

SECTION 01100 – SUMMARY OF WORK

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS AND COVENANTS

The INSTRUCTIONS TO BIDDERS, GENERAL PROVISIONS, General Specifications, SPECIAL PROVISIONS, and other applicable documents preceding these Specifications shall govern all work specified hereinafter in all Divisions and Sections.

1.02 APPLICABLE REGULATIONS

The Contractor shall comply with all local laws, ordinances, rules and regulations pertaining to such work and must obtain all required permits, licenses, and certificates and publish and post all notices required thereby.

1.03 SITE SUMMARY

The project site and surrounding areas were previously used for the commercial cultivation of sugarcane. The East Kapolei Pesticide Mixing and Loading site, in particular, was used to mix, store, and load pesticides onto trucks for approximately 40 years up to 1994. Currently, the East Kapolei site is vacant and surrounding areas are leased for commercial cultivation of diversified fruit and vegetable crops.

Under Section 11-451-15(k) of the State Contingency Plan for remedial actions, an environmental investigation of the site was conducted and the presence of elevated arsenic, dioxins/furans, pentachlorophenol, and triazine pesticides were identified in the soils that may present an endangerment to human health and the environment.

The proposed site grading and installation of engineering controls such as 60-mil geomembrane liner and low permeability soil layers will address the contaminated soils on the site. Contaminated soil will be effectively isolated from direct human contact and the geomembrane liner will prevent downward migration of storm water through the contaminated soils, eliminating the primary mechanism for contaminant leaching from the soil.

For the purpose of this project, the soils within the project site are classified as one of the following contamination levels:

- Level 1 contamination (slight): soils outside of the existing chain link fence area
- Level 2 contamination (moderate): soils along the perimeter within existing chain link fence area
- Level 3 contamination (high): soils near the middle of the existing chain link fence area

Following completion of remediation activities, DHHL proposes the redevelopment of the East Kapolei Pesticide Mixing and Loading site and surrounding lands as part of the agency's "East Kapolei II" community. No residential units are anticipated at the site itself, however, future land uses to be hosted at the site have yet to be determined.

1.04 WORK COVERED BY CONTRACT DOCUMENTS

- A. Perform operations and furnish tools, materials, related items and labor necessary to execute, complete and deliver the Work as required by the Contract Documents.
- B. These Specifications are divided for convenience into titled divisions and Sections as set forth in the TABLE OF CONTENTS preceding these Specifications and shall not be considered an accurate or complete segregation of the several units of labor and materials. No responsibility, either direct or implied is assumed by the Department of Hawaiian Home Lands (DHHL) for omissions or duplications of the subject matter. The Contractor will be held responsible for the complete work whenever or wherever the parts are described in one or more trades groups. Any mention in these sections or indication on the Drawings or articles, materials, operations, or methods, require that the Contractor furnish each item so mentioned or indicated, of the kind, type, or design and quality of each item so mentioned on the Drawings, and that the Contractor furnish all labor, materials, equipment, incidentals and supervision necessary to complete the work in accordance with the Drawings and the true meaning and intent of these Specifications, even though such mention or articles, materials, operations, methods, quality, qualifications or condition is not expressed in complete sentences
- C. The Contractor shall not alter from the Drawings and Specifications. In the event of errors or discrepancies, the Contractor shall immediately notify the Construction Manager. All figured dimensions take precedence over scaled measurements. No important dimension shall be determined by scale.

The work includes subgrade preparation, grading, and capping the contaminated soils with clean imported material and grassing. In areas with highest concentrations of contamination, a high-density polyethylene (HDPE) geomembrane liner and geotextile fabric will be installed to provide a primary barrier against storm water infiltration through the contaminated soil, therefore preventing migration of contaminants via soil leaching. Any construction activities that involve the disturbance of existing site soils that may expose workers or the public to potentially contaminated soil shall fall within the Specifications provided herein. Suspected contaminants associated with long-term exposure hazards at the various sites within the project area include, but are not limited to, arsenic, dioxins/furans, pentachlorophenol, and triazine pesticides. In addition, transite piping is likely to be present within the project area. An existing concrete ditch is also located adjacent to the contaminated site. Debris within the ditch shall be assumed to be slightly contaminated and shall be handled in accordance with the Plans and these Specifications.

