CONSTRUCTION GENERAL REQUIREMENTS

SEATTLE -TACOMA INTERNATIONAL AIRPORT
ENGINEERING CONSTRUCTION SERVICES
POST OFFICE BOX 68727
SEATTLE, WA 98168

Port of Seattle

NOTE:
These Seattle-Tacoma International Airport (STIA) Tenant Improvement Construction General Requirements are all inclusive and intended to address a wide variety of tenant and concessionaire projects. Information within certain sections may not be applicable to the project. The Port construction project representative (Construction Manager, Project Manager, Engineer or Inspector) will clarify which if any requirements are not required for a project.

Rev. 1 7/31/15

PART 1 GENERAL

1.01 SUMMARY

A. The Sea-Tac International Airport is a complex operating facility which is governed by a very strict set of operating rules to insure the safety of the traveling public, the operators of the various airlines and those individuals who function as support personnel to the facility. It is recognized and understood that the Contractor is required to comply with the most current edition requirements contained in FAA Advisory Circulars and Port of Seattle Rules and Regulations as they pertain to this project. It is understood and accepted by the Port of Seattle that the Contractor has familiarized itself with general Airport operations and has taken these into consideration in arriving at its bid prices and in scheduling its various activities.

B. Following are the general safety operations and objectives that must be achieved to maximize safety and to minimize time and economic loss to the aviation community, construction contractors and others directly or indirectly affected by the project. The Contractor shall keep these objectives in mind when formulating schedules and operational activities. The Contractor shall be responsible for controlling their operations and the operations of subcontractors (at all levels) and suppliers so as to comply with the requirements of this Section.

1. Keep the airport operational for all users
2. Minimize delays to aircraft operations
3. Maintain safety of aircraft movement and airport operations as a whole
4. Minimize delays to construction operations
5. Minimize airport operation and construction activity conflicts
6. Maintain safety of personnel using the airport at all times

1.02 DEFINITIONS

A. Air Operations Area (AOA): That area within the airfield perimeter security fence.

B. Air or Aircraft Movement Area (AMA): The movement area consists of runways, taxiways and other areas of the airport that are used for taxiing or hover taxiing, air taxiing, takeoff and landing of aircraft, exclusive of loading aprons and aircraft parking areas.

C. Non-Movement Area: That area of the Airport Operations Area not defined as a movement area and including the exterior of buildings on or adjacent to the non-movement area. Aircraft in motion on these surfaces are not under control of the air traffic control tower.

D. Apron: That non-movement area prepared for the positioning or parking of aircraft during ground operations not involving landing and takeoff of airplanes. The areas are usually designed according to use, such as terminal, cargo, parking, service hangar, or holding apron. Such terms as “ramp,” “hardstand,” “turnaround,” etc., are synonymous with apron. Other sub-area designations are:

1. Aircraft Parking Positions - used for parking aircraft to enplane and deplane passengers, load or unload cargo.

2. Aircraft Service Area - on or adjacent to an aircraft parking position. They are used by airline personnel and equipment for servicing aircraft and staging of baggage, freight and mail for loading and unloading of aircraft.

3. Service/Fire Lanes - identified rights-of-way on apron designated for aircraft ground service vehicles and fire equipment.

4. Taxi lanes - reserved to provide taxing aircraft with access to and from parking positions.

E. Runway: A clearly defined area on the airport that has been prepared and is suitable for landing and takeoff of airplanes. The principal runway elements include the structural pavement, shoulders, blast pads, runway safety area, extended runway safety area and airport imaginary surfaces. The runway drainage system, lighting, marking and areas required for landing aids are also integral design parts of the runway.

F. Taxiway: A defined path over which airplanes can taxi from one part of an airport to another. It includes the structural pavement, shoulder, taxiway safety area and obstacle-free area.

G. Vehicle Control Line: A red line bordered on both sides by white lines painted on the ramp parallel to and within 12 feet of the north-south vehicle drive lanes. The vehicle control line is present where movement area surfaces boundary non-movement areas and service roads.

H. Vehicle Drive Lanes: Identified rights-of-way in the non-movement area designated for vehicular movement on the AOA. Drive lanes are delineated by white lines or traffic markings painted on the pavement.

I. Terminal Buildings and Support Facilities: Interior of terminal and concourses, and support facilities such as cargo buildings (including exterior of buildings and roofs), which are inside the AOA.

J. Street-Side of Buildings: Exterior of building and roof on street side, outside of the AOA streets, multilanes, drives, parking garage and remote parking lots. This area is also referred to as the landside of the airport.

K. Foreign Object Debris (FOD): Any object capable of being ingested into aircraft engines or penetrating aircraft tires. Examples are knives, forks, spoons, hand tools, bolts, nails, nuts, cable, polyurethane, vehicle parts, sand, gravel, paper, rocks, dirt, cans, glass, wood, et al.

L. Director, Airport Operations: That individual who directs all airfield operations and activities with respect to safety, security, airport rules and regulations, and emergency situations.

M. Manager-Airfield Security/Airport Security Coordinator: That individual appointed by the General Manager, Airfield Line of Business, who directs all activities with respect to security.

N. Unsuitable Weather: Atmospheric or environmental conditions which restrict construction activities and effect operation of aircraft while approaching a runway to land; during landing; taxiing between runways, ramps, aprons, hangars, or loading zones; standing by to takeoff; or during takeoff as determined by the General Manager, Airfield Line of Business or the General Manager or his authorized representative. In addition, that atmospheric or environmental condition

which may, in the opinion of the construction project representative, affect the final outcome, position, or condition of construction work, maintenance work, or improvement of any sort or nature.

O. Jet Blast: Jet blast is the force of jet exhaust produced by the aircraft engines. The high velocities produced by aircraft engines are capable of causing bodily injury and damage to equipment. The drag and uplift forces produced by jet engines are capable of moving large boulders. A jet engine operating at maximum thrust is capable of lifting a 2-foot boulder 35 feet behind the airplane completely off the ground.

As an example, a DC10 at takeoff thrust can produce a velocity of 750 mph 10 feet behind the aircraft; a velocity of 260 mph 100 feet behind the aircraft; a velocity of 55 mph 1,000 feet behind the aircraft; 10 mph 4,400 feet behind the aircraft. At maximum values these velocities may extend 30’ out beyond the wingtips of the aircraft and to a height of 60’ above ground level. (This information is taken from FAA Advisory Circular 150/5300-13 Figure 8-4.)

P. Low Visibility Operations: Low Visibility Operations means movement of aircraft for takeoff landing or taxi when the visibility is reported to be less than 1,200 feet runway visual range (RVR).

1.03 REFERENCES

The rules, requirements and regulations specified in this section have been compiled from the following sources:

A. Sea-Tac International Airport Operation Rules and Regulations

B. Port of Seattle Regulations for Airport Construction, Revision 2014.

C. Federal Aviation Administration Advisory Circular 150/5370-2E, 150/5210-5B Appendix 1, and 70/7460-1K (Current Edition).

D. Federal Aviation Regulations (FAR) Part 77.

E. FAA order NM 5200.3.

1.04 REQUIREMENTS AND REGULATIONS RELATING TO THE OPERATION OF MOTOR VEHICLES

A. General:

1. During the term of this Contract, the Contractor shall recognize and abide by the following rules and controls as they may be modified by federal regulations.

2. In addition to these regulations, the construction project representative is empowered to issue such other instructions as may be deemed necessary for the safety and wellbeing of Airport users or otherwise in the best interests of the Port.

B. Operation of Motor Vehicles:

1. General:

a. Motor vehicle operations within and on the Airport premises shall be governed generally by the provisions of the Washington State Motor Vehicle Codes and Traffic Direction procedures and signals for turns, lights and safe-driving precaution shall be in conformity

therewith. In addition, motor vehicles shall conform to all special regulations prescribed by the Commission or procedures imposed pursuant to Commission regulation by the Director.

b. Traffic on enplaning and deplaning drives, public thoroughfares and parking areas of the Airport is limited to those vehicles properly licensed to operate on public streets and highways.

c. All vehicular equipment in the AOA, cargo, tunnel, access road, aircraft parking or storage areas shall at all times comply with any lawful signal or direction of Port employees. All traffic signs, lights and signals shall be obeyed, unless otherwise directed by Port employees.

d. Every person operating motorized equipment of any character on any area shall operate the same in a careful and prudent manner and at a rate of speed posted or fixed by this section and at no time greater than is reasonable and proper under the conditions existing at the point of operation, taking into account traffic and road conditions, view obstructions and consistent with all conditions so as not to endanger the life, limb, or property or the rights of others entitled to the use thereof.

2. Operation of Vehicles Within AOA:

a. All motor vehicles that enter the AOA shall possess exhaust systems which are protected with screens, mufflers, or other devices adequate to prevent the escape of sparks or the propagation of flame.

b. Regardless of the time of day, all powered construction vehicles that are equipped with headlights shall operate with the headlights on when the vehicle is in motion on the AOA.

c. All Contractor vehicles shall be equipped with the following visibility/identification features: 1) Operable yellow flashing beacons, beacons must be lighted during all periods of vehicle operation; 2) 3 foot by 3 foot flags having a checkered pattern of international orange and white squares at least 1 foot on each side (For fabric color specifications see FAA Advisory Circular 150/5210-5C, Appendix A.). Attach flag on top of vehicle with rigid pole so that flag will be visible at all times. Vehicles without beacons/flags will not be permitted to enter the AOA.

d. No person shall operate any motor vehicle or motorized equipment in the AOA of the Airport unless such motor vehicle or motorized equipment is in a safe and mechanically reliable condition for such operation.

e. Any person operating equipment in the Air Operations Area shall, in addition to this section, abide by all existing Federal Aviation Administration and other governmental rules and regulations.

f. No person shall operate any motor vehicle or motorized equipment on the aircraft movement or non-movement areas of the Airport at a speed in excess of twenty (20) miles [32 km/h] per hour, or the

posted speed limit, whichever is lower, less where conditions warrant. Designated motor vehicle drive lanes shall be utilized where provided unless specific authorization to the contrary is given by the construction project representative.

g. No person operating a motor vehicle or motorized equipment in the AOA shall in any way hinder, stop, slow, or otherwise interfere with the operation of any aircraft on the Airport.

h. All aircraft and emergency vehicles have priority over Contractor vehicles. Contractor vehicles shall yield right of way to aircraft and emergency vehicles. Contractor shall ensure that under no circumstances will any contractor or subcontractor or other vehicle associated with the job pass beneath any part of an aircraft or loading bridge, or block the access to any parking gate or delay any aircraft movement.

i. Vehicles shall remain within established drive lanes. The Vehicle Control Line separates the aircraft movement area (runways and taxiways) from the non-movement area (terminal and aircraft aprons and parking areas). It is prohibited to use runways or taxiways or adjacent field areas unless specifically indicated on the drawings. It is emphasized that the Contractor's authority to operate does not extend to active aircraft movement area. The Contractor shall operate along established haul routes with prior approval of the Director, Airport Operations, or the Director's designee, and the construction project representative. No vehicle shall cross the Vehicle Control Line without approval of the Airport Traffic Control Tower and must be in radio contact with the Tower, under escort, or on an established haul route.

j. Contractor vehicles shall not deviate from approved haul routes specified on the drawings.

k. Escorts: At all times during work within 250 feet of the centerline of an operating runway or 160 feet of the centerline of an operating taxiway, or when entering or crossing an active movement area, vehicles shall be accompanied by an approved Port of Seattle Escort. All requests for escorts and operations involving an aircraft movement area, or any other activity that may tend to interfere with the general operation of the Airport, shall be approved by the Director, Airport Operations by way of the construction project representative. A minimum of 24 hours' prior notice shall be given the construction project representative in each case. See Section 01500 - Temporary Facilities and Controls, for submittal requirements.

l.

C. Parking:

1. No parking is permitted on any Airport roadway as the primary purpose of the Airport roadways is for motor vehicle traffic.

2. No person shall park any motor vehicle, other equipment, or materials in the AOA of the Airport, except in a neat and orderly manner and at such points as prescribed by the contract documents.

3. No person shall park any motor vehicle or other equipment or materials in the AOA of the Airport within fifteen (15) feet of any fire hydrant or standpipe.

4. Parking of construction workers' private vehicles shall also be within the Port's Logistics yard parking area or in a public or private parking facility outside the AOA. Under no circumstances will vehicles or equipment be parked within five (5) feet of the Airport Perimeter Security fence line.

5. Vehicles parked within the AOA shall be chocked or have the parking brake activated.

D. Impoundment of Motor Vehicles:

1. Any vehicle in violation of the provisions as referenced in Chapter 46.52 (Abandoned Vehicles) or Chapter 46.61 (Rules of the Road) of the Revised Code of Washington may be subject to impoundment pursuant to the provisions and procedures contained therein.

2. No vehicle shall be impounded except under the direction of an authorized police officer of the Port of Seattle.

E. Vehicle Identification:

1. All vehicular equipment operating within the AOA must display signs of commercial design on both sides of the vehicle to identify the vehicle as belonging to the Contractor firm. The Contractor's name must appear in letters a minimum of two inches high. Magnetic signs are acceptable.

2. Vehicles that appear at access gates without signs on both sides of the vehicle will be denied access. Vehicles found to be missing signs within the Air Operations Area will be escorted off the job site and not be permitted to re-enter until signs have been installed.

F. Load Limits: Unless otherwise indicated, when using airport roadways, the Contractor shall restrict the gross combination weight to the legal limits allowed on public roads.

1.05 REQUIREMENTS AND REGULATIONS RELATING TO OPERATORS OF VEHICLES

A. All drivers operating vehicles on airport property must carry a valid United States driver's license on his/her person, appropriately endorsed for the type of equipment being operated.

B. All personnel (including drivers) working within the AOA must have a valid Port of Seattle Identification/Access badge. See Section 01567 - Airport Personnel Identification/Access Control for Procedures required for badge issuance.

C. All personnel working within the AOA shall receive special drivers training and be approved by the Port of Seattle before being allowed to operate within the AOA or be escorted by Port of Seattle approved escort. Personnel operating outside the AOA may operate vehicles without attending the special drivers training course.

D. Contractors, Subcontractors, Suppliers and Contractor occasional deliveries requiring access to the AOA in support of the contract work that do not have valid

Port identification shall be escorted by authorized Contractor personnel. The Port will not provide escorts for the Contractor's work.

1.06 REQUIREMENTS FOR ORIENTATION OF CONTRACTOR PERSONNEL AND PROJECT MEETINGS

A. Air Operations Orientation:

1. After Award of the contract has been issued, but prior to the start of the construction, arrange with the construction project representative to have all supervisory and job office personnel assigned to this project attend an "Air Operations Orientation." This orientation will be conducted by the Port for discussion of the rules and regulations pertinent to this Contract. The orientation will be repeated at reasonable intervals during the construction period. Port attendees will include the construction project representative and the Director, Airport Operations or the Director's authorized representative.

2. The Air Operations Orientation may be conducted as part of the preconstruction meeting and shall not be considered an educational course in Air Operations Safety, but a discussion of existing rules or regulations related to airport activities. The Contractor shall be totally responsible and liable for the actions of his employees, agents, or representatives.

B. Safety and Security Meetings: For tenant projects with an airfield component, an airport safety and security meeting will be conducted after the award of the contract and prior to commencing construction. Additional construction safety meetings will be scheduled throughout the life of the contract.

1.07 SECURITY REQUIREMENTS

A. General Intent: It is intended that the Contractor shall comply with all requirements of the Airport Security Plan (ASP), the Airport Rules and Regulations, and with the security requirements specified herein.

B. Security Identification Display Area (SIDA) Training: Comply with the requirements of Section 01567 - Airport Personnel Identification/Access Control.

C. Identification/Access Badging: To drive on the AOA, all Contractor personnel shall have Port-issued identification/access badges. See Section 01567 - Airport Personnel Identification/Access Control for procedures required for issuance of Identification/Access badges.

D. Perimeter Fence Security:

1. Do not open gates or remove fencing without approval of the Port construction project representative. Adequate precautions shall be taken to prevent entrance of unauthorized persons to Airport-restricted areas or inadvertent entry of dogs or large animals into the AOA.

2. Prior to securing work each evening, ensure that all access gates which have been opened are closed and locked and that perimeter fencing is restored to a condition that will maintain present security standards.

3. Five Foot Rule: No Contractor will be permitted to store materials, park equipment or erect permanent or semi-permanent structures within five (5) feet of either side of the AOA perimeter security fence.

4. Use of Gates: Access to work within the AOA shall be limited to only the gates shown on the drawings. Use of the gates shown for continuous access (in excess of twice per work shift) will require the gate be manned by Port Operations or Security personnel, provided by the Port. Gates for Contractor access during hours of darkness shall be supplied with a light plant and generator whenever the gate is in use. Furnishing, fueling and maintaining the light plants shall be the responsibility of the Contractor. The Contractor shall schedule with the construction project representative a minimum of 48 hours prior to requiring continuous access through a gate.

5. Prior to removing or making holes in the Airport perimeter fencing, the Contractor shall obtain permission and written approval from the construction project representative, and take adequate precautions to prevent entry of unauthorized personnel or animals.

1.08 SAFETY REQUIREMENTS

A. In addition to the requirements specified in other sections, the following Safety Requirements shall also apply to the Contractor's activities:

1. Traffic Control: The Contractor shall furnish all required traffic control to protect the public outside the AOA. The actions, equipment and position of flagmen, when required, shall be the sole responsibility of the Contractor. The Contractor shall provide flaggers and construction traffic control on public facilities in accordance local jurisdiction requirements and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

2. In the event an employee of the Contractor violates a safety provision, they shall be prohibited from returning to work on the AOA without first attending another Airport Safety Orientation class and approval of the Director, Airport Operations. Subsequent violations will be deemed as just and sufficient cause to demand the employee be permanently removed from the job site. The Contractor shall be responsible for all costs and delays caused by safety violation.

3. Contractor's Designated Representative: The Contractor shall inform its supervisors and workmen of the airport activity and operations that are inherent to this airport, as well as the safety requirements and security regulations of the airport. The Contractor shall conduct its construction activities to conform to both routine and emergency requirements. During the course of construction, the Contractor shall designate a responsible representative who will be personally available on a 24-hour basis. The Contractor shall advise the construction project representative of the representative's name and telephone number (the telephone shall not be connected to an answering machine). The Contractor shall comply with all current safety laws, ordinances and regulations as they may apply to this contract.

1.09 INTERRUPTIONS AND STOPPAGES OF THE WORK DUE TO AIRCRAFT OPERATIONS AND HAZARDOUS CONDITIONS

A. Work Stoppages:

1. Construction may be stopped by the Director, Airport Operations or the Director's designee, through the construction project representative, any

time the former considers that the intent of the regulations regarding safety or Security Requirements are being violated or that a hazardous condition exists. This decision to suspend the operation will be final and will only be rescinded when satisfied that the Contractor has taken action to correct the condition and prevent recurrence.

2. Frequent inspections will be made by the Director, Airport Operations or the Director's authorized representative during the critical phases of the work to insure that the Contractor is following the recommended safety procedures. The Inspector shall report any violations or potential safety hazards to the construction project representative who will in turn advise the Contractor of the concern for immediate correction by the Contractor.

3. Construction may also be stopped or suspended by Airport Operations through the construction project representative during periods of extremely inclement weather, such as low visibility, snow or ice accumulation, or when it is necessary to provide an extra margin of safety to aircraft operations due to other unsuitable conditions, or reduce other activities in favor of conducting snow removal operations required to keep the airport operational.

B. Intermittent Construction Operations:

1. Portions of the work in this contract may occur in the AOA. Heavy construction may require closing of certain areas by the Airport. However, some work may be done on an intermittent basis. The Contractor shall maintain constant communication with the Project Manager, construction project representative when working on an AOA location, and immediately obey all instructions from the Port. Failure to obey instructions or maintain proper communication will be cause to suspend the Contractor's operations in such areas until satisfactory conditions are assured.

2. When directed to cease construction and move from the area, the Contractor shall immediately respond and move all material, equipment and personnel outside areas. Operations shall not be resumed until directed from the Director, Airport Operations through the construction project representative. Every reasonable effort will be made to cause minimum disturbance to the Contractor's operations; however, no guarantee can be made as to the extent to which disturbance can be avoided.

3. Limitation of Operations: The Contractor shall be responsible for controlling its operations and those of its subcontractors so as to provide for the free movement of aircraft in the apron areas of the AOA.

1.10 REQUIREMENTS AND REGULATIONS AFFECTING THE CONDUCT OF THE WORK

A. General:

1. Requirements to Begin Work: Before starting work, the Contractor shall provide and have available all flags, signs, barricades, lights and electrical generators as may be required for the protection of air traffic, vehicular traffic and the construction work. All personnel shall have the proper identification badges and have received the required training and instruction.

2. No hazardous materials will be stored within the terminal complex.
3. No burning is permitted on Airport property.
4. Smoking by personnel is prohibited on the AOA and inside the terminal.
5. Construction Activity and Aircraft Movements:
    a. Prior to the start of the construction activities in the AOA affecting aircraft movement areas, the safety requirements relating thereto will be coordinated by the Port between the Director, Airport Operations, air carriers, fixed base operators, other users and appropriate representatives of the FAA. This coordination will be based on the Contractors approved construction schedule with the primary purpose of compliance with the contract document requirements.
    b. Construction activity and storage of equipment, relating to off-AOA projects are not exempt from all the regulations that govern the AOA. Materials cannot be stored in violation of POS security fence set back clearances (5' rule). Activity and storage of equipment may also have an impact on the FAR Part 77 surfaces that are prescribed to protect the airspace associated with the airport.
    c. Construction work will not be allowed within the safety area of an open runway or within the object free area of an open taxiway (160' from centerline) without prior permission of the Director, Airport Operations or authorized designee. (Refer to 1.11 Obstructions to Navigation.)
6. Limitation of Construction Activities:
    a. During construction there shall not be lips greater than 1 inch for pavement traveled by aircraft and 3 inches for edges between old and new surfaces at edges and ends not traveled by aircraft.
    b. Open-flame welding or torch-cutting operations are prohibited unless adequate fire and safety precautions are provided and have been approved by the Fire Department through the construction project representative.
    c. Open trenches, excavations and stockpiled material at the construction site shall be prominently marked with barricades and lights as detailed on the drawings.
    d. Stockpiled material shall be limited in height and constrained in a manner to prevent movement resulting from aircraft blast or wind conditions.
    e. The Contractor will ensure that all lighting fixtures are shielded against interference with the vision of pilots and air traffic controllers.
    f. During non-working hours, all trenches and excavations outside of the barricaded work areas shall be backfilled or covered unless otherwise indicated in the contract documents.

g. Non-working hours shall be defined as when construction is not taking place within a work area.

B. Construction Adjacent to Runways:

1. All equipment and material above the runway centerline grade and within a distance of 250 feet from the runway centerline must be removed when the runway is being used by aircraft unless specifically allowed by the phasing drawings.

2. Within 250 feet of the runway centerline, all open trenches, lips greater than one inch, and drop-offs greater than three inches must be filled, covered, or sloped when the runway is open.

3. Notification to the Director, Airport Operations or his representative, by way of the construction project representative, is required prior to beginning any construction within the aircraft movement area. Notification of the proposed construction should be made a minimum of fourteen (14) days prior to beginning work.

C. Construction Adjacent to Taxiways:

1. No equipment or material within 160 feet of a taxiway centerline shall be above the taxiway centerline grade while the taxiway is being used by aircraft unless specifically allowed in the phasing drawings.

2. Open trenches or abrupt drop-offs may be made adjacent to taxiway pavement edges only as shown on drawings.

3. Marking and lighting of work areas adjacent to taxiways shall be required and approved by the construction project representative.

D. Airfield Barricades and Marking of Barricades:

1. Barricades shall be Multi-Barrier AR-10 X 96 HDPE, or OTW Safety AR10x96 O V.2, or Sherwin Industries, Inc. RRM-Safety Barricade Model #1008-25, or Neubert Aero Corp., 8ft Airport “low-profile” barricade or approved equal compliant with FAA Advisory Circular 150/5370-2F with 6” X 72” orange and white reflective striping on both sides and two integral solar powered flashing red lights.

2. Barricades shall be installed as shown on the drawings or relocated by the Contractor at the direction of the construction project representative whenever the need arises throughout the duration of the Contract. Barricades shall be placed indicated on the drawings to separate active areas from areas under construction. Placement of the barricades shall be in accordance with the drawings and shall be approved by the construction project representative.

3. Barricade lights shall be operative at all times. It shall be the Contractor’s responsibility to immediately repair or replace any light or flasher that is not operating.

4. Barricades shall be in place prior to commencing construction operations, and shall be maintained in good appearance for the life of the contract.

5. Barricades shall be relocated as directed by the construction project representative.

6. Barricades shall be water filled where shown on the drawings or as directed by the construction project representative.

E. Reflector Markers:

1. Reflector markers shall be of an impact-resistance color impregnated special polymer extrusion that has been UV-stabilized with both ground and pavement mounts. Height shall be 18"; color shall be solid red or orange; or as specified in the specifications for color. Reflectors shall meet FAA AC 5345-39C.

2. Install reflector markers as shown on the drawings.

F. Closures: No ramp, apron, taxiway, or runway area shall be closed to aircraft without approval of the Director, Airport Operations through the construction project representative. This will enable Notices to Airmen (NOTAMS), or other advisory communications to be issued. A minimum of 72 hours' notice of requested closing shall be directed to the construction project representative. The construction project representative will arrange inspections prior to opening any area to air traffic. Any waste material, and/or debris must be removed from aprons promptly to avoid possible damage to aircraft.

G. Debris

1. Debris Control: When Airport roadways and public highways are used in connection with construction under this contract, the Contractor shall remove all debris cluttering the surfaces of such roadways. Trucks and equipment shall have all accumulated dirt, mud, rocks and debris removed before accessing the AOA and when leaving the work area. Loads shall be struck flush and secured to prohibit loss of material. If spillage occurs, such roadways shall be swept clean immediately after such spillage to allow for safe operation of vehicles as determined by the construction project representative. If the Contractor is negligent in cleanup and Port forces are required to perform the work, the expense of said cleanup shall be paid by the Contractor.

2. No loose material or waste (FOD), capable of causing damage to aircraft or capable of being ingested into jet engines may be left in the working area on or next to runways, taxiways, ramps, or aprons. The Contractor shall direct special attention to all areas that are operational to aircraft during construction. These shall be kept clean and clear of all materials or debris at all times.

3. Food waste on a work site is a safety concern in that it attracts animals and birds that may impact the safe movement and operation of aircraft on the airfield. Food waste shall be promptly removed from construction sites.

H. Existing Airport Pavements and Facilities: The Contractor shall preserve and/or protect existing and new pavements and other facilities from damage due to construction operations. Existing pavements, facilities, utilities, or that are damaged shall be replaced or reconstructed to original strength and appearance at the Contractor's expense. The Contractor shall take immediate action to replace any damaged facilities and equipment and reconstruct any damaged area that is to remain in service.

I. Storage Areas:

1. The storage area(s) depicted on the plans shall be used to store all idle equipment, supplies and construction materials (other than bulk materials such as aggregate, sand and soil). Storage shall not interfere with operational areas.
2. All material and equipment shall be stored at storage sites indicated on the contract drawings.
3. Do not store materials or equipment in areas in which the equipment or materials will affect the operation of FAA electronic apparatus.
4. All equipment storage and movement shall have prior approval of the Director, Airport Operations, or the Director's authorized designee and the construction project representative.
5. The perimeter of any storage area that abuts an AOA pavement shall be protected by barricades no more than 10 feet apart marked with red flashing lights. Upon completion of all work, remove all and barricades and lights from the project site.
6. Contractor's vehicles, equipment and materials shall be stored in areas designated on the drawings. Upon completion of the work, the storage area shall be cleaned up and returned to its original condition to the satisfaction of the construction project representative.
7. Equipment not in use during construction and during all non-construction hours shall be parked in the Contractor's storage area. All exceptions shall be approved in advance by the Director, Airport Operations by way of the construction project representative. Parking of construction workers' private vehicles shall not be allowed within storage areas located on the AOA.
8. Stockpile areas shall be used to store all bulk materials needed for the project and may or may not be fenced at the Contractor's option. However, barricades, as specified herein, shall be installed where potential conflicts with aircraft or ground vehicular traffic exists. Stockpiles shall not penetrate the FAR Part 77 imaginary surfaces or present FOD problems.
9. Equipment and materials shall not be stored between runways. . An exception to this is for tracked construction vehicles/devices, and certain materials that are specified in contract drawings. The height of the equipment and the location where it will be stored must be specified in the drawings.

1.11 OBSTRUCTIONS TO NAVIGATION

The Contractor shall limit the height of vehicles, equipment, stockpiled materials excavated earth, to the limits as specified on the drawings.

1.12 DAILY INSPECTIONS

A. The Director, Airport Operations or the Director's representative will conduct a daily inspection of each construction site before workers leave for the day to ensure that areas surrounding the sites are safe for aircraft operations. Inspector(s) will be watchful for Foreign Object Debris (FOD) that can be ingested into aircraft engines, loose polyethylene and other light materials capable of being blown onto aircraft movement areas by wind, unlighted construction and obstruction lights, vehicles and equipment left outside construction areas,

construction areas left unlocked, access gates left open, weak partitions or fences, etc. All discrepancies shall be corrected before workers depart from the work site.

B. Inspectors will review potentially hazardous conditions, which may occur during airport construction, and maintenance including, but not limited to the following:

1. Trenches, holes, or excavation on or adjacent to any open runway or related safety area.
2. Unmarked/unlighted holes or excavations in any apron, open taxiway, open taxi lane, or related safety area.
3. Mounds or piles of earth, construction materials, temporary structures, or other objects on or in the vicinity of any open runway, taxiway, taxi lane or in a related safety, approach or departure area.
4. Pavement drop-offs or pavement turf lips (either permanent or temporary) which would cause, if crossed at normal operating speeds, damage to aircraft that normally use the airport.
5. Vehicles or equipment (whether operating or idle) on any open runway, taxiway, taxi lane, or in any related safety, approach or departure area.
6. Vehicles, equipment, excavations, stockpiles, or other materials which could impinge upon NAVAID critical areas and degrade or otherwise interfere with electronic signals from radios or electronic NAVAIDs or interfere with visual NAVAID facilities.
7. Unmarked utility, NAVAID, weather service, runway lighting, or other power or signal cables that could be damaged during construction.
8. Objects (whether marked/flagged or not) or activities anywhere on or in the vicinity of airport which could be distracting, confusing, or alarming to pilots during aircraft operations.
9. Unflagged/unlighted low visibility items (such as tall cranes, drills, etc.) in the vicinity of an active runway, or in any approach or departure area.
10. Misleading or malfunctioning obstruction lights.
11. Unlighted/unmarked obstruction in an approach to any open runway.
12. Inadequate approach/departure surfaces (needed to assure adequate landing/takeoff clearance over obstructions or work or storage areas).
13. Inadequate, confusing, or misleading marking/lighting of runways (including displaced or relocated thresholds), taxiways, or taxi lanes.
14. Water, snow, dirt, debris, or other transient accumulation which temporarily obscures pavement marking, pavement edges, or derogates the visibility of runway/taxiway marking, lighting or of construction and maintenance areas.
15. Inadequate or improper methods of marking, barricading, or lighting temporarily closed portions of airport operation areas.
16. Trash or other materials with foreign object damage (FOD) potential, whether on runways, taxiways, aprons or related safety areas.
17. Inadequate fencing or other marking to separate construction or maintenance areas from open aircraft operating areas.

18. Inadequate control of vehicle and human access to and non-essential, non-aeronautical activities on, open aircraft operating areas.

19. Improper radio communication maintained between construction/maintenance vehicles and air traffic control tower or other on-field communications facility (e.g., FAA Flight Service Station (FSS) or unicom radio).

20. Construction/maintenance activities or materials which could hamper Aircraft Rescue and Fire Fighting (ARFF) vehicle access from the ARFF stations to all parts of the runway/taxiway system, runway approach and departure areas, or aircraft parking locations.

21. Bird attractants such as edibles (food scraps, etc.) trees, brush, other trash, grass/crop seeding, or pond water on or near the airport.

22. Personnel at the construction site without proper POS identification.

23. No escorts for persons at the job site without proper identification.

24. Vehicles involved in the project do not meet the safety requirements of POS Rules and Regulations.

25. Improperly marked, lighted and flagged vehicles involved in the project.

C. All work shifts, including the nightly work shifts are totally inclusive of the Contractor moving onto the site, performing work activities, performing all clean-up, having the work area and haul routes inspected and approved by the inspector(s) and moving off the site. The Contractor shall provide adequate lighting for the needs of the inspection personnel.

D. Any Aircraft Movement Surface or adjoining runway, taxiway or taxilane safety area that does not pass inspection must remain closed until such time cleanup is performed and approved.

1.13 EMERGENCY PROCEDURES

A. The Contractor shall familiarize itself with airport emergency procedures located on the Port's public website and shall conduct his operation so as not to conflict with such events. Clear routes for Airport Rescue and Fire Fighting (ARFF) equipment shall be maintained in operational condition at all times.

B. In case of an emergency caused by an accident, fire, or personal injury or illness, Port Police are to be immediately notified by calling 9-911 from airport phone (Port Police Dispatch), 911 from outside phones. Police will coordinate with other emergency agencies as necessary.

1.14 ADMINISTRATIVE REQUIREMENTS

A. Applicability: The provisions of this section shall apply to the Prime Contractor, subcontractors at all tiers, suppliers and all others which may have access to the Air Operations Area by way of the Contractor's activities.

B. Exclusion From Claims: Impacts caused by failure of the Prime Contractor, subcontractors at all tiers, and all others to comply, implement and maintain the provisions of this section shall not be cause for a claim of delay or increased cost to the Port.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

End of Section

PART 1 GENERAL

1.01 DESCRIPTION

A. General Work

1. The Contractor is responsible for all work related to demolition, removal, modification, cutting, patching, and re-installation or replacement requirements of all sub-trades required for work specified in the project documents.

B. Definition

1. Cutting and patching is hereby defined to include but is not necessarily limited to the cutting and patching of nominally completed or previously existing work in order to accommodate the construction of the work in this contract. This includes impacts related to the coordination of work, the installation work or uncovering other work for access or inspection; or to obtain samples for testing or for similar purposes. It is defined to include integral cutting and patching during the fabricating, erecting, and installing process for individual units of work. Drilling the work to install fasteners and similar operations are included under their specific section. The work in this section does not include hazardous materials work. Contact the Port construction project representative for information related to discovery of hazardous materials.

C. Coordination with Subcontractors

1. The Contractor is responsible for all costs associated with cutting, patching, and drilling; disconnecting electrical/mechanical services; disconnecting and capping utility lines at present locations; connections to new locations and modification in piping runs; and electrical devices, including control access and signal, as may be required for the installation and completion of other work in the area.

2. The Contractor will remove and replace any and all mechanical, electrical, access control and signal items as required for new work whether shown on the drawings or not to restore all existing functions and to produce a complete product as required by code.

1.02 QUALITY CONTROL

A. Requirements for Structural Work:

1. Notify the Port construction project representative immediately if work concerning structural integrity is involved.

B. Operational and Safety Limitations:

1. Do not cut and patch operational elements and safety-related components in a manner resulting in a reduction of capacities to perform in a manner intended or resulting in decreased operational life, increased maintenance, or decreased safety.

C. Visual Requirements:

1. Do not cut and patch work, which is exposed to the exterior or exposed in occupied spaces of the building, in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of the cut and patch

work, both as judged solely by the Port construction project representative. The Contractor will remove and replace work judged to be visually unsatisfactory.

PART 2 PRODUCT

2.01 MATERIALS

A. Except as otherwise indicated or approved by the Port construction project representative, provide materials for cutting and patching that will result in equal or better work than the work being cut and patched in terms of performance characteristics, including visual effect where applicable. Comply with the requirements and use materials identical, including texture and color, with original where feasible and where recognized that satisfactory results can be produced thereby. Re-install undamaged materials temporarily removed for installation of Work in their original locations where feasible or indicated unless noted otherwise.

1. Primary Products: Those required for original installation.
2. Product Substitution: For any proposed change in materials, submit request for substitution.

PART 3 EXECUTION

3.01 GENERAL

A. Execute cutting, fitting, and patching, to complete the work and to:

1. Gain access in order to install components associated with this work.
2. Fit the several parts together to integrate with other work.
3. Uncover Work to install ill-timed work.
4. Remove and replace defective and non-conforming work.
5. Remove samples of installed work for testing.
6. Provide openings in elements of work for penetrations of mechanical, electrical, signal and access control work.

3.02 EXAMINATION

A. Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching.

B. After uncovering existing work, assess conditions affecting performance of work.

C. Beginning of cutting and patching means acceptance of existing conditions.

3.03 PREPARATION

A. Temporary support: Provide adequate temporary support for work to be cut to prevent failure or deleterious movement of materials to remain. Do not endanger other work.

B. Protection from weather: In accordance with Section 01500 - Temporary Facilities and Controls, provide protection from elements for areas that may be exposed by uncovering work.

3.04 PERFORMANCE

A. Use methods to avoid damage to other work and to provide proper surfaces to receive patching and finishing.

B. Employ skilled and experienced installers. If possible, employ original installer or fabricator to perform cutting and patching for visually exposed surfaces.

C. Fit Work airtight to pipes, sleeves, ducts, conduits, structural elements and other penetrations through surfaces.

D. At penetrations of fire-rated material provide proper thickness of the construction element to maintain the required fire rating.

E. Refinish surfaces to match adjacent finishes. For continuous surfaces refinish to nearest intersection; for an assembly, refinish entire unit.

3.05 CUTTING AND PATCHING/REMOVAL AND RE-INSTALLATION

A. General - All work to be performed in a workmanlike manner. Employ skilled tradespeople to perform cutting and patching.

1. Cut work by methods least likely to damage work to be retained and work adjoining. Review proposed procedure with the original installer where possible and comply with their recommendations.

2. Cut rigid materials using saws, grinding tools or core drill. Pneumatic or percussion tools not allowed without prior approval of the Port construction project representative.

3. Use drilled-in inserts only where shown or approved by the Port construction project representative

4. Core drill inside corners of cuts in terrazzo and concrete to avoid over cuts. Do not use power-driven impact tools to finish cuts.

B. Condition removed materials to be reinstalled.

1. Clean, straighten and refinish materials to match existing surroundings.

2. Store and protect materials against damage as a result of weather, vandalism or neglect.

C. Patching

1. Execute patching to complement adjacent work. Inspect and test patched areas to demonstrate integrity of the work.

2. Fit products together to integrate with other work.

3. Restore work with new products in accordance with requirements of Contract Documents.

4. Restore exposed finishes of patched areas and, where necessary extend finish restoration onto retained work adjoining in a manner that will eliminate evidence of patching.

5. If a portion of a painted surface is patched and repaired, repaint entire surface to nearest natural break in wall surface, or as delineated on drawings for repaint.

6. Where new work abuts or aligns with existing, perform a smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

7. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Port construction project representative.

8. Where wall systems (metal studs, gypsum wall boards, insulation, etc.) are removed for Work, reinstall wall system using new material of same size, quality, and quantity to match existing. Paint all exposed surfaces to match existing.

D. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for the Port construction project representative's review; do no work until approval has been given.

End of Section

PART 1 GENERAL

1.01 DESCRIPTION

A. This section addresses the submittals that must be made by the Contractor and approved by the Port prior to issuance of a Notice to Proceed (NTP).

B. The Port will not issue an NTP, or accept requests for partial payments, or allow for onsite mobilization (less field office setup) until the Preconstruction submittals have been received and approved.

C. Early submission is encouraged. A submittal package that has “Accepted” or “Accepted As Noted” before the Preconstruction Conference can result in a Preconstruction Conference and NTP earlier than that originally contemplated. Poorly prepared, incomplete, or inaccurate submittals as well as non-receipt by the Port of required submittals will cause the Preconstruction Conference and the NTP to be delayed.

1.02 SUBMITTALS

A. Required Submittals:

1. Contractor certificate of Insurance
2. Building Permit
3. A Baseline Schedule, per Tenant Improvement Roadmap
4. Temporary Power Plan per Section 01500 - Temporary Facilities and Controls
5. Pollution Prevention Plan per Section 01631 - Pollution Prevention Planning and Execution, if required for the work.
6. Safety Plan per Document 01860 – Tenant Safety Management.
7. Copies of any permits or other regulatory or public agency approvals required within the Contract Documents.
8. Registered Design Professional Statement of Special Inspection/Contractor’s Written Statement of Responsibility (CSOR)
9. List of subcontractors.

1.03 APPROVALS

A. Submittals will be submitted to the Port via email for review and returned to the Contractor.

B. Contractor shall be responsible for submitting acceptable submittals in a timely manner in order to allow Notice to Proceed to be issued.

C. NTP will be issued by the Port upon approval of the required Preconstruction submittals and completion of the Preconstruction meeting.

End of Section

AIRPORT BUILDING DEPARTMENT (ABD)

REGISTERED DESIGN PROFESSIONAL STATEMENT OF SPECIAL INSPECTION (SOSI)
CONTRACTOR'S WRITTEN STATEMENT OF RESPONSIBILITY (CSOR)

POS Project No/Name: _____ ABD Permit No: _____

Contractor: _____

Registered Design Professional/
Engineer of Record: _____

1A. 2012 IBC Registered Design Professional (RDP) Statement of Special Inspection:

IBC Sections 1704.2.3 and 1704.3 requires the RDP to list these elements:

- **Special Inspection Agencies shall have a Washington Association of Building Official (WABO) certification.**
- **Special Inspectors shall have a WABO certification for the type of special inspection being performed.**
- **For certain types of special inspection that WABO does not certify, such as firestopping and smoke control systems, approval from the Building Department is required for the special inspector and agency.**

1B. Contractor's Statement of Responsibility:

The general contractor responsible for construction of the above elements shall acknowledge their responsibilities pursuant to the 2012 IBC, Section 1704.4.

2. Explicit Acknowledgements Relative to Item 1B above:

Contractor has read the relevant special inspection requirements contained in the Statement of Special Inspection above and will exercise control so that conformance with approved construction documents is met.

Contractor: _____ Date: _____

Contractor shall be responsible for notifying the Owner, Airport Building Department, and the Special Inspection Agency, when work is ready for inspection.

The following individual within the Contractor's organization is responsible for exercising control to assure compliance with the requirements described in this agreement:

Name(s): _____ Position(s): _____

_____ _____

ACCEPTED AS SUBMITTED BY:

By signing below, you are acknowledging completion and receipt of a copy of this form.

Applicant/Contractor: _____ Date: _____

Airport Building Dept: _____ Date: _____

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Contractor shall perform the following Project Coordination Requirements:

1. Coordinate the Work of all Subcontractors with the Work of the Contractor
    a. Distribute information and coordinate necessary action of subcontractors and suppliers in response to information and direction provided by the Port
    b. For temporary utilities
    c. Among the work of the trades specified in technical divisions.
    d. Ensure that notification to and inspections by permitting agencies are completed in a timely manner
2. Coordinate the schedules of all subcontractors to:
    a. Verify timely deliveries of products for installation by other trades
    b. Verify that labor and materials are adequate to maintain schedules
3. Conduct conferences among all subcontractors, and other concerned parties, as necessary to:
    a. Maintain coordination and schedules
    b. Resolve matters in dispute
    c. Coordinate utility outages
4. Participate in Project meetings:
    a. Report progress of the Work
    b. Recommend needed changes in schedules
    c. Transmit minutes of meetings to all other trades, as appropriate
5. Temporary Utilities Required During Construction:
    a. Coordinate submittals, installation, operation and maintenance, to verify compliance with Project requirements and with Contract Documents, see Section 01500 – Temporary Facilities and Controls
    b. Verify adequacy of service at required locations
6. Verify that subcontractors maintain accurate record documents
7. Observe the work for compliance with requirements of Contract Documents
    a. Maintain list of observed deficiencies and discrepancies
8. Promptly report and correct deficiencies or discrepancies. Assemble documentation for handling of disputes involving mechanical, electrical or other trades
9. Utility and Equipment Operations:
    a. Check to ensure that utilities and specified connections are complete and that equipment is in operable condition

b. Coordinate the acceptance of new and remodeled equipment through the Port construction project representative after Contractor functional testing is completed.

10. Pre- Final Inspection:

a. Prior to inspection, check that work is complete and equipment is clean, repainted as required, tested and operational and that a Contractor's Pre-Final punch list is prepared and delivered to the Port construction project representative.

b. After inspection assist the Port construction project representative in preparing a consolidated list of items to be completed or corrected after inspection

11. Assemble As-built Record Document information from subcontractors, incorporate into Contractor's Record Documents, and ensure that completed record documents are submitted to Port Project Manager.

1.02 PROJECT SCHEDULE

A. The Schedule shall designate areas of activity of the Contractor and subcontractors for the various items of Work for the Project. The Schedule shall be prepared, submitted for review, and accepted by the Port construction project representative.

B. Contractor shall:

1. Maintain Schedule throughout construction period; record changes in responsibilities due to:

a. Approved modifications to Contract

b. Approved substitutions

c. Changes to work responsibility

2. Reproduce and distribute revised Schedule promptly after each change to:

a. Affected subcontractors

b. Port construction project manager

1.03 EXCAVATION COORDINATION

A. Call Before You Dig. Washington State law, RCW 19.122.010 requires anyone planning to excavate, to know what is below the ground surface before they dig. All Contractors conducting excavation operations on Port projects shall comply with the law which at a minimum requires the following actions.

1. Before excavating 12" or deeper on Port projects, the Contractor shall call the Washington Utility Notification Center's One Call System at 811 or 1-800-424-5555 to provide notice two days before the scheduled start of earthwork. On busy days (M-W) hold time can be very lengthy. Entering your locate request online, via ITIC, eliminates the hold time. To learn more about ITIC visit www.callbeforeyoudig.org.

2. Utility locating is provided by Port of Seattle Engineering Survey and requires the submission of Port Form 811 via an email to posutility@portseattle.org (see attached form).

a. Form submission requires the 811 ticket number obtained from the One Call system notification.

3. If a project's excavation operations are completed within 45 days of notification, only one call and form needs to be made for each project, however, certain projects may have different requirements which will be discussed at the pre-construction meeting. Projects with longer-term excavation operations require a call every 45 days of the last notification.

1.04 UTILITY DEACTIVATION AND REACTIVATION PLANS

A. The Contractor shall submit a shutdown plan to the Port construction project manager for review (see attached Shutdown Request Form). The plan shall outline the proposed procedure to deactivate and reactivate utility services, lines and equipment required to be disrupted, disassembled, cut into, or modified during the course of the Work.

B. Plan Content: The plan shall include but not be limited to:

1. Shutdown and restart schedules.

2. Sequences required to deactivate, depressurize, and reactivate the utility service lines and equipment.

3. Detailed description of proof positive verification and/or tests to assure that utility service line and equipment are properly deactivated before proceeding with the work.

4. Methods of: discharging residual fluids from lines and equipment; value sequencing; electrical load shedding for deactivating and reactivating service lines, equipment and the system reactivation procedure.

5. Incorporation of the specific deactivation and reactivation requirements of the relevant technical specifications.

6. Compliance with safety standards.

7. Coordination required with the Port or utility owners.

C. It is the Contractor's responsibility to fully understand and verify the condition of any utility service lines, and equipment at all times directly prior to and during the course of the work. The Contractor shall be responsible for all damages resulting from its actions.

