DOT&PF SOUTH COAST REGION
STRUCTURE REMOVAL

PROJECT NO. TBD
AIP NO. TBD

65% TECHNICAL SPECIFICATIONS FOR DESIGN DEVELOPMENT REVIEW

March 15, 2022

TECHNICAL SPECIFICATION INDEX

SECTION 02 26 00
HAZARDOUS MATERIALS ASSESSMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. A Limited Hazardous Materials Assessment for the proposed construction has been completed as part of these project documents. Potentially hazardous materials in the work area have been identified on the project drawings. All sample locations and results collected as part of this assessment are identified on the project drawings. The Hazardous Material drawings and specifications represent the entirety of the Limited Hazardous Materials Assessment. A standalone Hazardous Materials Assessment report is not available.

1.2 USE OF INFORMATION

A. The Hazardous Materials documents are provided for the Contractor's information and use in the planning and performance of work in areas containing hazardous or potentially hazardous materials.

1. The information provided in the Hazardous Materials documents are based on samples collected in various locations of the building. The Department cannot guarantee or warrant that actual conditions encountered might not vary from the information presented in these reports.
2. The data reported in the Hazardous Materials documents are accurate to the best of the Department’s knowledge. The requirements contained in these specifications and in the relevant state and federal regulations pertaining to the performance of work in areas containing hazardous or potentially hazardous materials provide guidance for the Contractor for performance of work in these areas. The Department disclaims all responsibility for the Contractor's erroneous conclusions regarding the information presented in these reports; the requirements contained in these specifications; and the requirements of applicable state and federal regulations pertaining to performance of work in these areas.
3. The Contractor shall be responsible for obtaining additional information if Contractor deems it necessary to carry out the work.

B. It is highly recommended that the Contractor visit the site to acquaint themselves with existing conditions.

1.3 HAZARDOUS MATERIALS NOTIFICATION:

A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the buildings that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, may also be present in settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other

trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

PART 2-PRODUCTS
Not Used

PART 3-EXECUTION
Not Used

END OF SECTION

SECTION 02 41 00
DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. The Work includes the removal and proper disposal of all buildings, petroleum storage tanks, structures, signs, fencing, utilities, abandoned vehicles, abandoned equipment, debris, and any other obstructions, appurtenances, and infrastructure as indicated on the Plans and as described below:

1. ~~Demolition and removal of 6,000+ square foot (North Hangar) metal building on Lot 3B, Block 3 at Cold Bay Airport.~~
2. ~~Demolition and removal of 9,000+ square foot (South Hangar) metal building on Lot 3B, Block 3 at Cold Bay Airport.~~
3. Demolition and removal of 1,200 square foot wood frame building on Lot 3, Block 1400 at Kodiak Airport
4. Demolition and removal of 1,800 square foot wood-frame building on Lot 5, Block 1400 at Kodiak Airport
5. Disconnection of existing water, sanitary sewer, natural gas, telephone, and cable utility service connections in accordance with local utility requirements.

B. The following items shall remain on the parcels. Refer to Plans for specific direction.

1. Perimeter fencing and gates.
2. Structural concrete floors, concrete aprons, and concrete utility pads that are flush with the existing exterior grade.
3. Subsurface utility services as shown on the Plans. Subsurface utility piping and conduits shall remain in place unless otherwise stated in the specifications or indicated on the drawings.

C. Limit ground-disturbing activity to the greatest extent possible. Any disturbed soils shall be replaced into the same excavation.

D. Repair, without cost to the State and without delay, any damages caused to items to remain

1.2 RELATED SECTIONS

A. Division 1 Specifications

B. Section 02 61 13 – Excavation & Handling of Contaminated Material

C. Section 02 82 33 – Removal and Disposal of Asbestos Containing Materials.

D. Section 02 83 33 – Removal and Disposal of Materials Containing Lead.

E. Section 02 84 18 – Removal and Disposal of Chemical Hazards.

F. Section 31 20 00 – Earth Moving

1.3 JOB SAFETY

A. The Contractor is advised that they must comply with OSHA regulations relating to construction safety and health. The Contractor is further advised that safety on the project is solely their responsibility.

1.4 REFERENCE STANDARDS

A. 8 AAC 61 – Alaska Occupational Safety and Health

B. 29 CFR 1910 – Occupational Safety and Health Standards.

C. 29 CFR 1926 – Safety and Health Regulations for Construction.

D. NFPA 241 – Standard for Safeguarding Construction, Alteration, and Demolition Operations.

E. Alaska Department of Natural Resources (DNR) 11 AAC 93 – Water Management.

F. ASSE/SAFE A10.6 (2006) Safety Requirements for Demolition Operations

1.5 SUBMITTALS

A. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.

1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.
2. Identify items and areas that are to remain in place
3. Identify demolition firm and submit qualifications.
4. Include a summary of safety procedures.
5. Include utility approved disconnect forms.
6. Include schedule of demolition activities.

B. Project Daily Logs: The Contractor shall submit daily, to the Department's Representative, the previous day's Daily Logs.

C. Project Record Documents: Accurately record actual locations of utilities and subsurface construction encountered and/or terminated during the project.

D. Disposal Records: Indicate receipt and acceptance of hazardous wastes, including hazardous building materials, by a disposal facility licensed to accept hazardous wastes.

1.6 RESTRICTIONS

A. Use of tall equipment that must routinely operate more than 50 feet above ground level requires prior authorization of the Airport Manager. A request must also be submitted by the Contractor to the FAA on FAA Form 7460-1 for required prior approval. Use of

tall equipment such as cranes, drill rigs, or similar equipment will require obstruction lighting and use of orange and white flagging. Comply with the most current version of FAA Advisory Circular 70/7460-1.

B. Access to the airfield must be maintained at all times during construction and demolition.

C. Hot work - Hot work is any activity or process that generates a source of ignition, this could be through a flame, heat or a spark.

1. Maintain portable fire suppression devices during all hot work operations.
2. Maintain fire-watch during, and for at least two hours following, all hot work operations.
3. Do not use cutting torches for building demolition unless absolutely necessary.
4. If cutting torches are required for work, clear area of all flammable materials.
5. Any hazardous materials that may create an unsafe condition must be abated prior to use of a torch.
6. In concealed spaces, such as ducts and pipe interiors, verify conditions and contents are safe for flame operations.

1.7 UTILITY CONTACT INFORMATION

A. Electrical and overhead powerlines:

~~G&K, Inc.~~
~~PO Box 117~~
~~Cold Bay, Alaska, 99571~~
~~(907) 532-2407~~

~~B. Water & Sanitary Sewer:~~

~~City of Cold Bay~~
~~10 Baranov Road~~
~~P.O. Box 10~~
~~Cold Bay, AK 99571~~
~~(907) 532-2401~~

1.8 QUALITY ASSURANCE

A. Demolition Firm Qualifications: Company specializing in the type of work required.

1. Minimum of two years of documented experience.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 SCOPE

A. As indicated on the Plans, raze, remove, and dispose of or salvage buildings, storage tanks, structures, utilities, obstructions, and improvements for any portion of which are within the property boundaries, except for those which other provisions have been made to remain onsite.

B. Fill cavities left by structure and utility removal, to the level of the surrounding ground and compact backfill as specified in Section 31 20 00 – Earthwork.

C. The Work involves the abatement of all hazardous materials present in accordance with project documents.

D. ~~Remove existing buried heating oil tank(s) with environmental oversight and laboratory sampling by a Department-provided ADEC Qualified Environmental Professional (QEP). Provide documentation of tank removal following ADEC guidance for a Site Assessment Report. Refer to Section 02 61 13 – Excavation and Handling of Contaminated Material~~.

3.2 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. The Work shall meet the requirements of all local, state, and federal regulations including, but not limited to, that of the ~~City of Cold Bay~~, City of Kodiak, Alaska Department of Transportation, Federal Aviation Administration, State of Alaska, and the Federal Government.

B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.