1.05 SPECIFICATION FORMATS AND CONVENTIONS

- A. General: These Specifications are intended to cover all labor, materials and standard of workmanship employed in the work indicated on the plans and called for in the Specifications or reasonably implied therein. The plans and Specifications complement one another. Any part of the work mentioned in one and not represented in the other, shall be done the same as if it had been mentioned or represented in both.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated and include incomplete sentences. Omission of words or phrases such as “the Contractor shall”, “as shown on the Drawings”, “a”, “an”, and “the” are intentional. Omitted words and phrases shall be provided by inference to form complete sentences. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred, as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the Work.
2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

The words “shall”, “shall be”, or “shall comply with”, depending on the context, are implied where a colon (:) is used within a sentence or phrase.

C. Terms:

1. Directed: Terms such as “directed”, “requested”, “authorized”, “selected”, “approved”, “required”, and “permitted” mean directed by Construction Manager, requested by Construction Manager, and similar phrases.
2. Indicated: The term “indicated” refers to graphic representations, notes, or schedules on Drawings or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as “shown”, “noted” “scheduled”, and “specified” are used to help the user locate the reference.
3. Furnish: The term “furnish” means to supply and deliver to project site, ready for unloading, unpacking, assembly, and similar operations.
4. Install: The term “install” describes operations at project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
5. Provide: The terms “provide” or “provides” means to furnish and install, complete and ready for the intended use.
6. Installer: An installer is the Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-Subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

7. Submit: Terms such as “submit”, “furnish”, “provide”, and “prepare” and similar phrases in the context of a submittal, means to submit to the Construction Manager.

D. Industry Standards:

1. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
2. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
3. Conflicting Requirements: If compliance with 2 or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Construction Manager for a decision before proceeding.

1.06 CONTRACT

Refer to General Conditions and Special Provisions for other contract conditions.

1.07 USE OF PREMISES AND WORK RESTRICTIONS

- A. General: Contractor shall have full use of the construction zone for construction operations, including use of the project site during the construction period. The Contractor's use of the premises is limited only by DHHL's right to perform work or to retain other Contractors on portions of the project site.
- B. Contractor's use of premises is restricted as follows:
 1. Construction Times and Schedule:
 - a. Construction Times: Night, weekend and overtime work is allowed when approved by the Construction Manager unless restricted elsewhere.
 - b. Schedule: No on-site work shall be performed during holidays unless approved by the Construction Manager.
 2. Site Access and Parking:
 - a. Access: Access to the Project shall be via existing roadways or as directed by the Construction Manager.
 - b. Parking: Parking for the Contractor's employees (or Subcontractors) shall be coordinated with the Construction Manager.

3. Noise and Dust Control:

- a. Contractor shall address dust control in accordance with SECTION 02370 – EROSION AND SEDIMENTATION CONTROL.
- b. Noise Control
 - 1) Keep noise within acceptable levels at all times in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 46 - Community Noise Control. Obtain and pay for the Community Noise Permit when construction equipment or other devices emit noise at levels exceeding the allowable limits.
 - 2) Ensure mufflers and other devices are provided on equipment, internal combustion engines and compressors to reduce loud disruptive noise levels and maintain equipment to reduce noise to acceptable levels.
 - 3) The Contractor is forewarned that failure to employ best management noise limiting practices could lead to complaints from the public and/or penalties by the State of Hawaii Department of Health as provided in Section 342F-11, HRS, and Section 11-46-18, HAR Title 11 Chapter 46. The Contractor is responsible for all monetary fines or corrective action required as a result of complaints from the public and/or penalties from DHHL, State or Federal agencies at no additional cost to DHHL.
 - 4) The Contractor is forewarned that failure to employ best management noise limiting practices could lead to complaints from the public. The State of Hawaii Department of Health is empowered to reduce the allowable hours of work or to revoke the noise variance in its entirety on the basis of public complaints, even if the Contractor is monitored to be within the preceding numerical noise limits. The Contractor shall not be given a time extension or compensated for additional costs or damages due to a reduction of work hours or revocation of the variance
 - 5) Construction activities shall not emit noise in excess of the maximum permissible sound levels for the hours before 7:00 a.m. and after 6:00 p.m. of the same day, Monday through Friday. No work shall be conducted on weekends and holidays.
 - 6) The Construction Manager will notify the Contractor of any non-compliance with the foregoing provisions and the action to be taken. If the Contractor fails or refuses to comply promptly, the Construction Manager may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No extension of time or payment for excess costs or damages shall be made for the time lost due to such stop action.
 - 7) Compliance with the provisions of this Section by the subcontractors will be the responsibility of the Contractor.

