



**City and County of San Francisco
PORT OF SAN FRANCISCO**

MAINTENANCE DREDGING 2022 - 2024

CONTRACT NO. 2842

PROJECT MANUAL

VOLUME 2 OF 3

(Division 01)

The Port of San Francisco manages the waterfront as the gateway to a world-class city, and advances environmentally and financially sustainable maritime, recreational and economic opportunities to serve the City, Bay Area, and California.

SECTION 01 11 00**SUMMARY**

Part 1: GENERAL

1.1 RELATED DOCUMENTS

- A. Project Manual and Plans of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work includes providing all labor, materials, equipment, insurance, licenses and any related services required for the dredging and disposal of suitable and unsuitable sediments from Fisherman's Wharf, Hyde Street Harbor, Pier 9, Pier 27, Piers 35 East and West, Pier 40, Pier 80, Islais Creek and Approach, Pier 92 , Pier 94 and Pier 96, Downtown Ferry Terminal and other similar sites along the Port of San Francisco waterfront. The Work also includes providing hydrographic surveys and/or volume calculations, testing of material for landfill disposal, crane lifting services and knockdown events when requested by the Port.
- B. The Contractor needs to become familiar with all the sites and adjacent facilities designated for dredging and disposal. Actual site(s) to be dredged will be designated by the Port Engineer for each Dredge Event. Dredge Events will be similar to those shown on the enclosed Tentative Schedule, Exhibit A and each Dredge Event will require a separate mobilization. Specific information for each Dredge Event will be identified by the Engineer prior to the Dredge Event and includes Dredge Event schedule, required dredge elevations, dredge prism (i.e., dredging area limits), and delineation of suitable (i.e. SUAD) vs. unsuitable (i.e. NUAD) material areas. The Port reserves the right to vary the actual sites for each Dredge Event, and the area, depth, volume of material to be dredged , for each dredge site. See Section 35 20 23, Dredging and Disposal, 1.05, F for Dredge Event definition.
- C. Contractor is expected to visit each Dredge Site and adjacent facilities and properties, prior to commencement of dredging activity, to document existing Site conditions, including existing damage, if any, at the Site and adjacent properties. Contractor's failure to do so will be deemed a waiver of any objection to Port's determination of damage to the Site and adjacent properties as a result of Contractor's Work. (see Section 00 73 00, Supplementary Conditions, 1.3, Article 3.)
- D. This contract is an on-call program. The Work is subject to permitting, funding, operations, and other priority decisions made at the sole discretion of the Port. Plans and Tentative Schedule, Exhibit A shall be considered tentative. The actual work may require dredging at different times, sites and limits from those noted.

1.3 REGULATORY REQUIREMENTS

- A. Contractor is required to comply with all Federal, State, and local laws and regulations regarding storage, usage, and disposal of hazardous materials and hazardous wastes used or generated by Contractor during execution of the work completed under this contract.
- B. The Port has no evidence to believe that Contractor will encounter unknown hazardous wastes or hazardous materials on Port property in conjunction with completion of work. While the materials to be dredged may require disposal at various locations based upon chemical analyses or other determinations, no dredged materials at the Port's sites are known to exceed hazardous waste thresholds.
- C. NOAA Fisheries may impose conditions upon dredging at the Port of San Francisco during the period from December 1 until June 1 in order to protect migrating steelhead trout. Such conditions, if imposed, could include prohibitions or specific requirements regarding types of dredging equipment used or conditions regarding the operation of dredging equipment. Additionally, conditions and/or restrictions may vary from location to location and season to season. Contractor is responsible for (1) understanding the potential restrictions or conditions upon dredging schedule, equipment, and operations; (2) planning scheduling work accordingly; and (3) providing proper equipment accordingly. Summary of Environmental Windows Applicable to Dredging is attached as Exhibit G to this project manual.

END OF SECTION 01 11 00

SECTION 01 20 00**PRICE AND PAYMENT PROCEDURES****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section Includes: Procedures for preparation and submittal of Progress Payment Requests.
- B. Related Sections:
 - 1. Section 00 41 00 – Bid Form
 - 2. Section 00 42 00 – Description of Bid Items
 - 3. Section 00 72 00 – General Conditions (Article 9, Payments and Completion)
 - 4. Section 01 11 00 – Summary of Work
 - 5. Section 01 21 00 – Allowances
 - 6. Section 01 21 50 – Mobilization / Demobilization Item
 - 7. Section 01 26 00 – Contract Modification Procedures
 - 8. Section 01 29 73 – Schedule of Values
 - 9. Section 01 31 19 – Project Meetings
 - 10. Section 01 32 16 – Construction Progress Schedule (CPM)
 - 11. Section 01 33 00 – Submittal Procedures

1.2 SCOPE OF WORK

- A. Work under Contract, or under any bid item, allowance or alternate, shall include all labor, materials, transport, handling, supervision, administration and all other items necessary for the satisfactory completion of work, whether or not expressly specified or shown.

1.4 SCOPE OF PAYMENT

- A. Payment for the various items of the Schedule of Bid Prices, as further specified herein, shall include all compensation to be received by Contractor for furnishing all tools, equipment, supplies, and manufactured products, and for all labor, operations, overhead and profit, applicable taxes, and incidentals appurtenant to the items of Work being described, as necessary to complete the various items of work as specified and as shown on the Drawings. No separate payment will be made for any item that is not specifically set forth in the Schedule of Bid Prices, and all costs therefore shall be included in the prices named in the Schedule of Bid Prices for the various appurtenant items of Work.
- B. Contract Prices shall be deemed to include all bonds and insurance, all appurtenances necessary to complete the required Work, including all costs for compliance with the regulations of public agencies having jurisdiction, including Health and Safety Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA), and including all costs for loss or damage arising from the Work, or from action of the elements, for any unforeseen difficulties which may be encountered, and for all risks of every description connected with the prosecution of the Work until Project Completion, also for all expenses incurred in consequence of the suspension or discontinuance of the Work as provided in the Contract.

- C. Except as otherwise expressly stipulated in the Contract Documents, no payment shall be made for materials stored on or off site, and for materials not yet incorporated into the Work on site.
- D. Neither the payment of any estimate nor of any retained percentage shall relieve Contractor of its obligation to make good all defective work or material.

1.5 BASIS OF PAYMENT

- A. Unit Price Work
 1. The Port shall determine the quantities of Work to be paid for any item for which a unit price is fixed in the Contract.
 2. Unless otherwise provided, determination of the number of units of Work so completed shall be based, as far as practicable, on the actual measurement or count made by the Port of the Work satisfactorily completed within the prescribed limits.
 3. Measurement and computations shall be made by methods as the Port may consider appropriate for the class of Work measured.
 4. Should the actual quantities of Work performed under any unit price be greater or less than the estimated quantity stipulated on the Schedule of Bid Prices, or if an item of Work is deleted, the final Contract cost shall be adjusted by Change Order to reflect the actual quantities and actual costs including fixed costs for unit price items.
- B. Lump Sum: When the estimated quantity for specific portions of Work is not indicated on the Schedule of Bid Prices and unit is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed as set forth in the Specifications and shown on the Drawings.
- C. Monthly payment requests shall be based upon information developed at monthly Application for Payment meetings and shall be prepared by Contractor. The approved Schedule of Values will be the basis for Contractor's payment requests.
 1. No partial progress payment shall be made to Contractor until all cost information requested by the Port is submitted and reviewed.
 2. Submission of a progress schedule update in accordance with Section 013216 for the same period of the progress payment application shall be a condition precedent to making the progress payment application.

1.6 APPLICATION AND SCHEDULE PROCEDURES

- A. On the 25th of each month submit an itemized Application of Payment to the City Representative by email with all required supporting documents attached in PDF format (except Certified Payrolls) covering the Work completed as of the date of the Application for Payment.
 1. Submit a progress schedule update with each Application for Payment.
 2. List each authorized Change Order executed prior to date of submission by Change Order Number and description, as for original items of work.
 3. When the City requires substantiating data, Contractor shall submit suitable information with cover letter identifying Application of Payment number and date, line item by number and description.
 4. Submit Certified Payrolls through the City's internet-based Project Reporting System. Refer to Paragraph 9.03M of the General Conditions.
 5. Specify the desired Method of Payment, either by electronic funds transfer through Bank of America Paymode or by check.

- B. Progress payments for the work performed under this Contract will be made in the manner described in Paragraph 9.03 of the General Conditions.
1. Progress payments will be based upon progress estimates by Contractor and verified by the Port of the actual physical progress of the work, utilizing the Schedule of Values approved by the Port.
 2. Progress payments will be made on a monthly basis and no mid-monthly payments will be made regardless of the value of the work and material incorporated prior thereto.
 3. Contractor shall certify its estimate of the quantities of the work completed, contained in the monthly progress payment estimate, by signing each such estimate prior to its submission.
 4. Contractor shall submit Project Record Drawings as specified below under article "Project Record Drawings."
 5. The Port will make final determination if agreement cannot be reached on Contractor's progress payment request.
- C. The Port shall issue payments to Contractor through the City's electronic payment system called PayMode-X[®]. Contractor acknowledges and agrees to receive payment electronically through this system. Contractor shall not be entitled to any additional cost or charge under this Contract for using or failing to use the electronic payment system. Nor shall Contractor be entitled to any additional cost or charge for delays or failures of the electronic payment system to complete a payment transaction.

1.7 PROGRESS ESTIMATES

- A. Upon receiving Contractor's monthly progress payment application, the Port will review progress breakdown and make adjustments to percent of completion of each item of Work.
1. Monthly progress payments will be made based on the total value of Work items completed or partially completed, as determined by the Port with participation of Contractor.
 2. Accumulated retainage will be shown as separate item in payment summary.
- B. After approving the finalized Progress Payment Report, the Port will commence payment processing electronically. The payments will be made in accordance with Contractor's specified Method of Payment.
- C. However, the issuance of approval for Progress Payments will not be a representation that the Port, its officers, agents and employees has determined the following:
1. Made exhaustive or continuous on-site inspections to check the quality or quantity of Work;
 2. Reviewed construction means, methods, techniques, sequences or procedures;
 3. Reviewed copies of requisitions received from subcontractors and material suppliers and other data requested by the Port to substantiate Contractor's right to payment; or
 4. Made examination to ascertain how or for what purpose Contractor has used money previously paid on account of the Contract Sum.

1.8 PROJECT RECORD DRAWINGS

- A. Arrange review of the Project Record Drawings (As-Builts) with the monthly progress payments to the City Representative in the field for his/her review. The Contractor shall update the Record Drawings based on the Port comments. If the Record Drawings are not kept current or not furnished when specified herein, Progress Payments and if necessary the Final Payment will be withheld.

1.9 ELECTRONIC CERTIFIED PAYROLLS

- A. In accordance with the requirements of Paragraph 9.03M of the General Conditions, Contractor shall submit certified payrolls to the City electronically via the City-selected Project Reporting System ("PRS"), an internet-based program. This submittal is required for Progress Payments as specified in this Section 01 20 00 Price and Payment Procedures. In addition to data relating to weekly payroll information, the Contractor, Subcontractors and Suppliers shall enter in appropriate fields of the PRS information regarding new hires, including name and date hired of each new employee.

1.10 FINAL PAYMENT

- A. As soon as practicable after all required Work is completed in accordance with Contract, including Contractor maintenance after Final Acceptance, Port will pay to Contractor, in manner provided by law, unpaid balance of contract price of Work, or whole contract prices of Work, if no progress payment has been made, determined in accordance with terms of Contract, less sums as may be lawfully retained under any provisions of Contract or by law.
- B. Prior progress payments shall be subject to correction in the final payment. Port's determination of amount due as final payment shall be final and conclusive evidence of amount of Work performed by Contractor under Contract, and shall be full measure of compensation to be received by Contractor.
- C. Contractor and each assignee under an assignment in effect at time of final payment shall execute and deliver at time of final payment and as a condition precedent to final payment, Document 00 45 16 Agreement and Release of Any and All Claims discharging Port, its officers, agents and employees of and from liabilities, obligations, and claims arising under Contract.

PART 2 - PRODUCTS (Not Used)**PART 3 - EXECUTION (Not Used)**

END OF SECTION

SECTION 01 21 00**ALLOWANCES****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section Includes: Allowances and procedures for doing third-party dredge survey volume calculation, testing of material for landfill disposal and crane lifting services work.

1.02 PROJECT CONDITIONS

- A. Allowances shall be done only when and as directed in writing by the Engineer.
- B. Allowances shall cover the actual direct cost to Contractor of labor, materials and equipment for doing work.
- C. The amount given on Schedule of Bid Prices under each allowance item shall be the amount of funds set aside for each allowance. Said amounts shall be included in Contractor's Total Bid Price on the Schedule of Bid Prices.
- D. The work under these allowance bid items is subject to being increased, decreased or deleted.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION**3.01 SCHEDULE OF ALLOWANCES**

- A. Provide allowances indicated on the Schedule of Bid Prices as follows:
 - 1. Bid Item 11: Allowance of \$500,000 for dredging survey and volume calculation will be paid as directed by the Engineer. Refer to Section 35 20 30.
 - 2. Bid Item 12: Allowance of \$80,000 for the testing and characterization of dredged material for disposal will be paid as directed by the Engineer.

Soil samples will be collected for chemical analysis of dried dredge material, for the purpose of characterization for disposal at a licensed Class III landfill. Soil samples will be collected using sampling equipment that is precleaned or is cleaned appropriately between samples in order to minimize sample cross-contamination. Samples shall be placed in precleaned brass tubes or precleaned glass jars obtained from the laboratory. If brass tubes are used, the brass tube containing the sample will be covered with Teflon[®] sheets and capped with plastic caps. A

sample label, which will include a unique sample identification number, the sample location, and time and date when the sample was collected, will be attached to each sample container. The sample container will then be sealed in a plastic bag and placed in a cooler with ice for temporary storage and transport to a California State-certified laboratory for chemical analysis. Proper chain-of-custody records will be initiated and maintained.

Each soil sample collected for analysis will be analyzed by California State-certified laboratory for:

- Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015m;
- Total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015m;
- CAM 17 metals; and
- Semi-volatile organic compounds by EPA Method 8270,
- And/or other standard environmental methods as required for characterization by the landfill.

Results shall be submitted to the Port as a brief letter report that includes:

- A brief description of the volume of material sampled and the field procedures used;
- A site map showing the soil sampling locations;
- A table summarizing the results of the analyses;
- Copies of the original data sheets from the laboratory; and
- A copy of the chain-of-custody form(s).

3. Bid Item 13: Allowance of \$500,000 for crane lifting services will be paid as directed by the Engineer.
4. Bid Item 15: Allowance of \$25,000 is to cover all costs, including labor, supervision, management, materials, equipment, all as described in Section 01 31 33, PARTNERING REQUIREMENTS.

