#### STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:

Port of Seattle

AGREED ORDER

No. DE 6703

TO: Tay Yoshitani Chief Executive Officer Port of Seattle Seattle-Tacoma International Airport P.O. Box 1209 Seattle, WA 98111

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#### I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology) and the Port of Seattle under this Agreed Order (Order) is to provide for remedial action at a facility where there has been a release or threatened release of hazardous substances. This Order requires the Port of Seattle to perform the remedial investigation and feasibility study described in WAC 173-340-350 in a manner that complies with all requirements of the Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC. Ecology believes the actions required by this Order are in the public interest.

#### II. JURISDICTION

This Agreed Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1).

#### **III. PARTIES BOUND**

This Agreed Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such party to comply with this Order. The Port of Seattle agrees to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter the Port of Seattle's responsibility under this Order. The Port of Seattle shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order, and shall ensure that all work undertaken by such agents, contractors, and subcontractors complies with this Order.

#### **IV. DEFINITIONS**

Unless otherwise specified herein, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms in this Order.

A. <u>Site</u>: The Site is referred to as the Lora Lake Apartments Site and is generally located at 15001 Des Moines Memorial Drive, Burien, Washington 98148. The Site is defined by the extent of contamination caused by the release of hazardous substances at the Site. Based

upon factors currently known to Ecology, the Site is more particularly described in the Site Diagram (Exhibit A). The Site includes the Lora Lake Apartments Parcel (Parcel ID# 033-2023049105) and any other areas affected by the release of hazardous substances at the Site. The Site constitutes a Facility under RCW 70.105D.020(5).

B. <u>Parties</u>: Refers to the State of Washington, Department of Ecology and the Port of Seattle.

C. <u>Potentially Liable Person (PLP)</u>: Refers to the Port of Seattle.

D. <u>Agreed Order or Order</u>: Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order. The terms "Agreed Order" or "Order" shall include all exhibits to this Order.

#### V. FINDINGS OF FACT

Ecology makes the following findings of fact, without any express or implied admissions of such facts by the Port of Seattle:

A. The Port of Seattle is the current property owner of the Lora Lake Apartments Parcel. This parcel, together with other locations where contamination from this parcel has come to be located, comprise the Lora Lake Apartments Site.

B. Prior to 1940, the Lora Lake Apartments Parcel was both an orchard and private residence. During the 1940s and 1950s, Novak Barrel Cleaning Company operated at the Lora Lake Apartments Parcel. From approximately 1960 to 1981, Burien Auto Wrecking operated at the Lora Lake Apartments Parcel. In the 1986 to 1987 timeframe, The Mueller Group, a building developer, purchased the Lora Lake Apartments Parcel, investigated and removed contaminated soil, and constructed the apartment complex. In 1998, the Port acquired the Lora Lake Apartments Parcel from Pacific Gulf Properties, Inc. for conversion to airport support (industrial) use, and vacated the apartments. Ownership of the Lora Lake Apartments Parcel was transferred from the Port of Seattle to the King County Housing Authority (KCHA) in May 2000, and new tenants were brought in. On July 20, 2007, ownership of the Lora Lake

Apartments parcel was transferred back to the Port of Seattle. Following reacquisition of the site by the Port, six of the apartment buildings were demolished to comply with Federal Aviation Administration (FAA) flight path requirements for the Third Runway.

C. The Port of Seattle notified Ecology of soil and ground water contamination at the Lora Lake Apartments Site by letter dated February 27, 2008.

D. The Port of Seattle and the King County Housing Authority filed a Voluntary Cleanup Program application dated April 4, 2008 and entered Ecology's Voluntary Cleanup Program. The Port filed a Modified Voluntary Cleanup Program application dated September 23, 2008 that removed the King County Housing Authority from the Voluntary Cleanup application. The modified application lists polycyclic aromatic hydrocarbons, hydrocarbons (gasoline, diesel, and oil), and dioxins as confirmed soil contaminants and these same contaminants plus tetrachloroethene, trichloroethene, 1,2-dichloroethane, and arsenic as confirmed groundwater contaminants.

E. The Port of Seattle has apprised Ecology that the Lora Lake Apartments, which are abandoned, are a public nuisance. They may attract transients and are a fire hazard. Ecology has received letters from the Port of Seattle Fire Department, the Port of Seattle Police Department, and King County Fire District #2 confirming that the abandoned Lora Lake Apartments are a public nuisance. The Port of Seattle plans to demolish all buildings and ancillary above-ground facilities of the Lora Lake Apartments (excluding foundations) in the summer of 2009.

E. Barrel washing operations between 1940 and 1952 and auto-wrecking yard operations between 1952 and 1986 released contaminants to the environment. Soil and groundwater contamination at the Lora Lake Apartments Site has been documented by reports listed in the Exhibit B, most recently in the 2008 Geoscience Management, Inc., and ENSR reports.

F. By letter dated January 26, 2009, the Ecology notified Port of Seattle that Ecology was terminating the Lora Lake Apartments site from the Voluntary Cleanup Program and would supervise further action at the site under an Agreed Order.

#### VI. ECOLOGY DETERMINATIONS

A. The Port of Seattle is an "owner or operator" as defined in RCW 70.105D.020(12) of a "facility" as defined in RCW 70.105D.020(4).

B. Based upon all factors known to Ecology, a "release" or "threatened release" of "hazardous substance(s)" as defined in RCW 70.105D.020(20) and RCW 70.105D.020(7), respectively, has occurred at the Site.

C. Based upon credible evidence, Ecology issued a PLP status letter to the Port of Seattle dated February 3, 2009, pursuant to RCW 70.105D.040, -.020(16) and WAC 173-340-500. By letter dated March 5, 2009, the Port of Seattle voluntarily waived its rights to notice and comment and accepted Ecology's determination that the Port of Seattle is a PLP under RCW 70.105D.040.

D. Pursuant to RCW 70.105D.030(1) and -.050(1), Ecology may require PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

E. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action. Ecology has

determined contamination on the Apartment Parcel of the Loral Lake Apartments Site poses a hazard to human health and the environment. The contamination could migrate due to demolition activities conducted on site. Ecology has determined that temporary measures must be implemented to prevent such migration and hence reduce the threat to human health or the environment by eliminating or substantially reducing pathways for exposure to the hazardous substances at the facility pursuant to WAC 173-340-430.

F. Ecology hereby incorporates into this Order the previous remedial actions conducted by GeoScience Management and ENSR as described in the 2008 reports listed in Exhibit B. Reimbursement eligibility for specific project tasks under a grant agreement with Ecology is contingent upon the determination by Ecology's Toxic Cleanup Program that the work performed complies with the substantive requirements of Chapter 173-340 WAC and is consistent with the remedial action required under this Order.

#### VII. WORK TO BE PERFORMED

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that the Port of Seattle take the following remedial actions at the Site and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein. Exhibit C provides a schedule of deliverables for the actions to be conducted. All deliverables listed in Exhibit C and any deliverables subsequently developed for further work are integral and enforceable parts of this Agreed Order. All final deliverables must be approved by Ecology.

A. The Port of Seattle shall implement the interim actions described in Exhibit D to contain contamination on site and prevent its migration during the demolition activities planned for the summer of 2009 (See Section V.E). All construction storm water shall be contained and collected on site. All collected construction storm water shall be disposed of at a properly permitted facility. Ecology approval of the facility for disposal of the collected construction storm water is required.

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B. The Port of Seattle shall prepare a Public Participation Plan that meets the requirements of WAC 173-340-600. The plan will describe the activities the Port of Seattle will take to promote meaningful community involvement as the cleanup actions required by this Order are implemented. The plan will outline and describe the tools that the Port of Seattle and Ecology will use to inform the public about Site activities and will identify opportunities for the community to become involved. The Port of Seattle shall prepare the Public Participation Plan according to the schedule in Exhibit C, Schedule of deliverables.

C. The Port of Seattle shall prepare a Supplemental Data Gaps Report. This report will summarize existing information regarding the site and identify data gaps that must be filled in order to fully describe the nature and extent of contamination at the site and to provide information on the feasibility of alternative cleanup actions. The report will include, but not be limited to: (1) summary of available information regarding site history (including historic aerial photographs), site operations, descriptions of hazardous substances used at the Site, and previous remedial actions; (2) Description of all on-site structures (including utility and storm drains) past and present, insofar as is known, with available drawings or maps; (3) Compilation of available chemical and physical data regarding surface water, groundwater, soil, sediment, and air monitoring, including submittal of such data to Ecology's Environmental Information Management System (EIMS) at least seven calendar days before the due date of the Supplemental Data Gaps Report; (4) Evaluation of potential exposure pathways, including, but not limited to, past and present storm water discharges from the site, preferential subsurface pathways, groundwater discharges, seeps, and interflow, soil erosion, sediment in storm drains, at storm drain discharge points, and in Lora Lake, and underground storage tanks, underground piping, and similar structures.; (5) A preliminary Conceptual Site Model that includes the characterization of historical and existing contaminant sources, types, concentrations, and

distribution of hazardous substances, potentially contaminated media, and actual and potential exposure pathways and receptors; (6) identification of data gaps; (7) Recommendations for the scope of the remedial investigation/feasibility study work plan; and (8) other information as required by Ecology. The Port of Seattle shall prepare the Supplemental Data Gaps Report according to the schedule in Exhibit C, Schedule of Deliverables.