4. Other Conditions:

- a. Arrange for construction debris and trash to be removed from the Project site weekly.
- b. Contractor shall at all times conduct his operations to ensure the least inconvenience to the public. Operate machinery and equipment with discretion and with minimum interference to driveways and walkways. Do not leave machinery and equipment unattended on roads and driveways.
- c. Store materials in the areas as designated by the Construction Manager. Locate construction equipment, machinery, equipment and supplies within Project Contract Limits.
- d. Keep access roads to the project site free of dirt and debris. Provide, erect and maintain lights, barriers, signs, etc. when working on driveways and walkways to protect pedestrians and moped/bicycle riders. Obey facility traffic and safety regulations.
- e. Contractor shall comply with all legal load restrictions in the hauling of materials.

1.08 FIELD VERIFICATION

Field verify the conditions of the site including survey benchmarks/controls and dimensions affecting the work of this Contract before ordering products and materials.

1.09 SOILS INVESTIGATION REPORT

A soils investigation report entitled, "Soils Investigation, Asphalt Pavement Cover, Former East Kapolei Pesticide Mixing and Loading Facility, Kapolei, Oahu, Hawaii", dated June 15, 2010 was prepared by Hirata & Associates, Inc. In addition, two memorandums entitled "Gravel Cap Recommendations; Former East Kapolei Pesticide Mixing and Loading Facility Memorandums," dated November 1, 2010 and November 15, 2010 were also prepared by Hirata and Associates, Inc. The report and memorandums are available for examination at the State of Hawaii, Department of Hawaiian Home Lands, Hale Kalaniana'ole, 91-5420 Kapolei Parkway, Kapolei, Hawaii 96707 to provide the Contractor with general information regarding the types of soil, rock, and groundwater levels that he may encounter during his work.

The geotechnical report, including the recommendations in the report, and memorandums are not part of the Contract Documents and are available for information purposes only.

The information and data furnished are the product of facts gathered in investigations made at the specific locations indicated to aid in the design of the project, and no assurance is given that the conditions are necessarily typical of conditions at other locations or that such conditions remain unchanged. The Contractor shall be solely responsible for all assumptions, deductions, or conclusions he may make or derive from the subsurface information or data furnished. DHHL and its Consultants assume no

responsibility for the interpretation of the data, information, and recommendations presented in this report.

If discrepancies are found to exist between the report and Drawings or Specifications, the Drawings and Specifications shall govern.

1.10 ARCHAEOLOGICAL REQUIREMENTS

In the event any subsurface archaeological sites or remains of historic value such as artifacts or charcoal deposits are encountered, the Contractor shall stop work, protect the find from further damage and immediately notify the Construction Manager and the State Historic Preservation Officers from the State Department of Land and Natural Resources at phone (808) 692-8015 to assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

PART 2 – PRODUCTS

2.01 ASBESTOS PROHIBITION

No asbestos containing materials and equipment shall be used on this project. The Contractor shall ensure that all materials and equipment incorporated in the project are asbestos-free.

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01310 – PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.01 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Project meetings.

1.02 PERFORMANCE AND COORDINATION

- A. Contractor is in charge of the Work within the Project Contract Limits, and shall direct and schedule the Work. Include general supervision, management and control of the Work of this project, in addition to other areas more specifically noted throughout the Specifications. Final responsibility for performance, interface, and completion of the Work and the Project is the Contractor's.
- B. The Contractor is responsible for jobsite Administration. Provide a competent superintendent on the job and provide an adequate staff to execute the Work. In addition, all workers shall dress appropriately and conduct themselves properly at all times. Loud abusive behavior, sexual harassment and misconduct will not be tolerated. Workers found in violation of the above shall be removed from the job site as directed by the Construction Manager.
- C. The DHHL will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the Prime Contractor in matters pertaining to other trades employed on the job.
- D. Provide project interface and coordination to properly and accurately bring together the several parts, components, systems, and assemblies as required to complete the Work pursuant to the General Conditions and Special Provisions.
 - 1. Provide interface and coordination of all trades, crafts and subcontracts. Ensure and make correct and accurate connections of abutting, adjoining, overlapping, and related work. Provide accessories, appurtenances, and incidental items needed to complete the Work, fully, and correctly in accordance with the Contract Documents.
 - 2. Materials, accessories, incidental items, and services required to complete the Work which are not provided by Subcontractors shall be provided by the Contractor.
 - 3. Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.