END OF SECTION 01 21 00

SECTION 01 21 50**MOBILIZATION****PART 1 - GENERAL**

1.01 SUMMARY

- A. Perform all preparatory Work and appurtenant pre-construction operations as required for the proper performance and completion of the Work (include demobilization).

1.02 Related Sections:

1. Section 00 41 50 – Description of Bid Items
2. Section 35 20 23 – Dredging and Disposal

1.03 Payment:

- A. Payment will be made for satisfactory completion of each Dredge Event mobilization. This unit price amount shall include completion of all the items described in 1.04A for each Dredge Event. Mobilization for a Dredge Event may constitute the movement of labor and equipment to more than one site.

1.04 REQUIREMENT

- A. Mobilization shall include the following principal items.
1. Provide the items described in 1.07 Submittals A, of Section 35 20 23, Dredging and Disposal.
 2. In addition to the requirements specified above, the below requirement shall be included in this section:
 - a) Mobilizing and moving onto and off the site.
 - b) Contractor's plant and equipment required for the period from the date of Event Notice to Proceed to Event Substantial Completion.
 - c) Ensuring all dredging equipment and related support equipment is in good working order and meets regulatory standards.
 - d) Providing Contractor's superintendent at the project site full time.
 - e) Verifying the existing conditions before starting site work.
 - f) Obtaining and paying for all required permits, insurance and bonds.
 - g) Providing inspection accessibility to the barge, dredger, and other associated equipment.
 - h) Arranging, if needed, for storage yard(s) and off-site parking.
 - i) Coordination with all parties with legitimate access to site to avoid conflicts and delays.
 - j) Demobilization and clean-up.
 - k) All other activities necessary to complete the Work not included in other bid items.

1.05 PAYMENT PROCEDURES

- A. The retention of funds provisions of the General Conditions shall apply to the sum of all the Contract Work completed, including that under the Bid Item "Mobilization."
- B. Any extension of the Contract Time that may be granted will not of itself constitute grounds for a claim for additional payment under the Bid Item "Mobilization."

1.06 EFFECT OF CONTRACTOR'S DEFAULT ON CONTRACT

- A. The City reserves the right, if Contractor defaults on the contract, to retain and use, or allow others to use, Contractor's plant, equipment, tools materials and other property for, and until, completion of the Work.

END OF SECTION 01 21 50

SECTION 01 26 00**CONTRACT MODIFICATION PROCEDURES****PART 1 - General****1.1 SUMMARY**

- A. Section Includes: General procedural requirements for changes, modifications, and extras.
- B. Related Sections:
 - 1. Section 00 72 00 – General Conditions, Article 6
 - 2. Section 01 20 00 – Price and Payment Procedures, Article 1.6
 - 3. Section 01 31 13 – Project Coordination, Article 1.6
 - 4. Section 01 33 00 – Submittal Procedures

1.2 MINOR CHANGES

- A. Clarifications: The Port will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract by issuing written interpretations or clarifications of the Contract Documents as the Port deems necessary such as supplemental instructions on Request for Information (RFI) Form or by a written field order by the Port.
 - 1. Refer to Section 01 31 13 – Project Coordination for procedures for requesting information or clarifications on Contract Documents.
 - 2. Pursuant to Section 00 72 00 – General Conditions, Article 6, Paragraph 6.03, Change Order Requests and Proposed Change Orders, such written interpretations and clarifications shall be binding on the City and Contractor. Promptly execute the work required by the City's written interpretation or clarification.
- B. Notification: If Contractor believes that a written interpretation or clarification justifies an adjustment in the Contract Sum or Time, submit to the Port a request for Change Order therefore before beginning the work required by the written interpretation or clarification or within seven calendar days from the date of the Port's response.

1.3 DOCUMENTATION

- A. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.
- B. On request and within a reasonable period of time, provide additional data to support computations:
 - 1. Quantities and type of products.
 - 2. Labor breakdown by trade classification, wage rates, and estimated hours.
 - 3. Equipment breakdown by type, size, rental rates, and equipment hours.
 - 4. Taxes, insurance and bonds.
 - 5. Mark-ups, including overhead and profit.
 - 6. Justification for any change in Contract Time, including a schedule analysis identifying critical progress schedule activities delayed by the PCO.
 - 7. Credit for deletions from Contract and work estimates of subcontractors, similarly documented.
- C. Support each claim for additional costs, and for work done on a force account basis, with additional information:
 - 1. Origin and date of claim.

2. Date of authorization for extra work by the Port as per Force Account Change Order issued to Contractor.
 3. Dates and times work was performed, and by whom.
 4. Time records and wage rates paid.
 5. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
- D. Failure to properly document or provide supporting documents related to additional work or credit of a claim shall invalidate such claims or upon decision of the Port, proceed with the Port's best cost estimate of disputed additional work or credits.
- E. Documentation, data preparation, and administration of change orders shall be considered as incidental work and no additional payment will be made therefore.

1.4 CHANGE PROCEDURES

- A. The Port may issue a Proposed Change Order (PCO) Memorandum which includes a detailed description of a proposed change with supplementary or revised Drawings and Specifications, and a change in Contract Time for executing the change if necessary.
1. Prepare and submit a cost proposal estimate to the Port for approval within 21 calendar days of receiving a PCO, furnishing a complete breakdown of costs of both credits and extras, itemizing materials, labor, taxes, and mark-up for overhead and profit. Subcontract work shall also be indicated on the same form as for Contractor's breakdown.
 2. Limit Contractor's and subcontractor's mark-ups to the maximum percentages as specified for force account work under Paragraph 6.06, Cost of the Change Order Work, of the General Conditions. Contractor's mark-up on work performed by a subcontractor shall be a maximum of 5 percent of the subcontractor's total cost. No additional payment will be made by reason of performance of additional work by a subcontractor.
 3. All requests for time extensions pursuant to Paragraph 7.02, Delays and Extensions of Time, of the General Conditions or claims for damages for delay caused by the City's processing of Change Orders will be reduced by the additional time in excess of that allowed for Contractor to submit a PCO cost proposal as provided herein, provided that the activity was shown on the critical path on the base line schedule.
 4. Submit additional data as specified under Article "Documentation" as requested by the Port.
 5. The Port will review Contractor's cost proposal estimate and will negotiate the final terms of Change Order with Contractor.
 6. Upon approval of PCO by the Port, the Port will issue Change Order directing Contractor to proceed with the change in the work.
- B. Contractor may propose a change by submitting a request for a PCO number to the Port, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on the Work schedule and operations.
1. Document any requested substitutions in accordance with Section 01 25 13.
 2. Contractor's RFI submittal shall not constitute a request for change.

1.5 UNILATERAL CHANGE ORDER

- A. When time does not allow for the Change Order to be negotiated through the PCO process, or when the Port and Contractor are unable to agree on the cost or time required to complete the change in the Work described in a PCO, the Port may issue a document

instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order based on the Port's estimate of costs, if any.

- B. The document will describe changes in the Work, and will indicate the Port's determination of any change in cost.
- C. Promptly execute the change in Work.
- D. If Contractor disagrees with the Port's estimate of cost and time or other conditions of a Unilateral Change Order, Contractor shall submit a written protest in accordance with Paragraph 6.05, Unilateral Change Orders, of the General Conditions within 15 calendar days of its receipt and before proceeding with the required work.
 - 1. After the written protest has been filed and within 7 calendar days of completing said disputed work submit a notice of potential claim for the cost differential between Contractor's actual cost and the Port's estimate included in the Unilateral Change Order.
 - 2. Within 30 calendar days of the date of said notice of potential claim submit to the Port a claim with written documentation as specified under Article "Documentation".

1.6 FORCE ACCOUNT WORK

- A. All Force Account work shall be documented and reported to the Port on the day that the work is performed. No Force Account work that is not so reported to the Port will be paid by the Port. The Contractor shall notify the Port before the work begins or within 15 minutes of the shift of work.
- B. Force account charges, a definite price for which has not been agreed on in advance, shall be recorded daily upon a Daily Force Account Report Form obtained from the Port.
 - 1. Contractor or authorized representative shall complete and sign Form.
 - 2. The Form shall provide an itemized account and supporting data and shall be countersigned by the Port.

1.7 EXECUTION OF CHANGE ORDERS

- A. Execution of Change Orders: The Port will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- B. The Port shall have the right to audit all records in possession of Contractor relating to activities covered by Contractor.

1.8 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust time for other items of work affected by the change, and resubmit.
- C. Promptly enter changes in Project Record Documents.

1.9 CONTINUING WORK DURING DISPUTES

- A. The Contractor shall carry on and prosecute the work and maintain the progress schedule during all disputes and disagreements with the Port. Time is of the essence. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as the Port and the Contractor may otherwise agree in writing.

- B. The Contractor shall notify the Port at the beginning of each single day, shift, or phase before performing the disputed work. Failure to notify the Port at the beginning of each day, shift or phases will result in no verification of any work performed under dispute or disagreement. The Contractor and the Port shall agree upon the size and number of manpower, equipment, and materials for documentation at the end of every day, shift or phase until resolution or completion of the disputed work.
- C. Submit a Disputed Work Report Form on the day that work is performed if the Port and Contractor disagree as to the Port determination of said work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 29 73
SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Submittal requirements, coordination, review and acceptance of the schedule of values for evaluating progress payment applications.
- B. Related Sections:
 - 1. Section 00 72 00 – General Conditions, Article 9, Payments and Completion
 - 2. Section 01 20 00 – Price and Payment Procedures

1.2 SUBMITTAL REQUIREMENTS

- A. Submit within 15 calendar days after the Notice to Proceed date but in no event later than 14 calendar days before Contractor's initial application for payment, a schedule of values covering Lump Sum Work.
- B. The schedule of values shall consist of a detailed cost breakdown of Contractor's Bid covering the Lump Sum Work and Lump Sum Items of Work by classification, in accordance with the Construction Specifications Institute's MasterFormat® (2010 Update) as represented by the Specifications Table of Contents.
- C. The specific format and detail shall be acceptable to the Port for estimating and evaluating progress payments, as follows:
 - 1. The sum of the individual costs listed in the schedule of values shall equal the lump sum price bid under the Bid Item in the Schedule of Bid Prices for the Work activity.
 - 2. Provide breakdown in sufficient detail to facilitate continued evaluation of progress payment applications.
 - 3. Show the total cost of each item of work including all labor, material, equipment, fixed cost elements, incidental expenses, and overhead and profit.
 - 4. Overhead and profit shall not be listed as separate items.
 - 5. Identify separate line items for temporary items, mobilization, final cleaning, operations and maintenance manuals, and start-up, adjusting and testing.
 - 6. Coordinate the preparation of the schedule of values with Contractor's progress schedule.

1.3 REVIEW AND ACCEPTANCE

- A. The Port will review and return Contractor's schedule of values with comments within 7 calendar days of its receipt. Contractor shall make corrections requested by the Port and resubmit for approval within 3 calendar days.
- B. Final acceptance by Port shall indicate only consent to the schedule of values as a basis for preparation of applications for progress payments, and shall not constitute an agreement as to the value of each indicated item.
- C. Any attempt to increase the cost of early activities, i.e., "front loading," will be rejected by the Port resulting in a complete reallocation of monies until such "front loading" is corrected. Repeated attempts at "front loading" may result in suspension or termination of

the Work or refusal to process progress payments, until such time as the Schedule of Values is acceptable to the Port.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 31 13
PROJECT COORDINATION

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Provisions of coordination of the Work of the Contract and requesting clarifications and interpretations of the Contract Documents.
- B. Related Sections:
 - 1. Section 01 31 19 – Project Meetings
 - 2. Section 01 32 16 – Progress Schedule

1.02 CONTRACTOR'S USE OF SITE

- A. Limit of Work: The limit of work of this Contract is as indicated on the Drawing and as specified herein.
- B. Use of Site: Limit use of the site for construction operations necessary to perform the Work indicated on the Drawings.

1.02 GENERAL COORDINATION

- A. Contractor shall be responsible for all project coordination.
- B. Coordinate scheduling, submittals, and Work of various Sections to assure efficient and orderly sequence of installation of interdependent construction elements.

1.03 SUBCONTRACT COORDINATION

- A. Coordinate the Work and do not delegate responsibility for coordination to any other Subcontractor, and a foreman shall be available.
- B. Anticipate the interrelationship of all Subcontractors and their relationship with the Work and Safety Requirements.
- C. Resolve differences or disputes between Subcontractors concerning scheduling, interference, or extent of work between sections of the specifications including assigned Contract work. Contractor's decisions, if consistent with the Contract Section requirements, shall be final.
- D. Coordinate the work of Subcontractors so that their portions of the work are performed in a manner that minimizes interference with the progress of the Work.

1.04 REQUEST FOR INFORMATION (RFI)

- A. Requirement: It is Contractor's responsibility to review Contract Documents a minimum of 30 days in advance of the work to be executed, and to request for information so that the Port will have sufficient time to respond to Requests for Information prior to the start of actual construction of that part of the Work to which the RFI relates.

- B. Form:
1. Form available on Port website: <http://sfport.com/port-construction-management-forms>
 2. When an interpretation or clarification of the Contract Documents is required from the Port or Engineer, make a written request or electronic email, with a copy to all affected parties.
 3. Fill in all applicable information on the form, reason for clarification request, and timing or schedule needed for a response.
 4. Use one form for each request; limit the subject to one question to expedite reply. Attach supplementary information where necessary.
 5. The Port will reply or give summary of reply on the same form and include supplementary information where necessary.
 6. The completed form shall be the written record of each RFI.
 7. Do not use any other RFI form on this Project.
- C. Uses:
1. The RFI form shall be used for interpretation or clarification of the Contract Documents only.
 2. Do not use the RFI form for the following; they will be rejected:
 - a. Product or material substitution.
 - b. Questions relating to construction means, methods, techniques, sequences, procedures or safety precautions. (These are Contractor's responsibilities exclusively.)
 - c. Questions relating to construction schedule, coordination between trades, or division of work among subcontractors. (These are also Contractor's responsibilities exclusively.)
 - d. Questions on contract administration procedural matters, unless they require interpretation or clarification of the Contract Documents.
 - e. Dimensions or quantities which are shown on the Contract Documents, or which can be measured from the building, or calculated from the information contained in the Contract Documents.
 - f. Confirmation of interpretations or clarifications previously provided in writing by the Port or the Engineer.
 - g. The Port will reject requests for interpretations or clarifications of the Contract Documents which can reasonably be derived from a review of the Contract Documents.
- D. Reply:
1. The Port will endeavor to reply to all RFIs promptly as work schedule of the consultants allows; generally no later than seven calendar days from the day received.
 2. When an RFI involves a complex subject, extensive research or development, or substantial input from another governmental agency, the Port will inform Contractor and request additional time to prepare the reply. Contractor shall cooperate and agree to a reasonable time extension.
 3. The reply shall be a clarification or an interpretation of the Contract Documents; the reply is not an authorization of change in the Contract Sum or Time.
 4. Such written interpretation or clarification will be binding on Contractor and Port. If Contractor believes that a written interpretation or clarification justifies an adjustment in the Contract Sum or Time, then the Contractor shall make a written request for change order as provided in Section 103.03 of the General Conditions.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used



PORT OF SAN FRANCISCO
 Pier 1, The Embarcadero, San Francisco Ca 94111
 Phone: (415) 274-0566 Fax: (415) 274-0551

REQUEST FOR INFORMATION

For Contractor Use

RFI No.	Submitted Date

CONTRACT: _____
CONTRACTOR: _____

SUBJECT OF REQUEST (Contractor to fill in)

Correspondence: _____
Gen/Special Provisions: _____
Technical Specs: _____
Drawing: _____

Submittal: _____
Directive: _____
Field Issue: _____
Other: _____

INFORMATION REQUESTED: REQUESTED BY PHONE

DATE: _____ SIGNED: _____
 COMPANY: _____

REPLY RESPONDED BY PHONE

REVIEWER _____ Registered Design Professional In Responsible Charge (RDP): _____ Plan Review Engineer (PRE): _____
 DATE _____ DATE: _____ DATE: _____

RE Distribution:

<input type="radio"/> Contractor	<input type="radio"/> PE	<input type="radio"/>	<input type="radio"/>
<input type="radio"/> RE/CM File	<input type="radio"/> PM	<input type="radio"/>	<input type="radio"/>
<input type="radio"/> Inspectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

END OF SECTION

SECTION 01 31 19
PROJECT MEETINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Pre-Construction Conference.
 - 2. Progress Meetings.
 - 3. Pre-Installation Conferences.