The Port of Seattle shall prepare a Remedial Investigation/Feasibility (RI/FS) D. Study Work Plan that describes the tasks that will be performed to conduct a remedial investigation and feasibility study that meets the requirements of WAC 173-340-350. The work plan must provide for phasing the work so that additional work may be performed, if necessary, based on the results of earlier work. The Work Plan must provide for sufficient investigations, evaluations and analyses to be conducted and reported in the remedial investigation/feasibility study to provide Ecology with sufficient information to select a cleanup action pursuant to Chapter 173-340 WAC. The work plan must include continued ground water quality monitoring of all existing wells reported on in the ENSR, 2008, Supplemental Groundwater Investigation listed in Exhibit B. The need for additional ground water quality monitoring wells must be considered. The work plan must include a Sampling and Analysis Plan that meets the requirements of WAC 173-340-820, a list of deliverables, and a schedule. The Port of Seattle shall prepare a site-specific health and safety plan and forward it to Ecology for review and comment as required by WAC 173-340-350(7)(c)(iv) and WAC 173-340-810. The Port of Seattle shall prepare the RI/FS Work Plan according to the schedule in Exhibit C, Schedule of Deliverables.

E. The Port of Seattle shall perform the remedial investigation/feasibility study as described in WAC 173-340-350 and in a manner that complies with all requirements of the Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC. The study shall be

performed according to the RI/FS Work Plan prepared to meet the requirements of Subsection VII.D, above. The RI/FS will be performed and reported according to the Schedule in Exhibit C, Schedule of Deliverables. All chemical and physical data regarding surface water, groundwater, soil, sediment, and air monitoring, must be submitted to Ecology's Environmental Information Management System (EIMS) at least seven calendar days before the due date of the Ecology Review Draft Remedial Investigation/Feasibility Study Report.

F. Unless otherwise specified by the department, all reports, plans, specifications, and similar information submitted under this chapter shall meet the general submittal requirements specified in WAC 183-340-840, except that the number of hard copies will be specified by Ecology. Documents will be submitted as Word, AutoCAD, Excel, Adobe Acrobat, jpg, or other electronic file formats as specified by Ecology. Figures will be submitted as both Adobe Acrobat files (unless included in a Word file) and AutoCAD files. AutoCAD files will be readable by AutoCAD LT 2006. The RI/FS Work Plan shall specify the horizontal and vertical datums and Washington State Plane Coordinate System to be used for survey data [See WAC 173-340-840(e) and (f)]. All chemical and other appropriate data shall be submitted by upload to Ecology's Environmental Information Management System (EIMS). In addition to the above requirements, public comment drafts and final reports will be submitted in Adobe Acrobat files with file sizes less than 1½ MB (multiple files may be required) for posting in the Internet. See Section VIII.G for additional data submittal requirements. These requirements may be modified only with Ecology approval.

G. Hard copy reports shall be submitted to Ecology in the number required by Ecology. All deliverables shall be submitted in hard copy for Ecology files, for the site repository, and for other uses identified by Ecology. Ecology may specify other reports be submitted as hard copy. All hard copy reports shall be printed double-sided insofar as possible.

All text in hard copy reports shall have a font size of at least 8 points on the physical page submitted to Ecology. Primary text shall have minimum font size of 12 points unless otherwise approved by Ecology. Hard copy reports shall be spiral bound unless otherwise approved by Ecology. Hard copy reports shall include a CD-ROM containing the report in Adobe Acrobat files. These requirements may be modified only with Ecology approval.

H. All submittals shall follow the General Submittal requirements specified in WAC 173-340-840. In addition to the requirements for Visuals in WAC 173-340-840(4), all maps showing the distribution of chemical concentrations shall show the concentration centered on the location of the sample point from which it was collected unless otherwise approved by Ecology. When color is used in a visual, its readability by the greatest number of people, including colorblind people, and its ability to be reproduced without losing resolution and color accuracy will be carefully considered. Visuals showing concentrations as colored dots without also showing the concentration at the point are to be avoided. These requirements may be modified only with Ecology approval.

I. Site mapping shall use the Washington State Plane North system. Surveys shall have a horizontal and vertical closure of 1:5,000, except that monitoring well elevations shall have a vertical closure of 1:10,000. Soil, sediment, and waste sample depths shall be identified to within 0.1 foot. If this is not possible, the accuracy and limitations in using the data for its intended purpose shall be discussed. These requirements may be modified only with Ecology approval.

J. The concentration, mass, and distribution of each contaminant that exceeds cleanup levels in each impacted medium (ground water, surface water, soil, sediment, and air) shall be estimated. Reports will present masses in units of kilograms. The volumes of contaminated media will be estimated. Volumes of contaminated media will be expressed in cubic meters or cubic yards for soil and sediment. Volumes of contaminated ground water or surface water will be expressed in liters or gallons. Contour maps shall be prepared that plot contaminant concentrations in ng/m<sup>3</sup>, ug/m<sup>3</sup>, mg/m<sup>3</sup>, ng/kg, ug/kg, mg/kg, ng/l, ug/l, or mg/l, as appropriate. Masses of contaminants and volumes of contaminated media exceeding each concentration contoured shall be calculated for relevant depth intervals or other locations for each contaminant and presented in Excel electronic format and in tables in hard-copy format. These requirements may be modified only with Ecology approval.

K. The schedule of performance and list of deliverables is described in Exhibit C, "Schedule of Deliverables" and is incorporated by reference as an enforceable part of this Order.

L. The Port or Seattle shall submit monthly progress reports that include: (1) a list of activities that have taken place during the reporting period, including summaries of contacts with representatives of the local community, public interest groups, press, and federal, state, or tribal governments; (2) summaries of sampling and testing reports and other data reports received by the Port of Seattle; (3) summaries of problems or anticipated problems in meeting the schedule or objectives set forth in the RI/FS Work Plan; (4) summaries of solutions developed and implemented or planned to address any actual or anticipated problems or delays; (5) a detailed description of any deviations from required tasks and where those deviations will be documented in project plans or amendment requests; (6) a description of all deviations from the Schedule, and any planned deviations in the upcoming month; (7) for any deviations in schedule, a plan for recovering lost time and maintaining compliance with the schedule; (8) all raw data (including laboratory analyses) received by the Port of Seattle during the reporting period, including upload of this data to Ecology's Environmental Information Management System (EIMS); (9) a list of deliverables for the upcoming reporting period; (9) changes in key personnel; (10) a description of work planned for the next reporting period; and (11) any other information relevant to the timely execution of the work. Progress reports shall be submitted to Ecology until satisfaction of this Order in accordance with Section IX of the Order. Progress Reports shall be submitted to the Ecology project coordinator by the 15<sup>th</sup> of the month following the end of calendar year month. If this day is a weekend or holiday, deliverables will be submitted to Ecology on the next business day. Monthly reports shall be submitted to Ecology via email in Adobe Acrobat format. The Adobe Acrobat file will contain the complete monthly

report. Chemical and other appropriate data shall be submitted by upload to EIMS. If requested by Ecology, figures, drawings, and tables will be submitted in AutoCAD, Excel, Word, Access, or other format as approved by Ecology.

M. If, at any time after the first exchange of comments on drafts, Ecology determines that insufficient progress is being made in the preparation of any of the deliverables required by this Section, Ecology may complete and issue the final deliverable.

#### VIII. TERMS AND CONDITIONS OF ORDER

#### A. Public Notice

RCW 70.105D.030(2)(a) requires that, at a minimum, this Order be subject to concurrent public notice. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that this Order is inadequate or improper in any respect.

#### **B.** Remedial Action Costs

The Port of Seattle shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Site under Chapter 70.105D RCW, including remedial actions and Order preparation, negotiation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). The Port of Seattle shall pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within thirty (30) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly. Pursuant to RCW 70.105D.055, Ecology has authority to recover unreimbursed remedial action costs by filing a lien against real property subject to the remedial actions.

#### C. Implementation of Remedial Action

If Ecology determines that the Port of Seattle has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to the Port of Seattle, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of the Port of Seattle's failure to comply with its obligations under this Order, the Port of Seattle shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.B (Remedial Action Costs), provided that the Port of Seattle is not obligated under this Section to reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Order.

Except where necessary to abate an emergency situation, the Port of Seattle shall not perform any remedial actions at the Site outside those remedial actions required by this Order, unless Ecology concurs, in writing, with such additional remedial actions.

#### **D. Designated Project Coordinators**

The project coordinator for Ecology is: David L. South Washington State Department of Ecology 3190 160<sup>th</sup> Avenue SE Bellevue, WA 98008-5452

425-649-7200 <u>dsou461@ecy.wa.gov</u>

The project coordinator for the Port of Seattle is: Mr. Paul Agid P.O. Box 68727 Seattle, WA 98168-0727 (206) 439-6604 agid.p@portseattle.org

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Site. To the maximum extent possible, communications between Ecology and the Port of Seattle, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the project coordinators. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

#### E. Performance

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist licensed in the State of Washington or under the direct supervision of an engineer registered in the State of Washington, except as otherwise provided for by Chapters 18.220 and 18.43 RCW.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrologic or engineering work shall be under the seal of an appropriately licensed professional as required by Chapter 18.220 RCW or RCW 18.43.130.

The Port of Seattle shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s) and subcontractor(s), and others to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

#### F. Access

Ecology or any Ecology authorized representative shall have the full authority to enter and freely move about all property at the Site that the Port of Seattle either owns, controls, or has access rights to at all reasonable times for the purposes of, *inter alia*: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the Port of Seattle's progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by the Port of Seattle. The Port of Seattle shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by the Port of Seattle where remedial activities or investigations will be performed pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by the Port of Seattle unless an emergency prevents such notice. All persons who access the Site pursuant to this Section shall comply with any applicable Health and Safety Plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access.

#### G. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, the Port of Seattle shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf, including data generated prior to the effective date of this order, available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal.