1.03 COOPERATION WITH OTHER CONTRACTORS

The DHHL reserves the right at any time to contract for or otherwise perform other or additional work within the Project Contract Limits. The Contractor of this project shall to the extent ordered by the Construction Manager, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by DHHL or other Contractors.

1.04 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences as directed by the Construction Manager at the project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Construction Manager of scheduled meeting dates and times.
2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: The Contractor shall record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including the Construction Manager, within seven (7) days of the meeting.

B. Preconstruction Conference: The Construction Manager shall schedule a preconstruction conference before the start of construction, at a time convenient to the Construction Manager, but no later than 7 days before the Project start date or jobsite start date whichever is later. Conference will be held at the Project site or another convenient location. The Construction Manager shall conduct the meeting to review responsibilities and personnel assignments.

1. Attendees: The Construction Manager; design consultants; Owner; Contractor and its superintendent; major Subcontractors; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Hazards and risks.
 - b. Tentative construction schedule.
 - c. Critical work sequencing and coordination.
 - d. Designation of responsible personnel.
 - e. Submittal procedures.
 - f. Work scope.

- g. Use of the premises.
 - h. Parking availability.
 - i. Office, work, and storage areas.
 - j. Equipment deliveries and priorities.
 - k. First aid.
 - l. Security.
 - m. Progress cleaning.
 - n. Working hours.
- C. Progress Meetings: Conduct progress meetings at weekly or other intervals as determined by the Construction Manager. Coordinate dates of meetings with preparation of payment requests.
- 1. Attendees: In addition to the Construction Manager, each Contractor, Subcontractor, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Outstanding Requests for Information (clarification).
 - 2) Interface requirements.
 - 3) Sequence of operations.
 - 4) Status of outstanding submittals.
 - 5) Deliveries.
 - 6) Access.

- 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Force Account work.
 - 14) Change Orders and Change Proposals.
 - 15) Documentation of information for payment requests.
- c. Corrective Action Plan: Contractor shall provide a plan of corrective action for any item which is delayed or expected to be delayed, then that item impacts the contractual dates.
- 3. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01320 – CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 – GENERAL

1.01 SUMMARY

- A. General Requirements: This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Contractor's Construction Schedule.
 2. Submittals Schedule.
 3. Schedule of Prices.
- B. Related Sections:
1. SECTION 01310 – PROJECT MANAGEMENT AND COORDINATION
 2. SECTION 01330 – SUBMITTAL PROCEDURES

1.02 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
1. Critical activities are activities on the critical path and control the total length of the project. They must start and finish on the planned early start and finish times.
 2. Predecessor activity is an activity that must be completed before a given activity can be started.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of project.
- C. Critical Path: The longest continuous chain of activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Float: The measure of leeway in starting and completing an activity.
1. Float time is not for the exclusive use or benefit of the Contractor, expiring Project resources available as needed to meet schedule milestones and Contract completion date.

2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.
 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- F. Schedule of Prices: A statement furnished by Contractor allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Payment Applications.

1.03 SUBMITTALS

- A. Required Submittals: Submit 8 sets of the list of the required submittals, by Specification Section, within 15 days after award of the Contract or upon earlier written instructions from the Construction Manager.
1. The listing shall indicate and include the following:
 - a. The number of copies required for submittal.
 - b. Planned submittal date.
 - c. Approval date required by the Contractor.
 - d. A space where the "date of submittal" can be inserted.
 - e. A space where the "date of approval" can be inserted.
 - f. A space where an "action code" can be inserted.
- B. Construction Schedule: Submit 7 sets of the Construction Schedule for review within 15 days after the award of the Contract or upon earlier written instructions from the Construction Manager.
- C. Schedule of Prices: Submit 3 sets of the Schedule of Prices integrated with the Construction Schedule for review within 15 days after the award of the Contract or upon earlier written instructions from the Construction Manager.
1. Use the DHHL-approved forms for Payment Applications.

1.04 COORDINATION

- A. Schedules and Reports: Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate Contractors.
- B. Construction Schedule: Coordinate Contractor's Construction Schedule with the Schedule of Prices, Submittals Schedule, loaded monthly event activity, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.
- C. Schedule of Prices: Coordinate preparation of the schedule with preparation of Contractor's Construction Schedule.
1. Correlate line items in the Schedule of Prices with other required administrative forms and schedules, including the following:
 - a. The DHHL-approved Payment Application form and the Construction progress Report continuation sheet for the event cost estimate per time period.
 - b. Submittal Schedule.