1. Obtain required permits.
2. Comply with applicable requirements of NFPA 241.
3. Use of explosives is not permitted.
4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
5. Provide, erect, and maintain temporary barriers and security devices.
6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
8. Do not close or obstruct roadways or sidewalks without approval of the Department's Representative.
9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
10. All operations and staging must remain within the demolition limits or as approved by the Department.

C. Provide the Department's Representative with copies of all permits, agreements with utility companies and written consent to access private and or government property before starting work.

D. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

E. No staging areas are provided outside of stated project limits. All work shall be limited to the stated limits unless otherwise approved by the Department.

F. Where traffic maintenance is required for activities, submit a Traffic Control Plan to the Department for review and receive approval before beginning related construction activity, coordinate with the Department. Activities including moving whole or partial structures will require a Traffic Control Plan.

G. Hazardous materials encountered during structure removal operations must be removed in accordance with these Contract Documents.

H. All hazardous material found on site must be removed and disposed of in accordance with the project documents and all applicable regulations.

I. Provide temporary security fencing around the worksite before beginning demolition.

J. Property boundaries have not been surveyed. If necessary, the limits of the work will be defined by staked/ surveyed property boundaries established by the Contractor.

3.3 EXISTING UTILITIES

A. Coordinate work with utility companies and/or Department; notify before starting work and comply with their requirements; obtain required permits.

B. Protect existing utilities to remain from damage.

C. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

D. Remove exposed piping, valves, meters, equipment, supports, and mounts of disconnected and abandoned utilities as authorized by utility companies.

E. Coordinate all utility disconnects with the utility companies and the Department's Representative. Disconnects for this project will be of a permanent type, including shut-off valves, caps, plugs, and other as required to stop the flow of materials (water, sewer, gas, power, telephone) in accordance with the governing codes and utility company requirements. All permits required for this work will be paid for by the Contractor.

3.4 DEBRIS AND WASTE REMOVAL

A. Remove existing and new debris, junk, and trash from site. All demolished materials are the property of the Contractor unless noted otherwise. Handle, transport, and store waste materials according to all applicable regulations.

B. Disposal sites shall be outside the project limits unless directed otherwise, in writing, by the Department. Obtain written consent from the property owner. Dispose of solid waste materials (including handling, transporting, storing and disposing) according to the DEC Regulations.

C. Leave site in clean condition, ready for subsequent work.

END OF SECTION 02 41 00

SECTION 02 61 13
EXCAVATION & HANDLING CONTAMINATED MATERIAL

PART 1 - GENERAL

1.1 SUMMARY

A. This item covers construction field tasks including excavating, removing, hauling, handling, storage, transport, disposal and/or treatment of any contaminated soil encountered during demolition and excavation activities. Onsite or offsite disposal shall be determined by the Alaska Department of Environmental Conservation (ADEC) approved Work Plan. In case of conflict between this specification, project plans, and/or the ADEC approved Work Plan, the ADEC approved Work Plan shall be followed.

1.2 REFERENCES

A. Section 31 20 00 – Earth Moving

B. ADEC 18 AAC 75 Oil and Other Hazardous Substances Pollution Control

C. ADEC Field Sampling Guidance

PART 2 - PRODUCTS

2.1 ADEC Approved Work Plan

A. CONTRACTOR shall engage an Environmental Sub-consultant (QEP) to prepare a Work Plan governing any earth disturbing activities necessary to complete project scope. The Work Plan shall be provided as a Pre-Draft document for a 10 working day DEPARTMENT review. Following incorporation of any DEPARTMENT comments or suggestions, the CONTRACTOR or QEP will provide the Draft Work Plan to ADEC for review. It should be anticipated that this will take a minimum of 30 calendar days. Following agreement on any changes suggested by ADEC with DEPARTMENT approval, the CONTRACTOR or QEP will submit the Final Work Plan to ADEC and the DEPARTMENT.

2.2 QEP Field Monitoring

A. The QEP shall provide direct field observation of earth disturbing activities covered by the Work Plan to monitor that agreed construction practices and contaminated material handling practices related to ADEC regulated activities are followed in accordance with the ADEC approved Work Plan.

2.3 After-Action Report

A. Following field work governed by the ADEC approved Work Plan, the QEP shall prepare an ADEC compliance (18 AAC 75) After-Action Report documenting field activities performed in relation to the Work Plan. Report review will occur as detailed in Section 2.1 (A) of this specification for the Work Plan. Certificates of Disposal (COD) shall be included with this report per Section 3.4 (C).

PART 3 - EXECUTION

3.1 GROUND DISTURBING ACTIVITIES

A. Ground disturbing activities shall be limited to the greatest extent possible and onsite reuse of excavated material shall be prioritized per Section 3.4 (B). If offsite transport and disposal are proposed, Section 3.4 (C) shall be followed along with the ADEC approved Work Plan.

B. Field tasks will be monitored by an approved qualified environmental professional (QEP), as defined in 18 AAC 75.333, and as identified in the ADEC approved Work Plan. The QEP will be supplied by the DEPARTMENT.

C. Volumes of solid contaminated materials will be estimated as CUBIC YARDS in the field, TONS as measured by the disposal facility if shipped for offsite disposal, and in gallons for liquid materials. Measurement methods for determining quantities shall be approved by the DEPARTMENT prior to use.

3.2 DEWATERING REQUIREMENTS

A. Should groundwater be encountered during the excavation, Contractor shall implement an ADEC-approved dewatering plan for treatment and disposal. Groundwater is estimated to be present at twenty (20) to twenty-five (25) feet below existing grade and three (3) to five (5) feet below existing grade based on investigations at adjacent properties in Cold Bay and Kodiak, respectively.

3.3 CONFIRMATION SAMPLING OF CONTAMINATED SOIL AND OPEN EXCAVATION

A. Excavated soil shall be containerized and/or temporarily stockpiled on the site. The approved QEP shall collect samples of the stockpiled material for laboratory analysis and conduct confirmation sampling of the side walls and floor of the excavation. Stockpiles shall only be sampled if offsite disposal is proposed. Section 3.4 (A) shall be used if onsite reuse is proposed. These procedures shall be detailed in the ADEC approved Work Plan.

B. The Work Plan shall specify that contamination will not be “chased” only ground disturbing activities necessary to complete this project scope shall be assumed. This provision is subject to approval by ADEC during the Work Plan review process.

3.4 ON-SITE MANAGEMENT OF CONTAMINATED SOILS

A. Temporarily stockpiled contaminated soils that are to be returned to their original location on site will be managed in a manner compliant with ADEC regulations and guidance. Generally, soil will be temporarily stockpiled on a lined containment area, covered and flagged. The approved QEP shall collect samples of the stockpiled material for laboratory analysis.

B. If testing results (Section 3.3 [A]) indicate that stockpiled soils are not contaminated with project contaminants of concern above ADEC cleanup levels, the soil shall be used as backfill on site if soils meet backfill specifications under Specification Section 31 20 00 Earth Moving

C. Contaminated soils shall be containerized, transported, and disposed of off-site in accordance with project requirements following written ADEC approval. The CONTRACTOR shall provide Certificates of Disposal (COD) from the disposal facility to the DEPARTMENT.

END OF SECTION 02 61 13

SECTION 02 83 33
REMOVAL AND DISPOSAL OF MATERIALS CONTAINING LEAD

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. The work may require the disturbance (including cleanup of existing loose paint), demolition, or removal, and disposal of lead painted and/or lead-containing materials related to the Demolition of the structures. Items to be disturbed may include, but are not limited to:

1. Painted interior and exterior surfaces.
2. Painted windows, doors, and frames.
3. Painted mechanical and electrical equipment.
4. Painted structural and miscellaneous steel.

B. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the buildings. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials. This notification is provided in accordance with EPA and OSHA requirements.