1.2 GENERAL

- A. The Port's Representative will arrange project meetings after consultation with Contractor and will inform the Contractor of the meeting time and location.
- B. The Contractor's attendance is required at all meetings, including pre-construction, bi-weekly, and startups.
- C. The Port's Representative shall be responsible for taking the meeting minutes and providing the Contractor with a copy. The Contractor shall duplicate them and distribute the meeting minutes to the other participants of the meeting.

1.3 PRE-CONSTRUCTION CONFERENCE

- A. Prior to commencement of Work, the Port's Representative will schedule and conduct a pre-construction conference.
- B. The Contractor shall be prepared to review and discuss the construction schedule and sequence of operations. The conference will be held by the Port's Representative at a time and location selected and arranged with Contractor after award of the Contract.

1.4 SITE MOBILIZATION CONFERENCE

- A. The Port's Representative will schedule a conference at the Project site prior to Contractor mobilization.
- B. Attendance Required: Port's Representative, Special Consultants, Contractor's Superintendent, and major subcontractors.
- C. Typical Agenda:
 - 1. Use of premises by the Port and the Contractor
 - 2. Maintaining a dust-free environment – Security and housekeeping procedures
 - 3. Construction facilities and controls provided by the Port and the Contractor
 - 4. Temporary utilities provided by the Contractor
 - 5. TWIC
 - 6. Examination & Testing of the elevators
 - 7. Procedures for maintaining Record Documents
 - 8. Inspection and acceptance of equipment put into service during construction

1.5 PROGRESS MEETINGS

- A. The Port's Representative will schedule, prepare agenda, and administer meetings throughout progress of the Work at weekly intervals or more frequently, if required by the Port's

Representative. Progress Meetings will be held at a location to be determined by the Resident Engineer, and the Contractor's attendance is mandatory.

- B. Attendance Required: Job superintendent, major Subcontractors and suppliers, as appropriate to agenda topics for each meeting.
- C. Typical Agenda:
 - 1. Review and approval of minutes of previous meeting.
 - 2. Review of work progress since previous meeting.
 - 3. Field observations, problems, and conflicts.
 - 4. Problems which impede Contractor's construction schedule.
 - 5. Corrective measures and procedures to regain projected schedule(if necessary)
 - 6. Revision to Contractor's construction schedule and contractor provide "Look Ahead" work schedule in writing.
 - 7. Coordination of schedules.
 - 8. Review submittal, RFI logs.
 - 9. Maintenance of quality standards and field corrections – Housekeeping and cleaning of site.
 - 10. Review proposed changes for the following:
 - a. Effect on Contractor's construction schedule and completion date.
 - b. Effect on other aspects of the project.
 - c. General status of proposed change.
 - 11. Other business.

1.6 PRE-INSTALLATION CONFERENCES

- A. When required in individual specification Sections, the Contractor will convene a Pre-Installation Conference at work site prior to commencing work of the Section.
- B. The Contractor will require attendance of parties directly affecting, or affected by, work of the specific Specification Section.
- C. The Contractor will notify the Port's Representative at least four (4) days in advance of the meeting date.
- D. The Port's Representative will prepare an agenda, preside at conference, record minutes, and distribute copies within two days after the conference to the participants.
- E. The Contractor will review conditions of installation, preparation and installation procedures, and coordination with related work.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 31 33**PARTNERING REQUIREMENTS****PART 1 – GENERAL**

1.1 PARTNERING LEVEL

1. This Project shall incorporate the required partnering elements for **Partnering Level 1**.

1.2 SUMMARY

- A. This Document specifies the procedures for establishing a collaborative partnering process. The partnering process will assist the City and Contractor to develop a collaborative environment so that communication, coordination, and cooperation are the norm, and to encourage resolution of conflicts at the lowest responsible management level.
- B. The partnering process is not intended to have any legal significance or to be construed as denoting a legal relationship of agency, partnership, or joint venture between the City and Contractor.
- C. This specification does not supersede or modify any other provisions of the Contract, nor does it reduce or change the respective rights and duties of the City and Contractor under the Contract, or supersede contractual procedures for the resolution of disputes, including the submittal of a timely Notice of Potential Claim or Contract Claim.
- D. The "San Francisco Partnering Field Guide" is available to the project team as a recommended reference document. This guide provides structure, context and clarity to the partnering process. The guide is available at the City's partnering program website www.sfpartnering.com.

1.3 DEFINITIONS

- A. **Partnering Charter ("Charter"):** The Charter is the guiding focus for the project team. It documents the team's vision and commitment to work openly and cooperatively toward mutual success during the life of the project. The Charter helps to maintain accountability and clarity of agreements made and allows for broader communication of the team's distinct goals and partnering process. The Partnering Charter includes the following elements:
 1. Mutual goals
 2. Partnering maintenance plan
 3. Dispute resolution plan with Issue Resolution Ladder
 4. Team commitment statement and signatures
- B. **City Partnering Fundamentals Training:** Training provided by the City to contractor and City staff on the fundamentals of partnering. Information may be found at www.sfpartnering.com.
- C. **Collaborative Partnering:** A structured and scalable process made up of elements that develop and grow a culture (value system) of trust among the parties of a

construction contract. Together, the combination of elements, including the partnering charter, executive sponsorship, partnering meetings, accountability tools for the project team (Scorecards), and facilitator, if employed, create a collaborative atmosphere on each project.

- D. **Core Team Partnering:** The project team members who are a part of the project for its duration, including the following (not in order of hierarchy):

City:	Contractor:
Resident Engineer	Superintendent
Project Manager	Project Executive
Construction Manager	Jobsite Supervisor
Engineer, Architect	Project Manager
Division Manager	Project Engineer
Construction Engineer	Subcontractors
Inspectors	Key suppliers
Client Department representative	Senior Management (e.g. Area Manager, Operations Manager, VP, President, Owner)
Critical third parties: stakeholders, other agencies, utilities, etc., or anyone who could potentially stop or delay the project.	

- E. **Executive Partnering Team:** The senior leaders of the City and Contractor who may form a project board of directors and are charged with steering the project to success.
- F. **Executive Sponsorship:** Commitment to, and support of, the partnering process from the most senior levels of the City and Contractor organizations.
- G. **External Facilitator:** The mutually agreed upon experienced professional neutral partnering facilitator whose profession is providing partnering services for construction projects.
- H. **Internal Facilitator:** A trained employee or representative of the City who provides partnering facilitation services for Level 1, 2, or 3 projects.
- I. **Issue Resolution Ladder (IRL):** A stepped process that formalizes the negotiation between the parties of a construction project. While actual titles may differ, the intent of this ladder is to provide a process that elevates issues up the chain of command between the parties involved in an issue. The objective is to resolve issues at the lowest practical level and to not allow individual project issues to disrupt project momentum. When an issue is escalated one level, it is expected that a special meeting focusing on the negotiated settlement for that issue will be called with the goal of settling as quickly as possible. A sample issue resolution ladder (IRL) is shown below. The IRL will be developed during the kick-off partnering workshop or pre-construction meeting.

Escalation Resolution Ladder (ERL)	Level	Awarding City Department	Contractor	Time to Elevate
	I	Inspector or Resident Engineer	Foreman/ Superintendent	1 day
	II	Project Manager	Project Manager	1 week
	III	Construction Manager	Area Manager	1 week
	IV	Chief Harbor Engineer	Owner; President	2 weeks

- J. **Kick-off Partnering Workshop:** The initial partnering session where the team develops its partnering charter and officially starts the partnering process.

K. Multi-Tiered Partnering (Executive - Core Team - Stakeholder): Partnering workshops can be divided into multiple sessions, including an executive session, core team session and stakeholder session. For very large projects, a best practice is to use the executive team as a project board of directors who provide vision and steer the project. **The core team is the central group of key individuals who are on the project throughout the duration. The stakeholder team is made up of end users, operations and maintenance personnel or third parties who can influence the outcome of the project.**

L. Partnering Level: The desired level of engagement in the partnering process may vary depending on a contract's size, complexity, location or other risk factor. If a project encounters any of the following risk factors in the Matrix, the City may consider adjusting the partnering process to the appropriate level.

Level	Estimated Construction Amount	Complexity	Political Significance	Relationships	Partnering Process
5	\$100 million +	Highly technical and complex design & construction	High visibility/ oversight; significant strategic project	New project relationships; high potential for conflict (strained relationship, previous litigation, or high probability of claims)	Recommended Elements: 12 Sessions/yr. and 12 Surveys/yr. External Facilitator
4	\$30 - \$100 million	High complexity with schedule constraints, uncommon materials, etc.	Probable stakeholder and community interest or involvement	New contractors or CM, new subs	Recommended Elements: 6 Sessions/yr. and 12 Surveys/yr. External Facilitator
3	\$10 - \$30 million	Increased complexity	Likely, depending on the location and other project characteristics	Established relationships; new CM, subs, or other key stakeholders	Elements: 4 Sessions/yr. and 4 Surveys/yr. Internal or External Facilitator
2	\$2 - \$10 million	Standard complexity	Unlikely, unless in a place of importance	Established relationships; new subs, new stakeholders	Elements: Minimum 2 Sessions Internal or External Facilitator
1	\$600,000 - \$2,000,000	Low level complexity	Unlikely, unless in a place of importance	Established relationships; new subs, new stakeholders	Elements: Create IRL Recommended: Minimum 2 Sessions (Level 2)

M. Partnering Maintenance Plan: An element of the partnering charter, the partnering maintenance plan describes the frequency of follow-up partnering sessions (including the close-out/lessons learned session) and the use and frequency of project scorecards.

N. Partnering Sessions: Formalized meetings (workshops) focused on developing a collaborative culture among the project team. Teams use these meetings to, among other tasks, set project goals, define project commitments and attend joint training sessions.

O. Project Scorecards: An accountability tool that allows project teams to measure how well they are following through on commitments made to one another. Typically, the scorecard is a confidential survey prepared and submitted to the team by the partnering facilitator, if any. The facilitator then compiles the responses into a report which is then sent out to the project team for review.

- P. **Project Stakeholders:** Any person or entity that has a stake in the outcome of a construction project. Examples include the end users, neighbors, vendors, special interest groups, those who must maintain the facility, those providing funding, and those who own one or more of the systems.
- Q. **Project Team:** Key members from the City and Contractor organizations responsible for the management, implementation, and execution of the project, who will participate in the partnering process.
- R. **Self-Directed Partnering:** The project team leads itself through all of the collaborative partnering elements.
- S. **Stakeholder Team (in Multi-tiered Partnering):** Those individuals who have a stake in the outcome of a construction project.
- T. **Subcontractor on-boarding/off-boarding:** At the various stages of construction, key subcontractors (trades) determined by City and Contractor will participate in the partnering process as needed as their work begins and is completed.
- U. **Third-Party Facilitator Agreement:** An agreement, appended to this specification, to which the external facilitator and the City and the Contractor are parties, and which establishes a budget for fees and expenses of the facilitator, workshop site costs, if any, and the terms of the facilitator's role for the project consistent with the requirements of this specification.

1.4 PURPOSE/GOALS

- A. The goals of project partnering are to:
 - 1. Use early and regular communication with involved parties;
 - 2. Establish and maintain a relationship of shared trust, equity and commitment;
 - 3. Identify, quantify, and support attainment of mutual goals;
 - 4. Develop strategies for using risk management concepts and identify potential project efficiencies;
 - 5. Implement timely communication and decision-making;
 - 6. Resolve potential problems at the lowest possible level to avoid negative impacts;
 - 7. Hold periodic partnering sessions and workshops throughout the life of the project to maintain the benefits of a partnered relationship;
 - 8. Establish periodic joint evaluations of the partnering process and attainment of mutual goals.

1.5 COSTS

- A. The fees and expenses of the facilitator, project scorecards, partnering training and workshop site costs, if any, shall be paid for by the City as set forth in the Third-Party Facilitator Agreement.
- B. Each project will include an allowance to cover the full partnering costs. The allowance will be determined by the City based on the project's partnering level. The Contractor shall pay the invoices of the facilitator and/or workshop site costs after approval by both parties. Upon receipt of satisfactory evidence of payment of facilitator invoices by the

Contractor, the City will then reimburse the Contractor for such invoices from a fixed cash allowance included as a bid item in the bid prices. **No mark-up, overhead or other fees shall be added to the partnering costs.** If the total cost of the partnering differs from the allowance amount, the contract sum shall be adjusted by change order for the difference between the actual cost and the amount included in the bid, as an additional amount due the Contractor or a credit to the City, as appropriate. If the Contractor fails or refuses to pay the facilitator invoices, the City may pay such invoices and deduct the Contractor's portion from any amount that is due or may become due under the contract.

1.6 PARTNERING TRAINING

- A. In accordance with the Citywide partnering program, at least one member of the City staff team and the Contractor shall attend the City Partnering Fundamentals Training and have received a Certificate of Completion from the training session. It is recommended that the key members of the project delivery team (i.e. the Contractor's project executive, project manager and superintendent, and the City project manager and construction manager) be trained. It is recommended that the prime contractor have at least two members of the team trained so that one is available on the project at all times. Training is free to participants and is offered regularly by the City. Attendance can be coordinated through the Partnering Coordinator and www.sfpartnering.com. Evidence of training (i.e. the Certificate of Completion) must be provided to the City project manager no later than 90 days after Notice of Award.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 PARTNERING INITIATION

- A. The City Representative, after award of Contract but in no case longer than 30 days following Notice to Proceed (NTP), shall send the Contractor a written invitation to enter into a partnering relationship. If an external facilitator will be retained, the City and Contractor shall cooperatively and in good faith select the facilitator as specified in subparagraph 3.3 below.

3.2 PARTNERING ELEMENTS

The partnering levels are based on the Citywide Partnering Matrix listed in subparagraph 1.3L.

- A. For Level 1 Projects:

1. The team may self-direct partnering or retain an internal or an external facilitator.
2. **Self-Directed Partnering:** Teams electing to self-direct the partnering process shall develop the Issue Resolution Ladder during the pre-construction meeting. During the pre-construction meeting, the team is encouraged to mutually develop the core project goals, including: schedule, budget, quality, and safety. The team is encouraged to create a team commitment statement with signatures.
3. **Internal or External Facilitator.** If the City and Contractor elect to retain an internal or external facilitator, they will do so according to the process listed in subparagraph 3.3 of this document. They will follow the partnering elements listed for Level 2 Projects.

- B. For Level 2 Projects, the required partnering elements are:

1. **Internal or External Facilitator.** The City and Contractor shall retain either an internal or external facilitator according to the process listed in subparagraph 3.3 below for the partnering sessions or workshops. The facilitator shall be mutually agreed to by the City and Contractor.
 2. **Kick-off Partnering Workshop.** The City, Contractor, and facilitator, if any, shall meet to mutually develop a strategy for a successful partnering process and create their initial partnering charter.
 3. **Partnering Charter and/or mission statement.** The City and Contractor shall agree to create a partnering charter that includes:
 - (a) Mutual goals, including core project goals that relate to project schedule, budget, quality, and safety, and possibly project-specific goals and mutually-supported individual goals.
 - (b) Partnering maintenance and close-out plan, including partnering session attendees and frequency of meetings.
 - (c) Dispute resolution plan that includes an Issue Resolution Ladder.
 - (d) Team commitment statement and signatures.
 4. **Minimum Two Partnering Workshops or Sessions** (including kick-off workshop). The partnering team may participate in additional workshops or sessions during the life of the project that they mutually agree is necessary and appropriate.
 5. **Executive Sponsorship.** Commitment to, and support of, the partnering process from the most senior levels of the City and Contractor organizations.
 6. **Issue Resolution Ladder.** The City and Contractor shall mutually develop an IRL.
- C. For Level 3 Projects, add the following elements:
1. **Internal or External Facilitator.** City and Contractor shall retain either an internal facilitator or an external facilitator according to the process listed in subparagraph 3.3 below for the partnering meetings or workshops. The facilitator shall be mutually agreed to by the City and Contractor.
 2. **Quarterly Partnering Workshops or Sessions** (including kick-off workshop). The partnering team may participate in additional workshops or sessions during the life of the project as needed.
 3. **Quarterly Project Scorecards.** City and Contractor shall participate in periodic partnering evaluation surveys to measure progress on mutual goals and short-term key issues as they arise.
 4. **Key Subcontractor On-Boarding/Off-Boarding.** Key subcontractors will be invited to participate in the partnering sessions as necessary as determined by City and Contractor as their participation in the project work becomes relevant.
- D. For Level 4 Projects, recommend adding the following elements:

1. **External Facilitator for Kick-off and Bi-Monthly Partnering Sessions.** City and Contractor will retain an external facilitator according to the process listed in subparagraph 3.3 below for the kick-off partnering workshop and bi-monthly partnering meetings. Additional meetings, workshops, or sessions may be facilitated by mutual agreement.
 2. **Bi-Monthly Partnering Sessions.** The partnering team shall convene partnering sessions at least every two months throughout the duration of contract.
 3. **Monthly Project Scorecards.** City and Contractor shall participate in partnering evaluation surveys at least every month.
- E. For Level 5 Projects, recommend adding the following elements:
1. **Monthly Partnering Sessions.** The project team may hold professionally facilitated partnering sessions monthly throughout the duration of the project.
 2. **Multi-tiered Partnering (Executive – Core Team – Stakeholder).** Partnering team will divide into smaller groups and convene multiple sessions including an executive Session, core team session and stakeholder session.
 3. **Monthly Project Scorecards.** City and Contractor shall participate in monthly partnering evaluation surveys.

3.3 SELECTION OF A PROFESSIONAL NEUTRAL FACILITATOR

- A. If an external facilitator will be retained, the City and Contractor shall meet as soon as practicable after award of contract, but in no case later than 30 days after NTP, to mutually select a facilitator. The City and Contractor shall also schedule the kick-off workshop, determine the workshop site and duration, and agree to other administrative details.
- B. The City, Contractor, and selected facilitator shall execute a Third-Party Facilitator Agreement within 30 days of NTP.
- C. The facilitator shall lead the kick-off partnering workshop and other partnering sessions as necessary or required.

3.4 FACILITATOR QUALIFICATIONS AND REQUIREMENTS; EVALUATIONS

- A. The facilitator shall be trained in the recognized principles of partnering.
- B. The facilitator shall have the following professional experience and qualifications:
 1. At least 3 years' experience in partnering facilitation with a demonstrated track record, including public sector construction for a city or other municipal agency; and,
 2. Skill set that may include construction management, negotiations, labor-management mediation, and/or human relations.
- C. The facilitator shall be evaluated by the partnering team: (1) at the end of the kick-off partnering workshop; and (2) at the project close-out partnering session.

END OF DOCUMENT

SECTION 01 31 34
APPENDIX D: THIRD PARTY FACILITATOR AGREEMENT

THIS AGREEMENT, dated for convenience as of the _____ day of _____ 20____, is between the City and County of San Francisco (the "City"), acting by and through its Department _____, (the "Contractor") _____, and the following individual: _____ (the "Facilitator").

Recitals

A. The City, by and through its Department, has awarded to the Contractor public work Contract No. ____ (the "Contract") for the construction of a public work known as _____ (the "Project").

B. Included as part of the Contract is Section 01 31 33, Partnering Requirements, implementing a Partnering Facilitation procedure for the Project (the "Partnering Specification").

C. The Partnering Facilitator has been selected in conformance with the Partnering Specification.

Agreement

NOW THEREFORE, the City, the Contractor, and the Facilitator hereby agree as follows:

1. Compliance with Specification. The Facilitator agrees to be bound by the terms of the Partnering Specification and to perform the required duties strictly as set forth in the Partnering Specification. The Partnering Specification is incorporated here by reference as if fully set forth.

2. Compensation. The City and the Contractor agree that the Facilitator shall be compensated for his/her individual services as Facilitator at a billing rate of \$_____ per day and \$_____ per Scorecard. Compensation shall be paid at the stated billing rate, applied to travel time and reasonable study/consultation time and time spent in Partnering Workshops. Included in the billable rate shall be routine office expenses, such as secretarial, administrative, report preparation, telephone, computer, and internet connections.

3. Additional Compensation. Not included in the billable rate, and considered additional compensation, shall be any travel expenses, outside reproduction costs, and postage costs. Travel expenses must be approved in writing by both the City and the Contractor prior to being incurred. Outside reproduction and postage expenses may be billed at cost.

4. Invoices. The Facilitator shall submit to the Contractor invoices for work completed (a) not more frequent than once per month; (b) based on the agreed upon billing rate and conditions and on the number of hours expended, together with direct, non-salary expenses, including an itemized listing supported by copies of original bills, invoices, and expense accounts; and (c) accompanied by a description of activities performed daily during the invoice period.

5. Confidentiality. The Facilitator shall not divulge any information acquired during Partnering activities without obtaining prior written approval from the City and the Contractor.

6. Recordkeeping. The Facilitator shall maintain cost records pertaining to this Agreement for inspection by the City or the Contractor for a period of three years following the end or termination of

this Agreement.

7. Assignment. No party to this Agreement shall assign any duty established under this Agreement or the Partnering Specification.

8. Termination. This Agreement may be terminated only by mutual agreement of the City and the Contractor at any time upon not less than 10 days written notice to the Facilitator. If the Facilitator resigns, is unable to serve or is terminated, he/she will be replaced within four weeks in the same manner as he/she was originally selected under the Partnering Specification. This Agreement shall be amended to indicate the member replacement.

9. Legal Relations. The parties to this Agreement expressly acknowledge that the Facilitator, in the performance of his or her duties under this Agreement and the Partnering Specification, is acting in the capacity of an independent agent and not as an employee of the City or the Contractor. The Facilitator shall not participate in any dispute proceedings relating to the Contract or the Project. The City and Contractor release the Facilitator from any and all liability, claims, demands, actions and causes of action arising out of or resulting from partnering for the project. The release set forth above excludes any and all liability, claims, demands, actions and causes of action arising out of or resulting from fraud or willful misconduct by the Facilitator.

10. Jurisdiction and Venue. Disputes among the City, the Contractor, and the Facilitator arising out of this Agreement shall be brought in the California Superior Court, County of San Francisco. The Agreement shall be interpreted in accordance with the laws of the State of California. The Facilitator hereby consents to the personal jurisdiction of the California Superior Court, County of San Francisco.

CITY AND COUNTY OF SAN FRANCISCO [CONTRACTOR]
DEPARTMENT PORT OF SAN
FRANCISCO

BY: _____
Name: Rod Iwashita
Title: Chief Harbor Engineer

BY: _____
Name:
Title:

Approved as to form:
DENNIS J. HERRERA
City Attorney

FACILITATOR

BY: _____
Deputy City Attorney

BY: _____
Name:
Title:

END OF SECTION

SECTION 01 32 16**CONSTRUCTION PROGRESS SCHEDULE (CPM)****PART 1 - GENERAL****1.1 SUMMARY**

- A. Scheduling of Work under the Contract shall be performed by Contractor in accordance with requirements of this Section.
 - 1. Development of the Construction Schedule, resource loading of the Schedule, and Project status reporting requirements of the Contract shall employ computerized Critical Path Method (CPM) scheduling.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.3 GENERAL REQUIREMENTS

- A. Within 15 calendar days after the Notice To Proceed (NTP), Contractor shall furnish a pdf-formatted construction schedule showing in detail the proposed sequence of activities. The Port will not process any progress payments until the required schedule is submitted.
- B. The CPM schedule shall represent Contractor's plan of operation performed within the specified contract completion time and within the contract bid price. It shall represent a practical plan to complete the work. A schedule extending beyond the contract completion date will not be accepted.
- C. Contractor is required to involve all subcontractors in the development, implementation, and updating process of its schedule.
- D. The CPM Schedule shall be submitted to the Port's Representative for approval. After review and prior to acceptance, the Contractor shall revise the CPM schedules to incorporate the Port's comments and shall submit final documents to the Port's Representative for approval within five (5) working days.
- E. Acceptance or approval of the schedule is of general nature only. Failure by Contractor to include any element of work required for the performance of this contract shall not excuse him from completing all work required within any applicable completion date, notwithstanding the Port approval of the CPM diagrams. Items missing from the schedule are assumed to be incidental work and not missing from the schedule after City approval, Contractor may submit a revised schedule to include these items. The revised schedule is subject to review and approval by the Port as described in "Revised Schedule" clause. No extension of time will be granted because of errors or omissions on the schedule. It is Contractor's responsibility to incorporate all necessary activities to cover the work required by the Contract Documents.
- F. The CPM schedule and analysis when approved by the Port shall constitute the official project work schedule throughout the construction period. No alteration of the logic, duration of activities, etc. will be allowed without the approval of the Port.

1.4 CPM SCHEDULE CONTENT

- A. The progress schedule shall be calendar-based, using a precedence method network diagram in the CPM format indicating the critical path for the execution of the work utilizing the entire contract time.
- B. The network diagram(s) shall show the following activities:
 - 1. Required approvals, permits, notices, etc. necessary for Contractor's execution of the proposed work.
 - 2. Preparation of shop drawing and working drawing submittals.
 - 3. Administrative activities, procedures, and subsidiary actions that will affect the critical path:
 - a. Submittal to and review by the Port of shop drawings within the time limits noted in Contract Documents.
 - b. Submittal to and review by the Port of substitutions as noted in Contract Documents.
 - c. Submittal to and review by the Port of alternative construction methods or alternative designs, including all supporting data relating thereto, and
 - d. Submittal to and review by the Port and all utility companies involved, a schedule for coordination of all utility relocation work necessitated by Contractor's operations.
 - 4. Procurement of materials and equipment including ordering, fabrication, and delivery.
 - 5. Construction activities and sub activities tasks, including all activities shown on the Schedule of Values.
 - 6. Scheduled completion date shall be as specified within the time allowed.
 - 7. Project interim milestones shall be a maximum of two (2) events to be determined during submittal process.
- C. All CPM activity time duration shall be specified in five (5) day work weeks excluding holidays to be identified by Contractor.
- D. A maximum of fifteen (15) days duration shall be given to each CPM construction activity. Any activity in excess of the fifteen days shall be broken down in detail so that each detail activity will not exceed the fifteen days maximum.
- E. All constraints, dates and lags will require the Port's approval. All activities shall have succeeding activities except project completion. Contractor shall demonstrate the necessity of having any dummy activities.
- F. Negative float will not be allowed on the CPM schedule on the initial submittal. Initial CPM schedule with negative floats shall be rejected immediately. Contractor shall provide sufficient manpower (multiple crews) and maximize working hours (extended hours and /or weekend work) to perform the required work within the specified completion time and contract bid price.
- G. The CPM schedule's critical activities shall not exceed fifteen percent (15%) of the total number of activities. Critical activities are those which have the least float.

1.5 CPM SCHEDULE FORMAT

- A. The CPM schedule shall be prepared by Contractor using the precedence method of network diagramming.
 - 1. Time Scaled Graphic network diagram showing the critical path. The graphic network diagram shall not be larger than 24" x 48".

2. Tabulated Schedule shall include the following information for each activity:
 - a. Activity beginning and ending event numbers
 - b. Estimated duration in working days
 - c. Concise description of activity
 - d. Trade code (responsibility code including Contractor., all Subcontractors, Supplier, and Owner)
 - e. Early start date (ES) and early finish date (EF) (calendar dated).
 - f. Late start date (LS) and late finish date (LF) (calendar dated)
 - g. Actual start date and actual finish date (calendar dated)
 - h. Total float
 - i. Percent completed
3. Electronic File - Contractor shall furnish information of the schedule in pdf-format or a format using Microsoft Office Project software with the following requirements.
 - a. Sorting the activities as required.
 - b. Calculate the schedule as required in the updated schedule.
 - c. Include resource requirement as required.
 - d. Inputting actual start and completion dates of completed activities.
 - e. Inputting actual start dates and percent completion of activities in progress.
 - f. Print the total and free float for each activity.
4. Additional Information - The following computer- generated reports supplied with the project identification, schedule and run date, and type of sort on the first page.
 - a. List of all activities sorted, by total float including ES, LS, EF, LF, and Total Float duration.
 - b. List of all activities sorted numerically including ES, LS, EF, LF, and Total Float duration.
 - c. List of all activities sorted numerically including ES, LS, EF, LF, Total Float duration and Predecessor/Successor information of precedence network.
 - d. List of all activities sorted by responsibility including ES, LS, EF, LF and Total Float duration.
 - e. List of activities on the critical path sorted numerically including ES, LS, EF and LF.
 - f. List of near critical activities. (activities with total float less than ten (10) working days) sorted numerically including ES, LS, EF, and LF.

1.6 UPDATED SCHEDULE

- A. The CPM schedule shall be updated monthly by Contractor and submitted to the Port for review.
- B. Computer calculations of the updated schedule will be made starting from the current data date to the end of the project. Work completed shall be shown with actual start and finish dates for each activity. Work in progress shall be shown with the actual start date and the percentage completed for each activity.
- C. The CPM network diagram shall, at all times, represent the actual history of accomplishment of all activities as well as Contractor's current projected plan for orderly Completion of the work. Contractor shall, at monthly intervals, evaluate work progress with the Port by reviewing the actual accomplishments since the previous update.
- D. Contractor's monthly written evaluation of the critical path analysis shall show the following:

1. Computer printout of the work completed with actual start and finish dates for each activity;
 2. Critical path;
 3. Percentage of each activity completed;
 4. Anticipated completion time of entire work;
 5. Description of problem area;
 6. Current and anticipated delaying factors and their impacts
 7. Explanation of corrective action taken or proposed;
- E. This updated schedule shall not have any change in the logic of the network or in the duration of activities. The updated schedule shall be submitted with the monthly progress payment request showing all work completed as that date.
- F. If Contractor during the course of the construction desires to make changes in its method of operating and scheduling, it shall notify the Port in writing stating the reasons for the change. Any change to the schedule in the logic, order or sequence of work, duration activities, etc. shall constitute a revised schedule. A revised schedule will not be in effect until it is approved by the Port.
- G. The updated schedule shall have the same format and content as the initial CPM schedule and analysis for review and approval.

1.7 ACTIVITY SCHEDULE

- A. Contractor shall prepare and submit at the weekly progress meeting, in sufficient quantities, on a bar chart format showing a three-week window of the following:
1. Completed activities for last week.
 2. Scheduled activities for the next two weeks.
 3. Correlation to appropriate CPM schedule node or activity identification.
 4. Detailed information including all minor elements, subjectivity, or work phases for the major activity.

1.8 REVISED SCHEDULE

- A. Contractor shall submit to the Port a revised critical path schedule with its evaluation whenever a schedule revision is requested or any of the following occurs:
1. A change order affects the completion date or the sequence of the activities;
 2. Progress of any critical activity falls significantly behind schedule;
 3. Delay on a non critical activity changes the course of the critical path; or
 4. Contractor elects to change any sequence of activities affecting the critical path.
- B. All revisions to the Schedule shall be submitted in writing to the Port Representative for review and approval. The submission of a revised schedule shall not relieve the Contractor of the responsibility for the notification required by Section 6.22h.2.d of the San Francisco Administrative Code and as required by subparagraph 7.02.d – Notice of Delay of the General Conditions.

1.9 SUBMITTALS

- A. The CPM schedule prepared by Contractor shall be used for planning, organizing, directing, controlling, and reporting all work required by the Contract Documents.
- B. Therefore, the timely submission of the following is required:
1. Pdf-version of the CPM schedule 10 working days after the official date for Notice to Proceed;

2. Updated schedule on a monthly basis within 3 working days after update date as established by the Port.
 3. Activity schedule on a weekly basis at the progress meeting.
 4. Revised schedule within 10 working days when requested by the Port.
 5. Resubmittal of any rejected CPM schedule, updated schedule, or revised schedule within 5 working days after receipt of the returned schedule marked "RESUBMIT", if necessary.
- C. Failure to comply with timely submission of any one of the above schedules will be just cause to withhold the progress payment of any portions thereof by the Port and will trigger liquidated damages listed in § 1.10, LIQUIDATED DAMAGES.

1.10 LIQUIDATED DAMAGES

- A. Failure to submit any one of the above schedules will result in an assessment of two hundred dollars (\$200) per calendar day as liquidated damages per schedule to be deducted from the contract until the required submittals are provided by Contractor.
- B. Liquidated damages are in addition to any remedies taken by the Port under the Supplementary Conditions of this Contract.

1.11 APPROVED STANDARD

- A. CPM, as required by this section, shall be interpreted to be generally as outlined and defined in "CPM in Construction Management" by James O'Brien, McGraw-Hill Company, latest issue, Chapters 1 through 7.
- B. Free float is defined as the amount of time that any activity can be delayed without adversely affecting any succeeding activity for the project completion.
- C. Total float is defined as the amount of time that an activity can be delayed without adversely affecting the overall time for the project completion.

1.12 ADJUSTMENT OF THE CONTRACT TIME AND CHANGE ORDER

- A. Adjustments of the contract time due to delays, additional work, or any other cause will only be issued through a contract change order and only for causes specified in the Contract Documents.
 1. In the event Contractor requests an adjustment of the contract time, it shall furnish such justification, progress schedule data, and supporting evidence as the Port may deem necessary, for a determination as to whether or not the Contractor is entitled to an adjustment of time under the provisions of the Contract.
 - a. Contractor shall submit proof based on revised activity logic, durations, and costs with each request.
 2. The progress schedule shall clearly indicate that Contractor has used, in full, all the float time available for work involved in the request.
 3. Total and free float are not for the exclusive use of benefit of either the Port or Contractor, but is a resource available to both parties on a first needed basis. Contractor shall not be entitled to additional compensation due to schedule impacts for change order work that extends the contract beyond the scheduled completion date, but not beyond the contract completion date.
 4. The Port determination as to the adjustment of the contract time will be based upon the latest version of the progress schedule accepted at the time of the alleged delay, and all other relevant information.

5. Actual delays in activities which, according to the progress schedule, do not affect the critical path work, will not be the basis for an adjustment to the Contract time.
 6. No contract time extensions will be allowed for contract change orders for which there are concurrent contract work delays, unless' the excusable delays affect the critical path in the schedule and after all available float has been used.
- B. Contractor shall include, as part of each change order request for which it is requesting an adjustment in the contract duration, a sub network showing logic revisions, duration changes, and cost changes for the work in question and its relationship to other activities on the Progress Schedule. Contractor shall incorporate each Change Order into the updated schedule.
 - C. The Port will, within 15 working days after receipt of such request and supporting evidence, review the facts and advise Contractor in writing therefor.
 - D. The new progress schedule, if accepted by the Port shall be in compliance with the requirements under "Revised Schedule" as defined within this section.
 - E. Where the Port has not yet made a final determination as to the adjustment of the contract time, and the parties are unable to agree to the amount of the adjustment to be reflected in the Progress Schedule, the current schedule will be in effect and be updated regularly every month until a revised schedule is agreed and approved by the Port.

1.13 EARLY COMPLETION SCHEDULE

- A. Contractor may provide a progress schedule which contains a schedule completion date earlier than the time allowed for completion of work as specified in these Specifications.
- B. If Contractor submits an early completion schedule, it agrees to the following:
 1. The time difference between Contractor's early scheduled completion date and the Contract completion date will be considered as absolute float.
 2. The absolute float is not for the exclusive use of benefit of either the Port or Contractor, but is a resource available to both parties on a first needed basis.
 3. Contractor's original bid has included all cost for the full duration of the Project from the start date through the official Contract completion date. Specifically, Contractor has provided through its bid, the overhead cost including field office, home office, other off-site yard, and extended overhead cost for the duration of the absolute float between its early scheduled completion date and the Contract completion date in its bid items on the Schedule of Bid Prices or Bid Proposal as specified.
 4. If the Port requires additional work through change order which will be done after the early schedule completion date and prior to the official Contract agrees that no additional monies will be paid beyond the direct cost related to those change orders.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 33 00**SUBMITTALS****PART 1 GENERAL****1.01 SUMMARY**

- A. Section Includes: Procedures and requirements to submit shop drawings, product data, samples and similar submittals by Contractor to the Port for review and approval. Specific requirements for submittals are included in the Contract Documents and individual Specifications.
- B. Related Documents:
 - 1. Section 00 72 00: General Conditions
- C. Related Sections:
 - 1. Section 01 32 16: Progress Schedules
 - 2. Section 01 35 45: Health and Safety

1.02 SUBMITTAL SCHEDULE

- A. Contractor's submittal schedule shall be integrated into the progress schedule for the Work. Refer to Section 00 72 00: General Conditions, Article 3.08 Progress and Submittal Schedules, and Section 01 32 16: Progress Schedules.
- B. Contractor shall provide a submittal schedule detailing each submittal activity and contain only submittal activities.
- C. Submittals will not be received from the Contractor for review by the Port before the submittal schedule has been reviewed and accepted by the Port.
- D. Allow 21 calendar days for submittal review.

1.03 SUBMITTAL PROCEDURES

- A. Refer to Section 00 72 00: General Conditions, Article 3.11 Shop Drawings, Product Data and Samples for General Conditions and Contractor's responsibilities.
- B. Contractor shall review, approve and stamp submittals prior to forwarding them for Port's review.
 - 1. By approving and submitting shop drawings, product data and samples or similar submittals, Contractor represents that it has determined and verified dimensions, materials, field measurements, and related field construction criteria, and that it has checked and coordinated the information contained within such submittals with the requirements of the work and of the Construction Documents.

2. When professional certification of performance criteria of materials, systems or equipment is submitted, submittal shall be stamped and signed by the responsible design professional with license number and expiration date representing that the Port could rely upon the accuracy and completeness of such calculations and certifications.
 3. Submittals not reviewed, approved and stamped by the Contractor prior to forwarding for Port review will be discarded and not reviewed.
- C. Format of submittals:
1. Submittal Control Form available on Port website:
<http://sfport.com/port-construction-management-forms>
 2. Identify submittals with the following information:
 - a. Submittal number (e.g., Submittal No. 1).
 - b. "Contract No. 2814R"
 - c. Contractor's name, address, telephone number, fax number and e-mail address.
 3. Consecutively number the pages of the submittal (e.g., 1 of 5, 2 of 5, etc.), exclusive of any transmittal form.
 4. Shop drawings shall have a title and reference to where to product will be incorporated into the Work.
 5. Where product data contain more than one product, model, selection, etc., clearly mark and identify the information intended to be reviewed by Port.
 6. Reference to Contract Drawing or Specification Section as applicable.
 7. Where multiple Specification Sections govern any portion of the Work or where multiple trades are involved in any portion of the Work (e.g., steel, mechanical and electrical items embedded in concrete), indicate all pertinent Specification Sections in its submittal identification.
 8. Apply Contractor's stamp, signed or initialed, certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information are in accordance with the requirements of the Work and Construction Documents.
 9. Provide space for Port's review stamp. Space shall be minimum 4" x 6".
 10. Resubmitted shop drawings, product data, samples and other submittals shall:
 - a. Be identified by the original submittal number with a numbered suffix that indicates the number of times it has been resubmitted.
 - b. Be revised as required.
 - c. Identify all changes made since previous submittal with the use of "clouds".
- D. Packaging of Submittals:
1. Make submittals in groups containing all associated items as complete packages of information for review. The Port will reject partial submittals.
 2. Submittals shall be wrapped or packaged to prevent damage during delivery.
 3. Reproducible drawings shall be rolled and not folded.
 4. Submittal Control Form must be used for cover sheet of Submittal.
- E. Transmit each submittal to the Port's Representative at the following address:

Port of San Francisco
Contract No. 2842
Pier 1

San Francisco, CA 94111
consturctionbids@sfport.com

- F. The Port will review Contractor's submittals for conformance and compliance with the requirements of the Contract Documents, plans and specifications.
- G. The Port will return the submittals stamped:
1. "NO EXCEPTIONS TAKEN" – Contractor is advised that fabrication, manufacturer, or construction may proceed, providing it complies with the Construction Documents.
 2. "MAKE CORRECTIONS NOTED" – Contractor is advised that fabrication, manufacture, or construction may proceed, providing it complies with the Port's notations and the Construction Documents.
 3. "REVISE AND RESUBMIT" – Contractor is advised that no work shall be fabricated, manufactured, or constructed. Contractor shall revise the submittal and resubmit it with the requested changes.
 4. "REJECTED" – Submittal is rejected.
- H. No change shall be made by Contractor to any submittal after it has been accepted by the Port.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION

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SECTION 01 35 45
HEALTH AND SAFETY

PART 1 -- GENERAL

1.01 SUMMARY

- A. The Contractor shall be solely and fully responsible for compliance with regulatory requirements applicable to the health and safety of persons during the performance of the Work, and shall fully assume the defense of, indemnify and hold harmless those entities and persons stipulated in the Section 00 72 00, General Conditions.
1. Within 30 calendar days after award of the Contract, submit to the Port two copies of the project-specific Health and Safety Plan (HASP), including Fire Prevention Plan. Refer to Paragraph 1.06 of this Section for specific requirements.
 2. At the same time, submit to the Port two copies of the following items:
 - a. List of hazardous materials to be used by the Contractor or Subcontractors on the Project.
 - b. Safety Data Sheets (SDS) for each of the listed hazardous materials, and
 - c. Records of training of all the Contractor's, including Subcontractor's, personnel handling or contacting such materials.
 3. Within 30 calendar days after award of the Contract, submit to the Port two copies of the Cal/OSHA approved Written Compliance Plan which shall be subsequently updated every six (6) months thereafter throughout the duration of the Project.
 4. The Contractor shall be responsible for all costs associated with the compliance with applicable hazardous materials regulations or requirements incurred by Contractor or its subcontractors' in the demolition or construction Work.
- B. Related Sections
1. 01 41 00 Regulatory Requirements

1.02 REGULATORY REQUIREMENTS

- A. OSHA's Lead Exposure in Construction, Interim Final (29 CFR Part 1926.62) requires certain actions on the part of an employer when there is any possibility that an employee could be exposed to lead as a result of his/her activities. The level of engineering control and medical monitoring which may be required will be based on the governing regulations of Cal/OSHA (Title 8 CCR Section 1532.1), which are effective throughout the project duration for the level, and extent of lead exposure at the site. The Contractor shall designate a qualified person to identify potential lead hazards at the site and oversee implementation of appropriate protective measures to comply with all Cal/OSHA requirements applicable for lead-based paints.

1.03 HAZARDOUS MATERIALS

- A. Certain materials and items of equipment present at or used to construct the Project contain materials known to the State of California to be either carcinogenic or reproductive toxins. These materials may include:

1. Known or suspected building materials that contain lead and other hazardous materials.
 2. These materials include, but are not limited to soil, painted or coated surfaces (including walls, ceilings, moldings, windows, door components stairwell components, and floors), and plumbing components (including piping, fittings, and solders).
- B. Contractor shall ensure that all site personnel, including Subcontractors' personnel, receive appropriate and required awareness training and orientation that will prevent inadvertent or unauthorized disturbance of hazardous materials that maybe present in soil and/or structures at the site. The Port reserves the right to request proof of the training.
- C. Contractor and Subcontractor employees performing work in the Project shall implement all safety precautions, training, and monitoring related to hazardous materials required by Cal/OSHA CCR Title 8.

1.04 REMEDIAL ACTION

- A. Should the Contractor or its Subcontractors be notified by the Port of any unsafe or unhealthy condition associated with the performance of the Work and be required to take remedial action to correct same, such action shall be taken immediately, if so directed, or within 48 hours after receipt of a notice of violation.

1.05 HEALTH AND SAFETY PLAN (HASP)

- A. Contractor's specific HASP, shall include, but not be limited to, the following:
1. General Health and Safety per Title 8 Subchapter 4 of the Cal-OSHA Construction Safety Orders.
 2. Completion of site-specific individual worker training related to health and safety issues prior to start of worker employment on site.
 3. Personnel protective measures including proper respiratory protective equipment; proper protective clothing; head, eye, hand, and foot protection; and fall protection.
 4. Procedures for working around wall space, and other ceiling openings.
 5. Methods for demarcating and guarding wall space, and other ceiling openings.
 6. Procedures for lock out/tag out of electrical and mechanical systems.
 7. Electrical safety issues.
 8. Air monitoring strategy to evaluate Contractor employees' personal exposures to lead, and, as applicable, any other chemical materials that are used.
 9. Procedures for dealing with heat stress.
 10. Fire prevention and protection plan.
 11. Emergency procedures including, but not limited to, medical, fire, toxic atmospheres, electrical hazards, evacuation, cleanup of unintended releases, and power outages.
 12. Schedule of regular tool box meetings to discuss safety and health issues for each subcontractor and tradesperson.
 13. Lead hazard health and safety issues.
 14. Other hazardous materials health and safety issues.

15. Methods to ensure compliance with the most recent San Francisco Order of the Health Officer No. C19-07q requirements for construction projects (Applicable Appendixes) including posting of jobsite requirements, screening of personnel, required face coverings, actions to be taken for a confirmed case of COVID-19 ,hand washing, disinfecting of commonly touched surfaces, etc., which may be found at <https://www.sfdph.org/dph/alerts/coronavirus-healthorders.asp>
- B. The HASP shall incorporate Contractor's schedule of work and discuss the applicability of health and safety planning to each work phase.
- C. The Port reserves the right to reject or require modification of Contractor's HASP. However, the Port's action or lack thereof on Contractor's HASP shall not be construed to mean approval or acceptance of Contractor's responsibility for compliance with the applicable laws and regulations.
- D. No site work shall begin until the HASP is submitted.
- E. All site work shall be conducted in compliance with the HASP as well as all applicable laws and regulations.

1.06 HAZARDOUS MATERIALS IN THE WORK

- A. General: Materials which contain hazardous substances or mixtures may be required on the Work. Material usage shall be in strict adherence to Cal-OSHA safety requirements and all manufacturer's warnings and application instructions listed on the SDS provided by the product manufacturer and on the product container label.
 1. Be responsible for coordinating the exchange of SDS or other hazard communication information required to be made available to or exchanged between subcontractors at the site.
 2. Notify the Port if the Contractor considers a specified product or equipment, or their intended usage to be unsafe prior to ordering the product or equipment or prior to the product or equipment being incorporated in the Work.
- B. Prohibited Materials: The following materials and chemicals are specifically prohibited from use on this Project unless otherwise accepted in writing by the Port.
 1. All material with a stated ACGIH threshold limit value of less than 25 parts per million.
 2. Ethylene glycol monomethyl ether.
 3. Dipropylene glycol methyl ether.
 4. Ethylene glycol.
 5. Formaldehyde.
 6. Methylene chloride.
 7. Isocyanates.
 8. All chemicals with a flash point of less than 140 degrees Fahrenheit.
- C. Prohibited Equipment: The following tools and equipment are specifically prohibited for use on this Project unless otherwise accepted in writing by the Port:
 1. High- or low-pressure water-blasting equipment for hosing of ductwork or Work areas inside the building. If approval is granted by the Port, keep adjoining Work areas dry and protect existing surfaces and finishes from damage or deterioration and from contamination by hazardous materials removed by the water-blasting.
 2. Vacuum-powered removal or collection such as Vacu-loads.
 3. Gasoline-, propane-, diesel-. or other fuel-powered equipment inside a building.

4. Equipment which creates noise or vibration that would affect the safety of the building.
 5. Powder-activated fasteners except at locations specifically required by the Contract Documents or approved in writing by the Port. If approval is granted by the Port, the powder-activated gun shall be the low-velocity piston-operated type with a charge such that the velocity of the fastener is 300 feet per second or less measured 78 inches from the nozzle.
- D. Prohibited Methods: The following methods are specifically prohibited for surfaces known to contain lead-based paint on this Project unless otherwise accepted in writing by the Port:
1. Open-flame burning or torching.
 2. Machine sanding or grinding without a high-efficiency particulate air (HEPA) vacuum exhaust tool.
 3. Uncontained hydroblasting or high-pressure washing.
 4. Abrasive blasting or sandblasting without HEPA vacuum exhaust tools.
 5. Heat guns that operate above 1,100° F.
 6. On-site use of methylene chloride chemical strippers.

PART 2 -- PRODUCTS

Not Used

PART 3 -- EXECUTION

Not Used

END OF SECTION 01 35 45

SECTION 01 71 23
FIELD ENGINEERING

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Requirements for survey, project record keeping, and other field engineering.
- B. The work of this Section shall be considered incidental work.
- C. Related Documents:
 - 1. Port record documents.
 - 2. Document 00 72 00 – General Conditions
 - 3. Document 00 73 00 – Supplementary Conditions

1.02 DATUM

- A. Elevation Control: Primary elevation control consists of the vertical distance above or below 0' MLLW = City Datum – 11.67' = Mission Bay Vertical Datum +98.33'

1.03 QUALITY CONTROL

- A. The Contractor shall employ a civil engineer or land surveyor registered in the State of California and acceptable to the Port to perform site surveying under the Contract Documents.
- B. The Contractor shall submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.

1.04 SUBMITTALS FOR FIELD ENGINEERING

- A. Submit name, address, and telephone number and state registration number of the Surveyor before starting survey work.
- B. Submit a copy of site drawing, and a certificate that the elevations and locations of the Work are in conformance with Contract Documents, all prepared, stamped and signed by the surveyor.
- C. Copy of correspondence with the Department of Public Works, Bureau of Street Use and Mapping Survey Division (BSM) for potential monuments within the Contract boundary. Refer to paragraph 1.06, C below.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain a complete and accurate log of control and survey work as the work is in progress until its completion.
- B. On completion of major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

1.06 EXAMINATION

- A. Verify locations of survey control points prior to starting work.

- B. Promptly notify the Engineer of all discrepancies discovered in Contract Documents.
- C. Review the site for survey monuments. It is the responsibility of the Contractor to preserve all survey monuments, whether found or not, during the duration of this Contract. As due diligence, the Contractor shall also contact the Department of Public Works, Bureau of Street Use and Mapping Survey Division (BSM) for potential monuments within **10-feet** of the Contract boundary. A copy of the correspondence shall be transmitted to the Resident Engineer for record, but does not relieve the Contractor from the protection and preservation of survey monuments within 10 feet of the Contract boundary.

1.07 SURVEY REFERENCE POINTS

- A. Control datum for survey is that established by Port survey. All other lines and grades required for the completion of the Work shall be the Contractor's responsibility.
- B. Contractor to locate and protect survey control points prior to starting site work; preserve permanent reference points during construction. Where construction proceeded prior to standard monument referencing through BSM, Contractor shall pay for all fees and costs to reestablish the monument position. **Survey monuments shall not be reset or relocated by the Contractor unless under the direct supervision of a licensed land surveyor.**
- C. Some monuments are located beneath the ground surface and surrounded by well casings, refer to Figure 1. When a well casing and lid is reset in the course of construction, it shall be centered with respect to the monument.
- D. Promptly report to the Resident Engineer any loss or destruction of a reference point or relocation required because of changes in grades, or for any other reason.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to the Resident Engineer.

1.08 SURVEY REQUIREMENTS

- A. Provide field engineering services, using recognized engineering survey practices.
- B. Establish a minimum of one permanent benchmark on site, referenced to established control points. Record locations, with horizontal and vertical data, on Project Record Documents.
- C. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means. For site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
- D. Periodically verify layouts by same means.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

Figure 1

Typical Monuments with Well Casings



Figure 2
Typical Surface Monuments



END OF SECTION

SECTION 01 74 50**MATERIAL REDUCTION AND RECOVERY PLAN**

(Rev. 2/5/2021)

PART 1 - GENERAL

1.1 SUMMARY

- A. This section governs the recovery of construction and demolition debris.
- B. In October 16, 2006, the San Francisco Mayor issued Executive Directive 06-05 requiring all Construction Contracts to divert 75% of construction and demolition debris from landfill disposal sites. This directive is supported by existing policies that require reuse, recycling, and management of construction and demolition debris. Some of these policies are described below.
- C. The City and County of San Francisco adopted an ordinance (No. 27-06) that creates a mandatory program to maximize the recovery of all construction and demolition debris.
 - 1. The Ordinance requires that mixed construction and demolition debris material be transported off-site by a Registered Transporter and taken to a Registered Facility.
 - 2. Material source separated at the job site should be taken to a facility that reuses or recycles such material.
 - 3. This ordinance applies to all construction projects within the City and County of San Francisco, such as new construction, remodels, tenant improvements, additions, repairs, and full and partial demolitions.
 - 4. This ordinance prohibits any construction and demolition debris from being placed in trash or sent directly to a landfill.
- D. Contractor shall perform all work and meet all requirements in this Section at no additional cost to the City.
- E. Related Requirements:
 - 1. Section 01 50 00 -Temporary Facilities and Controls
 - 2. Section 01 77 00 - Closeout Procedures

1.2 REFERENCES

- A. Mayor's Executive Directive 06-05, Recycling and Resource Conservation, October 16, 2006.
- B. [San Francisco Environment Code](#)
 - 1. Chapter 5, Resource Conservation Ordinance for City Departments.
 - 2. Chapter 7, Green Building Requirements for City Buildings.
 - 3. Chapter 14, Construction and Demolition Debris Recovery Ordinance.
 - 4. Chapter 16, Food Service and Packaging Waste Reduction Ordinance.
 - 5. Chapter 19, Mandatory Recycling and Compositing Ordinance.
- C. Title 24 California Building Code Standard part 11, CALGreen:
<https://law.resource.org/pub/us/code/bsc.ca.gov/>

- D. [California Integrated Waste Management Act of 1989](#) (California Public Resources Code 40000 et. seq.) - Assembly Bill 939.
- E. Universal Waste information from the following website:
<https://www.calrecycle.ca.gov/HomeHazWaste/uwaste>
- F. Treated Wood Waste Fact Sheet from the following website:
<https://dtsc.ca.gov/toxics-in-products/treated-wood-waste-information-and-fact-sheets/>
- G. San Francisco Board Of Supervisors Resolution Nos. 530-04 and 679-02 establishing a zero waste goal.
- H. Food Service Waste Reduction Ordinance as set forth in San Francisco Environment Code Chapter 16.
- I. Refuse Collection and Disposal Ordinance, adopted November 8, 1932.

1.3 DEFINITIONS

- A. Alternative Daily Cover (ADC): Materials, other than soil, that have been approved by the California Department of Resources Recycling and Recovery ("CalRecycle") or a successor agency for use as a temporary overlay on an exposed landfill face.
- B. Beneficial Reuse: The reuse of material at a landfill that does not include ADC but does include use of materials for the following purposes: alternative intermediate cover; final cover foundation layer; liner operations layer; leachate and landfill gas collection system; construction fill; road base; wet weather operations pads and access roads; and, soil amendments for erosion control and landscaping. "Beneficial reuse" shall not include disposal of material at a landfill.
- C. City-owned Facility: Any building owned by the City and County of San Francisco. "City-owned Facility" includes City-owned facilities or portions thereof that the City leases to non-City entities.
- D. City Leasehold: A building or portion thereof owned by others where the City and County of San Francisco is a tenant.
- E. City Representative: The employee of San Francisco who oversees the construction and/or demolition process for a City construction and/or demolition project and is responsible for ensuring that the contractor complies with all aspects of the contract documents.
- F. Compostable: Any material that can be broken down into, or otherwise become part of, usable compost (e.g., soil-conditioning material) in a safe and timely manner as accepted in San Francisco's compostables collection program, such as food scraps, soiled paper and plant trimmings.
- G. Construction and Demolition Debris or C&D Debris: Building materials and solid waste generated from construction and demolition activities including, but not limited to, fully cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. This term does not include refuse regulated under the 1932 Refuse Collection and Disposal Initiative Ordinance or sections of the Municipal Code that implement the provisions of

that ordinance or materials from the public right-of-way. Hazardous material, as defined in California Health and Safety Code section 25100, et seq., as amended, is not construction and demolition debris.

- H. Construction Project: Any building, planning or construction activity, including demolition, new construction, major alteration, or building additions by a City department at a City-owned Facility or a City Leasehold.
- I. Contractor: The company or person to whom the City awards a contract for a construction and/or demolition project. The Contractor is responsible for complying with all aspects of this Specifications Section and for ensuring that all subcontractors, lower-tier subcontractors and suppliers also comply.
- J. Disposal: The final deposition of material at a legally operating permitted landfill that does not include beneficial reuse or at a permitted transformation facility. A legally operating, permitted landfill includes Class III landfills and inert fills. Disposal of inert materials at inert fills or inert backfill sites does not constitute recycling.
- K. Diversion: Use of material for any purpose other than disposal in a landfill or transformation facility, such as source reduction, reuse, recycling, and composting activities that do not result in material being disposed at permitted landfills and transformation facilities.
- L. Hazardous Material: Hazardous material is a waste with properties that make it potentially dangerous or harmful to human health or the environment. The universe of hazardous materials is large and diverse. Hazardous materials can be liquids, solids, or contained gases. They can be the by-products of manufacturing processes, discarded used materials, or discarded unused commercial products, such as cleaning fluids (solvents) or pesticides. In regulatory terms, a hazardous material is a waste that appears on one of the four RCRA hazardous materials lists (the F-list, K-list, P-list, or U-list) or that exhibits one of the four characteristics of a hazardous material - ignitability, corrosivity, reactivity, or toxicity. However, materials can be hazardous materials even if they are not specifically listed or don't exhibit any characteristic of a hazardous material. For example, "used oil," products which contain materials on California's M-list, materials regulated pursuant to the mixture or derived-from rules, and contaminated soil generated from a "clean up" can also be hazardous materials. The State Department of Toxic Substances Control offers assistance on this complex topic through its Regulatory Assistance Office. Call 1-800-728-6942 (from within California) or (916) 255-3618 (from out-of-state) or email RAO@dtsc.ca.gov.
- M. Landfill: A facility that (i) accepts for disposal in or on land non-hazardous material such as household, commercial, and industrial waste, and waste generated during construction, remodeling, repair and demolition operations, and (ii) has a valid current solid waste facilities permit from the California Department of Resources Recycling and Recovery (CalRecycle).
- N. Mixed Construction and Demolition Debris Material or Mixed C&D Debris Material: Construction and demolition (C&D) debris or C&D debris that are combined on the project site and hauled away for sorting.
- O. Person: A natural person, a firm, joint stock company, business concern, association, partnership or corporation or, to the extent permitted by law, governmental entity, including the City and County of San Francisco and its departments, boards and commissions for projects within the nine counties surrounding the San Francisco Bay, and its or their successors or assigns.

- P. Recover or Recovery: Any activity, including source reduction, deconstruction and salvaging, reuse, recycling, composting, or anaerobic digestion which causes materials to be recovered for use as a resource and diverted from disposal. Recovery shall not include engineered municipal solid waste conversion.
- Q. Recyclable Material: Any material or product that can be sorted and reconstituted, for the purpose of using the altered form in the manufacture of a new product, as accepted in San Francisco's recycling collection program, such as paper, bottles and cans. Recycling does not include burning, incinerating, converting, or otherwise thermally destroying solid waste.
- R. Recycling: The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace. Recycling does not include burning, incinerating, or thermally destroying solid waste, nor shall it include disposal.
- S. Recycling Facility: An operation or person that collects and processes materials for recycling.
- T. Registered Transporter: Anyone who is hired to remove Mixed Construction and Demolition Debris Material from a construction and/or demolition site in San Francisco, using a vehicle with more than two axles or two tires per axle (such as a large pickup truck with four tires on the rear axle or three-axle dump trucks) and is hauling at least one (1) cubic yard of Mixed Construction and Demolition Debris Material and holds a valid registration from the City and County of San Francisco pursuant to Chapter 14 of the Environment Code. A Registered Transporter is obligated to take all mixed material only to a Registered Facility.
- U. Registered Facility: Any facility that accepts Mixed Construction and Demolition Debris Material for processing and recycling and holds a valid registration issued by the City and County of San Francisco pursuant to Chapter 14 of the Environment Code.
- V. Reuse: Using an object or material again either for its original purpose or for a similar purpose without significantly altering the physical form of the object or material.
- W. Source Reduction: Any action which causes a net reduction in the generation of solid waste. Source reduction includes, but is not limited to, reducing the use of non-recyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard wastes generated, establishing garbage rate structures with incentives to reduce waste tonnage generated, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials.
- X. Source Separated Materials: Materials that have been separated or kept separate from the solid waste stream, at the point of generation, for the purpose of reuse, recycling or composting in order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.
- Y. Solid Waste: Materials designated as non-recyclable and discarded for the purposes of disposal.
- Z. Universal Waste (CCR Title 22, Division 4.5, Chapter 23): Certain specified hazardous materials that are more common and pose a lower risk to people and the environment

than other hazardous materials. Universal wastes are handled with reduced management requirements. Examples of universal waste: batteries, fluorescent tubes (lamps), electronic devices (cell phones, computers, televisions), cathode ray tubes (CRTs), mercury wastes (thermometers and toys), and non-empty aerosol cans.

- AA. Treated Wood Waste (CCR Title 22, Division 4.5, Chapter 34): Dimensional lumber and other wood products which have been removed from service and were treated with preserving chemicals that protect the wood from insect attack and fungal decay during its use. Examples include fence posts, sill plates, landscape timbers, pilings, railroad ties, guardrails, and decking. Treated Wood Waste is a hazardous material in California and must be managed according to specific regulations.
- BB. Waste Diversion: a management activity that disposes of waste through methods other than incineration or landfilling. Examples include reuse and recycling.

1.4 GENERAL REQUIREMENTS

- A. Recovery Goal: In order to meet the City's zero waste goal, the goal for this contract is to recover no less than 75% of the construction and demolition debris material from landfill disposal through waste prevention, reuse, and recycling. If a construction site contains hazardous materials and/or universal wastes, the 75% minimum recovery requirement should pertain to all non-hazardous material. No construction and demolition debris material shall be disposed in garbage or taken directly to landfill.
- B. In order for construction and/or demolition debris to be considered hazardous, such as containing asbestos or lead, it shall be evaluated and determined to be hazardous by an independent professional such as a Cal/OSHA Certified Asbestos Consultant. The waste determination and other verification shall be included with the C&D Debris Management Plan (refer to Paragraph 1.5 below), together with a list of hazardous materials found at the project site and plans for proper disposal.
- C. All Hazardous Materials, including Universal Wastes and Treated Wood Waste, shall be documented separately, and a summary of all manifests or other disposal documentation, including material description and weights, shall be provided to the City Representative.
- D. Highest and Best Use: The Contractor shall employ the following hierarchy of highest and best use for handling construction and demolition debris as follows:
1. Implement reduced material usage or reuse of materials before any recycling;
 2. Implement recycling or reuse of source separated material before any recycling of mixed construction and demolition debris material;
 3. Implement recycling of mixed construction and demolition debris material before all other forms of disposal.
- E. Recycling Requirements:
1. Source Separated Materials: The Contractor shall develop and implement procedures for source-separation, to the greatest extent feasible, of the following types of recyclable or reusable materials:
 - a. Asphalt.
 - b. Acoustical ceiling tiles.
 - c. Bricks, stone(s), granite, and other finished stone-type materials.
 - d. Carpet and padding.
 - e. Concrete, concrete block, slump stone (decorative concrete block).
 - f. Corrugated cardboard.
 - g. Dimensional lumber and beams.
 - h. Fixtures, hardware, doors, and windows.

- i. Metal, ferrous and non-ferrous.
 - j. Mixed Inerts.
 - k. Rigid plastic.
 - l. Soil/dirt/rock.
 - m. Trees, Landscape Debris, cleared vegetation and cut-off or other wood scraps.
 - n. Wall board, gypsum sheetrock.
2. Mixed Construction & Demolition Debris Material:
 - a. For projects within the legal and geographical boundaries of the City and County of San Francisco, mixed C&D debris material must be taken to a Registered Facility by a Registered Transporter, per Environment Code 14. Registered Facilities Recovery (Diversion) Rates are listed at: <https://sfenvironment.org/construction-demolition-resources>
 - b. For projects outside San Francisco, if mixed C&D debris material is taken to a non-registered facility the diversion rate approved by the local jurisdiction will be used, and official documentation of the diversion rate approved by the local jurisdiction must be provided by the Contractor. If a facility does not have a locally approved recovery/recycling rate, the recovery (diversion) rate is calculated as zero.
 3. Handling Of Recyclable Materials:
 - a. The Contractor shall assure that recyclable or reusable materials be free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process. The Contractor shall clean materials that are contaminated before placing it in collection containers.
 - b. The Contractor shall arrange for collection of reusable and recyclable materials by or delivery to the appropriate reuse and/or recycling centers for purposes of reuse and/or recycling.
 - c. All mixed C&D debris material from projects in San Francisco must be taken to a Registered Facility authorized to process the material, and it must be hauled by a Registered Transporter. For the lists of Registered Facilities and Registered Transporters refer to the website: <https://sfenvironment.org/construction-demolition-resources>
 4. No Construction and Demolition Debris shall be burned, buried or otherwise disposed of on the project site.
- F. The Contractor is prohibited from sending any Construction and Demolition Debris directly to landfill or to any facility that would incinerate or otherwise process such debris using high temperature technology without submitting a written request to and receiving approval from the San Francisco Department of the Environment; see Form A and Form B.
- G. Requirements only for Construction Contracts within the legal and geographical boundaries of the City and County of San Francisco:
1. Registered Transporters and Registered Facilities: Only Registered Transporters can remove mixed C&D debris material and they must take this material to a Registered Facility. Source separated material at the job site should be taken to the appropriate recycling or reuse facility.
 - a. For a list of Registered Facilities and Registered Transporters refer to the website: <https://sfenvironment.org/construction-demolition-resources>
 2. Full Demolition Requirements: Contractor conducting full demolition of an existing structure must submit a Demolition Debris Recovery Plan (DDRP) to the San Francisco Department of the Environment (SFE).

- a. The DDRP must demonstrate a **minimum of 75% recovery** from landfill of demolition debris, including materials source separated for reuse or recycling.
 - b. The DDRP must be submitted to and approved by SFE before the Department of Building Inspection will issue a Full Demolition Permit.
 - c. This requirement does not apply to City construction contracts outside of the legal and geographical boundaries of the City and County of San Francisco.
 - d. The DDRP is available at the following website:
<https://sfenvironment.org/construction-demolition-resources>
- H. Mixed C&D debris material from projects outside the legal and geographical boundaries of the City and County of San Francisco must be taken to a Recycling Facility that processes the material to achieve maximum recycling. If the material is taken to a facility not registered with San Francisco, the local jurisdiction's recycling rate for that facility shall be used provided official documentation from the local jurisdiction is attached to all submittals as required in Paragraphs 1.5, 1.6 and 1.7. If a facility does not have a local approved recycling rate, the diversion rate is calculated as zero.
- I. **Universal Wastes:** Contractor shall handle and dispose of all hazardous material, including "Universal Wastes," in accordance with the requirements of the California Department of Toxic Substances Control (DTSC). Refer to DTSC website: www.dtsc.ca.gov. In general, universal waste may not be discarded in solid waste landfills or with non-hazardous materials collected for recycling or composting. Contractor shall comply with all hazardous material regulations, including, but not limited to, the following:
1. Universal wastes shall be stored in containers so that they do not spill, leak, break, or are released into the environment.
 2. Label or mark universal wastes, or their containers, to identify their types.
 3. Send all universal waste to a facility authorized to collect, recycle or dispose of universal waste.
 4. Do not dispose of universal waste in the trash.
 5. Do not accumulate more than 5,000 kilograms of universal waste at any one time.
 6. Train employees in proper universal waste management including handling, packaging, storing and labeling the universal waste, as well as how to respond to releases. This training may be accomplished by simply giving employees written instructions about universal waste.
 7. Keep record of all shipments and receipts of universal waste for three years.
- J. **Treated Wood Waste:** For complete information on handling and disposal of Treated Wood Waste (TWW), refer to the fact sheet available from the DTSC website. For incidental TWW wastes generated during construction, the Contractor shall comply with the following minimum requirements:
1. Keep TWW segregated from other materials.
 2. Store no more than 1,000 pounds of TWW for no longer than 30 days. In the event that Contractor stores more than 1,000 pounds of TWW or stores TWW for more than 30 days, Contractor shall comply with additional requirements for routine generators of TWW. Refer to DTSC fact sheet.
 3. Label all TWW bundle/shipments with the following information:

<p><i>TREATED WOOD WASTE – Do not burn or scavenge.</i></p> <p><i>TWW Handler</i> <i>Name:</i> _____ <i>Address:</i> _____ <i>Accumulation Date:</i> _____</p>
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4. Take TWW to an authorized TWW facility. See the listings at the end of the factsheet for information on facilities who have been authorized to accept TWW in California.
 5. Keep records of all shipments of TWW for three years.
- K. Waste Reduction: Contractor shall implement waste reduction measures, including, but not limited to, the following:
1. Eliminating the procurement of unneeded supplies;
 2. Reduce waste by printing and copying double-sided;
 3. Submit all submittals, reports, and forms in electronic format (PDF);
 4. Fully participate in available and required recycling and composting programs; and
 5. Purchase products made with recycled content such as paper and recycled aggregate.
- L. Contractor shall submit the following items in electronic format (Green Halo Systems Platform: <http://sfgov.wastetracking.com/>) to the City Representative and in accordance with Paragraphs 1.5, 1.6, and 1.7 below:
1. Material Reduction and Recovery Plan.
 2. Material Reduction and Recovery Monthly Summary of Recovery (Diversion) and supporting documentation.
 3. Material Reduction and Recovery Final Report.

1.5 MATERIAL REDUCTION AND RECOVERY PLAN

- A. The requirements under this Paragraph 1.5 apply to all City construction contracts for City-owned Facilities or City leaseholds located within the nine counties surrounding the San Francisco Bay, regardless of size of the project.
- B. After Award of Contract and before commencement of the Work at the site, the Contractor shall conduct a site assessment to estimate the types and quantities of materials that will be generated by construction and/or demolition at the site and which materials are anticipated to be feasible and practical for reuse and recycling. Contractor shall complete a Material Reduction and Recovery Plan (MRRP) to be discussed with the City Representative.
- C. Contractor shall schedule a meeting with the City Representative to discuss its proposed MRRP to develop a mutual understanding regarding the City's reuse and recycling policies and goals and their application to this project. The contractor must manage all project Construction and Demolition Debris to meet a minimum recovery rate of 75%.
1. The MRRP will be used as a submittal for compliance with the waste management plan requirements of LEED version 4.0 MR Prerequisite Construction and Demolition Waste Management Planning. The MRRP shall include any and all required information to meet the LEED prerequisite - see specification Section 01 81 13 Sustainable Design Requirements, item 1.06 Submittals.
 2. The minimum recovery (diversion) rate of 75% cannot include any alternate daily cover (ADC) in order to meet the requirements of LEED version 4.0 MR Credit Construction and Demolition Waste Management to earn the project 2 points.
- D. Contractor shall obtain tonnage estimates for all construction and demolition debris from all subcontractors and compile data from all subcontractors into the MRRP. The plan shall include, but not be limited to, the following:
1. The Contractor's information and Project identification.
 2. Procedures to be used for debris management.
 3. A list of the materials and estimated quantities to be reused or recycled.

4. The names, locations, and permit or license, as applicable, of recycling and reuse facilities and Registered Facilities (for mixed C&D debris material) that the Contractor plans to use for this project.
 5. Procedures for source separation for the materials listed in subparagraph 1.4F "Recycling Requirements" of this Section.
 6. Source Reduction: Describe any project practices for this project which will reduce waste at the source, such as requiring vendors to deliver materials in reusable packaging.
 7. On-site Processing: Describe procedures in which materials are reused on-site, such as grinding materials for use on-site, or reuse of lumber for concrete frames, etc.
 8. Procedures to educate and train all employees and subcontractors on recycling and reuse procedures to be used at the jobsite.
- E. Contractor shall use the Green Halo System to provide all Material Reduction and Recovery Plans and Reports for the Project. The City Representative will create a Green Halo project account for use by the Contractor. The Contractor shall then use this account to prepare and submit the following:
1. **Material Reduction and Recovery Plan (MRRP).** Develop and submit a project specific MRRP for the Project:
 - a) Register the project and create a project tracking number
 - b) Provide the Plan (<http://sfgov.wastetracking.com/>).
 - c) Coordinate the MRRP with the LEED Construction and Demolition Debris Management Plan (if the project is pursuing a LEED certification) requirements.
 - d) Comply with the City and County of San Francisco's requirement for a minimum 75% recovery rate from landfill.
 - e) Describe the Contractor's approach to managing the Project's Construction and Demolition Debris.
 - f) When complete, click "Submit" for review and approval.
- F. The MRRP is subject to approval by the City Representative. Contractor shall revise and resubmit the MRRP as required by the City Representative.
- G. Review of the Contractor's MRRP will not relieve Contractor of responsibility for compliance with applicable laws and regulations governing control and disposal of solid waste or other pollutants.

1.6 MATERIAL REDUCTION AND RECOVERY MONTHLY SUMMARY OF RECOVERY

- A. Contractor shall provide monthly Material Reduction and Recovery reports, quantifying the construction and demolition debris generated and reused, or recycled through the Green Halo Platform.
- B. The Summary shall show actual construction and demolition debris material diversion coinciding with the time period of the Progress Payment. The Contractor shall compile data from all subcontractors into one report; all weights are reported in tons and documentation supporting the reported tons shall be attached. Documentation shall include weight tags or other similar proof the hauler received from a facility where material was transported. The documentation issued by the facility shall include the commodity or material type that was delivered to the facility and shall include evidence that the material was from the contracted job; such evidence may include the project address or project/job number provided by the facility on the weight tags or receipts it creates. Recovery reports prepared by vendors, work orders or invoices for services shall not be acceptable unless accompanied by requirements noted above.

- C. Failure to submit the Summary of Recovery and supporting documents shall render the application for progress payment incomplete and delay progress payment.

1.7 MATERIAL REDUCTION AND RECOVERY FINAL REPORT

- A. Upon final completion of the Project, the Contractor shall submit a Final Recovery Report, on the Green Halo Platform, showing weight of all construction and demolition debris material recovered for the entire project and the overall recovery rate achieved.
- B. The Final Recovery Report shall be prepared into one plan/report by the Contractor with data from all subcontractors and submitted to the City Representative.
 - 1. The Final Recovery Report will be used as a submittal for compliance with the final waste report requirements of LEED version 4.0 MR Prerequisite Construction and Demolition Waste Management Planning. The Final Recovery Report shall include any and all required information to meet the LEED prerequisite - see specification Section 01 81 13 Sustainable Design Requirements, item 1.06 Submittals.

1.8 JOB SITE ADMINISTRATION

- A. The Contractor shall review the environmental goals of this project with all subcontractors and sub-subcontractors. The Contractor shall make a proactive effort to increase awareness of these goals and ensure full compliance to the Construction and Demolition Debris Management Plan among the Contractor's job site workers and all subcontractors and other workers.
- B. The Contractor shall communicate the presence of demolition debris which is hazardous material to all workers on the job site and shall establish and clearly identify hazardous material storage areas. The Contractor shall discuss practices and alternatives to minimize worker exposure to potentially harmful substances expected to be encountered on the job site.
- C. For Construction Contracts within the legal and geographical boundaries of the City and County of San Francisco the Contractor shall provide green, blue and black refuse bins and appropriate signs for field offices to separate recyclable and compostable materials from the trash and subscribe to adequate collection services. To subscribe to these services, contact Recology San Francisco at 415-330-1300
- D. For projects outside the legal and geographical boundaries of the City and County of San Francisco, Contractor shall abide by local jurisdiction's refuse.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

(Not Used)

END OF SECTION

SECTION 01 77 00
CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes but is not limited to:
 - 1. Procedures.
 - 2. Substantial Completion.
 - 3. Final Acceptance.
 - 4. Project Record Documents.
 - 5. Release of Liens or Claims.

- B. Related Sections:
 - 1. Section 00 73 02, Contract Time and Liquidated Damages.
 - 2. Section 35 20 30 Dredging Survey And Volume Calculations

1.02 PROCEDURES

- A. Close-out Meeting:
 - 1. The Contractor shall submit all change orders, claims, and time extension requests by the final date as required by the Port's Representative before the Work is 95% complete.

 - 2. Prior to Substantial Completion, the Port's Representative will schedule a closeout meeting with the Contractor, Port representatives, and/or consultants to determine the status of completion.

 - 3. The Contractor shall attend the Close-out meeting scheduled by the Port's Representative to discuss the close-out procedure and responsibilities of the Contractor and Port's Representative.

 - 4. The Port's Representative will prepare a list of actions which are still open or pending that need to be resolved during the close-out period. Such actions may include, but are not necessarily limited to: record documents, final inspection, administrative activities, documentation of final quantities, and force account work.

1.03 SUBSTANTIAL COMPLETION

- A. Prerequisites to Substantial Completion:
 - 1. Submit to the Port's Representative with the application for payment just before Substantial Completion, a statement of all Change Orders, Modifications, claims, and time extension requests.
 - 2. Verify that the following administrative closeout submittals have been received by the Port:
 - a. Project Record Drawings and approved shop drawings, product data, and samples as specified in Section 35 20 30, DREDGING SURVEY AND VOLUME CALCULATIONS.
 - b. Keys and keying schedule, if applicable.
 - 3. Advise the Port's Representative of pending insurance change-over requirements.

4. Submit to the Port's Representative written certification that the Contract Documents have been reviewed, the Work has been inspected, the Work is complete, and conforms to the requirements of the Contract Documents.
 5. At no additional cost to the Port, restore and replace, as specified and as determined by the Port, material and finishes damaged due to the performance of the Work.
 6. Restoration or replacement shall be equal quality and match the appearance of the existing Work.
- B. Substantial Completion Inspection:
1. Notify the Port's Representative in writing that the Work is substantially complete and ready for inspection.
 2. Upon receipt of Contractor's written notice, the Port's Representative will make an inspection to determine the status of completion.
 3. Should the Port's Representative determine that the Work is not substantially complete; the Port's Representative will so notify Contractor with a deficiency list of all items that shall be completed before the Port considers the Work substantially complete.
 - a. Remedy all deficiencies as identified and notify the Port's Representative, in writing, when the Work is ready for reinspection.
 - b. Failure to complete this requirement within the time allowed to substantially complete the Work will result in liquidated damages being assessed.
 4. The Contractor shall verify that the work is complete, including but not necessarily limited to, the items required for Substantial Completion.
 5. If the Port's Representative concurs that the Work is substantially complete, the Port's Representative will prepare a Notice of Substantial Completion, accompanied by a punch list of remedial work items to be completed or corrected, as verified by the Port's Representative.
 - a. If the Work is not substantially complete, the Port's Representative will follow the same procedure as for the first inspection, and Contractor shall reimburse the Port for all reinspection costs.
- C. Partial Use or Occupancy of Work: When partial utilization of the Work is required and substantial completion is a condition of such partial utilization, the applicable requirements specified in this Section shall apply to the part of Work to be utilized.

1.04 FINAL ACCEPTANCE

- A. Prerequisites for Final Acceptance:
1. At no additional cost to the Port, perform all remedial work noted on the punch list before requesting a final inspection and acceptance.
 2. Coordinate the performance of remedial work with the Port to cause minimal inconvenience and interruption of the Port's and the tenant's operations.
 3. Perform final cleaning as specified in this Section. Remove protective coverings and similar items.
 4. Remove all temporary controls, utilities, facilities, field offices and sheds.
 5. Submit "redlines" of Record Drawings, including level controls and equipment settings.
 6. Submit the final payment request with releases and an updated final statement with supporting documentation, accounting for final additional charges for extras and liquidated damages for delays.
 7. Submit consent of surety to final payment.
 8. Submit a certified copy of the Port's Representative's punch list of remedial items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance by the Port.

9. Failure to complete all remedial work and prerequisites for final inspection within the time allowed after the date of Substantial Completion as specified in Section 00 73 02, Contract Time and Liquidated Damages, will result in liquidated damages being assessed.
- B. Final Inspection:
1. Notify the Port in writing that all punch list items of remedial work have been completed and the Work is ready for final inspection.
 2. The Port's Representative will make an inspection to verify the status of completion.
 3. Should the Port's Representative determine that the Work is not complete or is defective, the Port's Representative will so notify the Contractor, in writing, listing remaining incomplete or defective work.
 - a. Promptly complete the remaining deficiencies and notify the Port's Representative, in writing, when ready for reinspection.
 - b. If the Port's Representative finds the Work is still not complete, the Contractor shall be responsible for all subsequent reinspection and meeting costs incurred by the Port to resolve the remaining issues. Such costs will be deducted from progress payments owed to the Contractor.
 4. When the Port's Representative determines that the Work is acceptable under the Contract Documents and the Contractor has made all required closeout submittals, the Port's Representative will initiate the final payment recommendation and prepare the Certificate of Completion.
- C. Prior to the final payment recommendation, the Port's Representative shall be furnished with the following administrative close-out submittals:
1. Project Record Documents and Drawings.
 2. Parking Permits, NOI termination.
 3. Certificates of Final Inspection and Occupancy as evidence of compliance with the requirements of governmental agencies having jurisdiction.
 4. Evidence of payment and release of liens.
- D. Submittals for final adjustment of accounts shall include, but not necessarily be limited to:
1. Request for Final Payment.
 2. Final statement of accounting, payroll records, and final change orders showing adjustments to the Contract Price for all force account work and extra payments.
- E. All prior estimates and payments shall be subject to correction in the final estimate and payment.

1.05 RELEASE OF LIENS OR CLAIMS

- A. Before the Port issues final payment to Contractor for the Work, Contractor shall sign and deliver to the Port a release of liens or claims sworn to under oath and duly notarized. The release shall state that the Contractor has satisfied all claims and indebtedness of every nature in any way connected with the Work, including, but not limited to, the foregoing, all payrolls, amounts due to the subcontractors, accounts for labor performed and materials furnished, incidental services, liens, and judgments.
- B. If any liens or claims remain unsatisfied after all payments to the Contractor have been made, the Contractor shall refund to the Port all moneys that the latter may be compelled to pay in discharging such a lien or claim, including all costs and a reasonable attorney's fee.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used



AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

PORT CONTRACT NO. 2814

**EXHIBIT A: FINAL SETTLEMENT AND RELEASE OF CLAIMS
CONTRACT NO. 2842**

Maintenance Dredging 2022 - 2024

This agreement and release of claims (“Agreement and Release”) is made and entered into this ____ day of _____, 201____, in the City and County of San Francisco, State of California, by and between _____, (hereinafter referred to as “Contractor”), whose principal place of business is _____, and the City and County of San Francisco, a municipal corporation, (hereinafter referred to as “City”), acting by and through the Port of San Francisco.

RECITALS

WHEREAS, City and Contractor entered into Contract No. 2842, Maintenance Dredging 2022 - 2024, (hereinafter referred to as “Contract”); and

WHEREAS, The Work under the Contract has been completed and the City has issued a certificate of acceptance for the Work per Administrative Code Section 6.22(k); and

WHEREAS, Contractor has submitted its final application for payment.

Now, therefore, it is mutually agreed as follows:

AGREEMENT

1. Contractor and Port agree that Contractor is due payment as follows:

Original Contract Sum:	\$ _____
Change Orders (1 through ____ and Final Quantity Adjustment):	\$ _____
Modified Contract Sum:	\$ _____
Payments to Date (direct payments to Contractor and releases of retention)	\$ _____
Retention Remaining in Escrow Account:	\$ _____
Amount Due before Adjustments for Offsets & Stop Notices:	\$ _____
Offsets (e.g., OLSE forfeiture, non-conforming work, liquidated damages, etc.):	(\$ _____)
Outstanding Stop Notices (withheld @ 125% of Stop Notice amounts):	(\$ _____)
FINAL PAYMENT DUE CONTRACTOR:	\$0
Retention Release to Contractor from Escrow:	\$ _____
Return of Funds to City from Escrow:	\$ _____



AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

PORT CONTRACT NO. 2814

2. Subject to the provisions of this Agreement and Release, City shall forthwith pay to Contractor the sum of \$_____ under the Contract, less any amounts represented by Notices to Withhold Funds on file with the Controller as of the date of such payment.
3. Contractor acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against the City arising from the performance of Work under the Contract, except for (i) the Disputed Claims described in Paragraph 6, below, and (ii) continuing obligations described in Paragraph 6, below. It is the intention of the parties in executing this Agreement and Release that, upon Contractor's receipt of the final payment and escrow release amounts identified in Paragraph 1, above, this Agreement and Release shall be effective as a final accord and satisfaction and a full, final and release of all claims as set forth in the paragraphs below.
4. The following claims are disputed (the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

Contract Claim No.	Date Submitted	Description of Claim	Amount of Claim

Nothing herein shall operate to toll, waive, or excuse Contractor's compliance with the Government Code Claim requirements under California Government Code Section 900, et seq., and San Francisco Administrative Code Chapter 10 as to the Disputed Claims. Refer to Article 13 of Contract Section 00 72 00 (General Conditions).

5. Consistent with California Public Contract Code Section 7100, Contractor hereby agrees that, in consideration of the payment set forth in Paragraph 2, above, Contractor hereby releases and forever discharges the City, its boards and commissions, and all of its officers, agents, members, employees, authorized representatives, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract, about which the Contract knows or should have known, except for the Disputed Claims.
6. Guarantees and warranties for Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.
7. Contractor shall indemnify, hold harmless and defend City, its boards and commissions, and all of its officers, agents, members, employees, authorized representatives, assignees and transferees from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Contractor's Suppliers and/or Subcontractors of any tier and/or suppliers to them for any and all labor, materials, supplies, and equipment used, or contemplated to be used, in the performance of the Contract.
8. The provisions of this Agreement are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling or regulations, then such provision, or part thereof, shall remain in force and effect to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.



AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

PORT CONTRACT NO. 2814

9. All rights of City shall survive completion of the Work or termination of Contract, and execution of this Release.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement and Release on the day first mentioned above.

*****CAUTION: THIS IS A RELEASE – READ BEFORE EXECUTING*****

<CONTRACTOR>

PORT OF SAN FRANCISCO

By: _____
<Name> Date
<Title>

By: _____
<Name> Date
Chief Harbor Engineer

APPROVED AS TO FORM:
David Chiu, City Attorney

PORT OF SAN FRANCISCO

By: _____
<Name> Date
Deputy City Attorney

By: _____
<Name> Date
Executive Director

PORT COMMISSION
CITY AND COUNTY OF
SAN FRANCISCO

[Resolution / Award Memorandum] dated

END OF SECTION