PART 2 – PRODUCTS

2.01 SUBMITTALS SCHEDULE

- A. Furnish required submittals specified in this Section and in the Technical Sections in accordance with the General Conditions. Submittals may include one or more of the following: shop drawings, material samples, material safety data information, schedules of materials, schedule of operations, certifications, and field posted as-built drawings.
- B. Furnish a schedule of submittals per Construction Manager.
1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Prices, and Contractor's Construction Schedule.
 2. The schedule shall accommodate a minimum of twenty-one (21) calendar days for the DHHL's review.
 3. Prepare and submit an updated list to the Construction Manager at monthly intervals or as directed by the Construction Manager. The listing shall reflect all approvals received since the last update.

2.02 CONTRACTOR'S CONSTRUCTION SCHEDULE – GANTT CHART METHOD

- A. The construction schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. The progress chart shall indicate the order in which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment).
- B. Upon completion of the Construction Manager's review, the Contractor shall amend the schedule as necessary to reflect the comments. If necessary, the Contractor shall participate in a meeting with the Construction Manager to discuss the proposed

schedule and changes required. Submit the revised schedule for review within seven (7) calendar days after receipt of the comments.

- C. Use the reviewed schedule for planning, organizing and directing the work, for reporting progress, and for requesting payment for the work completed. Unless providing an update, do not make changes to the reviewed schedule without the Construction Manager's approval.
- D. If, in the opinion of the Construction Manager, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve progress, including those that may be required by the Construction Manager. The Construction Manager may require the Contractor to increase the number of shifts, overtime operations, days of work, or amount of construction plant, and to submit for approval any supplemental schedule or schedules in chart form as the Construction Manager deems necessary to demonstrate how the approved rate of progress will be regained.
- E. Update the construction schedule at monthly intervals or when directed by the Construction Manager to revise the schedule. Reflect any changes occurring since the last update with each invoice for progress payment. Submit copies of the purchase orders and confirmation of the delivery dates as directed. The Construction Manager's review of the updated schedule is to check that the updated schedule does not alter the construction performance period unless the period was revised through a change order or contract modification.
- F. At the Contractor's option a PERT chart may be used.

2.03 SCHEDULE OF PRICES

- A. Furnish a schedule of prices per Construction Manager.
- B. Provide a breakdown of the Contract Sum in enough detail to facilitate developing and the continued evaluation of Payment Applications. Provide several line items for principal subcontract amounts, or for materials or equipment purchased or fabricated and stored, but not yet installed, where appropriate. Round amounts to nearest whole dollar; total shall equal the Contract Price.
- C. Each item in the Schedule of Prices and Payment Application shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

2.04 CONTRACTOR DAILY PROGRESS REPORTS

- A. The General Contractor and all Subcontractors shall keep a daily report of events.
- B. The form of the Contractor Daily Progress Report shall be as directed by the Construction Manager.
- C. Submit copies of the previous week's reports on Monday morning at 10:00 a.m.
- D. Submit copies of the reports with the monthly payment request for the whole period since the last payment request submittal.

E. Deliver the reports in hard copy or by e-mail as directed by the Construction Manager.

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01330 – SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

- A. General: Comply with the General Conditions and Special Provisions where applicable.
- B. Requirements: This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.
- C. Related Sections:
 - 1. SECTION 01320 – CONSTRUCTION PROGRESS DOCUMENTATION
 - 2. SECTION 01770 – CLOSEOUT PROCEDURES

1.02 SUBMITTAL PROCEDURES

- A. Coordinate Work and Submittals: The Contractor is responsible for the coordination of all contractual work and submittals and shall certify the submittals were reviewed and coordinated.
- B. Submittal Certification: Provide in MS Word when submitting electronically. Construction Manager will provide an electronic copy of the Submittal Certification. Provide a reproduction (or stamp) of the “Submittal Certification” and furnish the required information with all submittals. Include the certification on:
 - 1. The title sheet of each shop drawing, or on
 - 2. The cover sheet of submittals in 8-1/2 inch x 11-inch format, or on
 - 3. One face of a cardstock tag (minimum size 3-inch x 6-inch) tied to each sample. On the sample tag, identify the sample to ensure sample can be matched to the tag if accidentally separated. The opposite face of the tag will be used by the Construction Manager to receive, review, log stamp and include comments.
- C. Ordering of Materials: All submittals for material and shop drawings listed in the Contract Documents shall be required and shall be reviewed by the Construction Manager prior to any ordering of materials.
- D. Variances: The Contractor shall request approval for a variance. Clearly note any proposed deviations or variances from the Specifications, Drawings, and other Contract Documents on the submittal and also in a separately written letter accompanying the submittal.