1.05 SHUTDOWNS AND COORDINATION FORMS

A. If any construction activity or shutdown affects the use of spaces outside the construction area, a Construction Advisory Form (CAF) will be required. The Contractor shall coordinate this with the Port construction project manager. The Contractor shall submit the form two weeks prior to commencement of work. (see attached CAF Form)

1. All shutdown times are subject to operational requirements and shall be coordinated with the Port construction project manager and other Port department to mitigate impacts to Port operations.

End of Section

Port of Seattle

Work Project Number- Shutdown #: _____

Airport Facilities - Systems & Utility Shutdown Request

***72 Hour** notice required for system shutdown – after final signature*

***96 Hour** notice required for DOMESTIC water shutdown – after final signature*

WEEKEND REQUESTS MUST BE APPROVED NO LATER THAN 12:30PM WEDNESDAY

Date of Request:	Date of Shutdown: Start Time: End Time:
Outages Coordinator: Phone No.:	RE/PM: Phone No.:
Contractor Contact During Shutdown:	Phone No.:
Inspector Contact During Shutdown:	Phone No.:
Contractor performing work:	Duration of Shutdown:
Reason for Shutdown:	
Buildings & Area Affected: (***DRAWING OF AFFECTED AREA REQUIRED WITH FORM***)	

UTILITY EQUIPMENT LIST: Must be filled out prior to shut down; each affected craft shall initial for approval.

☐ Domestic water - BLRM	☐ Chilled water - BLRM	☐ IWTP lift stations
☐ IT Department	☐ HVAC system – BLRM	☐ Storm lift stations – BLRM
☐ Elevators - Escalators	☐ Hot water heating	☐ Sanitary lift stations - BLRM
☐ Irrigation - FCRW	☐ Roadways - Parking	☐ Security
☐ Fire pumps - BLRM	☐ STS systems	☐ Electrical systems - ELEC
☐ Fire system	☐ Electronics/Security	☐ Conveyors

APPROVALS

Maintenance Craft: (must be 1st contact prior to manager's signature):			
1 Maintenance Manager:		Other:	
2 Maintenance Manager:		Other:	
Utility Manager:		Security:	
Fire Prevention:		Airport Operations:	
Landside:		ICT Department:	

MUST BE FILLED OUT PRIOR TO SHUTDOWN

Tenants requiring notification:	*Notified:*	*By: (initials)*	*Tenant Representative Notified:*

FOR DEPARTMENT USE ONLY:

Comments:

PLEASE RETURN A COPY OF THE COMPLETED SIGNATURE FORM TO ALL SIGNEES.

List of Appropriate Systems Contacts

Domestic Water

Doug Sinclair	787-7839	431-4938 fax
Paul Price	787-5825	431-4938 fax
Erik Knowles	787-4117	787-4902 fax

Utility Manager

Trevor Emtman	787-6638	988-5155 fax

Elevators/Escalators

Ryan Pazaruski	787-7590	787-4902 fax
Stuart Mathews	787-5604	787-4902 fax

Irrigation

Jeff Martens	787-4059	787-4902 fax
Terry Tucker	431-4490	439-5188 fax

Fire Pumps

Doug Sinclair	787-7839	431-4938 fax
Paul Price	787-5825	431-4938 fax
Stuart Mathews	787-5604	787-4902 fax
Erik Knowles	787-4117	787-4902 fax

Fire Systems

Keith Taylor	787-7242	431-4908 fax
Doug Sinclair	787-7839	431-4938 fax

Chilled Water

Dale Peters	787-7676	431-4938 fax
Paul Price	787-5825	431-4938 fax
Stuart Mathews	787-5604	787-4902 fax
Erik Knowles	787-4117	787-4902 fax

HVAC Systems

Dale Peters	787-7676	431-4938 fax
Harley Spaeth	787-5476	431-4938 fax
Paul Price	787-5825	431-4938 fax
Stuart Mathews	787-5604	787-4902 fax
Erik Knowles	787-4117	787-4902 fax

Hot Water Heating

Dale Peters	787-7676	431-4938 fax
Harl Spaeth	787-5476	431-4938 fax
BLRM Foreman	787-5475	431-4938 fax
Stuart Mathews	787-5604	787-4902 fax
Erik Knowles	787-4117	787-4902 fax

ICT Department

IT Service Desk	787-3333	728-3719 fax
Clarence Jaquez	787-6090	830-5500 fax
Matt Breed	787-7555	830-5500 fax

Conveyors

Denny Smullin	787-7599	433-7208 fax
Jay Altman	787-6886	787-4902 fax
Stuart Mathews	787-5604	787-4902 fax
John Causey	787-7541	433-7208 fax

Roadways / Parking

Nick Terrana	787-4903	835-7550 fax
Andy Ramsey	787-5187	439-5159 fax

ET/STS SYSTEMS

Dan Hytry(STS)	787-7231	787-4902 fax
Teri Grosvenor (ET)	787-4909	787-4902 fax
Mark Miller(ET)	787-6628	787-4902 fax

IWTP Lift Station

Ryan Pazaruski	787-7590	787-4902 fax
Stuart Mathews	787-5604	787-4902 fax

Storm Lift Station

Paul Price	787-5825	431-4938 fax
Harley Spaeth	787-5879	431-4938 fax
Stuart Mathews	787-5604	787-4902 fax
Erik Knowles	787-4117	787-4902 fax

Sanitary Lift Station

Paul Price	787-5825	431-4938 fax
Doug Sinclair	787-7839	431-4938 fax
Stuart Mathews	787-5604	787-4902 fax

Security

Christian Samlaska	787-7631	431-5912 fax
Clinton Hughes	787-2853	439-7749 fax
Deborah Miller	787-7367	439-7749 fax
Wendy Reiter	787-7554	431-5912 fax

Electrical Systems

John Walsh	787-6943	787-4902 fax
Gary Richer	787-4065	787-4905 fax

CONSTRUCTION ADVISORY

Affected Businesses:

Starting date:
Ending date:

When: (Project work hours.)

What: (Description of the work to be done and any impacts.)

Who to Call with Questions:

Port of Seattle Resident Engineer: Name, Phone
Port of Seattle Inspector (Day/Night): ,
Port of Seattle Construction Coordinator: ,

Project Information:
Title:
Work Order:

Distribution:

- Airport Communications
- Public Affairs
- POS Fire Department
- POS Police Department
- Maintenance Duty Office
- AFLOB
- ATLOB
- GALOB

Revised 10/03/12

POS-811 FORM

POS CALL BEFORE YOU DIG / 811
ENGINEERING/SURVEY
RCW 19.122.010 DIG LAW

IF YOU ARE DIGGING 12" OR DEEPER

PROCEDURE:

1. Call 811 or 1-800-424-5555
2. Fill out POS-811 FORM then send to: posutility@portseattle.org

IF YOU ARE NOT DIGGING

PROCEDURE:

1. Fill out POS-811 FORM then send to: posutility@portseattle.org

REQUESTED BY: _____

OFFICE PHONE: _____

811 TICKET # _____

PROJECT NUMBER: _____

TODAYS DATE: _____

PROJECT NAME: _____

DATE SERVICE REQUIRED: _____

DESCRIPTION / SUMMARY OF WORK:

Attach map to email if needed

"NOTICE" Two business days before commencing any excavation the excavator shall call 811 or 1-800-424-5555 to provide notice of their scheduled start of excavation. On busy days (M-W) hold time can be very lengthy. Entering your locate request online, via ITIC, eliminates the hold time. To learn more about ITIC visit www.callbeforeyoudig.org.

CONTACTS:

Garry Ensley Manager of Survey and Mapping 206-787-5670	Jeff Dixon APS INC. 425-864-2706	Adam Dreller Mapping Manager 206-787-7771	Braden Monson Survey Crew Manager 206-787-5846

PART 1 GENERAL

1.01 SUMMARY

A. General: The list of environmental laws set forth in this section is provided pursuant to Section 39.04.120 of the Revised Code of Washington. The Contractor shall fully comply with the provisions of such laws as they may apply to the Work.

1.02 LIST OF ENVIRONMENTAL STATUTES, ORDINANCES AND REGULATIONS

A. General: The following is a list of federal, State and local environmental statutes, ordinances and regulations which deal with the prevention of environmental pollution and the preservation of public natural resources that affect or may affect this Project. This list is not to be considered as all-inclusive, nor shall the absence of a law from this list be construed to relieve the Contractor from complying with such law, to the extent it is applicable to the Contractor.

B. Federal

1. Statutes:

a. National Environmental Policy Act: Establishes a Federal policy on the environment and requires the appropriate Federal agency, in any federally assisted or authorized project, to prepare an environmental impact statement for any "major action significantly affecting the quality of the human environment.

b. Clean Air Act: Establishes a Federal policy on air quality and directs each state to promulgate air quality laws and regulations to achieve the goals set forth in the Act.

c. Clean Water Act: Establishes a Federal policy on water quality and directs each state to promulgate water quality laws and regulations to achieve the goals set forth in the Act. In addition, the Act requires a permit for discharge of pollutants and sets forth oil spill prevention provisions and penalties.

d. Rivers and Harbors Act of 1899: Provides that discharge of refuse without a permit into navigable waters is prohibited.

e. Port and Waterways Safety Act of 1972: Provides vessel design and construction standards to protect the marine environment.

f. Resource Conservation and Recovery Act: Provides standards and requirements for the generation, transportation, treatment, storage and disposal of hazardous wastes.

g. Comprehensive Environmental Response Compensation and Liability Act: Provides standards and procedures for the investigation and remedial activities to clean up hazardous substances which substances that have been discharged into the environment.

h. Toxic Substances Control Act: Provides standards for the manufacture and distribution of chemicals and for the handling of PCBs.

2. Regulation and Guidelines:

a. Environmental Protection Agency Regulations on National Primary and Secondary Ambient Air Quality Standards: Establishes national primary and secondary air quality standards for certain compounds pursuant to Section 1.09 of the Clean Air Act.

b. Environmental Protection Agency Regulations Establishing Effluent Guidelines: Establishes national effluent limitations for discharges into navigable waters.

c. Environmental Protection Agency Regulations on Discharge of Oil: Regulations promulgated pursuant to the Clean Water Act.

d. Coast Guard Regulations on Oil Spills: Regulations promulgated pursuant to the Clean Water Act.

e. Army Corps of Engineers Regulations on Navigable Waters: Establishes procedures for obtaining permits required by the Rivers and Harbors Act of 1899 and the Clean Water Act.

f. Environmental Protection Agency Regulations on Discharge of Dredged or Fill Material Into Navigable Waters: Establishes guidelines for placing dredge or fill material into navigable waters pursuant to the Clean Water Act.

g. Environmental Protection Agency Regulations for Hazardous Waste Management: Regulations promulgated pursuant to the Resource Conservation and Recovery Act.

C. State:

1. Statutes:

a. State Environmental Policy Act: Establishes a State policy on the environment and requires the appropriate State or local agency to prepare an environmental impact statement for any "major action significantly affecting the quality of the environment" which the agency either undertakes directly or authorizes.

b. Shoreline Management Act: Requires a permit for development on State shorelines.

c. Clean Air Act: Provides that it is the policy of the State to secure and maintain such levels of air quality to protect health and comply with the Federal Clean Air Act.

d. Water Pollution Control Act: Establishes a State policy to maintain the highest possible standards for all water of the State, requires permits for the discharge of pollutants into the waters of the State of Washington and complies with the Federal Clean Water Act.

e. Washington Solid Waste Management Law: Establishes uniform State-wide program for handling solid wastes, which will prevent land, air and water pollution.

f. Washington Hazardous Waste Disposal Law: Establishes a statewide program for the regulation of the disposal of hazardous waste.

g. State Noise Control Act: Authorizes the Department of Ecology to establish maximum noise levels in order to protect against adverse effect of noise in the health, safety and welfare.

h. Model Toxics Control Act: State "Superfund" Law which Law that establishes how cleanups of hazardous waste will be managed and sets standards for performing cleanups.

2. Regulations and Guidelines:

a. Department of Ecology Guidelines for the Implementation of the State Environmental Protection Agency. State guidelines for the implementation of the State Environmental Policy Act.

b. Department of Ecology Shoreline Development Permit Regulations: State guidelines for the issuance of shoreline permits.

c. Air Pollution Regulations on Record keeping: Requires operators of stationary sources of air contaminants to maintain records of emissions and submit periodic reports.

d. Department of Ecology Regulations Relating to Minimum Functional Standards for Solid Waste Handling: Regulations promulgated pursuant to the State Solid Waste Act.

e. Department of Ecology Regulations for Waste Discharge Permits: Establishes standards and procedures for obtaining permits to discharge pollutants in navigable waters pursuant to the federal and state Clean Water Acts.

f. Department of Ecology Regulations on Dangerous Waste: Regulations promulgates pursuant to the state hazardous waste disposal statute.

g. Department of Ecology Regulations Relating to Noise: Regulations establishing noise levels and noise performance standards for certain activities.

h. Department of Ecology Model Toxics Control Act Cleanup Regulation: Establishing rules for reporting, listing, investigation and cleanup of hazardous waste sites.

D. Local:

1. Ordinances, Regulations and Orders

a. King County Environmental Policy Ordinances: Provisions for carrying out the County's responsibilities pursuant to the State Environmental Policy Act.

b. King County Shoreline Management Ordinance: Establishes procedures for obtaining a permit under the Shoreline Management Act.

c. King County Solid Waste Code: Establishes provisions for the disposal of solid waste.

d. King County Grading Ordinance: Requires permit for grading, landfills, gravel pits, dumping, quarrying and mining operations.

e. King County Zoning Code: Establishes zoning designations and uses within those designations.

f. City of SeaTac codes and ordinances as agreed to within the City of SeaTac/Port of Seattle 2005 Interlocal Agreement as may be subsequently amended.

g. Puget Sound Clean Air Agency Regulation I: A regulation to control the emission of air contaminants from all sources within the jurisdiction of the Puget Sound Air Clean Air Agency (King, Pierce, Snohomish and Kitsap Counties) in accordance with the Washington Clean Air Act.

h. City of Burien codes and ordinances

i. City of Des Moines codes and ordinance

j. City of Tukwila codes and ordinances

k. Seattle-King County Noise Ordinances: Establishes noise levels for various activities in different areas of the city and county.

l. Seattle Environmental Policy Executive Order: Provisions for carrying out the City's responsibilities pursuant to the State Environmental Policy Act.

E. Port of Seattle

a. Port of Seattle Sea-Tac International Airport National Pollutant Discharge Elimination System Waste Discharge Permit No. WA-002465-1

b. Port of Seattle -King County Waste Discharge Permit 7810-02

c. Sea-Tac International Airport Schedule of Rules and No. 4

d. Logistics Staging Area Stormwater Pollution Prevention Plan – Current Edition

PART 2 PRODUCTS - Not used

PART 3 EXECUTION –

3.01 Construction Water Management

A. The Contractor shall not discharge storm water, ground water, or process water to storm drains, ditches, gutters or any conveyance that discharges to receiving water as defined by the Washington Department of Ecology (WDOE) without prior approval of the Port construction project representative.

B. The Contractor shall be wholly responsible for control of water onto and exiting the construction site and/or staging areas, including groundwater, stormwater, and process water.

C. Stormwater from offsite shall be intercepted and conveyed around or through the project and shall not be combined with onsite construction stormwater.

D. All water used for hosing, washing, flushing, pressure washing and all other water defined by the WDOE as “process water” and shall be collected and disposed of in a manner that complies with all locate, state and federal regulations.

E. Disposal truck tickets shall be submitted for all water disposed of off Port property.

End of Section

PART 1 GENERAL

1.01 SUMMARY

A. Install, maintain, and operate all temporary facilities and controls as long as needed for the safe and proper completion of the work.

B. Provide adequate distribution equipment, wiring, and outlets to provide single-phase, branch circuits for temporary power and lighting. The Contractor shall submit their Temporary Power Plan, as part of the submittals defined in Section 01305 - Preconstruction Submittals. The Plan will define the required load, location, and timing for each connection.

1.02 TEMPORARY LAYDOWN AND PARKING

A. Refer to 01500 Attachment F for off-site construction offices, laydown areas, and parking.

B. Unless otherwise indicated on the Contract Drawings or as agreed to by Project Manager, no on-site laydown or parking is available.

1.03 TEMPORARY ELECTRICITY UTILIZING PORT POWER

A. Cost: Unless otherwise indicated by the Port construction project representative, the Contractor shall provide and pay for all power and associated services required from utility source. A subpanel and a revenue meter will need to be supplied and installed.

B. Provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Outlets for temporary power distribution boxes shall be protected by an overcurrent protection device adequately rated for the distribution box to be use. It is not acceptable to connect temporary power equipment directly to the panelboard bussing. A temporary outlet must be installed, and removed upon project completion. Provide flexible power cords as required. Submit an application for electrical connection for use of Port power.

1. Included in the Application for Electrical Connection should be the following:

   a. Panel schedule in Port Standard format.

   b. 30 day metered load data (7 day okay for preliminary approval for preliminary design phase).

   c. Load summary (existing load + 25% NEC Safety factor-removed load (if applicable) + new load = new total load).

   d. Layout showing location of panel, location of load, and conduit routing showing conduit type and size, wire size, and quantity.

   e. One-line diagram if new panel is being added.

C. Provide flexible cords from power distribution box as required. Where cords will pass through public areas, route cords such that they are unobtrusive and secure cords to structure.

D. Welders

1. Under no circumstances shall a welder be connected to the Airport's electrical system without first being connected to a power conditioner unit. The Contractor shall connect only one welder, via power conditioner unit, to each electrical connection.

    a. Contractor should provide an Application for Electrical Connection for temporary electrical power along with backup to obtain acceptance for the connection. It should include the size of the load and the size and type of power conditioner being provided.

2. Based on the welder used, the Contractor shall connect the appropriate size power conditioner unit. The conditioner unit shall comply with IEEE519 standards. The available power at the Airports Distribution Centers is 480V, three phase or single-phase. As appropriate, the Contractor shall provide 480V, 3-pole or single pole breakers at the Distribution Centers in order to obtain temporary power. Size breakers to match connected welder ampacity.

3. The Contractor shall coordinate and provide SO cords and twist-lock receptacles on the welders and units so that is only possible for welders to be connected to units and not directly to the Airport's electrical system.

4. The Contractor shall utilize existing conduit/wire chases to route welder cables from the distribution centers up to the work area. As accepted by the Project Manager, the Contractor may drill holes through floors or walls in order to route welder cables to the work area. Penetrations through floors or fire walls shall be packed solid with safing (fireproofing material) so as to maintain fire rating of partitions (1 hour) or floors and ceilings (2 hours). All drilled holes shall be patched to maintain fire rating and finished to match surrounding materials after work is completed.

1.04 TEMPORARY ELECTRICITY UTILIZING GENERATORS

A. The Contractor shall provide noise-suppressed generators as required to perform the specified welding work. All fuel-operated generators shall be located outside the building. No welders shall be connected to the Airport's electrical systems unless a power conditioner unit is accepted for use by the Project Manager.

1.05 TEMPORARY LIGHTING

A. Provide and maintain fluorescent/LED lighting for construction operations to achieve minimum lighting levels required by the Safety and Health Core Rules (WAC 296-800-210).

B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.

C. Maintain lighting and provide routine repairs.

D. In public areas the contractor shall provide temporary lighting to maintain lighting levels present prior to beginning of work at all times during all contractor operations.

1.06 TEMPORARY HEATING, COOLING, AND VENTILATING

A. Provide and pay for heating, cooling and ventilating devices as needed to maintain specified conditions for construction operations.

B. Permanent equipment shall not be used for temporary heating, cooling, or ventilating purposes. Prior to operation of temporary equipment for heating, cooling, or ventilating purposes, verify that installation is approved for operation, equipment is lubricated and filters are in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.

C. Maintain minimum ambient temperature of 50 degrees F and maximum temperature as required by Washington State Labor and Industries in indoor areas where construction is in progress, unless indicated otherwise in the specifications.

D. Ventilate enclosed areas to; assist cure of materials, dissipate humidity, and prevent accumulation of dust, fumes, vapors, or gas.

E. The Contractor shall construct dust-, vapor-, and smoke-proof enclosures to separate the work area from the central HVAC system and the public whenever welding, dust-, or vapor-generating activities are taking place and during any demolition activities. All outlets and paths for air to return to the central HVAC system or public spaces shall be sealed with 6 mil visqueen to prevent recirculation of contaminated air. The Contractor shall provide temporary ventilation to remove objectionable vapors and dust from within the enclosure. The temporary ventilation shall not discharge within the terminal building.

F. In order to mitigate grinding, sanding, and electric welding smoke when indoors, the Contractor shall furnish and use self-contained, mobile, high efficiency extraction arm filtration units such as Plymovent, Nederman, Miller, Lincoln, or approved equal whenever and wherever welding operations are taking place. Light duty and small (below 100 sq ft) construction zone extraction units to be minimum 130 CFM, include cleanable ASHRAE MERV 13 filter, and extraction arm. Medium and Heavy Duty and normal access construction zone extraction units to be 500 CFM min, include cleanable ASHRAE MERV 13 - 100 sq ft of filter area min, extraction arm. Contractor required to monitor space below OSHA and ACGIH levels for welding processes. If levels are exceeded, contractor to take additional steps to avoid creating an unsafe working environment. Contractor to provide respirators, dilution ventilation, or temporary exhaust to outdoors as necessary to comply.

Brazing and gas welding requires temporary exhaust vented directly to outdoors. Refer to drawings for routing, sizes, and design requirements. Contractor required to monitor space below OSHA and ACGIH levels for welding processes. If levels are exceeded, Contractor to take additional steps to avoid creating an unsafe working environment. Contractor to provide respirators and/or dilution ventilation as necessary to comply.

1. All welding, brazing or work that has the potential to create sparks requires hot work permit issued by Port Fire Department.

1.07 COMMUNICATIONS

A. Provide, maintain and pay for telephone and data services to field office throughout the duration of the project.

B. The Contractor shall provide his own means of job site communication.

1. Mobile communications equipment (i.e.,) must be approved in advance by the Port.

2. Contractor shall submit the RF Application and Approval form.

a. Form is available upon request.

1.08 TEMPORARY WATER

A. Provide, maintain and pay for suitable quality water service required for construction operations.

B. All temporary water connections shall require Airport Facilities Water Activation Request. See the attached Water Activation Request and Connection Procedure at the end of this Section.

C. Drinking water for employees shall be provided in accordance with Washington State Department of Labor & Industries (L&I) Division of Occupational Safety and Health (DOSH) requirements.

D. Construction water for inside terminal/ramp and buildings shall connect to the existing water system through existing branch piping, or as provided in the contract documents. Provide temporary pipe insulation to prevent freezing for any piping exposed. Each connection shall utilize a lockable shutoff valve and a Reduced Pressure Backflow Preventer device (WA DOH approved; contact Port of Seattle Maintenance Boiler Room at 206-787-5475 for list (as necessary) and a calibrated water flow meter readable in cubic feet, to be provided and maintained by the Contractor. The Contractor shall be fully responsible for the security of the temporary water connection, including freeze protection. No Contractor shall use water from another Contractor's temporary water connection unless approved in writing by the Port.

E. No meter is required for connections smaller than 1".

F. Construction water for exterior landside and airfield projects may be supplied via existing Port of Seattle supply mains under the following conditions:

1. Each connection shall be made at an existing Port of Seattle fire hydrant. Contractor shall not operate the fire hydrant or foot valve at any time; call the Port of Seattle Field Crew (206/787-4490) for assistance. Maximum connection size shall be 2 inches. The requirements of 1.08D also apply.

2. The Contractor shall obtain the device and register for temporary water service with Aviation Maintenance Boiler Room through the Project Manager.

3. The Port of Seattle reserves the right to test the water meter and operation of the reduced pressure backflow assembly at any time and require the Contractor to take necessary actions to maintain the integrity of the meter and backflow assembly at all times. The Contractor will be required to conduct water filling and usage operations in such a manner that do not endanger the Port of Seattle Water System at any time nor cause the Port to be in violation of Washington State Administrative Code (WAC) Section 246-290 at any time.

4. Failure of the Contractor to follow these backflow prevention requirements will result in the removal or locking out of the Contractor's connection to the Port of Seattle water system.

G. The Contractor shall notify the Port construction project representative a minimum of 7 days in advance of disconnection of a temporary water connection.

H. Connections to potable Water Systems shall be made in accordance with the Port's sterilization requirements, available upon request.

I. Construction water shall be disposed of in accordance with Section 02270 Temporary Erosion and Sediment Control Planning and Execution.

1.09 TEMPORARY SANITARY FACILITIES

A. Contractor personnel may use public restrooms throughout the Airport Terminal.

B. Concrete, grout, debris, or other related construction activities shall not be washed down the sanitary system.

1.10 BARRIERS AND ENCLOSURES

A. All Airport Dining & Retail Projects Barriers and Enclosures shall be provided and removed by Port Construction Services. The Project Manager and Inspector will coordinate with the Contractor for the installation.

B. General Requirements for all other Tenant projects:

1. Provide temporary Pedestrian Barriers, Partition Enclosures, and Polyethylene Enclosures as required to separate work areas from Owner/Public occupied areas, to prevent penetration of dust and moisture into Owner/Public occupied areas, and to prevent damage to existing materials, equipment, structures and other facilities. Constantly secure barriers and enclosures in a manner to prevent unauthorized entry into construction areas. Shield security and other stationary cameras from welding arc flash with visual barriers at the welding location. Do not obstruct the camera view unnecessarily. Notify the Project Manager and Inspector prior to shielding any cameras in order to obtain clearance from the Security Department.

2. All Barriers and Enclosures shall be fully installed and complete within 24 hours of initiating the installation. One week prior to installation, the floor area to be enclosed by a barrier or partition shall be clearly marked to indicate location and alignment. If more than 24 hours is required for large areas, provide a plan for phasing of the installation. Obtain acceptance from the Project Manager and Inspector prior to installation of any enclosure or barrier.

3. Barriers and Enclosures shall be installed and maintained in straight lines and with 90-degree corners typically. In high traffic areas for improved visibility, the use of 45 degree corners may be required as directed by the Project Manager. Partition panels shall neatly adjoin existing walls where necessary. Existing finishes shall be protected prior to installation of partitions. Gaps between existing walls and enclosures shall be 1-1/2" maximum. Provide braces as necessary to support enclosure. Cut bracing flush with exposed painted surface of panels. All wood surfaces that are exposed to Public view shall be painted.

4. Existing floor and carpet areas beneath panels and within barrier and enclosure areas shall be protected with polyethylene sheeting, cardboard, carpet or other suitable material. See 1.14 for additional protection requirements.

5. Panels shall be pre-painted prior to installation or painting shall occur immediately after installation between the hours of 2300 and 0400. Nails, screws and other fasteners shall be installed flush with the face of the partition. All wood, fasteners, hinges and other hardware exposed to Public view shall be painted.

6. Project information and directional signage attached to the Public side of enclosures shall be supplied and installed by the Port.

7. No unacceptable signage such as warning or directional signage shall be affixed to the Public side of the partition by the Contractor. Need for additional directional signage shall be brought to the attention of the Project Manager.

8. A neat, clean, uniform appearance of all Barriers and Enclosures shall be maintained at all times. Scuffed, dirty or discolored panels shall be cleaned or repainted as directed by the Project Manager and Inspector at no cost to the Port.

9. Barriers and Enclosures may be reused for subsequent phases of work at different locations if they are in acceptable condition as determined by the Project Manager. Panels shall not be reused if visible damage to exterior surfaces includes holes, dents or splintering. Contractor shall repaint panels as directed by the Project Manager at each relocation.

10. Paint for all Barriers and Enclosures, including exposed fasteners, hinges and other hardware, shall be Sherwin Williams Harmony Interior Acrylic Latex; or Kelly Moore with type and color to match or equal.

11. Provide electrical power outlets for any advertising, safety or exit signs to be relocated from their existing locations in or on walls to the surface of the construction barricades that would cover or otherwise block them. See paragraph 1.02 B.

C. Pedestrian Barriers

1. Pedestrian Barriers shall be constructed with integral base or other devices to resist an overturning moment created by the force of 50 pounds per lineal foot applied horizontally at the height of 3 feet 6 inches perpendicular to the partition for the full length of the partition.

2. Pedestrian Barriers shall be 3’-feet-6-inch minimum height constructed of 1/2-inch ACX fire retardant treated plywood fastened to either 3-5/8-inch - 18 GA light gage steel or 2”x4” fire retardant treated timber studs with continuous framing at top and bottom. Face of Barrier exposed to the Public shall be smooth (A side) and free from protrusions with edges and corners eased and painted per 1.09 A. General Requirements.

3. Batten strips shall be securely fastened to the exterior face of barrier along the top edge and to neatly conceal all vertical joints and corners as shown in the sketches provided at the end of this section. Batten strips shall be 1/2-inch x 4-inches wide with exposed corners rounded or beveled at 45 degrees and shall be painted to match exposed face of barrier.

4. For Barriers with height of less than 6-feet-0 inch which enclose a vacant space such as the lower portion of a scaffold, provide fire retardant debris screen stretched horizontally over the enclosed space or as directed by the

Port construction project representative when no work is being performed within the space. Submit debris screen product and color for approval prior to installation.

5. When approved by the Port construction project representative, orange cones, stanchions, warning barrier fence or marker tape may be used as a temporary Pedestrian Barrier around the construction area where hazard exists to the public, airport facilities and staff, or Contractor personnel.

D. Partition Enclosures

1. Partition Enclosures shall be capable of resisting 5 psf applied over the entire surface of each side, separately. Where required or as shown on the plans, partitions shall be constructed to safely support dislocated or relocated functioning appurtenances such as telephones, advertising signs, fire extinguishers, and other similar items. The Contractor shall be responsible for the structural integrity and capacity of the partitions carrying the additional weight of these items.

2. Partition Enclosures shall be 8-feet-0-inch minimum height, constructed of 1/2-inch ACX fire retardant treated plywood fastened to either 3-5/8-inch - 18 GA light gage steel or 2”x4” fire retardant treated timber studs with continuous framing at top and bottom. Face of Enclosure exposed to the Public shall be smooth (A side) and free from protrusions with edges and corners eased and painted per 1.09 A. General Requirements.

3. Batten strips shall be securely fastened to the exterior face of barrier along the top edge and to neatly conceal all vertical joints and corners as shown in the sketches provided at the end of this section. Batten strips shall be 1/2-inch x 4-inches wide with exposed corners rounded or beveled at 45 degrees and shall be painted to match exposed face of partition.

4. Double wide delivery doors shall be constructed of similar fire retardant materials and exposed finish used for partitions and shall be fully framed to eliminate warping. Doors shall remain flush with exposed partition face when closed. Rollers may be used to support doors if necessary to prevent damage to flooring. All exposed hinges and hardware for doors shall be clean and painted to match exposed face of partition. Holes in doors for locks and chains shall be drilled or machine cut with edges eased and no larger than 5 inches in diameter. For adjacent doors, holes shall be the same diameter and occur at the same height.

5. All chains and locks used at delivery doors visible to the Public shall be clean and free from rust. Verify chain and lock arrangement with the Port construction project representative to allow 24 hour access to enclosure areas for Contractor and authorized Port personnel. Delivery doors shall be secured when not in use.

6. Provide 3-0 X 7-0 hollow metal door for general personnel access into the work space. The door shall be provided with a closure and lockset to keep the site secure during construction.

7. See attached Elevation and Section details for Typical Enclosure dated Jan 2014.

E. Polyethylene Enclosures

1. Polyethylene Enclosures: Enclosures constructed with polyethylene as described in 1.08.A. General Requirements that completely enclose the work area above the 8-foot-0-inch height enclosed by Partition Enclosures as shown in the sketch provided at the end of this section. Polyethylene Enclosure support framework shall be capable of supporting 1 psf applied over the entire surface of each side, separately.

2. Polyethylene sheeting for enclosures, wall, stationary objects, floors, ceilings and all other uses shall be white in color and at least 6-mil thickness. Exterior sheeting exposed to Public view shall be installed on the outside of the support framework to cover the framework. Sheeting shall be used in widths selected to minimize the frequency of joints. All polyethylene sheeting used shall be fire retardant and meet Port Fire Department requirements.

3. Joints between polyethylene sheets shall be securely taped. Tape shall be white in color and one type of tape shall be used for all enclosures. Sheeting and tape samples shall be submitted for approval by the Port construction project representative prior to installation.

4. Polyethylene enclosures shall be neatly secured when not in use and care shall be taken to avoid loose sheeting and tape.

5. The use of polyethylene enclosures shall be minimized except as required in 1.09 A. General Requirements or as directed by the Port construction project representative.

1.11 FENCES

A. Provide a 6-foot-high chain link fence with gates around the perimeter of the site for security during the entire length of construction or unless approved otherwise by the Port.

B. Temporary AOA Fencing must meet FAA requirements. See attached appendix.

1.12 EXTERIOR ENCLOSURES

A. Provide temporary weather tight closure of exterior openings to outside of the building to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Exterior enclosures shall be constructed with full height, insulated partitions having a minimum R Value of 12. Provide access doors with self-closing hardware and locks.

1.13 STAGING AND ENTRANCE AREAS

A. Provide and maintain crushed rock roadway traffic zones at staging areas and site access locations to insure entrance, staging areas and surrounding roads are free from mud.

1.14 PROTECTION OF INSTALLED WORK

A. Protect installed work and provide special protection where specified in individual specification sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic across landscaped areas.

1.15 SECURITY

A. Provide security and facilities to protect the Work and Port's operations from unauthorized entry, vandalism, or theft.

B. The construction site shall be closed to the public at all times. Construction site is defined as the temporary facilities and work areas inside partitions, enclosures, and cones and tape.

C. Ensure the security of tenant facilities in the event construction activities endanger those facilities or commodities.

D. Abide by special requests of security personnel, Port of Seattle Police and Fire Departments.

E. Airport Security: See Sections 01140 - Operational Safety on Airports During Construction, and Section 01567 - Airport Personnel Identification/Access Control.

1.16 PROGRESS CLEANING AND WASTE REMOVAL

A. In addition to the requirements of Section 01740 - Cleaning:

1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

2. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.

3. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

4. Collect and remove waste materials, debris, and rubbish from site and dispose off-site in a legal manner.

5. Provide trash dumpster(s) for the packaging or waste material of all Port furnished items installed by the Port's vendors/installers.

1.17 STREET CLEANING AND DUST CONTROL

A. See Section 02270 - Temporary Erosion and Sediment Control Planning and Execution

1.18 FIELD OFFICES AND SHEDS

A. Construction field offices and sheds on Port property shall be weather tight, with lighting, electrical outlets, heating, cooling and ventilating equipment, and equipped with sturdy furniture drawing rack, and drawing display table.

1.19 REMOVAL OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

A. Remove temporary utilities, equipment, facilities, and materials, prior to Substantial Completion or as directed by the Port construction project representative.

B. Clean and repair damage caused by installation or use of temporary work.

C. Removal of temporary facilities and controls, including but not limited to restoration of site and laydown area utilities to preconstruction conditions (capping, safing and incorporation of lockout/tag-out protocols), shall be an element of the final inspection and punchlist. See Section 01500aTemporary Facilities Appendix Project Logistics.

1.20 USE AND OCCUPANCY

A. The Airport is an operating facility that must remain in full operation throughout the term of this Contract. Where facility operations conflict with those of the Contractor, the operations of the facility will take precedence over those of the Contractor. It shall be the sole responsibility of the Contractor to schedule and coordinate its activities with those of the facility to assure minimum disruption of facility operations.

B. Contractor will be allowed space for the storage of materials and the pursuance of Work under this Contract in the areas as directed by the Port construction project representative. The Contractor shall limit storage of materials, tools, and other items necessary to the work to areas within the construction barriers. Items stored outside the designated areas shall be prohibited without prior approval of the Port construction project representative.

C. The Contractor shall not use baggage carts provided by SmarteCarte to transport or store equipment or construction materials.

D. Time Restrictions will apply to locations for delivery of materials, tools, equipment, and debris disposal into or out of the work areas. The following time restrictions for deliveries or pickups shall apply unless approved otherwise by the Port construction project representative.

1.	Service Tunnel Loading Dock:	2400 to 0500
2.	Deplane Drive	2400 to 0900
3.	North and South Satellites	2400 to 0500
4.	Arrivals/Lower Drive	1000 to 2400

E. Contractor employee parking will be confined to the Logistics site or parking garage at the employee’s expense. Additional Port provided parking may be coordinated for or become available upon approval of the Port construction project representative however, no guarantee is made by the Port that spaces will be available

1.21 NOISE CONTROLS

A. At all times keep objectionable noise generation to a minimum by:

1. Equipping air compressors with silencing packages.

2. Equipping jackhammers with silencers on the air outlet.

3. Equipment that can be electrically driven instead of gas or diesel is preferred. If noise levels on equipment cannot reasonably be brought down to criteria, listed as follows, either the equipment will not be allowed on the job or use time will have to be scheduled subject to approval of the Port construction project representative.

4. All construction vehicles and equipment on the project operating between 10:00 p.m. and 7:00 a.m. shall be equipped with an ambient noise sensing variable volume backup alarm system. The system shall be in compliance with Washington Administrative Code (WAC) 296-155-615.

B. Objectionable noise received on neighboring (non-Port owned) properties is defined as any noise exceeding the noise limits of State Regulations (WAC 173-60-040) or City ordinance, as stated below, or as any noise causing a public nuisance in a residential area, as determined by the Port and community representatives, or by the nuisance provisions of local ordinances.

1. The noise limitations established are as set forth in the following table after any applicable adjustments provided for herein are applied:

RECEIVING PROPERTY

NOISE SOURCE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL
Airport	50 dBA	65 dBA	70 dBA

2. Between the hours of 2200 and 0500 on weekdays and 2200 and 0900 on weekends the noise limitations above may be exceeded for any receiving property by no more than:

a. 5 (five) dBA for a total of 15 minutes in any one hour period; or

b. 10 (ten) dBA for a total of 5 minutes in any one hour period; or

c. 15 (fifteen) dBA for a total of 1.5 minutes in any one hour period.

C. In addition to the noise controls specified, demolition and construction activities conducted within 1,000 feet of residential areas may have additional noise controls required.

D. The Contractor's operation shall at all times comply with all County and City requirements.

E. For work conducted within Airport buildings, noise levels from work activities shall not exceed 80 dBA on the slow scale at the project boundary.

F. The Contractor shall plan all work activities generating noise, such as saw cutting or core drilling, during periods of low airport activity.

1.22 SCAFFOLDING

A. The Contractor's attention is called to the fact that scaffolding or other support systems will be required. Tape, plastic, or cones shall not be used by themselves as protection. Scaffolding shall comply with the more stringent requirements of Labor and Industries. The Contractor shall be totally responsible for the structural integrity of any containment systems utilizing a scaffold system. The Contractor shall post a sign in each containment specifying the maximum number of persons

or weight for which the system is designed or installed and shall be responsible for seeing that this weight is not exceeded. All scaffolding exposed to public view shall be clean and freshly painted.

B. Any scaffolding used must be cleaned, completely free of debris, and painted Harmony Interior Acrylic Latex; or Kelly Moore with type and color to match; or equal unless directed otherwise by the Port construction project representative. Contractor shall verify color prior to paint procurement.

C. Follow all manufacturers' recommendations and all applicable regulations in the set-up, use and tear-down of all scaffolding used.

D. The Contractor shall ensure that all scaffolding has adequate debris and safety barriers to protect the public below.

E. The Contractor shall replace any existing lighting displayed or covered by ceiling mounted scaffolding with temporary lighting. The intent is to maintain, at a minimum, the existing lighting level.

F. The Contractor shall submit a scaffolding plan with details, approved and stamped by a licensed Professional Engineer.

1.23 CONSTRUCTION EQUIPMENT

A. The Contractor shall submit a list of construction equipment or machinery that will be used to perform the work. Construction machinery is a piece of equipment that will impose loads to the existing structure. (i.e., scissor lift, manlift, etc.) The equipment list shall include the weights of the equipment and any axial loads or construction loads expected to perform the work.

B. Equipment (Vehicles) used inside the building, including the baggage make-up area, shall be powered either electrically or by propane. If propane vehicles are used, the vehicles shall not be left running when not used.

1.24 WASTE WATER CONTROL

A. Prevent discharge of any water/contaminated or otherwise from the site or Work locations from any source, including runoff, from entering onto adjacent areas occupied or storage spaces and/or properties.

1.25 TEMPORARY OPENINGS

A. Ensure that all temporary openings formed required for execution of the Work, are labeled with the project name and contact information of the responsible contract. At the completion of work at each location, ensure that the openings are closed and restored to match the adjacent surfaces. This will include temporary ceiling tiles removal.

1.26 TEMPORARY CEILING REMOVAL

A. Where ceiling tile is required to be temporarily removed for construction purposes, the Contractor shall ensure the ceiling envelope is maintained. To maintain the ceiling envelope for limited durations, white fire retardant, flame resistant polyethylene of at least 6 mil thickness shall be used. The installation of the polyethylene sheeting shall be done in a neat manner. If tape is used, it shall be of matching color. The Contractor shall insure that the sheeting is legibly labeled in indelible black ink with the following information; the date the ceiling tile was removed, the name of the General Contractor, and the POS Work Project number.

The Contractor shall maintain a neat and clean appearance of the temporary ceilings. Unkempt, dirty or discolored sheeting shall be cleaned or reinstalled as directed by the Port construction project representative at no cost to the Port.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.01 MAINTENANCE OF OPERATIONS

A. Public Safety Convenience: The Contractor shall conduct all operations with the least possible obstruction and inconvenience to the Port, its tenants and the public.

1. Permit traffic (pedestrian and baggage) to pass through the Work area with least possible inconvenience and delay.

2. Maintain pedestrian traffic routes and existing roadways within, and adjacent to, the Work area.

3. Maintain existing signing and lighting systems in operation as the Work proceeds unless noted otherwise on drawings.

4. Maintain access to entrances, driveways, loading docks, buildings, etc. Unless noted otherwise on drawings. Coordinate any reduction in service at such locations with Port construction project representative.

5. Maintain all walkways, access ramps, entrances and related facilities that satisfy the requirements of the Americans with Disabilities Act (ADA) of 1990. If closure of such facilities is necessary, provide alternate temporary facilities that replace the temporarily closed facilities.

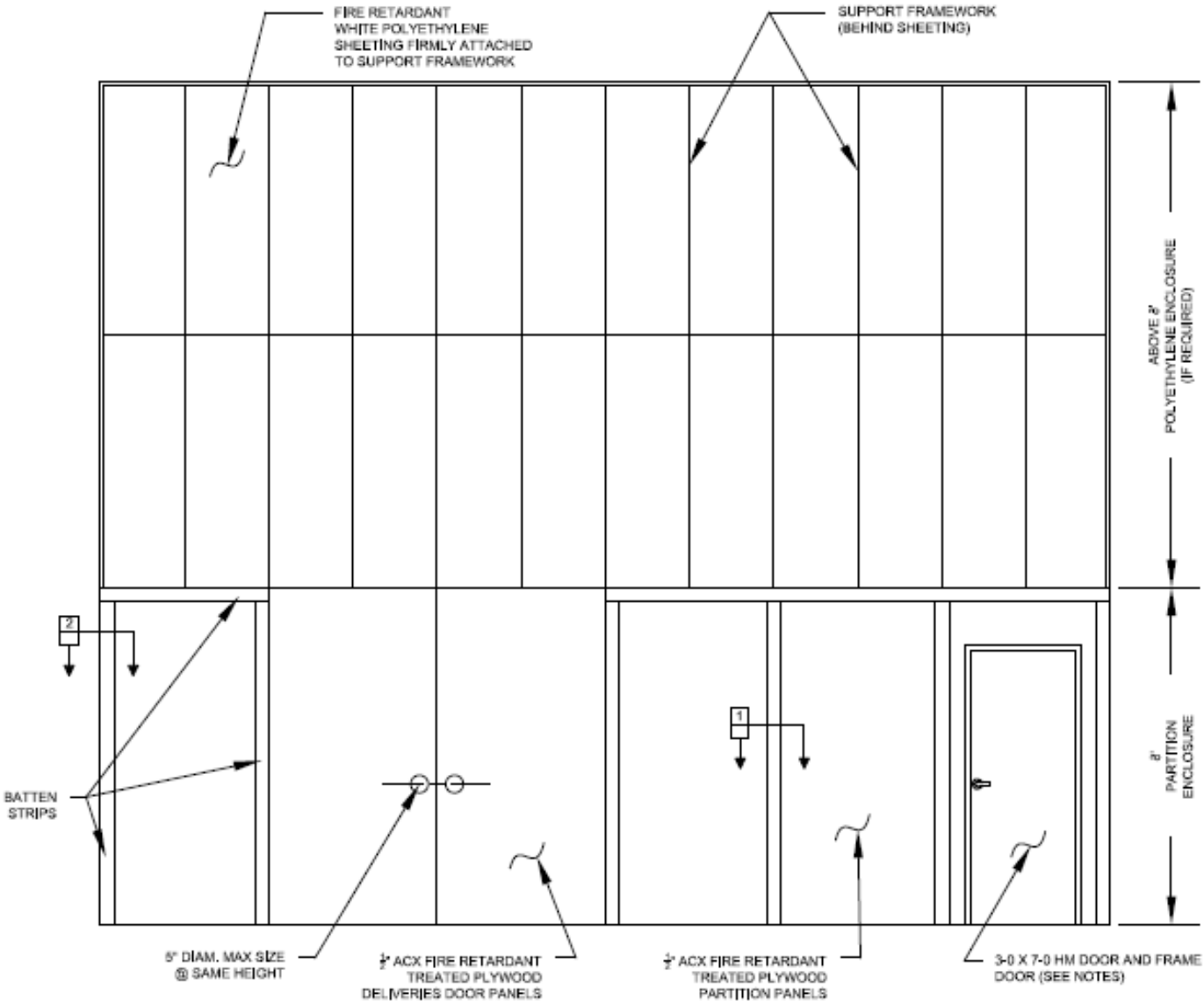
B. Responsible Representative: The Contractor shall appoint one employee as the Contractor's responsible representative and point of contact. The appointed representative shall have authority to act on behalf of the Contractor and shall be available, on call, twenty-four hours a day, throughout the period of construction for the Contract. A twenty-four hour telephone number shall be provided to the Port construction project representative for use in case of an off-hour emergency. The Contractor shall provide immediate response to correct all deficiencies upon notification.

C. Temporary Facilities: The Contractor shall provide temporary barriers, temporary enclosures and/or partitions sufficient to physically separate airport operations, including but not limited to pedestrians from the Work. The use of temporary scaffolding and other access equipment shall also be commensurate with facility operations. Traffic Control Devices: The Contractor shall provide and maintain controls as required to warn and protect the public, tenants and Port employees from injury or damage caused by the Contractor's operations. No Work shall be performed on or adjacent to any vehicular or pedestrian roadway/walkway until all necessary signage and traffic control devices have been approved and are in place.