If requested by Ecology, the Port of Seattle shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by the Port of Seattle pursuant to implementation of this Order. The Port of Seattle shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow the Port of Seattle and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing so does not interfere with Ecology's sampling. Without limitation on

Ecology's rights under Section VIII.F (Access), Ecology shall notify the Port of Seattle prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under Chapter 173-50 WAC for the specific analyses to be conducted, unless otherwise approved by Ecology.

#### H. Public Participation

A Public Participation Plan is required for this Site, and will be developed according to the schedule in Exhibit C. Ecology shall maintain the responsibility for public participation at the Site. However, the Port of Seattle shall cooperate with Ecology, and shall:

1. If agreed to by Ecology, develop appropriate mailing lists and prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, remedial investigation/feasibility study reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.

2. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before major meetings with the interested public and local governments. Likewise, Ecology shall notify the Port of Seattle prior to the issuance of all press releases and fact sheets, and before major meetings with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by the Port of Seattle that do not receive prior Ecology approval, the Port of Seattle shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

3. When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions or as a presenter.

4. When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:

- a. Burien Library 400 SW 152<sup>nd</sup> Street Burien, WA 98166 206-243-3490
- b. Ecology's Northwest Regional Office 3190 160<sup>th</sup> Avenue SE Bellevue, WA 98008-5452 425-649-7000

5. At a minimum, copies of all public notices, fact sheets, and press releases; all quality assured monitoring data; remedial action plans and reports, supplemental remedial planning documents, and all other similar documents relating to performance of the remedial action required by this Order shall be promptly placed in these repositories.

6. The draft reports required by Exhibit C of this Order will be subject to public notice and comment pursuant to WAC 173-340-600(4) and (5).

#### I. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of work performed pursuant to this Order, the Port of Seattle shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order and shall insert a similar record retention requirement into all contracts with project contractors and subcontractors. Upon request of Ecology, the Port of Seattle shall make all records available to Ecology and allow access for review within a reasonable time.

#### J. Resolution of Disputes

1. In the event a dispute arises as to an approval, disapproval, proposed change, or other decision or action by Ecology's project coordinator, or an itemized billing statement under Section VIII.B (Remedial Action Costs), the Parties shall utilize the dispute resolution procedure set forth below.

a. Upon receipt of Ecology's project coordinator's written decision or the itemized billing statement, the Port of Seattle has fourteen (14) days within which to notify Ecology's project coordinator in writing of its objection to the decision or itemized statement.

b. The Parties' project coordinators shall then confer in an effort to resolve the dispute. If the project coordinators cannot resolve the dispute within fourteen (14) days, Ecology's project coordinator shall issue a written decision.

c. The Port of Seattle may then request regional management review of the decision. This request shall be submitted in writing to the Region Toxics Cleanup Section Manager within seven (7) days of receipt of Ecology's project coordinator's written decision.

d. The Section Manager shall conduct a review of the dispute and shall endeavor to issue a written decision regarding the dispute within thirty (30) days of the Port of Seattle's request for review. The Section Manager's decision shall be Ecology's final decision on the disputed matter.

2. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

3. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

#### K. Extension of Schedule

1. An extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the deadline for which the extension is requested, and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify:

a. The deadline that is sought to be extended;

b. The length of the extension sought;

c. The reason(s) for the extension; and

d. Any related deadline or schedule that would be affected if the extension were granted.

2. The burden shall be on the Port of Seattle to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

a. Circumstances beyond the reasonable control and despite the due diligence of the Port of Seattle including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by the Port of Seattle;

b. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or

c. Endangerment as described in Section VIII.M (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of the Port of Seattle.

3. Ecology shall act upon any written request for extension in a timely fashion. Ecology shall give the Port of Seattle written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section VIII.L (Amendment of Order) when a schedule extension is granted.

4. An extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of:

a. Delays in the issuance of a necessary permit which was applied for in a timely manner;

b. Other circumstances deemed exceptional or extraordinary by Ecology; or

c. Endangerment as described in Section VIII.M (Endangerment).

#### L. Amendment of Order

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VIII.N (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and the Port of Seattle. The Port of Seattle shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request for amendment is received. If the amendment to this Order represents a substantial change, Ecology will provide public notice and opportunity to comment. Reasons for the disapproval of a proposed amendment to this Order shall be stated in writing. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in Section VIII.J (Resolution of Disputes).

#### M. Endangerment

In the event Ecology determines that any activity being performed at the Site is creating or has the potential to create a danger to human health or the environment on or surrounding the Site, Ecology may direct the Port of Seattle to cease such activities for such period of time as it deems necessary to abate the danger. The Port of Seattle shall immediately comply with such direction.

In the event the Port of Seattle determines that any activity being performed at the Site is creating or has the potential to create a danger to human health or the environment, the Port of Seattle may cease such activities. The Port of Seattle shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction the Port of Seattle shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology

disagrees with the Port of Seattle's cessation of activities, it may direct the Port of Seattle to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to Section VIII.M (Endangerment), the Port of Seattle's obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended in accordance with Section VIII.K (Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

#### N. Reservation of Rights

This Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any of Ecology's rights or authority. Ecology will not, however, bring an action against the Port of Seattle to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against the Port of Seattle regarding remedial actions required by this Order, provided the Port of Seattle complies with this Order.

Ecology nevertheless reserves its rights under Chapter 70.105D RCW, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Site.

#### **O.** Transfer of Interest in Property

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by the Port of Seattle without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to the Port of Seattle's transfer of any interest in all or any portion of the Site, and during the effective period of this Order, the Port of Seattle shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, the Port of Seattle shall notify Ecology of said transfer. Upon transfer of any interest, the Port of Seattle shall restrict uses and activities to those consistent with this Order and notify all transferees of the restrictions on the use of the property.

#### P. Compliance with Applicable Laws

1. All actions carried out by the Port of Seattle pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. At this time, no federal, state or local requirements have been identified as being applicable to the actions required by this Order.

2. Pursuant to RCW 70.105D.090(1), the Port of Seattle is exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the Port of Seattle shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this Section.

The Port of Seattle has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or the Port of Seattle determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or the Port of Seattle shall be

responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the Port of Seattle shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by the Port of Seattle and on how the Port of Seattle must meet those requirements. Ecology shall inform the Port of Seattle in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The Port of Seattle shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

3. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency that is necessary for the State to administer any federal law, the exemption shall not apply and the Port of Seattle shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

#### Q. Indemnification

The Port of Seattle agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action for death or injuries to persons or for loss or damage to property to the extent arising from or on account of acts or omissions of the Port of Seattle, its officers, employees, agents, or contractors in entering into and implementing this Order. However, the Port of Seattle shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

#### IX. SATISFACTION OF ORDER

The provisions of this Order shall be deemed satisfied upon the Port of Seattle's receipt of written notification from Ecology that the Port of Seattle has completed the remedial activity required by this Order, as amended by any modifications, and that the Port of Seattle has complied with all other provisions of this Agreed Order.

#### X. ENFORCEMENT

Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

A. The Attorney General may bring an action to enforce this Order in a state or federal court.

B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

C. In the event the Port of Seattle refuses, without sufficient cause, to comply with any term of this Order, the Port of Seattle will be liable for:

- a. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply; and
- b. Civil penalties of up to twenty-five thousand dollars (\$25,000) per day for each day it refuses to comply.
- D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

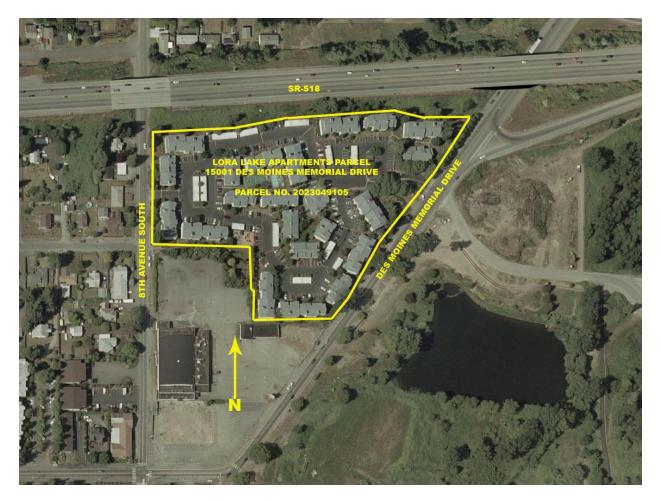
Effective date of this Order:

#### PORT OF SEATTLE

#### STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

Tay Yoshitani Chief Executive Officer Port of Seattle P.O. Box 1209 Seattle, WA 98111 Telephone: (206) 728-3000 Robert W. Warren, P. Hg. MBA Section Manager Toxics Cleanup Program Northwest Regional Office 3190 160<sup>th</sup> Avenue SE Bellevue, WA 98008 Telephone: (425\_649-7054 Agreed Order No. DE 6703 Page 25 of 28

## EXHIBIT A SITE DIAGRAM



### EXHIBIT B PREVIOUS ENVIRONMENTAL REPORTS

Golder Associates,1986. Letter to Mr. Raul Ramos, The Mueller Group, RE: Preliminary Geotechnical Site Investigation, Laura Lake Apartments, King County, Washington. August 1, 1986.

Golder Associates, 1986. Letter to Mr. Raul Ramos, The Mueller Group, RE: Geotechnical Site Investigation, Laura Lake Apartments, King County, Washington. September 19, 1986.

Golder Associates, 1987. Letter to Mr. Raul Ramos, The Mueller Group, RE: Cleanup Activities, Laura Lake Apartments. March 27, 1987.