E. Submittal Certification Form (stamp or digital):

CONTRACTOR'S NAME: _____
PROJECT: _____
DHHL JOB NO.: _____

As the General Contractor, we checked this submittal and we certify it is correct, complete, and in compliance with Contract Drawings and Specifications. All affected Contractors and suppliers are aware of, and will integrate this submittal into their own work.

SUBMITTAL NUMBER _____ DATE RECEIVED _____
REVISION NUMBER _____ DATE RECEIVED _____
SPECIFICATION SECTION NUMBER /PARAGRAPH NUMBER _____
DRAWING NUMBER _____
SUBCONTRACTOR'S NAME _____
SUPPLIER'S NAME _____
MANUFACTURER'S NAME _____

NOTE: DEVIATIONS FROM THE CONTRACT DOCUMENTS ARE PROPOSED AS FOLLOWS (Indicate "NONE" if there are no deviations)

CERTIFIED BY	
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PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 SUBMITTAL REGISTER AND TRANSMITTAL FORM

- A. Contractor shall use submittal register and transmittal forms as directed by the Construction Manager.
- B. The Contractor shall review the Specification sections and prepare a comprehensive listing of required submittals to the Construction Manager for review.
- C. The Contractor shall separate each submittal item by listing all submittals in the following groups with the items in each group sequentially listed by the specification section they come from:
 - 1. Administrative
 - 2. Data
 - 3. Tests

4. Closing

- D. The Contractor shall separate all different types of data as separate line items all with the column requirements.
- E. Contractor shall send monthly updates and reconciled copies electronically to the Construction Manager and the Design Consultant in MS Word or MS Excel or other format as accepted by the Construction Manager.

END OF SECTION

SECTION 01400 – QUALITY CONTROL

PART 1 – GENERAL

1.01 DEFINITION

Specific quality control requirements for the work are indicated throughout the Contract Documents. The requirements of this Section are primarily related to performance of the work beyond furnishing of manufactured products. The term "Quality Control" includes inspection, sampling and testing, and associated requirements.

1.02 SAMPLING AND TESTING

- A. Unless otherwise indicated, all sampling and testing shall be in accordance with the methods prescribed in the current standards as applicable to the class and nature of the article or material considered.
- B. The Construction Manager reserves the right to make independent investigations and tests, and failure of any portion of the work to meet any of the requirements of the Contract Documents, shall be reasonable cause for the Construction Manager to require the removal or correction and reconstruction of any such work in accordance with the General Conditions.
- C. During the grading phase in accordance with SECTION 02300 - GRADING, the Contractor shall notify the Construction Manager, who will arrange for testing of the soil for the presence of contaminants.

1.03 INSPECTION

The soil remediation work may be inspected by the State Department of Health and/or the Environmental Protection Agency both during and after construction. The Contractor shall make arrangements directly with the appropriate agencies and/or DHHL to arrange for inspection of work and obtain the necessary approvals prior to the completion date outlined in these specifications.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Inspection: The Contractor shall inspect materials or equipment upon the arrival on the job site and immediately prior to installation, and reject damaged and defective items.
- B. Measurements: The Contractor shall verify measurements and dimensions of the work, as an integral step of starting each installation.

- C. Manufacturer's Instructions: Where installations include manufactured products, the Contractor shall comply with manufacturer's applicable instructions and recommendations for installation, to whatever extent these are more explicit or more stringent than applicable requirements indicated in the Contract Documents.

END OF SECTION

SECTION 01700 – EXECUTION

PART 1 – GENERAL

1.01 SUMMARY

- A. General: This Section includes general procedural requirements governing execution of the Work including the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. General installation of products.
 - 4. Progress cleaning.
 - 5. Correction of the Work.
- B. Related Sections:
 - 1. SECTION 01770 – CLOSEOUT PROCEDURES.
 - 2. SECTION 02120 – ENVIRONMENTAL PROCEDURES.