End of Section

DIVISION 1 - GENERAL REQUIRMENTS

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS



NOTES:

1. PAINT FOR ALL EXPOSED WOOD SURFACES, DOORS, FASTENERS, HINGES, AND OTHER HARDWARE SHALL BE LOW ODOR INTERIOR LATEX-SEMI-GLOSS, 2 COATS MINIMUM, COLOR-PORT WHITE.

2. ALL DOORS SHALL SWING INTO THE CONSTRUCTION WORK SPACE. (IF OCCUPANCY IS GREATER THAN 49 PERSONS DOORS SHALL SWING OUTWARD.)

3. DOUBLE DOORS ARE FOR DELIVERIES ONLY AND ARE TO REMAIN LOCKED OTHERWISE. 3-0 X 7-0 HM DOOR IS FOR PERSONNEL ACCESS.

4. DOOR HARDWARE
   PROVIDE:
   HINGES1-1/2" PR 4-1/2"x4-1/2", CLOSER, LOCKSET (7-PIN STANLEY/BEST COMPATIBLE INTERCHANGEABLE SMALL FORMAT REMOVABLE CORE CYLINDERS). ACCEPTABLE MANUFACTURERS: STANLEY/BEST, SCHLAGE, FALCON OR APPROVED EQUAL.

ELEVATION

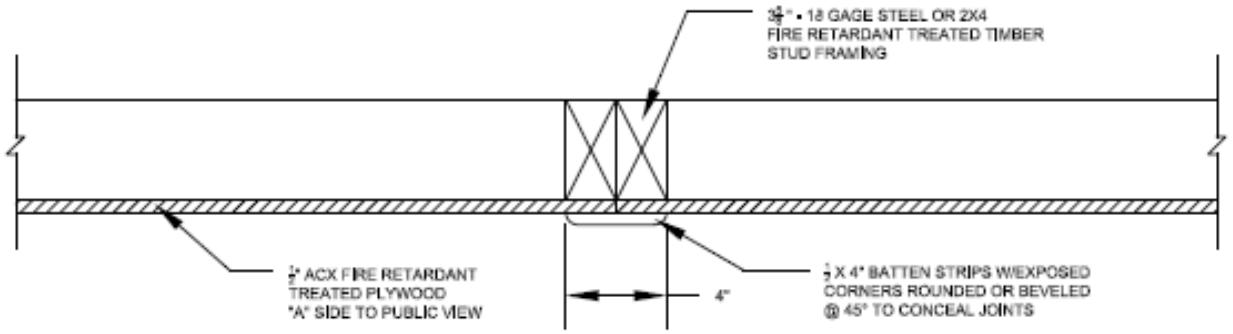
TYPICAL ENCLOSURE

1

(rev: 10 January 2014)

DIVISION 1 - GENERAL REQUIRMENTS

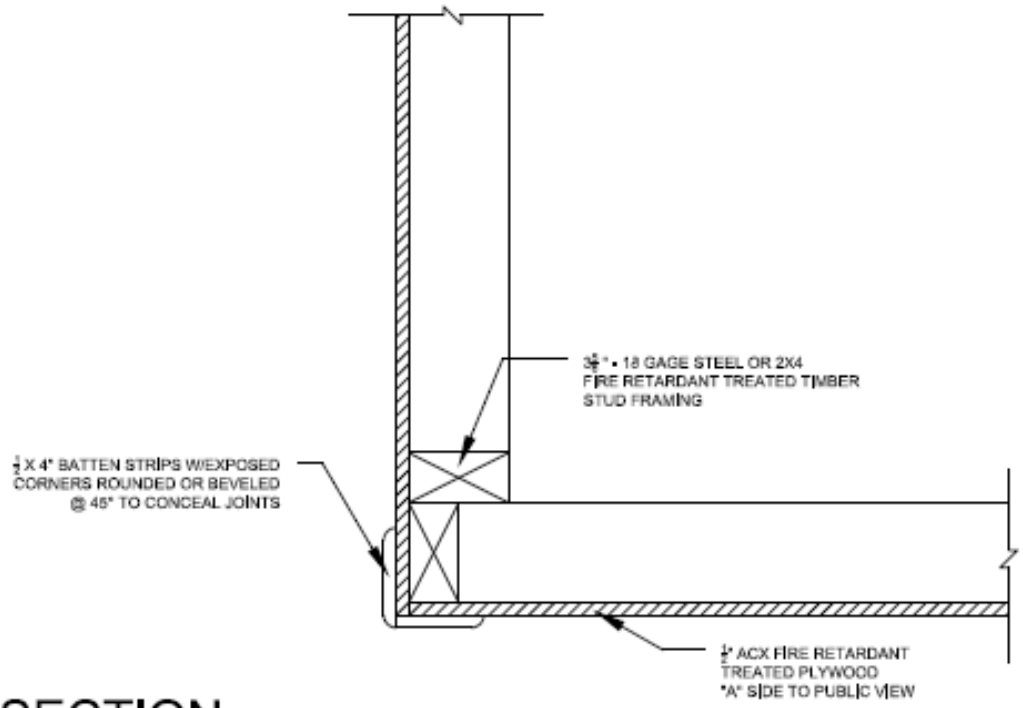
SECTION 01500 • TEMPORARY FACILITIES AND CONTROLS



SECTION 1

TYPICAL PARTITION JOINT

(rev: 04 NOVEMBER 2013)



SECTION 2

TYPICAL PARTITION CORNER

(rev: 10 January 2014)

TEMPORARY FACILITIES, APPENDIX

PROJECT LOGISTICS

PROJECT INFORMATION: PROJECT MANAGER WILL IDENTIFY SPACE ALLOCATION FOR TENANT IMPROVEMENT PROJECTS. UNLESS OTHERWISE INDICATED SPACE WILL BE PROVIDED AT THE OFFSITE LOGISTICS SITE.

OFFSITE LOGISTICS FACILITY FOR CONSTRUCTION OFFICES AND LAYDOWN AREAS

If requested, the Port of Seattle can provide the Contractor with a 5,000 square foot paved area for construction offices and laydown areas at the Offsite Logistics Facility. This space shall be available to the Contractor from two weeks prior to Construction Start until either a Certificate of Occupancy is granted for the project or the Project Manager has determined that the project is complete. The Contractor shall be responsible for site security. If the Contractor chooses to utilize this space, they should fill out the Logistics Space Request Form at the end of this attachment. For Tenant projects, a monthly fee of $3.27/sq ft for the space will be assessed to the Contractor. The cost is subject to change by Port Properties.

ADDRESS:

STIA Logistics Site:	2529 S 194th St SeaTac, WA 98188

OFFSITE LOGISTICS UTILITIES

The Port of Seattle shall provide electricity, water, or sewer to the Contractor, as shown on the Vicinity and Site Access Map in the Contract Drawings. The electrical power source shall consist of a 100 amp disconnect; water hookup shall consist of a 3/4-inch water stub-up and 4-inch sewer stub-up. The Contractor shall pay for connection to these sources and obtain all necessary permits and inspections. The Contractor shall pay for the cost of all utilities.

Removal of temporary facilities and controls, including but not limited to restoration of site and laydown area utilities to pre-mobilization conditions (capping, safing and incorporation of lockout/tag-out protocols), shall be an element of the final inspection and punch list. Work shall not be deemed complete until accepted by the Port construction project representatives.

OFFSITE LOGISTICS FACILITY PARKING

Limited parking for approximately 25 construction workers can be provided near the logistics area at no cost to the Contractor. Contractor shall coordinate the number of parking spaces available with the Port Project Manager or Inspector. Worker vehicles shall be confined to the designated POV parking area located within the offsite logistics facility.

ACCESS TO OFFSITE FACILITY

Contractor employees and deliveries shall access the Logistics Site via State Route (SR 99) (International Blvd), west on S192nd Street to entry road at northwest corner of property.

ACCESS TO WORK SITE - MATERIALS & EQUIPMENT

Refer to Construction Drawings

1. Materials & Equipment to Airport Operations Area (AOA):
   The Contractor shall access the AOA from the Offsite Logistics Facility via S 192nd Street, 28th Street S., Air Cargo Road, to Gate E45 onto the AOA. On the AOA, Contractor vehicles shall be escorted by Port provided escorts or approved Contractor personnel to their work site.
2. Materials & Equipment to Land Side:
   The Contractor shall access landside from the Offsite Logistics Facility via S192nd Street to SR 99 (International Blvd) north to South Entry to Airport Drive System.

ACCESS TO WORK SITE - EMPLOYEES

A. The Contractor shall be responsible for and bear all of the costs of transporting the employees between STIA logistics area and the project work site. The Port does not direct the Contractor regarding the means and methods of transporting the employees, nor does the Port preclude the Contractor from making any reasonable arrangement for getting the employees to the project work site, including but not limited to paying their employees to park in the Airport Parking Garage. The Contractor shall ensure that whatever transportation method is utilized, it is implemented in a manner that maximizes project efficiency, minimizes worker travel time between the STIA Logistics Site and the project work site, and minimizes impacts on public roadways.

LOGISTICS SPACE REQUEST FORM

To be completed by the Port:

Contract No.: Click here. WP No.: Click here.

Project Name: Click here.

Resident Eng.: Click here. Phone: Click here.

Inspector: Click here. Phone: Click here.

To be completed by the Contractor:

Company Name: Click here.

Project Manager: Click here. Phone: Click here.

Will a field office be located in Logistics? ☐ Yes ☐ No Office Size (SF): Click here.

Utilities Required (check all): ☐ Power ☐ Water ☐ Sewer ☐ Data ☐ Phone

Will additional laydown be required in Logistics? ☐ Yes ☐ No Size (SF): Click here.

Start Date: Click here. End Date: Click here.

Special Requests:

Click here.

Please note the following:

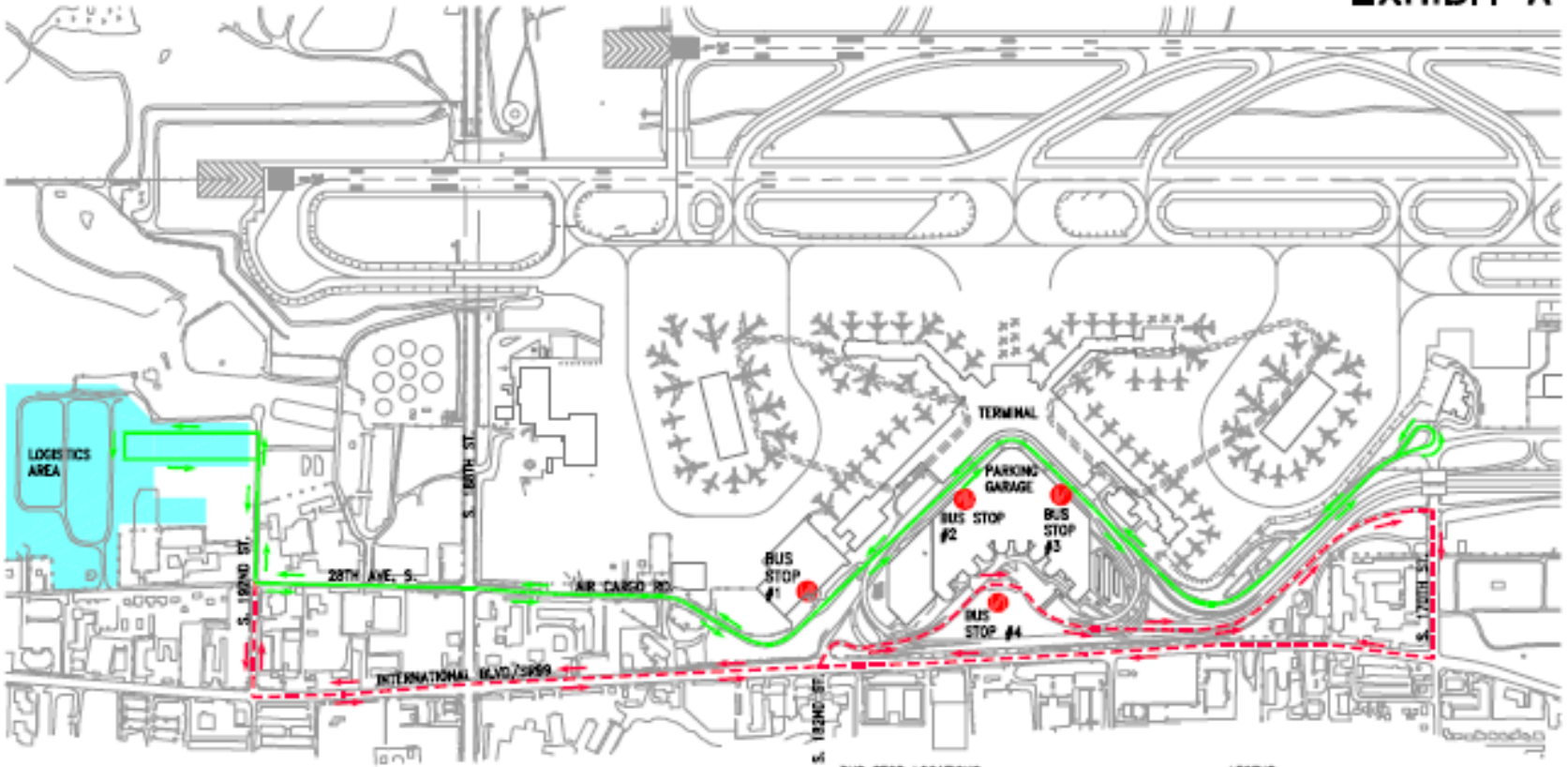
- The allocated space is for one contract only. If during this project the Contractor is awarded another, separate contract, they may be required to maintain a separate assigned space for that contract.
- The Contractor will be completely responsible for all housekeeping and security of the site and must keep all of their materials and equipment within the assigned area. The Contractor can request additional space from the Project Manager or Inspector if needed.

Send completed form to Robert Dahl, Construction Coordinator, at Dahl.r@portseattle.org and he will email you a response when a space has been assigned. If you have questions you can reach him at (206) 787-4136.

To be completed by the Port: Space Assigned Click here.

Comments: Click here.

EXHIBIT A



PORT OF SEATTLE

CONSTRUCTION BUSING
EXHIBIT A
PROPOSED BUS ROUTING

6-30-00

Port of Seattle

Work Project Number #: _____ - _____ Activity: _____ Resource Cat/Type: _____

Airport Facilities–Water Activation Request

REQUESTS MUST BE APPROVED NO LATER THAN 7 DAYS PRIOR TO ACTIVATION

Date of Request:	Date of Activation: Start Time: End Time:
Connection Number:	Connection Size:
Contractor Contact:	Phone No.:
Inspector:	Phone No.:
Contractor performing work:	Phone No:
Buildings & Area to be Activated (Accurate Description Required):	

APPROVALS

Boiler Shop: (Must be 1st contact prior to manager's signature):

POS Water Manager (Facilities & Infrastructure):

POS Aviation Mechanical Utilities Manager (Maintenance):

Other:

FOR DEPARTMENT USE ONLY:

Comments:

PLEASE RETURN A COPY OF THE COMPLETED SIGNATURE FORM TO ALL SIGNEES

DISTRIBUTION: Original: Boiler Shop; Copy To: Requestor, Water Manager, Utilities Manager, Fire Dept (if sign), Field Crew (if sign)

****RESULTS MAY TAKE UP TO 4 DAYS AFTER TEST SAMPLES SUBMITTED****

List of Appropriate Systems Contacts

Maintenance Domestic Water		
Malte Livingston	787-7121	787-4938 fax
Paul Price	787-5825	787-4938 fax
Erik Knowles	787-4117	787-4902 fax
Facilities and Infrastructure		
Bob York	787-4377	787-5515 fax
Ken Warren	787-6601	787-5515 fax
Mike Smith	787-4815	787-5515 fax
Utilities Manager		
Trevor Emtman	787-6638	787-5515 fax
Field Crew		
Terry Tucker	787-5190	787-5188 fax
Eric Schaefer	787-4047	787-5188 fax
Fire Department		
Jeff Gangnes	787-4000	787-4908 fax
Randy Wong	787-4390	787-4908 fax
Airport Operations		
Nick Terrana	787-4903	787-4837 fax
	714-5075	cell
Andy Ramsay	787-5187	787-4837 fax
	437-6323	cell

PORT OF SEATTLE
SEA-TAC INTERNATIONAL AIRPORT
APPLICATION FOR CONNECTION TO WATER SYSTEM

PURPOSE

The purpose of the ***'APPLICATION FOR CONNECTION'*** document is to formalize the procedure for making connections to the existing water system, assess the impacts of additional services/loads on the system, identify the point of connection, reserve the point of connection for the approved service/loads, establish and maintain configuration control of the system and plan for the long-term system development to meet the needs of Sea-Tac International Airport. By providing the information requested for each system included on the ***'APPLICATION FOR CONNECTION'*** form, Facilities & Infrastructure (F&I) can work with the project teams to achieve the most effective point of connection for the proposed service/load while maintaining system integrity. No connections to the water system will be allowed without an approved application for connection form.

WHO'S TO FILE

The Port of Seattle Project Manager responsible for the project and proposed connection is responsible for obtaining the required information and the timely filing of the ***'APPLICATION FOR CONNECTION'*** forms with Facilities and Infrastructure at the Sea-Tac International Airport.

WHEN TO FILE

The initial '***APPLICATION FOR CONNECTION'*** form should be filed during project scoping and budgeting, but no later than at the 15% design package stage. Updated ***'APPLICATION FOR CONNECTION'*** forms should be resubmitted at the 30%, 60%, 90%, and 100% submittals along with the technical documents of the project for review. At these review stages the project should be presented to the Mechanical Utilities Systems Team (MUST). Presentations can be scheduled by contacting the Facilities & Infrastructure department at (206) 433-5298.

WHAT TO FILE

The ***'APPLICATION FOR CONNECTION'*** must be filled out in detail. Please provide complete details for project accounting purposes as well as a detailed description of the project scope and the proposed connections to the existing systems. Documents to be provide with the ***'APPLICATION FOR CONNECTION'*** **should include, but are not limited to the following:**

- ☐ **Flow Calculations**
- ☐ **Fixture Schedule**
- ☐ **General Arrangement Drawing**
- ☐ **Elevation Drawing**
- ☐ **Riser Diagram**
- ☐ **Connection Details**

It is understood and recognized that all of the information identified will not be available at the early stages of the project**, but by the later stages of the project the requested information is required**.

WHERE TO FILE

The ***'APPLICATION FOR CONNECTION'*** documents are to be filed with the Facilities & Infrastructure (F&I) office in room MT6418M at the Sea-Tac International Airport. Office hours are 8:00 AM until 4:30 PM, Monday through Friday. Applications can be emailed to hanson.m@portseattle.org, faxed to (206) 988-5515 or mailed to the following address:

ATTN: ELAINE DYDASCO/APPLICATIONS FOR CONNECTIONS
AV/FACILITIES & INFRASTRUCTURE
MAIN TERMINAL BUILDING
POST OFFICE BOX 68727
SEATTLE, WA 98168

For further information, please call (206) 433-7270

PORT OF SEATTLE
SEA-TAC INTERNATIONAL AIRPORT
APPLICATION FOR CONNECTION TO WATER SYSTEM

Date		**CIP #**		**Mandatory Project ID#**	
Project Title:				**% Design Complete:**	
Project Description:					
Airport Tenant Company :					
Contact Person:		**Phone:**		**Fax:**	
Address:					
	Street Address	**City**	**State**	**Zip Code**	
Billing Address *(if different than above)*:					
	Street Address	**City**	**State**	**Zip Code**	
Port Line of Business Representative:					
Location of Service:					
POS Project Manager:			**Phone:**		
Design Firm:					
Design Project Manager:			**Phone:**		
Lead Design Engineer:			**Phone:**		
Project Presented to Mechanical Utilities System Team (MUST) on : If you have not presented to MUST and would like to schedule a time on the agenda, please call ***206.433.5298.***					

1. Connection Requested for:

- ☐ **New Domestic Service** *(Reduced Pressure Backflow Prevention Device Required)*
- ☐ ***New Fire Service*** *(Requires double Check Valve)*
- ☐ ***New Irrigation*** *(Reduced Pressure Backflow Prevention Device Required)*
- ☐ ***Expansion/Replacement of Existing Domestic Service***
- ☐ ***Expansion/Replacement of Existing Fire Service***
- ☐ **Other**

2. Required Date for Connection:				
3. Requested Size of Domestic Service (Meter):				
4. Fire Flow Header Size:				
5. Fire Flow Rate:				
6. Fire Flow Duration:				
7. Hydraulic Calculations Attached:	**Yes**	☐	**No**	☐
8. Drawings Attached:	**Yes**	☐	**No**	☐
9. Drawing Numbers:				

10. A final copy of "As-Built" system drawings must be provided to F&I at the conclusion of the project.

NOTES: Utility Shutdown Request Form must be completed before connection during construction phase (7 days notice required).

PORT OF SEATTLE
SEA-TAC INTERNATIONAL AIRPORT
APPLICATION FOR CONNECTION TO WATER SYSTEM

Prepared by:	_____	**Date:**	_____
A revised application is required to be submitted as the project progresses from pre-design to 100% design. No connections to the water system will be allowed without Facilities & Infrastructure approval of this document.			

Application is:	☐	**Approved**	☐	**Approved as noted** *(see below)*
	☐	**Revise and Resubmit**	☐	**Rejected**
Notes:				
_____.				_____.
Aviation/Facilities & Infrastructure				***Date***

FAA - Item F-162 Chain-Link Fence

DESCRIPTION

162-1.1 This item shall consist of furnishing and erecting a chain-link fence in accordance with these specifications and the details shown on the plans and in conformity with the lines and grades shown on the plans or established by the Project Manager.

MATERIALS

162-2.1 FABRIC. [The fabric shall be woven with a 9-gauge [galvanized steel wire] [polyvinyl chloride (PVC)-coated steel] [aluminum alloy] [zinc-5% aluminum mischmetal] wire in a 2 in (50 mm) mesh and shall meet the requirements of [ ].] [The fabric shall be woven from a [ ] gauge aluminum-coated steel wire in a 2 in (50 mm) mesh and shall conform to the requirements of ASTM A 491.]

****

Galvanized steel fabric shall conform to the requirements of ASTM A 392, Class 2.

Polyvinyl chloride-coated steel shall conform to the requirements of ASTM F 668, Class 2b.

Aluminum alloy fabric shall conform to the requirements of ASTM F 1183.

Zinc-5% aluminum mischmetal alloy coated steel shall conform to the requirements of ASTM F 1345, Class 2.

The Project Manager shall specify 9 or 10 gauge aluminum-coated wire.

Metallic-coated fabric shall have a clear acrylic coating applied to the selvage area after weaving.

****

162-2.2 BARBED WIRE. Barbed wire shall be 2-strand 12-1/2 gauge **[zinc-coated] [aluminum-coated]** wire with 4-point barbs and shall conform to the requirements of **[ ]**.

****

Zinc-coated barbed wire shall conform to the requirements of ASTM A 121, Class 3, Chain Link Fence Grade.

Aluminum-coated barbed wire shall conform to the requirements of ASTM A 121, Class II.

****

162-2.3 POSTS, RAILS AND BRACES. Line posts, rails, and braces shall conform to the requirements of ASTM F-1043 or ASTM F 1083 as follows.

Galvanized tubular steel pipe shall conform to the requirements of Group IA, (Schedule 40) coatings conforming to Type A, or Group IC (High Strength Pipe), External coating Type B, and internal coating Type B or D.

Roll Formed Steel Shapes (C-Sections) shall conform to the requirements of Group IIA, and be galvanized in accordance with the requirements of F 1043, Type A.

Hot-Rolled Shapes (H Beams) shall meet the requirements of Group III, and be galvanized in accordance with the requirements of F 1043, Type A.

Aluminum Pipe shall conform to the requirements of Group IB.

Aluminum Shapes shall conform to the requirements of Group IIB.

Vinyl or polyester coated steel shall conform to the requirements of ASTM F 1043, Paragraph 7.3 Optional Supplemental Color Coating.
Composite posts shall conform to the strength requirements of ASTM F 1043 or ASTM F 1083. The strength loss of composite posts shall not exceed 10 percent when subjected to 3,600 hours of exposure to light and water in accordance with ASTM G 23, ASTM G 26, and ASTM G-53.
Posts, rails, and braces furnished for use in conjunction with aluminum alloy fabric shall be aluminum alloy or composite.
Posts, rails, and braces, with the exception of galvanized steel conforming to F 1043 or ASTM F 1083, Group 1A, Type A, or aluminum alloy, shall demonstrate the ability to withstand testing in salt spray in accordance with ASTM B 117 as follows:

External: 1,000 hours with a maximum of 5% red rust.

Internal: 650 hours with a maximum of 5% red rust.

The dimensions of the posts, rails, and braces shall be in accordance with Tables I through VI of Fed. Spec. RR-F-191/3.
162-2.4 GATES. Gate frames shall consist of **[galvanized steel pipe] [polymer-coated steel pipe] [aluminum alloy pipe] [composite posts]** and shall conform to the specifications for the same material under paragraph 162-2.3. The fabric shall be of the same type material as used in the fence.
162-2.5 WIRE TIES AND TENSION WIRES. Wire ties for use in conjunction with a given type of fabric shall be of the same material and coating weight identified with the fabric type. Tension wire shall be 7-gauge marcelled steel wire with the same coating as the fabric type and shall conform to ASTM A 824.
All material shall conform to Fed. Spec. RR-F-191/4.
162-6 MISCELLANEOUS FITTINGS AND HARDWARE. Miscellaneous steel fittings and hardware for use with **[zinc-coated] [aluminum-coated] [zinc-5% aluminum-mischmetal alloy-coated]** steel fabric shall be of commercial grade steel or better quality, wrought or cast as appropriate to the article, and sufficient in strength to provide a balanced design when used in conjunction with fabric posts, and wires of the quality specified herein. **[All steel fittings and hardware shall be protected with a zinc coating applied in conformance with ASTM A 153.] [Miscellaneous aluminum fittings for use with aluminum alloy fabric shall be wrought or cast aluminum alloy.]** Barbed wire support arms shall withstand a load of 250 pounds (113 kg) applied vertically to the outermost end of the arm.
162-2.7 CONCRETE. Concrete shall be of a commercial grade with a minimum 28-day compressive strength of 2500 psi (17 240 kPa).
162-2.8 MARKING. Each roll of fabric shall carry a tag showing the kind of base metal (steel, aluminum, or aluminum alloy number), kind of coating, the gauge of the wire, the length of fencing in the roll, and the name of the manufacturer. Posts, wire, and other fittings shall be identified as to manufacturer, kind of base metal (steel, aluminum, or aluminum alloy number), and kind of coating.

CONSTRUCTION METHODS

162-3.1 CLEARING FENCE LINE. All trees, brush, stumps, logs, and other debris which would interfere with the proper construction of the fence in the required location shall be removed a minimum width of 2 ft (61 cm) on each side of the fence centerline before starting fencing operations. The cost of removing and disposing of the material shall not constitute a pay item and shall be considered incidental to fence construction.

162-3.2 INSTALLING POSTS. All posts shall be set in concrete at the required dimension and depth and at the spacing shown on the plans.

****

Posts should be spaced not more than 10 ft (3 m) apart and should be set a minimum of 36 in (90 cm) in concrete footings. If the frost depth is greater than 36 in (90 cm), the posts should be set accordingly. The posts holes shall be in proper alignment so that there is a minimum of 3 in (75 mm) of concrete on all sides of the posts.

****

The concrete shall be thoroughly compacted around the posts by tamping or vibrating and shall have a smooth finish slightly higher than the ground and sloped to drain away from the posts. All posts shall be set plumb and to the required grade and alignment. No materials shall be installed on the posts, nor shall the posts be disturbed in any manner within 7 days after the individual post footing is completed.

Should rock be encountered at a depth less than the planned footing depth, a hole 2 in (50 mm) larger than the greatest dimension of the posts shall be drilled to a depth of 12 in (300 mm). After the posts are set, the remainder of the drilled hole shall be filled with grout, composed of one part Portland cement and two parts mortar sand. Any remaining space above the rock shall be filled with concrete in the manner described above.

In lieu of drilling, the rock may be excavated to the required footing depth. No extra compensation shall be made for rock excavation.

162-3.3 INSTALLING TOP RAILS. The top rail shall be continuous and shall pass through the post tops. The coupling used to join the top rail lengths shall allow for expansion.

162-3.4 INSTALLING BRACES. Horizontal brace rails, with diagonal truss rods and turnbuckles, shall be installed at all terminal posts.

162-3.5 INSTALLING FABRIC. The wire fabric shall be firmly attached to the posts and braced in the manner shown on the plans. All wire shall be stretched taut and shall be installed to the required elevations. The fence shall generally follow the contour of the ground, with the bottom of the fence fabric no less than 1 in (25 mm) or more than 4 in (100 mm) from the ground surface. Grading shall be performed where necessary to provide a neat appearance.

At locations of small natural swales or drainage ditches and where it is not practical to have the fence conform to the general contour of the ground surface, longer posts may be used and multiple strands of barbed wire stretched thereon to span the opening below the fence. The vertical clearance between strands of barbed wire shall be 6 in (150 mm) or less.

****

Openings below the fence may also be spanned with barbed wire fastened to stakes.

The Project Manager shall specify if tension wire is to be installed.

****

162-3.6 ELECTRICAL GROUNDS. Electrical grounds shall be constructed **[where a power line passes over the fence] [at 500 ft (150 m) intervals]**. **[The ground shall be installed directly below the point of crossing.]** The ground shall be accomplished with a copper clad rod 8 ft (240 cm) long and a minimum of 5/8 in (15 mm) in diameter driven vertically until the top is 6 in (150 mm) below the ground surface. A No. 6 solid copper conductor shall be clamped to the rod and to the fence in such a manner that each element of the fence is grounded. Installation of ground rods shall not constitute a pay item and shall be considered incidental to fence construction.

****

The Project Manager shall indicate the location of all electrical grounds on the plans. Grounding may not be necessary with the use of composite posts.

****

METHOD OF MEASUREMENT

162-4.1 Chain-link fence will be measured for payment by the linear foot (meter). Measurement will be along the top of the fence from center to center of end posts, excluding the length occupied by gate openings.
Gates will be measured as complete units.

BASIS OF PAYMENT

162-5.1 Payment for chain-link fence will be made at the contract unit price per linear foot (meter).
Payment for driveway or walkway gates will be made at the contract unit price for each gate. The price shall be full compensation for furnishing all materials, and for all preparation, erection, and installation of these materials, and for all labor equipment, tools, and incidentals necessary to complete the item.
Payment will be made under:

Item F-162-5.1 Chain-Link Fence-per linear foot (meter)
Item F-162-5.2 Driveway Gates-per each
Item F-162-5.3 Walkway Gates-per each

MATERIAL REQUIREMENTS

ASTM A 121	Zinc-Coated (Galvanized) Steel Barbed Wire
ASTM A 123	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A 153	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A 392	Zinc-Coated Steel Chain-Link Fence Fabric
ASTM A 491	Aluminum-Coated Steel Chain-Link Fence Fabric
ASTM A 572	High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Steel Quality
ASTM A 653	Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM A 824	Metallic-Coated Steel Marcelled Tension Wire for Use With Chain Link Fence
ASTM A 1011	Steel Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability
ASTM B 117	Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM B 221	Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire Shapes and Tubes
ASTM B 429	Aluminum-Alloy Extruded Structural Pipe and Tube
ASTM F 668	Poly(vinyl Chloride)(PVC) and other Organic Polymer-Coated Steel Chain-Link Fence Fabric
ASTM F 1043	Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework
ASTM F 1083	Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures
ASTM F 1183	Aluminum Alloy Chain Link Fence Fabric
ASTM F 1345	Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Chain Link Fence

	Fabric
ASTM G 152	Operating Open Flame (Carbon-Arc) Light Apparatus for Exposure of Nonmetallic Materials
ASTM G 153	Operating Enclosed Carbon-Arc Light Apparatus for Exposure of Nonmetallic Materials
ASTM G 154	Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
ASTM G 155	Operating (Xenon-Arc) Light Apparatus for Exposure of Nonmetallic Materials
FED SPEC RR-F-191/3	Fencing, Wire and Post, Metal (Chain-Link Fence Posts, Top Rails and Braces)
FED SPEC RR-F-191/4	Fencing, Wire and Post, Metal (Chain-Link Fence Accessories)

END OF ITEM F-162

Intentionally Left Blank

PART 1 GENERAL

1.01 SUMMARY

A. This section includes construction waste management requirements.

1.02 DEFINITIONS

A. Co-mingled or Off-site Separation: Collecting all material types into a single bin or mixed collection system and separating the waste materials into recyclable material types at an off-site facility.

B. Construction, Demolition and Land-Clearing (CDL) Waste: Includes all non-hazardous solid wastes resulting from construction, remodeling, alterations, repair, demolition, and land clearing. Includes material that is recycled, reused, salvaged or disposed as garbage. This also includes uncontaminated soils that are designated as geotechnically unsuitable or excess excavation.

C. Hazardous/Dangerous Waste: As defined by Chapter 70.105.010 Revised Code of Washington and 40 Code of Federal Register 261 and by Washington Administrative Code 173-303.

D. Proper Disposal: As defined by the jurisdiction receiving the waste.

E. Recyclable Materials: Products and materials that can be recovered and remanufactured into new products.

F. Recycling: The process of sorting, cleaning, treating and reconstituting materials for the purpose of using the material in the manufacture of a new product. Can be conducted on-site (as in the grinding of concrete).

G. Recycling Facility: An operation that is permitted to accept materials for the purpose of processing the materials into an altered form for the manufacture of a new product.

H. Salvage for Reuse: Existing usable product or material that can be saved and reused in some manner on the project site or other projects off-site.

I. Salvage for Resale: Existing usable product or material that can be saved and removed intact (as is) from the project site to another site for resale to others without remanufacturing.

J. Source-Separated Materials: Materials that are sorted at the site into separate containers for the purpose of reuse or recycling.

K. Sources Separation: Sorting the recovered materials into specific material types with no, or a minimum amount of, contamination on site.

L. Time-Based Separation: Collecting waste during each phase of construction or deconstruction that results in primarily one major type of recovered material. The material is removed before it becomes mixed with the material from the next phase of construction.

M. Garbage: Product or material typically considered to be trash or debris that is unable to be salvaged for resale, salvaged and reused, returned, or recycled.

1.03 SUBMITTALS

A. Waste Management Plan

B. Waste Management Final Report

1.04 PERFORMANCE GOALS

A. General: Divert CDL waste to the maximum extent practicable from the landfill by one or a combination of the following activities:

1. Salvage
2. Reuse
3. Source separated CDL recycling
4. Co-mingled CDL recycling

B. CDL waste materials that can be salvaged, resold, reused or recycled, include, but are not limited to the following:

1. Clean dimensional wood, pallet wood, plywood, OSB, and particleboard
2. Asphalt
3. Concrete and concrete masonry units
4. Brick
5. Ferrous and non-ferrous metals
6. Gypsum products
7. Acoustical ceiling tile
8. Glass, both window and bottle
9. Plastics, including plastic film
10. Carpet and pad
11. Cardboard packaging
12. Insulation
13. Field office waste paper, aluminum cans, glass, plastic, and cardboard

C. Hazardous/Dangerous Wastes, contaminated soils and other hazardous materials such as paints, solvents, adhesives, batteries, and fluorescent light bulbs and ballasts shall be disposed of at applicable permitted facilities.

1.05 WASTE MANAGEMENT PLAN

A. Per the requirements of Section 01305, Preconstruction Submittals, submit to the Port construction project representative a Waste Management Plan narrative in accordance with these specifications. Use the Waste Management Plan Form attached at the end of this Section or other format as approved by the Port construction project representative (Attachment A).

B. The Waste Management Plan shall include the following:

1. Name of designated Recycling Coordinator
2. A list of waste materials that will be salvaged for resale, salvaged for reuse, recycled, and disposed.

3. Identify waste handling methods to be used, including one or more of the following:
    a. Method 1 – Contractor or subcontractor(s) hauls recyclable materials to an approved recycling facility.
    b. Method 2 - Contracting with diversion/recycling hauler to haul recyclable material to an approved recycling or material recovery facility.
    c. Method 3 – Recyclable material reuse on-site.
    d. Method 4 – Recyclable material salvage for resale.
4. Identification of each recycling or material recovery facility to be utilized, including name, address and types of materials being recycled at each facility
5. Description of the method to be employed in collecting, and handling, waste materials.
6. Description of methods to communicate Waste Management Plan to personnel and subcontractors.

1.06 WASTE MANAGEMENT FINAL REPORT

A. Use the Waste Management Final Report Form attached at the end of this section or other format as approved by the Port construction project representative (Attachment B).The Waste Management Final Report shall list the following for the project:
    1. A record of each waste material type and quantity recycled, reused, salvaged, or disposed from the Project. Include total quantity of waste material removed from the site and hauled to a landfill.
    2. Percentage of total waste material generated that was recycled, reused, or salvaged.

B. Quantities shall be reported by weight (tons) unless otherwise approved by the Port construction project representative.

C. Submit copies of manifests, weight tickets, recycling/disposal receipts or invoices, which validate the calculations or a signed certification of completeness and accuracy of the final quantities reported.

1.07 QUALITY ASSURANCE

A. Regulatory Requirements: The Contractor shall maintain compliance with all applicable Federal, State, or Local laws that apply to Construction Waste Management and material salvage, reuse, recycling and disposal.

B. Disposal Sites, Recyclers and Waste Materials Processors: All facilities utilized for management of any materials covered under this specification must maintain all necessary permits as required by federal, state and local jurisdictions.

C. For a comprehensive list of recycling facilities in King County, and other contractor resources, contact King County's Construction and Demolition Recycling Program:

http://your.kingcounty.gov/solidwaste/greenbuilding/construction-demolition.asp

PART 2 NOT USED

PART 3 EXECUTION

3.01 SOURCE-SEPARATED CDL RECYCLING

A. Provide individual containers for separate types of CDL waste to be recycled, clearly labeled with a list of acceptable and unacceptable materials.

3.02 CO-MINGLED CDL RECYCLING

A. Provide containers for co-mingled CDL waste to be recycled, clearly labeled with a list of acceptable and unacceptable materials.

3.03 LANDFILL

A. Provide containers for CDL waste that is to be disposed of in a landfill clearly labeled as such.

3.04 REMOVAL OF CDL WASTE FROM PROJECT SITE

A. Transport CDL waste off Owner's property and legally dispose of them.

End of Section

Attachment A
WASTE MANAGEMENT PLAN

Company:
Project:

Designated Recycling Coordinator:

Waste Management Goals:
This project will recycle or salvage for reuse CDL waste generated on-site to the maximum extent practicable.

Communication Plan:

Expected Project Waste, Disposal Facility, Collection Strategy, and Handling:

The following charts identify waste materials expected on this project, disposal facility details, collection strategies (e.g. source-separate, co-mingle), and waste handling methods (see Division 1 - Section 01 74 19 Construction Waste Management, section 1.05 Waste Management Plan)

Deconstruction/Demolition Phase

Waste Material	Facility (name, address)	Collection Strategy	Waste Handling Method

Construction Phase

Waste Material	Facility (name, address)	Collection Strategy	Waste Handling Method

Attachment B
WASTE MANAGEMENT PLAN

Project: _____

Contractor: _____

Date:

	MATERIAL CATEGORY	DISPOSED IN LANDFILL	DIVERTED FROM LANDFILL BY RECYCLING, SALVAGE OR REUSE			RECYCLING OR MATERIAL RECOVERY FACILITY
			Recycled	Salvaged	Reused	
1	Wood (tons)					
2	Asphalt (tons)					
3	Concrete (tons)					
4	Brick (tons)					
5	Metals Ferrous and Non-Ferrous (tons)					
6	Gypsum (tons)					
7	Acoustical Ceiling Tile (tons)					
8	Glass (tons)					
9	Plastic (tons)					
10	Carpet and pad (tons)					
11	Cardboard (tons)					
12	Insulation (tons)					
13	Field office waste paper, cans, glass, plastic, and cardboard (tons)					
14	Other:					
15	Other:					
16	Other:					
17	Other:					
18	Other:					
	Total (in Weight/Volume)		**(Total weight/volume of all above values)**			**% of Waste Diverted**

PART 1 GENERAL

1.01 REQUIREMENTS

A. Work related to this section is in accordance with current Department of Homeland Security / Transportation Security Administration (DHS / TSA) regulations.

B. Failure to comply with TSA rules and the Airport Security Plan may result in up to an $11,000 fine from the TSA. Fines assessed by the TSA against a Contractor, a Contractor's employee, Supplier or a Subcontractor will be paid by the Contractor. See the following: 1) Title 49; and 2) http://www.portseattle.org/Employee-Services/ID-Badges/Documents/idsecurityhandbook.pdf.

C. Additional information and forms associated with badging, custom bond seals and security access and key requests can be found here: http://www.portseattle.org/Employee-Services/ID-badges/Pages/default.aspx

1.02 SECURITY REQUIREMENTS

A. Identification/Access Badges:

1. All Contractor personnel working in restricted areas (including Air Operations Area (AOA), Secured, Security Identification Display Areas (SIDA) and Sterile areas) on this project shall have Port of Seattle airport-issued identification/access badges in accordance with Title 49, Code of Federal Regulations (CFR), Part 1540/1542 and the Airport Security Plan.

2. All or a portion of this Contract requires work to be performed within an area of the Airport controlled for security reasons. That area is defined as the area within the Air Operations Area security fence, and all other restricted areas indicated on applicable drawings, or as posted on the Airport premises ("restricted/secured area"), or otherwise defined under Airport Security Plan (ASP). No Contractor personnel are allowed to work in these restricted areas without a valid identification/access badge.

3. Badges must be worn on the outermost garment above waist height in order to gain access to and remain in restricted areas.

B. Security Identification Display Area (SIDA) Training:

1. All individuals requiring unescorted access to restricted areas (excluding sterile areas) will be required to attend Security Identification Display Area (SIDA) training in accordance with the Airport Security Plan (ASP) and Title 49, CFR, Part 1542.213 (b). This training must be completed prior to the issuance of an approved ID/access badge allowing unescorted access.

2. At a minimum, this training shall consist of a forty minute session discussing airport security procedures. The training session shall be conducted by the Port's Airport Operations SIDA/AOA Training Center. You may pre-register for classes online at http://www.portseattle.org/Employee-Services/Security-and-Driver-Training/Pages/default.aspx.

3. Required Training

a. Initial Training - All Port of Seattle SIDA badge applicants (either RESTRICTED AREA BADGES or DRIVING BADGES) must successfully complete SIDA training, and if applicable, any required driving training.

b. Recurrent Training – it is a requirement that all persons renewing Port of Seattle badges successfully complete SIDA training and, if applicable, any required driving training prior to receiving renewed badges

4. Recurrent Training Requirements:

a. SIDA and AOA/Driving Training are required every two (2) years and must be completed prior to badge renewal.

b. If an applicant is authorized to drive on the AMA, known as Air Movement Areas, recurrent training is required annually.

1.03 ISSUANCE OF IDENTIFICATION BADGES

A. New Company Setup (One time):

1. Companies initiating badges with the Port of Seattle for the first time, must complete a New Company setup package (available online or in the Credential Center). A onetime fee of $200 per company will be billed on the first statement.

2. The Contractor must complete the New Company Setup Application found on the website provided in 1.01 C which is necessary to join the Port of Seattle Identification Program. Each company must make an appointment with the Credential Center and have two representatives present at the time of the company setup. Both representatives must complete the badge process and complete the Authorized Signer Training Class. Upon completion of the Authorized Signer Training Class all authorized signers must have a Signature Capture Card on file with the Credential Center. This Signature Capture Card must be signed by the individuals designated by the company as an authorizing signatory; e.g., a chief executive officer, owner, senior manager, etc. Authorized Signature Cards must be renewed every two (2) years. To meet current Transportation Security Administration (TSA) regulations, any Authorized Signatory must hold a current SIDA badge to show proof of clearing all required background checks by the Port of Seattle. All Authorized Signers must attend, at minimum, SIDA training and additional training required by TSA for Authorized Signers. This includes all required recurrent training.

a. Contractors shall have the Project Manager co-sign and enter the Contract end dates on Contractor new company agreements before they are submitted to the Credential Office.

3. The Contractor shall designate one primary and one secondary point of contact (POC) for all matters pertaining to the badges and keys issued to the Contractor for their company. The Contractor shall provide contact phone numbers where at least one of these POCs can be reached 24 hours a day, seven days a week.

4. New Company Setups apply to the Contractor and its Suppliers and Subcontractors.

5. Companies will be notified by the Credential Center when the company representatives have been cleared and ID badges are available for pickup.

a. The two company representatives must have completed and received their ID badges prior to submittal of badge applications by Contractor employees, Suppliers or Subcontractors.

b. Ideally, Contractors will submit employee applications all at one time.

B. Obtaining an ID Badge (each applicant):

1. Submit a properly completed Identification/Access badge application, Disqualifying Crimes Statement and Privacy Act Notice for each employee requiring access to restricted areas.

2. The Contractor shall fill out the “Company” portion of each Identification/Access badge application form for each employee requiring access after the employee has completed their section.

3. Each applicant requiring access shall fill out the “Applicant” section of the Identification Badge/Access application form. The form shall be signed by the employee.

4. The Company authorized signer shall review the applicant section for accuracy prior to signing and submitting the application to the Credential Center.

5. Applicants must go to the Credential Center with their completed badge application, badge fees (if applicable), and two forms of identification. One must be government issued PROOF OF CITIZENSHIP. For a list of acceptable documentation, please refer to: http://www.portseattle.org/Employee-Services/ID-badges/Pages/default.aspx

6. When applications are completed and required documentation has been supplied, the applicant will be fingerprinted in accordance with Title 49, Code of Federal Regulations (CFR), Part 1542.209. Each applicant will also be submitted for a Security Threat Assessment.

7. Companies will be notified by the Credential Center when their employees have been cleared. They may then return to the Credential Center to pick up their ID badges.

C. Miscellaneous Badge Information

1. Nonrefundable badge fees are described on the following link:

http://www.portseattle.org/Employee-Services/ID-Badges/Pages/default.aspx

a. Badge fees are subject to annual adjustments. Companies will receive notification of any changes.

2. See Article 1.07 for details pertaining to working in a U.S. Customs and Border Protection restricted and/or secured areas. Additional time will be required to develop and process credential documents for these areas.

3. Permanent identification/access badges are valid for two years or the term of the contract, whichever is shorter. At project completion, Contractors must return the badges to the Credential Center or reapply for a new identification/access badge if performing additional work at the Airport.

a. The Contractor is responsible for tracking and ensuring the surrender of all badges issued for purposes of the Work to its employees, Suppliers or Subcontractors per the signed Acknowledgment letter.

4. Approval of an Identification/Access Badge Application may be withheld in the event the criminal history records check is found to be unsatisfactory or the applicant is unable to pass any other applicable TSA background checks.

5. Appointments must be scheduled for New Company Setups, issuance of new badges, renewal of badges, and training. The Credential Center is closed weekends and holidays. Special scheduling arrangements may be made if necessary. Hours are subject to change. Each applicant may make their own appointment online at:

https://app.timetrade.com/tc/login.do?url=portseattle.ca

D. All work and expenses required to obtain identification/access badges or for other activities required in this section shall be borne by the Contractor as part of the contract.