Golder Associates, 1987. Letter to Mr. Pat Hendley and Mr. Raul Ramos, The Mueller Group, RE: Site Investigation and Clean Up, Laura Lake Apartments. April 6, 1987.

Golder Associates, 1987. Letter to Mr. Pat Hendley, The Mueller Group, RE: Lora Lake Apartment Development Site Investigation and Clean-up. June 30, 1987.

Golder Associates, 1987. Letter to Mr. Douglas Barnes, The Mueller Group, RE: Lora Lakes Clean Up. December 9, 1987.

Ecology, 1987. Letter to Mr. Douglas J. Barnes, The Mueller Group, RE: Lora Lakes Apartments – Site Investigation and Clean-up. December 10, 1987.

GeoScience Management, 2008. Letter to Paul Agid and Don Robbins, Port of Seattle, RE: Report of Focused Subsurface Investigation at Lora Lake Apartments in Vicinity of Previous Environmental Clean-up in 1987 by Golder Associates, Tax Lot Number 2023049105, Port of Seattle Parcel Number 029R, 15001 Des Moines Memorial Way South, WA. April 7, 2008.

ENSR, 2008. *Site Investigation Work Plan – Lora Lake Apartments*, ENSR Corporation. March 24, 2008.

ENSR, 2008. Soil, Groundwater, and Sub-slab Air Investigation, Lora Lakes Apartments, ENSR Corporation. June 2008.

ENSR, 2008. Supplemental Groundwater Investigation, Lora Lakes Apartments, ENSR Corporation. November 17, 2008.

## **EXHIBIT C – SCHEDULE OF DELIVERABLES**

<b>RI/FS Deliverables</b>	Due Date <sup>1</sup>
Ecology Review Draft Public Participation	60 calendar days following effective date of the
Plan	agreed order.
Public Review Draft Public Participation	30 calendar days following receipt of Ecology's
Plan	review comments on the Ecology Review Draft
	Public Participation Plan.
Final Public Participation Plan	30 calendar days following receipt of Ecology's
	final review comments on the public review
	draft plan. Ecology's final review comments
	will be submitted only after completion of public
	comment.
Supplemental Data Gaps Report	60 calendar days following effective date of the agreed order.
Ecology Review Draft Remedial	135 calendar days following effective date of the
Investigation/Feasibility Study Work Plan	agreed order
Public Review Draft Remedial	30 calendar days following receipt of Ecology's
Investigation/Feasibility Study Work Plan	review comments on the Ecology Review Draft
	Remedial Investigation/Feasibility Study Work
	Plan.
Final Remedial Investigation/Feasibility	30 calendar days following receipt of Ecology's
Study Work Plan	final review comments on the draft plan.
	Ecology's final review comments will be
	submitted only after completion of public
	comment.
Remedial Investigation Sampling Completed	12 months following Ecology's approval of the
	final RI/FS Work Plan
Ecology Review Draft Remedial	90 days following completion of RI work
Investigation /Feasibility Study Report	
Public review Draft Remedial	30 calendar days following receipt of Ecology's
Investigation/Feasibility Study Report	review comments on the Ecology Review Draft
	Remedial Investigation/Feasibility Study Report.
Final RI/FS Report	30 calendar days following receipt of Ecology's
	final review comments on the draft report.
	Ecology's final review comments will be
	submitted only after completion of public
Drogrades Doports	comment.
Progress Reports	15 <sup>th</sup> of every month following the end of each
	calendar month, beginning after the completion of the first full month after the effective date of
	the AO

<sup>&</sup>lt;sup>1</sup> If a due dates falls on a holiday or weekend, the due date will be extended to the next working day.

Agreed Order No. DE 6703 Page 28 of 28

### EXHIBIT D INTERIM ACTION WORK PLAN - DEMOLITION

Prepared for: Port of Seattle Seattle, WA

# Interim Action Work Plan – Demolition Lora Lake Apartments Building

AECOM, Inc. April 2009 Document No.: 05482-145-6000

AECOM

Prepared for: Port of Seattle Seattle, WA

# Interim Action Work Plan – Demolition Lora Lake Apartments Building

tersor

Prepared by Stacy Patterson

ØD

Reviewed by Merv Coover

AECOM, Inc. April 2009 Document No.: 05482-145-6000

AECOM

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## **List of Appendices**

Appendix A Design Drawings

### 1.0 Introduction

The Port of Seattle (Port) is conducting demolition activities at the vacated Lora Lake Apartments to eliminate security issues associated with vacated buildings.

The Port has determined that soil and ground water contamination are present at the site. Prior to conducting demolition activities the Port will conduct an interim action pursuant to Washington Administrative Code (WAC) 173-340-430(1)(a). The interim action will reduce threats to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to hazardous substances at the site. This Interim Action Demolition Work Plan describes measures that will be implemented to protect impacted soil from disturbance during demolition activities, ensure site security, and protect demolition workers from site contaminants.

### 2.0 Interim Action

### 2.1 Purpose

The Lora Lake Apartments are located at 15001 Des Moines Memorial Drive in Burien, WA. The complex is 8.29 acres in size and was built in 1987. The complex was originally comprised of 22 wood frame, three and two story, slab on grade, buildings. Six of the original apartment building structures were demolished previously to comply with Federal Aviation Agency flight path requirements for the SeaTac Airport Third Runway expansion. The remaining 16 units are unoccupied and currently boarded up. The future use for the site is anticipated to be light industrial/commercial in nature.

Environmental site investigations conducted by the Port in 2008 identified impacted soil and groundwater. The Port is currently working with the Washington State Department of Ecology to develop a draft clean up action plan to address the impacted soil and groundwater. This process is ongoing and cleanup actions have yet to be developed. The apartment building structures are not part of the impacted media present on site. The vacant apartment buildings pose a serious security problem for the Port and surrounding community. The property must be continually monitored to discourage vagrants, illicit activities, and the threat of arson. The Port is initiating the demolition of the above ground building structures to eliminate these threats and ensure public safety.

Impacted soil and groundwater will not be disturbed during the demolition activities. Protective measures will be put in place, as outlined in this plan, to ensure demolition equipment and personnel do not disturb or come in contact with site contaminants.

The demolition activities are anticipated to occur in late spring or early summer of 2009. The Port of Seattle will begin the bid process in May 2009.

### 2.2 Work Plan

All above-ground structures at the unoccupied Lora Lake Apartment complex will be demolished. No in-ground structures will be removed or disturbed. All foundations will remain in place and be secured by construction fencing upon completion of building demolition. In-ground pools will be filled with gravel. A small amount of soil will be excavated in order to access and cut utility lines.

1

The Port of Seattle is instituting a number of procedures to protect workers and the public, as well as ensure minimal disturbance of impacted soils during the demolition activities. These procedures are incorporated into the demolition design drawings. The design drawings are provided in Appendix A. The protective measures are described in the following sections and references to the specific design drawings details are provided.

#### 2.2.1 Security Measures

The current chain link fence surrounding the complex will be maintained during and after demolition. During demolition, the entrance and exits will be monitored by site personnel and only authorized individuals will be permitted entrance. The site will be secured and the entrance gates will be locked when demolition work is not occurring.

#### 2.2.2 Site Soil Protection Measures

Building demolition will be managed in phases. All construction/storm water will be contained within each phased work area using methods described on Sheet C10.01 General Notes 2 and 4 in Appendix A. All storm drain catch basins within the work area will be blocked and storm and construction water will be captured and managed on-site by the contractor in storage tanks. Upon completion of the project or as needed to accommodate storage capacity, the water will be sampled, analyzed and disposed at a permitted facility in accordance with applicable state and federal regulations. Ecology approval of the facility for disposal of the collected construction storm water is required.

The site is located on a slope. The low side of the property borders Des Moines Memorial Drive. A modified silt fence will be installed along the property line in this down slope area as described on Sheet C10.01.

Utility cutoff excavations are required for disconnecting the domestic water services and sanitary sewer services to building. The locations and detail are illustrated on Sheet C12.01. The utility excavations will be approximately 2' wide x 4' long x 4' deep. Excavated soils will be temporarily stored adjacent to the excavation site on plastic and returned immediately to the excavation as backfill upon completion of disconnection of the utility services. The disturbed area will be covered with jute mat to eliminate soil erosion. Utility cutoff excavations required in existing paved surfaces will be patched with asphalt pavement upon completion of the disconnection activity.

Beyond the utility cutoff excavations no other disturbances of existing soils are planned during the demolition of buildings. All disturbed soils will be stabilized with appropriate Best Management Practices (BMPs) to prevent mobilization of soils by storm water runoff or wind.

Dust suppression will be conducted as needed during building demolition. Light water mist will be utilized to knock down fugitive dust generated when building structures are dismantled. Water misting will be managed to avoid water runoff from the individual demolition locations.

#### 2.2.3 Air Monitoring

Perimeter air monitoring will be conducted to ensure water misting measures, as described above, are effective at the property boundary perimeter. Air monitoring will be conducted during operations with the potential for dust generation (actual structure demolition). Airborne contaminants of concern are respirable dust generated during building demolition.

Respirable dust consists of aerosol particles with a mean aerodynamic diameter of less than 10 µm. This criterion is also referred to as Particulate Matter 10, or PM-10 in environmental air emission measurements.

Real-time instruments have been selected for perimeter monitoring instead of time-integrated sampling because Action Level exceedances can be more quickly identified and appropriate control actions can be implemented on a timely basis. In addition, real-time dust monitoring is a proven technology with a high degree of precision and reliability.

The monitoring program will utilize MIE DataRam 4000 portable Real-time Monitors. The MIE DataRam 4000 is a light-scattering aerosol monitor (also called a nephelometer or aerosol photometer) and operates by illuminating aerosol passing through a defined volume and detecting the total light scattered by all the particles in that volume. The instrument will be equipped with a size-selective inlet head calibrated to PM-10 particles. Additionally, the omni-directional sampling inlet compensates for interference from wind flow. The instrument has a detection limit of 0.0001 mg/m<sup>3</sup> and an accuracy of plus or minus two percent. The particulate data and alarm status are visible on an LCD screen and also stored in the unit's internal data logger, which can be downloaded to an external computer. The monitors are portable and powered by rechargeable batteries.

The instruments will be equipped with high level alarms calculated to alarm at one half the Washington State Division of Occupational Safety and Health (DOSH) permissible exposure limit (PEL) for respirable dust. The PEL for respirable dust is 5 mg/m<sup>3</sup> (WAC 296-841-200). The site action level will be 2.5 mg/m<sup>3</sup>.

A weather station measuring wind speed and wind direction will be constructed and monitored during demolition activities. The real time dust monitors will be located along the property boundaries, up and down wind of daily site operations. The location of the dust monitors will be dependent on the prevailing wind direction and demolition operation location. Background air monitoring will be conducted downwind of the project site for one day prior to the start of any demolition work on the property to determine background dust concentrations. At the beginning of demolition, daily air monitoring will be conducted downwind and upwind of the active demolition area and continue until site work is complete or until there is no longer a potential for release of fugitive dusts.

To appropriately respond to alarm situations, predetermined stepwise modifications will be implemented to reduce dust generation to within site boundaries and below health and safety action levels. The modification will include, but will not be limited to, the following actions:

- Increase misting during material movement to prevent dust generation.
- Increase misting prior to material movement to prevent dust generation;
- Slow or limit equipment movement to decrease dust generation; and
- Stop work and evaluate source of dust generation;

The Port will manage all air monitoring activities and work with the demolition contractor to ensure dust generation is maintained below health and safety action levels.

#### 2.2.4 Worker Protection and Contaminated Soil Isolation and Protection

Port contractors are required to comply with applicable DOSH and Federal Occupational Safety and Health (OSHA) standards. A site health and safety plan will be developed to cover all site activities. Construction activities that pose an exposure to contaminated soil will be conducted by personnel that have received health and safety training and medical monitoring as required in Chapter 296-62 WAC and General Occupational Health Standards. The only construction activity anticipated to pose an exposure to contaminated soil is excavation to access and cut utility lines.

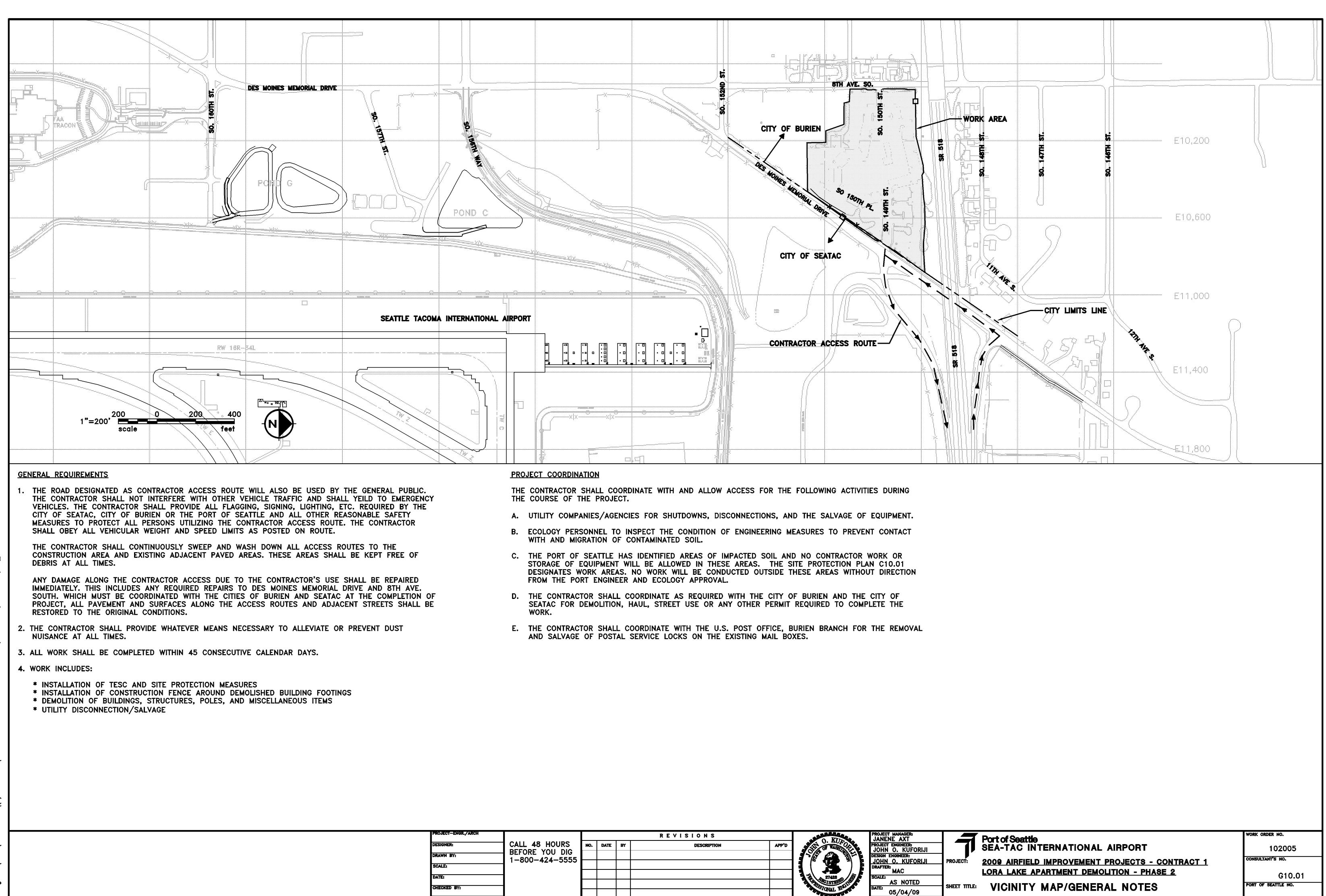
All site activities will be restricted to use of protected areas only. Protection will be in the form of existing pavement, concrete floor slabs or constructed barriers isolating contaminants to prevent contact by contractor personnel or site visitors. Protected areas are described and detailed in the demolition design drawing in Appendix A. The specific protection and detail locations are listed below:

- Constructed barriers to isolate contaminants are depicted as "Site Protection Areas" on Sheet C10.01. The constructed barriers are Geotextile Fabric (Mirafi 600X or approved equal), covered by 6 inches of crushed rock base course, and placed over existing ground. These constructed barriers will be installed to prevent workers and equipment from disturbing or coming in contact with potentially contaminated soils during demolition activities.
- Contractor personnel and construction equipment will be limited to existing pavement and constructed barriers described above. Temporary construction fencing will be installed in locations shown on Sheet C10.01 between "Site Protection Areas" and landscaping or lawn. The temporary construction fence detail is shown on sheet SD1.01A, Detail 11. Portable temporary construction panels may also be used to limit contractor personnel and construction equipment to existing pavement and constructed barriers. The portable temporary construction panels must provide protection equivalent to or better than the temporary construction fence.
- The restricted areas will be marked with temporary/construction barrier or orange fencing to visually delineate the restricted areas from work zones. Only individuals with appropriate training and under the direction of the Port Engineer will be allowed access in restricted zones as described under Project Coordination on Sheet C10.01.
- All buildings for demolition shall be accessed from existing pavement, concrete floor slabs or constructed barriers only.
- To ensure demolition transport trucks do not track dirt and debris onto public roadways all trucks will remain on paved areas while onsite and during loading operations. All truck tires will be inspected and dirt and debris will be removed prior to exit from the site.
- No construction demolition debris shall be allowed beyond building footprints or established protection areas. Random demolition debris unintentionally falling into the restricted/off-limits areas of the site will be retrieved by workers that are subject to requirements for heightened Personal Protective Equipment (PPE) requirements. No existing soils will be disturbed by such debris retrieval activity.

Additional generic protective measures associated with demolition activities are described in the design drawings. The Port of Seattle will provide oversight during demolition activities to ensure all requirements are met.