1.02 NOTIFICATION

Contact the Construction Manager at least 3 working days prior to starting any on-site work.

1.03 PROJECT AND SITE CONDITIONS

- A. Contract Zone Limits: The Project Contract Limits indicate only a general limit of the work involved. Perform necessary and incidental work, which may fall outside of these demarcation lines. Confine construction activities within the Project Contract Limits and do not spread equipment and materials indiscriminately about the area.
- B. Contractor's Operations: Provide means and methods to execute the Work and minimize interference to adjacent operations. Phasing indicated on the Plans is suggested only and the Contractor shall construct the Project to meet the general intent as shown. Any proposed deviation in construction phasing shall be submitted to the Construction Manager for review and approval prior to starting construction.
- C. Access: Maintain safe passageway to adjacent areas at all times.
- D. Parking: Subject to availability, the Construction Manager may designate areas outside of the Contract Zone Limits to be used by the Contractor. Restore any area damaged by construction activities.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 EXAMINING THE SITE

- A. Contractor and Subcontractors are expected to visit the site and make due allowances for difficulties and contingencies to be encountered. Compare contract documents with work in place. Become familiar, with existing conditions, the conditions to be encountered in performing the Work, and the requirements of the Drawings and Specifications.
- B. Verify construction extents, lines, grades, dimensions and elevations indicated on the Drawings before any clearing, excavation or construction begins. Bring any discrepancy to the attention of the Construction Manager, and make any change in accordance with the Construction Manager's instruction.
- C. Obtain all field measurements required for the accurate fabrication and installation of the Work included in this Contract. Verify governing dimensions and examine adjoining work on which the Contractor or Subcontractor's work is in any way dependent. Submit differences discovered during the verification work to the Construction Manager for interpretations before proceeding with the associated work. Exact measurements are the Contractor's responsibility.
- D. Contractor shall accept the site in the condition that exists at the time access is granted to begin the Work. Verify existing conditions and dimensions shown and other dimensions not indicated but necessary to accomplish the Work.
- E. Locate all general reference points and take action to prevent their destruction. Layout work and be responsible for lines, elevations and measurements and the work executed. Exercise precautions to verify figures and conditions shown on Drawings before layout of work.

3.02 EXISTING SITE UTILITIES

- A. Based on the topographic survey conducted, it is assumed that there are no existing utilities within the project area.
- B. Should the Contractor encounter existing utilities during his operations, he shall stop work and immediately notify the Construction Manager for further direction.

3.03 FIELD MEASUREMENTS

- A. General: Take field measurements to fit and install the Work properly. Coordinate fabrication schedule with construction progress.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

- C. Review of Contract Documents and Field Conditions: Submit a Request For Information (RFI) immediately upon discovery of the need for clarification of the Contract Documents. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.04 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the existing conditions. If discrepancies are discovered, notify the Construction Manager promptly.
- B. General: Lay out the Work using accepted construction and surveying practices.
 - 1. Establish benchmarks, control points, lines and levels as needed to locate each element of Project.
 - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 3. Inform installers of lines and levels to which they must comply.
 - 4. Check the location, level and plumb, of every major element as the Work progresses.
 - 5. Notify the Construction Manager when deviations from required lines and levels exceed allowable tolerances.
- C. Site Improvements: Locate and lay out site improvements, including limits of roadway, grading, fill and topsoil placement.

3.05 FIELD ENGINEERING

- A. Reference Points: Locate existing benchmarks, control points and similar reference points before beginning the Work. Preserve and protect permanent control points during construction operations.
 - 1. Do not change or relocate existing control points without the Construction Manager's approval. Report lost or destroyed permanent control points promptly. Report the need to relocate permanent control points to the Construction Manager before proceeding.
 - 2. Replace lost or destroyed permanent control points promptly. Base all replacements on the original survey control points.

3.06 INSTALLATION

Install materials required by the various Divisions and Sections of the Specifications in accordance with Contract Documents by workers specially trained and skilled in performance of the particular type of work to meet product guarantees and regulatory agency requirements. Should the Drawings or Specifications be void of installation

requirements, install the materials, items, and fixtures in accordance with the manufacturer's current specifications, recommendations, instructions and directions.