1.04 RULES AND REGULATIONS REGARDING IDENTIFICATION BADGES

A. Identification/access badges provide access to a default list of security access points. See Appendix 1.

B. Any employee found in a restricted area without an airport-issued identification/access badge will be issued a citation and escorted from that location and not be allowed to return until wearing a proper identification/access badge.

C. Employees shall be allowed access to the restricted areas only as necessary to travel to and from the construction/job site. Any employee found in any portion of the restricted areas other than the construction/job site or the area to and from the construction/job site will immediately have the employee's identification/access badge confiscated and will no longer be permitted to work at the Airport in a restricted area.

D. All identification/access badges issued by the Port of Seattle are the property of the Port of Seattle and must be immediately returned under the following conditions:

1. Upon expiration;

2. Upon separation of employment (for any reason);

3. When job function no longer requires a Port of Seattle airport-issued identification/access badge;

4. Upon demand by the Port of Seattle.

5. If convicted of, or found not guilty by reason of insanity of one of the crimes listed in Title 49, CFR, Part 1542.209 (d). A complete list is on the back of the Fingerprint Application.

E. The Contractor shall immediately notify the Port of personnel, Suppliers or Subcontractors whose work is terminated or completed and shall ensure badges are returned within 30 days of notification.

1. Notifications shall be in writing to the Credential Center.
2. The Contractor will be charged $250.00 per non-returned badge.
3. If badges are not returned at Project Completion, the Credential Center will issue an invoice to the Contractor. Non-payment will result in the standard Port collections process.

F. Escorting:

1. Any individual with a Port ID authorized access to a particular door/gate, may escort any individual(s) with an airport approved ID but without access to that particular door/gate; e.g., a badge with a lower access level or an escort badge. THE ESCORT MUST REMAIN WITH THE INDIVIDUAL(S) BEING ESCORTED AT ALL TIMES WHILE IN RESTRICTED AREAS.
    a. Escorts shall be limited to five (5) individuals, or less, depending on the circumstances to ensure positive control is maintained at all times.
    b. A non-badged person can be escorted a maximum of five (5) times in a calendar year, starting the day of the first escort.
        (1) A longer period must be approved by Airport Security Coordinator and coordinated through the Port construction project representative and Aviation Security.
2. Proper escort of another vehicle CANNOT be accomplished with the escort riding in the SAME vehicle as the individual being escorted. The escort must be in a separate vehicle from the individual being escorted and both must meet the requirements as stated in Section 01140 - Operational Safety on Airports during construction.
    a. Vehicle Signs: Vehicles must have signs of commercial design with lettering at least 2” in height on BOTH sides of the vehicle. Magnetic signs are acceptable. The company name on the driver’s badge MUST match the company name on the vehicle.

G. All badges that are lost, stolen, or otherwise unaccounted for must be immediately reported to the Credential Center at (206) 787-6859 or POS Alarm Response at (206) 787-4022. Any misuse of or willful failure to return a Port of Seattle airport-issued identification/access badge is subject to criminal prosecution. A fee of $250.00 will be charged for a lost or otherwise unaccounted for badge. The fee may be waived if documentation is received and verified from a law enforcement agency specifically indicating the badge was stolen. The Contractor must apply for a replacement identification badge for the employee as provided in Article 1.03; paragraph B, this Section of these specifications. Unsecured Doors: Contractors and its employees will be held accountable for doors located within their work sites that provide direct or indirect access to restricted and/or secured areas of the airport by unauthorized individuals. Doors that provide such access must NOT under ANY circumstances be left open and unattended. Individuals who have been issued Port of Seattle airport-issued identification are required to challenge any individual attempting unauthorized access to restricted areas.

H. Contractors requiring access through vehicle gates not normally staffed must make arrangements for access through the Aeronautical Duty Manager, (206) 787-

5229, who will make arrangements for either Access Controller or Senior Access Controller support.

1.05 FAILURE TO COMPLY

A. Compliance with these regulations and TSA directives will be monitored by the Airport Security Coordinator, other Airport Security personnel and/or other regulatory agencies. Failure on the part of the Contractor to comply may result in fines or other monetary considerations levied against the Port. In the event an action or absence of action, by the Contractor with regard to the TSA directive leads to any damages against the Port, the Contractor shall be liable for, and reimburse the Port for, all costs involved.

1.06 SPECIAL REQUIREMENTS FOR WORK IN AIRPORT TERMINAL

A. Pre-construction meetings with Security

1. The Contractor must schedule a preconstruction meeting with the Port construction project representative and the Security Construction Support Specialist, a week prior to performing the initial erection of any barricades in the terminal to confirm layout and identify the type of keys required on the barricade. Any special situation that may affect the security of the airport shall be identified and discussed in the meeting.

2. As soon as a new barricade installation is completed the Contractor shall schedule a site inspection of the enclosure with the Security Construction Support Specialist to obtain approval to proceed with the construction work at the site.

3. Prior to performing any work that modifies an existing security wall such as the removal of a window in the terminal or a penetration through a security wall shall require that a preconstruction meeting be scheduled with Security a week in advance of the work. Contractor shall describe the work plan to the Port construction project representative and Security. The Port will schedule a Security Construction Support Specialist to be on site when the work is performed. No work shall proceed without first having this meeting.

B. Barricaded sites must be locked except for the delivery of materials, equipment and personnel to the job site. There are two standard locks used in construction barricades:

1. High Profile (High Security Risk) Areas: PG-2 padlock installed on construction doors daisy chained with a unique lock for contractor use. Self-closing man-doors shall be keyed with a PG-2 core. First responders must be able to have access to the jobsite at all times.

2. Low Profile (Low Security Risk) Areas: AP-2 padlock installed on construction doors daisy chained with a unique lock for contractor use. Self-closing man-doors shall be keyed with an AP-2 core. First responders must be able to have access to the jobsite at all times.

C. Barricade Door and Window Security

1. Contractor and its employees will be held accountable for doors /windows located within their work sites that provide direct or indirect access to restricted and/or secured areas of the Airport by unauthorized individuals.

2. Doors that provide such access must NOT under ANY circumstances be left open and unattended. Individuals who have been issued Port of Seattle identification badges are required to challenge any individual attempting unauthorized access to restricted areas. If at any time during a construction project a door or window is not secured or there is a security breach, a Port provided AV Operations Construction Support Specialists will staff the duration of the work.

3. A walk through of the work to be conducted and completed needs to be reviewed by a Senior Access Controller to ensure the construction site is secured.

4. If a violation is found the work site will immediately be shut down until an appropriate security plan is approved. Penalties and fines will be incurred by the Contractor.

D. Leaving Prohibited Items Unattended in a Secured Area

1. When tools or equipment are in a secured sterile area (SIDA), control of them must be maintained 100% of the time.

a. The area shall be secured with a lock. If there is a possibility that someone may gain unauthorized access, take any TSA prohibited items with you.

b. The first offense cited by Security results in confiscation of identification badge for three (3) days, $200.00 fine, and a retake of SIDA training. Penalties increase after the first offense, as defined by the Seattle Tacoma International Airport Schedule of Rules and Regulations.

1.07 SPECIAL REQUIREMENTS, WORK IN U.S. CUSTOMS AND BORDER PROTECTION (CBP)

A. Work conducted within areas controlled by the U.S. Customs and Border Protection (CBP) in the South Satellite, will require special clearance and an identification seal issued by the U.S. Customs and Border Protection. In addition, unless granted otherwise, the CBP will require that a bond be provided by the Contractor as security for all work conducted within the controlled area. Work for this project may be conducted within controlled areas. See Appendix 2 for more details related to CBP areas in the South Satellite.

B. It shall be the Contractor's responsibility to coordinate with the CBP and provide an airport security bond in the amount of minimum $10,000, as required. All costs for securing special clearance via identification seals and the associated bonding shall be at the Contractor's expense. No separate or extra payment of any kind will be made to the Contractor for satisfying these requirements.

1. The Contractor is advised:

a. Seattle specific information on Customs bonds can be obtained by contacting the Cargo Security Officer, CBP Trade Office at (206) 553-1581 referencing CBP Form 301. For more information on bonds visit: https://help.cbp.gov/app/answers/detail/a_id/208/~/bonds---how-to-obtain-a-customs-bond

b. The Contractor shall initiate the bonding process upon notification of intent to award as all bond applications are processed at the national level and may take several weeks for approval and issuance of bonds.

c. It is ideal to complete the customs seal application 2 weeks prior to completing the SIDA training in order to have the badge issued with the seal.

d. The Contractor may choose to acquire a bond that extends beyond the Contract time. The Port of Seattle issues identification seals specific to the project. It is the Contractor's responsibility to coordinate issuance of the seal specific to the contract duration and properly notify CBP of any changes in status of issued badges (see 107.B.2.b).

2. The Contractor is responsible to ensure all their suppliers and subcontractors have special clearance identifications seals including inclusion under the Contractor's bond or having their suppliers or subcontractors secure their own bonds.

a. If a special clearance Customs seal is required, an applicant must submit Customs Seal documents with their SIDA badge application.

(1) Customs Seal documents include:

(a) Application for CBP security seal

(b) Letter from employer on company letterhead verifying employment status

(c) Application for Identification Card

(2) Once submitted, the clearance time for a Customs seal is approximately 14 days.

(3) Submit renewal requests for Customs seals at least 14 days prior to the expiration date and prior to the renewal appointment.

b. The Contractor is responsible to comply with the Federal Custom Seals program's employer responsibilities including but not limited to the following:

(1) Immediately informing CBP of a change in status of badges with a special clearance and identification seal as required by federal regulation. Without limitation, this includes separation of employment, badge expiration, lost badge, or when the job functions for an individual, Supplier or Subcontractor are complete. Copies of any written notifications required to be provided to U.S. Customs and Border Protection shall be copied to the Project Manager as a submittal in accordance with Section 01330- Submittals.

(2) Providing quarterly reports with a current list of employees with approved customs seal access and a separate list with all additions and deletions within the last quarter. The list should be provided to the Custom Seal Office during the first

month of each quarter and copied to the Project Manager as a submittal in accordance with Section 01330 – Submittals.

(a) Each list should identify the employee name, Port issued badge number at upper right corner of the badge and the badge expiration date.

For a full list of employer responsibilities see 19CFR122.181-188.

3. The Contractor is responsible for all fines assessed by U.S. Customs and Border Protection that arise from Contractor's activities or failure to comply with applicable regulations, whether assessed against the Contractor or the Port in the first instance. The Port shall have the right to issue a change order reducing the Contract Sum by the amount of any fines or other penalties not promptly paid by the Contractor. If fines are not paid at Project Completion, the Port will issue an invoice. Non-payment will result in the standard Port collections process.

C. The Contractor, their suppliers and subcontractors will work under the Port's Customs Bond to complete the Work. The Contractor, their suppliers and subcontractors are responsible to coordinate with the CBP to secure special clearance (customs seal). All costs for securing special clearance via identification seals to get them shall be at the Contractor's expense. No separate or extra payment of any kind will be made to the Contractor for satisfying these requirements.

a. If a special clearance Customs seal is required, an applicant must submit Customs Seal documents with their SIDA badge application.

(1) Customs Seal documents include:

(a) Application for CBP security seal

(b) Letter from employer on company letterhead verifying employment status

(c) Application for Identification Card

(2) Once submitted, the clearance time for a Customs seal is approximately 14 days.

(3) Submit renewal requests for Customs seals at least 14 days prior to the expiration date and prior to the renewal appointment.

b. The Contractor will work with the Project Manager to obtain a letter confirming the use of the Port's Bond for Contractor's employees, subcontractors and suppliers.

2. The Contractor is responsible for all fines assessed by the CBP that arise from Contractor's activities or failure to comply with applicable regulations, whether assessed against the Contractor or the Port in the first instance. The Port shall have the right to issue a change order reducing the Contract Sum by the amount of any fines or other penalties not promptly paid by the Contractor. If fines are not paid at project closeout, the Port will issue an invoice. Non-payment will result in the standard Port collections process.

1.08 AIRPORT SECURITY KEYS

A. Contractors that require keys to perform Work at the project site shall complete a key application form attached to a Contractor Access Plan (CAP) requesting key(s) and reason for request. All costs for obtaining airport security key(s) shall be at the Contractor's expense, including Lock Shop costs incurred for making keys.

1. The Contractor is responsible for keys provided to its Suppliers and Subcontractors for purposes of the Work identified in the contract.

B. Security keys are tracked via computer and tied to the employee's identification badge number. Security keys cannot be requested in multiples (no more than one per person). Keys are only issued to the person making the request. An identification/access badge is required prior to issuance.

C. The Contractor is responsible for tracking and ensuring the surrender of all keys issued for purposes of the Work to its employees, Suppliers or Subcontractors, per the Acknowledgement letter.

D. Upon completion of the contract, separation of employment or when job function no longer requires use of keys, the Contractor shall ensure they are returned within 14 calendar days of notification.

1. Notifications shall be in writing to the Credential Center.

2. No separate or extra payment of any kind will be made to the Contractor for satisfying this requirement.

3. The Contractor is responsible for tracking and returning all keys issued for the project. The Contractor will be charged $100.00 per non-returned key plus the cost of Airport rekeying if needed. Cost to be determined by overall impact.

4. If keys are not returned at Project Completion, the Credential Center will issue an invoice for the fines net 30 days. Non-payment will result in the standard Port collections process.

1.09 ACCESS AUTHORIZATION

A. See Section 01567, Appendix 2 for additional information.

B. Companies must submit an ID Badge Control Authorization Request Form attached to a Contractor Access Plan (CAP) to gain or delete access to controlled entry points. An exact description of the point location and door number is required.

1.10 RETURN OF BADGES AND KEYS AND FINES ASSOCIATED WITH THE PROJECT

A. The Contractor is responsible for the return of all badges and keys issued for the project, including those issued to its employees, Suppliers or Subcontractors.

B. All badges, keys and special clearances issued under the requirements of this Section, for this project, must be returned.

C. Unpaid fines assessed by the Port against a Contractor, its employee, Supplier or Subcontractor will be invoiced to the Contractor for payment.

End of Section

APPENDIX 1: BADGE ISSUANCE CONTRACTOR ACCESS

1. DEFAULT CONTRACTOR ACCESS LIST AND MAPS

The attached list of access points (doors, elevators, AOA perimeter gates) and correlating maps show the access provided when receiving a badge for Work on construction projects.

No.	Type	Access Point ID	Alternate Description	AP (1) Sheet #	Map Reference
1	CONTRACTOR ONLY	A-3176-B		3	Main Terminal – Bag/Ramp Level
2	CONTRACTOR ONLY	A-3312-B		3	Main Terminal – Bag/Ramp Level
3	CONTRACTOR ONLY	A-3482-B		3	Main Terminal – Bag/Ramp Level
4	CONTRACTOR ONLY	A-3505-B		3	Main Terminal – Bag/Ramp Level
5	CONTRACTOR ONLY	A-5038-C		2	Main Terminal – Concourse Level
6	CONTRACTOR ONLY	A-5108-C		2	Main Terminal – Concourse Level
7	CONTRACTOR ONLY	A-5139-C		2	Main Terminal – Concourse Level
8	CONTRACTOR ONLY	A-5159-C		2	Main Terminal – Concourse Level
9	CONTRACTOR ONLY	A-5171-C		2	Main Terminal – Concourse Level
10	CONTRACTOR ONLY	A-5186-C		2	Main Terminal – Concourse Level
11	CONTRACTOR ONLY	A-5201-C		2	Main Terminal – Concourse Level
12	CONTRACTOR ONLY	A-5220-C		2	Main Terminal – Concourse Level
13	CONTRACTOR ONLY	A-5221-C		2	Main Terminal – Concourse Level
14	CONTRACTOR ONLY	A-5300-C		2	Main Terminal – Concourse Level
15	CONTRACTOR ONLY	A-5311-C ST16			TBD
16	CONTRACTOR ONLY	A-5317-C		2	Main Terminal – Concourse Level
17	CONTRACTOR ONLY	A-5400-C		2	Main Terminal – Concourse Level
18	CONTRACTOR ONLY	A-5419-C		2	Main Terminal – Concourse Level
19	CONTRACTOR ONLY	A-5429-C		2	Main Terminal – Concourse Level
20	CONTRACTOR ONLY	A-5443-C		2	Main Terminal – Concourse Level
21	CONTRACTOR ONLY	A-5446-C	A-5446-C ST13	2	Main Terminal – Concourse Level
22	CONTRACTOR ONLY	A-5482-C		2	Main Terminal – Concourse Level
23	CONTRACTOR ONLY	A-5492-C		2	Main Terminal – Concourse Level
24	CONTRACTOR ONLY	A-6255-M		1	Main Terminal – Mezzanine Level
25	CONTRACTOR ONLY	A-6355-M		1	Main Terminal – Mezzanine Level
26	CONTRACTOR ONLY	A-6375-M		1	Main Terminal – Mezzanine Level
27	CONTRACTOR ONLY	A-7121-IP			TBD
28	CONTRACTOR ONLY	A1-5020-C	A01-5020-C	2	Main Terminal – Concourse Level
29	CONTRACTOR ONLY	A2-5040-C	A02-5040-C	2	Main Terminal – Concourse Level
30	CONTRACTOR ONLY	A3-5110-C	A03-5110-C	2	Main Terminal – Concourse Level
31	CONTRACTOR ONLY	A4-5141-C	A04-5141-C	2	Main Terminal – Concourse Level
32	CONTRACTOR ONLY	A5-5160-C	A05-5160-C	2	Main Terminal – Concourse Level
33	CONTRACTOR ONLY	A6-5200-C	A06-5200-C	2	Main Terminal – Concourse Level
34	CONTRACTOR ONLY	A7-5210-C	A07-5210-C	2	Main Terminal – Concourse Level
35	CONTRACTOR ONLY	A8-5230-C	A08-5230-C	2	Main Terminal – Concourse Level

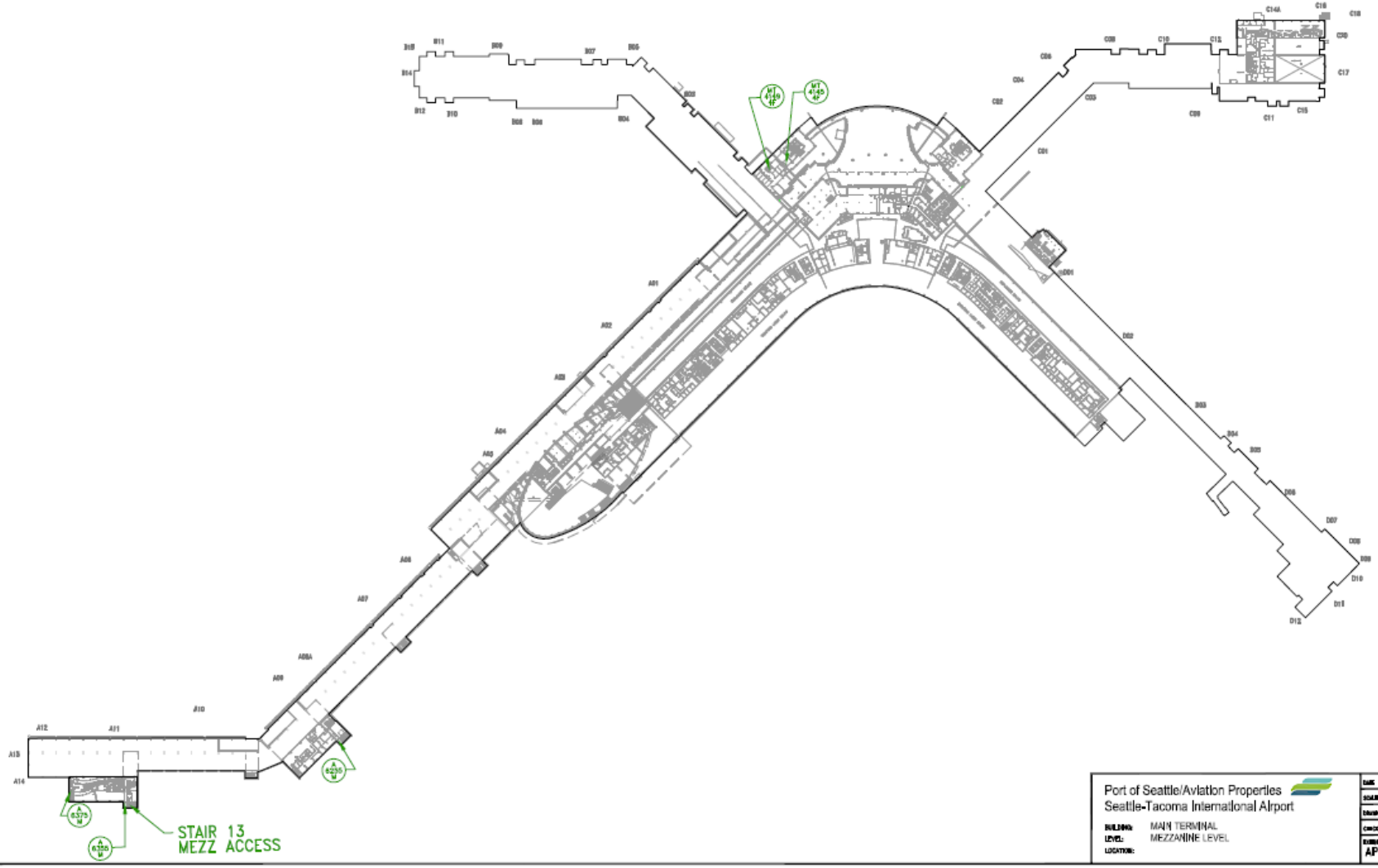
No.	Type	Access Point ID	Alternate Description	AP (1) Sheet #	Map Reference
36	CONTRACTOR ONLY	A9-5310-C	A09-5310-C	2	Main Terminal – Concourse Level
37	CONTRACTOR ONLY	A10-5420-C		2	Main Terminal – Concourse Level
38	CONTRACTOR ONLY	A11-5430-C		2	Main Terminal – Concourse Level
39	CONTRACTOR ONLY	A12-5480-C		2	Main Terminal – Concourse Level
40	CONTRACTOR ONLY	A13-5485-C		2	Main Terminal – Concourse Level
41	CONTRACTOR ONLY	A14-5490-C		2	Main Terminal – Concourse Level
42	CONTRACTOR ONLY	B-5052-C	B-5052-C EE	2	Main Terminal – Concourse Level
43	CONTRACTOR ONLY	B-5055-C		2	Main Terminal – Concourse Level
44	CONTRACTOR ONLY	B-5090-C		2	Main Terminal – Concourse Level
45	CONTRACTOR ONLY	B1-5037-C		2	Main Terminal – Concourse Level
46	CONTRACTOR ONLY	B10-5252-C	B10-5250-C	2	Main Terminal – Concourse Level
47	CONTRACTOR ONLY	B11-5234-C		2	Main Terminal – Concourse Level
48	CONTRACTOR ONLY	B12-5270-C		2	Main Terminal – Concourse Level
49	CONTRACTOR ONLY	B14-5274-C		2	Main Terminal – Concourse Level
50	CONTRACTOR ONLY	B15-5238-C		2	Main Terminal – Concourse Level
51	CONTRACTOR ONLY	B3-5080-C		2	Main Terminal – Concourse Level
52	CONTRACTOR ONLY	B-5115-C	B4-5114-C	2	Main Terminal – Concourse Level
53	CONTRACTOR ONLY	B-5125-C	B4-5125-C	2	Main Terminal – Concourse Level
54	CONTRACTOR ONLY	B5-5132-C		2	Main Terminal – Concourse Level
55	CONTRACTOR ONLY	B5-5132A-C	B5A-5132-C HANDI	2	Main Terminal – Mezzanine Level
56	CONTRACTOR ONLY	B7-5159-C		2	Main Terminal – Concourse Level
57	CONTRACTOR ONLY	B9-5197-C		2	Main Terminal – Concourse Level
58	CONTRACTOR ONLY	C-3157A-R		3	Main Terminal – Bag/Ramp Level
59	CONTRACTOR ONLY	C-3195B-R		3	Main Terminal – Bag Level
60	CONTRACTOR ONLY	C-3198-R		3	Main Terminal – Bag/Ramp Level
61	CONTRACTOR ONLY	C-5136-C	C1-5036-C	2	Main Terminal – Concourse Level
62	CONTRACTOR ONLY	C10-5140-C		2	Main Terminal – Concourse Level
63	CONTRACTOR ONLY	C10A-5159-C		2	Main Terminal – Concourse Level
64	CONTRACTOR ONLY	C10B-5160-C		2	Main Terminal – Concourse Level
65	CONTRACTOR ONLY	C11-5200-C		2	Main Terminal – Concourse Level
66	CONTRACTOR ONLY	C12-5162-C		2	Main Terminal – Concourse Level
67	CONTRACTOR ONLY	C14A-5174-C		2	Main Terminal – Concourse Level
68	CONTRACTOR ONLY	C15-5210-C		2	Main Terminal – Concourse Level
69	CONTRACTOR ONLY	C17-5212-C		2	Main Terminal – Concourse Level
70	CONTRACTOR ONLY	C18-5220-C		2	Main Terminal – Concourse Level
71	CONTRACTOR ONLY	C6-5074-C		2	Main Terminal – Concourse Level
72	CONTRACTOR ONLY	C8/C10-5080-C		2	Main Terminal – Concourse Level
73	CONTRACTOR ONLY	D-3002/3003-R		3	Main Terminal – Bag/Ramp Level
74	CONTRACTOR ONLY	D-5100-C		2	Main Terminal – Concourse Level
75	CONTRACTOR ONLY	D11-5138-C		2	Main Terminal – Concourse Level
76	CONTRACTOR ONLY	D4-5080-C		2	Main Terminal – Concourse Level
77	CONTRACTOR ONLY	D4-5182-C	D4-5082-C	2	Main Terminal – Concourse Level
78	CONTRACTOR ONLY	D6-5110-C		2	Main Terminal – Concourse Level
79	CONTRACTOR ONLY	ELEV 3 CAB 3rd FLOOR - P2000		3	Main Terminal – Bag/Ramp Level

No.	Type	Access Point ID	Alternate Description	AP (1) Sheet #	Map Reference
80	CONTRACTOR ONLY	ELEV 3F CAB - P2000		3	Main Terminal – Bag/Ramp Level
81	CONTRACTOR ONLY	ELEVATOR 3F	ELEV 3F CALL BAGGAGE - P2000	3	Main Terminal – Bag/Ramp Level
82	CONTRACTOR ONLY	ELEVATOR 3F	ELEV 3F CALL BAGWELL - P2000	3	Main Terminal – Bag/Ramp Level
83	CONTRACTOR ONLY	ELEV 3F CALL CONVEYOR T - P2000		3	Main Terminal – Bag/Ramp Level
84	CONTRACTOR ONLY	ELEV 3F CALL LOAD DOCK - P2000		3	Main Terminal – Bag/Ramp Level
85	CONTRACTOR ONLY	ELEV 4F CAB 3rd FLOOR - P2000		3	Main Terminal – Bag/Ramp Level
86	CONTRACTOR ONLY	ELEV 4F CAB 4th FLOOR - P2000		2	Main Terminal – Concourse Level
87	CONTRACTOR ONLY	ELEVATOR 4F	ELEV 4F CAB RAMP - P2000	3	Main Terminal – Bag/Ramp Level
88	CONTRACTOR ONLY	ELEV 4F GROUND LEVEL - P2000		3	Main Terminal – Bag/Ramp Level
89	CONTRACTOR ONLY	ELEV B-1 CAB - P2000		2	Main Terminal – Concourse Level
90	CONTRACTOR ONLY	ELEV B-1 RAMP - P2000		3	Main Terminal – Bag/Ramp Level
91	CONTRACTOR ONLY	ELEV C-1 CAB - P2000		2	Main Terminal – Concourse Level
92	CONTRACTOR ONLY	ELEVATOR C1	ELEV C-1 CALL Ramp - P2000	3	Main Terminal – Bag/Ramp Level
93	CONTRACTOR ONLY	ELEV D-1 CAB - P2000		3	Main Terminal – Bag/Ramp Level
94	CONTRACTOR ONLY	ELEV D-1 CAB - P2000 TG		3	Main Terminal – Bag/Ramp Level
95	CONTRACTOR ONLY	ELEVATOR D1	ELEV D-1 RAMP Level - P2000	3	Main Terminal – Bag/Ramp Level
96	CONTRACTOR ONLY	ELEV N SAT A CAB		4	North Satellite – Concourse Level
97	CONTRACTOR ONLY	ELEV N SAT A CAB - P2000			TBD
98	CONTRACTOR ONLY	ELEV N SAT B CAB		4	North Satellite – Concourse Level
99	CONTRACTOR ONLY	ELEV N SAT B CAB - P2000		5	Main Terminal – Bag/Ramp Level
100	CONTRACTOR ONLY	ELEV S SAT B CAB - P2000		6	South Satellite – Concourse Level
101	CONTRACTOR ONLY	ELEV S SAT C CAB - P2000		6	South Satellite – Concourse Level
102	CONTRACTOR ONLY	ELEV S SAT C CAB RESTRC - P2000		6	South Satellite – Penthouse Level
103	CONTRACTOR ONLY	ELEVATOR SSB	ELEV SSB CALL RAMP - P2000	6	South Satellite – Concourse Level
104	CONTRACTOR ONLY	ELEV SSC CALL CONC - P2000		6	South Satellite – Concourse Level
105	CONTRACTOR ONLY	ELEV SSC CALL INT COR - P2000		7	South Satellite – FIS Level
106	CONTRACTOR ONLY	ELEV SSC CALL MEZZ - P2000		8	South Satellite – Mezzanine Level
107	CONTRACTOR ONLY	GATE E-100 EGRESS - P2000		10	Security Gate Access Map
108	CONTRACTOR ONLY	GATE E-100 INGRESS - P2000		10	Security Gate Access Map
109	CONTRACTOR ONLY	GATE E-100 VERIFICATION - P2000		10	Security Gate Access Map
110	CONTRACTOR ONLY	GATE E-45 EGRESS - P2000		10	Security Gate Access Map
111	CONTRACTOR ONLY	GATE E-45 INGRESS - P2000		10	Security Gate Access Map
112	CONTRACTOR ONLY	GATE S-15 CONC LEVEL - P2000		6	South Satellite – Concourse Level
113	CONTRACTOR ONLY	GATE S-16 A/B CONC LEVEL - P2000		6	South Satellite – Concourse Level
114	CONTRACTOR ONLY	LOAD DOCK N. DOOR - P2000			TBD

No.	Type	Access Point ID	Alternate Description	AP (1) Sheet #	Map Reference
115	CONTRACTOR ONLY	MT-2132-BT		3	Main Terminal – Basement Level
116	CONTRACTOR ONLY	MT-2135-BT		3	Main Terminal – Basement Level
117	CONTRACTOR ONLY	MT-2149-BT		3	Main Terminal – Basement Level
118	CONTRACTOR ONLY	MT-2158-BT		3	Main Terminal – Basement Level
119	CONTRACTOR ONLY	MT-3130-R		3	Main Terminal – Bag/Ramp Level
120	CONTRACTOR ONLY	MT-3133-R		3	Main Terminal – Bag/Ramp Level
121	CONTRACTOR ONLY	MT-3148-R		3	Main Terminal – Bag/Ramp Level
122	CONTRACTOR ONLY	MT-3159-R		3	Main Terminal – Bag/Ramp Level
123	CONTRACTOR ONLY	MT-3446-B		3	Main Terminal – Bag/Ramp Level
124	CONTRACTOR ONLY	MT-3457-B		3	Main Terminal – Bag/Ramp Level
125	CONTRACTOR ONLY	MT-4145-4F		1	Main Terminal – Penthouse Level
126	CONTRACTOR ONLY	MT-4149-4F		1	Main Terminal – Penthouse Level
127	CONTRACTOR ONLY	MT-5128A-T		2	Main Terminal – Concourse Level
128	CONTRACTOR ONLY	MT-5128B-T		2	Main Terminal – Concourse Level
129	CONTRACTOR ONLY	MT-5128C-T		2	Main Terminal – Concourse Level
130	CONTRACTOR ONLY	MT-5139A-T		2	Main Terminal – Concourse Level
131	CONTRACTOR ONLY	MT-5139B-T		2	Main Terminal – Concourse Level
132	CONTRACTOR ONLY	MT-5139C-T		2	Main Terminal – Concourse Level
133	CONTRACTOR ONLY	N-3061-R		5	North Satellite – Bag/Ramp Level
134	CONTRACTOR ONLY	N-3076-R		5	North Satellite – Bag/Ramp Level
135	CONTRACTOR ONLY	N. SAT RAMP ELEV NSA - P2000			TBD
136	CONTRACTOR ONLY	N1-5120-C		4	North Satellite – Concourse
137	CONTRACTOR ONLY	N10-5133-C		4	North Satellite – Concourse
138	CONTRACTOR ONLY	N12-5151-C		4	North Satellite – Concourse
139	CONTRACTOR ONLY	N13-5156-C		4	North Satellite – Concourse
140	CONTRACTOR ONLY	N15-5136-C		4	North Satellite – Concourse
141	CONTRACTOR ONLY	N2-5100-C		4	North Satellite – Concourse
142	CONTRACTOR ONLY	N3-5080-C		4	North Satellite – Concourse
143	CONTRACTOR ONLY	N6-5095-C		4	North Satellite – Concourse
144	CONTRACTOR ONLY	N8-5105-C		4	North Satellite – Concourse
145	CONTRACTOR ONLY	N9-5123-C		4	North Satellite – Concourse
146	CONTRACTOR ONLY	S-1061-TR		9	South Satellite – STS Level
147	CONTRACTOR ONLY	S-1101-TR		9	South Satellite – STS Level
148	CONTRACTOR ONLY	S-1103-TR		9	South Satellite – STS Level
149	CONTRACTOR ONLY	S-1118C-TR		9	South Satellite – STS Level
150	CONTRACTOR ONLY	S-16a/b Exit from Jetway		6	South Satellite – Concourse Level
151	CONTRACTOR ONLY	S-2061-M		7	South Satellite – FIS Level
152	CONTRACTOR ONLY	S-2118-M		7	South Satellite – FIS Level
153	CONTRACTOR ONLY	S-2139-M		7	South Satellite – FIS Level
154	CONTRACTOR ONLY	S-3041-R		8	South Satellite – Ramp Level
155	CONTRACTOR ONLY	S-3069-R		8	South Satellite – Ramp Level
156	CONTRACTOR ONLY	S-3069A-R		8	South Satellite – Ramp Level
157	CONTRACTOR ONLY	S-3094-R		8	South Satellite – Ramp Level

No.	Type	Access Point ID	Alternate Description	AP (1) Sheet #	Map Reference
158	CONTRACTOR ONLY	S-3094A-R		8	South Satellite – Ramp Level
159	CONTRACTOR ONLY	S-3096-R		8	South Satellite – Ramp Level
160	CONTRACTOR ONLY	S-3118-R		8	South Satellite – Ramp Level
161	CONTRACTOR ONLY	S-3118A-R		8	South Satellite – Ramp Level
162	CONTRACTOR ONLY	S-3147-R		8	South Satellite – Ramp Level
163	CONTRACTOR ONLY	S-3147A-R RAMP		8	South Satellite – Ramp Level
164	CONTRACTOR ONLY	S. SAT LADDER TO CONVEYOR			TBD
165	CONTRACTOR ONLY	S1-5033-C	S01-5033-C	6	South Satellite – Concourse Level
166	CONTRACTOR ONLY	S1-5034-C	S01-5034-C EMR EX	6	South Satellite – Concourse Level
167	CONTRACTOR ONLY	S2-5028-C	S02-5028-C	6	South Satellite – Concourse Level
168	CONTRACTOR ONLY	S2-5018-C	S03-5018-C	6	South Satellite – Concourse Level
169	CONTRACTOR ONLY	S04-5004-C		6	South Satellite – Concourse Level
170	CONTRACTOR ONLY	S05-5003-C		6	South Satellite – Concourse Level
171	CONTRACTOR ONLY	S06-5002-C		6	South Satellite – Concourse Level
172	CONTRACTOR ONLY	S07-5006-C		6	South Satellite – Concourse Level
173	CONTRACTOR ONLY	S08-5004-C		6	South Satellite – Concourse Level
174	CONTRACTOR ONLY	S09-5014-C		6	South Satellite – Concourse Level
175	CONTRACTOR ONLY	S09-5016-C		6	South Satellite – Concourse Level
176	CONTRACTOR ONLY	S09-5031-C			TBD
177	CONTRACTOR ONLY	S-5034-C	S10-5034-C	6	South Satellite – Concourse Level
178	CONTRACTOR ONLY	S-5036-C	S10-5036-C	6	South Satellite – Concourse Level
179	CONTRACTOR ONLY	S11-5043-C		6	South Satellite – Concourse Level
180	CONTRACTOR ONLY	S12-5046-C		6	South Satellite – Concourse Level
181	CONTRACTOR ONLY	S16C/D-5035-C	S16-5035-C GATE C/D	6	South Satellite – Concourse Level
182	CONTRACTOR ONLY	S16A-5041-C		6	South Satellite – Concourse Level
183	CONTRACTOR ONLY	SAS TCK ROLL UP 1			TBD
184	CONTRACTOR ONLY	STEP - Elevator G Cab Baggage		3	Main Terminal – Bag/Ramp Level
185	CONTRACTOR ONLY	STEP - Elevator G Cab Ticketing		2	Main Terminal – Concourse Level
186	CONTRACTOR ONLY	STEP - Elevator M Cab		3	Main Terminal – Concourse Level
187	CONTRACTOR ONLY	STEP - Elevator M Cab Ticketing		2	Main Terminal – Concourse Level
188	CONTRACTOR ONLY	STEP - Elevator N Cab		2	Main Terminal – Concourse Level
189	CONTRACTOR ONLY	STEP - Elevator N Cab Baggage		2	Main Terminal – Concourse Level
190	CONTRACTOR ONLY	STEP - Elevator N Cab Ticketing		2	Main Terminal – Concourse Level
191	CONTRACTOR ONLY	STEP - Stairwell 13 Access Mezz		1	Main Terminal – Mezzanine Level

Contractor Access
Mezzanine Level

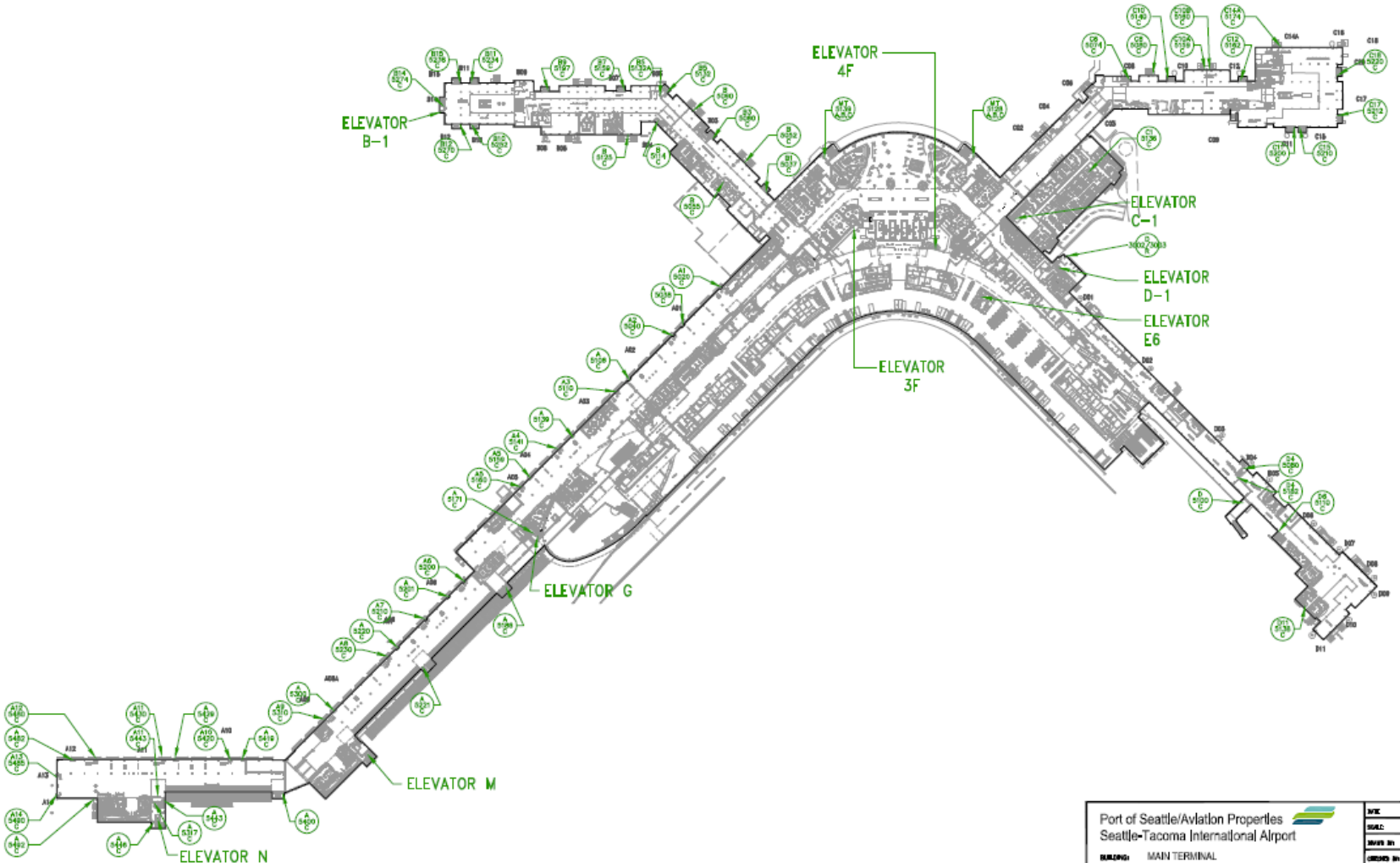


Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: MAIN TERMINAL
LEVEL: MEZZANINE LEVEL
LOCATION:

DATE
SCALE
DRAWN BY
CHECKED BY
SHEET NO. AP(1) 1 OF 10

Contractor Access
Concourse Level

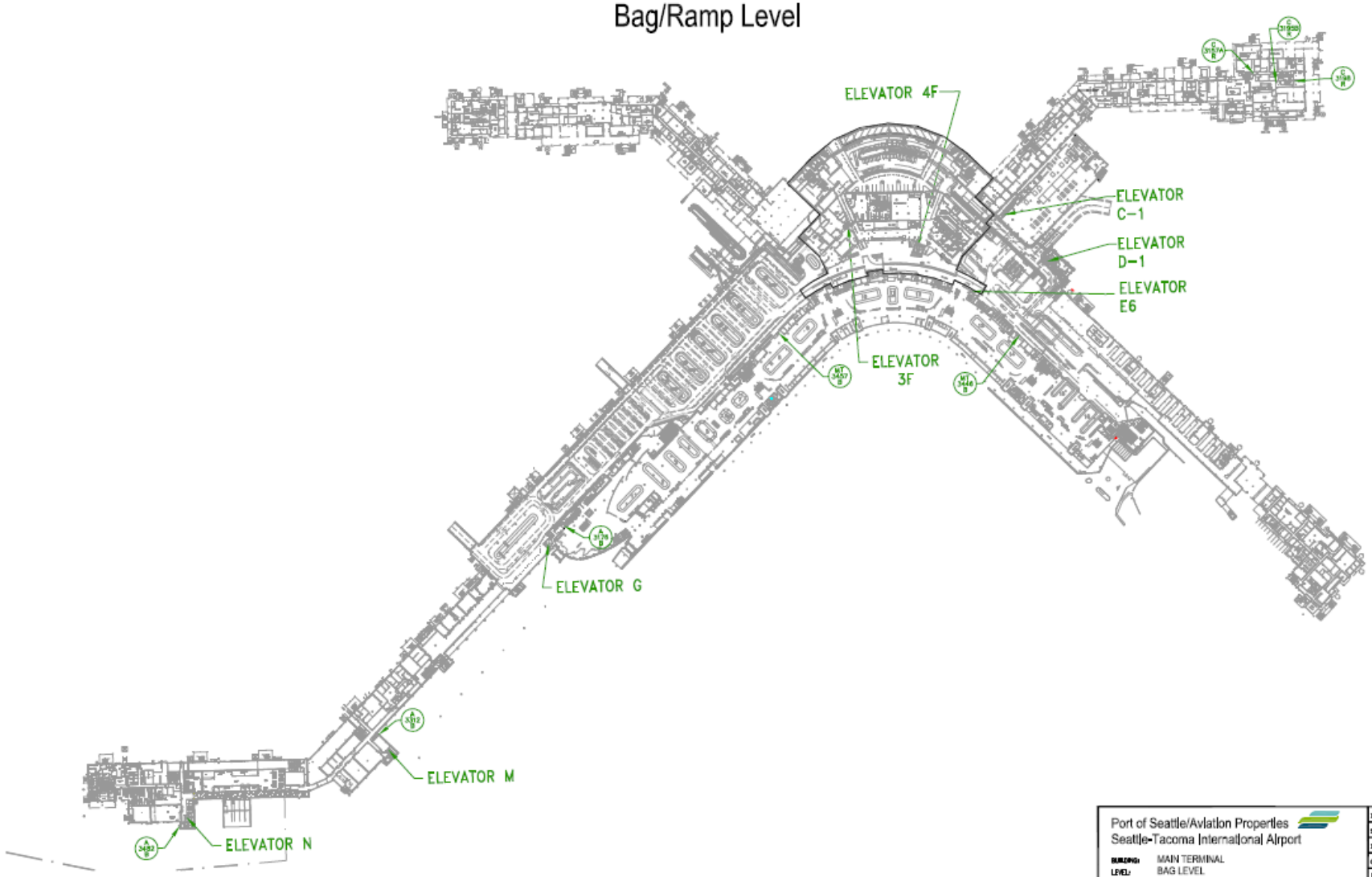


Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: MAIN TERMINAL
LEVEL: CONCOURSE LEVEL
LOCATION:

AP(1) 2 OF 10

Contractor Access
Bag/Ramp Level

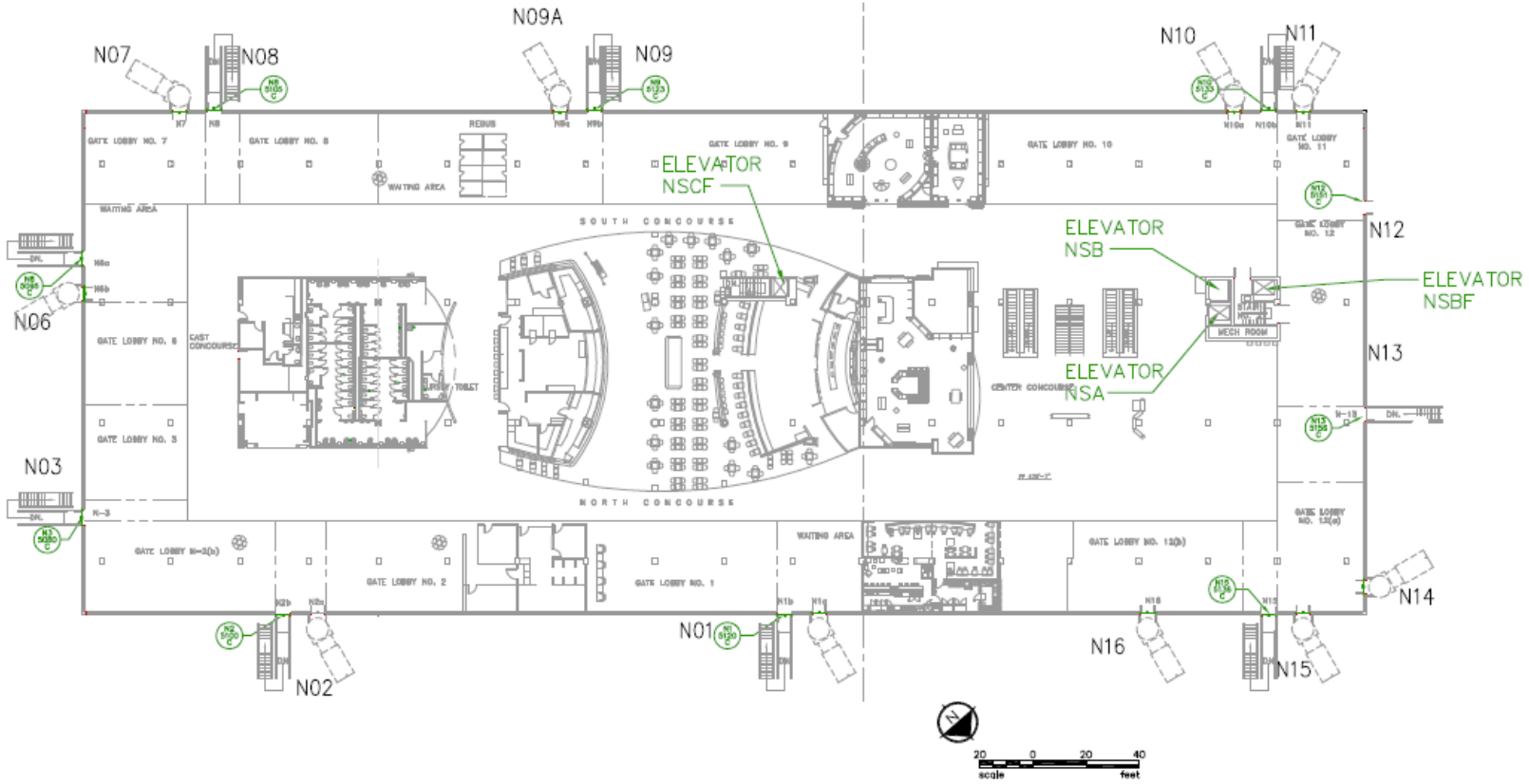


Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: MAIN TERMINAL
LEVEL: BAG LEVEL
LOCATION:

AP(1) 3 OF 10

Contractor Access
North Satellite
Concourse Level



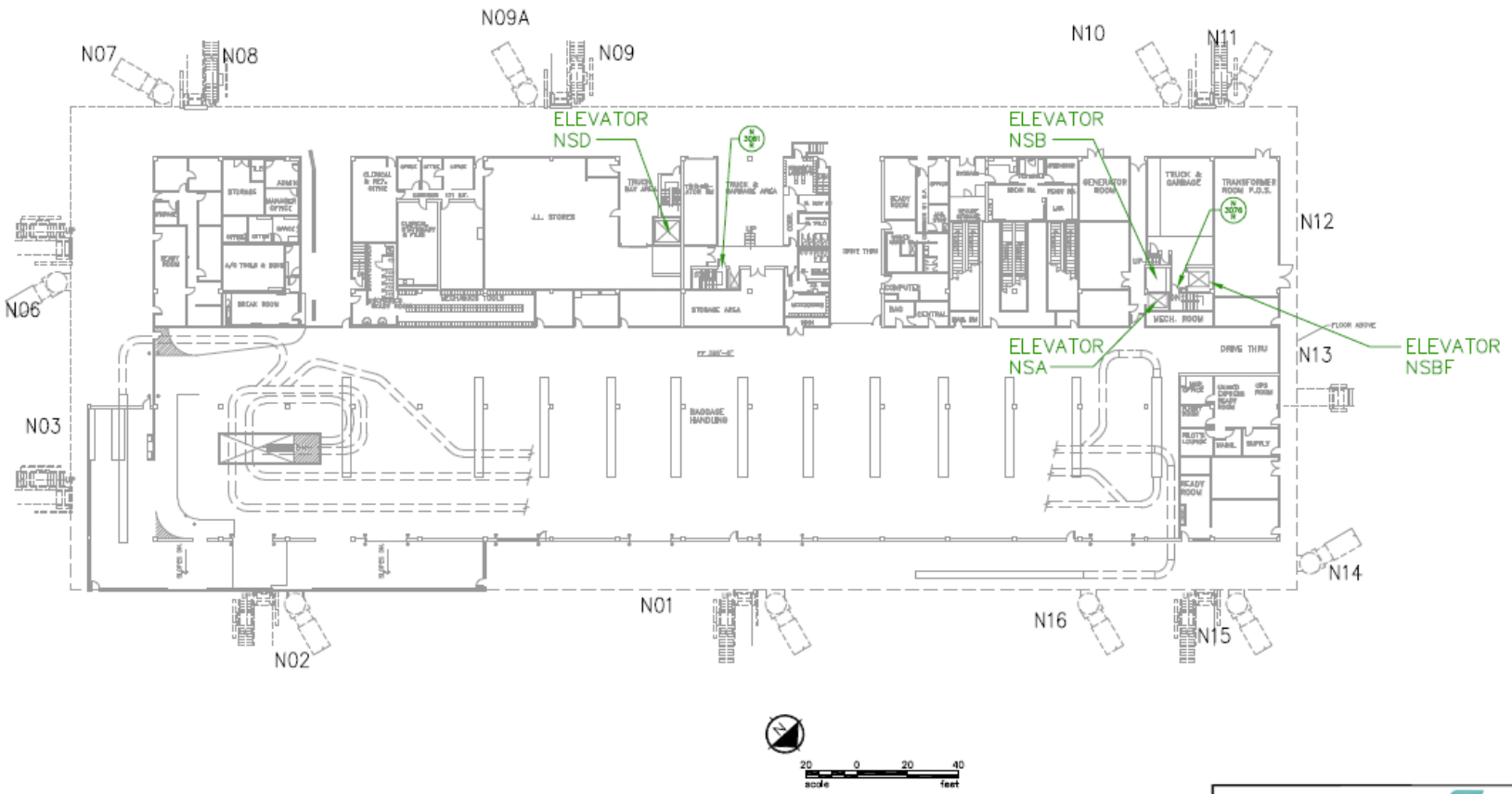
Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: NORTH SATELLITE
LEVEL: CONCOURSE
LOCATION:

AP(1) 4 OF 10

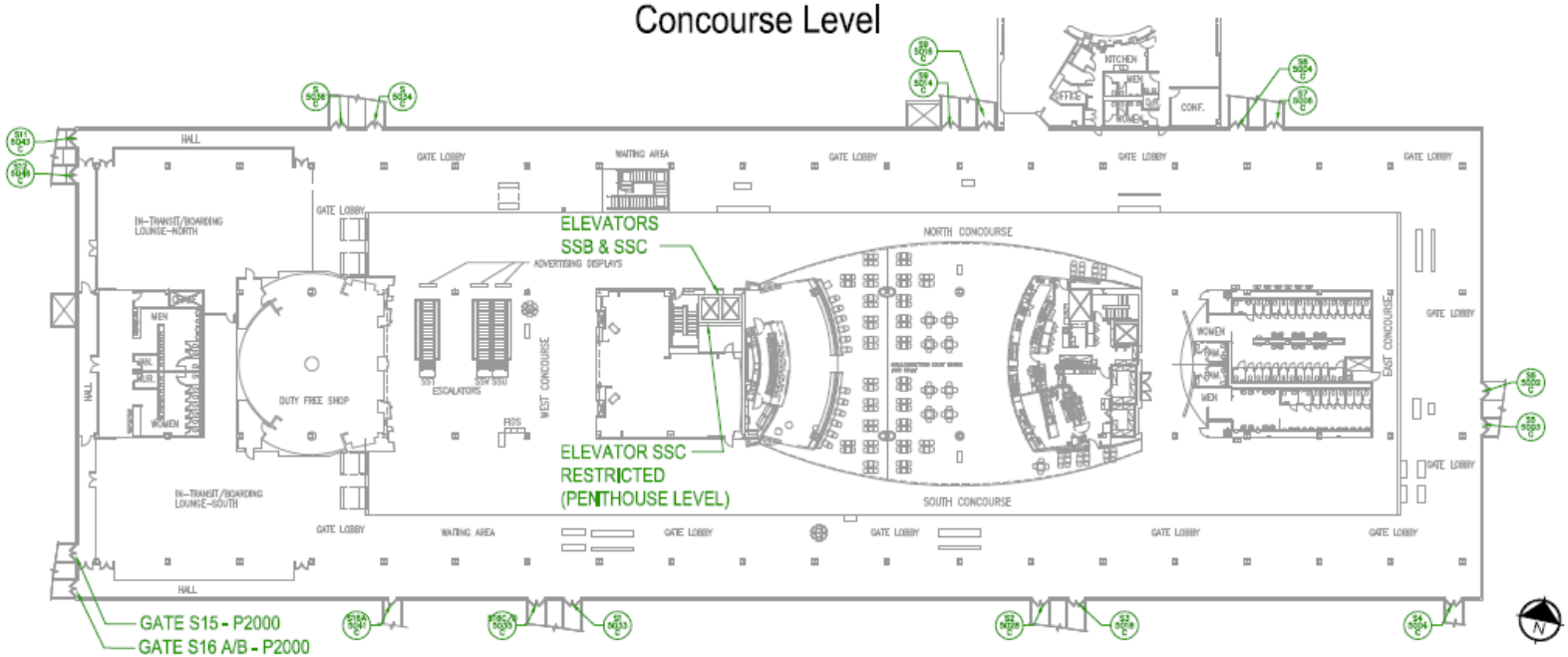
\\AIRMS280\Aviation\AV-Properties\01_PROPworks\01_Doors\Working\NS-Conc AP1 4-10.dwg Aug 24, 2012 - 12:44pm

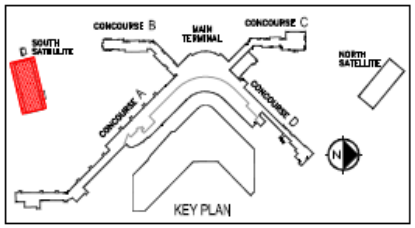
Contractor Access
North Satellite
Ramp Level



Port of Seattle/Aviation Properties Seattle-Tacoma International Airport	
BUILDING: NORTH SATELLITE LEVEL: RAMP LOCATION	AP(1) 5 OF 10

Contractor Access
South Satellite
Concourse Level





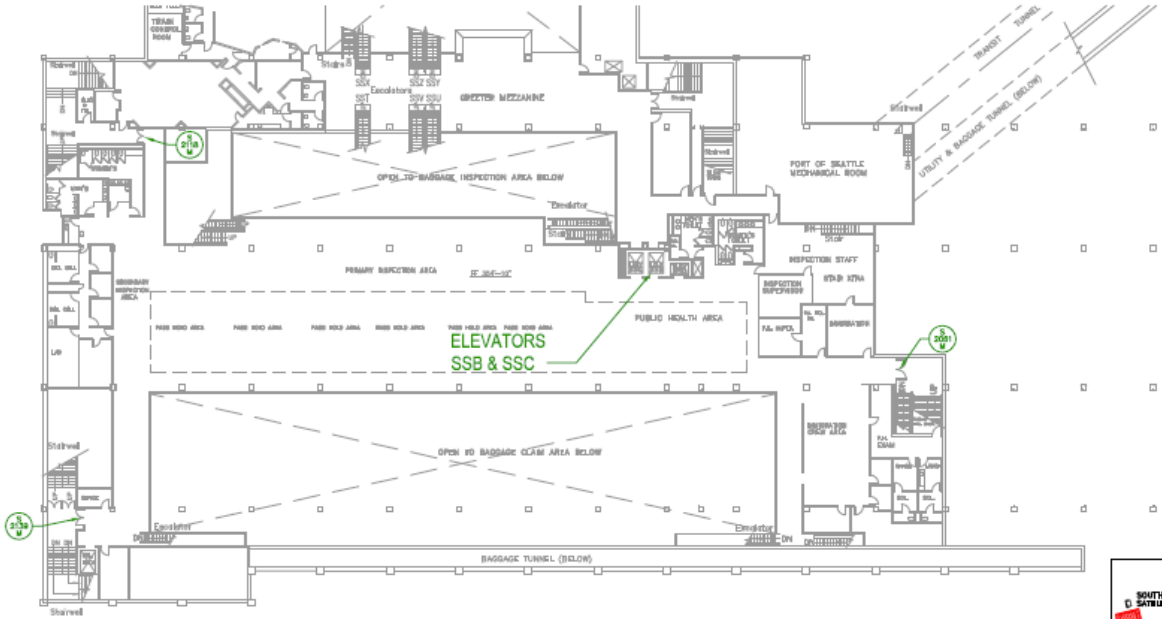
Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

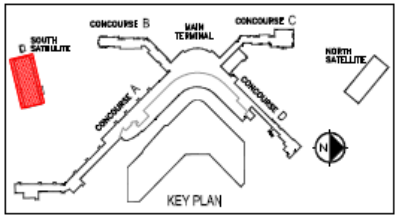
BUILDING: SOUTH SATELLITE
LEVEL: CONCOURSE
LOCATION:

SHEET AP(1) 6 OF 10

\\ARMS280\Aviation\AV-Properties\01_PROPworks\01_Doors\Working\SS-Conc AP1 6-10.dwg Aug 24, 2012 - 1:12pm

Contractor Access
South Satellite
FIS Level





20 0 20 40
scale Feet

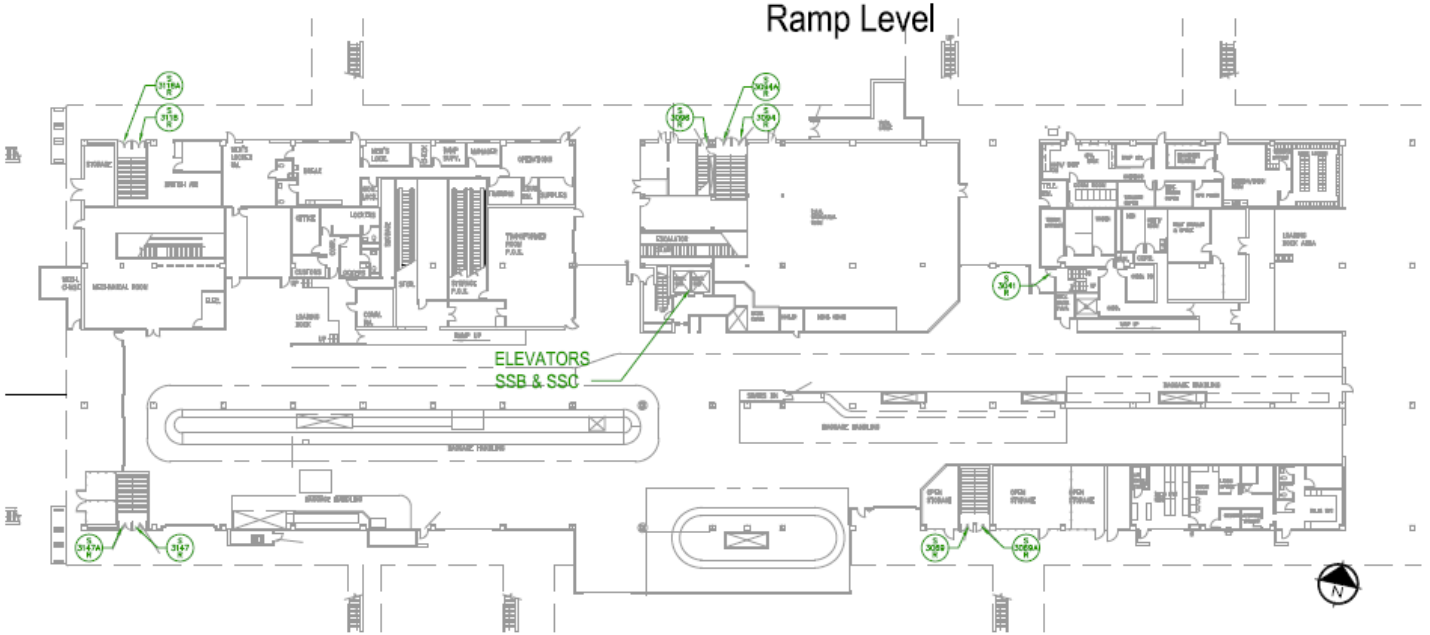
Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: SOUTH SATELLITE
LEVEL: FIS
LOCATION

AP(1) 7 OF 1

\\ARMS280\Aviation\AV-Properties\01_PROPworks\01_Doors\Working\SS-FIS AP1 7-10.dwg Aug 24, 2012 - 1:05pm

Contractor Access
South Satellite
Ramp Level

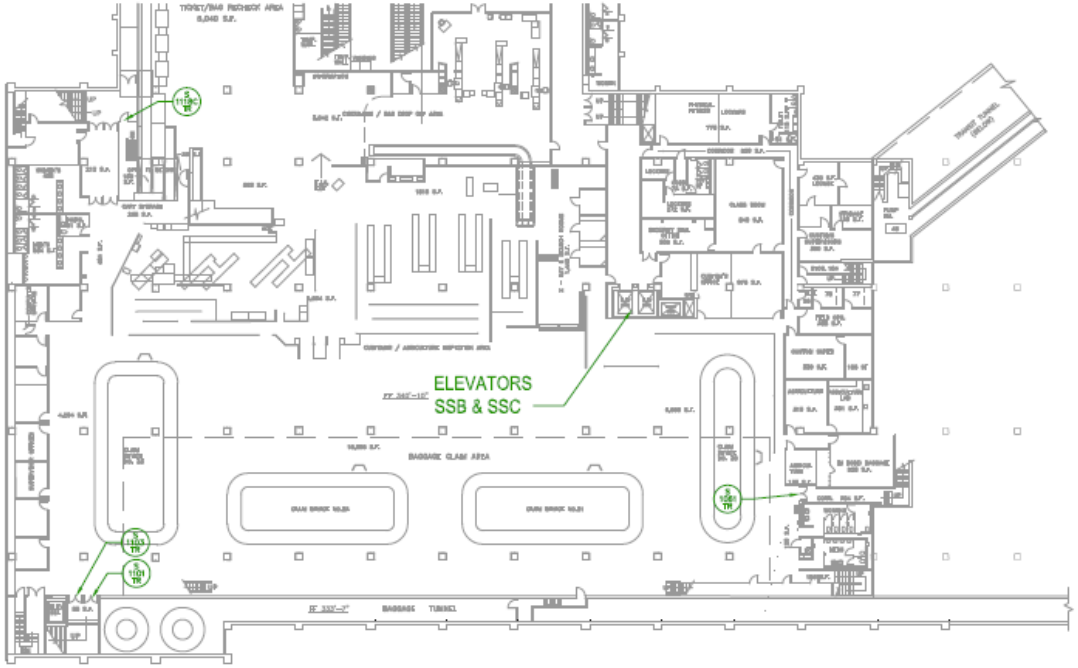


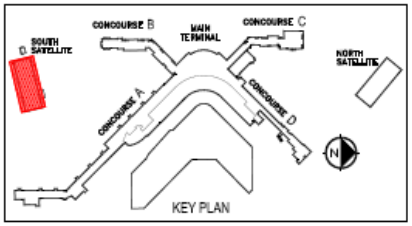
Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: SOUTH SATELLITE
LEVEL: RAMP
LOCATION:

AP(1) 8 OF 10

Contractor Access
South Satellite
STS Level



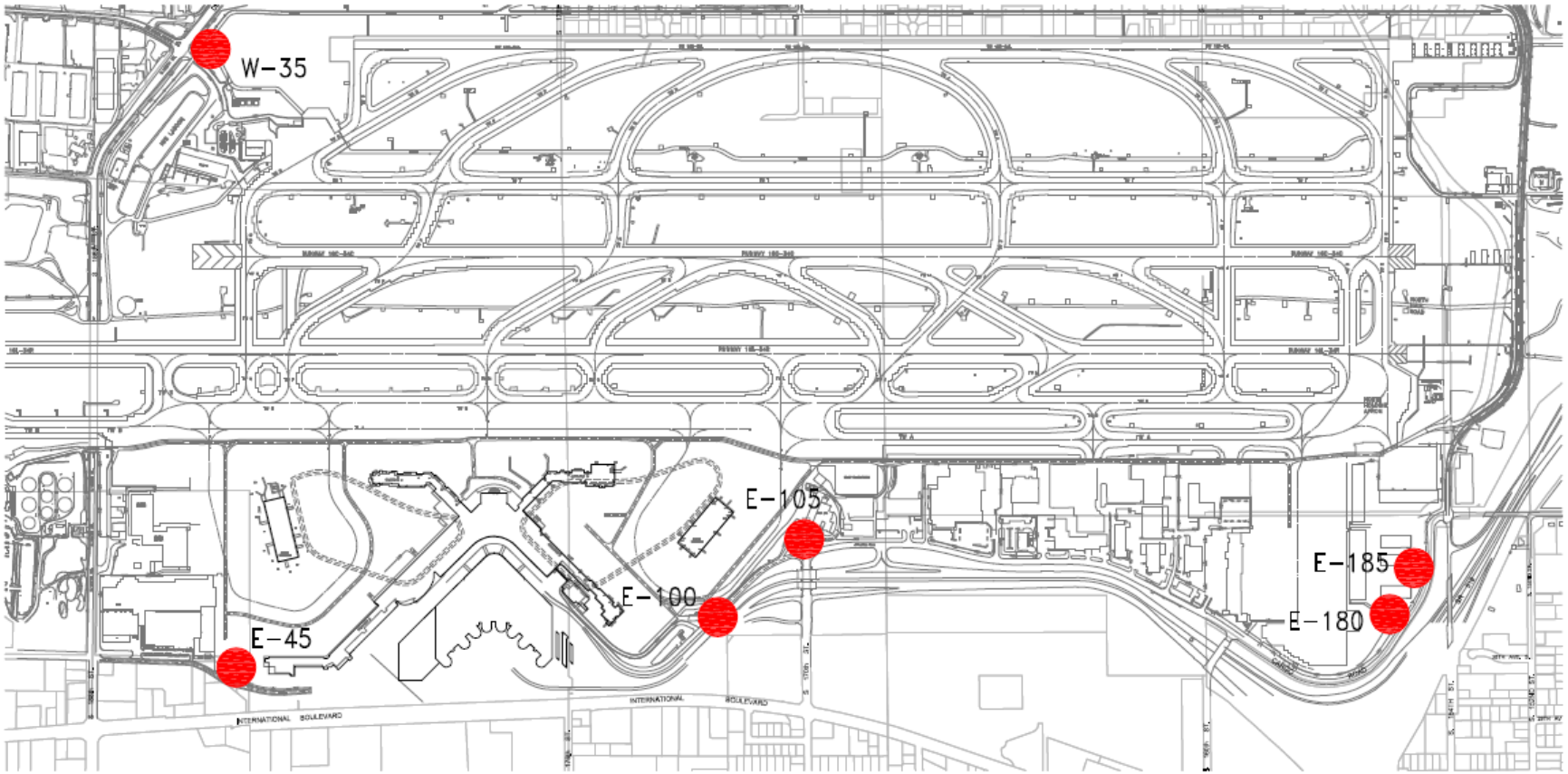


Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING: SOUTH SATELLITE
LEVEL: STS
LOCATION:

DATE:
SCALE:
DRAWN BY:
CHECKED BY:
DRAWING NO: AP(1) 9 OF 10

Security Gates



Port of Seattle

Port of Seattle/Aviation Properties
Seattle-Tacoma International Airport

BUILDING:
LEVEL:
LOCATION: SECURITY GATES

AP(1)-10 OF 10

APPENDIX 2: Project Specific Access Requirements

2. WORK IN U.S. CUSTOMS AREA

Anyone working inside the Federal Inspection Services (FIS includes Passport Control, Baggage Claim, the International Corridor, recheck area and Custom Border Protection (CBP) offices) must have a CBP Seal on an airport-issued SIDA badge or a CBP visitor badge and be under escort by a badged employee with a CBP Seal. All visitors, tours, media or high-level guests must be coordinated and pre-approved by CBP before entering the Customs Hall.

D. Anyone working in other areas of the South Satellite are not required to have a CBP seal provided:

1. They do not enter the footprint of an aircraft that is operating an international arrival (reverting to domestic status after cabin cleared by CBP's agriculture inspector AND all passengers and deadload have completely left the gate area.)
2. They do not enter jetways of aircraft as described above.
3. They do not enter the International/Sterile Corridor and associated escalators at any time.
4. They stay completely clear of unloading of international arriving bags (from containers or carts) from aircraft to baggage belts leading down into Customs.

E. Persons entering the vicinity of international operations are subject to challenge or search by CBP at any time; persons without a CBP Seal may be interviewed or asked to leave the area until international operations have completed.

3. CONTRACTOR ACCESS PLAN (CAP)

Upon Award, the Contractor will coordinate with the Port construction project representative to review and confirm the default access list is sufficient for completing Work within the facility. If not, the contractor can submit a request for additional access utilizing the Contractor Access Plan, as part of the Preconstruction Submittal Process.

F. The submittal shall identify any additional access points (doors, gates, elevators or exterior penetrations for mobilizing materials) the Contractor identifies for the project.

1. The Contractor can request additional access for consideration, but it may not be granted.

G. The Final Contractor Access Plan submittal shall be reviewed and approved by the appropriate Port stakeholders prior to the Contractor, its employees, Suppliers or Subcontractors submitting any requests for keys.

Project: Project Name

Contractor Access Plan

☑ **Preliminary** ☐ **Final**

Item #	Location of Access Point	Access Point ID Description	Keyed or Treated?	Approving Department	Approval Date	Additional Training?	Training Provided By	Comments
1	Concourse A	A-3226-B	Treated	Security	04/18/2011	N/A	N/A	STEP Concourse to South GT Lot
2	Concourse A	A-1015-TR	Treated	AV Maintenance	04/18/2011	N/A	N/A	STEP – C4 Penthouse Stair Vestibule
3	Concourse A	STEP Elevator C/D	Treated	AOB Property Manager	04/18/2011	N/A	N/A	STEP AOB Elevators & Mezzanine
4	AOA	Gate E-105	Treated	Security	Not Approved	Yes	ID Access	AOA Driver Training / 1 Hour Class
5	Service Tunnel	MT-1042-TR	Treated	Security	04/11/2011	N/A	N/A	South Service Tunnel
6	Central Terminal	A-9999-C	Keyed	AV Maintenance	04/11/2011	Yes	AV MAINT - Electrical	H5 Key / High Voltage Training / 2 Hour Class
7	Concourse A	A-3505-B	Treated	N/A	N/A	N/A	N/A	GML Arrivals Hall entry to bagwell
8	Concourse B	B-5505-C	Treated	N/A	N/A	N/A	N/A	Access to Concourse B ramp level hallway
9	Hudson News	Concourse A	Keyed	Business Development	04/20/2011	N/A	N/A	Adjacent to Gate A5
10								
11								
12								
13								
14								
15								
16								
17								
18								

PART 1 GENERAL

1.01 SUMMARY

A. This section consists of planning for and implementing the temporary measures indicated herein, shown on the contract drawings, or as ordered by the Port construction project representative to prevent pollution of soil and water, and control, respond to, and dispose of potential pollutants or hazardous materials during the life of the contract. This section is all inclusive and certain subsections may not apply to all projects.

B. This work shall apply to all areas associated with contract work including, but not limited to the following work areas:

1. Jobsite
2. Equipment and material storage areas
3. Staging/Laydown areas
4. Stockpiles

1.02 DESCRIPTION OF WORK

A. In order to comply with this specification the Contractor shall:

1. Develop and submit a site specific Pollution Prevention Plan
2. Revise the Pollution Prevention Plan during the life of the contract
3. Install, maintain, and remove all spill prevention, containment, countermeasures, and pollution prevention Best Management Practices during the life of the contract
4. Contain, cleanup and dispose of all hazardous materials or potential pollutants
5. Perform other work shown on the contract documents
6. Maintain any required contractor pollution liability insurance including insurance liability for the transportation of hazardous materials for the duration of the contract
7. Maintain a proper Hazardous Material Endorsement for any driver that is transporting hazardous material in a vehicle that requires the driver to maintain a valid and current Commercial Driver's License in the State of Washington

1.03 POLLUTION PREVENTION PLAN

A. The Contractor shall develop and submit to the Port of Seattle a site specific Pollution Prevention Plan. The Pollution Prevention Plan must be a site-specific document that outlines the administrative, operational, and structural Best Management Practices that will be implemented on the project. Approved BMPs may be found in the Stormwater Management Manual for Western Washington, Department of Ecology, August 2012, or current edition.

B. The Pollution Prevention Plan must, at a minimum, include the following:

1. Site specific description and drawings
2. Contractor pollution prevention contact personnel

3. Known or potential hazardous materials inventory list
4. Materials safety data sheets (SDSs) for hazardous materials identified on the inventory list
5. Hazardous material containers labeling system
6. Hazardous material container storage and handling procedures
7. Hazardous material spill prevention planning and execution
8. Hazardous material spill control and response planning and execution
9. Hazardous material cleanup and disposal planning and execution
10. Subcontractor's acknowledgement

1.04 SUBMITTALS

A. As part of the required Preconstruction Submittals, Section 01305 - Preconstruction Submittals, and before Notice to Proceed is issued, the Contractor shall submit the following information:

1. Pollution Prevention Plan and the required contents
2. Insurance Endorsements verifying liability coverage for job-site work and any transportation of hazardous materials to or away from the jobsite.
3. Copy of a completed MCS-90 Certificate if required under the Motor Carrier Act of 1980 for transportation of hazardous material which verifies compliance with the financial responsibility requirements of the Act;
4. A list of all drivers who will be hauling hazardous material, if applicable in a vehicle that requires the driver to maintain a Commercial Driver's License in the State of Washington under RCW 46.25.080. These drivers must show evidence of a proper Hazardous Material Endorsement in accordance with Washington RCW 46.25.070 and 46.25.085.

1.05 DEFINITIONS

A. Absorbent: Any material capable of absorbing oils, water-based materials, solvents, acids, and other hazardous materials. Absorbent materials include: pads, kitty litter, floor dry, and other commercially available materials.

B. Best Management Practice (BMP): The variety of administrative, operational, and structural measures that will be implemented to prevent and reduce the amount of contaminants in stormwater and the environment. (Example: Providing secondary containment for liquid storage is a BMP).

C. Container: Any portable device, in which a material is stored, transported, treated, disposed of, or otherwise handled.

D. Daily Report: The report (form CM03) that the Contractor shall submit daily to include Contractor daily activities.

E. Dangerous Waste: Solid wastes designated by the State of Washington Under Chapter 173-303 WAC and regulated as Dangerous Waste, Extremely Hazardous Waste, and/or Mixed Waste. (The State of Washington is authorized

to implement Federal Hazardous Waste Regulations - see also Hazardous Waste Definition)

F. Hazardous Material: A substance or material, including a hazardous substance, hazardous waste, marine pollutant, including but not limited to: diesel, gasoline, petroleum products, solvents, paints, acids, lubricants, curing compounds, form release agents, adhesives, sealants, and epoxies. (See also Hazardous Waste definition)

G. Hazardous Material Storage Area: The area used by the Contractor to store hazardous material.

H. Hazardous Material Container Labeling System: The system used by the Contractor for identifying the secondary containers used to store hazardous materials or wastes. Acceptable methods include: Department of Transportation (DOT), Hazardous Material Information System (HMIS); National Fire Protection Association Fire Diamond (NFPA Hazard Rating), or the Globally Harmonized System (GHS).

I. Hazardous Waste: Solid wastes designated by 40 CFR Part 261, and regulated as hazardous and/or mixed waste by the United States EPA.

J. Material Safety Data Sheet (SDSs): Written or printed material available for each chemical that includes information on: the physical properties, hazards to personnel, fire and explosion potential, safe handling recommendations, health effects, fire-fighting techniques, and reactivity and disposal.

K. Secondary Container: Any container, other than the original container that is used for transferring, holding, storing or otherwise containing hazardous materials or wastes.

L. Secondary Containment: A device designed, installed, or operated to prevent any migration of wastes or accumulated liquid to the soil, ground water, or surface water. The device must, at minimum, hold 110 percent of the volume of the largest container being stored. The device must have the strength to contain a spill and be made of materials that will not be degraded by the wastes or accumulated liquids it is intended to contain.

M. Sorbent: A material used to soak up free liquids by either adsorption or absorption, or both.

N. Storm Drainage System (SDS): Consists of any drain, inlet, catch basin, slot drain, pipe, gully, fissure, ditch, or other form of conveyance that collects and transports stormwater.

O. Tenant: The Tenant is the project owner who is conducting the work on Port Property. The

1.06 REFERENCES

A. The following rules, requirements and regulations specified may apply to this work:

1. Washington State Dangerous Waste Regulations: Chapter 173-303 WAC, February 1998 Edition.

2. National Pollution Discharge Elimination System Waste Discharge Permit No. WA-002465-1 (Seattle-Tacoma International Airport)

3. Part C - Hazardous Communication: Chapter 296-62-054 WAC, “Right to Know”
4. Port of Seattle Regulations for Airport Construction, (Current Edition).
5. Puget Sound Stormwater Management Plan, Puget Sound Water Quality Action Team; 1998.
6. Title 40 Code of Federal Regulation Subchapter I - Solid Wastes 261, 262, 263, 265, 268, 273, 279, 370 (Federal Hazardous Waste Regulations)
7. Sea-Tac International Airport Rules and Regulations (Current Edition).
8. Sea-Tac Airport Stormwater Pollution Prevention Plan, as required by NPDES permit No. WA-002465-1.
9. Seattle-Tacoma International Airport Spill Prevention Control and Countermeasure (SPCC) Plan.
10. Stormwater Management Manual for Western Washington, Department of Ecology; Current Version
11. Surface Water Design Manual, King County Public Works, Current Version
12. WAC 173-201 A, Water Quality Standards of the State of Washington.
13. Revised Code of Washington - 46.25.085, 46.25.080, 46.25.070, 46.48.170, 4.24.314

1.07 PERMITS

A. Work shall be conducted in accordance with STIA NPDES permit No. WA-002465-1.

PART 2 PRODUCT – Not Used

PART 3 EXECUTION

3.01 SITE DESCRIPTION AND DRAWINGS

A. A written site description shall be included in the Pollution Prevention Plan that addresses the following:

1. Physical description and location of the construction site and staging areas;
2. Construction activities that will involve the use of hazardous materials or generate hazardous waste;
3. Location of material storage areas and project staging areas;
4. Designated fueling areas;
5. Proximity to any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes;
6. Public areas relating to construction project;
7. Proximity to other construction sites;

B. Drawings shall be included in the Pollution Prevention Plan that show the construction site(s), location of fueling areas, equipment storage areas, catch basins and other man-made and natural drainage conveyances within the work area and storage areas. The drawings may be hand drawn sketches but must include the appropriate spatial information.

3.02 CONTRACTOR POLLUTION PREVENTION CONTACT PERSONNEL

A. The Contractor shall identify in the Pollution Prevention Plan at least one project personnel that will be available 24 hours a day to administer and respond to hazardous materials management requirement of the Contract and provide the following information:

1. Contact Name
2. Contact Phone Number
3. Contact E-mail Address
4. Contact Fax Number
5. Contact Address

B. Duties

1. Maintain permit file on site at all times which includes the Pollution Prevention Plan, Contractor Erosion and Sediment Control Plan and any associated permits and plans.
2. Direct BMP installation, inspection, maintenance, modification and removal.
3. Available 24 hours per day, 7 days per week by telephone.
4. Update all drawings with changes made to the Pollution Prevention Plan.
5. Maintain daily logs.
6. Immediately notify the fire department (911) of any hazardous material spill.
7. Inspect for Pollution Prevention Plan requirements including BMPs as required to ensure adequacy, facilitate, participate in, and take corrective actions resulting from inspections performed by outside agencies, Port employees and Port consultants.

C. Qualifications

1. The Pollution Prevention Plan Inspector shall have the following experience:
    a. Prevention, control and clean-up of construction caused pollution from petroleum, hazardous materials and construction wastes.
    b. Knowledge of basic hazard and risk assessment techniques.
    c. An understanding of basic hazardous materials terms.
    d. Ability to perform basic control, containment and/or confinement operations within the capabilities of the resources and personnel protective equipment available.

e. Installation, inspection, maintenance and removal of Pollution Prevention BMPs.

3.03 HAZARDOUS MATERIAL INVENTORY LIST

A. A complete list of all known or potential hazardous materials or waste to be used or generated during all phases of the construction project shall be included in the Pollution Prevention Plan.

3.04 MATERIALS SAFETY DATA SHEETS (SDSs)

A. SDSs shall be included in the Pollution Prevention Plan for all materials on the Hazardous Material Inventory List.

B. For all hazardous materials not submitted in the original Hazardous Material Inventory List, the Contractor shall provide to the Port of Seattle Project Manager an SDS prior to bringing the material on site and submit a revised inventory list (or plan if required) within 7 days.

1. Hazardous materials shall be permitted on the work site only with prior written acknowledgement of receipt of SDS by the Port of Seattle Project Manager.

3.05 HAZARDOUS CONTAINERS LABELING SYSTEM

A. The Pollution Prevention Plan shall address and the Contractor shall implement the following:

1. Identification of container with a legible label containing the materials product name, as was written on the material's original container label.

2. Include the name of the material's manufacturer, as was written on the chemicals original container label.

3. Include appropriate hazard warnings, which identify the chemicals associated risks to health, flammability, or reactivity.

4. Contractor shall mark each container with the contract project number and company owner of the container.

5. The mark shall be permanent, easily identifiable and placed with care to prevent defacing of the marker through abrasion, chemical reaction, or other means that would hinder marker identification.

6. At all times during the Work, the Contractor shall assure that proper and identifiable labels are attached to all hazardous materials and secondary containment.

3.06 HAZARDOUS MATERIAL CONTAINER STORAGE AND HANDLING

A. Solid Chemicals, chemical solutions, paints, petroleum products, solvents, acids, caustics solutions, and any waste materials, including used batteries, shall be stored in a manner that will prevent the inadvertent entry of these materials into waters of the state, including groundwater. Storage shall be in a manner that will prevent spills due to overfilling, tipping, or rupture. In addition, the Pollution Prevention Plan shall address and the Contractor shall implement the following specific requirements:

1. All liquid products must be stored on durable, impervious surfaces and within a berm or other means of secondary containment capable of

containing 110% of the largest single container volume in the storage area.

2. Waste liquids shall be stored under cover, such as tarps of roofed structures, in addition to secondary containment. Any waste storage areas, whether for waste oil or hazardous waste, shall be clearly designated as such and kept segregated from products to be used on the site.

3. In the event that the Contract Document Drawings designate a hazardous material storage area, the Contractor shall be restricted to storing hazardous materials or waste specific to the Project work to the area designated in the Contract Document Drawings.

4. All hazardous materials and waste containers shall be stored with the container lid secured, to prevent spills or leaking.

5. Upon completion of a specific task for which hazardous material(s) were used, the Contractor shall document in the Daily Report (Form CM03), the amount of hazardous material removed from the site, and the product and manufacturer name(s) of such material(s).

3.07 HAZARDOUS MATERIAL SPILL PREVENTION

A. The Pollution Prevention Plan shall address and the Contractor shall implement the following:

1. Hazardous Material Transfer

a. All hazardous materials shall be transferred from primary to secondary containers using secondary containment with spill kits in close proximity.

2. Vehicle and Equipment Fueling

a. All equipment fueling operations shall utilize pumps and funnels and absorbent pads and / or drip pans;

b. Fueling shall not take place within 100 feet of any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes;

c. Fueling shall be restricted to designated fueling areas as shown on the contract documents or as submitted and approved by the Port of Seattle Project Manager as a part of the Pollution Prevention Plan;

d. A spill kit will be located within 100 feet of the fueling operation.

e. Vehicle and Equipment Maintenance

f. Engine, transmission, and hydraulic oil may be added, as needed utilizing funnels and drip pans;

g. Absorbent pads shall be placed to prevent fluid contact with soil;

h. No fresh or used engine fluids will be stored on the project site;

i. No vehicle maintenance other than emergency repair shall be performed on the project site.

3. Small Engine Fueling and Maintenance

   a. All small engine fueling operations shall utilize funnels.

   b. Absorbent pads shall be placed to prevent fluid contact with soil.

   c. Fueling shall not take place within 100 feet of any natural or manmade drainage area.

   d. Contractor shall not drain and replace engine fluids on Port property.

   e. These fluids may be added, as needed utilizing funnels.

   f. Fluid addition shall be done over drip pans.

   g. Absorbent pads shall be placed to prevent fluid contact with soil.

4. Equipment Storage

   a. Drip pans and absorbent pads shall be placed under all equipment that is unused for more than 4 hours, overnights, weekends, and holidays.

5. Spill Response Kits

   a. Spill kits shall be stored at designated locations on the project site and at the hazardous material storage areas and in close proximity to any fueling operation.

   b. Spill Kits shall, at a minimum, contain the following:

      (1) 1-spill response procedures sheet

      (2) 12-oil absorbent pads

      (3) 12-water-based absorbent pads

      (4) 1-roll of Visqueen

      (5) 5-gallons of loose absorbent material i.e. kitty litter or floor sweep

      (6) 24-heavy duty garbage bags

      (7) 1-shovel

         (a) 1-broom

      (8) 10-copies spill report form

3.08 HAZARDOUS MATERIAL SPILL CONTROL AND RESPONSE

A. The Plan shall contain information on how the Contractor shall control and respond to hazardous material spills. At a minimum, the Contractor's employee responsible for the spill must take appropriate immediate action to protect human health and the environment (e.g., diking to prevent contamination of state waters).

   1. Hazard Assessment - assess the source, extent, and quantity of the spill.

   2. Containment and personal protection - If the spill cannot be safely and effectively controlled, then evacuate the area and immediately notify

outside response services (go to Step 5). If the spill can be safely and effectively controlled, secure the area and proceed immediately with spill control (impacts to waters of the state should be given the highest priority after human health and safety)

3. Containment and elimination of Source - Contain the spill with absorbent materials or a soil berm around the affected area. Eliminate the source of the spill by closing valves, sealing leaks, providing containment, or deactivating pumps.

   a. Spill control measures may include damming the spill, covering floor drains, catch basins, and/or preventing the contaminant from entering water systems. Contaminants include turbidity as well as chemicals.

4. Cleanup - when containment is complete, clean or remove the spill with absorbents or by pumping and containerizing the material for off-site disposal.

5. Notification - Report all spills immediately to the Port of Seattle Fire Department:

   a. Port Phone: 911

   b. External Phone: (206) 787-5380

   c. Provide the Following Information:

      (1) Time spill occurred or was discovered

      (2) Location of the spill and equipment involved

      (3) Estimated amount of spill

      (4) Measures taken to contain the spill and secure the area

3.09 HAZARDOUS MATERIAL CLEANUP AND DISPOSAL

A. The Plan shall contain information on how the Contractor shall characterize, cleanup and remove all hazardous material and waste generated from Contractor operations. At a minimum, the Plan shall include or communicate the following:

1. For the purposes of this section, clean shall be defined as the Work site being free of all hazardous material(s), waste(s) container(s), containment device(s), scrap material(s), used spill pads or absorbent pads, or any other hazardous material debris resulting from the Contractor activities.

2. The Tenant will retain title to all hazardous waste presently on site, encountered during demolition, removal, and excavation. This does not include hazardous materials generated by the Contractor, such as used motor oils, paints, lubricants, cleaners, spilled materials, etc. Contractor will be the generator and owner of these wastes and shall clean and dispose of such waste according to the Contract Documents and follow local, State, and Federal regulations. The Tenant will be shown as the hazardous waste generator and will sign all hazardous waste manifests for non-contractor generated hazardous wastes. Nothing contained within these Contract Documents shall be construed or interpreted as

requiring the Contractor to assume the status of owner or generator of hazardous waste substances for non-contractor generated hazardous wastes.

3. Hazardous material(s) and waste(s) shall be disposed in a fully permitted disposal facility with the approvals necessary to accept the waste materials that are disposed. Use of the Port of Seattle's EPA Identification Number for disposal purposes must be coordinated with the Port of Seattle Project Manager and all documentation such as manifests, land disposal restriction forms, and profiles must be delivered to the Port of Seattle Project Manager if the Port of Seattle's EPA Identification number is being used for disposal on the project.

4. Handling of any contaminated soils shall be coordinated with the Port of Seattle Project Manager. Contaminated soil stockpiles must be on a plastic liner, covered with plastic and labeled. Unknown contaminated soils must be characterized. Use of the Airport Environmental Soil Stockpile Facility is prohibited unless authorized by the Port of Seattle Project Manager.

5. Contaminated materials, such as absorbent materials, rags, containers, gloves, shall be collected and placed into labeled containers.

6. Any unanticipated hazardous materials, waste, or contaminated soils encountered during construction that are not generated by the Contractor shall be immediately brought to the Port of Seattle Project Manager's attention for determination of appropriate action. Contractor shall not disturb such hazardous materials or contaminated soils until directed by the Port of Seattle Project Manager.

3.10 SUBCONTRACTOR ACKNOWLEDGEMENT

A. The requirements of the Pollution Prevention Plan are the responsibility of the contractor and compliance must be communicated at all tiers of the contract. The contractor must provide a written acknowledgement from all subcontractors that they have read, understand, and will comply with the requirements of the Pollution Prevention Plan. This written acknowledgement must be included in the Pollution Prevention Plan as part of the preconstruction submittal. The subcontractor acknowledgement section of the Pollution Prevention Plan must be updated as needed throughout the life of the contract.

3.11 EDUCATION

A. The Contractor shall provide narrative in the Pollution Prevention Plan on how they will educate all personnel including subcontractors. At a minimum, the Contractor shall train staff through regularly scheduled meetings to discuss environmental protection subjects as related to this project. This may be added to any existing weekly meetings (such as safety meetings). Training content shall emphasize sensitive areas, emergency response, spill prevention and inspections. Keep minutes of the meetings detailing attendees and discussion points. Submit the minutes to the Port of Seattle Project Manager monthly.

End of Section

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. General:

1. The Contractor shall revise (1) set of Contract drawings by red-line process to show the as-built conditions during the course of the project.

2. Preparation of As-Built (Redline) Drawings is a requirement of STIA projects. The terms drawings, Contract drawings, drawing files and as-bid drawings refer to Permit or Contract Bid Documents, including Addendum drawings, that the Contractor is required to revise to produce an as-built record of the project. These drawings will be used by the Port at a future time as the basis of revision to the CAD drawing files and therefore must clearly communicate the changes in graphics and text to the CAD operator performing the drawing revisions.

1.02 QUALITY ASSURANCE

A. General:

1. The responsibility for maintenance of changes to the Project record documents shall be assigned to one person on the Contractor's staff.

B. Accuracy of Records:

1. General: These working, As-Built (Redline) Drawings shall be kept accurate and current per the requirements of paragraph 3.01, Maintenance of As-Built (Redline) Drawings.