C. The work includes all air monitoring, dust sampling, waste testing and disposal as specified herein. Materials listed are not necessarily hazardous waste or hazardous to handle. Expected waste streams with lead-containing paints or materials identified for demolition and disposal have not been evaluated by the Toxicity Characteristics Leaching Procedure (TCLP) (laboratory testing or theoretical calculation). Metal waste shall be recycled where practical. If metal waste is not recycled, a TCLP is required for waste characterization and proper disposal.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 02 26 00 Hazardous Materials Assessment

B. Section 02 82 33 Removal and Disposal of Asbestos Containing Materials

C. Section 02 84 18 Removal and Disposal of Chemical Hazards

1.3 DEFINITIONS AND ABBREVIATIONS

A. Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.4 of this section.

1.4 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced.

1. General Requirements: All work shall be performed in compliance with the International Building, Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code; Uniform Plumbing Code; the National Electrical Code; and the publications listed in this section that are in effect at the time of the bidding of this contract.
2. Title 29 Codes of Federal Regulations (CFR), Department of Labor (USDOL)
   a. Part 1910 General Occupational Safety and Health Standards
   b. Part 1926 Safety and Health Regulations for Construction
3. Title 40 CFR, Environmental Protection Agency (EPA)
   a. Part 260 Hazardous Waste Management System: General
   b. Part 261 Identification and Listing of Hazardous Wastes
   c. Part 262 Standards Applicable to Generators of Hazardous Waste
   d. Part 263 Standards Applicable to Transporters of Hazardous Waste
   e. Part 270 Hazardous Waste Permit Program
   f. Part 273 Standards for Universal Waste Management
   g. Part 311 Worker Protection
   h. Part 745 Lead Based Paint Poisoning Prevention in Certain Residential Structures
4. Title 49 CFR, Department of Transportation (DOT)
   a. Part 171 General Information, Regulations and Definitions
   b. Part 172 Hazardous Materials Communication and Regulations
   c. Part 173 General Requirements for Shipments and Packaging
   d. Part 176 Carriage by Vessel
   e. Part 177 Carriage by Public Highway
   f. Part 178 Specifications for Packaging
   g. Part 382 Requirements for Drug Testing
   h. Part 383 Commercial Driver's License Standards
5. Alaska Administrative Codes (AAC)
   a. 8 AAC 61 Occupational Safety and Health Standards
   b. 18 AAC 60 Solid Waste Management
   c. 18 AAC 62 Hazardous Waste Management
   d. 18 AAC 70 Water Quality Standards
   e. 18 AAC 75 Oil and Hazardous Substances Pollution Control
6. Alaska Statues (AS) AS 45.50.477 Titles Relating to Industrial Hygiene
7. Municipality of Anchorage AMC 26.50.060 Specific Discharge Limitations
8. Federal Standards 313E Safety Data Sheets
9. American National Standards Institute (ANSI)
   a. Z9.2 Local Exhaust Systems
   b. Z87.1 Eye and Face Protection Z88.2 Practices for Respiratory Protection
10. American Society for Testing and Materials (ASTM) D 4397 Polyethylene Sheeting
    a. E 1728 Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination
    b. E 1792 Specification for Wipe Sampling Materials for Lead in Surface Dust

11. International Code Council International Building (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code Current Standards
12. National Fire Protection Association (NFPA)
    a. NFPA 701 Fire Tests for Flame Resistant Textiles and Films
13. National Institute of Occupational Safety and Health (NIOSH)
    a. Manual of Analytical Methods, Current Edition
14. Underwriters Laboratories (UL)
    a. UL 586 High-Efficiency, Particulate, Air (HEPA) Filter Units

1.5 QUALITY ASSURANCE

A. On-site Observation:

1. The safety and protection of the Contractor's employees, Subcontractor's employees, Department employees, the facility, and the public is the sole responsibility of the Contractor.
2. The Department or representatives of State or Federal agencies may make unannounced visits to the site during the work. The Contractor shall make available two complete sets of clean, protective clothing for such visitor use. If the work requires the use of PAPR or Supplied Air Respirators, the Contractor shall provide respirators to the visitor to ensure compatibility with fresh batteries or supplied air system. It is the visitor's responsibility to ensure medical qualification, training, and current "fit test" prior to using any respirator provided by the Contractor.
3. If the Department or agency visitor determines that practices are in violation of applicable regulations; they will immediately notify the Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.
4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Department.
5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.

B. Monitoring and Testing: Monitoring and testing during the work shall be performed as follows:

1. The Contractor shall hire an Independent Testing Laboratory to collect and evaluate all air, dust, bulk, and toxicity characteristic leaching procedure (TCLP) samples that are the responsibility of the Contractor. The Contractor shall direct its laboratory, in writing, to release monitoring and testing data, and all other pertinent data and records, to the Department.
2. The Contractor shall be responsible for monitoring its employees for potential exposure to airborne contaminants as required by this specification and all applicable regulations.
3. The Contractor shall be responsible for work area monitoring and environmental monitoring outside the work area as required by this specification.

4. The Department may perform monitoring and testing inside the building, inside the work areas, and on the Contractor's employees while work is underway and at any time during the work.
5. Final inspection and clearance testing shall be conducted by the Contractor.
6. The Contractor shall have its Independent Testing Laboratory archive all samples until the successful completion of the project.

C. Additional Sampling of Suspect Materials:

1. The Contractor and all Subcontractors shall be vigilant during demolition and construction in the event additional suspect lead or hazardous materials are encountered. If suspect lead or hazardous materials not previously identified are encountered, the Contractor shall stop work that may be affected by this material and immediately notify the Department. The Department will provide recommendations and additional testing if necessary.
2. The Contractor and all Subcontractors shall notify the Department prior to any bulk sampling of suspect lead-containing material or other hazardous materials to allow the Department to be present during such sampling.

1.6 PROTECTION OF EXISTING WORK TO REMAIN

A. Perform lead removal in the project work areas without damage or contamination of adjacent work or the facility.

1.7 MEDICAL REQUIREMENTS

A. Institute and maintain a surveillance program in accordance with 29 CFR 1926.62 and 29 CFR 1910.134.

B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting hazardous materials.

1.8 TRAINING

A. Employ only workers who are trained and certified as required by 29 CFR 1910, 29 CFR 1926, 40 CFR 311, 40 CFR 745 and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of lead-containing materials.

1.9 PERMITS, IDENTIFICATION NUMBERS AND NOTIFICATIONS:

A. Secure necessary permits for hazardous material removal, storage, transport, and disposal and provide timely notification as required by federal, state, and local authorities.

1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE:

A. Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.

1.11 RESPIRATOR PROGRAM:

A. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.

1.12 HAZARD COMMUNICATION PROGRAM:

A. Implement a hazard communication program in accordance with 29 CFR 1910.1200.

1.13 SUBMITTALS

A. Submit the following documentation to the Department for review, approval, or rejection. Work shall not begin until submittals are approved.

1. Shop drawings.
2. Work plan.
3. Liability insurance policy and performance bond.
4. Schedule.
5. Independent testing laboratory and laboratory personnel.
6. Disposal site designations.
7. Waste transporter designations.
8. Representations.
9. "Competent Person" designation and experience.
10. Request for substitutions.

B. Shop drawings shall show:

1. Boundaries of each lead work area, if required.
2. Location and construction of decontamination stations, if required.
3. Location of temporary site storage facilities.
4. Location of air monitoring stations, both in and outside of the work area.
5. Emergency egress route(s).
6. Location of negative pressure exhaust systems, if required.

C. The work plan shall include procedures for:

1. Work area set-up and protection.
2. Worker protection and decontamination.
3. Initial exposure determination(s).
4. Lead removal procedures.
5. Waste testing, transport, and disposal procedures.
6. Monitoring and testing procedures (Lead Sampling and Analysis Plan, (SAP)).
7. Spill clean-up emergency procedures.

D. Insurance Policy and Bond: Submit copies of the Contractor’s or Subcontractor’s insurance policy and performance bond. Submittal requirement is only to ensure that the insurance certificate(s) show specific coverage for the potentially hazardous materials being handled by this project. The insurance and bond amounts and certificate holder requirements are addressed in other portions of the contract documents and are not covered as part of this submittal requirement.

E. Schedule: Submit construction schedule by work area.

F. Independent Testing Laboratories and Laboratory Personnel: Submit the name, location, and phone number of proposed Independent testing laboratories, and the names and certifications of the industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.

1. The Independent Testing Laboratories shall be acceptable to Department.
2. Submit evidence that the laboratory is currently judged proficient in lead analysis, as determined by the Environmental Lead Proficiency Analytical Testing (ELPAT) Program, of the American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) for lead in paint chip, soil, and dust wipe samples.
3. Submit evidence that the laboratory is currently certified by OSHA to perform blood lead analysis.
4. Submit evidence that the laboratory has demonstrated proficiency as determined by ELPAT or ELLAP performance for NIOSH Method 7082 and/or NIOSH Method 7105 analytical method for the determination of lead in air.
5. Submit evidence that the laboratory has demonstrated proficiency in performing analyses according to Method 1311 TCLP, corresponding to the current version of Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW846. Evidence may include successful participation in a recognized inter-laboratory quality control program such as a laboratory certified by the California Health and Welfare Agency, Department of Health Services, or a more informal inter-laboratory quality control program.
6. Submit evidence that the laboratory is currently accredited by the American Industrial Hygiene Association (AIHA).
7. Submit the name, address, telephone number, and résumé of the Contractor's Industrial Hygienist (IH) who prepared the Lead SAP and will oversee the on-site monitoring, visual inspections and clearance testing. Submit the names, addresses, and résumés of industrial hygiene technicians who may assist the IH for on-site tasks. Submit documentation that the IH has all the qualifications for the assigned duties as required by the Contractor's liability insurance policy.
8. Submit copies of the Contractor's letter to each of the Independent Testing Laboratories, directing each to release all the results for this project to the Department, as these results become available and as specified herein.

G. Disposal Site: Submit the name and location of the proposed Environmental Protection Agency (EPA) permitted disposal site.

H. Waste Transporter: Submit the name and address of the proposed waste transporter.

I. Representations: Submit statement by the Contractor that records of employees' work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.

J. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of their previous projects. Certify that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.04 above.

K. Substitutions: Submit requests for substitutions of materials, equipment, and methods.

L. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:

1. Updated schedules for lead removal.
2. Change in Competent Person.
3. Changes to work plan.

1.14 TEST REPORTS:

A. Submit the following documentation produced during the work as soon as received:

1. Project Daily Logs: Submit the previous day's Daily Logs. Logs shall include regulated area sign-in sheets and list of lead-containing materials removed, including quantities and locations of those materials, in the units used on the drawings. Claims for additional quantities will not be addressed unless daily quantities are submitted.
2. Monitoring and testing data sheets and laboratory reports.

1.15 PROJECT COMPLIANCE DOCUMENTS:

A. Submit the following documents to the Department with application for final payment:

1. Contractor's actual project "Start and Finish" dates.
2. Waste testing results per Paragraph 3.05 (A).
3. Waste Shipment Records (Manifest EPA form 8700-22) if required
4. Clearance sampling and soil sampling data sheets (if required) and laboratory reports.
5. Disposal site receipts.
6. Final clearance submittals as outlined in 3.07 (if required).
7. Evidence that each employee who was engaged in lead disturbance/removal work or who was exposed to lead completed training on lead covering the requirements of 29 CFR 1926.62.

1.16 SANITARY FACILITIES:

A. Provide adequate toilet and hygiene facilities.

1.17 MATERIAL STORAGE:

A. Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.

1.18 ON-SITE DOCUMENTATION

A. The Contractor shall maintain on the job site, at a location approved by the Department, copies of the following data for safety procedures, equipment, and supplies used for the work

1. Equipment: Show the model, style, capacity and the operation and maintenance procedures for the following, as applicable:
   a. High-Efficiency, Particulate, Air (HEPA) Filtration units.
   b. HEPA Vacuum cleaners.
   c. Pressure differential recording equipment.
2. Safety Data Sheets (SDSs): Maintain SDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
3. Respiratory Protection Plan: The Contractor's written respirator program.

PART 2 - PRODUCTS

2.1 PERSONAL PROTECTIVE EQUIPMENT

A. Provide personal protective clothing as approved and selected by the IH.

1. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters. Use respirators equipped with dual cartridges whenever both lead hazards and other respiratory hazards exist in the work area.
2. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges shall be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 8 AAC 61.1100.
3. Whole Body Protection: Provide approved aprons, gloves, eye protection, and hard-hats, and other protective clothing as required to meet applicable safety regulations to personnel potentially exposed to lead dust or fumes above the permissible exposure limit (PEL). Wear this protection properly. Full facepiece respirators shall meet the requirements of ANSI Z87.1.
4. Provide protective personal equipment and clothing at no cost to the workers.

2.2 DECONTAMINATION UNIT

A. Provide a temporary three-stage decontamination unit, attached in a leak-tight manner to each Contained Work Area. Decontamination units shall consist of a clean room equipped with separate lockers for each worker, a shower room, and an equipment locker room equipped with separate lockers for each worker.

B. Shower specifications: Locate flow and temperature controls within the shower and be adjustable by the user. Hot water service may be secured from the building hot water system if available, but only with back-flow protection installed by the Contractor at the point of connection, and with prior notification and approval by the Department. Should sufficient hot water be unavailable, the Contractor shall provide a minimum 40-gallon electric hot water heater with a minimum recovery rate of 20 gallons per hour. Water from the shower room shall not be allowed to wet the floor in the clean room.

2.3 WASTEWATER FILTERS

A. Install the wastewater filters in a series of stages with the final filtration stage sufficient to meet discharge standard of 18 AAC 70 and/or any local sewage system discharge limit for lead. Size the wastewater pump for 1.25 times the shower head flowrate. Dispose all filters as lead contaminated waste.

2.4 WARNING SIGNS AND TAPE

A. Post warning signs and tape at the boundaries and entrances to lead disturbance and removal work areas. Signs required by other statutes, regulations, or ordinances may be posted in addition to, or in combination with, this warning sign. Conform warning signs and tape to the requirements of 29 CFR 1926.62.

2.5 WARNING LABELS

A. Affix warning labels to all hazardous waste disposal containers as described in the Contractor's approved Solid Waste Disposal Plan. Conform labeling to 29 CFR 1926.62 and 49 CFR 100-199.

2.6 NEGATIVE PRESSURE EXHAUST SYSTEM

A. Use the negative pressure exhaust systems to exhaust each contained work area where the PEL will or is expected to be exceeded. Operate the negative pressure exhaust system continuously (24 hours a day) during lead work. Select the negative pressure exhaust system equipment to provide a minimum of 4 air changes per hour under load within the work area. The negative pressure exhaust system shall have a minimum of two stages of pre-filtration ahead of the HEPA filter: The HEPA filter shall bear the UL-586 label. In no case shall the building ventilation system be used as the local exhaust for the contained work area. Terminate the exhaust outside of the building. The exhaust ventilation system equipment shall be equipped with lock-out protection to prevent operation without a HEPA filter properly installed. The exhaust system equipment shall be equipped with the following instrumentation: a static pressure gauge with low flow alarm, an elapsed time indicator, automatic shutdown capability in the event of a major rupture in the HEPA filter or blocked air discharge and an automatic re-start when power is restored after a power failure.

2.7 PRESSURE DIFFERENTIAL MONITORING EQUIPMENT

A. Provide continuous monitoring of the pressure differential with an automatic recording instrument for each contained work area. Locate the instrument in a clean area where personnel have access to it without respiratory protection. The instrument shall be fitted with an alarm should the negative pressure drop below -0.02 inches of water column relative to the air outside containment.

2.8 TOOLS

A. Vacuum cleaners shall be equipped with HEPA filters. Use only approved power tools to remove lead-containing material. Do not use open-flame and electric element heat-gun type tools with temperatures in excess of 700° F to remove lead-containing

material. Remove all residual lead contamination from reusable tools being removed from lead disturbance or removal work areas. Electrical tools and equipment shall be UL listed.

2.9 AIR MONITORING EQUIPMENT

A. The Contractor's IH shall select the air monitoring equipment to be used for the evaluation of airborne lead.

2.10 EXPENDABLE SUPPLIES

A. Provide flame resistant 6-mil thick polyethylene sheet plastic shall be provided in widths necessary to minimize seams.

2.11 SAFETY DATA SHEETS (SDSs)

A. Provide SDSs for all chemical materials brought onto the worksite.

2.12 OTHER ITEMS

A. Provide other items, such as consumable materials, disposable and/or reusable cleaning equipment and hand tools, or miscellaneous construction equipment and materials, in sufficient quantity as necessary to fulfill and complete the requirements of the contract. Electrical equipment and supplies shall be UL listed.

2.13 ENCAPSULANTS

A. Encapsulants shall contain no toxic or hazardous substances. Encapsulants shall be compatible with the products to which they are applied and be compatible with replacement products.

PART 3 - EXECUTION

3.1 WORK AREAS

A. Lead Control Areas: A control area, structure or containment where lead-containing or contaminated materials are being disturbed. Critical barriers and/or physical boundaries shall be employed to isolate the lead control area and to prevent migration of lead contamination and unauthorized entry of personnel.

B. Contained Lead Work Area Requirements: Construct contained lead work areas as described in the Contractor's approved work plan. A contained lead work area is required whenever airborne lead levels cannot be maintained below the OSHA action level at the boundary of a lead work area.

C. Building Ventilation System: Shut down and isolate by air-tight seals all building ventilation systems supplying air into or returning air from a lead control area or contained lead work area.

D. Building Electrical Systems: Verify that the electrical service is deactivated, disconnected, and locked out where necessary for wet washing and/or removal. Provide temporary electrical service, equipped with ground fault protection, where needed.

3.2 PERSONNEL PROTECTION PROCEDURES

A. Initial Determination: An initial determination is required in the absence of acceptable prior exposure data in accordance with 29 CFR 1926.62. Establish an initial lead work area for each material to be disturbed and each disturbance procedure if required. Isolate these lead work areas from the rest of the building. Personnel working in these areas shall wear respiratory protection and personal protective equipment as directed by the IH. Perform personal and work area air monitoring as directed by the IH. Operational decontamination facilities shall be available. Work performed shall be representative of the work to be done during the remainder of the project.

B. Respirator Evaluation: Upgrading, downgrading, or not requiring respirators shall be recommended by the Contractor's IH based on the measured airborne lead-containing dust or fume concentrations. Immediately implement recommendations to upgrade the respiratory protection, followed by notification to the Department. NOTE: Submit recommendations in writing to downgrade respirator type or not require respirators to the Department for review and written approval prior to implementation.

C. Decontamination Procedures: Worker and material decontamination procedures shall be as described in the Contractor’s approved work plan. Worker decontamination shall be as directed by the Contractor’s competent person.

D. Work Stoppage: Stop work if the IH, the Department, or a representative of a regulatory agency determines that the work is not in compliance with the Contractor's approved work plan, these specifications, or applicable laws and regulations. The Contractor shall stop work and notify the Department whenever the measured concentrations of lead outside the lead control area equal or exceed 30 µg/m3 for airborne lead or 100 µg/ft2 for lead dust on surfaces outside of the work area. When such work stoppage occurs, the cause of the contamination shall be corrected, and the damaged or contaminated area shall be restored to its original decontaminated condition by the Contractor at no expense to the Department. The Contractor is responsible for removing dusts and debris that were generated as a result of his work.

E. The Contractor shall adhere to all applicable regulations regarding entry into confined spaces.

3.3 LEAD DISTURBANCE AND REMOVAL PROCEDURES

A. General: Perform lead disturbance or removal work in accordance with the Contractors approved work plan, applicable regulations, and this specification.

B. Pre-Cleaning: Removal of existing loose paint chips is included in the scope of work. Pre-clean surfaces by HEPA vacuum and wet washing/wiping prior to the establishment of a work area.

3.4 MONITORING AND TESTING

A. Conduct daily sampling in accordance with the Contractor's accepted Lead SAP and this specification.

1. The Department may conduct air monitoring in the Contractor’s work areas and on the Contractor’s employees.

B. Perform environmental air monitoring outside the lead work area for each lead work area without a negative initial determination. Include at least one sample immediately outside the entrance to the lead work area.

C. Perform dust wipe sampling for each lead work area without a negative initial determination. Include at least one sample immediately outside the entrance to the work area daily.

D. Take personnel samples in accordance with 29 CFR 1926.62. Personal samples for an employee will include a minimum of two samples per 8-hour shift. Employees will be monitored at the rate of at least one employee for every eight people performing each task in each work area. Persons performing separate tasks or in separate lead work areas shall be sampled separately.

E. Reduction of monitoring: For each operation for which the Negative Initial Determination established workers’ exposure will be below the action level, the Contractor’s IH may petition the Department to recommend that the monitoring as required above be reduced for the specific task or operation.

3.5 DISPOSAL

A. Sampling of Waste Materials: The Contractor shall test waste materials according to 40 CFR 261 and the disposal site's permit to determine if they are hazardous waste and to dispose of them accordingly. Collect, package and transport to an EPA approved Hazardous Waste Disposal Site all bulk debris, loose paint chips, fines, dust from HEPA filters and vacuum bags, unfiltered waste water, water filter cartridges, disposable personal protective equipment (including respirator filters, poly, and tape) which do not have TCLP test results that classify the material as non-hazardous for lead.

B. Lead-acid batteries and other batteries are classified by the EPA as Universal Wastes. The EPA encourages that all Universal Wastes be recycled in accordance with 40 CFR 273, or in the case of lead-acid batteries, in accordance with 40 CFR 266, subpart G. Lead-acid batteries are addressed in Section 02 84 18.

C. Hazardous Waste Disposal: Dispose of hazardous project wastes as required by 40 CFR 260 and the Contractor’s approved work plan.

D. Construction (Non-Hazardous) Waste Disposal: Dispose of solid (non-hazardous) waste in a permitted waste facility, in accordance with applicable federal, state, and local laws and regulations. Burning of waste is prohibited.

E. Salvageable Materials: The Contractor may salvage metallic lead, lead-acid batteries and other materials to keep such materials from entering the project waste stream. Sell or transfer salvage with a document of exempt status as provided by 40 CFR 261.

F. Waste Storage: Temporarily store solid wastes as described in the approved work plan.

3.6 FINAL CLEANING AND VISUAL INSPECTION

A. Perform a final cleaning and visual inspection of each lead control area prior to release to unprotected workers in accordance with the Contractor's approved work plan. Clean the lead control area by vacuuming with a HEPA filtered vacuum cleaner, wet mopping, or wet wiping. Do not dry sweep or use pressurized air to clean up the area. A final visual inspection report shall be provided verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.

3.7 WORK AREA CLEARANCE TESTING

A. Work area clearance testing by the Contractor is required for each lead control area where the lead action level has been exceeded. Clearance testing shall be performed only after a visual inspection report by the Contractor's IH Technician has documented that the work area is clean and that all lead disturbance required by the contract has been completed. Clearance testing shall include the following:

1. A visual inspection report by the Contractor's IH Technician verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.
2. Three (3) lead wipe and/or lead soil sample results from within the lead control area per the Contractor's approved work plan and in accordance with NIOSH method 9100. Clearance levels shall be 100 µg/ft2 for wipes or 400 mg/kg in soil.

B. The Department may conduct concurrent clearance testing.

C. Work area barriers or containments shall not be removed until clearance testing results are reviewed and approved by the Department.

3.8 SUBSTANTIAL COMPLETION

A. After the work area barriers and temporary construction and equipment have been removed, the Contractor shall inspect the work area to verify that no lead debris, contaminated water, or other residue remains. Any remaining residue shall be cleaned up using HEPA vacuum cleaners and wet wiping methods.