3.07 CLEANING

- A. General: Clean the Project site and work areas daily and dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste more than 7 days unless approved otherwise by the Construction Manager.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work. Remove liquid spills promptly.
- D. Waste Disposal: Burying or burning waste materials on-site will not be permitted.
- E. Protection of Construction in Progress: During handling and installation, protect construction in progress and adjoining materials already in place.
- F. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.08 CORRECTION OF THE WORK

- A. Repair defective construction at the Contractor's expense. Repairing includes replacing and/or reinstalling improperly installed materials at the discretion of the Construction Manager.

END OF SECTION

SECTION 01770 – CLOSEOUT PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

- A. General: This Section includes administrative and procedural requirements for contract closeout.
- B. Related Sections:
 - 1. SECTION 01700 – EXECUTION.

1.02 FINAL COMPLETION

Preliminary Procedures: Complete the following items within ten (10) calendar days from the Project Acceptance Date.

1.03 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit 2 copies of the initial and any updated and action taken list. Include name and identification of each area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize items applying to each area by major element.
 - 2. Include the following information at the top of each page:
 - a. Project Name and Title.
 - b. DHHL Job No.
 - c. Date and page number.
 - d. Name of Contractor.

1.04 PROJECT RECORD DOCUMENTS AND REQUIREMENTS

- A. General:
 - 1. Do not use Project Record Documents for daily construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Construction Manager's reference during normal working hours. Maintain these documents as specified in paragraph entitled "Record Drawings" hereinafter.
 - 2. The Designer, under contract with DHHL, will update the Drawings to show all addendum, PCD, and sketch changes. The Construction Manager will transmit these Drawings (mylar or vellum) to the Contractor who will make all "red-line" corrections

to these Drawings to record the changes depicted on the Contractor's Field Posted Record ("As-Builts") by accepted drafting practices as approved by the Construction Manager.

3. Where the recorded changes depicted on the Contractor's Field Posted Record ("As-Builts") Drawings are in the form of shop drawings, the Contractor shall provide those shop drawings on mylar or vellum sheets in the same material and size as the Drawings transmitted to the Contractor. The new drawing sheets shall be titled and numbered to conform to the construction Drawings and clearly indicate what information they supercede in the actual construction Drawings. For example a new drawing that replaces drawing M-3, could be numbered M3a.
4. The Contractor shall bring to the attention of the Construction Manager any discrepancy between the changes made by the Designer and those depicted on addendum, PCD, and sketch changes. The Construction Manager will resolve any conflicts.
5. Submit final Record Documents (Field Posted Record Drawings) within 10 days after the Final Inspection Date but no later than the Contract Completion Date.
6. The Contractor shall guarantee the accuracy of its final Record Documents. DHHL shall hold the Contractor liable for costs that DHHL incurs as a result of inaccuracies in the Contractor's Record Documents.

- B. Record Drawings: The Contractor shall prepare Record Drawings in accordance with the Special Provisions.

1.05 WARRANTIES

- A. Submittal Time: Submit written manufacturer's warranties at request of the Construction Manager for designated portions of the Work where commencement of warranties other than Project Acceptance date is indicated.
- B. Organization: Organize manufacturer's warranty documents into an orderly sequence based on the table of contents of the Specifications.
1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 inch x 11-inch paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer and prime Contractor.
 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES", Project Name and Title, DHHL Job Number, and name of Contractor.

4. Use the final submittal of the warranties to create an electronic Adobe Acrobat PDF (Portable Document Format) version of the bound warranty document files. Each sheet shall be separately scanned, at 600 DPI or better into a PDF file, indexed and recorded on a recordable compact disc (CD).
- C. Supplementary Warranties: Provide 2 sets of manufacturer's warranties that exceed one year as part of the closing document submittals. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.01 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and federal and local environmental and antipollution regulations. Perform cleaning using personnel specializing in and skilled in cleaning and maintenance work. Perform repair work using personnel skilled in executing the type of work being repaired. Perform all work to the highest trade standards applicable to that type of work.
- B. Cleaning: Complete the following cleaning operations before requesting final inspection for entire Project or for a portion of Project:
 1. Clean Project site and grounds, in areas disturbed by construction activities, of rubbish, waste material, litter, and other foreign substances.
 2. Remove tools, construction equipment, machinery, temporary construction, and surplus material from Project site.
 3. Leave Project area clean to a level acceptable by the Construction Manager.
- C. Safety Requirements: Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the property. Do not discharge volatile, harmful, or dangerous materials into drainage and sewer systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION