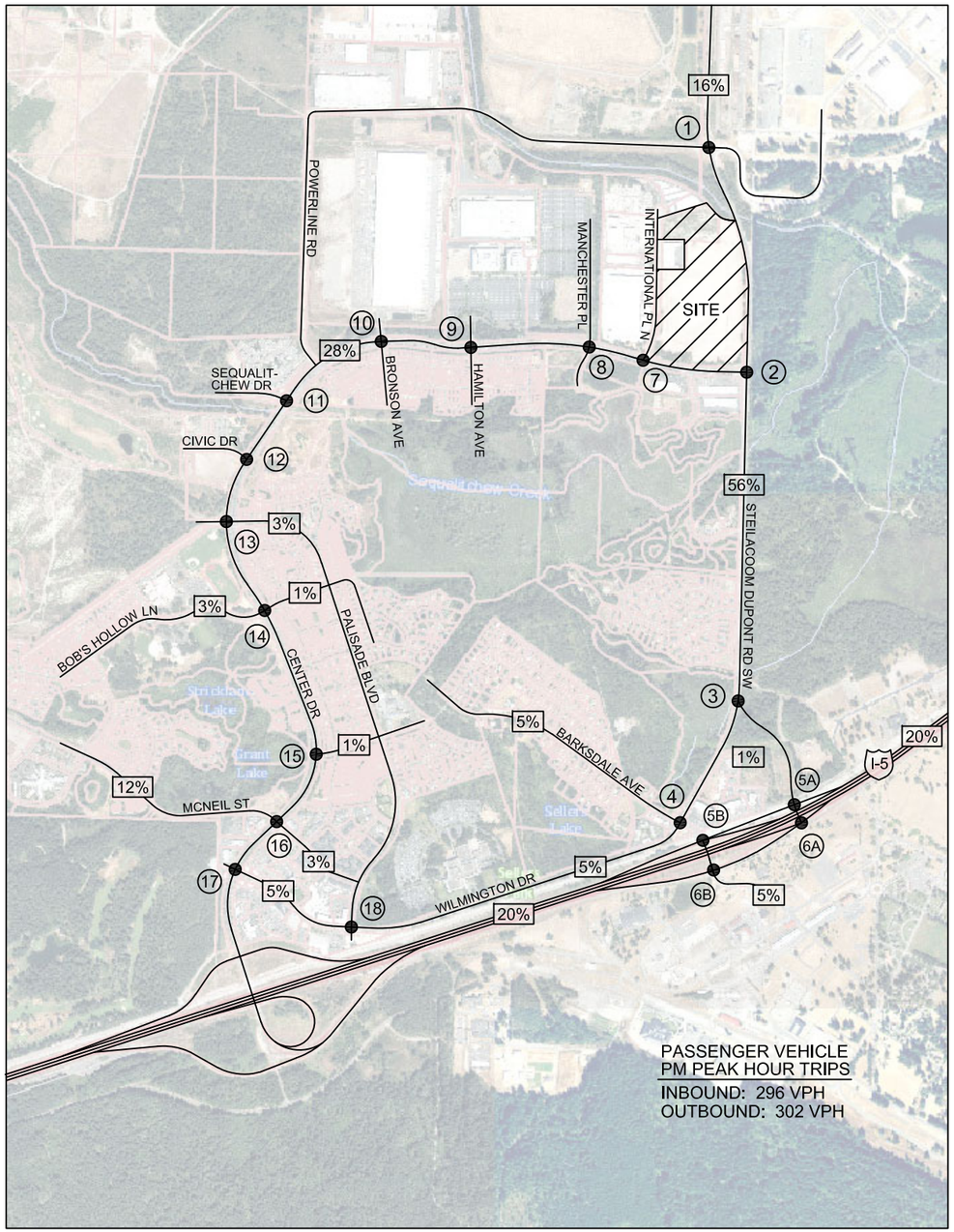


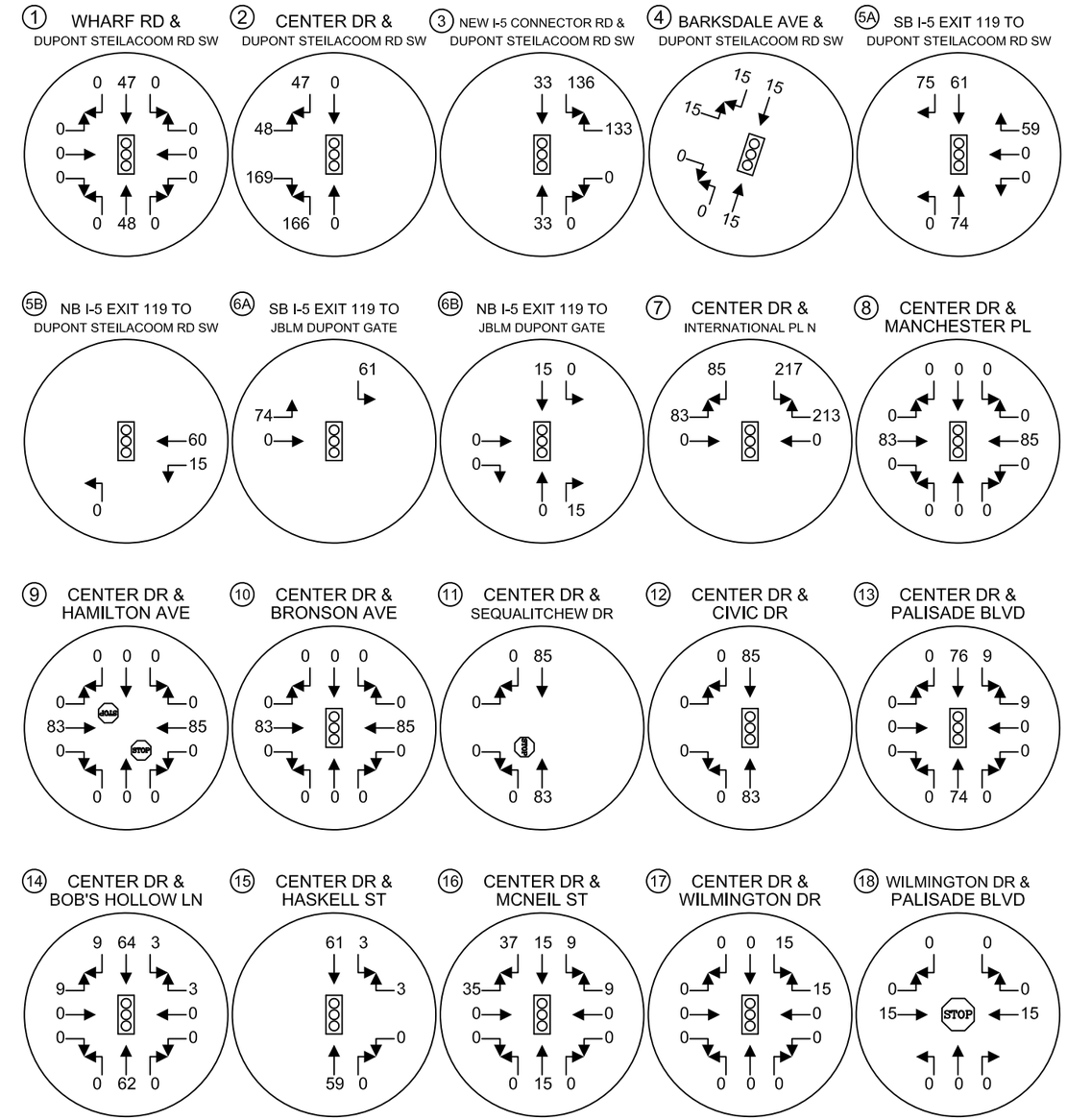
HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

AMAZON DUPONT

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE 5B



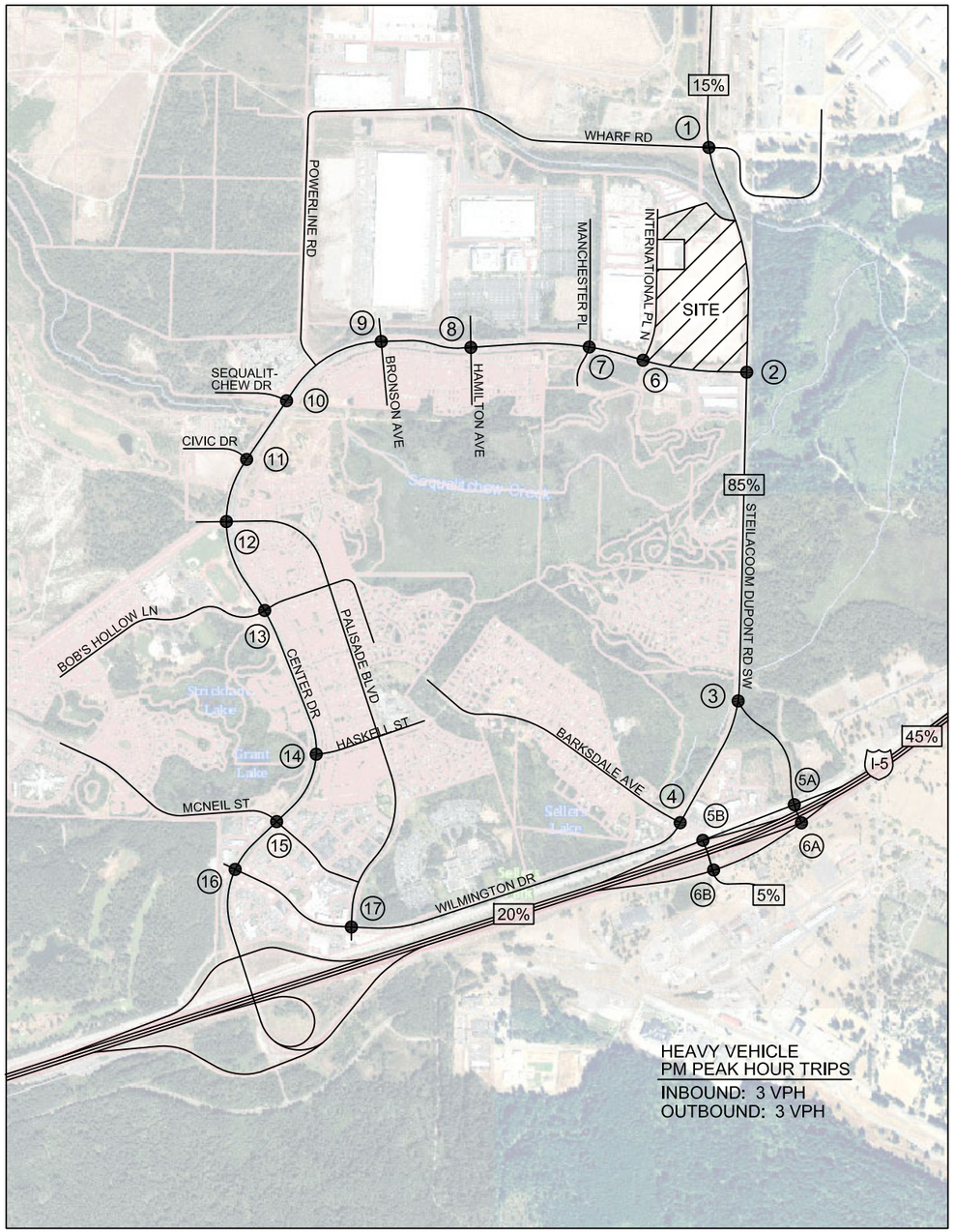


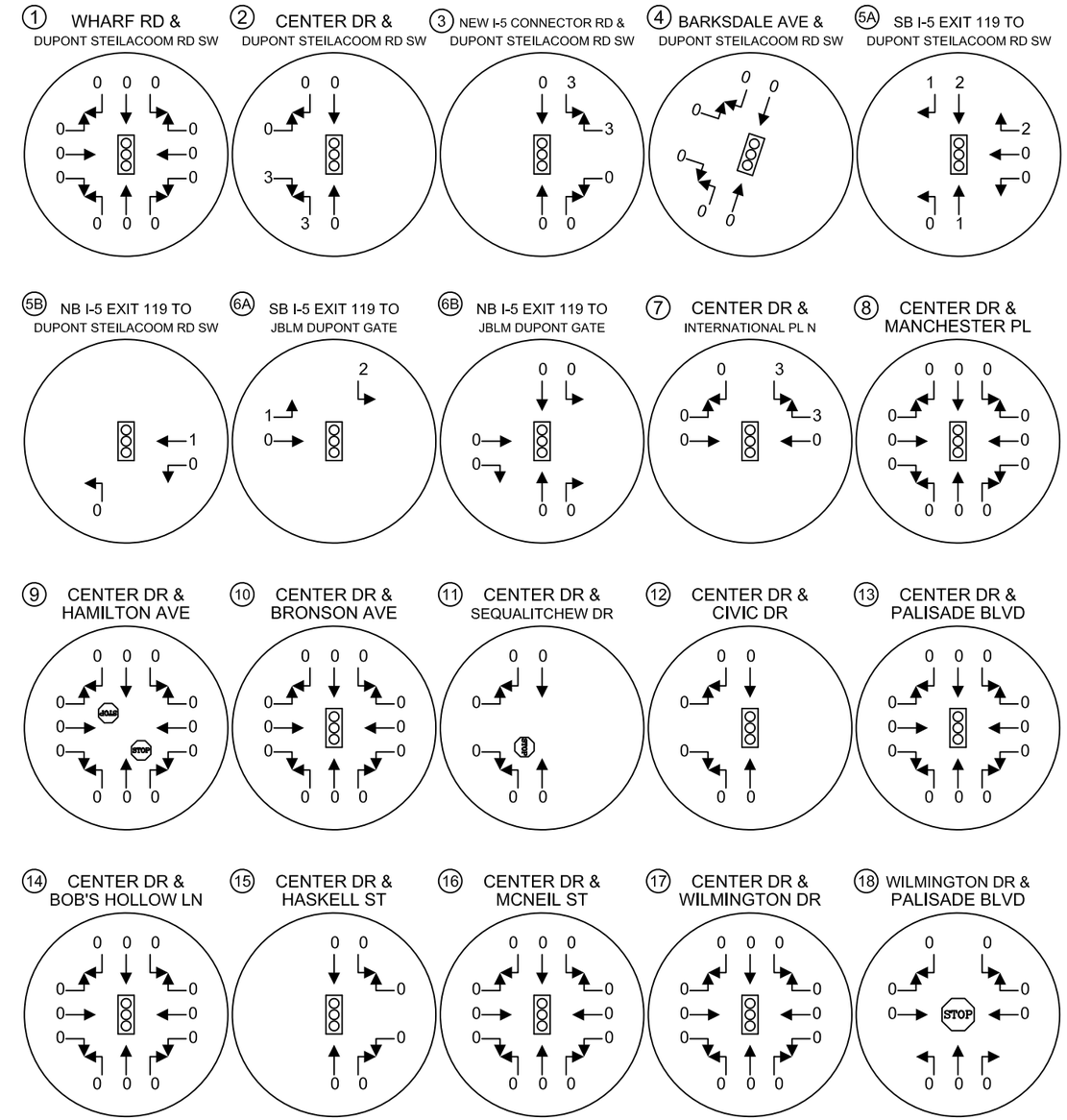
HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

AMAZON DUPONT

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE 6A





HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

AMAZON DUPONT

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE 6B

APPENDIX

AMAZON TRIP GENERATION MODEL

HAZMAT FC - Non Peak Season

TRAFFIC DATA FOR ENTITLMENT USE

Headcount

Headcount - Day Shift	486
Headcount Night Shift	486

Shift Structure

	Start	End	
Day Shift Inbound Employees	7:00:00 AM	5:30:00 PM	Inbound Are Employees Working Receiving Side of Operation
Day Shift Outbound Employees	7:30:00 AM	6:00:00 PM	Outbound Are Employees Working Shipping Side of Operation
Night Shift Inbound Employees	6:00:00 PM	4:30:00 AM	
Night Shift Outbound Employees	6:30:00 PM	5:00:00 AM	

Adjustment below accounts for mass transit and carpool users. Adjust as needed for local jurisdiction.

Net Cars Factor 95%

Traffic Schedule

Cars				Trucks				Total			
Average Weekday - Non Peak				Average Weekday - Non Peak				Average Weekday - Non Peak			
	In	Out	Total		In	Out	Total		In	Out	Total
00:00	2	3	5	00:00	7	6	14	00:00	9	9	18
01:00	1	2	3	01:00	6	6	12	01:00	7	8	15
02:00	3	7	10	02:00	6	6	12	02:00	9	12	22
03:00	4	7	11	03:00	8	7	15	03:00	12	14	26
04:00	9	93	102	04:00	7	6	14	04:00	16	95	111
05:00	19	246	265	05:00	9	8	17	05:00	27	242	269
06:00	14	8	22	06:00	2	2	3	06:00	15	9	24
06:15	38	9	47	06:15	2	2	3	06:15	38	10	48
06:30	66	5	71	06:30	2	2	3	06:30	65	6	71
06:45	88	3	91	06:45	2	2	3	06:45	85	4	90
07:00	87	5	92	07:00	2	2	3	07:00	84	6	91
07:15	113	2	115	07:15	1	1	2	07:15	108	3	111
07:30	17	3	20	07:30	1	1	2	07:30	17	4	21
07:45	4	3	7	07:45	1	1	2	07:45	5	4	8
08:00	13	9	22	08:00	5	4	9	08:00	17	13	29
09:00	8	5	13	09:00	5	5	10	09:00	13	10	23
10:00	11	9	20	10:00	5	4	9	10:00	15	13	28
11:00	20	21	41	11:00	5	4	9	11:00	24	24	48
12:00	6	9	15	12:00	5	5	10	12:00	11	13	25
13:00	7	7	14	13:00	5	4	9	13:00	11	11	22
14:00	6	13	19	14:00	4	3	7	14:00	9	16	25
15:00	15	19	34	15:00	4	3	7	15:00	18	21	39
16:00	23	17	40	16:00	3	2	5	16:00	25	19	43
17:00	14	17	31	17:00	1	1	2	17:00	14	17	31
17:15	26	8	34	17:15	1	1	2	17:15	26	8	34
17:30	57	66	123	17:30	1	1	2	17:30	55	64	119
17:45	74	38	112	17:45	0	0	0	17:45	70	36	106
18:00	92	128	220	18:00	1	1	2	18:00	88	122	211
18:15	89	86	175	18:15	1	1	2	18:15	85	83	168
18:30	12	57	69	18:30	1	1	2	18:30	12	55	67
18:45	3	21	24	18:45	0	0	0	18:45	3	20	23
19:00	9	18	27	19:00	4	3	7	19:00	12	20	33
20:00	4	4	8	20:00	2	2	3	20:00	6	5	11
21:00	8	8	16	21:00	3	2	5	21:00	10	10	20
22:00	9	11	20	22:00	4	3	7	22:00	12	14	26
23:00	1	3	4	23:00	6	6	12	23:00	7	9	16
	972	970	1,942		119	106	225		1,042	1,028	2,070

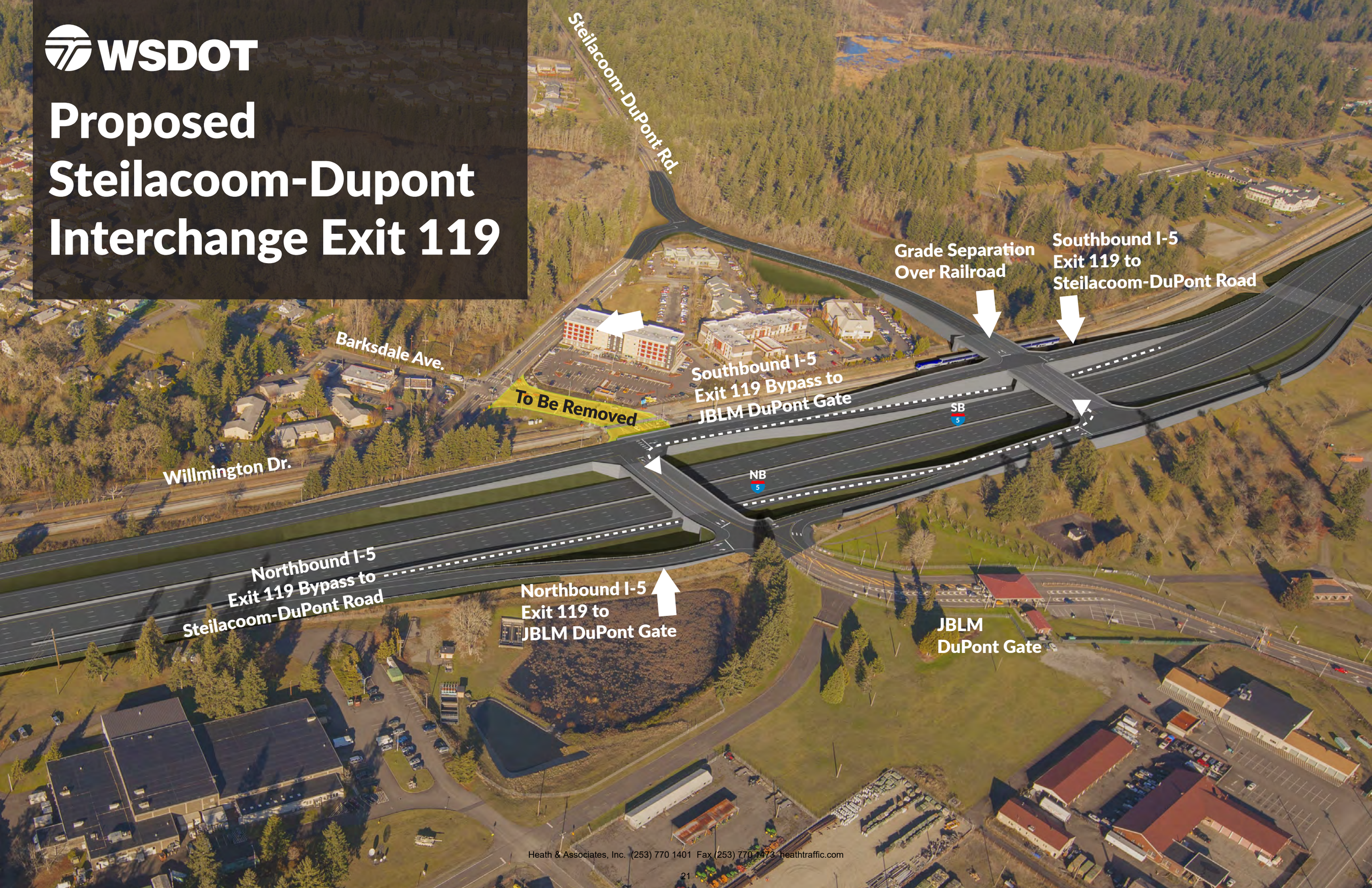
*Total columns may not equal summation due to rounding average rates

APPENDIX

WSDOT I-5 EXIT 119 INTERCHANGE
PROPOSED PROJECT SCHEMES

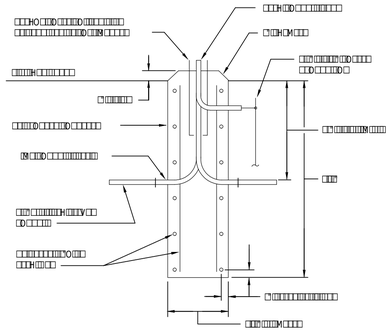
WSDOT

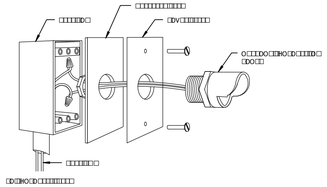
Proposed Steilacoom-Dupont Interchange Exit 119

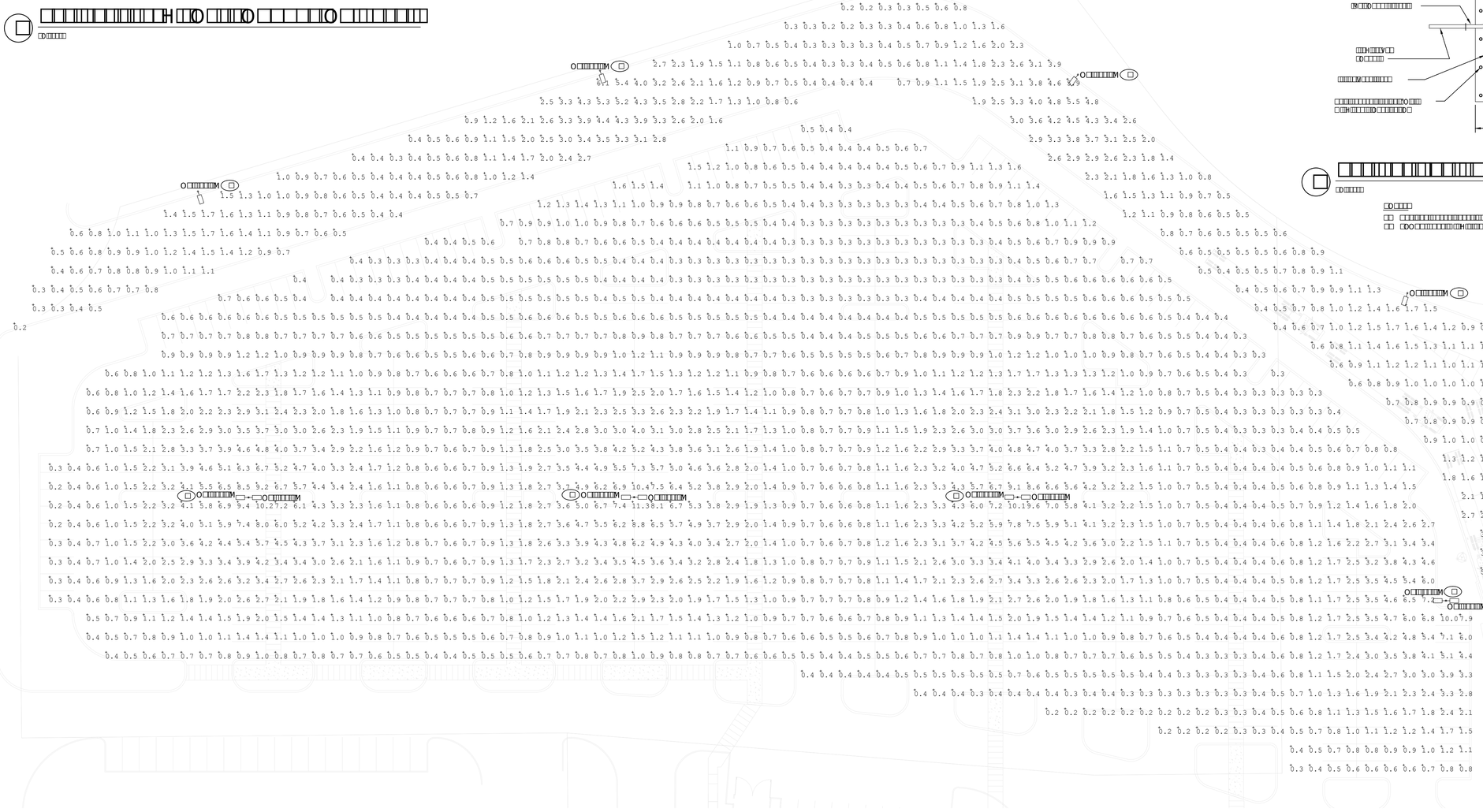


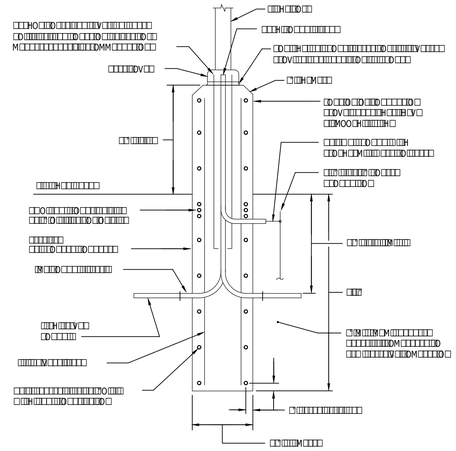
WSDOT

Proposed Steilacoom-Dupont Interchange Exit 119









FIXTURE TYPE	MANUFACTURER AND MODEL NUMBER	DESCRIPTION	LAMP	MOUNTING	VOLTAGE	REMARKS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CAR PARKING	Illuminance	Fc	1.52	11.3	0.2	7.60	56.50
TRUCK ENTRY DRIVE	Illuminance	Fc	1.47	6.1	0.2	7.35	30.50

NELSON

1200 F[illegible] A[illegible].
S[illegible] 1300
S[illegible], WA [illegible]8101
[illegible] :206[illegible]408-8500

CLIENT:

PANATTONI®

PROJECT:

SEAL:

CITY STAMP:

Attachment 1.p. Site Lighting Plan and Photometrics prepared by Nelson undated

BARGHAUSEN

August 5, 2020

Jeffrey S. Wilson, AICP
Director of Community Development
City of DuPont
Department of Community Development
1700 Civic Drive
DuPont, WA 98327

RE: Responses to Planning Department Notice of Incomplete Application
Major Site Plan Amendment Type II Application for
Northwest Logistics Center II – Trailer Lot Expansion
City of DuPont File No. PLNG 2020-012, 013, 014 & SEPA2020-001
Our Job No. 21227

Dear Jeffrey:

We have revised the plans and technical documents for the above-referenced project to address the comments in your letter dated July 30, 2020. Enclosed are the following documents for your review and approval:

1. One (1) electronic copy Non-Wetland and Fish and Wildlife Habitat Assessment (non-corrupt file)
2. One (1) electronic copy updated Title Reports
3. One (1) electronic copy Signed and Notarized Authority to Act as Agent Affidavit
4. One (1) electronic copy Financially Responsible Party Letter
5. One (1) electronic copy Lot Line Elimination
6. One (1) electronic copy Lot Line Elimination Fee in the amount of $1,500 (copy for reference only. Original to follow via courier)
7. One (1) electronic copy revised SEPA Checklist
8. One (1) electronic copy Traffic Impact Analysis
9. One (1) electronic copy revised Civil Engineering Design Plans
10. One (1) electronic copy Landscape Planting Plans

Four copies of all plans and documents listed above will be sent via courier to your office.

The following outline provides each of your comments in italics, along with a narrative response describing how each comment was addressed:

1. *Provide a non-corrupted electronic file for the Critical Areas Report.*

   Response: A non-corrupted version is included in this resubmittal. Please let us know if this is not the case as the file originally uploaded was checked for corruption and none was found on our end.

Attachment 1.q. Cover Letter prepared by Barghausen Consulting Engineers dated August 5, 2020

2. *Pursuant to the Land Use application submittal checklist, the Title Report shall be less than 30 days old. The submitted Title Reports are dated January 24, 2020 and August 31, 2018 and the land use application was submitted on July 2. 2019. Provide Title Reports less than 30 days old.*

   Response: Updated title reports have are included with this package.

3. *The Authorization to Act as Agent Affidavit is required to be notarized. The Northwest Logistics Industrial Holdings, LLC Authorization to Act as Agent is not notarized. Provide a notarized Authorization to Act as Agent Affidavit for tax parcel 3000390011.*

   Response: A notarized Authorization to Act as Agent Affidavit is included in this resubmittal.

4. *Per the Northwest Logistics Trailer Parking Area Pre-Application Meeting PLNG2020-002 Comment E.2.b, provide a letter indicating the name and address of the financially responsible party.*

   Response: A letter of Financially Responsible Party is included in this resubmittal naming Bjorn Brynestad at Panattoni Development Company, Inc.

5. *Pursuant to the Lot Line Elimination (LLE) application submittal checklist, Lot Line Elimination drawings showing all information required by DMC 24.7 for the LLE application. The submitted LLE application materials did not include the LLE drawings. Therefore, provide the required LLE drawings.*

   Response: The Lot Line Elimination drawings are included in this resubmittal.

6. *Pursuant to the Lot Line Elimination (LLE) application submittal checklist, the application filing fee is required. The application that we received did not include the LLE filing fee. Therefore, provide the require filing fee for the LLE application ($1,500).*

   Response: The check for $1,500 is included in this resubmittal sent directly to the City of DuPont.

7. *The amended SEPA checklist does not include updated traffic information. Revise the SEPA checklist to include the updated vehicle trip information.*

   Response: The SEPA checklist has been updated to include the information regarding vehicle trips and included in this resubmittal.

8. *If you are intending to incorporate a mezzanine, which increases the size of the building and floor area by adding an interior floor please clarify and provide this information in a revised SEPA Checklist.*

   Response: A mezzanine area is proposed in the building. Additional information regarding the mezzanine has been included within SEPA checklist numbers 7 and 11.

9. *The landscape plans indicate an 8-foot screening wall near DuPont-Steilacoom Road. This 8-foot structure is not provided on the civil plans nor did the application materials include an associated structure elevation drawing. Revise civil plans to include the 8-foot screening wall and provide a structure elevation drawing for the screening wall.*

   Response: Additional information on the wall is now included on landscape and civil plans. The proposed wall is an 8-foot CMU block wall for screening.

Although not required for a technically complete application, we are providing the following additional comments for you to address with your resubmittal:

1. *The landscape plans appear to show a gap between the new proposed screening wall and the existing berm. How will this gap area provide the required screening?*

   Response: The proposed screening wall has been extended to the south where the existing berm ends. Based on site photos, the berm ends approximately even with the landscape island and fire hydrant just north of the truck court.

We believe that the above responses, together with the enclosed documents address all of the comments in your July 30, 2020 comment letter. Please review and approve the enclosed at your earliest convenience. If you have questions or need additional information, please do not hesitate to contact me at this office. Thank you.

Sincerely,

Daniel K. Balmelli

Daniel K. Balmelli, P.E.
Executive Vice President

DKB
21227c.002.doc
enc: As Noted
cc: Brian Mattson, Panattoni Development Company
Bjorn Brynestad, Panattoni Development Company
Whitney Dunlap, Barghausen Consulting Engineers, Inc.
Betsy Dyer, Barghausen Consulting Engineers, Inc.

First American Commitment	ALTA Commitment for Title Insurance ISSUED BY **First American Title Insurance Company** File No: NCS-1000114-WA1

COMMITMENT FOR TITLE INSURANCE

Issued By

FIRST AMERICAN TITLE INSURANCE COMPANY

NOTICE

IMPORTANT-READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, ***First American Title Insurance Company***, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

First American Title Insurance Company

Dennis J. Gilmore, President

Greg L. Smith, Secretary

If this jacket was created electronically, it constitutes an original document.

Attachment 1.r. Title Report prepared by First American dated July 23, 2020 for parcel 300039-0-282

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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COMMITMENT CONDITIONS

1. DEFINITIONS

(a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
(b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
(c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
(d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
(e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
(f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
(g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
(h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
(a) the Notice;
(b) the Commitment to Issue Policy;
(c) the Commitment Conditions;
(d) Schedule A;
(e) Schedule B, Part I—Requirements; and
(f) Schedule B, Part II—Exceptions.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

(a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
  (i) comply with the Schedule B, Part I—Requirements;
  (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
  (iii) acquire the Title or create the Mortgage covered by this Commitment.
(b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
(c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
(d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
(e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
(f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
(g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

(a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
(b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
(c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
(d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
(e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
(f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is $2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Transaction Identification Data for reference only:

Issuing Agent: First American Title Insurance Company National Commercial Services
Issuing Office's ALTA® Registry ID:
Commitment No.: NCS-1000114-WA1
Property Address: International Place North, DuPont, WA 98327
Revision No.:

Issuing Office: 920 Fifth Avenue, Suite 1200, Seattle, WA 98104
Reference No.: International Place
Issuing Office File No.: NCS-1000114-WA1
Escrow Officer Name: Jean Couch
Escrow Officer Number: (206)615-3118
Escrow Officer Email: jcouch@firstam.com
Escrow Assistant Name: Willa Sweeney
Escrow Assistant Number: (206)615-2812
Escrow Assistant Email: wsweeney@firstam.com
Title Officer Name: Jen Modjeska
Title Officer Number: (206)615-3270
Title Officer Email: jmodjeska@firstam.com

REPORT NO. 2
SCHEDULE A

1. Commitment Date: July 23, 2020 at 8:00 AM
2. Policy to be Issued:

		Amount	Premium	Tax
(a)	☒ 2006 ALTA® Standard Owner's Policy Proposed Insured: PDC Seattle LPIV BB/TH, LLC	$4,584,377.00	$TBD	$TBD
(b)	☒ 2006 ALTA® Extended Loan Policy Proposed Insured: TBD	$TBD	$TBD	$TBD
(c)	☐ ALTA® Policy Proposed Insured:	$		

3. The estate or interest in the Land described or referred to in this Commitment is Fee Simple
4. The Title is, at the Commitment Date, vested in:

   Steilacoom Historical School District No. 1, a municipal corporation

5. The Land is described as follows:

   See Exhibit "A" attached hereto and made a part hereof

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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SCHEDULE B, PART I

Requirements

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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SCHEDULE B, PART II

Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met.

2. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records.

3. Any facts, rights, interests, or claims which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.

4. Easements, claims of easement or encumbrances which are not shown by the Public Records.

5. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the Public Records.

6. (A) Unpatented mining claims; (B) Reservations or exceptions in patents or in Acts authorizing the issuance thereof; (C) Water rights, claims or title to water; whether or not the matters excepted under (A), (B) or (C) are shown by the Public Records; (D) Indian Tribal Codes or Regulations, Indian Treaty or Aboriginal Rights, including easements or equitable servitudes.

7. Any lien or right to a lien for services, labor, material or equipment, unless such lien is shown by the Public Records at Date of Policy and not otherwise excepted from coverage herein.

8. Any service, installation, connection, maintenance, construction, tap or reimbursement charges/costs for sewer, water, garbage or electricity.

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SCHEDULE B - SECTION 2
(continued)
SPECIAL EXCEPTIONS

9. Lien of Real Estate Excise Tax upon sale of said premises, or transfer of a controlling interest, if unpaid. As of the date herein, the excise tax rates are as follows:
Levy/Area Code:055

State Excise Tax for real property classified as Timberland (RCW 84.34 or RCW 84.33) or Agricultural land (RCW 84.34.020):

1.28% of the selling price

All other State Excise Tax:
1.10% of the selling price less than or equal to $500,000.00
1.28% of the selling price from $500,000.01 to $1,500,000.00
2.75% of the selling price from $1,500,000.01 to $ 3,000,000.00
3.00% of the selling price over $3,000,000.00

Local Excise Tax for City of DuPont
.50% of the selling price

In additional to Excise Tax due, a fee of $5.00 will be charged on all taxable transactions ($10.00 on all exempt transactions)

10. Liability, if any, for pro-rata portion of **Real Property** taxes which are carried on the Pierce County Tax Rolls, as tax account no. 300039-0-282, are exempt.

We note Special Charges for the year 2020 in the amount of $10.76, of which $10.76 has been paid. Balance due: $0.00.

11. Potential charges, for the King County Sewage Treatment Capacity Charge, as authorized under RCW 35.58 and King County Code 28.84.050. Said charges could apply for any property that connected to the King County Sewer Service area on or after February 1, 1990.

Note: Properties located in Snohomish County and Pierce County may be subject to the King County Sewage Treatment Capacity Charges. To verify charges contact: (206) 296-1450 or CapChargeEscrow@kingcounty.gov.

12. Easement, including terms and provisions contained therein:

Recording Information:	November 21, 1958 as Recording No. 1836680
In Favor of:	The United States of America
For:	Sewer line

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13. Reservations and exceptions, including the terms and conditions thereof:

Reserving:	Mineral Rights
Reserved By:	Weyerhaeuser Company, a Washington corporation
Recorded:	January 26, 1989
Recording Information:	8901260100

Document(s) declaring modifications thereof recorded May 13, 1994 as Recording No. 9405130746 of Official Records.

14. Easement, including terms and provisions contained therein:

Recording Information:	April 12, 1990 as Recording No. 9004120162
In Favor of:	Puget Sound Power & Light Company, a Washington corporation
For:	Electric transmission and/or distribution line

15. The terms and provisions contained in the document entitled "Declaration of Covenants, Conditions, and Restrictions for Northwest Landing Commercial Property" recorded August 24, 1992 as Recording No. 9208240297 of Official Records.

Document(s) declaring modifications thereof recorded January 10, 1995 as Recording No. 9501100462 of Official Records.

Document(s) declaring modifications thereof recorded March 15, 1995 as Recording No. 9503150368 of Official Records.

Document(s) declaring modifications thereof recorded January 9, 1996 as Recording No. 9601090368 of Official Records.

Document(s) declaring modifications thereof recorded January 26, 1996 as Recording No. 9601260346 of Official Records.

Document(s) declaring modifications thereof recorded March 12, 1996 as Recording No. 9603120707 of Official Records.

Document(s) declaring modifications thereof recorded September 11, 1996 as Recording No. 9609110555 of Official Records.

Document(s) declaring modifications thereof recorded December 24, 1996 as Recording No. 9612240420 of Official Records.

Document(s) declaring modifications thereof recorded October 17, 1997 as Recording No. 9710170646 of Official Records.

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Document(s) declaring modifications thereof recorded March 17, 1998 as Recording No. 9803170310 of Official Records.

Document(s) declaring modifications thereof recorded as Recording No. 9807070025 of Official Records.

Document(s) declaring modifications thereof recorded December 20, 1999 as Recording No. 9912200109 of Official Records.

Document(s) declaring modifications thereof recorded November 8, 2000 as Recording No. 200011080374 of Official Records.

Said modification document was re-recorded December 6, 2000 in/as Recording No. 200012060263.

Document(s) declaring modifications thereof recorded January 8, 2002 as Recording No. 200201080843 of Official Records.

Document(s) declaring modifications thereof recorded September 18, 2002 as Recording No. 200209180938 of Official Records.

Document(s) declaring modifications thereof recorded September 18, 2002 as Recording No. 200209180939 of Official Records.

Document(s) declaring modifications thereof recorded September 18, 2002 as Recording No. 200209180940 of Official Records.

Document(s) declaring modifications thereof recorded April 4, 2003 as Recording No. 200304041433 of Official Records.

Document(s) declaring modifications thereof recorded April 4, 2003 as Recording No. 200304041434 of Official Records.

Document(s) declaring modifications thereof recorded December 5, 2005 as Recording No. 200512050081 of Official Records.

Document(s) declaring modifications thereof recorded December 21, 2007 as Recording No. 200712210490 of Official Records.

Document(s) declaring modifications thereof recorded August 15, 2008 as Recording No. 200808150280 of Official Records.

Document(s) declaring modifications thereof recorded September 30, 2010 as Recording No. 201009301051 of Official Records.

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Document(s) declaring modifications thereof recorded October 6, 2010 as Recording No. 201010060494 of Official Records.

Document(s) declaring modifications thereof recorded October 6, 2010 as Recording No. 201010060495 of Official Records.

Document(s) declaring modifications thereof recorded October 27, 2010 as Recording No. 201010270197 of Official Records.

16. Restrictions, conditions, dedications, notes, easements and provisions, if any, as contained and/or delineated on the face of the plat of Northwest Landing Industrial Park Division 1 recorded September 9, 1996 as Recording No. 9609090634, in Pierce County, Washington.

17. Terms, covenants, conditions, restrictions and easements as contained in recorded Lot Line Adjustment (Boundary Line Revision) BLA 02-01 :
Recorded: October 24, 2002
Recording Information: 200210245003

18. The terms and provisions contained in the document entitled "Declaration of Restriction on Self-Storage Consumer Storage Facilities" recorded May 20, 2003 as Recording No. 200305200603 of Official Records.

Document(s) declaring modifications thereof recorded January 10, 2005 as Recording No. 200501101194 of Official Records.

19. The terms and provisions contained in the document entitled "Non-Exclusive Easement for Ingress, Egress and Utilities" recorded May 17, 2006 as Recording No. 200605170142 of Official Records.

20. Terms, covenants, conditions, restrictions and easements as contained in recorded Lot Line Adjustment (Boundary Line Revision) BLA-LEE 0601 :
Recorded: March 21, 2007
Recording Information: 200703215009

21. Easement, including terms and provisions contained therein:
Recording Information: June 20, 2008 as Recording No. 200806200647
In Favor of: Puget Sound Energy, Inc., a Washington corporation
For: Utility systems for purposes of transmission, distribution and sale of gas and electricity

22. The terms and provisions contained in the document entitled "City of DuPont Agreement for Inspection and Maintenance of Privately Maintained Storm Drainage Facilities" recorded November 20, 2008 as Recording No. 200811200329 of Official Records.

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23. Easement, including terms and provisions contained therein:
    Recording Information: November 20, 2008 as Recording No. 200811200330
    In Favor of: The City of DuPont
    For: Water mains

24. Evidence of the authority of the officers of Steilacoom Historical School District No. 1, to execute the forthcoming instrument, copies of the current Articles of Incorporation, By-Laws and certified copies of appropriate resolutions should be submitted prior to closing.

25. Evidence of the authority of the individual(s) to execute the forthcoming document for PDC Seattle LPIV BB/TH, LLC, copies of the current operating agreement should be submitted prior to closing.

26. Prior to issuance of an extended coverage policy, the Company will require an Owner's Affidavit be completed and submitted to the Company for approval prior to closing. The Company reserves the right to make any additional requirement as warranted.

27. Matters of extended owner/purchaser coverage which are dependent upon an inspection and an ALTA survey of the property for determination of insurability.

    Please submit a copy of the ALTA Survey at your earliest convenience for review. Our inspection will be held pending our review of the ALTA Survey and the result of said inspection will be furnished by supplemental report.

28. Unrecorded leaseholds, if any, rights of vendors and security agreement on personal property and rights of tenants, and secured parties to remove trade fixtures at the expiration of the term.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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INFORMATION NOTES

A. Effective January 1, 1997, and pursuant to amendment of Washington State Statutes relating to standardization of recorded documents, the following format and content requirements must be met. Failure to comply may result in rejection of the document by the recorder.

B. Any sketch attached hereto is done so as a courtesy only and is not part of any Title Commitment or Policy. It is furnished solely for the purpose of assisting in locating the Land and First American expressly disclaims any liability which may result from reliance made upon it.

C. The description can be abbreviated as suggested below if necessary to meet standard requirements. The full text of the description must appear in the document (s) to be insured.

Lot 2, BLA #BLA-LEE 0601, rec. 200703215009

APN: 300039-0-282

D. A fee will be charged upon the cancellation of this Commitment pursuant to the Washington State Insurance Code and the filed Rate Schedule of the Company.

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First American Exhibit A	ISSUED BY **First American Title Insurance Company** File No: NCS-1000114-WA1

The Land referred to herein below is situated in the County of Pierce, State of Washington, and is described as follows:

Lot 2 of Boundary Line Adjustment No. BLA-LEE 0601 recorded March 21, 2007 as Recording No. 200703215009, records of Pierce County, Washington.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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First American Commitment	ALTA Commitment for Title Insurance ISSUED BY **First American Title Insurance Company** File No: NCS-1012840-WA1

COMMITMENT FOR TITLE INSURANCE

Issued By

FIRST AMERICAN TITLE INSURANCE COMPANY

NOTICE

IMPORTANT-READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, ***First American Title Insurance Company***, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

First American Title Insurance Company

Dennis J. Gilmore, President

Greg L. Smith, Secretary

If this jacket was created electronically, it constitutes an original document.

Attachment 1.s. Title Report prepared by First American dated July 23, 2020 for parcel 300039-001-1

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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COMMITMENT CONDITIONS

1. DEFINITIONS

(a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
(b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
(c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
(d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
(e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
(f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
(g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
(h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
(a) the Notice;
(b) the Commitment to Issue Policy;
(c) the Commitment Conditions;
(d) Schedule A;
(e) Schedule B, Part I—Requirements; and
(f) Schedule B, Part II—Exceptions.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

(a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
  (i) comply with the Schedule B, Part I—Requirements;
  (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
  (iii) acquire the Title or create the Mortgage covered by this Commitment.
(b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
(c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
(d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
(e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
(f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
(g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

(a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
(b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
(c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
(d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
(e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
(f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is $2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

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Transaction Identification Data for reference only:

Issuing Agent: First American Title Insurance Company National Commercial Services
Issuing Office's ALTA® Registry ID:
Commitment No.: NCS-1012840-WA1
Property Address: 3230 International Place, Dupont, WA 98327
Revision No.: 01

Issuing Office: 920 Fifth Avenue, Suite 1200, Seattle, WA 98104
Reference No.: APN #300039-0011
Issuing Office File No.: NCS-1012840-WA1
Escrow Officer Name: Jean Couch
Escrow Officer Number: (206)615-3118
Escrow Officer Email: jcouch@firstam.com
Escrow Assistant Name: Willa Sweeney
Escrow Assistant Number: (206)615-2812
Escrow Assistant Email: wsweeney@firstam.com
Title Officer Name: Jen Modjeska
Title Officer Number: (206)615-3270
Title Officer Email: jmodjeska@firstam.com

SCHEDULE A

1. Commitment Date: July 23, 2020 at 8:00 AM
2. Policy to be Issued:

	Amount	Premium	Tax
(a) ☒ 2006 ALTA® Standard Owner's Policy Proposed Insured: To Be Determined	$To Be Determined	$To Be Determined	$To Be Determined
(b) ☐ ALTA® Policy Proposed Insured:	$	$	$
(c) ☐ ALTA® Policy Proposed Insured:	$		

3. The estate or interest in the Land described or referred to in this Commitment is Fee Simple as to Parcel A, an Easement as to Parcel B
4. The Title is, at the Commitment Date, vested in:

   Northwest Logistics Industrial Holdings, LLC, a Delaware limited liability company
5. The Land is described as follows:

   See Exhibit "A" attached hereto and made a part hereof

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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SCHEDULE B, PART I

Requirements

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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SCHEDULE B, PART II

Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met.

2. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records.

3. Any facts, rights, interests, or claims which are not shown by the Public Records but which could be ascertained by an inspection of the Land or by making inquiry of persons in possession thereof.

4. Easements, claims of easement or encumbrances which are not shown by the Public Records.

5. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the Public Records.

6. (A) Unpatented mining claims; (B) Reservations or exceptions in patents or in Acts authorizing the issuance thereof; (C) Water rights, claims or title to water; whether or not the matters excepted under (A), (B) or (C) are shown by the Public Records; (D) Indian Tribal Codes or Regulations, Indian Treaty or Aboriginal Rights, including easements or equitable servitudes.

7. Any lien or right to a lien for services, labor, material or equipment, unless such lien is shown by the Public Records at Date of Policy and not otherwise excepted from coverage herein.

8. Any service, installation, connection, maintenance, construction, tap or reimbursement charges/costs for sewer, water, garbage or electricity.

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SCHEDULE B - SECTION 2
(continued)
SPECIAL EXCEPTIONS

9. Lien of Real Estate Excise Tax upon sale of said premises, or transfer of a controlling interest, if unpaid. As of the date herein, the excise tax rates are as follows:
Levy/Area Code:055

State Excise Tax for real property classified as Timberland (RCW 84.34 or RCW 84.33) or Agricultural land (RCW 84.34.020):

1.28% of the selling price

All other State Excise Tax:
1.10% of the selling price less than or equal to $500,000.00
1.28% of the selling price from $500,000.01 to $1,500,000.00
2.75% of the selling price from $1,500,000.01 to $ 3,000,000.00
3.00% of the selling price over $3,000,000.00

Local Excise Tax for DuPont
.50% of the selling price

In additional to Excise Tax due, a fee of $5.00 will be charged on all taxable transactions ($10.00 on all exempt transactions)

10. General Taxes for the year 2020.

Tax Account No.:	300039-001-1	
Amount Billed:	$	381,344.73
Amount Paid:	$	190,672.36
Amount Due:	$	190,672.37
Assessed Land Value:	$	17,538,400.00
Assessed Improvement Value:	$	18,748,300.00

11. Potential charges, for the King County Sewage Treatment Capacity Charge, as authorized under RCW 35.58 and King County Code 28.84.050. Said charges could apply for any property that connected to the King County Sewer Service area on or after February 1, 1990.

Note: Properties located in Snohomish County and Pierce County may be subject to the King County Sewage Treatment Capacity Charges. To verify charges contact: (206) 296-1450 or CapChargeEscrow@kingcounty.gov.

12. Reservations and exceptions, including the terms and conditions thereof, and as noted on that certain Survey, Job No. 15494, prepared by Brian D. Gillooly, RPLS No. 46315, of Barghausen Consulting Engineers, Inc., dated September 26, 2018, last revised December 14, 2018:

Reserving:	Minerals and Right of Way
Reserved By:	Weyerhaeuser Company

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Recorded: January 26, 1989
Recording Information: 8901260100

Document(s) declaring modifications thereof recorded May 13, 1994 as Recording No. 9405130746 of Official Records; said modification includes the following language:

Grantor, its successors and assigns, will not occupy or use the surface of said land and will not do any development, excavation or mining within a vertical depth of 500 feet.

13. Easement, including terms and provisions contained therein:
Recording Date: December 18, 1989
Recording Information: 8912180215
In Favor of: Puget Sound Power & Light Company
For: Electric Transmission and/or Distribution Line
Affects: as described therein.

The above document was re-recorded April 12, 1990 in/as Recording No. 9004120162 of Official Records.

14. Easement, including terms and provisions contained therein:
Recording Date: December 23, 1991
Recording Information: 9112230168
In Favor of: City of Dupont
For: Landscaping
Affects: as described therein.

15. Covenants, conditions, restrictions and/or easements:

Recorded: August 24, 1992
Recording No.: 9208240297

Document(s) declaring modifications thereof recorded January 10, 1995, March 15, 1995, January 9, 1996, January 26, 1996, March 12, 1996, September 11, 1996, December 24, 1996, October 17, 1997, March 17, 1998, July 7, 1998, December 20, 1999, November 8, 2000, January 8, 2002, September 18, 2002, April 4, 2003, April 16, 2003, August 25, 2003, December 21, 2007, August 15, 2008, October 6, 2010 and October 27, 2010 as Recording No. 9501100462, 9503150368, 9601090368, 9601260346, 9603120707, 9609110555, 9612240420, 9710170646, 9803170310, 9807070025, 9912200109, 200011080374, 200201080843, 200209180938, 200304041434, 200304160284, 200308250162, 200712210490, 200808150280, 201010060495 and 201010270197 of Official Records.

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16. Restrictions, conditions, dedications, notes, easements and provisions, if any, as contained and/or delineated on the face of the Plat of Northwest Landing Industrial Park Division 1 recorded September 9, 1996 under Recording No. 9609090634, in Pierce County, Washington.

17. Terms, covenants, conditions, restrictions and easements as contained in recorded Lot Line Adjustment (Boundary Line Revision) BLA 02-01:
Recorded: October 24, 2002
Recording Information: 200210245003

18. Terms, covenants, conditions, restrictions and easements as contained in recorded Lot Line Adjustment (Boundary Line Revision) BLA- LEE 06-01:
Recorded: March 21, 2007
Recording Information: 200703215009

19. Easement, including terms and provisions contained therein:
Recording Date: June 20, 2008
Recording Information: 200806200647
In Favor of: Puget Sound Energy, Inc
For: One or More Utility Systems
Affects: as described therein.

20. Easement, including terms and provisions contained therein:
Recording Date: January 10, 1995
Recording Information: 9501100464
In Favor of: Northwest Landing Commercial Owners Association
For: Sign
Affects: as described therein.

Document(s) declaring modifications thereof recorded February 22, 1999, July 1, 2009 and August 20, 2010 as Recording Nos. 9902220495, 200907010132 and 201008200408 of Official Records.

21. Provisions of the Articles of Incorporation and By-Laws of the Northwest Landing Commercial Owners Association, and any tax, fee, assessments or charges as may be levied by said association:
Recorded: September 9, 1996
Recording No.: 9609090634

22. Terms, covenants, conditions, restrictions and easements as contained in recorded Lot Line Adjustment (Boundary Line Revision) No. LLE 15-01 :
Recorded: March 13, 2015
Recording Information: 201503130126

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23. Any facts, rights, interests or claims that may exist or arise by reason of the following matters disclosed by an ALTA/NSPS survey made by Barghausen Consulting Engineers, Incorporated on September 26, 2018, last revised December 14, 2018, designated 15494:
(A) Landscaping on the northwesterly portion of the subject property meanders along the property line by various distances.

24. Deed of Trust and the terms and conditions thereof.

Grantor/Trustor:	Northwest Logistics Industrial Holdings, LLC, a Delaware limited liability company
Grantee/Beneficiary:	Texas Capital Bank, National Association
Trustee:	First American Title Insurance Company
Amount:	$36,093,803.00
Recorded:	December 21, 2018
Recording Information:	201812210389

25. Assignment of leases and/or rents and the terms and conditions thereof:

Assignor:	Northwest Logistics Industrial Holdings, LLC, a Delaware limited liability company
Assignee:	Texas Capital Bank, National Association, and its successors and assigns
Recorded:	December 21, 2018
Recording Information:	201812210390

26. A financing statement recorded December 21, 2018 as Recording No. 201812210391 of Official Records.

Debtor:	Northwest Logistics Industrial Holdings, LLC
Secured party:	Texas Capital Bank, National Association

27. Easement, including terms and provisions contained therein:

Recording Date:	May 14, 2019
Recording Information:	201905140555
In Favor of:	Puget Sound Energy, Inc., a Washington corporation
For:	Transmission, distribution and sale of gas and electricity
Affects:	as described therein.

28. Evidence of the authority of the individual(s) to execute the forthcoming document for Northwest Logistics Industrial Holdings, LLC, a Delaware limited liability company, copies of the current operating agreement should be submitted prior to closing.

29. Title to vest in an incoming owner whose name is not disclosed. Such name must be furnished to us so that a name search may be made.

30. Unrecorded leaseholds, if any, rights of vendors and security agreement on personal property and rights of tenants, and secured parties to remove trade fixtures at the expiration of the term.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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31. Prior to issuance of an extended coverage policy, the Company will require an Owner's Affidavit be completed and submitted to the Company for approval prior to closing. The Company reserves the right to make any additional requirement as warranted.

32. The terms, provisions and easement(s) contained in the document entitled "Conservation Easement Agreement (for Oak Tree Protection Areas) City of DuPont Reference Number: PLNG2018-012" recorded July 21, 2020 as Recording No. 202007210457 of Official Records.

33. The terms and provisions contained in the document entitled "City of DuPont Agreement for Inspection and Maintenance of Privately Maintained Storm Drainage Facilities" recorded July 21, 2020 as Recording No. 202007210467 of Official Records.

34. Easement, including terms and provisions contained therein:

Recording Date:	July 21, 2020
Recording Information:	202007210472
In Favor of:	City of DuPont, a municipal corporation, its successors and assigns
For:	construction, improvement, maintenance, and repair of underground utilities, including but not limited to underground water, storm drainage, and other appurtenant structures
Affects:	as described therein.

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INFORMATION NOTES

A. Effective January 1, 1997, and pursuant to amendment of Washington State Statutes relating to standardization of recorded documents, the following format and content requirements must be met. Failure to comply may result in rejection of the document by the recorder.

B. Any sketch attached hereto is done so as a courtesy only and is not part of any Title Commitment or Policy. It is furnished solely for the purpose of assisting in locating the Land and First American expressly disclaims any liability which may result from reliance made upon it.

C. The description can be abbreviated as suggested below if necessary to meet standard requirements. The full text of the description must appear in the document (s) to be insured.

Resultant Parcel, City of DuPont Lot Combination No. LLE 15-01, Rec. 201503130126

APN: 300039-001-1

D. A fee will be charged upon the cancellation of this Commitment pursuant to the Washington State Insurance Code and the filed Rate Schedule of the Company.

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First American Exhibit A	ISSUED BY **First American Title Insurance Company** File No: NCS-1012840-WA1

The Land referred to herein below is situated in the County of Pierce, State of Washington, and is described as follows:

PARCEL A:

RESULTANT PARCEL, CITY OF DUPONT LOT COMBINATION NO. LLE 15-01, RECORDED MARCH 13, 2015 UNDER RECORDING NO. 201503130126, RECORDS OF PIERCE COUNTY, WASHINGTON.

PARCEL B:

A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS CREATED BY INSTRUMENT RECORDED MAY 17, 2006 UNDER RECORDING NO. 200605170142 AND AS DELINEATED ON SAID BOUNDARY LINE ADJUSTMENT RECORDED MARCH 21, 2007 UNDER RECORDING NO. 200703215009, IN PIERCE COUNTY, WASHINGTON.

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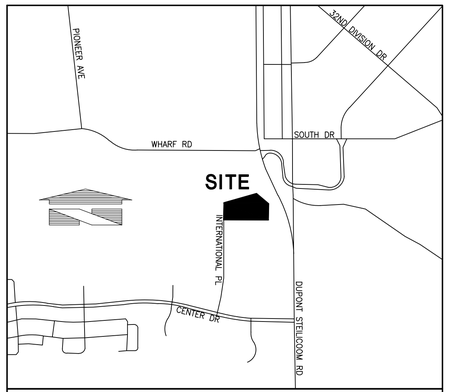
PRELIMINARY COVER SHEET
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 50' 100' 200'
SCALE: 1"=100'

811
Know what's **below.**
Call before you dig.



VICINITY MAP DUPONT, WASHINGTON

SURVEY INFORMATION

LEGAL DESCRIPTIONS:
(PER FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. NCS-921048-WA1, DATED AUGUST 31, 2018 8:00AM)

PARCEL A:
RESULTANT PARCEL, CITY OF DUPONT LOT COMBINATION NO. LLE 15-01, RECORDED MARCH 13, 2015 UNDER RECORDING NO. 201503130126, RECORDS OF PIERCE COUNTY, WASHINGTON.

PARCEL B:
A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS CREATED BY INSTRUMENT RECORDED MAY 17, 2006 UNDER RECORDING NO. 200605170142 AND AS DELINEATED ON SAID BOUNDARY LINE ADJUSTMENT RECORDED MARCH 21, 2007 UNDER RECORDING NO. 200703215009, IN PIERCE COUNTY, WASHINGTON.

HORIZONTAL DATUM – BASIS OF BEARINGS:
THE BASIS OF BEARINGS IS THE BEARING BETWEEN WCCS POINTS 413 (GPS 031) AND 1130 (LEWIS GP 809), TAKEN AS SOUTH 02° 28' 12" EAST, BASED UPON THE NORTH AMERICAN DATUM OF 1983–NAD 83 (91) – WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.

VERTICAL DATUM:
NATIONAL GEODETIC VERTICAL DATUM OF 1929 – NGVD 29
FROM DATA PROVIDED BY THE CITY OF DUPONT PLANNING DEPARTMENT – THE BENCHMARK IS THE SURFACE MON AT THE CENTERLINE OF THE INTERNATIONAL PLACE CUL-DE-SAC, TAKEN AS 221.82 FEET

PROCEDURE / NARRATIVE:
A FIELD TRAVERSE USING A TOPCON GT 1000 AND DELL TABLET WITH MAGNET FEILD WITH FIELD NOTES WAS PERFORMED, ESTABLISHING THE ANGULAR, DISTANCE, AND VERTICAL RELATIONSHIPS BETWEEN THE MONUMENTS, PROPERTY LINES AND IMPROVEMENTS. THE RESULTING DATA MEETS OR EXCEEDS THE STANDARDS FOR LAND BOUNDARY SURVEYS AS SET FORTH IN WAC 332-130-090.

LOT AREA:
232,834 SQ. FT.± (5.35 ACRES±)

SITE ADDRESS:
3330 INTERNATIONAL PL, DUPONT, WA 98327

TITLE INFORMATION:
FIDELITY NATIONAL TITLE OF WASHINGTON, INC ESCROW NO. 14255634-410-CFS, DATED MAY 16, 2012 WAS RELIED UPON FOR TITLE INFORMATION AND SUPPORTING DOCUMENTS. PLEASE REFER TO THAT REPORT FOR FURTHER INFORMATION REGARDING FINANCIAL MATTERS BEYOND THE SCOPE OF THIS SURVEY. DUE TO THE AGE OF THIS REPORT, THIS SURVEY DOESN'T PURPORT TO SHOW ALL EASEMENTS OF RECORD.

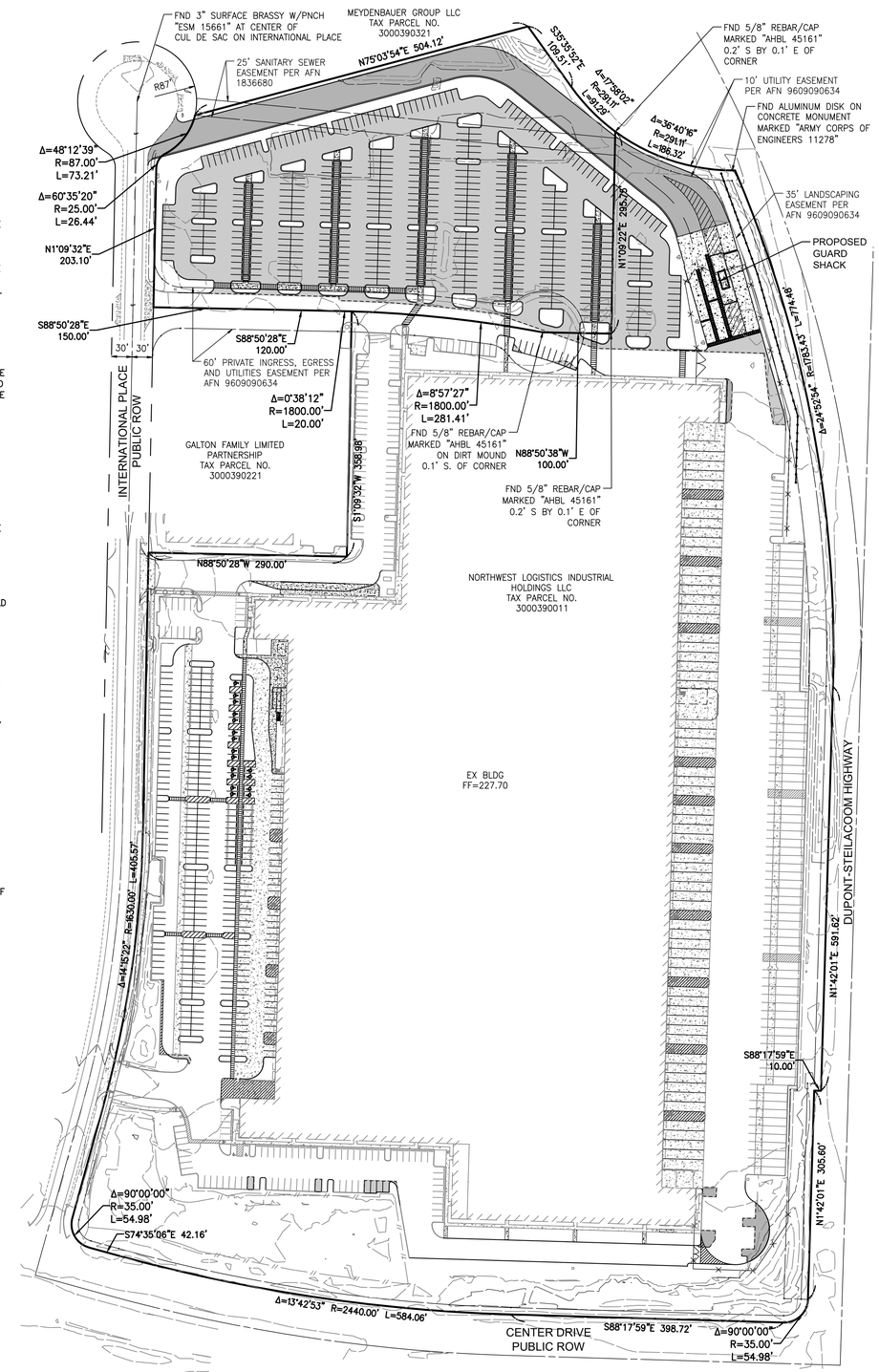
DATES OF SURVEYS:
THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON MAY 4, 2020. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN MAYL OF 2020.

TAX ACCOUNT NUMBERS:
APN 300039-0282

SURVEYORS NOTES:
- ALL DISTANCES SHOWN HEREON ARE GROUND MEASUREMENTS IN U.S. SURVEY FEET.
- UNDERGROUND UTILITIES AND FEATURES DEPICTED HEREON ARE BASED ON FIELD OBSERVATION ONLY. THE TRUE LOCATION, NATURE AND/OR EXISTENCE OF BELOW GROUND FEATURES, DETECTED OR UNDETECTED, SHOULD BE VERIFIED. THERE IS NO EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS. THERE IS NO EVIDENCE OF ANY CHANGES IN THE STREET RIGHT-OF-WAYS OR STREET/SIDEWALK REPAIRS OR ANY USE AS A LANDFILL.
- THIS SURVEY WAS PERFORMED WITHOUT A CURRENT TITLE REPORT AND DOESN'T PURPORT TO SHOW ALL EASEMENTS OF RECORD.

GENERAL SITE NOTES:

1. THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
2. CONTRACTOR SHALL ASSURE THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE OR SHOWN ON RECORD DRAWING PROVIDED BY OTHERS ARE SHOWN HEREON. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. BARGHAUSEN CONSULTING ENGINEERS, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS OR RECORDS OF OTHERS. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
6. INSPECTION OF SITE WORK WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE GOVERNING JURISDICTION. INSPECTION OF PRIVATE FACILITIES WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
7. PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY THE CONTRACTOR SHALL CONTACT THE AGENCY AND/OR UTILITY INSPECTION PERSONNEL AND ARRANGE ANY REQUIRED PRE-CONSTRUCTION MEETING(S). CONTRACTOR SHALL PROVIDE ONE WEEK MINIMUM ADVANCE NOTIFICATION TO OWNER, FIELD ENGINEER AND ENGINEER OF PRE-CONSTRUCTION MEETINGS.
8. THE CONTRACTOR IS RESPONSIBLE FOR WORKER AND SITE SAFETY AND SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED.
10. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ALL ADJACENT PUBLIC AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITY SERVICES THAT ARE TO REMAIN OPERATIONAL WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
11. TWO (2) COPIES OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. ONE (1) SET WITH RECORDS OF AS-BUILT INFORMATION SHALL BE SUBMITTED TO BARGHAUSEN CONSULTING ENGINEERS, INC. AT COMPLETION OF PROJECT.
12. CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL CONTROL FOR ALL NEW IMPROVEMENTS. STAKING CONTROL SHALL BE TAKEN FROM ELECTRONIC PLAN FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC.
13. CONTRACTOR SHALL REQUEST FROM BARGHAUSEN CONSULTING ENGINEERS, INC., PRIOR TO ANY CONSTRUCTION STAKING OR CONSTRUCTION WORK, A FORMAL CONSTRUCTION RELEASE PLAN SET OR SPECIFIC RELEASE IN WRITING. THE APPROVED AGENCY PERMIT DRAWINGS WILL NOT BE CONSIDERED CONSTRUCTION RELEASE PLANS BY BARGHAUSEN CONSULTING ENGINEERS, INC. UNLESS BARGHAUSEN CONSULTING ENGINEERS, INC. HAS GIVEN A FORMAL WRITTEN RELEASE OR ISSUED A CONSTRUCTION RELEASE PLAN SET.



APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

GEOTECHNICAL REPORT NOTES:

1. THE FOLLOWING GEOTECHNICAL REPORTS FOR THE SITE SHALL BE CONSIDERED PART OF THESE CONSTRUCTION DOCUMENTS:

   SOILS REPORTS: **GEOTECHNICAL ENGINEERING STUDY**
   DUPONT TRAILER YARD
   PROJECT NO: T-6897-3
   DATE: MAY 12, 2020

   PREPARED BY: **TERRA ASSOCIATES**
   12220 113TH AVE NE, SUITE 130
   KIRKLAND, WA 98034
   (425) 821-777

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PROVISIONS OF THE SOILS REPORT FOR THE SITE BE OBSERVED AND COMPLIED WITH DURING ALL PHASES OF THE SITE PREPARATION, GRADING OPERATIONS, FOUNDATION, SLAB, AND PAVING CONSTRUCTION.
3. ANY PROVISIONS OF THE SOILS REPORT WHICH CONFLICT WITH INFORMATION SHOWN ELSEWHERE ON THESE DRAWINGS, OR WHICH REQUIRE FURTHER CLARIFICATION, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR DETERMINATION.
4. A REPRESENTATIVE OF THE SOILS ENGINEER SHALL BE AVAILABLE TO OBSERVE AND APPROVE THE EARTHWORK OPERATIONS AND TO VERIFY FIELD CONDITIONS AS WORK PROCEEDS. THE SOILS ENGINEER SHALL SUBMIT FIELD REPORTS CERTIFYING THAT THE METHODS AND MATERIALS OF THE EARTHWORK OPERATIONS WERE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS INVESTIGATION AND THAT THE WORK WAS PERFORMED TO HIS/HER SATISFACTION.
5. THE SOILS ENGINEER SHOULD BE NOTIFIED AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY SITE CLEARING OR GRADING.

SHEET INDEX

C1 OF 13 PRELIMINARY COVER SHEET
C2 OF 13 PRELIMINARY OVERALL CIVIL SITE PLAN
C3 OF 13 PRELIMINARY EXISTING CONDITIONS AND DEMO PLAN NORTH
C4 OF 13 PREILIMINARY EXISTING CONDITIONS AND DEMO PLAN SOUTH
C5 OF 13 PRELIMINARY TESC PLAN NORTH
C6 OF 13 PRELIMINARY TESC PLAN SOUTH
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C8 OF 13 PRELIMINARY TESC NOTES AND DETAILS
C□ OF 13 PRELIMINARY GRADING PLAN NORTH
C10 OF 13 PRELIMINARY GRADING PLAN SOUTH
C11 OF 13 PRELIMINARY UTILITY PLAN
C12 OF 13 PRELIMINARY CONSTRUCTION NOTES AND DETAILS
C13 OF 13 PRELIMINARY CONSTRUCTION NOTES AND DETAILS

LEGEND:

SURVEY MONUMENT
EX. POWER VAULT
EX. LUMINAIRE (LUM.)
EX. LOT LIGHT
EX. POWER POLE
EX. JUNCTION BOX
EX. CATCH BASIN (CB)
EX. CATCH BASIN (CB) TYPE 2
EX. SANITARY SEWER MANHOLE (SSMH)
EX. GAS METER
EX. GAS VALVE
EX. WATER VALVE (WV)
EX. FIRE HYDRANT (FH)
MAIL BOX
EX. WATER METER
EX. SIGN
EX. WATER LINE —W— —W—
EX. SANITARY SEWER LINE
EX. STORM DRAINAGE LINE
EX. POWER UNDERGROUND P(UG)
EX. POWER OVERHEAD P(OH)
EX. METAL FENCE
EX. WOOD FENCE

PROPOSED TYPE II CATCH BASIN
PROPOSED TYPE I CATCH BASIN
PROPOSED STORM DRAIN FLOW ARROW
PROPOSED STORM DRAINAGE LINE
PROPOSED TRENCH DRAIN
PROPOSED SANITARY SEWER LINE
PROPOSED SANITARY SEWER CLEANOUT
PROPOSED WATERMAIN
PROPOSED FIRE HYDRANT
PROPOSED WATER VALVE
PROPOSED CONCRETE BLOCKING
PROPOSED 90° BEND
PROPOSED SPOT ELEVATIONS 23.20
EXISTING SPOT ELEVATIONS + 100.0
EXISTING CONTOURS
PROPOSED CONTOURS
EXISTING PAVEMENT
PROPOSED PAVEMENT
PROPOSED CONCRETE

ESTIMATED EARTHWORK □UANTITIES

CUT □7,000 CY

FILL □8,000 CY

NET □ □1,000 CY

AREA TO BE DISTURBED □6.□3 AC

CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORTS DATED **MAY 12, 2020** FOR THIS SITE PREPARED BY **TERRA ASSOCIATES** FOR GRADING RECOMMENDATIONS. EARTHWORK QUANTITIES ARE FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE USED FOR BIDDING PURPOSES. CONTRACTOR SHALL PERFORM AN INDEPENDENT ANALYSIS FOR THE PURPOSES OF PREPARING THEIR BID.

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AT LEAST 48 HOURS PRIOR TO POTHOLING. ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS ARE TO BE POTHOLED TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

MONUMENT DEMOLITION NOTE

CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM ANY JURISDICTIONS HAVING AUTHORITY FOR REMOVING AND REPLACING ALL SURVEY MONUMENTATION THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITY. UPON COMPLETION OF CONSTRUCTION, ALL MONUMENTS DISPLACED, REMOVED, OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR, AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

DEVELOPER
PANATTONI DEVELOPMENT COMPANY
CONTACT: BRIAN MATTSON
ADDRESS: 1821 DOCK ST. SUITE 100
TACOMA, WA 98402
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EMAIL: BMATTSON@PANATTONI.COM

CIVIL ENGINEER
BARGHAUSEN CONSULTING ENGINEERS
CONTACT: DANIEL K. BALMELLI, P.E.
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KENT, WA 98032
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EMAIL: DBALMELLI@BARGHAUSEN.COM

ARCHITECT
NELSON ARCHITECTS
CONTACT: MIKE SNYDER
ADDRESS: 1200 5TH AVE SUITE 1300
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GEOTECHNICAL ENGINEER
TERRA ASSOCIATES
CONTACT: TED SCHEPPER
ADDRESS: 12220 113TH AVE NE, SUITE 130
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PHONE: (425) 821-7777
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SURVEYOR
BARGHAUSEN CONSULTING ENGINEERS
CONTACT: BRIAN GILLOOLY, P.L.S.
ADDRESS: 18215 72ND AVENUE SOUTH
KENT, WA 98032
PHONE: (425) 251-6222
EMAIL: BGILLOOLY@BARGHAUSEN.COM

Attachment 1.t. Preliminary Civil Plans prepared by Barghausen Consulting Engineers dated August 5, 2020

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY COVER SHEET FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI — STATE OF WASHINGTON — 25672 — REGISTERED PROFESSIONAL ENGINEER — 8/5/2020

Scale: Horizontal 1"=100' Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 212227

Sheet C1 of 13

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PRELIMINARY OVERALL CIVIL SITE PLAN
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1/4 OF THE SW1/4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 30' 60' 120'
SCALE: 1"=60'

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BY: _____
CITY OF DUPONT

DATE: _____

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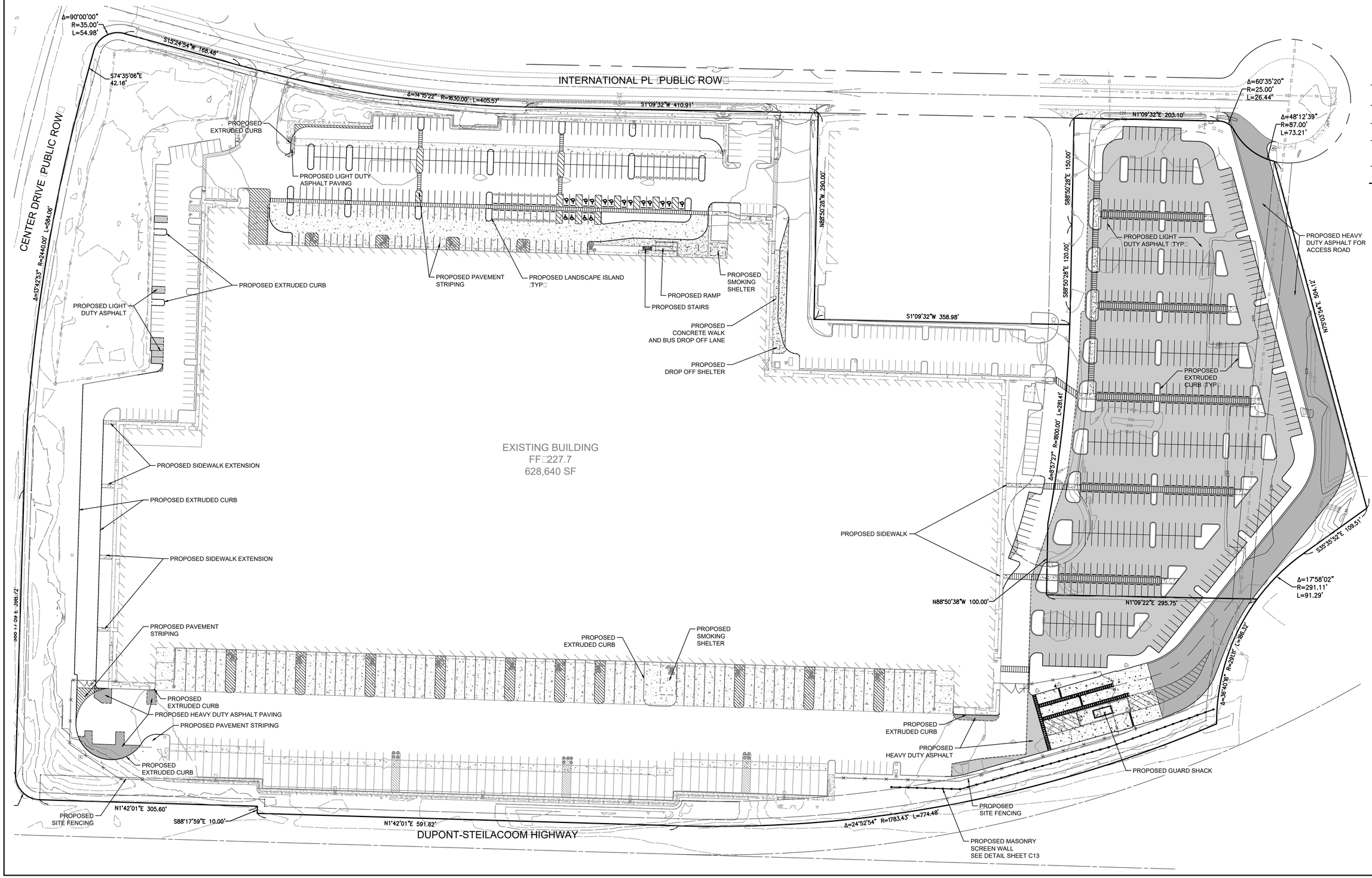

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY OVERALL CIVIL SITE PLAN FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALLARD
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=60' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

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Job Number 21227

Sheet C2 of 13

P:\21000s\21227\preliminary\21227-A-overall.dwg 8/5/2020 7:52 AM WDUNLAP

PRELIMINARY EXISTING CONDITIONS AND DEMO PLAN NORTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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DATE: _____

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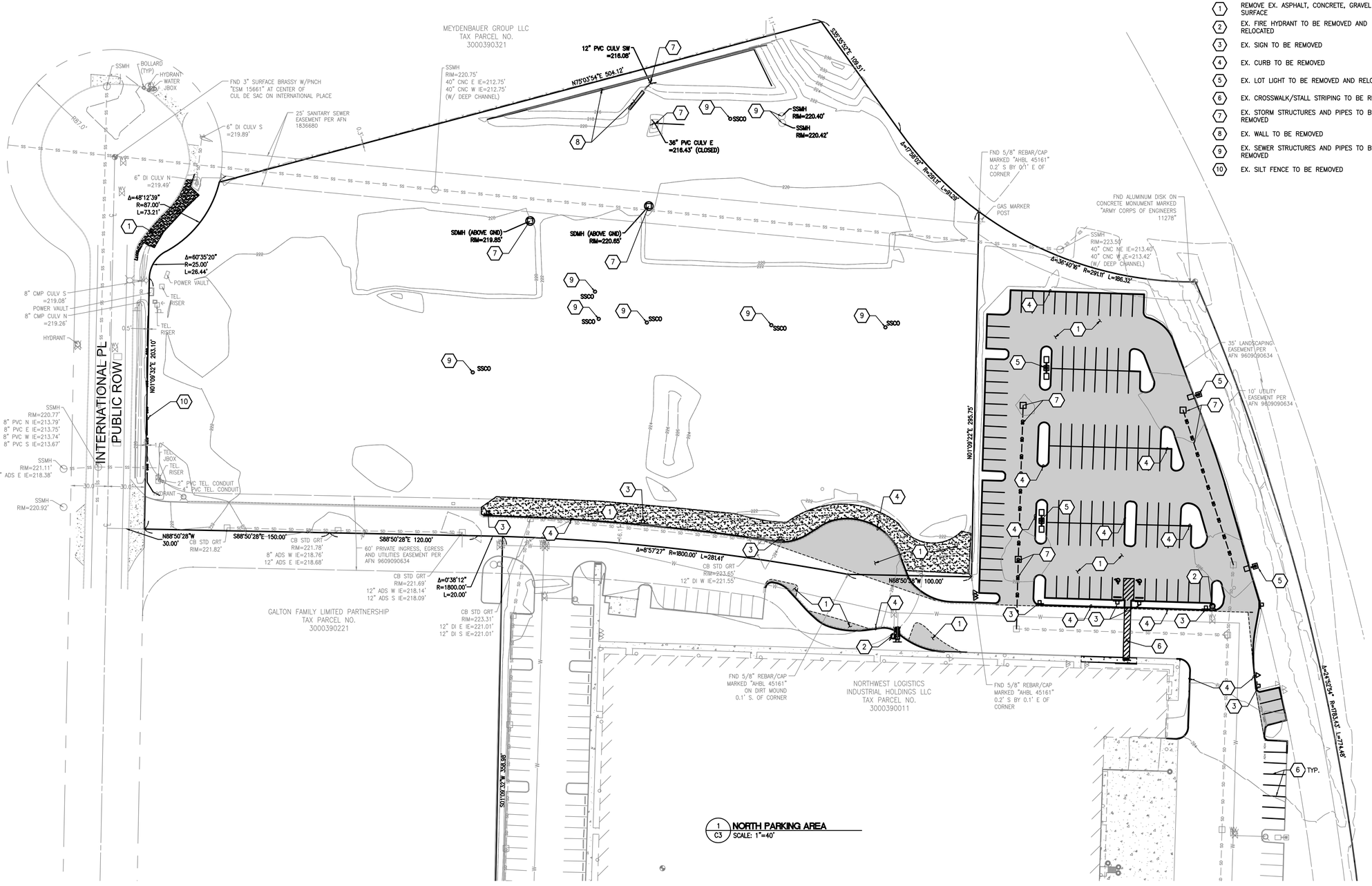

1 / C3 **NORTH PARKING AREA**
SCALE: 1"=40'

DEMOLITION SCHEDULE

1. REMOVE EX. ASPHALT, CONCRETE, GRAVEL SURFACE
2. EX. FIRE HYDRANT TO BE REMOVED AND RELOCATED
3. EX. SIGN TO BE REMOVED
4. EX. CURB TO BE REMOVED
5. EX. LOT LIGHT TO BE REMOVED AND RELOCATED
6. EX. CROSSWALK/STALL STRIPING TO BE REMOVED
7. EX. STORM STRUCTURES AND PIPES TO BE REMOVED
8. EX. WALL TO BE REMOVED
9. EX. SEWER STRUCTURES AND PIPES TO BE REMOVED
10. EX. SILT FENCE TO BE REMOVED

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY EXISTING CONDITIONS AND DEMO PLAN NORTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMANNO STATE OF WASHINGTON 25672 REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 **barghausen.com**

Job Number 21227

Sheet C3 of 13

P:\21000s\21227\preliminary\21227-N.dwg 6/30/2020 12:33 PM WDUNLAP

PREILIMINARY EXISTING CONDITIONS AND DEMO PLAN SOUTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

811 Know what's **below.** **Call** before you dig.

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CITY OF DUPONT

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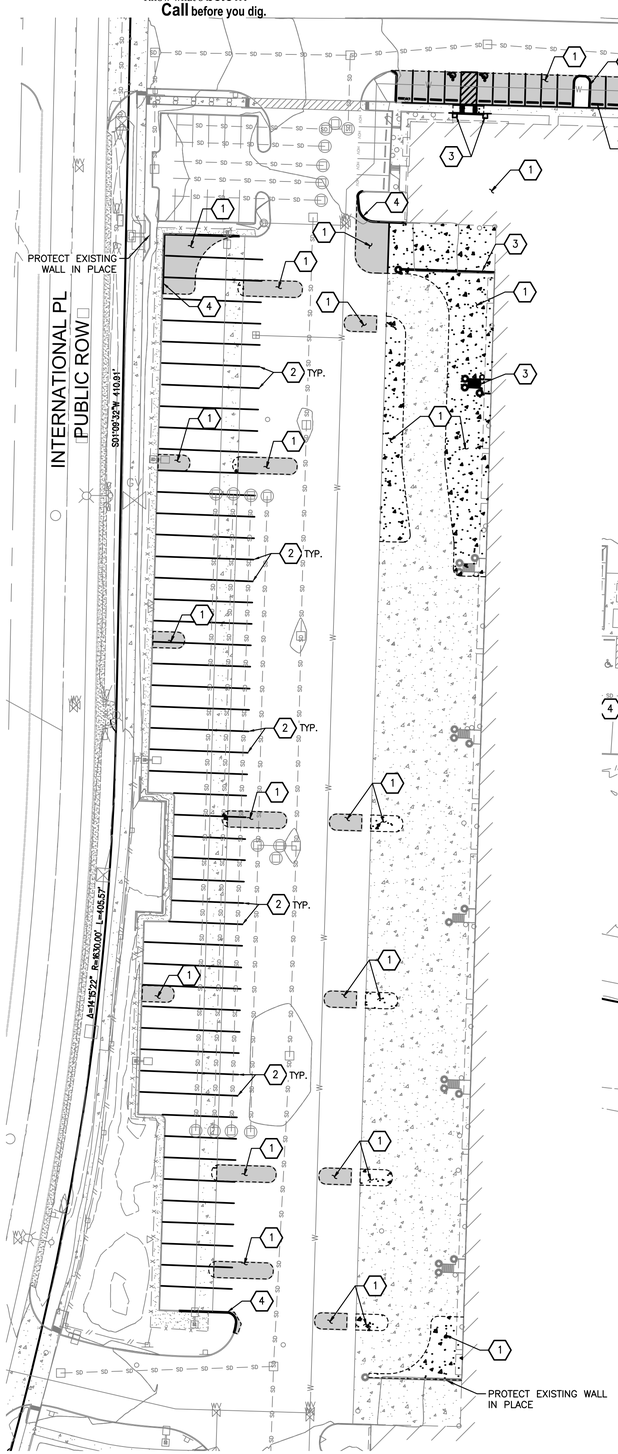
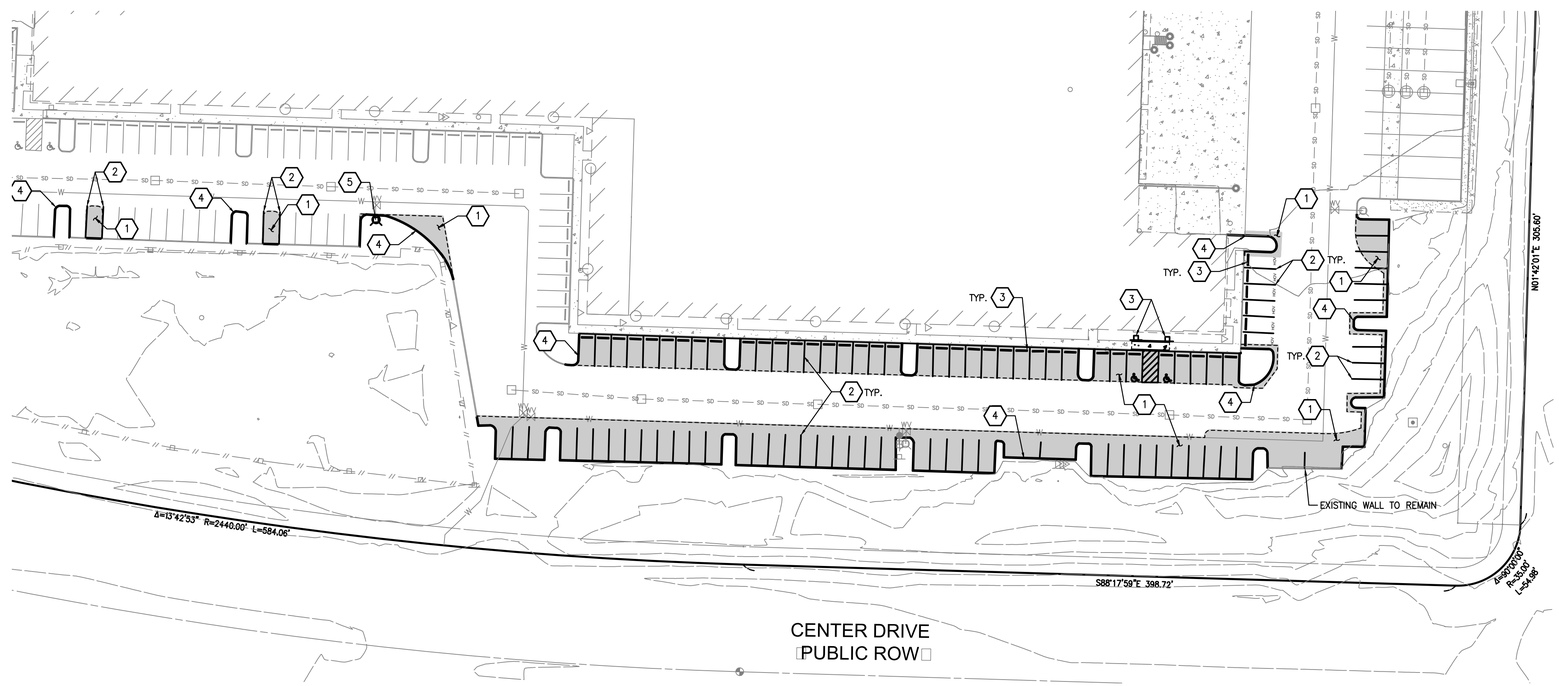
DEMOLITION SCHEDULE

1. REMOVE EX. ASPHALT, CONCRETE, GRAVEL SURFACE
2. EX. STRIPING TO BE REMOVED
3. EX. CURB STOP TO BE REMOVED
4. EX. CURB TO BE REMOVED
5. EX. FIRE HYDRANT TO BE RELOCATED



1 / C4 **WEST PARKING AREA**
SCALE: 1"=40'



2 / C4 **SOUTH PARKING AREA**
SCALE: 1"=40'

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PREILIMINARY EXISTING CONDITIONS AND DEMO PLAN SOUTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALDWIN STATE OF WASHINGTON 25672 REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 **barghausen.com**

Job Number 21227

Sheet C4 of 13

P:\21000s\21227\preliminary\21227-N.dwg 6/30/2020 12:33 PM WDUNLAP

PRELIMINARY TESC PLAN NORTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

SCALE: 1"=40'

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CITY OF DUPONT

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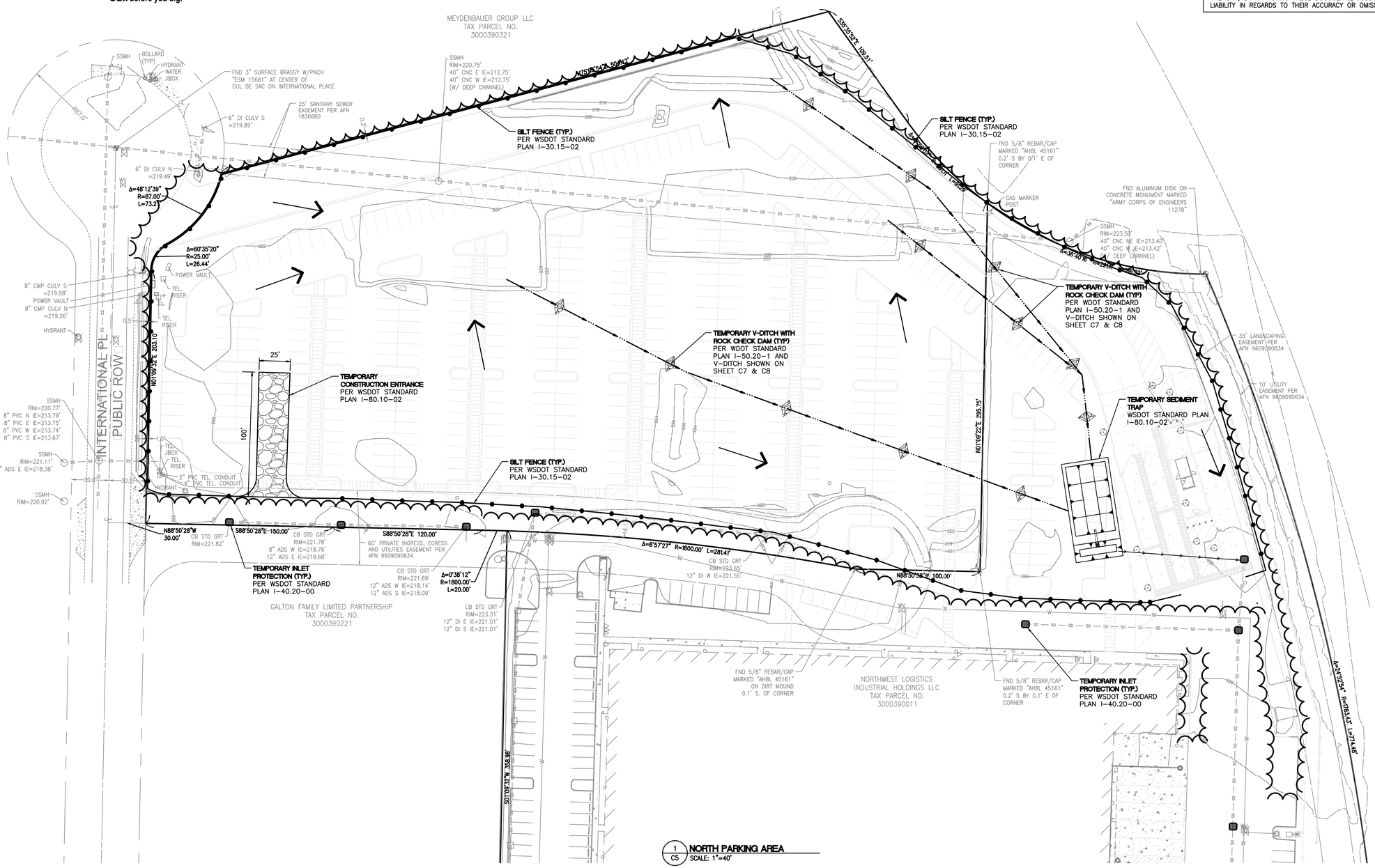

1 / C5 **NORTH PARKING AREA**
SCALE: 1"=40'

T.E.S.C. LEGEND

- FLOW ARROW
- CHECK DAM
- CLEARING LIMITS
- SILT FENCE
- INTERCEPTOR DITCH
- INLET PROTECTION

SEDIMENT TRAP SIZING:
AREA DRAINING TO TRAP = 6.05 AC
REQUIRED VOLUME = 6.05 AC * 35 CY/AC = 212 CY = 5,724 CF
NORTH SEDIMENT TRAP DIMENSIONS:
WIDTH = 50 FT
LENGTH = 115 FT
SIDE SLOPES = 3:1
PROVIDED VOLUME = 5,750 CF

NOTE:
CLEARING LIMITS ARE APPROXIMATE LIMITS OF DISTURBANCE

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY TESC PLAN NORTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMANOVICH
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

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Job Number 21227

Sheet C5 of 13

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PRELIMINARY TESC PLAN SOUTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1□4 OF THE SW1□4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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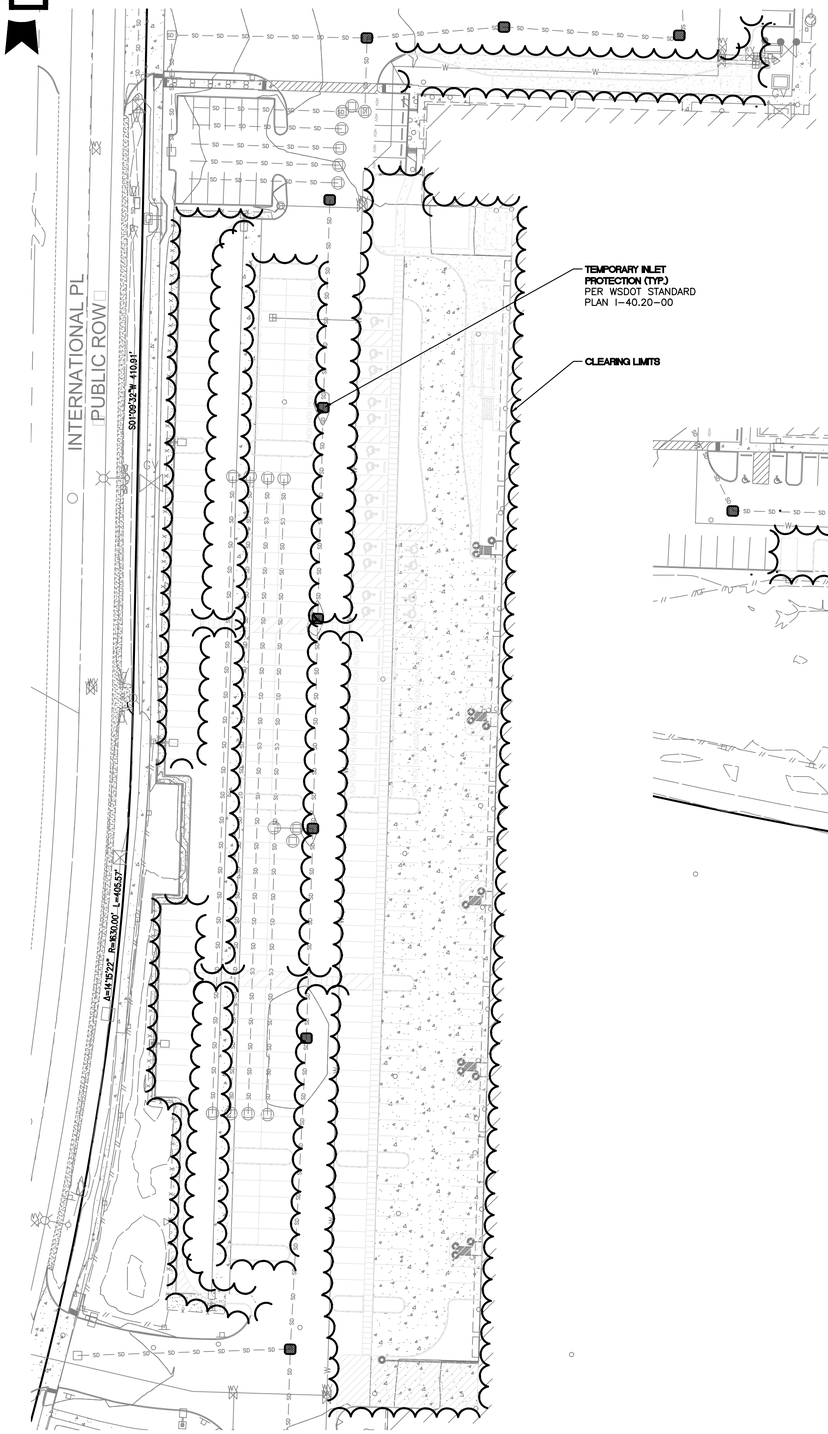
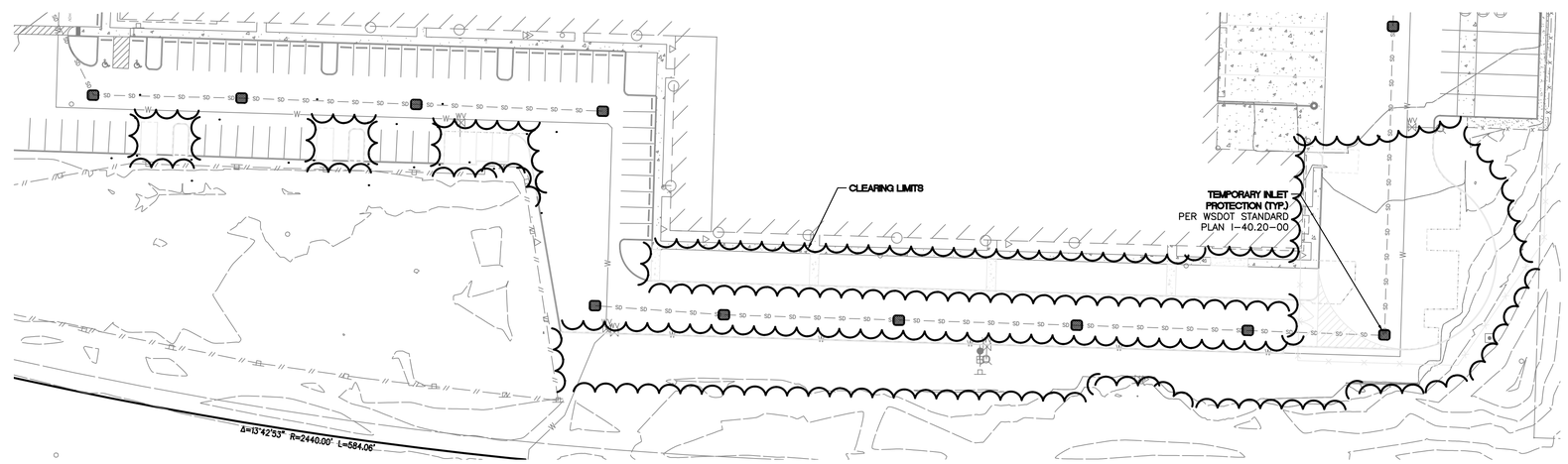


1 / C6 **WEST PARKING AREA**
SCALE: 1"=40'



2 / C6 **SOUTH PARKING AREA**
SCALE: 1"=40'

T.E.S.C. LEGEND

- FLOW ARROW
- CHECK DAM
- CLEARING LIMITS
- SILT FENCE
- INTERCEPTOR DITCH
- INLET PROTECTION

NOTE:
CLEARING LIMITS ARE APPROXIMATE LIMITS OF DISTURBANCE

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY TESC PLAN SOUTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

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Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C6 of 13

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PRELIMINARY TESC DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

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CITY OF DUPONT

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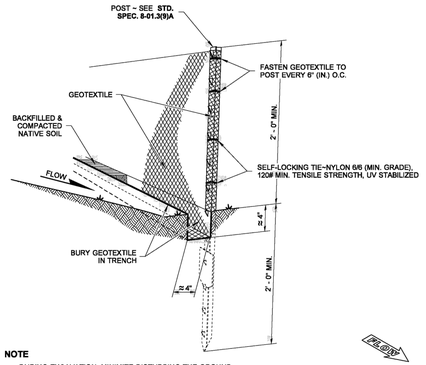
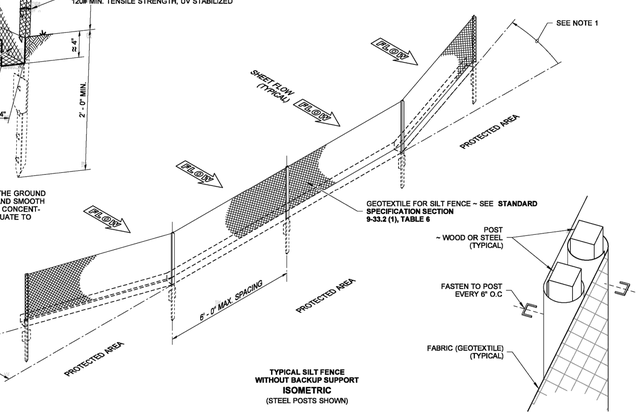
DRAWN BY: BILL BERENS



NOTE

DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

TYPICAL INSTALLATION DETAIL
(STEEL POSTS SHOWN)



TYPICAL SILT FENCE WITHOUT BACKUP SUPPORT
ISOMETRIC
(STEEL POSTS SHOWN)

SPLICED FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP.

SPLICE DETAIL
(WOOD POSTS SHOWN)

NOTES

1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(15)**.
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
4. Install silt fencing parallel to mapped contour lines.

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
SANDRA L. SALISBURY
CERTIFICATE NO. 000860
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SILT FENCE

STANDARD PLAN I-30.15-02

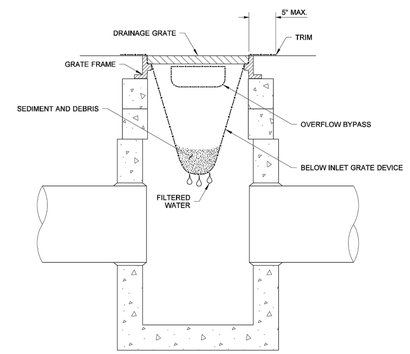
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 3/22/13
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

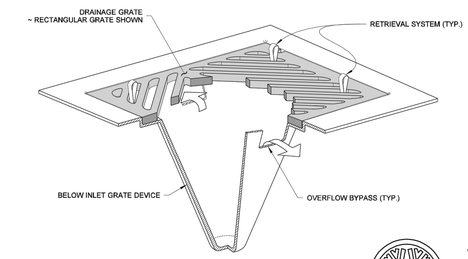
DRAWN BY: LISA CYFORD

NOTES

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



SECTION VIEW
NOT TO SCALE



ISOMETRIC VIEW

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
MARK W. MAURER
CERTIFICATE NO. 000598
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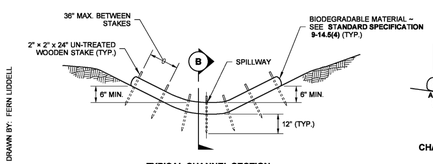
STORM DRAIN INLET PROTECTION

STANDARD PLAN I-40.20-00

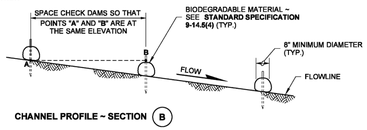
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 09-20-07
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

DRAWN BY: FERN LIDDELL



TYPICAL CHANNEL SECTION



CHANNEL PROFILE ~ SECTION (B)

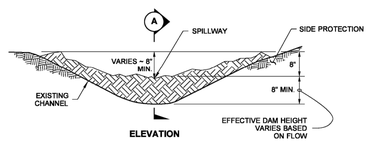
BIODEGRADABLE CHECK DAM

BIODEGRADABLE CHECK DAM NOTE

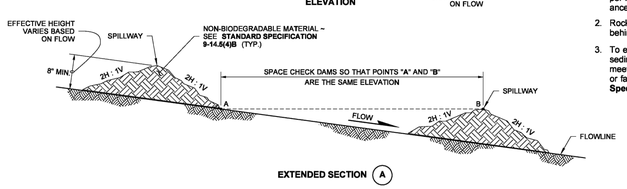
1. Biodegradable Check Dams may need additional or modified staking to prevent undercutting or scouring.

GENERAL NOTES

1. Check Dams shall meet the requirements of **Standard Specifications 8-01.3(6) and 9-14.5(4).**
2. In channels, install the sloped ends of the Check Dam a minimum of 6" higher than the spillway to ensure water flows over the dam and not around it.
3. Perform maintenance in accordance with **Standard Specification 8-01.3(15).**
4. Remove Check Dams in accordance with **Standard Specification 8-01.3(16).**



ELEVATION



EXTENDED SECTION (A)

NON-BIODEGRADABLE CHECK DAM

NON-BIODEGRADABLE CHECK DAM NOTES

1. Non-Biodegradable Manufactured Check Dam devices approved for use under **Standard Specification 9-14.5(4)** shall be installed per manufacturer's recommendations and shall perform in accordance with **Standard Specification 8-01.3(6).**
2. Rock Check Dams shall be placed outside of the clear zone or behind traffic barrier.
3. To ensure adequate damming time, Rock Check Dams used as sediment control may need to be enhanced with plastic that meets the requirements of **Standard Specification 9-14.5(3)** or fabric that meets the geotextile requirements of **Standard Specification 9-33.2(1), Table 6.**

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
Sandra L. Salisbury
SANDRA L. SALISBURY
LICENSE NO. 860
DATE: June 6, 2013
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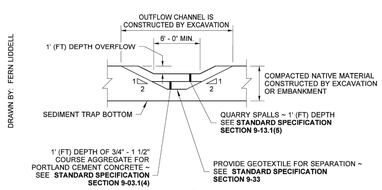
CHECK DAMS ON CHANNELS

STANDARD PLAN I-50.20-01

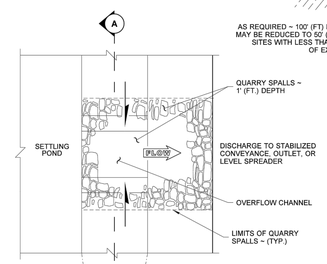
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Pasco Bakotich III 6/10/13
STATE DESIGN ENGINEER DATE
Washington State Department of Transportation

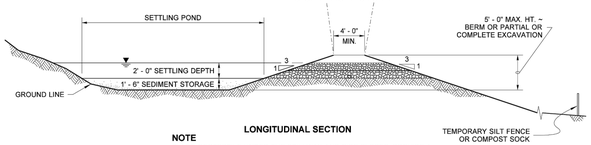
DRAWN BY: FERN LIDDELL



SECTION (A)



PARTIAL PLAN VIEW OF BERM
SHOWN LARGER FOR CLARITY

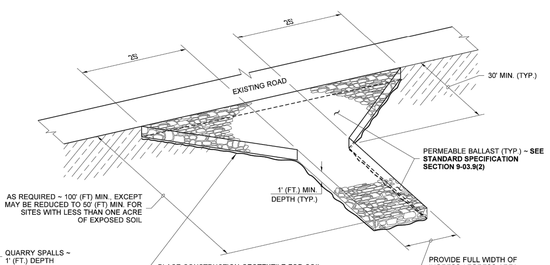


LONGITUDINAL SECTION

NOTE

PLACE GEOTEXTILE UNDER THE SPILLWAY AND SIDE SLOPES. PROVIDE A CONTINUOUS LAYER BETWEEN THE GRAVEL/ROCK AND THE NATIVE EARTHEN MATERIAL.

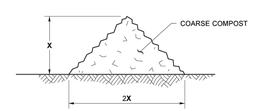
TEMPORARY SEDIMENT TRAP



ISOMETRIC VIEW

STABILIZED CONSTRUCTION ENTRANCE

STABILIZED CONSTRUCTION ENTRANCE SHALL MEET THE REQUIREMENTS OF **STANDARD SPECIFICATION SECTION 8-01.3(7).**



X = 1' - 0' FOR SLOPES 4H:1V OR FLATTER
X = 1' - 6' FOR SLOPES STEEPER THAN 4H:1V

TYPICAL SECTION
COMPOST BERM DETAIL

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
JULI DEE HARTWIG
LICENSE NO. 1422
DATE: 06-21-17
Jul 21 2016 2:28 PM

MISCELLANEOUS EROSION CONTROL DETAILS

STANDARD PLAN I-80.10-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION
Carpenter, Jeff
Jul 15 2016 2:28 PM
STATE DESIGN ENGINEER
Washington State Department of Transportation

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY TESC DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA 98402
CONTACT: BRIAN MATTSON

STATE OF WASHINGTON DANIEL K. BALKENBUSH 25672 REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1" = Vertical 1"

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com

Job Number 21227
Sheet C7 of 13

P:\21000s\21227\preliminary\21227-E.dwg 6/30/2020 11:31 AM WDUNLAP

PRELIMINARY TESC NOTES AND DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1□4 OF THE SW1□4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

Know what's **below.**
Call before you dig.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

GRADING, EROSION AND SEDIMENTATION CONTROL NOTES:

1. ON-SITE INSPECTIONS ARE REQUIRED AT THE FOLLOWING CONSTRUCTION STAGES:

   INSPECTION NO. 1: INSTALLATION OF EROSION CONTROL FACILITIES PRIOR TO CLEARING
   INSPECTION NO. 2: COMPLETION OF CLEARING
   INSPECTION NO. 3: UPON COMPLETION OF EXCAVATION, FILLING, AND EARTHWORK
   INSPECTION NO. 4: COMPLETION OF PROJECT
   INSPECTION NO. 5: AS NEEDED TO DETERMINE COMPLIANCE WITH APPROVED PLANS AND/OR SPECIFICATIONS

2. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

3. ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

4. ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER ANY EXISTING DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ONSITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.

5. THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY THEIR ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.

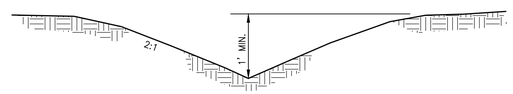
6. ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 7 DAYS OR MORE DURING THE DRY SEASON (MAY 1 – SEPT 30) OR 2 DAYS OR MORE IN THE WET SEASON (OCT 1 –APR 30), SHALL BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF MAY THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITTEE BUT SHALL BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.

7. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR SHALL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.

8. NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.

CONSTRUCTION SEQUENCE:

1. SCHEDULE AND ATTEND PRE-CONSTRUCTION MEETING WITH CITY OF LAKEWOOD OFFICIALS.
2. FLAG CLEARING AND GRADING LIMITS FOR PROJECT AS SHOWN ON THE PLANS PER THIS SHEET.
3. POST SIGN WITH NAME AND PHONE NUMBER OF THE CESCL.
4. INSTALL TEMPORARY FILTER FABRIC FENCE AND CB PROTECTION AS SHOWN ON PLANS TO PROTECT ADJACENT PROPERTIES AND STORMWATER SYSTEM.
5. GRADE AND INSTALL CONSTRUCTION ENTRANCE PER PLAN.
6. REMOVE ALL EXISTING SITE IMPROVEMENTS AND DEMO EXISTING BUILDINGS AS INDICATED ON PLANS.
7. INSTALL TEMPORARY SEDIMENT POND.
8. CONSTRUCT INTERCEPTOR DITCHES WHERE SHOWN.
9. CITY REPRESENTATIVE TO INSPECT AND APPROVE INSTALLATION OF T.E.S.C. MEASURES BEFORE SITE CLEARING AND GRADING.
10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY AND NPDES PERMIT REQUIREMENTS.
11. PROTECT ALL PROPERTIES ADJACENT TO THE PROJECT FROM SEDIMENT DEPOSITION.
12. NO RUNOFF IS TO LEAVE SITE WITHOUT TREATMENT.
13. CLEAR AND GRADE SITE, AMEND T.E.S.C. FACILITIES AS REQUIRED.
14. ONCE INFILTRATION GALLERY IS OPEN TO BOTTOM ELEVATION, PERFORM INFILTRATION TEST(S) IN ACCORDANCE WITH PIERCE COUNTY STANDARDS TO CONFIRM INFILTRATION RATE OF 10 IN/HR.
15. COVER ALL AREAS THAT WILL REMAIN UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
16. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
17. WHEREVER CONSTRUCTION VEHICLES ACCESS ROUTE CROSSES PAVED ROADS, CARE MUST BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD. IF SEDIMENT IS TRANSPORTED ONTO PAVED SURFACE, THE ROAD SHALL BE CLEANED IMMEDIATELY.
18. WITH EACH LAYER OF FILL MATERIAL, INTERCEPTOR DITCHES AND T.E.S.C. FACILITIES MUST BE GRADED AND MAINTAINED TO PROVIDE POSITIVE SLOPE FOR DRAINAGE TO DISCHARGE POINT.
19. MAINTAIN T.E.S.C. FACILITIES UNTIL ALL RISK OF EROSION/SEDIMENTATION DRAINAGE HAS PASSED AND PERMANENT STORM DRAINAGE SYSTEM IS INSTALLED AND FUNCTIONAL. DO NOT CONVEY SEDIMENT-LADEN WATER INTO STORM DRAINAGE SYSTEM. REMOVE TEMPORARY EROSION & SEDIMENTATION CONTROL MEASURES UPON FINAL SITE STABILIZATION AND APPROVAL FROM THE CITY INSPECTOR.
20. UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE REVEGETATED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.
21. COMPLETE INSPECTION/ PUNCHLIST



TEMPORARY "V" DITCH

NOT TO SCALE

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY TESC NOTES AND DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal –
Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C8 of 13

P:\21000s\21227\preliminary\21227-E.dwg 6/30/2020 11:31 AM WDUNLAP

PRELIMINARY GRADING PLAN NORTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

811
Know what's **below.**
Call before you dig.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

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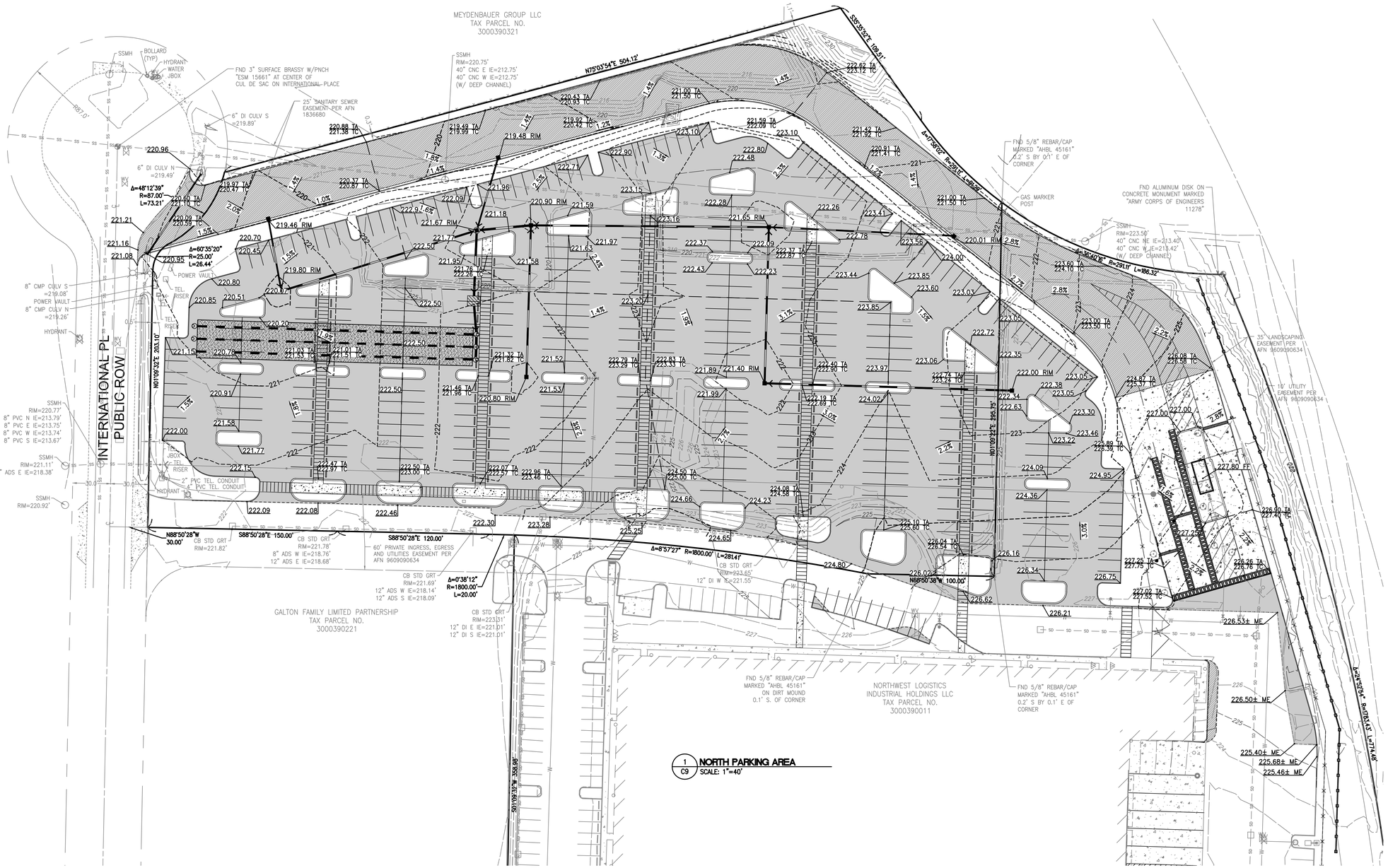

1 / C9 **NORTH PARKING AREA**
SCALE: 1"=40'

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY GRADING PLAN NORTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMANNO
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C□ of 13

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PRELIMINARY GRADING PLAN SOUTH
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1/4 OF THE SW1/4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

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CITY OF DUPONT

DATE: _____

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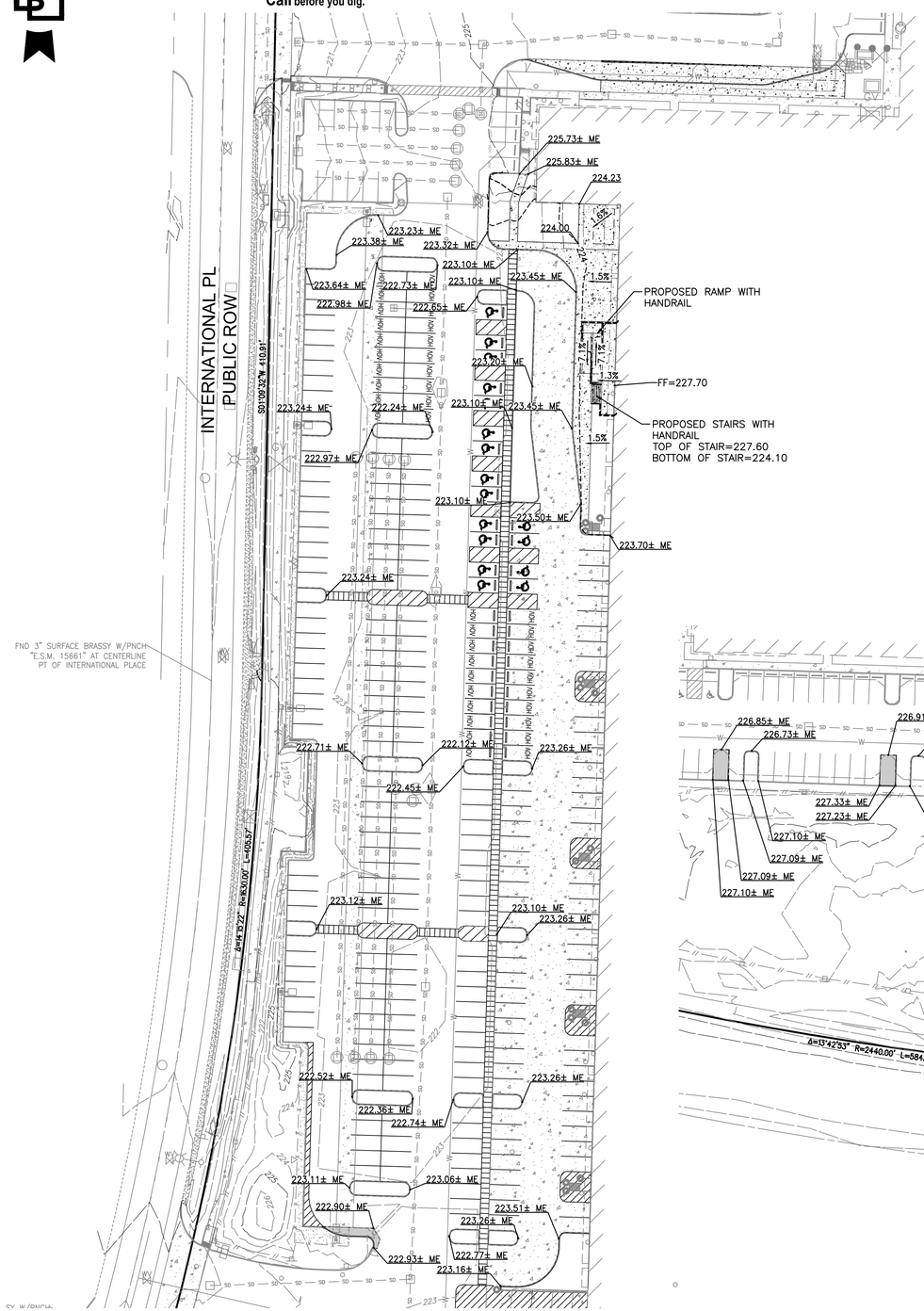
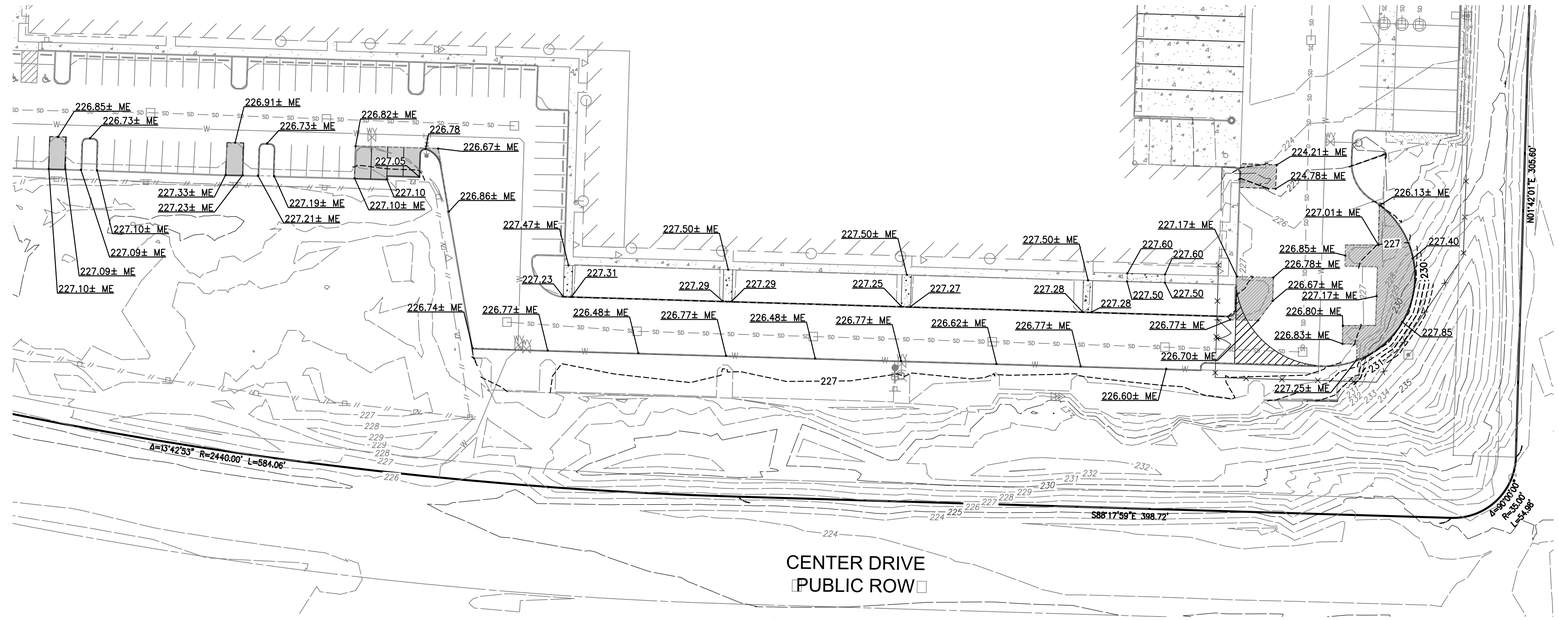


1 C10 **WEST PARKING AREA**
SCALE: 1"=40'



2 C10 **SOUTH PARKING AREA**
SCALE: 1"=40'

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY GRADING PLAN SOUTH FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal 1"=40' Vertical -

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
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barghausen.com

Job Number 21227

Sheet C10 of 13

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PRELIMINARY UTILITY PLAN
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

N

0 20' 40' 80'
SCALE: 1"=40'

811 Know what's **below.** **Call** before you dig.

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CITY OF DUPONT

DATE: _____

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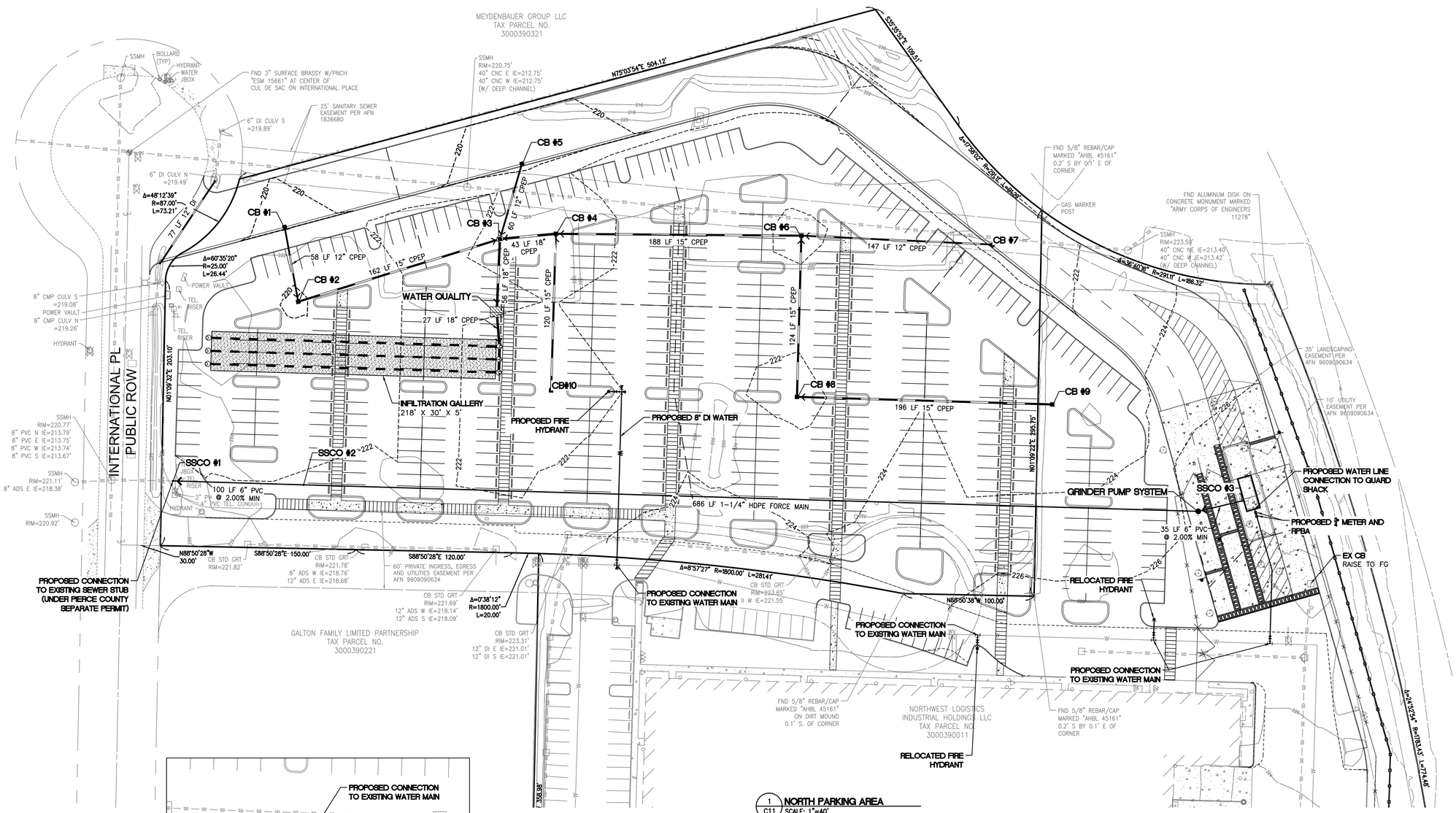
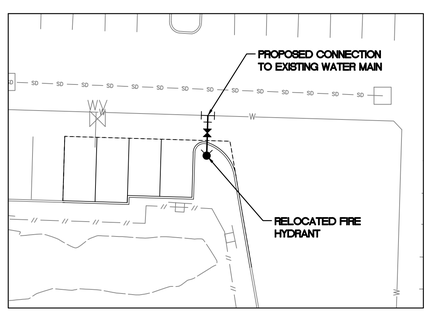


1 C11 **NORTH PARKING AREA**
SCALE: 1"=40'



2 C11 **SOUTH HYDRANT BLOW UP**
SCALE: 1"=20'

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY UTILITY PLAN FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER
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Sheet C11 of 13

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PRELIMINARY CONSTRUCTION NOTES AND DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1⁄4 OF THE SW1⁄4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

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GENERAL NOTES

10. GENERAL NOTES AND DRAWINGS

10.1 GENERAL NOTES (STREET CONSTRUCTION)

1. THESE DRAWINGS ARE APPROVED UNTIL _____ _____, _____ [EXPIRATION OF PRELIMINARY PLAT OR SITE PLAN APPROVAL]. THE CITY RESERVES THE RIGHT TO MAKE MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMIT. THE CITY, BY APPROVING THESE DOCUMENTS, IN NO WAY WARRANTS THEIR ACCURACY OR ACKNOWLEDGES ANY OMISSIONS.

2. A PRECONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

A COPY OF THE APPROVED ROADWAY PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DUPONT'S STREET STANDARDS AND STORM WATER MANAGEMENT MANUAL AND THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY TRAFFIC CONTROL TO ENSURE TRAFFIC SAFETY DURING CONSTRUCTION ACTIVITIES. THEREFORE, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE PUBLIC WORKS DEPARTMENT AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK IN THE RIGHT-OF-WAY. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD).

ALL CURB AND GUTTER, STREET GRADES, SIDEWALK GRADES, AND ANY OTHER VERTICAL AND/OR HORIZONTAL ALIGNMENT SHALL BE STAKED BY A PROFESSIONAL ENGINEER OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK.

ANY ROADWAY SIGNAGE OR STRIPING REMOVED OR TEMPORARILY MOVED BY THE CONTRACTOR SHALL BE RESTORED SO AS TO MEET THE CURRENT MUTCD STANDARDS.

WHERE NEW ASPHALT JOINS EXISTING, THE EXISTING ASPHALT SHALL BE CUT TO A NEAT VERTICAL EDGE AND TACKED WITH ASPHALT EMULSION TYPE CSS-1 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE JOINT SHALL BE SEALED WITH GRADE AR-4000W PAVING ASPHALT.

COMPACTION OF SUBGRADE, ROCK, AND ASPHALT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. SEE CITY OF DUPONT STREET STANDARDS FOR TESTING AND SAMPLING FREQUENCIES. DENSITY TEST REPORTS WILL BE REQUIRED FOR ALL PUBLIC ROADWAYS.

FORM AND SUBGRADE INSPECTION BY THE CITY IS REQUIRED BEFORE PLACING CONCRETE. TWENTY-FOUR HOURS ADVANCE NOTICE IS REQUIRED FOR THE SCHEDULING OF INSPECTION.

CALL UNDERGROUND UTILITY LOCATE LINE, 1-800-424-5555 OR 811, PRIOR TO ANY EXCAVATION.

DEAD-END STREETS SHALL BE APPROPRIATELY SIGNED AND BARRICADED.

WHERE A SIDEWALK IS TO BE CONSTRUCTED ABOVE A SLOPE OR ADJACENT TO A ROCKERY OR RETAINING WALL, WHERE THE LOWEST FINISHED ELEVATION OF THE SLOPE, ROCKERY, OR RETAINING WALL IS TO BE THIRTY INCHES (30") OR MORE BELOW THE FINISHED ELEVATION OF THE SIDEWALK, A SAFETY RAILING SHALL BE REQUIRED WHEN:

THE PLANE OF THE WALL IS LESS THAN 4' IN HORIZONTAL DISTANCE FROM THE OUTSIDE EDGE OF THE SIDEWALK.

THE PLANS OF THE WALL FACE IS GREATER THAN 4' HORIZONTAL DISTANCE TO THE OUTSIDE EDGE OF THE SIDEWALK, BUT THE SLOPE DOWN TO THE WALL TOP EXCEEDS THREE TO ONE.

THE SLOPES ADJACENT TO THE SIDEWALK AVERAGE GREATER THAN TWO TO ONE.

ANY VAULT CONSTRUCTION SHALL HAVE EITHER;

(A.) PROVIDED WITH WATER STOPS AT CAST-IN-PLACE CONSTRUCTION JOINTS.

(B.) PRE-CAST VAULT SHALL HAVE APPROVED RUBBER GASKET SYSTEM.

10.2 EROSION/SEDIMENTATION CONTROL NOTES.

THE CONTRACTOR SHALL PROVIDE EROSION CONTROL METHODS ACCORDING TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY'S (WDOE) "STORMWATER MANAGEMENT MANUAL FOR THE PUGET SOUND BASIN". THE FOLLOWING NOTES ARE ONLY A FEW OF THE MINIMUM REQUIREMENTS AND SHOULD NOT BE INTERPRETED TO EXCLUDE ANY EROSION CONTROL PRACTICES AS SPECIFIED IN THE WDOE STORMWATER MANUAL.

1. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLAN SHALL BE CLEARLY FLAGGED BY THE ENGINEER IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

2. ALL REQUIRED SEDIMENTATION/EROSION CONTROL FACILITIES MUST BE IN OPERATION PRIOR TO LAND CLEARING AND/OR OTHER CONSTRUCTION TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT AND ADDITIONS TO EROSION/SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3. THE EROSION AND SEDIMENTATION CONTROL SYSTEMS DEPICTED ON THIS DRAWING ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND AS UNEXPECTED OR SEASONAL CONDITIONS DICTATE, THE CONTRACTOR SHOULD ANTICIPATE THAT MORE EROSION AND SEDIMENTATION CONTROL FACILITIES WILL BE NECESSARY TO INSURE COMPLETE SILTATION CONTROL ON THE PROPOSED SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES AND WATER QUALITY OF THE RECEIVING DRAINAGE

4. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF THE SEDIMENT. ALL CATCH BASINS, CONVEYANCE LINES AND DITCHES ALONG INTERNATIONAL PLACE AND CENTER DRIVE SHALL BE CLEANED PRIOR TO PAVING.

5. THE CONTRACTOR SHALL REMOVE MATERIAL DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO THE CITY RIGHT-OF-WAY OR INTO THE STORM DRAINAGE SYSTEM ON INTERNATIONAL PLACE, CENTER DRIVE AND DUPONT-STEILACOOM HIGHWAY. DEBRIS SHALL NOT BE WASHED INTO THE STORM DRAINAGE SYSTEM.

6. TEMPORARY EROSION CONTROL FACILITIES SHALL BE INSPECTED WEEKLY AND MAINTAINED WITH 24 HOURS FOLLOWING A STORM EVENT. SEDIMENT SHALL BE REMOVED TO ENSURE THE FACILITIES WILL FUNCTION PROPERLY. THE FACILITIES SHALL BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED.

7. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT STORMWATER RUNOFF SHALL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

NO DISTURBED SOIL SHALL REMAIN UNSTABILIZED FOR MOR THAN TWO DAYS.

GENERAL NOTES (WATER SYSTEM CONSTRUCTION)

1. ALL IRRIGATION CROSSINGS SHALL HAVE SCHEDULE 80 SLEEVES AND THE SIZE SHALL BE PER THE APPROVED IRRIGATION DRAWINGS.

2. LIGHT POLES SHALL BE LOCATED A MINIMUM OF 3 FEET FROM ALL UNDERGROUND UTILITIES, INCLUDING WATER METERS. LIGHT POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM FIRE HYDRANTS.

3. WATER MAINS AND FITTINGS TO BE INSTALLED SHALL BE DUCTILE IRON FOR ALL SIZES, UNLESS SPECIFICALLY NOTED OTHERWISE. THE CLASS OF THE DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 52 FOR ALL DIAMETERS.

4. WATER MAINS SHALL MAINTAIN A MINIMUM OF 3 FEET AND A MAXIMUM OF 5 FEET OF COVER.

5. UTILITY CROSSINGS HAVING LESS THAN 1 FOOT OF VERTICAL SEPARATION SHALL BE CONSTRUCTED WITH CONTROLLED DENSITY FILL (CDF) TO PREVENT POSSIBLE DAMAGE TO EITHER UTILITY.

6. WATER MAIN DEFLECTIONS AT JOINTS ARE NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS PLUS AN ADDITIONAL FACTOR OF SAFETY OF 50 PERCENT.

7. IDENTIFY A MINIMUM HORIZONTAL SEPARATION OF 10 FEET BETWEEN SANITARY SEWER MAINS AND WATER MAINS, BOTH EXISTING AND PROPOSED.

8. FOR PROPOSED WATER MAINS, IDENTIFY RESTRAINED JOINT FITTINGS AND PUSH-ON JOINTS AT LOCATIONS WHERE THRUST BLOCKS WILL NOT HAVE SUFFICIENT UNDISTURBED ADJACENT AREA FOR BEARING.

9. WATER SERVICE CONNECTIONS SHALL BE MADE PERPENDICULAR TO THE MAIN.

10. THE WATER MAIN PIPES SHALL BE DISINFECTED AND TESTED BEFORE BEING PLACE IN SERVICE. ALL WATER MAIN TESTING AND DISINFECTION SHALL BE PER CITY OF DUPONT PUBLIC WORKS STANDARDS.

11. WATER MAIN STUBOUTS THAT ARE NOT USED SHALL BE DISCONNECTED AT THE MAIN, WITH A BLIND FLANGE INSTALLED AT THE TEE.

12. TEE CONNECTIONS TO EXISTING WATER MAINS SHALL BE WET TAPS.

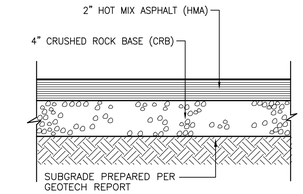
13. SEPARATE WATER CONNECTIONS WILL BE REQUIRED FOR DOMESTIC, FIRE, AND IRRIGATION. ALL SERVICES SHALL INCLUDE BACKFLOW PREVENTION DEVICES LOCATED OUTSIDE OF ANY PROPOSED BUILDINGS.

14. ALL FIRE PROTECTION SYSTEM INSTALLATIONS, INCLUDING PIPELINES AND DOUBLE DETECTOR CHECK ASSEMBLIES, ARE SUBJECT TO THE CONSTRUCTION STANDARDS OF NFPA 24 AND TO THE INSPECTION AND TESTING REQUIREMENTS OF THE CITY OF DUPONT FIRE DEPARTMENT.

15. THE FIRE PROTECTION SYSTEMS, INCLUDING THE BACKFLOW PREVENTION DEVICES, UNDERGROUND FIRE SERVICE LINES, AND FIRE DEPARTMENT CONNECTIONS, ARE SUBJECT TO SEPARATE REVIEW, PERMITTING, AND APPROVAL BY THE CITY OF DUPONT FIRE DEPARTMENT.

16. RELOCATE THE FIRE DEPARTMENT CONNECTIONS (FDCS) TO PLANTER ISLANDS OR OTHER LOCATIONS, AS FEASIBLE, TO BE OUTSIDE OF THE BUILDING COLLAPSE ZONES.

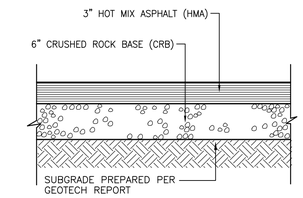
17. THE APPLICANT SHALL FURNISH METER SIZING CALCULATIONS FOR DOMESTIC AND FIRE WATER SERVICES. THE SPRINKLER SYSTEM DESIGN, INCLUDING CONFIRMATION OF THE PROVIDED SIZING FOR THE FIRE LINE COMPONENTS SHALL BE REVIEWED AND APPROVED BY THE CITY BUILDING DEPARTMENT AND FIRE DEPARTMENT AS PART OF THE BUILDING PERMIT PROCESS. EACH FIRE LINE CONNECTION TO A CITY WATER MAIN WILL REQUIRE A DOUBLE DETECTOR CHECK VALVE ASSEMBLY (DDCVA) IN AN UNDERGROUND VAULT AND A FIRE DEPARTMENT CONNECTION (FDC) WITHIN 50 FEET OF A FIRE HYDRANT.



NOTE:
REFER TO SOIL ENGINEER'S RECOMMENDATIONS FOR SITE PREPARATION & ALTERNATE PAVEMENT SECTIONS

TYPICAL LIGHT DUTY ON-SITE PAVEMENT SECTION

NOT TO SCALE



NOTE:
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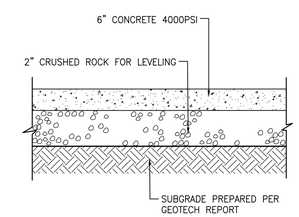
TYPICAL HEAVY DUTY ON-SITE PAVEMENT SECTION

NOT TO SCALE



TYPICAL CONCRETE PAVEMENT SECTION

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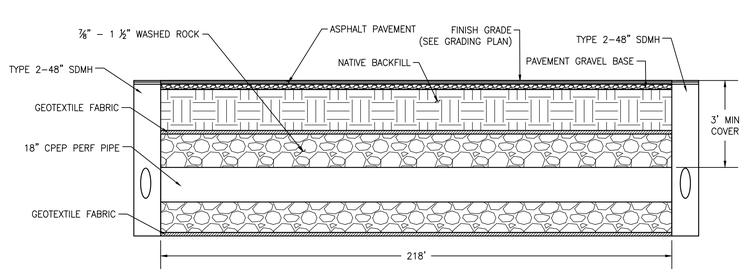
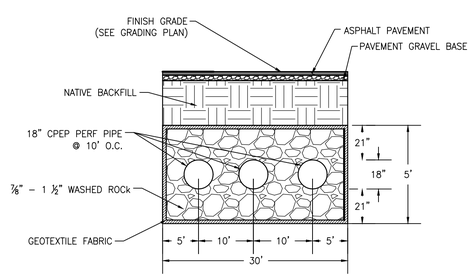
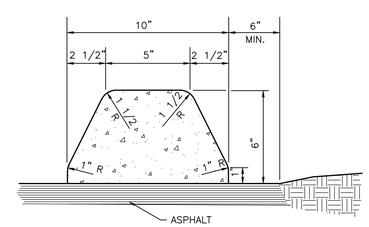


INFILTRATION GALLERY SECTION VIEW

NTS



INFILTRATION GALLERY CROSS-SECTION



EXTRUDED CONCRETE CURB DETAIL

NOT TO SCALE

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY CONSTRUCTION NOTES AND DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMER, STATE OF WASHINGTON, 25672, REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal –; Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C12 of 13

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PRELIMINARY CONSTRUCTION NOTES AND DETAILS
FOR
NW LOGISTICS 2 - PARKING EXPANSION
PTN OF THE SE1□4 OF THE SW1□4 OF SEC. 24, TWP. 1□N., RGE 1 EAST, W. M.
CITY OF DUPONT, PEIRCE COUNTY, STATE OF WASHINGTON

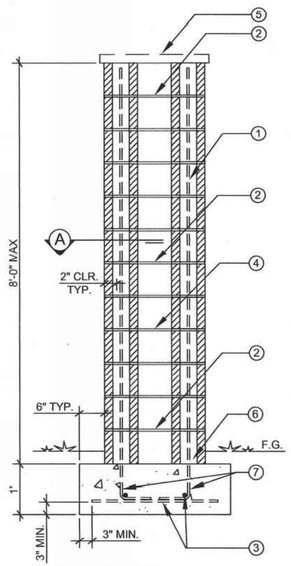
Know what's **below.**
Call before you dig.

APPROVED FOR CONSTRUCTION

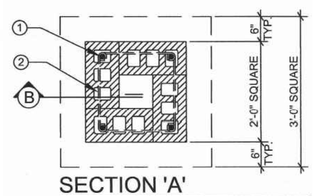
BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.



SECTION 'B'
NTS



SECTION 'A'
NTS

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2018 IBC WITH SNA.
2. CONCRETE MASONRY SHALL COMPLY WITH THE FOLLOWING:
   A. ASTM C 90, F'm = 1,500 PSI
   B. MORTAR: TYPE M OR S, 1800 PSI
   C. GROUT SHALL CONFORM TO ASTM C 476, 2000 PSI MIN.
3. FOUNDATION CONCRETE SHALL BE 4,500 PSI, TYPE V CEMENT AND 0.45 WATER TO CEMENT RATIO
4. ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE ASTM A615-40.
5. LAP VERTICAL STEEL 24 INCHES MINIMUM.
6. SITE PLAN SHALL BE SUBMITTED FOR REVIEW BEFORE THE BUILDING PERMIT CAN BE ISSUED.

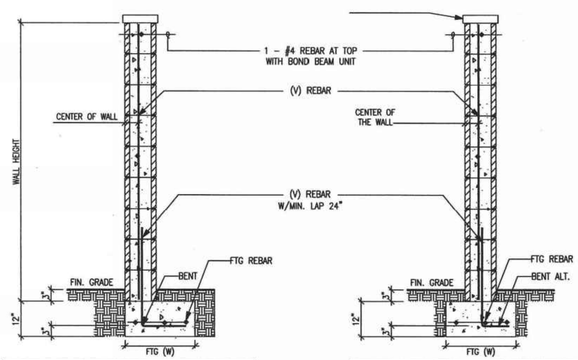
KEYNOTES:

1. - #4 VERTICAL REBAR AT EACH CELL CORNER, SOLID GROUTED
2. - #3 REBAR, TIE IN MINIMUM 8-INCH BOND BEAM AT TOP, MIDDLE, AND BOTTOM. PROVIDE A 2-INCH MINIMUM GROUT COVER AT ALL SIDES OF REBAR.
3. - (2) #4 CONTINUOUS REBAR EACH WAY
4. - LINE OF CMU GROUT BEYOND
5. - FINISH TOP OF COLUMN WITH A CAP BLOCK OR WITH CONCRETE FOR WATER RUN-OFF.
6. - GROUT ALL CELLS AND CAVITIES SOLID BELOW GRADE.
7. - STANDARD 90° HOOK WITH 9" MIN., LENGTH

REQUIRED INSPECTIONS: (SPECIAL INSPECTION – NONE REQUIRED)
1. FOUNDATION
2. MASONRY PREGROUT
3. FINAL

GENERAL NOTES:
1. ALL WORK SHALL CONFORM TO THE IBC 2018 EDITION AS AMENDED
2. CONCRETE BLOCK MASONRY SHALL COMPLY WITH THE FOLLOWING:
   A. CONCRETE MASONRY SHALL CONFORM TO ASTM C 90, F'm = 1500 PSI
   B. MORTAR: TYPE M – 2500 PSI OR TYPE S – 1800 PSI
   C. GROUT CONFORMS TO ASTM C 476, MINIMUM 2000 PSI
3. THE ULTIMATE COMPRESSIVE STRENGTH REQUIRED FOR FOUNDATION CONCRETE SHALL BE OF 4500 PSI, TYPE V CEMENT, AND 0.45 WATER TO CEMENT RATIO.
4. ALL REINFORCING STEEL SHALL BE GRADE 60, ASTM A615, MIN. LAP SPLICE = 24"
5. NO WATER COURSE OR NATURAL DRAINAGE SHALL BE OBSTRUCTED. FOR RETAINING WALL, PROVIDE 1CF/FT OF CLEAN COARSE GRAVEL WITH 2" DIAMETER WEEP HOLES THROUGH THE WALL AND LINED WITH PVC PIPE AT 8'-0" O.C. ALONG WALL AND PLACED 3" ABOVE THE LOWEST ADJACENT FINISHED GRADE
6. SITE PLAN SHALL BE SUBMITTED FOR REVIEW BEFORE THE PERMIT CAN BE ISSUED
7. CONTROL JOINT SPACING AT 24 FEET (MAX). VERTICAL REBARS SHALL BE LOCATED WITHIN 16 INCHES OF THE END.
8. GROUT ALL CELLS CONTAINING REINFORCEMENT. LOWER STEM IS SOLID GROUTED.
9. 3 INCHES COVER FOR ALL REBAR IN FOOTING (TYPICAL).
10. WATERPROOF THE INSIDE FACE OF ALL RETAINING WALLS PER 1805.3 OF 2018 IBC.

DESIGN CRITERIA
2018 IBC WITH SO. NV AMENDMENTS
WIND LOAD
BASIC WIND SPEED = 95 MPH, EXPOSURE C
Kz = 0.85
Ke = 1.0
Kzt = 1.0
Kd = 0.85
Cf = 1.4
G = 0.85
SEISMIC LOAD
DESIGN SPECTRAL RESPONSE Sds = 0.574g
SEISMIC COEFFICIENTS R = 1.25 (ASCE 7–16, T–15.4–2)
Cs = 0.46
SEISMIC LOAD DUE TO LATERAL EARTH PRESSURE
= $10.4h^2$ (LBS) THE POINT OF APPLICATION IS TAKEN AT 0.6H ABOVE THE BASE OF THE WALL, WHERE H IS THE HEIGHT OF THE BACKFILL
SOIL PARAMETER
SITE CLASS = D
ALLOWABLE SOIL BEARING PRESSURE = 1000 PSF
LATERAL EQUIVALENT FLUID PRESSURE OF 45 PSF/FT
PASSIVE PRESSURE = 100 PSF
COEFFICIENT OF FRICTION FOR SLIDING = .25



WALL SCHEDULE FOR WALL AT EDGE OF FOOTING				
WALL HEIGHT (FT)	4'–0"	6'–0"	6'–0"	8'–0"
CMU THICKNESS (IN)	6"	6"	8"	8"
(V) REBAR #4 ❶	48" O.C.	24" O.C.	24" O.C.	8" O.C.
FTG REBAR	1–#4	2–#4	2–#4	3–#4
FTG (W)	1'–9"	2'–9"	3'–0"	4'–9"

WALL SCHEDULE FOR WALL AT CENTER OF FOOTING				
WALL HEIGHT (FT)	4'–0"	6'–0"	6'–0"	8'–0"
CMU THICKNESS (IN)	6"	6"	8"	8"
(V) REBAR #4 ❶	48" O.C.	24" O.C.	24" O.C.	8" O.C.
FTG REBAR	1–#4	2–#4	2–#4	3–#4
FTG (W)	1'–6"	2'–0"	2'–3"	3'–3"

MASONRY SCREEN WALL DETAIL
NTS

No.	Date	By	Ckd.	Appr.	Revision
1	8/5/20	WED	DKB	DKB	SITE PLAN AMENDMENT RESUBMITTAL

Title: PRELIMINARY CONSTRUCTION NOTES AND DETAILS FOR NW LOGISTICS 2 - PARKING EXPANSION

For: PANATTONI DEVELOPMENT COMPANY
1821 DOCK ST. SUITE 100
TACOMA, WA □8402
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI
STATE OF WASHINGTON
25672
REGISTERED PROFESSIONAL ENGINEER
8/5/2020

Scale: Horizontal –; Vertical –

Designed WED
Drawn WED
Checked LD
Approved DKB
Date 8/5/20

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number 21227

Sheet C13 of 13

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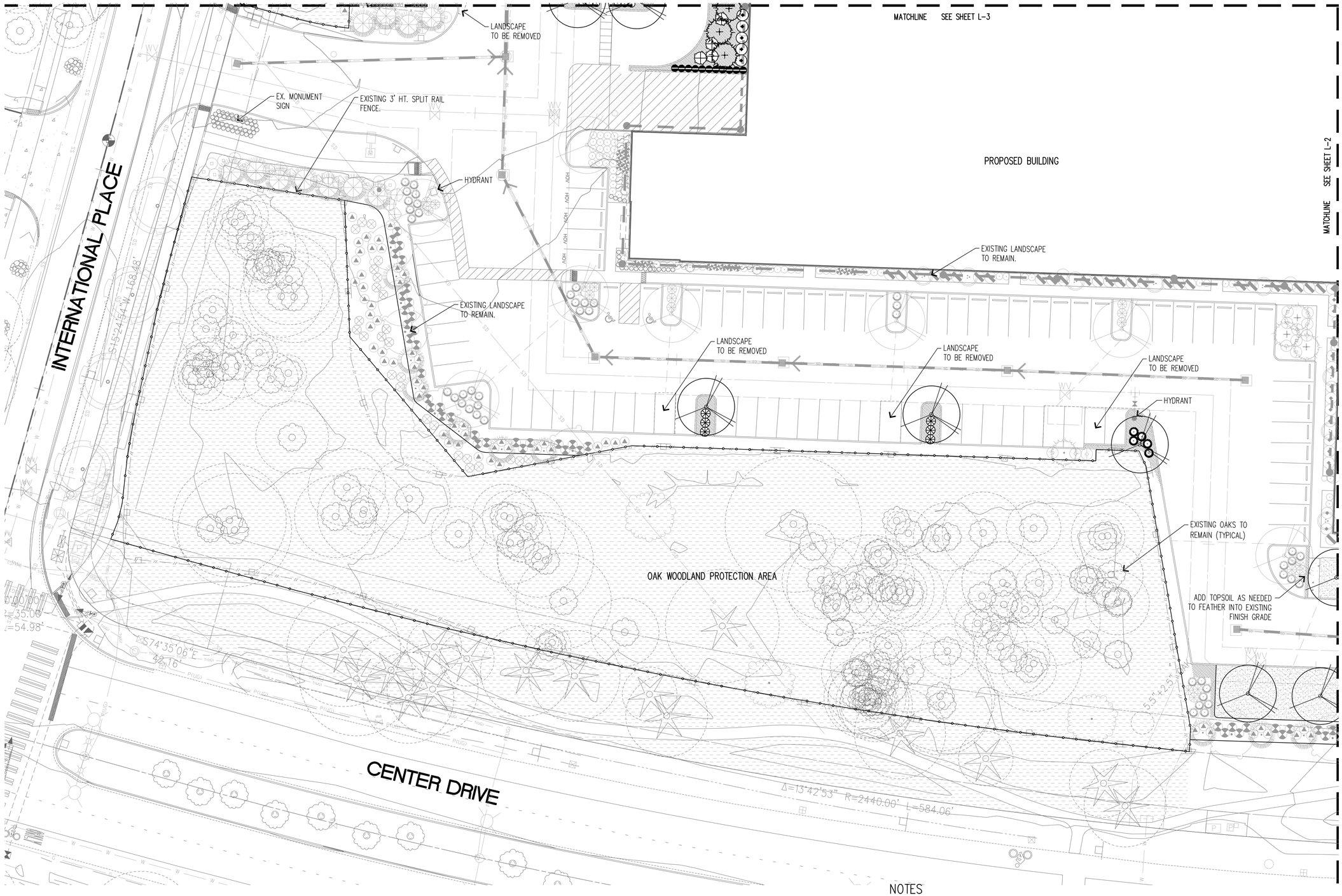

NOTES

1. REFER TO SHEET L-11 FOR PLANT SCHEDULE, AND NOTES.
2. REFER TO SHEET L-12 FOR LANDSCAPE DETAILS.

LANDSCAPE PLAN

0 10' 20' 40' 80'

SCALE: 1" = 20' - 0"

KEY MAP

APPROVED FOR CONSTRUCTION*

BY:_____

DATE:_____
CITY OF DUPONT

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SHEET SIZE: 24" x 36" AT 100%

Attachment 1.u. Preliminary Landscape & Tree Retention Plan prepared by WBLA dated August 5, 2020

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WBLA Landscape Architecture Site Planning Irrigation
16630 30th Dr. S.E.
Bothell, WA 98012
phone (425) 417-4609

PROJECT:
NW LOGISTICS 2 PARKING EXPANSION

LOCATION:
INTERNATIONAL PLACE
DUPONT, WA

CLIENT:
PANATTONI DEVELOPMENT COMPANY

NO.	DATE	REVISION
	07.02.2020	SEPA
1	08.05.2020	SEPA RESUBMITTAL

DESIGNED CB
DRAWN CB
CHECKED CB

PROFESSIONAL SEAL

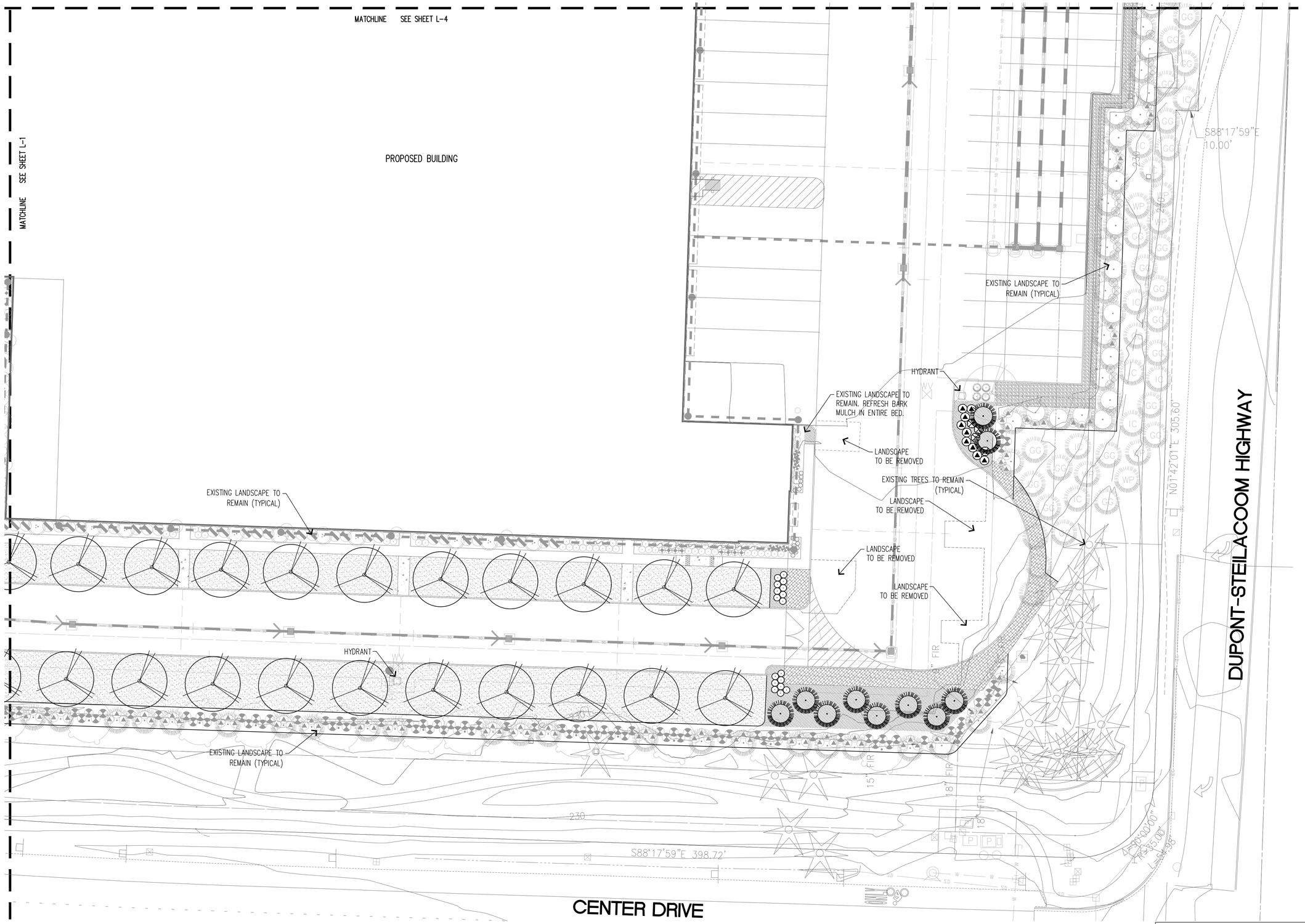
STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
WILLIAM A. BROWN
CERTIFICATE NO. 501

DATE 05.18.2020

PROJECT NO. 202011

TITLE
PRELIMINARY LANDSCAPE ☐ TREE RETENTION PLAN

SHEET NUMBER
L-1
1 OF 12



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DATE 05.18.2020

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TITLE
PRELIMINARY LANDSCAPE
☐ TREE RETENTION PLAN

SHEET NUMBER
L-2
2 OF 12

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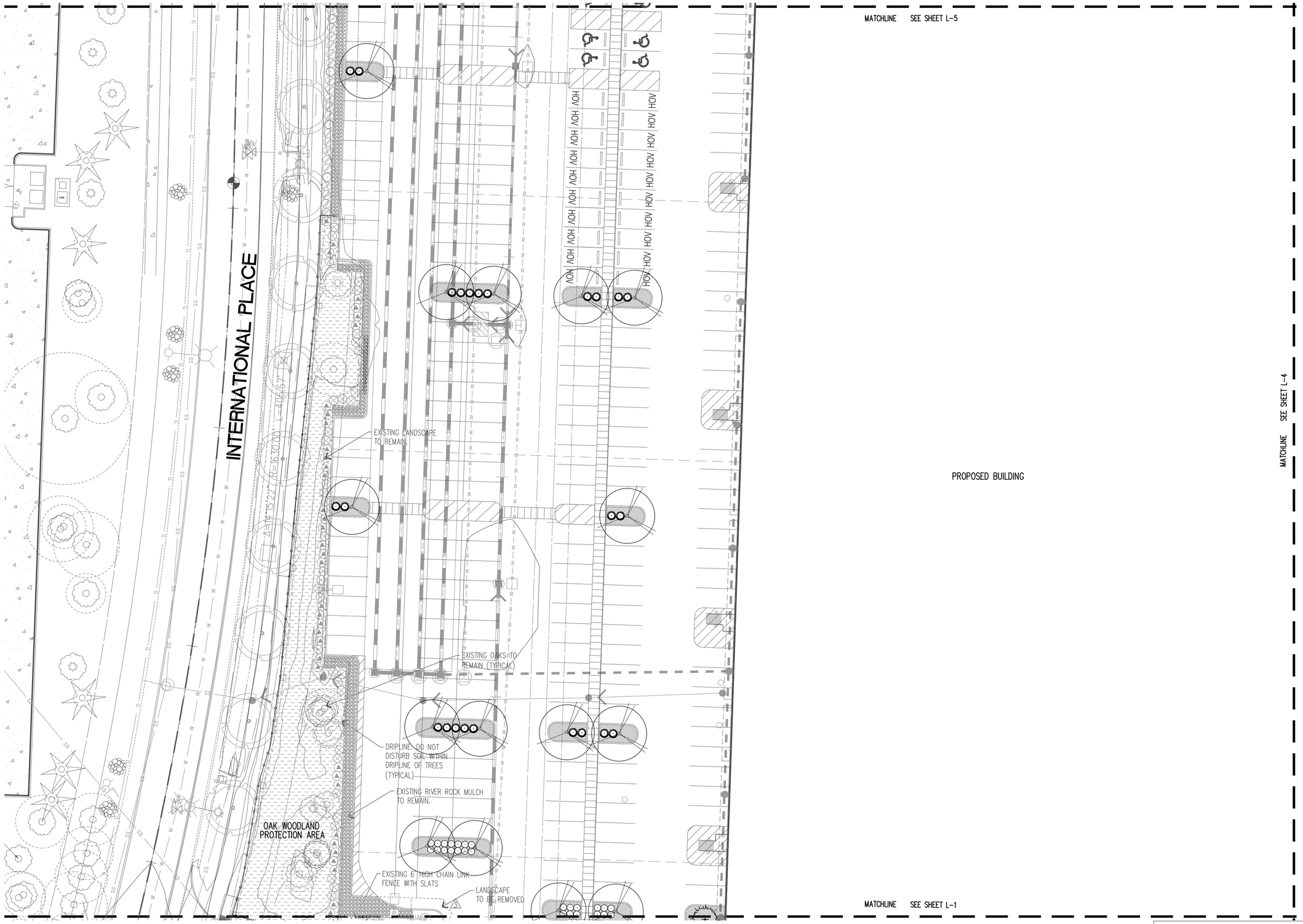

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Bothell, WA 98012
phone (425) 417-4609

PROJECT:
NW LOGISTICS 2 PARKING EXPANSION

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INTERNATIONAL PLACE
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NO.	DATE	REVISION
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DESIGNED CB
DRAWN CB
CHECKED CB

PROFESSIONAL SEAL

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT

WILLIAM A. BROWN
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DATE 05.18.2020

PROJECT NO. 202011

TITLE
PRELIMINARY LANDSCAPE
☐ TREE RETENTION PLAN

SHEET NUMBER
L-3
3 OF 12

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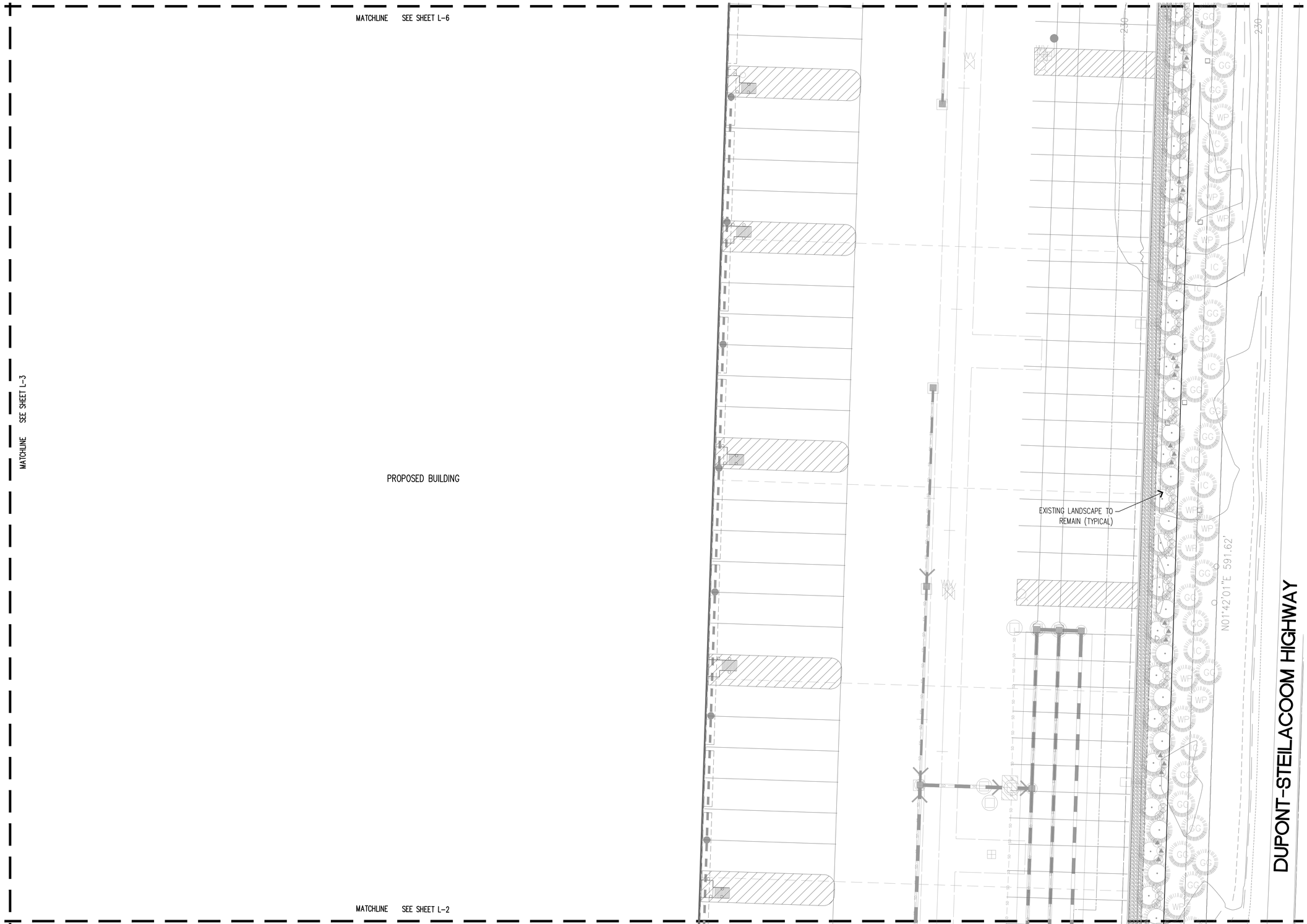

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NW LOGISTICS 2 PARKING EXPANSION

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NO.	DATE	REVISION
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DESIGNED CB
DRAWN CB
CHECKED CB

PROFESSIONAL SEAL

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
WILLIAM A. BROWN
CERTIFICATE NO. 501

DATE 05.18.2020

PROJECT NO. 202011

TITLE
PRELIMINARY LANDSCAPE
☐ TREE RETENTION PLAN

SHEET NUMBER
L-4
4 OF 12

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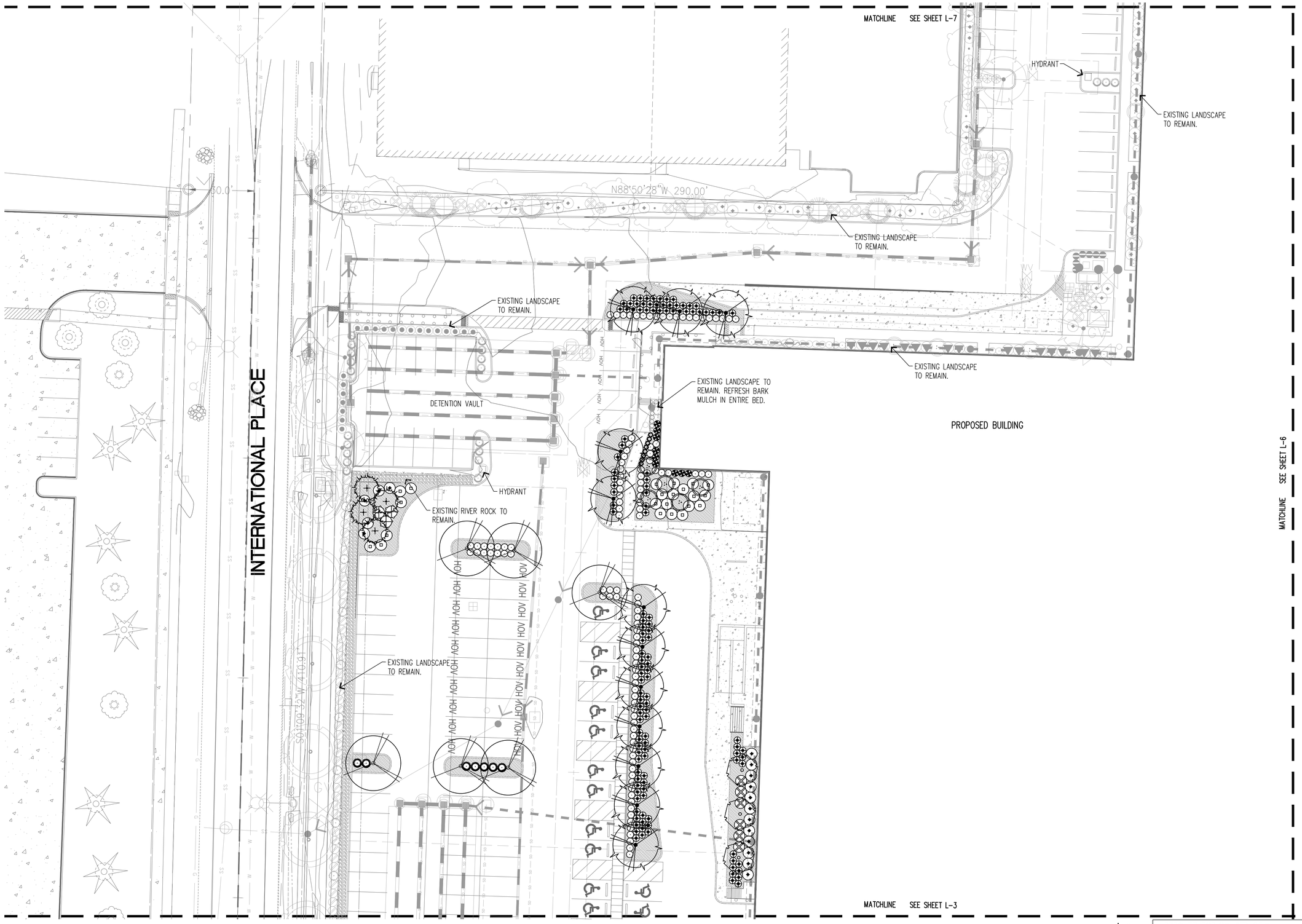

NOTES

1. REFER TO SHEET L-11 FOR PLANT SCHEDULE, AND NOTES.
2. REFER TO SHEET L-12 FOR LANDSCAPE DETAILS.

LANDSCAPE PLAN

0 10' 20' 40' 80'

SCALE: 1" = 20' - 0"

KEY MAP

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BY:_____

DATE:_____
CITY OF DUPONT

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SHEET SIZE: 24" x 36" AT 100%

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16630 30th Dr. S.E.
Bothell, WA 98012
phone (425) 417-4609

PROJECT:
NW LOGISTICS 2 PARKING EXPANSION

LOCATION:
INTERNATIONAL PLACE
DUPONT, WA

CLIENT:
PANATTONI DEVELOPMENT COMPANY

NO.	DATE	REVISION
	07.02.2020	SEPA
1	08.05.2020	SEPA RESUBMITTAL

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DRAWN CB
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PROFESSIONAL SEAL

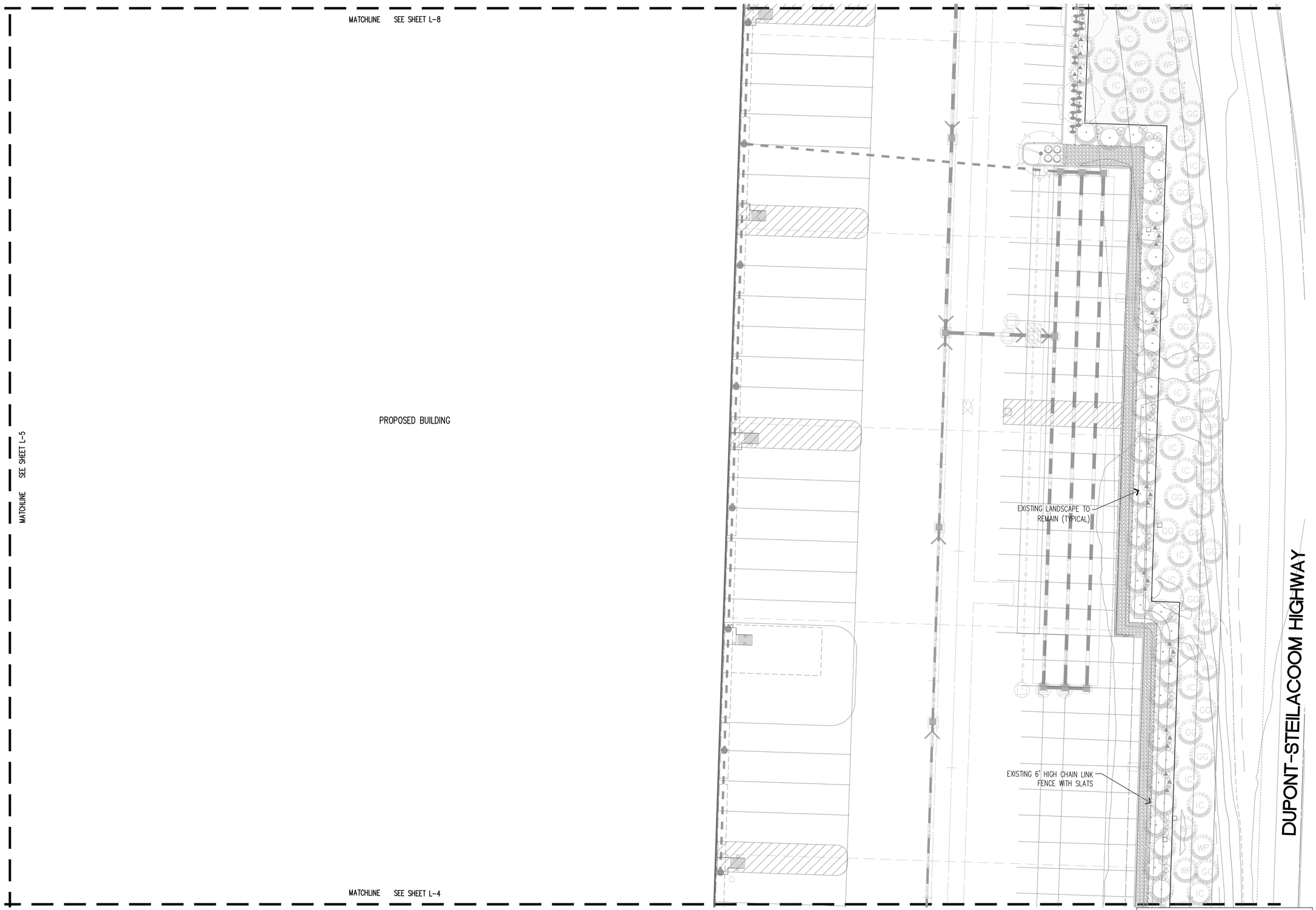
STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
WILLIAM A. BROWN
CERTIFICATE NO. 501

DATE 05.18.2020

PROJECT NO. 202011

TITLE
PRELIMINARY LANDSCAPE
☐ TREE RETENTION PLAN

SHEET NUMBER
L-5
5 OF 12



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TITLE
LANDSCAPE PLAN

SHEET NUMBER
L-6
6 OF 12

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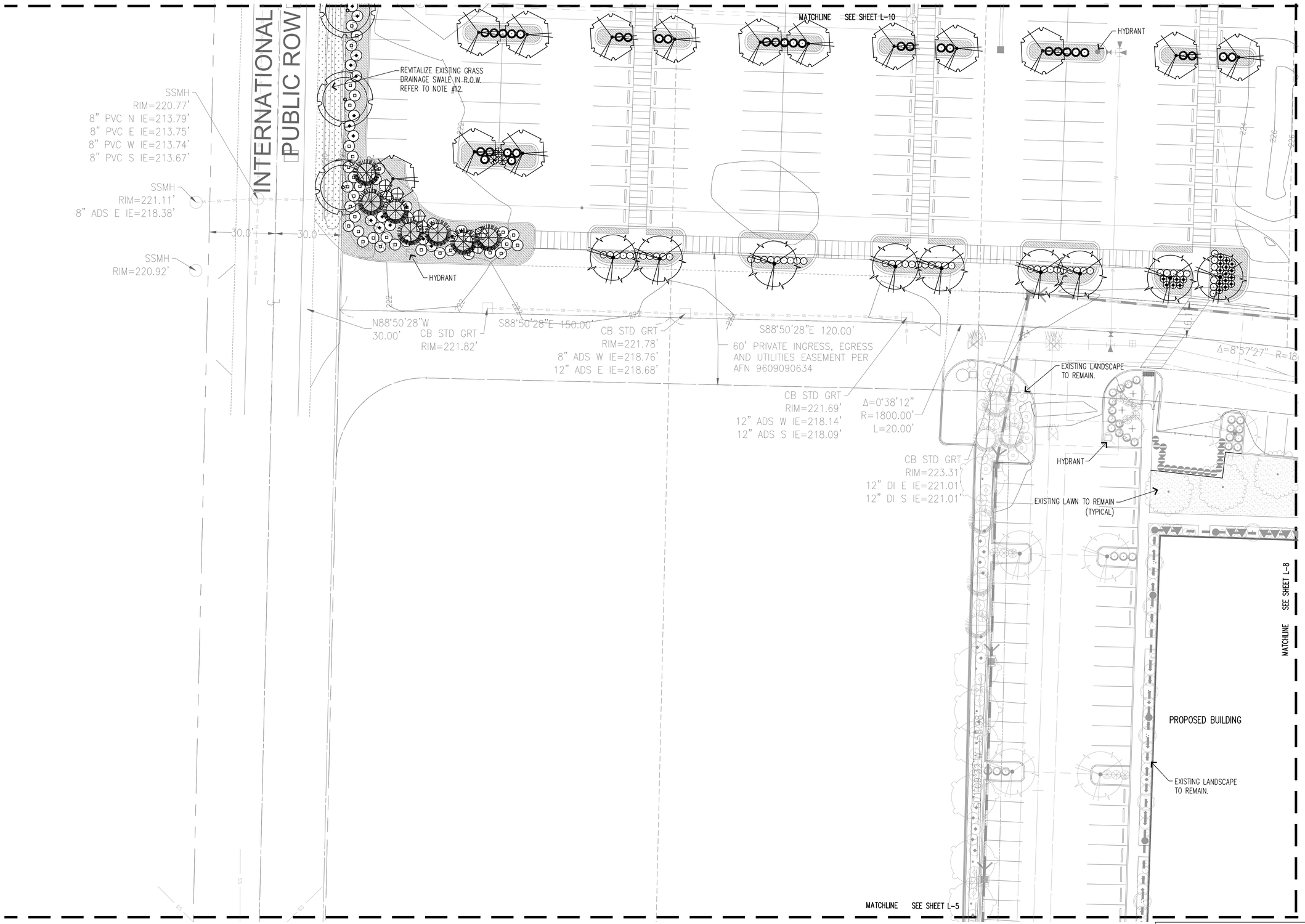

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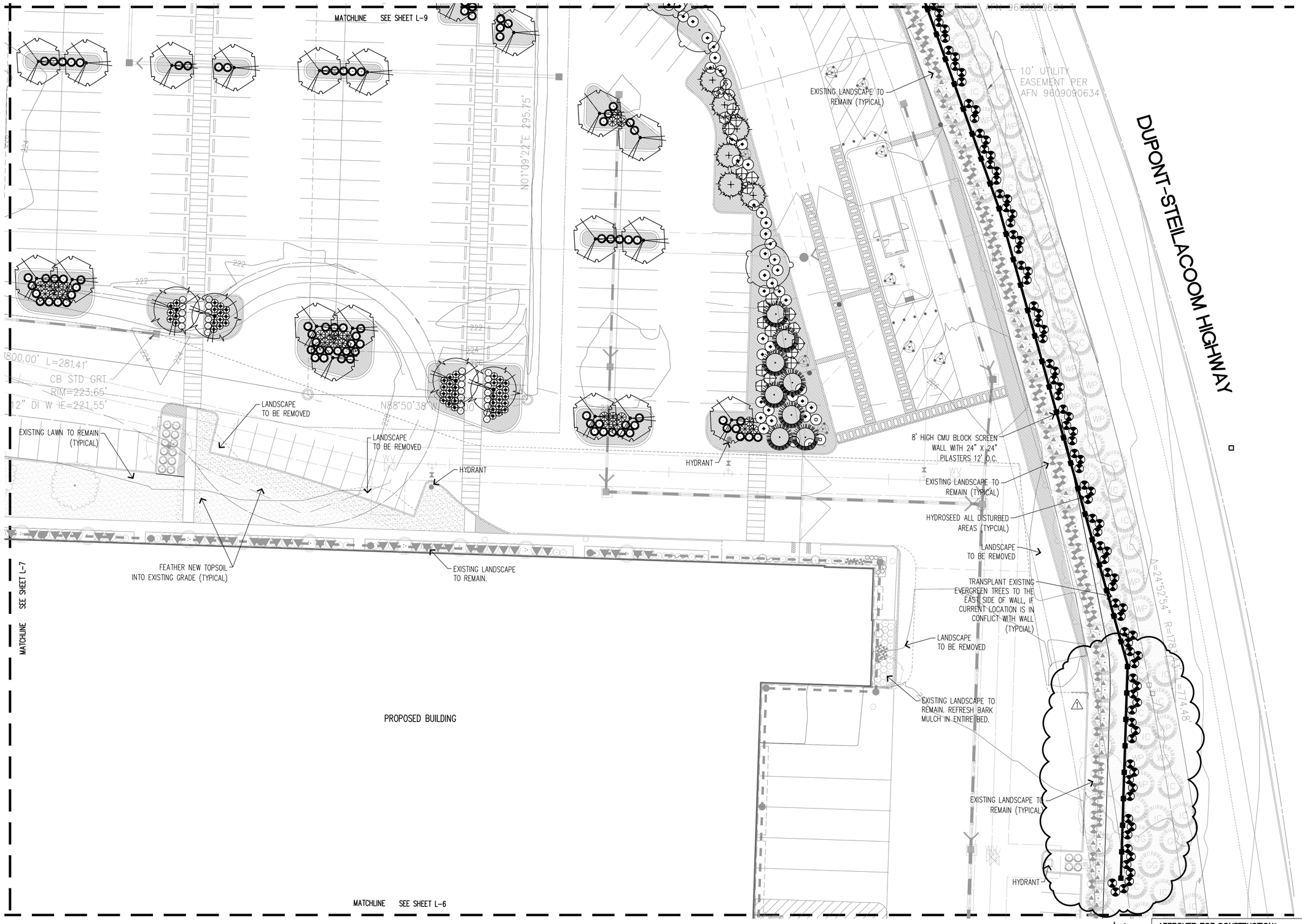
TITLE
LANDSCAPE PLAN

SHEET NUMBER
L-7
7 OF 12



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TITLE
LANDSCAPE PLAN

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8 OF 12

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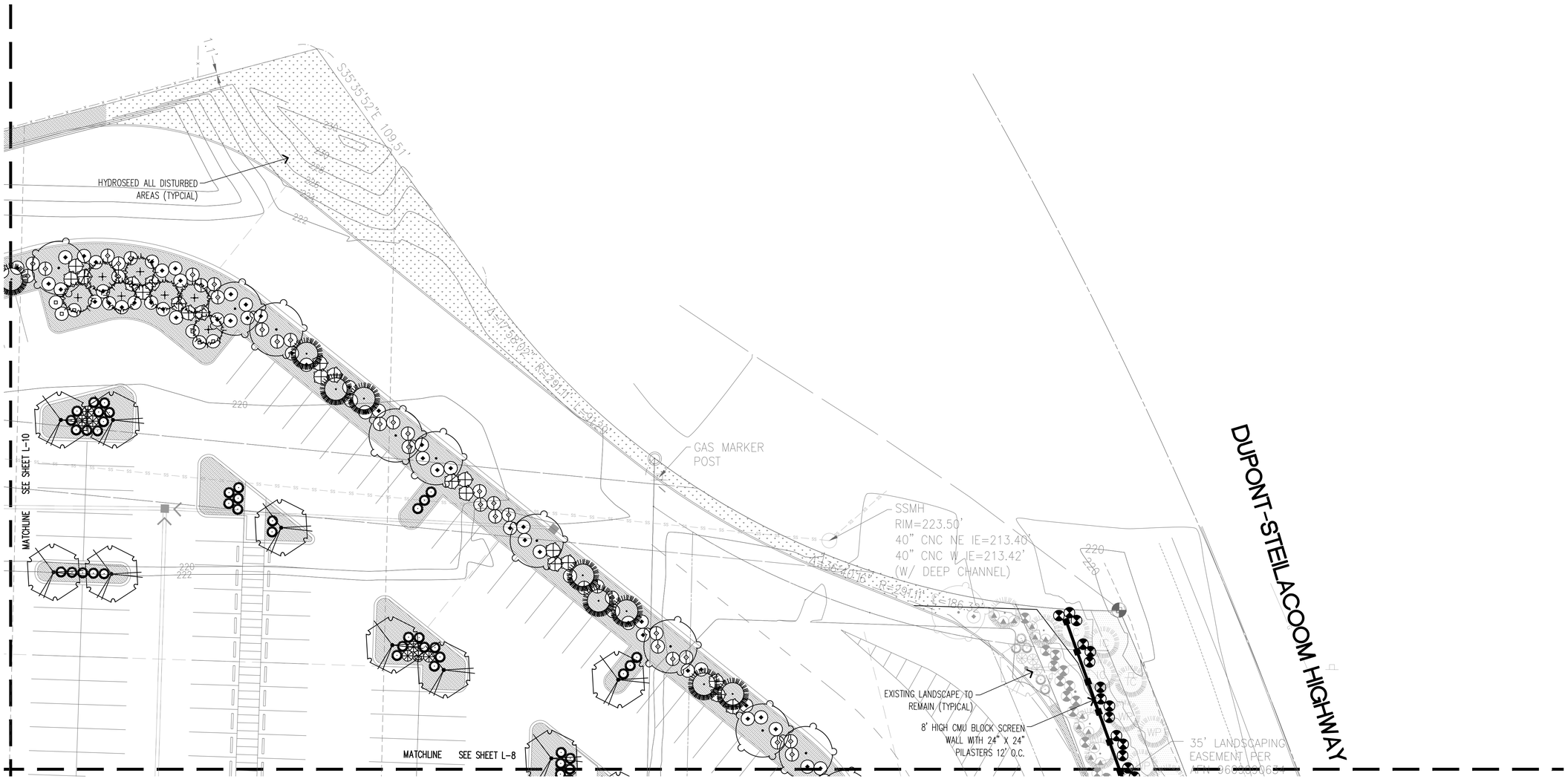

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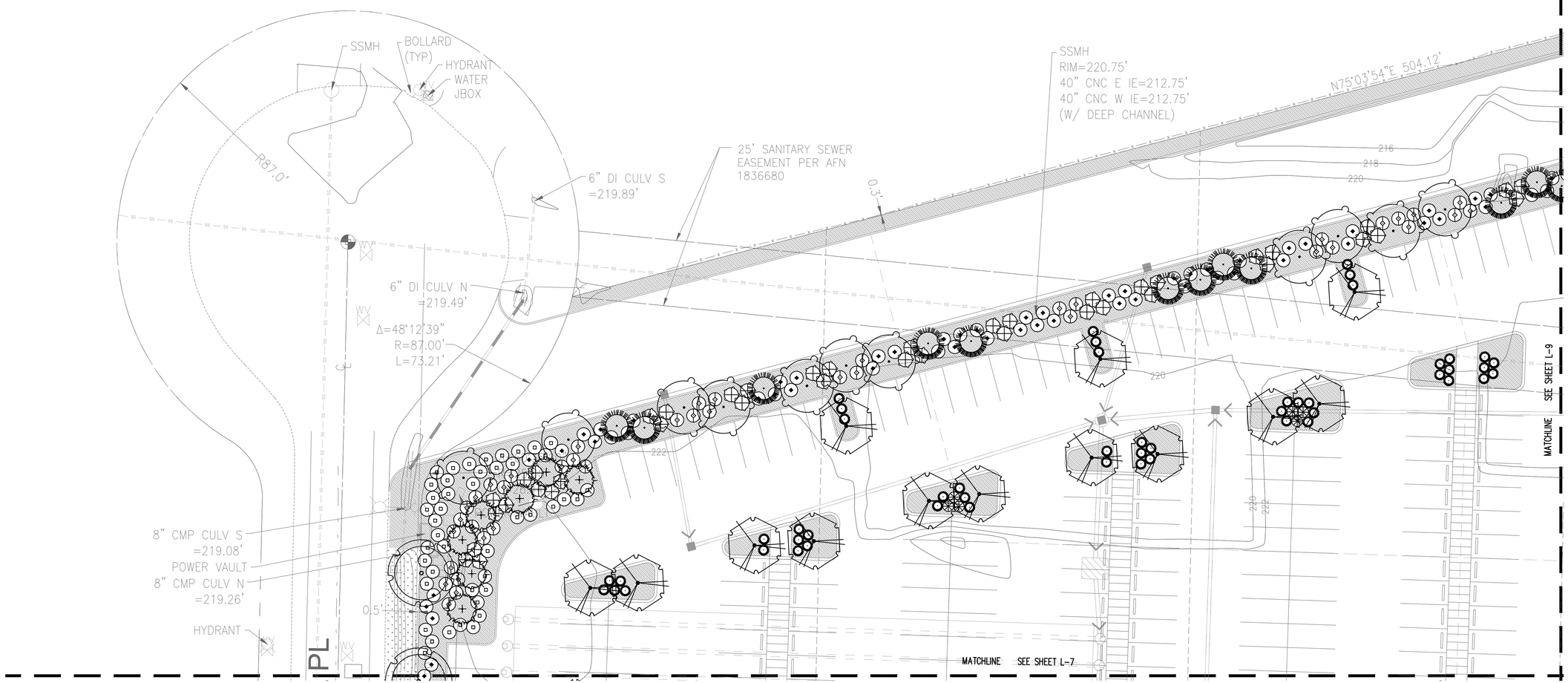

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TITLE
LANDSCAPE PLAN

SHEET NUMBER
L-10
10 OF 12

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME / COMMON NAME	QTY.	SIZE	NOTES
	DECIDUOUS TREES			
	ACER CIRCINATUM / VINE MAPLE	5	8-10' HT.	NURSERY GROWN, B&B
	ACER T. X ACER P. 'WARRENRED' / PACIFIC SUNSET	55	1-3/4" CAL.	B&B
	BETULA NIGRA 'CULLY' / HERITAGE RIVER BIRCH	22	1-3/4" CAL.	B&B
	BETULA NIGRA 'CULLY' / HERITAGE RIVER BIRCH	4	2" CAL.	B&B, PRUNE UP TO A MINIMUM 6' BRANCH HEIGHT
	CARPINUS BETULUS 'FRANS FONTAINE' / COLUMNAR HORNBEAM	3	1-3/4" CAL.	B&B
	PYRUS CALLERYANA 'ARISTOCRAT' / ARISTOCRAT PEAR	25	1-3/4" CAL.	B&B
	ZELCOVA SERRATA 'VILLAGE GREEN' / JAPANESE ZELCOVA	47	1-3/4" CAL.	B&B
	EVERGREEN TREES			
	CHAMAECYPARIS L. 'OREGON BLUE' / PORT ORFORD CEDAR	27	6' HT.	B&B
	PINUS NIGRA / AUSTRIAN BLACK PINE	7	6' HT.	B&B
	THUJA PLICATA 'GREEN GIANT' / GREEN GIANT RED CEDAR	38	8' HT.	B&B
	EVERGREEN SHRUBS			
	ARBUTUS UNEDO 'COMPACATA' / COMPACT STRAWBERRY BUSH	T.B.D.	3 GAL.	FULL & BUSHY, 5' O.C.
	CISTUS X HYBRIDUS / WHITE ROCKROSE	T.B.D.	5 GAL.	FULL & BUSHY, 5' O.C.
	LONICERA NITIDA 'BAGGESEN'S GOLD' / BOX HONEYSUCKLE	T.B.D.	5 GAL.	FULL & BUSHY, 5' O.C.
	MAHONIA AQUIFOLIUM / OREGON GRAPE	T.B.D.	5 GAL.	FULL & BUSHY, 4' O.C.
	MYRICA CALIFORNICA / PACIFIC WAX LEAF MYRTLE	T.B.D.	5 GAL.	FULL & BUSHY, 4' O.C.
	NANDINA DOMESTICA 'MOON BAY' / HEAVENLY BAMBOO	T.B.D.	5 GAL.	FULL & BUSHY, 3' O.C.
	OSMANTHUS HETEROPHYLLUS 'GOSHIKI' / GOSHIKI OSMANTHUS	T.B.D.	5 GAL.	FULL & BUSHY, 3' O.C.
	PINUS MUGO 'PUMILIO' / DWARF MUGO PINE	T.B.D.	5 GAL.	FULL & BUSHY, 5' O.C.
	PRUNUS L. 'OTTO LUYKEN' / OTTO LUYKEN LAUREL	T.B.D.	5 GAL.	FULL & BUSHY, 3' O.C.
	TAXUS 'DARK GREEN SPREADER' / SPREADING YEW	T.B.D.	5 GAL.	FULL & BUSHY, 4' O.C.
	TAXUS X MEDIA 'HICKII'/ HICK'S YEW	T.B.D.	30-36" HT.	B&B, 3' O.C.

ALL PLANT MATERIAL TO BE NATIVE AND/OR DROUGHT TOLERANT

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME / COMMON NAME	QTY.	SIZE	NOTES
	DECIDUOUS SHRUBS			
	PHYSOCARPUS OPULIFOLIUS 'MINDA' / SUMMER WINE NINEBARK	T.B.D.	5 GAL.	FULL & BUSHY, 4' O.C.
	SALIX PURPUREA / PURPLE OSIER	T.B.D.	5 GAL.	FULL & BUSHY, 5' O.C.
	SPIRAEA JAPONICA 'MAGIC CARPET' / MAGIC CARPET SPIREA	T.B.D.	5 GAL.	FULL & BUSHY, 3' O.C.
	SPIRAEA J. 'ANTHONY WATERER' / ANTHONY WATER SPIREA	T.B.D.	5 GAL.	FULL & BUSHY, 4' O.C.
	SYMPHORICARPOS ALBUS / COMMON SNOWBERRY	T.B.D.	5 GAL.	FULL & BUSHY, 4' O.C.
	ORNAMENTAL GRASSES / PERENNIALS			
HSS	HELICTOTRICHON S. 'SAPPHIRE' / BLUE OAT GRASS	T.B.D.	1 GAL.	SPACED 2' O.C.
	GROUNDCOVER			
	ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	T.B.D.	4" POT	SPACED 24" O.C.
	NATIVE GROUNDCOVER MIX			SPACED 24" O.C.
	40% ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	T.B.D.	4" POT	IN RANDOM GROUPINGS
	40% GAULTHERIA SHALLON / SALAL	T.B.D.	4" POT	OF 3-5 PLANTS EACH
	20% MAHONIA REPENS / CREEPING MAHONIA	T.B.D.	4" POT	
	DROUGHT TOLERANT TURF / JB KEVLAR TALL FESCUE SEED MIX			
	33.33% FESTUCA ARUNDINACEA 'FIRECRACKER LS' / FIRECRACKER LS TALL FESCUE			SEED-80 LBS. / ACRE
	33.33% FESTUCA ARUNDINACEA 'SPYDER LS' / SPYDER LS TALL FESCUE			MULCH-1,500 LBS. / ACRE
	33.33% FESTUCA ARUNDINACEA 'RAPTOR II' / RAPTOR II TALL FESCUE			
	EROSION CONTROL SEED MIX			
	45% FESTUCA ARUNDINACEA VAR. / DWARF TALL FESCUE (SEVERAL VARIETIES)			SEED-80 LBS. / ACRE
	30% LOLIUM PERENNE VAR. BARCLAY / DWARF PERENNIAL RYE (BARCLAY)			MULCH-1,500 LBS. / ACRE
	20% FESTUCA RUBRA / RED FESCUE			
	5% AGROSTIS TENUIS 'HIGHLAND STRAIN / COLONIAL BENTGRASS			

ALL PLANT MATERIAL TO BE NATIVE AND/OR DROUGHT TOLERANT

LEGEND

RIVER ROCK MULCH
4-12" DIA. WASHED RIVER ROCK. INSTALLED TO A MINIMUM 6" DEPTH.

8' HIGH SCREEN WALL
CMU BLOCK SCREEN WALL WITH 24" X 24" PILASTERS (COLOR TO BE SELECTED)

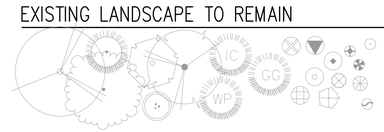
EXISTING LANDSCAPE / NATIVE AREAS TO REMAIN (EXCLUDES R.O.W.)

EXISTING OAK WOODLAND PROTECTION AREA

EXISTING RIVER ROCK MULCH

EXISTING 4' HIGH SPLIT RAIL FENCE

EXISTING LANDSCAPE TO REMAIN



EXISTING SIGNIFICANT TREE LEGEND

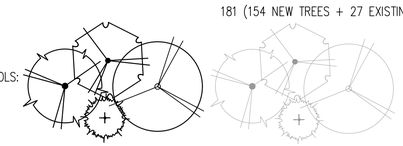
EXISTING DECIDUOUS TREES TO REMAIN

EXISTING EVERGREEN TREES TO REMAIN

LANDSCAPE PARKING LOT CALCULATIONS

PARKING LOT STALL:	912
REQUIRED PARKING LOT TREES:	152 (1 TREE / 6 STALLS)
PROVIDED PARKING LOT TREES:	181 (154 NEW TREES + 27 EXISTING TREES)

PROVIDED PARKING LOT TREE SYMBOLS:



LANDSCAPE NOTES

1. LANDSCAPE CONTRACTOR TO CLEAR AND GRUB ALL PERIMETER LANDSCAPE AREAS SHOWN TO RECEIVE NEW LANDSCAPE.
2. ALL NEW LANDSCAPE AREAS ADJACENT TO BUILDINGS AND WITHIN PARKING LOT TO BE SET AT 18" MINUS FINISH ELEVATION EXCEPT AS NOTED. THESE AREAS TO RECEIVE IMPORTED 3-WAY TOPSOIL TO A MIN. DEPTH OF 24". ALL PERIMETER BEDS THAT ARE SHOWN WITH GROUNDCOVER TO RECEIVE IMPORTED 3-WAY TO A 18" DEPTH. TREES PLANTED INTO EXISTING LANDSCAPE/NATIVE AREAS TO REMAIN TO BE PIT PLANTED WITH IMPORTED 3-WAY TOPSOIL. PLANT PIT TO BE 3X THE DIAMETER OF THE ROOTBALL AND AS DEEP AS ROOTBALL.
3. ALL NEW PLANTING BEDS TO HAVE FINE BARK MULCH TO A MINIMUM DEPTH OF 2. ALL EXISTING BEDS TO HAVE FINE BARK TO 1" DEPTH.
4. GROUND COVER TO EXTEND UNDER ALL DECIDUOUS TREE CANOPIES AT THE SPECIFIED SPACING TO PROVIDE COMPLETE COVERAGE IN ALL PLANTING BEDS DESIGNATED TO RECEIVE GROUND COVER. GROUNDCOVER BENEATH EVERGREEN TREES TO BE MAINTAIN A 3' CLEARANCE FROM BASE OF TRUNK.
5. ALL LANDSCAPE BEDS SHALL BE PLANTED WITH GROUNDCOVER, PLANTED IN A TRIANGULAR PATTERN, TO ACHIEVE FULL COVERAGE WITHIN TWO YEARS OF PLANTING.
6. LANDSCAPE DRAWINGS ARE BASED ON THE SITE PLANS PREPARED BY NELSON ARCHITECTS. IMMEDIATELY NOTIFY LANDSCAPE ARCHITECT OF ANY FIELD CHANGES TO THE SITE PLAN WHICH MAY REQUIRE ADJUSTMENT OF DESIGN.
7. REFER TO CIVIL ENGINEERING DRAWINGS FOR GRADING AND DRAINAGE INFORMATION. IMMEDIATELY NOTIFY LANDSCAPE ARCHITECT OF ANY ADVERSE DRAINAGE CONDITIONS WHICH MAY AFFECT THE HEALTH OF PLANT MATERIAL.
8. NO PRE-EMERGENT HERBICIDES TO BE USED ON THE PROJECT SITE DURING THE FIRST YEAR WARRANTY PERIOD.
9. TREES SHALL NOT BE PLACED WITHIN 15' WIDE WATER EASEMENT. VERIFY WATER EASEMENT BEFORE INSTALLATION.
10. TREES TO MAINTAIN A MINIMUM CLEARANCE OF 6' FROM WATER, SEWER, AND FIRE HYDRANTS. SHRUBS TO MAINTAIN A MINIMUM CLEARANCE OF 4' FROM FIRE HYDRANTS. PROVIDE A 3' LEVEL AREA AROUND ALL HYDRANTS.
11. FERTILIZE ALL TREES, SHRUBS AND GROUNDCOVER WITH STARTER FERTILIZER 2-4-2. APPLIED AT MANUFACTURES RECOMMENDED RATES. ADDITIONALLY FERTILIZE ALL TREES AND SHRUBS WITH AGRIFROM TABS 20-10-5. APPLIED AT MANUFACTURES RECOMMENDED RATES. FERTILIZE DROUGHT TOLERANT LAWN WITH 10-20-20. APPLIED AT MANUFACTURES RECOMMENDED RATES.
12. REVITALIZE EXISTING GRASS DRAINAGE SWALE. REMOVE ALL VOLUNTEER SHRUB AND TREE SAPLINGS, INCLUDING BUT NOT LIMITED TOO SCOTCH BROOM, ALDER, AND BLACKBERRY. ADD TOPSOIL AS NEEDED TO TRANSITION EXISTING GRADES TO NEW GRADING AROUND THE PERIMETER OF THE SWALE. HYDROSEED AND PROVIDE TEMOPORARY IRRIGATION AS NEEDED UNTIL ESTABLISHED.
13. NEW PLANTING IN EROSION CONTROL HYDROSEED TO BE IRRIGATED BY A TEMPORARY DESIGN/BUILD IRRIGATION VALVE TAPPED OFF OF MAINLINE FOR BUILDING 2. ALL PIPING TO BE ABOVE GROUND AND TO BE REMOVED AFTER 2 GROWING SEASONS.
14. REFER TO SHEET L-12 FOR LANDSCAPE DETAILS.

LANDSCAPE IRRIGATION WATER CONSERVATION NOTES

1. IRRIGATION TO BE A HIGH EFFICIENCY EVAPOTRANSPERATION ADJUSTED IRRIGATION SYSTEM. PROVIDED WITH AN ON SITE ET SENSOR.
2. ALL NEW IRRIGATED LANDSCAPE AREAS TO HAVE SOIL AMENDED AND MULCHED TO MINIMIZE EVAPORATION OF IRRIGATED WATER.
3. LAWN AREAS TO BE DROUGHT TOLERANT LAWN SEED ONLY AND WILL ONLY BE TEMPORARLY IRRIGATED UNTIL ESTABLISHED. TREES WITHIN LAWN TO BE IRRIGATED SEPARATELY.
4. NEW TREES PLANTED INTO EXISTING LANDSCAPE/NATIVE AREAS TO BE IRRIGATED WITH ROOT WATERING SYSTEM BUBBLERS OR POINT SOURCE DRIP EMITTERS.
5. ALL PLANTING HAS BEEN SELECTED TO BE NATIVE AND OR DROUGHT TOLERANT PLANT MATERIAL.
6. IRRIGATION ZONES WILL BE SEPARATED BY PLANT MATERIAL TYPE, WATER NEEDS AND EXPOSURE.

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WILLIAM A. BROWN
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LANDSCAPE SCHEDULE AND NOTES

SHEET NUMBER
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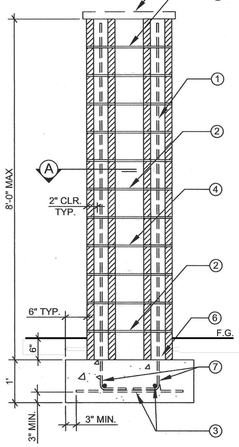
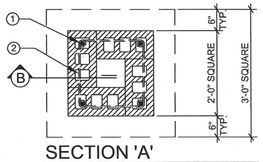




SECTION 'A'
NTS

SECTION 'B'
NTS

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2018 IBC WITH SNA.
2. CONCRETE MASONRY SHALL COMPLY WITH THE FOLLOWING:
   A. ASTM C 90, F'm = 1,500 PSI
   B. MORTAR: TYPE M OR S, 1800 PSI
   C. GROUT SHALL CONFORM TO ASTM C 476, 2000 PSI MIN.
3. FOUNDATION CONCRETE SHALL BE 4,500 PSI, TYPE V CEMENT AND 0.45 WATER TO CEMENT RATIO
4. ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE ASTM A615-40.
5. LAP VERTICAL STEEL 24 INCHES MINIMUM.
6. SITE PLAN SHALL BE SUBMITTED FOR REVIEW BEFORE THE BUILDING PERMIT CAN BE ISSUED.

KEYNOTES:

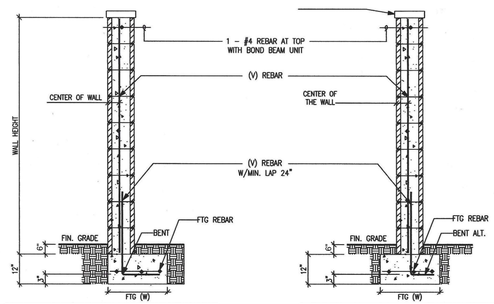
1. #4 VERTICAL REBAR AT EACH CELL CORNER, SOLID GROUTED
2. #3 REBAR, TIE IN MINIMUM 8-INCH BOND BEAM AT TOP, MIDDLE, AND BOTTOM. PROVIDE A 2-INCH MINIMUM GROUT COVER AT ALL SIDES OF REBAR.
3. (2) #4 CONTINUOUS REBAR EACH WAY
4. LINE OF CMU GROUT BEYOND
5. FINISH TOP OF COLUMN WITH A CAP BLOCK OR WITH CONCRETE FOR WATER RUN-OFF.
6. GROUT ALL CELLS AND CAVITIES SOLID BELOW GRADE.
7. STANDARD 90° HOOK WITH 9" MIN., LENGTH

1 CMU PILASTER
NTS

REQUIRED INSPECTIONS: (SPECIAL INSPECTION – NONE REQUIRED)
1. FOUNDATION
2. MASONRY PREGROUT
3. FINAL

GENERAL NOTES:
1. ALL WORK SHALL CONFORM TO THE IBC 2018 EDITION AS AMENDED
2. CONCRETE BLOCK MASONRY SHALL COMPLY WITH THE FOLLOWING:
   A. CONCRETE MASONRY SHALL CONFORM TO ASTM C 90, F'm = 1500 PSI
   B. MORTAR: TYPE M – 2500 PSI OR TYPE S – 1800 PSI
   C. GROUT CONFORMS TO ASTM C 476, MINIMUM 2000 PSI
3. THE ULTIMATE COMPRESSIVE STRENGTH REQUIRED FOR FOUNDATION CONCRETE SHALL BE OF 4500 PSI, TYPE V CEMENT, AND 0.45 WATER TO CEMENT RATIO.
4. ALL REINFORCING STEEL SHALL BE GRADE 60, ASTM A615, MIN. LAP SPLICE = 24"
5. NO WATER COURSE OR NATURAL DRAINAGE SHALL BE OBSTRUCTED. FOR RETAINING WALL, PROVIDE 1CF/FT OF CLEAN COARSE GRAVEL WITH 2" DIAMETER WEEP HOLES THROUGH THE WALL AND LINED WITH PVC PIPE AT 8'–0" O.C. ALONG WALL AND PLACED 3" ABOVE THE LOWEST ADJACENT FINISHED GRADE
6. SITE PLAN SHALL BE SUBMITTED FOR REVIEW BEFORE THE PERMIT CAN BE ISSUED
7. CONTROL JOINT SPACING AT 24 FEET (MAX). VERTICAL REBARS SHALL BE LOCATED WITHIN 16 INCHES OF THE END.
8. GROUT ALL CELLS CONTAINING REINFORCEMENT. LOWER STEM IS SOLID GROUTED.
9. 3 INCHES COVER FOR ALL REBAR IN FOOTING (TYPICAL).
10. WATERPROOF THE INSIDE FACE OF ALL RETAINING WALLS PER 1805.J OF 2018 IBC.

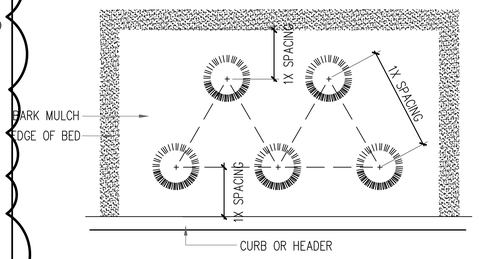
DESIGN CRITERIA
2018 IBC WITH SO. NV AMENDMENTS
WIND LOAD
BASIC WIND SPEED = 95 MPH, EXPOSURE C
Kz = 0.85
Kε = 1.0
Kzt = 1.0
Kd = 0.85
CF = 1.4
G = 0.85
SEISMIC LOAD
DESIGN SPECTRAL RESPONSE Sds = 0.574g
SEISMIC COEFFICIENTS R = 1.25 (ASCE 7–16, T–15.4–2)
Cs = 0.46
SEISMIC LOAD DUE TO LATERAL EARTH PRESSURE = $10.4h^2$ (LBS) THE POINT OF APPLICATION IS TAKEN AT 0.6H ABOVE THE BASE OF THE WALL, WHERE H IS THE HEIGHT OF THE BACKFILL
SOIL PARAMETER
SITE CLASS = D
ALLOWABLE SOIL BEARING PRESSURE = 1000 PSF
LATERAL EQUIVALENT FLUID PRESSURE OF 45 PSF/FT
PASSIVE PRESSURE = 100 PSF
COEFFICIENT OF FRICTION FOR SLIDING = .25



WALL SCHEDULE FOR WALL AT EDGE OF FOOTING				
WALL HEIGHT (FT)	4'–0"	6'–0"	6'–0"	8'–0"
CMU THICKNESS (IN)	6"	6"	8"	8"
(V) REBAR #4 @	48" O.C.	24" O.C.	24" O.C.	8" O.C.
FTG REBAR	1–#4	2–#4	2–#4	3–#4
FTG (W)	1'–9"	2'–9"	3'–0"	4'–9"

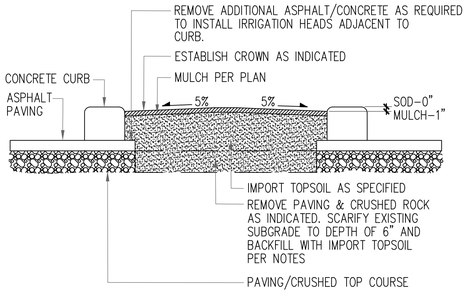
WALL SCHEDULE FOR WALL AT CENTER OF FOOTING				
WALL HEIGHT (FT)	4'–0"	6'–0"	6'–0"	8'–0"
CMU THICKNESS (IN)	6"	6"	8"	8"
(V) REBAR #4 @	48" O.C.	24" O.C.	24" O.C.	8" O.C.
FTG REBAR	1–#4	2–#4	2–#4	3–#4
FTG (W)	1'–6"	2'–0"	2'–3"	3'–3"

2 CMU WALL
NTS

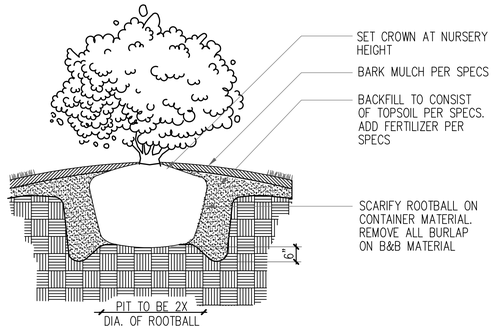


NOTE: SPACING TO BE TRIANG. PER DISTANCE SHOWN ON PLANT SCHEDULE

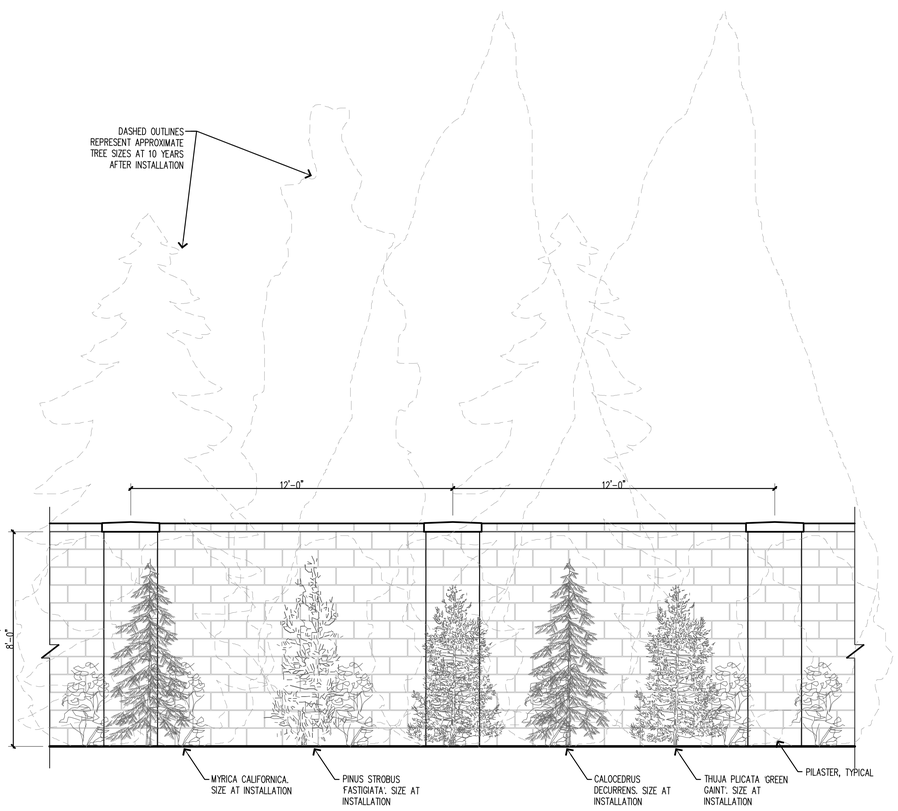
3 GROUND COVER SPACING
NTS



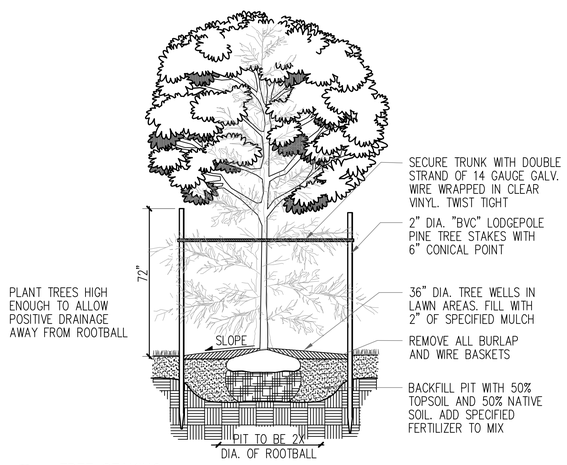
4 LANDSCAPE ISLAND
NTS



5 SHRUB PLANTING
NTS



3 WALL ELEVATION
NTS



7 TREE STAKING
NTS

APRROVED FOR CONSTRUCTION*

BY:_____

DATE:_____
CITY OF DUPONT

"THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMIT. THE CITY, BY APPROVING THESE DOCUMENTS, IN NO WAY WARRANTS THEIR ACCURACY OR ACKNOWLEDGES ANY OMISSIONS."

SHEET SIZE: 24" x 36" AT 100%

© WBLA 2015

WBLA Landscape Architecture Site Planning Irrigation
16630 30th Dr. S.E.
Bothell, WA 98012
phone (425) 417-4609

PROJECT:
NW LOGISTICS 2 PARKING EXPANSION

LOCATION:
INTERNATIONAL PLACE DUPONT, WA

CLIENT:
PANATTONI DEVELOPMENT COMPANY

NO.	DATE	REVISION
	07.02.2020	SEPA
1	08.05.2020	SEPA RESUBMITTAL

DESIGNED CB
DRAWN CB
CHECKED CB

PROFESSIONAL SEAL
STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
WILLIAM A. BROWN
CERTIFICATE NO. 501

DATE 05.18.2020

PROJECT NO. 202011

TITLE
LANDSCAPE DETAILS

SHEET NUMBER
L-12
12 OF 12

Return Address:

Barghausen Consulting Engineers, Inc.
18215 72nd Ave S
Kent, WA 98032

Document Title(s): Declaration of Lot Combination City of Dupont File No. LLE 20-0_	Assessor's Property Tax Parcel/Account Numbers: 300039-0011 & 300039-0282
Reference Number(s) of Documents assigned or released if applicable: Additional reference numbers are on page of document. N/A	
Grantor(s) (Last name first, then first name and initials): Northwest Logistics Industrial Holdings, LLC, a Washington Limited Liability Company Steilacoom Historical School District No. 1	
Grantee(s) (Last name first, then first name and initials): Northwest Logistics Industrial Holdings, LLC, a Washington Limited Liability Company Steilacoom Historical School District No. 1	
Legal Description (abbreviated: i.e., lot, block, plat or section, township, range): Additional legal is on page 2 of document. Resultant Parcel, LLE 15-01, AFN 201503130126 & Lot 2, BLA-LEE 06-01, AFN 200703215009, records of Pierce County, Washington.	
The Auditor/Recorder will rely on the information provided on the form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.	

Attachment 1.v .Preliminary Lot Line Elimination Plans prepared by Barghausen Consulting Engineers dated July 10, 2020

DECLARATION OF LOT COMBINATION
CITY OF DUPONT FILE NO. LLE 20-0_

WHEREAS, the parties executing this document are the owners of the following described properties in Pierce County, Washington, to wit:

PARCEL A:
RESULTANT PARCEL, CITY OF DUPONT LOT COMBINATION NO. LLE 15-01, RECORDED MARCH 13, 2015 UNDER RECORDING NO. 201503130126, RECORDS OF PIERCE COUNTY, WASHINGTON.

PARCEL B:
A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS CREATED BY INSTRUMENT RECORDED MAY 17, 2006 UNDER RECORDING NO. 200605170142 AND AS DELINEATED ON SAID BOUNDARY LINE ADJUSTMENT RECORDED MARCH 21, 2007 UNDER RECORDING NO. 200703215009, IN PIERCE COUNTY, WASHINGTON.

PARCEL C:
LOT 2, BOUNDARY LINE ADJUSTMENT BLA-LEE 06-01, AFN 200703215009, ACCORDING TO THE SURVEY THEREOF RECORDED MARCH 21, 2007, RECORDS OF PIERCE COUNTY AUDITOR.

SITUATE IN THE CITY OF DUPONT, COUNTY OF PIERCE, STATE OF WASHINGTON.

WHEREAS, the foregoing described properties have boundaries as shown on attached Legal Description Exhibit “A”; and

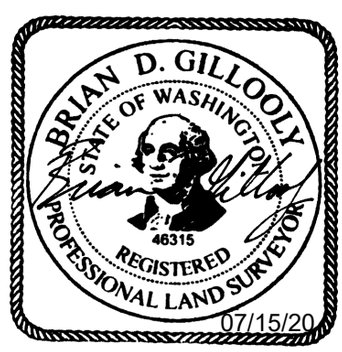
WHEREAS, the Revised Code of Washington Section 58.17.040 96) has provisions to allow for adjusting boundary lines between contiguous properties;

WHEREAS, on _____, 2020, the City of DuPont approved the Lot Combination as shown on attached Legal Description Exhibit “A”, DuPont File No. LLE 20-0_; and

NOW THEREFORE, in consideration of the mutual benefits to the foregoing described properties, the parties do for themselves, their heirs, and assigns, revise the boundary lines of each parcel, with the boundaries to be as shown on attached Legal Description Exhibit “B”, and described as follows:

LOT 2 OF BOUNDARY LINE ADJUSTMENT NO. BLA-LEE 0601 RECORDED MARCH 21, 2007 AS RECORDING NO. 200703215009, RECORDS OF PIERCE COUNTY, WASHINGTON.
AND
RESULTANT PARCEL, CITY OF DUPONT LOT COMBINATION NO. LLE 15-01, RECORDED MARCH 13, 2015 UNDER RECORDING NO. 201503130126, RECORDS OF PIERCE COUNTY, WASHINGTON.

SITUATE IN THE CITY OF DUPONT, COUNTY OF PIERCE, STATE OF WASHINGTON.



IN WITNESS WHEREOF, said parties hereto have caused this instrument to be executed this _____ day of _____, 20 ___.

Northwest Logistics Industrial Holdings, LLC, A Washington Limited Liability Company

BY: _____

ITS: _____

Steilacoom Historical School District No. 1

BY: _____

ITS: _____

STATE OF WASHINGTON
} ss.
COUNTY OF

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that (s)he signed this instrument and acknowledged it as _____ of Northwest Logistics Industrial Holdings LLC., a Washington Limited Liability Company and to be his/her free and voluntary act for the uses and purposes mentioned in the instrument.

DATED this _____ day of _____, 20 ____.

STATE OF WASHINGTON
} ss.
COUNTY OF

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that (s)he signed this instrument and acknowledged it as _____ of Steilacoom Historical School District No. 1 and to be his/her free and voluntary act for the uses and purposes mentioned in the instrument.

DATED this _____ day of _____, 20 ____.

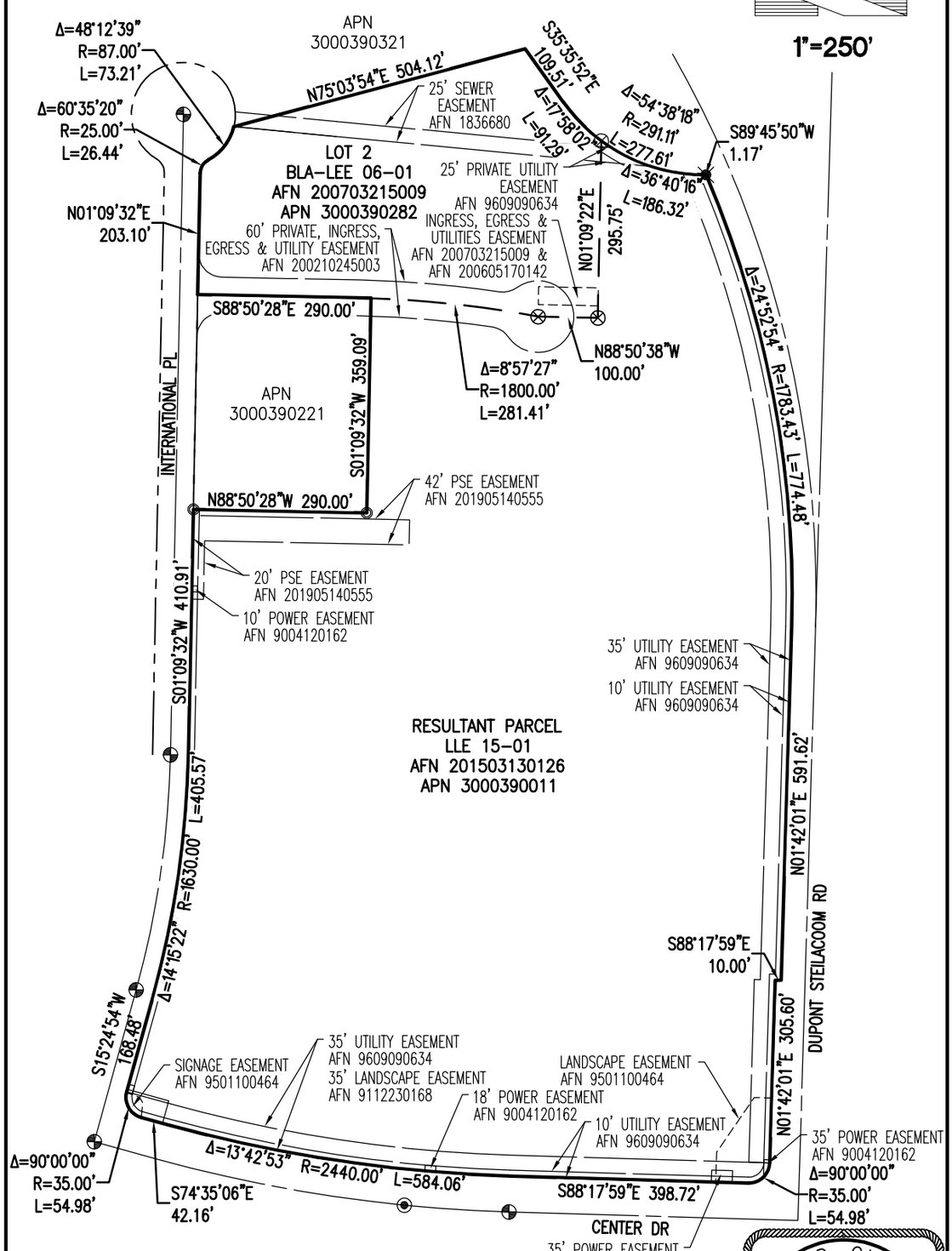
_____
Signature

Print Name _____

Residing at _____

My Appointment Expires _____

EXHIBIT "A"
EXISTING PROPERTY LINES



FND 3" SURFACE BRASSY W/PUNCH "E.S.M. 15661"

FND MONUMENT IN CASE

FND 1/2" REBAR/CAP "BCE 36807"

FND ALUMINUM DISK ON CONCRETE MON. "ARMY CORPS OF ENGINEERS 11278"

FND 5/8" REBAR/CAP "AHBL 45161"

NOTE: ALL EXISTING LOT LINES TO BE REMOVED

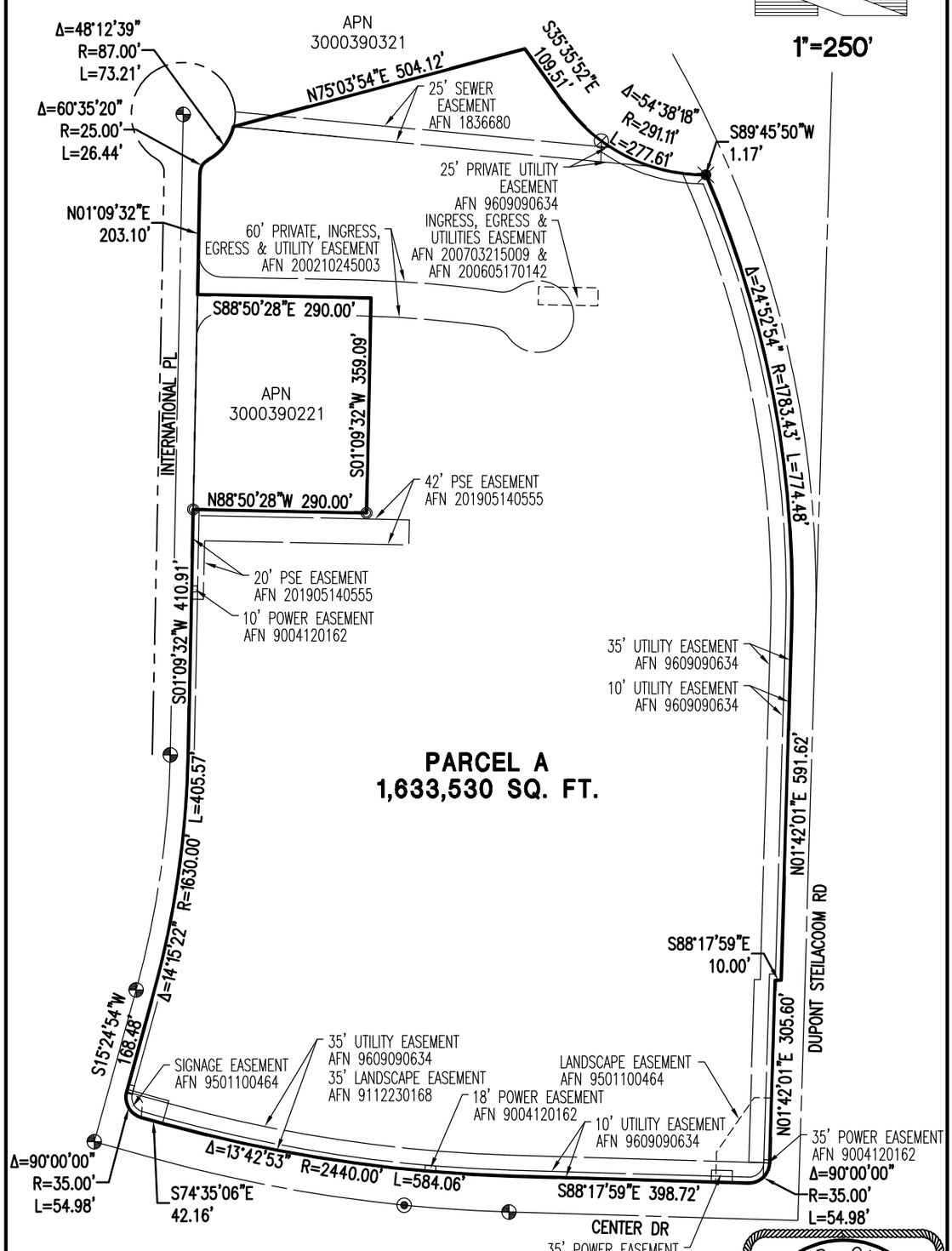
BRIAN D. GILLOOLY
STATE OF WASHINGTON
46315
REGISTERED
PROFESSIONAL LAND SURVEYOR

File:P:\21000s\21227\survey\plats\21227bla01.dwg Date/Time:7/10/2020 4:49 PM

SCALE: HORIZONTAL 1"=250' VERTICAL N/A	For: NORTHWEST LOGISTICS CENTER	JOB NUMBER 21227
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com	Title: DECLARATION OF LOT COMBINATION CITY FILE NO. LLE 20-__	PAGE 4 of 5

DESIGNED ____ DRAWN KMA CHECKED BDG APPROVED BDG DATE 7/10/2020

EXHIBIT "B"
REVISED PROPERTY LINES



- FND 3" SURFACE BRASSY W/PUNCH "E.S.M. 15661"
- FND MONUMENT IN CASE
- FND 1/2" REBAR/CAP "BCE 36807"
- FND ALUMINUM DISK ON CONCRETE MON. "ARMY CORPS OF ENGINEERS 11278"
- FND 5/8" REBAR/CAP "AHBL 45161"

NOTE: ALL EXISTING LOT LINES TO BE REMOVED

BRIAN D. GILLOOLY
STATE OF WASHINGTON
46315
REGISTERED
PROFESSIONAL LAND SURVEYOR

File:P:\21000s\21227\survey\plats\21227bla01.dwg Date/Time:7/10/2020 4:49 PM

SCALE: HORIZONTAL 1"=250' VERTICAL N/A	For: NORTHWEST LOGISITICS CENTER	JOB NUMBER 21227
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com	Title: DECLARATION OF LOT COMBINATION CITY FILE NO. LLE 20-__	PAGE 5 of 5

DESIGNED ____ DRAWN KMA CHECKED BDG APPROVED BDG DATE 7/10/2020

City of DuPont
1700 Civic Drive • DuPont, WA 98327
Phone: (253) 964-8121 / Fax: (253) 964-1455

AUTHORIZATION TO ACT AS AGENT AFFIDAVIT

I, Steilacoom Historical School District 1, as property owner of the following described property

32xx International Place North
(Property Address)
300039-0282
(Parcel Number)

hereby authorize
Dan Balmelli / Betsy Dyer, Barghausen Consulting Engineers
(Name)
18215 - 72nd Avenue South, Kent, WA 98032
(Address)
425-251-6222 / dbalmelli@barghausen.com / bdyer@barghausen.com
(Phone/Email)

to act as agent on my behalf before the City of DuPont regarding the application to
Pre-Application Review, land use reviews and site development reviews as needed.

K. Weight
Property Owner Signature

2-24-2020
Date

Dr. Kathi Weight - Superintendent
Print Name

STATE OF WASHINGTON }
COUNTY OF PIERCE }

On this 24 day of FEBRUARY, 20 20, personally appeared before me KATHI WEIGHT known to be the individual(s) described in and who executed the within and foregoing instrument and acknowledged that he/she signed the same as given, as his/her free and voluntary act and deed, for the uses and purposes therein mentioned, and under oath stated that he/she was authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereto set my hand and affixed my official seal the day and year first above written.

RICHARD PAUL LOVELESS
COMMISSION EXPIRES
NOTARY
PUBLIC
05-13-20
STATE OF WASHINGTON

Notary Public
RICHARD PAUL LOVELESS
Print Name
NOTARY PUBLIC in and for the State of Washington
Residing at STEILACOOM, WA.
My Commission expires: 5/13/2020

Attachment 1.w. Authorization to Act as Agent Affidavit dated Feb. 24, 2020

PANATTONI®

August 5, 2020

Jeff Wilson
Community Development Director
City of Dupont
1700 Civic Dr
Dupont, WA 98327

Dear Jeff:

This letter will serve as notice that Panattoni Development will be the responsible party for the NW Logistics Center 2 Parking Expansion. Please send bills and notices to the following contact:

Bjorn Brynestad | Development Manager
Panattoni Development Company, Inc.
1821 Dock St.
Suite 100 | Tacoma, WA 98402
Office: 206.838.1730 | Cell: 253-444-8478
BJorn@panattoni.com

We look forward to a successful project with the City of Dupont and hope to have more in the future.

Very Truly Yours,

Bart Brynestad
Local Partner

Attachment 1.x. Authorization to Act as Agent Affidavit dated July 31, 2020

BARGHAUSEN

September 3, 2020

Lisa Klein
AHBL, Inc.
2215 North 30th Street, Suite 300
Tacoma, WA 98403

RE: Responses to Review Comments
Major Site Plan Amendment Type II and SEPA Applications for
Northwest Logistics Center II – Parking Expansion
City of DuPont File No. PLNG 2020-012, 013, 014 & SEPA2020-001 / PLNG2020-002 RFI
Our Job No. 21227

Dear Lisa:

We have revised the documents for the above-referenced project to address the comments in your email dated August 27, 2020. Enclosed are the following documents for your review and approval:

1. One (1) electronic copy revised Non-Wetland and Fish and Wildlife Habitat Assessment

2. One (1) electronic copy Response Letter addressing Third Party Comments

3. One (1) electronic copy revised Traffic Impact Analysis

4. One (1) electronic copy revised SEPA Environmental Checklist

The following outline provides each of your comments in italics, along with a narrative response describing how each comment was addressed:

1. *The Soundview Non-Wetland and Fish and Wildlife Habitat Assessment was sent out to the City's peer review consultant for review. Attached are the comments we received. Soundview will need to provide a revised report addressing the comments.*

   Response: A response letter prepared by Soundview Consultants, LLC addressing the comments provided by Stantec Consulting Services Inc. and the revised Non-Wetland and Fish and Wildlife Habitat Assessment are enclosed.

2. *The SEPA Checklist describes in Section B.8.i. that there will be 912 employees per shift. The TIA describes that there will be 486 employees per shift. Revise either one so that they are consistent.*

   Response: The SEPA checklist and the TIA have been updated to reflect 486 employees per shift.

3. *The TIA describes the building size as 612,412 SF, however additional floor area is being added to bring the building size to 746,790 SF. While the size increase may not affect the conclusions of the TIA, it should accurately describe the scope of the project. Please amend the TIA to reflect the total floor area.*

   Response: The TIA has been updated to reflect the additional floor area of the building for a total of 746,790 square feet.

Attachment 1.y. Responsible Party Letter prepared by Panattoni dated August 5, 2020

4. *On 8/19 we requested that you provide the SEPA checklist using the SEPA form on the City's website, which is updated since the 2008 form that you have been using during the life of the NW Logistics project. On 8/25/2020 Betsy provided a revised SEPA Checklist (attached), but it is still using the same 2008 form. Please provide a SEPA checklist using the City's 2014 form and let me know if there is any confusion about this.*

   Response: The SEPA checklist was prepared using the current City of DuPont version of the checklist and the footer has been updated on the enclosed copy to reflect this version.

We believe that the above responses, together with the enclosed documents address all of the comments in your August 27, 2020 email. Please review and approve the enclosed at your earliest convenience. If you have questions or need additional information, please do not hesitate to contact me at this office. Thank you.

Sincerely,

Daniel K. Balmelli

Daniel K. Balmelli, P.E.
Executive Vice President

DKB
21227c.003.doc
enc: As Noted
cc: Janet Howald, City of DuPont Community Development
Brian Mattson, Panattoni Development Company
Bjorn Brynestad, Panattoni Development Company
Ben Eldridge, Barghausen Consulting Engineers, Inc.
Betsy Dyer, Barghausen Consulting Engineers, Inc.

Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
Phone: (253) 514-8952 Fax: (253) 514-8954

Technical Memorandum

To: **Lisa Klein, AHBL, Inc.** **Project Number: 1144.0025**

From: **Ben Wright, Soundview Consultants LLC** **Date: September 2, 2020**

Re: **Response to Third-Party Comments**
International Place North adjacent to 3250 International Place North, Dupont, Washington

Dear Ms. Klein,

Soundview Consultants LLC (SVC) has been assisting Panattoni Development (Applicant) with a Non-Wetland and Fish and Wildlife Habitat Assessment Technical Memorandum for proposed industrial development of an approximately 5.34-acre site located north-adjacent to 3250 International Place North in the City of Dupont, Washington. The subject property is situated in the Southwest ¼ of Section 24, Township 19 North, Range 01 East, W.M. (Pierce County Tax Parcel Number 3000390282). This Technical Memorandum has been prepared in response to the City of Dupont's third-party review comments dated August 25, 2020 (Stantec, 2020). It should be noted that the comments provided for the proposed project are overtly tendentious and do not reflect critical areas assessment requirements of the Dupont Municipal Code, are not aligned with the preapplication meeting discussions between the City of Dupont and the Applicant, and appear to ignore known prior approvals and documentation. This memorandum supersedes any inconsistencies that may remain between the memorandum and the revised report. Below are the third-party review comments (italicized) followed by SVC's responses.

1. Overall, the report has a few technical/completeness items to note.

a. The site is disturbed, it was filled around 2007 (I verified this by a Google Earth Image review). Site fill history must be researched and discussed fully.

The site was previously cleared and graded as noted on page 3 of our report. As the City of Dupont, Applicant and third-party reviewer are all aware, the clearing and grading activities conducted on the subject property were previously approved by the City of Dupont under a prior Mitigated Determination of Non-Significance (MDNS) (SEPA 05-12). The reviewer's comment provided no substantive benefit, and further investigation and analysis is not supported by code requirements.

Attachment 1.z. Response to Third-Party Comments by Soundview Consultants dated September 2, 2020

b. The proximity to the Sequalitchew Creek channel indicates the site may have been part of a floodplain and could have supported critical areas.

The language in the reviewer's comment is not based in fact and is misleading. As is clearly indicated in the USGS contours map provided in Appendix B8 of our report, as well as in the additional LiDAR exhibit provided in Attachment A, the site is situated over 20 feet elevation above the offsite stream channel. In addition, the Federal Emergency Management Agency (FEMA) FIRMette mapping for the area (Attachment B) does not depict a floodplain extending beyond the offsite stream channel. Lastly, the City of Dupont already determined that the subject property is not situated in a regulated floodplain (SEPA 05-12). A simple site inspection and/or minor effort in reviewing city or FEMA resources by the reviewer should have been conducted rather than providing misleading conjecture. The site is not located in a floodplain.

c. With this information, a disturbed methodology for wetland investigation should have been employed for this site. The report presents three soil plots for wetland investigations. This is not very many for a site this large and does not really address the historical fill for the site. Also, 2007 was a time when critical areas were regulated. The original fill should have had a report and historical documentation available. That data should be searched and provided or stated that it is not available. Checking with previous owners and the City files would be helpful.

Disturbed methodology is not appropriate for this site. The previous clearing and grading activity occurred 13 years ago as part of an approved clearing and grading activity, which the City of Dupont was fully aware of and is well documented in the public record for the property. In addition, there was no evidence of recent disturbance of the regrown vegetation or soils onsite. As such, there is no valid basis for requiring implementation of the disturbed methodology. The report clearly discusses the intention of the assessment was to determine if regulated wetlands or potentially regulated fish and wildlife habitat conservation areas are currently present onsite. They are not.

d. Photos presented in the report should be properly referenced as to source and date. A scale would also be helpful.

Photographs of the subject property were referenced on page 3 and provided in Attachment C of our report, and the date of our site investigation is clearly shown in Table 1 on page 2. Further, explanations of each photograph's content was provided in their descriptive headers. The Dupont Municipal Code does not specify a requirement for site photographs nor how they should be referenced or require scaling.

e. References are provided but they are not all properly referenced in the report. This presents as a bit sloppy and casts some concern about the overall accuracy and attention to detail of these consultants. A proper technical edit is needed to make the report ready for public review.

Our report followed American Psychological Association (APA) style standards for in-text citations, and the field references listed are not required to be cited in text by these standards. This overtly critical comment is not based in fact and is quite unprofessional. Further, the comment serves no purpose in searching for facts related to the proposed project and has no basis in code. We recommend the City of Dupont carefully evaluate the third-party reviewer's overall intent as can be clearly concluded from these points.

2. Wildlife habitat/ESA and sensitive species –

a. The report notes the literature search identified several species listed by the state but does not include the USFWS ESA species listing. USFWS lists several subspecies of pocket gopher as Threatened. Some of these species are very location/region specific but all have a strong affinity to gravelly soils – such as shown on this site.

U.S. Fish and Wildlife Service (USFWS) Endangered Species Act (ESA)-listed species and their protected habitats are included in the Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) listings provided in Appendix B5 of our report. This PHS table lists any potential critical habitat and/or priority habitat, in addition to identifying both state and federal listing status for species and their habitats which occur within 300 feet of the subject property. In fact, currently Mazama pocket gopher screening protocol established by the USFWS and by WDFW requires the use of WDFW's database (WDFW, N.d). Providing a USFWS list of species potentially onsite is redundant, unnecessary, and outside of established protocol.

In addition, the reviewer's statement regarding pocket gophers having a strong affinity to gravelly soils is factually incorrect. According to Maser et al. (1981) and Stinson (2005), Mazama pocket gopher habitat includes open meadows, prairie, and/or grassland areas with friable, well-drained soils that are not too rocky. Steinberg and Heller (1997) further state that the majority of sites with pocket gophers generally have friable, loamy, deep soils with less than 15 percent slopes and less than 10 percent by weight of medium sized rocks (1-2 inches). Further, the site is documented to have been legally filled, graded and compacted as noted in our report, the preapplication response letter issued by the City of Dupont, and in the prior MDNS (SEPA 05-12). These prior-approved actions significantly altered the soil content and compaction from the natural mapped Spanaway gravelly sandy loam soils (which are more preferred) to the point of being very unsuitable to Mazama pocket gopher. As documented at our representative formal data plots excavated throughout the site, the soils were primarily classified as sand to gravelly sand, which are unsuitable for Mazama pocket gopher. Suitable soils must have a higher loam content to allow the creation of underground tunnel systems that are unlikely to collapse (Stinson, 2019).

Additionally, the predominance of woody vegetation and compacted soils onsite severely inhibits the colonization of herbaceous vegetation which further precludes the use of the subject property by Mazama pocket gopher. Mazama pocket gopher forage requirements include an assortment of plant material including leafy vegetation, succulent roots, shoots, and tubers such as clover (*Trifolium* spp.), lupine (*Lupinus* spp.), false dandelions (presumably *Hypochaeris radicata*), and grasses, with a preference towards plant species with bulbs such as wild onion and wild garlic (Maser et al., 1981; Stinson, 2005). Sites with significant woody cover, including Scotch broom (*Cytisus scoparius*), are not generally utilized by Mazama pocket gopher (Steinberg, 1996). The site generally lacks herbaceous forbs as can readily be discerned from the photographs and data sheets provided in our report. Rather, the site is primarily dominated by woody vegetation unsuitable to Mazama pocket gopher including Douglas fir (*Pseudotsuga menziesii*) saplings, black cottonwood (*Populus balsamifera*) saplings, non-native invasive Scotch broom, and non-native invasive butterfly bush (*Buddleja davidii*), all of which is documented in our report.

It is also important to note that USFWS (2014) specifies that inhospitable soil types or substrates present impermeable barriers to Mazama pocket gopher movement and dispersal. The nearest documented occurrence of Mazama pocket gopher appears to be greater than 4 linear miles to the south of the subject property (WDFW, N.d.). This documented occurrence is separated from the

subject property by large commercial/industrial developments, freeways and arterial roadways, other impervious surfaces, and large forest patches which are all uninhabitable and present impermeable barriers to Mazama pocket gopher movement and dispersal. With the lack of potential dispersal routes from the closest documented occurrence several miles from the subject property coupled with the lack of suitable soils and forage onsite, the likelihood for the presence of Mazama pocket gopher onsite was discounted and no formal survey was necessary nor should be required now.

b. Page 3, last paragraph of the Methods section, states a fish and wildlife habitat assessment was conducted. Which species were addressed in this assessment? What accepted scientific methods were followed – provide reference to proper manuals and protocols? Photos provided in Attachment C are not sufficient to withstand public scrutiny.

The third-party reviewer oddly fails to acknowledge our summary of the field inspection within the same Methods section of our report: "The experienced biologist made visual observations using stationary and walking survey methods for both aquatic and upland habitats noting any special habitat features or signs of fish and wildlife activity." In addition to prescreening research, such methods are standard for wildlife habitat assessments covering the range of habitats and species protected under Dupont Municipal Code. If no potentially regulated fish and wildlife habitat conservation areas are identified in SVC's initial surveys, more in-depth assessment methods are unnecessary. Our report provides more than adequate representation of methods used given the prior approved grading and degraded habitat conditions present. This comment and others make us question if the reviewer thoroughly read our report, bothered to inspect the site, or even contemplated the project's compliance with city code.

c. One of the qualifications of a brief bio in the appendices includes a pocket gopher trained individual. The site should be assessed for possible pocket gopher presence and findings reported. Similarly, the WDFW listing includes bat species as state sensitive and to complete the assessment, the site's capability to support these bat species should also be assessed and summarized. All methods used to assess bat and pocket gopher habitat should be described and referenced appropriately.

As discussed in our response to comment 2.b above, the habitat conditions onsite clearly indicate a lack of potential habitat for Mazama pocket gopher, and our report clearly states the results of our investigation. Further, we revisited the site on August 28, 2020 and again confirmed the lack of any indicators of Mazama pocket gopher presence per USFWS protocol (USFWS, 2018). In addition, the bat species listed in WDFW's summary are not listed as state sensitive nor are they candidate species for listing contrary to the reviewer's statement. Further, WDFW lists potential occurrences of bat species within the general township, not necessarily on the subject property. The site is documented to have been legally filled, graded and compacted as noted in our report and does not contain any large trees or structures suitable for roosting. As such, this matter warrants no further review.

It should be noted that the intent of our report was to provide a legitimate albeit, brief assessment of the existing onsite conditions. Being brief, a summary of methods can and was used for sites where there is clearly a lack of any potentially regulated critical areas onsite. This report was prepared to streamline the review process and regulatory burden, not exacerbate or delay it. The analysis requested above is not supported by Dupont Municipal Code nor warranted based on site conditions documented in our report or requested review per the City of Dupont's preapplication meeting notes.

d. Note that the report states on page 3 – final paragraph – that "No potentially-regulated wetlands and/or fish and wildlife habitat were identified…". To make this statement, the report must present the data and investigation to support the "wildlife" portion of the conclusion. The report as written, glosses over this issue and presents a weak, unsupported finding. This unsupported conclusion is repeated on page four – final paragraph.

Our report "glosses over" nothing, and our findings are neither "weak" nor "unsupported" as the reviewer tendentiously states. The site conditions are documented in our report and in the photographs, data sheets, and background mapping provided. These items clearly document a lack of vertical vegetative structure (saplings, shrubs and sparse herbaceous layer), an invasive species dominated plant community, and graded and compacted soil conditions. We clearly presented more than adequate data to support our conclusions.

The site clearly lacks any potentially regulated wetlands and/or fish and wildlife habitat conservation areas listed within Dupont Municipal Code. As noted previously, the reviewer clearly did not inspect the site, nor does it appear that they even conducted a cursory-level review beyond simply looking at "Google Earth" (reviewer's note, item 1.a). Such actions appear to be a gross misapplication of the peer review process to unfairly critique a competing firm's work product while unnecessarily delaying our client's SEPA review process. Had the reviewer bothered to give our work a fair and unbiased review, inspect the site, or confer with City of Dupont staff regarding the status of prior entitlements and permitting actions, these issues and delays would not exist. We ask that the City of Dupont make a fair and unbiased determination that the site does in fact not contain any critical areas per the Dupont Municipal Code rather than get bogged down in an overtly critical review.

3. Stormwater infrastructure –

a. The figures clearly define some sort of odd-shaped stormwater infrastructure on the subject parcel of land. Nowhere in the report is this feature described, discussed, or verified by formal documentation. Outfalls into and out of this feature should be defined as well as possibility of infiltration to groundwater and possible aquifer recharge area impacts. Again, if this is an existing feature – there must be design drawings and permits. If not, then this must be clearly stated and discussed as to the origin and function of the area defined as stormwater infrastructure. This omission indicates a weak effort in site history review and a lack of completeness in the field investigation of the property.

This comment, while again unnecessarily critical, does identify a minor error within our report. During our review process, our staff mapped and evaluated an existing temporary construction stormwater pond. This feature is clearly unregulated, but a secondary layer was inadvertently left on Figure 2 (Proposed Site Plan) when the final maps were produced. It should however be noted that Figure 1 (existing conditions) clearly notes that this feature is an existing stormwater facility. As the site has been fallow for 13 years, we assessed the stormwater infrastructure potential development of regulated wetland presence, and we clearly documented it does not meet such criteria, nor would be regulated by the City of Dupont. If the reviewer visited the site or bothered to do anything more than a cursory review, they would know that the site was not fully developed and the stormwater infrastructure was associated with temporary erosion and sediment control measures during construction, and as such is clearly not regulated by the City of Dupont. Aquifer recharge and stormwater design analysis is outside the scope of this assessment and if warranted would be assessed by the project's civil engineer. For further detail on proposed stormwater

compliance measures, see Barghausen Consulting Engineers' stormwater report submitted for this project.

b. The proposed development shown in Figure 2 indicates the stormwater infrastructure will conflict with the proposed development. Impact to existing infrastructure should be described and discussed.

As noted above, the conflict of the existing temporary construction stormwater infrastructure and proposed development was an inadvertent error in the production of a map. A revised version of the proposed site plan is provided as Attachment C.

4. Figure 2 presents what appears to be the site plan for the property development. There are several comments about this figure to consider.

a. The figure is unclear and vague and lacks dimensions to assess accuracy of setbacks and buffers. The stream buffer should be set from OHWM and since that has not been fully verified, the depiction of the 100' buffer is suspect. A verified OHWM is needed from the stream and can be done with an accurate GPS data set and GIS mapping tools. It is possible a stream assessment and OHWM determination has already been done for this stream as part of other projects along the DuPont-Steilacoom Road. A check with the DuPont Public Works Department, Joint Base Lewis McCord, WDFW, or the Nisqually Tribe is suggested. The culvert nearby (shown as the second "Offsite Type F Stream photo) has likely been assessed for fish passage and OHWM is commonly recorded in those assessments.

The drainage in question is located offsite on Joint Base Lewis McChord property. As such, physical access is prohibited. As described previously in our report, we utilized LiDAR data, onsite GPS and field observations to accurately define the closest extent of the drainage's ordinary high water. The reviewer appears to have overlooked or ignored the information provided in our report regarding this matter. For further clarification, a copy of our LiDAR analysis is included in Attachment A. Further, our estimated OHW very closely matches publicly available GIS data and existing property lines which were clearly stablished using a 100-foot setback when platted. In other words, our work is accurate and valid. Speculatively searching agency files for old data that may or may not exist is unnecessarily time consumptive and likely pointless.

b. How is stormwater from the large parking area to be collected, treated, and released into the environment? The proximity to the stream and known porous nature of the soils indicates a likelihood of possible water quality impacts to the stream from stormwater discharge. This issue warrants a specific assessment and discussion.

Stormwater design and compliance is included in the engineering design and consists of infiltration basins with at least 5 feet of separation from seasonal groundwater table as required in the City of Dupont adopted 2012 (revised 2014) Stormwater Design Manual and as recommended in the geotechnical report provided in the application package. Water quality impacts from stormwater infiltration are expected to conform with City of Dupont and Washington State Department of Ecology requirements. For further information please see the Storm Drainage Plan prepared by Barghausen Consulting Engineers for this project.

5. Technical qualifications of the team performing the investigation and reporting is overly brief and lacks necessary detail for a thorough assessment of training, qualifications, certifications, and experience. Full resumes are appropriate and should be furnished.

The qualifications section of the report adequately summarizes the teams experience and ability to meet the standards required under Dupont Municipal Code. Education, training, and experience of our staff are clearly presented. SVC has submitted these exact qualifications summaries for thousands of documents submitted across numerous local jurisdictions and state and federal agencies without requirement of full resumes. In fact, this is the first time we have experienced such a request.

In consideration of these responses, we ask that the City of Dupont incorporate these responses into the SEPA record along with our revised report which includes the reviewer's request that the words "approved and compacted" be added in the context of prior grading and a revised map. It is our sincere hope that the City of Dupont is able to progress to a SEPA determination with this additional information.

Sincerely,

Ben Wright
Environmental Planner/Fisheries Biologist
Office 253.514.8952
ben@soundviewconsultants.com

References

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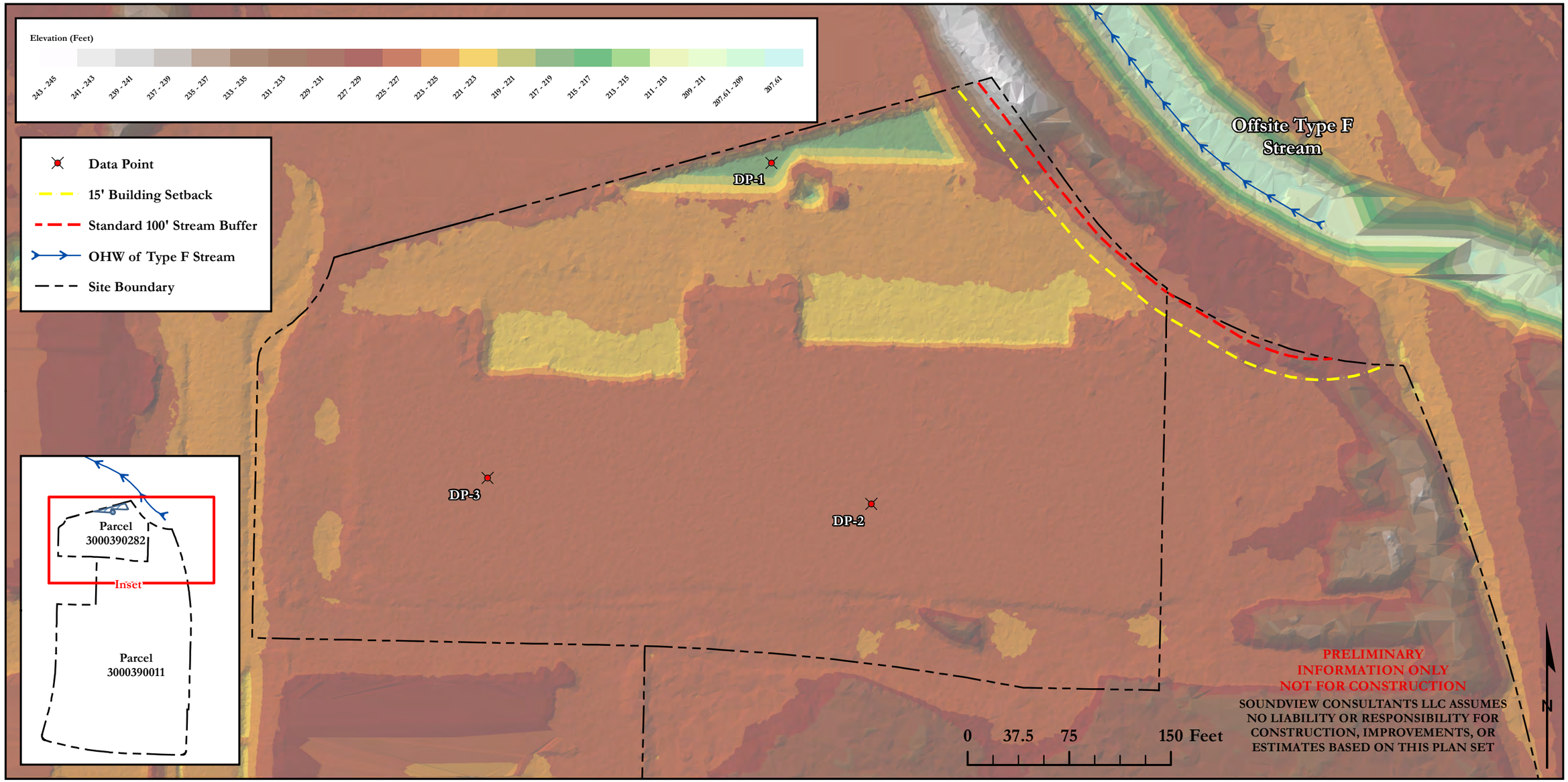
Attachment A – Lidar Based OHWM Assessment Map

INTERNATIONAL PLACE - LIDAR EXHIBIT



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Phone: (253) 514-8952 Fax: (253) 514-8954
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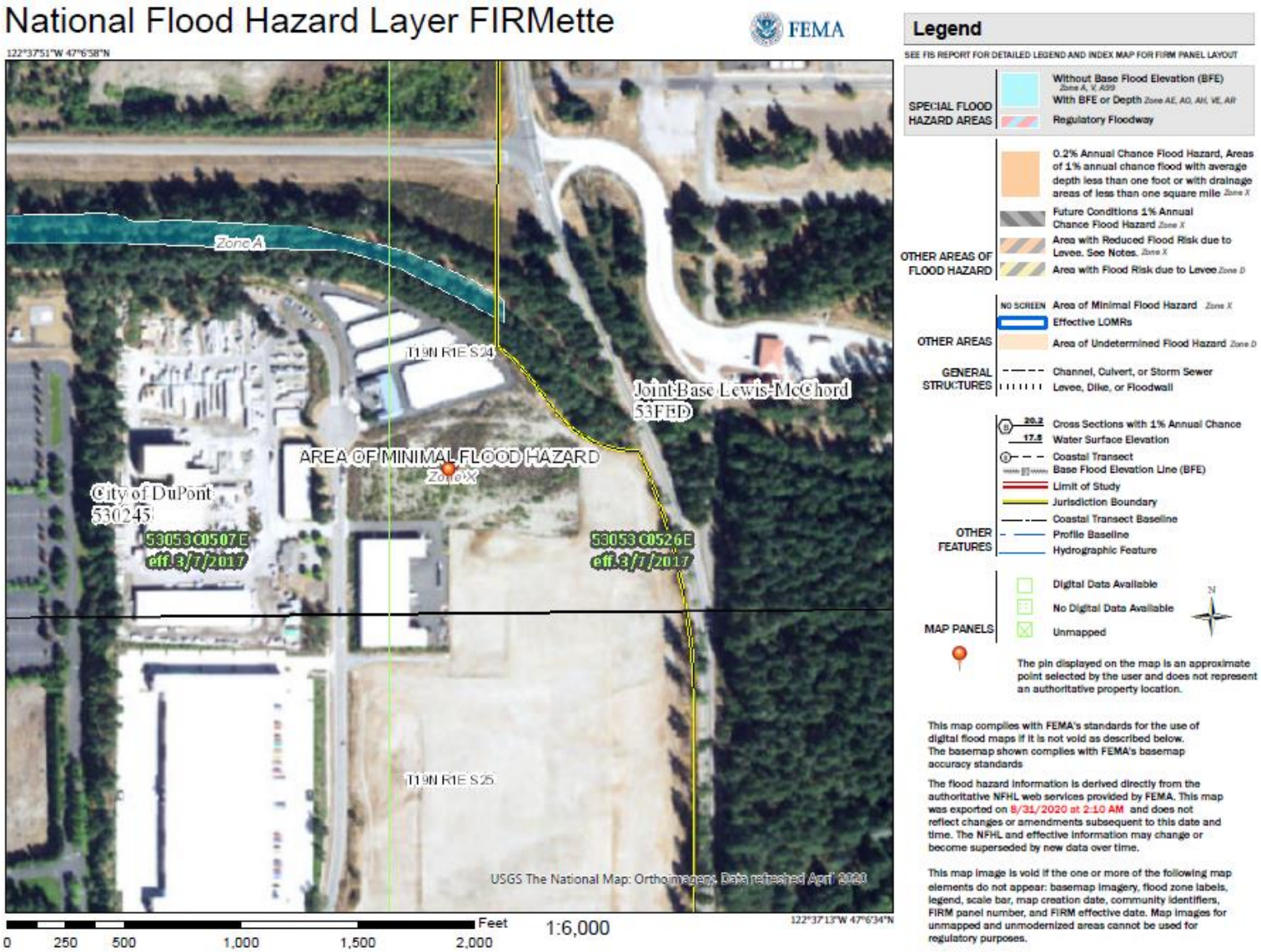
INTERNATIONAL PLACE

ADJACENT TO:
3250 & 3230 INTERNATIONAL PL N
DUPONT, WA 98327

PIERCE COUNTY PARCEL NUMBERS:
3000390282, 3000390011

DATE:	9/2/2020
JOB:	1144.0025
BY:	DLS
SCALE:	1 " = 75 '
FIGURE NO.	1

Attachment B – FEMA FIRMette Map



Attachment C – Revised Proposed Project Exhibit

INTERNATIONAL PLACE - EXISTING CONDITIONS

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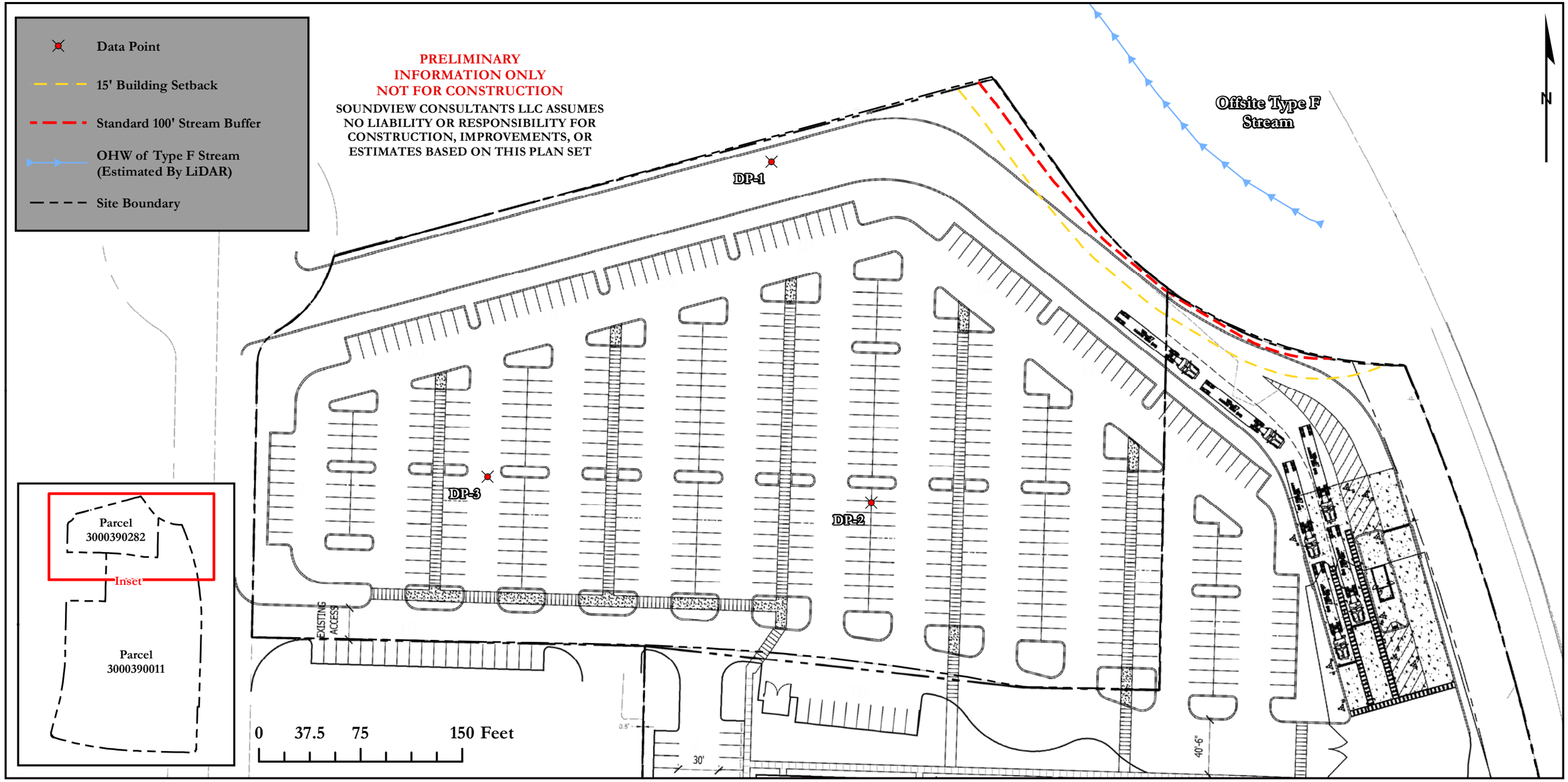
PIERCE COUNTY PARCEL NUMBERS:
3000390282, 3000390011

DATE:	9/2/2020
JOB:	1144.0025
BY:	DLS
SCALE:	1 " = 75 '
FIGURE NO.	1

INTERNATIONAL PLACE - PRELIMINARY PROPOSED SITE PLAN



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3000390282, 3000390011

DATE:	9/2/2020
JOB:	1144.0025
BY:	DLS
SCALE:	1 " = 75 '
FIGURE NO.	2

City of DuPont
SEPA Checklist

303 Barksdale Avenue
DuPont, WA 98327

phone 253-912-5393
fax 253-964-1455

City File Number: _____

STATE ENVIRONMENTAL POLICY ACT
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21 C, RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions to Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on difference parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Attachment 1.aa. SEPA Checklist prepared by Barghausen Consulting Engineers dated September 2, 2020

A BACKGROUND

1. Name of proposed project, if applicable:

Northwest Logistics Center 2

2. Name of applicant:

Brian Mattson

3. Address and phone number of applicant and contact person:

Applicant:
Brian Mattson
Panattoni Development Company
1821 Dock Street, Suite 100
Tacoma, WA 98402
(206) 838-6182

Contact:
Daniel K. Balmelli
Barghausen Consulting Engineers
18215-72nd Avenue South
Kent, WA 98032
(425) 251-6222

4. Date checklist prepared:

March 20, 2013
Revised September 13, 2013
Revised February 28, 2018
Revised June 12, 2018
Revised August 20, 2018
Revised November 16, 2018
Revised July 2, 2020
Revised August 4, 2020
Revised August 25, 2020
Revised September 2, 2020

5. Agency requesting checklist:

City of DuPont

6. Proposed timing or schedule (including phasing, if applicable):

Construction to start as soon as applicable permits are issued. **Construction for parking lot addition, guard house and tenant improvements would be anticipated to start summer of 2020.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no future additions or expansions associated with this proposal **beyond the parking lot expansion *and tenant improvements to the building including mezzanine areas* that are proposed in this application.**

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Environmental Checklist prepared by Barghausen Consulting Engineers, Inc., dated March 20, 2013, revised September 13, 2013, Revised February 28, 2018

Phase I Environmental Site Assessment prepared by Farallon Consulting, Dated July 26, 2012
Soils Sampling Results Letter prepared by Farallon Consulting, dated July 3, 2012
Geotechnical Engineering Report prepared by GeoResources, June 20, 2012
Stormwater Site Plan prepared by Barghausen Consulting Engineers, Inc., March 5, 2013
Environmental Mitigation Plan prepared by Barghausen Consulting Engineers, Inc., January 4, 2013
Geotech Report by Terra Associated dated April 2016
Tree Retention History Memo by EDA dated February 2018
Cultural Resource Report by Aqua Terra dated October 2015
Archaeological Excavation Permit dated November 2015
NFA Letter by Department of Ecology dated June 2016
Updated Trip Generation and Assignment by Heath & Associates dated November 2018
Updated Stormwater Site Plan by Barghausen Consulting Engineers dated November 2018
Stormwater Site Plan prepared by Barghausen Consulting Engineers dated June 30, 2020
Stormwater Pollution Prevention Plan prepared by Barghausen Consulting Engineers dated June 30, 2020
Cultural Resources Report prepared by Aqua Terra Consultants dated June 3, 2020
Geotechnical Engineering Report prepared by Terra Associates dated May 12, 2020
Subsurface Investigative Report prepared by ATC dated June 30, 2020

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

A grading permit has been issued by the City of DuPont and cleanup of specific areas of contaminated soil on the site has been completed.

10. List any government approvals or permits that will be needed for your proposal, if known.

Environment Determination by City of DuPont
Site Work Construction Permit by City of DuPont
Type II Administrative Approval by City of DuPont
Minor Site Plan Modification by City of DuPont
Boundary Line Adjustment or Lot Line Adjustment by City of DuPont
Building Permit by City of DuPont
Plumbing/Electrical Mechanical Permits by City of DuPont
Fire Suppression/Underground Fire Supply and Fire Alarm Permits by City of DuPont
Right-of Way Use Permit by City of DuPont
Pre-Treatment Review by Pierce County Public Works and Utilities
Sanitary Sewer Permits by Pierce County Public Works and Utilities
NFA by Department of Ecology
Environmental Determination for Parking Lot Addition by City of DuPont
Major Site Plan Amendment by City of DuPont
Site Development Permit by City of DuPont
Water Connection Permit for Guard Shack by City of DuPont
Right-of-Way Use Permit by City of DuPont
Sewer Service Permit for Guard Shack by Pierce County Utilities
NPDES Permit by Department of Ecology

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The proposed project will construct a 628,640± square foot warehouse building on an approximately 32 acre site with the associated grading activities, asphalt parking, drive aisles and truck loading and maneuvering areas, landscaping, stormwater infiltration facilities, water and sanitary sewer extensions, franchise utilities improvements and half-street frontage improvements to include sidewalk extension along International Place.

The proposed project will construct additional vehicular parking and a guard shack in association with the Northwest Logistics II project. The site is located on the 5.3-acre Steilacoom Historic School District (SHSD) lot adjacent to the north of the Northwest Logistics II site. A portion of the parking addition consists of removal and relocation of existing parking in the northeast corner of the Northwest Logistics II site. Along with construction of the additional parking, the project will also include clearing and grading, storm drainage facilities, and a guard shack to be located in the southeast corner of the site and will be connected to sewer and water available to the site. Tenant improvements inside the building include *mezzanine areas of 118,150 square feet of flammable and combustible liquid shelving and 51,040 square feet of aerosol shelving are proposed for the building*. Roadway improvements along the frontage of the site along International Place North will be constructed as part of the project.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The site is located on the northeast corner of International Place and Center Drive in DuPont, Pierce County, Washington and includes tax parcel numbers 300039-0010 through 0210 and 300039-0240 through 0270 within the Northwest Landing Industrial Park Division I Plat. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

The parking lot addition is located on the eastern side of the terminus of International Place North and is within a portion of the southwest quarter of Section 24, Township 19 North, Range 1 East in DuPont, Pierce County, Washington.

Tax Parcel Nos: 300039-0011 (Northwest Logistics II) and 300039-0282 (SHSD)

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

The site is generally flat.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on site is approximately 8 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

According to the Soil Survey of Pierce County Area, Washington, the soil type is classified as 41A-Spanaway gravelly sandy loam.

The Geologic Map of the Tacoma 1:100,000-scale Quadrangle, Washington, maps the site soils as Vashon Recessional outwash, Steilacoom gravel (Qgo_{sg}) Per the Geotechnical Engineering Report prepared by Terra Associates, dated May 12, 2020, soils observed in the test pits correlate with the published description of this soil unit.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There is no known history of unstable soils to our knowledge.

e. Describe the purpose, type, total area and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate source of fill.

Approximately 81,100 cubic yards of cut material and 65,200 cubic yards of fill material will be used to prepare the site for construction of the proposed building. Approximately 60,000 cubic yards of cut and 46,000 cubic yards of fill work has been completed on the site. Approximately 18,000 cubic yards of cut and 17,000 cubic yards of fill work will be completed for completion of the project.

Approximately 7,000 cubic yards of cut, 8,000 cubic yards of fill and 2,000 cubic yards of stripping will be used to prepare the site for construction of the proposed parking expansion. The source of fill material is unknown at this time but will be from an approved source.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Depending on weather conditions, erosion could occur as a result of construction activities.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 83% of the site will be impervious surface upon completion of the project. **Approximately 81 percent of the site will be impervious surface upon completion of the proposed new parking area.**

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

A temporary erosion and sedimentation control plan has been designed and constructed to meet City of DuPont standards to control erosion impacts.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities, if known.

Emissions from construction equipment would be present from approximately 7 am to 6 pm, Monday through Friday during the construction phase of the project. Emissions from vehicular traffic to and from the site would be present upon project completion. **A minor additional emissions increase from vehicular traffic would be anticipated upon completion of the proposed new parking addition.**

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Emissions from vehicular traffic traveling the surrounding roadways may be present but would not be anticipated to affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Construction equipment will meet state and federal emission standards. No other specific measures are proposed.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no surface water bodies on or in the immediate vicinity of the site.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No work will be done in or adjacent to any waters.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge material will be placed in or removed from surface water.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

No surface water withdrawals or diversions are proposed.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

The site is not within a 100-year floodplain. **Per current FIRM map panel 53053C0507, dated March 7, 2017, the site is not located in the 100-year floodplain.**

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No waste materials will be discharged to surface waters.

b. Ground:

1) Will ground water be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities, if known.

No groundwater will be withdrawn however, water will be discharged into the ground from storm drainage infiltration facilities.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals;… agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste materials will be discharged into the ground under this proposal. All sanitary sewer effluent will be routed via tightlined pipe to the existing sanitary sewer system.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The source of runoff will be from the building roof top and pavement areas. All runoff will be routed via storm pipes and catch basins into infiltration galleries for water quality treatment and infiltration. **Under the new proposal, stormwater from new impervious surfaces will be collected and conveyed via storm pipe ad catch basins to a retention infiltration facility prior to discharging to the ground.**

2) Could waste materials enter ground or surface waters? If so, generally describe.

No waste material will enter ground or surface waters. All stormwater runoff will be routed for treatment into the infiltration system prior to discharge and all sanitary sewer discharge will be routed to the existing sanitary sewer system.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The proposed development is designed to incorporate the existing drainage system and will not affect the drainage patterns in the vicinity of the site.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, and drainage pattern impacts, if any:

Temporary erosion and sedimentation control measures will be implemented per City of DuPont standards for the construction phase of the project and the storm drainage infiltration system will be designed and constructed per City of DuPont standards to control stormwater runoff from the completed project. **A storm drainage plan for the parking lot addition will be designed according to the 2014 Department of Ecology stormwater manual and City of DuPont standards and implemented to control runoff from the proposed project.**

4. Plants

a. Check or circle types of vegetation found on the site:

_____deciduous tree: Alder, Maple, Oregon White Oaks, Apple, Plum, Pear
_____evergreen tree: Fir, Cedar, Pine
__X__shrubs
__X__grass
_____pasture
_____crop or grain
_____Orchard, vineyards or other permanent crops
_____wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
_____water plants: water lily, eelgrass, milfoil, other
_____other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Most of the vegetation has been removed from the site for development of the proposed project. Also, the project has complied with the City of DuPont Oak Management Mapping Criteria for tree retention. **The majority of the vegetation on the SHSD site will be removed and a portion of the existing landscaping on the Northwest Logistics II site will be removed for reconfiguration of the parking.**

c. List threatened and endangered species known to be on or near the site.

None are known to exist to our knowledge.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping will be designed and implemented to meet City of DuPont standards and trees will be retained where possible to meet with City code.

e. List all noxious weeds and invasive species known to be on or near the site.

None are known to exist on or near the site.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

Examples include:

birds: Hawk, Heron, Eagle, Songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

None are known to exist to our knowledge.

c. Is the site part of a migration route? If so, explain.

Yes, the site is part of the Pacific Flyway for Migratory Birds.

d. Proposed measures to preserve or enhance wildlife, if any:

On-site landscaping and tree retention will help to preserve wildlife in the area.

e. List any invasive animal species known to be on or near the site.

None are known to be on or near the site to our knowledge.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity will be used for lighting and natural gas will be used for heating.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe:

It is not anticipated that the project would affect potential use of solar energy by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

The building will comply with all current energy code requirements. **The proposed guard shack will use electricity for lighting and natural gas for heating.**

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No environmental hazards are expected to occur as a result of this project.

1) Describe any know or possible contamination at the site from present of past users.

None are known to be present at the site to our knowledge.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None are known to exist to our knowledge.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

During the construction phase of the project, chemicals associated with construction equipment will be at the site. Upon project completion, no hazardous chemicals are anticipated to be at the site.

4) Describe special emergency services that might be required.

Other than fire, medical and police services already available in the area, no other specific services are anticipated.

5) Proposed measures to reduce or control environmental health hazards, if any:

No specific measures are proposed.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noise from vehicular traffic along Center Drive and International Place exist but would not be anticipated to affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

On a short-term basis, noise from construction equipment will be present from approximately 7 am to 6 pm, Monday – Friday. On a long-term basis, noise from vehicular traffic to and from the site will be present from approximately 6 am to 6 pm, Monday – Friday.

3) Proposed measures to reduce or control noise impacts, if any:

Construction equipment will be maintained and will comply with state standards. No other specific measures are proposed.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is undeveloped but has been previously cleared and graded. Property to the north contains a warehouse facility and areas of undeveloped land which will be used for the future Steilacoom Historical School District Bus Barn. Directly to the northwest is a warehouse building for metal fabrication. Steilacoom-DuPont Road and JBLM are located to the east and Northwest Logistics Center Phase I is completed to the west and is currently being used as a storage warehouse. The property to the south contains office and warehouse use developments. **The SHSD site is vacant land that was previously cleared and graded and the Northwest Landing site is occupied with a warehouse facility. Adjacent properties to the north and west are industrial/warehouse use. Center Drive is located to the south and Steilacoom-DuPont Road S.W. is located to the east.**

b. Has the site been used as working farmlands or forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Historically, the site may have been used for agriculture but specific details are not known.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

There are no working farm or forest lands near the site to our knowledge.

c. Describe any structures on the site.

There are no structures on site.

d. Will any structures be demolished? If so, what?

No structures will be demolished.

e. What is the current zoning classification of the site?

The current zoning classification is Industrial (IND). **The current zoning of the site is Community Business.**

f. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation is Industrial. **The current comprehensive plan designation is Manufacturing Research Park and Industry Planning area.**

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as a critical area by the city of county? If so, specify.

Yes. The Department of Ecology indicates that the site and vicinity have a known or suspected presence of metals in the soil from the Tacoma Asarco Smelter plume, including lead and arsenic. A Soils Sampling Report has been prepared by Farallon Consulting to locate areas of contaminated soil and a grading permit to remove the soil in these areas has been approved by the City of DuPont. Clearing and grading work has been completed and NFA letters from the Department of Ecology have been issued.

i. Approximately how many people would reside or work in the completed project?

The maximum number of employees per shift would be a total of approximately 300 to 400 persons could work at the completed project depending on the tenants. **Four hundred and eighty-six (486) total employees is the maximum employee count per shift.**

j. Approximately how many people would the completed project displace?

No persons will be displaced.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No specific measures are proposed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed warehouse use is compatible with the City of DuPont zoning code and the project will be designed to meet City standards.

m. Proposed measures to ensure that proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

There are no nearby working farms or forest lands.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

N/A

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

N/A

c. Proposed measures to reduce or control housing impacts, if any:

N/A

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The tallest height of the building will be approximately 38-foot and the principal building materials will be concrete and glass. **The guard shack proposed with the vehicular parking addition would be not taller than the maximum height allowed within the Community Business zoning designation.**

b. What views in the immediate vicinity would be altered or obstructed?

Some views from adjacent properties are expected to be altered with completion of the project but no views are anticipated to be obstructed.

c. Proposed measures to reduce or control aesthetic impacts, if any:

No specific measures are proposed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Glare from building window glass could occur during daylight hours and light and glare from parking lot lighting could be present during evening hours. **Lighting for the parking lot addition could generate additional light or glare during evening hours.**

b. Could light or glare from the finished project be a safety hazard or interfere with views?

It is not anticipated that light or glare created by the project would be a safety hazard.

c. What existing off-site sources of light or glare may affect your proposal?

Headlights from vehicular traffic on nearby roadways could be present but would not be anticipated to affect the project.

d. Proposed measures to reduce or control light and glare impacts, if any:

The building will use non-glare window glass and the parking lot lighting will be shielded. Perimeter landscaping will also help to control light or glare impacts. **The additional parking lot lighting will be shielded and directed appropriately.** No other specific measures are proposed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

No recreational areas are in the immediate vicinity of the site.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No recreational uses will be displaced.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No specific measures are proposed.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

None are known to exist on the site to our knowledge.

b. Are there any landmarks, features or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None are known to exist on the site to our knowledge. **A Cultural Resource Report has been completed for the parking lot addition site and a copy is included with this package.**

c. Describe the methods used to access the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archaeology and historic preservations, archaeological surveys, historic maps, GIS data, etc.

A Cultural Resource Report was prepared by Aqua Terra, dated October 2015 for the site and a copy is included with this package.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

No specific measures are proposed however, the Memorandum of Agreement will be implemented and if cultural artifacts are found during construction, the proper agencies will be notified.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

International Place is to the west of the site and Center Drive is to the south. Two driveways are proposed on International Place for access. Access will also be obtained from the existing cul-de-sak to the north that is part of the Northwest Landing Industrial Park Division I Plat. **One new driveway onto International Drive North will be constructed for access to the proposed parking area.**

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Transit service is not available to the site. The closest transit route is Route 592 with a stop at the park and ride located at Wilmington Drive and Palisades Drive.

c. How many parking spaces would the completed project or non-project have? How many would the project eliminate?

The completed project will provide 414 car parking stalls and 124 trailer parking stalls. No parking stalls will be eliminated. **With the proposed parking lot addition a total of 912 vehicular parking stalls and 77 trailer storage stalls will be provided across both lots. Some existing parking will be reconfigured but no parking will be eliminated.**

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Yes, half-street improvements along International Place will be required as well as completion of the cul-de-sac access on the north end and construction of a new traffic signal at Center Drive and International Place. **Roadway improvements to the frontage of the SHSD lot will be construction as part of the proposal.**

e. Will the project or proposed use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

It is anticipated that, based on high-cube warehousing use, the proposed project could generate approximately 880 average daily trips upon completion. ***Upon tenant occupancy the site can be estimated to generate approximately 2,167 average daily trips. Peak volumes would likely occur between 6:30-7:30 AM with 363 trips and 5:30-6:30 PM with 604 trips. The majority of trips would be employee vehicles and delivery vans with approximately 10-15 percent of the total volumes in the form of multi-axle trucks. Data were obtained from an independent study on similar fulfillment centers.*** (Please refer to the updated Traffic Impact Analysis by Heath and Associates.)

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

It is no anticipated that the proposal would affect the movement of agricultural or forest products on area roadways.

h. Proposed measures to reduce or control transportation impacts, if any:

Construction of roadway improvements and payment of traffic mitigation fees, if required will reduce transportation impacts.

15. Public Services

a. Would the project result in an increase need for public services (for example, fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

Yes, the project will result in an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Roadway improvements, construction of water line with the addition of fire hydrants and payment of traffic and fire mitigation fees will reduce impacts to public services. . **Payment of additional traffic mitigation and construction of roadway improvements, new fire line and fire hydrant will reduce current impacts from the parking addition.**

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity:	Puget Sound Energy
Natural Gas:	Puget Sound Energy
Water:	City of DuPont
Sanitary Sewer:	Pierce County Public Works and Utilities
Refuse:	LeMay
Telephone:	CenturyLink
Cable:	Comcast

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Daniel K. Balmelli

Print your name: Daniel K. Balmelli

Date Submitted: September 17, 2013 / Revised February 28, 2018 / Revised June 12, 2018 / Revised August 20, 2018/ Revised November 16, 2018, **Revised July 2, 2020,** ***Revised August 4, 2020, Revised August 25, 2020, Revised September 2, 2020***
(Issued 4/6/01)

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Evaluation for Agency Use Only. Do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent of the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

   Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

   Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources? Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection: such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

   Proposed measures to protect such resources or to avoid or reduce impacts are:

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

   Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

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Technical Memorandum

To:	**Bjorn Brynestad, Panattoni Development Company, Inc.**	**File Number: 1144.0025**
From:	**Ben Wright, Soundview Consultants LLC**	**Date: July 27, 2020** **Revised September 2, 2020**
Re:	**Non-Wetland and Fish and Wildlife Habitat Assessment – International Place North adjacent to 3250 International Place North, Dupont, Washington 98327**	

Dear Mr. Brynestad,

Soundview Consultants LLC (SVC) conducted a wetland and fish and wildlife habitat assessment of an approximately 5.34-acre site located north-adjacent to 3250 International Place North in the City of Dupont, Washington (Figure 1). The site consists of one parcel located in the Southwest ¼ of Section 24, Township 19 North, Range 01 East, W.M. (Pierce County Tax Parcel Number 3000390282). This assessment was conducted to support proposed commercial development of the subject property. SVC investigated the site to evaluate if any potentially-regulated wetlands, streams, or other fish and wildlife habitat are located on or adjacent to the subject property. This Technical Memorandum has been prepared to document the results of this assessment.

Figure 1. Subject Property Location.

Attachment 1.bb. Non-Wetland and Fish and Wildlife Habitat Assessment prepared by Soundview Consultants Revised September 2, 2020

Background Data

Prior to the site investigation, staff conducted background research using Pierce County Geographic Information System (GIS) data, Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species (PHS) and SalmonScape mapping tools, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), Washington Department of Natural Resources (DNR) water typing system, and Natural Resource Conservation Service (NRCS) soil survey (Attachment B). All determinations were made using observable vegetation, hydrology, and soils in conjunction with data from the U.S. Geological Survey (USGS) topographic maps, USFWS, local precipitation data, and various orthophotographic resources.

The Pierce County Stream and Wetland Inventory map (Attachment B1) and the USFWS NWI map (Attachment B2) identify a potential stream and associated wetlands approximately 100 feet north and east of the subject property. The DNR Stream Typing map (Attachment B3) identifies this potential stream as a Type F (fish-bearing) water, and the WDFW SalmonScape map (Attachment B4) and PHS map (Attachment B5) identify the documented presence of resident coastal cutthroat trout (*Oncorhynchus clarkia*) and the presumed presence of Coho salmon (*Oncorhynchus kisutch*) within this stream. The WDFW PHS map also identifies the presence of potential breeding areas for big brown bat (*Eptesicus fuscus*), little brown bat (*Myotis lucifugus*), and Yuma myotis (*Myotis yumanensis*) within the township but not necessarily on the subject property. In addition, the DNR Rare Plant and Wetland Inventory (Attachment B6) identifies the potential occurrence of Thompson's chaenactis (*Chaenactis thompsonii*), a state-listed sensitive plant species, approximately 295 feet offsite to the north of the subject property.

The NRCS soil survey map (Attachment B7) identifies one soil series on the subject property: Spanaway gravelly sandy loam (41A), which is considered a non-hydric soil. No other wetlands, streams, or priority habitats or species are documented within 300 feet of the subject property.

Precipitation

Precipitation data was obtained from the National Oceanic and Atmospheric Administration (NOAA) weather station at the Olympia Regional Airport Station in order to acquire percent of normal precipitation during and preceding the June 11, 2020 site investigation. A summary of data collected is provided in Table 1 below.

Table 1. Precipitation Summary[1].

Site Visit Date	Day Of	Day Before	1 Week Prior	2 Weeks Prior	30 Days Prior (Observed/Normal)	Year to Date (Observed/Normal)[2]	Percent of Normal[3]
6/11/2020	0.14	0.05	1.24	1.47	3.10/2.22	27.81/25.05	140/111

1. Precipitation levels provided in inches. Data obtained from NOAA (http://w2.weather.gov/climate/xmacis.php?wfo=sew) for Olympia Airport.
2. Year-to-date precipitation is for the calendar year from January 1 to the onsite date.
3. Percent of normal is shown for the last 30 days and calendar year to date.

Precipitation levels during the June 2020 site investigation were slightly above the statistical normal for the prior 30 days (140 percent of normal) and within normal range for the 2020 calendar year (111 percent of normal). This data suggests that hydrologic conditions encountered during the site investigation were relatively normal. However, 1.24 inches of precipitation (221 percent of normal) was recorded in the week leading up to the site investigation, which may have caused temporarily

wetter than normal hydrologic conditions. Such conditions were considered in making professional wetland determinations.

Methods

A site investigation was performed during June of 2020 by qualified SVC staff. The investigation consisted of walk-through survey of the subject property and accessible areas within 300 feet of the subject property for potentially-regulated wetlands, waterbodies, fish and wildlife habitat, and/or priority habitat species as specified in Dupont Municipal Code (DMC) Chapter 25.105 – Critical Areas.

Wetlands, streams, and select fish and wildlife habitats and species are regulated features per DMC Chapter 25.105.050 and subject to restricted uses/activities under the same title. Wetland absence was determined in accordance with DMC 25.105.050(1)(i) and as outlined in the U.S. Army Corps of Engineers' (USACE) *Wetlands Delineation Manual* (Environmental Laboratory, 1987) and modified according to the guidelines established in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Version 2.0* (USACE, 2010) and *Field Indicators of Hydric Soils in the United States* (NRCS, 2018). Test pits were excavated at the most likely locations (i.e. topographic depressions and hydrophytic plant communities) throughout the subject property to confirm wetland absence. To mark the points where data was collected (DP-1 through DP-3), pink surveyor's flagging was alpha-numerically labeled and tied to 3-foot lath or vegetation at the sample location (Attachment A). The ordinary high water mark (OHW) of the offsite stream was estimated using publicly available LiDAR maps and offsite field observations made from the right-of-way.

The fish and wildlife habitat assessment was conducted during the same site visit by a qualified fish and wildlife biologist. The experienced biologist made visual observations using stationary and walking survey methods for both aquatic and upland habitats noting any special habitat features or signs of fish and wildlife activity.

Results

The 5.34-acre property is located in an urban industrial setting and consists of a mostly vacant gravel lot with sparse vegetation due to prior approved clearing, grading and compaction activities. The site is bounded by industrial development to the northwest; International Place road to the west with industrial development beyond; industrial development to the south and east; and a vacant lot and undeveloped forested area to the northeast with Dupont-Steilacoom Road beyond. Vegetation on the subject property consists of Douglas fir (*Pseudotsuga menziesii*) saplings, black cottonwood (*Populus balsamifera*) saplings, non-native invasive Scotch broom (*Cytisus scoparius*), non-native invasive butterfly bush (*Buddleja davidii*), common St. Johnswort (*Hypericum perforatum*), foxglove (*Digitalis purpurea*), and common sheep sorrel (*Rumex acetosella*). Topography on the site slopes down gently approximately 10 feet from north to south with elevations ranging from approximately 220 to 230 feet above mean sea level (Attachment B8).

No potentially-regulated wetlands and/or fish and wildlife habitat were identified on the subject property; however, one stream was identified approximately 95 feet offsite to the northeast. Three formal data plots, DP-1 through DP-3 (shown in Attachment A), and additional test pits confirm wetland absence on the subject property. Photographs at the data plot locations and general site conditions are included in Attachment C and copies of the completed data forms are provided in Attachment D.

Lack of Onsite Wetlands

Three formal data plots (DP-1 through DP-3) were collected at representative locations throughout the subject property which confirm non-wetland conditions onsite due to the lack of all three wetland criteria (predominance of hydrophytic vegetation, hydric soils, and wetland hydrology) according to current wetland delineation methodology. None of the data plots met hydrophytic vegetation or wetland hydrology criteria. Lack of hydrophytic vegetation and wetland hydrology at a time when precipitation levels were relatively normal (with temporarily wetter hydrologic conditions due to the 1.24 inches of precipitation observed the week leading up to the site visit) indicate that the area does not hold water long enough during the growing season to support wetland conditions. Data plots DP-1 and DP-2 did meet technical hydric soil criteria through indicator S5 (Sandy Redox). However, the entire subject property was observed to be highly disturbed, and review of historical aerial photographs confirm that the property was likely cleared and graded in 2007. This prior clearing and grading activity resulted in the placement of fill material which can typically contain unnatural redoximorphic concentrations or depleted matrices. As not all three required wetland criteria were observed, no wetlands were identified on the subject property.

Offsite Type F Stream

One stream was identified approximately 95 feet offsite to the northeast of the subject property. This stream contained a well-defined channel and sorting of substrate. The stream is a perennial stream with adequate structure and hydrology to support multiple salmonid species. The offsite stream is recognized by DNR as a Type F (fish-bearing) stream, and WDFW documents the presence of cutthroat trout as well as modeled presence of coho salmon in the stream. Per DMC 25.105.050(2)(g)(i), all streams require a standard buffer width of 100 feet. Per DMC 25.105.050(2)(g)(v), an additional 15-foot building setback is required from the edge of all critical area buffers. The associated stream buffer and associated building setback minimally projects onto the northeast portion of the subject property.

Proposed Project

The proposed project consists of a parking lot associated with the large industrial warehouse development to the south (Pierce County Tax Parcel Number 3000390011). The previously mentioned 15-foot building setback line associated with the offsite stream projects minimally onsite as required under DMC 25.105.050(2)(g)(v), a small portion of the proposed impervious surface area will be located within the required 15 foot building setback, which this development per DMC 25.10.020.065 does not meet the definition of a building, *"Building" means any structure used or intended for supporting or sheltering any use or occupancy.* Thus, this development of impervious surface within the building setback is expected to be allowed. All other proposed development will remain entirely outside of the 100-foot stream buffer and associated building setback.

Conclusions

No potentially-regulated wetlands, fish and wildlife habitat, or other regulated critical areas were identified on the subject property during the site investigation; however, one stream was identified approximately 95 feet offsite to the northeast. The 100-foot protective buffer and 15-foot building setback associated with this offsite Type F stream only project slightly onto the subject property. A small portion of the proposed impervious surface area will be located within the 15-foot building setback line associated with the offsite stream as allowed per Dupont Municipal Code. All other

proposed development will remain entirely outside of the 100-foot stream buffer and associated building setback.

If you have any further questions, please contact me at your earliest convenience.

Sincerely,

September 2, 2020

Ben Wright
Environmental Planner / Fisheries Biologist

Date

References

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Attachment A – Existing Conditions and Proposed Plan Exhibits

INTERNATIONAL PLACE - EXISTING CONDITIONS

Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

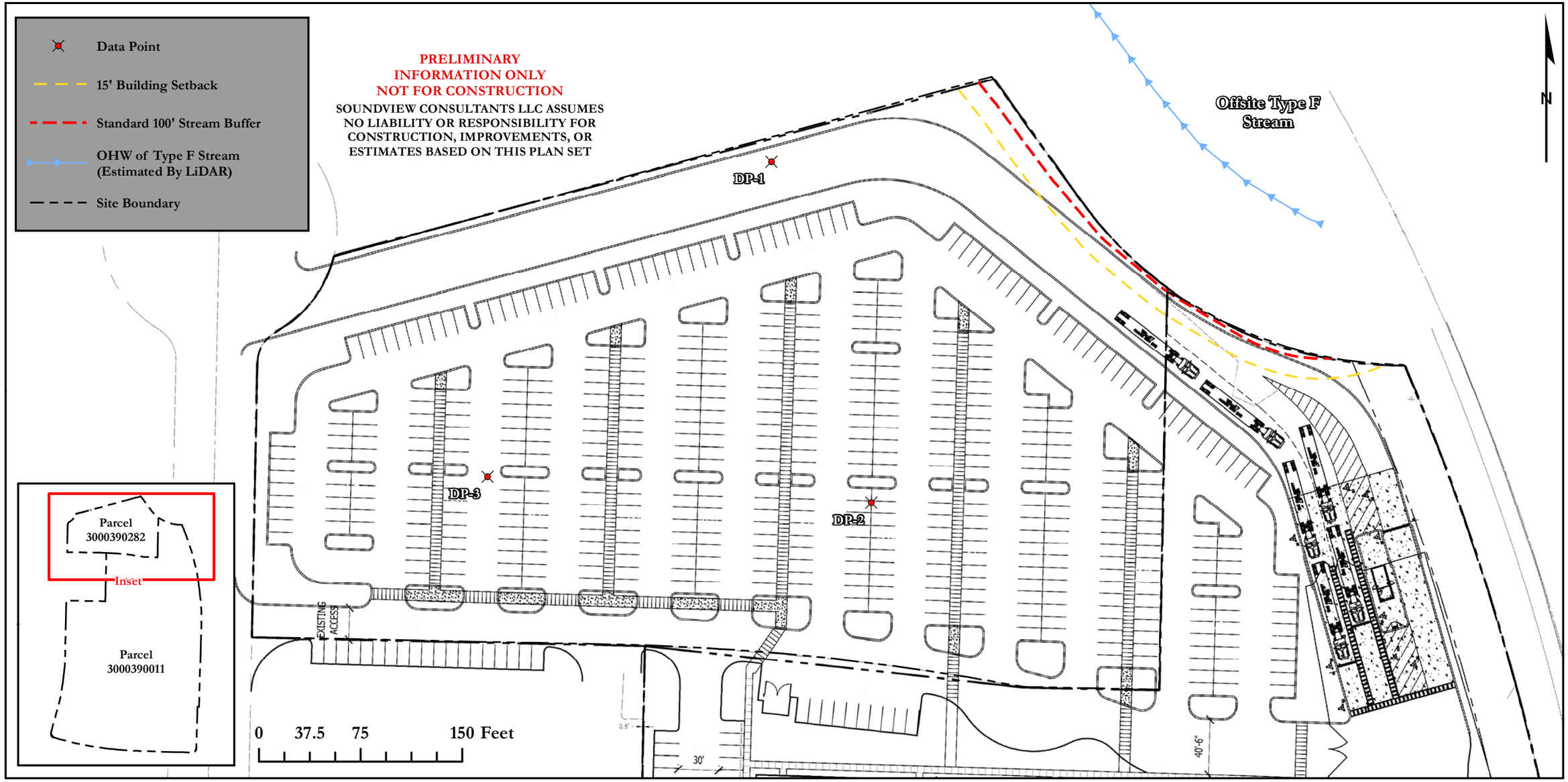
INTERNATIONAL PLACE

ADJACENT TO:
3250 & 3230 INTERNATIONAL PL N
DUPONT, WA 98327

PIERCE COUNTY PARCEL NUMBERS:
3000390282, 3000390011

DATE:	9/2/2020
JOB:	1144.0025
BY:	DLS
SCALE:	1 " = 75 '
FIGURE NO.	1

INTERNATIONAL PLACE - PRELIMINARY PROPOSED SITE PLAN



Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
Phone: (253) 514-8952 Fax: (253) 514-8954
www.soundviewconsultants.com

INTERNATIONAL PLACE

ADJACENT TO:
3250 & 3230 INTERNATIONAL PL N
DUPONT, WA 98327

PIERCE COUNTY PARCEL NUMBERS:
3000390282, 3000390011

DATE:	9/2/2020
JOB:	1144.0025
BY:	DLS
SCALE:	1 " = 75 '
FIGURE NO.	2

Attachment B – Background Information

This attachment includes a Pierce County Stream and Wetland Inventory (B1); USFWS NWI map (B2); DNR Stream Typing map (B3); WDFW SalmonScape map (B4); WDFW PHS map (B5); DNR Rare Plant and Wetland Inventory (B6); NRCS Soil Survey map (B7); and USGS Contours map (B8).

Attachment B1 – Pierce County Stream and Wetland Inventory

5/29/2020, 6:06:04 PM

Pierce Parcels _Query result

Pierce_Wetlands

Pierce - Streams

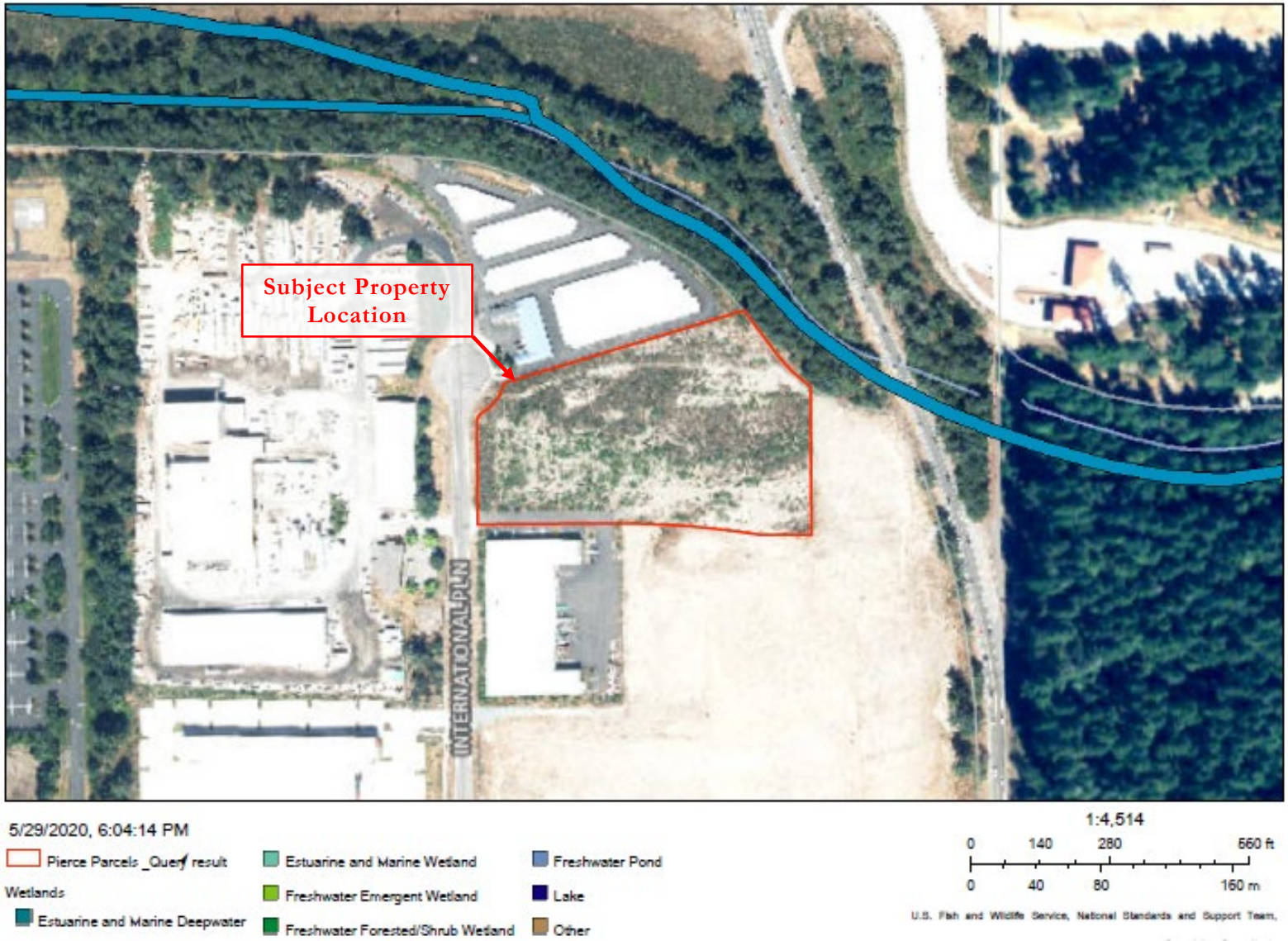
1:4,514

0 140 280 560 ft

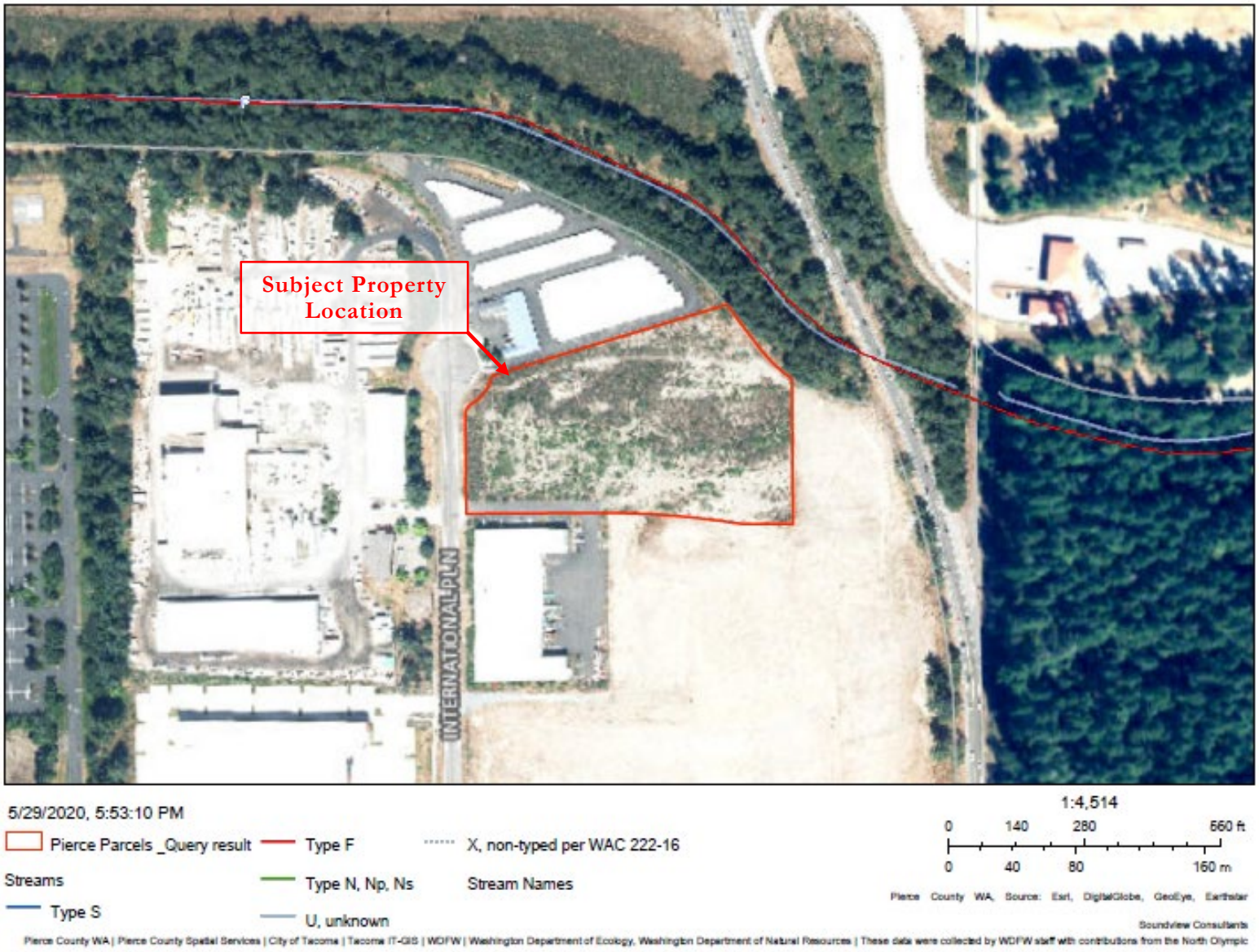
0 40 80 160 m

Pierce County WA, Source: Esri, DigitalGlobe, GeoEye, Earthstar

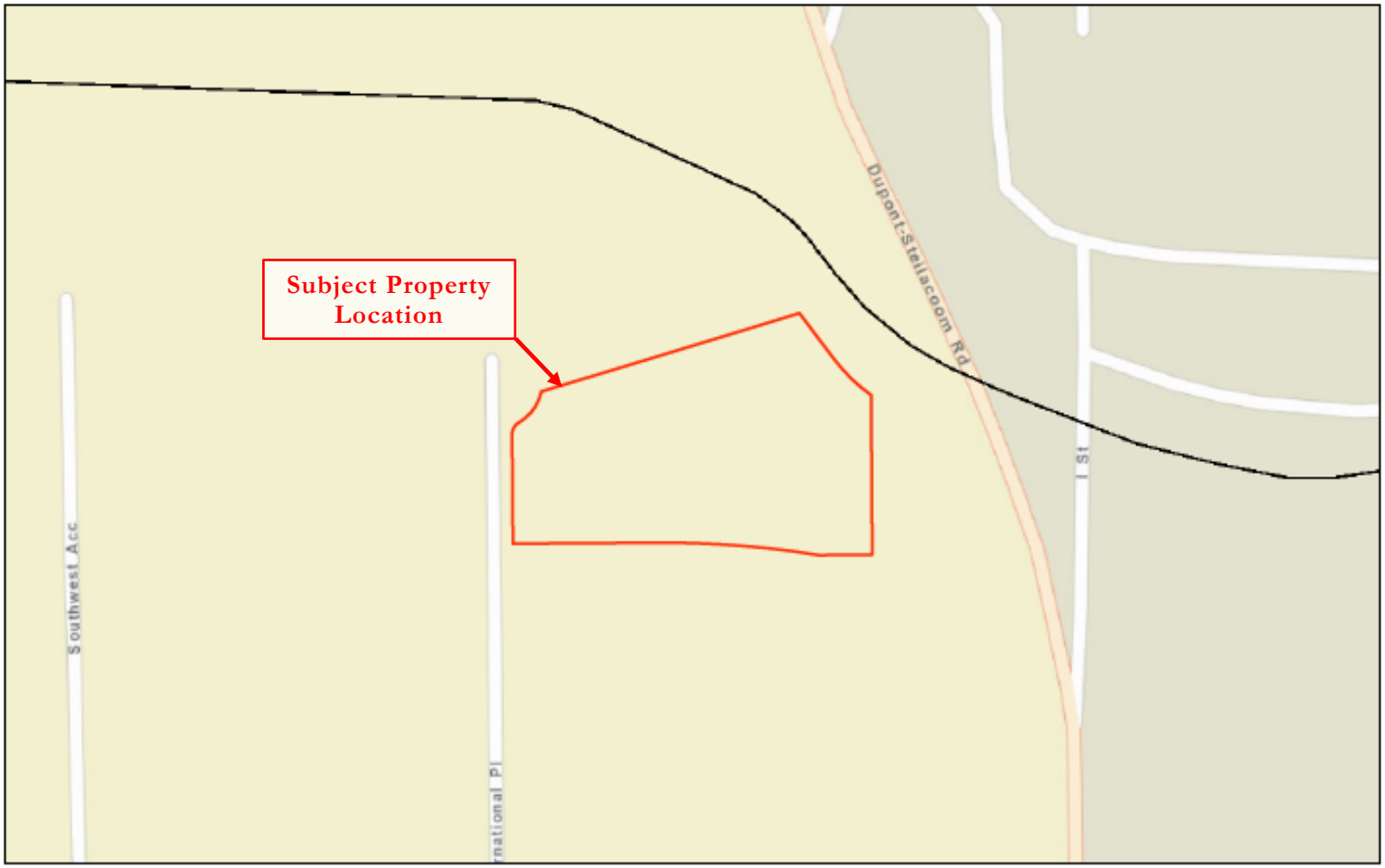
Attachment B2 – USFWS NWI Map



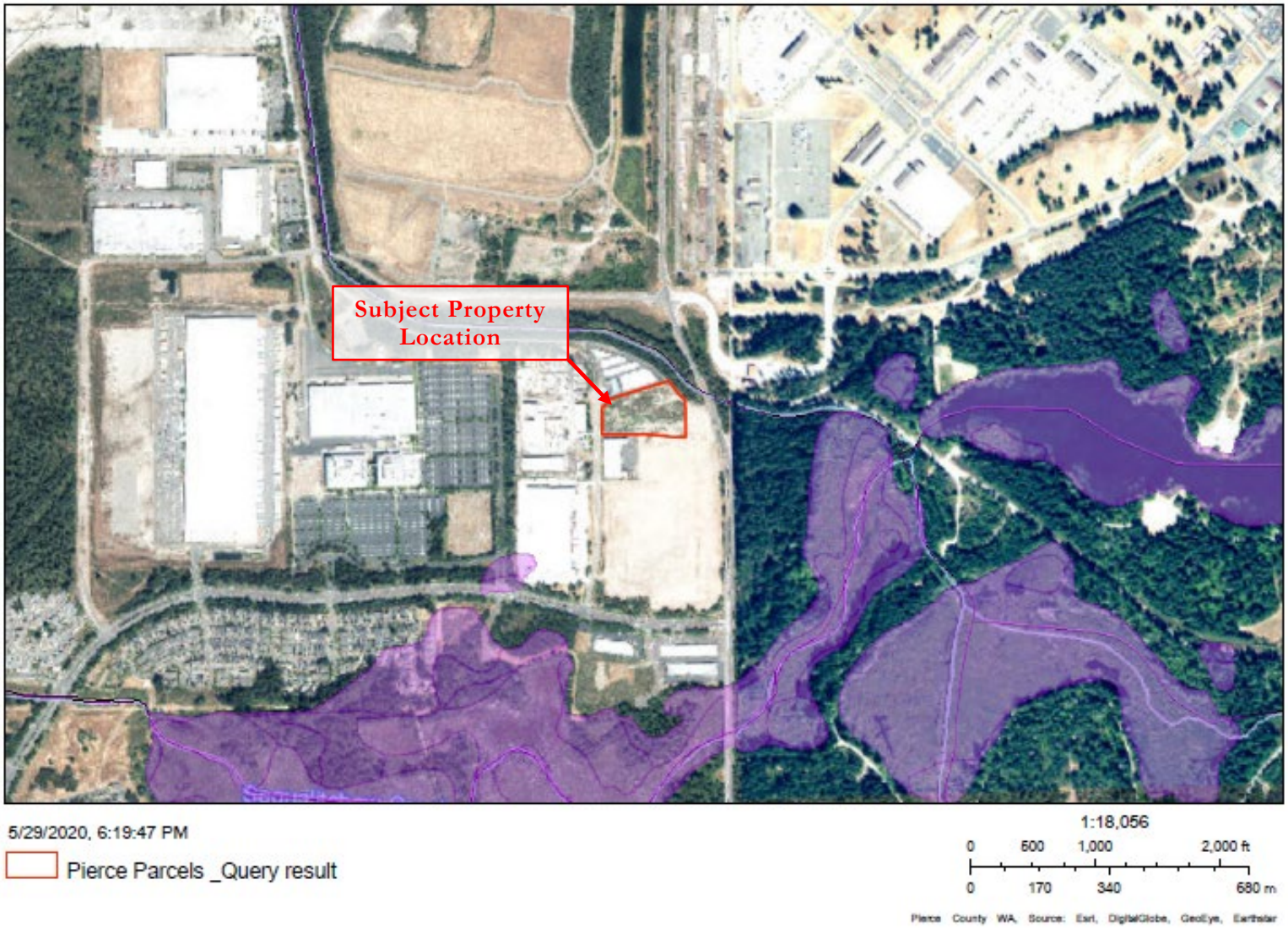
Attachment B3 – DNR Stream Typing Map



Attachment B4 – WDFW SalmonScape Map



Attachment B5 – WDFW PHS Map



Priority Habitats and Species on the Web

Report Date: 07/24/2020

PHS Species/Habitats Overview:

Occurence Name	Federal Status	State Status	Generalized Location
Resident Coastal Cutthroat	N/A	N/A	No
Coho	N/A	N/A	No
Big brown bat	N/A	N/A	Yes
Little Brown Bat	N/A	N/A	Yes
Yuma myotis	N/A	N/A	Yes

PHS Species/Habitats Details:

Resident Coastal Cutthroat	
Scientific Name	*Oncorhynchus clarki*
Priority Area	Occurrence/Migration
Accuracy	NA
Notes	LLID: 1226157471128, Fish Name: Cutthroat Trout, Run Time: Unknown or not Applicable, Life History: Unknown
Source Record	48769
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Coho	
Scientific Name	*Oncorhynchus kisutch*
Priority Area	Occurrence/Migration
Accuracy	NA
Notes	LLID: 1226157471128, Fish Name: Coho Salmon, Run Time: Unknown or not Applicable, Life History: Anadromous
Source Record	48770
Source Dataset	SWIFD
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	N
SGCN	N
Display Resolution	AS MAPPED
More Info	http://wdfw.wa.gov/wlm/diversty/soc/soc.htm
Geometry Type	Lines

Big brown bat	
Scientific Name	*Eptesicus fuscus*
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	N
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

Little Brown Bat	
Scientific Name	*Myotis lucifugus*
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	N
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

Yuma myotis	
Scientific Name	*Myotis yumanensis*
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	Y
SGCN	N
Display Resolution	TOWNSHIP
ManagementRecommendations	http://wdfw.wa.gov/publications/pub.php?id=00605

Attachment B6 – DNR Rare Plant and Wetland Inventory

Rare Plants and Nonvascular Species: NOT LISTED

FEDERAL STATUS	NOT LISTED
STATE STATUS	SENSITIVE
GLOBAL RANK CODE	G3
GLOBAL RANK DESCRIPTION	VULNERABLE
STATE RANK CODE	S3
STATE RANK DESCRIPTION	VULNERABLE
ELEMENT OCCURRENCE RANK CODE	D
ELEMENT OCCURRENCE RANK DESCRIPTION	POOR
LAST OBSERVED DATE	1991-09-30
ELEMENT_OCCURRENCE_ID	5,378

5/29/2020, 5:54:42 PM

Pierce Parcels _Query result

DNR - Rare Plants & Nonvascular Species

Chaenactis thompsonii
Thompson's chaenactis

1:4,514

0 140 280 560 ft

0 40 80 160 m

Pierce County WA, Source: Esri, DigitalGlobe, GeoEye, Earthstar

Attachment B7 – NRCS Soil Survey Map

5/29/2020, 6:08:09 PM

41A: Spanaway gravelly sandy loam

1:4,514

0 140 280 560 ft

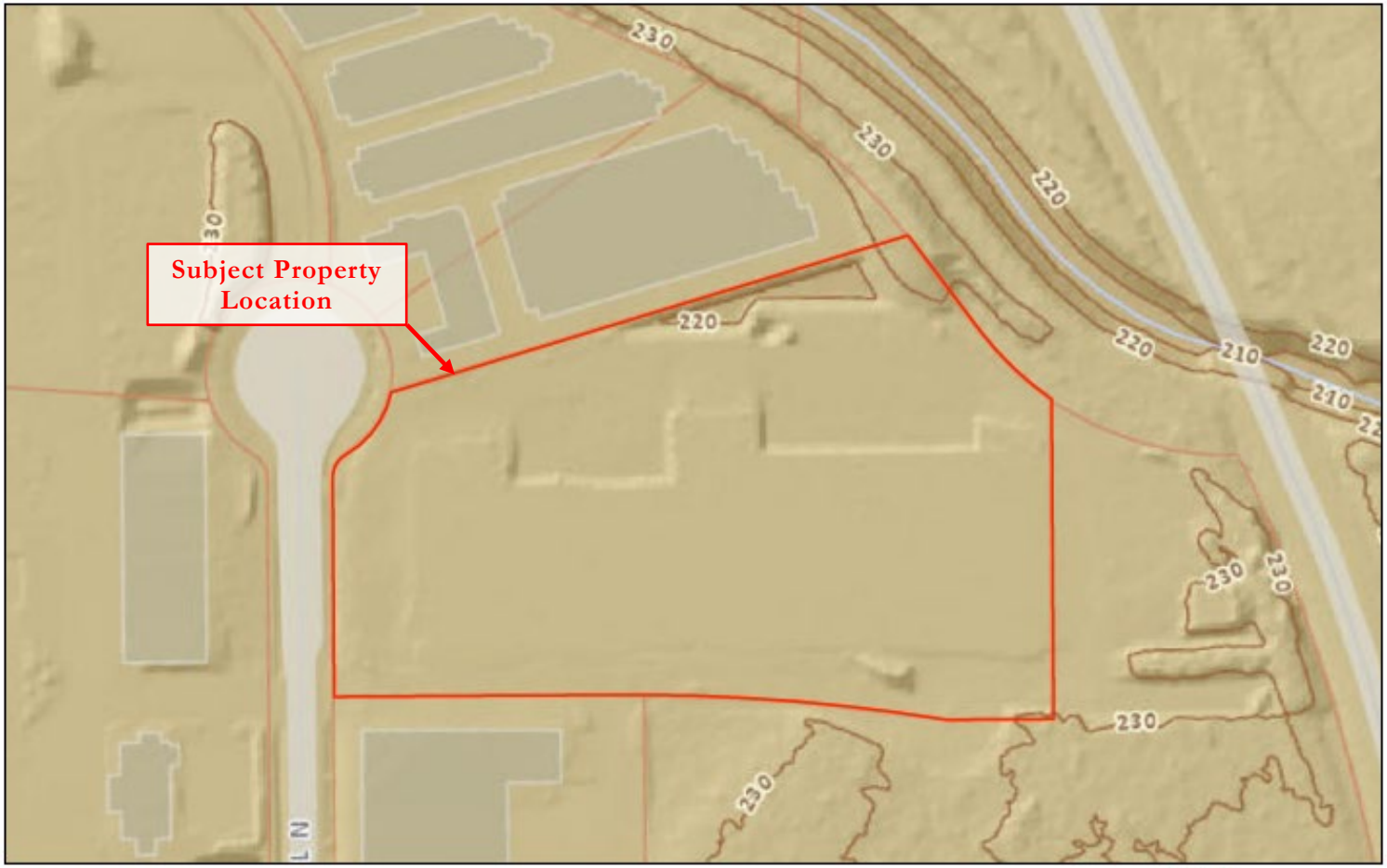
0 40 80 160 m

Pierce County WA, Source: Earl, DigitalGlobe, GeoEye, Earthstar

Pierce Parcels _Query result

USA Soils Map Units

Attachment B8 – USGS Contours Map



5/29/2020, 5:49:58 PM

Pierce Parcels _Query result

1:2,257

0 70 140 280 ft

0 20 40 80 m

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

Attachment C – Site Photographs

Typical Upland Conditions on the Subject Property

Typical Upland Conditions on the Subject Property

Offsite Type F Stream

Offsite Type F Stream

Data Plot DP-1 Soil Profile

Data Plot DP-1 Soil Pit

Data Plot DP-1 Surrounding Area

Data Plot DP-2 Soil Profile

Data Plot DP-2 Soil Pit

Data Plot DP-2 Surrounding Area

Data Plot DP-3 Soil Profile

Data Plot DP-3 Soil Pit

Data Plot DP-3 Surrounding Area

Attachment D – Non-Wetland Data Forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: International Place City/County: Dupont/Pierce Sampling Date: 6/11/2020

Applicant/Owner: Panattoni Development Company, Inc. State: WA Sampling Point: DP-1

Investigator(s): Jacob Layman, Ben Wright Section, Township, Range: 24 / 19N / 1E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): A2 Lat: 47.113444 Long: -122.62519992 Datum: WGS 84

Soil Map Unit Name: Spanaway gravelly sandy loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks:
Not all three wetland criteria met; only hydric soil present due to the prior placement of fill material. Data collected in detention pond on the northern portion of the subject property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	15	Yes	FACU
2. Populus balsamifera	1	No	FAC
3.			
4.			
	16	= Total Cover	

Sapling/Shrub Stratum (Plot size: 30 ft)			
1. Cytisus scoparius	30	Yes	UPL
2. Spiraea douglasii	1	No	FACW
3.			
4.			
5.			
	31	= Total Cover	

Herb Stratum (Plot size: 10 ft)			
1. Hypericum perforatum	15	Yes	FACU
2. Rumex acetosella	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:
No hydrophytic vegetation indicators met.
Prevalence Index test not warranted due to lack of wetland hydrology.

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 4	5Y 4/1	100	-	-	-	-	Sand	Sand
4 - 10	5Y 3/1	90	2.5Y 6/6	10	C	M	Sand	Sand with gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☒ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ---

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Hydric soil criteria met through indicator S5 (Sandy Redox). However, prior clearing and grading activities likely resulted in the placement of fill material which can typically contain unnatural redoximorphic features or depleted matrices.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): None

Water Table Present? Yes ☐ No ☒ Depth (inches): None

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): None

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: International Place City/County: Dupont/Pierce Sampling Date: 6/11/2020

Applicant/Owner: Panattoni Development Company, Inc. State: WA Sampling Point: DP-2

Investigator(s): Jacob Layman, Ben Wright Section, Township, Range: 24 / 19N / 1E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR): A2 Lat: 47.112760 Long: -122.62487635 Datum: WGS 84

Soil Map Unit Name: Spanaway gravelly sandy loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks:
Not all three wetland criteria met; only hydric soil present due to the prior placement of fill material. Data collected on the eastern portion of the subject property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera	40	Yes	FAC
2. Pseudotsuga menziesii	5	No	FACU
3. Arbutus mensiesii	1	No	UPL
4.			
	46	= Total Cover	

Sapling/Shrub Stratum (Plot size: 30 ft)			
1. Buddleja davidii	15	Yes	FACU
2. Cytisus scoparius	5	Yes	UPL
3.			
4.			
5.			
	20	= Total Cover	

Herb Stratum (Plot size: 10 ft)			
1. Arctostaphylos uva-ursi	50	Yes	FACU
2. Hypericum perforatum	5	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	55	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 45

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:
No hydrophytic vegetation indicators met.
Prevalence Index test not warranted due to lack of wetland hydrology.

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 15	10YR 3/1	98	10YR 5/6	2	C	M	Sand	Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☒ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ---

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Hydric soil criteria met through indicator S5 (Sandy Redox). However, prior clearing and grading activities likely resulted in the placement of fill material which can typically contain unnatural redoximorphic features or depleted matrices.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes ☐	No ☒	Depth (inches): None
Water Table Present?	Yes ☐	No ☒	Depth (inches): None
Saturation Present? (includes capillary fringe)	Yes ☐	No ☒	Depth (inches): None

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: International Place City/County: Dupont/Pierce Sampling Date: 6/11/2020

Applicant/Owner: Panattoni Development Company, Inc. State: WA Sampling Point: DP-3

Investigator(s): Jacob Layman, Ben Wright Section, Township, Range: 24 / 19N / 1E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0

Subregion (LRR): A2 Lat: 47.112791 Long: -122.62601533 Datum: WGS 84

Soil Map Unit Name: Spanaway gravelly sandy loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	**Is the Sampled Area within a Wetland?** Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks:
No wetland criteria met. Data collected on the western portion of the subject property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	20	Yes	FACU
2. Populus balsamifera	15	Yes	FAC
3. Arbutus mensiesii	15	Yes	UPL
4.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30 ft)			
1. Buddleja davidii	25	Yes	FACU
2. Cytisus scoparius	10	Yes	UPL
3.			
4.			
5.			
	35	= Total Cover	
Herb Stratum (Plot size: 10 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 100

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:
No hydrophytic vegetation indicators met.
Prevalence Index test not warranted due to lack of wetland hydrology.

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 3/2	100	-	-	-	-	SaLo	Sandy loam with gravel
3 - 11	10YR 3/4	100	-	-	-	-	SaLo	Sandy loam with gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (**except MLRA 1**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ---

Hydric Soil Present? **Yes** ☐ **No** ☒

Remarks:

No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
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- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
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- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): None

Water Table Present? Yes ☐ No ☒ Depth (inches): None

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): None

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators observed.

Attachment E – Qualifications

All field inspections, jurisdictional wetland determinations, habitat assessments, and supporting documentation, including this ***Non-Wetland and Fish and Wildlife Habitat Assessment Technical Memorandum*** prepared for the ***International Place*** project site, were prepared by, or under the direction of, Ben Wright of SVC. The site inspections were performed by Jake Layman and Ben Wright, and report preparation was completed by Kyla Caddey and Kelly Kramer.

Ben Wright

Environmental Planner/Fisheries Biologist
Professional Experience: 18 years

Ben Wright is an Environmental Scientist with a varied background in lake ecology, stream ecology, fisheries biology, water quality and climate science. Ben has 13 years of experience at the federal level providing technical assistance for both the development of infrastructure projects and management of aquatic resources. He has experience developing biological assessments, water quality monitoring plans, and fisheries management plans. Ben has an additional 10 years of experience working on long-term ecological monitoring programs related to lakes, streams, water quality and climate.

Ben earned a Bachelor of Science degree in Genetics and Cell Biology with an emphasis in aquatic ecology from Washington State University and has a graduate certificate in Fisheries Management from Oregon State University. Ben's expertise includes endangered species monitoring, assessments and permitting, and NEPA documentation across disciplines gained during his work on federal highway projects. Ben also has experience in fish population assessments, utilizing genetic analysis, spawning escapement and movement studies. Ben has received formal training from the Washington State Department of Ecology in the Using the Revised 2014 Wetland Rating System for Western Washington, How to Determine the Ordinary High Water Mark, Navigating SEPA, How to Conduct a Forage Fish Survey and Puget Sound Costal Processes, Shoreline Modifications and Beach Restoration.

Jake Layman

Environmental Scientist
Professional Experience: 10+ years

Jake Layman is an Environmental Scientist with a varied background in fisheries, wildlife, and aquatic invertebrate biology and stream and lake ecology. Jakes's expertise includes endangered species monitoring, lake limnology assessments, water chemistry profiles, off-channel habitat characterization, laboratory management, and terrestrial and aquatic amphibian identification with associated habitat assessments. Jake also has experience in fish population assessments, stream typing, spawning escapement, environmental disaster recovery, and amphibian toxicology research. Jake has over 10 years of experience at the federal and state level conducting ecological monitoring surveys throughout eastern and western Washington. He worked with the National Park Service to conduct environmental compliance monitoring on park construction projects, infrastructure maintenance projects, and federal highways projects. This position also included environmental spill response, fish exclusion surveys in support of construction, and effectiveness monitoring on Engineered Log Jam (ELJ) projects. Jake has worked with the Washington State Department of Fish and Wildlife (WDFW) to assess and inventory fish passage barriers and monitor culvert removal projects throughout Western Washington. While working for WDFW, Jake managed the daily operation for the intensive habitat study, on off-channel wetlands, for the Chehalis Aquatic Resources Protection Plan (ASRP).

Jake earned Bachelor's degrees in both Biology, with an Ecology specialization, and Geography, with a Natural Resource Management specialization, from Central Washington University. In addition, Jake also has a Minor in Environmental Studies and a Certificate in Geographic Information Systems (GIS) and Cartography form Central Washington University. Jake has received 40-hour wetland delineation training (Western Mtns, Valleys, & Coast and Arid West Regional Supplement), Jake has received training from the Washington State Department of Ecology in Environmental Negotiations; Navigating SEPA; Conducting Forage Fish Surveys; Puget Sound Coastal Processes, Shoreline Modifications, and Beach Restoration; Using the Marine Shoreline Design Guidelines for Marine Shoreline Stabilization; How to Determine the Ordinary High Water Mark; and Using the Revised Washington State Wetland Rating System (2014) in Western Washington.

Kyla Caddey

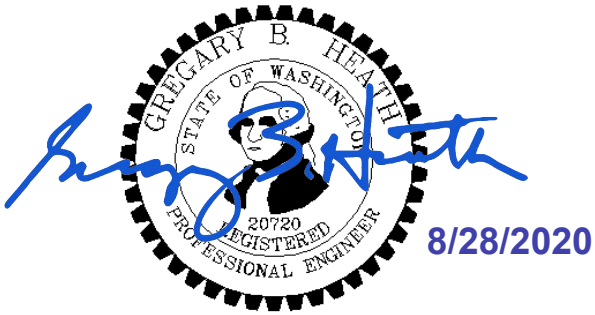
Environmental Scientist & Certified Ecologist
Professional Experience: 6 years

Kyla Caddey is an Environmental Scientist with a diverse background in riparian habitat restoration, stream and wetland ecology, wildlife ecology and conservation, and wildlife and natural resource assessments and monitoring. Kyla has advanced expertise in report preparation, grant writing, environmental education, data compilation and statistical analysis. Kyla has field experience performing in-depth studies in both the Pacific Northwest and Central American ecosystems. She currently performs wetland, stream, and shoreline delineations and fish and wildlife habitat assessments; conducts environmental code analysis; and prepares environmental assessment and mitigation reports, biological evaluations, and permit applications to support clients through the regulatory and planning process for various land use projects.

Kyla earned a Bachelor of Science degree in Environmental Science and Resource Management from the University of Washington, Seattle with a focus in Wildlife Conservation and a minor in Quantitative Science. Ms. Caddey is a Certified Ecologist through the Ecological Society of America. She has received 40-hour wetland delineation training (Western Mtns, Valleys, & Coast and Arid West Regional Supplement), is a Pierce County Qualified Wetland Specialist and Wildlife Biologist, and is a USFWS-approved Mazama pocket gopher survey biologist. Kyla has been formally trained through the Washington State Department of Ecology, Coastal Training Program, and the Washington Native Plant Society in winter twig and grass, sedge, and rush identification for Western WA; Using the Credit-Debit Method in Estimating Wetland Mitigation Needs; How to Determine the Ordinary High Water Mark; Using Field Indicators for Hydric Soils; How to Administer Development Permits in Washington Shorelines; Puget Sound Coastal Processes; and Forage Fish Survey Techniques. Additionally, she has received formal training in preparing WSDOT Biological Assessments.

SNOW BLOSSOM FULFILLMENT CENTER
TRAFFIC IMPACT ANALYSIS

DuPont, WA



Prepared for: Mr. Brian Mattson
Panattoni Development Company, Inc.
1821 Dock Street, Suite 100
Tacoma, WA 98402

Attachment 1.cc. Traffic Impact Analysis prepared by Heath & Associates, Inc. dated August 28, 2020

August 2020

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SNOW BLOSSOM FULFILLMENT CENTER
TRAFFIC IMPACT ANALYSIS

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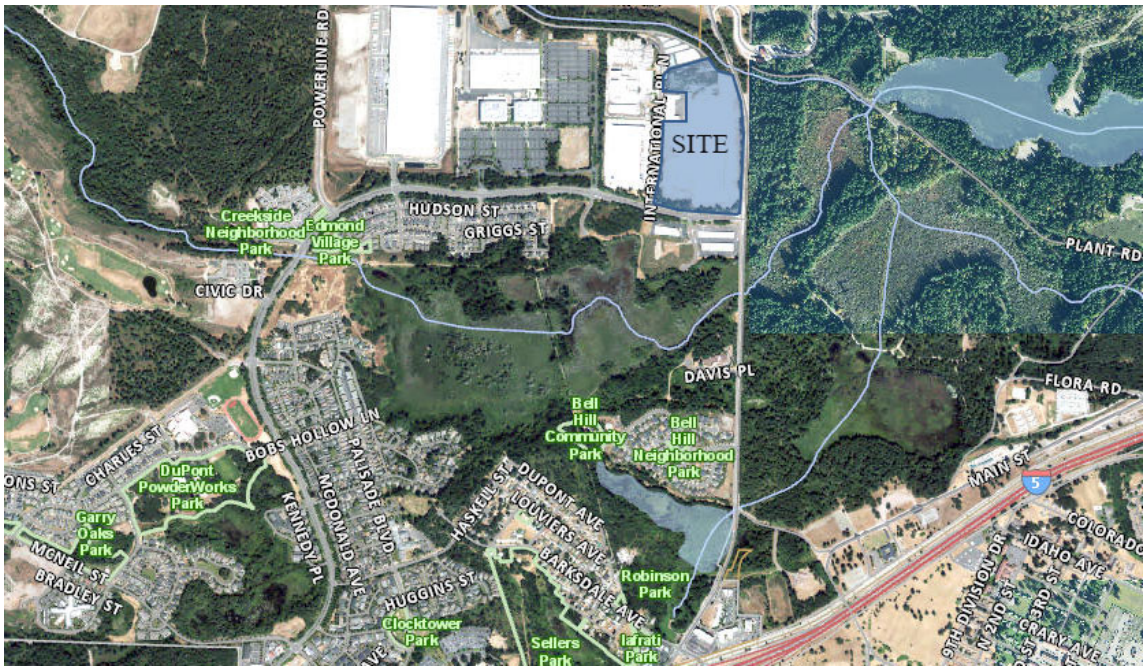
SNOW BLOSSOM FULFILLMENT CENTER
TRAFFIC IMPACT ANALYSIS

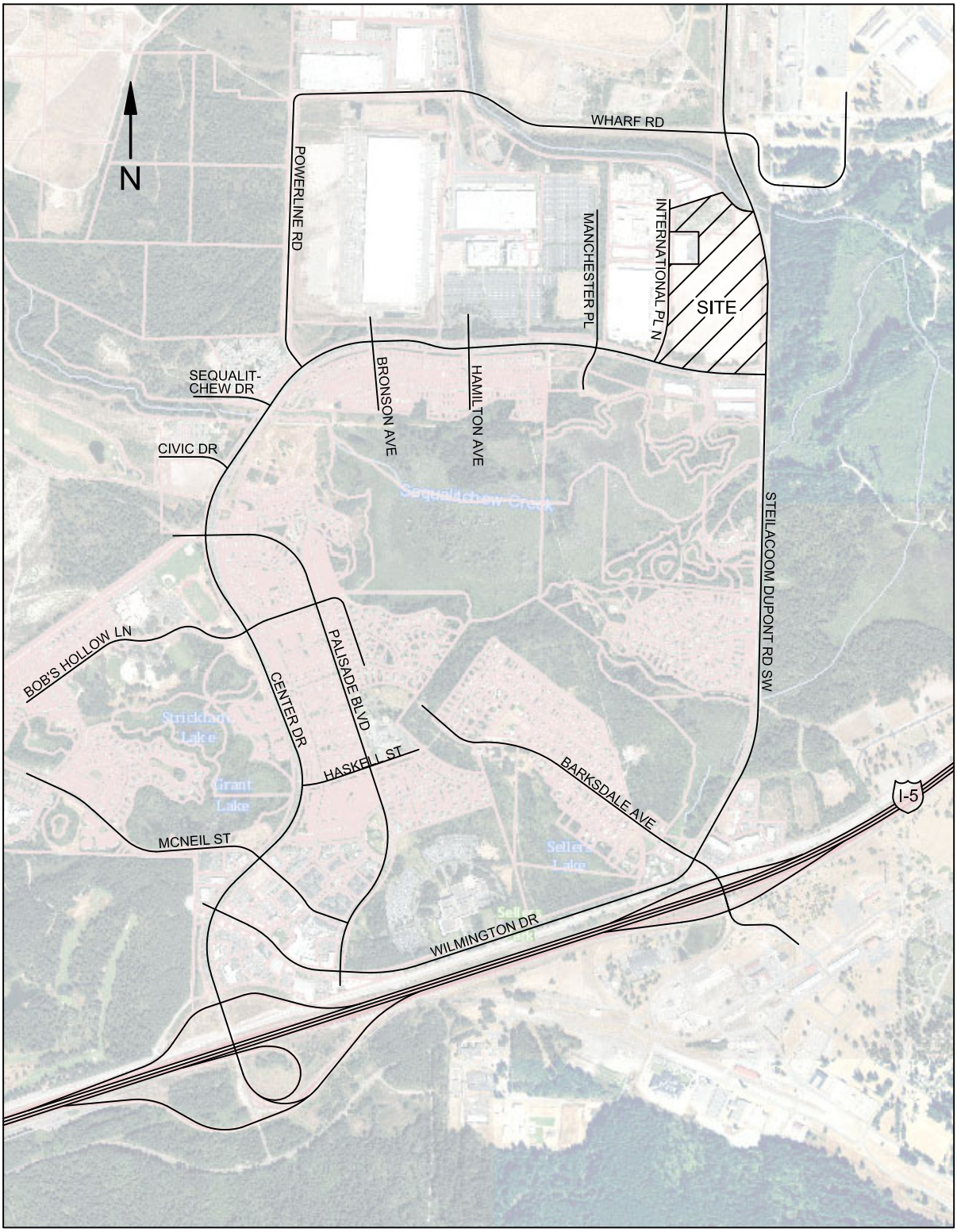
1. INTRODUCTION

The main goals of this study focus on the assessment of existing roadway conditions and forecasts of newly generated project traffic. The first task includes the review of general roadway information on the adjacent street system, baseline vehicular volumes, and any planned infrastructure projects that may affect the study area. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques. As a final step, appropriate conclusions and mitigation measures are defined if needed.

2. PROJECT DESCRIPTION

Snow Blossom Fulfillment Center proposes to occupy an existing 746,790 square foot warehouse located in the city of DuPont. The warehouse, with a site address of 3230 International Place N, is proposed to be utilized as a hazmat fulfillment center. The subject property is bordered to the west by International Place N, to the east by Steilacoom DuPont Road SW and to the south by Center Drive on a cumulative 37.5-acres within tax parcel #'s: 300039-0011; - 3282. Access is to be provided via International Place N. A two-year horizon of 2022 was analyzed to assess future project impacts subsequent to tenant occupancy. Figure 1 on the following page shows the general site location and roadway network serving the vicinity. A site plan illustrating the overall configuration of the project is presented in Figure 2.





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VICINITY MAP & ROADWAY SYSTEM
FIGURE 1

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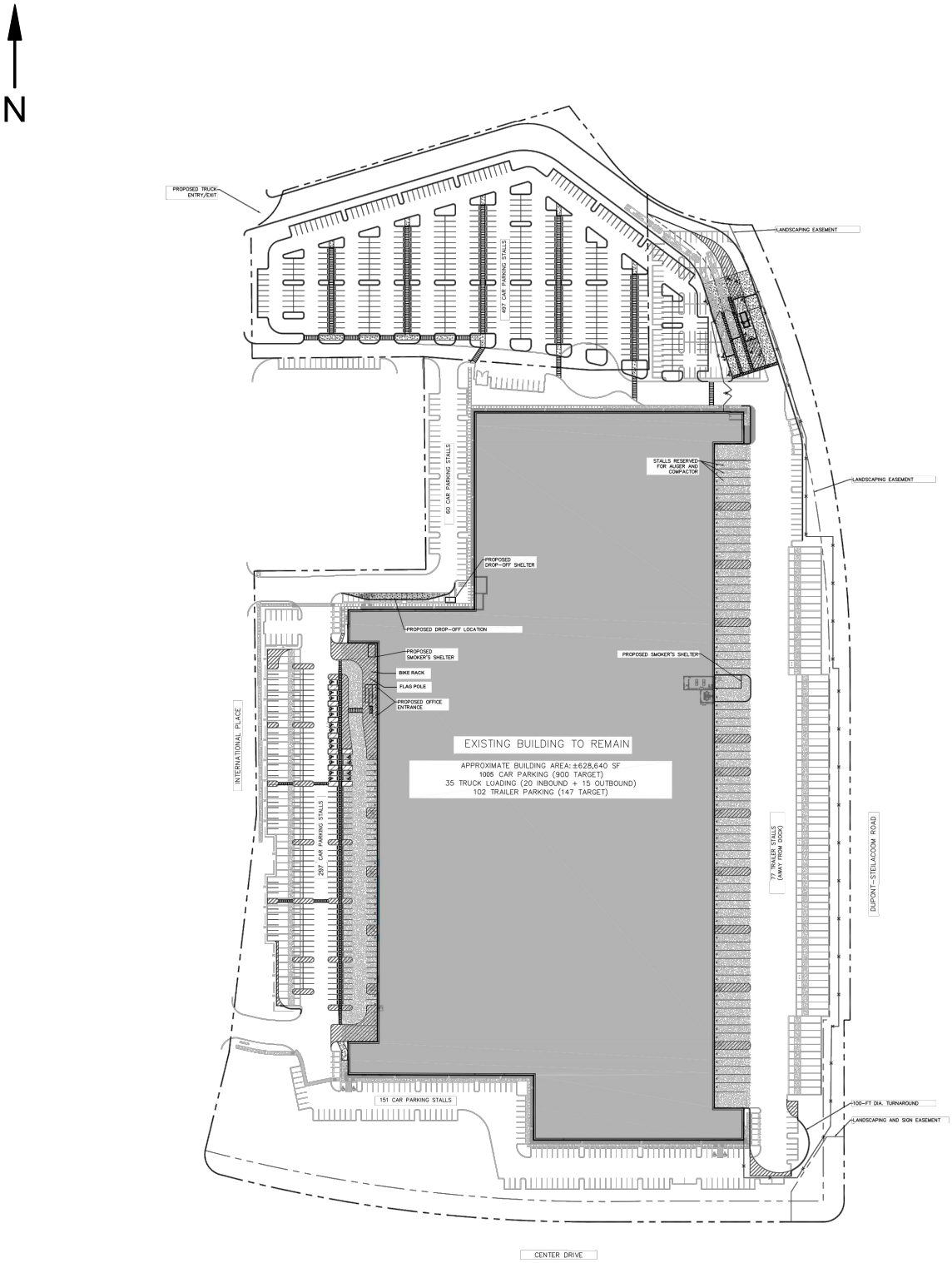

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SNOW BLOSSOM FULFILLMENT CENTER

SITE PLAN
FIGURE 2

3. EXISTING CONDITIONS

3.1 Existing Roadway Characteristics

The street network serving the proposed project consists of a variety of roadways. The major roadways and arterials defined in the study area are listed and described below.

Table 1: Roadway Network

Functional Classification	Roadway	Speed Limit	Lanes	Street Parking	Sidewalk	Bike Facilities
Principal Arterial	Center Street	35 mph	4	No	Yes	Lanes
Minor Arterial	Steilacoom DuPont Rd SW	35-45 mph	2-3	No	S/O Station Dr	Signage
Local	International Place	25 mph	2	No	Yes	Paved Shoulders

3.2 Public Transit Service

Transit within the city is provided via two Sound Transit Express Bus routes. Route 592 – DuPont-Seattle provides service from DuPont to Downtown Seattle and runs from approximately 4:00 AM to 8:30 PM with 15-20 minute headways during peak periods. Route 594 – Lakewood/Tacoma-Seattle offers select service to DuPont (see Sound Transit routes and schedules for further information). All stops originate and depart from the DuPont Station located on the southeast corner of Wilmington Drive & Palisade Boulevard, approximately two miles from the subject site and is therefore not anticipated to be significantly utilized by the proposed development's employees.

According to the DuPont's Comprehensive Plan, the City would like to explore adding and expanding transit opportunities as employment and populations continue to grow. As a potential transportation demand measure, and if demand exists, the developer may consider adding a shuttle service to run to and from DuPont Station during employee shift periods as a way to incentivize and encourage alternative modes of transport.

3.3 Non-Motorist Infrastructure

The adjacent Center Drive and International Place roadways support detached sidewalks along either side and shoulders accommodating bicycle transport. The intersection of the two roadways allows for safe pedestrian crossings facilitated via actuated walk phases controlled by the signal. However, with no transit readily available within the immediate site vicinity, little non-motorist activity to/from the site can be expected.

3.4 Roadway Improvements

A review of the City of DuPont's Six-Year (2019-2024) Transportation Improvement Plan and WSDOT's 2020-2023 Statewide Transportation Improvement Program indicates improvement projects are scheduled within the project vicinity. The most significant project to note is WSDOT's proposed Interchange Exit 119 Redesign:

I-5 Exit 119 Reconstruction – is a proposed redesign of the existing I-5 Exit 119 to increase capacity and allow for a more efficient and safe design. The scope of work include removing a portion of Barksdale Avenue, east of Steilacoom-DuPont Road and constructing a new grade-separated southbound exit. Also proposed are new I-5 Northbound and Southbound Bypass routes to Steilacoom-DuPont Road and the JBLM DuPont Gate. See appendix for WSDOT's design exhibits. The project is currently undergoing environmental studies and the construction is estimated to be completed in 2025.

As part of WSDOT's involvements with the I-5 Exit 119 Reconstruction, the City has established a number of improvements along Steilacoom-DuPont Road from the proposed Exit 119 location to Wharf Road including intersection improvements at Center Drive.

Other City improvement projects consist of traffic signal modernization and coordination from I-5 Exit 118 to Steilacoom-DuPont Road; however, these projects have not secured funding and are in the preplanning stages. Given the time horizons of the planned improvements, no projects were considered in the forecast horizon analysis as they would not be completed at such time.

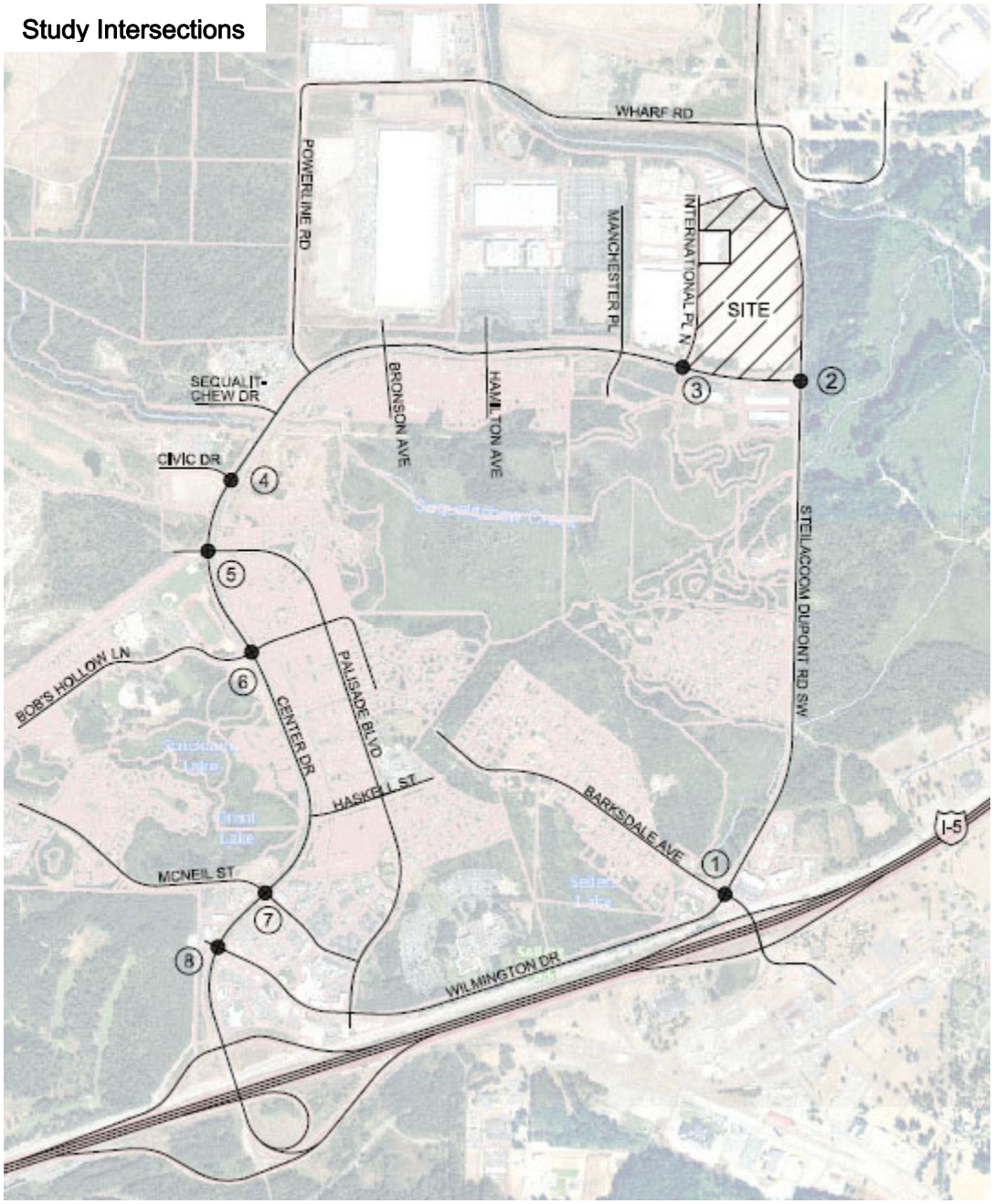
3.5 Baseline Intersection Volumes

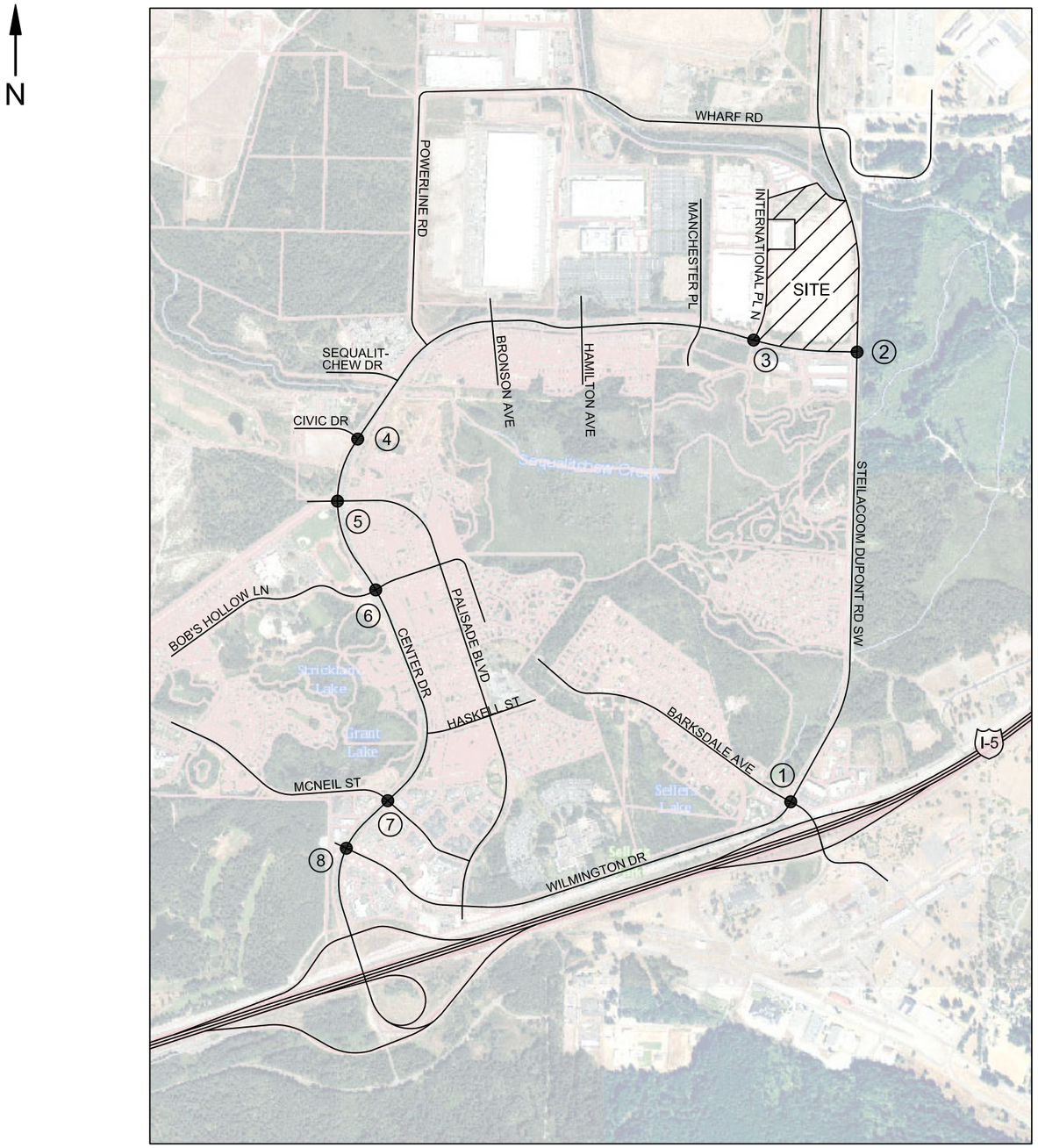
In order to assess and evaluate the project impacts relative to the adjacent street system, a number of outlying intersections were selected for evaluation by the City. All intersections are signalized controlled and turning movement count data were provided in the scoping request through the City. Timeframes examined in this analysis consist of the AM peak period (7:00-9:00 AM) and the PM peak period (4:00-6:00 PM) as these periods generally represent the highest congestion points of a typical weekday.

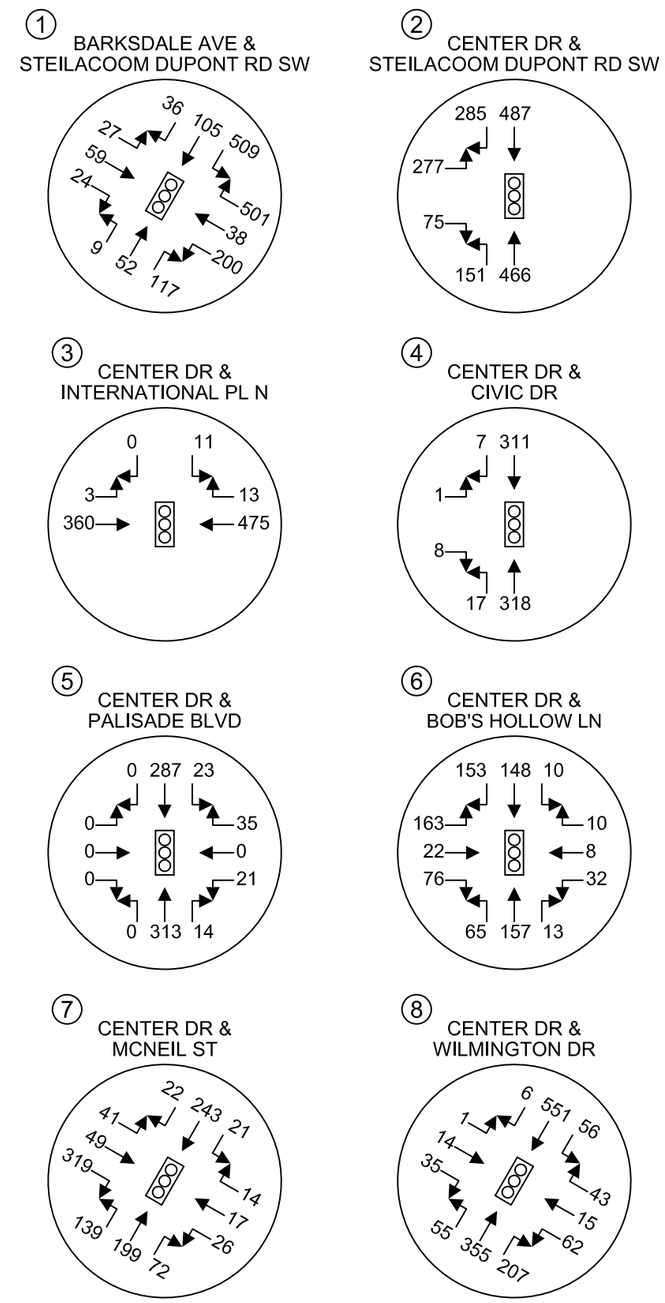
Data were available from 2019 for all locations with the exception of two intersections. These two intersections were from 2017 and have been adjusted via a two percent compound annual growth rate. Listed on the following page are the study intersections with respective AM and PM peak hour volumes illustrated in Figure 3A & 3B. Full count sheets and baseline volumes are included in the appendix.

1. Barksdale Ave & Steilacoom DuPont Rd
2. Center Drive & Steilacoom DuPont Rd
3. Center Drive & International Drive
4. Center Drive & Civic Drive
5. Center Drive & Palisade Drive
6. Center Drive & Bob's Hollow Lane
7. Center Drive & McNeil Street
8. Center Drive & Wilmington Drive

Study Intersections







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EXISTING AM PEAK HOUR VOLUMES
FIGURE 3A

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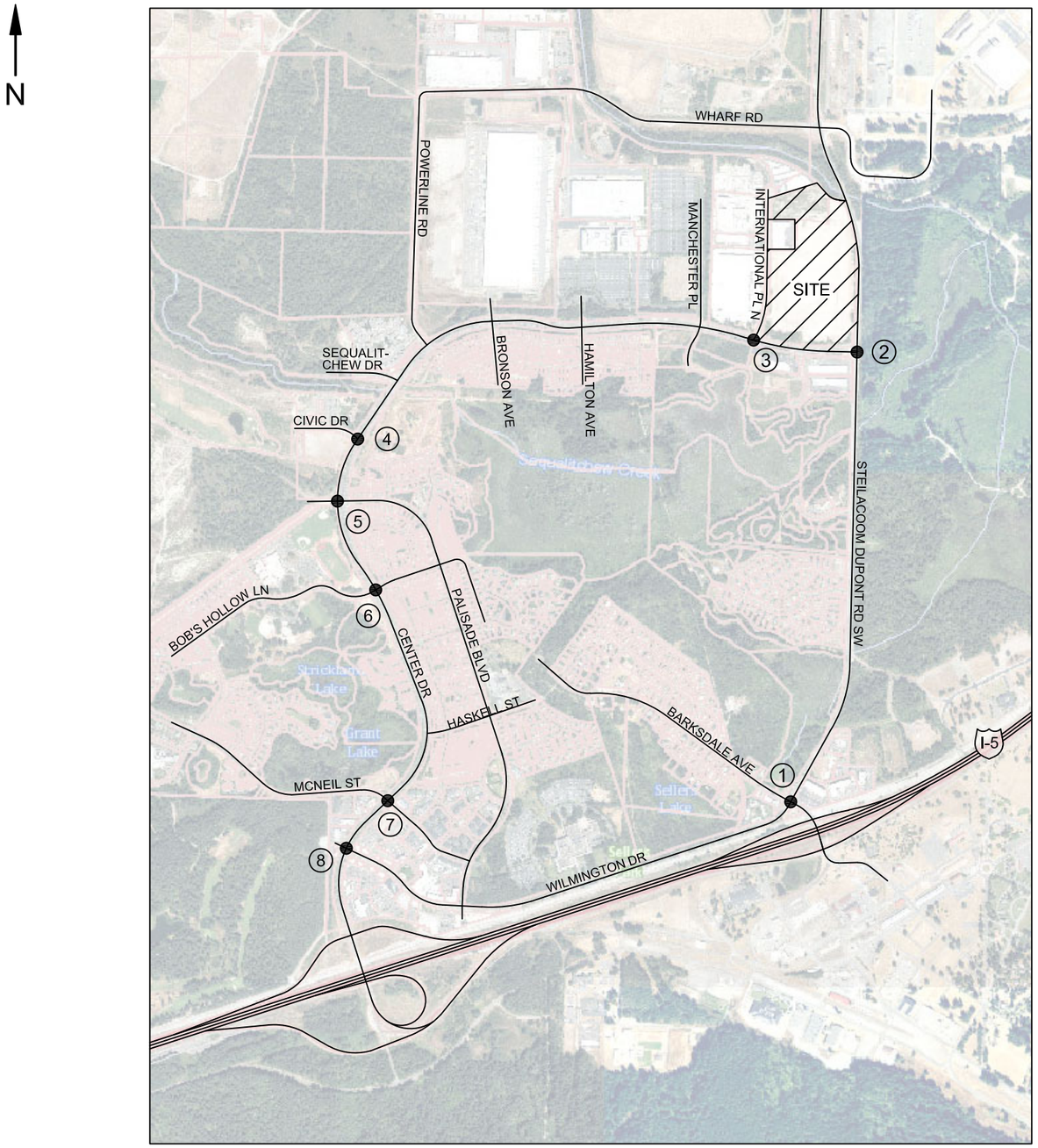

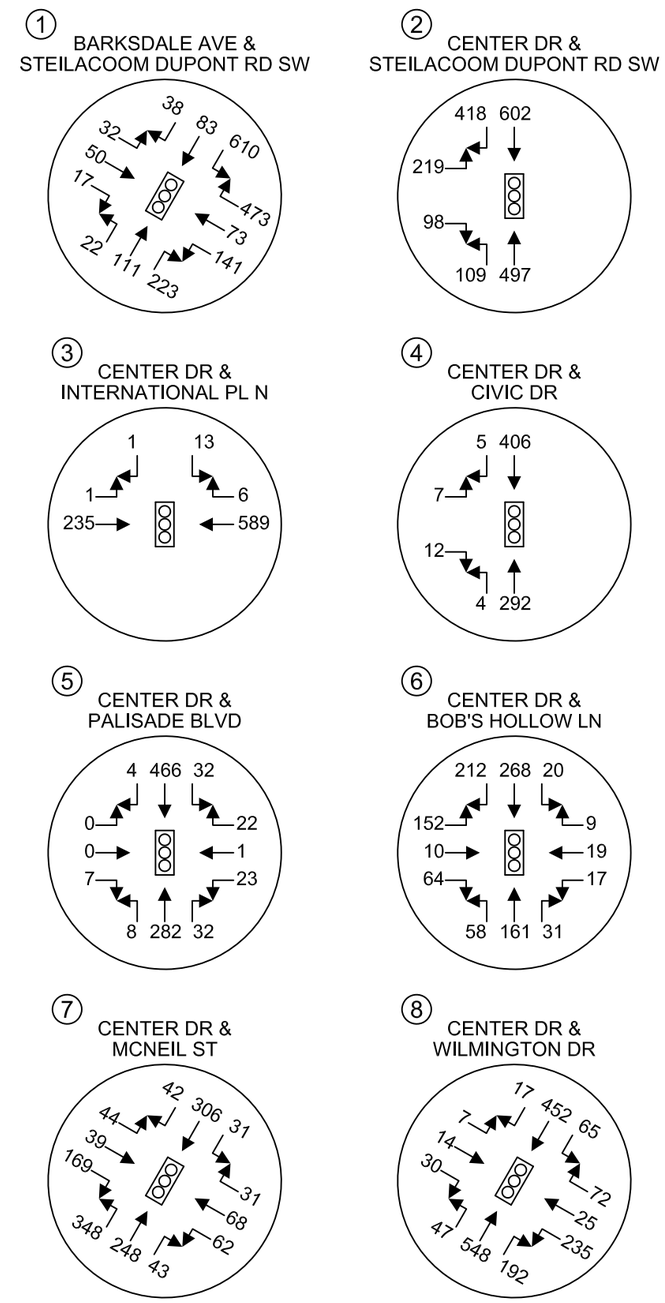

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EXISTING PM PEAK HOUR VOLUMES
FIGURE 3B

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3.6 Baseline Level of Service

Baseline peak hour delays were determined through the use of the *Highway Capacity Manual* 6th Edition. Capacity analysis is used to determine level of service (LOS) which is an established measure of congestion for transportation facilities. The range[1] for intersection level of service is LOS A to LOS F with the former indicating the best operating conditions with low control delays and the latter indicating saturated conditions with heavy control delays. Detailed descriptions of intersection LOS are given in the *2016 Highway Capacity Manual*. Level of service calculations were made through the use of the *Synchro 10* analysis program. Table 2 below summarizes existing peak hour delays at the eight study intersections. For signalized control, LOS is determined as the overall average delay experienced by the intersection. Delays are reported in seconds per vehicle.

Table 2: Existing Peak Hour Level of Service

Map ID	Intersection	Control	Peak Hour	LOS	Delay
1	Barksdale Ave & Steilacoom DuPont Rd / Wilmington Dr	Signal	AM	C	24.0
			PM	C	24.4
2	Center Drive & Steilacoom DuPont Rd	Signal	AM	B	14.3
			PM	B	12.6
3	Center Drive & International Place N	Signal	AM	A	2.1
			PM	A	3.1
4	Center Drive & Civic Drive	Signal	AM	A	4.4
			PM	A	4.6
5	Center Drive & Palisade Blvd	Signal	AM	A	5.5
			PM	A	6.8
6	Center Drive & Bob's Hollow Ln	Signal	AM	B	12.0
			PM	B	10.7
7	Center Drive & McNeil Street	Signal	AM	B	11.1
			PM	C	29.2
8	Center Drive & Wilmington Drive	Signal	AM	A	8.9
			PM	B	12.9

[1] *Signalized Intersections - Level of Service*

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤20
C	> 20 and ≤35
D	> 35 and ≤55
E	> 55 and ≤80
F	> 80

Stop Controlled Intersections – Level of Service

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤15
C	> 15 and ≤25
D	> 25 and ≤35
E	> 35 and ≤50
F	> 50

Highway Capacity Manual, 6th Edition

City of DuPont Level of Service Standards[2]: The city has an adopted standard of LOS D for most intersections within the City. Exemptions are allowed for Steilacoom DuPont Road's intersections with Barksdale Avenue and Center Drive, which may operate at LOS E.

As shown in Table 2 above, all study intersections are shown to meet City standards operating at LOS C of better for either the AM or PM peak hour periods.

4. FUTURE TRAFFIC CONDITIONS

4.1 Trip Generation

Trip generation can be defined by the number of vehicles entering or exiting a site within a particular time period such as a "peak hour" or an entire day. Vehicular volume estimates have been obtained from the client based on a number of similar hazmat fulfillment centers, which tend to function similarly. Table 3 below summarizes the average weekday daily trips (AWDT) and the AM and PM peak hour volumes. Classifications have been broken down to identify either passenger vehicle/delivery vans versus heavy vehicles (multi-axle).

Table 3: Project Trip Generation

Land Use	Vehicle Type	AWDT	AM Peak-Hour Trips			PM Peak-Hour Trips		
			In	Out	Total	In	Out	Total
Hazmat Fulfillment Center	Vehicle	**1942**	336	13	**349**	296	302	**598**
	Heavy Vehicle	**225**	7	7	**14**	3	3	**6**
Total		**2167**	343	20	**363**	299	305	**604**

Based on data provided by the client, the project can be anticipated to generate approximately 2,167 daily trips, 363 AM and 604 PM peak hour trips. As shown, the majority of trips would be in the form of employee or delivery vehicle/van with few heavy vehicle trips. It should be acknowledged that these volumes represent typical operations or "non-peak" volumes. During peak seasons (i.e., holiday season) volumes to and from the site would increase. According to the aggregated trip generation report, peak season AM peak hour volumes would close to double while peak PM volumes would increase by approximately 50 percent. These volumes, however, are not typical through most of the year. Also to consider, the hazmat fulfillment center's peak hours tend to be dissimilar with respect to the adjacent street. The AM peak hour tends to start at 6:00 or 6:30 AM while the PM peak hour tends to start at 5:30 PM. No volume adjustments were considered given the 7:00-9:00 AM and 4:00-6:00 PM study periods so as to remain conservative.

[2] 2015 Comprehensive Plan Periodic Update, City of DuPont – Chapter 9 Transportation

4.2 Trip Distribution and Assignment

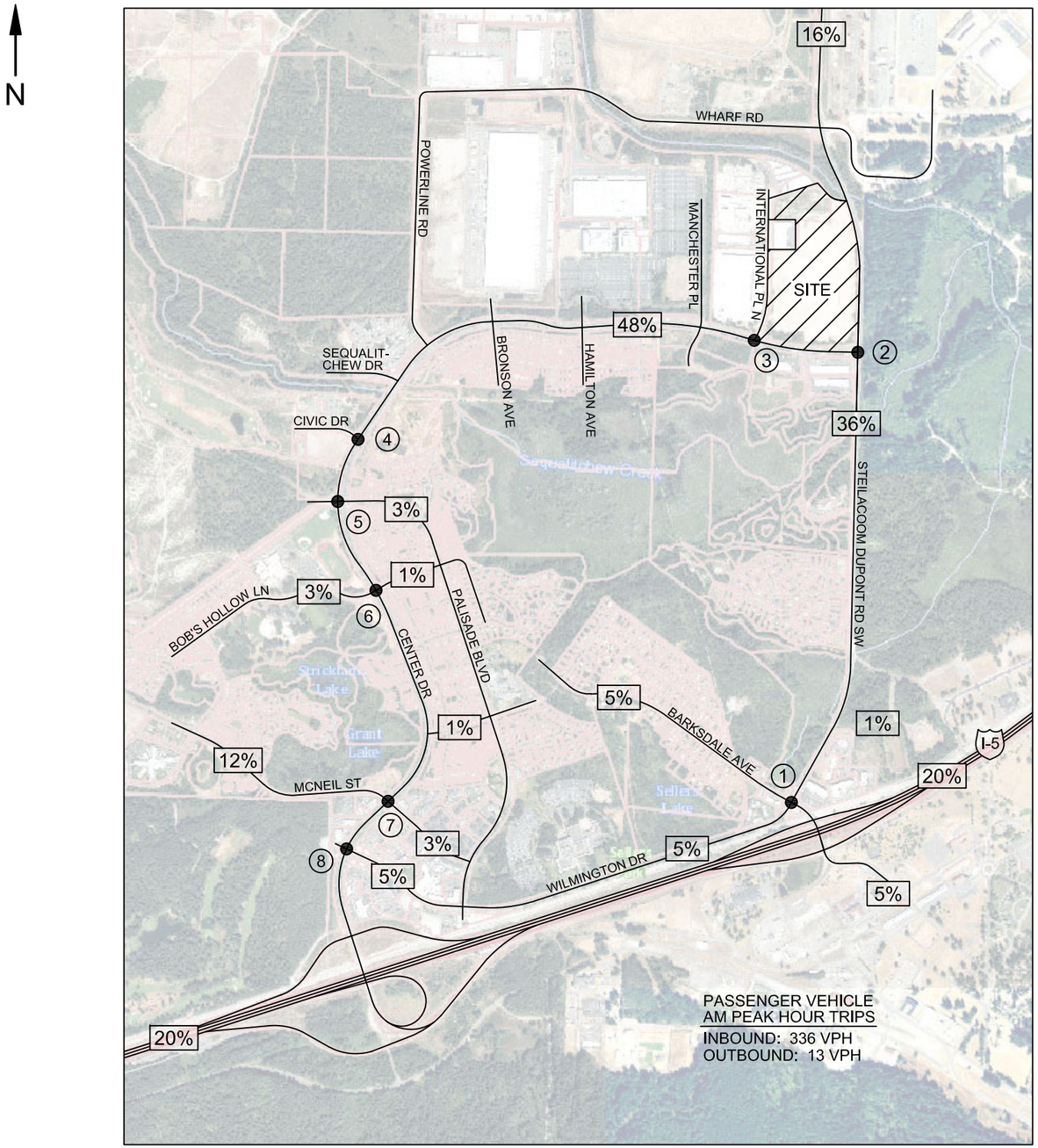
Trip distribution can be described as the travel routes to/from the subject site relative to the adjacent street system. The specific destinations and origins of the generated traffic primarily influences the key study intersections, which will effectively receive the bulk of project impacts. The trips generated by the project are expected to follow the general trip pattern as shown in Figures 4A & 4B and Figures 5A & 5B for the AM and PM peak hours, respectively. Separate distributions have been assigned to passenger and heavy vehicle trip types. Center Drive, west of the site, has a gross weight vehicle restriction of 14,000 pounds and therefore no heavy vehicles were routed to and from the west.

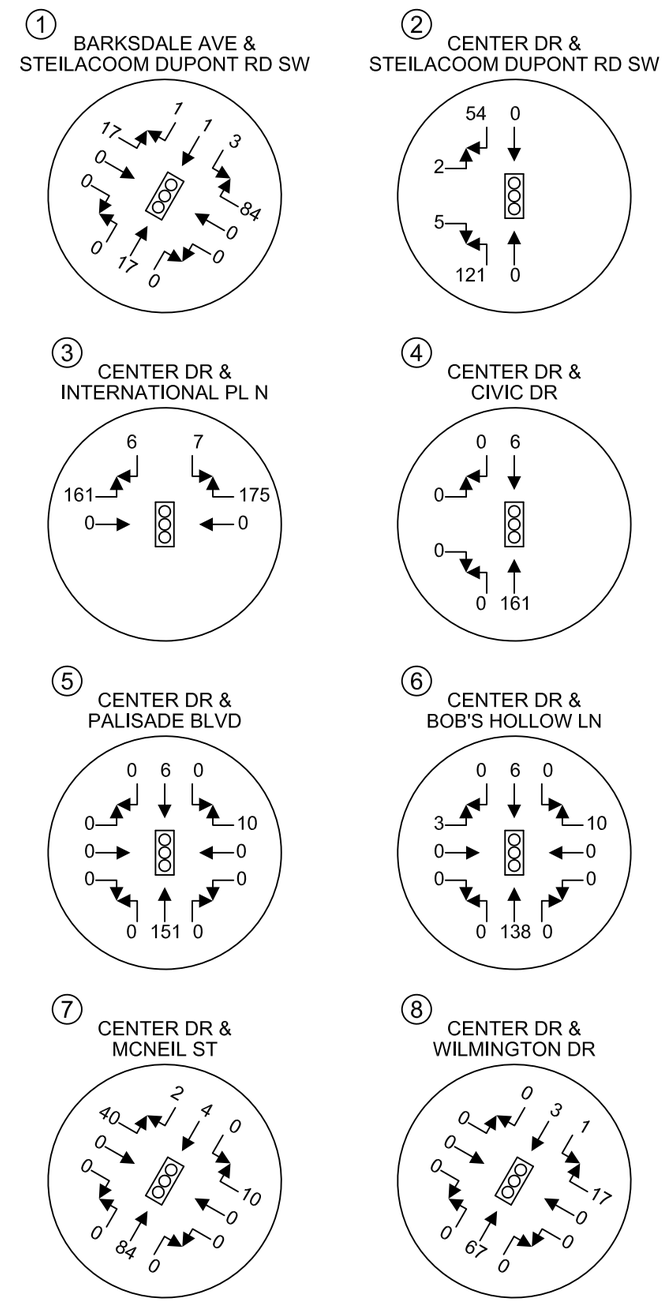
Additional trip distribution exhibits have been prepared under the following scenarios: Scenario 2 – With I-5 Interchange Project and Scenario 3 – Peak Season Volumes. These scenarios were provided as additional information for the City.

4.3 Future Peak Hour Volumes

A two-year horizon of 2022 was used for future delay analysis. The proposed building is already constructed and the developer would intend to occupy late 2021 or early 2022. Forecast 2022 background volumes were estimated by applying two assumptions: planned projects in the City that would act as pipeline; and a general background growth rate to account for other miscellaneous growth. Pipeline projects were obtained through the City and are included in the appendix. The aggregate AM and PM peak hour intersection pipeline volumes are illustrated in Figures 6A & 6B.

A general two percent compound annual growth rate was similarly applied to all existing volumes. Forecast 2022 AM and PM peak hour volumes without project (pipeline and background growth only) and with project are presented in Figures 7A & 7B and Figures 8A & 8B, respectively.





HEATH & ASSOCIATES

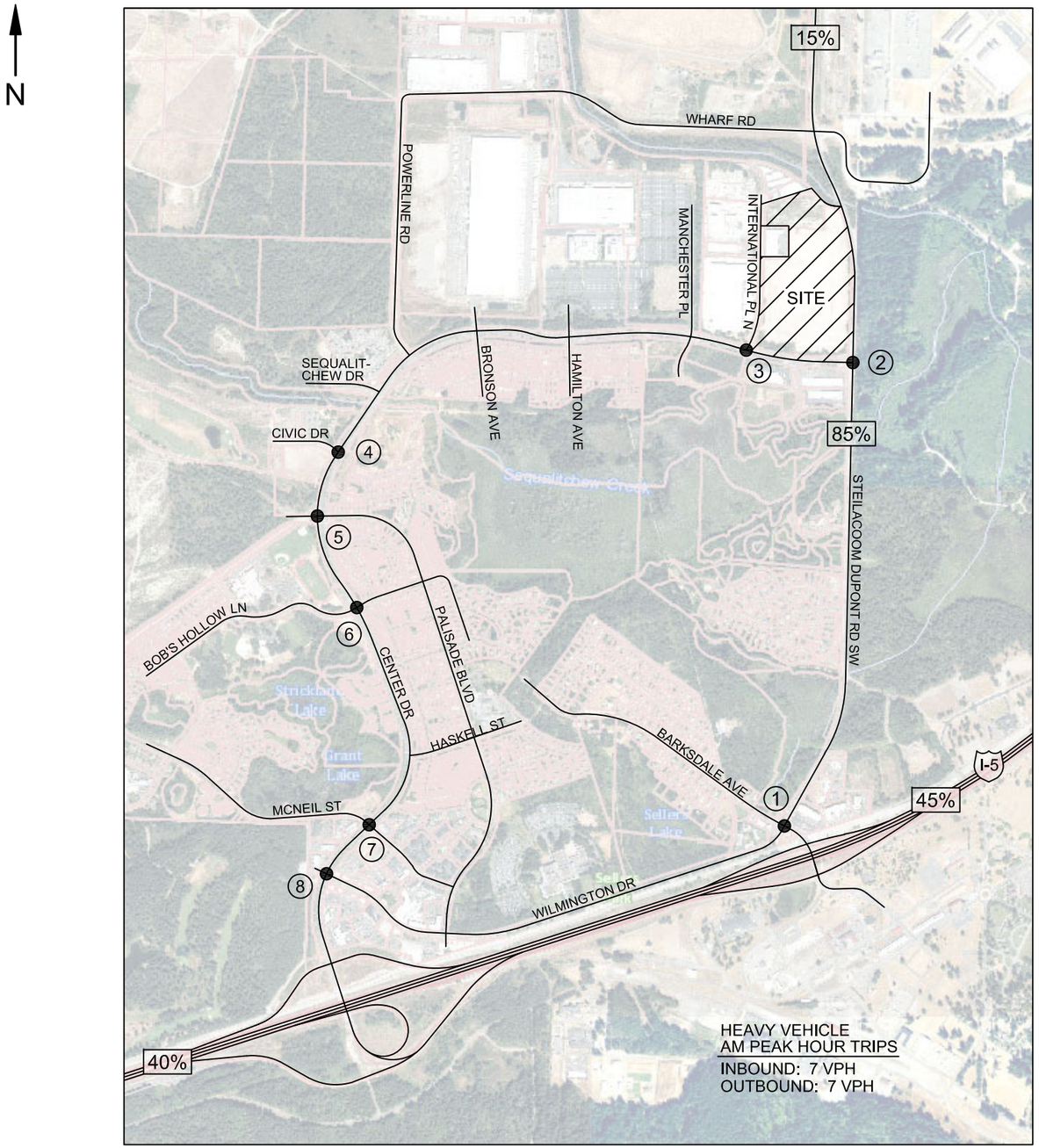
TRAFFIC AND CIVIL ENGINEERING

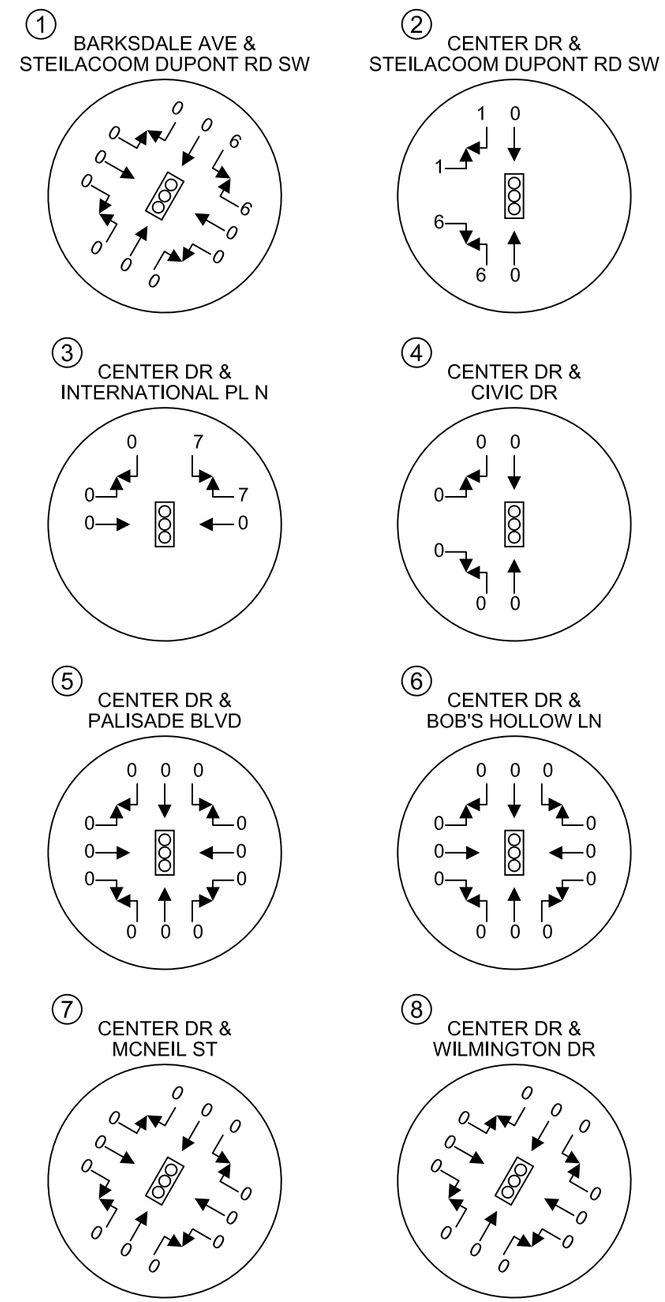
SNOW BLOSSOM FULFILLMENT CENTER

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES

FIGURE 4A

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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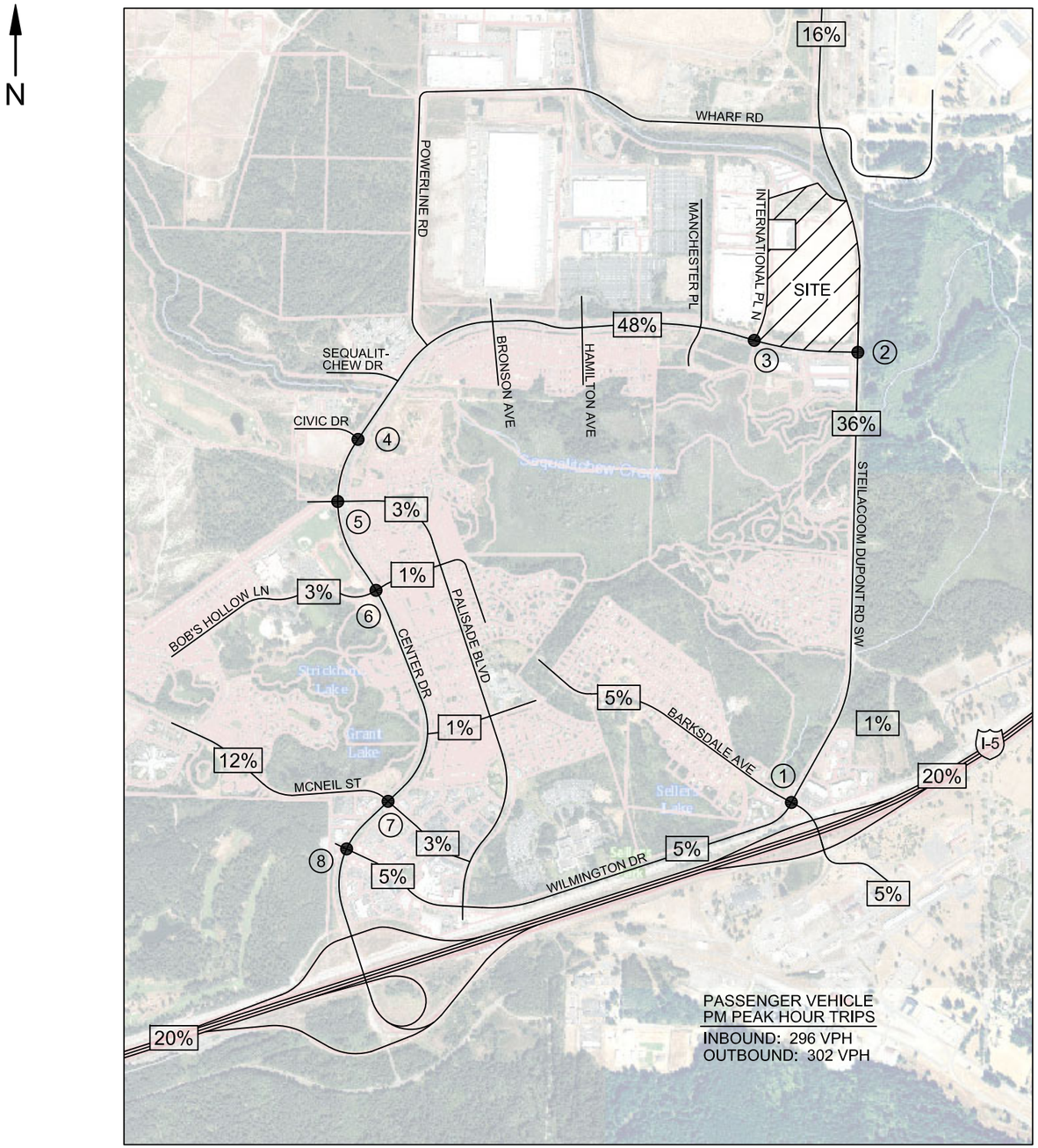
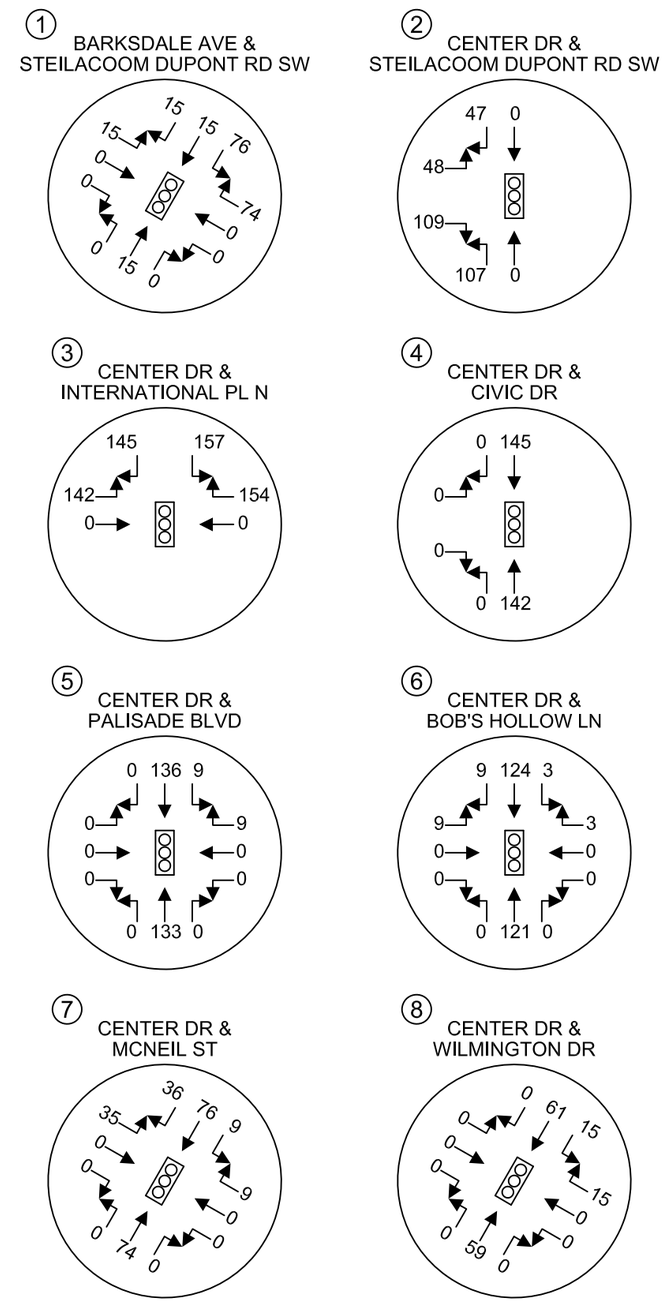
SNOW BLOSSOM FULFILLMENT CENTER

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES

FIGURE 4B

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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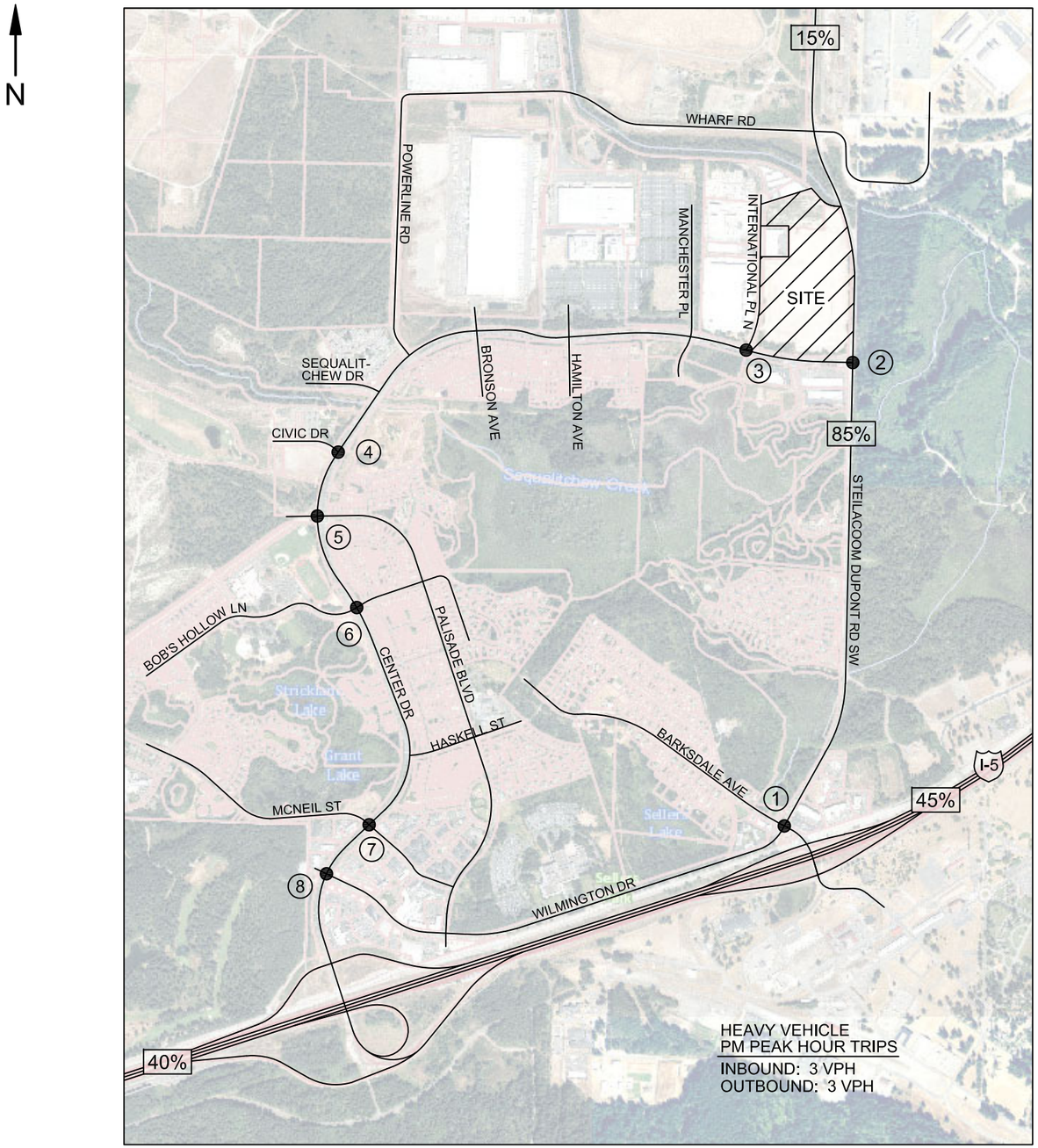
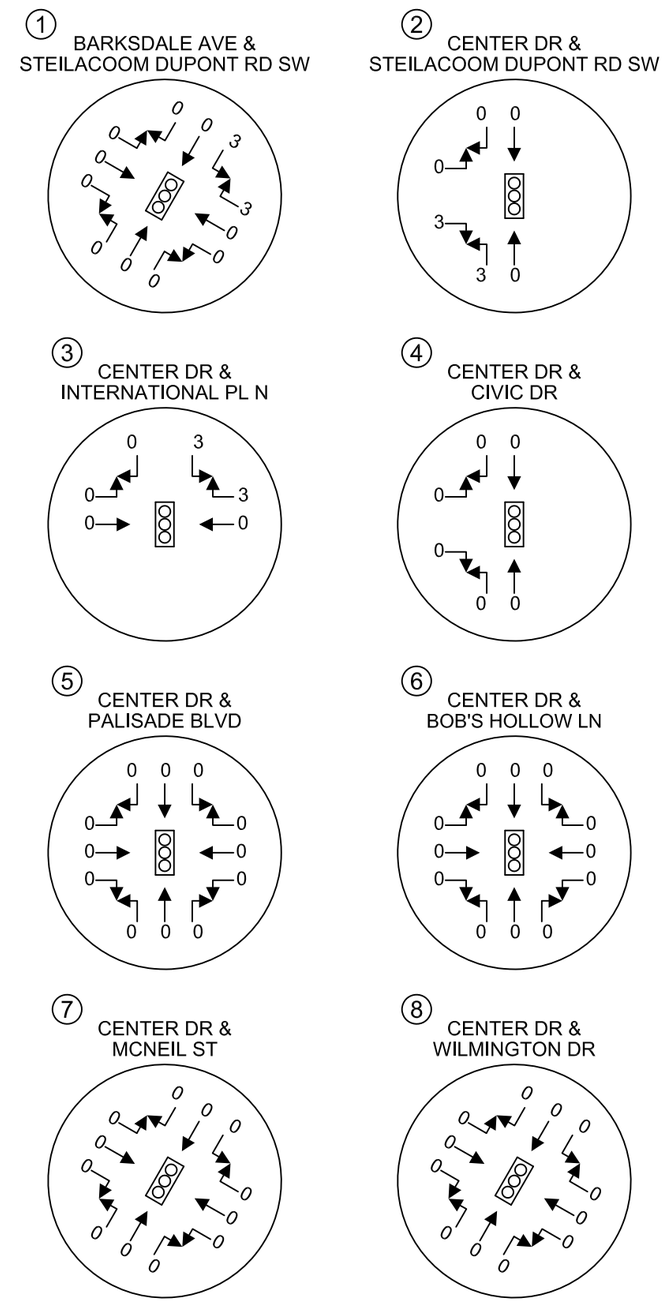
SNOW BLOSSOM FULFILLMENT CENTER

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES

FIGURE 5A

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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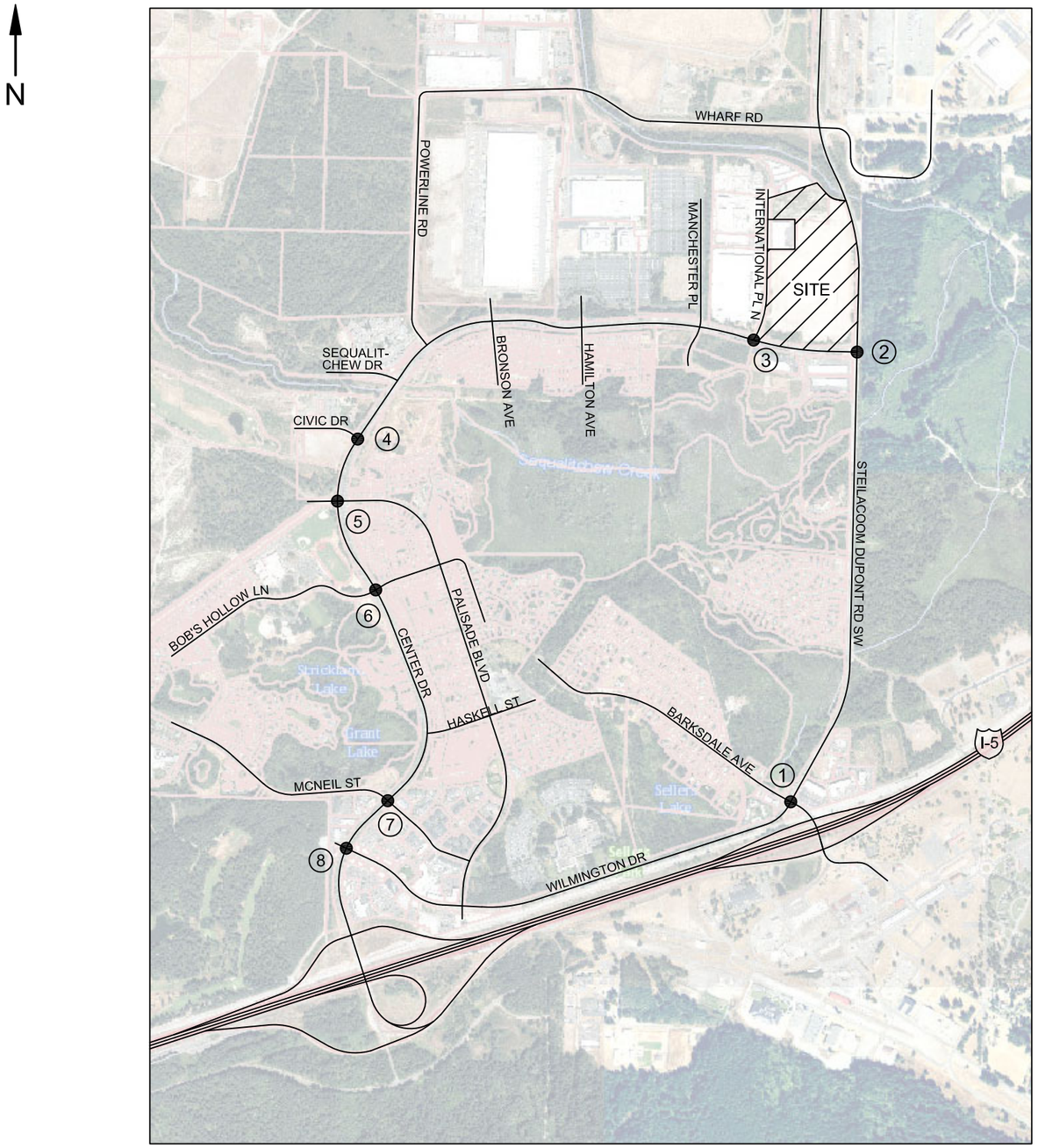
TRAFFIC AND CIVIL ENGINEERING

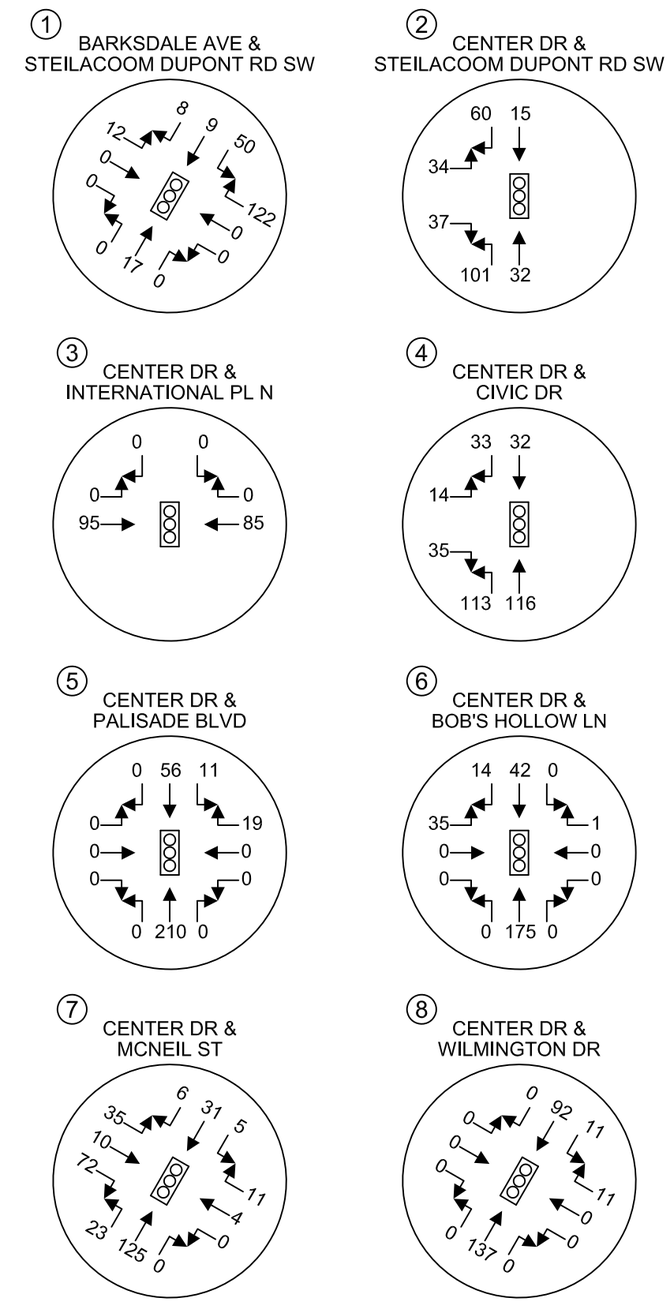
SNOW BLOSSOM FULFILLMENT CENTER

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES

FIGURE 5B

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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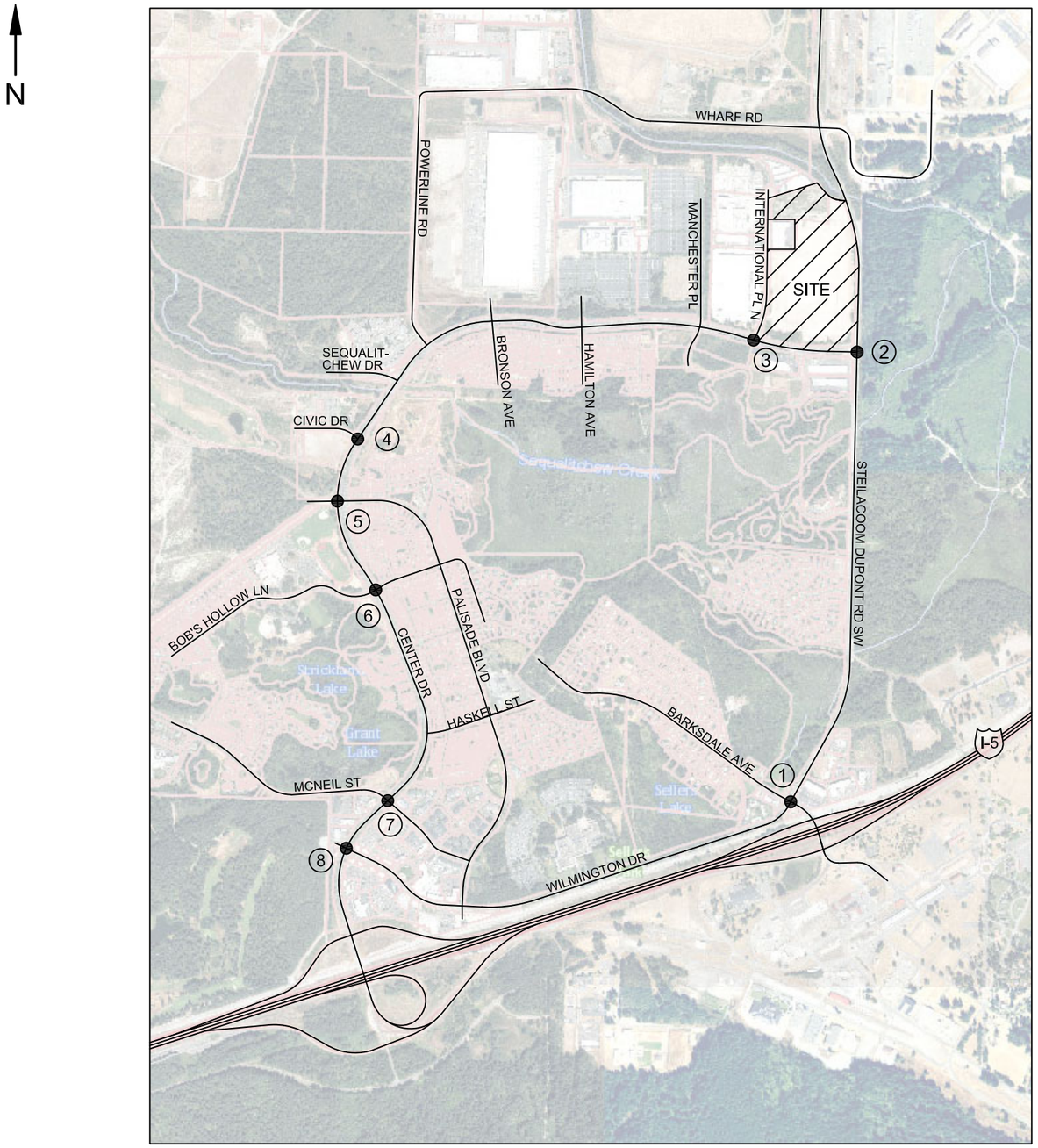
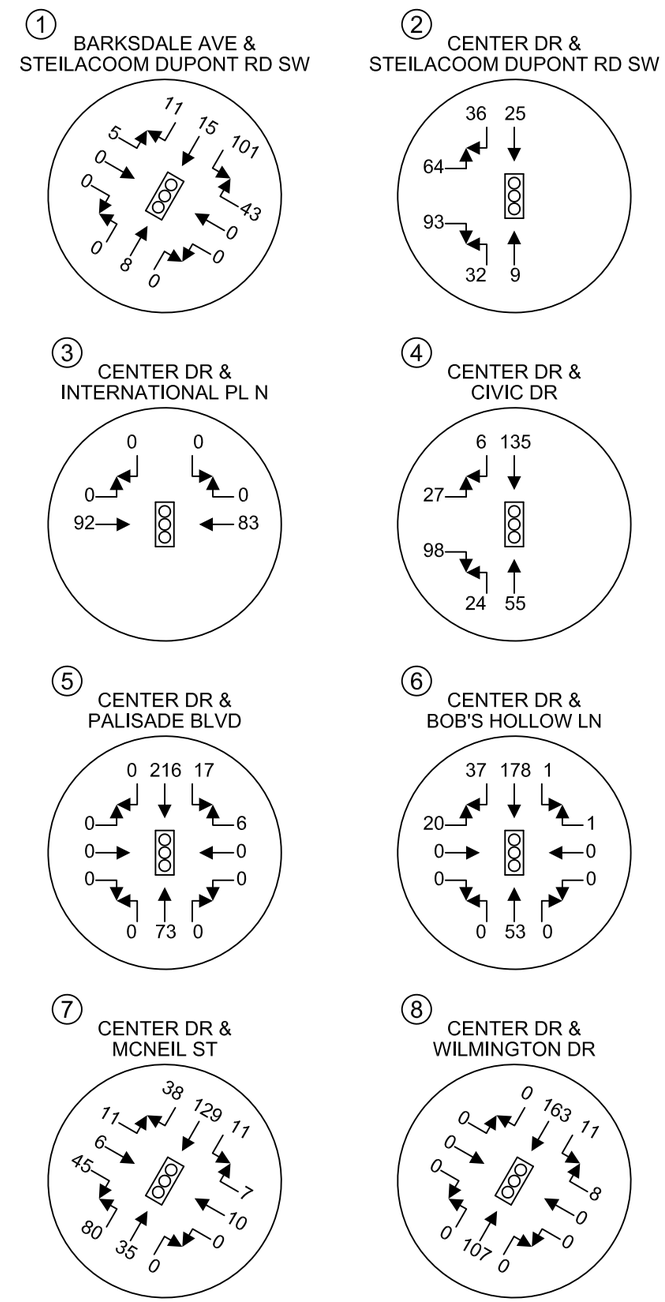
SNOW BLOSSOM FULFILLMENT CENTER

AM PEAK HOUR PIPELINE VOLUMES
FIGURE 6A

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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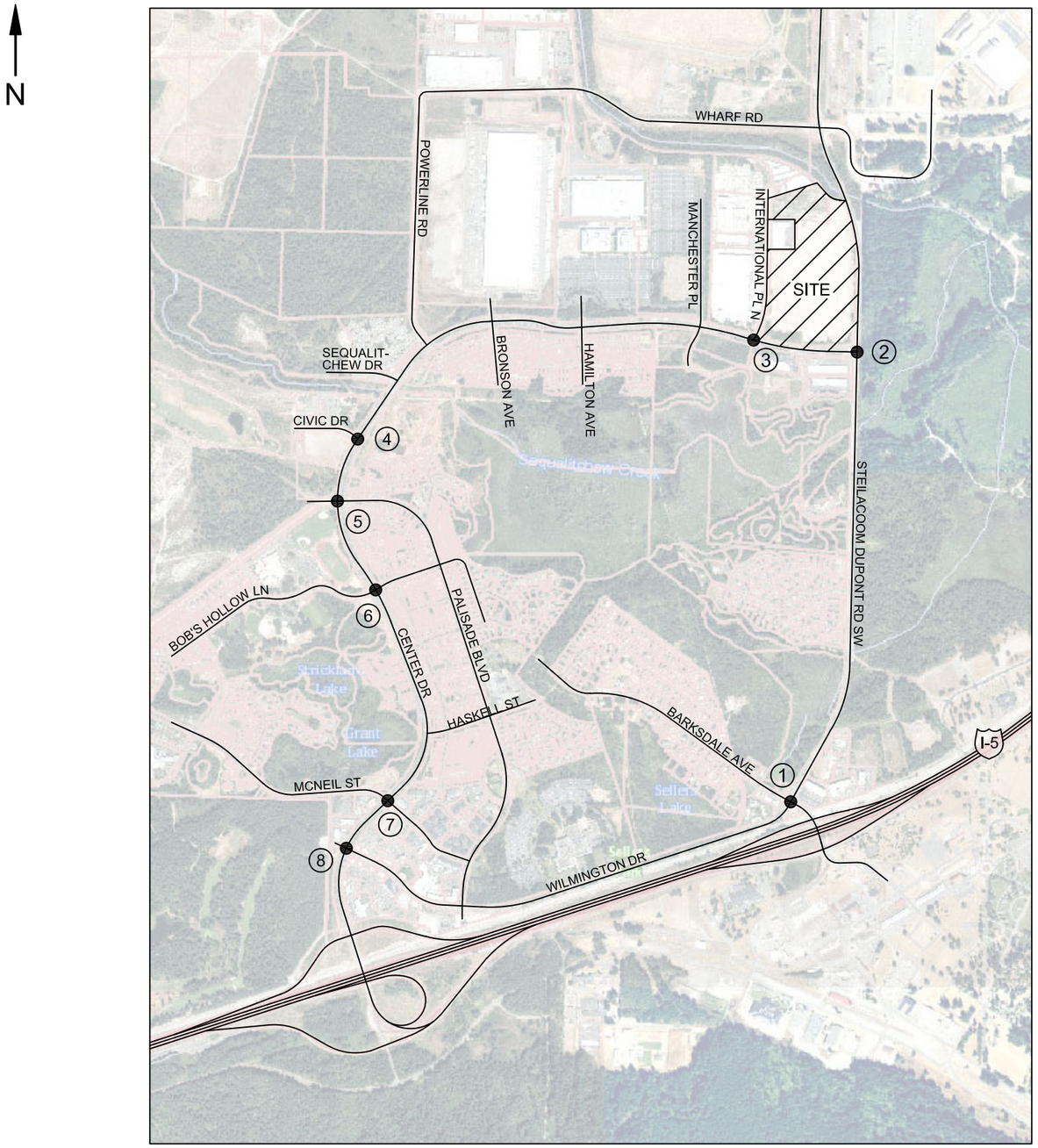
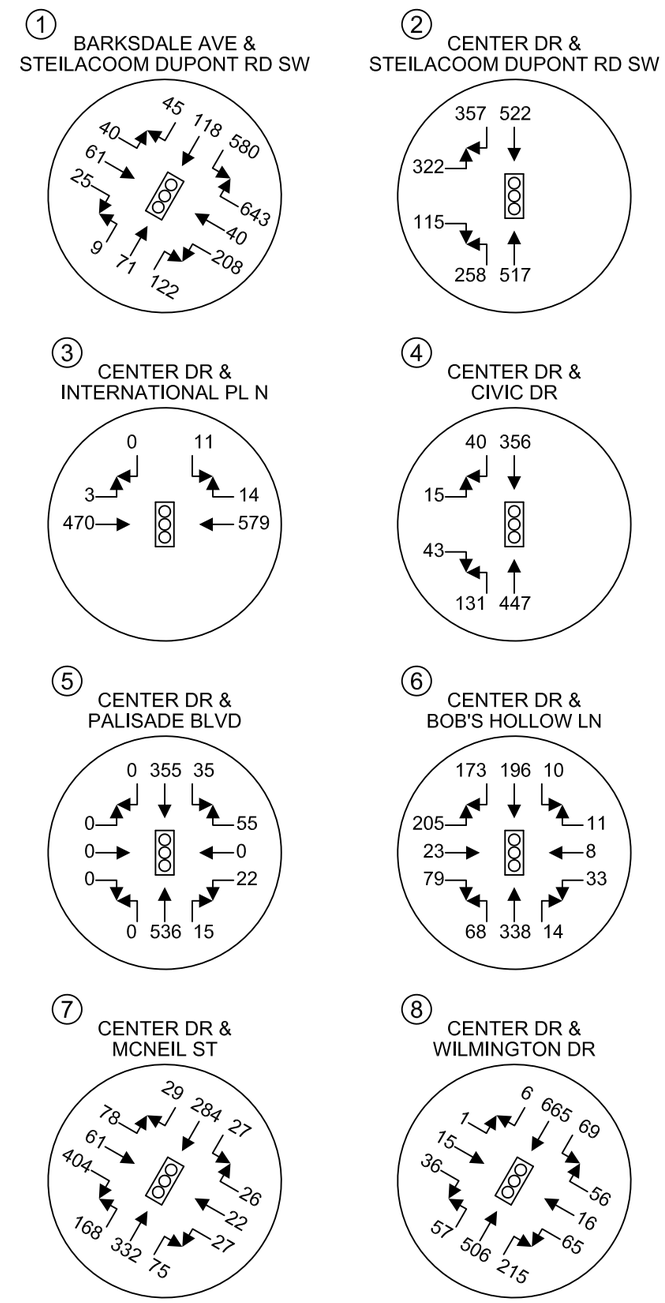
SNOW BLOSSOM FULFILLMENT CENTER

PM PEAK HOUR PIPELINE VOLUMES

FIGURE 6B

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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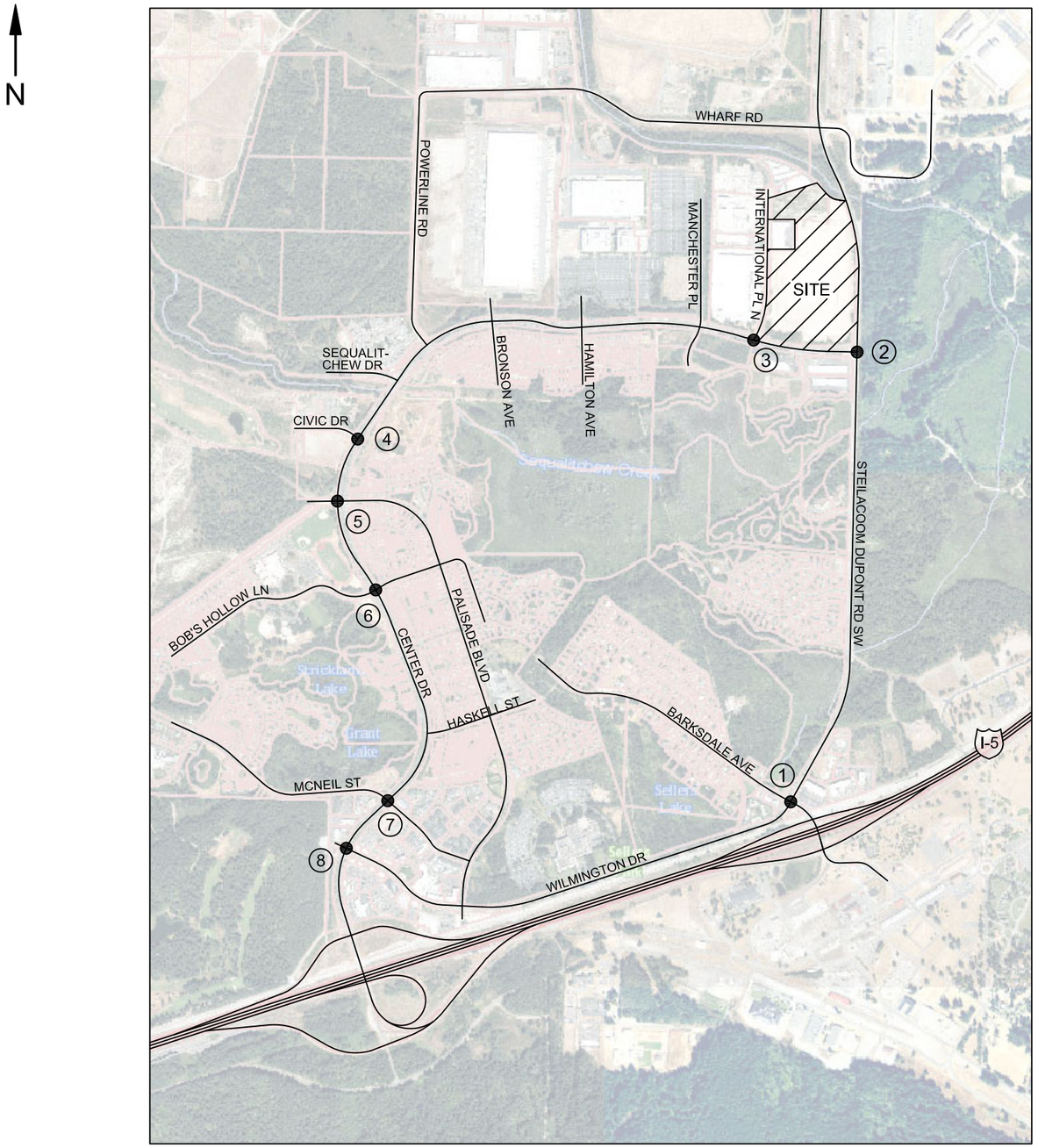
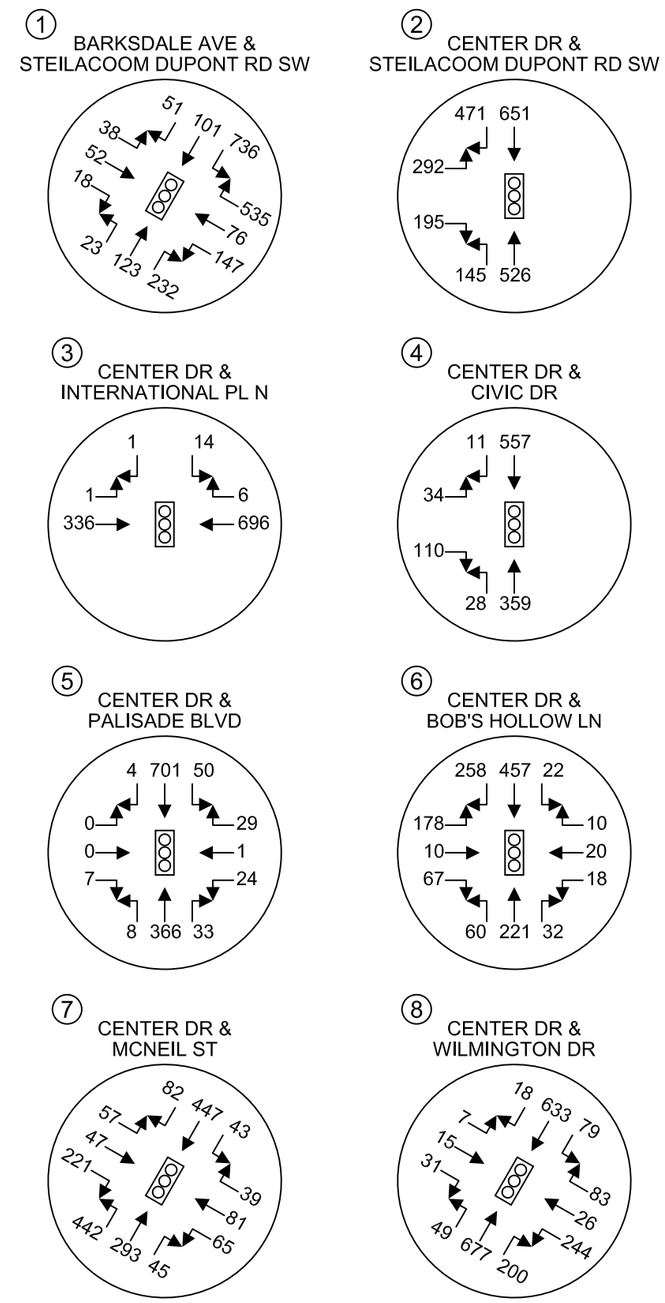
SNOW BLOSSOM FULFILLMENT CENTER

FORECAST 2022 AM PEAK HOUR BACKGROUND VOLUMES

FIGURE 7A

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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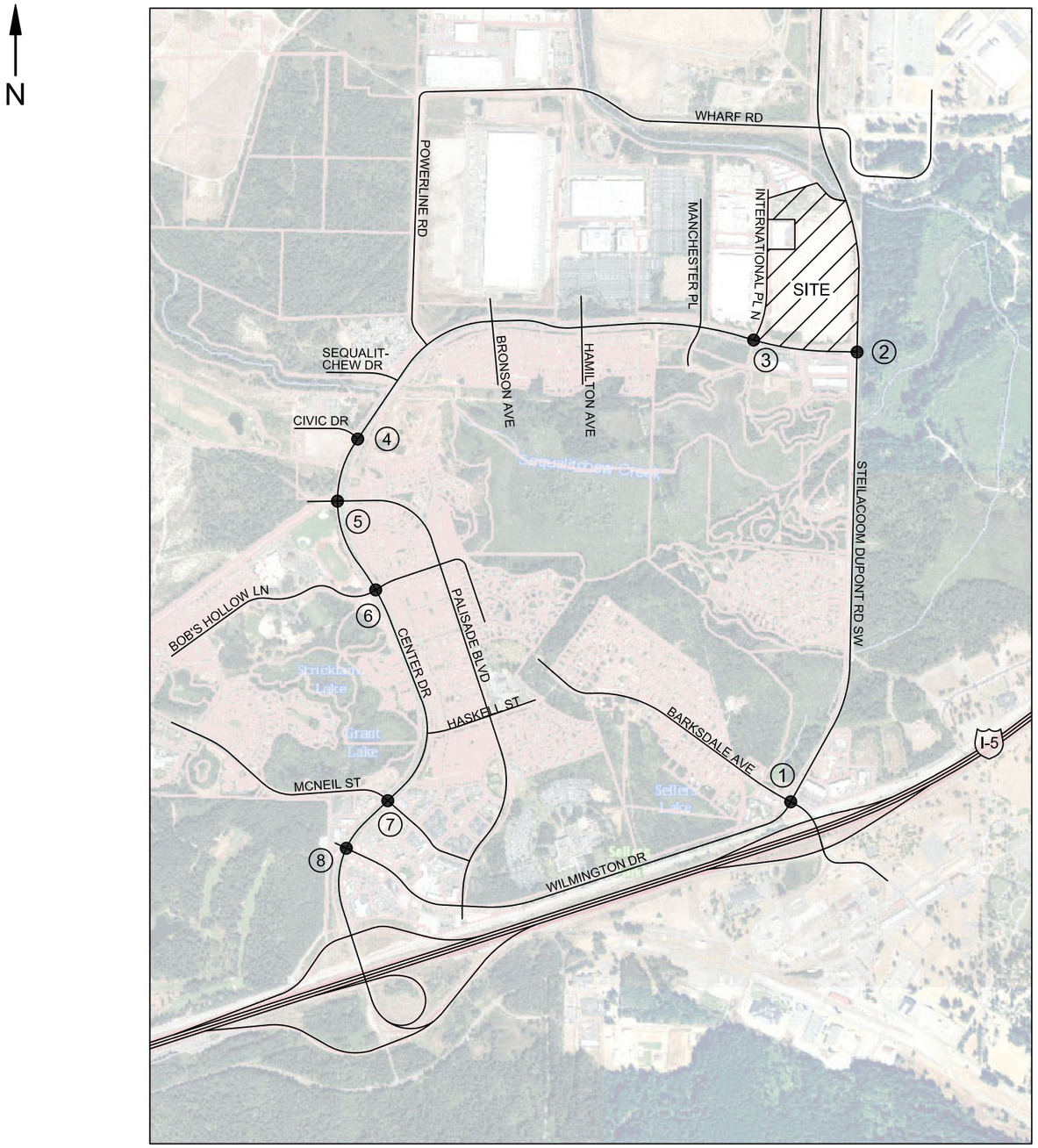
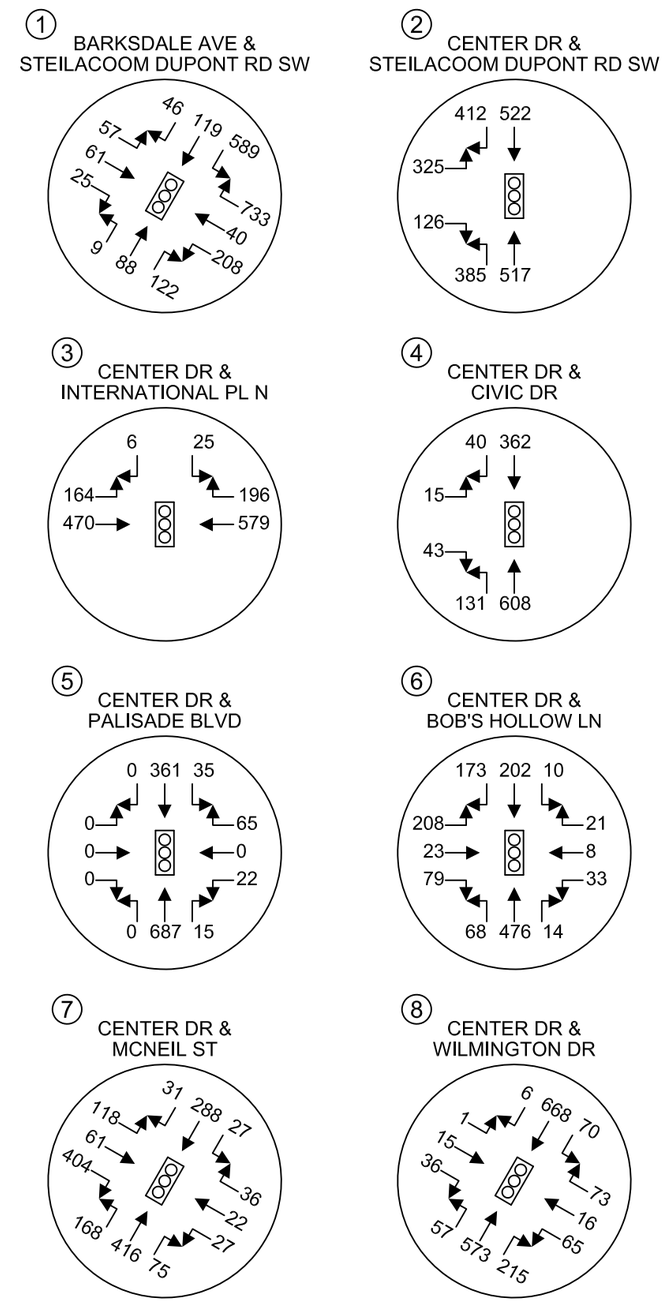
SNOW BLOSSOM FULFILLMENT CENTER

FORECAST 2022 PM PEAK HOUR BACKGROUND VOLUMES

FIGURE 7B

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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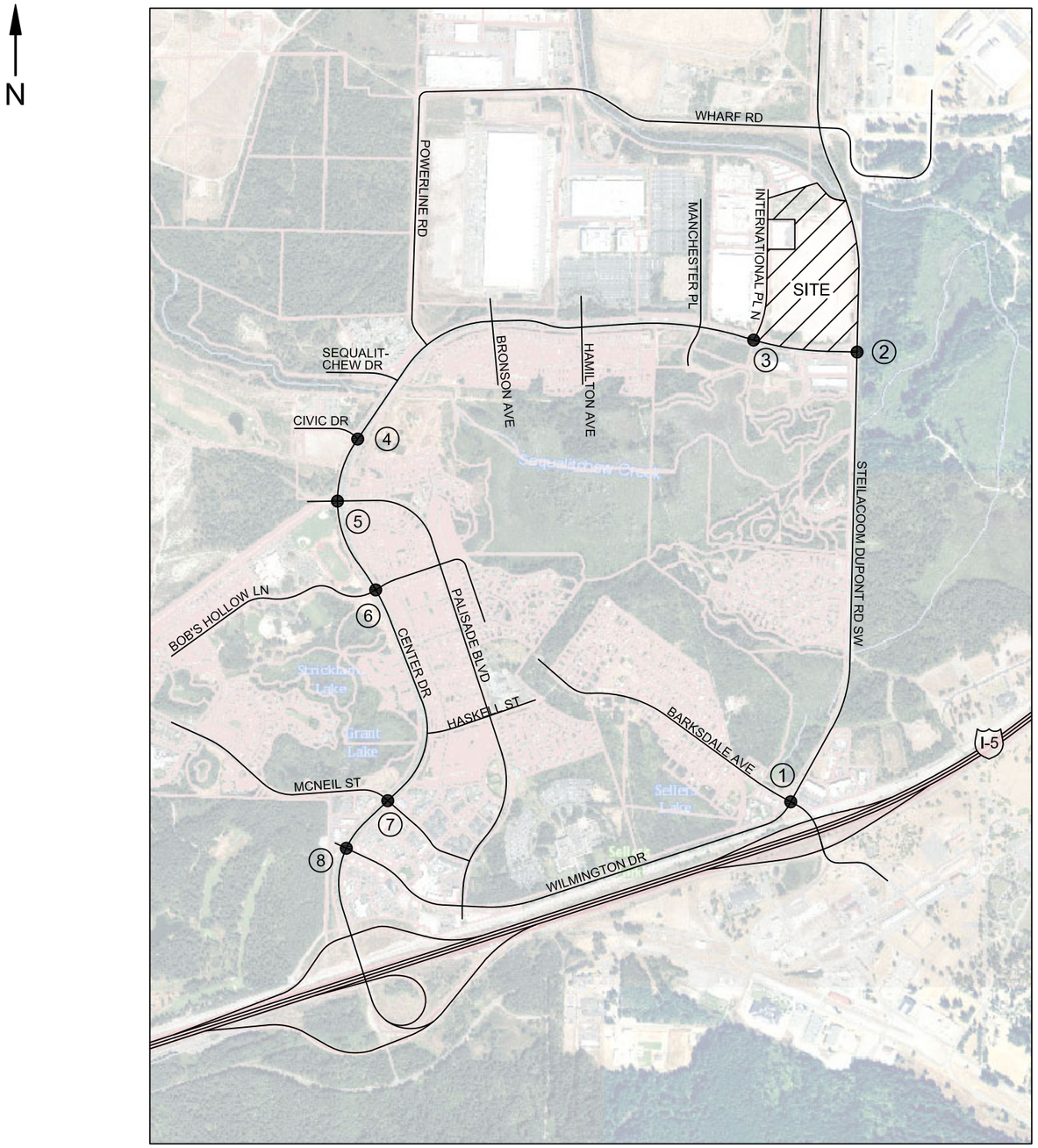
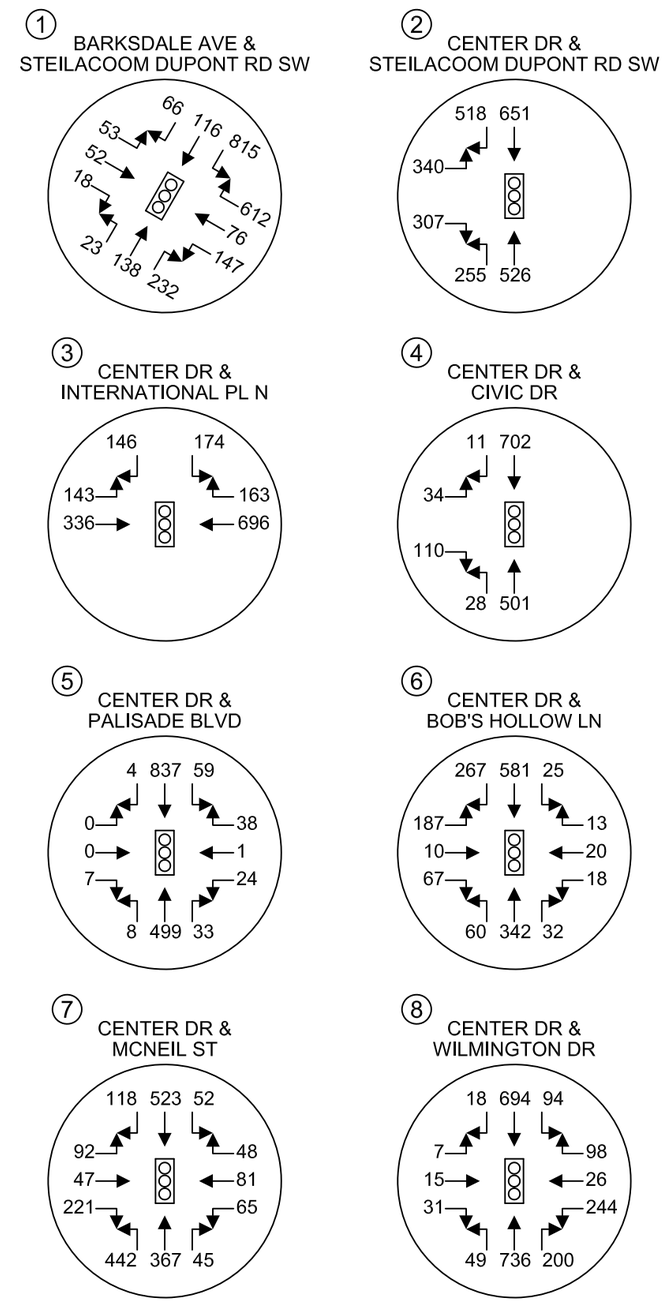
SNOW BLOSSOM FULFILLMENT CENTER

FORECAST 2022 AM PEAK HOUR VOLUMES WITH PROJECT

FIGURE 8A

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

FORECAST 2022 PM PEAK HOUR VOLUMES WITH PROJECT

FIGURE 8B

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com

4.4 Future Level of Service

Level of Service calculations were made for future conditions without (background) and with project-generated traffic added to the adjacent street network. Table 4 below portrays forecast LOS delays for the intersections of study.

Table 4: Forecast 2022 Peak Hour Level of Service

Delays given in seconds per vehicle

				Without Project		With Project	
Map ID	Intersection	Control	Peak Hour	LOS	Delay	LOS	Delay
1	Barksdale Ave & Steilacoom DuPont Rd / Wilmington Dr	Signal	AM	C	26.2	C	27.0
			PM	C	26.8	C	28.9
2	Center Drive & Steilacoom DuPont Rd	Signal	AM	C	21.0	C	30.9
			PM	B	17.7	C	29.4
3	Center Drive & International Place N	Signal	AM	A	2.8	A	8.3
			PM	A	3.1	B	13.7
4	Center Drive & Civic Drive	Signal	AM	A	5.6	A	6.1
			PM	A	6.8	A	7.1
5	Center Drive & Palisade Blvd	Signal	AM	A	6.3	A	6.7
			PM	A	7.2	A	7.3
6	Center Drive & Bob's Hollow Ln	Signal	AM	B	13.4	B	13.6
			PM	B	12.2	B	12.8
7	Center Drive & McNeil Street	Signal	AM	B	14.9	C	26.1
			PM	C	30.7	D	42.3
8	Center Drive & Wilmington Drive	Signal	AM	A	9.1	A	9.2
			PM	B	14.0	B	14.4

As shown in Table 4, all study intersections are anticipated to remain meeting the city of DuPont's LOS D standards. No operational deficiencies are identified as a result of the project.

4.5 Queuing

As part of the project evaluation, the City requested two specific movements to examine in terms of vehicle queuing: northbound left-turns at Steilacoom DuPont Road & Center Drive and eastbound left-turns at Center Drive & International Place N. A queuing analysis can determine whether there is sufficient storage capacity to accommodate turning demands during peak periods and avoid any spillover to the advancing through lanes.

Queues were estimated through the use of *SimTraffic*, a traffic simulation modeling program, in conjunction with *Synchro 10*. Using peak hour volumes under forecast 2022 conditions, 5 one-hour simulations were performed under each scenario to determined average queue lengths. As requested, the project's "non-peak" and "peak" conditions were both evaluated. Queue outputs are summarized in the table below.

Table 5: Forecast 2022 Queuing

Center Street at	Approach	Non-Peak Season				Peak Season			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Avg.	95th	Avg.	95th	Avg.	95th	Avg.	95th
Steilacoom DuPont Rd	NB LT	267'	303'	221'	308'	270'	296'	255'	311'
International Place	WB LT	52'	92'	66'	113'	69'	71'	95'	157'

Center Street & Steilacoom DuPont Road: is a signalized intersection offering approximately 250-feet of storage for the northbound left-turn before the lane striping transitions into a two-way left-turn lane. The max queue was estimated at 311 feet, which exceeds the storage capacity. However, no driveways exist south of the intersection where blocking conflicts would occur. Additional green time allocation and signal timing adjustments for the northbound left-turn phase could be implemented, should queuing become an issue.

Also of note: intersection improvements are identified at this location under the City's Six Year Transportation Improvement Plan. A consideration may be for the City to examine the benefits of dual northbound left-turn lanes. Dual left-turn lanes are generally considered when left-turn volumes exceed 300 vehicles per hour[3] provided that opposing volumes are moderate to high. Dual left-turn lanes can also allow for a shorter cycle while increasing left-turn capacity and allocate green time to other critical movements. However, with no queuing conflicts and acceptable service levels, dual left-turn lanes may not be needed until further demand and growth occur.

Center Drive & International Place: has recently been converted from stop-control to signalization with a new stop-bar and crosswalk located along the west leg. The eastbound left-turn lane has approximately 125-feet of storage as delineated by the solid white lane marking. An additional approximately 50 feet is available as the deceleration area before the tapers begin which can also be used to store vehicles under congested conditions. In total, approximately 175-feet of storage capacity is available which is shown to accommodate forecast peak demands under all scenarios.

[3] Federal Highway Administration Research and Technology

5. SUMMARY

Snow Blossom Fulfillment Center proposes to occupy an approximate 746,790 square foot warehouse for the use of a hazmat fulfillment center. The subject site is located on the northwest corner of Steilacoom DuPont Road & Center Drive and has multiple access driveways along International Place N. A site plan illustrating the building and parking configuration is presented in Figure 2.

The site can be expected to generate approximately 2,167 average weekday daily trips with 363 trips occurring during the AM peak hour and 604 during the PM peak hour. These volume estimates were derived from data provided by the client from a number of similar facilities and are representative of typical operations. Additional volume increases would be expected during the peak holiday season with volume and distribution estimations supplied in the appendix. The majority of traffic would be in the form of employee vehicles and delivery vans with relatively low amounts of heavy vehicles. A total of eight intersections within the city were selected for examination as part of this impact analysis. Existing conditions and a list of the study intersections are summarized in Table 2.

A two-year horizon was analyzed to assess project impacts subsequent to occupancy. Background growth rates and traffic volumes from nearby planned developments were included in the forecast analysis. All study intersections are shown to continue to meet the City of DuPont's LOS D standards for both AM and PM peak hours. No intersection or operational deficiencies were identified as a result of the proposed tenant occupancy. Queuing analyses were performed for the northbound left-turn approach at Steilacoom DuPont Road & Center Drive and the eastbound left-turn approach at Center Drive and International Place N with findings summarized in Table 5. Queuing was shown to exceed the 250-foot storage capacity for the northbound left-turn lane along Steilacoom DuPont Road at Center Drive with approximately 311 feet during the PM peak season period. However, additional storage is available as the lane transitions into a two-way left turn lane with no nearby driveways that would be obstructed. The City may want to consider dual left-turn lanes though the forecast Level of Service was shown to be acceptable. Additional green time allocation or other signal adjustments may also mitigate the left-turn queues.

Based on the findings above, no offsite mitigation is identified at this time.

SNOW BLOSSOM FULFILLMENT CENTER
TRAFFIC IMPACT ANALYSIS

APPENDIX

INTERSECTION COUNT SHEETS

Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

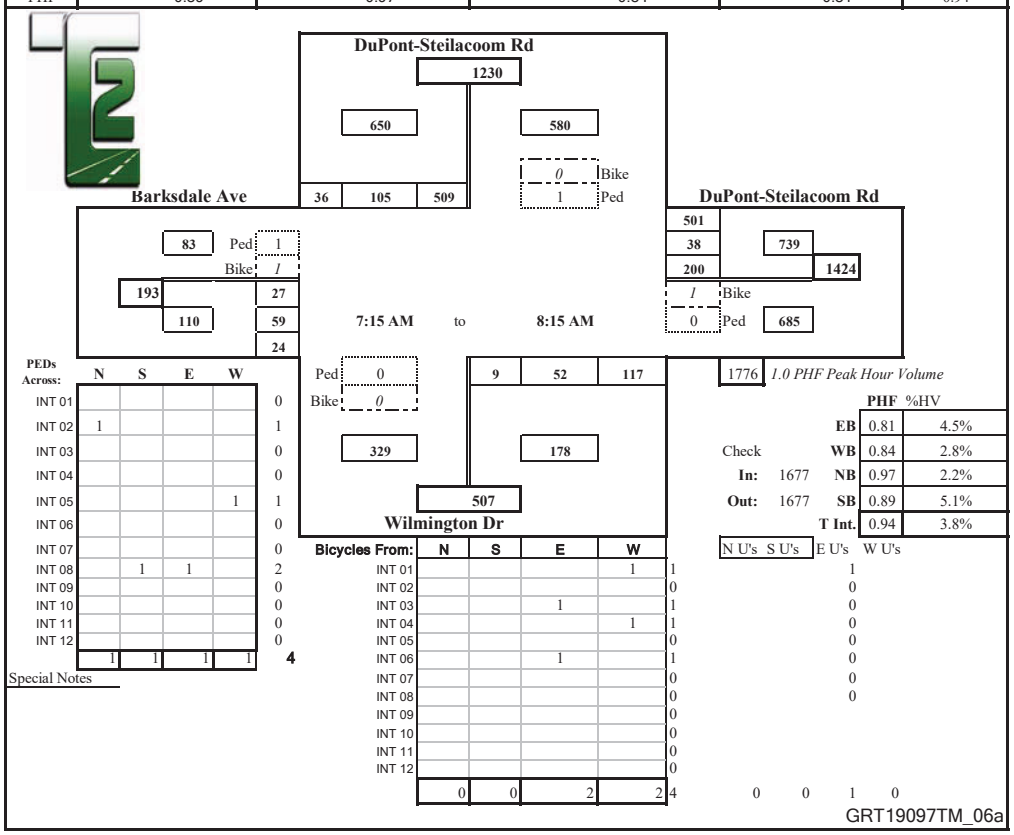
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: DuPont-Steilacoom Rd/Wilmington Dr & DuPont-Steilacoom Rd/Barksdale Ave **Date of Count:** Thurs 10/03/2019

Location: DuPont, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) DuPont-Steilacoom Rd				From South on (NB) Wilmington Dr				From East on (WB) DuPont-Steilacoom Rd				From West on (EB) Barksdale Ave				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	2	112	8	8	1	0	6	32	6	43	14	136	0	6	12	2	379
7:30 A	2	108	30	10	1	3	10	32	4	57	10	154	0	10	16	4	444
7:45 A	10	136	23	7	1	1	11	31	8	47	5	151	0	4	16	4	436
8:00 A	12	137	33	13	1	2	13	31	2	56	12	98	3	8	8	6	417
8:15 A	9	128	19	6	1	3	18	23	7	40	11	98	2	5	19	10	380
8:30 A	11	105	19	10	0	3	14	41	3	36	9	106	0	12	12	3	370
8:45 A	14	120	14	12	0	7	16	49	3	27	16	106	1	11	13	8	399
9:00 A	3	90	12	10	1	5	10	34	5	35	11	126	1	10	16	10	369
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	63	936	158	76	6	24	98	273	38	341	88	975	7	66	112	47	3194
Peak Hour: 7:15 AM to 8:15 AM																	
Total	33	509	105	36	4	9	52	117	21	200	38	501	5	27	59	24	1677
Approach	650				178				739				110				1677
%HV	5.1%				2.2%				2.8%				4.5%				3.8%
PHF	0.89				0.97				0.84				0.81				0.94



Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

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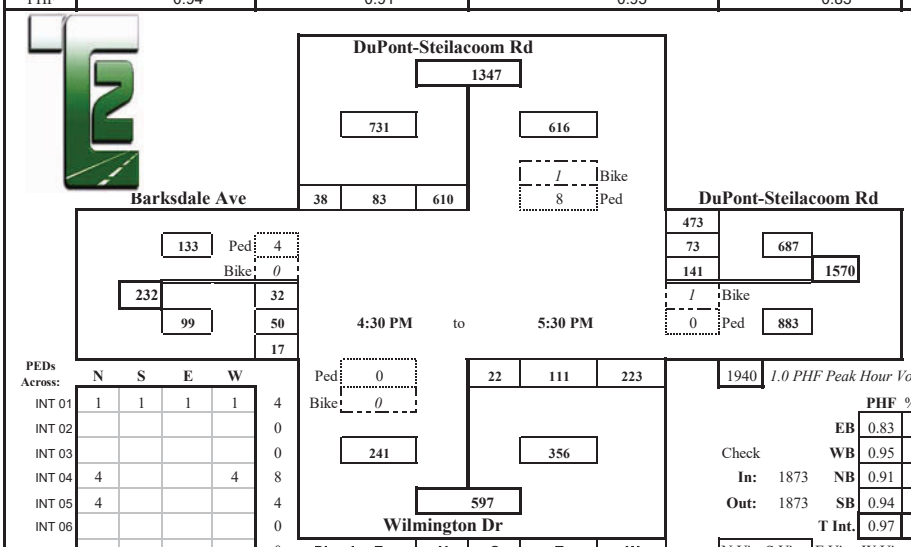
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	7	131	9	5	2	8	25	54	2	32	16	110	1	11	20	7	428
4:30 P	4	167	13	10	0	4	12	31	1	36	20	114	0	10	19	5	441
4:45 P	4	167	16	7	1	4	23	61	5	26	20	119	1	6	8	3	460
5:00 P	0	146	20	15	2	9	41	48	6	38	10	132	1	8	14	4	485
5:15 P	4	160	26	8	0	5	28	46	3	31	19	117	0	8	12	6	466
5:30 P	4	137	21	8	0	4	19	68	4	46	24	105	0	10	16	4	462
5:45 P	3	124	15	8	1	3	27	57	1	46	21	123	1	8	11	5	448
6:00 P	3	97	15	2	0	2	13	34	3	38	18	125	1	10	12	8	374
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	29	1129	135	63	6	39	188	399	25	293	148	945	5	71	112	42	3564
	Peak Hour: 4:30 PM to 5:30 PM																
Total	12	610	83	38	3	22	111	223	18	141	73	473	2	32	50	17	1873
Approach	731				356				687				99				1873
%HV	1.6%				0.8%				2.6%				2.0%				1.9%
PHF	0.94				0.91				0.95				0.83				0.97



1940 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.83	2.0%
Check	WB	0.95	2.6%
In: 1873	NB	0.91	0.8%
Out: 1873	SB	0.94	1.6%
	T Int.	0.97	1.9%

PEDs Across:	N	S	E	W	
INT 01	1	1	1	1	4
INT 02					0
INT 03					0
INT 04	4			4	8
INT 05	4				4
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	9	1	1	5	16

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01			1		1	0			
INT 02					0	0			
INT 03			1		1	0			
INT 04					0	1			
INT 05					0	0			
INT 06	1				1	0			
INT 07	1				1	0			
INT 08				1	1	0			
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	2	0	2	1	5	1	0	0	0

GRT19097TM_06p

Prepared for: **Geralyn Reinart, P.E.**

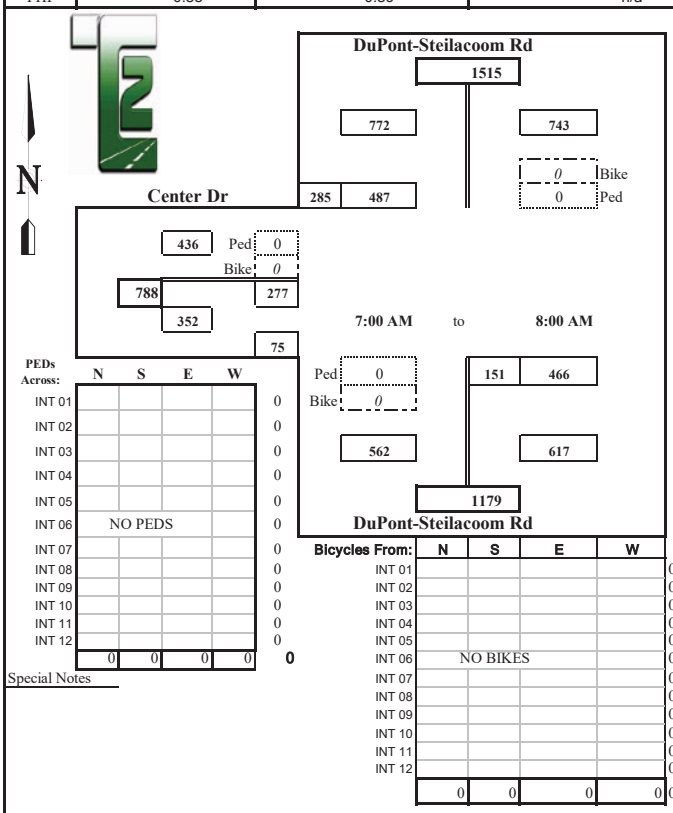
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: DuPont-Steilacoom Rd & Center Dr
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) DuPont-Steilacoom Rd				From South on (NB) DuPont-Steilacoom Rd				From East on (WB) 0				From West on (EB) Center Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	3	0	90	36	9	35	125	0	0	0	0	0	2	87	0	22	395
7:30 A	5	0	128	72	5	49	117	0	0	0	0	0	2	70	0	11	447
7:45 A	9	0	140	93	8	34	139	0	0	0	0	0	6	60	0	16	482
8:00 A	7	0	129	84	4	33	85	0	0	0	0	0	3	60	0	26	417
8:15 A	9	0	120	55	6	20	88	0	0	0	0	0	9	85	0	17	385
8:30 A	12	0	109	43	4	20	105	0	0	0	0	0	4	53	0	18	348
8:45 A	10	0	95	30	4	22	109	0	0	0	0	0	7	85	0	28	369
9:00 A	5	0	73	32	6	20	108	0	0	0	0	0	2	102	0	28	363
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	60	0	884	445	46	233	876	0	0	0	0	0	35	602	0	166	3206
	Peak Hour: 7:00 AM to 8:00 AM																
Total	24	0	487	285	26	151	466	0	0	0	0	0	13	277	0	75	1741
Approach	772				617				0				352				1741
%HV	3.1%				4.2%				n/a				3.7%				3.6%
PHF	0.83				0.89				n/a				0.81				0.90



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO BIKES				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

1928 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.81	3.7%
Check	WB	n/a	n/a
In: 1741	NB	0.89	4.2%
Out: 1741	SB	0.83	3.1%
	T Int.	0.90	3.6%

Conditions:

GRT19097TM_05a

Prepared for: **Geralyn Reinart, P.E.**

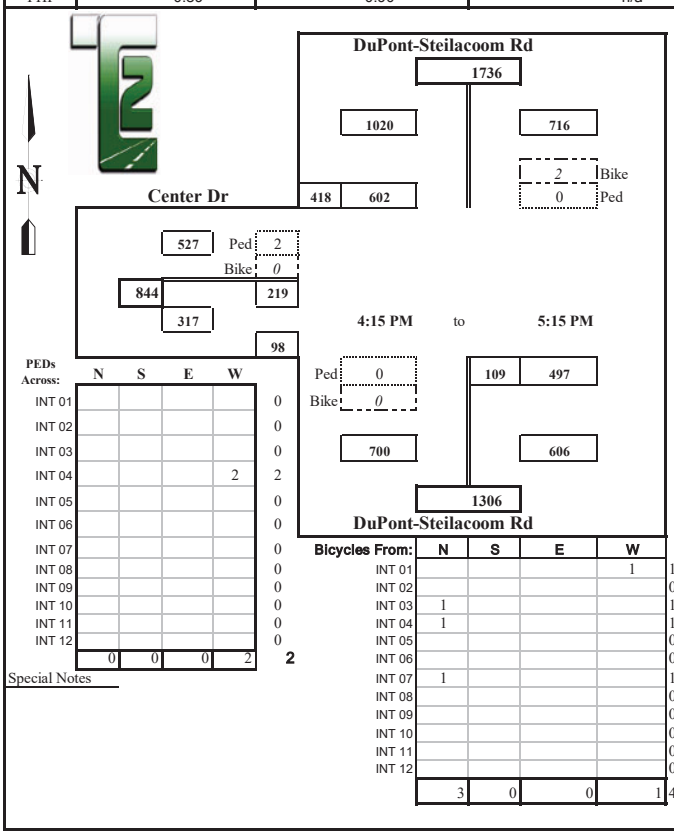
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: DuPont-Steilacoom Rd & Center Dr
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) DuPont-Steilacoom Rd				From South on (NB) DuPont-Steilacoom Rd				From East on (WB) 0				From West on (EB) Center Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	6	0	128	67	5	20	105	0	0	0	0	0	5	35	0	28	383
4:30 P	3	0	155	75	3	26	105	0	0	0	0	0	5	55	0	28	444
4:45 P	2	0	122	95	7	20	124	0	0	0	0	0	5	55	0	34	450
5:00 P	0	0	165	121	7	38	130	0	0	0	0	0	0	54	0	15	523
5:15 P	4	0	160	127	8	25	138	0	0	0	0	0	2	55	0	21	526
5:30 P	0	0	123	115	3	32	99	0	0	0	0	0	3	55	0	17	441
5:45 P	0	0	102	96	2	40	82	0	0	0	0	0	4	66	0	20	406
6:00 P	3	0	79	82	5	47	98	0	0	0	0	0	2	57	0	17	380
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	18	0	1034	778	40	248	881	0	0	0	0	0	26	432	0	180	3553
Peak Hour: 4:15 PM to 5:15 PM																	
Total	9	0	602	418	25	109	497	0	0	0	0	0	12	219	0	98	1943
Approach	1020				606				0				317				1943
%HV	0.9%				4.1%				n/a				3.8%				2.4%
PHF	0.89				0.90				n/a				0.89				0.92



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04				2	2
INT 05					0
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	2	2

Special Notes

Bicycles From:	N	S	E	W	
INT 01				1	1
INT 02					0
INT 03	1				1
INT 04	1				1
INT 05					0
INT 06					0
INT 07	1				1
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	0	0	1	4

2104 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.89	3.8%
Check	WB	n/a	n/a
In: 1943	NB	0.90	4.1%
Out: 1943	SB	0.89	0.9%
	T Int.	0.92	2.4%

Conditions:

GRT19097TM_05p

Prepared for: **PH Consulting LLC**

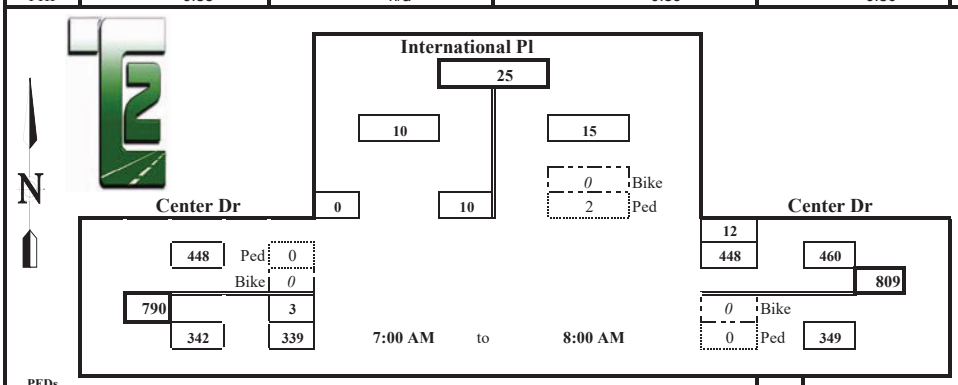
Traffic Count Consultants, Inc.

Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: International Pl & Center Dr
Location: Dupont, Washington
Date of Count: Tues 10/03/2017
Checked By: Jess

Time Interval Ending at	From North on (SB) International Pl				From South on (NB) 0				From East on (WB) Center Dr				From West on (EB) Center Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	3	3	0	0	0	0	0	0	3	0	88	3	3	0	107	0	201
7:30 A	2	2	0	0	0	0	0	0	6	0	115	5	0	0	77	0	199
7:45 A	3	3	0	0	0	0	0	0	2	0	119	1	0	1	77	0	201
8:00 A	2	2	0	0	0	0	0	0	11	0	126	3	4	2	78	0	211
8:15 A	2	2	0	0	0	0	0	0	1	0	65	1	4	0	78	0	146
8:30 A	2	1	0	1	0	0	0	0	2	0	40	1	3	0	81	0	124
8:45 A	2	2	0	0	0	0	0	0	6	0	55	4	0	0	99	0	160
9:00 A	1	1	0	0	0	0	0	0	2	0	44	1	4	0	144	0	190
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	17	16	0	1	0	0	0	0	33	0	652	19	18	3	741	0	1432
Peak Hour: 7:00 AM to 8:00 AM																	
Total	10	10	0	0	0	0	0	0	22	0	448	12	7	3	339	0	812
Approach	10				0				460				342				812
%HV	100.0%				n/a				4.8%				2.0%				4.8%
PHF	0.83				n/a				0.89				0.80				0.96



844 *1.0 PHF Peak Hour Volume*

PEDs Across:	N	S	E	W	
INT 01					0
INT 02	2				2
INT 03					0
INT 04					0
INT 05					0
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	2	0	0	0	2

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06				1	1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	1	1

		PHF	%HV
	EB	0.80	2.0%
Check	WB	0.89	4.8%
In: 812	NB	n/a	n/a
Out: 812	SB	0.83	100.0%
	T Int.	0.96	4.8%

N U's	S U's	E U's	W U's
			0
			0
			0
			0
			0
			0
			1
			0
0	0	0	1

PHC17102M_01a

Prepared for: **PH Consulting LLC**

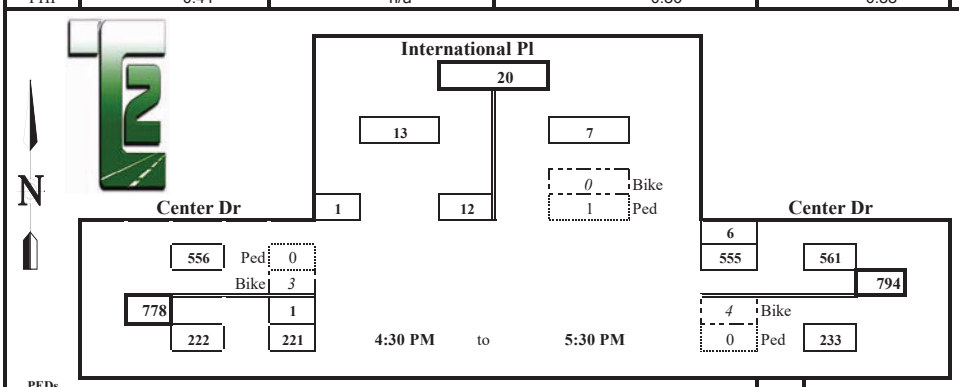
Traffic Count Consultants, Inc.

Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: International Pl & Center Dr
Location: Dupont, Washington
Date of Count: Tues 10/03/2017
Checked By: Jess

Time Interval Ending at	From North on (SB) International Pl				From South on (NB) 0				From East on (WB) Center Dr				From West on (EB) Center Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	1	3	0	6	0	0	0	0	2	0	91	0	5	0	55	0	155
4:30 P	0	2	0	1	0	0	0	0	2	0	86	0	4	0	48	0	137
4:45 P	0	7	0	1	0	0	0	0	4	0	108	3	1	0	54	0	173
5:00 P	0	4	0	0	0	0	0	0	2	0	164	0	3	0	52	0	220
5:15 P	0	1	0	0	0	0	0	0	3	0	139	1	3	0	63	0	204
5:30 P	0	0	0	0	0	0	0	0	1	0	144	2	2	1	52	0	199
5:45 P	1	1	0	1	0	0	0	0	0	0	106	1	4	0	62	0	171
6:00 P	1	2	0	3	0	0	0	0	0	0	132	1	3	0	59	0	197
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	3	20	0	12	0	0	0	0	14	0	970	8	25	1	445	0	1456
Peak Hour: 4:30 PM to 5:30 PM																	
Total	0	12	0	1	0	0	0	0	10	0	555	6	9	1	221	0	796
Approach	13				0				561				222				796
%HV	n/a				n/a				1.8%				4.1%				2.4%
PHF	0.41				n/a				0.86				0.88				0.90



880 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.88	4.1%
WB	0.86	1.8%
NB	n/a	n/a
SB	0.41	n/a
T Int.	0.90	2.4%

Check In: 796 Out: 796

PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	1				1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	0	0	0	1

Special Notes

Bicycles From:	N	S	E	W	
INT 01				1	1
INT 02					0
INT 03			1	1	2
INT 04			1	1	2
INT 05					0
INT 06			2	1	3
INT 07	1		1		2
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	0	5	5	11

PHC17102M_01p

Prepared for: **PH Consulting LLC**

Traffic Count Consultants, Inc.

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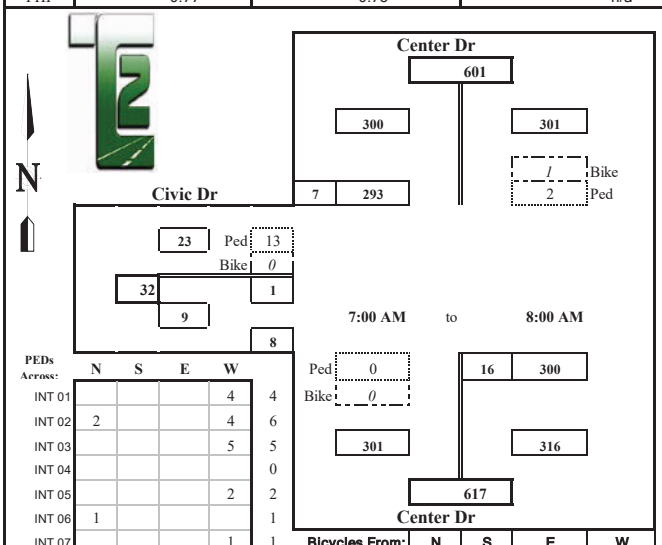
WBE/DBE

Intersection: Center Dr & Civic Dr
Location: Dupont, Washington
Date of Count: Tues 9/05/2017
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) 0				From West on (EB) Civic Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	1	0	52	0	3	5	101	0	0	0	0	0	0	0	0	0	158
7:30 A	2	0	65	5	3	4	60	0	0	0	0	0	1	1	0	0	135
7:45 A	5	0	97	1	1	1	65	0	0	0	0	0	0	0	0	7	171
8:00 A	4	0	79	1	3	6	74	0	0	0	0	0	0	0	0	1	161
8:15 A	0	0	32	3	4	4	67	0	0	0	0	0	0	0	0	2	108
8:30 A	0	0	38	2	3	5	60	0	0	0	0	0	0	2	0	1	108
8:45 A	2	0	49	3	3	2	62	0	0	0	0	0	0	1	0	5	122
9:00 A	2	0	52	0	3	5	54	0	0	0	0	0	0	1	0	1	113
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	16	0	464	15	23	32	543	0	0	0	0	0	1	5	0	17	1076
Peak Hour: 7:00 AM to 8:00 AM																	
Total	12	0	293	7	10	16	300	0	0	0	0	0	1	1	0	8	625
Approach	300				316				0				9				625
%HV	4.0%				3.2%				n/a				11.1%				3.7%
PHF	0.77				0.75				n/a				0.32				0.91



684 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.32	11.1%
Check	WB	n/a	n/a
In: 625	NB	0.75	3.2%
Out: 625	SB	0.77	4.0%
	T Int.	0.91	3.7%

PEDs Across:	N	S	E	W	
INT 01				4	4
INT 02	2			4	6
INT 03				5	5
INT 04					0
INT 05				2	2
INT 06	1				1
INT 07				1	1
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	0	0	17	20

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01					0	0			
INT 02					0	2			
INT 03					0	0			
INT 04	1				1	1			
INT 05		1			1	0			
INT 06					0	0			
INT 07	2	2			4	0			
INT 08	1				1	0			
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	4	3	0	0	7	3	0	0	0

PHC17102M_05a

Prepared for: **PH Consulting LLC**

Traffic Count Consultants, Inc.

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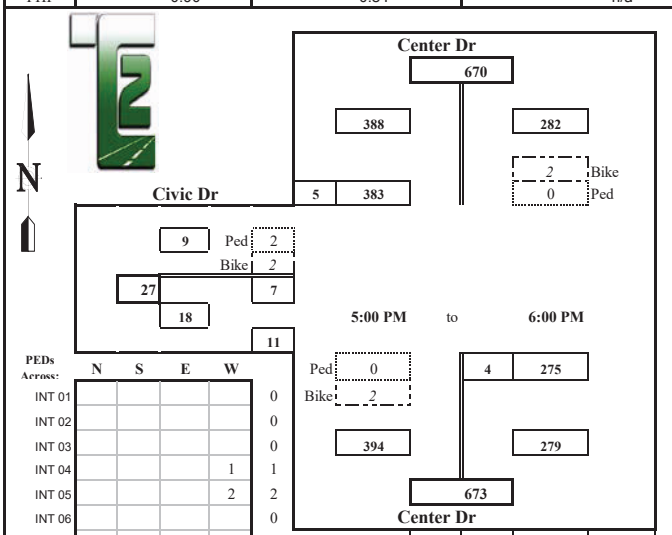
WBE/DBE

Intersection: Center Dr & Civic Dr
Location: Dupont, Washington
Date of Count: Tues 9/05/2017
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) 0				From West on (EB) Civic Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	82	2	2	0	51	0	0	0	0	0	0	2	0	4	141
4:30 P	0	0	83	0	3	0	52	0	0	0	0	0	0	0	0	6	141
4:45 P	1	0	94	0	2	2	68	0	0	0	0	0	0	2	0	4	170
5:00 P	1	0	91	0	0	2	55	0	0	0	0	0	0	1	0	2	151
5:15 P	1	0	106	2	1	0	51	0	0	0	0	0	0	3	0	5	167
5:30 P	0	0	97	1	1	0	65	0	0	0	0	0	0	1	0	4	168
5:45 P	1	0	89	0	0	1	79	0	0	0	0	0	0	0	0	0	169
6:00 P	0	0	91	2	0	3	80	0	0	0	0	0	0	3	0	2	181
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	4	0	733	7	9	8	501	0	0	0	0	0	0	12	0	27	1288
Peak Hour: 5:00 PM to 6:00 PM																	
Total	2	0	383	5	2	4	275	0	0	0	0	0	0	7	0	11	685
Approach	388				279				0				18				685
%HV	0.5%				0.7%				n/a				n/a				0.6%
PHF	0.90				0.84				n/a				0.56				0.95



724 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.56	n/a
Check	WB	n/a	n/a
In: 685	NB	0.84	0.7%
Out: 685	SB	0.90	0.5%
	T Int.	0.95	0.6%

PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04				1	1
INT 05				2	2
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	3	3

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01		1			1	0			
INT 02					0	0			
INT 03					0	2			
INT 04					0	0			
INT 05					0	0			
INT 06	2			2	4	0			
INT 07		1			1	1			
INT 08		1			1	0			
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	2	3	0	2	7	3	0	0	0

PHC17102M_05p

Prepared for: **Geralyn Reinart, P.E.**

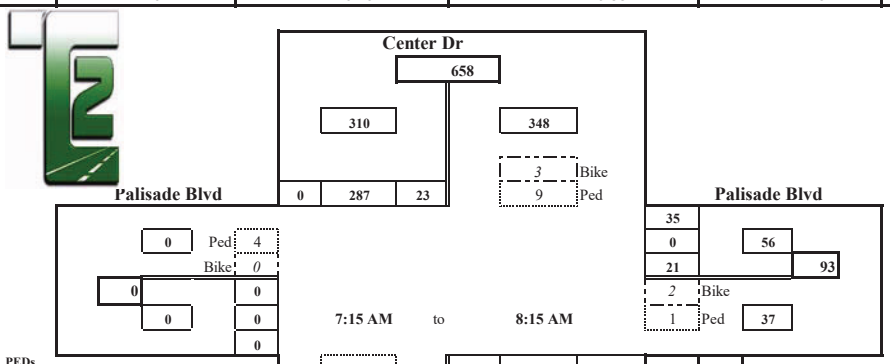
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Center Dr & Palisade Blvd
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) Palisade Blvd				From West on (EB) Palisade Blvd				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	6	30	0	0	0	90	2	0	5	0	7	0	0	0	0	140
7:30 A	2	4	46	0	0	0	96	7	0	5	0	7	0	0	0	0	165
7:45 A	7	5	91	0	0	0	67	3	0	7	0	9	0	0	0	0	182
8:00 A	7	6	101	0	1	0	69	2	0	5	0	10	0	0	0	0	193
8:15 A	0	8	49	0	6	0	81	2	1	4	0	9	0	0	0	0	153
8:30 A	1	6	44	0	1	0	62	5	0	6	0	2	0	0	0	0	125
8:45 A	1	3	48	0	1	1	92	7	0	4	0	9	0	0	0	0	164
9:00 A	2	5	56	0	3	0	105	5	0	9	0	6	0	0	0	0	186
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	20	43	465	0	12	1	662	33	1	45	0	59	0	0	0	0	1308
Peak Hour: 7:15 AM to 8:15 AM																	
Total	16	23	287	0	7	0	313	14	1	21	0	35	0	0	0	0	693
Approach	310				327				56				0				693
%HV	5.2%				2.1%				1.8%				n/a				3.5%
PHF	0.72				0.79				0.88				n/a				0.90



772 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	n/a	n/a
Check	WB	0.88	1.8%
In: 693	NB	0.79	2.1%
Out: 693	SB	0.72	5.2%
	T Int.	0.90	3.5%

PEDs Across:	N	S	E	W	
INT 01	1		2		3
INT 02					0
INT 03	1				1
INT 04	7	1		2	10
INT 05	1		1	2	4
INT 06			1	1	2
INT 07			1		1
INT 08			1	1	2
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	10	1	6	6	23

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01				1	1	0			
INT 02	1				1	1			
INT 03	2		2		4	0			
INT 04					0	0			
INT 05					0	1			
INT 06		1			1	0			
INT 07					0	0			
INT 08	1				1	0			
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	4	1	2	1	8	2	0	0	0

GRT19097TM_04a

Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

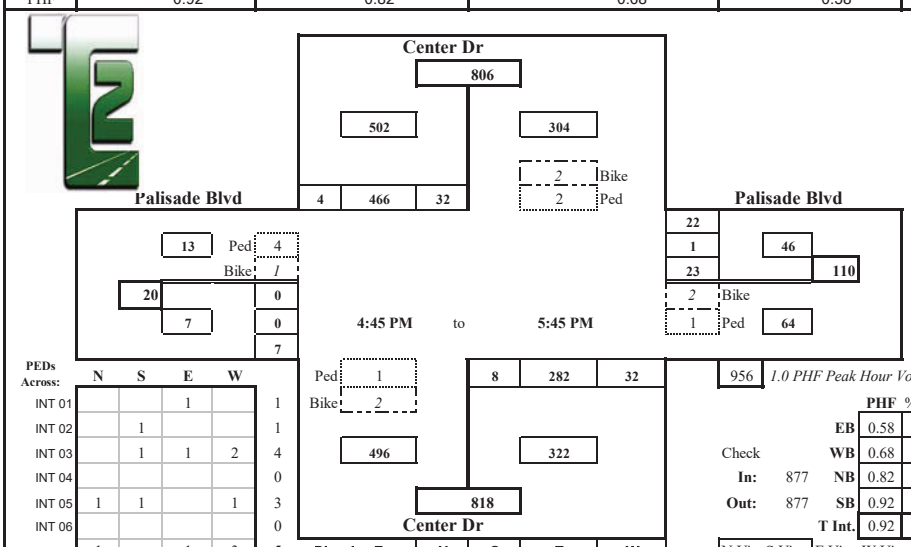
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Center Dr & Palisade Blvd **Date of Count:** Thurs 10/03/2019

Location: DuPont, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) Palisade Blvd				From West on (EB) Palisade Blvd				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	2	6	83	0	3	0	48	2	0	7	0	7	0	0	0	1	154
4:30 P	1	5	83	0	2	0	57	8	1	2	0	10	0	0	0	0	165
4:45 P	0	7	94	2	3	1	57	9	0	6	0	6	0	0	0	0	182
5:00 P	0	11	114	1	0	3	55	7	0	7	0	3	0	0	0	2	203
5:15 P	0	4	128	1	1	1	64	9	0	5	1	2	0	0	0	1	216
5:30 P	0	8	128	0	1	2	75	8	0	7	0	10	0	0	0	1	239
5:45 P	0	9	96	2	1	2	88	8	0	4	0	7	0	0	0	3	219
6:00 P	1	6	72	0	0	0	83	2	0	4	0	8	0	0	0	0	175
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	4	56	798	6	11	9	527	53	1	42	1	53	0	0	0	8	1553
	Peak Hour: 4:45 PM to 5:45 PM																
Total	0	32	466	4	3	8	282	32	0	23	1	22	0	0	0	7	877
Approach	502				322				46				7				877
%HV	n/a				0.9%				n/a				n/a				0.3%
PHF	0.92				0.82				0.68				0.58				0.92



956 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.58	n/a
Check	WB	0.68	n/a
In: 877	NB	0.82	0.9%
Out: 877	SB	0.92	n/a
	T Int.	0.92	0.3%

PEDs Across:	N	S	E	W	
INT 01			1		1
INT 02		1			1
INT 03		1	1	2	4
INT 04					0
INT 05	1	1		1	3
INT 06					0
INT 07	1		1	3	5
INT 08	2		2	1	5
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	4	3	5	7	19

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01		1			1	0	0		
INT 02					0	0	0		
INT 03					0	0	1		
INT 04	1				1	1	0		
INT 05	1	1		1	3	1	1		
INT 06		1	1		2	0	0		
INT 07			1		1	0	0		
INT 08		2		5	7	0	0		
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	2	5	2	6	15	2	2	0	0

GRT19097TM_04p

Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

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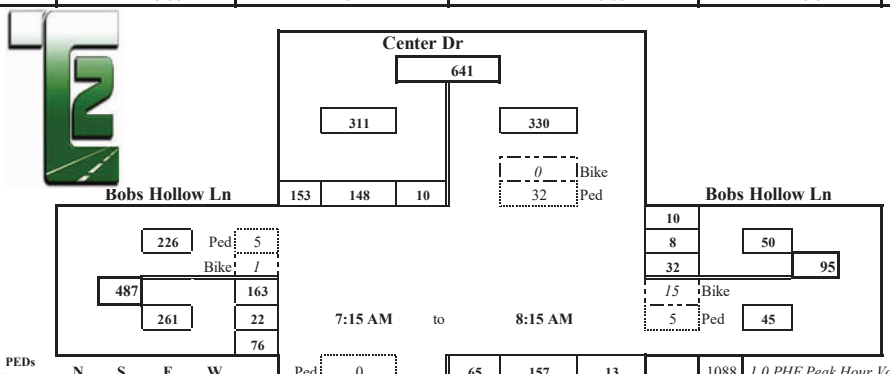
WBE/DBE

Intersection: Center Dr & Bobs Hollw Ln
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) Bobs Hollow Ln				From West on (EB) Bobs Hollow Ln				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	25	11	0	4	45	0	0	6	1	3	0	43	5	8	151
7:30 A	2	2	27	17	0	7	65	4	0	13	0	5	0	33	3	7	183
7:45 A	7	1	43	42	0	23	33	4	0	9	2	1	0	34	2	8	202
8:00 A	7	4	44	70	1	18	26	1	0	7	3	1	5	52	7	39	272
8:15 A	0	3	34	24	1	17	33	4	0	3	3	3	4	44	10	22	200
8:30 A	1	2	31	14	0	6	38	1	0	7	0	3	1	28	3	8	141
8:45 A	0	1	34	15	0	1	52	0	0	7	1	4	1	40	15	13	183
9:00 A	3	4	42	14	3	6	53	2	0	12	9	10	1	43	24	11	230
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	20	17	280	207	5	82	345	16	0	64	19	30	12	317	69	116	1562
Peak Hour: 7:15 AM to 8:15 AM																	
Total	16	10	148	153	2	65	157	13	0	32	8	10	9	163	22	76	857
Approach	311				235				50				261				857
%HV	5.1%				0.9%				n/a				3.4%				3.2%
PHF	0.66				0.77				0.69				0.67				0.79



1088 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.67	3.4%
WB	0.69	n/a
NB	0.77	0.9%
SB	0.66	5.1%
T Int.	0.79	3.2%

Check In: 857 Out: 857

Conditions:

PEDs Across:	N	S	E	W	
INT 01			1		1
INT 02					0
INT 03	11		2		13
INT 04	18		2	4	24
INT 05	3		1	1	5
INT 06			2	1	3
INT 07	3		1		4
INT 08			2	1	3
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	35	0	11	7	53

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03			6	1	7
INT 04		2	8		10
INT 05			1		1
INT 06		1			1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	3	15	1	19

GRT19097TM_03a

Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

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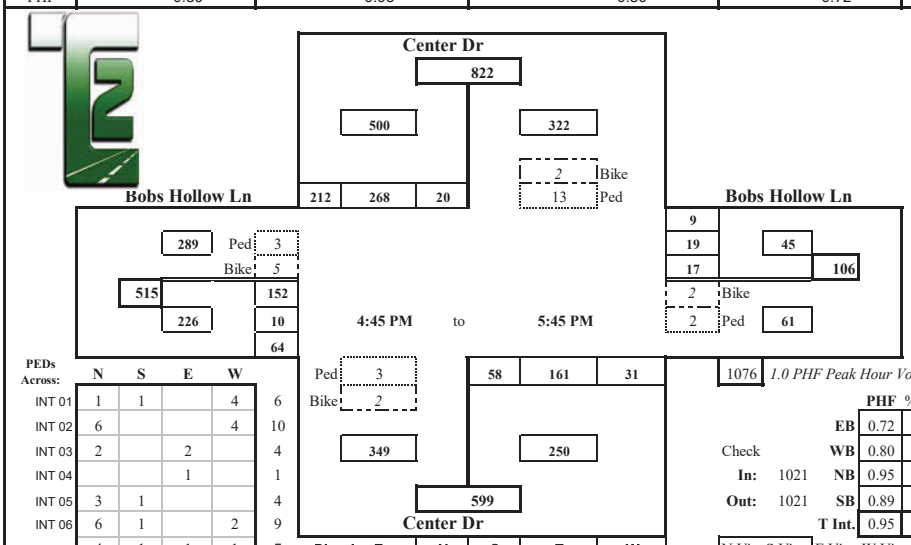
WBE/DBE

Intersection: Center Dr & Bobs Hollw Ln **Date of Count:** Thurs 10/03/2019

Location: DuPont, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) Bobs Hollow Ln				From West on (EB) Bobs Hollow Ln				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	2	5	49	36	2	18	33	1	0	1	4	4	1	17	3	3	174
4:30 P	0	5	48	28	1	6	35	10	0	1	2	2	2	26	6	6	175
4:45 P	1	4	66	36	2	23	44	9	0	1	2	7	1	18	3	7	220
5:00 P	0	2	68	49	0	12	36	9	0	4	4	2	1	30	3	8	227
5:15 P	0	6	74	60	0	12	43	9	0	7	5	1	1	36	3	10	266
5:30 P	0	5	78	48	1	16	40	7	0	4	3	1	1	38	1	18	259
5:45 P	0	7	48	55	0	18	42	6	0	2	7	5	1	48	3	28	269
6:00 P	1	3	46	22	0	12	58	3	0	1	5	3	0	23	4	11	191
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	4	37	477	334	6	117	331	54	0	21	32	25	8	236	26	91	1781
	Peak Hour: 4:45 PM to 5:45 PM																
Total	0	20	268	212	1	58	161	31	0	17	19	9	4	152	10	64	1021
Approach	500				250				45				226				1021
%HV	n/a				0.4%				n/a				1.8%				0.5%
PHF	0.89				0.95				0.80				0.72				0.95



PEDs Across:	N	S	E	W	
INT 01	1	1		4	6
INT 02	6			4	10
INT 03	2		2		4
INT 04			1		1
INT 05	3	1			4
INT 06	6	1		2	9
INT 07	4	1	1	1	7
INT 08	7	1	3	1	12
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	29	5	7	12	53

Special Notes

Bicycles From:	N	S	E	W	
INT 01			1		1
INT 02		3			3
INT 03	1	3		2	6
INT 04	2		1		3
INT 05				2	2
INT 06		1	1	2	4
INT 07		1		1	2
INT 08	3	1			4
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	6	9	3	7	25

1076 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.72	1.8%
Check	WB	0.80	n/a
In: 1021	NB	0.95	0.4%
Out: 1021	SB	0.89	n/a
	T Int.	0.95	0.5%

N U's	S U's	E U's	W U's
0			
0			
0			
0			
1			
0			
0			
1	0	0	0

GRT19097TM_03p

Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

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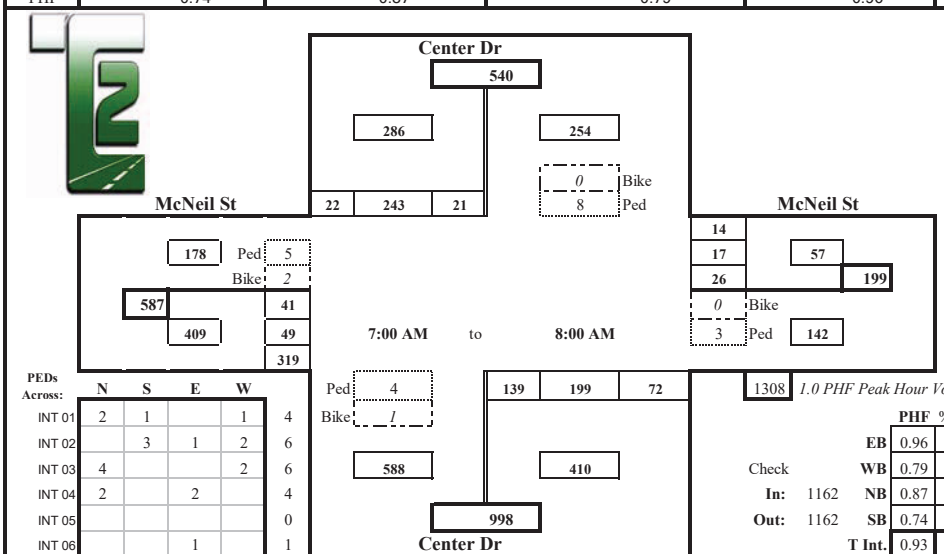
WBE/DBE

Intersection: Center Dr & McNeil St
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) McNeil St				From West on (EB) McNeil St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	4	51	3	1	24	51	10	1	4	2	3	0	11	12	79	254
7:30 A	0	3	57	6	0	34	58	18	1	8	3	4	0	9	11	86	297
7:45 A	0	7	53	5	0	43	54	21	1	9	3	3	0	7	16	77	298
8:00 A	1	7	82	8	3	38	36	23	1	5	9	4	1	14	10	77	313
8:15 A	0	2	62	5	2	28	43	15	0	10	4	2	0	12	9	61	253
8:30 A	0	6	52	5	2	21	47	10	0	5	5	3	0	14	5	50	223
8:45 A	0	3	56	1	1	31	31	12	1	10	4	4	1	30	15	91	288
9:00 A	1	6	79	17	0	25	32	4	0	7	7	1	3	50	23	76	327
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	38	492	50	9	244	352	113	5	58	37	24	5	147	101	597	2253
Peak Hour:	7:00 AM to 8:00 AM																
Total	1	21	243	22	4	139	199	72	4	26	17	14	1	41	49	319	1162
Approach	286				410				57				409				1162
%HV	0.3%				1.0%				7.0%				0.2%				0.9%
PHF	0.74				0.87				0.79				0.96				0.93



1308 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.96	0.2%
WB	0.79	7.0%
NB	0.87	1.0%
SB	0.74	0.3%
T Int.	0.93	0.9%

Check In: 1162 Out: 1162

Conditions:

PEDs Across:	N	S	E	W	
INT 01	2	1		1	4
INT 02		3	1	2	6
INT 03	4			2	6
INT 04	2		2		4
INT 05					0
INT 06			1		1
INT 07			1		1
INT 08	2	1	2	1	6
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	10	5	7	6	28

Bicycles From:	N	S	E	W	
INT 01				1	1
INT 02					0
INT 03		1			1
INT 04				1	1
INT 05					0
INT 06		1			1
INT 07				2	2
INT 08	1		1		2
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	2	1	4	8

Special Notes

GRT19097TM_02a

Prepared for: **Geralyn Reinart, P.E.**

Traffic Count Consultants, Inc.

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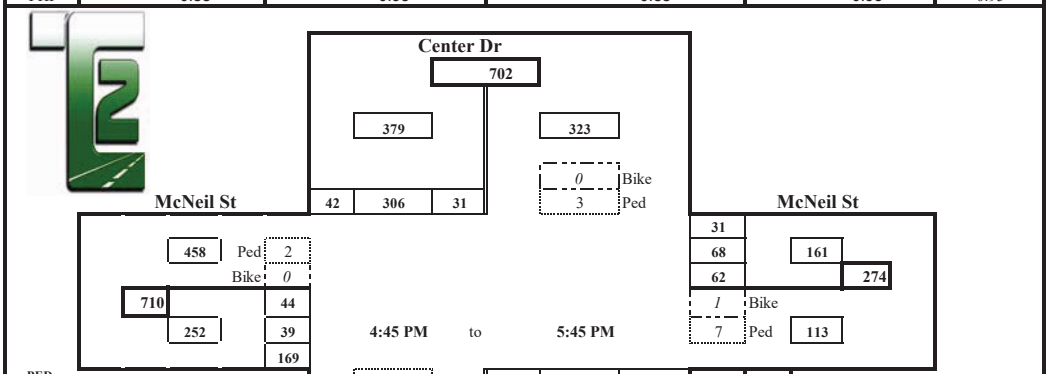
WBE/DBE

Intersection: Center Dr & McNeil St
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) McNeil St				From West on (EB) McNeil St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	1	3	58	8	2	76	47	12	0	27	17	5	1	5	9	34	301
4:30 P	0	2	66	1	1	64	41	11	0	13	14	5	1	14	9	37	277
4:45 P	0	4	54	10	0	81	60	4	0	31	16	8	2	12	6	36	322
5:00 P	1	2	70	11	0	93	61	11	2	13	17	5	1	8	9	49	349
5:15 P	0	7	73	11	0	77	61	8	1	22	16	8	0	15	10	36	344
5:30 P	0	13	86	9	0	90	66	16	1	12	15	9	0	10	11	38	375
5:45 P	0	9	77	11	1	88	60	8	1	15	20	9	0	11	9	46	363
6:00 P	0	4	43	9	0	84	66	13	1	12	25	5	0	23	7	40	331
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	44	527	70	4	653	462	83	6	145	140	54	5	98	70	316	2662
Peak Hour: 4:45 PM to 5:45 PM																	
Total	1	31	306	42	1	348	248	43	5	62	68	31	1	44	39	169	1431
Approach	379				639				161				252				1431
%HV	0.3%				0.2%				3.1%				0.4%				0.6%
PHF	0.88				0.93				0.88				0.95				0.95



1500 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.95	0.4%
WB	0.88	3.1%
NB	0.93	0.2%
SB	0.88	0.3%
T Int.	0.95	0.6%

Check In: 1431 Out: 1431

PEDs Across:	N	S	E	W	
INT 01	3	1	1	3	8
INT 02	1		1		2
INT 03	1	1	1	1	4
INT 04		3	3		6
INT 05	1	1			2
INT 06	1				1
INT 07	1	1	4	2	8
INT 08	1	2		3	6
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	9	9	10	9	37

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01					0		2		
INT 02		3	2		5		0		
INT 03			3		3		0		
INT 04		1	1		2		0		
INT 05		1			1		0		
INT 06					0		0		
INT 07					0		0		
INT 08		1			1		0		
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	0	6	6	0	12	0	2	0	0

GRT19097TM_02p

Prepared for: **Geralyn Reinart, P.E.**

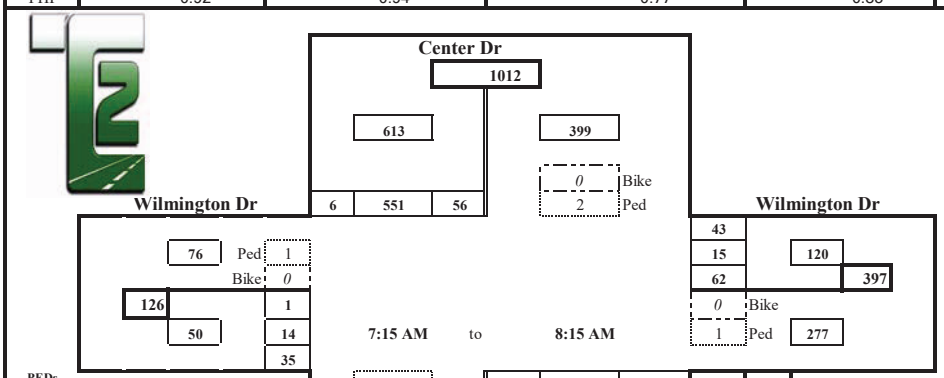
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Center Dr & Wilmington Dr
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) Wilmington Dr				From West on (EB) Wilmington Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	1	5	122	4	2	10	66	27	0	27	5	7	0	1	2	9	285
7:30 A	2	9	155	2	1	7	97	52	0	12	3	8	0	1	6	8	360
7:45 A	1	19	126	1	2	6	101	57	0	19	6	14	0	0	3	12	364
8:00 A	2	18	147	1	3	17	85	54	1	13	4	9	0	0	2	5	355
8:15 A	0	10	123	2	2	25	72	44	0	18	2	12	0	0	3	10	321
8:30 A	0	13	96	5	2	13	62	56	0	22	5	13	0	3	2	14	304
8:45 A	1	9	160	6	1	17	60	47	0	34	3	9	0	3	4	9	361
9:00 A	1	21	147	8	0	11	46	43	0	13	5	9	0	4	3	7	317
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	8	104	1076	29	13	106	589	380	1	158	33	81	0	12	25	74	2667
Peak Hour: 7:15 AM to 8:15 AM																	
Total	5	56	551	6	8	55	355	207	1	62	15	43	0	1	14	35	1400
Approach	613				617				120				50				1400
%HV	0.8%				1.3%				0.8%				n/a				1.0%
PHF	0.92				0.94				0.77				0.83				0.96



1456 *1.0 PHF Peak Hour Volume*

PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03	1		1		2
INT 04					0
INT 05	1			1	2
INT 06	2		2		4
INT 07	2		3	2	7
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	6	0	6	3	15

	PHF	%HV
EB	0.83	n/a
WB	0.77	0.8%
NB	0.94	1.3%
SB	0.92	0.8%
T Int.	0.96	1.0%

Check In: 1400 Out: 1400

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01					0	0			
INT 02					0	0			
INT 03					0	0			
INT 04					0	0			
INT 05					0	0			
INT 06		1			1	1			
INT 07					0	0			
INT 08					0	1			
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	0	1	0	0	1	2	0	0	0

Special Notes

GRT19097TM_01a

Prepared for: **Geralyn Reinart, P.E.**

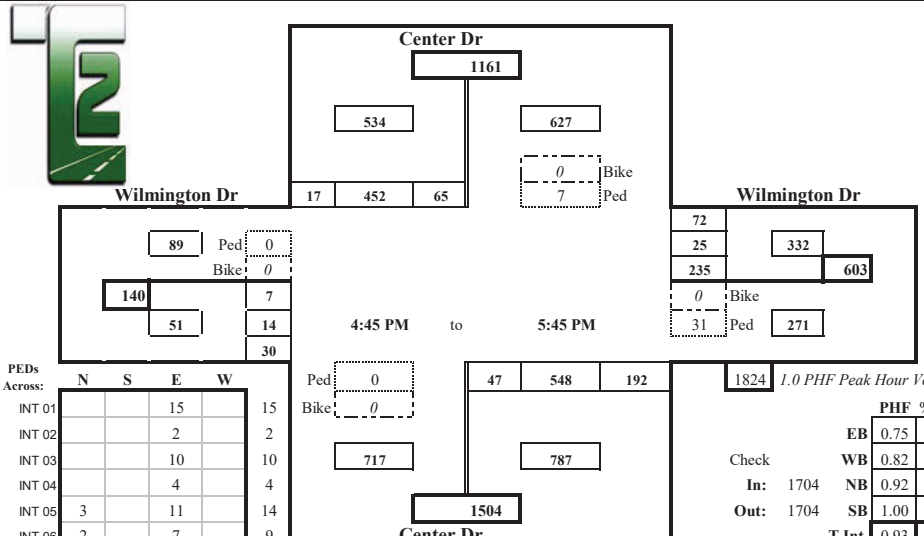
Traffic Count Consultants, Inc.

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: Center Dr & Wilmington Dr
Location: DuPont, Washington
Date of Count: Thurs 10/03/2019
Checked By: Jess

Time Interval Ending at	From North on (SB) Center Dr				From South on (NB) Center Dr				From East on (WB) Wilmington Dr				From West on (EB) Wilmington Dr				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	14	102	3	2	11	117	40	3	57	5	17	0	1	2	10	379
4:30 P	0	19	102	5	1	19	100	38	0	46	11	12	0	2	4	7	365
4:45 P	0	14	106	1	2	6	142	29	1	61	6	11	0	1	6	10	393
5:00 P	4	21	110	3	3	17	138	58	1	62	6	15	0	2	5	10	447
5:15 P	1	16	109	9	1	9	131	40	0	64	6	19	0	2	1	5	411
5:30 P	1	13	118	3	0	4	143	34	0	37	4	18	0	1	5	10	390
5:45 P	1	15	115	2	2	17	136	60	0	72	9	20	0	2	3	5	456
6:00 P	2	18	83	2	2	11	135	31	0	42	12	24	0	2	5	4	369
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	9	130	845	28	13	94	1042	330	5	441	59	136	0	13	31	61	3210
Peak Hour: 4:45 PM to 5:45 PM																	
Total	7	65	452	17	6	47	548	192	1	235	25	72	0	7	14	30	1704
Approach	534				787				332				51				1704
%HV	1.3%				0.8%				0.3%				n/a				0.8%
PHF	1.00				0.92				0.82				0.75				0.93



1824 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.75	n/a
WB	0.82	0.3%
NB	0.92	0.8%
SB	1.00	1.3%
T Int.	0.93	0.8%

Check In: 1704 Out: 1704

PEDs Across:	N	S	E	W	
INT 01			15		15
INT 02			2		2
INT 03			10		10
INT 04			4		4
INT 05	3		11		14
INT 06	2		7		9
INT 07	2		9		11
INT 08			6		6
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	7	0	64	0	71

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01					0	0	0		
INT 02					0	0	0		
INT 03					0	1	1		
INT 04					0	0	0		
INT 05					0	0	0		
INT 06	NO BIKES				0	0	0		
INT 07					0	0	0		
INT 08					0	0	1		
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	0	0	0	0	0	1	2	0	0

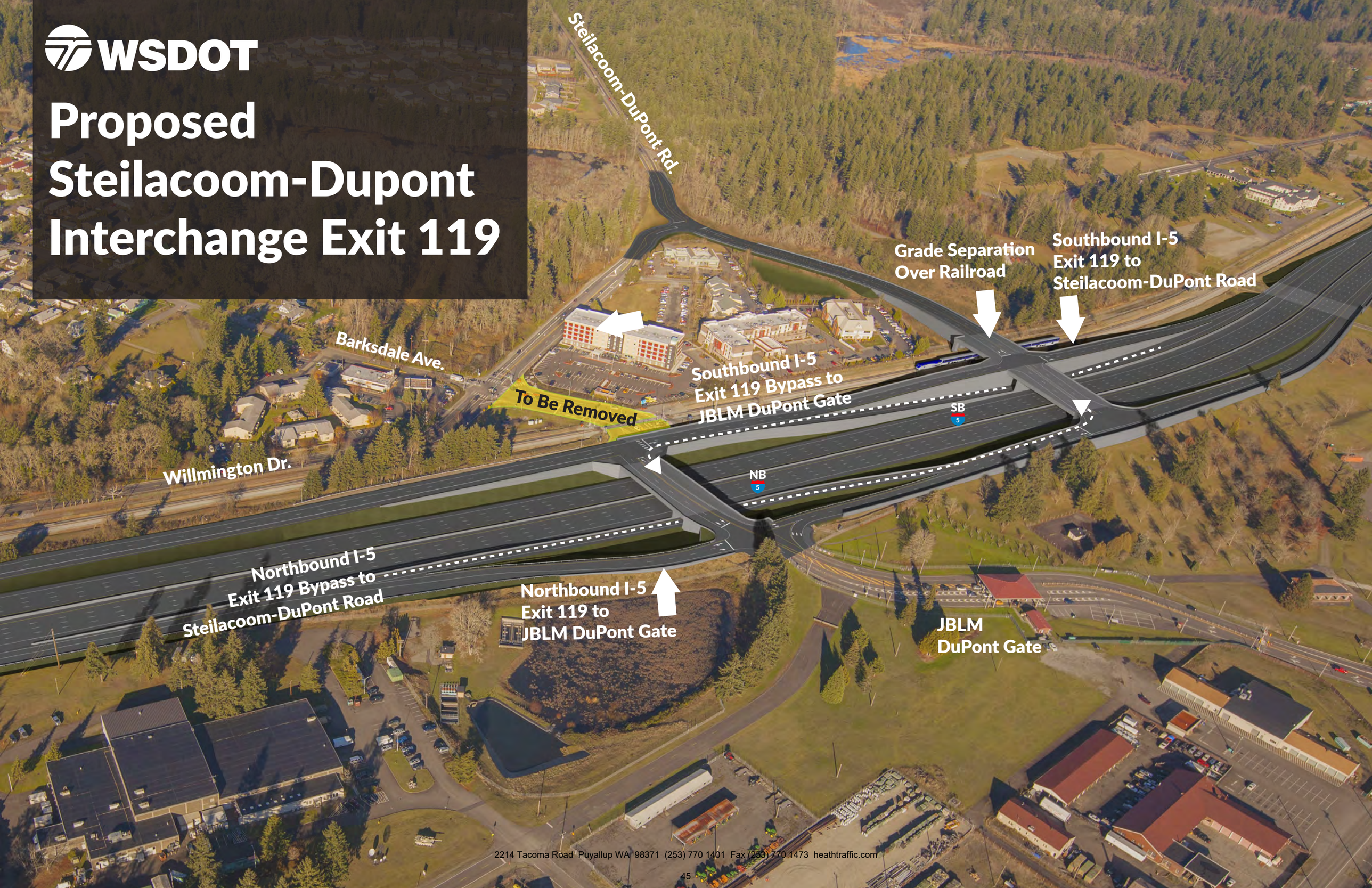
GRT19097TM_01p

APPENDIX

WSDOT I-5 EXIT 119 INTERCHANGE
DESIGN EXHIBITS

WSDOT

Proposed Steilacoom-Dupont Interchange Exit 119



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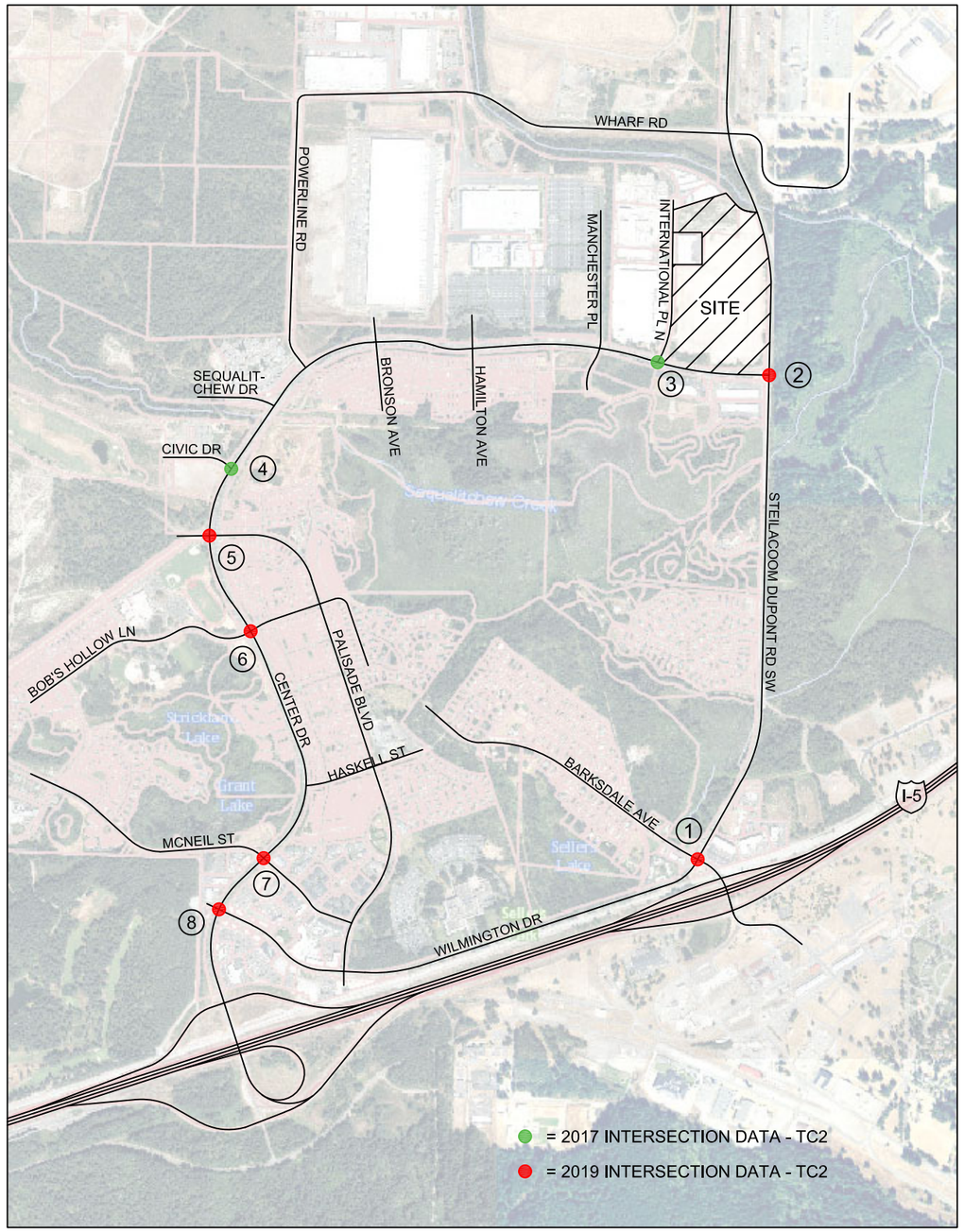
WSDOT

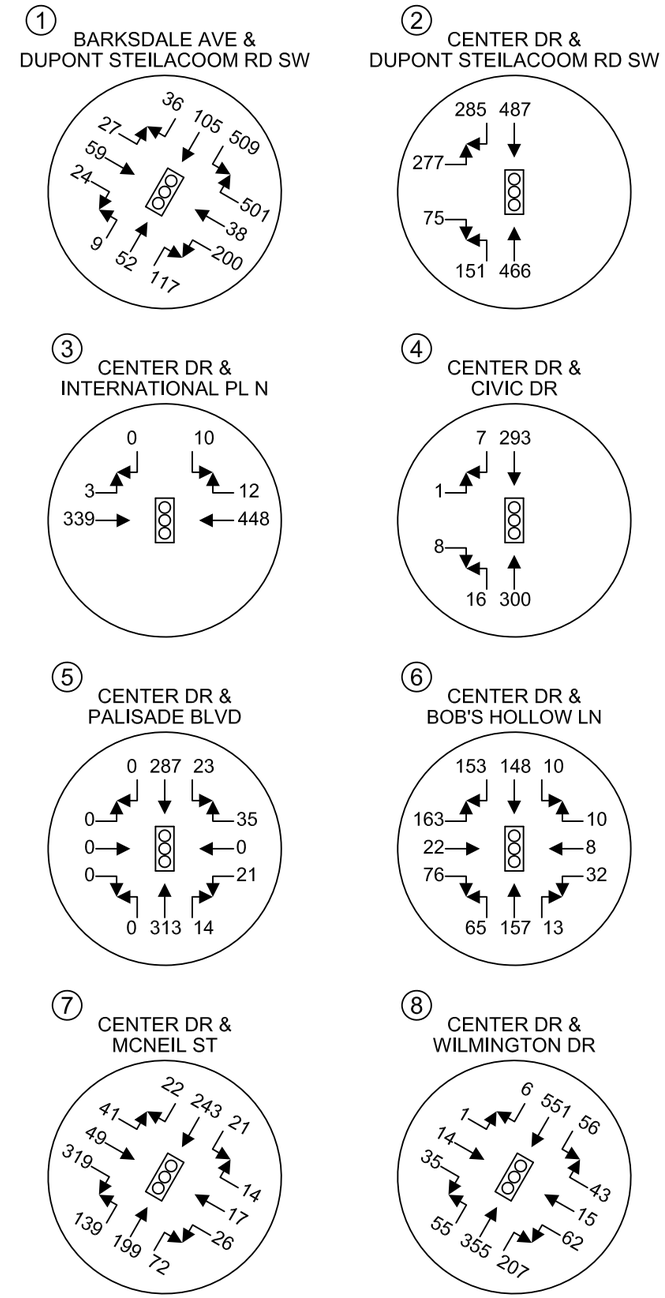
Proposed Steilacoom-Dupont Interchange Exit 119

APPENDIX

BASELINE VOLUMES &
INTERSECTION COMPARISON FIGURES

N





HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

BASELINE AM PEAK HOUR INTERSECTION DATA
APPENDIX: FIGURE A

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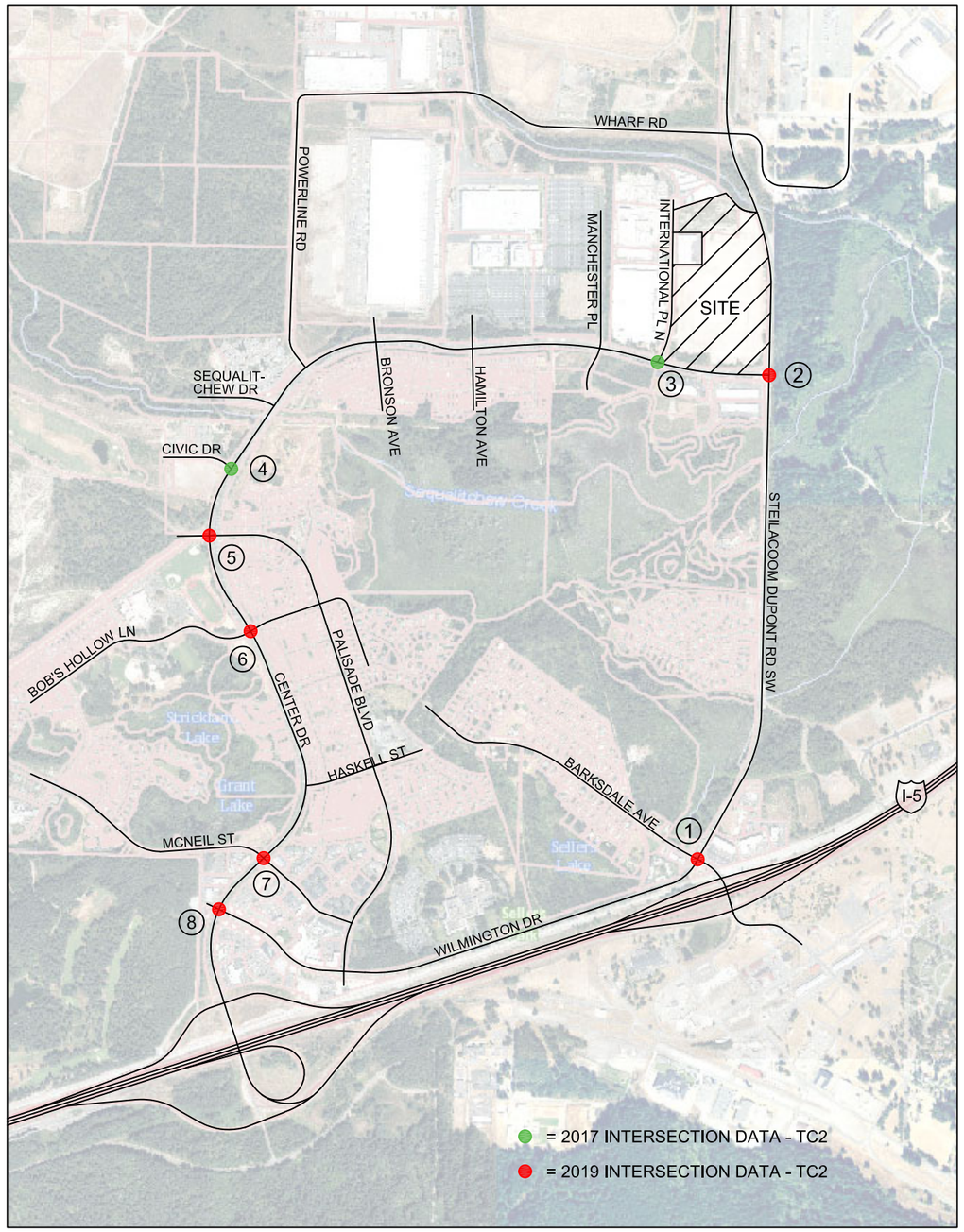
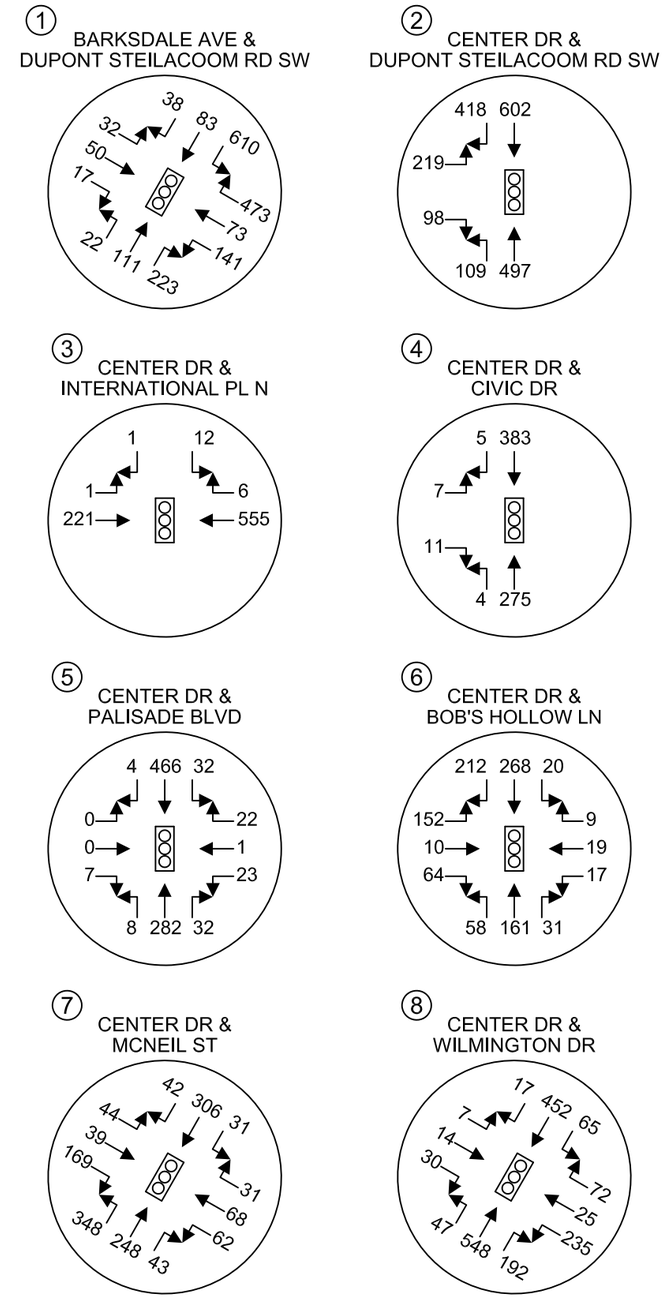
N





HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

BASELINE PM PEAK HOUR INTERSECTION DATA
APPENDIX: FIGURE B

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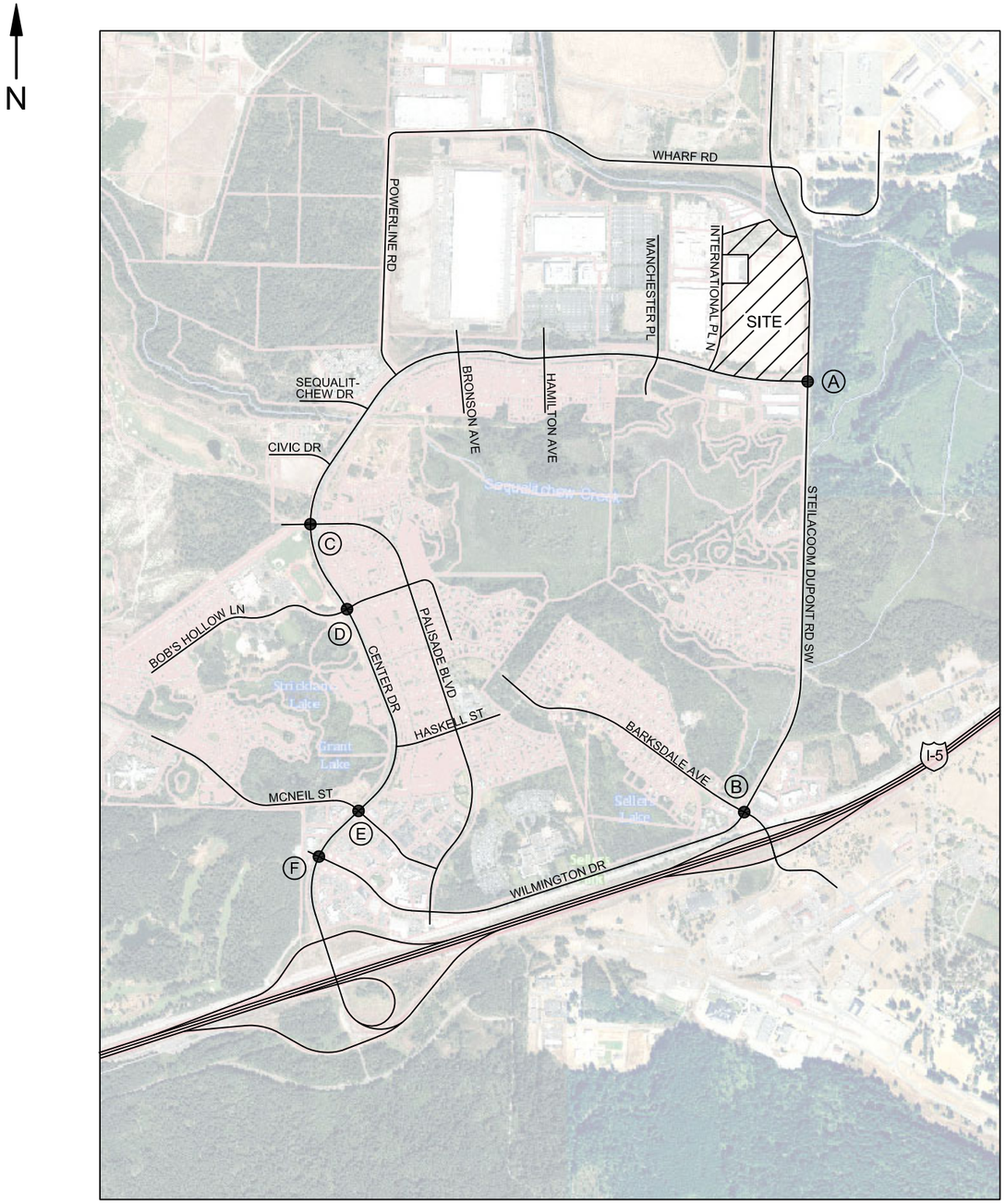
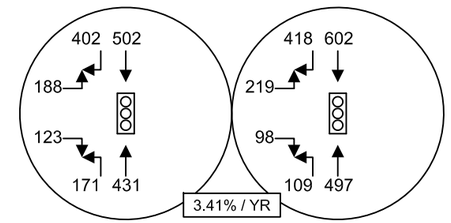


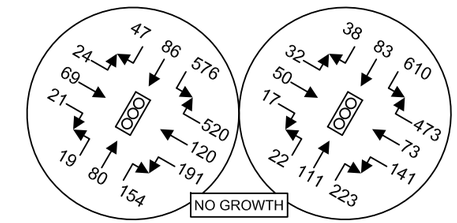
Ⓐ CENTER DR & DUPONT STEILACOOM RD SW



2017 VOLUMES
TOTAL VOL.: 1817

2019 VOLUMES
TOTAL VOL.: 1943

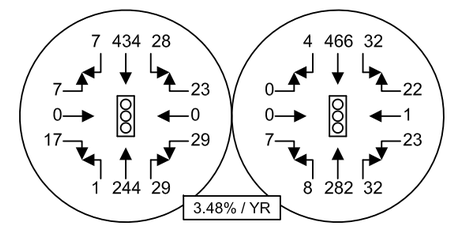
Ⓑ BARKSDALE AVE & STEILACOOM DUPONT RD SW



2017 VOLUMES
TOTAL VOL.: 1907

2019 VOLUMES
TOTAL VOL.: 1873

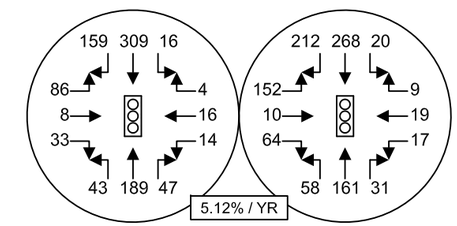
Ⓒ CENTER DR & PALISADE BLVD



2017 VOLUMES
TOTAL VOL.: 819

2019 VOLUMES
TOTAL VOL.: 877

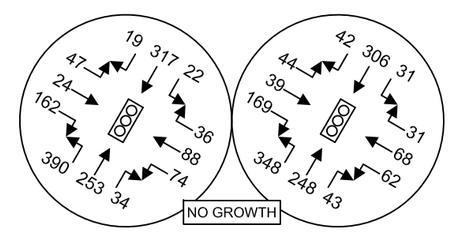
Ⓓ CENTER DR & BOB'S HOLLOW LN



2017 VOLUMES
TOTAL VOL.: 924

2019 VOLUMES
TOTAL VOL.: 1021

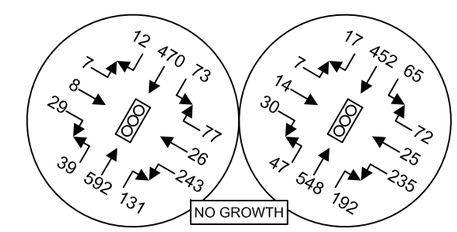
Ⓔ CENTER DR & MCNEIL ST



2017 VOLUMES
TOTAL VOL.: 1466

2019 VOLUMES
TOTAL VOL.: 1431

Ⓕ CENTER DR & WILMINGTON DR



2017 VOLUMES
TOTAL VOL.: 1707

2019 VOLUMES
TOTAL VOL.: 1704

HEATH & ASSOCIATES
TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

2017-2019 PM PEAK HOUR INTERSECTION VOLUME COMPARISON
APPENDIX: FIGURE C

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APPENDIX

TRIP GENERATION MODEL

HAZMAT FC - Non Peak Season

TRAFFIC DATA FOR ENTITLMENT USE

Headcount

Headcount - Day Shift	486
Headcount Night Shift	486

Shift Structure

	Start	End	
Day Shift Inbound Employees	7:00:00 AM	5:30:00 PM	Inbound Are Employees Working Receiving Side of Operation
Day Shift Outbound Employees	7:30:00 AM	6:00:00 PM	Outbound Are Employees Working Shipping Side of Operation
Night Shift Inbound Employees	6:00:00 PM	4:30:00 AM	
Night Shift Outbound Employees	6:30:00 PM	5:00:00 AM	

Adjustment below accounts for mass transit and carpool users. Adjust as needed for local jurisdiction.

Net Cars Factor 95%

Traffic Schedule

Cars

Average Weekday - Non Peak

	In	Out	Total
00:00	2	3	5
01:00	1	2	3
02:00	3	7	10
03:00	4	7	11
04:00	9	93	102
05:00	19	246	265
06:00	14	8	22
06:15	38	9	47
06:30	66	5	71
06:45	88	3	91
07:00	87	5	92
07:15	113	2	115
07:30	17	3	20
07:45	4	3	7
08:00	13	9	22
09:00	8	5	13
10:00	11	9	20
11:00	20	21	41
12:00	6	9	15
13:00	7	7	14
14:00	6	13	19
15:00	15	19	34
16:00	23	17	40
17:00	14	17	31
17:15	26	8	34
17:30	57	66	123
17:45	74	38	112
18:00	92	128	220
18:15	89	86	175
18:30	12	57	69
18:45	3	21	24
19:00	9	18	27
20:00	4	4	8
21:00	8	8	16
22:00	9	11	20
23:00	1	3	4
	972	970	1,942

Trucks

Average Weekday - Non Peak

	In	Out	Total
00:00	7	6	14
01:00	6	6	12
02:00	6	6	12
03:00	8	7	15
04:00	7	6	14
05:00	9	8	17
06:00	2	2	3
06:15	2	2	3
06:30	2	2	3
06:45	2	2	3
07:00	2	2	3
07:15	1	1	2
07:30	1	1	2
07:45	1	1	2
08:00	5	4	9
09:00	5	5	10
10:00	5	4	9
11:00	5	4	9
12:00	5	5	10
13:00	5	4	9
14:00	4	3	7
15:00	4	3	7
16:00	3	2	5
17:00	1	1	2
17:15	1	1	2
17:30	1	1	2
17:45	0	0	0
18:00	1	1	2
18:15	1	1	2
18:30	1	1	2
18:45	0	0	0
19:00	4	3	7
20:00	2	2	3
21:00	3	2	5
22:00	4	3	7
23:00	6	6	12
	119	106	225

Total

Average Weekday - Non Peak

	In	Out	Total
00:00	9	9	18
01:00	7	8	15
02:00	9	12	22
03:00	12	14	26
04:00	16	95	111
05:00	27	242	269
06:00	15	9	24
06:15	38	10	48
06:30	65	6	71
06:45	85	4	90
07:00	84	6	91
07:15	108	3	111
07:30	17	4	21
07:45	5	4	8
08:00	17	13	29
09:00	13	10	23
10:00	15	13	28
11:00	24	24	48
12:00	11	13	25
13:00	11	11	22
14:00	9	16	25
15:00	18	21	39
16:00	25	19	43
17:00	14	17	31
17:15	26	8	34
17:30	55	64	119
17:45	70	36	106
18:00	88	122	211
18:15	85	83	168
18:30	12	55	67
18:45	3	20	23
19:00	12	20	33
20:00	6	5	11
21:00	10	10	20
22:00	12	14	26
23:00	7	9	16
	1,042	1,028	2,070

APPENDIX

PIPELINE VOLUMES

PIPELINE TRIPS AT CRITICAL INTERSECTIONS
(AM PEAK HOUR)

1. Center Drive/Wilmington Drive

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0	0	0	0	0	1	0	4	0	2	16	0
Williamson Pl. (3)	0	0	0	0	0	0	0	12	0	0	3	0
Patriot's Lndng. (1)	0	0	0	0	0	1	0	17	0	4	50	0
Civic Ctr. Phase 2	0	0	0	0	0	5	0	28	0	3	4	0
Civic Ctr. Phase 3	0	0	0	0	0	1	0	27	0	0	4	0
DuPont Corp. Ctr.	0	0	0	0	0	3	0	23	0	1	9	0
DuPont Industrial	0	0	0	0	0	0	0	21	0	0	6	0
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	0	0	0	0	0	0	0	5	0	1	0	0
Total	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**137**	**0**	**11**	**92**	**0**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

2. Center Drive/McNeil Street

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0	2	18	0	1	0	5	0	0	0	0	0
Williamson Pl. (3)	17	0	0	0	0	3	0	12	0	0	3	2
Patriot's Lndng. (1)	2	8	54	0	3	0	18	0	0	0	0	1
Civic Ctr. Phase 2	3	0	0	0	0	4	0	33	0	3	7	0
Civic Ctr. Phase 3	3	0	0	0	0	2	0	28	0	0	4	0
DuPont Corp. Ctr.	7	0	0	0	0	2	0	26	0	1	10	2
DuPont Industrial	2	0	0	0	0	0	0	21	0	0	6	0
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	1	0	0	0	0	0	0	5	0	1	1	1
Total	**35**	**10**	**72**	**0**	**4**	**11**	**23**	**125**	**0**	**5**	**31**	**6**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

Revised 07/08/2020

3. Center Drive/Bob's Hollow Lane

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	7	0	0	0	0	0	0	0	0	0	0	2
Williamson Pl. (3)	0	0	0	0	0	0	0	35	0	0	5	0
Patriot's Lndng. (1)	5	0	0	0	0	0	0	2	0	0	1	2
Civic Ctr. Phase 2	12	0	0	0	0	0	0	40	0	0	10	6
Civic Ctr. Phase 3	6	0	0	0	0	0	0	33	0	0	4	1
DuPont Corp. Ctr.	2	0	0	0	0	1	0	35	0	0	13	1
DuPont Industrial	2	0	0	0	0	0	0	23	0	0	6	1
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	1	0	0	0	0	0	0	7	0	0	3	1
Total	**35**	**0**	**0**	**0**	**0**	**1**	**0**	**175**	**0**	**0**	**42**	**14**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

4. Center Drive/Palisade Blvd.

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0	0	0	0	0	0	0	7	0	0	2	0
Williamson Pl. (3)	0	0	0	0	0	3	0	35	0	0	5	0
Patriot's Lndng. (1)	0	0	0	0	0	0	0	7	0	0	3	0
Civic Ctr. Phase 2	0	0	0	0	0	10	0	52	0	7	16	0
Civic Ctr. Phase 3	0	0	0	0	0	4	0	39	0	1	5	0
DuPont Corp. Ctr.	0	0	0	0	0	1	0	38	0	1	14	0
DuPont Industrial	0	0	0	0	0	0	0	25	0	0	7	0
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	0	0	0	0	0	1	0	7	0	2	4	0
Total	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**210**	**0**	**11**	**56**	**0**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

5. Center Drive/Civic

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0		0				0	7			2	0
Williamson Pl. (3)	0		0				0	38			5	0
Patriot's Lndng. (1)	0		0				0	7			3	0
Civic Ctr. Phase 2	8		23				62	0			0	18
Civic Ctr. Phase 3	2		6				43	0			0	11
DuPont Corp. Ctr.	0		0				0	39			15	0
DuPont Industrial	0		0				0	25			7	0
Barksdale Sta. (1)	0		0				0	0			0	0
PW Facility	4		6				8	0			0	4
Total	**14**		**35**				**113**	**116**			**32**	**33**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

Revised 07/08/2020

6. Center Drive/International Place

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (1,2)	0	10	0	0	6	0	0	0	0	0	0	0
Williamson Pl. (3)	0	38	0	0	5	0	0	0	0	0	0	0
Patriot's Lndg. (1)	0	12	0	0	4	0	0	0	0	0	0	0
Civic Ctr. Phs. 2	0	8	0	0	18	0	0	0	0	0	0	0
Civic Ctr. Phs. 3	0	2	0	0	11	0	0	0	0	0	0	0
DuPont Corp. Ctr.	0	7	0	0	18	0	0	0	0	0	0	0
DuPont Industrial	0	3	0	0	8	0	0	0	0	0	0	0
Barksdale Sta. (1)	0	12	0	0	11	0	0	0	0	0	0	0
PW Facility	0	3	0	0	4	0	0	0	0	0	0	0
Total	**0**	**95**	**0**	**0**	**85**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

7. Center Drive/DuPont Steilacoom Road

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (1,2)	8		2				2	0			0	4
Williamson Pl. (3)	4		10				61	0			0	20
Patriot's Lndg. (1)	12		0				0	0			0	4
Civic Ctr. Phase 2	4		4				6	0			0	12
Civic Ctr. Phase 3	1		1				3	0			0	8
DuPont Corp. Ctr.	3		4				9	27			10	9
DuPont Ind. (1)	1		2				6	0			0	2
Barksdale Sta.	0		12				11	5			5	0
PW Facility	1		2				3	0			0	1
Total	**34**		**37**				**101**	**32**			**15**	**60**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

8. Barksdale Avenue/DuPont-Steilacoom Road

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (1,2)	0	0	0	0	0	2	0	0	0	2	0	0
Williamson Pl. (3)	6	0	0	0	0	49	0	6	0	8	0	2
Patriot's Lndg. (1)	0	0	0	0	0	0	0	0	0	0	0	0
Civic Ctr. Phs. 2 (1)	0	0	0	0	0	3	0	0	0	2	0	0
Civic Ctr. Phs. 3 (1)	0	0	0	0	0	2	0	0	0	0	0	0
DuPont Corp. Ctr.	3	0	0	0	0	30	0	3	0	11	1	1
DuPont Ind. (1)	0	0	0	0	0	6	0	0	0	2	0	0
Barksdale Sta.	3	0	0	0	0	27	0	8	0	25	8	3
PW Facility	0	0	0	0	0	3	0	0	0	0	0	2
Total	**12**	**0**	**0**	**0**	**0**	**122**	**0**	**17**	**0**	**50**	**9**	**8**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal
(4) – includes pass-by trip volumes
Barksdale Avenue considered the east-west street

Revised 07/08/2020

(PM PEAK HOUR)

1. Center Drive/Wilmington Drive

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0	0	0	0	0	1	0	18	0	1	8	0
Williamson Pl. (3)	0	0	0	0	0	0	0	3	0	0	12	0
Patriot's Lndng. (1)	0	0	0	0	0	4	0	57	0	3	33	0
Civic Ctr. Phase 2	0	0	0	0	0	1	0	5	0	2	25	0
Civic Ctr. Phase 3	0	0	0	0	0	0	0	4	0	1	25	0
DuPont Corp. Ctr.	0	0	0	0	0	2	0	12	0	4	30	0
DuPont Industrial	0	0	0	0	0	0	0	8	0	0	23	0
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	0	0	0	0	0	0	0	0	0	0	7	0
Total	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**107**	**0**	**11**	**163**	**0**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

2. Center Drive/McNeil Street

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0	1	9	0	1	0	19	0	0	0	0	0
Williamson Pl. (3)	3	0	0	0	0	3	0	3	0	3	12	17
Patriot's Lndng. (1)	2	5	36	0	9	0	61	0	0	0	0	3
Civic Ctr. Phase 2	1	0	0	0	0	2	0	6	0	3	27	3
Civic Ctr. Phase 3	1	0	0	0	0	1	0	4	0	2	26	3
DuPont Corp. Ctr.	3	0	0	0	0	1	0	14	0	2	34	9
DuPont Industrial	1	0	0	0	0	0	0	8	0	0	23	2
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	0	0	0	0	0	0	0	0	0	1	7	1
Total	**11**	**6**	**45**	**0**	**10**	**7**	**80**	**35**	**0**	**11**	**129**	**38**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

Revised 07/08/2020

3. Center Drive/Bob's Hollow Lane

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	8	0	0	0	0	0	0	0	0	0	0	10
Williamson Pl. (3)	0	0	0	0	0	0	0	9	0	0	32	0
Patriot's Lndng. (1)	6	0	0	0	0	0	0	2	0	0	3	10
Civic Ctr. Phase 2	3	0	0	0	0	0	0	9	0	0	33	7
Civic Ctr. Phase 3	1	0	0	0	0	0	0	6	0	0	31	5
DuPont Corp. Ctr.	1	0	0	0	0	1	0	18	0	1	45	2
DuPont Industrial	1	0	0	0	0	0	0	9	0	0	25	2
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	0	0	0	0	0	0	0	0	0	0	9	1
Total	**20**	**0**	**0**	**0**	**0**	**1**	**0**	**53**	**0**	**1**	**178**	**37**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

4. Center Drive/Palisade Blvd.

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0	0	0	0	0	0	0	8	0	0	10	0
Williamson Pl. (3)	0	0	0	0	0	0	0	9	0	3	32	0
Patriot's Lndng. (1)	0	0	0	0	0	0	0	8	0	0	13	0
Civic Ctr. Phase 2	0	0	0	0	0	4	0	12	0	7	40	0
Civic Ctr. Phase 3	0	0	0	0	0	1	0	7	0	4	36	0
DuPont Corp. Ctr.	0	0	0	0	0	1	0	19	0	2	48	0
DuPont Industrial	0	0	0	0	0	0	0	10	0	0	27	0
Barksdale Sta. (1)	0	0	0	0	0	0	0	0	0	0	0	0
PW Facility	0	0	0	0	0	0	0	0	0	1	10	0
Total	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**73**	**0**	**17**	**216**	**0**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

5. Center Drive/Civic Drive

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (2)	0		0				0	8			10	0
Williamson Pl. (3)	0		0				0	9			35	0
Patriot's Lndng. (1)	0		0				0	8			13	0
Civic Ctr. Phase 2	12		47				16	0			0	4
Civic Ctr. Phase 3	10		40				8	0			0	2
DuPont Corp. Ctr.	0		0				0	20			50	0
DuPont Industrial	0		0				0	10			27	0
Barksdale Sta. (1)	0		0				0	0			0	0
PW Facility	5		11				0	0			0	0
Total	**27**		**98**				**24**	**55**			**135**	**6**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

Revised 07/08/2020

6. Center Drive/International Place

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (1,2)	0	8	0	0	10	0	0	0	0	0	0	0
Williamson Pl. (3)	0	9	0	0	35	0	0	0	0	0	0	0
Patriot's Lndg. (1)	0	8	0	0	13	0	0	0	0	0	0	0
Civic Ctr. Phs. 2	0	12	0	0	4	0	0	0	0	0	0	0
Civic Ctr. Phs. 3	0	10	0	0	2	0	0	0	0	0	0	0
DuPont Corp. Ctr.	0	24	0	0	10	0	0	0	0	0	0	0
DuPont Industrial	0	9	0	0	3	0	0	0	0	0	0	0
Barksdale Sta.	0	7	0	0	6	0	0	0	0	0	0	0
PW Facility	0	5	0	0	0	0	0	0	0	0	0	0
Total	**0**	**92**	**0**	**0**	**83**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

7. Center Drive/DuPont Steilacoom Road

Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (1,2)	6		2				2	0			0	8
Williamson Pl. (3)	17		57				14	0			0	6
Patriot's Lndg. (1)	8		0				0	0			0	13
Civic Ctr. Phase 2	9		3				2	0			0	2
Civic Ctr. Phase 3	8		2				1	0			0	1
DuPont Corp. Ctr.	12		12				5	9			21	5
DuPont Ind. (1)	3		6				2	0			0	1
Barksdale Sta. (1)	0		7				6	0			4	0
PW Facility	1		4				0	0			0	0
Total	**64**		**93**				**32**	**9**			**25**	**36**

(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal

8. Barksdale Avenue/DuPont-Steilacoom Road

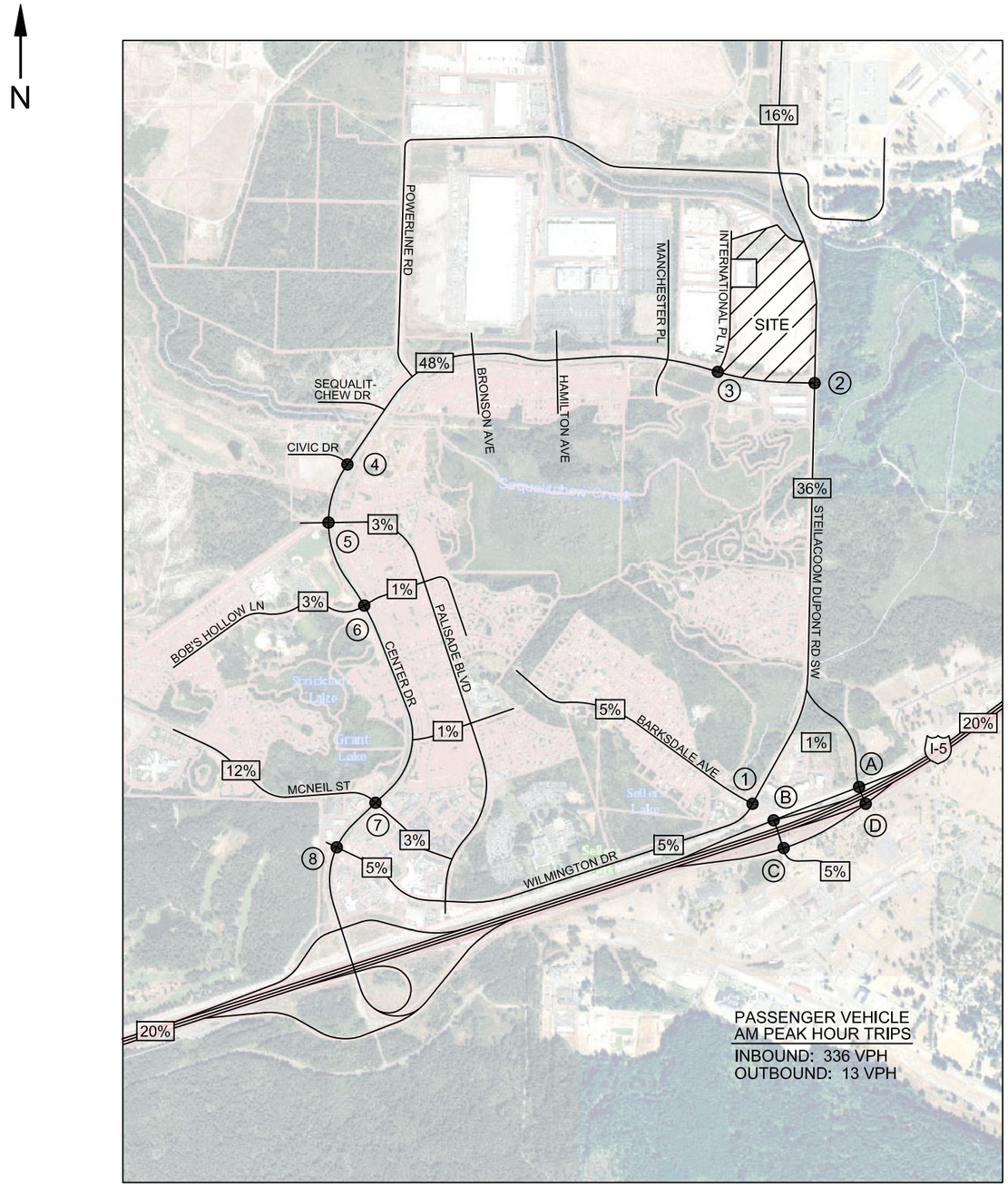
Development	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Village IV (1,2)	0	0	0	0	0	2	0	0	0	2	0	0
Williamson Pl. (3)	1	0	0	0	0	12	0	1	0	46	6	5
Patriot's Lndg. (1)	0	0	0	0	0	0	0	0	0	0	0	0
Civic Ctr. Phs. 2 (1)	0	0	0	0	0	1	0	0	0	2	0	0
Civic Ctr. Phs. 3 (1)	0	0	0	0	0	0	0	0	0	1	0	0
DuPont Corp. Ctr.	2	0	0	0	0	10	0	2	0	24	4	4
DuPont Ind. (1)	0	0	0	0	0	2	0	0	0	6	0	0
Barksdale Sta. (1)	2	0	0	0	0	16	0	5	0	16	5	2
PW Facility	0	0	0	0	0	0	0	0	0	4	0	0
Total	**5**	**0**	**0**	**0**	**0**	**43**	**0**	**8**	**0**	**101**	**15**	**11**

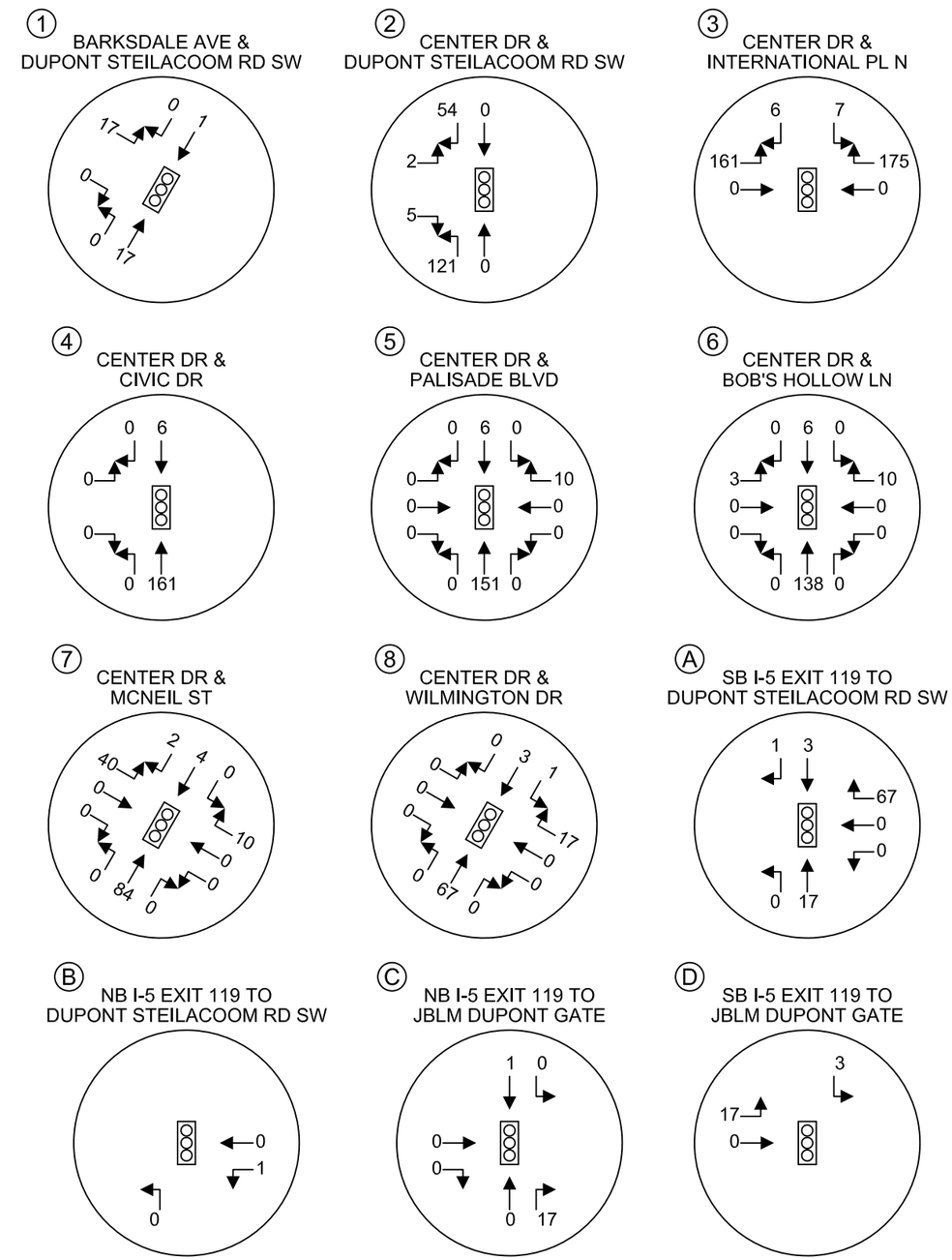
(1) – estimated trips; assignment not available or not provided in TIA
(2) – assignment revised to reflect modified trip generation for partial build-out
(3) – modified from original TIA to reflect scaled-back SEPA proposal
Barksdale Avenue considered the east-west street

Revised 07/08/2020

APPENDIX

TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT





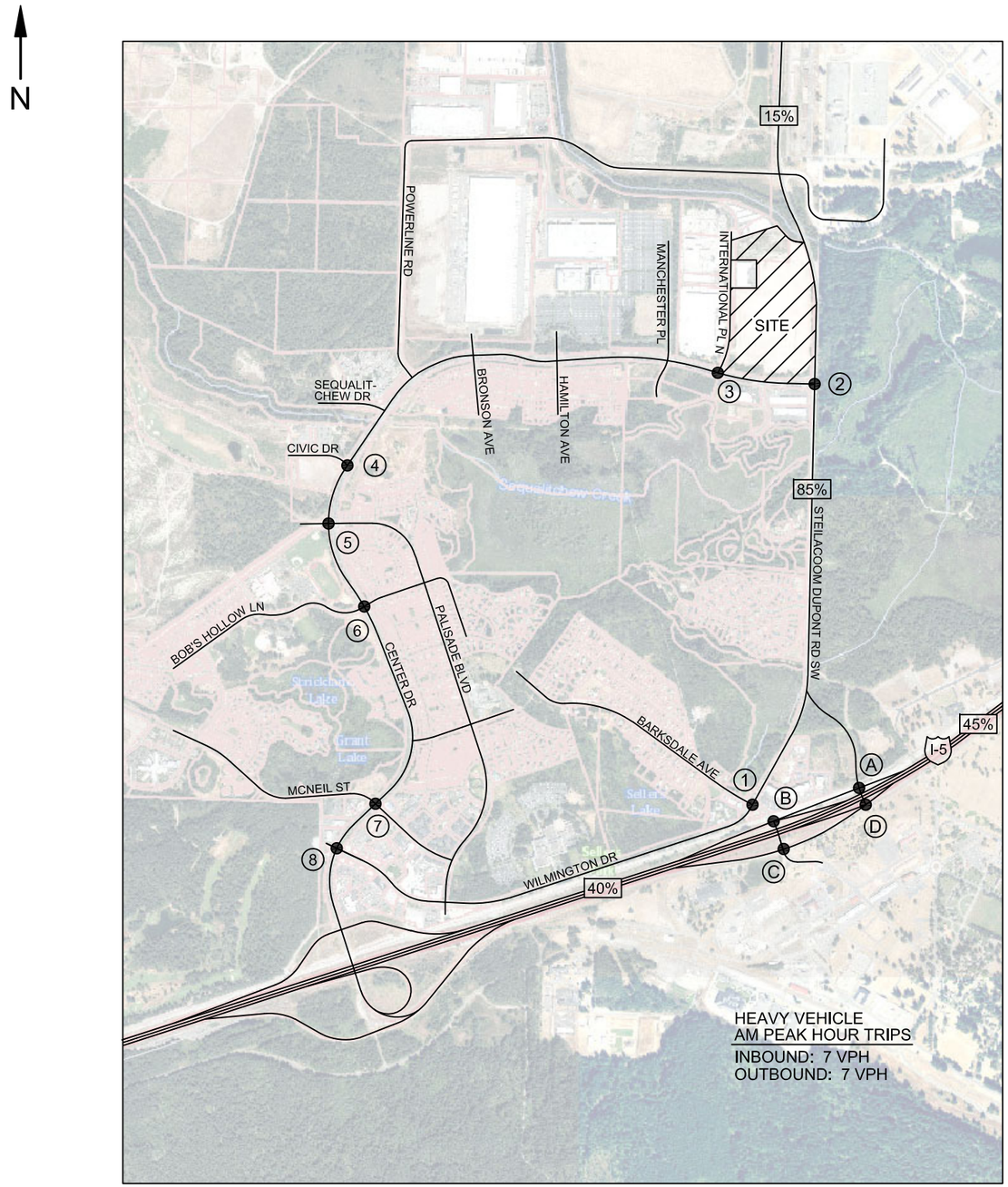
HEATH & ASSOCIATES

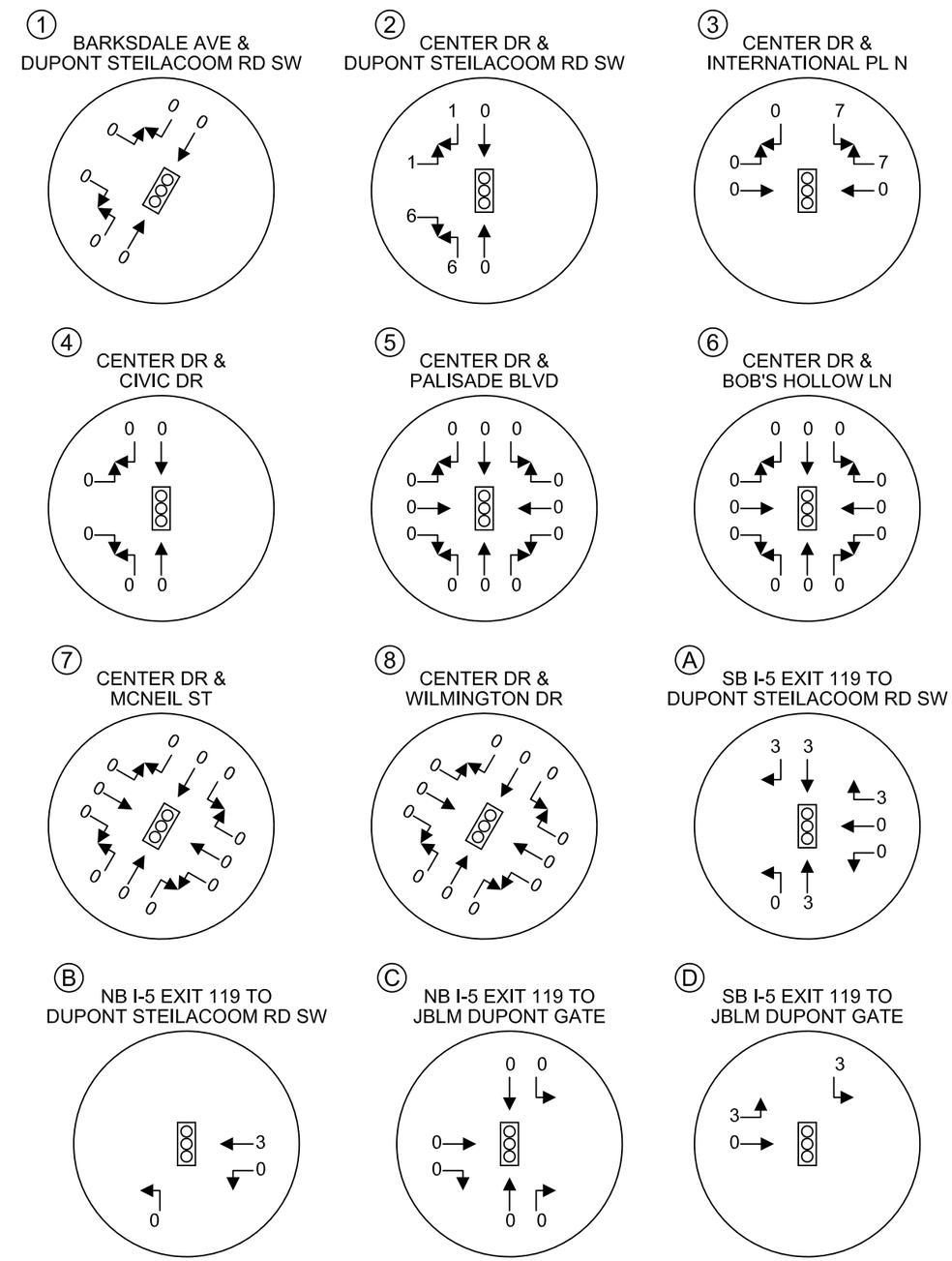
TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE D

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





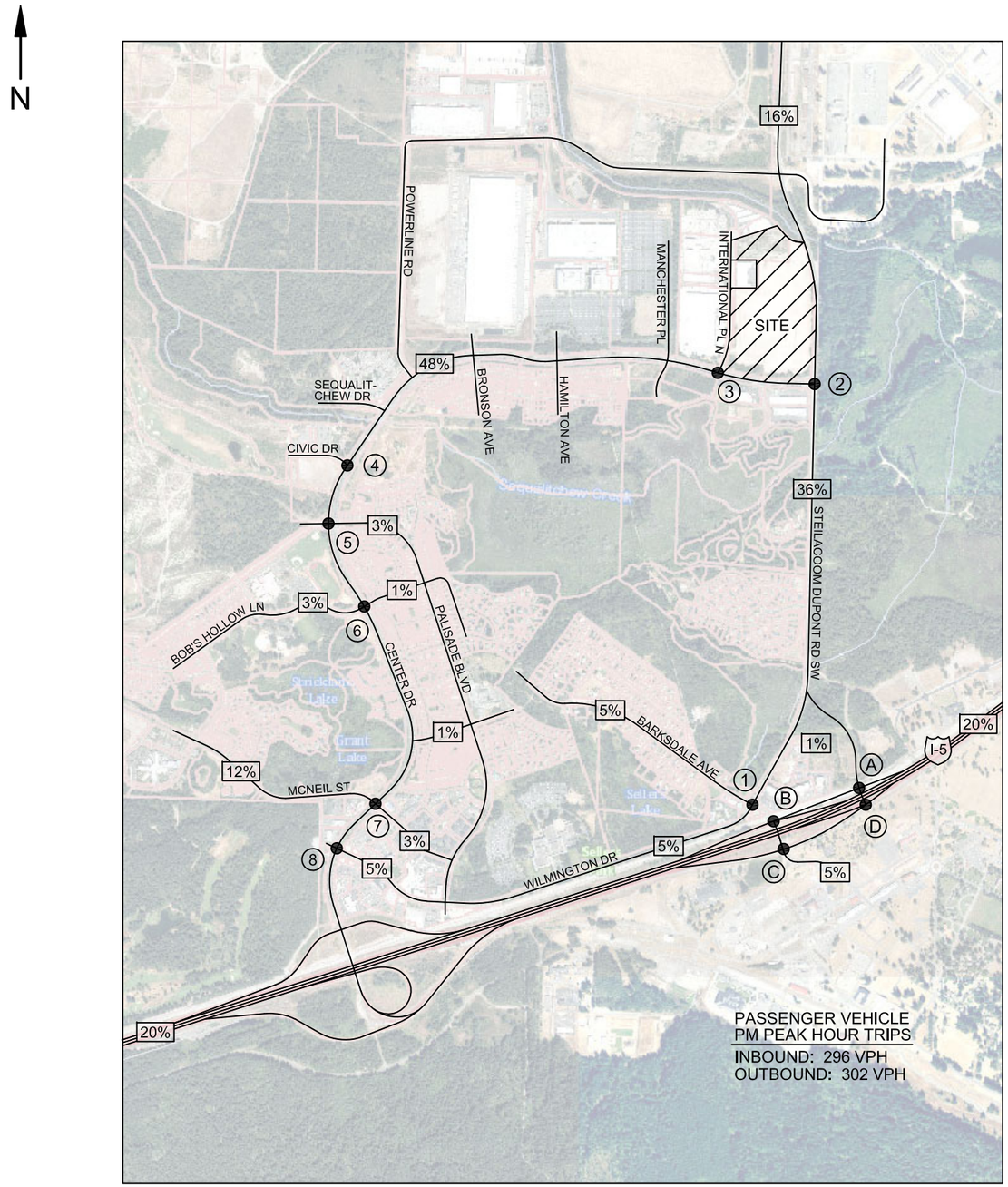
HEATH & ASSOCIATES

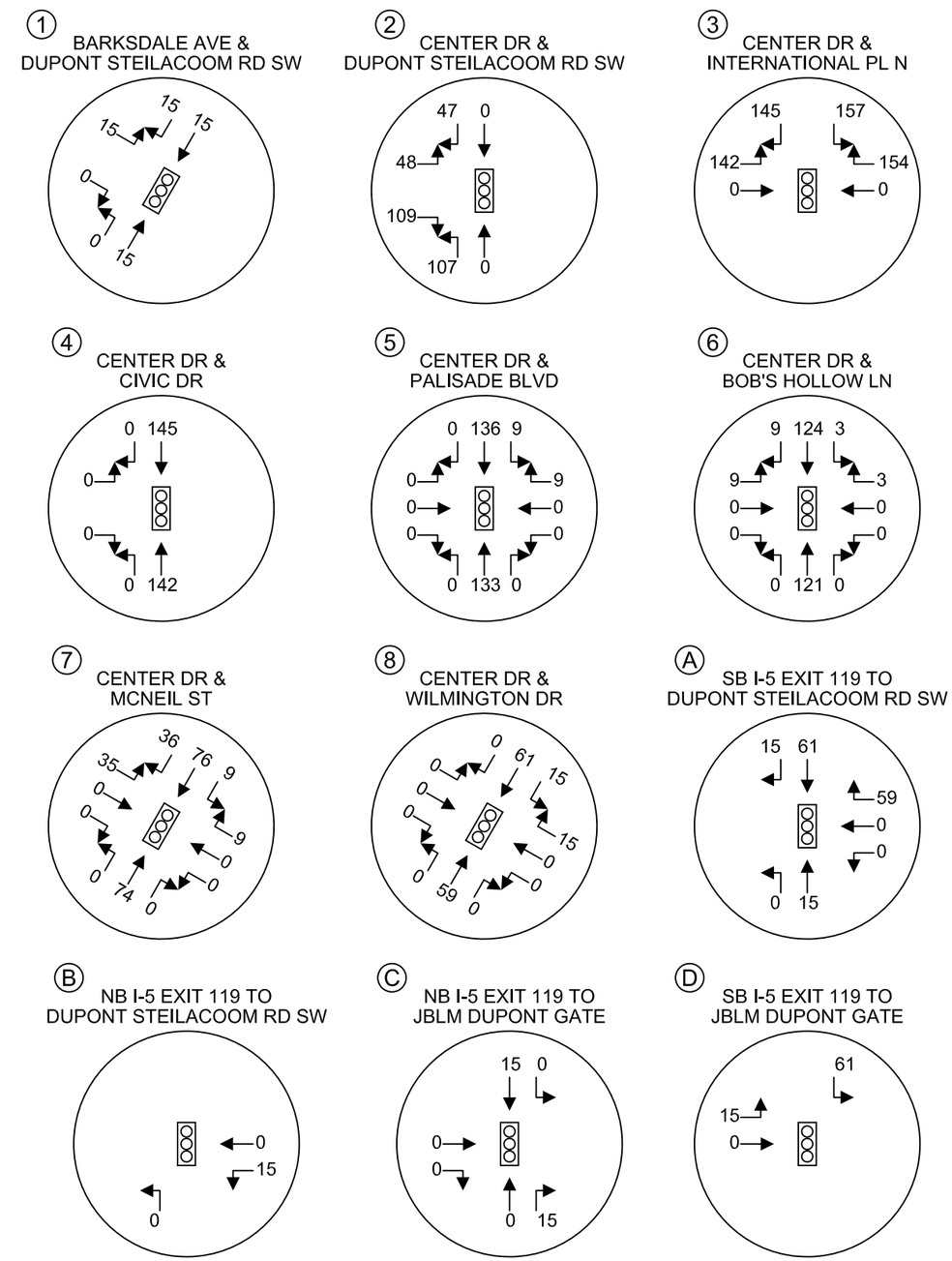
TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE E

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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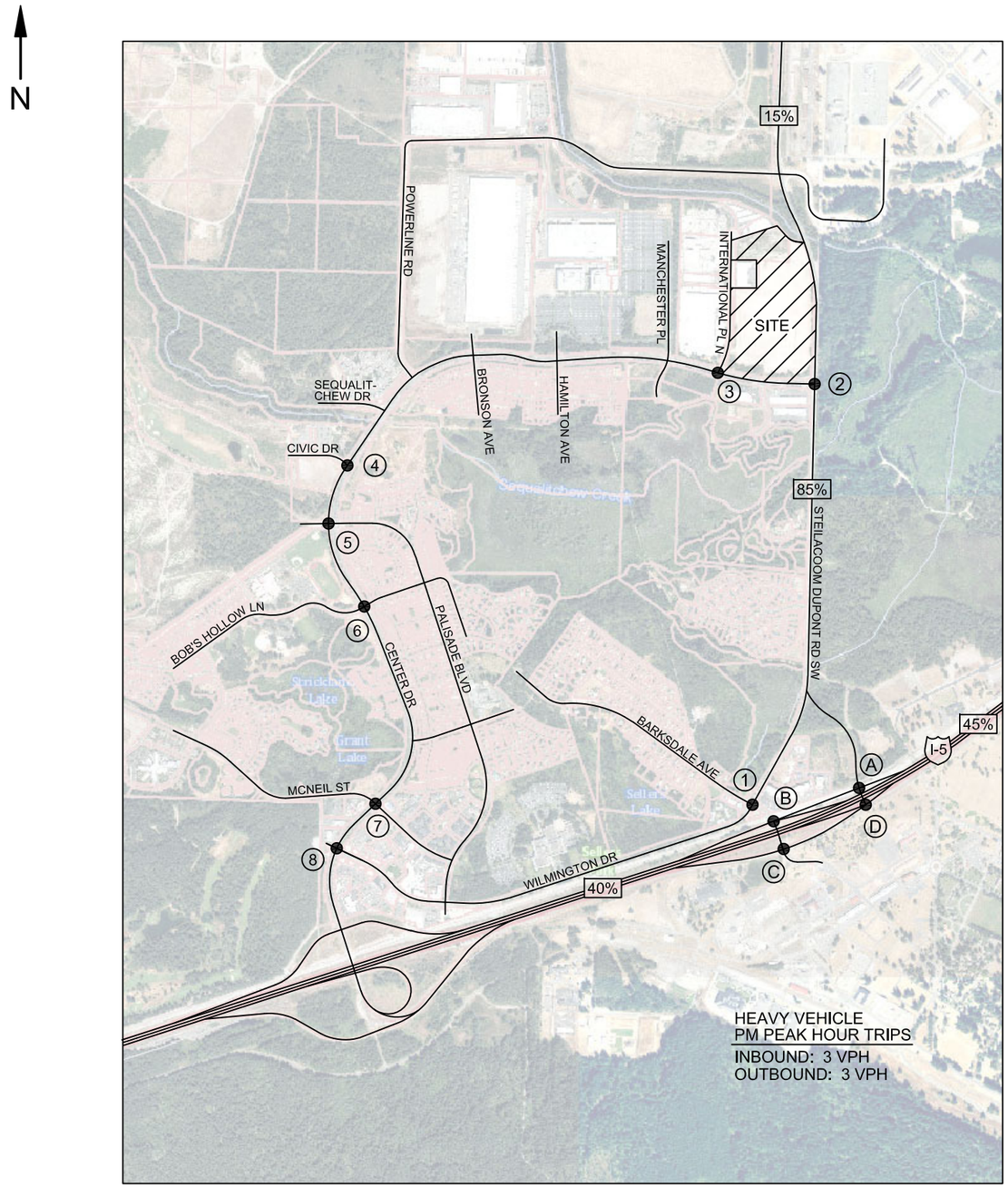
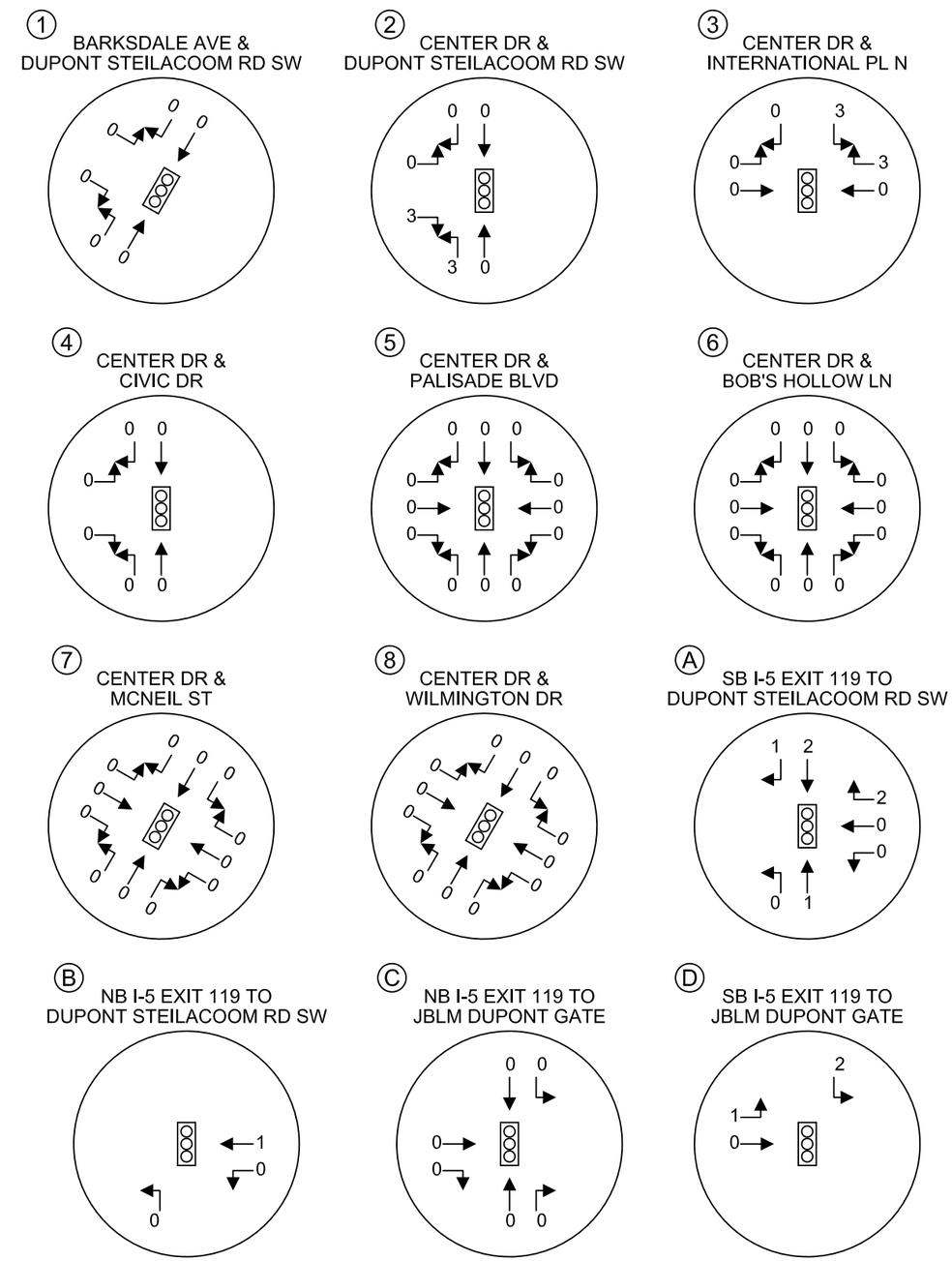
TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE F

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com





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TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 2: WITH I-5 EXIT 119 INTERCHANGE PROJECT
FIGURE G

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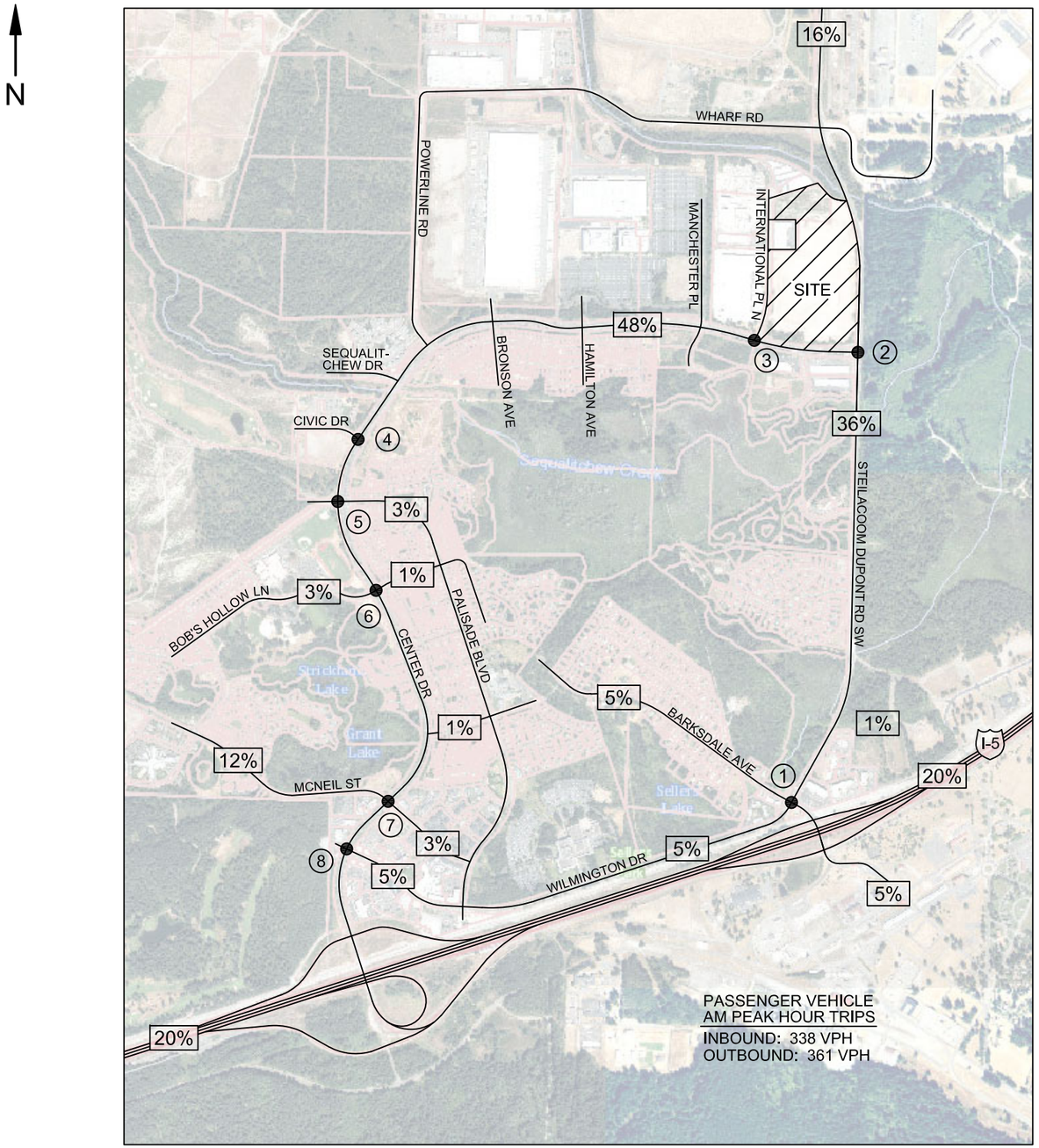
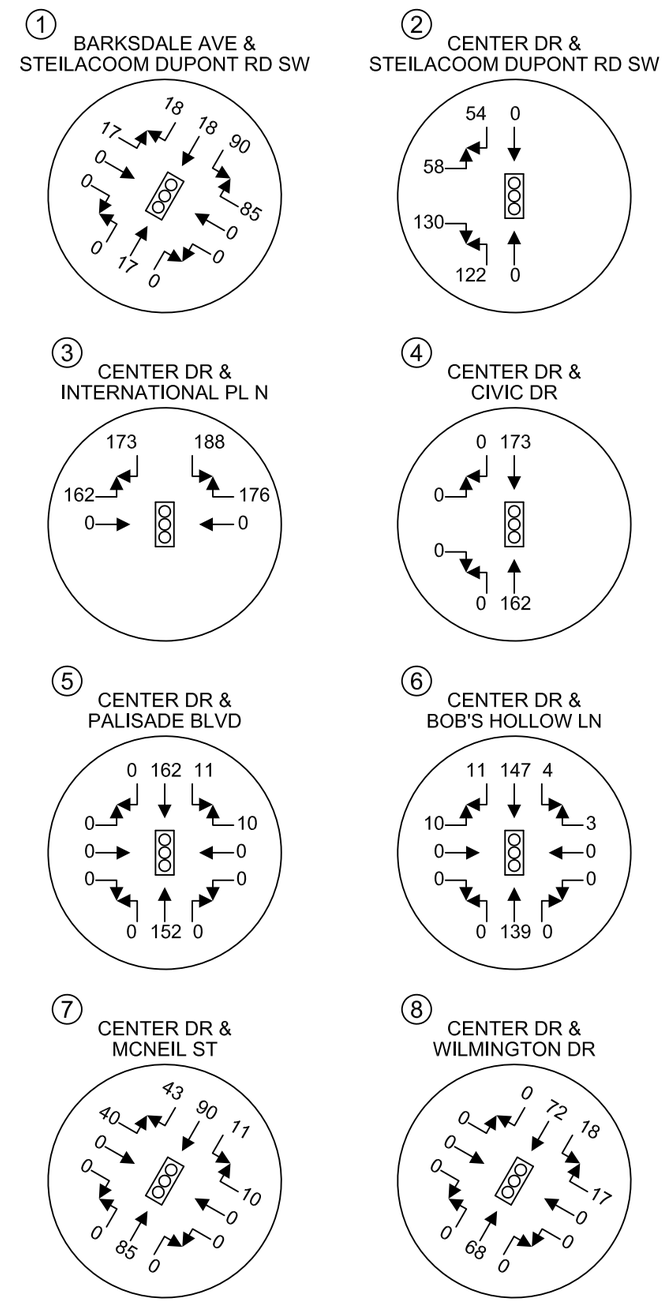
APPENDIX

TRIP DISTRIBUTION & ASSIGNMENT
SCENARIO 3: PEAK SEASON VOLUMES





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AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 3: PEAK SEASON VOLUMES
FIGURE H

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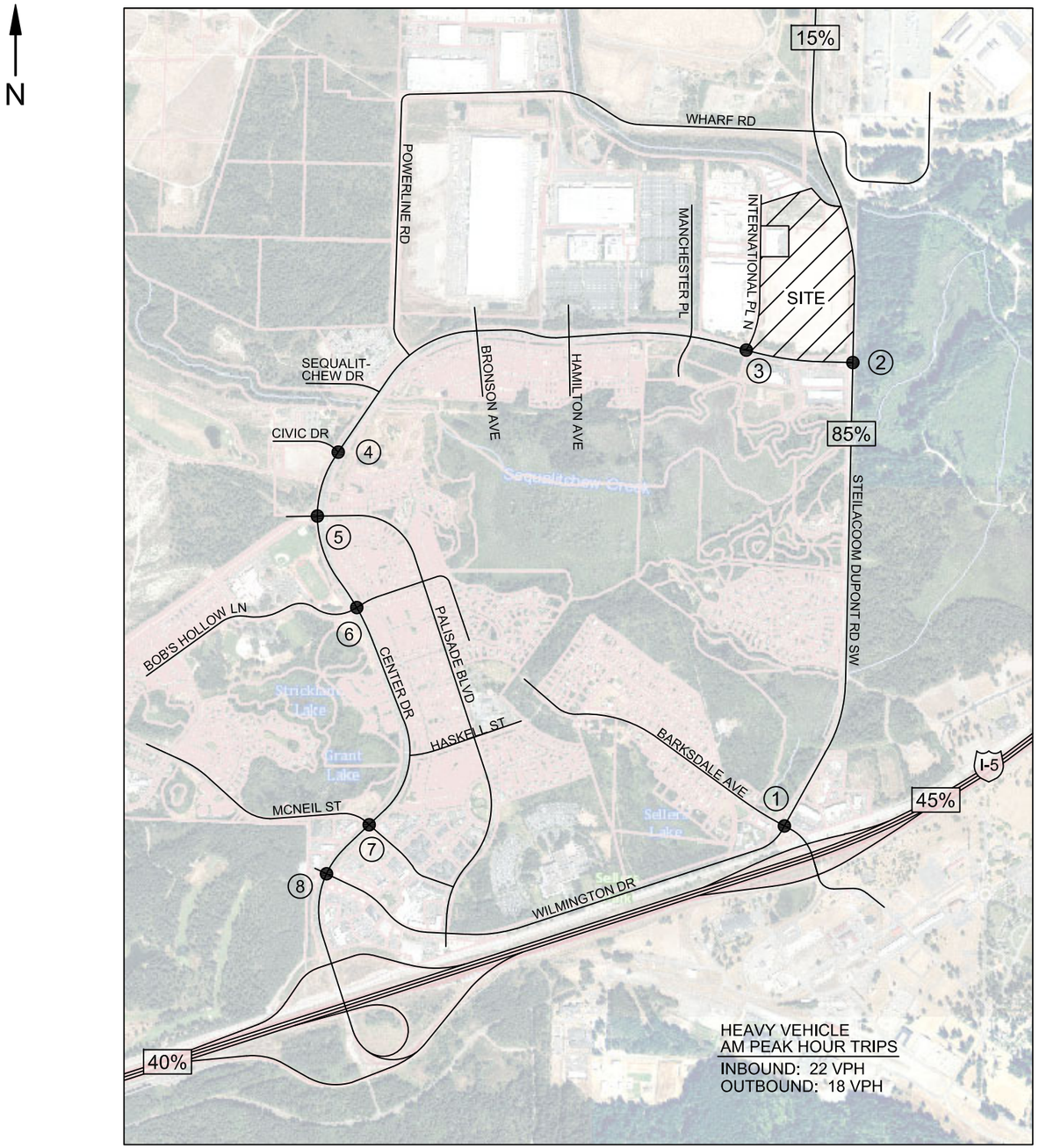

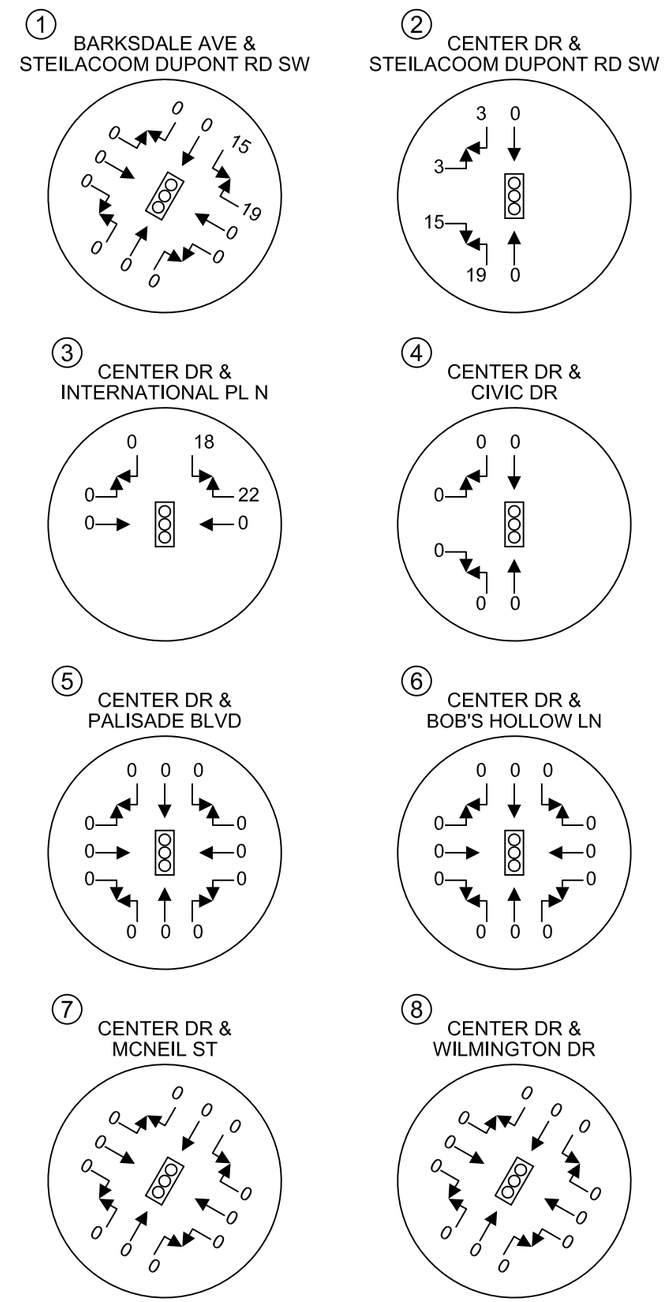

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SNOW BLOSSOM FULFILLMENT CENTER

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 3: PEAK SEASON VOLUMES
FIGURE I

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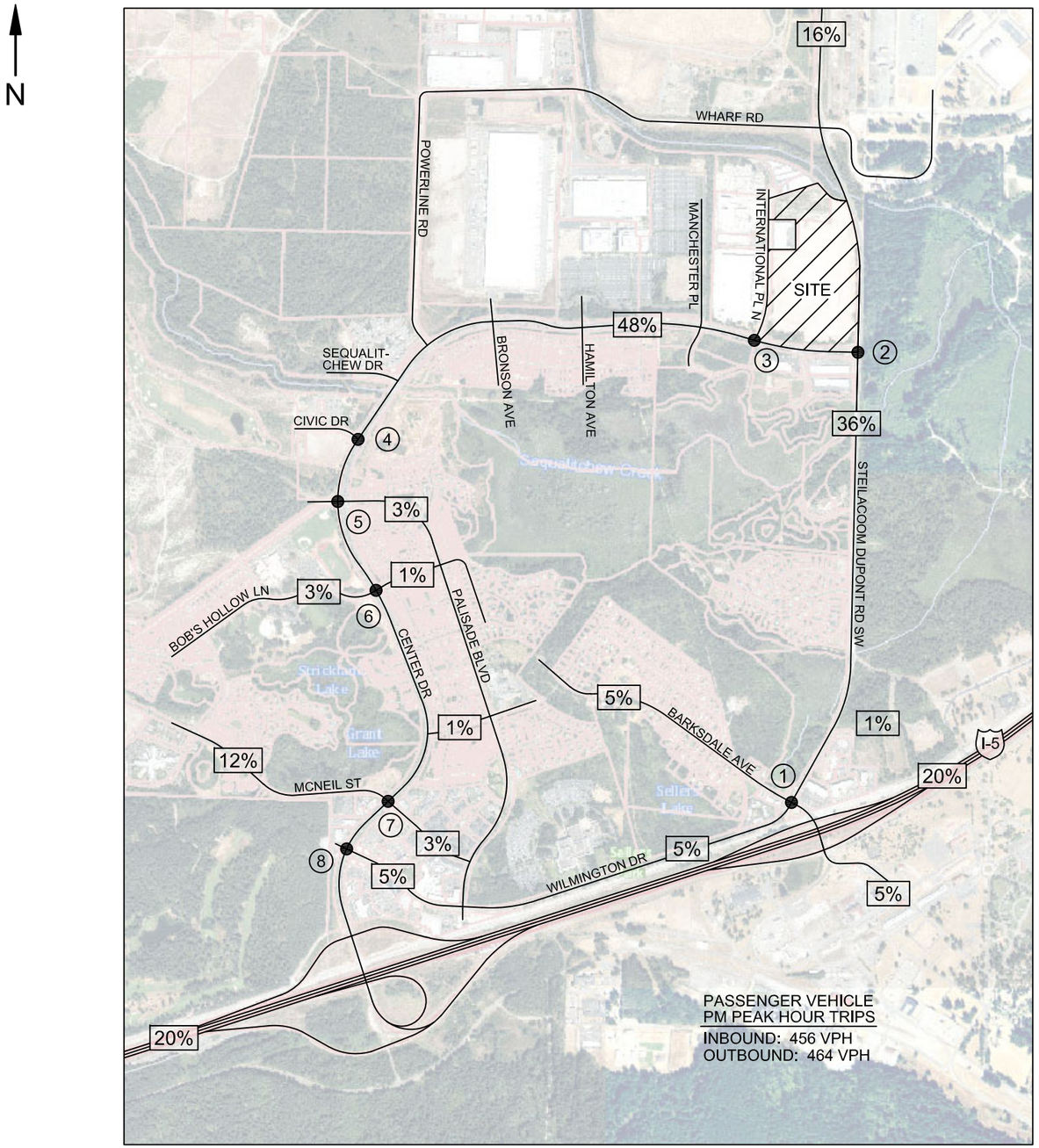

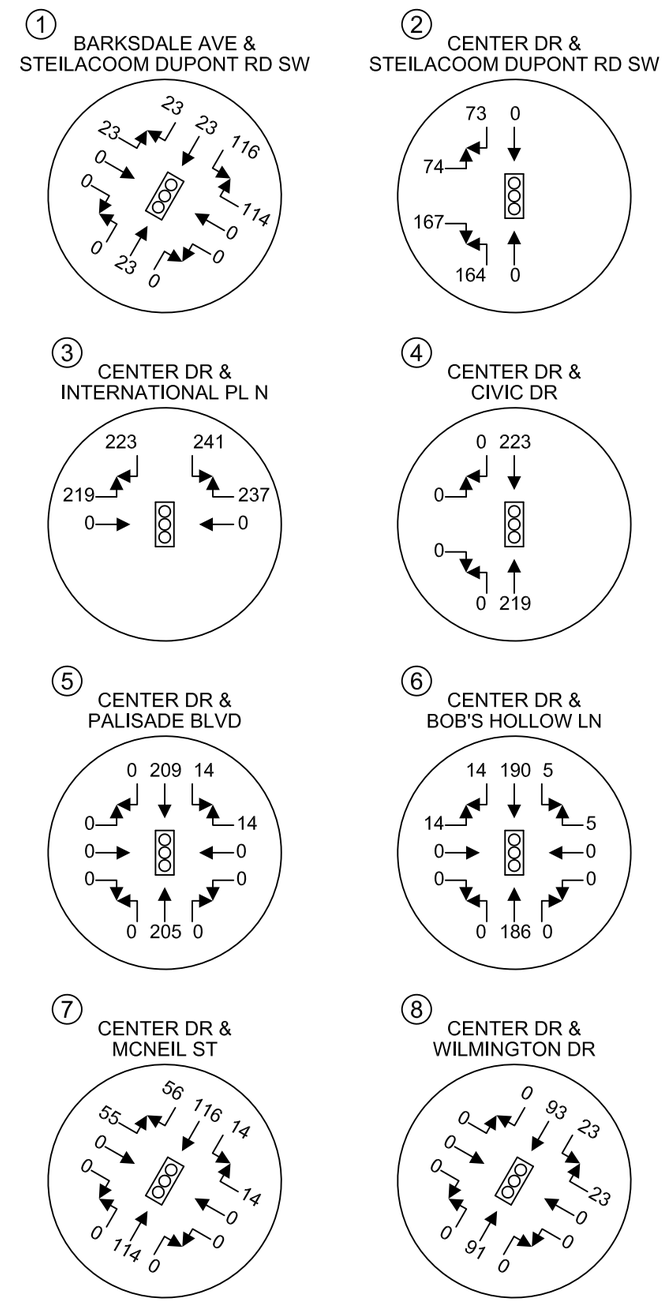

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PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - PASSENGER VEHICLES
SCENARIO 3: PEAK SEASON VOLUMES
FIGURE J

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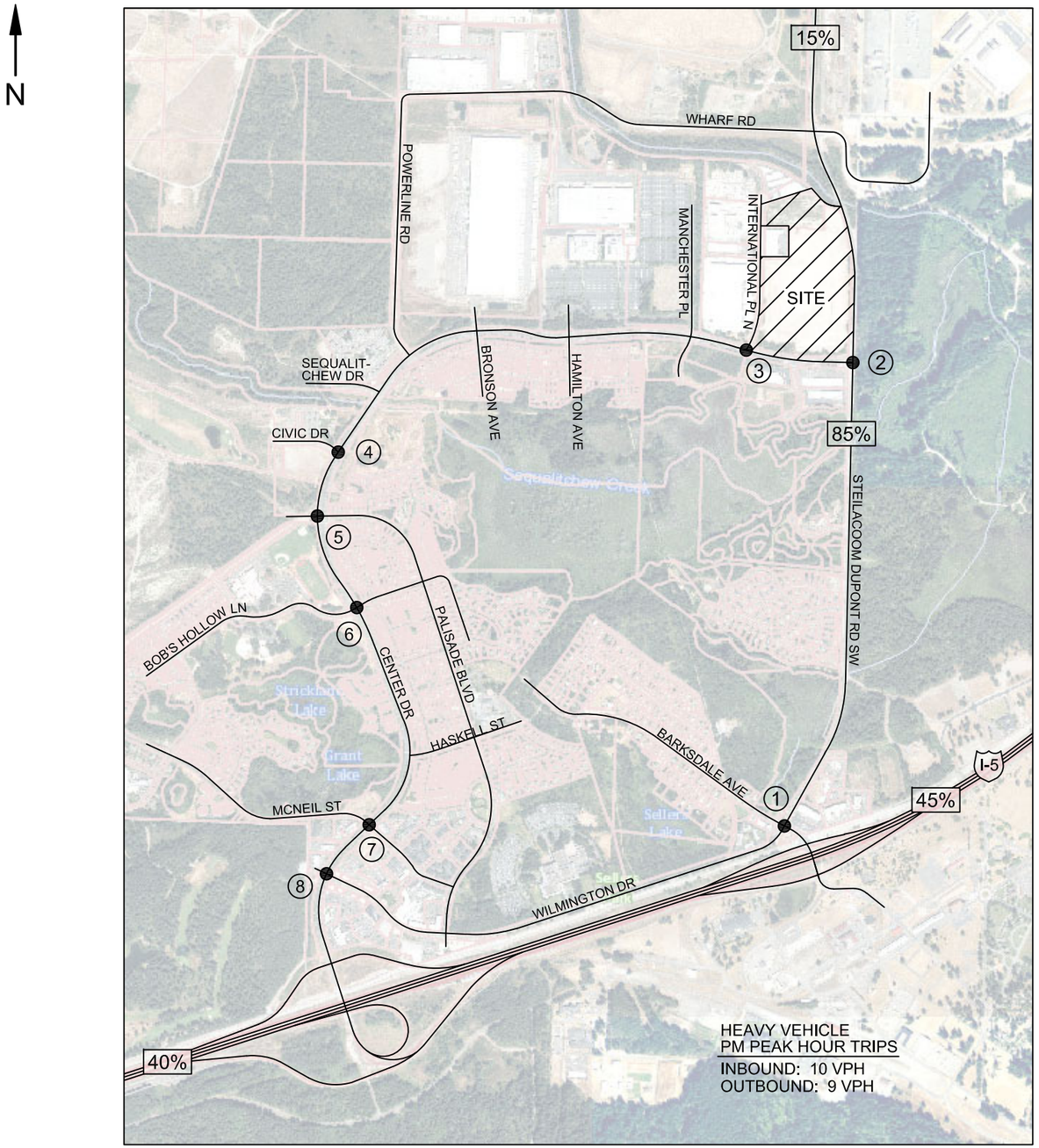

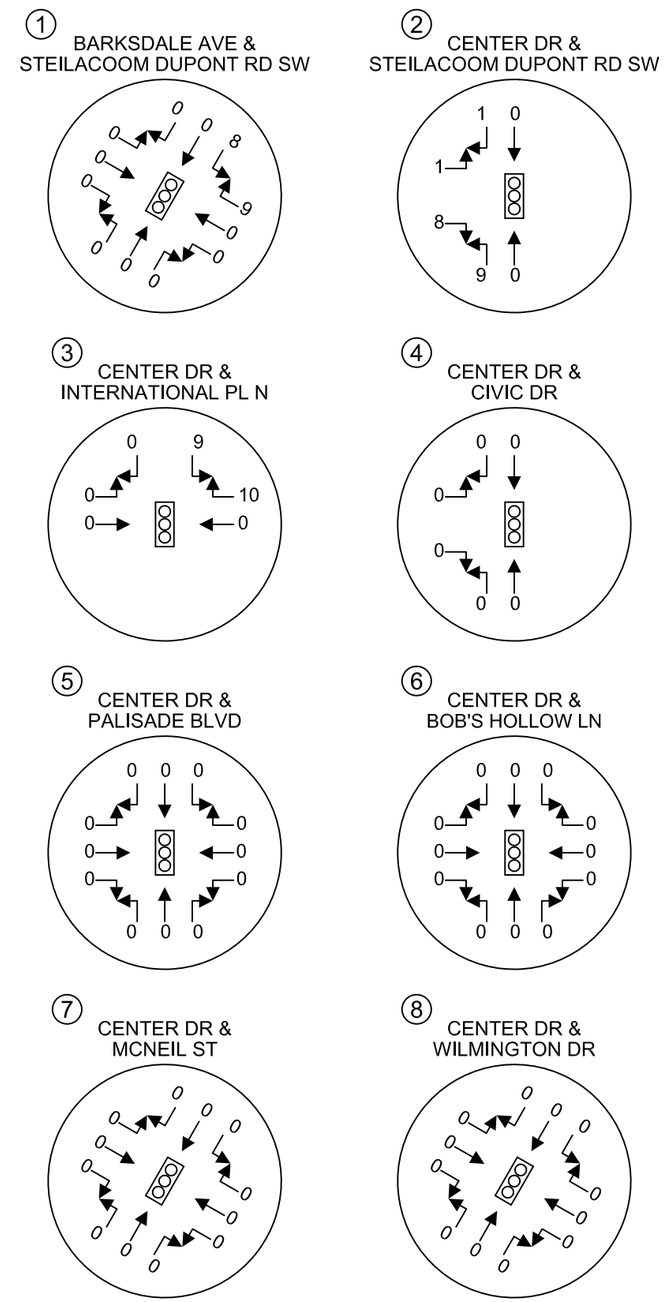

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SNOW BLOSSOM FULFILLMENT CENTER

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT - HEAVY VEHICLES
SCENARIO 3: PEAK SEASON VOLUMES
FIGURE K

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APPENDIX

LEVEL OF SERVICE

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	59	24	200	38	501	9	52	117	509	105	36
Future Volume (vph)	27	59	24	200	38	501	9	52	117	509	105	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	125		125	100		75	0		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	0.99	0.99		0.99		0.97	0.99		0.97	0.99	0.99	
Frt		0.956				0.850			0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950	0.973	
Satd. Flow (prot)	1719	1714	0	1752	1845	1568	1770	1863	1583	1633	1639	0
Flt Permitted	0.950			0.950			0.950			0.950	0.973	
Satd. Flow (perm)	1702	1714	0	1737	1845	1519	1758	1863	1533	1618	1630	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				533			134		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			383			251			690	
Travel Time (s)		8.1			8.7			5.7			15.7	
Confl. Peds. (#/hr)	3		3	3		3	3		3	3		3
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	29	63	26	213	40	533	10	55	124	541	112	38
Shared Lane Traffic (%)										36%		
Lane Group Flow (vph)	29	89	0	213	40	533	10	55	124	346	345	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Total Split (s)	14.5	26.5		29.5	24.6	24.6	27.5	27.5	27.5	39.5	39.5	
Total Lost Time (s)	4.5	4.5		4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	8.4	10.8		16.7	23.6	23.6	13.4	13.4	13.4	24.5	24.5	
Actuated g/C Ratio	0.11	0.14		0.22	0.32	0.32	0.18	0.18	0.18	0.33	0.33	
v/c Ratio	0.15	0.34		0.54	0.07	0.63	0.03	0.17	0.32	0.65	0.64	
Control Delay	42.9	35.3		37.6	24.7	6.7	37.3	37.4	9.1	32.5	31.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.9	35.3		37.6	24.7	6.7	37.3	37.4	9.1	32.5	31.8	
LOS	D	D		D	C	A	D	D	A	C	C	
Approach Delay		37.2			16.0			18.9			32.2	
Approach LOS		D			B			B			C	
Queue Length 50th (ft)	13	33		93	12	0	4	24	0	149	146	
Queue Length 95th (ft)	51	98		220	48	89	22	74	46	348	343	
Internal Link Dist (ft)		275			303			171			610	
Turn Bay Length (ft)	75			125		125	100		75			
Base Capacity (vph)	283	631		722	1025	1081	671	706	664	878	883	
Starvation Cap Reductn	0	0		0	0	17	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.10	0.14		0.30	0.04	0.50	0.01	0.08	0.19	0.39	0.39	

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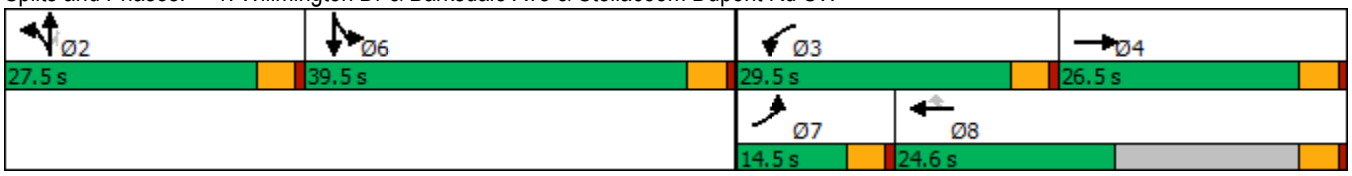
Intersection Summary	
Area Type: Other	
Cycle Length: 123	
Actuated Cycle Length: 74.8	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 24.0	Intersection LOS: C
Intersection Capacity Utilization 56.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Wilimington Dr & Barksdale Ave & Steilacoom Dupont Rd SW



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	277	75	151	466	487	285
Future Volume (veh/h)	277	75	151	466	487	285
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1856	1856
Adj Flow Rate, veh/h	308	83	168	518	541	317
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	3	3
Cap, veh/h	399	355	224	1093	718	595
Arrive On Green	0.23	0.23	0.13	0.59	0.39	0.39
Sat Flow, veh/h	1753	1560	1753	1841	1856	1538
Grp Volume(v), veh/h	308	83	168	518	541	317
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1856	1538
Q Serve(g_s), s	8.3	2.2	4.7	8.0	12.7	8.0
Cycle Q Clear(g_c), s	8.3	2.2	4.7	8.0	12.7	8.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	399	355	224	1093	718	595
V/C Ratio(X)	0.77	0.23	0.75	0.47	0.75	0.53
Avail Cap(c_a), veh/h	1392	1239	1392	2193	2210	1832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	15.9	21.2	5.8	13.4	11.9
Incr Delay (d2), s/veh	3.2	0.3	5.0	0.3	1.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	2.1	1.9	1.6	4.2	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.5	16.2	26.2	6.1	15.0	12.7
LnGrp LOS	C	B	C	A	B	B
Approach Vol, veh/h	391			686	858	
Approach Delay, s/veh	20.3			11.0	14.1	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		34.9		15.5	10.4	24.5
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		60.0		40.0	40.0	60.0
Max Q Clear Time (g_c+I1), s		10.0		10.3	6.7	14.7
Green Ext Time (p_c), s		3.3		1.2	0.4	4.8

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	360	475	13	11	0
Future Volume (vph)	3	360	475	13	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00		1.00		1.00	
Frt			0.996			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3360	0	902	0
Flt Permitted	0.394				0.950	
Satd. Flow (perm)	732	3539	3360	0	899	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			3			
Link Speed (mph)		35	35		25	
Link Distance (ft)		687	519		307	
Travel Time (s)		13.4	10.1		8.4	
Confl. Peds. (#/hr)	2			2	2	2
Confl. Bikes (#/hr)				1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	5%	75%	100%	0%
Adj. Flow (vph)	3	375	495	14	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	375	509	0	11	0
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Total Split (s)	26.0	93.0	67.0		27.0	
Total Lost Time (s)	4.5	4.5	4.5		4.5	
Act Effct Green (s)	26.4	30.8	29.5		6.5	
Actuated g/C Ratio	0.81	0.94	0.90		0.20	
v/c Ratio	0.00	0.11	0.17		0.06	
Control Delay	1.7	1.0	2.6		16.4	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	1.7	1.0	2.6		16.4	
LOS	A	A	A		B	
Approach Delay		1.0	2.6		16.4	
Approach LOS		A	A		B	
Queue Length 50th (ft)	0	0	0		1	
Queue Length 95th (ft)	2	26	71		16	
Internal Link Dist (ft)		607	439		227	
Turn Bay Length (ft)	150					
Base Capacity (vph)	1337	3539	3360		679	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.00	0.11	0.15		0.02	

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Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 32.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.17	
Intersection Signal Delay: 2.1	Intersection LOS: A
Intersection Capacity Utilization 26.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Center Drive & International Pl

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	8	17	318	311	7
Future Volume (veh/h)	1	8	17	318	311	7
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1737	1737	1856	1856	1841	1841
Adj Flow Rate, veh/h	1	9	19	349	342	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	3	3	4	4
Cap, veh/h	22	20	624	1916	1037	24
Arrive On Green	0.01	0.01	0.03	0.54	0.30	0.30
Sat Flow, veh/h	1654	1472	1767	3618	3583	81
Grp Volume(v), veh/h	1	9	19	349	171	179
Grp Sat Flow(s),veh/h/ln	1654	1472	1767	1763	1749	1823
Q Serve(g_s), s	0.0	0.1	0.1	1.0	1.5	1.6
Cycle Q Clear(g_c), s	0.0	0.1	0.1	1.0	1.5	1.6
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	22	20	624	1916	519	542
V/C Ratio(X)	0.04	0.45	0.03	0.18	0.33	0.33
Avail Cap(c_a), veh/h	407	362	2102	15009	5551	5788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	9.9	3.8	2.3	5.6	5.6
Incr Delay (d2), s/veh	0.8	15.2	0.0	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.7	25.2	3.8	2.4	5.9	5.9
LnGrp LOS	B	C	A	A	A	A
Approach Vol, veh/h	10			368	350	
Approach Delay, s/veh	23.7			2.5	5.9	
Approach LOS	C			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		15.5		4.8	5.0	10.5
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		86.5		5.0	17.5	64.5
Max Q Clear Time (g_c+I1), s		3.0		2.1	2.1	3.6
Green Ext Time (p_c), s		2.5		0.0	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	21	0	35	0	313	14	23	287	0
Future Volume (veh/h)	0	0	0	21	0	35	0	313	14	23	287	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.98		0.98	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1870	1900	1870	1870	1826	1826	1900
Adj Flow Rate, veh/h	0	0	0	23	0	39	0	348	16	26	319	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	2	0	2	0	2	2	5	5	0
Cap, veh/h	0	136	0	373	0	111	7	1360	62	46	2045	0
Arrive On Green	0.00	0.00	0.00	0.07	0.00	0.07	0.00	0.39	0.39	0.03	0.59	0.00
Sat Flow, veh/h	0	1900	0	1416	0	1550	1810	3455	158	1739	3561	0
Grp Volume(v), veh/h	0	0	0	23	0	39	0	178	186	26	319	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1416	0	1550	1810	1777	1837	1739	1735	0
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.6	0.0	1.8	1.8	0.4	1.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.4	0.0	0.6	0.0	1.8	1.8	0.4	1.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	0	136	0	373	0	111	7	699	723	46	2045	0
V/C Ratio(X)	0.00	0.00	0.00	0.06	0.00	0.35	0.00	0.26	0.26	0.57	0.16	0.00
Avail Cap(c_a), veh/h	0	2148	0	1872	0	1752	1364	4018	4153	1311	7844	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.6	0.0	11.7	0.0	5.4	5.4	12.8	2.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	1.9	0.0	0.2	0.2	10.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.3	0.3	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.7	0.0	13.6	0.0	5.6	5.6	23.4	2.5	0.0
LnGrp LOS	A	A	A	B	A	B	A	A	A	C	A	A
Approach Vol, veh/h		0			62			364			345	
Approach Delay, s/veh		0.0			12.9			5.6			4.1	
Approach LOS					B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	14.9		6.4	0.0	20.1		6.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.4	3.8		0.0	0.0	3.1		2.6
Green Ext Time (p_c), s	0.0	2.2		0.0	0.0	2.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	22	76	32	8	10	65	157	13	10	148	153
Future Volume (veh/h)	163	22	76	32	8	10	65	157	13	10	148	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.99		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1885	1885	1885	1885	1885	1885	1826	1826	1826
Adj Flow Rate, veh/h	206	28	96	41	10	13	82	199	16	13	187	194
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	5	5	5
Cap, veh/h	399	61	130	405	103	93	493	1151	92	521	477	391
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.09	0.34	0.34	0.02	0.27	0.27
Sat Flow, veh/h	846	200	429	861	340	306	1795	3351	267	1739	1735	1424
Grp Volume(v), veh/h	330	0	0	64	0	0	82	105	110	13	187	194
Grp Sat Flow(s),veh/h/ln	1476	0	0	1506	0	0	1795	1791	1827	1739	1735	1424
Q Serve(g_s), s	7.1	0.0	0.0	0.0	0.0	0.0	1.2	1.7	1.7	0.2	3.6	4.7
Cycle Q Clear(g_c), s	8.2	0.0	0.0	1.0	0.0	0.0	1.2	1.7	1.7	0.2	3.6	4.7
Prop In Lane	0.62		0.29	0.64		0.20	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	589	0	0	600	0	0	493	615	627	521	477	391
V/C Ratio(X)	0.56	0.00	0.00	0.11	0.00	0.00	0.17	0.17	0.17	0.02	0.39	0.50
Avail Cap(c_a), veh/h	1209	0	0	1197	0	0	1207	2615	2667	1333	2533	2079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	0.0	10.3	0.0	0.0	8.9	9.4	9.4	10.3	12.1	12.5
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.1	0.0	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.4	0.0	0.0	0.4	0.5	0.5	0.1	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	0.0	10.4	0.0	0.0	9.1	9.5	9.6	10.3	12.6	13.5
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	B	B
Approach Vol, veh/h		330			64			297			394	
Approach Delay, s/veh		13.6			10.4			9.4			13.0	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	18.7		16.9	8.2	15.9		16.9
Change Period (Y+Rc), s	4.6	4.6		4.5	4.6	4.6		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	3.7		10.2	3.2	6.7		3.0
Green Ext Time (p_c), s	0.0	1.3		2.1	0.1	2.6		0.3

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

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Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	41	49	319	26	17	14	139	199	72	21	243	22
Future Volume (veh/h)	41	49	319	26	17	14	139	199	72	21	243	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1796	1796	1796	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	44	53	343	28	18	15	149	214	77	23	261	24
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	7	7	7	1	1	1	1	1	1
Cap, veh/h	311	317	655	340	177	476	237	755	262	62	644	59
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.13	0.29	0.29	0.03	0.19	0.19
Sat Flow, veh/h	563	1116	1566	610	625	1493	1795	2583	896	1795	3307	301
Grp Volume(v), veh/h	97	0	343	46	0	15	149	146	145	23	140	145
Grp Sat Flow(s),veh/h/ln	1679	0	1566	1235	0	1493	1795	1791	1689	1795	1791	1817
Q Serve(g_s), s	0.0	0.0	5.7	0.0	0.0	0.2	2.7	2.2	2.3	0.4	2.4	2.4
Cycle Q Clear(g_c), s	1.3	0.0	5.7	1.3	0.0	0.2	2.7	2.2	2.3	0.4	2.4	2.4
Prop In Lane	0.45		1.00	0.61		1.00	1.00		0.53	1.00		0.17
Lane Grp Cap(c), veh/h	628	0	655	518	0	476	237	523	493	62	349	354
V/C Ratio(X)	0.15	0.00	0.52	0.09	0.00	0.03	0.63	0.28	0.29	0.37	0.40	0.41
Avail Cap(c_a), veh/h	1568	0	1566	1193	0	1344	1036	3100	2923	1036	3100	3145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	0.0	7.6	9.1	0.0	8.1	14.2	9.5	9.5	16.4	12.2	12.2
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.0	0.0	2.7	0.3	0.3	3.7	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.2	0.2	0.0	0.1	1.0	0.6	0.6	0.2	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.5	0.0	8.2	9.2	0.0	8.2	17.0	9.7	9.8	20.1	12.9	13.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	C	B	B
Approach Vol, veh/h		440			61			440			308	
Approach Delay, s/veh		8.5			8.9			12.2			13.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.3	5.7	14.6		14.3	9.1	11.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		30.0	20.0	60.0		30.0	20.0	60.0				
Max Q Clear Time (g_c+I1), s		3.3	2.4	4.3		7.7	4.7	4.4				
Green Ext Time (p_c), s		0.3	0.0	1.8		1.8	0.3	1.7				

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	14	35	62	15	43	55	355	207	56	551	6
Future Volume (veh/h)	1	14	35	62	15	43	55	355	207	56	551	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	1	15	36	65	16	45	57	370	216	58	574	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	408	78	188	417	69	195	525	730	419	513	1224	13
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.06	0.34	0.34	0.06	0.34	0.34
Sat Flow, veh/h	1348	486	1167	1360	431	1212	1795	2171	1245	1795	3630	38
Grp Volume(v), veh/h	1	0	51	65	0	61	57	304	282	58	283	297
Grp Sat Flow(s),veh/h/ln	1348	0	1653	1360	0	1643	1795	1791	1625	1795	1791	1877
Q Serve(g_s), s	0.0	0.0	0.8	1.3	0.0	1.0	0.6	4.2	4.3	0.6	3.8	3.8
Cycle Q Clear(g_c), s	1.0	0.0	0.8	2.2	0.0	1.0	0.6	4.2	4.3	0.6	3.8	3.8
Prop In Lane	1.00		0.71	1.00		0.74	1.00		0.77	1.00		0.02
Lane Grp Cap(c), veh/h	408	0	266	417	0	265	525	602	547	513	604	633
V/C Ratio(X)	0.00	0.00	0.19	0.16	0.00	0.23	0.11	0.50	0.52	0.11	0.47	0.47
Avail Cap(c_a), veh/h	1506	0	1612	1525	0	1603	1581	3494	3171	1566	3494	3663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	11.2	12.1	0.0	11.2	6.0	8.2	8.2	6.0	8.0	8.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.2	0.0	0.4	0.1	0.7	0.8	0.1	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.3	0.0	0.3	0.1	1.1	1.0	0.1	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	0.0	11.5	12.3	0.0	11.7	6.1	8.8	8.9	6.1	8.6	8.6
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	A	A
Approach Vol, veh/h		52			126			643			638	
Approach Delay, s/veh		11.5			12.0			8.6			8.4	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	14.8		9.5	6.4	14.9		9.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.6	6.3		3.0	2.6	5.8		4.2
Green Ext Time (p_c), s	0.1	4.1		0.2	0.1	3.8		0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	50	17	141	73	473	22	111	223	610	83	38
Future Volume (vph)	32	50	17	141	73	473	22	111	223	610	83	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	125		125	100		75	0		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	0.98	0.99		0.98		0.96	0.99		0.96	0.99	0.99	
Frt		0.961				0.850			0.850		0.984	
Flt Protected	0.950			0.950			0.950			0.950	0.968	
Satd. Flow (prot)	1770	1772	0	1752	1845	1568	1787	1881	1599	1681	1679	0
Flt Permitted	0.950			0.950			0.950			0.950	0.968	
Satd. Flow (perm)	1742	1772	0	1725	1845	1508	1769	1881	1537	1657	1663	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12				488			230		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			383			251			690	
Travel Time (s)		8.1			8.7			5.7			15.7	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	1%	1%	1%	2%	2%	2%
Adj. Flow (vph)	33	52	18	145	75	488	23	114	230	629	86	39
Shared Lane Traffic (%)										40%		
Lane Group Flow (vph)	33	70	0	145	75	488	23	114	230	377	377	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Total Split (s)	14.5	26.5		29.5	24.6	24.6	27.5	27.5	27.5	39.5	39.5	
Total Lost Time (s)	4.5	4.5		4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	7.7	9.5		12.5	16.7	16.7	12.6	12.6	12.6	24.5	24.5	
Actuated g/C Ratio	0.10	0.13		0.17	0.22	0.22	0.17	0.17	0.17	0.33	0.33	
v/c Ratio	0.18	0.30		0.50	0.18	0.68	0.08	0.36	0.51	0.69	0.69	
Control Delay	41.2	33.7		39.6	29.3	8.7	34.5	37.6	10.0	31.8	31.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.2	33.7		39.6	29.3	8.7	34.5	37.6	10.0	31.8	31.3	
LOS	D	C		D	C	A	C	D	A	C	C	
Approach Delay		36.1			17.2			20.1			31.6	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	14	25		61	29	0	9	48	0	152	150	
Queue Length 95th (ft)	53	77		155	79	90	38	126	68	354	350	
Internal Link Dist (ft)		275			303			171			610	
Turn Bay Length (ft)	75			125		125	100		75			
Base Capacity (vph)	257	575		637	991	1035	598	629	667	856	857	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.13	0.12		0.23	0.08	0.47	0.04	0.18	0.34	0.44	0.44	

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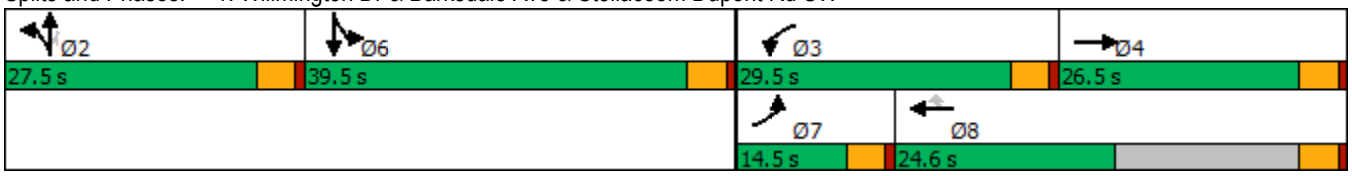
Intersection Summary	
Area Type: Other	
Cycle Length: 123	
Actuated Cycle Length: 75.2	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 24.4	Intersection LOS: C
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Wilimington Dr & Barksdale Ave & Steilacoom Dupont Rd SW



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	219	98	109	497	602	418
Future Volume (veh/h)	219	98	109	497	602	418
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1885	1885
Adj Flow Rate, veh/h	238	107	118	540	654	454
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	1	1
Cap, veh/h	329	292	158	1163	869	720
Arrive On Green	0.19	0.19	0.09	0.63	0.46	0.46
Sat Flow, veh/h	1753	1560	1753	1841	1885	1561
Grp Volume(v), veh/h	238	107	118	540	654	454
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1885	1561
Q Serve(g_s), s	6.3	3.0	3.3	7.6	14.2	11.0
Cycle Q Clear(g_c), s	6.3	3.0	3.3	7.6	14.2	11.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	329	292	158	1163	869	720
V/C Ratio(X)	0.72	0.37	0.75	0.46	0.75	0.63
Avail Cap(c_a), veh/h	1410	1255	1410	2221	2274	1883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	17.6	22.1	4.8	11.1	10.2
Incr Delay (d2), s/veh	3.0	0.8	6.9	0.3	1.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.1	1.4	1.3	4.2	2.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	18.4	29.0	5.1	12.4	11.1
LnGrp LOS	C	B	C	A	B	B
Approach Vol, veh/h	345			658	1108	
Approach Delay, s/veh	20.9			9.4	11.9	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.4		13.3	8.5	27.9
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		60.0		40.0	40.0	60.0
Max Q Clear Time (g_c+I1), s		9.6		8.3	5.3	16.2
Green Ext Time (p_c), s		3.5		1.1	0.3	6.7

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	235	589	6	13	1
Future Volume (vph)	1	235	589	6	13	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00		1.00		1.00	
Frt			0.998		0.991	
Flt Protected	0.950				0.955	
Satd. Flow (prot)	1736	3471	3531	0	1761	0
Flt Permitted	0.349				0.955	
Satd. Flow (perm)	637	3471	3531	0	1757	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1		1	
Link Speed (mph)		30	30		30	
Link Distance (ft)		687	519		294	
Travel Time (s)		15.6	11.8		6.7	
Confl. Peds. (#/hr)	1			1	1	1
Confl. Bikes (#/hr)				4		4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	4%	2%	2%	2%	2%
Adj. Flow (vph)	1	261	654	7	14	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	261	661	0	15	0
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases	4					
Total Split (s)	16.0	91.0	75.0		29.0	
Total Lost Time (s)	4.5	4.5	4.5		4.5	
Act Effct Green (s)	31.4	36.3	35.2		7.9	
Actuated g/C Ratio	0.81	0.93	0.90		0.20	
v/c Ratio	0.00	0.08	0.21		0.04	
Control Delay	3.0	1.7	3.4		16.9	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.0	1.7	3.4		16.9	
LOS	A	A	A		B	
Approach Delay		1.7	3.4		16.9	
Approach LOS		A	A		B	
Queue Length 50th (ft)	0	0	0		2	
Queue Length 95th (ft)	2	34	128		20	
Internal Link Dist (ft)		607	439		214	
Turn Bay Length (ft)	150					
Base Capacity (vph)	897	3471	3453		1311	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.00	0.08	0.19		0.01	

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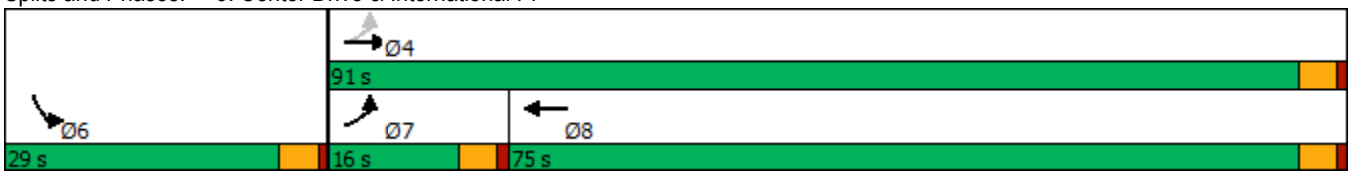
Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 38.9	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.21	
Intersection Signal Delay: 3.1	Intersection LOS: A
Intersection Capacity Utilization 28.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Center Drive & International Pl



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	12	4	292	406	5
Future Volume (veh/h)	7	12	4	292	406	5
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	7	13	4	307	427	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	47	42	581	1959	1189	14
Arrive On Green	0.03	0.03	0.01	0.55	0.33	0.33
Sat Flow, veh/h	1795	1598	1795	3676	3719	42
Grp Volume(v), veh/h	7	13	4	307	211	221
Grp Sat Flow(s),veh/h/ln	1795	1598	1795	1791	1791	1876
Q Serve(g_s), s	0.1	0.2	0.0	0.9	1.9	1.9
Cycle Q Clear(g_c), s	0.1	0.2	0.0	0.9	1.9	1.9
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	47	42	581	1959	587	615
V/C Ratio(X)	0.15	0.31	0.01	0.16	0.36	0.36
Avail Cap(c_a), veh/h	2001	1781	1891	14865	5734	6007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	10.1	3.8	2.4	5.4	5.4
Incr Delay (d2), s/veh	1.4	4.1	0.0	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	0.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	14.2	3.8	2.4	5.8	5.8
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	20			311	432	
Approach Delay, s/veh	13.2			2.4	5.8	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		16.0		5.1	4.6	11.4
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		87.5		23.5	15.5	67.5
Max Q Clear Time (g_c+I1), s		2.9		2.2	2.0	3.9
Green Ext Time (p_c), s		2.1		0.0	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	7	23	1	22	8	282	32	32	466	4
Future Volume (veh/h)	0	0	7	23	1	22	8	282	32	32	466	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1885	1900	1885	1885	1885	1885	1900
Adj Flow Rate, veh/h	0	0	8	25	1	24	9	307	35	35	507	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	1	0	1	0	1	1	1	1	0
Cap, veh/h	0	0	105	352	3	104	18	1253	141	62	1501	12
Arrive On Green	0.00	0.00	0.07	0.07	0.07	0.07	0.01	0.39	0.39	0.03	0.41	0.41
Sat Flow, veh/h	0	0	1577	1272	51	1565	1810	3234	365	1795	3641	29
Grp Volume(v), veh/h	0	0	8	26	0	24	9	169	173	35	249	262
Grp Sat Flow(s),veh/h/ln	0	0	1577	1323	0	1565	1810	1791	1808	1795	1791	1879
Q Serve(g_s), s	0.0	0.0	0.1	0.5	0.0	0.4	0.1	1.7	1.7	0.5	2.5	2.5
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.6	0.0	0.4	0.1	1.7	1.7	0.5	2.5	2.5
Prop In Lane	0.00		1.00	0.96		1.00	1.00		0.20	1.00		0.02
Lane Grp Cap(c), veh/h	0	0	105	356	0	104	18	694	701	62	738	774
V/C Ratio(X)	0.00	0.00	0.08	0.07	0.00	0.23	0.51	0.24	0.25	0.57	0.34	0.34
Avail Cap(c_a), veh/h	0	0	1793	1882	0	1779	1372	4073	4112	1361	4073	4274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	11.6	11.8	0.0	11.7	13.0	5.5	5.5	12.5	5.3	5.3
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.1	0.0	1.1	21.4	0.2	0.2	8.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.3	0.3	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	11.9	11.9	0.0	12.8	34.4	5.6	5.7	20.5	5.6	5.6
LnGrp LOS	A	A	B	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		8			50			351			546	
Approach Delay, s/veh		11.9			12.3			6.4			6.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	14.7		6.3	4.8	15.4		6.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.5	3.7		2.1	2.1	4.5		2.6
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	3.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	10	64	17	19	9	58	161	31	20	268	212
Future Volume (veh/h)	152	10	64	17	19	9	58	161	31	20	268	212
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	0.99		0.97	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	160	11	67	18	20	9	61	169	33	21	282	223
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	1	1	1
Cap, veh/h	381	41	100	244	232	80	492	1030	196	613	571	434
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.08	0.35	0.35	0.03	0.30	0.30
Sat Flow, veh/h	884	168	412	434	960	330	1795	2983	568	1795	1898	1443
Grp Volume(v), veh/h	238	0	0	47	0	0	61	100	102	21	265	240
Grp Sat Flow(s),veh/h/ln	1465	0	0	1725	0	0	1795	1791	1760	1795	1791	1550
Q Serve(g_s), s	4.5	0.0	0.0	0.0	0.0	0.0	0.8	1.4	1.4	0.3	4.4	4.6
Cycle Q Clear(g_c), s	5.2	0.0	0.0	0.7	0.0	0.0	0.8	1.4	1.4	0.3	4.4	4.6
Prop In Lane	0.67		0.28	0.38		0.19	1.00		0.32	1.00		0.93
Lane Grp Cap(c), veh/h	522	0	0	555	0	0	492	618	608	613	538	466
V/C Ratio(X)	0.46	0.00	0.00	0.08	0.00	0.00	0.12	0.16	0.17	0.03	0.49	0.51
Avail Cap(c_a), veh/h	1375	0	0	1488	0	0	1355	2993	2942	1556	2993	2591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	0.0	10.6	0.0	0.0	7.5	8.1	8.2	8.1	10.3	10.4
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.2	0.0	0.0	0.2	0.4	0.4	0.1	1.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.9	0.0	0.0	10.7	0.0	0.0	7.6	8.3	8.3	8.1	11.0	11.3
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	B	B
Approach Vol, veh/h		238			47			263			526	
Approach Delay, s/veh		12.9			10.7			8.1			11.0	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	17.0		13.2	7.3	15.4		13.2
Change Period (Y+Rc), s	4.6	4.6		4.5	4.6	4.6		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.3	3.4		7.2	2.8	6.6		2.7
Green Ext Time (p_c), s	0.0	1.2		1.5	0.1	3.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

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Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	44	39	169	62	68	31	348	248	43	31	306	42
Future Volume (veh/h)	44	39	169	62	68	31	348	248	43	31	306	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	46	41	178	65	72	33	366	261	45	33	322	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	90	58	1016	86	69	707	405	1067	181	71	517	70
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.23	0.35	0.35	0.04	0.16	0.16
Sat Flow, veh/h	27	139	1570	23	166	1546	1795	3047	517	1795	3152	426
Grp Volume(v), veh/h	87	0	178	137	0	33	366	152	154	33	181	185
Grp Sat Flow(s),veh/h/ln	166	0	1570	189	0	1546	1795	1791	1773	1795	1791	1787
Q Serve(g_s), s	1.0	0.0	3.2	1.0	0.0	0.8	13.9	4.2	4.3	1.3	6.6	6.7
Cycle Q Clear(g_c), s	29.1	0.0	3.2	29.1	0.0	0.8	13.9	4.2	4.3	1.3	6.6	6.7
Prop In Lane	0.53		1.00	0.47		1.00	1.00		0.29	1.00		0.24
Lane Grp Cap(c), veh/h	148	0	1016	155	0	707	405	627	621	71	294	293
V/C Ratio(X)	0.59	0.00	0.18	0.88	0.00	0.05	0.90	0.24	0.25	0.47	0.62	0.63
Avail Cap(c_a), veh/h	167	0	1035	173	0	726	514	1538	1523	514	1538	1535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	5.0	22.8	0.0	10.5	26.3	16.1	16.2	32.8	27.2	27.2
Incr Delay (d2), s/veh	4.2	0.0	0.1	35.7	0.0	0.0	16.5	0.2	0.2	4.7	2.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.9	3.8	0.0	0.3	7.3	1.6	1.6	0.6	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	0.0	5.1	58.5	0.0	10.6	42.8	16.3	16.4	37.6	29.3	29.5
LnGrp LOS	C	A	A	E	A	B	D	B	B	D	C	C
Approach Vol, veh/h		265			170			672			399	
Approach Delay, s/veh		11.1			49.2			30.8			30.1	
Approach LOS		B			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	29.3		34.1	20.5	16.1		34.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	3.3	6.3		31.1	15.9	8.7		31.1
Green Ext Time (p_c), s	0.0	1.9		0.0	0.5	2.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	14	30	235	25	72	47	548	192	65	452	17
Future Volume (veh/h)	7	14	30	235	25	72	47	548	192	65	452	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	1.00		0.96	0.99		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	8	15	32	253	27	77	51	589	206	70	486	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	460	154	328	522	121	346	487	924	322	383	1300	48
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.36	0.36	0.06	0.37	0.37
Sat Flow, veh/h	1269	530	1130	1366	417	1190	1795	2584	902	1795	3517	130
Grp Volume(v), veh/h	8	0	47	253	0	104	51	408	387	70	247	257
Grp Sat Flow(s),veh/h/ln	1269	0	1659	1366	0	1607	1795	1791	1694	1795	1791	1856
Q Serve(g_s), s	0.2	0.0	1.0	7.8	0.0	2.3	0.8	8.9	8.9	1.1	4.7	4.7
Cycle Q Clear(g_c), s	2.5	0.0	1.0	8.8	0.0	2.3	0.8	8.9	8.9	1.1	4.7	4.7
Prop In Lane	1.00		0.68	1.00		0.74	1.00		0.53	1.00		0.07
Lane Grp Cap(c), veh/h	460	0	482	522	0	467	487	641	606	383	662	686
V/C Ratio(X)	0.02	0.00	0.10	0.48	0.00	0.22	0.10	0.64	0.64	0.18	0.37	0.37
Avail Cap(c_a), veh/h	903	0	1062	999	0	1028	1160	2291	2168	1034	2291	2375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	12.1	15.3	0.0	12.6	8.6	12.5	12.5	9.1	10.8	10.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.7	0.0	0.2	0.1	1.1	1.1	0.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	2.2	0.0	0.8	0.3	3.0	2.8	0.3	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	12.2	16.0	0.0	12.9	8.7	13.6	13.7	9.3	11.2	11.1
LnGrp LOS	B	A	B	B	A	B	A	B	B	A	B	B
Approach Vol, veh/h		55			357			846			574	
Approach Delay, s/veh		12.4			15.1			13.3			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	21.3		18.1	6.9	21.8		18.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	3.1	10.9		4.5	2.8	6.7		10.8
Green Ext Time (p_c), s	0.1	5.9		0.2	0.1	3.2		1.4

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	61	25	208	40	643	9	71	122	580	118	45
Future Volume (vph)	40	61	25	208	40	643	9	71	122	580	118	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	125		125	100		75	0		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	0.99	0.99		0.99		0.97	0.99		0.97	0.99	0.99	
Frt		0.956				0.850			0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950	0.973	
Satd. Flow (prot)	1719	1714	0	1752	1845	1568	1770	1863	1583	1633	1636	0
Flt Permitted	0.950			0.950			0.950			0.950	0.973	
Satd. Flow (perm)	1702	1714	0	1737	1845	1519	1759	1863	1533	1618	1628	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				684			134		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			383			251			690	
Travel Time (s)		8.1			8.7			5.7			15.7	
Confl. Peds. (#/hr)	3		3	3		3	3		3	3		3
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Adj. Flow (vph)	43	65	27	221	43	684	10	76	130	617	126	48
Shared Lane Traffic (%)										36%		
Lane Group Flow (vph)	43	92	0	221	43	684	10	76	130	395	396	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Total Split (s)	14.5	26.5		29.5	24.6	24.6	27.5	27.5	27.5	39.5	39.5	
Total Lost Time (s)	4.5	4.5		4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	8.0	10.3		16.7	21.3	21.3	12.1	12.1	12.1	28.3	28.3	
Actuated g/C Ratio	0.10	0.12		0.20	0.26	0.26	0.15	0.15	0.15	0.34	0.34	
v/c Ratio	0.26	0.41		0.63	0.09	0.76	0.04	0.28	0.39	0.71	0.71	
Control Delay	46.3	39.1		42.6	28.2	9.0	38.9	41.0	10.9	35.0	34.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	46.3	39.1		42.6	28.2	9.0	38.9	41.0	10.9	35.0	34.3	
LOS	D	D		D	C	A	D	D	B	C	C	
Approach Delay		41.4			17.7			22.8			34.6	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	21	38		108	18	0	5	37	0	182	180	
Queue Length 95th (ft)	68	102		228	52	110	22	95	51	#434	#429	
Internal Link Dist (ft)		275			303			171			610	
Turn Bay Length (ft)	75			125		125	100		75			
Base Capacity (vph)	222	498		566	880	1082	526	554	550	739	744	
Starvation Cap Reductn	0	0		1	0	8	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.19	0.18		0.39	0.05	0.64	0.02	0.14	0.24	0.53	0.53	

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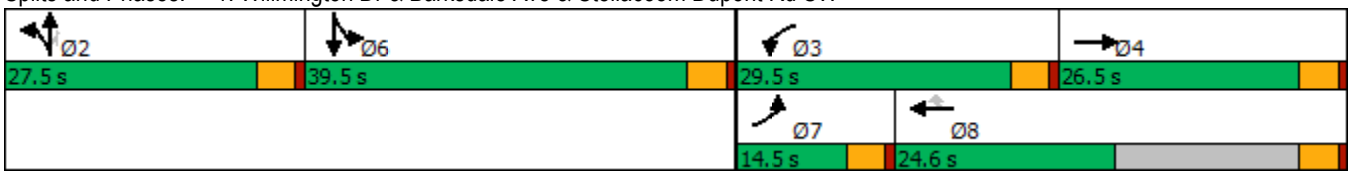
Intersection Summary	
Area Type: Other	
Cycle Length: 123	
Actuated Cycle Length: 83.2	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 26.2	Intersection LOS: C
Intersection Capacity Utilization 65.4%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Wilimington Dr & Barksdale Ave & Steilacoom Dupont Rd SW



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	322	115	258	517	522	357
Future Volume (veh/h)	322	115	258	517	522	357
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1856	1856
Adj Flow Rate, veh/h	358	128	287	574	580	397
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	3	3
Cap, veh/h	425	379	342	1167	712	590
Arrive On Green	0.24	0.24	0.20	0.63	0.38	0.38
Sat Flow, veh/h	1753	1560	1753	1841	1856	1538
Grp Volume(v), veh/h	358	128	287	574	580	397
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1856	1538
Q Serve(g_s), s	14.2	4.9	11.5	12.1	20.4	15.6
Cycle Q Clear(g_c), s	14.2	4.9	11.5	12.1	20.4	15.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	425	379	342	1167	712	590
V/C Ratio(X)	0.84	0.34	0.84	0.49	0.81	0.67
Avail Cap(c_a), veh/h	1010	899	842	2577	1604	1329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	22.8	28.2	7.1	20.1	18.6
Incr Delay (d2), s/veh	4.6	0.5	5.5	0.3	2.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	4.6	4.9	3.3	8.0	5.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.8	23.3	33.7	7.4	22.5	20.0
LnGrp LOS	C	C	C	A	C	B
Approach Vol, veh/h	486			861	977	
Approach Delay, s/veh	28.8			16.2	21.5	
Approach LOS	C			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.2		21.7	18.2	33.0
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		102.0		42.0	35.0	63.0
Max Q Clear Time (g_c+I1), s		14.1		16.2	13.5	22.4
Green Ext Time (p_c), s		3.8		1.5	0.8	5.5

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	3	470	579	14	11	0
Future Volume (vph)	3	470	579	14	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00		1.00		1.00	
Frt			0.996			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3368	0	902	0
Flt Permitted	0.363				0.950	
Satd. Flow (perm)	675	3539	3368	0	899	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			3			
Link Speed (mph)		35	35		25	
Link Distance (ft)		687	519		294	
Travel Time (s)		15.6	11.8		6.7	
Confl. Peds. (#/hr)	2			2	2	2
Confl. Bikes (#/hr)				1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	5%	75%	100%	0%
Adj. Flow (vph)	3	490	603	15	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	490	618	0	11	0
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases	4					
Total Split (s)	18.0	88.0	70.0		32.0	
Total Lost Time (s)	4.5	4.5	4.5		4.5	
Act Effct Green (s)	31.0	36.0	35.0		8.2	
Actuated g/C Ratio	0.80	0.93	0.91		0.21	
v/c Ratio	0.00	0.15	0.20		0.06	
Control Delay	2.7	1.7	3.4		18.1	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	2.7	1.7	3.4		18.1	
LOS	A	A	A		B	
Approach Delay		1.7	3.4		18.1	
Approach LOS		A	A		B	
Queue Length 50th (ft)	0	0	0		1	
Queue Length 95th (ft)	3	62	121		17	
Internal Link Dist (ft)		607	439		214	
Turn Bay Length (ft)	150					
Base Capacity (vph)	1000	3539	3249		758	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.00	0.14	0.19		0.01	

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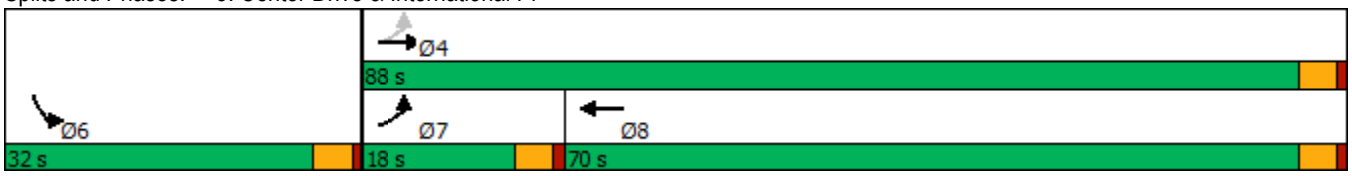
Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 38.6	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.20	
Intersection Signal Delay: 2.8	Intersection LOS: A
Intersection Capacity Utilization 29.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Center Drive & International Pl



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	15	43	131	447	356	40
Future Volume (veh/h)	15	43	131	447	356	40
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1737	1737	1856	1856	1841	1841
Adj Flow Rate, veh/h	16	47	144	491	391	44
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	3	3	4	4
Cap, veh/h	116	103	675	2078	935	104
Arrive On Green	0.07	0.07	0.12	0.59	0.30	0.30
Sat Flow, veh/h	1654	1472	1767	3618	3253	353
Grp Volume(v), veh/h	16	47	144	491	215	220
Grp Sat Flow(s),veh/h/ln	1654	1472	1767	1763	1749	1765
Q Serve(g_s), s	0.2	0.8	1.2	1.8	2.6	2.6
Cycle Q Clear(g_c), s	0.2	0.8	1.2	1.8	2.6	2.6
Prop In Lane	1.00	1.00	1.00			0.20
Lane Grp Cap(c), veh/h	116	103	675	2078	517	522
V/C Ratio(X)	0.14	0.46	0.21	0.24	0.42	0.42
Avail Cap(c_a), veh/h	313	278	1627	11539	4268	4308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	11.8	4.2	2.6	7.5	7.5
Incr Delay (d2), s/veh	0.5	3.1	0.2	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0	0.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.1	14.9	4.3	2.6	8.0	8.0
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	63			635	435	
Approach Delay, s/veh	14.2			3.0	8.0	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		20.1		6.4	7.8	12.3
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		86.5		5.0	17.5	64.5
Max Q Clear Time (g_c+I1), s		3.8		2.8	3.2	4.6
Green Ext Time (p_c), s		3.6		0.0	0.3	2.8

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	22	0	55	0	536	15	35	355	0
Future Volume (veh/h)	0	0	0	22	0	55	0	536	15	35	355	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.98	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1870	1900	1870	1870	1826	1826	1900
Adj Flow Rate, veh/h	0	0	0	24	0	61	0	596	17	39	394	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	2	0	2	0	2	2	5	5	0
Cap, veh/h	0	162	0	385	0	132	7	1349	38	65	2030	0
Arrive On Green	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.38	0.38	0.04	0.59	0.00
Sat Flow, veh/h	0	1900	0	1420	0	1549	1810	3525	100	1739	3561	0
Grp Volume(v), veh/h	0	0	0	24	0	61	0	300	313	39	394	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1420	0	1549	1810	1777	1849	1739	1735	0
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	1.0	0.0	3.4	3.4	0.6	1.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.4	0.0	1.0	0.0	3.4	3.4	0.6	1.5	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	0	162	0	385	0	132	7	680	708	65	2030	0
V/C Ratio(X)	0.00	0.00	0.00	0.06	0.00	0.46	0.00	0.44	0.44	0.60	0.19	0.00
Avail Cap(c_a), veh/h	0	2087	0	1823	0	1702	1325	3904	4062	1274	7622	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.6	0.0	11.9	0.0	6.3	6.3	12.9	2.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	2.5	0.0	0.5	0.4	8.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.7	0.7	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	11.7	0.0	14.4	0.0	6.7	6.7	21.4	2.7	0.0
LnGrp LOS	A	A	A	B	A	B	A	A	A	C	A	A
Approach Vol, veh/h		0			85			613			433	
Approach Delay, s/veh		0.0			13.6			6.7			4.4	
Approach LOS					B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	15.0		6.8	0.0	20.5		6.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.6	5.4		0.0	0.0	3.5		3.0
Green Ext Time (p_c), s	0.1	4.0		0.0	0.0	2.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	23	79	33	8	11	68	338	14	10	196	173
Future Volume (veh/h)	205	23	79	33	8	11	68	338	14	10	196	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1885	1885	1885	1885	1885	1885	1826	1826	1826
Adj Flow Rate, veh/h	259	29	100	42	10	14	86	428	18	13	248	219
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	5	5	5
Cap, veh/h	445	49	127	414	103	105	450	1221	51	427	490	403
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.09	0.35	0.35	0.02	0.28	0.28
Sat Flow, veh/h	942	146	378	857	309	314	1795	3497	147	1739	1735	1426
Grp Volume(v), veh/h	388	0	0	66	0	0	86	219	227	13	248	219
Grp Sat Flow(s),veh/h/ln	1465	0	0	1480	0	0	1795	1791	1853	1739	1735	1426
Q Serve(g_s), s	9.8	0.0	0.0	0.0	0.0	0.0	1.4	4.2	4.2	0.2	5.5	6.0
Cycle Q Clear(g_c), s	11.0	0.0	0.0	1.2	0.0	0.0	1.4	4.2	4.2	0.2	5.5	6.0
Prop In Lane	0.67		0.26	0.64		0.21	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	621	0	0	623	0	0	450	625	647	427	490	403
V/C Ratio(X)	0.63	0.00	0.00	0.11	0.00	0.00	0.19	0.35	0.35	0.03	0.51	0.54
Avail Cap(c_a), veh/h	1071	0	0	1059	0	0	1070	2321	2401	1143	2248	1848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	0.0	10.6	0.0	0.0	9.9	11.2	11.2	11.4	13.9	14.1
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0	0.2	0.3	0.3	0.0	0.8	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	0.4	0.0	0.0	0.5	1.4	1.4	0.1	1.9	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	0.0	10.7	0.0	0.0	10.1	11.5	11.5	11.4	14.7	15.2
LnGrp LOS	B	A	A	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h		388			66			532			480	
Approach Delay, s/veh		14.8			10.7			11.3			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	20.8		20.0	8.6	17.7		20.0
Change Period (Y+Rc), s	4.6	4.6		4.5	4.6	4.6		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	6.2		13.0	3.4	8.0		3.2
Green Ext Time (p_c), s	0.0	2.8		2.4	0.2	3.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

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Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	78	61	404	27	22	26	168	332	75	27	284	29
Future Volume (veh/h)	78	61	404	27	22	26	168	332	75	27	284	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1796	1796	1796	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	84	66	434	29	24	28	181	357	81	29	305	31
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	7	7	7	1	1	1	1	1	1
Cap, veh/h	199	125	847	164	101	667	233	775	173	69	578	58
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.13	0.27	0.27	0.04	0.18	0.18
Sat Flow, veh/h	196	308	1570	112	248	1496	1795	2888	646	1795	3271	329
Grp Volume(v), veh/h	150	0	434	53	0	28	181	219	219	29	166	170
Grp Sat Flow(s),veh/h/ln	504	0	1570	360	0	1496	1795	1791	1743	1795	1791	1810
Q Serve(g_s), s	2.5	0.0	8.3	0.7	0.0	0.5	4.6	4.8	4.9	0.7	4.0	4.0
Cycle Q Clear(g_c), s	17.3	0.0	8.3	16.4	0.0	0.5	4.6	4.8	4.9	0.7	4.0	4.0
Prop In Lane	0.56		1.00	0.55		1.00	1.00		0.37	1.00		0.18
Lane Grp Cap(c), veh/h	324	0	847	265	0	667	233	480	467	69	316	320
V/C Ratio(X)	0.46	0.00	0.51	0.20	0.00	0.04	0.78	0.46	0.47	0.42	0.52	0.53
Avail Cap(c_a), veh/h	878	0	1407	667	0	1202	1734	2376	2312	438	1083	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	0.0	7.0	10.7	0.0	7.4	19.8	14.4	14.4	22.1	17.6	17.6
Incr Delay (d2), s/veh	1.0	0.0	0.5	0.4	0.0	0.0	5.5	0.7	0.7	4.0	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.9	0.3	0.0	0.1	2.0	1.7	1.7	0.4	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	7.5	11.1	0.0	7.4	25.3	15.1	15.2	26.2	18.9	19.0
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		584			81			619			365	
Approach Delay, s/veh		9.4			9.8			18.1			19.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.9	6.4	17.4		24.9	10.8	13.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		36.0	11.5	62.5		36.0	45.5	28.5				
Max Q Clear Time (g_c+I1), s		18.4	2.7	6.9		19.3	6.6	6.0				
Green Ext Time (p_c), s		0.3	0.0	2.8		2.4	0.5	1.8				

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	15	36	65	16	56	57	506	215	69	665	6
Future Volume (veh/h)	1	15	36	65	16	56	57	506	215	69	665	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	1	16	38	68	17	58	59	527	224	72	693	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	359	76	180	378	57	196	509	938	397	490	1437	12
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.06	0.39	0.39	0.07	0.40	0.40
Sat Flow, veh/h	1331	490	1163	1356	370	1263	1795	2432	1029	1795	3638	31
Grp Volume(v), veh/h	1	0	54	68	0	75	59	387	364	72	341	358
Grp Sat Flow(s),veh/h/ln	1331	0	1653	1356	0	1633	1795	1791	1671	1795	1791	1879
Q Serve(g_s), s	0.0	0.0	1.0	1.6	0.0	1.4	0.7	5.9	6.0	0.8	5.0	5.0
Cycle Q Clear(g_c), s	1.4	0.0	1.0	2.6	0.0	1.4	0.7	5.9	6.0	0.8	5.0	5.0
Prop In Lane	1.00		0.70	1.00		0.77	1.00		0.62	1.00		0.02
Lane Grp Cap(c), veh/h	359	0	256	378	0	253	509	690	644	490	707	742
V/C Ratio(X)	0.00	0.00	0.21	0.18	0.00	0.30	0.12	0.56	0.56	0.15	0.48	0.48
Avail Cap(c_a), veh/h	1298	0	1423	1335	0	1405	1427	3083	2876	1391	3083	3234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	12.9	14.0	0.0	13.0	5.8	8.4	8.4	5.9	7.9	7.9
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.2	0.0	0.6	0.1	0.7	0.8	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.4	0.0	0.5	0.1	1.5	1.5	0.2	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	13.3	14.2	0.0	13.7	5.9	9.1	9.2	6.0	8.4	8.4
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	A	A
Approach Vol, veh/h		55			143			810			771	
Approach Delay, s/veh		13.3			13.9			8.9			8.2	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	17.9		9.9	6.7	18.3		9.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.8	8.0		3.4	2.7	7.0		4.6
Green Ext Time (p_c), s	0.1	5.5		0.3	0.1	4.7		0.6

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	52	18	147	76	535	23	123	232	736	101	51
Future Volume (vph)	38	52	18	147	76	535	23	123	232	736	101	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	125		125	100		75	0		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	0.98	0.99		0.98		0.96	0.99		0.96	0.99	0.99	
Frt		0.961				0.850			0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950	0.968	
Satd. Flow (prot)	1770	1772	0	1752	1845	1568	1787	1881	1599	1681	1677	0
Flt Permitted	0.950			0.950			0.950			0.950	0.968	
Satd. Flow (perm)	1742	1772	0	1725	1845	1508	1771	1881	1537	1657	1661	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12				552			239		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			383			251			690	
Travel Time (s)		8.1			8.7			5.7			15.7	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	1%	1%	1%	2%	2%	2%
Adj. Flow (vph)	39	54	19	152	78	552	24	127	239	759	104	53
Shared Lane Traffic (%)										40%		
Lane Group Flow (vph)	39	73	0	152	78	552	24	127	239	455	461	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Total Split (s)	11.0	24.6		23.4	37.0	37.0	25.0	25.0	25.0	50.0	50.0	
Total Lost Time (s)	4.5	4.5		4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	7.0	9.9		13.4	18.7	18.7	13.6	13.6	13.6	30.5	30.5	
Actuated g/C Ratio	0.08	0.12		0.16	0.22	0.22	0.16	0.16	0.16	0.36	0.36	
v/c Ratio	0.26	0.33		0.54	0.19	0.72	0.08	0.42	0.53	0.74	0.75	
Control Delay	50.9	39.3		46.1	32.4	9.3	38.9	43.1	10.6	33.3	33.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.9	39.3		46.1	32.4	9.3	38.9	43.1	10.6	33.3	33.3	
LOS	D	D		D	C	A	D	D	B	C	C	
Approach Delay		43.3			18.8			22.9			33.3	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	20	30		73	35	0	11	62	0	207	208	
Queue Length 95th (ft)	67	88		180	89	102	41	152	73	443	447	
Internal Link Dist (ft)		275			303			171			610	
Turn Bay Length (ft)	75			125		125	100		75			
Base Capacity (vph)	153	484		441	797	965	488	514	594	1019	1019	
Starvation Cap Reductn	0	0		0	0	3	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.25	0.15		0.34	0.10	0.57	0.05	0.25	0.40	0.45	0.45	

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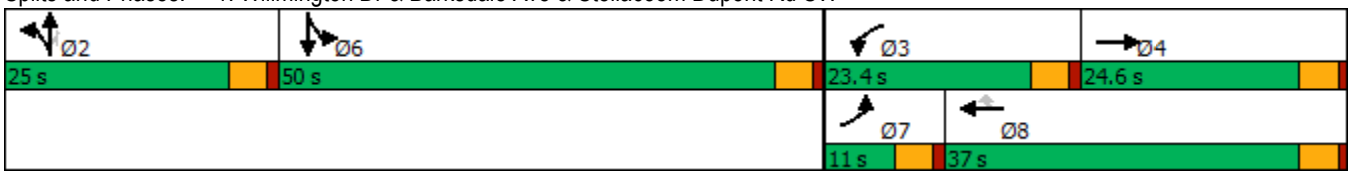
Intersection Summary	
Area Type: Other	
Cycle Length: 123	
Actuated Cycle Length: 83.6	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 26.8	Intersection LOS: C
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Wilimington Dr & Barksdale Ave & Steilacoom Dupont Rd SW



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	292	195	145	526	651	471
Future Volume (veh/h)	292	195	145	526	651	471
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1885	1885
Adj Flow Rate, veh/h	317	212	158	572	708	512
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	1	1
Cap, veh/h	395	352	203	1181	879	728
Arrive On Green	0.23	0.23	0.12	0.64	0.47	0.47
Sat Flow, veh/h	1753	1560	1753	1841	1885	1561
Grp Volume(v), veh/h	317	212	158	572	708	512
Grp Sat Flow(s),veh/h/ln	1753	1560	1753	1841	1885	1561
Q Serve(g_s), s	11.6	8.2	5.9	10.9	21.7	17.6
Cycle Q Clear(g_c), s	11.6	8.2	5.9	10.9	21.7	17.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	395	352	203	1181	879	728
V/C Ratio(X)	0.80	0.60	0.78	0.48	0.81	0.70
Avail Cap(c_a), veh/h	1036	922	612	2830	2129	1763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	23.5	29.1	6.3	15.4	14.3
Incr Delay (d2), s/veh	3.8	1.7	6.3	0.3	1.8	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	7.2	2.6	2.7	7.8	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.6	25.1	35.4	6.6	17.2	15.6
LnGrp LOS	C	C	D	A	B	B
Approach Vol, veh/h	529			730	1220	
Approach Delay, s/veh	27.2			12.8	16.5	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		48.4		19.3	11.8	36.6
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		104.0		40.0	23.6	76.4
Max Q Clear Time (g_c+I1), s		12.9		13.6	7.9	23.7
Green Ext Time (p_c), s		3.8		1.7	0.3	7.9

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1	336	696	6	14	1
Future Volume (vph)	1	336	696	6	14	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00		1.00		1.00	
Frt			0.999		0.992	
Flt Protected	0.950				0.955	
Satd. Flow (prot)	1736	3471	3535	0	1763	0
Flt Permitted	0.309				0.955	
Satd. Flow (perm)	564	3471	3535	0	1760	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			1		1	
Link Speed (mph)		35	35		25	
Link Distance (ft)		687	519		294	
Travel Time (s)		13.4	10.1		8.0	
Confl. Peds. (#/hr)	1			1	1	1
Confl. Bikes (#/hr)				4		4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	4%	2%	2%	2%	2%
Adj. Flow (vph)	1	373	773	7	16	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	373	780	0	17	0
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases	4					
Total Split (s)	21.0	72.0	51.0		48.0	
Total Lost Time (s)	4.5	4.5	4.5		4.5	
Act Effct Green (s)	32.2	37.0	36.0		8.0	
Actuated g/C Ratio	0.81	0.93	0.91		0.20	
v/c Ratio	0.00	0.12	0.24		0.05	
Control Delay	3.0	1.7	3.5		17.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.0	1.7	3.5		17.3	
LOS	A	A	A		B	
Approach Delay		1.7	3.5		17.3	
Approach LOS		A	A		B	
Queue Length 50th (ft)	0	0	0		2	
Queue Length 95th (ft)	2	47	154		22	
Internal Link Dist (ft)		607	439		214	
Turn Bay Length (ft)	150					
Base Capacity (vph)	1027	3368	3243		1604	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.00	0.11	0.24		0.01	

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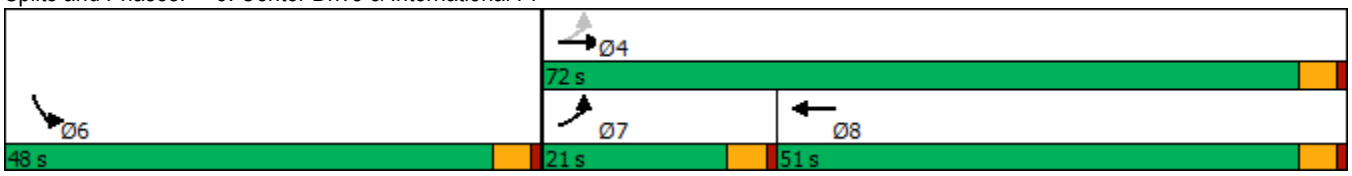
Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 39.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.24	
Intersection Signal Delay: 3.1	Intersection LOS: A
Intersection Capacity Utilization 31.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Center Drive & International Pl



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	110	28	359	557	11
Future Volume (veh/h)	34	110	28	359	557	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	36	116	29	378	586	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	223	199	512	1975	1268	26
Arrive On Green	0.12	0.12	0.04	0.55	0.35	0.35
Sat Flow, veh/h	1795	1598	1795	3676	3681	73
Grp Volume(v), veh/h	36	116	29	378	292	306
Grp Sat Flow(s),veh/h/ln	1795	1598	1795	1791	1791	1870
Q Serve(g_s), s	0.5	1.9	0.2	1.5	3.5	3.5
Cycle Q Clear(g_c), s	0.5	1.9	0.2	1.5	3.5	3.5
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	223	199	512	1975	633	661
V/C Ratio(X)	0.16	0.58	0.06	0.19	0.46	0.46
Avail Cap(c_a), veh/h	1520	1352	1449	11288	4354	4545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	11.5	4.7	3.1	6.9	6.9
Incr Delay (d2), s/veh	0.3	2.7	0.0	0.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.8	0.0	0.1	0.8	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.2	14.2	4.7	3.2	7.5	7.4
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	152			407	598	
Approach Delay, s/veh	13.5			3.3	7.5	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		19.8		8.0	5.5	14.3
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		87.5		23.5	15.5	67.5
Max Q Clear Time (g_c+I1), s		3.5		3.9	2.2	5.5
Green Ext Time (p_c), s		2.7		0.4	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	7	24	1	29	8	366	33	50	701	4
Future Volume (veh/h)	0	0	7	24	1	29	8	366	33	50	701	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1885	1900	1885	1885	1885	1885	1900
Adj Flow Rate, veh/h	0	0	8	26	1	32	9	398	36	54	762	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	1	0	1	0	1	1	1	1	0
Cap, veh/h	0	0	114	350	4	113	17	1281	115	88	1556	8
Arrive On Green	0.00	0.00	0.07	0.07	0.07	0.07	0.01	0.39	0.39	0.05	0.43	0.43
Sat Flow, veh/h	0	0	1576	1283	49	1564	1810	3315	298	1795	3653	19
Grp Volume(v), veh/h	0	0	8	27	0	32	9	214	220	54	374	392
Grp Sat Flow(s),veh/h/ln	0	0	1576	1332	0	1564	1810	1791	1822	1795	1791	1881
Q Serve(g_s), s	0.0	0.0	0.1	0.5	0.0	0.5	0.1	2.3	2.3	0.8	4.1	4.1
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.6	0.0	0.5	0.1	2.3	2.3	0.8	4.1	4.1
Prop In Lane	0.00		1.00	0.96		1.00	1.00		0.16	1.00		0.01
Lane Grp Cap(c), veh/h	0	0	114	354	0	113	17	692	704	88	763	801
V/C Ratio(X)	0.00	0.00	0.07	0.08	0.00	0.28	0.51	0.31	0.31	0.61	0.49	0.49
Avail Cap(c_a), veh/h	0	0	1725	1812	0	1711	1320	3919	3988	1310	3919	4117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	11.9	12.2	0.0	12.0	13.5	5.9	5.9	12.8	5.7	5.7
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.1	0.0	1.4	21.5	0.3	0.3	6.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.4	0.4	0.4	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	12.1	12.2	0.0	13.4	35.0	6.1	6.1	19.4	6.2	6.2
LnGrp LOS	A	A	B	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		8			59			443			820	
Approach Delay, s/veh		12.1			12.9			6.7			7.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	15.1		6.5	4.8	16.2		6.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.8	4.3		2.1	2.1	6.1		2.6
Green Ext Time (p_c), s	0.1	2.7		0.0	0.0	5.3		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	10	67	18	20	10	60	221	32	22	457	258
Future Volume (veh/h)	178	10	67	18	20	10	60	221	32	22	457	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	187	11	71	19	21	11	63	233	34	23	481	272
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	1	1	1
Cap, veh/h	378	33	98	228	229	95	423	1259	181	617	789	443
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.40	0.40	0.03	0.36	0.36
Sat Flow, veh/h	945	129	385	458	899	373	1795	3129	449	1795	2176	1223
Grp Volume(v), veh/h	269	0	0	51	0	0	63	132	135	23	395	358
Grp Sat Flow(s),veh/h/ln	1459	0	0	1731	0	0	1795	1791	1788	1795	1791	1607
Q Serve(g_s), s	6.4	0.0	0.0	0.0	0.0	0.0	0.9	2.1	2.2	0.3	8.0	8.1
Cycle Q Clear(g_c), s	7.4	0.0	0.0	1.0	0.0	0.0	0.9	2.1	2.2	0.3	8.0	8.1
Prop In Lane	0.70		0.26	0.37		0.22	1.00		0.25	1.00		0.76
Lane Grp Cap(c), veh/h	509	0	0	552	0	0	423	721	719	617	650	583
V/C Ratio(X)	0.53	0.00	0.00	0.09	0.00	0.00	0.15	0.18	0.19	0.04	0.61	0.61
Avail Cap(c_a), veh/h	1116	0	0	1217	0	0	1104	2431	2426	1370	2431	2182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	12.6	0.0	0.0	8.1	8.5	8.5	8.2	11.5	11.5
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.1	0.0	0.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.4	0.0	0.0	0.3	0.6	0.6	0.1	2.6	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	12.7	0.0	0.0	8.3	8.6	8.7	8.2	12.4	12.6
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	B	B
Approach Vol, veh/h		269			51			330			776	
Approach Delay, s/veh		15.8			12.7			8.6			12.4	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	22.4		15.7	7.8	20.6		15.7
Change Period (Y+Rc), s	4.6	4.6		4.5	4.6	4.6		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.3	4.2		9.4	2.9	10.1		3.0
Green Ext Time (p_c), s	0.0	1.6		1.7	0.1	5.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

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Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	57	47	221	65	81	39	442	293	45	43	447	82
Future Volume (veh/h)	57	47	221	65	81	39	442	293	45	43	447	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	60	49	233	68	85	41	465	308	47	45	471	86
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	88	49	901	82	73	519	513	1403	211	93	654	118
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.45	0.45	0.05	0.22	0.22
Sat Flow, veh/h	0	171	1566	0	256	1542	1795	3108	468	1795	3008	545
Grp Volume(v), veh/h	109	0	233	153	0	41	465	176	179	45	279	278
Grp Sat Flow(s),veh/h/ln	171	0	1566	256	0	1542	1795	1791	1785	1795	1791	1763
Q Serve(g_s), s	0.0	0.0	4.8	0.0	0.0	1.2	15.8	3.8	3.9	1.5	9.2	9.3
Cycle Q Clear(g_c), s	18.0	0.0	4.8	18.0	0.0	1.2	15.8	3.8	3.9	1.5	9.2	9.3
Prop In Lane	0.55		1.00	0.44		1.00	1.00		0.26	1.00		0.31
Lane Grp Cap(c), veh/h	137	0	901	155	0	519	513	808	806	93	389	383
V/C Ratio(X)	0.80	0.00	0.26	0.99	0.00	0.08	0.91	0.22	0.22	0.48	0.72	0.73
Avail Cap(c_a), veh/h	137	0	901	155	0	519	552	907	904	181	537	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	6.9	23.7	0.0	14.4	21.8	10.6	10.6	29.2	23.0	23.1
Incr Delay (d2), s/veh	27.4	0.0	0.2	68.6	0.0	0.1	17.9	0.1	0.1	3.9	2.8	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	1.3	5.2	0.0	0.4	8.5	1.3	1.3	0.7	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.4	0.0	7.0	92.4	0.0	14.4	39.7	10.7	10.7	33.1	25.8	26.2
LnGrp LOS	D	A	A	F	A	B	D	B	B	C	C	C
Approach Vol, veh/h		342			194			820			602	
Approach Delay, s/veh		21.2			75.9			27.2			26.5	
Approach LOS		C			E			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	7.8	33.1		22.5	22.6	18.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	6.4	32.1		18.0	19.5	19.0				
Max Q Clear Time (g_c+I1), s		20.0	3.5	5.9		20.0	17.8	11.3				
Green Ext Time (p_c), s		0.0	0.0	2.0		0.0	0.3	2.0				

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	15	31	244	26	83	49	677	200	79	633	18
Future Volume (veh/h)	7	15	31	244	26	83	49	677	200	79	633	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	8	16	33	262	28	89	53	728	215	85	681	19
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	421	155	319	494	109	347	430	1073	317	358	1466	41
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.40	0.40	0.07	0.41	0.41
Sat Flow, veh/h	1254	543	1119	1363	383	1217	1795	2708	800	1795	3555	99
Grp Volume(v), veh/h	8	0	49	262	0	117	53	481	462	85	343	357
Grp Sat Flow(s),veh/h/ln	1254	0	1661	1363	0	1600	1795	1791	1716	1795	1791	1863
Q Serve(g_s), s	0.3	0.0	1.2	9.4	0.0	3.0	0.9	11.9	11.9	1.4	7.5	7.5
Cycle Q Clear(g_c), s	3.3	0.0	1.2	10.6	0.0	3.0	0.9	11.9	11.9	1.4	7.5	7.5
Prop In Lane	1.00		0.67	1.00		0.76	1.00		0.47	1.00		0.05
Lane Grp Cap(c), veh/h	421	0	474	494	0	457	430	710	680	358	738	768
V/C Ratio(X)	0.02	0.00	0.10	0.53	0.00	0.26	0.12	0.68	0.68	0.24	0.46	0.46
Avail Cap(c_a), veh/h	764	0	928	866	0	893	1007	2001	1917	907	2001	2081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	0.0	14.1	18.0	0.0	14.8	8.9	13.4	13.4	9.7	11.5	11.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.9	0.0	0.3	0.1	1.1	1.2	0.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	2.8	0.0	1.0	0.3	4.1	4.0	0.5	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	14.2	18.9	0.0	15.1	9.0	14.5	14.6	10.0	11.9	11.9
LnGrp LOS	B	A	B	B	A	B	A	B	B	B	B	B
Approach Vol, veh/h		57			379			996			785	
Approach Delay, s/veh		14.5			17.7			14.3			11.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	25.8		19.8	7.2	26.6		19.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	3.4	13.9		5.3	2.9	9.5		12.6
Green Ext Time (p_c), s	0.2	7.4		0.2	0.1	4.8		1.4

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	61	25	208	40	733	9	88	122	589	119	46
Future Volume (vph)	57	61	25	208	40	733	9	88	122	589	119	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	125		125	100		75	0		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	0.99	0.99		0.99		0.97	0.99		0.97	0.99	0.99	
Frt		0.956				0.850			0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950	0.973	
Satd. Flow (prot)	1719	1714	0	1752	1845	1553	1770	1863	1583	1618	1628	0
Flt Permitted	0.950			0.950			0.950			0.950	0.973	
Satd. Flow (perm)	1702	1714	0	1737	1845	1504	1759	1863	1533	1603	1619	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				780			134		6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			383			251			690	
Travel Time (s)		8.1			8.7			5.7			15.7	
Confl. Peds. (#/hr)	3		3	3		3	3		3	3		3
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	5%	5%	3%	3%	4%	2%	2%	2%	6%	5%	5%
Adj. Flow (vph)	61	65	27	221	43	780	10	94	130	627	127	49
Shared Lane Traffic (%)										36%		
Lane Group Flow (vph)	61	92	0	221	43	780	10	94	130	401	402	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Total Split (s)	14.5	26.5		29.5	24.6	24.6	27.5	27.5	27.5	39.5	39.5	
Total Lost Time (s)	4.5	4.5		4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	8.6	10.3		16.8	18.4	18.4	12.2	12.2	12.2	29.2	29.2	
Actuated g/C Ratio	0.10	0.12		0.20	0.22	0.22	0.14	0.14	0.14	0.35	0.35	
v/c Ratio	0.35	0.41		0.64	0.11	0.83	0.04	0.35	0.39	0.72	0.71	
Control Delay	48.0	39.7		43.3	29.9	11.5	39.0	42.5	10.9	35.4	34.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	48.0	39.7		43.3	29.9	11.5	39.0	42.5	10.9	35.4	34.5	
LOS	D	D		D	C	B	D	D	B	D	C	
Approach Delay		43.0			19.0			24.8			35.0	
Approach LOS		D			B			C			C	
Queue Length 50th (ft)	31	39		111	19	0	5	48	0	187	184	
Queue Length 95th (ft)	88	102		228	52	127	22	114	51	#448	#441	
Internal Link Dist (ft)		275			303			171			610	
Turn Bay Length (ft)	75			125		125	100		75			
Base Capacity (vph)	218	490		557	865	1119	517	544	543	720	727	
Starvation Cap Reductn	0	0		1	0	6	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.28	0.19		0.40	0.05	0.70	0.02	0.17	0.24	0.56	0.55	

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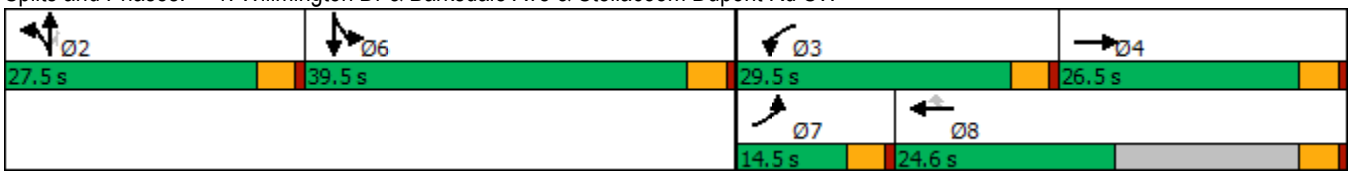
Intersection Summary	
Area Type: Other	
Cycle Length: 123	
Actuated Cycle Length: 84.4	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 27.0	Intersection LOS: C
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Wilimington Dr & Barksdale Ave & Steilacoom Dupont Rd SW



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	325	126	385	517	522	412
Future Volume (veh/h)	325	126	385	517	522	412
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1826	1826	1841	1856	1856
Adj Flow Rate, veh/h	361	140	428	574	580	458
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	5	5	4	3	3
Cap, veh/h	410	362	469	1244	679	562
Arrive On Green	0.23	0.23	0.27	0.68	0.37	0.37
Sat Flow, veh/h	1753	1547	1739	1841	1856	1537
Grp Volume(v), veh/h	361	140	428	574	580	458
Grp Sat Flow(s),veh/h/ln	1753	1547	1739	1841	1856	1537
Q Serve(g_s), s	19.8	7.6	23.7	14.6	28.7	26.8
Cycle Q Clear(g_c), s	19.8	7.6	23.7	14.6	28.7	26.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	410	362	469	1244	679	562
V/C Ratio(X)	0.88	0.39	0.91	0.46	0.85	0.81
Avail Cap(c_a), veh/h	705	622	699	1244	1119	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	32.1	35.2	7.6	29.1	28.5
Incr Delay (d2), s/veh	6.8	0.7	12.0	0.3	3.6	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.1	11.0	4.6	12.5	9.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.6	32.8	47.2	7.9	32.7	31.5
LnGrp LOS	D	C	D	A	C	C
Approach Vol, veh/h	501			1002	1038	
Approach Delay, s/veh	40.5			24.6	32.2	
Approach LOS	D			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		72.2		27.3	30.8	41.4
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		60.0		40.0	40.0	60.0
Max Q Clear Time (g_c+I1), s		16.6		21.8	25.7	30.7
Green Ext Time (p_c), s		3.8		1.5	1.1	5.7

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

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Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	164	470	579	196	25	6
Future Volume (vph)	164	470	579	196	25	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00		0.99		0.99	
Frt			0.962		0.975	
Flt Protected	0.950				0.961	
Satd. Flow (prot)	1770	3539	3247	0	1103	0
Flt Permitted	0.237				0.961	
Satd. Flow (perm)	441	3539	3247	0	1099	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			54		6	
Link Speed (mph)		35	35		25	
Link Distance (ft)		687	519		294	
Travel Time (s)		13.4	10.1		8.0	
Confl. Peds. (#/hr)	2			2	2	2
Confl. Bikes (#/hr)				1		1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	5%	10%	75%	0%
Adj. Flow (vph)	171	490	603	204	26	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	171	490	807	0	32	0
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases	4					
Total Split (s)	27.0	90.0	63.0		30.0	
Total Lost Time (s)	4.5	4.5	4.5		4.5	
Act Effct Green (s)	38.4	41.9	22.6		8.3	
Actuated g/C Ratio	0.79	0.87	0.47		0.17	
v/c Ratio	0.26	0.16	0.52		0.16	
Control Delay	4.0	2.6	12.3		19.6	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	4.0	2.6	12.3		19.6	
LOS	A	A	B		B	
Approach Delay		3.0	12.3		19.6	
Approach LOS		A	B		B	
Queue Length 50th (ft)	0	0	48		5	
Queue Length 95th (ft)	51	63	204		30	
Internal Link Dist (ft)		607	439		214	
Turn Bay Length (ft)	150					
Base Capacity (vph)	1015	3539	3112		628	
Starvation Cap Reductn	0	0	0		0	
Spillback Cap Reductn	0	0	0		0	
Storage Cap Reductn	0	0	0		0	
Reduced v/c Ratio	0.17	0.14	0.26		0.05	

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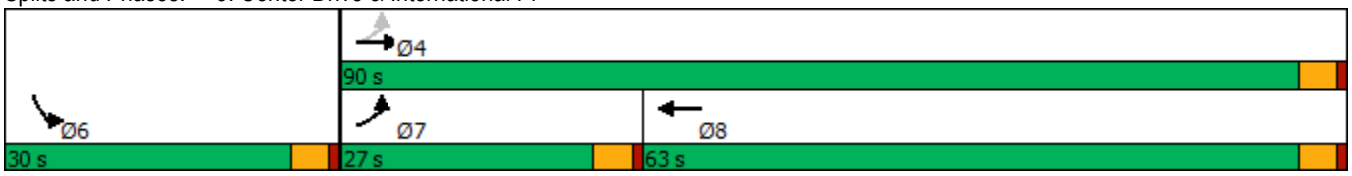
Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 48.4	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 47.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Center Drive & International Pl



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	15	43	131	608	362	40
Future Volume (veh/h)	15	43	131	608	362	40
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1737	1737	1856	1856	1841	1841
Adj Flow Rate, veh/h	16	47	144	668	398	44
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	3	3	4	4
Cap, veh/h	116	103	673	2083	944	104
Arrive On Green	0.07	0.07	0.12	0.59	0.30	0.30
Sat Flow, veh/h	1654	1472	1767	3618	3259	348
Grp Volume(v), veh/h	16	47	144	668	219	223
Grp Sat Flow(s),veh/h/ln	1654	1472	1767	1763	1749	1767
Q Serve(g_s), s	0.2	0.8	1.2	2.5	2.7	2.7
Cycle Q Clear(g_c), s	0.2	0.8	1.2	2.5	2.7	2.7
Prop In Lane	1.00	1.00	1.00			0.20
Lane Grp Cap(c), veh/h	116	103	673	2083	521	527
V/C Ratio(X)	0.14	0.46	0.21	0.32	0.42	0.42
Avail Cap(c_a), veh/h	312	277	1621	11490	4250	4293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	11.9	4.2	2.7	7.5	7.5
Incr Delay (d2), s/veh	0.5	3.1	0.2	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.1	0.0	0.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.1	15.0	4.3	2.8	8.0	8.0
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	63			812	442	
Approach Delay, s/veh	14.3			3.1	8.0	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		20.2		6.4	7.8	12.4
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		86.5		5.0	17.5	64.5
Max Q Clear Time (g_c+I1), s		4.5		2.8	3.2	4.7
Green Ext Time (p_c), s		5.2		0.0	0.3	2.8

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	22	0	65	0	687	15	35	361	0
Future Volume (veh/h)	0	0	0	22	0	65	0	687	15	35	361	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.98	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1900	1870	1900	1870	1870	1826	1826	1900
Adj Flow Rate, veh/h	0	0	0	24	0	72	0	763	17	39	401	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	2	0	2	0	2	2	5	5	0
Cap, veh/h	0	169	0	368	0	138	6	1498	33	64	2115	0
Arrive On Green	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.42	0.42	0.04	0.61	0.00
Sat Flow, veh/h	0	1900	0	1421	0	1548	1810	3551	79	1739	3561	0
Grp Volume(v), veh/h	0	0	0	24	0	72	0	382	398	39	401	0
Grp Sat Flow(s),veh/h/ln	0	1900	0	1421	0	1548	1810	1777	1854	1739	1735	0
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	1.3	0.0	4.7	4.7	0.7	1.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.5	0.0	1.3	0.0	4.7	4.7	0.7	1.5	0.0
Prop In Lane	0.00		0.00	1.00		1.00	1.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	0	169	0	368	0	138	6	750	782	64	2115	0
V/C Ratio(X)	0.00	0.00	0.00	0.07	0.00	0.52	0.00	0.51	0.51	0.61	0.19	0.00
Avail Cap(c_a), veh/h	0	1909	0	1669	0	1555	1212	3571	3725	1165	6972	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	12.6	0.0	13.0	0.0	6.4	6.4	14.2	2.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	3.0	0.0	0.5	0.5	8.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.5	0.0	0.9	1.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	12.7	0.0	16.0	0.0	6.9	6.9	23.0	2.6	0.0
LnGrp LOS	A	A	A	B	A	B	A	A	A	C	A	A
Approach Vol, veh/h		0			96			780			440	
Approach Delay, s/veh		0.0			15.2			6.9			4.4	
Approach LOS					B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	17.1		7.2	0.0	22.7		7.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.7	6.7		0.0	0.0	3.5		3.3
Green Ext Time (p_c), s	0.1	5.5		0.0	0.0	2.9		0.3

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	23	79	33	8	21	68	476	14	10	202	173
Future Volume (veh/h)	208	23	79	33	8	21	68	476	14	10	202	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1885	1885	1885	1885	1885	1885	1826	1826	1826
Adj Flow Rate, veh/h	263	29	100	42	10	27	86	603	18	13	256	219
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	5	5	5
Cap, veh/h	448	48	126	358	101	177	447	1240	37	358	496	400
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.09	0.35	0.35	0.02	0.28	0.28
Sat Flow, veh/h	946	142	372	711	298	524	1795	3547	106	1739	1751	1414
Grp Volume(v), veh/h	392	0	0	79	0	0	86	304	317	13	253	222
Grp Sat Flow(s),veh/h/ln	1460	0	0	1533	0	0	1795	1791	1862	1739	1735	1430
Q Serve(g_s), s	9.8	0.0	0.0	0.0	0.0	0.0	1.5	6.2	6.2	0.2	5.7	6.1
Cycle Q Clear(g_c), s	11.2	0.0	0.0	1.5	0.0	0.0	1.5	6.2	6.2	0.2	5.7	6.1
Prop In Lane	0.67		0.26	0.53		0.34	1.00		0.06	1.00		0.99
Lane Grp Cap(c), veh/h	621	0	0	635	0	0	447	626	651	358	491	405
V/C Ratio(X)	0.63	0.00	0.00	0.12	0.00	0.00	0.19	0.49	0.49	0.04	0.52	0.55
Avail Cap(c_a), veh/h	1056	0	0	1067	0	0	1060	2298	2390	1067	2226	1835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	0.0	10.7	0.0	0.0	10.0	11.9	11.9	11.5	14.1	14.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.1	0.0	0.0	0.2	0.6	0.6	0.0	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	0.5	0.0	0.0	0.5	2.1	2.1	0.1	2.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	0.0	10.8	0.0	0.0	10.2	12.5	12.5	11.6	14.9	15.4
LnGrp LOS	B	A	A	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h		392			79			707			488	
Approach Delay, s/veh		14.9			10.8			12.2			15.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	20.9		20.3	8.6	17.8		20.3
Change Period (Y+Rc), s	4.6	4.6		4.5	4.6	4.6		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.2	8.2		13.2	3.5	8.1		3.5
Green Ext Time (p_c), s	0.0	4.1		2.4	0.2	3.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

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Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	118	61	404	27	22	36	168	416	75	27	288	31
Future Volume (veh/h)	118	61	404	27	22	36	168	416	75	27	288	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1796	1796	1796	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	127	66	434	29	24	39	181	447	81	29	310	33
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	7	7	7	1	1	1	1	1	1
Cap, veh/h	131	43	826	122	65	651	233	812	146	73	586	62
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.13	0.27	0.27	0.04	0.18	0.18
Sat Flow, veh/h	0	109	1570	0	165	1496	1795	3015	542	1795	3254	343
Grp Volume(v), veh/h	193	0	434	53	0	39	181	264	264	29	169	174
Grp Sat Flow(s),veh/h/ln	109	0	1570	165	0	1496	1795	1791	1766	1795	1791	1807
Q Serve(g_s), s	0.0	0.0	8.3	0.0	0.0	0.7	4.5	5.8	5.9	0.7	3.9	4.0
Cycle Q Clear(g_c), s	18.0	0.0	8.3	18.0	0.0	0.7	4.5	5.8	5.9	0.7	3.9	4.0
Prop In Lane	0.66		1.00	0.55		1.00	1.00		0.31	1.00		0.19
Lane Grp Cap(c), veh/h	174	0	826	187	0	651	233	483	476	73	323	325
V/C Ratio(X)	1.11	0.00	0.53	0.28	0.00	0.06	0.78	0.55	0.55	0.40	0.52	0.53
Avail Cap(c_a), veh/h	174	0	826	187	0	651	374	883	870	236	745	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	7.1	11.6	0.0	7.5	19.2	14.3	14.3	21.4	16.9	17.0
Incr Delay (d2), s/veh	101.2	0.0	0.6	0.8	0.0	0.0	5.5	1.0	1.0	3.5	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	1.9	0.3	0.0	0.2	2.0	2.0	2.0	0.3	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	119.7	0.0	7.8	12.4	0.0	7.5	24.7	15.3	15.3	24.9	18.3	18.3
LnGrp LOS	F	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		627			92			709			372	
Approach Delay, s/veh		42.2			10.3			17.7			18.8	
Approach LOS		D			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	6.3	16.8		22.5	10.4	12.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	6.0	22.5		18.0	9.5	19.0				
Max Q Clear Time (g_c+I1), s		20.0	2.7	7.9		20.0	6.5	6.0				
Green Ext Time (p_c), s		0.0	0.0	2.7		0.0	0.1	1.5				

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	15	36	65	16	73	57	573	215	70	668	6
Future Volume (veh/h)	1	15	36	65	16	73	57	573	215	70	668	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	1	16	38	68	17	76	59	597	224	73	696	6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	331	75	179	366	46	204	516	1028	385	474	1513	13
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.41	0.41	0.07	0.42	0.42
Sat Flow, veh/h	1310	490	1163	1356	296	1324	1795	2531	948	1795	3638	31
Grp Volume(v), veh/h	1	0	54	68	0	93	59	422	399	73	343	359
Grp Sat Flow(s),veh/h/ln	1310	0	1652	1356	0	1620	1795	1791	1688	1795	1791	1879
Q Serve(g_s), s	0.0	0.0	1.0	1.7	0.0	1.9	0.7	6.7	6.7	0.8	5.1	5.1
Cycle Q Clear(g_c), s	1.9	0.0	1.0	2.7	0.0	1.9	0.7	6.7	6.7	0.8	5.1	5.1
Prop In Lane	1.00		0.70	1.00		0.82	1.00		0.56	1.00		0.02
Lane Grp Cap(c), veh/h	331	0	254	366	0	249	516	727	685	474	745	781
V/C Ratio(X)	0.00	0.00	0.21	0.19	0.00	0.37	0.11	0.58	0.58	0.15	0.46	0.46
Avail Cap(c_a), veh/h	1202	0	1353	1269	0	1327	1385	2934	2765	1326	2934	3077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	0.0	13.6	14.8	0.0	13.9	5.7	8.5	8.5	5.9	7.7	7.7
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.2	0.0	0.9	0.1	0.7	0.8	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	0.5	0.0	0.7	0.2	1.8	1.7	0.2	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	14.0	15.0	0.0	14.8	5.8	9.2	9.2	6.1	8.2	8.1
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	A	A
Approach Vol, veh/h		55			161			880			775	
Approach Delay, s/veh		14.0			14.9			9.0			8.0	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	19.4		10.1	6.8	19.7		10.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	2.8	8.7		3.9	2.7	7.1		4.7
Green Ext Time (p_c), s	0.1	6.1		0.3	0.1	4.8		0.7

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	52	18	147	76	612	23	138	232	815	101	66
Future Volume (vph)	53	52	18	147	76	612	23	138	232	815	101	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		0	125		125	100		75	0		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor	0.98	0.99		0.98		0.96	0.99		0.96	0.99	0.99	
Frt		0.961				0.850			0.850		0.980	
Flt Protected	0.950			0.950			0.950			0.950	0.968	
Satd. Flow (prot)	1770	1772	0	1752	1845	1553	1787	1881	1599	1665	1659	0
Flt Permitted	0.950			0.950			0.950			0.950	0.968	
Satd. Flow (perm)	1742	1772	0	1725	1845	1494	1772	1881	1537	1641	1644	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12				631			239		7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		355			383			251			690	
Travel Time (s)		8.1			8.7			5.7			15.7	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Confl. Bikes (#/hr)			1			1			1			1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	3%	3%	4%	1%	1%	1%	3%	2%	2%
Adj. Flow (vph)	55	54	19	152	78	631	24	142	239	840	104	68
Shared Lane Traffic (%)										40%		
Lane Group Flow (vph)	55	73	0	152	78	631	24	142	239	504	508	0
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Total Split (s)	11.1	23.7		23.4	36.0	36.0	25.9	25.9	25.9	50.0	50.0	
Total Lost Time (s)	4.5	4.5		4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Act Effct Green (s)	7.1	10.2		13.6	16.6	16.6	14.3	14.3	14.3	34.8	34.8	
Actuated g/C Ratio	0.08	0.11		0.15	0.19	0.19	0.16	0.16	0.16	0.39	0.39	
v/c Ratio	0.39	0.34		0.57	0.23	0.80	0.08	0.47	0.53	0.78	0.78	
Control Delay	57.2	41.5		49.7	36.2	11.6	40.3	45.8	10.6	35.3	35.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	57.2	41.5		49.7	36.2	11.6	40.3	45.8	10.6	35.3	35.2	
LOS	E	D		D	D	B	D	D	B	D	D	
Approach Delay		48.2			20.6			24.7			35.2	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	31	34		82	39	0	12	77	0	252	251	
Queue Length 95th (ft)	#101	88		184	90	115	42	168	72	#560	#562	
Internal Link Dist (ft)		275			303			171			610	
Turn Bay Length (ft)	75			125		125	100		75			
Base Capacity (vph)	145	432		411	720	968	475	500	584	942	941	
Starvation Cap Reductn	0	0		0	0	4	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.38	0.17		0.37	0.11	0.65	0.05	0.28	0.41	0.54	0.54	

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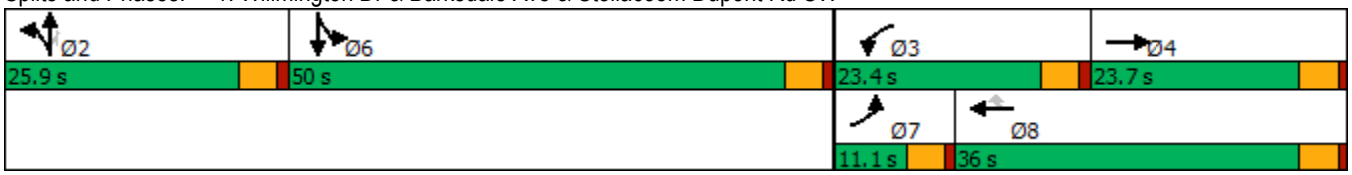
Intersection Summary	
Area Type: Other	
Cycle Length: 123	
Actuated Cycle Length: 89	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 28.9	Intersection LOS: C
Intersection Capacity Utilization 64.1%	ICU Level of Service C
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Wilimington Dr & Barksdale Ave & Steilacoom Dupont Rd SW



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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	340	307	255	526	651	518
Future Volume (veh/h)	340	307	255	526	651	518
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1826	1826	1841	1885	1885
Adj Flow Rate, veh/h	370	334	277	572	708	563
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	5	5	4	1	1
Cap, veh/h	437	386	316	1214	825	683
Arrive On Green	0.25	0.25	0.18	0.66	0.44	0.44
Sat Flow, veh/h	1753	1547	1739	1841	1885	1561
Grp Volume(v), veh/h	370	334	277	572	708	563
Grp Sat Flow(s),veh/h/ln	1753	1547	1739	1841	1885	1561
Q Serve(g_s), s	19.9	20.5	15.3	15.2	33.5	31.4
Cycle Q Clear(g_c), s	19.9	20.5	15.3	15.2	33.5	31.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	437	386	316	1214	825	683
V/C Ratio(X)	0.85	0.87	0.88	0.47	0.86	0.82
Avail Cap(c_a), veh/h	708	625	562	1934	1295	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	35.6	39.4	8.3	25.1	24.5
Incr Delay (d2), s/veh	5.3	7.2	7.6	0.3	3.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	16.8	6.9	4.9	14.3	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.6	42.8	47.0	8.6	28.7	27.6
LnGrp LOS	D	D	D	A	C	C
Approach Vol, veh/h	704			849	1271	
Approach Delay, s/veh	41.7			21.1	28.2	
Approach LOS	D			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		70.3		28.7	22.0	48.3
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		104.0		40.0	32.0	68.0
Max Q Clear Time (g_c+I1), s		17.2		22.5	17.3	35.5
Green Ext Time (p_c), s		3.8		2.2	0.7	7.8

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	143	336	696	163	174	146
Future Volume (veh/h)	143	336	696	163	174	146
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1870	1856	1856	1870
Adj Flow Rate, veh/h	159	373	773	181	193	162
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	2	3	3	2
Cap, veh/h	386	1988	1131	265	236	198
Arrive On Green	0.09	0.57	0.40	0.40	0.26	0.26
Sat Flow, veh/h	1753	3589	2935	665	900	755
Grp Volume(v), veh/h	159	373	483	471	356	0
Grp Sat Flow(s),veh/h/ln	1753	1749	1777	1730	1660	0
Q Serve(g_s), s	2.5	2.7	11.9	11.9	10.7	0.0
Cycle Q Clear(g_c), s	2.5	2.7	11.9	11.9	10.7	0.0
Prop In Lane	1.00			0.38	0.54	0.46
Lane Grp Cap(c), veh/h	386	1988	707	689	435	0
V/C Ratio(X)	0.41	0.19	0.68	0.68	0.82	0.00
Avail Cap(c_a), veh/h	815	4521	1559	1519	1331	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.2	5.5	13.2	13.2	18.4	0.0
Incr Delay (d2), s/veh	0.7	0.0	1.2	1.2	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.7	4.0	3.9	4.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	5.6	14.4	14.4	22.2	0.0
LnGrp LOS	A	A	B	B	C	A
Approach Vol, veh/h		532	954		356	
Approach Delay, s/veh		6.9	14.4		22.2	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		34.6		18.4	9.0	25.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		68.5		42.5	17.5	46.5
Max Q Clear Time (g_c+I1), s		4.7		12.7	4.5	13.9
Green Ext Time (p_c), s		2.6		1.2	0.3	7.1

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	110	28	501	702	11
Future Volume (veh/h)	34	110	28	501	702	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	36	116	29	527	739	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	213	190	478	2099	1452	24
Arrive On Green	0.12	0.12	0.04	0.59	0.40	0.40
Sat Flow, veh/h	1795	1598	1795	3676	3699	59
Grp Volume(v), veh/h	36	116	29	527	367	384
Grp Sat Flow(s),veh/h/ln	1795	1598	1795	1791	1791	1873
Q Serve(g_s), s	0.5	2.1	0.2	2.2	4.7	4.7
Cycle Q Clear(g_c), s	0.5	2.1	0.2	2.2	4.7	4.7
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	213	190	478	2099	721	754
V/C Ratio(X)	0.17	0.61	0.06	0.25	0.51	0.51
Avail Cap(c_a), veh/h	1384	1232	1327	10282	3966	4147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	12.8	4.6	3.1	6.8	6.8
Incr Delay (d2), s/veh	0.4	3.2	0.1	0.1	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.0	0.0	0.1	1.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.4	15.9	4.6	3.1	7.4	7.4
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	152			556	751	
Approach Delay, s/veh	15.1			3.2	7.4	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.4		8.1	5.6	16.8
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		87.5		23.5	15.5	67.5
Max Q Clear Time (g_c+I1), s		4.2		4.1	2.2	6.7
Green Ext Time (p_c), s		3.9		0.4	0.0	5.2

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	7	24	1	38	8	499	33	59	837	4
Future Volume (veh/h)	0	0	7	24	1	38	8	499	33	59	837	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	1885	1900	1885	1885	1885	1885	1900
Adj Flow Rate, veh/h	0	0	8	26	1	41	9	542	36	64	910	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	1	0	1	0	1	1	1	1	0
Cap, veh/h	0	0	119	330	4	119	17	1445	96	99	1719	8
Arrive On Green	0.00	0.00	0.08	0.08	0.08	0.08	0.01	0.42	0.42	0.05	0.47	0.47
Sat Flow, veh/h	0	0	1575	1289	50	1562	1810	3403	226	1795	3657	16
Grp Volume(v), veh/h	0	0	8	27	0	41	9	285	293	64	446	468
Grp Sat Flow(s),veh/h/ln	0	0	1575	1338	0	1562	1810	1791	1838	1795	1791	1882
Q Serve(g_s), s	0.0	0.0	0.1	0.5	0.0	0.8	0.2	3.3	3.3	1.1	5.3	5.3
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.7	0.0	0.8	0.2	3.3	3.3	1.1	5.3	5.3
Prop In Lane	0.00		1.00	0.96		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	0	0	119	334	0	119	17	761	781	99	842	885
V/C Ratio(X)	0.00	0.00	0.07	0.08	0.00	0.35	0.52	0.37	0.38	0.65	0.53	0.53
Avail Cap(c_a), veh/h	0	0	1555	1635	0	1543	1192	3538	3630	1182	3538	3717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	13.0	13.4	0.0	13.3	15.0	6.0	6.0	14.1	5.7	5.7
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.1	0.0	1.7	21.7	0.3	0.3	7.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.3	0.2	0.6	0.7	0.5	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	13.3	13.5	0.0	15.0	36.7	6.3	6.3	21.0	6.2	6.2
LnGrp LOS	A	A	B	B	A	B	D	A	A	C	A	A
Approach Vol, veh/h		8			68			587			978	
Approach Delay, s/veh		13.3			14.4			6.7			7.2	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	17.4		6.8	4.8	18.8		6.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	3.1	5.3		2.1	2.2	7.3		2.8
Green Ext Time (p_c), s	0.1	3.8		0.0	0.0	6.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	10	67	18	20	13	60	342	32	25	581	267
Future Volume (veh/h)	187	10	67	18	20	13	60	342	32	25	581	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	197	11	71	19	21	14	63	360	34	26	612	281
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	1	1	1
Cap, veh/h	374	28	95	209	214	113	388	1419	133	570	932	428
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.43	0.43	0.04	0.40	0.40
Sat Flow, veh/h	977	110	371	430	839	444	1795	3300	310	1795	2353	1080
Grp Volume(v), veh/h	279	0	0	54	0	0	63	194	200	26	466	427
Grp Sat Flow(s),veh/h/ln	1457	0	0	1714	0	0	1795	1791	1818	1795	1791	1642
Q Serve(g_s), s	7.4	0.0	0.0	0.0	0.0	0.0	1.0	3.4	3.5	0.4	10.4	10.4
Cycle Q Clear(g_c), s	8.6	0.0	0.0	1.1	0.0	0.0	1.0	3.4	3.5	0.4	10.4	10.4
Prop In Lane	0.71		0.25	0.35		0.26	1.00		0.17	1.00		0.66
Lane Grp Cap(c), veh/h	496	0	0	536	0	0	388	770	782	570	709	650
V/C Ratio(X)	0.56	0.00	0.00	0.10	0.00	0.00	0.16	0.25	0.26	0.05	0.66	0.66
Avail Cap(c_a), veh/h	1003	0	0	1093	0	0	992	2186	2219	1235	2186	2004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	0.0	14.1	0.0	0.0	8.5	9.0	9.0	8.1	12.1	12.1
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.2	0.0	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.4	0.0	0.0	0.3	1.1	1.1	0.1	3.4	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	0.0	0.0	14.2	0.0	0.0	8.7	9.1	9.1	8.1	13.2	13.3
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	B	B
Approach Vol, veh/h		279			54			457			919	
Approach Delay, s/veh		17.7			14.2			9.1			13.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	25.7		17.0	8.1	24.1		17.0				
Change Period (Y+Rc), s	4.6	4.6		4.5	4.6	4.6		4.5				
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0				
Max Q Clear Time (g_c+I1), s	2.4	5.5		10.6	3.0	12.4		3.1				
Green Ext Time (p_c), s	0.0	2.4		1.7	0.1	7.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		12.8
HCM 6th LOS		B

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Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	92	47	221	65	81	48	442	367	45	52	523	118
Future Volume (veh/h)	92	47	221	65	81	48	442	367	45	52	523	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1856	1856	1856	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	97	49	233	68	85	51	465	386	47	55	551	124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	90	29	877	78	70	509	508	1499	181	103	698	156
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.47	0.47	0.06	0.24	0.24
Sat Flow, veh/h	0	106	1566	0	256	1541	1795	3206	387	1795	2886	647
Grp Volume(v), veh/h	146	0	233	153	0	51	465	214	219	55	341	334
Grp Sat Flow(s),veh/h/ln	106	0	1566	256	0	1541	1795	1791	1802	1795	1791	1741
Q Serve(g_s), s	0.0	0.0	5.2	0.0	0.0	1.5	16.6	4.8	4.9	2.0	11.8	11.9
Cycle Q Clear(g_c), s	18.0	0.0	5.2	18.0	0.0	1.5	16.6	4.8	4.9	2.0	11.8	11.9
Prop In Lane	0.66		1.00	0.44		1.00	1.00		0.21	1.00		0.37
Lane Grp Cap(c), veh/h	119	0	877	148	0	509	508	837	843	103	433	421
V/C Ratio(X)	1.23	0.00	0.27	1.03	0.00	0.10	0.91	0.26	0.26	0.53	0.79	0.79
Avail Cap(c_a), veh/h	119	0	877	148	0	509	528	867	872	173	513	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	7.7	25.3	0.0	15.4	23.0	10.7	10.7	30.4	23.5	23.6
Incr Delay (d2), s/veh	155.6	0.0	0.2	83.3	0.0	0.1	20.2	0.2	0.2	4.2	6.8	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	1.4	5.8	0.0	0.5	9.2	1.7	1.7	0.9	5.4	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	184.5	0.0	7.9	108.6	0.0	15.5	43.2	10.8	10.9	34.6	30.3	30.9
LnGrp LOS	F	A	A	F	A	B	D	B	B	C	C	C
Approach Vol, veh/h		379			204			898			730	
Approach Delay, s/veh		75.9			85.3			27.6			30.9	
Approach LOS		E			F			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	8.3	35.5		22.5	23.3	20.5				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	6.4	32.1		18.0	19.5	19.0				
Max Q Clear Time (g_c+I1), s		20.0	4.0	6.9		20.0	18.6	13.9				
Green Ext Time (p_c), s		0.0	0.0	2.5		0.0	0.2	1.8				

Intersection Summary	
HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	15	31	244	26	98	49	736	200	94	694	18
Future Volume (veh/h)	7	15	31	244	26	98	49	736	200	94	694	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	8	16	33	262	28	105	53	791	215	101	746	19
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	393	153	315	480	94	353	415	1139	310	351	1540	39
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.05	0.41	0.41	0.07	0.43	0.43
Sat Flow, veh/h	1237	542	1119	1363	335	1255	1795	2766	752	1795	3565	91
Grp Volume(v), veh/h	8	0	49	262	0	133	53	512	494	101	375	390
Grp Sat Flow(s),veh/h/ln	1237	0	1661	1363	0	1590	1795	1791	1727	1795	1791	1865
Q Serve(g_s), s	0.3	0.0	1.2	10.0	0.0	3.7	0.9	13.4	13.4	1.8	8.6	8.6
Cycle Q Clear(g_c), s	4.0	0.0	1.2	11.3	0.0	3.7	0.9	13.4	13.4	1.8	8.6	8.6
Prop In Lane	1.00		0.67	1.00		0.79	1.00		0.44	1.00		0.05
Lane Grp Cap(c), veh/h	393	0	467	480	0	447	415	738	711	351	774	806
V/C Ratio(X)	0.02	0.00	0.10	0.55	0.00	0.30	0.13	0.69	0.69	0.29	0.48	0.48
Avail Cap(c_a), veh/h	696	0	875	814	0	837	955	1886	1818	856	1886	1964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	15.2	19.3	0.0	16.1	9.0	13.8	13.8	10.0	11.6	11.6
Incr Delay (d2), s/veh	0.0	0.0	0.1	1.0	0.0	0.4	0.1	1.2	1.2	0.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	3.1	0.0	1.3	0.3	4.7	4.5	0.6	2.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	0.0	15.3	20.3	0.0	16.4	9.2	15.0	15.0	10.5	12.1	12.1
LnGrp LOS	B	A	B	C	A	B	A	B	B	B	B	B
Approach Vol, veh/h		57			395			1059			866	
Approach Delay, s/veh		15.6			19.0			14.7			11.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	28.0		20.5	7.3	29.1		20.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		30.0	20.0	60.0		30.0
Max Q Clear Time (g_c+I1), s	3.8	15.4		6.0	2.9	10.6		13.3
Green Ext Time (p_c), s	0.2	8.0		0.2	0.1	5.3		1.5

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

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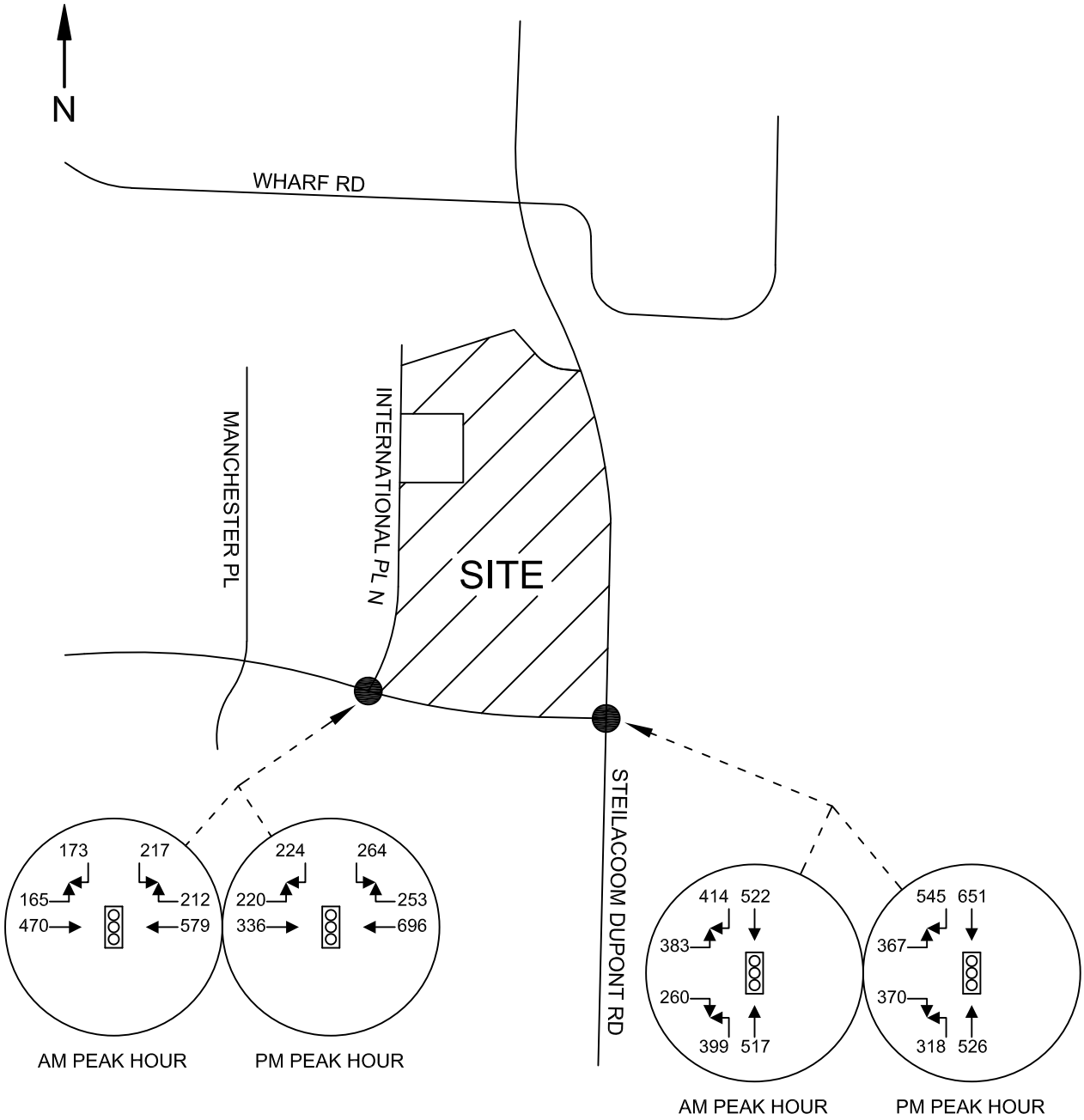
APPENDIX

QUEUING ANALYSIS



HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

SNOW BLOSSOM FULFILLMENT CENTER

FORECAST 2022 PEAK HOUR VOLUMES - PEAK SEASON QUEUING

FIGURE L

2214 Tacoma Road Puyallup WA 98371 (253) 770 1401 Fax (253) 770 1473 heathtraffic.com

Intersection: 3: Center Drive & Steilacoom-Dupont Rd

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	479	105	275	1318	1054	250
Average Queue (ft)	290	47	267	854	776	226
95th Queue (ft)	438	88	303	1540	1258	320
Link Distance (ft)	1070	1070		1274	1004	
Upstream Blk Time (%)				14	23	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)			250			225
Storage Blk Time (%)			40	1	37	2
Queuing Penalty (veh)			227	4	168	9

Intersection: 4: Center Drive & International Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	117	101	38	151	208	104
Average Queue (ft)	52	22	9	42	77	38
95th Queue (ft)	92	66	32	106	150	89
Link Distance (ft)		919	919	1070	1070	319
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 408

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Intersection: 3: Center Drive & Steilacoom-Dupont Rd

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	657	389	275	1333	1035	250
Average Queue (ft)	419	139	270	1157	672	214
95th Queue (ft)	725	339	296	1660	1152	326
Link Distance (ft)	1070	1070		1274	1004	
Upstream Blk Time (%)				46	11	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)			250			225
Storage Blk Time (%)			54	0	33	0
Queuing Penalty (veh)			306	2	149	2

Intersection: 4: Center Drive & International Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	152	153	140	256	279	316
Average Queue (ft)	69	71	58	116	152	176
95th Queue (ft)	124	129	112	222	261	290
Link Distance (ft)		919	919	1070	1070	319
Upstream Blk Time (%)						1
Queuing Penalty (veh)						0
Storage Bay Dist (ft)	200					
Storage Blk Time (%)	0					
Queuing Penalty (veh)	1					

Network Summary

Network wide Queuing Penalty: 460

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Intersection: 3: Center Drive & Steilacoom-Dupont Rd

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	503	335	274	592	1048	250
Average Queue (ft)	283	154	221	225	978	227
95th Queue (ft)	433	270	308	467	1240	318
Link Distance (ft)	1070	1070		1274	1004	
Upstream Blk Time (%)					39	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)			250			225
Storage Blk Time (%)			10	2	36	1
Queuing Penalty (veh)			56	5	201	8

Intersection: 4: Center Drive & International Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	140	123	109	245	275	319
Average Queue (ft)	66	49	49	123	156	157
95th Queue (ft)	113	102	95	214	254	280
Link Distance (ft)		919	919	1070	1070	319
Upstream Blk Time (%)						0
Queuing Penalty (veh)						0
Storage Bay Dist (ft)	200					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 270

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Intersection: 3: Center Drive & Steilacoom-Dupont Rd

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	494	330	275	1107	1049	250
Average Queue (ft)	301	182	255	446	980	229
95th Queue (ft)	458	299	311	954	1229	315
Link Distance (ft)	1070	1070		1274	1004	
Upstream Blk Time (%)				1	42	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)			250			225
Storage Blk Time (%)			26	2	39	2
Queuing Penalty (veh)			151	6	233	15

Intersection: 4: Center Drive & International Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	196	132	124	264	308	365
Average Queue (ft)	95	46	48	142	180	297
95th Queue (ft)	157	97	101	246	290	410
Link Distance (ft)		919	919	1070	1070	319
Upstream Blk Time (%)						39
Queuing Penalty (veh)						0
Storage Bay Dist (ft)	200					
Storage Blk Time (%)	0					
Queuing Penalty (veh)	1					

Network Summary

Network wide Queuing Penalty: 406

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BARGHAUSEN

September 3, 2020

Lisa Klein
AHBL, Inc.
2215 North 30th Street, Suite 300
Tacoma, WA 98403

RE: Responses to Review Comments
Major Site Plan Amendment Type II and SEPA Applications for
Northwest Logistics Center II – Parking Expansion
City of DuPont File No. PLNG 2020-012, 013, 014 & SEPA2020-001 / PLNG2020-002 RFI
Our Job No. 21227

Dear Lisa:

We have revised the documents for the above-referenced project to address the comments in your email dated August 27, 2020. Enclosed are the following documents for your review and approval:

1. One (1) electronic copy revised Non-Wetland and Fish and Wildlife Habitat Assessment

2. One (1) electronic copy Response Letter addressing Third Party Comments

3. One (1) electronic copy revised Traffic Impact Analysis

4. One (1) electronic copy revised SEPA Environmental Checklist

The following outline provides each of your comments in italics, along with a narrative response describing how each comment was addressed:

1. *The Soundview Non-Wetland and Fish and Wildlife Habitat Assessment was sent out to the City's peer review consultant for review. Attached are the comments we received. Soundview will need to provide a revised report addressing the comments.*

   Response: A response letter prepared by Soundview Consultants, LLC addressing the comments provided by Stantec Consulting Services Inc. and the revised Non-Wetland and Fish and Wildlife Habitat Assessment are enclosed.

2. *The SEPA Checklist describes in Section B.8.i. that there will be 912 employees per shift. The TIA describes that there will be 486 employees per shift. Revise either one so that they are consistent.*

   Response: The SEPA checklist and the TIA have been updated to reflect 486 employees per shift.

3. *The TIA describes the building size as 612,412 SF, however additional floor area is being added to bring the building size to 746,790 SF. While the size increase may not affect the conclusions of the TIA, it should accurately describe the scope of the project. Please amend the TIA to reflect the total floor area.*

   Response: The TIA has been updated to reflect the additional floor area of the building for a total of 746,790 square feet.

Attachment 1.dd. Comment Response Letter prepared by Barghausen Consulting Engineers dated September 3, 2020

4. *On 8/19 we requested that you provide the SEPA checklist using the SEPA form on the City's website, which is updated since the 2008 form that you have been using during the life of the NW Logistics project. On 8/25/2020 Betsy provided a revised SEPA Checklist (attached), but it is still using the same 2008 form. Please provide a SEPA checklist using the City's 2014 form and let me know if there is any confusion about this.*

   Response: The SEPA checklist was prepared using the current City of DuPont version of the checklist and the footer has been updated on the enclosed copy to reflect this version.

We believe that the above responses, together with the enclosed documents address all of the comments in your August 27, 2020 email. Please review and approve the enclosed at your earliest convenience. If you have questions or need additional information, please do not hesitate to contact me at this office. Thank you.

Sincerely,

Daniel K. Balmelli

Daniel K. Balmelli, P.E.
Executive Vice President

DKB
21227c.003.doc
enc: As Noted
cc: Janet Howald, City of DuPont Community Development
Brian Mattson, Panattoni Development Company
Bjorn Brynestad, Panattoni Development Company
Ben Eldridge, Barghausen Consulting Engineers, Inc.
Betsy Dyer, Barghausen Consulting Engineers, Inc.

CITY OF DUPONT

Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
www.dupontwa.gov

August 11, 2020

Sent via email only to: dbalmelli@barghausen.com

Daniel K. Balmelli, Executive Vice President
Barghausen Consulting Engineers, Inc.
18215 72nd Ave South
Kent, WA 98032

Subject: NW Logistics Center 2 Parking Expansion - Applications for PLNG2020-012 (Major Site Plan Revision), -013 (Administrative Variance), -014 (Boundary Line Adjustment) and SEPA2020-001 (SEPA Environmental Review)
Notice of Complete Application

Dear Mr. Balmelli:

On August 5, 2020, we received the following additional information to supplement your application for Major Site Plan Amendment, Administrative Variance, Boundary Line Adjustment, and SEPA Environmental Review for the parking expansion:

- Cover Letter prepared by Barghausen Consulting Engineers dated August 5, 2020
- Title Report prepared by First American dated July 23, 2020 for parcel 300039-0-282
- Title Report prepared by First American dated July 23, 2020 for parcel 300039-001-1
- Preliminary Civil Plans prepared by Barghausen Consulting Engineers dated August 5, 2020
- Preliminary Landscape Plans prepared WBLA dated August 5, 2020
- Preliminary Lot Line Elimination Plans prepared by Barghausen Consulting Engineers dated July 10, 2020
- SEPA Checklist prepared by Barghausen Consulting Engineers dated August 4, 2020
- Authorization to Act as Agent Affidavit dated Feb. 24, 2020
- Authorization to Act as Agent Affidavit dated July 31, 2020
- Traffic Impact Analysis prepared by Heath & Associates, Inc. dated July 2020
- Non-Wetland and Fish and Wildlife Habitat Assessment prepared by Soundview Consultants dated July 2020
- Responsible Party Letter prepared by Panattoni dated August 5, 2020

Your applications are now considered complete for processing. The City intends to publish in the newspaper a Notice of Application with Optional DNS on or about August 17, 2020.

We will contact you know if we have any questions or require additional information to complete the land use staff report prior to issuance of a decision. If you have any questions, please call me at 253.912.5393, or email me at jwilson@dupontwa.gov.

Attachment 2.a. Notice of Complete Application dated August 11, 2020.

Sincerely,

Jeffrey S. Wilson

Jeffrey S. Wilson, AICP
Director of Community Development

Cc: Brian Mattson, Panattoni Development Company via email: bmattson@panattoni.com
File No. PLNG2020-012, -013, -014, SEPA2020-001
Bill Anderson, City of DuPont Building Official
Mike Turner, City of DuPont Fire Marshal
Fred Foreman, City of DuPont Public Works
Scott Hein, City of DuPont Public Works
Dominic Miller, Gray & Osborne, Inc. (representing the City of DuPont)
Lisa Klein, AHBL, Inc. (representing the City of DuPont)

CITY OF DUPONT
Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
www.dupontwa.gov

Notice of Application with Optional DNS
Northwest Logistics Center II Parking Expansion
City File Nos. PLNG2020-012, -013, -014, SEPA2020-001

The City of DuPont has received a permit application for the following project that may be of interest to you. You are invited to comment on this proposed project.

Date of Complete Application: August 11, 2020
Date of Notice of Application: August 17, 2020
Comment Due Date: August 31, 2020

Description of current proposal: A proposed modification to a previously approved and constructed development to modify building space, construct a new guard house, expand and reconfigure parking, and add the 5.3-acre lot adjacent to the north of the Northwest Logistics Center II site to the project. The changes require approval of a Type II Major Site Plan Amendment (PLNG2020-012), administrative variance (PLNG2020-013), a boundary line adjustment to eliminate a lot line (PLNG2020-014), and SEPA Environmental Review (SEPA2020-001). Only the changed aspects of the proposal are up for review. The lot line elimination would add 5.3 acres to the existing 32-acre site for a total of 37.3 acres. The parking reconfiguration and expansion of the north parking area will add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. The proposal will also include clearing and grading, storm drainage facilities, and the addition of a 277 square foot guard shack to be located in the southeast corner of the site. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Roadway improvements will be provided along the frontage of International Place North.

Project Location: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011 and 300039-0282. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

Project Applicant: Panattoni Development Company, Inc.
900 SW 16th Street, Suite 330
Renton, WA 98057

Applicant's Agent: Daniel K. Balmelli, Executive Vice President
Barghausen Consulting Engineers, Inc.
18215 72nd Ave South
Kent, WA 98032

Attachment 2.b. Notice of Application with Optional DNS issued August 17, 2020.

Environmental Review: The City of DuPont has reviewed the proposed project for probable adverse environmental impacts and expects to issue a new or Modified Mitigated Determination of Non-

significance (MDNS) for this project. The optional DNS process in WAC 197-11-355 is being used. **This may be your only opportunity to comment on the environmental impacts of the proposed project.**

Agencies, tribes, and the public are encouraged to review and comment on the proposed project and its probable environmental impacts. Comments must be submitted by the date noted above to:

Jeff Wilson, AICP
Community Development Director and City SEPA Official
City of DuPont
1700 Civic Drive
DuPont, WA 98327
(253) 912-5393 / jwilson@dupontwa.gov

City Permits and Approvals: Major Site Plan Amendment (PLNG 2020-012), Administrative Variance (PLNG 2020-013), Boundary Line Adjustment (PLNG 2020-014), SEPA Environmental Review (SEPA 2020-001), Building Permits, Fire Suppression/Fire Alarm Permits, Plumbing/Electrical/Mechanical Permits, Site Development Permit, Right-of-Way Use Permit, Water Service/Connection Permits and Determination of Transportation Concurrency.

Other Permits and Approvals: Sanitary Sewer Permits by Pierce County and NPDES Permit by Department of Ecology.

Required Studies: Amended Environmental Checklist, Stormwater Site Plan, Cultural Resources Study, Traffic Impact Analysis, Geotechnical Report, Non-Wetland and Fish and Wildlife Habitat Assessment, Civil Plans, Architectural Site Plan and Elevations, Lighting Plan, Tree Retention Plan and Landscaping Plans.

The following may require mitigation for the adverse environmental impacts of the proposal: Noise, light and glare, traffic, soil remediation, and cultural resources mitigation measures are anticipated. (Note: These conditions would be in addition to mitigation required by the development regulations.) The project will be evaluated for consistency with the City development regulations, including Title 12, Buildings & Construction; Title 14, Streets, Sidewalks, Curbs, Driveways and Parking Strips; Title 21, Water & Sewer Utilities; Title 22, Stormwater Utility; Title 23, Environment; Title 24 Subdivision Regulations; and Title 25 Land Use Code.

Public Comment: The public may comment on the proposal by submitting written comments to the City of DuPont by 5 p.m. August 31, 2020. The City intends to issue the SEPA Determination with a 14-day appeal period, followed by a final decision on the application by the Community Development Director. Copies of all application plans and documents may be viewed at City Hall.

CITY OF DUPONT
Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
www.dupontwa.gov

Notice of Application with Optional DNS
Northwest Logistics Center II Parking Expansion
City File Nos. PLNG2020-012, -013, -014, SEPA2020-001

The City of DuPont has received a permit application for the following project that may be of interest to you. You are invited to comment on this proposed project.

Date of Complete Application: August 11, 2020
Date of Notice of Application: August 17, 2020 | **Comment Due Date:** August 31, 2020
Date of re-issuance of ODNS: August 27, 2020
ODNS Extended Comment Due Date: Extended to September 10, 2020

Description of current proposal: A proposed modification to a previously approved and constructed development to modify building space, construct a new guard house, expand and reconfigure parking, and add the 5.3-acre lot adjacent to the north of the Northwest Logistics Center II site to the project. The changes require approval of a Type II Major Site Plan Amendment (PLNG2020-012), administrative variance (PLNG2020-013), a boundary line adjustment to eliminate a lot line (PLNG2020-014), and SEPA Environmental Review (SEPA2020-001). Only the changed aspects of the proposal are up for review. The lot line elimination would add 5.3 acres to the existing 32-acre site for a total of 37.3 acres. The parking reconfiguration and expansion of the north parking area will add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. The proposal will also include clearing and grading, storm drainage facilities, and the addition of a 277 square foot guard shack to be located in the southeast corner of the site. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Roadway improvements will be provided along the frontage of International Place North.

Project Location: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011 and 300039-0282. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

Project Applicant: Panattoni Development Company, Inc.
900 SW 16th Street, Suite 330
Renton, WA 98057

Applicant's Agent: Daniel K. Balmelli, Executive Vice President
Barghausen Consulting Engineers, Inc.
18215 72nd Ave South
Kent, WA 98032

Attachment 2.c. Revised Notice of Application with Optional DNS dated August 27, 2020.

Environmental Review: The City of DuPont has reviewed the proposed project for probable adverse environmental impacts and expects to issue a new or Modified Mitigated Determination of Non-significance (MDNS) for this project. The optional DNS process in WAC 197-11-355 is being used. **The optional DNS comment period has been extended to correct a procedural error in noticing to agencies. This may be your only opportunity to comment on the environmental impacts of the proposed project.**

Agencies, tribes, and the public are encouraged to review and comment on the proposed project and its probable environmental impacts. Comments must be submitted by the date noted above to:

Jeff Wilson, AICP
Community Development Director and City SEPA Official
City of DuPont
1700 Civic Drive | DuPont, WA 98327
(253) 912-5393 / jwilson@dupontwa.gov

City Permits and Approvals: Major Site Plan Amendment (PLNG 2020-012), Administrative Variance (PLNG 2020-013), Boundary Line Adjustment (PLNG 2020-014), SEPA Environmental Review (SEPA 2020-001), Building Permits, Fire Suppression/Fire Alarm Permits, Plumbing/Electrical/Mechanical Permits, Site Development Permit, Right-of-Way Use Permit, Water Service/Connection Permits and Determination of Transportation Concurrency.

Other Permits and Approvals: Sanitary Sewer Permits by Pierce County and NPDES Permit by Department of Ecology.

Required Studies: Amended Environmental Checklist, Stormwater Site Plan, Cultural Resources Study, Traffic Impact Analysis, Geotechnical Report, Non-Wetland and Fish and Wildlife Habitat Assessment, Civil Plans, Architectural Site Plan and Elevations, Lighting Plan, Tree Retention Plan and Landscaping Plans.

The following may require mitigation for the adverse environmental impacts of the proposal: Noise, light and glare, traffic, soil remediation, and cultural resources mitigation measures are anticipated. (Note: These conditions would be in addition to mitigation required by the development regulations.) The project will be evaluated for consistency with the City development regulations, including Title 12, Buildings & Construction; Title 14, Streets, Sidewalks, Curbs, Driveways and Parking Strips; Title 21, Water & Sewer Utilities; Title 22, Stormwater Utility; Title 23, Environment; Title 24 Subdivision Regulations; and Title 25 Land Use Code.

Public Comment: The public may comment on the proposal by submitting written comments to the City of DuPont by 5 p.m. August 31, 2020. SEPA comments on the environmental impacts of the proposal have been extended to September 10, 2020. The City intends to issue the SEPA Determination with a 14-day appeal period, followed by a final decision on the application by the Community Development Director.

Copies of all application plans and documents may be viewed on the city's website at: https://dupontwa.gov/551/Northwest-Logistics-Center-2-Site-Plan-A

FILE NO.: PLNG2020-012, PLNG2020-013,
PLNG2020-014, SEPA2020-001
APPLICANT: Daniel Balmelli
Barghausen Consulting Engineers, Inc.

DECLARATION OF POSTING
CITY HALL NOTICE BOARD

On the 17th of August, 2020, the attached Notice of Application with Optional DNS Related to City of DuPont File No.s PLNG2020-012, PLNG2020-013, PLNG2020-14, SEPA2020-001 was posted on the City of DuPont public notice board.

I, Janet Howald, hereby declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct this of 17th of August, 2020 at DuPont, Washington.

Signed: Janet Howald

Attachment 2.d. Affidavits of Posting dated August 17, 202

THE NEWS TRIBUNE
[thenewstribune.com]

The Olympian www.theolympian.com
Gateway gateline.com
The Herald puyallupherald.com
Northwest Guardian

Order Confirmation

Customer
BILL CITY OF DUPONT *LEGALS

Payor Customer
BILL CITY OF DUPONT *LEGALS

Customer Account
256347

Payor Account
256347

Customer Address
1700 CIVIC DR
DUPONT WA 983279603 USA

Payor Address
1700 CIVIC DR
DUPONT WA 983279603 USA

Customer Phone
253-964-8121

Payor Phone
253-964-8121

Customer Fax
253-964-3554

Customer EMail

Sales Rep
cdaniels@mcclatchy.com

Order Taker
cdaniels@mcclatchy.com

PO Number	Payment Method	Blind Box	Tear Sheets	Proofs	Affidavits
	Invoice		0	0	1

Net Amount	Tax Amount	Total Amount	Payment Amount	Amount Due
$762.11	$0.00	$762.11	$0.00	$762.11

Ad Order Number
0004726519

Order Source

Ordered By
Janet Howald

Special Pricing

Invoice Text
NOA and ODNS NW Log Ctr II PLNG2020-012_SEPA2020-001_08-11-2020-pub

Promo Type

Package Buy

Materials

Attachment 3.e. Confirmation of Publication on August 17, 2020.

Ad Order Information

Ad Number	Ad Type	Production Method	Production Notes
0004726519-01	TAC-Legal Liner	AdBooker	

External Ad Number	Ad Attributes	Ad Released	Pick Up
		No	

Ad Size	Color
2 X 69 li	

Product	Placement	Times Run	Schedule Cost
TAC-NT-News Tribune	0300 - Legals Classified	1	$608.87

Run Schedule Invoice Text
Notice of Application with Optional DNS

Position
0301 - Legals & Public Notices

Run Dates
08/17/2020

Product	Placement	Times Run	Schedule Cost
TAC-upsell.thenewstribune.com	0300 - Legals Classified	1	$153.24

Run Schedule Invoice Text
Notice of Application with Optional DNS

Position
0301 - Legals & Public Notices

Run Dates
08/17/2020

Notice of Application with Optional DNS
Northwest Logistics Center II Parking Expansion
City File Nos. PLNG2020-012, -013, -014, SEPA2020-001

The City of DuPont has received a permit application for the following project that may be of interest to you. You are invited to comment on this proposed project.

Date of Complete Application: August 11, 2020
Date of Notice of Application: August 17, 2020
Comment Due Date: August 31, 2020

Description of current proposal: A proposed modification to a previously approved and constructed development to modify building space, construct a new guard house, expand and reconfigure parking, and add the 5.3-acre lot adjacent to the north of the Northwest Logistics Center II site to the project. The changes require approval of a Type II Major Site Plan Amendment (PLNG2020-012), administrative variance (PLNG2020-013), a boundary line adjustment to eliminate a lot line (PLNG2020-014), and SEPA Environmental Review (SEPA2020-001). Only the changed aspects of the proposal are up for review. The lot line elimination would add 5.3 acres to the existing 32-acre site for a total of 37.3 acres. The parking reconfiguration and expansion of the north parking area will add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. The proposal will also include clearing and grading, storm drainage facilities, and the addition of a 277 square foot guard shack to be located in the southeast corner of the site. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Roadway improvements will be provided along the frontage of International Place North.

Project Location: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011 and 300039-0282. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

Project Applicant: Panattoni Development Company, Inc.
900 SW 16th Street, Suite 330 | Renton, WA 98057

Applicant's Agent: Daniel K. Balmelli, Executive Vice President
Barghausen Consulting Engineers, Inc.
18215 72nd Ave South | Kent, WA 98032

Environmental Review: The City of DuPont has reviewed the proposed project for probable adverse environmental impacts and expects to issue a new or Modified Mitigated Determination of Non-significance (MDNS) for this project. The optional DNS process in WAC 197-11-355 is being used. **This may be your only opportunity to comment on the environmental impacts of the proposed project.**

Agencies, tribes, and the public are encouraged to review and comment on the proposed project and its probable environmental impacts. Comments must be submitted by the date noted above to:

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Required Studies: Amended Environmental Checklist, Stormwater Site Plan, Cultural Resources Study, Traffic Impact Analysis, Geotechnical Report, Non-Wetland and Fish and Wildlife Habitat Assessment, Civil Plans, Architectural Site Plan and Elevations, Lighting Plan, Tree Retention Plan and Landscaping Plans.

The following may require mitigation for the adverse environmental impacts of the proposal: Noise, light and glare, traffic, soil remediation, and cultural resources mitigation measures are anticipated. (Note: These conditions would be in addition to mitigation required by the development regulations.) The project will be evaluated for consistency with the City development regulations, including Title 12, Buildings & Construction; Title 14, Streets, Sidewalks, Curbs, Driveways and Parking Strips; Title 21, Water & Sewer Utilities; Title 22, Stormwater Utility; Title 23, Environment; Title 24 Subdivision Regulations; and Title 25 Land Use Code.

Public Comment: The public may comment on the proposal by submitting written comments to the City of DuPont by 5 p.m. August 31, 2020. The City intends to issue the SEPA Determination with a 14-day appeal period, followed by a final decision on the application by the Community Development Director. Copies of all application plans and documents may be viewed on the city's website at:
https://dupontwa.gov/551/Northwest-Logistics-Center-2-Site-Plan-A

CITY OF DUPONT
Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
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SEPA ENVIRONMENTAL POLICY ACT
MITIGATED DETERMINATION OF NONSIGNIFICANCE
Northwest Logistics Center II Parking Expansion

The City of DuPont is issuing a SEPA Determination on a proposal for modifications to a partially developed site.

City File Number: SEPA2020-001
Related File Numbers: PLNG2020-012 (Type II Site Plan Major Modification), -013 (Type I Administrative Variance), -014 (Type I Lot Line Elimination)

Description of proposal: A proposed modification to a previously approved and constructed development to modify building space, construct a new guard house, expand and reconfigure parking, and add the 5.3-acre lot adjacent to the north of the Northwest Logistics Center II site to the project. The changes require approval of a Type II Major Site Plan Amendment (PLNG2020-012), administrative variance (PLNG2020-013), a boundary line adjustment to eliminate a lot line (PLNG2020-014), and SEPA Environmental Review (SEPA2020-001). Only the changed aspects of the proposal are up for review. The lot line elimination would add 5.3 acres to the existing 32-acre site for a total of 37.3 acres. The parking reconfiguration and expansion of the north parking area will add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. The proposal will also include clearing and grading, storm drainage facilities, and the addition of a 277 square foot guard shack to be located in the southeast corner of the site. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Roadway improvements will be provided along the frontage of International Place North.

Project Location: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Numbers 300039-0011 and 300039-0282. The project is located within a portion of the SW quarter of Section 24, Township 19 North, Range 1 East and the NW quarter of Section 25, Township 19 North, Range 1 East.

Proponent: Panattoni Development Company, Inc.
1821 Dock Street, Suite 100
Tacoma, WA 98402

Lead Agency: City of DuPont

Responsible Official: Andy Takata
City Administrator
City of DuPont

Attachment 2.f. SEPA Mitigated Determination of Nonsignificance dated September 18, 2020.

Contact Information: Janet Howald, City of DuPont | 1700 Civic Drive, DuPont, WA 98327 | 253-964-8121

The Responsible Official hereby makes the following findings and conclusions based on a review of the environmental checklist and attachments; comments received from City Departments; other information on file with the City and the policies, plans and regulations designated by the City of DuPont as a basis for the exercise of substantive authority under RCW 43.21C.060. The Optional DNS process in WAC 197-11-355 is being used. A Notice of Application was issued on August 17, 2020 with a 14-day comment period. The Notice was re-issued on August 27, 2020 and the SEPA comment period was extended to September 10, 2020 to correct a procedural error in noticing. Comments received from agencies and the public were reviewed and considered in the findings and conclusions of this Determination.

The lead agency has determined that the requirements for environmental analysis and protection have been adequately addressed in the development regulations and comprehensive plan adopted under chapter 36.70A RCW, and/or mitigating measures have been applied that ensure no significant adverse impacts will be created.

A. FINDINGS

This determination is based on the following findings and conclusions:

1. The 5.34-acre parcel to be added to the proposal ("north parcel") is tax parcel number 300039-0282. It was previously cleared and graded circa 2007.

2. 32-acres of the subject property ("main parcel") are currently constructed with a 628,640 square foot vacant warehouse building, 414 vehicle parking spaces and 124 truck trailer spaces ("main parcel"). Access is provided from three driveways from International Place. The property is landscaped along the east, west and south perimeters and includes Tree Protection Tracts A and B.

3. The main parcel was the subject of prior land use approvals (PLNG2018-063, PLNG2018-012, ADM 13-01) and a SEPA Determination of Nonsignificance ("MDNS", SEPA13-01). The SEPA MDNS was issued on Feb. 10, 2015 with 13 mitigation measures intended to minimize many of the potential impacts caused by the development. The City adopted the MDNS for a previous amended proposal (PLNG2018-063, i.e. developed site) on January 8, 2019. All of the mitigation measures have been completed or complied with.

4. The changed aspects of the proposal are:

    a. Tenant improvements inside the building include adding a 118,150 square foot mezzanine for storing flammable and combustible liquid and aerosol products. The total floor area of the building after the addition will be 746,790 square feet. Additional exterior improvements to the building will be made including a replacement of the roof.

    b. Construct a new 277 square foot guard shack to be located in the northeast corner of the site.

    c. Expand and reconfigure parking, to add 498 vehicle parking spaces and reduce trailer storage spaces by 47. In total, the proposal will provide 912 vehicle parking spaces and 77 trailer storage spaces. Changes to vehicle and truck parking will occur within the main parcel; the north parcel will be used primarily for additional parking and truck circulation.

The applicant will eliminate the shared lot line of the main and north parcels to combine the parcels for a total of 37.3 acres. Alteration of property lines are exempt from SEPA Review per WAC 197-11-800(6)(f).

5. A Combined Notice of Application with Optional DNS was issued on August 17, 2020 with a 14-day comment period. The optional DNS comment period was extended on August 27, 2020 to correct a procedural error in noticing to agencies. The end of the extended comment period was September 10, 2020. The Comments received during the comment period are summarized as follows:

   a. Email from Charles Markham of US Army dated August 31, 2020 regarding concerns for potential impacts to the JBLM Canal. The comments are addressed in Findings #8, Water, below.

   b. Email from Department of Ecology dated August 27, 2020 regarding potential soil contamination on the north parcel. The comments are addressed in Findings #11, Environmental Health.

   c. Letter from Department of Ecology dated September 10, 2020 with comments pertaining to solid waste management, toxics cleanup, and water quality. See Findings #6, Earth; #11 Environmental Health.

   d. Letter from Nisqually Indian Tribe dated September 9, 2020 concurring with the recommendations found in the cultural resources assessment summarized in Findings #16, Historic and Cultural Resources, below.

   e. Letter from Department of Archaeology and Historic Preservation (DAHP) concurring with the Cultural Resource Survey and recommending the implementation of an Inadvertent Discovery Plan during all ground disturbing activities. See Findings #16, Historic and Cultural Resources, below.

6. <u>Earth</u> – The site is generally flat with 8 percent slopes in the eastern portion. The soils are mapped as Vashon Recessional outwash, Steilacoom gravel. A Geotechnical Engineering Report prepared by Terra Associates dated May 12, 2020 was provided for the 5.34-acre north parcel. The soils observed in the test pits correlate with the published description of this soil unit. The test pits found 12 to 24 inches of forest duff with gravel overlying Recessional outwash soils consisting of silty sand and silty gravel ranging from 3.5 to 5 feet. Outwash deposits were found below these depths. There are no geotechnical conditions that would preclude the planned development.

   Approximately 7,000 cubic yards of cut, 8,000 cubic yards of fill and 2,000 cubic yards of stripping will be used to prepare the site for construction of the expanded and reconfigured parking areas. The source of fill will be from an approved source. Approximately 81 percent of the north parcel will be impervious surface upon completion of the proposed new parking area. A temporary erosion and sedimentation control plan (TESC) is required to be prepared and approved in accordance with the requirements of the 2014 Ecology Stormwater Manual and city of DuPont standards to control erosion impacts. See Mitigation Measures #1, #5, and #7.

7. Air – Temporary emissions from construction equipment would be present from 7 am to 6 pm Monday through Friday during the construction phase of the project. Emissions from vehicular traffic to and from the site would be present upon project completion. There are no other known types of emissions as a result of the proposal. See Mitigation Measures #8 and #9.

8. Water – A Non-Wetland and fish and Wildlife Habitat Assessment was submitted together with a response to City peer review comments dated September 2, 2020. A Type F stream is located offsite to the northeast on JBLM land. The stream is located approximately 95 feet from the property boundary. No work is proposed within the City's 100-foot stream buffer.

   No groundwater will be withdrawn and to waste material will be discharged into the ground.

   Water runoff will be generated from new and replaced impervious surfaces. It will be collected and conveyed via storm pipe and catch basins to a retention infiltration facility located under the new parking lot in the western half of the property where it will be treated prior to infiltrating to the ground. The stormwater system will be designed according to the requirements of the Department of Ecology Stormwater Management Manual for Western Washington (2012 version with 2014 amendments) as adopted by the City of DuPont to control runoff from construction activities and the new impervious surfaces, including erosion control best management practices.

   A comment was received from the U.S. Army regarding concerns for impacts of the stormwater facility to the JBLM Canal located northeast of the site. The comments were reviewed and considered by the City Engineer. The applicant proposes to provide water quality treatment and infiltration and will be required to keep and treat the stormwater onsite. The applicant is also required by City code to enter into an agreement with the City to maintain the private stormwater system. The city will ensure that the maintenance schedule includes inspections to ensure that no stormwater runoff is leaving the site. See Mitigation Measure #5.

9. Plants – The north parcel was previously cleared and graded; existing vegetation is sparse and comprised of shrubs and grass. All vegetation on the north parcel will be removed as part of the proposal. Some of the landscaping planted on the main parcel in the southeast corner and the west side will be removed to reconfigure parking and circulation. The landscaping will be replanted following construction. The northeast corner of the main parcel will be revised to remove or transplant existing vegetation. An 8-foot tall CMU screen wall will be added, and new plantings added on the east side of the wall to screen the guard shack/truck access area from view.

10. Animals – The north parcel likely contains small rodents and songbirds. The Type F stream that is located approximately 95 feet to the northeast of the site is recognized by Department of Fish and Wildlife as containing cutthroat trout and coho salmon. The following bat species are shown on Priority Habitat Species (PHS) maps as having habitat in the same township as the property: big brown bat (Eptesicus fuscus), Yuma myotis (Myotis umanensis), and little brown bat (Myotis lucifugus). Per DMC 25.105.050(2)(e), a habitat management plan is required for any development within or adjacent to areas identified as breeding or nesting habitat of priority species. The site has been previously cleared and contains sparse vegetation that would not likely be used by bats for hibernation, roosting or nursery sites. There are no specific

management recommendations provided by WDFW for the bat speciess. Therefore, no impact to animals are anticipated and no construction-related mitigation is required.

11. Environmental Health – ATC prepared a Limited Subsurface Investigation Report dated June 30, 2020 to characterize the subsurface conditions of the north parcel in accordance with the Model Toxics Control Act (MTCA) and its implementation regulations and Ecology's Tacoma Smelter Plume Model Remedies Guidance. The evaluated the fill materials at the site and the native soil below the fill for arsenic and lead. Sample results indicated that the site-wide averages for arsenic and lead in each horizon were below the required cleanup levels. One of the native soil samples contained an arsenic concentration above the Tacoma Smelter Plume Model Remedy individual soil sample concentration. ATC recommended additional soil sampling to delineate the extent of the arsenic exceedance.

    The Dept. of Ecology issued a comment letter regarding the potential for soil contamination on the north parcel. The comments included potential SEPA mitigation measures for testing and cleanup, if needed. See Mitigation Measure #4.

    The building will be modified and floor spaced added to allow for the storage of flammable/combustible aerosol and liquid products. The building improvements will be required to follow the International Building Code and International Fire Code requirements for use of proper building materials and fire suppression methods.

12. Noise – Hours of construction noise will be limited to the hours permitted by City code, DMC 9.09. On a long-term basis noise will be from vehicles exiting and entering the property.

13. Land Use – The property is zoned Community Business and the land use designation in the Comprehensive Plan is Industry with Community Commercial Opportunity Area Overlay. The main site is a constructed but vacant warehouse with associated parking and landscaping. The north parcel is currently vacant land. The proposed use is compatible with adjacent uses. The site is not classified as a critical area, but a portion of the buffer associated with the adjacent stream extends onsite and the larger region is known to contain Priority Habitat for the bat species listed in the Animals section above. The applicant anticipates a maximum of 972 employees (486 employees per shift) will be working in the completed project.

    The property is surrounded by the following land uses:

    North: Mini Storage
    East: DuPont Steilacoom Road and Joint Base Lewis McChord
    South: Center Drive and commercial and light industrial uses
    West: International Place and warehouse/distribution uses

14. Aesthetics – The new guard shack will be less than the maximum height allowed by city code. The main site has been landscaped around the perimeter to screen the trucks and vehicle parking area from view, including landscape berms and plantings along DuPont Steilacoom Road. The proposal would extend the screening further north to screen the new parking area and the guard shack/truck access area. The screening will be a combination of 8-foot tall CMU wall and vegetation between the wall and the DuPont Steilacoom Road right of way. The interior parking lot will be landscaped in accordance with City code.

15. Light and Glare – The new parking lot on the north parcel will be lit from dusk to midnight. Lights will be shielded and directed downward. The applicant submitted Site Lighting Plan that depicts the lighting levels in foot candles. The maximum light spill permitted at the east property line is 1.0 foot candles (FCs). Lighting permitted at the west property line will be sufficient for safe lighting of International Place. Lighting levels at the north property line shall be minimized to the greatest extent possible to allow for safe truck circulation. Additional lighting details will be reviewed prior to issuance of permits to ensure lighting fixtures are full cut-off type and do not exceed the maximum light spill at the property lines. See Mitigation Measures #3, #6, #10.

16. Historic and Cultural Preservation – A Cultural Resources Survey was prepared for the north parcel in June 2020. No archaeological sites or historic structures are located within the area and the property is deemed to have low or moderately low probability for cultural resources. The consultant recommends no additional survey work, however monitoring of the site will be required during soil disturbing activities.

    A Memorandum of Agreement (MOA) dated August 7, 1989, was executed between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws. Implementation of the MOA requires archaeological monitoring during soil disturbing activities, including extending an invitation to the Nisqually Tribe to be present during such activities, and preparation of a closing report. Any artifacts found are required to be donated in accordance with the MOA. See Mitigation Measures #11 and #13.

17. Transportation – One new driveway onto International Place N will be constructed on the north parcel for access to the proposed parking area and truck circulation route. There are three existing driveways on the main parcel. Half street improvements to International Place will be required along the frontage of the north parcel. International Place is a local road which connects to Center Drive, which is a principal Arterial located to the south. DuPont Steilacoom Road is a north/south minor arterial located along the property's east boundary that is scheduled for improvements beginning in 2021.

    The previous SEPA Determination issued in 2015 required the installation of a traffic signal at the intersection of International Place and Center Drive, which has been constructed. The previous proposal anticipated approximately 1,168 vehicle trips per average weekday with 76 trips during the AM peak hour, and 83 trips during the PM peak hour.

    Transit service is available at DuPont Station located on the southeast corner of Wilmington Drive and Palisade Boulevard approximately two miles from the property and is therefore not anticipated to be significantly utilized by the proposed development's employees. Similarly, little non-motorist activity to/from the site is expected. Employers with more than 100 employees are required to meet the Commute Trip Reduction requirements of DMC Chapter 25.72.

The parking expansion and reconfiguration will add 498 vehicle parking spaces and reduce truck trailer storage spaces by 47 in the main and north parcel. In total, the proposal will provide 912 vehicle parking spaces and 77 truck trailer storage spaces.

A Traffic Impact Analysis was prepared dated August 28, 2020. The completed proposal is anticipated to generate approximately 2,167 average vehicle trips per day. Peak volumes will occur during 6:30 to 7:30 AM with 363 trips and 5:30 to 6:30 PM. with 604 trips. During peak seasons (i.e. holiday season) volumes to and from the site will increase. According to the aggregated trip generation report, peak season AM volumes would close to double while peak PM volumes would increase by 50 percent. The peak hours for the proposed use tend to be dissimilar with respect to the adjacent street. The AM peak hour tends to start at 6:00 or 6:30 AM while the PM peak hour tends to start at 5:30 PM. No volume adjustments were considered given the 7:00 – 9:00 AM and 4:00 – 6:00 PM study periods to remain conservative. The majority of the trips would be employee vehicles and delivery vans with approximately 10-15 percent of the total volumes in the form of multi-axle trucks. Trip generation data was obtained from an independent study on similar fulfillment centers.

Future level of service (LOS) calculations were made for area intersections. All intersections are anticipated to remain meeting the city of DuPont's LOS D standards. No operational deficiencies at the area intersections are identified as a result of the project.

A queuing analysis was completed to determine vehicle storage capacity in the turning lanes for two turning movements: northbound left-turns at DuPont Steilacoom Road and Center Drive, and eastbound left-turns at Center Drive and International Place. The analysis concluded the following:

> *Center Drive and International Place*: Approximately 175 feet of storage capacity is available which is shown to accommodate forecast peak demands under all scenarios.
>
> *DuPont Steilacoom Road and Center Drive*: The 95th–percentile queue for the northbound left-turn on DuPont-Steilacoom Road at Center Drive would periodically exceed the existing 250-foot storage during the PM peak hour. During this time period the queue for the northbound through lane would be considerably longer and potentially block vehicles from entering the left-turn lanes. The TIA notes that dual northbound left-turn lanes at this intersection should be considered as part of the City's improvements for DuPont-Steilacoom Road.

DuPont Steilacoom Road is a north/south minor arterial located along the property's east boundary that is scheduled for improvements beginning in 2021. The current design for the improvements does not include a dual left turn lane at the Center Drive intersection. It is anticipated that as this project develops, as well as other planned projects in the future, the need for the dual left turn lane will be imperative. The dual left turn lane will also require relocation of the signal located along the eastern right of way.

The applicant shall be required to pay their fair share of the costs associated with the dual left turn lane improvements. The applicant and City have agreed that the signal relocation/replacement component required for widening the roadway to accommodate the dual left turn lane is proportional to their fair share contribution. The applicant will be provided

with the bid results for verification of costs. The City will require that payment for the signal relocation/replacement costs be provided in the form of a letter of credit prior to issuing a Certificate of Occupancy for the building. See Mitigation Measures #14 and #15.

18. Public Services – all utilities are available to serve the proposal.

B. MITIGATION MEASURES

General Mitigation Measures:

1. The design and construction of the proposal is required to follow the recommendations of the AESI Geotechnical Report dated May 12, 2020, as amended or updated.

2. The Checklist states the project will provide jobs for more than 100 employees per shift. Any business with more than 100 employees shall follow the requirements of DMC Chapter 25.75 Commute Trip Reduction.

The following mitigation measures shall be in place on the plans prior to issuance of site development permits:

3. Light fixtures shall be full cut-off type and shielded to minimize light spill and glare. A photometric analysis shall be submitted that depicts light spill at the property lines. A maximum of 1.0 foot candles of light spill will be allowed at the easement property line. Light spill at the north property line shall be minimized to the greatest extent possible to accommodate safe truck circulation.

4. Additional soil sampling shall occur on the north parcel to delineate the extent of the arsenic exceedance found pursuant to the recommendations of the soil investigation report. Half of the soil samples should be collected from the top 6 inches of native material and the other half from six inches to one foot into the native material. Soils sampling, precautions and cleanup shall occur in compliance with the following Ecology-recommended measures:

    a) The soil on the north parcel shall be sampled and analyzed for arsenic and lead adhering to the 2019 Tacoma Smelter Plume Guidance. The soil sampling results shall be sent to Ecology for review.

    b) If lead or arsenic are found at concentrations above the Model Toxics Control Act (MTCA) cleanup levels (Chapter 173-340 WAC); the owners, potential buyers, construction workers, and others shall be notified of their occurrence. The MTCA cleanup level for arsenic is 20 parts per million (ppm) and lead is 250 ppm.

    c) If lead, arsenic and/or other contaminants are found at concentrations above MTCA cleanup levels, the applicant shall:

        i. Develop soil remediation plan and enter into the Voluntary Cleanup Program with Ecology.

ii. Obtain an opinion letter from Ecology stating that the proposed soil remediation plan will likely result in no further action under MTCA. The applicant shall provide to the local permitting agency the opinion letter from Ecology.

iii. Prior to finalizing site development permits, provide to the local land use permitting agency "No Further Action" determination from Ecology indicating that the remediation plans were successfully implemented under MTCA.

d) If soils are found to be contaminated with arsenic, lead, or other contaminants, extra precautions shall be taken to avoid escaping dust, soil erosion, and water pollution during grading and site construction. Site design shall include protective measures to isolate or remove contaminated soils from public spaces. Contaminated soils generated during site construction shall be managed and disposed of in accordance with state and local regulations, including the Solid Waste Handling Standards regulation (Chapter 173-350 WAC). For information about soil disposal contact the local health department in the jurisdiction where soils will be placed.

5. A temporary erosion and sedimentation control plan (TESC) shall be approved in accordance with the requirements of the 2012 Ecology Stormwater Manual and city of DuPont standards to control erosion impacts.

6. Additional lighting details shall be provided to ensure lighting fixtures are full cut-off type. The photometric plan shall be revised to demonstrate that spill levels at the north and east property line do not exceed 1.0 foot candles.

The following mitigation measures shall be in place during site construction:

7. All grading and filling of land must utilize only clean fill from a City-approved source.

8. Best Management Practices to minimize dust during construction shall be used, including temporary paving of certain roads, street sweeping, and watering the site as needed.

9. Construction equipment shall be maintained to meet emission standards. Construction vehicles shall be turned off when not in use to limit emissions caused by idling.

10. Site lighting during construction shall be directed away from the public right of way to ensure there is no light spill to these areas.

11. The Applicant shall fully implement the Memorandum of Agreement dated August 7, 1989, between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws.

    a) The Applicant shall provide a professional archaeologist to monitor onsite soil disturbance activities.

    b) The Project Archaeologist shall notify and allow a Nisqually Indian Tribe representative to be present during soil disturbance activities.

c) The Project Archaeologist shall notify the Nisqually Indian Tribal representative if Native American cultural resources are discovered during any soil disturbance activities. Construction activities that might disturb or affect such resources are to stop until the Tribal representative has had the opportunity to examine the find.

d) If the Tribal representative cannot be reached through reasonable efforts or does not come to the construction site within a reasonable period of time after being notified, construction does not need to stop. However, archaeological work shall to follow the 1989 Memo of Agreement, customary professional standards for archaeology, and applicable state and federal laws.

e) The City of DuPont requests Native American artifacts recovered during construction activities be donated to the Nisqually Indian Tribe. Hudson's Bay Company-era artifacts should be donated to the Fort Nisqually Living History Museum, located in the City of Tacoma's Point Defiance Park. DuPont-era artifacts should be donated to the DuPont Historical Museum.

The following mitigation measures shall be in place prior to issuance of a building permit:

12. The applicant shall pay the required fire impact fee for the increased site area, as required per DMC 26.05.

The following mitigation measures shall be in place prior to the issuance of a Certificate of Occupancy:

13. The Project Archaeologist shall forward a closing report to the City of DuPont. The report shall discuss contact with the Nisqually Indian Tribe, implemented procedures and observed conditions and be submitted prior to issuance of any permanent Certificate of Occupancy for the project.

14. To mitigate for the proposal's impacts to the northbound left turn lane queue on DuPont Steilacoom Road (DSR) at Center Drive intersection, the applicant shall contribute their fair share of the costs associated with the required additional dedicated left turn lane improvements. The city and applicant have agreed that the required signal replacement/relocation component of the improvements would be proportional to their fair share contribution and that they would be responsible for the costs associated with the design, permitting and construction for the signal. The design, permitting and construction, including cost estimating, would be prepared by the engineering consultant for DSR improvements project. The design would need to include design of the left turn lane to ensure that eventual construction of the lane can be accommodated within the right of way. The applicant will be provided the bid results for verification of the costs. The applicant will provide the city with a line of credit for the costs of the signal relocation improvement prior to issuance of a final Certificate of Occupancy.

15. A truck/traffic management plan shall be prepared and approved by the City for the initial stocking of the building so as not create any lane blockages along Center Drive or DuPont-Steilacoom Road. The plan may include the use of off-duty police officers to direct traffic, staging of trucks off-site and timed entries to the site, etc. Further discussion with the Public Works Director and Police Chief is recommended to avoid traffic impacts during the initial stocking of the building.

CONCLUSIONS OF THE RESPONSIBLE OFFICIAL: The Responsible Official has determined, with the mitigation measures listed above, that the proposal will not have a probable significant adverse impact on the environment, and an Environmental Impact Statement is not required under RCW 43.21c.030(2). The mitigation measures described are recommended as conditions of project approval. This decision is made after review of a completed environmental checklist, other information on file with the City, and existing regulations.

APPEAL PERIOD: This MDNS is issued using the optional DNS process in WAC 197-11-355. There is no further comment period on the MDNS. Consistent with DMC 25.175.060(4) and WAC 197-11-680, this Determination may be appealed to the City hearing examiner. Pursuant to DMC 25.175.060(3), only parties of record may file an administrative appeal. **Appeals must be filed within 14 days after issuance of this MDNS (no later than 5:00 pm on October 2, 2020)**. Instructions for filing an appeal are found in DMC 25.175.060(4). Appeals shall be in writing, be accompanied by the required appeal fee ($1,500), and contain the information detailed in DMC 25.175.060(4) (d). You should be prepared to make specific factual objections. Contact Janet Howald at the City at (253) 964-8121 to read or ask about the procedures for SEPA appeals.

SEPA Responsible Official Signature: _____ 09-18-2020

Andy Takata
City Administrator
City of DuPont

Date

Issue Date: September 18, 2020

End of Appeal Period: October 2, 2020

Parties of Record:

Applicant: Brian Mattson, Panattoni Development Company, Inc.
Eva Barber, Washington State Department of Ecology, Southwest Regional Office (evba461@ECY.WA.GOV)
Charles S. Markham, JBLM DPW (Charles.s.markham2.civ@mail.mil)
Stephanie Jolivette, DAHP: stephanie.jolivette@dahp.wa.gov
Brad Beach, Annette "Nettsie" Bullchild, and Jeremy "Badoldman" Perkuhn, Nisqually Indian Tribe: beach.brad@nisqually-nsn.gov; bullchild.annette@nisqually-nsn.gov; badoldman.jp@nisqually-nsn.gov

Distributed to the Attached List

SEPA Distribution List

X Indicates notice mailed to the following:

Northwest Logistics Center II, Parking Expansion
PLNG2020-012,013,014, SEPA2020-001 9-XX-XX

Dist.	Agency/Contact		Dist.	Agency/Contact
X	WA State Dept. of Archaeology & Historic Preservation SEPA@dahp.wa.gov		X	WA State Dept. of Labor and Industries PO Box 44000 Olympia, WA 98504
	WA State Dept. of Commerce Anne Fritzel, AICP Anne.fritzel@commerce.wa.gov			WA State Dept. of Natural Resources SEPA Center SEPACENTER@dnr.wa.gov
X	WA State Dept. of Ecology SEPA Unit Separegister@ecy.wa.gov			WA State Dept. of Natural Resources South Puget Sound Region Southpuget.region@dnr.wa.gov
X	WA State Dept. of Ecology Environmental Review Section SEPAunit@ecy.wa.gov			WA State Dept. of Social and Health Services Lands & Bldg Div Elizabeth McNagny PO Box 45848 Olympia, WA 98504-5848
	WA State Dept. of Ecology SW Regional Office Shorelands & Environmental Assistance Donna Joblonski Donna.joblonski@ecy.wa.gov			WA State Dept. of Social and Health Services Robert J. Hubenthal hubenbj@dshs.wa.gov
X	WA State Dept. of Ecology SW Regional Office Toxic Clean-up Program Marian Abbett Marian.abbett@ecy.wa.gov		X	WA State Dept. of Transportation OR-SEPA-REVIEW@wsdot.wa.gov
X	WA. State Dept. of Ecology SW Regional Office Toxic Clean-up Program Eva Barber Eva.Barber@ecy.wa.gov			WA State Parks and Recreation Commission PO Box 42650 Olympia, WA 98504
	WA State Dept. of Ecology SW Regional Office Shorelands & Environmental Assistance Zachary Meyer Zachary.meyer@ecy.wa.gov			Puget Sound Partnership Heather Saunders Benson Environmental Planner Heather.benson@psp.wa.gov
	WA State Dept. of Health SEPA.reviewteam@doh.wa.gov		X	Puget Sound Clean Air Agency 1904 3rd Ave #105 Seattle, WA 98101 SEPA@pscleanair.org
	WA State Dept. of Fish & Wildlife(WDFW) SEPA Coordinator SEPAdesk@dfw.wa.gov			BNSF Railway General Manager 2454 Occidental Ave. South, Ste 1A Seattle, WA 98134-1451
	WA State Dept. of Fish & Wildlife (WDFW) Michele Culver Regional Director Teammontesano@dfw.wa.gov			FEMA John Graves John.graves1@dhs.gov

Updated 9/2020

	WA State Dept of Fish & Wildlife (WDFW) Kelly Still Area Habitat Biologist, Region 6 Kelly.Still@dfw.wa.gov		X	DuPont City Clerk Karri Muir Kmuir@dupontwa.gov
X	JBLM Charles Markham Director of Public Works Charles.s.markham2.civ@mail.mil		X	Nisqually Indian Tribe Joe Cushman Cushman.joe@nisqually-nsn.gov
X	JBLM Rebecca Kowalski Water Program Manager PW, Environment Division Rebecca.j.kowalski.civ@mail.mil		X	Yakama Nation Elizabeth Sanchey Elizabeth_sanchey@yakama.com
X	US Army Corps of Engineers (Corps Project Manager for Western Pierce County) Halie N. Endicott Halie.N.Endicott@usace.army.mil			Lakewood Community & Economic Development Courtney Brunell Planning Manager cbrunell@cityoflakewood.us
	USDA-Natural Resources Conservation Service 941 Powell Ave SW. Ste 102 Renton, WA 98057		X	Steilacoom Community Development Doug Fortner Town Planner Doug.fortner@ci.steilacoom.wa.us
	DuPont Post Office Attn: Post Master 1313 Thompson Circle DuPont, WA 98327			Clover Park School District 10903 Gravelly Lake Dr. SW Lakewood, WA 98499
	National Marine Fisheries Service Northwest Regional Office 7600 Sand Point Way NE Seattle, WA 98115-0070			Steilacoom Historical School District Celeste Johnston cjohnston@steilacoom.k12.wa.us
	Nisqually Nat'l Wildlife Refuge Glynnis Nakai Glynnis Nakai@fws.gov		X	LeMay Cust2180@wcnx.org
X	Environmental Official-Pierce County Kathleen Larrabee Klarrab@co.pierce.wa.us			PSE Jeffrey Payne Jeffrey.payne@pse.com
X	Pierce Co. PALS Adonais Clark aclark@co.pierce.wa.us		X	AHBL Lisa Klein Lklein@AHBL.com
X	Pierce Co. Assessor/Treasurer-Commercial Dept. Darci Brandvold Darci.brandvold@piercecountywa.gov		X	Gray & Osborne Dominic Miller, PE dmiller@g-o.com
X	Pierce Co. Environmental Services Bldg Public Works Kip Julin 9850 64th St. West University Place, WA 98467		X	Geri Reinart, P.E. greinart@msn.com
X	Pierce Co. Public Works Debbie Germer debbie.germer@piercecountywa.gov		X	CalPortland Pete Stoltz Pstoltz@calportland.com

	Tacoma Pierce Co. Health Dept. Sara Bird SEPA@tpchd.org		X	NWL Association Emily Griffith nwlassistdirector@reachone.com
	Land Use Review Capital Development-Pierce Transit PO Box 99070 Lakewood, WA 98499-0070		X	Nisqually Indian Tribe Jeremy "Badoldman"Perkuhn,THPO Dept Badoldman.jp@nisqually-nsn.gov
X	Nisqually Indian Tribe Annette Bullchild, THPO Dept Bullchild.annette@nisqually-nsn.gov		X	Nisqually Indian Tribe Brad Beach, THPO Dept beach.brad@nisqually-nsn.gov

Permit Applicant Information

X	Barghausen Engineering Co., Inc Daniel Balmelli, Exec. Vice President dbalmelli@barghausen.com		X	Panattoni Development Co., Inc. Bjorn Brynestad, Development Manger BJorn@panattoni.com

CITY OF DUPONT
Department of Community Development
1700 Civic Drive, DuPont, WA 98327
Telephone: (253) 964-8121
www.dupontwa.gov

REPORT AND RECOMMENDATION TO THE DIRECTOR

Project: Northwest Logistics Center 2
File Number: PLNG2018-063
Date of Report: February 1, 2019
From: Lisa Klein, AHBL (planning consultant to the City)

SUMMARY OF REQUEST: Type I Minor Site Plan Amendment

PROJECT DESCRIPTION: The Type I Minor Site Plan Amendment is for a proposed modification to a previously approved site plan. Previous approvals were issued in March 2015 and May 2018. Below is a comparison of the two previous approvals with the current proposal. Only the changed aspects of the proposal are up for review.

Current Proposal:

Construct a warehouse totaling approximately 628,640 square feet on a 32 acre site with associated grading activities, asphalt parking, drive aisles and truck loading and maneuvering areas, landscaping, stormwater infiltration facilities, water and sanitary sewer extensions, franchise utility improvements and half-street frontage improvements along International Place. Approximately 414 parking spaces plus 124 truck trailer spaces are proposed. There are no changes to access and there is a slight reduction in impervious surface from the 2015 site plan.

Prior Approved Site Plans:

On March 13, 2015, the following project received Type II Land Use Approval (ADM 13-01): Construct a warehouse totaling approximately 695,000 square feet, storm drainage, parking spaces and landscaping on a 32 acre site. Access was proposed from three driveways located off International Place and 384 vehicle parking spaces were anticipated.

On May 25, 2018, the following project received a Type 1 approval for a Minor Site Plan Amendment (PLNG2018-012): Construct a warehouse totaling approximately 586,025 square feet on a 32 acre site with associated grading activities, asphalt parking, drive aisles and truck loading and maneuvering areas, landscaping, stormwater infiltration facilities, water and sanitary sewer extensions, franchise utility improvements and half-street frontage improvements along International Place. Approximately 384 parking spaces plus 152 truck trailer spaces are proposed. There are no changes to access and there is a slight reduction in impervious surface.

LOCATION: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

Attachment 3.a. Report and Decision for a Site Plan Amendment (PLNG2018-063) dated February 4, 2019.

APPLICANT: Panattoni Development Company, Inc.
900 SW 16th Street, Suite 330
Renton, WA 98057

APPLICANT'S AGENT: Dan Balmelli, PE
Barghausen Consulting Engineers
18215-72nd Ave So
Kent, WA 98032

CITY CONTACT: Jeffrey S. Wilson, AICP
Community Development Director
City of DuPont
1700 Civic Drive
DuPont, WA 98327-9603
Office: (253) 912-5393
jwilson@dupontwa.gov / www.dupontwa.gov

SUMMARY OF RECOMMENDATION: Type I Minor Site Plan Amendment is recommended for approval subject to the conditions listed in Section E.

A. SUMMARY OF RECORD:

See the list of attachments provided in Section H, which includes the submittal plans and documents, historical records and comments received on the application during the City review process (Attachments 1 – 25).

B. FINDINGS OF FACT:

1. Permit History

a. The City issued a SEPA Mitigated Determination of Nonsignificance (SEPA MDNS) on February 10, 2015 that included 13 mitigation measures intended to minimize many of the potential impacts caused by the development. No comments were received and no appeals were filed. The Traffic Impact Assessment for the 2015 project anticipated a high cube warehouse land use with 1,168 vehicle trips on a typical weekday, 76 during the AM peak and 83 during the PM peak hour (revisions ensued). The project included mitigation for intersection improvements, including a new traffic signal at Center Drive/International Place. *(Attachment H.19)*

b. On March 13, 2015 the City issued Type II Site Plan Approval for the NW Logistics Center II proposal (ADM 13-01). See *Project Description*, above. *(Attachment H.17)*

c. On March 27, 2015 the City issued a Grading Permit for the site with 24 conditions of approval. The site was subsequently cleared and graded.

d. On May 4, 2018 the City adopted the prior SEPA Determination for the May 2018 Site Plan Amendment proposal (PLNG2018-012).

e. On May 25, 2018 the City issued approval for a Site Plan Amendment (PLNG2018-012). See *Project Description*, above. *(Attachment H.18)*

f. On October 26, 2018 the City issued a construction permit. Construction is currently underway.

2. Site Plan Amendment Procedures

a. A Notice of Complete Application for the Type I Minor Site Plan Amendment was issued on December 10, 2018. *(Attachment H.15)*

b. On January 8, 2019 the City SEPA Official adopted the February 2015 SEPA document as being appropriate for the current proposal after independent review. The document meets the

environmental review needs for the current proposal. The adoption of previously issued SEPA determinations is not appealable. *(Attachment H. 20)*

c. Pursuant to DMC 25.175.010(7)(b), administrative approvals for which previous environmental review has been completed in connection with other project permits, are excluded from the Notice of Application and Notice of Decision requirements.

d. DMC 25.10.190(S) defines Site Plan Amendments as follows:

> "Site plan amendment, major" means an amendment to an approved site plan that substantially changes the site design, increases density by more than 5 percent or increases building area by greater than 10 percent, reduces open space or landscape area by more than 10%, requires a modification to a condition of approval or other requirements and conditions of the approved site plan, or includes new requests to deviate from the standards of the applicable district.
>
> "Site plan amendment, minor" means an amendment to an approved site plan for modifications to the dimensions or footprint location of a building(s) but does not substantially modify the arrangement or increase the number of buildings approved in the plan. Increases in density shall be less than 5% and building size/area shall be less than 10%. The amount and quality of landscaping may be increased but may not be reduced more than 10%, provided it complies with the minimum landscaping requirements of the zone in which the property is located. Proposed amendments shall not deviate from the standards of the applicable district.

Staff Analysis: A minor site plan amendment is required because the building arrangement and number of buildings is the same (one building) and the building size represents a decrease from the original approved 2015 site plan (decrease of 66,360 square feet from the 2015 proposal). The 2015 proposal established the maximum building threshold for the site and the minor amendment represents a decrease from that established amount. The amount and quality of open space is not calculated in the Industrial district, however the percentage of landscaping is. The 2015 proposal had 17 percent of the site in landscaping, whereas the current proposal has 17.2 percent, representing a slight increase, consistent with the minor site amendment criteria for changes in landscaping. Further, the application also does not meet the definition of a major site plan amendment.

Minor Site Plan Amendments are processed in accordance with DMC 25.150.050 and are processed as a Type I procedure as set forth in DMC 25.175.010.

The application meets the definition of a minor site plan amendment and shall be processed following the Type 1 procedures.

e. DMC Chapter 25.150 Site Plan Review states that in order to obtain site plan approval, all of the development regulations and criteria specified in the district applicable to the property must be satisfied in addition to any general development requirements in DMC Chapters 25.75 through 25.95 and 25.105 through 254.125.

The previous Type II Site Plan Review process approved in March 2015 (ADM 13-01) included review of the project to ensure it is carried out in a manner consistent with the DMC and site plan review criteria. Only the changed aspects of the proposal are up for review with this site plan amendment. The changed aspects of the proposal to be reviewed are regulated by the following chapters shown in bold type:

- **Chapter 25.50 Industrial District**
- Chapter 25.75 Commute Trip Reduction

- Chapter 25.80 Cultural, Historical and Archaeological Resources
- Chapter 25.85 Affordable Housing Incentives Program
- **Chapter 25.90 Landscaping**
- **Chapter 25.95 Off-Street Parking**
- Chapter 25.105 Sensitive Areas
- Chapter 25.110 Setbacks – Street corners
- **Chapter 25.115 Transportation Concurrency Review**
- Chapter 25.116 Sign Code
- **Chapter 25.120 Tree Retention**
- Chapter 25.125 Wireless Communication Facilities

C. CONSISTENCY WITH CITY OF DUPONT DEVELOPMENT REGULATIONS

As described in Finding B.2.e, the proposed Minor Site Plan Amendment is to be reviewed for consistency with Chapters 25.50 Industrial District; Chapter 25.90 Landscaping; Chapter 25.95 Off-Street Parking; Chapter 25.115 Transportation Concurrency Review and Chapter 25.120 Tree Retention. The following presents staff consistency review and analysis with these Chapters.

1. PLANNING DEPARTMENT REVIEW

a. DMC Chapter 25.50 Industrial District

i. The described use of the property is industrial warehouse, which is an allowed use in the Industrial District.

Staff Analysis: The use is allowed.

ii. There is no minimum lot area or maximum lot coverage in the Industrial District.

iii. Building Setbacks: DMC 25.50.030 (3) requires a front yard setback of 25 feet, side setbacks of 15 feet and a rear setback of 15 feet. There are provisions for additional setbacks when building height exceeds 40 feet.

Staff Analysis: The building is setback from Center Drive a distance of 136 feet, from DuPont-Steilacoom Highway a distance of 125 feet, from International Place a distance of 160 to 200 feet. The interior setback is 70 feet from the adjacent property lines. The building setback requirements are met.

iv. Building height: DMC 25.50.030(4) shall not exceed 65 feet.

Staff Analysis: The building height is proposed to be 43 feet to the top of the parapet. The building height requirement is met.

v. Parking and loading: Shall be required as provided in Chapter 25.95, see Parking below.

vi. Landscaping: Shall be provided as required by Chapter 25.90. See Landscaping, below.

vii. Exterior Mechanical Devices: All HVAC equipment, pumps, heaters, and other mechanical equipment shall be fully screened from view from all public rights-of-way.

Staff Analysis: Exterior mechanical equipment is not shown on the plans. Building permit applications shall be assessed for compliance with the provisions for screening mechanical equipment. (Condition 23)

viii. Outdoor Storage: Outdoor storage shall be screened by a six-foot high solid fence or wall when the outdoor storage is between a building and a street or side of the buildings, and is visible form the street or driveway.

Staff Analysis: No outdoor storage areas are shown on the submitted plans. Building permit applications shall be assessed for compliance with the provisions for size and screening of outdoor storage, if provided. (Condition 52)

ix. Trash Enclosures: Trash enclosures are required to comply with DMC Chapter 25.100 Recycling.

Staff Analysis: The applicant submitted an email dated Nov. 15, 2018 indicating that LeMay (the service provider) has reviewed and approved the design and location of the trash enclosure. The single trash enclosure is located to the west of the northern turnaround. It is approximately 308 square feet and provides a 22-foot opening. It is fully gated with no separate pedestrian opening.

DMC 25.100.050(2) requires the enclosure be designed and finished to match the primary building in terms of design and materials. The architectural plans indicate that enclosure details are provided on Sheet A0.5, however this sheet was not provided.

Details on the design and building materials shall be provided to demonstrate compliance with DMC 25.100.050(2). (Condition 33 and 36)

x. Signage: Signage shall comply with the requirements of DMC Chapter 25.115.

Staff Analysis: No signage application or details were submitted for review. Applications for sign permits shall be assessed for compliance with DMC Chapter 25.115. (Condition 2)

xi. Noise: Noise levels shall not exceed the maximum allowed in DMC Chapter 9.09 (Sound and Vibration) for Class C (industrial) environmental designations.

Staff Analysis: The SEPA Checklist submitted with the application indicates that noise from vehicular traffic to and from the site will be present from approximately 6 am to 6 pm, Monday through Friday. The SEPA Checklist also states that all construction equipment will be maintained and will comply with state standards. Each user will be assessed at the time of building permit for compliance with this requirement. (Condition 37)

xii. Air emissions: Shall meet applicable regulations of the Puget Sound Air Pollution Control Authority, and no visible, frequent smoke, dust, or gases shall be emitted; nor shall offensive gases or odors be permitted.

Staff Analysis: The SEPA checklist submitted with the application indicates that long term air emissions will be due to vehicle traffic traveling to and from the site. Each user will be assessed at the time of building permit for compliance with this requirement. (Condition 37)

xiii. Outdoor lighting: shall be designed to minimize light escapement beyond the site.

Staff Analysis: The SEPA Checklist submitted with the application indicates that light or glare created by the project will not be a safety hazard. Each user will be assessed at the time of building permit for compliance with this requirement. (Condition 27 and 37)

xiv. Hazardous Substances or Waste Storage: No more than 20,000 pounds of hazardous substances or hazardous wastes may be stored onsite, and no hazardous substances or wastes may be stored onsite, except that which is delivered for onsite operations or produced onsite.

Staff Analysis: The SEPA Checklist submitted with the application did not identify the potential for storage of hazardous substances or waste. Each user should be assessed at the time of building permit for compliance with this requirement. (Condition 37)

xv. Site Plan approval: DMC 25.50.040 requires site plan approval for all development projects following the procedures in DMC 25.175.010.

Staff Analysis: The original Site Plan Review was processed under the Type II permit process and approved in March 2015. A subsequent Minor Amendment following the Type I process was completed in May 2018. This application for a Minor Amendment is being processed under a Type I permit process. This requirement is met.

b. Chapter 25.90 Landscaping

i. Proportion of landscape areas: DMC 25.90.020(2) requires that 10 percent of the site be landscaped.

Staff Analysis: The Landscape Plan and Civil Plans provide the following calculation demonstrating how the project proposes to exceed the requirement as follows:

- *Landscaping required (10% of overall site area) = 140,070 SF*
- *Landscape area provided per Sheet L9 of the landscape plans (17.2% of overall site area) = 241,601 SF*
- *Landscape area provided per Sheet C2 of the civil engineering plans (17.49%) = 244,620 SF*

The landscaping area requirement is met; however the landscape plans and civil plans shall be reconciled upon submittal of the site development permit application and shall not be less than the 241,601 SF provided on Sheet L9. (Condition 10)

The landscape plans submitted for the Temporary Use Permit (PLNG2018-058) identify an additional approximately 54 shrubs (Oregon grape and summer wine bark) to restore the area where the temporary construction trailers will be placed. These shrubs are not shown on the landscape plans submitted with the Minor Site Plan Amendment application. The shrubs are required to be planted as depicted in the TUP landscape plans.

ii. Street Trees: DMC Section 25.90.030 requires street trees be provided at time of construction or development of adjoining land. They are to be of similar species as existing street trees, be provided at least one per 40 to 50 feet of frontage, be located within the right-of-way, be spaced to accommodate sight distance for driveways and intersections; and be at least two inches caliper measured six inches above the ground with a single-stem and minimum branch height of six feet.

Staff Analysis: The proposal includes the required number, size and spacing of street trees on International Place. The existing street trees are Katsura, which are noted as dead or dying, and are also provided on the opposite side of the street. The replacement street trees are Heritage River Birch. The size of the trees is noted as 2-inch caliper on Landscape Plan Sheet to be pruned up to a minimum 6-foot branch height (Sheet L-9 dated Nov. 16, 2018).

Heritage River Birch appears to be similar in terms of leafy structure and size, however no explanation was provided for the change from the Katsura trees. If a suitable explanation can be made for the change in tree type, the condition is met. If not, the tree type should be revised to match the existing tree types. (Condition 20)

Street Trees are existing along Center Drive. DuPont Steilacoom Road is a Pierce County-maintained right-of-way that is proposed for improvements within the next few years.

iii. Landscaping Interior Parking Lots: DMC 25.90.030(2) requires that the interior of surface parking lots with 10 or more stalls be landscaped with at least one tree per six stalls.

Staff Analysis: The application provides 414 parking spaces, which requires 69 parking spaces. Sheet L-9 of the landscape plans indicate that 71 parking lot trees will be provided. Staff counts a total of 67 parking trees marked on the plans and discrepancies in the planting counts. Additional detail is required to verify compliance. (Condition 18)

iv. Landscaping Buffers: DMC 25.90.030(3) requires that a moderate buffer be provided between parking lots and any adjacent public right-of-way.

Staff Analysis: Standard vehicle parking areas are provided adjacent to two public rights of way: Center Drive (southeast), and DuPont Steilacoom Road. There are also large trailer storage areas located adjacent to DuPont Steilacoom Road and International Place.

A moderate buffer is defined in DMC 25.10.020 as follows:

> "Buffer" means a strip of trees, shrubs, and ground cover of sufficient height, width, and density to screen, within three years of planting, an unsightly or nuisance-generating land use from a more sensitive land use, even in the winter months. The minimum visual screening is ...50 percent for moderate buffers....Berms, grade separation, walls, and fences may be incorporated to achieve up to 50 percent of the minimum screening."

Center Drive Moderate Buffers: The western portion of landscape buffer adjacent to the parking lot provides a combination of new trees, shrubs and groundcover plantings is of a type, size and density meeting the definition of moderate buffer. The buffer width varies from 5 to 12 feet and is located adjacent to the north of the Oak Woodland Protection Area, which provides additional screening.

As the parking lot buffer extends easterly, the plantings stop and do not meet the City requirements for a moderate buffer. Where the drive aisle extends southerly, plantings are not required on the west side of the drive aisle as there are no stalls at that location. The plantings begin again where the drive aisle turns easterly and meet the City requirements for a moderate buffer. The requirement for a moderate buffer along Center Drive is partially met, but needs to be provided in the center. (Condition 19)

DuPont Steilacoom Road Buffers: At the southeast corner, plans provide for a 10-foot wide landscape buffer with a combination of trees, shrubs and groundcover is provided. It is adjacent to a relatively sparsely vegetated area. Heading north on DuPont Steilacoom Road the landscaping transitions to a row of Western red cedar trees with a combination of evergreen and deciduous shrubs. A 6-foot chain link fence with slats is provided between the trailer parking area and trees. To the east of the new trees are the existing mature Douglas fir trees. The landscape plans

submitted with the application represent a planting scheme and density that meets City requirements for a moderate buffer along DuPont Steilacoom Road.

Subsequent to application for the subject proposal, the applicant has submitted a request to remove trees within the right of way of DuPont Steilacoom Road as well as some within private property. The applicant will be required to demonstrate to the City's satisfaction that the trees are dead/dying and/or pose a threat to safety prior to being authorized for removal. Additionally, all trees authorized to be removed will be required to be replacement to offset the removal and ensure that the moderate screening buffer is provided. (Condition 8)

International Place Buffer: The landscape buffer between International Place and the proposed trailer parking area provides a narrow row of supplemental shrubs where it is within or adjacent to the Oak Tree Preservation Area. The plans indicate a 6-foot tall chain link fence with slats is proposed between the plantings and the street to screen the trailer parking area. In addition, a 4-foot split rail fence is provided between the Oak Tree Protection Area and the trailer parking. North of this area the landscaping transitions to a 5-foot wide row of shrubs and groundcover and the slatted chain link fence. The requirement for a moderate buffer on International Place is met.

v. Trash receptacles screening:

Staff Analysis: The trash receptacle has been relocated from the May 2018 plans to a location west of the northern turnaround. It is screened by 30 to 36 inch shrubs on three sides and further screened from view by trees on the west side. The screening requirement is met.

vi. Irrigation: DMC 25.90.040 requires that the landscaping require minimal irrigation.

Staff Analysis: Irrigation plans were provided. The irrigation plans will be reviewed at the time of site development permit for compliance with DMC 25.90.040. (Condition 21)

c. DMC Chapter 25.95 – Off-Street Parking

i. Required Parking: DMC 25.95.030 stipulates the minimum and maximum parking spaces required for the proposed type of use. For warehouse uses, DMC 25.95.030 requires a minimum of 0.3 and a maximum of 1 parking space per worker at maximum shift.

Staff Analysis: The project is providing a total of 414 vehicle parking spaces, which would allow for 125 to 414 workers at maximum shift. In addition they are providing 124 trailer parking spaces. The City does not include trailer parking spaces in determining if a site meets the code requirements. The reason is because trailers are often driven by the same driver using a vehicle parking space.

The SEPA checklist provides an estimated employee count of 384 – 400 employees and the civil plans indicate a maximum of 1,253 employees.

The parking quantity requirement is met for a maximum employee count of 414. Compliance will be verified at the time of building permit. (Condition #35)

ii. Location of parking: DMC 25.95.040 requires that off-street parking be located within a 500-foot walking distance from an entrance to the building served, and that it not be located in required front yard or within 5 feet of any property line.

Staff Analysis: No parking is provided within 5 feet of a property line. Entries are provided along the west and east sides of the building and in close proximity to the standard vehicle parking areas. The parking distance requirement is met.

iii. Parking dimensions: DMC 25.05.050 provides dimensional requirements for parking lots and spaces.

Staff Analysis: Parking stall and aisle dimensions are provided and appear to meet the code requirements. Parking aisle and stall dimensions will be confirmed for compliance at the time of site development or building permit application. (Conditions 22)

iv. High-Occupancy Parking: DMC 25.95.060 requires that at least one of every 20 employee parking spaces be reserved for high-occupancy vehicles.

Staff Analysis: High-occupancy vehicle spaces are not noted on the civil site plan. Quantities and locations of high-occupancy vehicles will be reviewed for compliance with the site development permit. (Condition 25)

v. Loading Area Requirements: Loading spaces are to be located so as not to impede with the public streets and are to be designed per dimensional requirements of City code.

Staff Analysis: The project provides numerous dock loading spaces along the east and west elevations that will clearly not impede the public right of way. They provide 12-foot berth widths and 75-foot aprons with 130-foot offsets. The loading area dimensional and locational requirements appear to be in compliance with DMC 25.95.070; however they should be reviewed for code compliance at the time of site development permit. (Condition 22)

d. Chapter 25.115 Transportation Concurrency Review

Projects requiring Site Plan and design review are also required to undergo Transportation Concurrency Review. Per DMC 25.115.020 the city shall not issue a development permit until the test has been completed and a certificate of concurrency has been issued. Per DMC 25.115.040, the finding of concurrency may occur at the building permit application phase.

Staff Analysis: The project will be required to complete the Transportation Concurrency requirements at the time of building permit application. Indications are that the project will meet concurrency requirements. (Condition 52)

e. DMC Chapter 25.120 Tree Retention

i. DMC Chapter 25.120 requires that all landmark Oregon white oak trees be retained, along with any native understory within a protection zone 1.5 times the radius of the oak's canopy. In the Industrial district, landmark trees that are in the building footprint, parking lot, or storm retention area may be removed, provided that tree retention is achieved along street boundaries and when abutting a residential district.

Staff Analysis: The 2015 Site Plan was reviewed and approved subject to Condition #2, which reads:

> *"2. Full implementation of the Revised Tree Plan dated February 14, 2014."*

The Minor Amendment approved May 25, 2018 (PLNG2018-012) included several conditions of approval for protection of the oak trees and oak tree protection areas. Conditions # 4 and #10 state the following:

> *4. All existing trees within the tree retention areas depicted on the City-approved Tree Retention Plan dated March 26, 2015 shall be retained on an ongoing basis unless deemed unsafe or unhealthy by an arborist. Any unhealthy or unsafe trees that are removed are to be replaced.*

10. *Per DMC 25.120.030(7), the Oak Woodland Protection Areas are to be retained for life. The site plan shall include the following note: "this plan is also subject to an approved tree retention plan which requires that certain trees be preserved. That plan, which is binding on all owners, is on file with the City Planning Department."*

See the Staff Report (PLNG2018-012) for the Minor Site Plan Amendment for a full accounting of the history of the Tree Protection Area and Plans.

The November 13, 2018 Civil and Landscape Plans (Attachments H.4 and H.5) indicate a modification to the previously approved 2015 and May 2018 Tree Retention Plans as follows:

	2015 Approved Tree Retention Plan	**May 2018 Approved Tree Retention Plan**	**Current Proposed Tree Retention Plan**
West Oak Tree Protection Area	9,022 SF	9,022 SF	8,095 SF
South Oak Tree Protection Area	67,885 SF	70,585 SF	72,570 SF
Total Oak Tree Protection Area	76,907 SF	79,607 SF	80,665 SF
Oak Trees to be retained	119 Trees	119 trees	122 trees

No explanation was provided for the increase in number of trees to be retained. Revision of the Oak Tree Protection Area boundaries does not appear to impact the oak trees to be retained as all identified oak trees remain within the boundaries. Staff finds no impact is caused by the insignificant boundary changes.

The civil plans indicate a sewer line crossing the northwesterly tree protection area and a water line extending through the southerly tree retention area (Sheet C18 of Attachment H.4). An existing Oregon white oak tree (Tree #5) is proposed to be removed and replaced in the vicinity of the proposed water line extension.

The civil plans contain these notes:

> *"Location of proposed sanitary sewer within Woodland Protection Area to be reviewed and coordinated with City Arborist. Sewer to remain at least 6 feet north of Tree #8 referenced in Washington Forestry Consultants Inc. Report dated 8/9/2018."*
>
> *and*
>
> *"Oak Tree #5 referenced in Washington Forestry Consultants Inc. Report dated 8/9/2018 in very poor condition to be removed. Work for proposed water main within Woodland Protection Area to be reviewed and coordinated with City Arborist."*

Notes number 3 and 8 on the landscape plans Sheet L-1 (Attachment H.5) also reference a Tree Evaluation Report dated August 9, 2018 prepared by Washington Forestry Consultants and that replacement trees are to be provided with a 15 gallon tree gator irrigation bag and water as directed by a certified arborist. The

referenced Tree Evaluation Report was not provided with the application and no replacement trees are provided on the plans.

While the revised plans exceed the combined tree retention area and quantity of retained trees, the water and sewer line extension through the retention areas is not allowed per previous Conditions of approval that will be enforced. The health of Tree #5 should be assessed and confirmed by the City arborist prior to removal. If the City arborist confirms the tree should be removed, the tree shall be replaced. (Conditions 11 - 14)

ii. Per DMC 25.120.030(7), the Oak Woodland Protection Areas are to be retained for life with specific notations provided on the plans: "this plan is also subject to an approved tree retention plan which requires that certain trees be preserved. That plan, which is binding on all owners, is on file with the City Planning Department."

Staff Analysis: The 2015 project was approved with specific requirements for tree retention and the same requirements apply to the current amendment application. All Oregon white oak trees within the boundaries of the Oak Woodland Protection Per DMC 25.120.030(7) The Oak Woodland Protection Areas are protected with a 4-foot tall split rail fence, and signage. A conservation easement will be required to protect the areas in perpetuity. (Conditions 12 and 15)

2. ENGINEERING DEPARTMENT REVIEW

The City Engineer has reviewed the application and provided comments and conditions in the letter dated December 10, 2018, which has been incorporated in the summary of record *(Attachment H.21)* and made conditions of approval, where warranted. The City Traffic Engineering Consultant, Geralyn Reinart, P.E., provided a memorandum with comments on the review of the updated Trip Generation letter prepared by Heath & Associates dated November 14, 2018. That memorandum is incorporated in the summary of record. *(Attachment H.24)*

3. FIRE DEPARTMENT REVIEW

The City Fire Marshal has reviewed the application and provided a no-comments memorandum dated December 20, 2018, which has been incorporated in the summary of record. *(Attachment H.23).*

4. BUILDING DEPARTMENT REVIEW

The City Building Official has reviewed the application and provided no comments in an email dated November 26, 2018, which have been incorporated in the summary of record. *(Attachment H.22)*

D. CONCLUSIONS

In accordance with DMC 25.175.040, staff finds that, subject to the recommended conditions below, the proposal is consistent the DMC and existing ordinances concerning public utilities, traffic, facilities, and services, and provides access, landscaping, screening, building placement, parking lot layout, and protection of sensitive areas, subject to the recommended conditions of approval listed below. The proposal has also been reviewed and found compliant with Site Plan Review criteria in DMC 25.150.

E. RECOMMENDATION

Based on the findings and conclusions in this report, DuPont staff recommends approval of the Minor Site Plan Amendment for the Northwest Logistics Center 2 Project, PLNG 2018-063, subject to the following conditions. The Conditions of Approval listed in the March 13, 2015 Type II Site Plan Review Decision and the May 25, 2018 Site Plan Amendment have been reviewed and either restated,

modified or deleted as necessary herein for the current proposal. Some of these conditions may have been met since the May 2018 Amendment but are restated here for consistency.

1. All Mitigation Measures, numbered 1-13, included in the MDNS issued for the proposal on February 10, 2015 (attachment H.19 and H.20), are hereby adopted in full, incorporated by reference, and included as Conditions of Approval for the Site Plan approved by this Decision.
2. Prior to installation of any sign on the property, a sign permit will be required that meets the requirements of DMC 25.116.
3. Construction of the development proposal must commence within 24 months from the date of the City's final decision on the site plan, otherwise the site plan approval expires.
4. Per DMC 25.75, at the time an individual business meets or exceeds 100 employees, the County Commute Trip Reduction Department is to be notified within 30 days. The employer shall make a good faith effort, as defined in RCW 70.94.534(2) and DMC Chapter 25.75, to develop and implement a CTR program that will encourage their employees to reduce vehicle miles traveled per employee and single occupancy vehicle trips. The requirements of the CTR program are provided in DMC Chapter 25.75.
5. Trucks and vehicles are prohibited from parking on all public rights of way while waiting to access the property, unless temporary approval is granted by the City.
6. The applicant is responsible for coordinating with the Nisqually Tribe for the archaeological testing and monitoring that is required per the MOU dated August 7, 1989 and the SEPA MDNS dated February 10, 2015 (see SEPA Mitigation Measures #5-11).
7. All fences or walls that are greater than 6 feet in height shall be located outside of property setbacks provided in DMC 25.50.030((3) as they are defined as a structure per DMC 25.10.190.165.
8. Tree removal outside of what is provided on the Landscape Plans submitted with the application, shall only be authorized following demonstration to the City's satisfaction that the trees are dead/dying or pose a threat to public safety. Any trees authorized for removal will be required to be replaced to offset the removal and ensure that the City's screening requirements per DMC 25.90.030(3)(a) and Tree Retention Requirements per Chapter 25.120 are met, in addition to any Pierce County or Joint Base Lewis McChord requirements.

<u>Prior to issuance of Site Development Permits</u>

9. Civil and Landscape Plans were approved as part of the Construction permit dated October 26, 2018 in accordance with the previously approved site plan. The applicant shall submit the revised Civil and Landscape Plans to the City with clouded revisions, to include all revisions in both plan and profile views to the proposed storm drainage collection system and the proposed water mains. The City will review and approved these revisions as "Plan Changes" under the process covered in the pre-construction meeting held on October 31, 2018.
10. The civil and landscape plans shall be reconciled for amount of total landscaping. The final number shall not be less than the 241,601 (17.2 %) as currently provided on the landscape plans.
11. A copy of the referenced Washington Forestry Consultants Tree Evaluation Report dated August 9, 2018 shall be provided. The health of Tree #5 shall be assessed by the City arborist. If confirmed as unhealthy, the tree may be removed and replaced with a tree type as recommended by the City arborist.
12. Tree Protection measures are required per DMC 25.120.030(5), the WFC Tree Retention Plan dated October 23, 2013 and the Barghausen Tree Retention Plan (civil plans, Sheet C18). The Landscape Plans and Tree Retention Plan shall contain the following notes:

(a) Per DMC 25.120.030(7), the Oak Woodland Protection Areas are to be retained for life. The site plan shall include the following note: "this plan is also subject to an approved tree retention plan which requires that certain trees be preserved. That plan, which is binding on all owners, is on file with the City Planning Department."

(b) No clearing, grading, trenching, cutting, impervious surfacing, or other construction shall be allowed within the drip line of any tree to be retained, or within one and one-half times the radius of the canopy in the case of oak trees to be retained, nor shall grades be lowered or raised so near as to jeopardize said trees; unless there is no other alternative and the intrusion is the minimum possible as determined by the administrator. Temporary barriers shall be installed around trees requiring protection during construction.

(c) Trees required to be retained by this chapter shall not be removed unless the administrator determines in writing that they have become hazardous or diseased or threaten to damage public or private property. Whoever removes a street tree or required tree shall replace it with a tree approved by the City arborist.

(d) A temporary fence shall be located at the boundary of the Oak Preserve during construction to avoid disturbance.

(e) No cuts, fills or trenching shall occur in the Oak Woodland Protection Areas.

(f) The Oak Preserve shall not be irrigated unless an arborist experienced with oaks determines that, due to drought, the oak trees need deep watering around the drip line. Oak trees in areas surrounded by impervious surfaces may be more susceptible to drought.

(g) Landscaping in the oak preserve shall be limited to native shrubs, grasses or herbs. Native understory shrubs such as snowberry may be planted.

(h) Remove nonnative shrubs such as Scott's broom, from the oak preserve.

(i) Douglas fir trees shall be removed from the oak preserve as needed to ensure oak survival.

(j) Oak trees in the oak preserve shall not be cut, but may be pruned by an arborist experienced with oaks, during the dormant season, to remove dead, weakened, diseased, or dangerous branches.

(k) During construction field modifications may be made with the approval of City officials, City arborist, developer's arborist, and developer's landscape architect to preserve all oak trees within the tree protection areas with no disturbance within the tree drip line.

13. The notes added to the Civil Plans, Tree Retention Plan and Landscape Plan regarding water and sewer line extensions through the oak preserve areas shall be removed, per Condition #11(e).

14. The Civil and Landscape plans shall retain the clear labeling and demarcation of the northerly Oak Woodland Protection Area. The hatching used in the Oak Woodland Protection Areas in the Tree Retention Plan shall be added to the Legend (Sheet C18).

15. Per DMC 25.120.030(7) the Oak Woodland Protection Areas are to be protected with a 4-foot tall split rail fence, signage and recording of a conservation easement. If the documents aren't recorded prior to construction the Oak Woodland Protection Areas shall be protected during construction with a chain link fence.

16. The final tree planting locations will be confirmed dependent on the location of any existing easements.

17. The existing landscaping and drainage swales abutting and parallel to the parcel boundary lines shall be revitalized as part of the landscape plans. During previous grading activities, the clearing and grading work extended into the DuPont-Steilacoom Road right-of-way. All landscaping within the right-of-ways should be revitalized.

18. Provide parking lot tree counts on each sheet of the landscape plans demonstrating compliance with DMC 25.90.030(2).

19. Moderate buffer landscaping, as defined and required in DMC 25.10.020 and 25.90.030(3), shall be provided adjacent to the south central parking lot area facing Center Drive. See Finding C.1.b.v for details.

20. The Landscape Architect shall provide an explanation for the change in street tree types from Katsura to Heritage River Birch. The City requires tree types be similar to existing street tree types. If unacceptable, the tree type shall revert back to Katsura.

21. Irrigation plans reviewed and approved at the time of site development permit. The Applicant is required to demonstrate compliance with the substantive requirements identified in DMC 25.90, Landscaping.

22. Per DMC 25.50.030(5), the project's parking and loading areas shall comply with DMC 25.95. The Plans shall demonstrate compliance with all applicable requirements. Per DMC 25.95.040(6), in industrial areas, parking spaces shall not be located within 20-feet of the front property line. The parking setback distances shall be provided on the plans demonstrating it meets the requirements.

23. All outdoor mechanical equipment shall be screened from view from public rights of way in accordance with DMC 25.50.030(7).

24. Accessible parking spaces shall be provided for each building in conformance with International Building Code (IBC) Section 1106 and accessible routes of travel shall conform to IBC Sections 1104 and 1105. Conformance with the IBC accessible provisions will be reviewed at the final Site configuration.

25. High Occupancy Vehicle parking spaces shall be provided in accordance with DMC 25.95.060(2) and (3).

26. A parking lot lighting plan, including a photometric exhibit showing the lighting levels within the parking lot, will be required for the proposed project.

27. The project activities shall comply with the requirements of the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges associated with construction activity.

28. Turning movement drawings will be required to allow the City to determine the feasibility of the site layout. The site plan shall include supplemental exhibits to demonstrate that the City Fire Department's large apparatus can navigate the site (lane width, radius), including access to FDCs and hydrants. The Fire Department will confirm the adequacy of vehicle access points.

29. All easements identified in the Title Report shall be delineated and labeled on the Plans (i.e. width, type, and recording number).

30. As a condition of Land Use approval, the project off-site improvements shall include the installation of a traffic signal at the Center Drive/International Place intersection.

31. The submitted Pierce County Utilities Information Request for Connection to the Pierce County Sanitary Sewer System letter is acceptable for Land Use Application approval. Documentation of Pierce County Public Works and Utilities approval of the Sanitary Sewer Plans for this project will be required prior to issuance of a construction permit. Documentation demonstrating approval will be required prior to issuance of a construction permit.

32. Any land development abutting and impacting existing roads shall improve the frontage of those roads in accordance with the City of DuPont Standards. The applicable street for this project is International Place, which is classified as an Industrial Access Street. As part of the project requirements, improvements along International Place are required, including extension of the existing sidewalk, revitalization of the existing drainage swale, replacement of existing asphalt to

the road, and channelization pavement markings. A sheet demonstrating the International Place improvements should be added to the Plans.

33. Relocation and design changes to the trash enclosure shall be re-evaluated by the City for compliance with City code.

34. Clearances, in accordance with City Standards, will be reviewed for compliance during construction review. A minimum 3-foot clearance and level area is required around fire hydrants.

Prior to issuance of Building Permits

35. Each application for building permit will be required to identify the uses, details and employee forecast to ensure compliance with DMC 25.95.030 (number of parking spaces). No more than 414 employees shall be allowed at maximum shift without additional parking added. The addition of parking beyond which is approved herein, may require additional land use and/or SEPA environmental review and approval.

36. Elevations and building material details of the trash enclosure(s) shall be provided at the time of building permit to ensure compliance with DMC 25.100.050.

37. Each user will be assess at the time of building permit for compliance with the City performance standards in DMC 25.50.030(11-15) including noise, air emissions, lighting, and hazardous substances.

38. The proposed structure must be designed to meet the requirements of the building construction codes in effect at the time of building permit submittal. The following codes are currently enforced by the City of DuPont: the 2015 International Building Code, the 2015 International Residential Code, the 2015 International Fire Code, the 2015 International Mechanical Code, the 2015 International Fuel Gas Code, the 2015 Uniform Plumbing Code (each as amended and adopted by the State of Washington); the 2015 Washington State Energy Code.

39. The project will be required to receive all land use and civil construction approvals prior to issuance of building permit for the proposed structures.

40. All applicable Fire Impact and Storm System Development Charge fees assessed for the proposed development will be required to be paid prior to the issuance of building permit(s) associated with the proposed project.

41. Also prior to issuance of a building permit for the structure, the applicant shall provide a copy of Pierce County Sewer Service Permits for City record. This permit (and authorization to connect to sewer service) is/may be independent from any sewer system extension that may also apply to the project. All sewer connection and permitting requirements must be coordinated with the utility purveyor. (Please note that Pierce County Sewer Utility requires a pre-treatment review and approval be completed prior to their issuance of sewer extension or sewer service connection permit(s). Each subsequent tenant, for multi-tenant buildings, must also complete a separate pre-treatment review and provide copy of sewer service permitting, where applicable, prior to obtaining a building permit for associated improvements.

42. The project will be required to comply with the requirements for provision of as-built drawings contained in DMC Chapter 24.10, GIS. As-built drawings and submittals must be submitted and approved prior to issuance of a Certificate of Occupancy for the building, or portions thereof.

43. Fire Suppression, Underground Fire supply and Fire Alarm permits associated with the structure must be obtained through DuPont Fire Department prior to initiating any such work. All alarms systems will be required to obtain an alarm registration permit with the city, prior to full activation of the alarm system for operation; forms may be obtained at city hall.

44. Fire flow requirements and requirements for on–site hydrants and site access provisions will be determined by the DuPont Fire Chief or designee. Such requirements may be subject to additional review and requirements as future submittals come forward.

45. Addressing for the building within the project area has been assigned as 3230 International Place, DuPont, WA 98327.

46. A building permit is required when gates are installed on commercial developments. In order for the City to issue the building permit, the following requirements must be met:

    a. Gates shall have an Opticom activation system or an equivalent and compatible system that is approved by the Fire Chief.

    b. Gates shall have rapid-entry key capabilities compatible with the local fire department per IFC, Section 506.

    c. All electrically activated gates shall have default capabilities to the unlocked position.

    d. The minimum clear width of a gate shall be compatible with the required street width.

    e. Gates that might be obstructed by the accumulation of snow shall not be installed.

    f. A vehicular turn-around must be provide in front of the gate.

47. A maintenance agreement, in accordance with Section 3.1.2.4 of the DuPont Public Works Standards, should be provided for the 60-foot wide ingress, egress, and utilities easement for exclusive benefit of Lots 22 through 31. The underlying Northwest Landing Industrial Park Division 1 plat does not appear to specifically address the shared maintenance requirements. The agreement shall be submitted to the City for review and approval and recorded at the Developer's expense prior to issuance of the building permit. The agreement shall specify the shared driveway use and maintenance requirements affecting the subject lots.

48. Proposed site improvements within the easements on the project site shall comply with the conditions of said easements.

49. The Applicant shall furnish meter sizing calculations for domestic and fire water services. The sprinkler system design, including confirmation of the provided sizing for the fire line components shall be reviewed and approved by the City Building Department and Fire Department as part of the building permit process. Each fire line connection to a City water main will require a double detector check valve assembly (DDCVA) in an underground vault and a Fire Department Connection (FDC) within 50 feet of a fire hydrant. The double detector check valve assemblies (DDCVA) shall be located in underground vaults outside of the building to allow direct access by City staff.

50. A minimum of one fire hydrant per 1,250 gallons per minute of required fire flow shall be provided within 150 feet of the proposed building. The Applicant shall confirm the required fire flow with the City Fire Department and identify the existing and proposed fire hydrants to meet this requirement. The fire hydrant within 50 feet of the FDC for the building will not count towards the required hydrants for fire flow.

51. An application for Transportation Concurrency shall be applied for and a transportation concurrency certificate received.

52. If outdoor storage is provided, size and screening shall meet the requirements of DMC 25.50.030(8).

<u>Prior to issuance of Certificate of Occupancy</u>

53. Prior to Fire Department approval for occupancy, an underground fire line shall be installed. The system shall comply with NFPA 24 Standard for Installation of Private Fire Service Mains. Three (3) sets of plans, material specifications sheets for all equipment used in the system shall be

submitted by a State of Washington Licensed Contractor for review, approval, and permits issued prior to commencing work. The FDC shall be a minimum of 50 feet or 1&1/2 times the height of the structure away from the building. The FDC shall be within 50 feet of a hydrant and be 5 inch with a locking cap. (Fire Department approval for location) Separate Permit required. The above FDC Location requirement shall be waved for this project. The FDC location on sheet C5 of 9 is approved.

54. All new building shall have approved emergency responder radio coverage per section 510 of the 2015 International Fire Code.

55. Following construction and prior to final acceptance of this project, the Applicant will be required to execute an Agreement for Inspection and Maintenance of Privately Maintained Storm Drainage Facilities. The Agreement should be provided after construction of the storm drainage system to reflect "as-built" conditions. A copy of the form of the agreement is included in the City Public Works Standards.

56. The site is located within the boundary of LID No. 88-1. Prior to finalization of the proposed project, the Applicant will need to document payment of the costs associated with City LID No. 88-1.

57. This project is subject to the Geographic Information System (GIS) requirements as stated in the City of DuPont Municipal Code, Chapter 24.09, and Ordinance No. 97-559.

F. DECISION

Based on the Findings and Analysis summarized above, the City finds that the site plan amendment, as conditioned, is consistent with City development regulations DMC Title 25.75 through 25.95 and 25.105 through 25.125. The City has determined that the site plan amendment meets the standards and criteria necessary to obtain approval by the City. All conditions included in the Recommendation are incorporated herein with this Approval.

Jeffrey S. Wilson — 2/4/2019

Jeffrey S. Wilson, AICP
Director of Community Development, City of DuPont

Date

G. APPEALS

Consistent with DMC 25.175.010 and 25.175.060(4), this decision by the director may be appealed to the City hearing examiner. Only parties of record may file an administrative appeal. An appeal must be filed within 14 days after issuance of this decision. The instructions for filing an appeal are found in DMC 25.175.060(4).

H. LIST OF ATTACHMENTS

The following List of Attachments represents the Summary of Record on the application.

1. Land Use Application Form, dated Feb. 27, 2018, received Nov. 19, 2018
2. Pierce County Sewer Availability letter dated March 20, 2013

3. Architectural Plans including site plan and elevations prepared by Craft Architects dated Nov. 14, 2018
4. Civil Plans including site plan, grading and storm plan, sewer, water and tree retention plans prepare by Barghausen Consulting Engineers dated Nov. 13, 2018
5. Landscape & Irrigation Plans prepared by Craft Architects dated Nov. 16, 2018
6. Authorization to Act as Agent Affidavit dated November 12, 2018
7. Financially Responsible Party Letter dated November 15, 2018
8. Revised SEPA Checklist prepared by Dan Balmelli dated November 16, 2018
9. Special Warranty Deed recorded October 22, 2018
10. LeMay/Waste Connections approval of refuse enclosure with exhibit dated November 15, 2018
11. Vicinity Map dated Feb. 27, 2018
12. Stormwater Site Plan prepared by Barghausen Consulting Engineers dated November 16, 2018
13. Trip Generation letter from Heath & Associates dated November 14, 2018
14. Cover Letter from Barghausen Consulting Engineers dated November 19, 2018
15. Notice of Complete Application dated December 10, 2018 (PLNG2018-063)
16. Type II Site Plan Approval Staff Report dated March 12, 2015(ADM 13-01)
17. Type II Site Plan Decision dated March 13, 2015 (ADM 13-01)
18. Type I Site Plan Approval Report and Decision dated May 25, 2018 (PLNG2018-012)
19. SEPA Mitigated Determination of Nonsignificance dated February 10, 2015 (SEPA 13-01)
20. SEPA Adoption Notice dated January 8, 2018 (PLNG2018-063)
21. Gray and Osborne, Inc. comment letter dated December 10, 2018.
22. Building Department comment email dated November 26, 2018.
23. Fire Department comment memorandum dated December 20, 2018
24. Geralyn Reinart, P.E., City Traffic Engineering Consultant, comment memorandum dated November 30, 2018
25. Washington Forestry Consultants Revised Tree Plan dated October 23, 2013

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cc: PLNG2018-063
Applicant: Travis Hale, Panattoni Development Co. (thale@panattoni.com)
Dan Balmelli, Barghausen Consulting Engineers, Inc. (dbalmelli@barghauesen.com)

Attachments: Summary of Record

City of DuPont
State Environmental Policy Act
Mitigated Determination of Non-Significance

Northwest Logistics Center II
DuPont File No. SEPA 13-01

Description
Construct one warehouse totaling approximately 695,000 square feet, storm drainage, parking, and landscaping on a 32 acre site.

Applicant/Proponent
Dan Balmelli, Barghausen Consulting Engineers, Inc., 18215 72nd Avenue South, Kent, WA 98032, Agent for Nick Griot, Tacoma, WA.

Location
Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Numbers 300039-0010 through 0210 and 300039-0240 through 0270.

Lead Agency
City of DuPont.

Findings

1. The Applicant submitted:
   a. Land Use Application received March 20, 2013,
   b. Revised SEPA Checklist signed September 17, 2013,
   c. Phase I Environmental Site Assessment Report dated June 26, 2012,
   d. Geotechnical Engineering Report dated June 19, 2012,
   e. Soil Sampling Results dated July 3, 2012,
   f. Preliminary Stormwater Site Plan dated March 5, 2013,
   g. Geotechnical Report dated May 27, 1999,
   h. Geotechnical Report dated June 19, 2012
   i. Revised Oak Tree Plan dated February 14, 2014,
   j. Traffic Impact Analysis dated April 2013,
   k. Traffic Impact Analysis revisions dated July 16, 2013,
   l. DuPont Water Availability Form,
   m. Title Report dated December 22, 2014,
   n. LeMay, Inc. email regarding refuse service dated December 4, 2014, and
   o. Pierce County Public Works and Utilities letter regarding Sewer Service Information dated March 20, 2013.

2. The subject site is composed of 25 separate and abutting parcels at the northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Numbers 300039-0010 through 0210 and 300039-0240 through 0270. All parcels are designated Industrial by the DuPont Comprehensive Plan and zoned Industrial by the DuPont Zoning Map. Warehouses are permitted in the Industrial zone per DuPont Municipal Code (DMC) 25.50.020. The Applicant will eliminate all interior property lines and shared access/utility easements prior to issuance of a building permit.

3. The Checklist states the steepest slopes on the site are approximately 8 percent, onsite soils are Spanaway gravelly sandy loam, there are no indications of unstable soils in the

Attachment 3.b.SEPA MDNS dated Feb. 10, 2015 and SEPA Adoption dated January 8, 2019.

immediate vicinity, approximately 81,137 cubic yards (CY) of cut material and 65,262 CY of fill material will be used to prepare the site for construction of site, and approximately 82 percent of the site will be covered with impervious surfaces upon completion of the project.

The Applicant submitted a document titled, *Phase I Environmental Site Assessment Report*, dated June 26, 2012.

In response, environmentally sensitive areas, as defined by the DuPont Municipal Code, have not been identified on or within 100 feet of the subject site. A grading permit will be required and a haul route provided to DuPont. DuPont requirements and best available management practices will be implemented with the grading permit, including testing all imported soils for arsenic and lead prior to arrival on the subject site following the directions of Chapter 10 of the Tacoma Smelter Plume *Model Remedies Guidance*.

4. The Applicant submitted a report titled, *Geotechnical Engineering Report*, dated June 19, 2012. The report states 12 test pits were dug between 8.5 and 12.5 feet deep, soil was categorized and determined suitable for proposed grading and light industrial structures. No groundwater was observed.

5. The Applicant submitted a report titled, *Soil Sampling Results*, dated July 3, 2012. The report stated 38 test pits were dug 0.5 feet deep and 12 pits were dug 1.0 feet deep. Soil samples were collected and sent to a laboratory for analysis of lead and arsenic. The report concludes concentrations of arsenic exceeding the MTCA Method A soil cleanup level were detected in soil samples collected at depths of 0 to 1 foot deep at 20 sample locations. Lead was not detected at concentrations above the MTCA Method A soil cleanup level.

   Ecology reviewed the SEPA Checklist and proposed cleanup plan, which was submitted directly to Ecology, and issued a letter dated November 24, 2014.

   In summary, the letter concludes:
   a. No further remedial action will likely be necessary at the property to clean up contamination associated with the site.
   b. Further remedial action will likely still be necessary elsewhere at the site, but no further remediation will be necessary for the property.

6. Sheet C1, Special Note #3 contains the following note, consistent with DMC 25.45.030(16), "No more than 20,000 pounds of hazardous substances or hazardous wastes may be stored onsite, and no hazardous substances or wastes may be stored onsite except that which is delivered for onsite operations or produced onsite consistent with DMC 25.45.030(16). Diesel fuel for onsite emergency generators is exempt from the requirement."

7. The Checklist states air emissions will occur from construction equipment and vehicles during operation of the facility. The Applicant is responsible for complying with all applicable federal, state and local standards governing air quality during construction and operation of the facility.

8. The Checklist states there are no surface water bodies on or in the immediate vicinity of the site, no work will be required in or adjacent to any waters, no fill or dredge material

will be placed in or removed from any surface waters, no surface water withdrawals or diversions are required, and the proposal is not within a 100-year flood plain.

In response, the Puget Sound Outfall, a man-made surface water conveyance feature, is located 100 feet north of the north property line of the subject site. No withdrawals or diversions of surface water are proposed. National Flood Insurance Program Flood Insurance Rate Map Community Panel No. 530245 0001 B, effective September 15, 1983, shows the subject site is located in Zone C. Zone C is an area of minimal flooding.

DuPont incorporated the FIRM map data into Figure 1-4, FEMA 100 Years Flood Plain Map, of the DuPont Water Comprehensive Plan. This map shows the subject site lying outside the 100 year flood plain.

9. The Checklist states no groundwater will be withdrawn, and water will be discharged into the ground via the proposed storm drainage infiltration facilities.

   The Applicant submitted a document titled, *Preliminary Stormwater Site Plan*, dated March 5, 2013. The document states there are four separate drainage basins on the site, following construction of the project there will be four underground infiltration systems on the site, and water quality will be provided via onsite filters. The storm drainage system is designed and will be constructed to the requirements of the DuPont Street Standards/DuPont Public Works Standards and 2005 Ecology Stormwater Management Manual for Western Washington Volume III.

   DuPont reviewed the application and recommend the following mitigation measure:

   a. The Applicant shall submit a Final Stormwater Site Plan to DuPont for the project for review and approval prior to issuance of a DuPont grading or civil construction permit.

10. The Checklist states trees are located on the site, a majority of vegetation will be removed for construction of the project and DuPont tree retention and landscape requirements will be met.

11. In response, the site contains evergreen and deciduous trees and native shrubs and groundcover. Total proposed landscape area is approximately 17% of the site. DuPont Municipal Code 25.90.020(2)(d) requires a minimum of 10% of the site be landscaped.

12. Sheet C9 indicates the site contains 580 oak trees. 119 oak trees are proposed to be saved. Landmark class trees on a parcel zoned Industrial, which this site is zoned, that are located inside a building footprint, parking lot or storm retention area may be removed provided tree retention is achieved along street boundaries, which the site abuts on two sides per DMC 25.120.030(2). The requirement is met.

    A 7.99 acre portion of Oak Management Mapping Unit MO-17a is located on southwest corner of the site. DMC 25.120.040 requires 20 percent of the 7.99 acres, or 1.59 acres minimum, be retained. Sheet C9 indicates 22.9 percent (1.82 acres) of the onsite portion of Unit MO-17a will be retained. The requirement is met.

    The Applicant submitted a Revised Tree Plan dated February 14, 2014 to demonstrate compliance with DMC 25.120.040 regarding applicable Oak Management Mapping Unit requirements. The submitted Plan was reviewed by the City's oak tree consultant.

DuPont reviewed the revised Tree Plan dated February 14, 2014, and recommend the following mitigation measure:

a. The Revised Tree Plan dated February 14, 2014, shall be fully implemented with construction of the site and the City Oak Tree Consultant shall monitor implementation of said plan at the Applicant's expense.

13. The Checklist states songbirds are located on the site, endangered species are not known to exist on the site and the site is part of the Pacific Flyway for migratory birds, and landscaping and tree retention will help preserve wildlife in the area.

    In response, Washington Department of Fish and Wildlife data indicates the site contains no priority habitats or species. The site is located within the Pacific Flyway, a major migratory bird route.

14. The Checklist states electricity will be used for lighting, natural gas will be used for heating and the building will meet all current energy code requirements.

15. The Checklist states the project will not create environmental health hazards other than fire, medical and police are already available in the area, and no specific mitigation measures are proposed.

    DuPont reviewed the application and recommend the following mitigation measure:

    a. The Applicant shall pay the City of DuPont fire impact fee totaling $86,732.62 at time of building permit issuance as required by DMC 26.05 ($2,696.91 per acre impact fee X 32.16 acre site size).

16. The Checklist states noise will occur from construction and operation of the facility. The Applicant is responsible for complying with all applicable federal, state and local standards governing air quality during construction and operation of the facility.

17. The Checklist states the project will provide jobs for approximately 100 to 200 people. Any business with more than 100 employees shall contact Pierce Transit to determine if compliance with the Commute Trip Reduction Act is necessary, and if so, shall participate in the program as required by DMC 25.75. A note to consistent with this requirement is shown on Sheet C1, Special Note #4.

18. The Checklist states the building will be approximately 38 feet tall and constructed of concrete and glass. Maximum building height is limited to 65 feet per DMC 25.50.030(4).

19. Exterior building illumination and parking lot lighting are not shown on the submitted drawings. Full cut-offs are necessary for all lighting to reduce off site glare consistent with DMC 25.45.010.

    DuPont reviewed the application and recommend the following mitigation measure:

    a. Full cut-offs shall be provided for all exterior lighting to reduce off site glare consistent with DMC 25.45.010.

20. The Checklist states there are no known archaeological or culturally important sites on or next to the site. A Cultural Resource Assessment was not submitted for the site.

In response, it is well documented that DuPont contains a wide variety of historic and prehistoric cultural resources. It is possible that not all cultural resources have been found. Weyerhaeuser Real Estate entered into two Memorandums of Agreement (MOA). The first MOA, dated August 7, 1989, is between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont. The second MOA, dated October 20, 1988, is between WRECO and the Nisqually Tribe to provide for the establishment of a cemetery for reburial of Native American remains.

DuPont reviewed the application and recommend the following mitigation measures:

a. The Applicant shall fully implement the Memo of Agreement dated August 7, 1989, between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws.
b. The Applicant shall provide a professional archaeologist from the State Historic Preservation list to monitor onsite soil disturbance activities.
c. The Project Archaeologist shall notify and allow a Nisqually Indian Tribe representative to be present during soil disturbance activities.
d. The Project Archaeologist shall notify the Nisqually Indian Tribal representative if Native American cultural resources are discovered during any soil disturbance activities. Construction activities that may disturb or affect such resources are to stop until the Tribal representative has had the opportunity to examine the find.
e. If the Tribal representative cannot be reached through reasonable efforts or does not come to the construction site within a reasonable period of time after being notified, construction does not need to stop. However, archaeological work shall follow the 1989 Memo of Agreement, customary professional standards for archaeology, and applicable state and federal laws.
f. The City of DuPont requests Native American artifacts recovered during construction activities be donated to the Nisqually Indian Tribe. Hudson's Bay Company-era artifacts shall be donated to the Fort Nisqually Living History Museum, located in the City of Tacoma's Point Defiance Park. DuPont-era artifacts shall be donated to the DuPont Historical Museum.
g. The Project Archaeologist shall forward a closing report to the City of DuPont. The report shall discuss contact with the Nisqually Indian Tribe, implemented procedures and observed conditions and be submitted prior to the permanent Certificate of Occupancy.

21. The Checklist states: vehicular access will be provided by two driveways from abutting International Place, a public street; approximately 384 parking stalls will be provided, and approximately 1,000 to 2,000 vehicle trips per day will be generated by the project.

The Applicant submitted a document titled, *Northwest Logistics Center DuPont Building 2 Traffic Impact Analysis, prepared by Heath & Associates,* dated April 2013. The Traffic Impact Analysis (TIA) states project vehicle trip generation is based on a high cube warehouse land use with roughly 1,168 vehicle trips on a typical weekday, 76 trips during the AM peak, and 83 trips during the PM peak hour.

The TIA concludes pedestrian/bicyclist traffic along the area roadways is presently mild, with possible increases during warmer seasons. Sight distance at the project entrances should be adequate. Some increases in delay may be expected due to the addition of project traffic.

The TIA concludes the intersection of DuPont-Steilacoom Road & Center Drive may reach approach delays of LOS F during the AM peak hour without or with project traffic included under existing signal cycle lengths. Future AM delays with the project could be reduced to LOS D overall assuming cycle length optimization to account for the heavy pipeline volume increase.

The TIA concludes DuPont-Steilacoom Road & Barksdale Avenue may have some approach delays of LOS E during the AM peak hour due to difficult volume balancing.

The TIA concludes some delays at the Barksdale/I-5 interchange could be expected to reach LOS F levels by 2015 without project traffic included. Improvements at this interchange are planned by WSDOT as part of regional I-5 corridor improvements generally outlined in the I-5 Fort Lewis/McCord Transportation Analysis.

The TIA recommend proposed mitigation at this time including installation of a signal at the Center Drive & International Place intersection. Installation and costs should be coordinated among developers of new projects on International Place.

The TIA revisions letter dated July 16, 2013 from Heath and Associates, Inc., provided a revised signalized AM peak LOS analysis for the Center Drive/DuPont Steilacoom Road intersection. The revised LOS analysis indicates eastbound peak hour factors to 0.89 and optimizes timing, results in LOS D for overall delays.

The TIA revisions letter dated July 16, 2013, provided a revised AM peak LOS analysis for the Barksdale Avenue/DuPont Steilacoom Road intersection. The revised LOS indicates increased peak hour factors of 0.89 for the westbound and northbound approaches, a free westbound to northbound right turn movement, and optimized timing while trying to limit westbound queues. The results under these assumptions are LOS C overall.

The TIA revisions letter dated July 16, 2013, analyzed Manual of Uniform Traffic Control Devices Signal Warrants 1 & 2 for future 2015 conditions of the Center Drive/international Place intersection with the project but without JBLM pipeline traffic. Assumptions were made for the 4th and 8th hour based on their proportions to the PM peak hours as taken from the hourly tube count volumes on Center Drive provided by the City. Based on the tube count data of Center Drive, the 4th highest hour has approximately 77% of the peak hour volumes, while the 8th highest hour has approximately 50% of the peak hour volumes. These values were used to approximate 4th and 8th hour volumes for the Center Drive/International Place intersection, and applied to the analysis of Warrants 1 & 2. The volumes would be met for Condition A and minor street volumes met for Condition B. Warrant 2 (2 hour volume) would be met. In addition, Warrant 3 is met for the PM peak hour.

The TIA and revision analyzed the LOS at the Center Drive/International Place, DuPont-Steilacoom Road/Center Drive and DuPont Steilacoom Road/Barksdale Avenue intersections with and without the pipeline trips generated from the proposed JBLM

Wharf Road Gate. The proposed project, a 695,000 square foot High Cube Warehouse/Distribution Center, will generate 1,168 trips per day and 83 trips during the pm peak hour. The table below summarizes the LOS and the mitigation recommended in the TIA.

Intersection	LOS without JBLM trips	LOS with JBLM trips	Recommended Mitigation
Center Drive/International Place	F	F	Signal
DuPont Steilacoom Road/Center Drive	D	F	None
DuPont Steilacoom Road/Barksdale Ave.	D	F	None

The Traffic Impact Analysis Guidelines in City's Public Works Standards state

"The City of DuPont considers level of service "D" to be acceptable. Appropriate mitigation should be proposed to maintain this level of service upon completion of the development. Exceptions to level of service "D" will be considered by the City at locations where the potential mitigation (such as a traffic signal) is not reasonable or desirable."

Based on the City of DuPont Standards, mitigation should be proposed at all three intersections noted in the above table; however, the City issued a variance on November 5, 2013, to not require the applicant to provide mitigation at the DuPont-Steilacoom/Center Drive and DuPont Steilacoom/Barksdale Ave. intersections to achieve an LOS of D since it is not reasonable for a project of this size due to the following:

- The project's traffic mitigation includes installation of a traffic signal at the Center Drive/International Place intersection. The estimated cost of this signal is $350,000.

- The improvements needed at the DuPont Steilacoom/Center Drive intersection to achieve a LOS of D would require the installation of a second northbound left turn lane on DuPont Steilacoom Road. The left turn lane would require a new mast arm pole to be installed to accommodate the additional lane and additional widening on the north leg of the intersection. These improvements, estimated at $700,000, would also require concurrence with JBLM and therefore not a reasonable mitigation measure for the magnitude of the project.

- Potential improvements at the Barksdale Avenue/DuPont-Steilacoom Road intersection are limited at this time due to right of way constraints, current interchange configuration for Exit 119, and the existing rail line. This intersection is adjacent to Exit 119 and is included in the I-5 JBLM Corridor Interchange Justification Report (IJR) Study that is currently underway by WSDOT, which is intended to identify long-term improvements to this corridor.

DuPont reviewed the above-referenced documents, issued an administrative variance to the DuPont Street Standards regarding traffic mitigation dated November 5, 2013, concur the analyses are acceptable and recommend the following mitigation measure:

a. The Applicant shall, at their sole expense, install a traffic signal at the Center Drive/International Place intersection consistent with the City of DuPont Standards to mitigate traffic impacts from the subject development. Said signal shall be fully operational to the satisfaction of the City of DuPont prior to issuance of the building Temporary Certificate of Occupancy. The Applicant may coordinate with the Steilacoom Historical School District regarding cost sharing of the signal.

22. Sheet C2 indicates the developed site will contain 385 onsite parking stalls are proposed for the approximately 384 to 400 employees indicated in the SEPA Checklist. DMC 25.95.030 requires a minimum stall count of 120 stalls based on a ratio of 0.3 stalls per 400 workers at maximum shift, and a maximum stall count of 400 stalls based on a ratio of 1.0 stall per 400 workers at maximum shift. The requirement is met.

23. The submitted DuPont Water Availability Form indicates the development will use 1,392 gallons of water per day. DuPont reviewed and completed the Water Availability Form as Water Purveyor on April 30, 2013, noting the site is within the approved City of DuPont Water Service Area and DuPont has adequate water source and storage capacity to provide 1,392 gallons of water to the development.

24. Refuse service is provided by Lemay, Inc. The Applicant provided an email from LeMay, Inc., dated December 4, 2014, stating the location of the proposed refuse enclosure is acceptable.

25. The Applicant submitted a letter from Pierce County Public Works and Utilities, the sewer provider. Pierce County reviewed the request for connection, noting the site is within the approved Pierce County Sewer Service Area, within the Comprehensive Urban Growth Area, within 300 feet of an existing accessible sanitary sewer which has sufficient capacity to accommodate the development and the development shall be required to connect to the sanitary sewer.

DuPont reviewed the application and recommend the following mitigation measure:

a. The Applicant shall forward a copy of the Pierce County Sewer permit to the City of DuPont prior to issuance of the DuPont civil construction permit.

Conclusions

The lead agency has determined that the proposal does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request. The file may be examined during regular City business hours at DuPont City Hall, 1700 Civic Drive, DuPont WA, 98327. The full decision is posted on the City of DuPont website under Planning Division/Development Projects/Decisions.

Mitigation Measures

As required by the City of DuPont, the following mitigation measures must be implemented concurrent with the project in order to mitigate potential adverse impacts resulting from the project:

1. The Applicant shall submit a Final Stormwater Site Plan to DuPont for the project for review and approval prior to issuance of a DuPont grading or civil construction permit.

2. The Revised Tree Plan dated February 14, 2014, shall be fully implemented with construction of the site and the City Oak Tree Consultant shall monitor implementation of said plan at the Applicant's expense.

3. The Applicant shall pay the City of DuPont fire impact fee totaling $86,732.62 at time of building permit issuance as required by DMC 26.05 ($2,696.91 per acre impact fee X 32.16 acre site size).

4. Full cut-offs shall be provided for all exterior lighting to reduce off site glare consistent with DMC 25.45.010.

5. The Applicant shall fully implement the Memo of Agreement dated August 7, 1989, between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws.

6. The Applicant shall provide a professional archaeologist from the State Historic Preservation list to monitor onsite soil disturbance activities.

7. The Project Archaeologist shall notify and allow a Nisqually Indian Tribe representative to be present during soil disturbance activities.

8. The Project Archaeologist shall notify the Nisqually Indian Tribal representative if Native American cultural resources are discovered during any soil disturbance activities. Construction activities that may disturb or affect such resources are to stop until the Tribal representative has had the opportunity to examine the find.

9. If the Tribal representative cannot be reached through reasonable efforts or does not come to the construction site within a reasonable period of time after being notified, construction does not need to stop. However, archaeological work shall follow the 1989 Memo of Agreement, customary professional standards for archaeology, and applicable state and federal laws.

10. The City of DuPont requests Native American artifacts recovered during construction activities be donated to the Nisqually Indian Tribe. Hudson's Bay Company-era artifacts shall be donated to the Fort Nisqually Living History Museum, located in the City of Tacoma's Point Defiance Park. DuPont-era artifacts shall be donated to the DuPont Historical Museum.

11. The Project Archaeologist shall forward a closing report to the City of DuPont. The report shall discuss contact with the Nisqually Indian Tribe, implemented procedures and observed conditions and be submitted prior to the permanent Certificate of Occupancy.

12. The Applicant shall, at their sole expense, install a traffic signal at the Center Drive/International Place intersection consistent with the City of DuPont Standards to mitigate traffic impacts from the subject development. Said signal shall be fully operational to the satisfaction of the City of DuPont prior to issuance of the building Temporary

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CITY OF DUPONT

Department of Community Development
1700 Civic Drive, DuPont, WA 98327
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www.dupontwa.gov

ADOPTION OF EXISTING ENVIRONMENTAL DOCUMENT (WAC 197-11-630)

Northwest Logistics Center II

City File No: PLNG2018-063

Adoption of SEPA Mitigated Determination of Non-Significance and Addendum

Description of current proposal: A proposed modification to a previously approved site plan to modify building space and parking. The change requires approval of a Type I Minor Site Plan Amendment. Only the changed aspects of the proposal are up for review. Construct one warehouse totaling approximately 628,640 square feet on a 32 acre site with associated grading activities, asphalt parking, drive aisles and truck loading and maneuvering areas, landscaping, stormwater infiltration facilities, water and sanitary sewer extensions, franchise utility improvements and half-street frontage improvements to include sidewalk extension along International Place. Approximately 414 parking spaces plus 124 truck trailer spaces are proposed.

Description of February 10, 2015 Proposal (SEPA 13-01): Construct one warehouse totaling approximately 695,000 square feet, storm drainage, 384 parking spaces and landscaping on a 32 acre site.

Proponent: Panattoni Development Company, Inc.
900 SW 16th Street, Suite 330
Renton, WA 98057

Location of proposal: Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Number 300039-0011. The project is located within a portion of the Southwest quarter of Section 24, Township 19 North, Range 1 East and the Northwest quarter of Section 25, Township 19 North, Range 1 East.

Title of Document Being Adopted: SEPA Mitigated Determination of Non-Significance

Agency that prepared document being adopted: City of DuPont

Date adopted documents were prepared: February 10, 2015 (issue date)

Description of document (or portion) being adopted: A SEPA Mitigated Determination of Nonsignificance (MDNS) was issued for the proposal described above on Feb. 10, 2015. The MDNS included 13 Mitigation Measures. No comments were received. On May 8, 2018 (post adoption) the City received a comment letter from the Nisqually Indian Tribe indicating that they have no further information or concerns at this time and would like to be informed of the Archaeological study starting date and of any Inadvertent Discoveries of Archaeological Resources/Human Burials. SEPA Mitigation Measures #5-11 address the required study and notification procedures for the archaeological testing and monitoring.

The adopted documents have not been challenged (WAC 197-11-630). The documents are available for review at City Hall (see address and contact information below).

The City SEPA Official has identified and adopted this document as being appropriate for this proposal after independent review. The document meets our environmental review needs for the current proposal and will accompany the proposal to the decision maker (Community Development Director). The adoption of previously issued SEPA determinations is not appealable.

Agency adopting document: City of DuPont

SEPA Responsible Official: Jeffrey S. Wilson, AICP
Director of Community Development and City SEPA Official
City of DuPont
1700 Civic Drive
DuPont, WA 98327
(253) 912-5393
jwilson@dupontwa.gov

For questions on the adoption, contact Jeff Wilson, AICP, Director of Community Development for the City of DuPont, at (253) 912-5393 or jwilson@dupontwa.gov.

SEPA Responsible Official Signature: Jeffrey S. Wilson 1/8/2019
Jeffrey S. Wilson, AICP Date
Community Development Director, City of DuPont

Date of Adoption: January 8, 2019

SEPA Distribution List

NW Logistics PLNG2018-063

XX Indicates notice mailed to the following: 1/8/19

Dist.	Agency/Contact	Dist.	Agency/Contact
XX	WA State Dept. of Archaeology & Historic Preservation SEPA@dahp.wa.gov		WA State Dept. of Labor and Industries PO Box 44000 Olympia, WA 98504
	WA State Dept. of Commerce Anne Fritzel, AICP Anne.fritzel@commerce.wa.gov		WA State Dept. of Natural Resources SEPA Center SEPACENTER@dnr.wa.gov
XX	WA State Dept. of Ecology SEPA Unit Separegister@ecy.wa.gov		WA State Dept. of Natural Resources South Puget Sound Region Southpuget.region@dnr.wa.gov
XX	WA State Dept. of Ecology Environmental Review Section SEPAunit@ecy.wa.gov	XX	WA State Dept. of Social and Health Services Lands & Bldg Div Elizabeth McNagny PO Box 45848 Olympia, WA 98504-5848
	WA State Dept. of Ecology SW Regional Office Shorelands & Environmental Assistance Donna Joblonski dmca461@ECY.WA.GOV		WA State Dept. of Social and Health Services Robert J. Hubenthal hubenbj@dshs.wa.gov
XX	WA State Dept. of Ecology SW Regional Office Toxic Clean-up Program Marian Abbett Marian.abbett@ecy.wa.gov		WA State Dept. of Transportation OR-SEPA-REVIEW@wsdot.wa.gov
XX	WA. State Dept. of Ecology SW Regional Office Toxic Clean-up Program Eva Barber Evba461@ECY.WA.GOV		WA State Parks and Recreation Commission PO Box 42650 Olympia, WA 98504
	WA State Dept. of Ecology SW Regional Office Shorelands & Environmental Assistance Zachary Meyer ZMEY461@ECY.WA.GOV		Puget Sound Partnership Heather Saunders Benson Environmental Planner Heather.benson@psp.wa.gov
	WA State Dept. of Health SEPA.reviewteam@doh.wa.gov	XX	Puget Sound Clean Air Agency 1904 3rd Ave #105 Seattle, WA 98101 SEPA@pscleanair.org
	WA State Dept. of Fish & Wildlife(WDFW) SEPA Coordinator SEPAdesk@dfw.wa.gov		BNSF Railway General Manager 2454 Occidental Ave. South, Ste 1A Seattle, WA 98134-1451
	WA State Dept. of Fish & Wildlife (WDFW) Michele Culver Regional Director Teammontesano@dfw.wa.gov		FEMA John Graves John.graves1@dhs.gov

			XX	DuPont City Clerk Karri Muir Kmuir@dupontwa.gov
XX	JBLM Public Works Charles Markham Deputy for Programs and Operations Charles.s.markham2.civ@mail.mil		XX	Nisqually Indian Tribe Joe Cushman Cushman.joe@nisqually-nsn.gov
XX	JBLM Steven Perrenot Director Public Works Steven.t.perrenot.civ@mail.mil		XX	Yakama Nation Elizabeth Sanchey Elizabeth_sanchey@yakama.com
XX	US Army Corps of Engineers (Regulatory Branch) Suzanne Anderson Suzanne.l.anderson@usace.army.mil		XX	Lakewood Community & Economic Development Frank Fiori Planning Manager ffiori@cityoflakewood.us
	USDA-Natural Resources Conservation Service 941 Powell Ave SW. Ste 102 Renton, WA 98057		XX	Steilacoom Community Development Doug Fortner Town Planner Doug.fortner@ci.steilacoom.wa.us
	DuPont Post Office Attn: Post Master 1313 Thompson Circle DuPont, WA 98327			Clover Park School District 10903 Gravelly Lake Dr. SW Lakewood, WA 98499
	National Marine Fisheries Service Northwest Regional Office 7600 Sand Point Way NE Seattle, WA 98115-0070			Steilacoom Historical School District Celeste Johnston cjohnston@steilacoom.k12.wa.us
	Nisqually Nat'l Wildlife Refuge Glynnis Nakai Glynnis Nakai@fws.gov		XX	LeMay Cust2180@wcnx.org
XX	Environmental Official-Pierce County Kathleen Larrabee Klarrab@co.pierce.wa.us		XX	PSE Jeff Payne Jeff.payne@pse.com
XX	Land Use Review Capital Development-Pierce Transit PO Box 99070 Lakewood, WA 98499-0070		XX	AHBL Lisa Klein Lklein@AHBL.com
XX	Pierce Co. Assessor/Treasurer-Commercial Dept. Darci Brandvold dbrandv@co.pierce.wa.us		XX	Gray & Osborne Dominic Miller, PE dmiller@g-o.com
XX	Pierce Co. Environmental Services Bldg Public Works Kip Julin 9850 64th St. West University Place, WA 98467		XX	Geri Reinart, P.E. greinart@msn.com
XX	Pierce Co. PALS Adonais Clark aclark@co.pierce.wa.us		XX	CalPortland Pete Stoltz Pstoltz@calportland.com

XX	Pierce Co. Public Works Debbie Germer dgermer@co.pierce.wa.us		**XX**	NWL Association Emily Griffith nwlassistdirector@reachone.com
XX	Tacoma Pierce Co. Health Dept. Sara Bird SEPA@tpchd.org		**XX**	NWL Associates Larry Ackerman nwldirector@reachone.com
XX	Nisqually Indian Tribe Annette Bullchild, THPO Bullchild.annette@nisqually-nsn.gov		**XX**	Nisqually Indian Tribe Jackie Wall, THPO Wall.jackie@nisqually-nsn.gov
	Carol Estep President, DuPont Historical Society estepcarol@gmail.com			
	Name Title Address Address Email			Name Title Address Address Email

Permit Applicant Information

XX	Dan Balmelli Barghausen Consulting Engineers, Inc. dbalmelli@barghausen.com		**XX**	Travis Hale Panatonni Development Co thale@panatonni.com

COVER SHEET
NORTHWEST LOGISTICS CENTER 2

PORTIONS OF THE SE 1/4 OF THE SW 1/4 SECTION 24, TOWNSHIP 19 NORTH, RANGE 1 EAST,
AND THE NE 1/4 OF THE NW 1/4 SECTION 25, TOWNSHIP 19 NORTH, RANGE 1 EAST, W.M.
CITY OF DUPONT, PIERCE COUNTY, STATE OF WASHINGTON

SPECIAL NOTES:

1. NO MORE THAN 20,000 POUNDS OF HAZARDOUS SUBSTANCES OR HAZARDOUS WASTES MAY BE STORED ONSITE, AND NO HAZARDOUS SUBSTANCES OR WASTES MAY BE STORED ONSITE EXCEPT THAT WHICH IS DELIVERED FOR ONSITE OPERATIONS OR PRODUCED ONSITE CONSISTENT WITH DMC 25.45.030 (16). DIESEL FUEL FOR ONSITE EMERGENCY GENERATORS IS EXEMPT FROM THE REQUIREMENT.
2. ANY BUSINESS WITH MORE THAN 100 EMPLOYEES SHALL CONTACT PIERCE TRANSIT TO DETERMINE IF COMPLIANCE WITH THE COMMUTE TRIP REDUCTION ACT IS NECESSARY, AND IF SO, PARTICIPATE IN THE PROGRAM AS REQUIRED PER DMC 25.75.
3. A SEPARATE PERMIT SHALL BE REQUIRED FOR UNDERGROUND FIRE LINE INSTALLATION. THE SYSTEM SHALL COMPLY WITH NFPA 24 STANDARD FOR INSTALLATION OF PRIVATE FIRE SERVE MAINS. THREE (3) SETS OF PLANS, MATERIAL SPECIFICATIONS SHEETS FOR ALL EQUIPMENT USED IN THE SYSTEM SHALL BE SUBMITTED BY A STATE OF WASHINGTON LICENSED CONTRACTOR FOR REVIEW, APPROVAL, AND PERMITS ISSUED PRIOR TO COMMENCING WORK.
4. A SEPARATE PERMIT SHALL BE REQUIRED FOR INSTALLATION OF AN AUTOMATIC FIRE ALARM SYSTEM. THE SYSTEM SHALL COMPLY WITH NFPA 72 STANDARD FOR FIRE ALARM SYSTEMS. THREE (3) SETS OF PLANS, MATERIAL SPECIFICATIONS SHEET FOR ALL EQUIPMENT USED IN THE SYSTEM SHALL BE SUBMITTED BY A STATE OF WASHINGTON LICENSED CONTRACTOR FOR REVIEW, APPROVAL AND PERMITS ISSUED PRIOR TO COMMENCING WORK.
5. PRIOR TO FIRE DEPARTMENT APPROVAL FOR OCCUPANCY, PORTABLE FIRE EXTINGUISHERS ARE REQUIRED TO BE INSTALLED AS DIRECTED BY CITY OF DUPONT FIRE DEPARTMENT. PRIOR TO INSTALLATION, APPLICANT IS TO REQUEST A FIRE INSPECTION TO CONFIRM THE LOCATIONS.
6. PRIOR TO FIRE DEPARTMENT APPROVAL FOR OCCUPANCY, A KNOX BOX SYSTEM SHALL BE REQUIRED. KNOX APPLICATIONS MAY BE PICKED UP AT THE LAKEWOOD FIRE DEPARTMENT HEADQUARTERS STATION LOCATED AT 10928 PACIFIC HWY SW.
7. PRIOR TO FIRE DEPARTMENT APPROVAL FOR OCCUPANCY, AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED. THE SYSTEM SHALL COMPLY WITH NFPA 13 STANDARD FOR AUTOMATIC FIRE SPRINKLER SYSTEMS. THREE (3) SETS OF PLANS, HYDRAULIC CALCULATIONS, AND MATERIAL SPECIFICATIONS SHEETS FOR ALL EQUIPMENT USED IN THE SYSTEM SHALL BE SUBMITTED BY A STATE OF WASHINGTON LICENSED CONTRACTOR FOR REVIEW, APPROVAL, AND PERMITS ISSUED PRIOR TO COMMENCING WORK. SEPARATE PERMIT REQUIRED.
8. PRIOR TO FIRE DEPARTMENT APPROVAL FOR OCCUPANCY, A CLASS 1 STANDPIPE SYSTEM SHALL BE INSTALLED. THE SYSTEM SHALL COMPLY WITH NFPA 14 INSTALLATION OF STANDPIPE AND HOSE SYSTEMS. THREE (3) SETS OF PLANS, HYDRAULIC CALCULATIONS, AND MATERIALS SPECIFICATIONS SHEETS FOR ALL EQUIPMENT USED IN THE SYSTEM SHALL BE SUBMITTED BY A WASHINGTON LICENSED CONTRACTOR FOR REVIEW, APPROVAL, AND PERMITS ISSUED PRIOR TO COMMENCING WORK. SEPARATE PERMIT REQUIRED.
9. PRIOR TO FIRE DEPARTMENT APPROVAL FOR OCCUPANCY, MEANS OF EGRESS SHALL BE ILLUMINATED, THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE GENERATOR.
10. PRIOR TO FIRE DEPARTMENT APPROVAL FOR OCCUPANCY, FIRE APPARATUS ACCESS ROADS SHALL HAVE APPROVED STRIPING OR SIGNS. (PRIOR TO INSTALLATION, APPLICANT SHALL REQUEST A FIRE INSPECTION TO CONFIRM THE LOCATIONS.)
11. OFF-SITE IMPROVEMENTS ARE INCLUDED IN SEPARATE CIVIL PERMIT. THIS INCLUDES SIGNALIZATION DESIGN, CHANNELIZATION DESIGN, AND STREET IMPROVEMENT WORK FOR THE RIGHT-OF-WAY.

CONSTRUCTION SEQUENCE:

1. INSTALL FILTER FABRIC AND N.G.P.E. FENCE WHERE INDICATED.
2. IDENTIFY LIMITS OF CLEARING.
3. INSTALL ROCK-LINED CONSTRUCTION ENTRANCE.
4. CLEAR TO LIMITS SHOWN ON DRAWINGS.
5. ROUGH GRADE ROADWAY AS DESIGNED AND INSTALL INTERCEPTOR DITCHES.
6. INSTALL SEDIMENT TRAPS AND PONDS.
7. INSTALL SANITARY SEWER SYSTEM.
8. INSTALL DOMESTIC WATER SYSTEM.
9. INSTALL STORM DRAINAGE SYSTEM.

ESTIMATED EARTHWORK QUANTITIES

ESTIMATED AMOUNT UNDER ORIGINAL SEPA DETERMINATION
CUT = 81,000 CY
FILL = 65,200 CY

ESTIMATED AMOUNT COMPLETED TO DATE
CUT = 60,000 CY (74.0% OF TOTAL CUT EARTHWORK)
FILL = 46,000 CY (70.1% OF TOTAL FILL EARTHWORK)

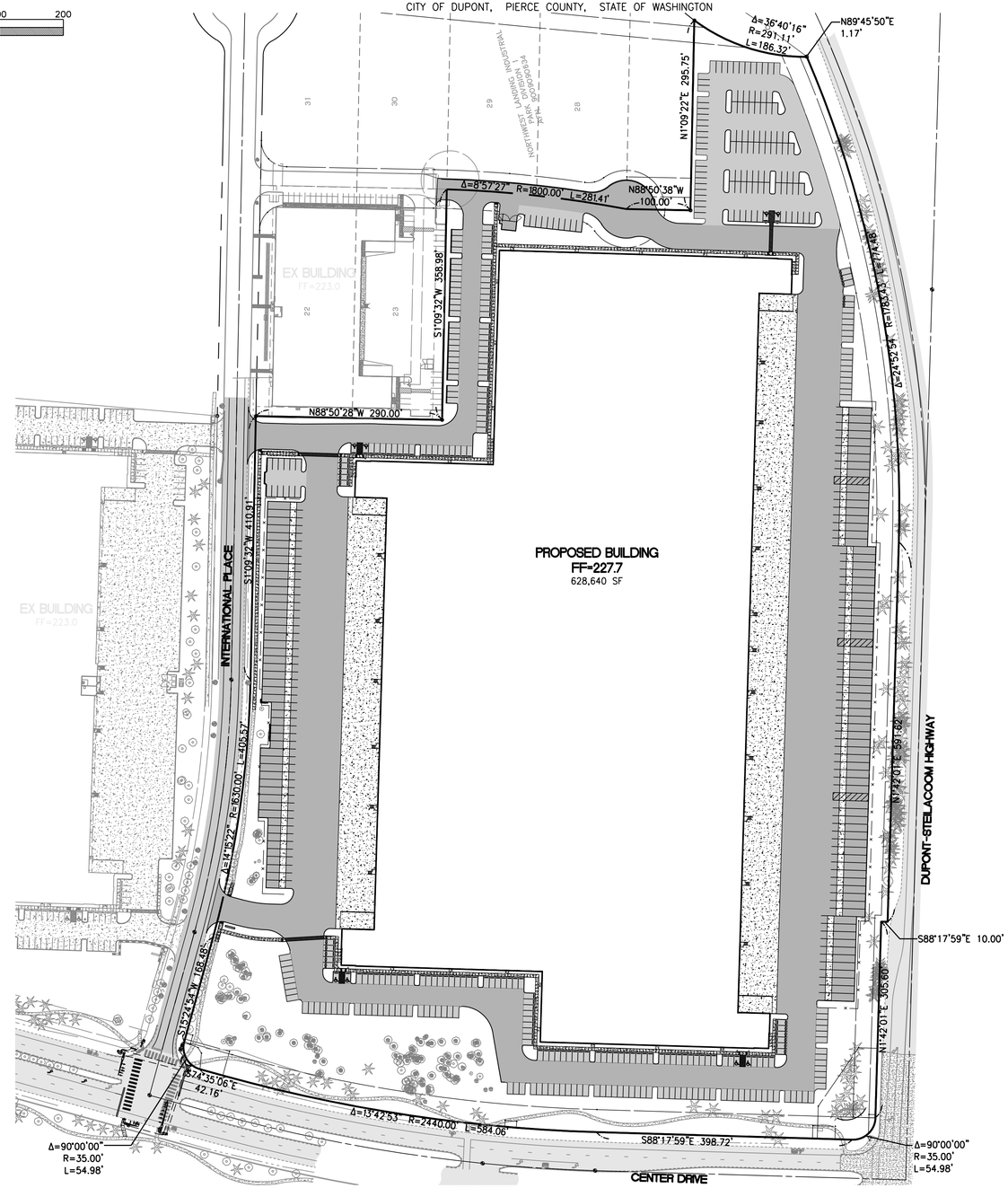
ESTIMATED AMOUNT TO BE COMPLETED UNDER THIS PERMIT
CUT = 18,000 CY (22.2% OF TOTAL CUT EARTHWORK)
FILL = 17,000 CY (26.1% OF TOTAL FILL EARTHWORK)

ESTIMATED AMOUNT AT COMPLETION OF CONSTRUCTION
CUT = 18,000 CY + 60,000 CY = 68,000 CY TOTAL CUT < 81,000 CY
FILL = 17,000 CY + 46,000 CY = 63,000 CY TOTAL FILL < 65,200 CY

LEGEND

SURVEY MONUMENT	PROPOSED TYPE II CATCH BASIN
EX. POWER VAULT	PROPOSED TYPE I CATCH BASIN
EX. LUMINAIRE (LUM.)	PROPOSED STORM DRAIN FLOW ARROW
EX. LOT LIGHT	PROPOSED STORM DRAINAGE LINE
EX. POWER POLE	PROPOSED TRENCH DRAIN
EX. JUNCTION BOX	PROPOSED SANITARY SEWER LINE
EX. CATCH BASIN (CB)	PROPOSED SANITARY SEWER CLEANOUT
EX. CATCH BASIN (CB) TYPE 2	PROPOSED WATERMAIN — W
EX. SANITARY SEWER MANHOLE (SSMH)	PROPOSED FIRE HYDRANT
EX. GAS METER	PROPOSED WATER VALVE
EX. GAS VALVE	PROPOSED CONCRETE BLOCKING
EX. WATER VALVE (WV)	PROPOSED 90° BEND
EX. FIRE HYDRANT (FH)	PROPOSED SPOT ELEVATIONS — 23.20
EX. WATER METER	EXISTING SPOT ELEVATIONS — +100.10
EX. SIGN	PROPOSED CONTOURS — 40
EX. WATER LINE	
EX. SANITARY SEWER LINE — SS	PROPOSED LIGHT PAVEMENT
EX. STORM DRAINAGE LINE — SD	
EX. POWER UNDERGROUND — P(UG)	EXISTING ASPHALT PAVEMENT
EX. POWER OVERHEAD — P(OH)	
EX. CONTOURS — 470	PROPOSED CONCRETE

1"=100'
0 50 100 200



Know what's **below.**
Call before you dig.

OWNER
PANATTONI DEVELOPMENT COMPANY, INC.
900 SW 16TH STREET, SUITE 330
RENTON, WA 98057
CONTACT: BRIAN MATTSON

ENGINEER/SURVEYOR
BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE S.
KENT, WA 98032
PHONE: (425) 251-6222
CONTACT: DAN BALMELLI

ARCHITECT
NELSON ARCHITECTS
2505 3RD AVENUE, SUITE 324
SEATTLE, WA 98121
PHONE: (425) 720-7001
CONTACT: KATHY CRAFT

UTILITIES:

WATER:
CITY OF DUPONT (CITY HALL)
1700 CENTER DRIVE
DUPONT, WA 98327
PHONE: (253) 964-8121

SEWER:
PIERCE COUNTY SEWER
9850 64TH STREET WEST
UNIVERSITY PLACE, WA 98467
PHONE: (253) 798-4020

GAS AND ELECTRICITY:
PUGET SOUND ENERGY
3130 SOUTH 38TH STREET
TACOMA, WA 98409
PHONE: (888) 225-5773

GARBAGE SERVICE:
LEMAY ENTERPRISES
13502 PACIFIC AVENUE
TACOMA, WA 98444
PHONE: (253) 537-8687

TELEPHONE:
QUEST COMMUNICATIONS
PHONE: (800) 244-1111

TELEVISION/CABLE:
AT&T BROADBAND
PHONE: (877) 824-2288

UTILITY CONFLICT NOTE:

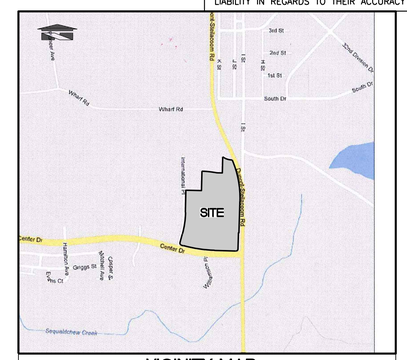
CAUTION:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

APPROVED FOR CONSTRUCTION

BY: _____
CITY OF DUPONT

DATE: _____

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DOCUMENTS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.



VICINITY MAP

LEGAL DESCRIPTION
UPDATED PER CITY OF DUPONT LLE 15-01, PIERCE COUNTY RECORDING NO. 201503130126 (PER CHICAGO TITLE COMPANY'S SECOND ALTA COMMITMENT (THEIR ORDER NO. 4366563A), DATED JUNE 8, 2012 AT 8:00 A.M.) PARCEL A: LOTS 1 THROUGH 21, INCLUSIVE, AND LOTS 24 THROUGH 26, INCLUSIVE, NORTHWEST LANDING INDUSTRIAL PARK DIVISION 1, ACCORDING TO THE PLAT THEREOF RECORDED SEPTEMBER 9, 1996 UNDER RECORDING NUMBER 9609090634, RECORDS OF PIERCE COUNTY AUDITOR. PARCEL B: LOT 1, BOUNDARY LINE ADJUSTMENT 200703215009, ACCORDING TO THE SURVEY THEREOF RECORDED MARCH 21, 2007, RECORDS OF PIERCE COUNTY AUDITOR. TOGETHER WITH A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS CREATED BY INSTRUMENT RECORDED UNDER RECORDING NO. 200605170142 AND AS DELINEATED ON SAID BOUNDARY LINE ADJUSTMENT 200703215009. SITUATE IN THE CITY OF DUPONT, COUNTY OF PIERCE, STATE OF WASHINGTON.

SURVEY INFORMATION

HORIZONTAL DATUM - BASIS OF BEARING
THE BASIS OF BEARINGS IS THE BEARING BETWEEN WCCS POINTS 413 (GPS 031) AND 1130 (LEWIS GP 807), TAKEN AS SOUTH 02° 28' 23" EAST, BASED UPON THE NORTH AMERICAN DATUM OF 1983 – NAD 83 (91) – WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE.

VERTICAL DATUM
NATIONAL GEODETIC VERTICAL DATUM OF 1929 – NGVD 29
FROM DATA PROVIDED BY THE CITY OF DUPONT PLANNING DEPARTMENT – THE BENCHMARK IS THE SURFACE MON AT THE CENTERLINE OF THE INTERNATIONAL PLACE CUL-DE-SAC, TAKEN AS 221.82 FEET

PROJECT INFORMATION

TAX ACCOUNT NUMBERS
300039-0110

CALCULATED LAND AREA
1,400,697± S.F. (32.16± ACRES)

CURRENT OWNER
NWLC-P2, LLC

LAND USE GOVERNING JURISDICTION
CITY OF DUPONT

SITE ADDRESS
3230 INTERNATIONAL PLACE N
DUPONT, WA 98327

INDEX OF SHEETS

C1 OF 19 COVER SHEET
C2 OF 19 HORIZONTAL CONTROL PLAN
C3 OF 19 GRADING AND STORM DRAINAGE PLAN (NORTH)
C4 OF 19 GRADING AND STORM DRAINAGE PLAN (SOUTH)
C5 OF 19 STORM PROFILES
C6 OF 19 STORM PROFILES
C7 OF 19 GRADING PLAN DETAILS
C8 OF 19 SANITARY SEWER AND WATER PLAN (NORTH)
C9 OF 19 SANITARY SEWER AND WATER PLAN (SOUTH)
C10 OF 19 WATER MAIN PROFILE
C11 OF 19 WATER MAIN PROFILE
C12 OF 19 CONSTRUCTION NOTES AND DETAILS
C13 OF 19 CONSTRUCTION NOTES AND DETAILS
C14 OF 19 CONSTRUCTION NOTES AND DETAILS
C15 OF 19 CONSTRUCTION NOTES AND DETAILS
C16 OF 19 CONSTRUCTION NOTES AND DETAILS
C17 OF 19 CONSTRUCTION NOTES AND DETAILS
C18 OF 19 TREE RETENTION PLAN
C19 OF 19 BOUNDARY AND TOPO SURVEY EXHIBIT

CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES FOR REMOVING AND REPLACING ALL SURVEY MONUMENTATION THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITY, PURSUANT TO WAC 332-120. APPLICATIONS MUST BE COMPLETED BY A REGISTERED LAND SURVEYOR. APPLICATIONS FOR PERMITS TO REMOVE MONUMENTS MAY BE OBTAINED FROM THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, OR BY CONTACTING THEIR OFFICE BY TELEPHONE AT (206) 902-1190.

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
PUBLIC LAND SURVEY OFFICE
1111 WASHINGTON STREET S.E.
P.O. BOX 47060
OLYMPIA, WASHINGTON 98504-7060

UPON COMPLETION OF CONSTRUCTION, ALL MONUMENTS DISPLACED, REMOVED, OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR, AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

No.	Date	By	Ckd.	Appr.	Revision
1	11/16/18	WED	CP	DKB	MINOR SITE PLAN AMENDMENT

Title: COVER SHEET FOR NORTHWEST LOGISTICS CENTER 2

For: PANATTONI DEVELOPMENT COMPANY
900 SW 16TH STREET, SUITE 330
RENTON, WA 98057
CONTACT: BRIAN MATTSON

DANIEL K. BALMELLI — STATE OF WASHINGTON — 25672 — REGISTERED PROFESSIONAL ENGINEER — 11/16/2018

Scale: Horizontal 1"=100' Vertical N/A

Designed WED
Drawn WED
Checked DKB
Approved DKB
Date 11/13/18

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING, SURVEYING, ENVIRONMENTAL SERVICES

Job Number 15753
Sheet C1 of 19

File:P:\15000s\15753\engineering\15753-a.dwg Date/Time:11/16/2018 10:04 AM Scale:1" = 1' WDUNLAP Xref: ----

City of DuPont
State Environmental Policy Act
Mitigated Determination of Non-Significance

Northwest Logistics Center II
DuPont File No. SEPA 13-01

Description
Construct one warehouse totaling approximately 695,000 square feet, storm drainage, parking, and landscaping on a 32 acre site.

Applicant/Proponent
Dan Balmelli, Barghausen Consulting Engineers, Inc., 18215 72nd Avenue South, Kent, WA 98032, Agent for Nick Griot, Tacoma, WA.

Location
Northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Numbers 300039-0010 through 0210 and 300039-0240 through 0270.

Lead Agency
City of DuPont.

Findings

1. The Applicant submitted:
   a. Land Use Application received March 20, 2013,
   b. Revised SEPA Checklist signed September 17, 2013,
   c. Phase I Environmental Site Assessment Report dated June 26, 2012,
   d. Geotechnical Engineering Report dated June 19, 2012,
   e. Soil Sampling Results dated July 3, 2012,
   f. Preliminary Stormwater Site Plan dated March 5, 2013,
   g. Geotechnical Report dated May 27, 1999,
   h. Geotechnical Report dated June 19, 2012
   i. Revised Oak Tree Plan dated February 14, 2014,
   j. Traffic Impact Analysis dated April 2013,
   k. Traffic Impact Analysis revisions dated July 16, 2013,
   l. DuPont Water Availability Form,
   m. Title Report dated December 22, 2014,
   n. LeMay, Inc. email regarding refuse service dated December 4, 2014, and
   o. Pierce County Public Works and Utilities letter regarding Sewer Service Information dated March 20, 2013.

2. The subject site is composed of 25 separate and abutting parcels at the northeast corner of International Place and Center Drive, Pierce County Assessor's Parcel Numbers 300039-0010 through 0210 and 300039-0240 through 0270. All parcels are designated Industrial by the DuPont Comprehensive Plan and zoned Industrial by the DuPont Zoning Map. Warehouses are permitted in the Industrial zone per DuPont Municipal Code (DMC) 25.50.020. The Applicant will eliminate all interior property lines and shared access/utility easements prior to issuance of a building permit.

3. The Checklist states the steepest slopes on the site are approximately 8 percent, onsite soils are Spanaway gravelly sandy loam, there are no indications of unstable soils in the

immediate vicinity, approximately 81,137 cubic yards (CY) of cut material and 65,262 CY of fill material will be used to prepare the site for construction of site, and approximately 82 percent of the site will be covered with impervious surfaces upon completion of the project.

The Applicant submitted a document titled, *Phase I Environmental Site Assessment Report*, dated June 26, 2012.

In response, environmentally sensitive areas, as defined by the DuPont Municipal Code, have not been identified on or within 100 feet of the subject site. A grading permit will be required and a haul route provided to DuPont. DuPont requirements and best available management practices will be implemented with the grading permit, including testing all imported soils for arsenic and lead prior to arrival on the subject site following the directions of Chapter 10 of the Tacoma Smelter Plume *Model Remedies Guidance*.

4. The Applicant submitted a report titled, *Geotechnical Engineering Report*, dated June 19, 2012. The report states 12 test pits were dug between 8.5 and 12.5 feet deep, soil was categorized and determined suitable for proposed grading and light industrial structures. No groundwater was observed.

5. The Applicant submitted a report titled, *Soil Sampling Results*, dated July 3, 2012. The report stated 38 test pits were dug 0.5 feet deep and 12 pits were dug 1.0 feet deep. Soil samples were collected and sent to a laboratory for analysis of lead and arsenic. The report concludes concentrations of arsenic exceeding the MTCA Method A soil cleanup level were detected in soil samples collected at depths of 0 to 1 foot deep at 20 sample locations. Lead was not detected at concentrations above the MTCA Method A soil cleanup level.

   Ecology reviewed the SEPA Checklist and proposed cleanup plan, which was submitted directly to Ecology, and issued a letter dated November 24, 2014.

   In summary, the letter concludes:
   a. No further remedial action will likely be necessary at the property to clean up contamination associated with the site.
   b. Further remedial action will likely still be necessary elsewhere at the site, but no further remediation will be necessary for the property.

6. Sheet C1, Special Note #3 contains the following note, consistent with DMC 25.45.030(16), "No more than 20,000 pounds of hazardous substances or hazardous wastes may be stored onsite, and no hazardous substances or wastes may be stored onsite except that which is delivered for onsite operations or produced onsite consistent with DMC 25.45.030(16). Diesel fuel for onsite emergency generators is exempt from the requirement."

7. The Checklist states air emissions will occur from construction equipment and vehicles during operation of the facility. The Applicant is responsible for complying with all applicable federal, state and local standards governing air quality during construction and operation of the facility.

8. The Checklist states there are no surface water bodies on or in the immediate vicinity of the site, no work will be required in or adjacent to any waters, no fill or dredge material

will be placed in or removed from any surface waters, no surface water withdrawals or diversions are required, and the proposal is not within a 100-year flood plain.

In response, the Puget Sound Outfall, a man-made surface water conveyance feature, is located 100 feet north of the north property line of the subject site. No withdrawals or diversions of surface water are proposed. National Flood Insurance Program Flood Insurance Rate Map Community Panel No. 530245 0001 B, effective September 15, 1983, shows the subject site is located in Zone C. Zone C is an area of minimal flooding.

DuPont incorporated the FIRM map data into Figure 1-4, FEMA 100 Years Flood Plain Map, of the DuPont Water Comprehensive Plan. This map shows the subject site lying outside the 100 year flood plain.

9. The Checklist states no groundwater will be withdrawn, and water will be discharged into the ground via the proposed storm drainage infiltration facilities.

   The Applicant submitted a document titled, *Preliminary Stormwater Site Plan*, dated March 5, 2013. The document states there are four separate drainage basins on the site, following construction of the project there will be four underground infiltration systems on the site, and water quality will be provided via onsite filters. The storm drainage system is designed and will be constructed to the requirements of the DuPont Street Standards/DuPont Public Works Standards and 2005 Ecology Stormwater Management Manual for Western Washington Volume III.

   DuPont reviewed the application and recommend the following mitigation measure:

   a. The Applicant shall submit a Final Stormwater Site Plan to DuPont for the project for review and approval prior to issuance of a DuPont grading or civil construction permit.

10. The Checklist states trees are located on the site, a majority of vegetation will be removed for construction of the project and DuPont tree retention and landscape requirements will be met.

11. In response, the site contains evergreen and deciduous trees and native shrubs and groundcover. Total proposed landscape area is approximately 17% of the site. DuPont Municipal Code 25.90.020(2)(d) requires a minimum of 10% of the site be landscaped.

12. Sheet C9 indicates the site contains 580 oak trees. 119 oak trees are proposed to be saved. Landmark class trees on a parcel zoned Industrial, which this site is zoned, that are located inside a building footprint, parking lot or storm retention area may be removed provided tree retention is achieved along street boundaries, which the site abuts on two sides per DMC 25.120.030(2). The requirement is met.

    A 7.99 acre portion of Oak Management Mapping Unit MO-17a is located on southwest corner of the site. DMC 25.120.040 requires 20 percent of the 7.99 acres, or 1.59 acres minimum, be retained. Sheet C9 indicates 22.9 percent (1.82 acres) of the onsite portion of Unit MO-17a will be retained. The requirement is met.

    The Applicant submitted a Revised Tree Plan dated February 14, 2014 to demonstrate compliance with DMC 25.120.040 regarding applicable Oak Management Mapping Unit requirements. The submitted Plan was reviewed by the City's oak tree consultant.

DuPont reviewed the revised Tree Plan dated February 14, 2014, and recommend the following mitigation measure:

a. The Revised Tree Plan dated February 14, 2014, shall be fully implemented with construction of the site and the City Oak Tree Consultant shall monitor implementation of said plan at the Applicant's expense.

13. The Checklist states songbirds are located on the site, endangered species are not known to exist on the site and the site is part of the Pacific Flyway for migratory birds, and landscaping and tree retention will help preserve wildlife in the area.

    In response, Washington Department of Fish and Wildlife data indicates the site contains no priority habitats or species. The site is located within the Pacific Flyway, a major migratory bird route.

14. The Checklist states electricity will be used for lighting, natural gas will be used for heating and the building will meet all current energy code requirements.

15. The Checklist states the project will not create environmental health hazards other than fire, medical and police are already available in the area, and no specific mitigation measures are proposed.

    DuPont reviewed the application and recommend the following mitigation measure:

    a. The Applicant shall pay the City of DuPont fire impact fee totaling $86,732.62 at time of building permit issuance as required by DMC 26.05 ($2,696.91 per acre impact fee X 32.16 acre site size).

16. The Checklist states noise will occur from construction and operation of the facility. The Applicant is responsible for complying with all applicable federal, state and local standards governing air quality during construction and operation of the facility.

17. The Checklist states the project will provide jobs for approximately 100 to 200 people. Any business with more than 100 employees shall contact Pierce Transit to determine if compliance with the Commute Trip Reduction Act is necessary, and if so, shall participate in the program as required by DMC 25.75. A note to consistent with this requirement is shown on Sheet C1, Special Note #4.

18. The Checklist states the building will be approximately 38 feet tall and constructed of concrete and glass. Maximum building height is limited to 65 feet per DMC 25.50.030(4).

19. Exterior building illumination and parking lot lighting are not shown on the submitted drawings. Full cut-offs are necessary for all lighting to reduce off site glare consistent with DMC 25.45.010.

    DuPont reviewed the application and recommend the following mitigation measure:

    a. Full cut-offs shall be provided for all exterior lighting to reduce off site glare consistent with DMC 25.45.010.

20. The Checklist states there are no known archaeological or culturally important sites on or next to the site. A Cultural Resource Assessment was not submitted for the site.

In response, it is well documented that DuPont contains a wide variety of historic and prehistoric cultural resources. It is possible that not all cultural resources have been found. Weyerhaeuser Real Estate entered into two Memorandums of Agreement (MOA). The first MOA, dated August 7, 1989, is between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont. The second MOA, dated October 20, 1988, is between WRECO and the Nisqually Tribe to provide for the establishment of a cemetery for reburial of Native American remains.

DuPont reviewed the application and recommend the following mitigation measures:

a. The Applicant shall fully implement the Memo of Agreement dated August 7, 1989, between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws.
b. The Applicant shall provide a professional archaeologist from the State Historic Preservation list to monitor onsite soil disturbance activities.
c. The Project Archaeologist shall notify and allow a Nisqually Indian Tribe representative to be present during soil disturbance activities.
d. The Project Archaeologist shall notify the Nisqually Indian Tribal representative if Native American cultural resources are discovered during any soil disturbance activities. Construction activities that may disturb or affect such resources are to stop until the Tribal representative has had the opportunity to examine the find.
e. If the Tribal representative cannot be reached through reasonable efforts or does not come to the construction site within a reasonable period of time after being notified, construction does not need to stop. However, archaeological work shall follow the 1989 Memo of Agreement, customary professional standards for archaeology, and applicable state and federal laws.
f. The City of DuPont requests Native American artifacts recovered during construction activities be donated to the Nisqually Indian Tribe. Hudson's Bay Company-era artifacts shall be donated to the Fort Nisqually Living History Museum, located in the City of Tacoma's Point Defiance Park. DuPont-era artifacts shall be donated to the DuPont Historical Museum.
g. The Project Archaeologist shall forward a closing report to the City of DuPont. The report shall discuss contact with the Nisqually Indian Tribe, implemented procedures and observed conditions and be submitted prior to the permanent Certificate of Occupancy.

21. The Checklist states: vehicular access will be provided by two driveways from abutting International Place, a public street; approximately 384 parking stalls will be provided, and approximately 1,000 to 2,000 vehicle trips per day will be generated by the project.

The Applicant submitted a document titled, *Northwest Logistics Center DuPont Building 2 Traffic Impact Analysis, prepared by Heath & Associates,* dated April 2013. The Traffic Impact Analysis (TIA) states project vehicle trip generation is based on a high cube warehouse land use with roughly 1,168 vehicle trips on a typical weekday, 76 trips during the AM peak, and 83 trips during the PM peak hour.

The TIA concludes pedestrian/bicyclist traffic along the area roadways is presently mild, with possible increases during warmer seasons. Sight distance at the project entrances should be adequate. Some increases in delay may be expected due to the addition of project traffic.

The TIA concludes the intersection of DuPont-Steilacoom Road & Center Drive may reach approach delays of LOS F during the AM peak hour without or with project traffic included under existing signal cycle lengths. Future AM delays with the project could be reduced to LOS D overall assuming cycle length optimization to account for the heavy pipeline volume increase.

The TIA concludes DuPont-Steilacoom Road & Barksdale Avenue may have some approach delays of LOS E during the AM peak hour due to difficult volume balancing.

The TIA concludes some delays at the Barksdale/I-5 interchange could be expected to reach LOS F levels by 2015 without project traffic included. Improvements at this interchange are planned by WSDOT as part of regional I-5 corridor improvements generally outlined in the I-5 Fort Lewis/McCord Transportation Analysis.

The TIA recommend proposed mitigation at this time including installation of a signal at the Center Drive & International Place intersection. Installation and costs should be coordinated among developers of new projects on International Place.

The TIA revisions letter dated July 16, 2013 from Heath and Associates, Inc., provided a revised signalized AM peak LOS analysis for the Center Drive/DuPont Steilacoom Road intersection. The revised LOS analysis indicates eastbound peak hour factors to 0.89 and optimizes timing, results in LOS D for overall delays.

The TIA revisions letter dated July 16, 2013, provided a revised AM peak LOS analysis for the Barksdale Avenue/DuPont Steilacoom Road intersection. The revised LOS indicates increased peak hour factors of 0.89 for the westbound and northbound approaches, a free westbound to northbound right turn movement, and optimized timing while trying to limit westbound queues. The results under these assumptions are LOS C overall.

The TIA revisions letter dated July 16, 2013, analyzed Manual of Uniform Traffic Control Devices Signal Warrants 1 & 2 for future 2015 conditions of the Center Drive/international Place intersection with the project but without JBLM pipeline traffic. Assumptions were made for the 4th and 8th hour based on their proportions to the PM peak hours as taken from the hourly tube count volumes on Center Drive provided by the City. Based on the tube count data of Center Drive, the 4th highest hour has approximately 77% of the peak hour volumes, while the 8th highest hour has approximately 50% of the peak hour volumes. These values were used to approximate 4th and 8th hour volumes for the Center Drive/International Place intersection, and applied to the analysis of Warrants 1 & 2. The volumes would be met for Condition A and minor street volumes met for Condition B. Warrant 2 (2 hour volume) would be met. In addition, Warrant 3 is met for the PM peak hour.

The TIA and revision analyzed the LOS at the Center Drive/International Place, DuPont-Steilacoom Road/Center Drive and DuPont Steilacoom Road/Barksdale Avenue intersections with and without the pipeline trips generated from the proposed JBLM

Wharf Road Gate. The proposed project, a 695,000 square foot High Cube Warehouse/Distribution Center, will generate 1,168 trips per day and 83 trips during the pm peak hour. The table below summarizes the LOS and the mitigation recommended in the TIA.

Intersection	LOS without JBLM trips	LOS with JBLM trips	Recommended Mitigation
Center Drive/International Place	F	F	Signal
DuPont Steilacoom Road/Center Drive	D	F	None
DuPont Steilacoom Road/Barksdale Ave.	D	F	None

The Traffic Impact Analysis Guidelines in City's Public Works Standards state

"The City of DuPont considers level of service "D" to be acceptable. Appropriate mitigation should be proposed to maintain this level of service upon completion of the development. Exceptions to level of service "D" will be considered by the City at locations where the potential mitigation (such as a traffic signal) is not reasonable or desirable."

Based on the City of DuPont Standards, mitigation should be proposed at all three intersections noted in the above table; however, the City issued a variance on November 5, 2013, to not require the applicant to provide mitigation at the DuPont-Steilacoom/Center Drive and DuPont Steilacoom/Barksdale Ave. intersections to achieve an LOS of D since it is not reasonable for a project of this size due to the following:

- The project's traffic mitigation includes installation of a traffic signal at the Center Drive/International Place intersection. The estimated cost of this signal is $350,000.

- The improvements needed at the DuPont Steilacoom/Center Drive intersection to achieve a LOS of D would require the installation of a second northbound left turn lane on DuPont Steilacoom Road. The left turn lane would require a new mast arm pole to be installed to accommodate the additional lane and additional widening on the north leg of the intersection. These improvements, estimated at $700,000, would also require concurrence with JBLM and therefore not a reasonable mitigation measure for the magnitude of the project.

- Potential improvements at the Barksdale Avenue/DuPont-Steilacoom Road intersection are limited at this time due to right of way constraints, current interchange configuration for Exit 119, and the existing rail line. This intersection is adjacent to Exit 119 and is included in the I-5 JBLM Corridor Interchange Justification Report (IJR) Study that is currently underway by WSDOT, which is intended to identify long-term improvements to this corridor.

DuPont reviewed the above-referenced documents, issued an administrative variance to the DuPont Street Standards regarding traffic mitigation dated November 5, 2013, concur the analyses are acceptable and recommend the following mitigation measure:

a. The Applicant shall, at their sole expense, install a traffic signal at the Center Drive/International Place intersection consistent with the City of DuPont Standards to mitigate traffic impacts from the subject development. Said signal shall be fully operational to the satisfaction of the City of DuPont prior to issuance of the building Temporary Certificate of Occupancy. The Applicant may coordinate with the Steilacoom Historical School District regarding cost sharing of the signal.

22. Sheet C2 indicates the developed site will contain 385 onsite parking stalls are proposed for the approximately 384 to 400 employees indicated in the SEPA Checklist. DMC 25.95.030 requires a minimum stall count of 120 stalls based on a ratio of 0.3 stalls per 400 workers at maximum shift, and a maximum stall count of 400 stalls based on a ratio of 1.0 stall per 400 workers at maximum shift. The requirement is met.

23. The submitted DuPont Water Availability Form indicates the development will use 1,392 gallons of water per day. DuPont reviewed and completed the Water Availability Form as Water Purveyor on April 30, 2013, noting the site is within the approved City of DuPont Water Service Area and DuPont has adequate water source and storage capacity to provide 1,392 gallons of water to the development.

24. Refuse service is provided by Lemay, Inc. The Applicant provided an email from LeMay, Inc., dated December 4, 2014, stating the location of the proposed refuse enclosure is acceptable.

25. The Applicant submitted a letter from Pierce County Public Works and Utilities, the sewer provider. Pierce County reviewed the request for connection, noting the site is within the approved Pierce County Sewer Service Area, within the Comprehensive Urban Growth Area, within 300 feet of an existing accessible sanitary sewer which has sufficient capacity to accommodate the development and the development shall be required to connect to the sanitary sewer.

DuPont reviewed the application and recommend the following mitigation measure:

a. The Applicant shall forward a copy of the Pierce County Sewer permit to the City of DuPont prior to issuance of the DuPont civil construction permit.

Conclusions

The lead agency has determined that the proposal does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request. The file may be examined during regular City business hours at DuPont City Hall, 1700 Civic Drive, DuPont WA, 98327. The full decision is posted on the City of DuPont website under Planning Division/Development Projects/Decisions.

Mitigation Measures

As required by the City of DuPont, the following mitigation measures must be implemented concurrent with the project in order to mitigate potential adverse impacts resulting from the project:

1. The Applicant shall submit a Final Stormwater Site Plan to DuPont for the project for review and approval prior to issuance of a DuPont grading or civil construction permit.

2. The Revised Tree Plan dated February 14, 2014, shall be fully implemented with construction of the site and the City Oak Tree Consultant shall monitor implementation of said plan at the Applicant's expense.

3. The Applicant shall pay the City of DuPont fire impact fee totaling $86,732.62 at time of building permit issuance as required by DMC 26.05 ($2,696.91 per acre impact fee X 32.16 acre site size).

4. Full cut-offs shall be provided for all exterior lighting to reduce off site glare consistent with DMC 25.45.010.

5. The Applicant shall fully implement the Memo of Agreement dated August 7, 1989, between Weyerhaeuser Real Estate Company (WRECO), the City of DuPont and the Washington State Historic Preservation Officer regarding the discovery of cultural resources within the City of DuPont, customary professional standards for archaeology, and applicable state and federal laws.

6. The Applicant shall provide a professional archaeologist from the State Historic Preservation list to monitor onsite soil disturbance activities.

7. The Project Archaeologist shall notify and allow a Nisqually Indian Tribe representative to be present during soil disturbance activities.

8. The Project Archaeologist shall notify the Nisqually Indian Tribal representative if Native American cultural resources are discovered during any soil disturbance activities. Construction activities that may disturb or affect such resources are to stop until the Tribal representative has had the opportunity to examine the find.

9. If the Tribal representative cannot be reached through reasonable efforts or does not come to the construction site within a reasonable period of time after being notified, construction does not need to stop. However, archaeological work shall follow the 1989 Memo of Agreement, customary professional standards for archaeology, and applicable state and federal laws.

10. The City of DuPont requests Native American artifacts recovered during construction activities be donated to the Nisqually Indian Tribe. Hudson's Bay Company-era artifacts shall be donated to the Fort Nisqually Living History Museum, located in the City of Tacoma's Point Defiance Park. DuPont-era artifacts shall be donated to the DuPont Historical Museum.

11. The Project Archaeologist shall forward a closing report to the City of DuPont. The report shall discuss contact with the Nisqually Indian Tribe, implemented procedures and observed conditions and be submitted prior to the permanent Certificate of Occupancy.

12. The Applicant shall, at their sole expense, install a traffic signal at the Center Drive/International Place intersection consistent with the City of DuPont Standards to mitigate traffic impacts from the subject development. Said signal shall be fully operational to the satisfaction of the City of DuPont prior to issuance of the building Temporary

Certificate of Occupancy. The Applicant may coordinate with the Steilacoom Historical School District regarding cost sharing of the signal.

13. The Applicant shall forward a copy of the Pierce County Sewer permit to the City of DuPont prior to issuance of the DuPont civil construction permit.

Comment Period

This decision is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted by 5:00 PM, February 24, 2015. Appeals must be filed with the DuPont Hearing Examiner between 8:00 AM, February 25, 2015, and no later than 5:00 PM, March 11, 2015, in the manner more specifically set forth in DMC 25.175.060. You should be prepared to make specific factual objections.

February 10, 2015

Thomas E. Danek, Jr.
City Administrator
DuPont SEPA Responsible Official

City of DuPont Fire Department

Proudly serving the community of DuPont

1780 Civic Drive, DuPont, WA, 98327

Phone 253.964.8414 ▪ Fax 253.912.5240 ▪ www.ci.dupont.wa.us

September 2, 2020

TO: Lisa Klein

FROM: Mike Turner Fire Marshal

RE: Northwest Logistics 2 Parking Expansion Review
City No. PLNg2020-012,013,014 & SEPA2020-001

The DuPont Fire Department Prevention Division reviewed the above project and has the following comments.

Site Plan Related Comments

1. Per DMC 13.05.100, Emergency Vehicle Access Standards Section I. (Gates) Number one thru six shall be followed if gates are installed.

Building related comments.

1. An automatic fire sprinkler system shall be installed. The system shall comply with NFPA 13 Standard for Automatic Fire Sprinkler System. Three (3) sets of plans, hydraulic calculations and material specification sheets for all equipment used in the system shall be submitted by a State of Washington Licensed Contractor for review, approval and permits issued prior to commencing work. **Separate Permit Required.**

2. If a fire pump is required. The system shall comply with NFPA 20. Three (3) sets of plans and material specification sheets for all equipment used in the system shall be submitted by a State of Washington Licensed Contractor for review, approval and permits issued prior to commencing work. **Separate Permit Required.**

3. An automatic fire alarm system shall be installed. The system shall comply with NFPA 72 Standard for Fire Alarm System. Three (3) sets of plans, material specifications sheet for all equipment used in the system shall be submitted by a State of Washington Licensed Contractor for review, approval and permits issued prior to commencing work. **Separate Permit Required.**

Attachment 4.a. City of DuPont Fire Department Memorandum dated September 2, 2020 and September 17, 2020.

City of DuPont Fire Department

Proudly serving the community of DuPont

1780 Civic Drive, DuPont, WA, 98327

Phone 253.964.8414 ▪ Fax 253.912.5240 ▪ www.ci.dupont.wa.us

4. If an emergency generator is installed. The system shall comply with NFPA 110 and 111. The generator shall be listed in accordance with UL 220. Three (3) sets of plans and material specification sheets for all equipment used in the system shall be submitted for review, approval and permits used prior to commencing work. **Separate Permit Required.**

2. Fire extinguishers are required to be installed as directed by City of DuPont Fire Department. Prior to installation the client is directed to request a fire inspection to confirm the locations of the fire extinguishers.

3. Make sure you follow Chapter 33 of the 2015 International Fire Code (Fire safety during construction and demolition.)

4. All new building shall have approved emergency responder radio coverage per section 510 of the 2015 International Fire Code.

If you have any questions, you may call Fire Marshal Mike Turner at (253) 666-2760 or e-mail mturner@dupontwa.gov.

Sincerely,

Fire Marshal

Mike Turner

Lisa Klein

From: Mike Turner <MTurner@dupontwa.gov>
Sent: Thursday, September 17, 2020 9:05 AM
To: Lisa Klein; Janet Howald; Bill Anderson; Dominic Miller
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Hi Lisa,

I have no further comments on this project.

Thanks,
Mike

From: Lisa Klein <LKlein@AHBL.com>
Sent: Wednesday, September 16, 2020 5:53 PM
To: Janet Howald <JHowald@dupontwa.gov>; Bill Anderson <BAnderson@dupontwa.gov>; Mike Turner <MTurner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

All,
I have not received comments yet on the resubmittal. Please let me know if you do or do not have comments. A simple no further comment will suffice.
Thanks,
Lisa

Lisa Klein, AICP | Associate Principal
AHBL, Inc. | **TACOMA** • SEATTLE • SPOKANE • TRI-CITIES
253.383.2422 **TEL** | 253.284.0256 **DIRECT** | lklein@ahbl.com **EMAIL** | Send us a file.

From: Janet Howald <JHowald@dupontwa.gov>
Sent: Thursday, September 3, 2020 4:05 PM
To: Bill Anderson <BAnderson@dupontwa.gov>; Mike Turner <MTurner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>; Valeska Silva <vsilva@dupontwa.gov>; Scott Hein <SHein@dupontwa.gov>; Gus Lim <GLim@dupontwa.gov>; Geri Reinart <greinart@msn.com>
Cc: Lisa Klein <LKlein@AHBL.com>
Subject: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Hi all,

See the attached and provide comments by Friday, September 10th. Please reply even if this may not apply to you.

Below is a link to the revised documents for the Northwest Logistics Center 2 project.

https://secure-web.cisco.com/17fxy3OMkA_wxbZo7etXl4qME4v7jihOZc2zqIYLX_yUI1fnmAaegZJ0p4hJCst4Xcz_Pql3My5WHMNafdmNB_Gvl_47eaIcZlA-

abXvuvf16AGmGOtdUGscmAYZG9meWrJPAcicJ7dx3c94v96LZNFr5WLD5UDOYbiuabIvLC5GSFD4qqu2EBUKIMlEpQ_XV6YLLVdSi803_j1zpa7Ysn65V2FDeHAEo18BjhsdBCwyWSvWN-KmDGd1tYyouZm4d7andsArgIUEZoAnSYuQj7UsRNpdyp00679eMfarmDEn_4hCsKQ75Ubzk8KkaZkCKLPHe0VGpPXni1jvIxonCPObOb11rHaCjcKKSjav6TLa6Y4cxdSsPLdIThTRj_M8aOh00pWXSn0lko6dNGMM_TQ/https%3A%2F%2Fwe.tl%2Ft-Hctj6lePxV

Janet Howald
Community Development
Administrative Specialist
City of DuPont
1700 Civic Drive, DuPont WA 98327

Direct - 253.912.5232
Internal Ext. 5209
City Hall - 253.964.8121
Jhowald@dupontwa.gov

COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING SERVICES DIVISION
1700 Civic Drive
DuPont, WA 98327
Ph 253.964.5387 Fax 253.964.1455

MEMORANDUM

TO: **Lisa Klein**

FROM: **Bill Anderson**

RE: **Northwest Logistics Center 2 Parking Expansion Review comments**
3230 International Place, DuPont, WA 98327
City No. PLNG2020-012, 013, 014 & SEPA2020-001

DATE: **September 1, 2020**

The Building Services Division has reviewed the application received on August 6, 2020 for the proposed Site Plan Amendment, Administrative Variance, Boundary Line Adjustment and SEPA for the proposed parking lot expansion at the referenced location. The following comments are provided for the applicant's use in progressing with planning and design of their project:

1. Any proposed modifications to the structure must be designed to meet the requirements of the building construction codes **in effect at the time of building permit submittal**. The following codes are currently enforced by the City of DuPont: the 2015 International Building Code, the 2015 International Residential Code, the 2015 International Fire Code, the 2015 International Mechanical Code, the 2015 International Fuel Gas Code, the 2015 Uniform Plumbing Code (each as amended and adopted by the State of Washington); the 2015 Washington State Energy Code.
2. All applicable Fire Impact and Storm System Development Charge fees assessed for the proposed development will be required to be paid prior to the issuance of a Civil or Grading permit(s) associated with the proposed project.
3. Also prior to issuance of a building permit for any structure modifications, the applicant shall provide a copy of Pierce County Sewer Service Permits for City record. This permit (and authorization to connect to sewer service) is/may be independent from any sewer system extension that may also apply to the project. All sewer connection and permitting requirements must be coordinated with the utility purveyor. (Please note that Pierce County Sewer Utility requires a pre-treatment review and approval be completed prior to their issuance of sewer extension or sewer service connection permit(s). Each subsequent

tenant, for multi-tenant buildings, must also complete a separate pre-treatment review and provide copy of sewer service permitting, where applicable, prior to obtaining a building permit for associated improvements.)

4. Permit forms may be obtained either at city hall or may be downloaded through the city's website. Assistance in completing applications is available by contacting permit staff.

As the project proceeds, more specific requirements may be discussed with our department. If there are any questions or clarifications needed, please contact me.

Lisa Klein

From: Bill Anderson <BAnderson@dupontwa.gov>
Sent: Thursday, September 17, 2020 7:37 AM
To: Lisa Klein; Janet Howald; Mike Turner; Dominic Miller
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Lisa,
I have no further comments.

Bill Anderson

From: Lisa Klein <LKlein@AHBL.com>
Sent: Wednesday, September 16, 2020 5:53 PM
To: Janet Howald <JHowald@dupontwa.gov>; Bill Anderson <BAnderson@dupontwa.gov>; Mike Turner <MTurner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

All,
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Lisa

Lisa Klein, AICP | Associate Principal
AHBL, Inc. | **TACOMA** • SEATTLE • SPOKANE • TRI-CITIES
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From: Janet Howald <JHowald@dupontwa.gov>
Sent: Thursday, September 3, 2020 4:05 PM
To: Bill Anderson <BAnderson@dupontwa.gov>; Mike Turner <MTurner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>; Valeska Silva <vsilva@dupontwa.gov>; Scott Hein <SHein@dupontwa.gov>; Gus Lim <GLim@dupontwa.gov>; Geri Reinart <greinart@msn.com>
Cc: Lisa Klein <LKlein@AHBL.com>
Subject: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Hi all,

See the attached and provide comments by Friday, September 10th. Please reply even if this may not apply to you.

Below is a link to the revised documents for the Northwest Logistics Center 2 project.

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KmDGd1tYyouZm4d7andsArgIUEZoAnSYuQj7UsRNpdyp00679eMfarmDEn_4hCsKQ75Ubzk8KkaZkCKLPHe0VGpPXni1jvIxonCPObOb11rHaCjcKKSjav6TLa6Y4cxdSsPLdIThTRj_M8aOh00pWXSn0lko6dNGMM_TQ/https%3A%2F%2Fwe.tl%2Ft-Hctj6lePxV

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Jhowald@dupontwa.gov

Gray & Osborne, Inc.

CONSULTING ENGINEERS

August 24, 2020

Mr. Jeff Wilson
City of DuPont
1700 Civic Drive
DuPont, Washington 98327

SUBJECT: NORTHWEST LOGISTICS CENTER II PARKING, LAND USE APPLICATION
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON
G&O #20268

Dear Mr. Wilson:

On July 2, 2020, Gray & Osborne, Inc. received an initial submittal package for the above-subject project. The package included the following:

- City of DuPont Land Use Application dated July 2, 2020;
- City of DuPont Boundary Line Adjustment Application dated July 1, 2020;
- SEPA Checklist dated July 2, 2020;
- Title Reports by First American Title Insurance Company dated August 31, 2018 and January 24, 2020;
- Preliminary Stormwater Site Plan by Barghausen Consulting Engineers, Inc. dated June 30, 2020;
- Cultural Resource Report by Aqua Terra Cultural Resources Consultants dated June 2, 2020;
- Geotechnical Engineering Report by Terra Associates, Inc. dated May 12, 2020;
- Draft Limited Subsurface Investigation Report by ATC Group Services, LLC dated June 30, 2020;
- Civil Plans by Barghausen Consulting Engineers, Inc. (12 sheets dated May 26, 2020);
- Landscaping Plans by WBLA Landscape Architecture (12 sheets dated July 2, 2020); and
- Lighting Site Plan by Panattoni Development (1 sheet dated July 7, 2020).

We have reviewed this information for compliance with the current City of DuPont Public Work Standards (City Standards), codes, policies, and the DuPont Municipal Code (DMC), and have the following comments:

Attachment 4.c. City of DuPont Engineering Department comment letter dated August 24, 2020 and September 17, 2020.

GENERAL

1. The Developer shall demonstrate compliance with any conditions or mitigations stated in any previously issued official documents associated with the parcel and project referenced above.

2. Proposed site improvements within the easements on the project site shall comply with the conditions of said easements.

3. The project activities shall comply with the requirements of the Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) general permit for stormwater discharges associated with construction activity.

4. Turning movement drawings will be required to allow the City to determine the feasibility of the site layout. The site plan shall include supplemental exhibits to demonstrate that the City Fire Department's large apparatus can navigate the site (lane width, radius), including access to FDCs and hydrants. The Fire Department will confirm the adequacy of vehicle access points.

5. Following construction and prior to final acceptance of this project, the Applicant will be required to execute an Agreement for Inspection and Maintenance of Privately Maintained Storm Drainage Facilities. The Agreement should be provided after construction of the storm drainage system to reflect "as-built" conditions. A copy of the form of the agreement is included in the City Public Works Standards.

6. The site is located within the boundary of LID No. 88-1. Prior to finalization of the proposed project, the Applicant will need to document payment of the costs associated with City LID No. 88-1.

7. This project is subject to the Geographic Information System (GIS) requirements as stated in the City of DuPont Municipal Code, Chapter 24.09, and Ordinance No. 97-559.

LAND USE APPLICATION

8. No comments at this time.

BOUNDARY LINE APPLICATION

9. For a Boundary Line Adjustment, the required information under DMC 24.07.040 shall be submitted.

10. For a Lot Line Elimination, the required information under DMC 24.08.040 shall be submitted.

SEPA CHECKLIST

11. No comments at this time.

TITLE REPORTS

12. All easements identified in the Title Reports shall be delineated and labeled on the Plans (i.e. width, type, and recording number).

STORMWATER SITE PLAN

13. Conveyance calculations and O&M documentation will be required in the final engineering submittal:

14. In Section 1.0, the overview describes 5.43 acres of new and replaced impervious surfaces. The tabulation later in the report notes 5.87 ac of impervious surface within the project area. A basin map indicating new, replaced, and unchanged impervious surfaces should be included to clarify the site areas. The minimum requirements apply to all new and replaced impervious surfaces.

15. In Section 2.0, Specific Source Control Pollution BMPs should be identified from Volume IV of the Manual. These may be included in the O&M Documentation.

16. In Section 3.0, the report notes a 12 in/hr infiltration rate per the geotechnical investigation. Page 5 of the geotechnical report states that 12 in/hr is a preliminary infiltration rate based on grain size analysis and seems to imply that a final infiltration rate will be determined. The geotechnical consultant should confirm that this rate is appropriate for the proposed facility. An infiltration test should be conducted at the same location as the proposed facility unless the geotechnical engineer confirms that the other test pits in the area indicate consistent subsurface conditions.

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17. In Section 5.0, the type of stormwater treatment is not described or sized in the report. A treatment method must be selected. The flow control and Water Quality Sizing Criteria table indicates a total of 5.87 ac of pavement within the project area, but treatment will address only 5.19 acres of impervious area.

18. The modeling includes 1.22 acres of roadway in the predeveloped condition. It appears that this area is the existing parking area at the northeast corner of the parcel. If the pavement in this area is to be removed down to the base course or lower, it counts as replaced impervious area and must be modeled as forested area in the predeveloped condition to meet the flow control requirement. The flow control requirement applies to all new and replaced impervious surfaces on this project.

19. The total area in the developed condition modeling includes 5.19 ac of impervious area, though the project description notes either 5.43 or 5.87 ac of new and replaced impervious surface. The minimum requirements apply to all new and replaced impervious surfaces. If there are areas that are difficult to address because they are isolated from the rest of the project, treatment and infiltration can be installed to address existing pavement instead as an "area trade".

CULTURAL RESOURCE REPORT

20. No comments at this time.

GEOTECHNICAL REPORT

21. Recommendations from the geotechnical report shall be incorporated into the design.

CIVIL PLANS

GENERAL

22. The Site Plan should show the existing and proposed easements.

STREET

23. Per DMC 25.50.030(5), the project's parking and loading areas shall comply with DMC 25.95. The Plans shall demonstrate compliance with all applicable requirements. Per DMC 25.95.040(6), in industrial areas,

parking spaces shall not be located within 20-feet of the front property line.

STORMWATER

24. Include proper information for the stormwater plans (i.e.: type, invert elevations, rim elevations, etc.).

25. Add the following City Standard Details to the Plans:

- Catch Basin Type I (Drawing No. 7.4-1)
- Catch Basin Type 2 (Drawing No. 7.4-3)

26. Add directional flow arrows to the stormwater pipes.

27. The final plans must include additional details for the stormwater elements including details for the treatment system.

28. A temporary sediment pond is indicated on the TESC sheet. The final SWPPP should include a calculation for sizing the pond.

WATER

29. Include proposed water easements, 15 feet in width.

30. Indicate the length, size, type and class of the water main and hydrant runs.

31. Indicate the existing main sizes which are being tapped into.

32. The number and location of hydrants shall be coordinated with the City Fire Department.

33. Drains to daylight, infiltration sump, or to the onsite storm system shall be provided for the water service vaults and meter boxes as required per City Standard Details.

34. The construction plans shall include profiles for storm drains and for water mains to include proposed utility crossings.

35. The utility crossings of the water, storm, and sewer systems shall be provided to demonstrate compliance with the City's 1-foot minimum vertical clearance requirement.

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36. Add the following City Standard Details to the Plans:

- Water Main Trench Section (Drawing No. 8.2-1)
- Typical Utility Crossing (Drawing No. 8.2-3)
- Thrust Blocks (Drawing No. 8.3-1)
- Water Valve Stem Extension (Drawing No. 8.5)
- Fire Hydrant Installation (Drawing No. 8.6-1)
- Wet Tap Main Connection (Drawing No. 8.10-1)
- Testing Connection (Drawing No. 8.11)

LANDSCAPE AND IRRIGATION PLANS

37. Clearances, in accordance with City Standards, will be reviewed for compliance during construction review. A minimum 3-foot clearance and level area is required around fire hydrants.

LIGHTING PLANS

38. No comments at this time.

Thank you for the opportunity to provide these comments. Please contact the undersigned if you have any questions or comments regarding this review.

Sincerely,

GRAY & OSBORNE, INC.

Dominic J. Miller, P.E.

DJM/sp

cc: Mr. Gus Lim, P.E., Public Works Director, City of DuPont
Mr. Bill Anderson, Building Official, City of DuPont
Mr. Scott Hein, Public Works Supervisor, City of DuPont
Mr. Mike Turner, City of DuPont
Ms. Lisa Klein, AHBL, Inc.

Printed on recycled paper

Lisa Klein

From: Dom Miller <dmiller@g-o.com>
Sent: Thursday, September 17, 2020 5:53 PM
To: Lisa Klein
Cc: 'Janet Howald'; Gus Lim
Subject: FW: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227
Attachments: Wilson-NWL2 Parking-LU 8-24-2020.pdf

Lisa,

I have reviewed the revised documents as for the subject project and do not have any comments.

My previous comments from the letter dated August 24, 2020 (see attached) remain.

Dominic J. Miller, P.E. *| 360.292.7481, Ext. 1504 p | 360.292.7517 f*
Gray & Osborne, Inc. *| 2102 Carriage Drive SW, Building I, Olympia, WA 98502*

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From: Dom Miller [mailto:dmiller@g-o.com]
Sent: Thursday, September 17, 2020 5:05 PM
To: 'Lisa Klein' <LKlein@AHBL.com>
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Yes, by 9:00 a.m.

Dominic J. Miller, P.E. *| 360.292.7481, Ext. 1504 p | 360.292.7517 f*
Gray & Osborne, Inc. *| 2102 Carriage Drive SW, Building I, Olympia, WA 98502*

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From: Lisa Klein [mailto:LKlein@AHBL.com]
Sent: Thursday, September 17, 2020 5:04 PM
To: Dom Miller <dmiller@g-o.com>

Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Can you provide in the morning? I am trying to package it up.

Lisa Klein, AICP | Associate Principal
AHBL, Inc. | **TACOMA** • SEATTLE • SPOKANE • TRI-CITIES
253.383.2422 **TEL** | 253.284.0256 **DIRECT** | lklein@ahbl.com **EMAIL** | Send us a file.

From: Dom Miller <dmiller@g-o.com>
Sent: Thursday, September 17, 2020 5:01 PM
To: Lisa Klein <LKlein@AHBL.com>
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Lisa,

I will try to get you my comments tomorrow.

Dominic J. Miller, P.E. *| 360.292.7481, Ext. 1504 p | 360.292.7517 f*
Gray & Osborne, Inc. *| 2102 Carriage Drive SW, Building I, Olympia, WA 98502*

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From: Lisa Klein [mailto:LKlein@AHBL.com]
Sent: Wednesday, September 16, 2020 5:53 PM
To: Janet Howald <jhowald@dupontwa.gov>; Bill Anderson <banderson@dupontwa.gov>; Mike Turner <mturner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>
Subject: RE: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

All,
I have not received comments yet on the resubmittal. Please let me know if you do or do not have comments. A simple no further comment will suffice.
Thanks,
Lisa

Lisa Klein, AICP | Associate Principal
AHBL, Inc. | **TACOMA** • SEATTLE • SPOKANE • TRI-CITIES
253.383.2422 **TEL** | 253.284.0256 **DIRECT** | lklein@ahbl.com **EMAIL** | Send us a file.

From: Janet Howald <JHowald@dupontwa.gov>
Sent: Thursday, September 3, 2020 4:05 PM
To: Bill Anderson <BAnderson@dupontwa.gov>; Mike Turner <MTurner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>; Valeska Silva <vsilva@dupontwa.gov>; Scott Hein <SHein@dupontwa.gov>; Gus Lim <GLim@dupontwa.gov>; Geri Reinart <greinart@msn.com>

Cc: Lisa Klein <LKlein@AHBL.com>
Subject: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Hi all,

See the attached and provide comments by Friday, September 10th. Please reply even if this may not apply to you.

Below is a link to the revised documents for the Northwest Logistics Center 2 project.

https://secure-web.cisco.com/17fxy3OMkA_wxbZo7etXl4qME4v7jihOZc2zqIYLX_yUI1fnmAaegZJ0p4hJCst4Xcz_Pql3My5WHMNafdmNB_Gvl_47eaIcZlA-abXvuvf16AGmGOtdUGscmAYZG9meWrJPAcicJ7dx3c94v96LZNFr5WLD5UDOYbiuabIvLC5GSFD4qqu2EBUKIMlEpQ_XV6YLLVdSi803_j1zpa7Ysn65V2FDeHAEo18BjhsdBCwyWSvWN-KmDGd1tYyouZm4d7andsArgIUEZoAnSYuQj7UsRNpdyp00679eMfarmDEn_4hCsKQ75Ubzk8KkaZkCKLPHe0VGpPXni1jvIxonCPObOb11rHaCjcKKSjav6TLa6Y4cxdSsPLdIThTRj_M8aOh00pWXSn0lko6dNGMM_TQ/https%3A%2F%2Fwe.tl%2Ft-Hctj6lePxV

Janet Howald
Community Development
Administrative Specialist
City of DuPont
1700 Civic Drive, DuPont WA 98327

Direct - 253.912.5232
Internal Ext. 5209
City Hall - 253.964.8121
Jhowald@dupontwa.gov

Geralyn Reinart, P.E.
831 Sprague Street
Edmonds, WA. 98020
(206) 285-9035
Traffic & Transportation Engineering Services

MEMORANDUM

August 4, 2020

TO: Jeff Wilson, AICP
Community Development Director

FROM: Geralyn Reinart, P.E.

SUBJECT: Snow Blossom Fulfillment Center – Review of July 2020 Traffic Impact Analysis

The following summarizes my review of the traffic impact analysis (TIA) for the proposed Snow Blossom Fulfillment Center dated July 2020 and prepared by Heath & Associates. The traffic study reviews the use of an existing 612,412 square foot building (previously known as the NW Logistics development) as a hazmat fulfillment center. Completion of the project is estimated for 2022. A TIA was previously submitted for the subject site in 2013, with updated trip generation summaries prepared in 2018. The 2013 TIA for a distribution center indicated that the proposal would generate 1168 daily trips, 76 AM peak hour trips and 83 PM peak hour trips. The updated trip generation summaries were for a smaller building than originally proposed in 2013 with slightly fewer trips associated with the smaller size. Mitigation associated with this prior proposal was the construction of the traffic signal at the Center Drive/International Place intersection, which has been completed.

The project site is located on the north side of Center Drive between DuPont-Steilacoom Road and International Place. Access to the site is currently available from International Place. The current proposal could potentially generate 2167 daily trips, 363 trips during the AM peak hour and 604 trips during the PM peak hour. These values include both vehicle and heavy truck trips. (See subsequent discussion for more details.)

Preliminary trip generation and trip assignment information for both vehicles and heavy trucks was submitted to the City for use in scoping for the TIA. Based on the preliminary trip generation and assignment, eight critical intersections within the City were identified for analysis during both the AM and PM peak hours.

The main items included in the TIA were as follows:

- An analysis of the Barksdale/DuPont-Steilacoom Road, Center

Attachment 4.d. City of DuPont Traffic & Transportation Engineer comment memorandum dated August 4, 2020 and email dated September. 4, 2020.

Drive/DuPont-Steilacoom Road, Center Drive/International Place, Center Drive/Civic Drive, Center Drive/Palisade, Center Drive/Bobs Hollow Lane, Center Drive/McNeil Street and Center Drive/Wilmington intersections for both the AM and PM peak hours.

- AM and PM peak hour trip assignments for both passenger vehicles/ vans and heavy vehicles taking into account truck restrictions along Center Drive for the current interchange 119 layout.
- AM and PM peak hour trip assignments for both passenger vehicles/ vans and heavy vehicles taking into account truck restrictions along Center Drive for the future interchange 119 layout.
- Peak season trip generation/assignment.
- Identification/discussion of any queuing issues for the northbound left-turns on DuPont-Steilacoom Road at Center Drive and for the eastbound left-turns on Center Drive at International Place (for adequate storage) during average and peak season conditions.
- Future volumes included both a 2% annual growth rate plus pipeline trips associated with nine other projects.

It was also noted that the proposed project would impact the I-5 ramps with 25 or more new trips; however, since these intersections are under WSDOT authority and the interchange will be re-constructed in the next several years, no analysis was requested.

General Comments:

The analysis was prepared by a consultant fully qualified and experienced in the preparation of analyses of this nature, and conforms to the City's guidelines and includes all the necessary information to complete my review. The study summarized the existing and future conditions in the vicinity, along with the impacts of the project. All identified critical intersections impacted by the project were included in the analysis. Pipeline trips provided by the City were utilized as requested along with a 2% annual traffic growth rate.

Traffic counts completed in October of 2019 for the peak hours at six of the eight intersections were available from the City, along with counts from 2017 at the Center Drive/International Place and Center Drive/Civic Drive intersections. The counts from 2017 were increased by the 2% annual growth rate to reflect existing conditions.

My specific comments with respect to the analysis are as follows:

1. **Pages 9 and 10, Figures 3A/3B** – all existing volumes are shown correctly; the volumes from 2017 were increased to reflect existing conditions.
2. **Page 11, Table 2** – the existing levels of service are correctly shown and all locations are operating acceptably.
3. **Page 12, Table 3** – the project trip generation was based on information provided by the Applicant from similar fulfillment centers. A detailed spreadsheet of employee hourly entering and exiting times, along with heavy

vehicle deliveries was provided in the Appendix. This methodology is allowed per the City's standards and is acceptable. The site will operate 24 hours a day with the main shift of employees entering between 6:30 AM to 7:30 AM and departing between 5:30 PM to 6:30 PM. These times are slightly offset from the 'traditional' street peak hours (i.e., 30 minutes earlier in the AM and 30 minutes later in the evening) reflecting a 10-hour work day rather than the traditional 8-hour day. However, the Consultant applied these higher values to the peak hour trip assignments in order to be conservative. Heavy vehicle data was also provided indicating that the late evening/early morning hours will typically be when the majority of the heavy truck activity occurs, with much less activity during the AM or PM peak hours. The volumes associated with this current proposal are higher than volumes originally estimated in 2013 for the distribution center that was proposed for the site. More specifically, the current proposal would generate 999 more daily trips, 287 more AM peak hour trips, and 521 more PM peak hour trips than previously estimated for this site. It was also noted that during the peak holiday season, project trips could double during the AM peak hour and be about 50% higher during the PM peak hour reflecting higher employment levels.

4. **Pages 14, 15, 16, and 17, Figures 4A, 4B, 5A, and 5B** – the AM and PM peak hour trip assignments are shown correctly breaking out heavy vehicles and passenger vehicles onto separate figures. The truck restrictions along Center Drive were accounted for in the heavy vehicle assignment. All values were checked and are correct as shown with one exception. The eastbound left-turn and westbound right-turn volumes at Center Drive/Bobs Hollow Lane were reversed for the AM peak hour (eastbound left-turn should be '10' and westbound right-turn should be '3'). This error is fairly minor and has limited impact.
5. **Pages 18 and 19, Figures 6A and 6B** – all pipeline project trips were checked and shown correctly.
6. **Pages 20 and 21, Figures 7A and 7B** – the forecast AM and PM peak hour volumes were checked and are shown correctly and include the 2% growth rate plus the pipeline trips.
7. **Pages 22 and 23, Figures 8A and 8B** – the forecast AM and PM volumes with the project are acceptable as shown with one exception. The trip assignment error noted in item #4 above carried over to the AM volumes on Figure 8A at Center Drive/Bobs Hollow Lane. Again, this a fairly minor error with limited impacts.
8. **Page 24, Table 4** – the future levels of service, as shown, were checked and presented accurately. All locations would meet the City's level of service standards. These results are consistent with values that have been presented in other recent analyses.
9. **Page 25, Table 5** – queue analyses were requested at two intersections for the normal and peak season conditions, more specifically for the northbound left-turn on DuPont-Steilacoom Road at Center Drive and the eastbound left-turn on Center Drive at International Place. Based on the analyses, it appears that the existing eastbound left-turn storage on Center Drive at International Place will be adequate (*for the 95th-percentile queue; a condition that would be exceeded only 5% of the time for the subject analysis period*) under normal

and peak season conditions and the through lanes will not block vehicles from entering the turn lane. It should be noted that the southerly driveway serving the site on the northwest corner of the intersection could occasionally be blocked; however, the site has another access to the north which can be used.

The 95th–percentile queue for the northbound left-turn on DuPont-Steilacoom Road at Center Drive would periodically exceed the existing 250-foot storage during both the AM and PM peak hours under normal and peak season conditions. During this same time period the queue for the northbound through lane would be considerably longer and potentially block vehicles from entering the left-turn lane. While there is a two-way left-turn lane present that could be used during those periods when the left-turn queue exceeds the storage, some drivers hesitate doing this. The Consultant notes that dual northbound left-turn lanes at this intersection should be considered as part of the City's improvements for DuPont-Steilacoom Road due to the future volume of left-turns exceeding 300 per hour (300 turns are typically considered the threshold for needing dual turn lanes). I concur; this recommendation has been noted for several years prior to this analysis.

10. **Page 26, Summary** – no mitigation was recommended since all intersections are expected to operate at an acceptable level of service in the future. Furthermore, mitigation for the subject site on its initial application included the installation of the traffic signal at the Center Drive/International Place intersection, which has been completed. However, the queueing for the northbound left-turn lane on DuPont-Steilacoom Road at Center Drive will exceed its capacity and the most reasonable/best solution would be the installation of dual left-turn lanes as part of the City's improvement project.

APPENDIX – Trip Distribution and Assignment with Exit 119 Project - a trip assignment for the AM and PM peak hours was provided for the future conditions upon completion of the Exit 119 reconstruction, as requested. The future conditions show that the major change would be the significant decrease in project trips through the Barksdale/DuPont-Steilacoom Road intersection. More specifically, this intersection would be impacted by 100 fewer project trips during the AM peak hour and 156 fewer PM peak hour project trips. This decrease would be even more significant during peak season. (*Note: significantly fewer 'other' trips would pass through this intersection upon completion of the interchange.*)

Level of service calculations – all level of service calculations were checked and were correctly presented in the findings with the exception of the volumes shown for the eastbound left-turn and westbound right-turn at the Center Drive/Bobs Hollow intersection during the future AM peak hour, with project. This is the carry-over of the volumes that were reversed and noted in the above comments. This minor error would have little to no bearing on the calculations. There was also a minor volume error for the southbound through movement at the Barksdale/ DuPont-Steilacoom Road intersection for the PM peak hour 'with project' condition. Again, this would have limited impact on the overall intersection LOS

condition. It should be noted that heavy vehicle percentages were adjusted (upwards) on the movements at the intersection impacted by project truck trips to reflect their impact. It should also be noted that the westbound movement at the Center Drive/McNeil Street intersection will become increasingly congested in the future during the PM peak hour with or without the project, as well as the eastbound movement during both the AM and PM peak hour for the 'with project' condition. However, the overall LOS for the intersection is still acceptable for all of these conditions and therefore meets the City's requirements.

Final Comments/Mitigation

The TIA is acceptable as presented and addresses the items that were requested; no re-submittal is needed. As noted above in comment #9, there is one issue that I would recommend be considered for mitigation/conditions of approval to address the northbound left-turn vehicle queue on DuPont-Steilacoom Road at Center Drive.

This condition for your consideration is as follows:

- (Comment #9) – The 95th–percentile queue for the northbound left-turn on DuPont-Steilacoom Road at Center Drive would periodically exceed the existing 250-foot storage during the PM peak hour. During this same time period the queue for the northbound through lane would be considerably longer and potentially block vehicles from entering the left-turn lanes. The Consultant notes that dual northbound left-turn lanes at this intersection should be considered as part of the City's improvements for DuPont-Steilacoom Road. Discussion with the PW Director is recommended to determine appropriate participation by the Applicant in this improvement project.

One additional measure for your consideration is as follows:

- Consideration should be given to requiring a truck/traffic management plan during the initial stocking of the building so as not create any lane blockages along Center Drive or DuPont-Steilacoom Road. This could include such things as off-duty police officers to direct traffic, staging of trucks off-site and timed entries to the site, etc. Further discussion with the PW Director and Police Chief is recommended to avoid the situation that occurred when Amazon first opened.

Please let me know if you have any questions with respect to the above information or if you'd like to discuss in more detail.

Lisa Klein

From: Geralyn Reinart <greinart@msn.com>
Sent: Friday, September 4, 2020 7:27 AM
To: Janet Howald; Bill Anderson; Mike Turner; Dominic Miller; Valeska Silva; Scott Hein; Gus Lim
Cc: Lisa Klein
Subject: Re: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Janet-

I have no additional comments. The corrections in the TIA (i.e., corrected building square footage) had no bearing on the prior analysis and results since they were based on employment and not square footage.

Thanks!

geri

Geralyn Reinart, P.E.
831 Sprague Street
Edmonds, WA. 98020
(206) 285-9035
(425) 530-0664 cell
greinart@msn.com

From: Janet Howald <JHowald@dupontwa.gov>
Sent: Thursday, September 3, 2020 4:04 PM
To: Bill Anderson <BAnderson@dupontwa.gov>; Mike Turner <MTurner@dupontwa.gov>; Dominic Miller <dmiller@g-o.com>; Valeska Silva <vsilva@dupontwa.gov>; Scott Hein <SHein@dupontwa.gov>; Gus Lim <GLim@dupontwa.gov>; Geri Reinart <greinart@msn.com>
Cc: Lisa Klein, AHBL <LKlein@AHBL.com>
Subject: Resubmittal for Major Site Plan Amendment and SEPA / NW Logistics Center II Parking Expansion PLNG2020-002 RFI / BCE#21227

Hi all,

See the attached and provide comments by Friday, September 10th. Please reply even if this may not apply to you.

Below is a link to the revised documents for the Northwest Logistics Center 2 project.

https://secure-web.cisco.com/17fxy3OMkA_wxbZo7etXl4qME4v7jihOZc2zqIYLX_yUI1fnmAaegZJ0p4hJCst4Xcz_Pql3My5WHMNafdmNB_Gvl_47eaIcZlA-abXvuvf16AGmGOtdUGscmAYZG9meWrJPAcicJ7dx3c94v96LZNFr5WLD5UDOYbiuabIvLC5GSFD4qqu2EBUKIMlEpQ_XV6YLLVdSi803_j1zpa7Ysn65V2FDeHAEo18BjhsdBCwyWSvWN-KmDGd1tYyouZm4d7andsArgIUEZoAnSYuQj7UsRNpdyp00679eMfarmDEn_4hCsKQ75Ubzk8KkaZkCKLPHe0VGpPXni1jvIxonCPObOb11rHaCjcKKSjav6TLa6Y4cxdSsPLdIThTRj_M8aOh00pWXSn0lko6dNGMM_TQ/https%3A%2F%2Fwe.tl%2Ft-Hctj6lePxV

Stantec Consulting Services Inc.
1687 114th Avenue SE Suite 100, Bellevue WA 98004-6964

August 25, 2020
File: 185705053

Attention: Ms. Lisa Klein
AHBL, Inc.
2215 N 30th Street, Suite 300
Tacoma, WA 98403

Reference: Technical Review of Soundview Consultants, LLC. Report -
Non-Wetland and Fish and Wildlife Habitat Assessment – International Place North adjacent to 3250 International Place North, Dupont, Washington 98327

Dear Ms. Klein,

Thank you for the opportunity to assist with the review of this proposed project. The comments below are provided at your request per our contract to assist the City of DuPont with development applications. At this point, I have not linked the comments to the DMC.

1. Overall, the report has a few technical/completeness items to note.
    a. The site is disturbed, it was filled around 2007 (I verified this by a Google Earth Image review). Site fill history must be researched and discussed fully.
    b. The proximity to the Sequalitchew Creek channel indicates the site may have been part of a floodplain and could have supported critical areas.
    c. With this information, a disturbed methodology for wetland investigation should have been employed for this site. The report presents three soil plots for wetland investigations. This is not very many for a site this large and does not really address the historical fill for the site. Also, 2007 was a time when critical areas were regulated. The original fill should have had a report and historical documentation available. That data should be searched and provided or stated that it is not available. Checking with previous owners and the City files would be helpful.
    d. Photos presented in the report should be properly referenced as to source and date. A scale would also be helpful.
    e. References are provided but they are not all properly referenced in the report. This presents as a bit sloppy and casts some concern about the overall accuracy and attention to detail of these consultants. A proper technical edit is needed to make the report ready for public review.

2. Wildlife habitat/ESA and sensitive species –
    a. The report notes the literature search identified several species listed by the state but does not include the USFWS ESA species listing. USFWS lists several subspecies of pocket gopher as Threatened. Some of these species are very location/region specific but all have a strong affinity to gravelly soils – such as shown on this site.

Attachment 4.e. Stantec Consulting Services, Inc. Comment Letters dated August 25, 2020 and September 9, 2020.

Reference: **Technical Review of Soundview Consultants, LLC. Report - Non-Wetland and Fish and Wildlife Habitat Assessment – International Place North adjacent to 3250 International Place North, Dupont, Washington 98327**

b. Page 3, last paragraph of the Methods section, states a fish and wildlife habitat assessment was conducted. Which species were addressed in this assessment? What accepted scientific methods were followed – provide reference to proper manuals and protocols? Photos provided in Attachment C are not sufficient to withstand public scrutiny.
c. One of the qualifications of a brief bio in the appendices includes a pocket gopher trained individual. The site should be assessed for possible pocket gopher presence and findings reported. Similarly, the WDFW listing includes bat species as state sensitive and to complete the assessment, the site's capability to support these bat species should also be assessed and summarized. All methods used to assess bat and pocket gopher habitat should be described and referenced appropriately.
d. Note that the report states on page 3 – final paragraph – that "No potentially-regulated wetlands and/or fish <u>and wildlife</u> habitat were identified…". To make this statement, the report must present the data and investigation to support the "wildlife" portion of the conclusion. The report as written, glosses over this issue and presents a weak, unsupported finding. This unsupported conclusion is repeated on page four – final paragraph.

3. Stormwater infrastructure –
   a. The figures clearly define some sort of odd-shaped stormwater infrastructure on the subject parcel of land. Nowhere in the report is this feature described, discussed, or verified by formal documentation. Outfalls into and out of this feature should be defined as well as possibility of infiltration to groundwater and possible aquifer recharge area impacts. Again, if this is an existing feature – there must be design drawings and permits. If not, then this must be clearly stated and discussed as to the origin and function of the area defined as stormwater infrastructure. This omission indicates a weak effort in site history review and a lack of completeness in the field investigation of the property.
   b. The proposed development shown in Figure 2 indicates the stormwater infrastructure will conflict with the proposed development. Impact to existing infrastructure should be described and discussed.

4. Figure 2 presents what appears to be the site plan for the property development. There are several comments about this figure to consider.
   a. The figure is unclear and vague and lacks dimensions to assess accuracy of setbacks and buffers. The stream buffer should be set from OHWM and since that has not been fully verified, the depiction of the 100' buffer is suspect. A verified OHWM is needed from the stream and can be done with an accurate GPS data set and GIS mapping tools. It is possible a stream assessment and OHWM determination has already been done for this stream as part of other projects along the DuPont-Steilacoom Road. A check with the DuPont Public Works Department, Joint Base Lewis McCord, WDFW, or the Nisqually Tribe is suggested. The culvert nearby (shown as the second "Offsite Type F Stream photo) has likely been assessed for fish passage and OHWM is commonly recorded in those assessments.
   b. How is stormwater from the large parking area to be collected, treated, and released into the environment? The proximity to the stream and known porous nature of the soils indicates a likelihood of possible water quality impacts to the stream from stormwater discharge. This issue warrants a specific assessment and discussion.

Reference: **Technical Review of Soundview Consultants, LLC. Report - Non-Wetland and Fish and Wildlife Habitat Assessment – International Place North adjacent to 3250 International Place North, Dupont, Washington 98327**

5. Technical qualifications of the team performing the investigation and reporting is overly brief and lacks necessary detail for a thorough assessment of training, qualifications, certifications, and experience. Full resumes are appropriate and should be furnished.

Thank you for the opportunity to provide these comments. There is obviously more to this file than this one report and to assess proper evaluation of the potential environmental impacts, more data is needed. The comments above are only specific to the report reviewed and may be changed once more information is known about the overall proposal. Please contact me if you have any questions or comments regarding this review.

Regards,

Stantec Consulting Services Inc.

Wayne Wright
Principal Scientist
Phone: 425 289 7320
Wayne.Wright@stantec.com

Attachment: Attachment
c.

Stantec Consulting Services Inc.
1687 114th Avenue SE Suite 100, Bellevue WA 98004-6964

September 9, 2020
File: 185705053

Attention: Ms. Lisa Klein
AHBL, Inc.
2215 N 30th Street, Suite 300
Tacoma, WA 98403

Reference: Technical Review of Soundview Consultants, LLC. Report -
Non-Wetland and Fish and Wildlife Habitat Assessment – International Place North adjacent to 3250 International Place North, Dupont, Washington 98327

Dear Ms. Klein,

I have received and reviewed the revised and supplemental correspondence provided by Soundview Consultants, LLC for the above referenced project. In addition, you and I participated in a conference call on September 1, 2020 with the consultant team to discuss and review my comments. The supplemental correspondence and revised document satisfactorily address my comments.

Please contact me if you have any questions or comments regarding this review.

Regards,

Stantec Consulting Services Inc.

Wayne Wright
Principal Scientist
Phone: 425 289 7320
Wayne.Wright@stantec.com

Attachment: Attachment
c.