B. The Contractor shall certify that the work area has been cleaned of all lead in compliance with the contract.

C. Costs of restoration of damage to adjacent areas or properties shall be borne by the Contractor.

END OF SECTION

SECTION 02 84 18
REMOVAL AND DISPOSAL OF CHEMICAL HAZARDS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

A. The work includes proper removal and disposal of electrical equipment and chemical hazards related to the Demolition Project. Known hazardous materials identified are indicated as follows:

1. ~~Cold Bay~~
   - ~~a. Mercury Containing Fluorescent Bulbs/Tubes - 81~~
   - ~~b. Potential PCB Containing Ballasts - 34~~
   - ~~c. High Pressure Sodium Bulbs - 24~~
   - ~~d. Fire Extinguishers - 26~~
   - ~~e. Lead Acid Batteries - 5~~
   - ~~f. Hydraulic Door Closers - 3~~
   - ~~g. 55-Gallon Drums Containing Various Fluids - 22~~
   - ~~h. 5-Gallon Container of AFFF~~
2. Kodiak
   - a. Mercury Containing Fluorescent Bulbs - 44
   - b. Potential PCB Containing Ballasts - 22
   - c. Fire Extinguishers - 9
   - d. Lead Acid Batteries - 19
   - e. Abandoned Vehicles & Motorhome - 47
   - f. Portable Propane Tanks - 3

B. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the buildings. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials. This notification is provided in accordance with EPA and OSHA requirements.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 02 26 00 Hazardous Materials Assessment

B. Section 02 82 33 Removal and Disposal of Asbestos Containing Materials

C. Section 02 83 33 Removal and Disposal of Materials Containing Lead

1.3 DEFINITIONS AND ABBREVIATIONS

A. Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.04 of this Section.

1.4 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced.

1. General Requirements: All work shall be performed in compliance with the International Building, Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Codes; Uniform Plumbing Code; the National Electrical Code; and the publications listed in this section that are in effect at the time of the bidding of this contract.
2. Title 10 Code of Federal Regulations (CFR), Nuclear Regulatory Commission Part 20 Standard for Protection Against Radiation
3. Title 29 CFR, Department of Labor (USDOL)
   a. Part 1910 General Occupational Safety and Health Standards
   b. Part 1926 Safety and Health Regulations for Construction
4. Title 40 CFR, Environmental Protection Agency (EPA)
   a. Part 61 National Emission Standards for Hazardous Air Pollutants
   b. Part 260 Hazardous Waste Management System: General
   c. Part 261 Identification and Listing of Hazardous Waste
   d. Part 262 Standards Applicable to Generators of Hazardous Waste
   e. Part 263 Standards Applicable to Transporters of Hazardous Waste
   f. Part 270 The Hazardous Waste Permit Program
   g. Part 273 Standards for Universal Waste Management
   h. Part 311 Worker Protection
   i. Part 761 Polychlorinated Biphenyls (PCBs)
5. Title 49 CFR, Department of Transportation (DOT)
6. Part 171 General Information, Regulations and Definitions
7. Part 172 Hazardous Materials Communication and Regulations
8. Part 173 General Requirements for Shipments and Packaging
9. Part 177 Carriage by Public Highway
10. Part 178 Specifications for Packaging
11. Part 382 Requirements for Drug Testing
12. Part 383 Commercial Driver's License Standards

B. State of Alaska Administrative Codes (AAC)

1. 8 AAC 61 Occupational Safety and Health Standards
2. 18 AAC 60 Solid Waste Management
3. 18 AAC 62 Hazardous Wastes
4. 18 AAC 75 Oil and Hazardous Substances Pollution Control

C. State of Alaska Statutes (AS) AS 45.50.477 Titles Relating to Industrial Hygiene

D. Federal Standards 313E Safety Data Sheets

E. American National Standard Institute (ANSI)

F. Z9.2 Local Exhaust Systems

G. Z87.1 Eye and Face Protection

H. Z88.2 Practices for Respiratory Protection

I. C78.LL 1256 Procedures for Fluorescent Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure.

J. American Society for Testing and Materials (ASTM) D-4397 Polyethylene Sheeting

K. National Fire Protection Association (NFPA) NFPA 701 Fire Tests for Flame Resistant Textiles and Films

L. National Institute of Occupational Safety and Health (NIOSH) Manual of Analytical Methods, Current Edition

1.5 QUALITY ASSURANCE

A. On-site Observation:

1. The safety and protection of the Contractor's employees, sub-contractor's employees, Department employees, the facility, and the public is the sole responsibility of the Contractor.
2. The Department or representatives of State or Federal agencies may make unannounced visits to the site during the work. The Contractor shall make available two complete sets of clean protective clothing for such visitor use. If the work requires the use of PAPR or Supplied Air Respirators, the Contractor shall provide respirators to the visitor with fresh batteries or supplied air system. It is the visitor's responsibility to ensure medical qualification, training, and current "fit test" prior to using any respirator provided by the Contractor.
3. If the Department or agency visitor determines that practices are in violation of applicable regulations; they will immediately notify the Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.
4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Department.
5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.

B. Monitoring and Testing: Monitoring and testing during the work shall be performed as follows:

1. The Contractor shall hire Independent Testing Laboratories to collect and evaluate all air, bulk, and toxicity characteristic leaching procedure (TCLP) samples, which are the responsibility of the Contractor. The Contractor shall direct its laboratories, in writing, to release monitoring and testing data, and all other pertinent data and records, to the Department.

2. The Contractor shall be responsible for monitoring its employees for potential exposure to airborne contaminants as required by project documents and all applicable regulations.
3. The Contractor shall be responsible for work area monitoring and environmental monitoring outside the work area as required by this specification.
4. The Department may perform monitoring and testing inside the building, inside the work areas, and on the Contractor's employees while work is underway and at any time during the work.
5. The Contractor shall have its Independent Testing Laboratories archive all samples until the successful completion of the project.
6. Final inspection and clearance testing shall be conducted by the Contractor.

1.6 PROTECTION OF EXISTING WORK TO REMAIN

A. Perform hazardous material removal work without damage or contamination of adjacent work or the site.

1.7 MEDICAL REQUIREMENTS

A. Institute and maintain a medical surveillance program in accordance with 29 CFR 1910.134.

B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting hazardous materials.

1.8 TRAINING

A. Employ only workers who are trained and certified as required by 29 CFR 1910, 29 CFR 1926, 40 CFR 311, and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of hazardous materials.

1.9 PERMITS AND NOTIFICATIONS

A. Secure necessary permits for hazardous material removal, storage, transport and disposal and provide timely notification as required by federal, state, and local authorities.

1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE

A. Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.

1.11 RESPIRATOR PROGRAM

A. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.

1.12 HAZARD COMMUNICATION PROGRAM

A. Implement a hazard communication program in accordance with 29 CFR 1910.1200.

1.13 SUBMITTALS

A. Approval: Submit the following documentation to the Department for review, approval, or rejection. Work shall not begin until submittals are approved.

1. Shop drawings.
2. Hazardous material removal work plan.
3. Liability insurance policy and performance bond.
4. Schedule.
5. Independent Testing Laboratory(ies).
6. Disposal site designations.
7. Waste Transporter Designations.
8. Notifications and certifications.
9. Competent Person Designation Notifications and Certifications.
10. Request for Substitutions.

B. Shop drawings shall show:

1. Boundaries of all hazardous material removal areas.
2. Location and construction of decontamination stations, if required.
3. Location of temporary site storage facilities.
4. Location of air monitoring stations, if required.
5. Emergency egress route(s).

C. The work plan shall include procedures for:

1. Work area set-up and protection.
2. Worker protection and decontamination.
3. PCB removal procedures.
4. Mercury-containing lamp removal and packaging procedures.
5. Mercury-containing material removal procedures.
6. Monitoring and testing procedures (Chemical Hazards Sampling and Analysis Plan (SAP)).
7. Radioactive materials removal and tracking procedures.
8. Waste handling, packaging, labeling, and manifesting procedures.

D. Insurance Policy and Performance Bond: Submit copies of the Contractor's or Subcontractor's insurance policy and performance bond. Submittal requirement is only to ensure that the insurance certificate(s) show specific coverage for the potentially hazardous materials being handled by this project. The insurance and bond amounts and certificate holder requirements are addressed in other portions of the contract documents and are not covered as part of this submittal requirement.