Appendix A

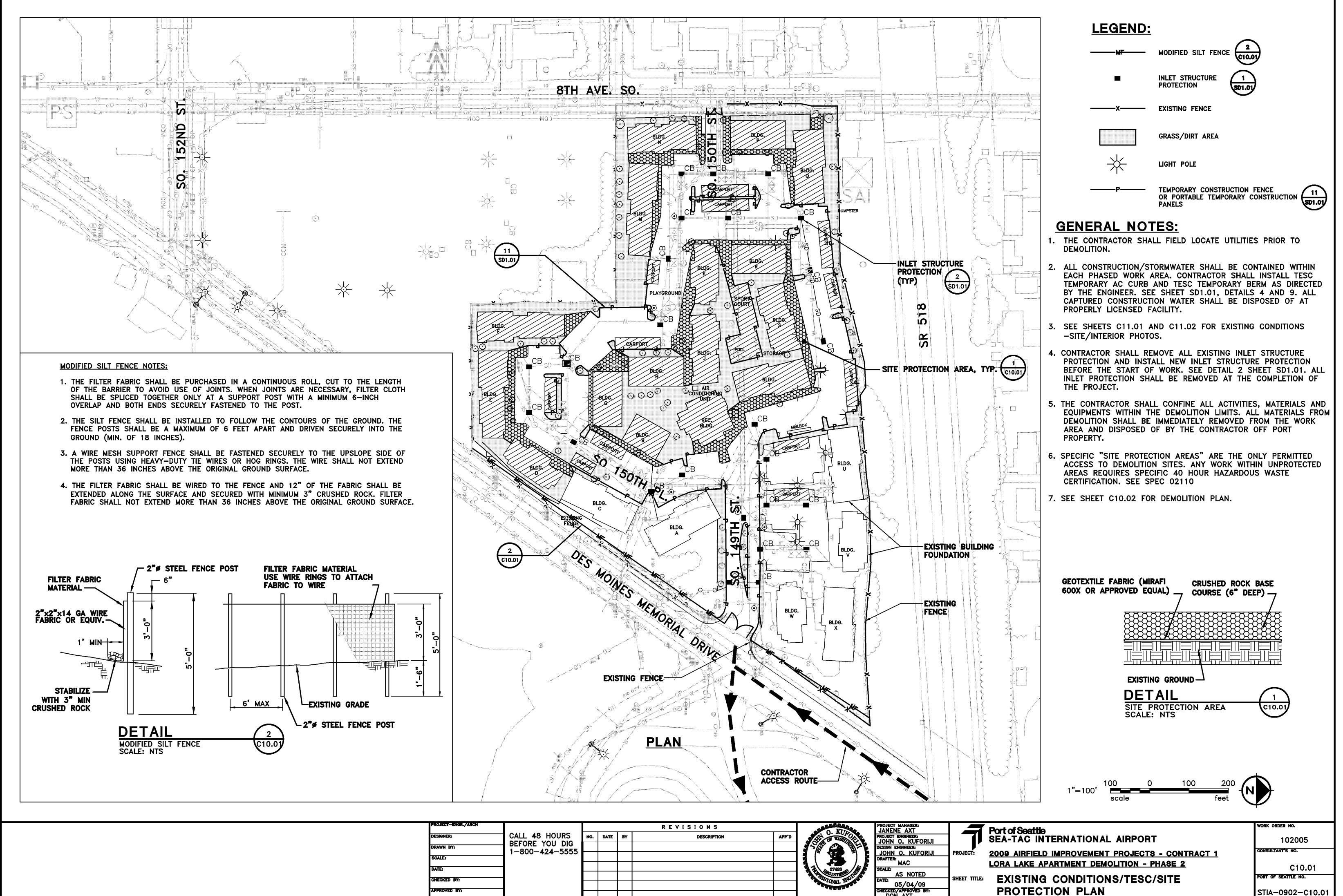
**Design Drawings** 



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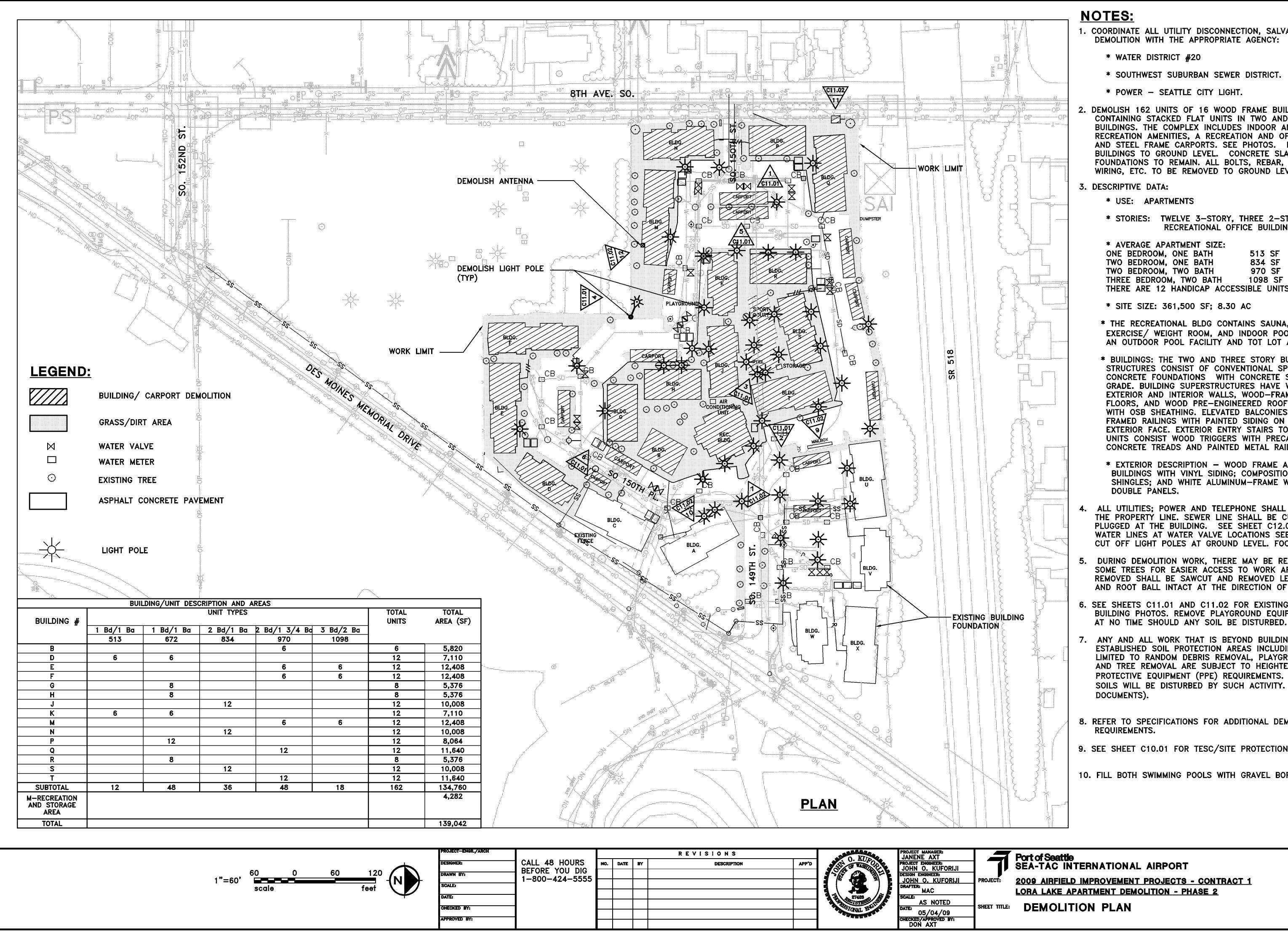


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- 1. COORDINATE ALL UTILITY DISCONNECTION, SALVAGE AND
- 2. DEMOLISH 162 UNITS OF 16 WOOD FRAME BUILDINGS CONTAINING STACKED FLAT UNITS IN TWO AND THREE STORY BUILDINGS. THE COMPLEX INCLUDES INDOOR AND OUTDOOR RECREATION AMENITIES, A RECREATION AND OFFICE BUILDING, AND STEEL FRAME CARPORTS. SEE PHOTOS. DEMOLISH ALL BUILDINGS TO GROUND LEVEL. CONCRETE SLABS AND FOUNDATIONS TO REMAIN. ALL BOLTS, REBAR, CONDUIT, WIRING, ETC. TO BE REMOVED TO GROUND LEVEL.
- - \* STORIES: TWELVE 3-STORY, THREE 2-STORY AND RECREATIONAL OFFICE BUILDING

* AVERAGE APARTMENT SIZE:	
ONE BEDROOM, ONE BATH	513 SF
TWO BEDROOM, ONE BATH	834 SF
TWO BEDROOM, TWO BATH	970 SF
THREE BEDROOM, TWO BATH	1098 SF
THERE ARE 12 HANDICAP ACCES	SIBLE UNITS

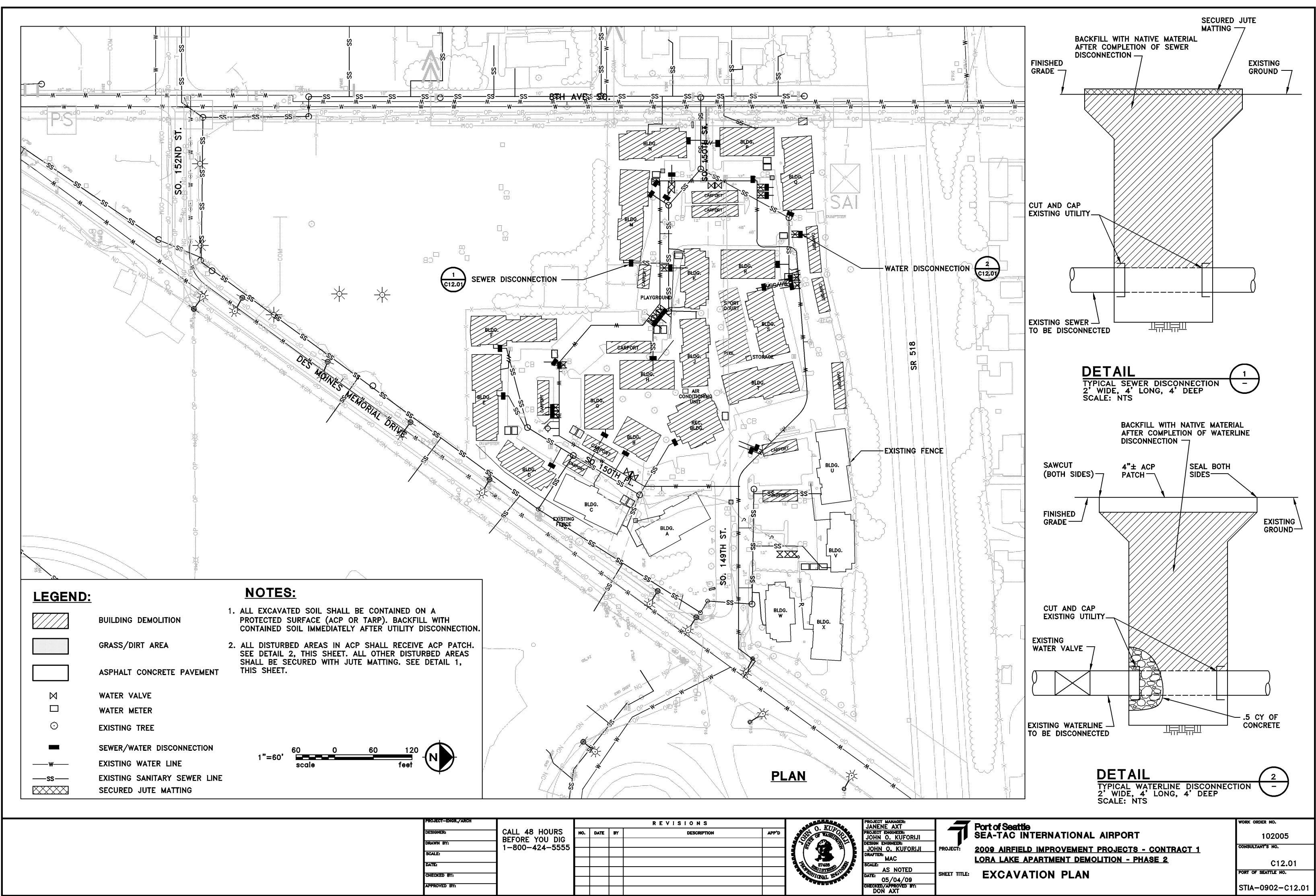
- \* THE RECREATIONAL BLDG CONTAINS SAUNA, TANNING ROOMS, EXERCISE/ WEIGHT ROOM, AND INDOOR POOL AND SPA. AN OUTDOOR POOL FACILITY AND TOT LOT ALSO PROVIDED.
- \* BUILDINGS: THE TWO AND THREE STORY BUILDING STRUCTURES CONSIST OF CONVENTIONAL SPREAD CONCRETE FOUNDATIONS WITH CONCRETE SLAB-ON-GRADE. BUILDING SUPERSTRUCTURES HAVE WOOD-FRAMED EXTERIOR AND INTERIOR WALLS, WOOD-FRAMED ELEVATED FLOORS, AND WOOD PRE-ENGINEERED ROOF TRUSSES WITH OSB SHEATHING. ELEVATED BALCONIES ARE WOOD-FRAMED RAILINGS WITH PAINTED SIDING ON THE EXTERIOR FACE. EXTERIOR ENTRY STAIRS TO ELEVATED UNITS CONSIST WOOD TRIGGERS WITH PRECAST CONCRETE TREADS AND PAINTED METAL RAILINGS.
- \* EXTERIOR DESCRIPTION WOOD FRAME APARTMENT BUILDINGS WITH VINYL SIDING; COMPOSITION ROOF SHINGLES; AND WHITE ALUMINUM-FRAME WINDOWS WITH
- 4. ALL UTILITIES; POWER AND TELEPHONE SHALL BE CUT OFF AT THE PROPERTY LINE. SEWER LINE SHALL BE CUT OFF AND PLUGGED AT THE BUILDING. SEE SHEET C12.01. CUT AND CAP WATER LINES AT WATER VALVE LOCATIONS SEE SHEET C12.01. CUT OFF LIGHT POLES AT GROUND LEVEL. FOOTINGS TO REMAIN.
- 5. DURING DEMOLITION WORK, THERE MAY BE REASONS TO REMOVE SOME TREES FOR EASIER ACCESS TO WORK AREA. ANY TREE REMOVED SHALL BE SAWCUT AND REMOVED LEAVING THE STUMP AND ROOT BALL INTACT AT THE DIRECTION OF THE ENGINEER.
- 6. SEE SHEETS C11.01 AND C11.02 FOR EXISTING CONDITIONS BUILDING PHOTOS. REMOVE PLAYGROUND EQUIPMENT DEBRIS. AT NO TIME SHOULD ANY SOIL BE DISTURBED.
- 7. ANY AND ALL WORK THAT IS BEYOND BUILDING FOOTPRINT OR ESTABLISHED SOIL PROTECTION AREAS INCLUDING BUT NOT LIMITED TO RANDOM DEBRIS REMOVAL, PLAYGROUND DEMOLITION, AND TREE REMOVAL ARE SUBJECT TO HEIGHTENED PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS. NO EXISTING SOILS WILL BE DISTURBED BY SUCH ACTIVITY. (SEE REFERENCE
- 8. REFER TO SPECIFICATIONS FOR ADDITIONAL DEMOLITION
- 9. SEE SHEET C10.01 FOR TESC/SITE PROTECTION PLAN.
- 10. FILL BOTH SWIMMING POOLS WITH GRAVEL BORROW.

WORK ORDER NO. 102005

CONSULTANT'S NO.

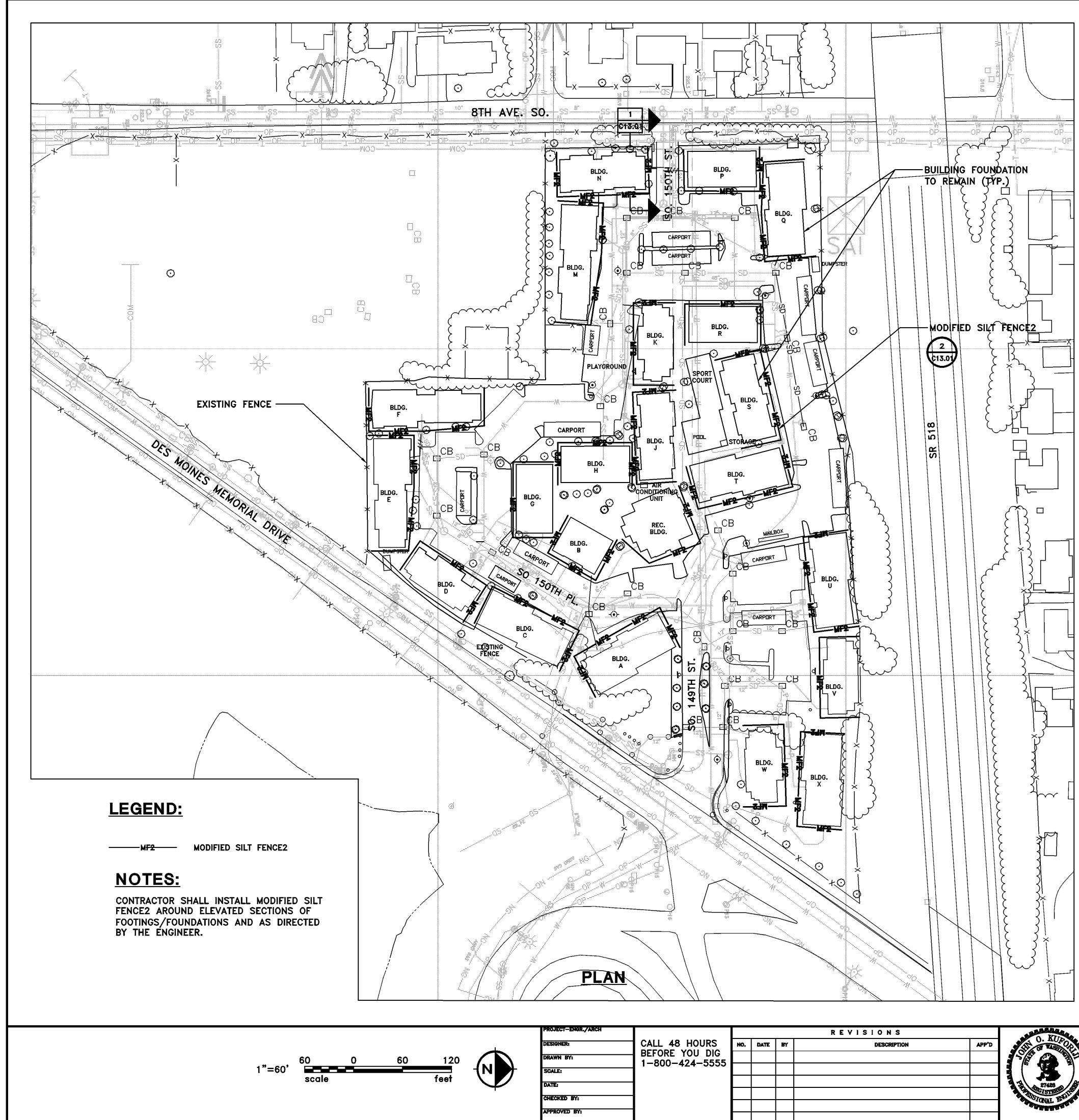
C10.02 PORT OF SEATTLE NO.

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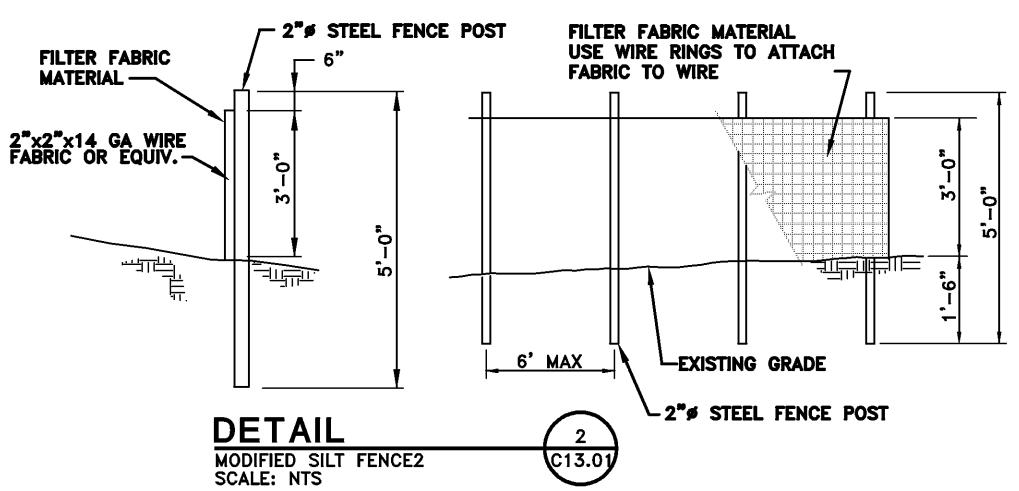
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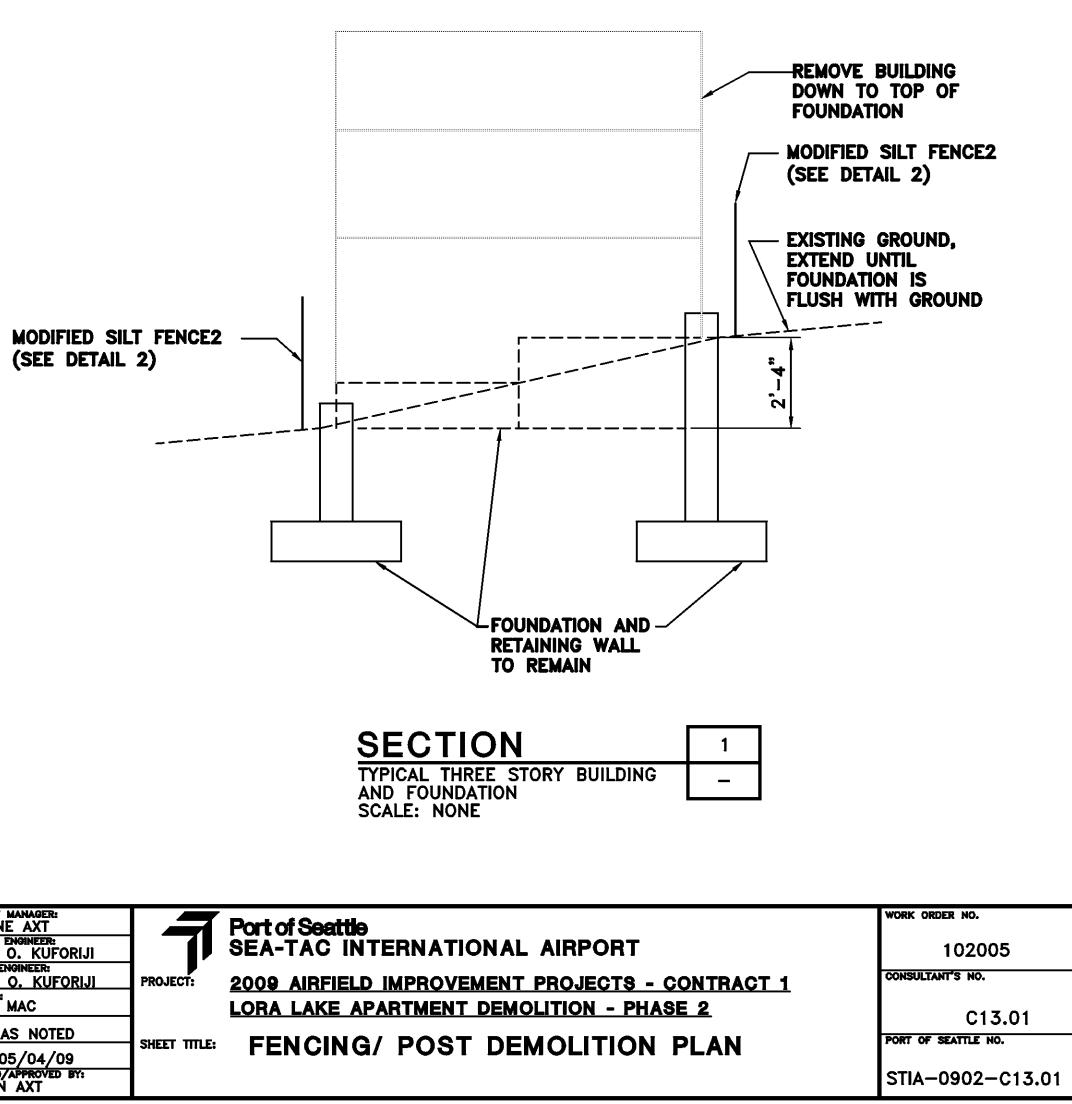
MODIFIED SILT FENCE2 NOTES:

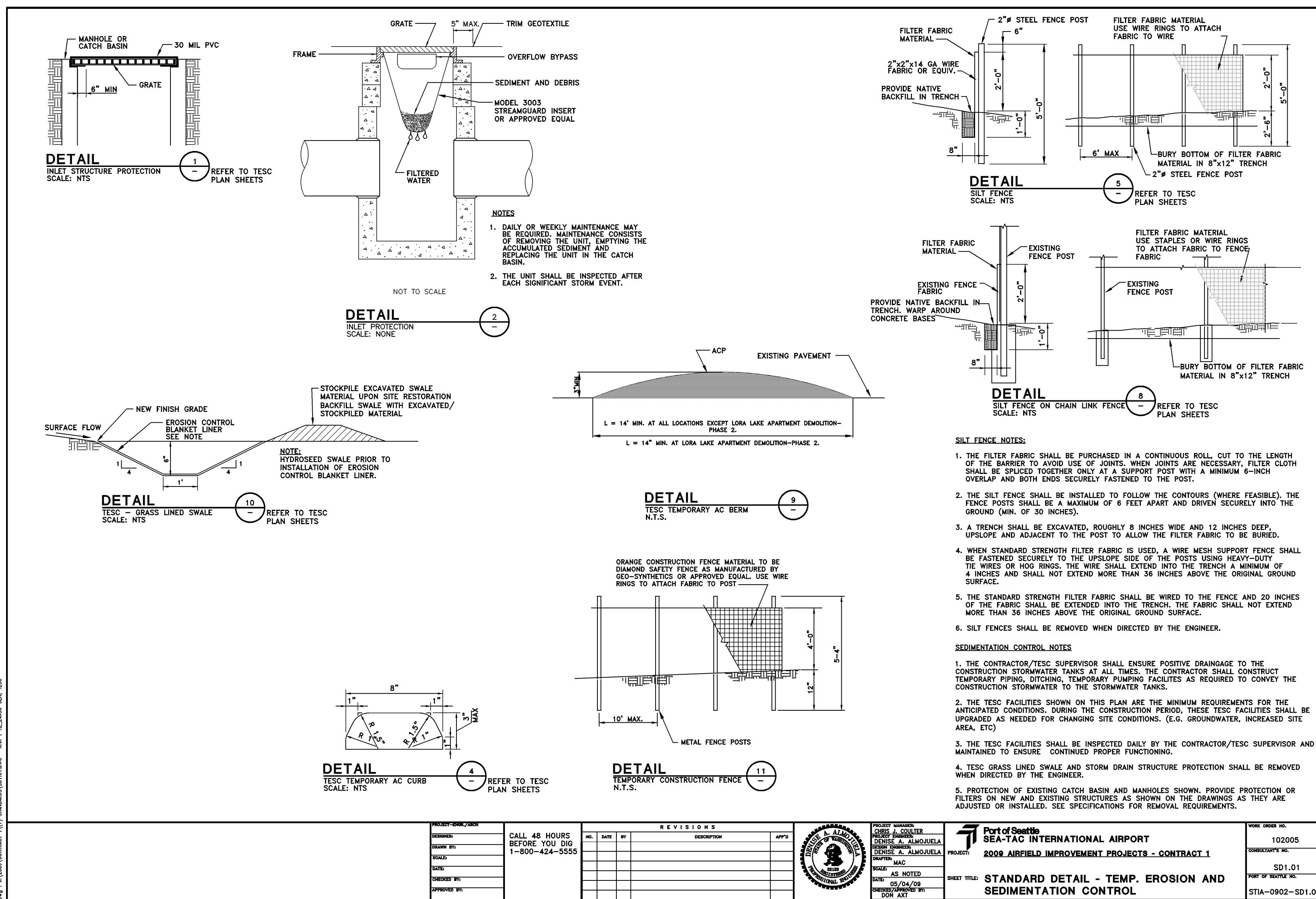
1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL, CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.

2. THE SILT FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS OF THE GROUND. THE FENCE POSTS SHALL BE A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MIN. OF 18 INCHES).

3. A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY TIE WIRES OR HOG RINGS. THE WIRE SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

4. THE FILTER FABRIC SHALL BE WIRED TO THE FENCE AND SHALL NOT EXTEND MORE THAN **36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.** 





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JUELA	F	Port of Seattle SEA-TAC INTERNATIONAL AIRPORT	work order no. 102005
JUELA	PROJECT:	2009 AIRFIELD IMPROVEMENT PROJECTS - CONTRACT 1	consultant's no. SD1.01
ſ:	Sheet Title:	STANDARD DETAIL - TEMP. EROSION AND SEDIMENTATION CONTROL	PORT OF SEATTLE NO. STIA-0902-SD1.01