2. As-Built (Redline) Drawings: Thoroughly coordinate all changes to the Contract Drawings by making red-line entries on an ongoing basis on a single set of As-bid drawings maintained at the job site. Accuracy shall be such that future users of information showing the as-built condition of the Work may reasonably rely on the information shown. The Port's Project Manager will receive and accept the final As-built documents.

C. As-Built (Redline) Drawings kick-off conference

1. Convene a meeting with the Port construction project representatives prior to making entries in the As-Built (Redline) Drawings set to clarify level and style of information requirements. Attendees should include the Tenant's Representative, Contractor's field manager, the Contractor's staff responsible for making the entries.

1.03 SUBMITTALS

A. Beneficial Occupancy:

1. At the time of Beneficial Occupancy, provide one copy of the As-Built (Redline) Drawings including design-build drawings to the Port Project Manager.

B. Final As-Built (Redline) Drawings Submittal:

1. After acceptance of the current Red-Line documents by the Port Project Manager, provide one copy of the final Red-lines within 14 days.

1.04 PRODUCT HANDLING: AS-BUILT (REDLINE) DRAWINGS

A. During prosecution of the Work, the Contractor shall use all means necessary to maintain a record of changes to the project drawings completely protected from deterioration and from loss and damage. Such changes shall be recorded upon the Red-Lines which will be composed of Contractor markups on project drawings.

PART 2 PRODUCTS - Not used

PART 3 EXECUTION

3.01 MAINTENANCE OF RED-LINE DRAWINGS

A. Identification:

1. Identify one set of project drawings with the title RED-LINES.

B. Preservation:

1. Devise a suitable method for protecting the project Red-Lines for the duration of the contract to the acceptance of the Port.

2. Do not use the Red-Lines for any purpose except entry of new data and for review by the Port.

3. Maintain the Red-Lines at the site of Work.

C. Making Entries to the Red-Lines:

1. Using an erasable red-colored pencil (not ink or indelible pencil), clearly indicate the changed graphics and text. It is not necessary to describe the directive, when, why or who authorized the change. The directive (RFI/ CB #) should be identified only for the purpose of checking. It is not necessary for the Contractor to redraw what is clearly shown and dimensioned on a sketch accompanying any directive, however the sketch should be attached to the back of the preceding sheet.

2. Make clear what information a sketch replaces, e.g. the "footprint" of the changed area, by “cloud” or similar device.

3. Distinguish between annotations intended to be copied exactly by a future drafter creating Record Drawing files, and information that is supplemental and not meant to be copied. Examples of supplemental information would include notes to the drafter and information purely for the Contractor’s information in monitoring the change. A suggested approach is to make all markings not to be copied by a CAD operator in a color other than red, reserving red for information to be copied exactly.

D. The working and final As-Built (Redline)Drawings shall show, the following information:

1. All changes in the work generated by documents such as Change Orders, Construction Bulletins, Requests for Information (RFIs) and Contractor-originated proposals. Identify the documents generating changes from the As-bid documents. These changes shall show the actual work with the same level of accuracy and completeness as the original Contract documents. Do not include markings or reference to documents that do not generate a graphic or text change.

2. Any sketches that accompanied the Change directive attached to the drawing sheet or the back of the sheet preceding it.

3. The actual location, identification and sizes of material, equipment, utilities and elements of the project to the same level of detail as the original Contract (As-bid) drawings.

4. The correct scale, grade, elevations, dimensions and coordinates of changes.

5. Changes or modifications that result from final inspection.

E. If applicable, shop drawings and design/ build drawings shall be maintained accurate and current and show, as a minimum, the following information:

1. Changes from approved detail drawings prepared and/or furnished by the Contractor; including but not limited to shop drawings, installation plans and dimensions of equipment.

2. The actual design/build work by the Contractor to meet performance specifications, such as HVAC controls, Fire Alarm, Sprinkler systems and Data Management systems, to the same level of detail as the submitted and approved design/build drawings.

F. Shop Drawings and Design/Build drawings shall be submitted as electronic PDF files and hard copy.

End of Section

PART 1 GENERAL

1.01 SUMMARY

Throughout the construction period, maintain the project site where work is carried out in a standard of cleanliness as described in this section.

1.02 QUALITY ASSURANCE

A. Inspection: Conduct daily inspections (and more often if necessary) to verify that requirements of cleanliness are being met.

B. Codes and Standards: In addition to the standard described in this section, comply with all pertinent requirements of governmental agencies having jurisdiction.

PART 2 PRODUCTS

2.01 CLEANING MATERIALS AND EQUIPMENT

A. Provide all required personnel, equipment, and materials needed to maintain specified standard of cleanliness.

B. Provide SDS to POS Safety for all cleaning products brought on site.

PART 3 EXECUTION

3.01 PROGRESS CLEANING

A. Site:

1. At all times, and as may specifically be requested by the Port construction project representative, the Contractor shall cleanup and remove all refuse resulting from the Work in order that the Project site remains free from an accumulation of construction debris. Upon failure to do so within 24 hours, such cleanup work may be done by the Port and the cost thereof shall be charged to the Contractor.

2. Project sites adjacent to public areas shall at all times be maintained in a condition suitable for public viewing and ensure public safety is not compromised in any way. The Port's right to require or perform any necessary cleanup to maintain this condition as stated above applies.

3. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of materials.

4. Provide adequate storage for all items, awaiting removal from the job site, observing all requirements for fire prevention and protection of the ecology.

3.02 DUST CONTROL

A. Maintain continuous cleaning and wetting procedures to control dust pollution at project site and haul routes as required by governing authorities. Use power sweepers for street cleaning, if necessary.

B. Schedule cleaning so that resultant dust and contaminants will not fall on wet or newly coated surfaces.

3.03 CLOSEOUT CLEANING

A. Cleaning: Provide final cleaning of Work prior to Final Inspection. Employ experienced workers or professional cleaners for final cleaning. Clean each

surface or unit of work to condition expected from normal commercial building cleaning and maintenance program. Comply with manufacturer's recommendations. Complete following cleaning operations:

1. In addition to removal of debris and cleaning specified in other sections, clean interior and exterior exposed-to-view surfaces.
2. Remove grease, mastic, adhesives, dust dirt, stains, fingerprints, labels, and other foreign matter from sight exposed interior and exterior surfaces.
3. Clean transparent and glossy materials to a polished condition; remove foreign substances. Polish reflective surfaces to a clear shine.
4. Remove temporary protection and labels not required to remain.
5. Vacuum clean carpeted and similar soft surfaces.
6. Clean, wax, and polish resilient and hard-surfaces floor as specified.
7. Clean equipment and fixtures to sanitary condition.
8. Clean surfaces of equipment; remove excess lubrication.
9. Clean plumbing fixtures to a sanitary condition.
10. Clean light fixtures and lamps.
11. Clean permanent filters of ventilating equipment and replace disposable filters when units have been operated during construction; in addition, clean ducts, blowers, and coils when units have been operated without filters during construction.
12. Clean mechanical and electrical equipment and spaces, including tops of pipes, ducts, equipment, etc.
13. Remove waste, foreign matter, and debris from roofs, gutters, area ways, and drainage systems.
14. Hose-clean exterior paved surfaces; rake clean other surfaces of grounds.
15. Remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.
16. Maintain cleaning until Final Completion.
17. Re-clean areas or equipment, after final inspection, if dirtied as result of Contractor's work in preparing for final inspection or completion of punchlist.

End of Section

PART 1 GENERAL

1.01 SUMMARY

A. Submit a complete and concise description of the product, system, or piece of equipment, stressing and enhancing the importance of system interactions, troubleshooting, and long-term preventive maintenance and operation.

B. This section identifies the requirements for the formatting and compilation of all operation and maintenance (O&M) documentation for this project and equipment labeling by posting condensed operating instructions as identified in the technical specifications. Unless otherwise directed by the Project Manager, the Contractor shall prepare and compile O&M documentation as defined in this section.

C. This section also includes requirements for the Contractor's input to the Port Computerized Maintenance Management System (CMMS) form listing equipment installed as part of the Work.

1. Attachment A contains the project's CMMS form

1.02 SUBMITTALS/APPROVALS

A. O&M Documentation and the CMMS form shall be submitted electronically to the Project Manager.

1. CMMS forms shall be submitted as a PDF within the O&M submittals along with the Excel source file.

2. Port acceptance of draft O&M is required prior to training of Port personnel, Partial Substantial or Substantial Completion. Submit draft documentation prior to the anticipated scheduled punchlist inspection date.

a. For Partial Substantial Completion, the O&M and index shall be complete for the respective elements being turned over to the Port. Partial manuals shall be clearly labeled on the cover sheet as "PARTIAL O&M MANUAL."

3. Port acceptance of the final O&M is required for Physical Completion and shall be submitted prior to final inspection. If changes are required to Final Document, the Contractor shall incorporate revisions and resubmit a full electronic copy of the manual. All changes shall be submitted with a transmittal identifying all changes.

a. Final documentation shall contain "Partial" O&M documentation.

1.03 OPERATING AND MAINTENANCE DOCUMENTATION

A. The O&M documentation shall be electronic utilizing Microsoft Word or searchable Adobe PDF format. The electronic data shall have software search features and interactive capabilities in the format prescribed within this section.

1. PDF versions originating from scanned documentation shall be generated from legible documents, indexed, formatted and fully text searchable.

2. Contractor is responsible for obtaining written releases dealing with copyright restrictions.

B. The electronic documentation shall be titled as follows :

1. Draft O&M Manual [WPXXXXX ContractName]

2. Final O&M Manual [WPXXXXX ContractName]

1.04 CMMS FORMS

A. An electronic (Excel) file will be provided to the Contractor by the Project Manager after Contract Execution. The Contractor is responsible to ensure the form is accurately and fully completed.

1. The file name shall be titled: *WPXXXXXX CMMS FORM [FINAL or DRAFT]*

1.05 OPERATIONS AND MAINTENANCE (O&M) DOCUMENTATION FORMAT

A. The O&M documentation shall be organized to include four sections:

1. Title page

a. The title page shall identify Port information including the Port project number and formal Port project name, Contractor information and the anticipated substantial completion date and warranty start date(s). See Appendix A.

2. Table of Contents

a. The table of contents shall identify product, system or piece of equipment by the CSI section within the technical specifications and shall be hyperlinked to the manual content.

3. Computerized Maintenance Management System (CMMS): provide a PDF of the Excel file within the O&M Documentation.

4. Technical Content of all the product, system(s) or equipment organized by technical specification Construction Specifications Institute (CSI) section number and title. It is comprised of two sections:

a. Summary Information on products, systems and equipment

b. Data Package information (see Parts 1.06B and 1.07).

1.06 TECHNICAL CONTENT

A. Summary Information on Products, Systems and Equipment.

1. Contractor, distributor and manufacturer support information:

a. Provide the name, address, and telephone number of each Subcontractor who installed the product, system or equipment.

b. For each item, also provide the name address and telephone number of the manufacturer's representative and service organization that can provide replacements most convenient to the project site.

c. Provide the name, address, and telephone number of the product, equipment, and system manufacturers.

d. Include the 24-hour emergency support numbers.

2. Equipment information: All equipment information identified in the CMMS form shall be included in the O&M documentation on the first applicable product page and include the CMMS equipment identification number and description as provided in the CMMS form. All equipment identification numbers shall be in bold-type face in a contrasting color from the balance

of the font on the page. Red is a typical contrasting color. Include the following:

a. Equipment or system photo as installed within the project with description and design intent.

b. Special outside agency permits including Washington State Labor & Industries.

c. Copies of condensed operating instructions posted on equipment.

3. Submittal and Product Data: Include accepted submittal data, cut sheets and appropriate shop drawings. If submittal was not required for acceptance, descriptive product data shall be included.

a. Include all building material and finishes. Provide specific information, lot numbers, local distributors and suppliers with their company names, addresses, and phones numbers. List all information needed to identify, maintain, and replace/duplicate any finish materials, equipment or features installed in this project. Examples include:

(1) Material or finish designation.

(2) Manufacturer's name, model number, make, size, local vendor and supplier.

(3) Proportions of mixes. (Example: terrazzo)

(4) Color formula list for each project specific paint color used.

b. Highlight the submittal/product data pertinent to the Contract within manufacturer's boiler plate information documentation.

c. Clearly mark the work product, system or piece of equipment and eliminate or strikeout advertisement and other data that does not specifically relate to the Work.

4. Warranty Information: List and explain the various warranties and clearly identify the servicing and technical precautions prescribed by the manufacturers or Contract in order to keep warranties in force.

5. Start Up and Testing/Balancing Information:

a. Testing and Performance Data: Include completed pre-functional checklists, functional performance test forms, and monitoring reports. Include recommended schedule for retesting and blank test forms.

b. Copy of the start-up report.

c. Completed pre-commissioning and pre-functional checklists with all data and documentation.

d. Completed functional test and calibration results.

B. Data Packages. The type of data depends upon the complexity of the product, system, or equipment. Data Package data is categorized into three (3) kinds of information: Operating Instructions, Preventive Maintenance, and Corrective

Maintenance. See as identified in Table 1 and described below in Part 1.07 for the kinds of information included in the data packages.

1. Data Package 1: typically used for architectural items requiring simple but specific maintenance and replacement; for example, acoustical ceiling, floor tile or carpeting system.

2. Data Package 2: used for an item that has motors or adjustable electronics; for example, an item having a motor and some sequence of operation such as a refrigerated drinking fountain or adjustable photosensor.

3. Data Package 3: used for an complex piece of equipment, having an extensive sequence of operation, a complex troubleshooting sequence and one requiring frequent operator attention; at least for start-up and shut-down.

	TABLE 1	**Data Packages**		
	Technical Data Content	**1**	**2**	**3**
Operating Instruction				
	Safety Precautions	X	X	X
	Operator prestart			X
	Startup, shutdown, and post-shutdown procedures			X
	Normal operations		X	X
	Emergency operations			X
	Operator service requirements			X
	Environmental conditions		X	X
	Parts identification		X	X
	Testing equipment and special tool information			X
Preventive Maintenance (PM)Plan &Schedule				
	Manufacturer's PM recommendation		X	X
	Calibration recommendations		X	X
	Cleaning recommendations	X	X	X
	Lubrication data		X	X
Corrective Maintenance (Repair)				
	Troubleshooting guides and diagnostic techniques			X
	Wiring diagrams and control diagrams			X
	Maintenance and repair procedures	X	X	X
	Removal and replacement instructions		X	X
	Spare parts and supply lists	X	X	X
	Corrective Maintenance Work Hours			X
Video O&M Documentation				
	O&M Videos		**X**	**X**

1.07 DATA PACKAGE TECHNICAL INFORMATION

A. Operating Instructions: Include specific instructions, procedures, and illustrations for the following as required by installed products, systems and equipment:

1. Safety Precautions: List personnel hazards and equipment or product safety precautions for all operating conditions. Include Safety Data Sheets.

2. Operator Prestart: Include procedures required to install, set up, and prepare each system for use.

3. Startup, Shutdown, and Post-Shutdown Procedures: Provide narrative description for Startup, Shutdown and Post-shutdown operating procedures including the control sequence for each procedure.

4. Normal Operations: Provide narrative description of Normal Operating Procedures. Include Control Diagrams with data to explain operation and control of systems and specific equipment.

5. Emergency Operations: Include Emergency Procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment or harm personnel. Include Emergency Shutdown Instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance and procedures for emergency operation of all utility systems including required valve positions, valve locations and zones or portions of systems controlled.

6. Operator Service Requirement: Include instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and recording gage readings.

7. Environmental Conditions: Include a list of Environmental Conditions (temperature, humidity, and other relevant data) that are best suited for the operation of each product, component or system. Describe conditions under which the item equipment should not be allowed to operate.

8. Parts Identification: Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number that will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies in accordance with the manufacturer's standard practice. Parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as typically shown in a master parts catalog.

9. Testing Equipment and Special Tool Information: Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components.

B. Preventive Maintenance Plan and Schedule: Include the following information for preventive and scheduled maintenance to minimize corrective maintenance and

repair for installed products, and the model and features of each system and piece of equipment.

1. Include manufacturer's schedule for routine preventive maintenance, inspections, tests and adjustments required to ensure proper and economical operation and to minimize corrective maintenance.

2. For periodic calibrations, provide manufacturer's specified frequency and procedures for each separate operation.

3. Cleaning Recommendations: Provide environmentally preferable cleaning recommendations.

4. Lubrication Data: Include preventive maintenance lubrication data, in addition to instructions for lubrication provided under paragraph titled "Operator Service Requirements":

    a. A table showing recommended lubricants for specific temperature ranges and applications.

    b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities.

    c. A Lubrication Schedule showing service interval frequency.

C. Corrective Maintenance (Repair): Include manufacturer's recommended procedures and instructions for correcting problems and making repairs as required for installed products, and model and features of each system and pieces of equipment. Include potential environmental and indoor air quality impacts of recommended maintenance procedures and materials.

1. Troubleshooting Guides and Diagnostic Techniques: Include step-by-step procedures to promptly isolate the cause of typical malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.

2. Wiring Diagrams and Control Diagrams: Wiring diagrams and control diagrams shall be point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams, number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation configuration and numbering.

    a. Maintenance and Repair Procedures: Include instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards.

3. Maintenance and Repair Procedures: Include instructions and a list of tools required to repair or restore the product or equipment to proper condition or operating standards.

4. Removal and Replacement Instructions: Include step-by-step procedures and a list of required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies,

accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Instructions shall include a combination of text and illustrations.

5. Spare Parts and Supply Lists: Include lists of spare parts and supplies required for maintenance and repair to ensure continued service or operation without unreasonable delays. List spare parts and supplies that have a long lead-time to obtain. Corrective Maintenance Work-Hours: Include manufacturer's projection of corrective maintenance work-hours including requirements by type of craft.

6. Corrective maintenance that requires completion or participation of the equipment manufacturer shall be identified and tabulated separately.

7. Video O&M Documentation: Include reference to training videos as identified by the technical specifications. See Section 01820 – Training for video and audio technical requirements. Video titles shall be coordinated with the table of contents for the respective section

   a. Example: *Section [XXXXX] Training Video for [specific equipment] provided separately.*

1.08 EQUIPMENT OPERATING INSTRUCTIONS: POSTING CONDENSED INSTRUCTIONS

A. Condensed operating instructions shall be clearly laminated and secured adjacent to or inside the equipment where it can be easily read by operating personnel performing the steps listed. The writing shall not fade in sunlight and shall be secured to prevent easy removal, peeling and degradation if exposed to the weather.

APPENDIX A: Title Page for Operations and Maintenance Documentation

POS Project Number	
Project Name	
Port Project Manager	
Port Resident Engineer	
Prime Contractor Name	
Prime Contractor Project Number	
Primary Contact Name	
Primary Contact Number	
Emergency Contact Number	
Anticipated Substantial Completion Date	
Phased Warranty Yes/No	If yes, list all anticipated dates:
Anticipated Warranty Date(s)	

End of Section

PART 1 GENERAL

3.01 SUMMARY

A. The intent of Commissioning is to verify systems and equipment are being delivered to the Port fully functioning in accordance with Contract Documents.

B. Commissioning activities will be provided by the Contractor utilizing the attached Port's checklists and as described in Divisions 2 through 48.

C. Where 01811 - Commissioning specifications or requirements conflict with Divisions 2 through 48 or other requirements, the Divisions 2 through 48 requirements shall take precedence.

3.02 TERMS AND DEFINITIONS

A. Commissioning: The process certifying that mechanical, electrical, communications, and control and life safety systems, equipment, subsystems or systems, function together properly to meet performance requirements and design intent as shown in a composite manner in the Contract Documents.

B. Systems: Group of components and equipment functioning as a unit or performing a common function. (IE: Chilled Water System: consisting of piping, valves, fittings, controls, chillers, expansion tanks, air relief, chemical treatment, pumps, etc.)

C. Functional Testing: That full range of checks and tests carried out to determine if all components, sub-systems, systems, and interfaces between systems function in accordance with the contract documents. In this context, "function" includes all modes and sequences of control operation, all interlocks and conditional control responses, and all specified responses to abnormal emergency conditions.

D. Acceptable Performance: A component or system shall meet specified design parameters and criteria under actual load conditions for duration of time as indicated within the functional test criteria as determined by technical specifications and manufacturer's literature.

3.03 COMMISSIONING TE AM

A. The commissioning team shall consist of the Port's representatives, Contractor, Subcontractors, Manufacturers, and the project Designers in accordance with their contractual arrangements with the Port. The Port's operating staff will be included during specific elements of the commissioning process.

3.04 CONTRACTOR

A. Execute the testing procedures in accordance with the commissioning checklists.

B. A Contractor's representative shall be present during all commissioning activities performed by itself or one of its Subcontractors.

C. The Contractor will schedule and execute the commissioning activities.

3.05 DUTIES OF THE CONTRACTOR

A. Contractor solely responsible for the operations, testing, and results during the commissioning process for systems and equipment to perform in accordance with the Contract Documents.

B. Subcontractor installing equipment and systems shall execute the commissioning activities on their respective Work.

C. Include Commissioning activities and durations within the master schedule.

D. Coordinate all phasing and/or sequencing requirements to integrate the commissioning activities and durations within the master schedule.

3.06 ACCEPTANCE PROCEDURES

A. The Contractor shall verify that all checklists have been completed and equipment and systems functional testing successfully met or exceeded the established acceptance criteria.

B. The Contractor shall provide all acceptance test results, checklists and associated documentation to the Engineer for review and acceptance.

PART 4 PRODUCTS - Not Used

PART 5 EXECUTION

5.01 GENERAL

A. Contractor shall operate equipment and systems, and conduct all tests in presence of the Engineer and/or a designated Port Representative(s) to demonstrate compliance with Divisions 2 through 48.

1. Testing shall be conducted under design operating conditions as defined within the specifications and in the commissioning activities and approved by the Engineer.

B. All elements of systems shall be tested to demonstrate that total systems satisfy all requirements of the technical specifications. Testing shall be accomplished on hierarchical basis. Each piece of equipment will be tested for proper operation, followed by each subsystem, followed by entire system, followed by interfaces to other major systems.

C. Contractor or their subcontractor shall provide all special testing materials and test equipment.

5.02 PRE-COMMISSIONING WORK

A. Attend a commissioning scoping meeting and other meetings necessary to facilitate the commissioning process. One representative of the Contractor cognizant of respective aspects of their work shall attend commissioning meetings. Other trades shall attend the commissioning meetings when their portions of the work are being tested. The Owner's personnel will administer the meetings. Meeting location will be determined.

B. Normal start-up services required to bring system into a fully operational state. This includes cleaning, filling, purging, leak testing, motor rotation check, control sequences of operation, full and part load performance, and similar conditions.

C. Completion of controls installation, calibration, programming, and testing is critical for efficient and successful commissioning process.

5.03 EXECUTING CHECKLIST REVIEW, TESTING AND ACCEPTANCE PROCEDURES

A. CHECKLISTS

1. Utilize the following checklists with an “X” on this project:

	Checklist Title		**Checklist Title**
	Chilled Water Piping		Heating Hot Water Piping
	Chilled Water Pump		Lighting and Lighting Control
	Direct Digital Control (DDC)		Panels
	Domestic Water Heater		Plumbing Fixture
	Ductwork		Plumbing Piping
	Emergency Lighting		Steam and Condensate Piping
	Exhaust Fan		Steam System Condensate Pump
	Fan-Coil with Hydronic Coils		TAB Plan Review
	Heat Exchanger		Variable Air Volume with Hot Water Reheat

B. FUNCTIONAL TESTING AND ACCEPTANCE PROCEDURES

1. Start up and test of systems shall be by skilled technicians. Make these same technicians available to assist the Owner's personnel in completing the commissioning process as it relates to each system and their technical specialty.
2. Coordinate work schedules and time required for commissioning activities, with the Port. Ensure that qualified technicians are available and present during agreed upon schedules and for sufficient duration to complete necessary tests, adjustments, and problem resolutions.

C. System Issues and Discrepancies: Additional technician time and Port personnel time may be required to resolve issues and discrepancies. Make additional technician time available for subsequent commissioning periods until required system performance is obtained.

1. Complete corrective work to permit completion of commissioning activities.
2. If deadlines pass without resolution of the problems, the Port reserves its right to obtain supplementary services and equipment to resolve problems.

End of Section

PART 1 GENERAL

1.01 SUMMARY

D. The Port's operating and maintenance staff shall receive orientation and training on all modes, functions, operations and maintenance of all features, systems, and equipment as a provided by this project and as defined and outlined herein.

E. Prior to receiving Temporary or final Certificate of Occupancy, the Contractor shall provide instructions for all systems as described in specifications contained in Divisions 2 through 17. The Contactor and applicable subcontractors shall keep on the project competent personnel familiar with the items installed, sequence of operations, maintenance procedures and trouble shooting whose assignment will be to instruct the Port's operations and maintenance personnel in the operation and maintenance of the equipment and systems as required within the individual technical specification sections of this Project Manual. The time and place of the instruction period shall be coordinated by the Contractor with the Project Inspector.

F. The Project Manager may require additional training if the instruction is not deemed adequate for safe turnover and operations by Port personnel.

G. The Training Plan and Syllabus detailing the content of training and corresponding O&M Manual sections shall be approved by the Project Manager prior to the scheduling of any training.

H. All equipment and systems shall be operational and fully functional.

I. Training sessions shall be repeated to cover three (3) Port operational and maintenance shifts: first, second and third shifts

1.02 EQUIPMENT-SPECIFIC REQUIREMENTS

J. Hours of training and any special requirements for specific equipment are found in each equipment technical specification section. The General Requirements of Division 1 shall take precedence over the training requirements of the technical specifications.

1.03 TRAINING

K. Training Plan: The Contractor shall submit for review and approval the Training Plan and Syllabus detailing the content of training to be provided, a proposed schedule, training aides and training materials to be left with students. The syllabus shall outline subject, main points, objectives, and detailed content of curriculum. This training plan and syllabus shall be submitted to Project Manager no less than thirty (30) calendar days prior to the proposed training date(s). All systems and equipment shall be 100% operational prior to any training on that system or piece of equipment.

L. The Contractor shall include all training materials and aids as part of the O&M manuals.

M. All but the following training sessions shall be video recorded:

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

5.01 GENERAL

A. The Contractor shall be responsible for training coordination, scheduling, and for ensuring that training is completed on all equipment per the specifications.

1. The Project Manager shall be responsible for monitoring the content and determining the adequacy of the training of Port personnel.

2. The Contractor shall coordinate with the Project Manager to determine needs and areas of emphasis for training on this project.

3. The Contractor shall develop the Training Plan and Syllabus for each piece of equipment or system requiring training. The final Training Plan and Syllabus for each training shall be submitted to the Project Manager.

B. The appropriate trade or manufacturer's representative shall provide the instructions on each major piece of equipment. This person may be the start-up technician for the piece of equipment, the installing Contactor or manufacturer’s representative. Trainers shall have practical building operating expertise as well as in-depth knowledge of all modes of operation of the specific piece of equipment as installed in this project are required. More than one party may be required to execute the training.

5.02 TRAINING PLAN

A. For each piece of equipment or system, a written Training Plan will be submitted by the Contactor to the Project Manager for acceptance prior to training. The plan will cover the following elements:

1. Equipment (included in training)

2. Intended audience

3. Location of training

4. Objectives

5. Detailed outline including system overview

6. Subjects covered (description, duration of discussion, special methods, etc.)

7. Duration of training on each subject

8. Instructor for each subject

9. Instructor qualifications

10. Methods (classroom lecture, site walk-through, operational demonstrations, written handouts, etc.)

11. Questionnaire/Testing and evaluation of Port staff for understanding of systems and equipment, safety features, and functional operation.

5.03 TRAINING PROCESS AND CONTENT

A. Training process:

1. The Contractor shall conduct a site walk-through with the completed red lined as-built drawings.

2. During any demonstration, should the system fail to perform in accordance with the requirements of the O&M manual or sequence of operations, the system will be repaired or adjusted as necessary and the demonstration repeated.

3. Training content:

a. Follow the outline in the table of contents of the O&M manual and illustrate the use of the O&M manuals for reference.

b. Use of the printed installation, operation and maintenance instruction material included in the O&M manuals.

c. Review of the written O&M instructions emphasizing safe and proper operating requirements, preventative maintenance, special tools needed and recommended spare parts inventory.

d. Start-up, operation in all modes possible, shut-down, seasonal changeover, as applicable and any emergency procedures.

e. Discussion of relevant health and safety issues and concerns.

f. Discussion of warranties and guarantees.

g. Common troubleshooting and maintenance issues, problems and solutions.

h. Explanatory information included in the O&M manuals and the location of all related plans and manuals in the facility.

i. Discussion of any peculiarities of equipment installation or operation.

j. Start-up, operation in all modes possible, including manual, safety, shut-down and any emergency procedures and routine preventative/annual maintenance for all pieces of equipment.

5.04 SPECIAL TRAINING

A. General Requirements: (For all training sessions)

1. The training will be tailored to the needs and skill level of the trainees.

2. The trainers will be knowledgeable on the system and its use in buildings. For the on-site sessions, the most qualified trainer(s) will be used. The Port shall approve the instructor prior to scheduling the training.

3. During any demonstration, should the system fail to perform in accordance with the requirements of the O&M manual or sequence of operations, the system will be repaired or adjusted as necessary and the demonstration repeated.

4. Provide designated Port personnel with comprehensive orientation and training in the understanding of the systems and the operation, functionality, and maintenance of each piece of equipment.

B. Electrical Contractor:

1. Duration of Training: The Electrical Contractor shall provide a two (2) hour training session for the Division 16, electrical scope of work.

2. Quantity of Training: Each training sessions shall be repeated three (3) times to cover the Port of Seattle's operational and maintenance shifts: first, second and third shifts.

3. Scope of Training: The Electrical Contractor shall conduct a site walk-through identifying all connection points, conduit routings, pathways, equipment, and demonstrate all features to ensure complete system functionality.

4. System operations and dependence to operations: To include but not limited to breaker coordination and other required studies or testing requirements.

C. Mechanical Contractor:

1. Duration of Training: The Electrical Contractor shall provide a one (1) hour training session for the Division 15, mechanical scope of work.

2. Quantity of Training: Each training sessions shall be repeated three (3) times to cover the Port of Seattle's operational and maintenance shifts: first, second and third shifts.

3. Scope of Training: The Mechanical Contractor shall conduct an orientation in the Port of Seattle Boiler Shop of the system using as-built drawings and updated DDC Graphics to identify all connection points, damper locations, equipment, system functionality and integration with existing systems.

4. System operations and dependence to operations: To include but not limited to breaker coordination and other required studies or testing requirements.

5.05 NOTICES

A. All arrangements and notices for training periods shall be made through the Project Manager and Inspector. The Contractor shall coordinate with Project Manager and Inspector for convenient times and locations.

5.06 SCHEDULE

A. All required training sessions shall be completed to the satisfaction of the Project Manager prior to receiving Temporary or final Certificate of Occupancy,. If the Contractor fails to complete the required training sessions, the Contractor shall be responsible for maintenance until such time all training is complete.

End of Section

PART 1 GENERAL

1.01 CONTRACTOR FULLY RESPONSIBLE FOR SAFETY

A. The Contractor assumes full and sole responsibility for and shall comply with all laws, regulations, ordinances, and governmental orders pertaining to safety in the performance of this Work. The Contractor shall conduct all operations for this project to offer the least possible obstruction and inconvenience to the Port, its tenants, the public and abutting property owners. The Contractor shall be responsible for employing adequate safety measures and taking all other actions reasonably necessary to protect the life, health, and safety of employees, the public, and to protect adjacent and Port-owned property in connection with the performance of the Work.

B. The Contractor shall have the sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the Project Site, including safety of all persons and property in performance of the Work. This requirement shall apply continuously, and is not limited to normal working hours. Nothing the Port may do, or fail to do, with respect to safety in the performance of the Work shall relieve Contractor of this responsibility.

1.02 REFERENCES

A. The Contractor shall comply with the provisions found in the Port of Seattle Construction Safety & Health Manual, the Federal Occupational Safety and Health Act of 1970 (OSHA), including all revisions and amendments thereto; the provisions of the Department of Safety & Health (DOSH) Washington Industrial Safety Act of 1973 (WISHA); and the requirements of the following chapters of the Washington Administrative Code:

1. Chapter 296-24 WAC General Safety and Health Standards.
2. Chapter 296-62 WAC Occupational Health Standards.
3. Chapter 296-155 WAC Safety Standards for Construction Work.
4. Chapter 296-800 WAC Core Safety & Health Standards
5. ANSI/ASSE Standards

B. In addition, the Contractor shall comply with the following requirements when they are applicable:

1. Local Building and Construction Codes.
2. POS Fire Department Standards
3. Latest FAA Advisory Circular regarding Operational Safety On Airports During Construction.
4. United States Coast Guard
5. Seattle Fire Department Codes
6. NFPA 70E
7. National Electrical Code

NOTE: In cases of conflict between different safety regulations, the more stringent regulation shall apply.

1.03 DEFINITIONS

A. Manager, Construction Safety Services

An employee of the Port or designated consultant who is responsible for the day-to-day management of the Port of Seattle's Construction Safety Program, and such agents, including the Field Safety Manager, as authorized to act in his/her behalf.

B. Field Safety Manager

An employee of the Port or designated consultant who conducts and monitors jobsite inspections and verifies Contractor compliance with identified corrective actions.

C. Contractor

Normally the General Contractor hired by the Tenant. However, in the case where a Tenant directly hires more than one Contractor to be on site at one time, the responsibility of the Contractor shall apply to the Tenant as well as the contractors on site.

1.04 SUBMITTALS

A. The Contractor shall submit the following information as found in paragraph 1.05 A

B. The Contractor shall submit a site specific Chemical Exposure Plan prepared by a Certified Industrial Hygienist for any products containing isocyanates, methylene chloride, Hydrofluoric Acid, lead, silica, and processes involving floor sealers, traffic coatings, terrazzo sealers, or specialty paints. The plan shall include employee exposure control methods, isolation methods to prevent spread of chemicals outside the work area and safeguarding of the public.

1.05 CONTRACTOR RESPONSIBILITIES

A. SITE SPECIFIC SAFETY PLAN

1. The Contractor shall submit, for the Port’s review and comment, a Site-Specific Safety Plan in connection with the Work. The submittal shall be made in accordance with Section 01305, Pre-Construction Submittals. An outline of the matters to be address in the Safety Plan is set forth in Appendix A to this Division. The Port’s review of, or comment on, the Safety Plan shall not, in any way, relieve the Contractor of any responsibility or liability for the Safety Plan. Delay in submitting a written safety plan will not constitute grounds for a contract schedule extension or delay claim.

2. The Port will not issue a Notice to Proceed (NTP), until the Safety Plan has been received and accepted by the TCI and Manager of Construction Safety Services.

B. GENERAL OBLIGATIONS

The Contractor is responsible for accident prevention and job site safety. This responsibility cannot be delegated to Subcontractors, suppliers, the Port, or other persons. To this end, the Contractor shall:

1. Promote a safe and healthy work environment.
2. Provide an accident prevention program.
3. Promote training programs to improve the skill and competency of all employees in the field of occupational safety and health.
4. Instruct all employees of safe work methods and practices when assigning work.
5. Ensure that employees have and use the proper protective equipment and tools for the job.
6. Ensure that all heavy equipment operators (i.e. cranes, loaders, and forklifts) are properly qualified and trained on the specific piece of equipment in use.
7. Plan and execute all work to comply with the stated objectives and safety requirements contained in the contract provisions, Federal, State, local laws and regulations, and industry standards.
8. Cooperate fully with the Port and its Consultants and insurers (if applicable) in connection with all matters pertaining to safety.
9. Maintain an orientation program for new employees, including subcontractor employees, that includes at a minimum, a review of:
    a) Potential hazards in the work areas
    b) Required personal protective equipment and apparel
    c) The following prohibited conduct shall result in the immediate removal from the project: gambling, fighting or horseplay, possession of firearms, alcohol or illegal use, possession or sale of a controlled substance or being under their influence.
    d) Emergency procedures
10. Perform documented daily inspections of the project in the Contractor Daily Report. Review and direct immediate action to correct any substandard safety conditions or practices, including those of any Subcontractor, regardless of classification.
11. Hold a minimum of one weekly scheduled safety meetings with its employees. Such meetings shall include a discussion of all observed unsafe work practices or conditions, a review of the accident experience and all corrective actions. The Contractor shall encourage safety suggestions from employees.
12. Hold a minimum of one monthly all-hands safety meeting with its employees, and subcontractor employees - subcontractors at any tier. An agenda shall be prepared and distributed for this meeting. The meeting shall include a safety update, and pertinent safety information for upcoming work. The Contractor shall encourage input and involvement from the subcontractors.

13. Ensure prompt medical treatment is administered to any injured employee.

14. Undertake a complete investigation of all accidents and implement corrective action to prevent a recurrence.

15. Prepare and implement a site safety plan as set forth in Paragraph 1.05. A hereof.

16. Comply with the Administrative Procedures set forth in Paragraph 1.08 hereof.

17. Provide the TCI and Manager of Construction Safety Services with copies of all DOSH citations immediately upon receipt.

18. Ensure that all of its subcontractors, suppliers, etc., are provided with a copy of this specification and are informed of their obligations regarding safety.

19. Ensure that all Contractor and subcontractor personnel at any tier have completed a one and one-half (1 ½) hour Port of Seattle safety orientation to be held by the Port of Seattle at a time and location to be to be specified by the Port, prior to commencing work. The time expended and any associated costs such as travel time, parking, and other expenses are to be born by the Contractor.

C. CONTRACTOR SAFETY REPRESENTATIVE

1. It is recognized that the responsibility for safety lies with the Contractor. Each Contractor shall appoint an individual (s) responsible for safety on each contract. This individual (s) must be employed in a supervisory position, empowered by their employer to take corrective action; be present on the project while work is being performed; and spend the amount of time necessary to ensure the Contractor's compliance with safety requirements.

2. A safety inspection shall be performed and documented for each shift worked, by the Contractor's safety representative.

3. The Contractor shall submit a resume of the experience and qualifications for the proposed Safety Representative(s) as part of the Safety Plan submittal. Please refer to part D. Definitions, subparagraphs 1 and 2 below. The Port will review the resumes and a personal interview may be required. The Port may reject anyone it deems "Not Qualified." It is the responsibility of the Tenant to enforce the determination.

4. [The Prime contractor shall provide three (3) of their site management personnel and three (3) - four (4) of their major Subcontractors shall provide one (1) site management person, to attend a two (2) day Safety Management training, presented by the Port. The Port shall make the final determination on the attendees.]

D. DEFINITIONS

1. Fulltime Safety Professional qualifications include:

a) Shall have no other duties.

b) An individual possessing a minimum of five years progressive experience managing safety programs on large construction projects comparable to this contract in scope and complexity.

c) Be knowledgeable concerning all federal, state, and Port of Seattle regulations applicable to construction safety.

d) Possess "Competent Person" certification in construction safety disciplines related to the work performed and possess verifiable training. This individual shall also be responsible for identifying "Competent Persons" required by State and Federal safety standards for which they are not certified.

e) Have successfully completed the OSHA 500 Safety and Health Course. This requirement may be waived in lieu of a safety and health degree or professional safety certification.

f) Training and current certification for CPR and First Aid is preferred.

g) Be capable of performing accident investigations and developing a concise report.

h) Is proficient in the development and presentation of "tool box" meetings and safety training.

2. Site Safety Officer qualifications include:

a) An individual assigned to perform safety functions on any contract not requiring a Fulltime Safety Professional. This can be a collateral duty position held by a supervisor. Safety duties shall take priority over other collateral duties.

b) Possess a minimum 5 years progressive experience in their trade.

c) Be knowledgeable concerning all federal, state, and Port of Seattle regulations applicable to safety.

d) Have successfully completed the OSHA 10-hour Safety & Health Course.

e) Possess "Competent Person" certification in construction safety disciplines related to the work performed and possess verifiable training. This individual shall also be responsible for identifying "Competent Persons" required by State and Federal safety standards for which they are not certified.

f) Be trained in, and possess current certification for CPR and First Aid.

g) Possess verifiable training and be capable of performing accident investigations and developing a concise report.

h) Possess verifiable training in the development and presentation of "tool box" meetings and safety training.

E. DETERMINATION

1. When the number of personnel on any shift is under 40 (including Subcontractor employees), the Contractor's safety representative will meet the definition of "Site Safety Officer" as defined above for each shift.

2. For Contractors with a total of 40 or more personnel (including Subcontractor employees) on any shift, a Fulltime Safety Professional as defined above shall be required for each shift.

3. For each additional 75 employees (including Subcontractors employees) on any shift, a second Fulltime Safety Professional shall be required.

4. At the Port's discretion the requirements for Contractor safety personnel can be reviewed and action taken to decrease or increase the number of individuals.

5. The Contractor Safety Officer/Professional (s) shall be primarily responsible for ensuring Contractor's compliance with the safety requirements provided in this Document. Without limiting the generality of the foregoing, the Contractor Safety Officer/Professional (s) shall:

   a) Review all subcontractor and sub-tier contractor's Site Specific Safety Programs and Job Hazard Analysis (JHA) for compliance with applicable POS Construction Safety, State, and Federal Standards and ensure that they receive a copy and are briefed on Section 01860 – Tenant Safety Management.

   b) Perform a site-specific safety orientation for all employees, subcontractors and sub tier contractors prior to beginning work. This is in addition to the Port's safety orientation.

   c) Perform daily safety inspections of the Contractor and Subcontractor's project to evaluate the project for unsafe conditions and/or practices, and take the appropriate corrective action when required.

   d) Immediately report all injuries of personnel, vehicles, "Near Miss" incidents, and property damage and insure immediate corrective action is taken. Assist in the preparation of all accident investigations and ensure reports are submitted within 24-hours.

   e) Ensure meaningful, weekly safety meetings are held for all on-site employees. Provide the job foremen with appropriate training materials to conduct weekly "tool box" safety meetings and attend safety meetings to evaluate their effectiveness. Maintain documentation of topics discussed and attendees, with copies submitted to the TCI or included with Contractors Daily Construction Report.

   f) Be responsible for the control, availability, and use of necessary safety equipment, including personal protective equipment and apparel for the employees.

   g) Shall attend a monthly safety committee meeting scheduled by the Manager of Construction Safety Services to discuss and resolve relevant issues related to safety and health on Port of Seattle projects.

6. Contractor Safety Officer/Professional (s) not performing their duties in accordance with this document, shall be replaced at the Port's discretion by an individual meeting the requirements of this section. In addition, the Contractor Safety Officer/Professional (s) may not be removed from this contract or replaced without the Port's advanced written approval. The Contractor shall notify the TCI and Manager of Construction Safety Services when this person cannot be on duty while work is being

performed and shall submit the name(s) and qualifications of the individual assigned to perform said duties. It is the responsibility of the Tenant to enforce this requirement.

F. ACCIDENT PREVENTION

1. The Contractor has the responsibility to correct hazardous conditions and practices. When more than one Contractor is working within a given job site, any project management personnel shall have the authority to take action to prevent physical harm or significant property damage. If it is determined there is "Imminent Danger" the Contractor shall:

a) Take immediate action to remove workers from the hazard and stabilize or stop work until corrective actions can be implemented to eliminate the hazard.

b) Immediately identify and implement corrective action to eliminate the hazard.

c) Immediately notify the TCI, and Manager of Construction Safety Services or others as necessary. The TCI will notify the proper authorities if the damage cannot be promptly corrected and could develop into an emergency.

d) Each worker shall immediately report any condition suspected to be unsafe or unhealthy to his or her job foreman or safety representative. If there is no resolution of the concern at that level, the employee shall report the concern to the TCI and Manager of Construction Safety Services.

G. ON SITE FIRST AID

1. At least one person shall be available at the work site at all times to render first aid. This person must have a valid certificate in first-aid training from the American Red Cross, or equivalent verifiable training program. A minimum ratio of one such qualified person for every 25 employees shall be maintained throughout the project. Additionally, the Contractor shall:

a) Post emergency procedures which shall include telephone numbers and locations of facilities including, but not limited to, hospitals, physicians, police, fire and emergency medical services, in conspicuous locations at the job site and at all telephone locations.

b) Provide in a readily accessible location, first-aid supplies of sufficient size and number to handle common first-aid incidents.

c) Identify personnel qualified to render first aid with suitable emblems affixed to the rear of their hard hats for identification.

d) Regularly discuss actions to be taken during emergencies with the Contractor's supervisory personnel and at "tool box" safety meetings.

1.06 PORT OF SEATTLE'S RIGHTS

A. INSPECTIONS/INVESTIGATIONS

1. The Port may, in any reasonable manner, observe and inspect the Contractor's safety and accident prevention procedures for all activities and

personnel working at the construction sites, including the Contractor, subcontractors, visitors, and materials or equipment suppliers. This specifically includes, but is not limited to, the right to attend all safety meetings.

2. The Port shall receive written copies of accident or incident reports completed by the Contractor within 24-hours of occurrence, using the accident investigation reports found in the Port of Seattle Construction Safety & Health Manual. This reporting shall include but not be limited to those reports prepared pursuant to OSHA and/or DOSH regulations.

3. The Port may, in any reasonable manner, observe or participate in any accident investigation conducted by the Contractor or anyone performing work for, on behalf of, or under the Contractor. The Port may also, at its sole discretion and in any reasonable manner, undertake its own accident investigation.

B. CORRECTIVE ACTIONS/STOP-WORK

1. The Port shall have the right to require the Contractor to address unsafe working conditions, including taking corrective action when unsafe working conditions are observed (i.e., lack of good housekeeping practices, use of equipment in obviously poor condition, failure to adhere to statutory construction regulations, etc.).

2. The Port shall have the right to require the removal from the work site of any person, property, or equipment that, in the Port's opinion, is deemed unsafe.

3. The Port shall have the right to require the Contractor to immediately cease any action and/or stop the Work (or any portion thereof) in the event that any condition exists that, in the Port's opinion, constitutes an imminent danger or serious harm.

4. The Port shall have the right to suspend the Work (or any portion thereof) pending the completion of any accident/incident investigation, whether undertaken by Contractor, the Port or others.

C. PORT'S ACTION/INACTION DOES NOT RELIEVE CONTRACTOR

1. Nothing the Port may do, or fail to do, with respect to safety in the performance of the Work shall relieve the Contractor of its responsibility to comply strictly with this Division and all standards referenced in Paragraph 1.02 of this document.

D. PORT'S ACTION/INACTION NO BASIS FOR ADJUSTMENT

1. The Port's exercise of any rights under this Paragraph 1.06 shall not be a basis for any adjustment in the Contract Price or Time.

E. PORT OF SEATTLE INCLUDES CONSULTANTS

1. As used in these requirements, the terms "Port of Seattle" and "Port" specifically includes the Port's designated consultants.

1.07 PORT MANDATED SAFETY REQUIREMENTS

A. Prior to mobilization, the Contractor's Project Manager and Safety Representative shall meet with the TCI and Manager of Construction Safety Services to review and discuss the safety requirements of this contract.

B. SPECIFIC SAFETY PROVISIONS

1. In addition to Federal, State, and Local regulations pertaining to operations and safety, the Contractor shall adhere to the following Port mandated safety requirements:

a) Asbestos and Contractor Personnel Asbestos Training: Ensure that all workers have received the initial and annual Asbestos Awareness training prior to the start of work.

b) Entry into Confined Spaces: Work on this project may require entry into confined spaces as defined by WAC 296-809. The Contractor shall read and follow the requirements of the Port of Seattle's Confined Space Entry Program, as found in the Port of Seattle Construction Safety and Health Manual. The Contractor's Confined Space Entry Program must meet or exceed these requirements.

1) The Contractor shall provide the TCI a copy of its Confined Space Entry Program as part of the Contractor's Safety Plan Submittal. As part of this submittal, the Contractor shall complete the "Confined Space Entry Program Certificate" (Appendix B).

2) Should the Contractor employ subcontractors to work in confined spaces it shall be the Contractor's responsibility to submit the required documentation for each subcontractor.

3) No work shall be allowed to start in a confined space until the required submittals have been made. In the event the Contractor does not comply with these regulations, ACCESS WILL BE DENIED and the TCI notified. Delays caused by failure to submit the required documentation shall not be considered a reason for extension of contract time.

c) Electrical - Safe Clearance Procedures

1) Entry into High Voltage Areas: Work on this project may require entry into manholes, vaults, electrical rooms or other High Voltage areas.

2) In the event entry is required, the Contractor is obligated to identify any High Voltage areas that may be involved in the project and immediately notify the TCI if they have not been properly identified. Before entry into a High Voltage work area the Contractor shall notify the TCI and contact STIA Electrical Shop at (206) 787-5311.

d) Fire Prevention: The Contractor shall ensure that fire prevention measures on-site are in accordance with OSHA, DOSH, and NFPA standards. Approved safety cans shall be used for flammable and combustible liquids. Signs and fire extinguishers shall be provided where required.

e) Hazardous Materials: Ensure compliance with Section 01631 - Pollution Prevention Planning and Execution.

f) Open Flame Devices: Prohibit the use of unapproved fuel-burning types of lanterns, torches, flares or other open-flame devices on Port property.

g) Hot Work Permit: Open Flame Welding and spark producing equipment and tasks require the Contractor to secure a “Hot Work Permit” from the Port Of Seattle Fire Department.

1) Open Flame Welding and spark producing equipment and tasks require the Contractor to secure a “Hot Work Permit.”

h) Liquid propane storage and use below grade is prohibited.

i) Excavating & Trenching: Coordination with the TCI shall be required for work performed on the site.

j) Construction activities that pose a potential risk of exposure to contaminated soil (such as excavations) shall be supervised by personnel who have both a current 40-hour Hazardous Waste certification, and an 8-hour Hazardous Waste Supervisor’s certification. These individuals shall be able to identify the potential need for upgrading the level of health and safety protection. All personnel working in direct contact with contaminated soil shall have a current 40-hour Hazardous Waste certification and medical monitoring, as required in Standards For General Safety & Health, Chapter 296-843 WAC and in accordance with OSHA regulations. The plan shall also include emergency procedures and medical treatment, fire protection, Job Hazard Analysis (JHA), and PPE requirements.

k) The Contractor is responsible for soil sampling and air monitoring to determine hazards and exposures to their employees.

l) Safety plan shall include requirements for daily stretching and flexing of on-site personnel.

m) Individuals who operate hoisting equipment, including but not limited to cranes, boom trucks, and forklifts so configured, shall possess certification from the National Commission for the Certification of Crane Operators (NCCO). A copy of the certification (s) shall be submitted in accordance with Section 01305 - Pre-Construction Submittals.

n) Personal Protective Equipment Policy: To reduce the possibility of injuries, the Contractor shall implement a policy that requires 100% use of hardhats, safety glasses, and gloves for all personnel under their control. It is the responsibility of the Contractor to supply the proper personal protective equipment for the task.

o) Chemical Exposure Plan: The Contractor shall submit a Chemical Exposure Plan for any products containing isocyanates, methylene chloride, Hydrofluoric Acid, lead, silica, and processes involving floor sealers, traffic coatings, terrazzo sealers, or specialty paints. The plan shall include employee exposure control methods,

isolation methods to prevent spread of chemicals outside the work area and safeguarding of the public.

p) Protection of the Public: The Contractor shall submit a plan for the protection of the public on or adjacent to construction and demolition operations. This plan shall include, but not be limited to, barricades, fencing, and signage. "Public" is defined, as anyone not associated with the project - general public, POS and tenant employees.

q) AOA Operations: Ensure compliance with Section 01140 - Operational Safety on Airports during construction.

r) Foreign Objects Debris (FOD): Ensure compliance with Section 01140 - Operational Safety on Airports During Construction.

C. DISCIPLINARY ACTION MATRIX:

1. Defining “The Plan”

a) The object of this matrix is to consistently and effectively control safety hazards such as unsafe acts, and unsafe conditions that lead to injuries of employees, the general public, or that cause property damage.

b) The matrix also provides a basis for the Contractor’s program by standardizing how safety infractions committed by those employees will be handled.

c) All employees of the Contractor, subcontractor, sub tier contractor, vendor, or tenant are covered under this matrix regardless of classification.

d) Damage to equipment or property due to unsafe act or using damaged equipment.

e) Listed are the minimum requirements for discipline. The Contractor has the right to incorporate more stringent procedures from their corporate policy into this matrix. The Contractor shall not submit two Disciplinary Action Programs.

f) Individuals observed by the Contractor’s management shall be disciplined under this matrix.

g) Individuals observed by the Port of Seattle management shall also be subject to disciplinary action. POS management shall immediately contact the Contractor’s management or provide written information to the Contractor’s management as to violation, time, date, employer, and employee.

h) The Contractor’s Safety Manager shall perform the act of documenting and distributing the “Written Violation Notice.”

2. Defining “Violation”

a) Violations are defined as:

b) “General Violations” are considered to be those infractions that may not cause serious injury or illness to an individual but are still

violations of written safety policies and procedures. Examples include housekeeping, unregulated ACM incidents, property damage, mushroomed tools, etc. "General Violations" do not necessarily require a written warning unless they become classified as "Repeat Violations."

c) "Serious Violations" are those violations that if left uncorrected could cause serious injury or illness to an individual. Examples include employees exposed to fall or impalement hazards or serious bodily harm.

d) "Imminent Danger" is violations/situations that will most likely cause permanent disability or death to an individual. Examples can include falls, electrical, or trenching hazards and unsafe equipment.

e) "Repeat Violations" are situations that arise as a result of a previously identified infraction not being abated in the time frame required or numerous violations of the same classification. "Repeat Violations" can also be defined as a situation where one supervisor has multiple employees working under their direction who are in violation of a written Federal, State, project, or company policy.

f) Violations are not limited to the examples listed above.

1) NOTE: An "employee" may be removed from the project at any time for a safety violation that endangers his life or the life of a fellow employee.

3. Defining "Employee"

a) As mentioned earlier, all employees of the Contractor, subcontractor, vendor, or tenant are included in this program.

b) Job title classifications can include but are not limited to trades person, foreman, supervisor, superintendent, etc.

c) Any person (s) directly reprimanded for his or her own actions or inactions, regardless of their position, shall be reprimanded as a "Worker."

4. Defining the "Procedure"

a) Individuals observed committing infractions of written Federal, State, site, or company safety policies shall be brought to the attention of the Contractor's management.

b) The contractor shall in a timely manner, notify the identified employee(s) that they are in violation of written safety rules or procedures and shall abate the hazard.

c) In the event of "Imminent Danger or" a "Serious Violation," the Contractor or POS shall immediately notify and remove the employee(s) from the hazardous situation.

d) The Contractor shall provide timely written warning to the identified individual(s), as well as the direct supervisor and superintendent of that individual(s). The supervisor's names shall be recorded on the "Written Violation Notice."

e) To discourage “Repeat Violations” or supervisor apathy, the supervision is subject to disciplinary action as stated in the matrix.

f) The Contractor shall utilize the “Written Violation Notice” provided in this section.

5. Defining the “Results”

a) Personnel (including supervisors) receiving a Written Violation Notice shall be retrained in the appropriate standard or procedures. Said training shall be documented in writing and submitted to the TCI.

b) Written Violation Notices received will remain in force for the duration of the project.

c) Removal from the project of an “employee” for a minimum of 3 working days.

d) Removal of an “employee” from any port of Seattle project for one year.

e) Written notice sent to the appropriate corporate president.

f) Copies of all “written violation notices” are to be submitted to the TCI with a copy forwarded to the Manager of Construction Safety Services within 24-hours of issuance of notice.

DISCIPLINARY ACTION MATRIX

FOCUS POINT /INCIDENT	1ST VIOLATION	2ND VIOLATION	3RD VIOLATION	NOTES
Worker	Verbal & Written Notice	3 Days Off	Removed From POS Projects For One Year	
Worker’s Direct Foremen	Written Notice	Written Notice	3 Days Off	3 Worker Lay-offs = Removal From POS Projects For One Year
Worker’s Direct Superintendent	Written Notice	Written Notice	Written Notice to Sub/Prime Superintendent and President of Sub/Company	3 Worker Lay-offs = 3 Days Off For Superintendent
Prime Contractor’s Superintendent	Written Notice	Written Notice	Written Notice to President of Prime Company	3 Worker Lay-offs = 3 Days Off For Superintendent*

*Section 01860 - Safety Management/1.07/B, this individual may also be removed from the project.

DISCIPLINARY ACTION MATRIX

WRITTEN VIOLATION NOTICE

PROJECT NAME: _____ PROJECT #: _____

CONTRACTOR: _____

EMPLOYEE BEING REPRIMANDED _____

DATE: _____ TIME: _____

VIOLATION:

_____
_____
_____
_____
_____

TASK BEING PERFORMED:

_____
_____
_____
_____
_____

CORRECTIVE ACTION/TRAINING REQUIRED:

_____
_____
_____
_____
_____

WITNESS: _____

FOREMAN: _____ _____

SUPERINTENDANT: _____:_____

GC SUPERINTENDANT: _____ _____

FIRST NOTICE: _____ SECOND NOTICE: _____ THIRD NOTICE: _____

EMPLOYEE LAY-OFF OR REMOVAL REQUIRED (YES/NO): _____

WRITTEN NOTICE TO COMPANY PRESIDENT REQUIRED (YES/NO): _____

ISSUED BY: _____ COMPANY: _____

D. SAFETY PERFORMANCE

If the Contractor experiences ongoing safety concerns such as a Lost Work Day Case or Recordable Incident Rate greater than the Bureau of Labor Statistics National Average for Construction, experiences repeated violations of safety & health rules and regulations or "Imminent Danger" situations, or fails to abate violations in a timely manner, the Contractor shall be subject to the following action at the Ports discretion:

1. Removal and replacement of management personnel.
2. Submit a written Safety Recovery plan to the TCI and Manager of Construction Safety Services detailing what changes will be made to their safety program and a timeline as to when the changes will be implemented.
3. Hiring an independent safety consultant who shall audit the Contractor's procedures and operations. The consultant shall compile a plan detailing what changes the Contractor shall implement. This report shall be submitted to the TCI, Construction Manager, and Manager of Construction Safety Services.
4. Notwithstanding 01860 paragraph 1.05 (B)(9)(c), Disciplinary Action Matrix, above in 1.07 (C)(2), shall be used for determining the appropriate corrective action.
5. Conduct a "Safety Stand Down" (suspend all work or any portion thereof) in accordance with the provisions of the General Conditions, Article G-10-04. Suspended work shall not be allowed to resume until the Contractor has completed the following actions for review and acceptance by the TCI:
    a) Hazardous conditions leading up to the Safety Stand Down shall be abated.
    b) Training of such type and duration shall be conducted to educate personnel on the awareness of, identification of, and correction of hazards leading up to the stand down.
    c) Document the completion of items a. and b. above.

It is the responsibility of the Tenant to enforce these requirements.

E. TOUR GUIDELINES

1. It is imperative that the highest degree of protection is afforded to all individuals touring any Port construction site. The following guidelines have been prepared as general instructions for the organization, direction and safe conduct of such tours:
    a) Escorted Visitors: While on the job site, non-construction personnel or groups shall be accompanied at all times by an authorized representative, the TCI, the Contractor, or other designee familiar with the job site.
    b) Notification and Tours: Personnel tours including technical inspections need to be cleared through the TCI, allowing maximum advance notice. The TCI shall be consulted to coordinate the tour plan, identify specific rules, and to ensure necessary safety precautions are taken.

c) Safety Enforcement: Before entering a job site, all visitors must be informed regarding the need for careful, orderly conduct and notified of any special hazards that may be encountered.

d) Personal Protective Equipment: All visitors and tour groups must comply with proper dress, footwear, personal protective equipment or other safety requirements deemed appropriate.

1.08 CONTRACTOR ADMINISTRATIVE PROCEDURES

A. PROJECT SAFETY INSPECTIONS

1. Unsafe conditions or acts having the potential to cause bodily injury or property damage are classified as either “Imminent Danger” or “Serious.” In either case, action shall be taken immediately to correct the situation. Any item(s) that cannot be corrected immediately are required to be abated within 24-hours of notification. In the interim, other steps shall be taken to insure the safety of employees or the public.

2. The Construction Safety Inspection Report (CSIR) will be used by the Port Construction Safety Management as the field report for recording the Safety Manager’s observations in Section One(see Appendix D).

The following instructions apply to the use of this form:

a) Contractor’s Corrective Action (Section Two): The Contractor shall note the action taken to abate the observation. If an item is abated immediately, it will be so noted in Section One by the Port Safety Manager.

b) Date Corrected: The Contractor, upon completion, shall enter the date in the appropriate column.

c) Submittal Procedure:

i. Email distribution will be used on projects not utilizing LiveLink

2) When corrective action has been completed, the Contractor’s Project Manager or Designee will electronically sign and date the form and return it to the Port construction project manager

3) The Port’s construction project representative will review the form and follow-up to ensure the “Contractor’s Corrective Action” has been addressed, initialing each item corrected.

4) The Port’s construction project representative will discuss the noted observations at the Weekly Contractor Progress Meeting.

5) The electronically signed copy of the form shall be returned to the Manager of Construction Safety Services within five working days.

B. ACCIDENT INVESTIGATION AND REPORTING PROCEDURES

1. All accidents and incidents occurring from operations or work performed under the contract shall be reported, verified, investigated, and analyzed as

prescribed by the Port of Seattle Construction Safety & Health Manual. Contractors and other individuals involved in the work shall instruct employees and other personnel to follow these procedures if someone is injured.

a) Seek medical assistance for anyone injured. The injured person's supervisor will see that first aid is administered.

b) When a serious accident or emergency occurs/exists, secure the incident area tightly and quickly except for rescue and emergency personnel.

c) Send individuals as required, to assist or direct any emergency personnel arriving on the site.

d) The accident scene shall not be disturbed until released by the Incident Command or Manager of Construction Safety Services, except for circumstances where "Imminent Danger" exists to those performing any emergency services.

e) Immediately notify the TCI and Manager of Construction Safety Services (or designee) regarding any accident or injury requiring more than First Aid treatment, any third-party incident, or any equipment or property damage estimate in excess of $1,000. Notify the Manager of Construction Safety Services of all other incidents including near miss incidents as soon as possible following the event.

f) Washington State Department of Labor and Industries must be notified immediately by the Contractor in the event of an accident involving the death or in-patient hospitalization of any employee.

g) Employees must report all injuries or occupational-related illnesses as soon as possible to their employer or immediate supervisor.

h) A detailed written report, identifying causes and recommending corrective action, must be submitted to the TCI and Manager, Construction Safety Services within 24 hours. No supervisor may decline to accept a report of an injury from a subordinate.

i) Within 48-hours of a Recordable or Lost Work Day Case Injury, incident involving 3rd party, or property damage incident, the Contractor shall meet with the TCI and Manager of Construction Safety Services. The meeting shall discuss the status of the injured employee, the root cause of the incident, corrective action implemented, the Job Hazard Analysis, and retraining of the employee and supervisor.

j) Report all accident exposures and near miss incidents that occur on the job site. These records are to be maintained and submitted to the TCI or other designated authority upon request and shall include but not be limited to:

    1) First-aid injuries not reported on the OSHA No. 300 Form.

    2) The Contractor's OSHA 300 Form.

k) The above information shall be provided only to authorized personnel including the TCI and Manager of Construction Safety Services.

l) All questions from the media regarding any incident occurring on site shall be referred to the Port's Public Affairs Manager via the TCI.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

End of Document

APPENDIX A

SAMPLE CONTRACTOR'S SAFETY PLAN

The Contractor is responsible for reviewing the requirements found and referenced in this Document, the Contract, the Port of Seattle Construction Safety & Health Manual as a minimum, and incorporating any additional specific, or unique safety requirements into their written plan. The Contractor's Safety Plan shall include but not be limited to the following guidelines:

A. GENERAL PROVISIONS

1. **Compliance**: Provisions for accident investigations and reporting, formal incident review, reporting, corrective action and disciplinary action procedures meeting the minimum Port of Seattle requirements.

2. **Job Hazard Analysis (JHA)**: The Contractor shall complete detailed, written Job Hazard Analysis for the work to be performed, identifying hazards that may exist or be created, outline the equipment to be used, and what procedures and/or safety equipment will be used to eliminate or reduce those hazards. The Contractor shall use the form provided in the Port of Seattle's Construction Safety & Health Manual.

3. **Medical Treatment**: Provide medical treatment in compliance with Federal, State and local requirements. Names of individuals CPR and First Aid trained.

4. **Site Specific Emergency Procedures**: As related to injuries, weather or emergencies at an active POS facility including pre-determined sites for assembly and measures for accounting of employees shall be included. Emergency numbers shall be posted at the given work area(s):

Fire or Ambulance from a non-Port hard-line phone	911
Fire or Police from a Port hard-line phone	9911
Fire or Police Emergency	(206) 433-5380

5. **DOSH/OSHA Requirements and Personal Protection**: Safety and health provisions for providing adequate lighting, ventilation, hearing conservation, CO monitoring, and housekeeping. A written Personal Protective Equipment Assessment for head, face, eye, and hand and torso protection shall be included.

6. **Personnel Instruction**: The Contractor must identify the greatest number of employees to be working at any one time during peak construction periods, the company policies for initial safety indoctrination of all employees, and company plans for continued safety education for all employees, including weekly safety meetings, POS Safety Orientation, Stretch & Flex, Asbestos Awareness training, and English as a second language.

7. **Responsibilities**: Acknowledgment that the Contractor is totally responsible for compliance with OSHA, DOSH, Port or other applicable

rules and orders. Additionally, the plan will require a place of employment that is free of unsanitary or hazardous conditions that would harm an employee's health or safety.

8. **Safety Inspections**: Detailed information concerning how safety inspections will be conducted, their frequency, and their documentation.

9. **Safety Personnel**: State the name of the Contractor's Safety Representative(s), their experience and qualifications (i.e. Training in the OSHA 500, 30-hour or 10-hour) Indicate their authority to take the appropriate measures to eliminate hazards or stop work until hazardous conditions are corrected.

10. **Safety Requirements, Electrical**: Testing, inspection and repair of electrical equipment, GFCI Program, lockout/tagout procedures, how existing circuits will be located, and the installation of electrical circuits in accordance with the National Electric Code or Port Mandated Requirements.

11. **Safety Requirements, Equipment**: Operation, inspection, and maintenance for trucks and heavy equipment such as backhoes, dozers, motor graders, elevated work platforms, powered industrial trucks, and all hand and power tools.

12. **Safety Requirements, Ladders**: Types of ladders for specific uses and their training requirements.

13. **Site Layout**: A layout drawing of the site indicating access roads, fire and ambulance lanes, location of first aid stations, location of required alarm systems, location of offices, parking for private vehicles and equipment, and storage of all flammable and/or combustible liquids, gases, or other hazardous materials.

14. **Storage**: Requirements for storage of flammable and combustible liquids or gases.

15. **Field Sanitation**: Provisions for toilet and hand washing facilities, including the frequency at which they will be cleaned and maintained.

B. SPECIAL PROVISIONS

Depending on the type of construction, additional items must be incorporated into the Contractor's Safety Plan.

1. **Confined Space Entry**: Procedures for confined space entry and work operations in and around confined spaces (including elevator shafts) as well as emergency measures. These procedures must meet or exceed the Port of Seattle requirements found in the Port of Seattle Construction Safety & Health Manual. When entry is to be made into a Permit Required Confined Space the Port of Seattle Fire Department shall be contacted prior to entry and at completion of shift.

2. **Respiratory Protection Plan**

   a) Submit a letter signed by the Contractor stating that all employees or agents required to wear a negative pressure or supplied air respirator have been medically evaluated in accordance with WAC 296-842.

b) Submit National Institute for Occupational Safety and Health (NIOSH) certification for all respiratory protective devices utilized on site, including a list of approved components (parts) for each type of respirator that may potentially be used on the project.

c) Submit a letter signed by the Contractor stating that respirator fit testing is current for all Contractor employees and agents who wear negative pressure or supplied air respirators. This fit testing shall be in accordance with quantitative procedures as detailed in WAC 296-842 and 296-62-07715.

d) Respiratory protection requirements for work impacting the following regulated materials:

1) Asbestos (see Section 02085)
2) Lead (see Section 02080)
3) Light ballasts and universal waste lamps (see Section 02 84 16)
4) PCBs and PCB-containing materials (see Section 02 84 33)
5) PCB caulk (see Section 02 84 33.13)
6) Fugitive and silica dust (see Section 02083)

3. **Steel Erection**: These requirements shall meet or exceed the guidelines of Chapter 296-155 WAC Part P, and shall include pre-planning, hoisting operations, fall protection procedures, overhead protection, and Site-Specific Erection Plan.

4. **Cranes**: Use of cranes or derricks and the testing and inspection thereof, including hooks, latches, wire rope, operator certification, boom stops, load charts, wind speed, warning devices, fire extinguishers, crane operation signals, suspended work platform pre-lift planning, and critical lift plans.

5. **Excavations**: Excavation plans must indicate sloping, documented daily inspections, shoring, barricading, excavation access, fall protection, and excavated material storage.

6. **Fall Protection**: How 100% protection will be maintained, identify the use of personal fall arrest equipment, fall protection systems, and fall protection work plans for heights 4-feet. NOTE: The Monitor System is prohibited.

7. **Formwork**: Submittal of formwork and false work drawings for review and approval to the TCI.

8. **Hazard Communication Program**: Including SDS, their location, Master List of Chemicals, Personal Protective Equipment, Training, Labeling, and SDS review and special procedures for sealers, coatings or specialty paints.

9. **Interruption of Fire/Security Systems**: Plans shall include measures and/or procedures to provide interim fire and security protection to facilities or areas affected by interruptions. These include automatic detection devices and alarms, automatic sprinkler systems, fire pumps, fire hydrants, applicable water supplies and reservoirs.

10. **Lock-out/Tag-out**: Procedures for lock-out/tag-out of energy sources during work operations. The Contractor shall include as part of the Lock-

out/Tag-out program protocol for Clearance Orders and Switching Orders on electrical and mechanical systems.

11. **Scaffolding**: "Use" tag system, planking, guardrails, toe boards, anchor points, fall protection, access points, and inspections of.

12. **Fire Protection**: Including Hot Work Permits, Welding, shields, fire extinguishers, ventilation, PPE, fire watch and cylinder storage.

13. **Work Adjacent To Occupied Spaces**: Procedures for ensuring occupants of spaces adjoining, above and below construction areas will be protected from hazards created by construction, including but not limited to, falling debris, equipment noise, and penetration of partitions, ceilings, and floors.

14. **Competent Persons**: Where regulatory requirements (DOSH) specify the use of Competent Persons, the Contractor shall submit in writing the names of those persons. Their area of competency and applicable experience/training documentation.

15. **Energized Electrical Work Plan**: Submit detailed procedures for working on and guarding of energized equipment or conducting system outages.

16. **Seaport Safety**: Contractors shall submit a safety plan complying with all Federal, State, Corp of Engineers, Port of Seattle, and Coast Guard rules applicable to this type of construction.

17. **Health Considerations**: The Contractor shall submit a plan that addresses safety & health procedures for working in contact with contaminated soils. This plan shall be revised and resubmitted in the event that conditions encountered during the work are different than those initially planned for. It shall also include:

    a) Identification and evaluation of the hazards and risks associated with each work task.

    b) The names and qualifications of each contractor's representative(s) in charge of the work and present at the project when pipeline removal is performed.

    c) Identification of supervisory personnel and alternative responsibilities for site safety/response operations.

    d) Determine levels of personnel protection to be worn for various site operations.

    e) List equipment with adequate nomenclature by item that will be used at the job site and the date and location where the TCI can inspect this equipment.

    f) Establishment of emergency procedures, such as: escape routes, fire protection, signals for withdrawing work parties from the site, emergency communications, wind indicators, including facility notification.

    g) Identification and arrangements with the nearest medical facility for emergency medical care of both routine-type injuries and toxicological problems. Submit the name, location, and telephone number of this facility.

18. **Conveyor Safety Policy**: To include procedures for deactivation of conveyor systems, lockout/tagout of systems, working around operating conveyors and required Port of Seattle conveyor safety training.

19. **STS Tunnel Access Procedures**: What procedures employees will follow if work requires access into the STS system.

20. **Demolition**: The Contractor shall submit a plan to include how they will safely demolish existing structures, ensure security, safe guard employees and the public from falling material, electrical hazards and air quality issues. An Engineering Survey performed and signed by a Qualified Person shall be included.

21. **Public Protection Plan**: The actions the Contractor will take to protect the public while performing construction or demolition on the project. The plan shall include, but not be limited to, barricades, fencing, and signage. "Public" is defined, as anyone not associated with the project - general public, POS and tenant employees.

C. SITE SPECIFIC SAFETY PLAN WORKSHEET

1. The following worksheet is to be used for Port Construction Services On Call Contracts for each work authorization. Once a safety submittal has been made and accepted for the On Call contract, Contractor will submit for each work authorization the following worksheet including support documentation referenced within the worksheet prior to beginning work.

Port of Seattle	JOB HAZARD ANALYSIS WORKSHEET			Site Specific Plan Addendum	
				Person in Charge* for Reporting Hazards and Injuries:	
Location/address:				Phone Number:	
				* requires OSHA 10 & complete documented daily inspections	
Title of Job/Operation:		Date:		Day of Safety Meetings:	
		Work Order #:		Emergency action plan	Call Fire Dept 787-5380 on airport grounds. 911 everywhere else. For large scale emergency meet at:
Analysis Made By:		Contact person:			
Analysis Reviewed By:		Phone Number:			
Location of Master Prevention Program:					

Sequence of Basic Job Steps	Potential Hazards/Ergonomics	Recommended Safe Job Procedures and Required PPE

Supervisor Signature:		Received by RE/CM:	

Will the Scope of Work consist of the following tasks? (check all that apply)			
	Traffic control*		Confined Space Entry*
	Welding, Cutting, Grinding*		Heavy Equipment
	Trenching or Excavation*		Flammable or Combustible materials[(a)]
	Carpentry		Steel Erection*
	Painting, Staining, Sealant*[(a)]		Ladder or Scaffold work
	Demolition (Structural)*		Roofing
	Energized Electrical*		Regulated Materials
	Use of a Crane/Boom/Hoisting device*		Hazardous Materials
	Work from heights of 6' or greater*		Conveyors*

* Requires additional paperwork – checklists, plans, permits, shut-down notice, etc.

[(a)]List Chemicals to be used on the project.
Material Safety Data Sheets attached ☐ Yes ☐ No *Physical MSDS must be on-site.

(*) A ***Chemical Exposure Plan*** will be required for products containing isocyanates, methylene chloride, Hydroflouric Acid, lead, silica and processes involving floor sealers, traffic coatings, terrazzo sealers or specialty paints.

Description of public protection measures ("Public" is defined as anyone not associated with the project - general public, POS, Tenant, and Airline Employees):

Employee Disciplinary for non-compliance with set forth safety policies and procedures will be consistent Port of Seattle's disciplinary action matrix as described within your site-specific safety plan and site-specific orientation.

Sign Up			
Print Name	**Signature**	**Print Name**	**Signature**

APPENDIX B

CONTRACTOR CONFINED SPACE ENTRY PROGRAM CERTIFICATE

I hereby certify that the attached Confined Space Entry Program meets or exceeds the requirements of DOSH standards WAC 296-804 and the Port Of Seattle's Confined Space Entry Program.

My employees will utilize the Port of Seattle (POS) confined space entry permit(s). They will complete all other sections of the permit that are appropriate for the confined space being entered.

My employees will be informed that they must coordinate their confined space entry procedures with other Contractors and POS employees working in or around the confined space. If entering into a Permit Required Confined Space, we will first contact the Port of Seattle Fire Department, notifying them of the specific location and activity to be performed.

My employees, who will be acting as authorized entrants, attendants, entry supervisors, and air testers, have been trained in accordance with the DOSH procedures and will be made aware of all of the POS procedures for entering confined spaces.

After the confined space entry project is complete my employees will make the TCI and Construction Safety aware of any new hazards confronted or created during entry operations. My employees will contact the Port of Seattle Fire Department and advise them that operations have ceased.

A copy of finalized permit with all attachments will be provided to the TCI at the end of each project.

Contractor's Name: _____

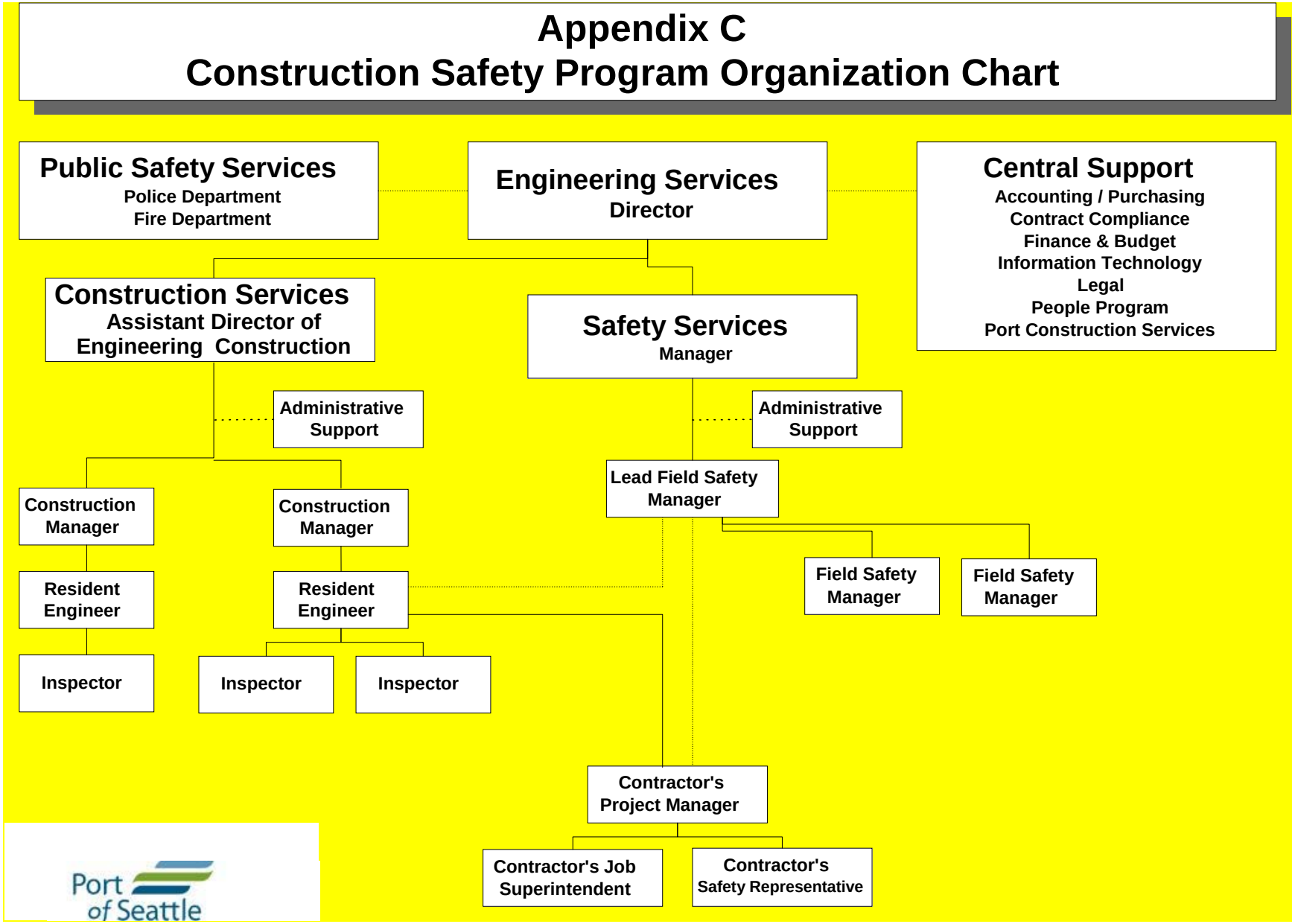
Contractor's Signature: _____

Company Name: _____ Date: _____

Port of Seattle TCI: _____

Date: _____

Appendix C
Construction Safety Program Organization Chart



Port of Seattle

CSIR [Construction Safety Inspection Report]

CSIR DATE	Click here to enter a date.
CONTRACTOR NAME	
PROJECT NUMBER	
PROJECT TITLE	
ACCOMPANIED BY	

SECTION ONE: To be completed by Port of Seattle, Construction Safety Management

CSIR PREPARED BY	
TITLE	
DATE	Click here to enter a date.

ITEM NUMBER	SAFETY OBSERVATION	REFERENCE
001		
002		
003		
004		

SECTION TWO: To be completed by the Contractor Project Manager, except gray column

NOTE: All corrective actions shall be implemented within 48-hours, and the signed report returned immediately or within 5 working

PROJECT MANAGER OR DESIGNEE TYPE NAME TO ACKNOWLEDGE RECEIPT	
DATE	Click here to enter a date.

ITEM NUMBER (FROM ABOVE)	CONTRACTOR'S CORRECTIVE ACTION TAKEN	DATE ITEM CORRECTED	POS INSPECTOR (POS USE ONLY)	FINAL SAFETY REVIEW (POS USE ONLY)
001		Click here to enter a date.		Choose an item.
002		Click here to enter a date.		Choose an item.
003		Click here to enter a date.		Choose an item.
004		Click here to enter a date.		Choose an item.

Port of Seattle

CSIR [Construction Safety Inspection Report]

SECTION THREE: To be completed by Port of Seattle, Construction Safety Management	
CSIR PREPARED BY	
TITLE	
DATE	Click here to enter a date.

ITEM NUMBER	FINAL SAFETY REVIEW COMMENTS
001	
002	
003	
004	

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. The Contractor shall supply all labor, materials, vehicles, services, insurance and equipment necessary to remove, transport, recycle and dispose universal waste lamps, and non-PCB ballasts in accordance with all applicable federal and state regulations and these specifications.

B. The Contractor shall supply all labor, materials, vehicles, services, insurance and equipment necessary to remove containerize and transfer to the Port all Polychlorinated Biphenyls (PCB) containing light ballasts (PCB ballasts) or other PCB containing equipment regulated by 40 CFR 761 or WAC 173-303.

C. This project involves complete removal of light fixtures in areas of new construction and/or demolition.

D. Refer to the design drawings for specific information about location of lamps and/or ballast removal. The work includes the following:

1. Dismantling of light fixtures and separation of ballasts and lamps.
2. Determination whether ballasts are PCB ballasts or non-PCB ballasts. Unmarked ballasts shall be considered to be PCB ballasts.
3. Package, label and store lamps in accordance with WAC-173-303-573, Standards for Universal Waste Management.
4. Immediate identification and notification to Port PM regarding any leaking PCB Ballasts.
5. Package, mark, label and store all PCB or PCB containing/contaminated waste generated as a result of work activities in in accordance with 40 CFR 761.
6. Collection and containerization of all non-PCB ballasts.
7. Coordinating transfer of all PCB ballasts or other PCB containing/contaminated waste to the Port of Seattle within 30 days of generation of waste.
8. Coordinate proper recycling of all non-PCB ballasts to approved recycling facitlity.
9. Coordinate transportation and recycling of lamps in accordance with WAC-173-303-573, Standards for Universal Waste Management.

1.02 DEFINITIONS

A. ASTM – American Society for Testing and Materials

B. Certified Industrial Hygienist (CIH) – An industrial hygienist certified in the Comprehensive Practice of Industrial Hygiene by the American Board of Industrial Hygiene

C. Contractor – The individual or business with whom the Port has contracted to perform the work as specified herein

D. DOE – Washington State Department of Ecology

E. Port construction project manager – The Port of Seattle's designated contact person

F. EPA – United States Environmental Protection Agency

G. L & I – Washington State Department of Labor & Industries

H. NIOSH – The National Institute for Occupational Safety and Health

I. OSHA – The Occupational Safety and Health Administration

J. Universal Waste Lamps – any light bulb, lamp or tube that contain constituents, such as mercury or lead that could otherwise cause a Dangerous Waste designation when discarded but can be managed as universal waste. The following lamps must be considered universal waste lamps and managed accordingly:

1. Fluorescent tubes
2. High intensity discharge lamps (including mercury vapor, metal halide, and high pressure sodium)
3. Compact fluorescent lamps
4. Incandescent bulbs
5. Any other lights or lamps that are dangerous waste

K. WAC – Washington Administrative Code

L. WISHA – Washington Industrial Safety and Health Act as enforced by the Washington State Department of Labor and Industries

1.03 APPLICABLE REGULATIONS AND STANDARDS

A. The applicable sections, latest editions and addenda of the following government regulations, codes, industry standards and recommended practices, form a part of these specifications.

1. U.S. EPA - Environmental Protection Agency, Toxic Substances Control Act Title 40 Code of Federal Regulations Part 700 (40 CFR 761)
2. U.S. EPA - Environmental Protection Agency, Standards for Universal Waste Management (40 CFR 27)
3. U.S. DOT - Department of Transportation, Title 49 Code of Federal Regulations
4. DOE - Washington State Department of Ecology, Dangerous Waste Regulations, Washington Administrative Code 173-303
5. Washington State Department of Labor and Industries (L&I) WISHA - Washington State Industrial Safety & Health Act, Chapter 296-800 Washington Administrative Code (WAC), Safety and Health Core Rules
    a. WAC 296-800-170 Hazard Communication Standard
6. L&I Chapter 296 -24 WAC, General Safety and Health Standards
    a. L&I Chapter 296-62 WAC, Occupational Health Standards including: WAC 296-842 Respiratory Protection
7. L&I Chapter 296-155 WAC, Construction Standards

8. Puget Sound Clean Air Agency (PSCAA), Article 4
9. All other applicable Federal, State, county and city standards codes

1.04 COORDINATION

A. Contractor shall coordinate ballast removal with the following Port of Seattle Departments:

1. Port of Seattle Aviation Maintenance, Electrical Department: The Contractor must coordinate with the Electrical Department for disconnection and lockout of electrical service. This coordination will be communicated through the Port construction project manager.
2. Port of Seattle Aviation Environmental Programs: The Contractor must coordinate with Aviation Environmental Programs to coordinate transfer of any PCB ballasts or other PCB containing materials to Port of Seattle.

1.05 QUALITY CONTROL

A. Use properly trained and experienced workers to perform the removal and containerization of PCB ballasts and universal waste lights and lamps.

PART 2 PRODUCT

2.01 MATERIAL AND EQUIPMENT

A. Containers

1. All PCB Ballasts or PCB contaminated material or Non-PCB ballasts shall be packaged in sealed steel drums with appropriate UN Performance Package Ratings.
2. All drums must be in shipping condition and water tight with gaskets intact.

B. Labels

1. All containers holding PCB ballasts or PCB Contaminated Material shall be labeled with the Large PCB Mark (M_L) in accordance with 49 CFR 761.40 marking requirements.
2. All containers holding non-PCB Ballasts shall be labeled with the words “non—PCB Ballasts”.
3. All containers that contain Universal Waste Lamps shall be labeled with The words universal waste labels.
4. All containers designated for disposal shall be marked with the project number.

C. Personal Protective Equipment

1. Provide proper and appropriate Personal Protective Equipment, as necessary for the performance of this work.

D. Removal Equipment

1. A sufficient supply of scaffolds, ladders, lifts and hand tools shall be provided as needed.
2. Additional support equipment as needed.

PART 3 EXECUTION

3.01 WASTE STREAM DETERMINATION, PACKAGING, AND MARKING

A. Waste Stream Determination-Ballasts

1. Before removing the ballast from the fixture, the Contractor shall distinguish PCB Ballasts from non-PCB ballasts by looking for the words “No PCBs” on the ballast. If the words “No PCBs” do not appear on the ballast, the ballast must be considered PCB Equipment as defined in 40 CFR 761.3. If the words “No PCBs” do appear on the ballast, the ballasts shall be considered non-PCB. Contractor will also determine if the ballast is leaking.

2. The determinations made by the Contractor will result in the following three possible waste streams that must be segregated:

   a. PCB Ballasts

   b. Leaking PCB Ballasts and PCB contaminated materials

   c. Non-PCB Ballasts (leaking non-PCB ballasts can be packaged with the non-leaking, non-PCB ballasts).

3. Any leaking PCB ballasts must be reported to the Port construction project representative immediately.

B. Waste Stream Determination – Universal Waste Lamps

1. All lamps removed from the site shall be considered universal waste lamps as defined by 40 CFR 273.5 and WAC 173-303-040 provided the lamps are managed accordingly.

2. Any accidently broken lamps are fully regulated under Federal Resource Conservation and Recovery Act (40 CFR 261) and Washington State Dangerous Waste Regulations (WAC 173-303.

3. Any onsite disposal of universal waste lamps constitutes improper disposal of fully regulated dangerous waste and would be considered a violation of the Federal Resource Conservation and Recovery Act and the Washington State Dangerous Waste Regulations.

C. Containerization and Marking

1. All non-leaking PCB Ballasts shall be packaged in steel drums marked or labeled with the Large M_L PCB Mark. The “taken out of service” date shall be marked on the drum as the date the first ballast is removed and placed in the drum.

2. All leaking PCB ballasts shall be double bagged, packed in steel drums and marked or labeled with the Large M_L PCB Mark. The “taken out of service” date and “Leaking PCB Ballasts” shall be marked on the drum. Upon notification to Port of Seattle Aviation Environmental Programs, Leaking PCB Ballasts will be removed from the site immediately by the Port.

3. Any PCB contaminated material generated as a result of the work shall be packaged in steel drums marked or labeled with the Large M_L PCB Mark. The accumulation start date shall be indicated on the drum as the date the first piece of contaminated material is placed in the drum.

4. All non-PCB ballasts shall be packaged in steel drums and marked with the words “Non-PCB Ballasts for Recycling”.

5. Lamps shall be removed and containerized in a manner to prevent breakage. If a lamp breaks, the Contractor shall immediately clean-up debris and place in double plastic taped bags and placed in a container specified for broken lamps and labeled and managed in accordance with 40 CFR 261.

3.02 CLEANUP PROCEDURES

A. All leaking PCB ballasts shall be addressed immediately. Upon discovery of leaking PCB ballasts, the Contractor shall commence with cleanup as follow:

1. Clear the area and prohibit those not involved with cleanup from entering the area. Ventilate area if possible.

2. Contact the Port construction project representative immediately.

3. Don appropriate personal protection equipment for handling organic liquids as specified in the site specific safety plan.

4. Ensure that the light fixture is turned off and disconnect electricity at the fuse or breaker box. Follow all lockout/tagout procedures.

5. Remove the fluorescent lamp if it is still affixed and manage according to this Section.

6. Remove the ballast and immediately double-bag in plastic.

7. Place ballast in steel drum, seal the drum, and mark the drum as indicated in 3.01 B.

8. If there are any uncontained liquids or other material on a surface other than the ballast, and prevent area from being disturbed.

9. Arrangements will be made by Port of Seattle Aviation Environmental Programs to remove the drums containing leaking PCB Ballasts from the site within 30 days for storage in accordance with 49 CFR 761.65(b).

B. Clean-up Procedures for Broken Lamps

1. The Contractor shall have a cleanup kit on site prior to removing/dismantling universal waste lamp fixtures.

2. Avoid breathing dust created by broken lamps. Allow vapor to dissipate.

3. Do not vacuum the broken lamps.

4. Ventilate area and leave area for 5 minutes prior to returning to clean up broken glass. Keep people from the site.

5. Use approved and appropriate cleanup solvents and neutralizers.

6. Place all broken glass and phosphor powder in double plastic taped bags, place in sealed containers, and label as specified in this Section.

3.03 TEMPORARY STORAGE, TRANSPORTATION AND DISPOSAL

A. Temporary Storage

1. The Contractor may temporarily store non-leaking PCB ballasts onsite for a maximum of 30 days. Contractor must arrange for transfer to Port of Seattle within 30.
2. Leaking PCB ballasts cannot be temporarily stored onsite. If leaking PCB ballasts are discovered, immediately contact Port construction project representative.
3. Universal waste lamps that have been removed, properly packaged, and are awaiting disposal must be stored in a manner consistent with WAC-173-303-573 and the contractors Pollution Prevention Plan.
4. Under no circumstances shall universal waste be stored onsite for longer than 1 year.

B. Transportation and Recycling

1. PCB Containing Ballasts
   a. The Port will take possession of and remove from the project site, all non-leaking PCB containing ballasts at a minimum of every 30 days.
   b. The Contractor is responsible for scheduling transfer of drums to the Port. The Contractor must notify the Port construction project representative at least 48 hrs in advance to coordinate pickup of drums by the Port.
2. Non-PCB Containing Ballasts
   a. The Contractor is responsible for soliciting a waste service provider and any cost negotiations regarding disposal.
   b. The Port of Seattle requires that all non-PCB ballasts are recycled. Landfill of any light ballast is not allowed under this contract. The Contractor must ensure that the disposal/recycling facility will separate metal components from the ballast for recovery.
3. Universal Waste Lamps
   a. The universal waste lamps shall be packaged, labeled and transported to the Port approved recycling facility. Include documentation in form of log, invoice, manifest, bill of lading or other shipping documents. This documentation shall include the name and address of the generator, address of the site where the waste was generated, quantity, date of shipment, name and address of hauler and name and address of waste facility receiving waste.

      These boxes shall be shipped to the following Port approved recycling facility:

      Ecolights Northwest
      1915 South Cargiat Drive
      Seattle, WA 98108
      Facility Phone: (206) 343-1247

If an alternate permitted facility has been identified by the Contractor, the facility must be approved by the Port.

b. The Port of Seattle shall be listed as the Generator of the universal waste lamps on all shipping papers,

c. The Contractor shall provide a shipping record to the Port at the time of shipment.

d. The Contractor shall arrange for all certificates of recycle to be mailed to the Port at the following address:

Port of Seattle AV/ENV
PO Box 68727
Seattle, WA 98168-0727

End of Section

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Soils excavated within the projects areas, as shown on the drawings, are potentially contaminated. The Contractor, using visual and olfactory methods, will identify potentially contaminated soil. If contaminated soil is encountered, the Contractor shall notify the Port construction project representative and a Port authorized Environmental Agent will determine if the soil requires special handling. In these areas, only soil requiring excavation for project construction will require special handling. Soil beyond construction excavation limits will not require excavation unless free draining product is observed or other special conditions exist in which case the Port construction project representative will direct the Contractor in additional excavation. Soils determined to be contaminated by the Environmental Agent will be hauled and disposed as contaminated materials in accordance with 3.02 of this Specification Section.

B. Notify the City of SeaTac prior to handling contaminated soil to the soil disposal facility. The notification shall include:

1. An estimate of the number of truck-trips, the haul destination, and the period in which these trips will be made (e.g., 20 truck-trips to the Waste Management Facility over the two-week period beginning on March 1, 2014).

2. For scheduled haul-outs, the City shall be notified at least 24 hours, but no more than 7 days, before the scheduled hauling start time. For unscheduled haul-outs, the Contractor shall make every attempt to achieve the same notification schedule. If the schedule for unscheduled haul-outs cannot be achieved, the Contractor shall notify the City as soon as possible. All notifications and correspondence shall be made to:

a. Dale Schroeder
Port of Seattle Project Manager

b. City of SeaTac
Public Works Department
Port of Seattle Project Managering Division
17900 International Blvd, Suite 401
SeaTac, Washington 98188-4236
Phone: 206-439-4741
Fax: 206-241-3999
Email: dales@seatac.wa.gov

C. Cover all soil stockpiles and maintain stockpile areas in accordance with Section 02270- Temporary Erosion and Sediment Control Planning and Execution.

D. Sweep clean the surface of the active pavements outside the current work continuously and remove all debris, rubble, or litter completely during each working shift.

1.02 HEALTH AND SAFETY

A. The Contractor is required to implement all health and safety provisions as required by Section 01860. These provisions include any special monitoring,

personal protective equipment, or work plans to accommodate contaminated soil or material handling. Use of environmental characterization data may not be appropriate for health and safety purposes.

1.03 SUBMITTALS

A. Prior to excavation of any subsurface materials, the Contractor shall submit a Contaminated Soils Management Plan to the Port of Seattle Project Manager. The Contaminated Soils Management Plan must be approved by the Port of Seattle Project Manager and Port of Seattle Environmental Programs prior to any excavation of subsurface materials. The Contaminated Soils Management Plan must include the following:

1. Identification of all soil disposal/recycling facilities to be used on the project. Acceptable facilities are identified in 3.02 of this section.

2. Identification of all fill sites, disposal facilities and/or end uses of material determined to be Type D soil in accordance with 3.02 of this section.

3. Contingency for delivery of Type C Contaminated Soil to the Port's Contaminated Soil Stockpile Facility located inside the Airport Operations Area (AOA). Access to the Contaminated Soil Stockpile Facility will require personnel with Airport Security badges.

4. Contingency for managing debris encountered during excavation that may disqualify soil for disposal or recycle at the approved facilities.

5. General description of how equipment operators, safety personnel and other applicable Contractor management will coordinate with the Port of Seattle Project Manager and the Port of Seattle Environmental Agents, if required, to facilitate handling of contaminated soil in accordance with this specification.

6. Description of all haul routes to be used on the project.

B. The Contractor shall include specific time frames for excavation in the Two Week Look Ahead Schedule described in Section 01324. Each excavation activity shall be given an individual line item description, time frame and duration.

1.04 DEFINITIONS

A. Environmental Agent (EA): Port environmental management organization representative responsible for oversight and implementation of certain Port environmental policy and procedures at Port construction sites. The EA is responsible for coordinating environmental requirements, monitoring Contractor performance relative to environmental specifications and liaison with the Port of Seattle Project Manager and Contractor representatives for oversight of and/or conducting environmental monitoring and sampling. EA activities may also include field screening and documentation of excavation, transport and disposal of contaminated materials.

B. Olfactory Indications (methods): Of or relating to the sense of smell. Soils contaminated with petroleum and other volatile constituents typically exhibit characteristic odors that can be detected (and sometimes identified) by smell.

C. PID: Photo ionization detector. A field instrument that is used to detect the presence of and give a relative indication of the concentration of vapors emitted from volatile constituents (contamination) in environmental media (soil and water).

D. Soil (waste) Profile: A characterization of the chemical and physical properties of a waste material including the types of contaminants and their concentrations as measured by approved laboratory analytical methods. A profile is required by the receiving permitted disposal or recycling facility.

E. Special Handling: Refers to hauling and disposal of soils that, because they are contaminated, cannot be reused in place as backfill or as general fill at another location. Such soils must be hauled to and managed at a permitted disposal or recycling facility.

F. Type A Contaminated Soil: Soil that must be removed from the Project site and has been determined by the Port of Seattle Project Manager or a representative Environmental Agent or Contractor to contain petroleum hydrocarbons in concentrations exceeding state or federal cleanup standards or special Port determined criteria. Type A soil requires disposal at one of the approved facilities listed in 3.02(B) of this section.

G. Type B Contaminated Soil: Soil that must be removed from the Project site and has been determined by the Port of Seattle Project Manager or a representative Environmental Agent or Contractor to contain petroleum hydrocarbons or other contaminants in concentrations that will require disposal or recycling at one of the approved facilities listed in 3.02(B) of this section.

H. Type C Contaminated Soil: Soil determined by Port of Seattle Project Manager or representative Environmental Agent to contain unknown constituent(s) and requires further testing and classification.

I. Type D Material: Material including soil, determined by the Port of Seattle Project Manager or representative Environmental Agent or Contractor not to require special handling with regard to this Contract. Classification of material as Type D material by the Port is not a certification nor does it release the Contractor of liability or obligation to meet any disposal or storage facility acceptance or testing requirements.

J. Unanticipated Contamination: Contamination unexpectedly found in an excavation or in other locations where there is no prior knowledge, information, or history to indicate possible spills or releases of contamination.

K. Visual Indications (methods): A preliminary evaluation of the potential presence of contamination based on visual observation. For example, fuel contaminated soils are frequently discolored or stained relative to non-petroleum impacted native soils or clean fill. Such discoloration often appears dull gray in color.

PART 2 PRODUCT – Not Used

PART 3 EXECUTION

3.01 EXCAVATION/TESTING

A. The field-testing for contaminated soil will be performed by the Environmental Agent or Contractor and will result in the following classification of material:

1. Type A Contaminated Material as defined in 1.04(F) of this section.
2. Type B Contaminated Material as defined in 1.04(G) of this section.
3. Type C Contaminated Material as defined in 1.04(H) of this section.
4. Type D Material as defined in 1.04(I) of this section.

3.02 DISPOSAL OF MATERIAL

A. Type A/B Contaminated Soil – Material determined to be Type A or B contaminated soil shall be hauled to one of the following facilities by the Contractor for disposal:

1. Waste Management Columbia Ridge Landfill – via Alaska Street Transfer Station: 70 South Alaska Street, Seattle, WA 98106

2. Allied Waste Roosevelt Regional Landfill – via Seattle Transfer Station: 2733 3rd Ave. So., Seattle, WA 98134

3. Cemex (Formerly Rinker Materials – 6300 Glenwood Ave., Everett, WA 98203

B. Type C Material - Material determined to be Type C is of unknown origin or special circumstances and shall be hauled and placed by the Contractor at the Environmental Soil Stockpile site depicted on the Contract drawings. Contractor will be relieved of responsibility for Type C material upon delivery to the Environmental Soil Stockpile.

C. Type D Material - Material determined not to require special handling (Type D) shall be hauled by the Contractor to a site determined by the Contractor. If testing or certification of this material is required by the receiving site, the Contractor shall complete these requirements. The Port will not certify or declare the material suitable for unrestricted use.

3.03 OTHER REQUIREMENTS

A. Upon approval of the Port of Seattle Project Manager, material determined to be Type A, Type B or Type C contaminated material may be, temporarily stockpiled within the construction area, but must be securely covered with a waterproof covering. The Port of Seattle Project Manager may require a liner beneath this soil.

B. The Port of Seattle Project Manager or an authorized agent of the Port will prepare and provide the Contractor with required documentation and shipping papers for hauling and disposal of Type A and Type B Contaminated soil.

C. The Contractor is not to haul any Type A or B material off-site until a material profile has been developed and a bill of lading has been issued. Each load of Type A or B material will receive an individual bill of lading issued by the Port of Seattle Project Manager or Environmental Agent or Contractor.

D. The Contractor shall provide the Port of Seattle Project Manager with all hauling receipts (or copies of receipts) from the receiving facility for all Type A and Type B Contaminated soil at least weekly.

E. Use of the Airport Environmental Soil Stockpile Facility: The Environmental Soil Stockpile facility is located adjacent to the snow equipment building at the southwest end of the airfield. Use of the Environmental Soil Stockpile Facility by the Contractor is prohibited unless approved by the Port of Seattle Project Manager and coordinated with Port Environmental Staff or Agents. The facility was designed to accommodate end dumping from single dump trucks and sufficient area is not provided to allow efficient maneuvering of truck and pup combinations. The Environmental Soil Stockpile Facility is located within the AOA at Sea-Tac

International Airport and associated access restrictions apply. The Environmental Soil Stockpile Facility will not accommodate soil-water slurries.

F. The Port of Seattle Project Manager or Environmental Agent may require shut down of excavation should unforeseen condition warrant.

End of Section

PART 1 GENERAL

1.01 SUMMARY

A. This item shall consist of planning, installing, inspecting, maintaining, upgrading and removing temporary erosion and sediment control Best Management Practices (BMPs) as shown on the drawings, in the Contractor's Erosion and Sediment Control Plan (CESCP), or as ordered by the Port construction project representative to prevent pollution of air and water, and control, respond to, and manage eroded sediment and turbid water during the life of the contract.

B. This work shall apply to all areas associated with contract work including, but not limited to the following:

1. Work areas
2. Equipment and material storage areas
3. Staging areas
4. Stockpiles
5. Access Roads

1.02 DESCRIPTION OF WORK

A. In order to comply with the requirements of this section, the Contractor shall:

1. Develop and submit a Contractor's Erosion and Sediment Control Plan (CESCP). The CESCP shall, at a minimum, include and address the following:
   a. Site Description and Drawings
   b. Contractor Erosion and Sediment Control Personnel
   c. Schedule and Sequencing
   d. BMP Installation
   e. BMP Maintenance
   f. BMP Inspection
   g. Record keeping
   h. BMP Removal
   i. Emergency Response
   j. Construction Dewatering
   k. Fugitive Dust Planning
   l. Utilities Planning
   m. Education
2. Revise and modify the CESCP during the life of the contract and maintain records.

3. Install, maintain, and upgrade all erosion prevention, containment, and countermeasures BMPs during the life of the contract, and removal at the end of the project.

4. Contain, cleanup and dispose of all sediment and convey turbid water to existing or proposed detention/treatment facilities.

5. Perform other work shown on the project drawings, in the Contractor Erosion and Sediment Control Plan, or as directed by the Port construction project representative.

6. Inspect to verify compliance with the CESCP requirements including BMPs; facilitate, participate in, and implement directed corrective actions resulting from inspections conducted by others including outside Agencies and Port employees/consultants.

7. Educate all Contractor and sub-contractor staff in environmental compliance issues at weekly meetings and document attendance and content.

1.03 SUBMITTALS

A. As part of the required Preconstruction Submittals, Section 01305 - Preconstruction Submittals and before NOTICE TO PROCEED is given, the Contractor shall submit the following:

1. Contractor Erosion and Sediment Control Plan (CESCP)

B. As required by the project, the following shall be submitted in accordance with Section 01330 – Submittals:

1. Oil Absorbent Pads

2. Silt Fence

3. Straw Wattle

4. Erosion Control Matting

5. Bonded Fiber Matrix

6. Catch Basin Protection

7. Temporary Piping

8. CESCL Certification Cards

9. CESCL Qualifications

1.04 DEFINITION

A. SWPPP: Stormwater Pollution Prevention Plan consisting of the following documents:

1. Temporary Erosion and Sediment Control Plan sheets in the contract documents;

2. Section 02270 - Temporary Erosion and Sediment Control Planning and Execution;

3. Section 01631 - Pollution Prevention Planning and Execution;

4. Contractor's Erosion and Sediment Control Plan (CESCP), both submitted by the Contractor.

5. Construction Storm Water Monitoring Plan developed by the Port.

B. BMP: Best Management Practice

C. NPDES: National Pollutant Discharge Elimination System

D. CESCP: Contractor's Erosion and Sediment Control Plan

E. IWS: Industrial Waste System Airport construction only

F. STIA: Sea-Tac International Airport Airport construction only

1.05 REFERENCES

A. The following rules, requirements and regulations specified may apply to this work:

1. Sea-Tac International Airport Rules and Regulations (current edition)

2. Port of Seattle Regulations for Airport Construction (current edition)

3. National Pollution Discharge Elimination System Waste Discharge Permit No. WA-002465-1

4. Stormwater Pollution Prevention Plan, as required by the NPDES Permit No. WA-002465-1.

5. Section 401 Water Quality Certification

6. Hydraulic Project Approval Permit (HPA)

7. Puget Sound Storm water Management Plan, Puget Sound Water Quality Action Team; 1998

8. WAC 173-201 A, Water Quality Standards of the State of Washington

9. Surface Water Design Manual, King County, Department of Natural Resources, (Current Edition)

10. Storm water Management Manual for Western Washington, Department of Ecology (Current Edition).

1.06 PERMITS

A. Work shall be conducted in accordance with NPDES permit No. WA- 0024565-1.

1. Work shall be conducted in accordance with Stormwater Pollution Prevention Plan, as required by the NPDES permit No. WA-002465-1

2. When a project requires a construction General NPDES Permit and the contractor is completely responsible for compliance, the Port will obtain the permit and the contractor shall accept transfer of the permit from the Port.

a. The Contractor shall submit a signed Notice of Transfer before Notice to Proceed. The form can be obtained at: http://www.ecy.wa.gov/biblio/ecy02087a.html

1.07 ADMINISTRATIVE REQUIREMENTS

A. The provisions of this section shall apply to the Contractor, subcontractors at all tiers, suppliers and all others who may have access to the work site by way of the contractor's activities.

B. Failure to install, maintain, and/or remove BMPs shown on the drawings, in the approved Contractor Erosion and Sediment Control Plan and specified herein, or by order of the Port construction project representative; or failure to conduct project operations in accordance with Section 02270 - Temporary Erosion and Sediment Control Planning and Execution will result in the suspension of the Contractor's operations by the Port construction project representative.

C. The Contractor shall be solely responsible for any damages, fines, levies, or judgments incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section.

D. Any damages, fines, levies, or judgments incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section will be deducted from payment due by Modification.

E. Any time and material costs incurred by the Port due to damages, fines, levies, or judgments incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section will be deducted from payment due by Modification.

F. The Contractor shall be solely responsible for any schedule impacts from damages, fines, levies, judgments, or stop work orders incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section. The project schedule will not be changed to accommodate the time lost.

G. Contractor shall not clear, grub, grade, demolish, or perform any earthwork after NOTICE TO PROCEED until the following has been installed per the project drawings, the approved Contractor Erosion and Sediment Control Plan, or as directed by the Port construction project representaive:

1. Silt Fence or other perimeter controls are in place.
2. Areas not to be disturbed are delineated with safety fence.
3. Temporary ponds and ditches are installed and vegetated or covered.
4. Permanent ponds used for sediment control during construction have been installed and vegetated or covered and modified with riser.
5. Water flows from off site are tight lined and directed away from work area.

6. All construction entrances are stabilized and tire wash systems in place and operational.

7. Catch basin inserts are installed in all catch basins that receive drainage from the Work area and haul routes within the STIA NPDES boundaries.

8. Stormwater storage tanks are located onsite to provide for additional storage volume and/or treatment volume required for treatment by settlement.

9. Materials on hand, in quantities sufficient to cover all bare soil, divert all flows, contain all sediments, and prevent turbid discharges from the site during all stages of construction. These materials include, but are not limited to the following:

   a. Reinforced 6 mil plastic sheeting

   b. Straw bales

   c. 6” pipe

   d. 8” pipe

   e. Sand bags, filled

   f. Wire-backed silt fence

   g. Steel “T” posts

1.08 AUTHORITY OF CONSTRUCTION PROJECT REPRESENTATIVE

A. The Port construction project manager has the authority to limit the surface area of erodible earth material exposed by clearing, excavation, and fill operations, and to direct the Contractor to provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams or other watercourses, lakes, ponds, wetlands or other areas of water impoundment.

B. In the event that temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or are ordered by the Port construction project manager, such work shall be performed by the Contractor at his/her own expense.

C. The Port construction project manager may increase or decrease the area of erodible earth material to be exposed at one time as determined by analysis of project conditions.

D. In the event that areas adjacent to the work area are suffering degradation due to erosion, sediment deposit, water flows, or other causes, the Port construction project manager may stop construction activities until the situation is rectified.

E. In the event that the Washington State Department of Ecology issues an Inspection Report, a Notice of Non-Compliance, Notice of Violation or Enforcement Action, the Port construction project manager may stop all construction activities until it has been determined that the project is in compliance. The Port construction project manager may require the

Contractor to send additional staff to successfully complete Contractor Erosion and Sediment Control Lead (CESCL) training before construction activities may begin. The number of working days will not be changed to accommodate the work stoppage. All costs associated with work stoppages, mitigation of the event, and/or training shall be paid by the Contractor.

F. In the event that the Contractor discharges storm water, ground water, or process water to storm drains, ditches, gutters or any conveyance that discharges to a receiving water as defined by the Department of Ecology without prior approval of the Port construction project manager, the Port construction project manager may stop all construction activities and require additional Contractor staff training and may require that all parties involved in the unapproved discharge be removed from the project for a time determined by the Port construction project manager. The project schedule will not be changed to accommodate the time lost. All costs associated with mitigation of the unauthorized discharge, work stoppages, training and/or removal of personnel from the project shall be paid by the Contractor.

1.09 COORDINATION MEETINGS

A. The Contractor shall be available, at a minimum, for a weekly coordination meeting with the Port construction project manager, other Port Staff and outside agency representatives to review the ongoing contract work for compliance with the provision of this specification.

PART 2 PRODUCTS

2.01 GENERAL:

A. All products used to construct the Contractor selected BMPs shall be suitable for such use and submitted to the Port construction project manager for approval.

2.02 OIL ABSORBENT PADS:

A. Oil absorbent pads shall be made of white, 100 % polypropylene fabric that absorbs oil-based fluids and repels water-based fluids. Each pad shall be a minimum of 15x19 inches in size and absorb no less than 50 ounces of oil-based fluids.

2.03 TESC – ASPHALT CURB & ASPHALT BERM:

A. Asphalt curb and asphalt berm shall be constructed as directed by the Port construction project manager. The asphalt concrete shall meet the requirements of Section 02743 – Asphalt Concrete Pavement.

2.04 SILT FENCE:

A. Geotextile material shall meet the requirements of WSDOT Specification Section 9-33 Table 6. Geotextile material shall be backed by 2”x4” wire mesh and shall be attached to steel “T” posts using wire or zip ties. Dimensions and spacing shall be as detailed on the drawings.

2.05 STRAW WATTLE:

A. Wattles shall consist of cylinders of biodegradable plant material, such as straw, coir, or compost encased within biodegradable or photodegradable netting. Wattles shall be a minimum of 5 inches in diameter, unless otherwise specified. Encasing material shall be clean, evenly woven, and free of debris or any contaminating material, such as preservative and free of cuts, tears or damage. Compost filler shall meet material requirements specified in WSDOT Section 9-14.4(8) Coarse Compost. Straw filler shall be 100% free of weed seeds.

2.06 EROSION CONTROL BLANKET:

A. Erosion Control Blanket shall meet the requirements of WSDOT Specification Section 9-14, paragraph 9-14.5(2) “Erosion Control Blanket”. Installation in ditches and swales shall be per WSDOT Standard Plan I-60.20-00 “Erosion Control Blanket Placement in Channel”. Installation on slopes shall be per WSDOT Standard Plan I-60.10-00 “Erosion Control Blanket Placement on Slope”.

2.07 BONDED FIBER MATRIX SOIL STABILIZATION:

A. Bonded Fiber Matrix soil stabilization shall be labeled as such on the unopened bags furnished by the manufacturer. Bonded fiber matrix shall be installed with seed and fertilizer included in the homogenous mix.

2.08 CATCH BASIN PROTECTION:

A. Catch basin protection shall be designed and installed for the purpose of preventing sediment from entering the storm system. Protection shall:

1) Be constructed of non-woven geotextile fabric with sewn seams;

2) Contain a built-in lifting strap;

3) Have a built-in, high flow bypass;

4) Be sized such that all water draining to the catch basin flows into the insert and does not flow directly into the storm.

B. Catch basin covers shall be 30 mil PVC liner material.

2.09 TEMPORARY PIPING/CONNECTIONS:

A. Temporary piping and catch basins shall meet the requirements of the storm drain pipe as described in the technical specifications of the project.

2.10 TEMPORARY PIPING PLUGS:

A. Installation in Pipe/Structure to be Demolished/Abandoned. Plug shall be concrete as specified in the technical specifications.

B. Installation in Pipe/Structure to Remain. Plug shall be a mechanical secured plug.

2.11 STORMWATER STORAGE TANK:

A. The tank shall be a fixed axle weir tank with a minimum 21,000 gallon.

2.12 STORMWATER STORAGE TANK PADS:

A. The stormwater storage tank pads shall be as detailed on the drawings.

2.13 CONSTRUCTION LIMITS FENCING:

A. Fencing material shall be standard size orange plastic mesh construction safety fence. Posts shall be steel “T” posts.

2.14 ROCK CHECK DAMS:

A. Rock check dams shall be constructed of quarry spalls per the details shown in the project drawings and as specified in technical specifications.

2.15 STABILIZED CONSTRUCTION ENTRANCE

A. Stabilized construction shall be constructed of stabilization geotextile fabric and quarry spalls as specified in technical specifications.

2.16 WHEEL WASH

A. The wheel wash shall be a high water pressure, low water volume system long enough to allow for at least two full tire rotations. Spray nozzles shall be directed at inner and outer side walls for all tires including duals, all treads from two directions, wheel wells and flaps, and truck sides up to

the bottom of the windshield. For water line material and construction requirements shall be as specified in technical specifications.

2.17 GEOTEXTILE FABRIC CHECK DAMS

A. Geotextile check dam shall be a urethane foam core encased on Geotextile material. The minimum length of the unit shall be 7 feet. The foam core shall be a minimum of 8 inches in height, and have a minimum base width of 16 inches. The geotextile material shall overhang the foam by at least 6 inches at each end, and shall have apron type flaps that extend a minimum of 24 inches on each side of the foam core. The geotextile material shall meet the requirements for silt fence.

2.18 PLASTIC SHEETING

A. Plastic sheeting shall be clear, reinforced, and a minimum of 6 mil thick. Sandbags or other Port construction project manager-approved material shall be used to secure the plastic sheeting in place. Black plastic may be used to cover stockpiles.

2.19 TEMPORARY ORGANIC MULCH

A. Temporary organic mulch shall consist of straw, wood chips, hog fuel, compost or other material approved by the Port construction project manager.

PART 3 EXECUTION

3.01 GENERAL

A. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other Federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

B. No discharge of water shall be allowed that increases volume, velocity, or peak flow rate of receiving water background conditions, or that does not meet state of Washington water quality standards.

C. The Contractor's Erosion and Sediment Control Plan (CESCP) required by this section shall be based upon the Temporary Erosion and Sediment Control (TESC) requirements of the contract but shall specifically phase, adjust, improve and incorporate the TESC requirements into the Contractor's specific schedule and plan for accomplishing the work. The CESCP shall be modified as changes are made to improve, upgrade and repair best management practices used by the Contractor and as the work progresses and TESC needs change.

D. The Contractor shall be wholly responsible for control of water onto and exiting the construction site and/or staging areas, including groundwater, stormwater, and process water. Stormwater from offsite shall be intercepted and conveyed around or through the project and shall not be combined with onsite construction stormwater.

E. Modifications to project hydraulic conveyances, detention facilities, and TESC plan sheets shall be stamped by a Professional Engineer (P.E.) licensed by the State of Washington. All other changes to the CESCP shall be signed by the CESCL.

3.02 CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN (CESCP)

A. In order to comply with these requirements, the Contractor shall include and address the following in the CESCP Site Description and Drawings:

1. Included in the CESCP shall be a written description of the construction site, including location of staging areas, stockpile areas, material storage areas, natural and constructed drainage systems within the work area and staging areas, and proximity to other construction projects.

2. Drawings shall be included in the CESCP which show the location of the construction site, including location of staging areas, stockpile areas, material storage areas, natural and constructed drainage systems within the work area and staging areas, and proximity to other construction projects.

3. The drawings shall show locations of BMPs during each phase of construction as identified by the Contractor in the Project Schedule.

4. The drawings and written description shall detail temporary stormwater conveyance facilities and other measures proposed by the Contractor to limit the contributing drainage areas to not exceed the capacity of each of the stormwater ponds.

B. Contractor Erosion and Sediment Control Personnel

1. The Contractor shall designate sufficient employees as the responsible representatives in charge of erosion and sedimentation control. These employees' responsibility will be the oversight of all water and air quality issues. One of these designees shall be onsite at all times when any work activity is taking place.

2. One of the designated employees responsible for erosion and sedimentation control as discussed above shall be the Contractor Erosion and Sediment Control Lead (CESCL) who is responsible for developing, maintaining and modifying the CESCP for the life of the Contract and ensuring compliance with all requirements of this section.

3. The CESCL shall be qualified in the preparation of erosion and sediment control plans, in the installation, inspection, monitoring, maintenance of BMP's, and documentation required for NPDES permits as well as sensitive resource identification, water treatment, and restoration and stabilization of unstable slopes, shorelines, stream banks, and wetlands.

4. The CESCL shall have authority to direct all Contractor and sub-contractor personnel.

5. The CESCL shall have no other duties aside from developing, maintaining, modifying, inspecting, implementing the CESCP and ensuring compliance with all requirements of this section, and, all other environmental regulations, or as directed by the Port construction project manager.

6. Qualifications of the CESCL shall be as follows:

a. Have successfully completed Contractor Erosion and Sediment Control Lead (CESCL) training given by a Washington State Department of Ecology-approved provider, ,and have five years' experience in construction site erosion and sediment control regulatory requirements and BMPs, erosion and sediment control plan development, and stormwater/water quality monitoring, or

b. Currently certified as a Certified Professional in Erosion and sediment Control (CPESC) offered by CPESC, Inc. (www.cpesc.org) and have one year experience in state of Washington construction site erosion and sediment control regulatory requirements and BMPs, erosion and sediment control plan development and stormwater monitoring.

7. The CESCL shall also have done the following:

a. Coordinated, developed, and implemented erosion and sediment control plans for NPDES permit compliance in the State of Washington.

b. Completed at least two erosion and sediment control plans for earthwork projects.

c. Developed phased construction work schedules addressing all ground disturbing activities.

d. Designed proper temporary and permanent erosion and sediment control measures (BMPs) during clearing, new road construction, existing road improvement, and for emergency situations.

e. Designed excavation dewatering plans.

f. Designed plans for dust abatement, embankment stabilization, and restoration

g. The Contractor shall submit for approval all documentation listed above necessary to prove CESCL qualifications including but not limited to resumes, certificates, degrees, recommendation letters, and plan examples.

8. Duties and responsibilities of the CESCL shall include:

a. Maintaining permit file on site at all times which includes the CESCP, the SWPPP, and any associated permits and plans;

b. Directing BMP installation, inspection, maintenance, modification, and removal;

c. Availability 24 hours per day, 7 days per week by telephone;

d. Updating all drawings with changes made to the plan;

e. Keeping daily logs;

f. Prepare and submit for approval a Contractor Erosion and Sediment Control Plan (CESCP);

g. Immediately notify the Port construction project manager should any point be identified where storm water runoff potentially leaves the site, is collected in a surface water conveyance system (i.e., road ditch, storm sewer), and enters receiving waters of the State;

h. If water sheet flows from the site, identify the point at which it becomes concentrated in a collection system.

i. Inspect CESCP requirements including BMPs as required to ensure adequacy; facilitate, participate in, and take corrective actions resulting from inspections performed by outside agencies, Port employees, and Port consultants.

j. Set up and maintain a construction stormwater monitoring plan that includes monitoring locations and procedures. At a minimum, the plan will include monitoring points everywhere construction stormwater discharges from the project.

9. The CESCL shall have authority to act on behalf of the Contractor and shall be available, on call, 24 hours per day throughout the period of construction.

10. The CESCP shall include the name, office and mobile telephone numbers, fax number, and address of the designated CESCL and all Contractor personnel responsible for erosion and sediment control.

11. In addition to the CESCL, the Contractor shall designate sufficient employees as Erosion and Sediment Control Inspectors who will be responsible for all erosion and sediment control, water quality, fugitive dust and other environmental compliance as directed by the CESCL. At a minimum, the Contractor's superintendent foremen, and lead persons shall be designated as Erosion and Sediment Control Inspectors. On matters concerning erosion control, the Erosion and Sediment Control Inspectors shall report to the CESCL.

12. The Erosion and Sediment Control Inspectors shall have successfully completed "Contractor Erosion and Sediment Control Lead" (CESCL) training given by a Washington State Department of Ecology-approved provider.

C. Schedule and Sequencing

1. The CESCP shall include:

a. Schedules for accomplishment of temporary and permanent erosion control work, that include as a minimum all specific work items as are applicable for clearing and grubbing; grading; construction; paving; structures at watercourses, sawcutting, and dewatering, underground utilities; Stormwater conveyances, and seeding.

b. Proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials;

c. Estimated removal date of all temporary BMPs;

d. Estimated date of final site stabilization.

e. Dates of earthwork activities.

f. Dates when construction activities temporarily or permanently cease on any portion of the site.

g. Dates when any stabilization measures are installed.

h. Dates when structural BMPs are initiated.

i. Dates for all work performed within 200 feet of sensitive environmental areas including wetlands, streams and ponds.

2. Erosion control work activities consistent with the CECSP shall be included in the Project Schedule for each work area and project activity as shown on the drawings.

D. BMP Installation

1. The CESCP shall include installation instructions and details for each BMP used during the life of the Project;

2. To prepare or modify Contractor's Erosion and Sediment Control Plans, use BMPs from the Washington State Department of Ecology, Stormwater Management Manual for Western Washington, Vol. 2, and (Current Version). May be downloaded at: http://www.ecy.wa.gov/programs/wq/stormwater/manual.html

3. The CESCL shall certify that all BMP installers are trained in proper installation procedures.

E. BMP Maintenance

1. The CESCP shall include a description of the maintenance and inspection procedures to be used for the life of the project.

2. BMPs shall be maintained for the life of the project, the completion of a work phase and/or until removed by direction of the Port construction project manager;

3. BMPs shall be maintained during all suspensions of work and all non-work periods;

4. BMPs shall be maintained and repaired as needed to assure continued performance of their intended function and in accordance with the approved CESCP;

5. Sediments removed during BMP maintenance shall be placed away from natural and constructed storm water conveyances and permanently stabilized.

6. All maintenance shall be completed within 24 hours of inspection

F. BMP Inspection

1. The Contractor shall inspect all TESC best management practices daily during workdays and anytime 0.5" of rainfall has occurred within 24 hours on weekends, holidays, and after hours. Rainfall amounts can be determined by calling (206) 444-4360 Airport Projects or contacting the National Weather Service for Sea-Tac International Airport rainfall.
2. Deficiencies identified during the inspection shall be corrected within 24 hours or as directed by the Port construction project manager.
3. Note repairs or improvements needed, if any, and notify CESCL or site project superintendent to implement improvements;
4. Observe runoff leaving the site during storms, checking for turbid water;
5. Implement additional BMPs, if needed, to address site-specific erosion control;
6. Inspect streets surrounding site for dirt tracking;
7. Inspect for dust.
8. The Contractor shall visually inspect all stormwater runoff that discharges from the project for petroleum or chemical sheen, or "rainbow". Occurrences of sheen shall be reported immediately to the Port construction project representative and shall follow procedures specified in Section 01631 – Pollution Prevention Planning & Execution.
9. The Contractor shall collect samples and test all stormwater runoff that discharges from the project for turbidity using a calibrated turbidimeter, and for pH using test strips that measure from pH 0 - 14. Turbidity that exceeds 25 NTUs or pH that is below 6.5 or above 8.5 shall be reported immediately to the Port construction project manager.

G. Record keeping

1. Reports summarizing the scope of inspections, the personnel conducting the inspection, the date(s) of the inspection, major observations relating to the implementation of the CESCP, and actions taken as a result of these inspections shall be prepared and retained as a part of the CESCP;
2. All inspection reports shall be kept on-site during the life of the project and available for review upon request of the Port construction project representative.
3. Copies of all inspection records and updated CESCP shall be submitted to the Port construction project manager weekly.
4. The CESCP shall include the Contractor's inspection form which includes the following:

a. All best management practices to be inspected and monitored for all work areas and work activities identified in the schedule for the life of the contract.

b. Inspection time and date.

c. Weather information including current conditions, total rainfall since last inspection and rainfall in the 24 hours prior to the current inspection.

d. Locations of BMPs inspected.

e. Locations of BMPs that need maintenance and reasons why.

f. Locations of BMPs that failed to operate as designed or intended.

g. Locations where additional or different BMPs are needed and reasons why.

5. A description of stormwater discharged from the site. The CESCL shall note the presence of suspended sediment, turbid water, discoloration, and/or petroleum sheen.

6. Any water quality monitoring performed during inspection.

7. General comments and notes, including a description of any BMP repairs, maintenance or installations made as a result of the inspection.

8. A statement that, in the judgment of the person conducting the site inspection, the site is either in compliance or out of compliance CESCP. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance, as well as a schedule of implementation. If the site inspection indicates that the site is out of compliance, the CESCL shall notify the Port construction project manager immediately.

9. Name, title, and signature of the CESCL conducting site inspection and the following statement: “I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.”

H. BMP Removal

1. After cleaning and removal, the drainage system shall not be used for temporary construction stormwater conveyance or storage.

2. Sediment removed shall be placed away from drainage conveyances and permanently covered with hydro seed or other material as directed by the Port construction project manager.

3. Stormwater ponds used to contain construction stormwater runoff shall be returned to elevations shown on the plans.

4. Temporary BMPs shall be removed upon permanent stabilization or as directed by the Port construction project manager.

5. Areas disturbed during removal of temporary BMPs shall be permanently stabilized.

6. Permanent stabilization shall occur upon installation of:

   a. Concrete or asphalt pavement.

   b. On grades 3:1 and less, soil is covered by a minimum of 80% grass growth, as determined by the Port construction project manager.

   c. On grades greater than 3:1 soil is covered by an approved erosion control blanket or bonded fiber matrix and a minimum of 80% grass growth, utilizing the "Line Intercept Method".

   d. All stormwater discharges from the project meet the following criteria:

      (1) 0-25 NTUs.

      (2) 6.5-8.5 pH.

      (3) No visible sheen.

      (4) No settleable solids.

      (5) Washington state Stormwater Quality Standards (WAC 173-201A) at the receiving water, as determined by the Port construction project manager.

I. Emergency Response

1. The CESCP shall contain information on how the Contractor shall control and respond to turbid water discharges, sediment movement, and fugitive dust. At a minimum, the Contractor's employee responsible for, or first noticing, the discharges shall take appropriate immediate action to protect the work area, private property, and the environment (e.g., diking to prevent pollution of state waters). Appropriate action includes but is not limited to the following:

   a. Hazard Assessment - assess the source, extent, and quantity of the discharge.

   b. Securement and Personal Protection - If the discharge cannot be safely and effectively controlled, then immediately notify the CESCL and the Port construction project manager. If the discharge can be safely and effectively controlled, proceed immediately with action to protect the work area, private property, and the environment.

   c. Containment and Elimination of Source - Contain the discharge with silt fence, pipes, sand bags or a soil berm down slope from the affected area. Eliminate the source of the discharge by pumping turbid water to a controlled area,

building berms, piping clean water away from the area or other means necessary.

d. Cleanup - when containment is complete, remove sediment, stabilize, dispose of contaminated water and prevent future discharge.

e. Notification - report all discharges immediately to the Port construction project manager.

J. Construction Dewatering

1. Storm water and construction dewatering operations shall not discharge to the Storm Drain System (SDS) unless free from pollutants. Before discharge, water shall be measured using a properly calibrated, approved turbidity meter. Discharged water shall not exceed 25 Nephelometric Turbidity Units (NTUs) and pH levels shall be between 6.5 and 8.5.

2. Storm water and construction dewatering water shall not be discharged to the Industrial Wastewater System (IWS) unless free from pollutants. Before discharge, water shall be measured using a properly calibrated, approved turbidity meter. Discharged water shall not exceed 200 Nephelometric Turbidity Units (NTUs) and pH levels shall be between 6.0 and 9.0. There shall be no discharge to any catch basin without specific approval of the Port construction project manager.

3. The CESCP shall address how the Contractor plans to manage clean and polluted water during the life of the project. Specific procedures shall be developed and included in the CESCP when work includes excavation within 10 feet of any water, sewer, or storm system. Procedures shall address, at a minimum, locating, protecting, and connecting to existing pipes, as well as response plans for broken pipes.

4. The Port construction project manager shall be notified before any disposal, hauling, pumping, or treatment of water occurs. Notification shall include location of disposal and methods of treatment.

5. Water shall not be pumped into ditches, gutters, drainage conveyance, catch basins, or any area that drains to one of these unless it meets the specifications outlined in this section and with prior approval of the Port construction project manager.

6. Chlorinated water used for disinfecting water pipes shall not be discharged to the storm drain system.

K. Fugitive Dust Planning:

1. The CESCP shall detail the Contractor proposed approach to fugitive dust management. The plan shall include the following:

a. Identification of all fugitive dust sources for each work activity.

b. Description of the fugitive dust control measures to be used for each source.

c. Schedule, rate of application and calculations to identify how often, how much, and when the control method is to be used.

d. Provisions for monitoring and recordkeeping.

e. Contingency plan in case the first control plan does not work or is inadequate.

f. Name and telephone number of the person responsible for fugitive dust control.

g. Source and availability of fugitive dust control materials.

2. The Contractor shall provide whatever means is necessary to keep fugitive dust on site and at an absolute minimum during working hours, non-working hours and any shut-down periods.

3. The Contractor's methods for fugitive dust control will be continuously monitored and if the methods are not controlling fugitive dust to the satisfaction of the Port, the Contractor shall improve the methods or utilize new methods at no additional cost.

4. The Contractor shall maintain as many water trucks on a site during working and non-working hours as required to maintain the site free from fugitive dust.

5. During time periods of no construction activity, water trucks must be ready with on-site Contractor's personnel available to respond immediately to a dust or debris problem as identified by the Port construction project manager.

6. At no time shall there be more than a 10 minute response time to calls concerning fugitive dust/debris problems during work hours and a 90 minute response at all other times on a 24 hour basis.

L. Utilities Planning:

The CESCP shall identify when and how all underground utility work will be conducted so that water quality compliance is maintained. At a minimum, the Contractor shall:

1. Have all shut off valves located and have procured the means to shut off valves within 10 minutes of a water line break.

2. Before cutting into an existing water line, the Contractor shall verify to the Port construction project manager that the water line is not pressurized.

3. The Contractor shall not cut into an existing storm drain or connect new stormwater conveyance systems into existing systems until it has been verified to the Port construction project manager there will be no discharge of non-compliant water during and after cutting and connection operations.

4. The Contractor shall grout all holes, seams, cracks, joints, cast iron rings and grates within 24 hours of installation of each item.

5. Storm systems to be demolished in place shall be first blocked at the point of connection to existing section to prevent contamination of existing storm system.

6. Chlorinated water shall be discharged to sanitary sewer or removed from the site.

7. Air plugs shall not be utilized for more than 24 hours and shall be in new condition with no leaks and monitored daily for proper air pressure.

8. Mechanical plugs shall not be utilized for more than 5 calendar days and shall be used according to the manufacturer's instructions and engineering parameters. The Contractor shall submit instructions and engineering documentation before use.

9. When a plug needs to remain in place longer than 5 days, the Contractor shall utilize grout. The grout shall be installed so that the length is one and a half times the diameter of the pipe.

M. Education:

1. The Contractor shall provide narrative in the CESCP on how they will educate all personnel including subcontractors. At a minimum, the Contractor shall:

a. Train staff through regularly scheduled meetings to discuss environmental protection subjects as related to this project. This may be added to any existing weekly meetings (such as safety meetings).

b. Training shall emphasize water quality compliance, BMP installation and maintenance, sensitive areas, emergency response, spill prevention, and inspections.

c. Minutes of the meetings detailing attendees and subjects discussed shall be kept and submitted to the Port construction project manager weekly.

d. Prior to commencing work, all Contractor and subcontractor personnel at any tier shall complete a Port of Seattle Environmental Compliance Orientation given with the required Safety Orientation.

3.03 CONSTRUCTION REQUIREMENTS

A. Saw cutting

1. Saw cut slurry and cuttings shall be vacuumed during cutting operations;

2. Saw cut slurry and cuttings shall not remain on permanent concrete or asphalt pavement overnight;

3. Saw cut slurry and cuttings shall not drain to SDS, IWS, or any other natural or constructed drainage conveyance;

4. Collected slurry and cuttings are the responsibility of the Contractor and shall be disposed of off site in a manner that does not violate groundwater or surface water quality standards.

B. Soil and Construction Debris Stockpiles

1. Soils and construction debris, including broken concrete and asphalt paving, shall be stockpiled within the work site or off site.

2. Stockpiles shall be covered with plastic and secured from blowing wind or jet blast.

3. Plastic shall be a minimum thickness of 6 mil.

4. Materials to be stockpiled on pavement shall be placed on plastic and contained within a bermed area.

5. Clean storm water runoff from the plastic covering shall be directed away from bare soil using pipes, sandbags, or other temporary diversion devices.

C. Construction Roads, Entrances, and Exits

1. Before leaving project site, all trucks and equipment shall be inspected for mud and debris. All mud and debris shall be removed as per Section 01500 - Temporary Facilities and Controls.

2. At no time shall mud, debris, or visible sediment be allowed outside of the project boundaries and on any Port-owned and public roads.

3. Mud and debris shall be removed from pavement by vacuum sweeping and shoveling and transported to a controlled sediment disposal area identified in the CESCP.

4. If the mud and debris are contaminated by fuels, grease, metals or other pollutants, they shall be disposed of in accordance with Section 01631 - Pollution Prevention Planning and Execution.

5. Use of water to wash concrete or asphalt pavement shall be allowed only after sediment has been removed by vacuum sweeping and shoveling, and a Road Wash Plan has been submitted and accepted by the Port construction project manager.

6. Water used to wash pavement shall not drain into the SDS, IWS or any other natural or constructed storm water conveyance and shall be removed from Port property and disposed of off-site in accordance with local, state, and federal regulations.

7. Power brooms shall not be utilized without prior approval by the Port construction project manager.

8. Contractor shall have sufficient working vacuum sweepers on site at all times work is being performed. All sweepers shall have on-board water spray systems that shall be operating at all times.

9. Vacuum sweepers shall be dedicated to this project and shall not be utilized by any other contract, nor be hired out to another contractor.

10. At least one driver shall be assigned to a vacuum sweeper and shall do no other work.

11. Coverage shall be provided during lunch breaks, and during unfilling activities.

12. If, in the Port construction project manager's opinion, the Contractor does not adequately manage the tracking of sediment, the Port may subcontract out the control of sediment tracking at the Contractor's expense.

D. Catch Basin Protection

1. All catch basins within the project limits, and outside the project limits but within the project drainage basin, including haul roads, shall be protected

2. Catch basin protection shall be installed where shown in the project drawings, in all storm drainage structures within the work area, or as otherwise directed by the Port construction project manager.

E. Concrete Truck and Equipment Washing

1. Concrete truck chutes, concrete pumps, hand tools, screeds, floats, trowels, rollers and all other tools shall be washed out only into Washington State Department of Ecology (WDOE)-approved covered steel containers or formed areas awaiting concrete or asphalt pavement.

2. All contained concrete waste shall be disposed of offsite in a manner that does not violate groundwater or surface water quality standards.

3. All water used for washing, is defined by the WDOE as "process water" and shall be collected and disposed of in a manner that complies with all locate, state and federal regulations.

F. Wheel Washes

1. All haul vehicles exiting the work site to public roads shall pass through a wheel wash system to control sediment tracking. Any required modification, alteration or improvement needed on the existing wheel wash systems or supplemental vehicle washing for the successful control of dirt, debris or sediment tracking beyond the wheel wash, either on Port haul roads or public roads, for the duration of the contract shall be the responsibility of the Contractor.

2. No modifications of the wheel wash system will be allowed that would alter the design of a contained operation with recycled wash water with no release of sediment laden wash water. The sediment shall be contained and disposed of at an appropriate disposal facility off Port Property.

3. The wash water is “process water” and shall not be released on site or to the storm drain system and shall be disposed of in accordance with all water quality regulations

G. Silt Fence

1. Silt fence shall be constructed at the locations shown in the project drawings, in the approved Contractor Erosion and Sediment Control Plan, or otherwise directed by the Port construction project manager.

2. The geotextile shall be attached to the up-slope side of the posts and the wire mesh using staples, wire rings, or in accordance to the manufacturer’s recommendations.

3. Where seams are required to join two sections of fence material, the seams shall be taped together, wrapped three times around a 2” steel post and the post driven into the ground. All rips, tears, holes, and other damage to silt fences shall be repaired within 24 hours of locating the damage.

4. When sediments deposits reach approximately one-third the height of the silt fence, the deposits shall be removed and disposed of outside Port property.

H. Straw Wattle

1. The installation of straw wattles shall be per WSDOT Standard Plan I-30.30-00 “Wattle Installation on Slope”, or as directed by the Port construction project manager.

I. Bonded Fiber Matrix Soil Stabilization

1. The installation of Bonded Fiber Matrix Soil Stabilization shall be applied at a minimum rate of 3,000 pounds per acre and provide a minimum of 95% soil cover. Seed and fertilizer shall be included.

J. Temporary Organic Mulch

1. Temporary organic mulch shall be applied at a minimum rate of 1.5 tons per acre.

K. Swale Construction

1. Grass-lined swales shall be constructed to the lines and grades shown on the drawings. The swale includes excavating, grading, placement of topsoil, placement of erosion control blanket, and hydroseeding as detailed on the drawings. Excavated material from the swale construction shall be considered Excess Soil as defined in Section 02330 – Excavation and Embankment.

L. Temporary Piping/Connections

1. The Contractor shall install temporary piping, catch basins and connections to the existing storm drain system in locations shown on the drawings. At the completion of the work, the piping shall be removed and the temporary connections plugged.

M. Temporary Pipe Plugging

1. The locations of piping to be temporarily plugged are indicated on the drawings. At the completion of the work, the plugs shall be removed.

N. Construction Stormwater

1. The Contractor shall construct stormwater tank pads in the size, location and as detailed on the drawings.
2. The Contractor shall install stormwater storage tanks, as specified, in the locations and quantities shown on the drawings.
3. The Contractor is responsible for conveying construction stormwater within each work area to the stormwater storage tank area shown on the drawings.
4. Temporary piping, structures and pump facilities required for the conveyance are the responsibility of the Contractor.
5. The construction stormwater shall be held in the storage tanks until hauled and disposed of by the Contractor on a Force Account basis.
6. The storage tank facilities including pads, access roads, ramps, temporary structures and piping shall be removed at the completion of the work or as directed by the Port construction project manager

O. Surface Roughening:

1. All soil shall be roughened, loose and friable, by ripping or with equipment tracks before being permanently stabilized.

End of Section