E. Schedule: Submit construction schedule by work area.

F. Independent Testing Laboratory(ies) and Laboratory Personnel: Submit the name, location, and phone number of proposed Independent Testing Laboratory, and the names and certifications of industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.

1. The Independent Testing Laboratory shall be acceptable to the Department.
2. Evidence that a laboratory has demonstrated proficiency in performing analyses according to Method 1311 TCLP, corresponding to the current version of Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW-846. Evidence may include successful participation in a recognized inter-laboratory quality control program such as a laboratory certified by the California Health and Welfare Agency, Department of Health Services, or a more informal interlaboratory quality control program.
3. Submit the name, address, telephone number, and résumé of the Industrial Hygienist (IH) who prepared the Chemical Hazards (SAP) and will oversee the on-site monitoring. Submit the names, addresses, and résumés of industrial hygiene technicians who may assist the IH for on-site tasks. The Contractor shall submit documentation that the IH has all the qualifications for the assigned duties as required by the Contractor's liability insurance policy.
4. Submit copies of the Contractor's letters to the Independent Testing Laboratory, directing each to release all the results for this project to the Department, as these results become available and as specified herein.

G. Disposal Site: Submit the name and location of the proposed Alaska Department of Environmental Conservation (DEC) or U.S. Environmental Protection Agency (EPA) permitted disposal sites.

H. Waste Transporter: Submit the name, address, and EPA Hazardous Waste Transporter identification number for the proposed waste transporters.

I. Certifications, Permits, and Notifications: Obtain and submit copies of EPA Hazardous Waste Generator identification number for the purpose of accumulating hazardous waste in accordance with 40 CFR 262. Submit copies of refrigerant recovery technician’s EPA certification and company name when refrigeration systems are being demolished or deactivated. If the site does not have an EPA ID number for hazardous wastes, the Contractor will need to assist the Department in obtaining the EPA ID number, but the Department will be available to sign the application documents and shipment records prepared by the Contractor.

J. Representations: Submit statement by the Contractor that records of employees' work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.

K. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of their previous projects. Certify that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.04 above.

L. Substitutions: Submit requests for substitutions of materials, equipment, and methods.

M. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:

1. Updated schedules for hazardous material removal.
2. Change in competent person.

3. Changes to work plan.

1.14 TEST REPORTS

A. Submit the following documentation produced during the work as received:

1. Project Daily Logs: Submit the previous day's Daily Logs. Logs shall include regulated area sign-in sheets and list of chemical hazards removed including quantities and locations of those materials, in the units used on the drawings. Claims for additional quantities will not be addressed unless daily quantities are submitted.
2. Monitoring and testing data sheets and laboratory reports.

1.15 PROJECT COMPLIANCE DOCUMENTS

A. Submit the following documents with the application for final payment.

1. Daily sign-in sheets.
2. Contractor's actual "start and finish" project dates.
3. All hazardous waste shipping manifests.
4. Disposal site receipts, including manufacturer name and serial numbers from each radioactive exit sign
5. All final laboratory results.
6. Submit legible copies of each Worker’s Hazardous Waste Operations and Emergency Response (HAZWOPR) cards and/or a copy of the refresher training certificate to show that all workers have received their initial training or an eight-hour refresher course within the past year.

1.16 SANITARY FACILITIES

A. Provide adequate toilet and hygiene facilities.

1.17 MATERIAL STORAGE

A. Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.

1.18 ON-SITE DOCUMENTATION

A. The Contractor shall maintain on the job site, at a location approved by the Department, copies of the following data for safety procedures, equipment, and supplies used for the work

1. Equipment: Show the model, style, operations, and maintenance for the following, as applicable:
   a. Respirators, PAPR and canister types.
   b. Decontamination facilities.
   c. Specialized hazards handling equipment.
2. Expendable supplies: Maintain the manufacturer’s safety data, and use the data for the following supplies:

a. Coveralls and headgear.
b. Boots, aprons, and gloves.
c. Disposal containers.
d. Solvents and degreasers.

3. Safety Data Sheets (SDS): Maintain SDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
4. Respirator Program: The Contractor's written respirator program.

PART 2 - PRODUCTS

2.1 PERSONAL PROTECTIVE EQUIPMENT

A. Provide personal protective clothing as approved and selected by the IH.

1. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters.
2. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges shall be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 8 AAC 61.1100.
3. Whole Body Protection: Provide approved aprons, gloves, goggles, face shields, and hard-hats, and other protective clothing as required to meet applicable safety regulations to all workers engaged in hazardous materials removal. Full facepiece respirators shall meet the requirements of ANSI Z87.1.
4. Provide protective personal equipment and clothing at no cost to the workers.

2.2 DECONTAMINATION UNIT

A. Provide a decontamination station in accordance with the Contractor's accepted work plan and applicable regulations.

2.3 WARNING SIGNS AND TAPE

A. Post warning signs and tape at the boundaries and entrances to chemical hazards removal areas. Signs required by other statutes, regulations, or ordinances may be posted in addition to, or in combination with, this warning sign.

2.4 WARNING LABELS

A. Affix warning labels to all hazardous waste disposal containers as described in the Contractor's approved Solid Waste Disposal Plan. Conform labeling to 49 CFR 100-199.

2.5 SPECIALIZED EQUIPMENT

A. Lamp crushers and other specialized equipment to consolidate, reduce or treat hazardous materials are classified as RCRA treatment. The EPA specifically prohibits

the use of Drum Top Crushers for management of fluorescent lamps as universal waste unless an equivalency determination is made by the state.

2.6 EXPENDABLE SUPPLIES

A. Provide flame resistant 6-mil thick polyethylene sheet plastic in widths necessary to minimize seams.

2.7 SAFETY DATA SHEETS (SDSs)

A. Provide SDSs for all chemical materials brought onto the work-site.

2.8 OTHER ITEMS

A. Provide other items, such as consumable materials, disposable and/or reusable cleaning equipment and hand tools, or miscellaneous construction equipment and materials, in sufficient quantity as necessary to fulfill and complete the requirements of the contract. Electrical equipment and supplies shall be UL listed.

2.9 ENCAPSULANTS

A. Encapsulants shall contain no toxic or hazardous substances. Encapsulants shall be compatible with the products to which they are applied and be compatible with any replacement products.

PART 3 - EXECUTION

3.1 WORK AREAS

A. Electrical Power: Verify that the electrical power to the equipment being removed is deactivated, disconnected, and locked-out.

B. Loaded Disposal Drums: The Contractor shall provide handling equipment to move disposal drums loaded with hazardous wastes.

3.2 PERSONNEL PROTECTION PROCEDURES

A. All personnel entering the work area shall sign the daily log and put on clean protective clothing.

B. Basic protective clothing shall consist of aprons, gloves, goggles, face shields, and hard hats.

1. The addition of approved full body coveralls, bib-type aprons, and respirators is necessary as conditions warrant.

C. Make available a contaminated material disposal drum, 6-mil. plastic wrapping and tape, or appropriate bagging materials for leaking ballasts and/or oil-contaminated components.

D. Decontamination Procedures: All personnel handling or removing hazardous materials will comply with the decontamination procedures as described in the approved work plan.

3.3 HAZARDOUS MATERIAL REMOVAL PROCEDURES

A. Conduct hazardous materials removal, handling, packaging, storage, transport and disposal in accordance with the Contractor's approved work plan, applicable regulations, and this specification.

B. Perform PCB related work in accordance with 40 CFR 761, 8 AAC 61, 18 AAC 60 and 18 AAC 62.

C. Perform mercury-containing lamps work in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and 8 AAC.

D. Perform waste battery work in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and 8 AAC.

E. Perform radioactive smoke detector work in accordance with 10 CFR 20, 8 AAC 61, 18 AAC 60 and 18 AAC 62.

F. Perform ozone depleting substances work in accordance with 40 CFR 82, 8 AAC 61, 18 AAC 60, and 18 AAC 62.

3.4 MONITORING AND TESTING

A. Conduct daily sampling in accordance with the Contractor's accepted Chemical Hazards SAP and this specification.

1. The Department may conduct air monitoring in the Contractor’s work areas and on the Contractor’s employees.

B. Personal, work area, and environmental monitoring for airborne contaminants shall be performed by industrial hygiene technicians who are employees of (one of) the Contractor's Independent Testing Laboratories.

C. Perform air monitoring in accordance with 29 CFR 1926, current EPA guidance, and as specified herein. Calibrate all sampling pumps on-site with a calibrated transfer standard before and after each sample. Built-in rotameters on pumps are not acceptable for calibration.

D. Monitor for all airborne contaminants listed in 29 CFR 1926.55 and 8 AAC 61.1100, which are produced by the Contractor's operations.

E. Contractor shall test waste materials as required by 40 CFR 261, the disposal site's permit, and its approved work plan. If performed, TCLP testing of fluorescent lamps shall comply with ANSI/NEMA Standard Procedure for Fluorescent Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure, C78.LL 1256-2003 or latest version.

3.5 DISPOSAL

A. Dispose of hazardous wastes in an EPA permitted hazardous waste disposal site as required by 40 CFR 260 and 40 CFR 761, the Contractor's approved plan, and the disposal site operator.

B. Comply with current waste disposal, handling, labeling, storage, and transportation requirements of the waste disposal facility, U.S. Department of Transportation, and EPA regulations.

C. Fluorescent, mercury vapor, metal halide and high-pressure sodium lamps are classified by the EPA as hazardous mercury waste under the Universal Waste Rule under 40 CFR 273. Mercury and mercury-containing products are considered hazardous waste unless TCLP testing of the waste for mercury confirms the mercury content to be less than the EPA criteria of 0.2 mg/l. If mercury-containing lamps and thermostats are handled and disposed of in accordance with the Universal Waste Regulations, no TCLP test is required. If the Contractor chooses to perform a TCLP test of fluorescent lamps, the test shall be conducted in accordance with the requirements of ANSI/NEMA Standard Procedure for Fluorescent Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure, C78.LL 1256-2003 or latest version.

D. Dispose of radioactive materials and equipment in accordance with the manufacturer's recommendations, the disposal site's requirements, and 10 CFR 20 Subpart K.

E. Refrigerants in refrigeration and cooling systems in the buildings contain ODS components that must be recovered and recycled or disposed of in accordance with 40 CFR 82. Personnel decommissioning or removing ODS refrigerants shall hold appropriate EPA training and certificate for handling and recovering these materials.

F. Heating systems containing glycol shall be drained and all glycol collected in appropriate waste containers for recycling or disposal. Glycol shall be tested for heavy metals using the Toxicity Characteristics Leaching Procedure (TCLP). Glycol that failed the TCLP shall be packaged for disposal as hazardous waste.

3.6 CLEANING OF WORK AREA

A. Remove all hazardous materials and debris within a work area. Wet clean all work area surfaces.

B. Notify the Department that hazardous materials removal has been completed and the work area is ready for visual inspection. Include a statement that all hazardous materials and debris in the work area have been removed as required by the contract.

END OF SECTION

SECTION 31 20 00
EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Excavating and backfilling related to building, structure, and utility removal.
   2. Excavating and backfilling related to minor site improvements and fence installation.
   3. Excavating and backfilling for utility trenches.

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. Section 02 61 13 Excavation & Handling Contaminated Material

1.3 DEFINITIONS

A. Backfill: Soil material used to fill an excavation.

B. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

C. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
   1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by the Engineer.
   2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by the Engineer. Unauthorized excavation, as well as remedial work directed by the Engineer, shall be without additional compensation.

D. Fill: Soil materials used to raise existing grades.

E. NFS: Non-frost susceptible.

F. Structures: Buildings, footings, foundations, slabs, tanks, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

G. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase.

H. Trench: Any excavation for a utility or drainage system.

I. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

J. Unsuitable Material: Material that, in the opinion of the Department's Representative, is inadequate for use in the proposed project.

1.4 SUBMITTALS

A. Fill and Backfill Material Test Reports. From a qualified independent geotechnical testing agency indicating and interpreting test results for compliance.

B. Material/Disposal Site permits: Prior to hauling material to or from the site, the Contractor shall provide copies of approved material/disposal site permits.

C. Material Site test results: Prior to delivery of materials to the site, Contractor shall notify the Department's Representative of the material source and arrange for access for sampling purposes. Material shall not be delivered to the site until receipt of test results verifying compliance with this specification.

1.5 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.
   1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
   2. Provide routes around closed or obstructed traffic ways if required by Department.

B. Utilities: Notify "Call Before You Dig" for existing underground utility locates in areas of work prior to any earthwork.
   1. Should uncharted or incorrectly charted utilities be encountered during excavation, consult Department immediately for direction. Cooperate with Department in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of Department.

C. Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights.
   1. Operate warning lights as required, and/or recommended by authorities having jurisdiction.

D. Protect structures, utilities, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

E. Do not commence earthwork operations until temporary erosion and sediment control measures are in place.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from on-site excavations.

B. Satisfactory Soils: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP and SM, or a combination of these group symbols, and free of debris, waste, frozen materials, vegetation, and other deleterious matter.

C. Unsatisfactory Soils: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.

D. General Fill: Earth, sand, gravel, rock, or combinations thereof containing no muck, peat, frozen material, roots, sod, or other deleterious matter and is compactable.
   1. Material excavated on site may be used as General Fill if it meets the above criteria, is stockpiled separately, and is free of organics, contamination, other debris, and excess moisture.
   2. General Fill used as trench backfill within 12 inches of a pipe or conduit shall have all material passing the 3-inch sieve.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, foundations, utilities, pavements, and other facilities scheduled to remain from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.

B. Protect and maintain erosion and sedimentation controls during earth-moving operations.

C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
   1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
   2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

3.3 EXCAVATION, GENERAL

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
   1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.4 SUBGRADE INSPECTION

A. Notify Department's Representative when excavations have reached required subgrade.

B. Inspect subgrade to identify soft pockets and areas of excess yielding.
   1. Do not compact wet or saturated subgrades.

C. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.

D. Any seasonally frozen soils in the base of excavations shall be replaced or allowed to thaw to a minimum depth of 4 feet below the base of excavation prior to subgrade compaction and placement of fill.
   1. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Department's Representative, without additional compensation.

E. Prepare subgrade. Scarify the top 6 inches of the subgrade surface. Compact subgrade to the extent that insures the first lift of backfill can be compacted.

3.5 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavations as directed by the Department's Representative.

3.6 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust or water erosion.
   1. Stockpile soil materials away from edge of excavations.

3.7 SOIL FILL

A. Place and compact fill and backfill in excavations promptly, but not before completing the following:
   1. Surveying and recording locations and conditions of underground utilities for Record Documents.
   2. Removing trash and debris.

B. Place backfill on subgrades free of mud, frost, snow, or ice.

C. Backfill cavities left by structure and utility removal to the level of the surrounding ground surface. Material shall be placed in uniform layers not exceeding 9 inches loose depth.

3.8 SOIL MOISTURE CONTROL

A. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

B. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that is too wet to compact.

3.9 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 9 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

B. Fill within 5 feet (horizontal) of foundations shall be compacted with lighter compaction equipment to prevent overstressing and movement of the foundations or stem walls.

C. Compact each layer with a minimum of 5 passes using compaction equipment. Compact until soil material does not rut under the compaction equipment.

3.10 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
   1. Provide a smooth transition between adjacent existing grades and new grades.

B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding.

3.11 FIELD QUALITY CONTROL

A. Quality Control Testing During Construction: Allow Department's Representative access inspect subgrades and fill layers before further construction work is performed. Department's Representative approval is required prior to placement of additional lifts.

B. When the inspector finds that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and reinspect until the specified compaction is obtained.

3.12 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

C. Where settling occurs before Project correction period elapses, backfill with additional soil material and compact.

3.13 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION