

INVITATION FOR BIDS
CONTRACT No. 2024-04

for

Oyster Point Marina
West Basin Access Improvements

San Mateo County Harbor District



NOTICE INVITING BIDS

NOTICE IS HEREBY GIVEN that sealed bids will be received in the Harbor District Administrative Offices, San Mateo County Harbor District (District), either by U.S. Postal Service addressed to its mailing address, PO Box 1449, El Granada, CA 94018, or by courier or personal delivery to 504 Avenue Alhambra, 2nd Floor, El Granada, CA 94018, on **May 30, 2024 by 2:00 p.m., Pacific Standard Time**, at which time bids will be publicly opened and read for the following:

CONTRACT NO. 2024-04 **Oyster Point Marina West Basin Access Improvements**

The District seeks bids for the Oyster Point Marina West Basin Access Improvements project. Bids shall be submitted on the District's "Bid Form" and enclosed in a sealed envelope marked "CONTRACT NO. 2024-04, Oyster Point Marina West Basin Access Improvements," and plainly endorsed with Bidder's name and address.

Bidders bidding as the prime contractor must possess a valid State of California **Class A** Contractor's License at the time of contract award. All subcontractors, if any, must be properly licensed by the State of California to perform specialized trades.

A mandatory pre-bid conference and site visit will be held prior to the date of bid opening. District staff will be available to answer general questions pertaining to the solicitation documents and the specifications. Any questions that may require staff research to answer or that will otherwise modify the meaning or intent of this solicitation shall be submitted to the District in writing as described in Special Provision 1.8. The pre-bid conference will take place on **April 25, 2024 at 10:30 am at the Oyster Point Marina Harbor Master's Office**. There will be a site visit immediately following the pre-bid conference. The project site is not an active construction site and personal protective equipment (PPE) is not required for the pre-bid conference site visit. Access to the existing dock(s) will be made, and flotation devices may be worn if desired. If bidders are required by their firm to wear PPE they must bring their own PPE to wear during the site visit.

Bids must be accompanied by a deposit either in the form of a certified or cashier's check or Bidder's Bond, as described in the documents, which shall be applied to damages sustained by the District in the event that the successful Bidder fails or refuses to enter into a contract awarded to it by the District.

Requests for modifications or clarifications of any requirement must be submitted in writing to San Mateo County Harbor District, attn: Capital Improvement Projects (Oyster Point Marina West Basin Access Improvements) by e-mail at jmoren@smharbor.com by **May 10, 2024 at 4:30 p.m., Pacific Standard Time**.

This is a Public Works Contract. The general prevailing rates of per diem wages and the general prevailing rates for regular (straight) time, holiday and overtime work in San Mateo County for each craft, classification and type of worker needed to execute the Contract shall be set forth in the current General Prevailing Wage Determinations made by the Director of Industrial Relations pursuant to California Labor Code Sections 1720 et seq. The current General Prevailing Wage Determinations are incorporated into the Contract and are available at the California Department of Industrial Relations' website (www.dir.ca.gov/dlsr/DPreWageDetermination.htm). Should the general prevailing wage rates not specify a wage determination for a particular type of worker, attention is directed to 8 CCR 16202(b)

regarding petitioning the Director of the California Department of Industrial Relations for a special wage determination. Responsibility for labor law enforcement remains with the Division of Labor Standards Enforcement.

The successful Bidder will be required to furnish a Performance Bond and a Payment Bond, both in the amount set forth in the Special Provisions.

Pursuant to Public Contract Code Section 22300, the successful Bidder may submit certain securities in lieu of the District withholding funds from progress payments (retention) during the Project.

Bids will be examined and reported to the General Manager within ninety (90) calendar days after the bids have been opened. The District reserves the right to reject any and all bids, or to waive any irregularities or informalities in any bid or in the bid procedure, or to postpone the bid opening for good cause. No Bidder may withdraw its bid for a period of ninety (90) calendar days after the date of opening of the bids. Each Bidder will be notified of award of contract, if award is made.

Contractors and subcontractors must be registered with the Department of Industrial Relations (DIR) at the time of bid, or else the bid may be rejected as non-responsive. (See Labor Code sections 1725.5 and 1771.1.) For federally funded projects, the contractor and subcontractors must be registered at the time of contract award. (See Labor Code section 1771.1(a)). Each bidder must submit proof of contractor registration with DIR (e.g. a hard copy of the relevant page of the DIR's database found at: <https://efiling.dir.ca.gov/PWCR/Search>). This Contract is subject to monitoring and enforcement by the DIR pursuant to Labor Code Section 1771.4.

To inspect and obtain the Bid Documents or for additional information, please contact San Mateo County Harbor District, Capital Improvement Projects by e-mail at jmoren@smharbor.com or on the District website smharbor.com.

Dated at El Granada, this Date. April 11, 2024

CONTRACT NO. 2024-04
Oyster Point Marina – West Basin Access Improvements

GENERAL CONDITIONS AND INSTRUCTIONS FOR BIDDERS

SAN MATEO COUNTY HARBOR DISTRICT

GENERAL CONDITIONS AND INSTRUCTIONS FOR BIDDERS

These General Conditions and Instructions apply to all bids, except insofar as they may be modified by the Special Provisions, Technical Specifications or Bid Forms.

1. **Definition of Terms.** Whenever in the Bid or Contract Documents the following terms or pronouns in place of them, or abbreviations are used the intent and meaning shall be interpreted as follows:

"District" shall mean San Mateo County Harbor District.

"Board," "Director," "Directors," or "Board of Directors" shall mean the five (5) member governing board of the San Mateo County Harbor District or members thereof.

"Secretary" means the Administrative Assistant/Deputy Secretary of the Board of the San Mateo County Harbor District.

"General Manager" means General Manager of the San Mateo County Harbor District.

"Contractor" means the successful bidder to whom a contract is awarded.

"Written Order" means a written order signed by the General Manager or properly authorized representative or agent, mailed to the Contractor at the address designated in the firm's Bid, or to such other address as may be designated in writing as its official place of business.

"Bid Documents" or "Contract Documents" mean the Notice Inviting Sealed Bids, General Conditions and Instructions for Bidders, Special Provisions, Technical Specifications, Bid Forms and Addenda, if any.

"Bidder" or "Bid" means Proposer or Proposal, respectively.

2. **Explanations and Clarifications**

- A. **Request for Interpretation or Correction.** Prospective Bidders must examine the Contract Documents carefully. It shall be the duty of every person contemplating submitting a Bid for the proposed Contract, to contact the Secretary and request in writing, before bidding, an interpretation or correction of every discrepancy, ambiguity, error or omission in any of the Contract Documents which should have been discovered by a reasonably prudent Bidder.

Any interpretation, change or correction of said Contract Documents will be made by addenda only, duly issued by the District. Copies of such addenda will be mailed or delivered to each firm receiving a set of said specifications. Upon such mailing or delivery, such addendum will become a part of the Contract Documents, and binding on all Bidders whether or not actual notices of such addenda are shown.

- B. Interpretations or Corrections Binding. Only the written interpretation or correction so given by the District shall be binding. All oral modifications of the Contract Documents are void and ineffective.
3. **Form of Bid and Signature.** The Bid shall be made on the form provided and shall be enclosed in a sealed envelope marked and addressed as required. If the Bid is made by a sole owner, it shall be signed with the firm's full name and its address shall be given; if it is made by a partnership, it shall be signed with the partnership name by a member of the firm, who shall also sign its own name, and the name and address of each member of the firm shall be given; and if it is made by a corporation it shall be signed by **two** officers of the corporation, consisting of (1) the chairman of the board, president, or vice president, and (2) the secretary, assistant secretary, chief financial officer, assistant financial officer, or by a person authorized by the corporation to execute written Contracts on its behalf. If the Bid made by a corporation is signed by a person other than an officer, or by only one officer, there must be attached to the Bid a certified copy of a resolution of the corporation authorizing such officer or person to sign Bids on behalf of the corporation. If it is made by a joint venture, it shall be signed on behalf of each participating company by officers or other individuals who have the full and proper authorization so to do. If it is made by an LLC, it must be signed by an officer or other member who has full and proper authorization to execute contracts on behalf of the LLC. Bids submitted in any other form will be considered non-responsive and may be rejected.
4. **Bid Form.** Blank spaces in the Bid shall be properly filled. The phraseology of the Bid must not be changed and no additions shall be made to the items mentioned therein. Alterations by erasure or interlineations must be explained or noted in the Bid over the signature of the Bidder. If the unit price and the total amount named by a Bidder for any item do not agree, the unit price alone will be considered as representing the Bidder's intention. Any mathematical errors apparent on the face of the Bid shall be corrected and the mathematically correct total shall be used to determine the lowest Bidder.
5. **Unauthorized Conditions.** Unauthorized conditions, limitations or provisions attached to a Bid will render it informal and may cause its rejection. No telegraphic Bids or modifications will be considered.
6. **Submission of Bid.** Prior to the hour specified in the notice inviting sealed Bids, all Bids shall be delivered to the Secretary at the address shown in the Notice. All Bids shall be in a sealed envelope properly endorsed as to the item being Bid and the Bidder's name and address. No Bids received after said time or at any place other than the time and place as stated in the notice will be considered.
7. **Withdrawal of Bid.** Any Bid may be withdrawn at any time prior to the time fixed in the public notice for the opening of Bids only by written request for the withdrawal of the Bid filed with the District. The request shall be executed by the Bidder or its duly authorized representative.

A telephonic request is not acceptable. The District will accept facsimile or email transmissions of properly executed requests that are received by the District prior to the time fixed in the public notice for the opening of Bids. The District will not be responsible

for interruptions, delays, or any other unsuccessful facsimile or email transmission of Bid withdrawals, whether or not caused by the District's facsimile equipment. The withdrawal of a Bid does not prejudice the right of the Bidder to file a new Bid. Whether or not Bids are opened exactly at the time fixed in the public notice opening Bids, a Bid will not be received after that time, nor may any Bid be withdrawn after the time fixed in the public notice for the opening of Bids.

8. **Canvass of Bid.** At the hour specified in the notice, the Secretary will open, examine and publicly declare all Bids received. Bidders, their representatives, and others interested are invited to be present at the opening of Bids. Award will be made or Bids rejected by the District within the time specified in the Specifications or Bid Forms or, if not specified, within a reasonable time after Bids have been opened. The District reserves the right to postpone the Bid opening for its own convenience.
9. **Award of Contract.** The award of the Contract, if awarded, will be made to the lowest responsible Bidder whose Bid complies with the requirements prescribed and whose qualifications are satisfactory to the District. Such award, if made, will be made within ninety (90) days after the opening of the Bids. If the lowest responsible Bidder refuses or fails to execute the Contract or file the required bonds, the District may award the Contract to the second lowest responsible Bidder. The periods of time specified above within which the award of Contract may be made shall be subject to extension for such further period as may be agreed upon in writing between the District and the Bidders concerned. All Bidders shall be notified of the award.
10. **Rejection of Bids.** The District may reject any and all Bids. The District also reserves the right to waive any irregularities or informalities in any Bid or in the bidding procedure. All Bidders shall be notified of the award. All Bids must remain in effect at least ninety (90) days from the Bid opening date.
11. **Taxes.** The supplies, materials or equipment called for under the Specifications will be used by the District in the performance of a governmental function and are exempt from taxation by the United States Government, and the District will, if requested, furnish a tax exemption certificate and any and all affidavits and documents that may be necessary to establish such exemption. California State sales or use taxes shall be included in the Bid price.
12. **Additional Taxes.** Any sales tax, use tax, imposts, revenues, excise, or other taxes which may hereafter be imposed by the State of California or any political subdivision thereof, and applicable to the sale of the material delivered as a result of the Bidder's Bid and which, by the terms of the tax law may be passed directly to the purchases, will be included in the Bid price.
13. **Alternative Bid.** Submission of alternative Bid or Bids, except as specifically called for in the Specifications or Bid Forms, will render it informal and may cause its rejection.
14. **Bidder's Security.** Each Bidder shall submit with its Bid one of the following forms of Bidder's security:
 - (a) An unconditional Certified or Cashier's Check on a solvent bank, in an amount

equal to at least ten percent (10%) of the amount Bid, payable to the order of San Mateo County Harbor District; or

- (b) A Bidder's Bond, in an amount equal to at least ten percent (10%) of the amount Bid, using the form entitled "Bidder's Bond," provided with the Bid documents, and properly executed and acknowledged by the Bidder and by a corporate surety authorized to transact such business in the State of California and acceptable to the District.

Any condition or limitation placed upon said check or any alteration of said form of bond, or imperfection in the execution thereof, as herein required will render it informal and may, at the option of the District, result in the rejection of the Bid under which such check or bond is submitted. Said check or Bidder's Bond shall be a guarantee that the Bidder(s), if awarded the Contract, will execute the required Contract and bonds within fifteen (15) days after receipt of the contract and bond forms from the District or such additional time as may be allowed by the District. If the Bidder(s) fails or refuses to execute the required Contract and bonds within said time, the money and proceeds from the check or bond as the case may be, shall be applied towards payment of the damage to the District on account of the delay in the execution of the Contract and bonds and the performance of the work thereunder, and the necessity of accepting a higher or less desirable Bid resulting from such failure or refusal to execute the Contract and bonds required. The amount of the check or bond as the case may be, shall not constitute a limitation upon the right of the District to recover for the full amount of such damage. The check or bond of the successful Bidder(s) and the next two highest Bidders will be returned after the execution of the Contract with the successful Bidder(s) and the approval of its bonds on behalf of the District, and the checks or bonds of the other Bidders will be returned promptly after the Bids have been opened and reviewed by the District.

- 15. **Permits and Licenses.** To the extent permit and licensing requirements are applicable, the Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.
- 16. **Statement of Experience and Qualifications.** Upon request, the Bidder may be required to prove to the District's satisfaction that it has the skill and experience and that it has the necessary facilities and ample financial resources to perform the Contract in a satisfactory manner and within the required time.
- 17. **Waiver.** The Bidder shall represent and warrant that it has sufficiently informed itself in all matters affecting the performance of the work or the furnishing of the labor, supplies, material or equipment called for in the Specifications; that Bidder has checked its Bid for errors and omissions; that the prices stated in its Bid are correct and as intended by it and are a complete and correct statement of its prices for performing the work or furnishing the labor, supplies, materials or equipment required by the Contract Documents.

The Bidder waives any claim for the return of its Bid deposit if, on account of errors or omissions claimed to have been made by it in its Bid, or for any other reason, it should refuse or fail to execute the Contract.

18. **Non-Collusion Certification.** By submitting a Bid, the Bidder represents and warrants that such Bid is genuine and not sham or collusive or made in the interest or in behalf of any person not therein named, and that the Bidder has not, directly or indirectly, induced or solicited any other Bidder to put in a sham Bid, or any other person, firm or corporation to refrain from bidding, and that the Bidder has not in any manner sought by collusion to secure to the Bidder an advantage over any other Bidder.
19. **Penalty for Collusion.** If at any time it shall be found that the person, firm or corporation to whom a Contract has been awarded has, in presenting any Bid or Bids, colluded with any other party or parties, then the Contract so awarded shall be null and void and the Contractor and its bondsmen shall be liable to the District for all loss or damage which the District may suffer thereby and the District may advertise for a new Contract for said labor, supplies, materials or equipment.
20. **Interest of District Personnel.** By submitting a Bid, the Bidder represents and warrants that neither the General Manager, nor any Director, officer or employee of the District is in any manner interested directly or indirectly in the Bid or in the Contract which may be made under it, or in any expected profits to arise therefrom, as set forth in Article 4, Division 4, Title 1 (commencing with Sec. 1090) or Title 9 (commencing with Section 8100 of the Government Code of the State of California).
21. **Representation Before the District.** No person previously in the position of Director, Officer, employee, or agent of the District may act as an agent or attorney for, or otherwise represent, a Bidder or Contractor by making any formal or informal appearance, or any oral or written communication, before the District, or any officer or employee of the District, for a period of twelve months after leaving office or employment with the District, if the appearance or communication is made for the purpose of influencing any action involving the issuance, amendment, award, or revocation of a permit, license, grant or Contract.
22. **Time for Execution of Contract and Filing Bond.** The Bidder(s) to whom award is made shall execute a written Contract with the District on the form of Contract of the District and furnish good and approved bonds and provide evidence of insurance as herein required within fifteen (15) days after receiving the forms of Contract and bond for execution.

If the Bidder to whom award is made fails to enter into the Contract as herein provided and furnish the bonds and evidence of insurance, the award will be annulled and an award may, in the discretion of the District, be made to the Bidder whose Bid is next most acceptable; and such Bidder shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.
23. **Documents Deemed Part of Contract.** The Notice Inviting Sealed Bids, General Conditions and Instructions for Bidders, Special Provisions, Bid Form, Technical Specifications and Addenda, if any, and the Agreement will be deemed a part of the Contract.
24. **Governing Law; Compliance with Laws.** The Contractor hereunder shall be governed by the laws of the State of California. The Contractor must comply with all local, state and

federal laws, rules and regulations applicable to this Contract and to the work to be done hereunder, including, all rules and regulations of the District.

25. **Manner of Execution of Contract.** If the Contractor is an individual, the Contract shall be executed by the Contractor personally. If the Contractor is a co-partnership, it is desirable that the Contract be executed by all of the partners, but it may be executed by one of them. If the Contractor is a corporation, it must be executed by two officers of the corporation consisting of (1) the Chairman of the Board, President or Vice President; and (2) the Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer, or by a person authorized by the corporation to execute written Contracts on its behalf, and the corporate seal affixed thereto. If the corporate seal is not affixed to the Contract, or if it is executed by a person other than an officer, or by only one officer there must be attached to the Contract a certified copy of a resolution of the corporation authorizing such officer or person to execute written Contracts for and on behalf of the corporation. If the Contractor is a joint venture, the Contract must be executed on behalf of each participating firm by officers or other individuals who have the full and proper authorization so to do. If the Contractor is an LLC, the Contract must be executed by an officer or other member who has full and proper authorization to execute contracts on behalf of the LLC.
26. **Faithful Performance Bond.** Upon execution of the contract, the Contractor shall furnish a bond to guarantee the faithful performance of the contract. The amount of the bond shall be stated in the Special Provisions. The bond shall be with a California-admitted corporate surety, or with two or more sufficient sureties to be approved by the District. As an alternative to furnishing a bond, Contractor may guarantee faithful performance of the contract by (1) depositing with the District a certified check or cashier's check from a solvent bank for the prescribed amount.
27. **Payment Bond.** Upon execution of the contract, the Contractor shall furnish a bond to guarantee payment for costs of materials, equipment, supplies, and labor furnished in the course of the performance of the Contract. The amount of the bond shall be stated in the Special Provisions. The bond shall be with a California-admitted corporate surety, or with two or more sufficient sureties to be approved by the District.
28. **Effect of Extensions of Time.** Granting, or acceptance, of extensions of time to complete the work or furnish the labor, supplies, materials or equipment, or any one of the aforementioned, will not operate as a release to Contractor or the surety on Contractor's faithful performance bond from said guarantee.
29. **Changes by the Contractor.** If the Contractor, on account of conditions developing during the performance of the contract, finds it impracticable to comply with these Specifications and applies in writing for a modification of requirements, such change may be authorized only in writing by the General Manager, if not detrimental to the District.
30. **Changes by the District.** In case any work, materials or equipment shall be required which are not mentioned, specified or indicated or otherwise provided for herein, the Contractor shall, if ordered in writing by the General Manager, do and perform such work and furnish such materials or equipment at the Contractor's catalogue prices, less discounts ordinarily

allowed to users of such materials or equipment or at regular labor charges less customary discounts, or both.

The Contractor's Bid to perform any changes requested by the District shall include the cost of the material, engineering time, labor for installation if required and a reasonable markup, if any.

In case any work, materials or equipment which are mentioned, specified or indicated or otherwise provided for in the contract or in the Specifications forming a part of the contract shall be required to be omitted from, in or about the work, the Contractor shall, if ordered by the General Manager, omit the performance of such work and the furnishing of such materials or equipment and there shall be deducted from the amount to be paid to the Contractor the amount which the General Manager and the Contractor shall determine and mutually agree to be the reasonable value of such work, materials or equipment, and such determination and agreement shall be final and conclusive upon the Contractor.

It is understood, however, that the amount of work, materials or equipment required by the Contract shall not, in accordance with the above provisions referring to additions or omissions, be so increased or diminished as substantially to alter the general character or extent of the Contract.

31. **Change Orders.** The Contract may be modified or changed by the District from time to time, in order to carry out and complete more fully and perfectly the work agreed to be done and performed. An order that modifies or changes work to be performed under the Contract shall be valid only if issued in writing and signed by the General Manager and shall designate (1) the change in cost or manner of payment, if any and (2) the effect on time for Contract performance, if any. Work so ordered must be performed by the Contractor.
32. **Disputed Work/Claims.** The Contractor must promptly comply with the following procedures in the event the Contractor has any dispute regarding (1) the District's determination on any change orders relative to adjustments in Contract price, time for performance or any other requirement or (2) whether a determination or order by the District violates the provisions of the Contract. Before proceeding with such work or complying with such determination or order, or simultaneously, the Contractor must notify the General Manager in writing of the reasons for the Contractor's opinion with respect to the dispute and request a final determination. The General Manager shall render the final determination within a reasonable time of receipt of such written request.

If the General Manager determines that the work in question is Contract work and not extra work, or that the determination or order complained of is proper, he/she will direct the Contractor to proceed, and the Contractor must promptly comply. However, in order to reserve its right to claim compensation for such work or damages resulting from such compliance, the Contractor must, within ten (10) days after receiving notice of the General Manager's determination and direction, notify the General Manager in writing that the work is being performed, or that the determination direction is being complied with under protest.

If the Contractor fails to so appeal to the General Manager for a determination, or having so appealed, should the Contractor thus fail to notify the General Manager in writing of its protest, the Contractor shall be deemed to have waived any claim for extra compensation or damage therefore. Oral appeals or oral protests, no matter to whom made, shall not be deemed even substantial compliance with the provisions of this Section.

33. **Notice of Potential Claim.** The Contractor shall not be entitled to the payment of any additional compensation or damages for any cause, including any act or failure to act by the District, or the happening of any event, thing or occurrence, unless it shall give the District due written notice of potential claim as described below. Compliance with this section shall not be a prerequisite as to matters within the scope of the protest provisions in General Condition 31, "Disputed Work/Claims."

The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation or damages will or may be due, the nature of the cost involved and, insofar as possible, the amount of the potential claim. The notice must be given to the General Manager prior to the time that the Contractor shall have performed the work giving rise to the potential claim for additional compensation or damages, if based on an act or failure to act by the District, or in all other cases, within fifteen days after the happening of the event, thing or occurrence giving rise to the potential claim.

It is the intention of this section that differences between the parties arising under and by virtue of the Contract be brought to the attention of the District at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor agrees that it shall have no right to additional compensation or damages for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as required was filed.

34. **Contractor's Liability.** The Contractor will indemnify, keep and save harmless the District, its agents, officials and employees, against all suits or claims arising out of any injury or death to persons or property caused by, resulting from, relating to, or alleged to have been caused by, result from, or relate to, the acts or omissions of the Contractor (including its employees and subcontractors) , whether or not it has been alleged that the injury was caused through a negligent act or omission of the Contractor (or its employees or subcontractors), unless the injury was caused by the willful misconduct or the sole or active negligence on the part of the District, its agents, officials or employees. The Contractor will, at its own expense, defend any and all such actions, and will at its own expense pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith. If any judgment is rendered against the District in any such action, the Contractor will at its own expense satisfy and discharge the same.
35. **Approval by the General Manager.** The work shall be executed under the direction and supervision of the General Manager or his designee, on whose inspection all work shall be accepted or condemned. The General Manager shall have full power to reject or condemn any materials furnished or work performed under the Contract which do not conform to the terms and conditions set forth in the Contract Documents.

36. **Defective or Damaged Work.** The Contractor agrees that within ten calendar days after being notified in writing by the District of any work not in accordance with the requirements in the Contract or of any defects in the work, it will commence and prosecute with due diligence all work necessary to fulfill the requirements of the Contract or correct the defect and will complete such work in a reasonable period of time and at no additional cost to the District.

If the Contractor fails to promptly comply with this provision, the Contractor hereby authorizes the District to proceed to have such work done at the Contractor's expense, and Contractor agrees to honor and pay the costs and charges upon the District's demand. In the alternative, the District may elect to deduct the costs and charges from any compensation due or to become due to the Contractor. The District shall be entitled to all costs and expenses, including reasonable attorney's fees, necessarily incurred upon the Contractor's refusal to pay the above costs and charges. Nothing in the provision shall limit or restrict the warranty provisions set forth in the General Conditions, Special Provisions, and Technical Specifications.

37. **Independent Contractor.** Neither Contractor nor any of the Contractor's employees is, or shall be deemed, an agent or employee of the District, and in the performance of all work hereunder, Contractor shall be an independent Contractor, shall comply with all applicable Worker's Compensation laws, shall pay all required Social Security taxes and Unemployment Compensation taxes, and shall pay or perform all other obligations imposed upon an employer of labor, all at Contractor's expense, and, furthermore, shall indemnify the District against any and all liability as a result of Contractor's failure to perform any of the foregoing requirements.

38. **Protection of Work and of Persons and Property.** During performance and up to the date of final acceptance by the District, the Contractor shall be under an absolute obligation to protect the finished and unfinished work against any damage, loss or injury. In the event of damage, loss or injury to the finished and unfinished work, the Contractor shall promptly replace or repair such work, whichever the District shall determine to be preferable. The obligation to deliver finished work in strict accordance with the Contract shall be absolute and shall not be affected by the District's approval of or failure to prohibit means and methods of construction used by the Contractor.

During the performance of this Contract and up to the date of final acceptance, the Contractor must take all reasonable precautions to protect the persons and property of others from damage, loss or injury. Within three (3) days after notice to it of the happening of any such loss, damage or injury to work, persons and property, the Contractor shall make a full and complete report thereof in writing to the District.

Under this article the Contractor assumes the following distinct and several risks, whether they arise from acts or omissions (whether negligent or not) of the Contractor, or the District, or the District's Representative, or of third persons; or from any other cause, and whether such risks are within or beyond the control of the Contractor, excepting risks which arise solely from District or District Representative's active negligence or affirmative acts with actual and willful intent to cause the loss, damage and injuries, and professional errors and omissions of the District or of the District's Representative:

- a. The risk of loss or damage to the finished and unfinished Work prior to final acceptance by the District;
- b. The risk of claims, just or unjust, by third persons against the Contractor, the District or the District's Representative on account of injuries (including wrongful death), loss or damage of any kind whatsoever arising or alleged to arise out of or in connection with the performance of the Work (whether or not actually caused by or resulting from the performance of the Work) or out of or in connection with the Contractor's operations or presence at or in the vicinity of the work site, whether such claims are made and whether such injuries, damage and loss are sustained at any time both before and after final acceptance of the Work;
- c. The risk of loss or damage to any property, including the loss of use thereof of the Contractor, and of claims made against the Contractor, the District, or the District's Representative for loss or damage to any property, including the loss of use thereof of subcontractors, material men, workmen and other performing the Work, occurring at any time prior to completion of removal of such property from the premises or in the vicinity thereof.

Neither the acceptance of the completed Work or payment therefore shall release the Contractor from its obligations under this article. The enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall not be deemed to limit the effect of the provisions of this article or to imply that it assumes or is responsible for only risks or claims of the type enumerated; and neither the enumeration in this article nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall be deemed to limit the risks which the Contractor would assume or the claims for which it would be responsible in the absence of such enumerations.

Except as these specifications otherwise may provide, all loss or damage of any sort or nature arising from any unforeseen obstruction or difficulties, either natural or artificial, or from any act or omission not authorized by these specifications on the part of the Contractor, or any agent or person employed by it, shall be the responsibility of the Contractor.

The provisions of this Article shall not be deemed to create any new right of action in favor of third parties against the Contractor, or the District.

39. **Damages.** All loss or damage arising from any unforeseen obstruction or difficulties, whether natural or artificial, which may be encountered in the prosecution of the work, or the furnishing of the supplies, materials or equipment, or from any action of the elements prior to the final acceptance of the work or of the supplies, materials or equipment, or from any act or omission not authorized by these Specifications on the part of the Contractor or any agent or person employed by it shall be sustained by the Contractor.
40. **Failure to Complete Contract-Effect.** In case of failure on the part of the Contractor to complete its Contract within the specified time or within authorized extensions thereof, the

Contract may be terminated and the District shall in such event not thereafter pay or allow to the Contractor any further compensation for any labor, supplies or materials furnished by it under said Contract; and the District may proceed to complete such Contract either by reletting or otherwise, and the Contractor and its bondsmen shall be liable to the District for all loss or damage which it may suffer on account of the Contractor's failure to complete its Contract within the specified time.

41. Non-Performance of Contract.

- a. Right to Stop Work. Authority to stop the work, in whole or in part is vested in the District and may be invoked whenever it deems such action necessary to insure proper execution of the Contract; work may not be resumed until the District has given written consent.
- b. Rejection of Materials and Workmanship. The District has the right to reject defective material and workmanship and to require its replacement or correction without additional cost to District. Defective material and workmanship includes, but is not limited to, materials and workmanship that does not meet the requirements of the specifications of this Contract reasonably interpreted in the sole discretion of the District. Contractor shall promptly segregate and remove rejected work. All adjacent work disturbed by removal of such work shall be replaced in accordance with this Contract and without expense to the District including work of other contractors disturbed by such removals and replacements.
 - (1) If Contractor fails to proceed at once with replacement of rejected work, District may, by Contract or otherwise, replace such material and correct such workmanship and charge the cost to the Contractor, or District may terminate right of the Contractor to proceed. The Contractor and its surety shall be liable for any damage to same extent as provided for by terminations hereunder.
 - (2) If rejected materials are not removed within a reasonable time, District may cause them to be removed and stored at Contractor's expense three days after issuing written notice to so remove them. If Contractor does not pay for such removal and storage within six days thereafter, District may, six days after further written notice, sell the materials and credit Contractor with net proceeds after all costs of removal and sale are deducted. If materials so removed are valueless or sale does not meet cost of removal, Contractor shall bear all resultant loss.
- c. Neglected Work. District may perform or employ others to undertake portions of the work persistently neglected by the Contractor if work is still proceeding unsatisfactorily three days after written notice to the Contractor. In such casework will be done according to the Contract Documents and the cost deducted from next payment falling due to the Contractor. Such action shall in no way affect status of either party under Contract, nor be held as basis of any claim by the Contractor or for extension of time.

d. Right to Withhold Payment. Part or whole of any payment or any certificate may be withheld by District if such course is deemed necessary to protect District from loss on account of Contractor's failure to meet its obligations or if balances unpaid to Contractor are insufficient to complete the work. This right may also be exercised if in District's opinion the work will not be completed in time specified for performance of the Contract.

42. Termination of Right to Proceed. If the Contractor should appear to the District to be in default and the Contractor fails to remedy its default within five (5) days after receipt from the District of notice of such default, the District may terminate the Contractor's right to proceed with work or that portion which the District determines is most directly affected by the default.

The term "default" for purposes of this provision includes, but is not limited to, the performance of work in violation of the terms of the Contract; abandonment, assignment or subletting of the Contract without approval of the District, bankruptcy or appointment of a receiver for Contractor's property; failure to maintain the schedule of work; refusal or failure to maintain the schedule of work; refusal or failure properly to prosecute the work; use of materials, supplies, plant or equipment of improper quality or quantity; refusal or failure to provide proper workmanship; failure to take effective steps to end a prolonged labor dispute; and the performance of the Contract in bad faith.

Upon the District's termination of the Contractor's right to proceed with the work or a portion of it, the District will have the right to complete the work or the portion by whatever means and methods it deems expedient, including the hiring of others on such terms as the District deems advisable.

The expense of completing such work or portion thereof, together with a reasonable charge for managerial and administrative services as certified by the District, will be charged to the Contractor, and the expense so charged will be deducted by the District out of such monies as may be due or may at any time thereafter become due to the Contractor. In case such expense is more than the sum which otherwise would have been payable to the Contractor under the Contract, then the Contractor or its surety or sureties shall promptly pay the amount of such excess to the District, upon notice from the District of the excess so due. The District may, in its sole discretion, withhold all or any part of any progress payments otherwise due to the Contractor until completion and final settlement of the work covered by such notice of default.

43. Payments. Unless otherwise stated in the Specifications or Bid forms, the District shall pay the Contractor within thirty (30) days after the District issues a written notice of final acceptance.

44. Liquidated Damages. It is agreed by the parties to the Contract that time is of the essence, and in event of delay in completion of the work or the delivery of the supplies, materials or equipment beyond the date set forth in the Contract documents, or beyond authorized extensions thereof, damage will be sustained by the District and that it is or will be impracticable to determine the actual amount of the damage by reason of such delay, and it is, therefore, agreed that the District shall be paid an amount as set forth in the Special

Provisions as liquidated damages. If no amount is set forth, Contractor shall be liable for actual damages for each and every calendar day that the time consumed in said completion extends beyond the date herein specified in that the District will suffer by reason of said delay or default. If the delay in delivery is caused by strikes, government controls or other causes beyond the control of the Contractor, an extension of time without liquidated damages liability shall be granted by the District upon a proper showing and finding by the District that the extension is justified.

45. **Insurance Certificates.** Certificates of insurance required by the Special Provisions shall be delivered to the District concurrently with the executed Contract. The District reserves the right to request certified copies of an insurance policy if questions arise.

All required insurance under this Contract shall provide adequate protection for the San Mateo County Harbor District, its Officers, Agents, Representatives and Employees, while acting in such capacity and their successors or assignees, as they now or as they may hereinafter be constituted singly, jointly or severally, and the Contractor, against all claims, liability damages and accidents of any kind.

46. **Infringement of Patents.** The Contractor agrees that it will, at its own expense, defend all suits or proceedings instituted against the District and pay any award of damages assessed against the District in such suits or proceedings, insofar as the same are based on any claim that the materials or equipment, or any part thereof, or any tool, article or process used in the manufacture thereof, constitutes an infringement of any patent of the United States provided the District gives to the Contractor prompt notice in writing of the institution of the suit or proceeding and permits the Contractor through its counsel to defend the same and gives the Contractor all needed information, assistance and authority to enable the Contractor so to do.

47. **Assignment.** The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of the Contract or its right, title or interest in or to the same, or any part thereof, without previous consent in writing of the General Manager endorsed thereon or attached thereto.

48. **Warranty of Title.** Contractor shall warrant to the District, its successors and assigns, that the title to the material, supplies or equipment covered by the Contract, when delivered to the District or to its successors or assigns, is free from all liens and encumbrances.

49. **Warranty of Fitness.** Contractor hereby warrants that all materials furnished shall meet the requirements and conditions of the Bid documents; shall be fit for the purposes intended and fulfill its design functions; shall be free of all patent and latent defects in design materials, and workmanship and perform satisfactorily.

It is understood and agreed that by acceptance of this warranty and the acceptance of materials or supplies to be manufactured or assembled pursuant to these Specifications, District does not waive any warranty, either expressed or implied in Sections 2312 to 2317, inclusive, of the Commercial Code of the State of California or any products liability of the Contractor as determined by any applicable decision of a court of the State of California or of the United States.

50. **Time of Completion.** The Contractor shall complete all or any designated portion of the work called for under the Contract in all parts and requirements within the time set forth in the Special Provisions.

Time shall be computed starting the first day after the effective date of the Notice to Proceed. The effective date of the Notice to Proceed will be the date stated as such in the Notice to Proceed, provided that in no case will such effective date be earlier than the date of the issuance of such Notice to Proceed.

51. **Or Approved Equal Clause.** In order to establish a basis of quality, certain materials, processes and type of machinery and equipment, or kinds of materials may be specified on the plans or herein, either by description of process or by designating a manufacturer by name or by referring to a brand of product designation, or by specifying a kind of material. It is not the intent of these Specifications to exclude other processes, equipment or materials of equal Value, Utility or Merit which are approved by the District.

52. **Antitrust Claims.** The Contractor's attention is directed to California Government Code Section 4552, which shall be applicable to the Contractor and its subcontractors:

In submitting a Bid to a public purchasing body, the Bidder offers and agrees that if the Bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the Bidder for sale to the purchasing body pursuant to the Bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the Bidder.

53. **Environmental and Safety and Health Standards Compliance.** Contractor shall comply with applicable environmental statutes, regulations and guidelines in performing the work under this Contract. The Contractor shall also comply with applicable Occupational Safety and Health standards, regulations and guidelines in performing the work under this Contract.

54. **Equal Employment Opportunity.** In connection with the performance of this Contract, the Contractor shall not discriminate against any employee or an applicant for employment because of race, color, religion, gender, national origin, ancestry, age, marital status, pregnancy, medical condition, disability, or sexual orientation as provided for in Federal, State and local laws in consideration of an award.

The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during their employment, without regard to the above factors. Such actions shall include but not be limited to the following: demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay; other forms of compensation; and selection for training, including apprenticeship.

55. **Rights and Remedies of the District.** The rights and remedies of the District provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.
56. **Qualification Questionnaire.** The Contractor shall submit with its bid documentation showing whether or not the Contractor, any officer of the Contractor, or any employee of the Contractor, has ever been disqualified, removed, or otherwise prevented from bidding on or completing any federal, state or local government project because of a violation of law or safety regulation. For this purpose, Contractor must complete the Bidders Statement of Qualification Questionnaire and Financial Statement with Business Reference.
57. **Bid Protest Procedures. FAILURE TO COMPLY WITH ANY OF THE REQUIREMENTS SET FORTH IN THE DISTRICT'S BID PROTEST PROCEDURES MAY RESULT IN REJECTION OF THE PROTEST.**
- a. **Protests Based Upon the Specifications.**
- (1) **Pre-Protest Procedures.** Bidders must first utilize any procedures in the specifications for Approved Equals or Requests for Clarifications or Modifications, prior to submitting a protest. If the bidder disagrees with the District's decision on such requests, the bidder may then avail itself of the bid protest procedures.
 - (2) **Submission of Protest.** Protests based upon restrictive specifications or alleged improprieties in the bidding procedure or contract specifications, which are apparent or reasonably should have been discovered prior to bid opening, shall be filed in writing with the District not later than five calendar days before the bid opening or proposal due date. The protest must clearly specify in writing the grounds and evidence on which the protest is based. If the protestor later raises new grounds or new evidence that reasonably could have been raised, the District will not consider such new grounds or evidence in the determination on the protest. Staff shall respond to the protest with its written determination prior to bid opening or proposal due date. Where the staff determination could affect bid responses, an appropriate extension of the bid opening or proposal due date may be granted.
 - (3) **Review by the General Manager.** If the protest is denied, the bidder may pursue its protest to the General Manager. Within forty-eight (48) hours of receipt of the staff's written determination to deny the protest, the bidder must submit in writing to the General Manager a statement of the reasons for the protest, with supporting evidence, and document that it has exhausted all administrative remedies at the District staff level. The General Manager will issue a written decision prior to the bid opening, which shall be final.

b. Protests Based Upon Contract Award.

- (1) Notice of Staff Recommendation for Award of Contract. Upon conclusion of the bid evaluation for each contract, the District shall send a notice to all bidders of the staff's recommendation for contract award. Such notice shall be sent at least seventy-two (72) hours prior to the Board or Committee meeting, if applicable, at which the recommendation will be considered.
- (2) Submission of Protest; Initial Procedures. Protests based upon alleged improprieties that are not apparent or which could not reasonably have been discovered prior to bid opening, such as disputes over the staff recommendation for contract award, shall be submitted in writing to the District by the deadline specified in the notice from the District advising of the staff's recommendation for award of contract.
- (3) The protest must clearly specify in writing the grounds and evidence on which the protest is based. If the protestor later raises new grounds or new evidence not previously set forth in written submissions that reasonably could have been raised earlier, the District will not consider such new grounds or evidence in the determination on the protest.
- (4) The Deputy Secretary of the District will make best efforts to notify the other bidders of the protest, and the time and place it will be considered by the Board.

- c. Proceedings Before the Board. The protestor may appear before the Board to present evidence in support of its appeal. After consideration of the protestor's evidence, the staff recommendation, and any other relevant information, the Board may determine whether to reject or allow the protest. Upon Board action, a written statement of the reasons therefore shall be included in the record.

The decision of the Board on the protest and the award of contract, if such a decision is made, shall be final.

- d. Protests after Contract Award. No protests will be considered after contract award, except for compelling reasons whereby the lateness is due to the District's untimely handling of the protest submission. In no event will the District consider protests filed after contract award due to the neglect of the protestor. Failure to comply with the time periods for filing protests as set forth herein shall be a basis for rejection of the protest.

58. Air Pollution Control. The Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes which apply to any work performed pursuant to the Contract, including any air pollution control rules, regulations, ordinances and statutes, specified in Section 11017 of the Government Code. Material to be disposed of shall not be burned, either inside or outside the work site.

59. **Water Pollution Control.** The Contractor shall comply with all water pollution control rules, regulations, ordinances and statutes which apply to any work performed pursuant to this Contract.

The Contractor shall exercise every reasonable precaution to protect streams, lakes, reservoirs, bays, coastal waters and other bodies of water from pollution with fuels, oils, bitumens, calcium chloride and other harmful materials, and shall conduct and schedule its operations so as to avoid or minimize muddying and silting of said waters.

60. **Compliance with Law.**

- (a) The Contract documents, and the rights of the parties thereunder, shall be interpreted in accordance with the laws of the State of California.
- (b) The Contractor warrants that all operational practices of the Contractor, and all workmanship and material, equipment and articles used in the performance of the work hereunder shall be in accordance with the rules and requirements of the United States Coast Guard in effect at the time of Contractor's submission of Bid. In addition, all safety orders, rules and recommendations of the State of California, Division of Industrial Safety, and the United States Department of Labor, Occupational Safety and Health Administration applicable to the work to be done under this Contract shall be obeyed and enforced by the Contractor.

61. **Discharge of Liens.** The Contractor shall pay all costs and expenses incident to any work performed by it or for its account, and shall not create, incur, suffer or permit to be placed or imposed any lien or encumbrance or charge in any way arising from any act or omission of the Contractor. The Contractor shall orally or in writing inform all persons dealing with it in performing the work of the provisions of this paragraph.

The Contractor shall immediately discharge or cause to be discharged any lien or right in rem of any kind, other than in favor of the District, and if any such lien or right in rem is not immediately discharged, the District may, after notification to the Contractor, discharge or cause to be discharged such lien or right at the expense of the Contractor.

CONTRACT NO. 2024-04

Oyster Point Marina West Basin Access Improvements

SPECIAL PROVISIONS

SAN MATEO COUNTY HARBOR DISTRICT

**CONTRACT NO. 2024-04
Oyster Point Marina West Basin Access Improvements**

SPECIAL PROVISIONS

Coordination of General Conditions and Instructions for Bidders, Special Provisions, and Technical Specifications. The General Conditions and Instructions for Bidders, Special Provisions, and Technical Specifications are intended to be complementary and to describe and provide for a complete work. In the event that there are inconsistencies or discrepancies between provisions contained in these components of the Contract Documents, the Special Provisions and Technical Specifications shall govern over the General Conditions and Instructions for Bidders.

SECTION 1. BID REQUIREMENTS AND CONDITIONS

- 1.1 **Bid Invited.** The San Mateo County Harbor District (District) invites bids for the Oyster Point Marina West Basin Access Improvements, in full accordance with these specifications.
- 1.2 **Schedule of Activities.** Listed below is the “Schedule of Activities” which outlines pertinent dates of which Bidders should make themselves aware. These dates may be subject to change.

DATE	ACTIVITY
April 25, 2024 @ 10:30 am	MANDATORY Pre-Bid Conference and site visit at Oyster Point Marina Harbor Master’s Office
May 10, 2024 @ 4:30 pm	Written requests for approved equals/modifications/clarifications are due.
May 17, 2024 @ 4:30 pm	District will respond to requests for approved equals.
May 30, 2024 @ 2:00 pm	Bid Opening San Mateo County Harbor District Office, 504 Avenue Alhambra, 2 nd floor, El Granada, CA 94018

- 1.3 **Bid Form.** Bids shall be submitted on the District’s “Bid Form” attached hereto, enclosed in a sealed envelope marked “**CONTRACT NO. 2024-04, Oyster Point Marina West Basin Access Improvements Project,**” and plainly endorsed with the Bidder’s name and address. Bids must be received by the Deputy Secretary, San Mateo County Harbor District, at its mailing address PO Box 1449, El Granada, CA 94018, or by courier or personal delivery to 504 Avenue Alhambra, 2nd Floor, El Granada, CA 94018 by **May 30, 2024, 2:00 p.m. Pacific Time**, at which time they will be publicly opened and read in the Board Room of said building.

The Total Bid Price shall include all labor, equipment, materials, applicable taxes, delivery charges, warranties, insurance, license fees, bonds, and all other costs necessary for the Oyster Point Marina West Basin Access Improvements project.

Each Bid Form must be signed on Bid Form page 2 by one or more individuals with authority to bind the Contractor to the bid. Please refer to General Condition 3 and the Bid Form. All bids without the appropriate signature(s) on Bid Form page 2 may be deemed non-responsive and may result in the rejection of the bid. Bidder must submit the three-page Bid Form properly executed.

1.4 Examination of Contract Documents and Site of Work. The Bidder shall have examined carefully the Contract Documents. The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, the character, quality and scope of work to be performed, the quantities of materials to be furnished and the requirements of the Contract Documents.

1.5 Pre-Bid Conference and Site Visit. A mandatory pre-bid conference and site visit will be held prior to the date of bid opening. District staff will be available to answer general questions pertaining to the solicitation documents and the specifications. Any questions that may require staff research to answer or that will otherwise modify the meaning or intent of this solicitation shall be submitted to the District in writing as described in Special Provision 1.8. The pre-bid conference will take place on **April 25, 2024, at 10:30 am, Pacific Standard Time, in the Oyster Point Marina Harbor Master's Office.**

1.6 Documents to Accompany Bid. The bid shall be accompanied by the following:

- (1) The Bidder's Bond or certified or cashier's check required by Section 14 of the General Conditions and Section 1.10 of the Special Provisions in an amount equal to at least ten percent (10%) of the proposed Total Bid Price
- (2) List of Subcontractors
- (3) Acknowledgement of Addenda, if any
- (4) Qualification Questionnaire
- (5) Proof of DIR Registration in accordance with Special Provision 5.14
- (6) Non-Collusion Declaration

1.7 Approved Equals and Qualified Products. It should be understood that specifying a brand name or specific types of components and/or equipment in these specifications shall not relieve the Bidder from its responsibility to furnish the end product in accordance with the warranty and contractual requirements. The Bidder is responsible for notifying the District of any inappropriate brand names, or types of components and/or equipment that may be called for in these specifications and to propose a suitable substitute for consideration.

Unless otherwise specifically provided in the specifications, reference to any equipment, material, article or patented process by trade name, make, or catalog number shall be regarded as establishing a standard of quality and shall not be construed as limiting

competition; and a Bidder may, at its option, use any equipment, material, article or process which, in the judgment of the District, is equal to that designated.

The Bidder shall furnish, at its own expense, all test results, technical data, and background information required by the District in making the determination as to whether the proposed equipment, material, article or process is an approved equal. The District shall be the sole judge as to the comparative equality and suitability of alternative equipment, article, material or process and its decision shall be final.

1.8 Request for Approved Equals/Questions/Clarifications. A Bidder may submit to the District requests for approved equals, modifications, or clarifications regarding any requirements, terms, or conditions contained herein. Any such requests must be received in writing to jmoren@smharbor.com by **May 10, 2024, at 4:30 p.m., Pacific Time**. Any requests of approved equals must be fully supported with samples, technical data, test results, or other pertinent information as evidence that the substitute offered is essentially equal or better than that specified in the Contract Documents. The District shall make a determination on each Bidder's request under this procedure in writing. The written determination shall be mailed or otherwise furnished to the Bidder by **May 17, 2024, at 4:30 p.m.** Failure of the District to respond within the time limit shall be deemed to be a denial of request. In the event that a request for an approved equal, modification, or clarification is granted, an addendum detailing the approved equal, modification, or clarification will be mailed or otherwise furnished to all potential Bidders who received bid packets.

1.9 Single-Bid Response. In the event of a single-bid response, the District reserves the right to conduct a price and/or cost analysis of the bid to verify that the bid price is fair and reasonable. The Bidder will be expected to cooperate in this process and to submit cost and pricing data to verify that the bid price is fair and reasonable. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost of the replacement and the prices quoted and shall include the computations and projections used by the Bidder.

Failure to submit the data as requested by the District within ten (10) calendar days of receipt of written notification to the sole offeror shall result in the Bidder being declared non-responsive.

1.10 Bidder's Bond. As required by Section 14 of the General Conditions and Instructions for Bidders, the Bidder's Security to be submitted with the Bid shall be in the amount of at least ten (10) percent of the Total Bid Price as specified on the Bid Form.

SECTION 2. AWARD OF CONTRACT

2.1 Award of Contract. The award of Contract, if any, will be made within ninety (90) calendar days after the date of bid opening to the lowest responsible Bidder based on the Total Bid Price. Each bid as submitted shall remain in effect for ninety (90) calendar days after the date the bids are opened. No Bidder may withdraw its bid during this time period. The lowest responsive and responsible Bidder shall be determined by comparing and evaluating the Total Bid Price as set forth in the Bid Form. The District reserves the right

to reject any and all bids or to waive any irregularities in any bid or in the bidding procedure.

2.2 **Contract Bonds**

- A. **Performance Bond.** The Performance Bond as described in Paragraph 26 of the General Conditions shall be in the amount of one hundred percent (100%) of the total contract price, as awarded by the District. Said bond shall guarantee the Contractor's faithful performance of the Contract and compliance with all terms, conditions and requirements specified in the Contract Documents and shall remain in full force and effect for a period of twelve (12) months after the District's final acceptance of the Contractor's work in accordance with Special Provision 3.2 hereof. The Contractor shall use the form entitled "Performance Bond" included in the Contract Documents.
- B. **Payment Bond.** The Contractor shall provide a payment bond in the amount equal to one hundred percent (100%) of the total contract price and issued by California admitted surety. The payment bond shall provide security for Contractor's full payment to all subcontractors for costs of materials, equipment, supplies, and labor furnished in the course of the performance of the Contract. Full compensation for furnishing the payment bond is included in the total contract price. The Contractor shall use the form entitled "Payment Bond" included in the Contract Documents.

SECTION 3. CONTRACT PERFORMANCE

- 3.1 **General.** The Contractor shall perform all work and undertake all services detailed in the Contract Documents in accordance with the specified requirements, terms and conditions.
- 3.2 **Acceptance and Payment.** The Contractor shall notify the District once it has completed all work and services detailed in the Contract Documents in accordance with the specified requirements, terms and condition. Following the Contractor's notification, the District shall undertake a thirty (30)-calendar-day period for inspection. The District will notify the Contractor in writing within said thirty (30) calendar days as to whether the work and services have been accepted.

If the District determines that the work and services are not in conformity with the specification requirements, or that there are defects or deficiencies requiring correction, the District will notify the Contractor of such deficiencies or nonconformity in writing within the aforementioned thirty (30)-day period. The Contractor shall promptly correct or remedy any and all deficiencies or defects noted by the District at no cost to the District. The Contractor shall complete the necessary corrections within fifteen (15) days of the District's notification of deficiencies or nonconformity. At such time as the Contractor has made all necessary corrections to the satisfaction of the District, the District shall issue the Contractor a written notice of final acceptance. In the event the Contractor fails to remedy the deficiencies, the District shall have the right to reject the work and terminate the Contract for breach as provided below in Special Provision Section 3.7, Termination. Alternatively, the District may cause the repair to be made by its own or other forces, whereupon the cost of the repair shall be deducted from sums otherwise due the Contractor.

After final acceptance by the District, the Contractor may thereupon furnish to the District satisfactory evidence that all liens, claims and demands of Subcontractors, laborers and materialmen, arising out of such work, are fully satisfied, and that all of the work is fully released from all liens, claims and demands of whatever kind and nature and whether just or otherwise.

In accordance with Paragraph 43 of the General Conditions, the District shall make payment to the Contractor following the receipt of proper statements or invoices for the work within thirty (30) days of the date of final acceptance of the work by the District. The acceptance by the Contractor of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release to the District of any and all claims of the Contractor and liability to the Contractor for anything theretofore done or furnished for or relating to or arising out of this Contract and the work done hereunder, and for any prior act, neglect or default on the part of the District or any of its directors, officers, agents or employees excepting only claims against the District for the amounts deducted or retained in accordance with the terms and provisions of this Contract by law. Should the Contractor refuse to accept the final payment as tendered by the General Manager, it shall constitute waiver of any right to interest thereon.

- 3.3 Liquidated Damages.** Failure of the Contractor to complete the Work within the time allowed will result in damages being sustained by the District. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified for completion of the Work, the Contractor shall pay to the District, or have withheld from monies due it, the sum of \$500, unless otherwise specified in the Special Provisions.

Execution of the Contract shall constitute agreement by the District and Contractor that \$500 per Day is the minimum value of the costs and actual damage caused by the failure of the Contractor to complete the Work within the allotted time. Such sum is liquidated damages and shall not be construed as a penalty, and may be deducted from payments due the Contractor if such delay occurs.

- 3.4 Time of Performance.** The project will be completed in full no later than 100 working days after receiving Notice to Proceed.

- 3.5 Interference with District Operations.** Any and all work must not interfere with the District's normal operations including operation of Pillar Point Harbor .

- 3.6 Warranty.** All work, including all installation work or repairs, is guaranteed by the Contractor against failure, damage, defect, or non-compliance with the Contract of any kind for a period of one (1) year from the date of District's final acceptance. The Contractor must furnish a Performance Bond therefor as provided in the Special Provisions. In addition to said guarantee, the District will have the benefits of any manufacturer's or builder's guarantee given by a manufacturer or builder. Where any individual work item is incomplete at the time of acceptance by the District, the guarantee will run from the date of completion of such item. If the Contractor fails to proceed promptly with any repairs as directed by the District, such corrections and repairs shall be affected at the Contractor's

expense at such time as the District may determine. The District may deduct the cost of such repairs from any amount owed to the Contractor or require the Contractor to reimburse such costs to the District.

It is understood and agreed that the District does not waive any warranty, either express or implied, in Sections 2312 through 2317, inclusive, of the California Commercial Code, or any liability of the manufacturer or Contractor as may be determined by a decision of the court of the State of California or of the United States.

3.7 Termination. The District may terminate the Contract for convenience for any reason at any time by giving the Contractor fifteen (15) days' notice thereof. Notice of termination shall be by Certified Mail. Upon termination for the convenience of the District, the District shall pay the Contractor the allowable costs incurred to the date of termination and those costs deemed reasonably necessary by the District to affect the termination. In the event that the Contractor breaches the terms or violates the conditions of this Contract and does not correct such breaches or violations within ten (10) days following notice thereof from the District, the District may immediately terminate the Contract and shall pay the Contractor only for work performed in full conformance with the specifications to the date of termination, less any costs incurred by the District to repair and complete any remaining work under the Contract. The District reserves the right to pursue any and all remedies available in equity or law in the event the District suffers any damages due to the Contractor's breach of terms or violation of the conditions in this Contract.

3.8 Protection of Property. The Contractor shall exercise every precaution to ensure that no injury or damage occurs to District property as a result of its operations. Should any existing property be damaged by or through any of the Contractor's operations, such injury or damage shall be replaced or repaired immediately by the Contractor, at Contractor's sole cost, in a manner satisfactory to the District.

SECTION 4. INSURANCE

4.1 Insurance Requirements

A. Types of Insurance

Contractor shall not commence work until proper evidence of insurance coverage of the types and amounts specified in this Section has been provided to District. Contractor shall not violate or permit to be violated any conditions or provisions of said policies of insurance, and at all times shall satisfy the requirements of the insurer for the purpose of maintaining said insurance in effect.

If any claim is made by any third person against Contractor on account of any incident connected to the Contract, Contractor shall promptly report the fact in writing to District, giving full details of the claim.

Any person, firm, or corporation that Contractor authorizes to work upon the District's property, including any Subcontractor, shall be deemed to be Contractor's agent and shall be subject to all applicable terms of this Contract. Prior to the Contractor's start of the work

or entry onto the District's property, Contractor agrees to require its Subcontractors to procure and maintain, at Contractor's (or its Subcontractor(s)') sole cost and expense (and to prove to the District's reasonable satisfaction that it remains in effect throughout the performance of the work under this Contract), the kinds of insurance described below. Such insurance must remain in effect throughout the term of this Contract and will be at the sole cost and expense of Contractor (or its Subcontractor(s)).

1. Commercial General Liability Insurance

The Contractor shall, at its own expense, procure and maintain Commercial General Liability insurance providing bodily injury and property damage coverage with a combined limit of at least One Million Dollars (\$1,000,000) each occurrence. This insurance shall include but not be limited to premises and operations, contractual liability covering the indemnity provisions contained in this Contract, personal injury, products and completed operations, and broad form property damage, and include a Cross Liability endorsement.

Said Policy shall protect Contractor and District in the same manner as though a separate policy had been issued to each, but nothing in said policy shall operate to increase the insurance company's liability as set forth in its policy beyond the amount or amounts shown or to which the insurance company would have been liable if only one interest had been named as an insured.

2. Business Automobile Liability

Contractor shall, at its own cost and expense, procure and maintain Business Automobile Liability insurance providing bodily injury and property damage with a combined single limit of at least Two Million Dollars (\$2,000,000) per occurrence for all owned, non-owned and hired automobiles. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from general liability insurance.

3. Workers' Compensation and Employers' Liability Insurance

If Contractor employs any person to perform work in connection with this Contract, Contractor shall procure and maintain at all times during the performance of such work Workers' Compensation Insurance in conformance with the laws of the State of California, and Federal laws where applicable. Employers' Liability Insurance shall not be less than Five Million Dollars (\$5,000,000) for each accident and Five Million Dollars (\$5,000,000) for each disease, with a policy limit of Five Million Dollars (\$5,000,000).

The policy shall contain a waiver of subrogation in favor of the San Mateo County Harbor District and its officers, directors, employees, volunteers, and agents, while acting in such capacity, and their successors and assignees, as they now or as they may hereafter be constituted, singly, jointly, or severally.

4. Protection & Indemnity.

The Contractor shall provide Protection and Indemnity (including crew), Collision Liabilities and Vessel Pollution insurance covering all vessels, barges or other marine equipment that will be used in connection with this project. The limits of liability shall be not less than \$5,000,000.

5. General Insurance Requirements

1) Acceptable Insurance

All policies will be issued by insurers acceptable to the District. This insurance shall be issued by an insurance company or companies authorized to do business in the State of California with minimum "Best's" rating of A- and with minimum policyholder surplus of Fifty Million Dollars (\$50,000,000) or a company acceptable to District in its sole discretion. All policies shall be issued in a form satisfactory to the General Manager of the District and shall be issued specifically as primary insurance. Workers' Compensation coverage requirements may be met with the California State Compensation Fund.

2) Procure and Maintain Insurance

Contractor must, at its own cost and expense, procure and maintain at all times during the performance of this Contract, all of the required policies specified above. The failure to procure or maintain the required insurance policies and/or an adequately funded self-insurance program acceptable to the District will constitute a material breach of the Contract.

3) Terms of Policies

All insurance specified above shall remain in force until all work to be performed is satisfactorily completed. If the insurance is provided on a claims-made basis it must remain in force for the entire term of the Contract and a minimum of three (3) years thereafter.

4) Self-Insurance

Upon evidence of financial capacity satisfactory to the District and Contractor's agreement to waive subrogation against the District respecting any and all claims that may arise, the Contractor's obligations hereunder may be satisfied in whole or in part by adequately funded self-insurance.

5) Deductibles and Retentions

The Contractor shall be responsible for payment of any deductible or retention on the Contractor's policies without right of contribution from the District. Deductible and retention provisions shall not contain any restrictions as to how or by whom the deductible or retention is paid. Any deductible or retention provision limiting payment to the Named Insured is unacceptable.

In the event that the policy of the Contractor or any subcontractor contains a deductible or self-insured retention, and in the event that the District seeks coverage under such policy as an additional insured, the Contractor shall satisfy such deductible or self-insured retention to the extent of loss covered by such policy for a lawsuit arising from or connected with any alleged act or omission of the Contractor, subcontractor, or any of their officers, directors, employees, agents, or suppliers, even if the Contractor or subcontractor is not a named defendant in the lawsuit.

B. Evidence of Insurance and Endorsements

Prior to commencing of work or entering onto the District's property, Contractor shall file a Certificate of Insurance with the District evidencing the foregoing coverages, including the following endorsements:

- 1) The insurance company(ies) issuing such policy(ies) will provide at least thirty (30) days' notice to the District of cancellation or non-renewal.
- 2) That the policy(ies) is primary insurance and the insurance company(ies) providing such policy(ies) shall be liable thereunder for the full amount of any loss or claim that Contractor is liable for under this Section, up to and including the total limit of liability, without right of contribution from any other insurance maintained or which may be maintained by the San Mateo County Harbor District.
- 3) Such insurance shall include as additional insureds the San Mateo County Harbor District, and its respective directors, officers, employees, and agents while acting in such capacity, and their successors or assignees, as they now or as they may hereafter be constituted, singly, jointly, or severally.
- 4) The policy must also contain either a Cross Liability endorsement or Severability of Interests Clause and stipulate that inclusion of the District as an additional insured will not in any way affect the District's rights as respects any claim, demand, suit or judgment made, brought, or recovered against the Contractor. Said policy shall protect Contractor and the District in the same manner as though a separate policy had been issued to each, but nothing in said policy shall operate to increase the insurance company's liability as set forth in its policy beyond the amount or amounts shown or to which the insurance company would have been liable if only one interest had been named as an insured.

C. Consequence of Lapse

Should any required insurance not be procured or lapse during the term of this Contract, requests for payment originating after such lapse will not be processed until the District receives satisfactory evidence of reinstated coverage as required by the Contract. If insurance is not reinstated, the District, may, at its sole option, terminate this Contract effective on the date of such lapse of insurance.

SECTION 5. PUBLIC WORKS PROVISIONS

5.1 Labor Compliance Requirements

In the performance of this Contract, Contractor's attention is directed to the following requirements of the Labor Code:

- A. Hours of Labor. Eight hours labor constitutes a legal day's work. Contractor shall forfeit, as penalty to District, \$25 for each worker employed in the performance of the Contract by Contractor or by any subcontractor under it for each calendar day during which such worker is required or permitted to work more than eight hours in any one day and 40 hours in any one calendar week in violation of the provisions of the California Labor Code and in particular, Sections 1810 to 1815, inclusive. Work performed by employees of the Contractor in excess of eight hours per day and 40 hours during any one week shall be permitted upon compensation for all hours worked in excess of eight hours per day at not less than one-and-one-half times the basic rate of pay, as provided in Section 1815.
- B. Prevailing Wages. Contractor shall comply with California Labor Code Sections 1770 to 1780, inclusive. In accordance with Section 1775, the Contractor shall forfeit as a penalty to District an amount as determined by the Labor Commissioner not to exceed \$200 for each calendar day or portion thereof for each worker paid less than stipulated prevailing wage rates for such work or craft in which such worker is employed for any work done under the contract by him or by any subcontractor under it in violation of the revisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to said penalty and pursuant to Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by Contractor. Pursuant to the provisions of Section 1773 of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work applicable to the work to be done from the Director of the Department of Industrial Relations. Copies of the prevailing wage rates are on file at the District and are available for review upon request. Pursuant to §1773.2 of the Labor Code, the Contractor shall post general prevailing wage rates at a prominent place at the site of the work.
- C. Payroll Records. Contractor and each subcontractor shall submit electronic certified payroll records to the California Labor Commissioner in the manner and format set forth in California Labor Code section 1771.4.

The Contractor's attention is directed to the following provisions of Labor Code Section 1776. The Contractor shall be responsible for the compliance with these provisions by its subcontractors.

- (a) Each contractor and subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification,

straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work.

- (b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:
 - (i) A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - (ii) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to the District, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.
 - (iii) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Contractor, subcontractor and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.
- (c) Unless required to be furnished directly to the Labor Commissioner in accordance with Labor Code Section 1771.4(3)(b), the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division.
- (d) The Contractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested such records within ten (10) days after receipt of a written request.
- (e) Any copy of records made available for inspection as copies and furnished upon request to the public or the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor shall not be marked or obliterated.
- (f) The Contractor shall inform the District of the location of records

enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address. In the event of noncompliance with the requirements of this Section, the Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects such contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, the Contractor shall, as a penalty the State or the District, forfeit One-Hundred Dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The penalties specified in subdivision (g) of Labor Code Section 1776 for noncompliance with the provisions of said Section 1776 may be deducted from any monies due or which may become due to the Contractor.

(g) The Contractor and each subcontractor shall preserve their payroll records for a period of three (3) years from the date of completion of the Contract.

D. Labor Non-discrimination. Attention is directed to Section 1735 of the Labor Code which provides that Contractor shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status of any person, except as provided in Section 12940 of the Government Code. Contractor further agrees to include a similar provision in all subcontracts, except subcontracts for standard commercial supplies or raw materials.

E. Apprentices. The Contractor and all subcontractors shall comply with the requirements of California Labor Code sections 1777.5, 1777.6 and 1777.7 regarding the employment of apprentices.

5.2 **Prohibition Against Contracting with Debarred Subcontractors**

Contractor is prohibited from performing work on a public works project with a subcontractor who is ineligible to perform work on the public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

5.3 **Use of Subcontractors**

Contractor shall not subcontract any work to be performed by it under this Agreement without the prior written approval of the Agency. Contractor shall be solely responsible for reimbursing any subcontractors and the Agency shall have no obligation to them. Attention is directed to the requirements of Section 4100 to 4113, inclusive of the California Public Contract Code which may be applicable to the work covered by this section of the Agreement. Each Contractor shall list the name and business address of each subcontractor to whom the Contractor proposes to subcontract a portion of the work in an amount in

excess of one-half of one percent (0.5%) of the Total Contract Price, along with a description of the portion of the work which shall be done by each subcontractor, by executing the “List of Subcontractors” form attached to this Contract.

A. Prompt Payment to Subcontractors

Pursuant to Business and Professions Code Section 7108.5, the Contractor shall pay each first tier Subcontractor under this Contract for satisfactory performance of work under its subcontract no later than 7 days from the Contractor’s receipt of payment from the District for such work. The Contractor shall require each first tier Subcontractor to make payments to lower tier Subcontractors in a similar manner. The District shall have no obligation to pay or to verify the payment of money to any Subcontractor, except as may otherwise be required by law.

The Contractor, not the District, shall be solely responsible for payment to Subcontractors at any tier for any amounts owing from the Contractor. All such Subcontractors agree that they shall have no claim and shall take no action against the District or its officers, directors, employees or sureties, for non-payment by the Contractor.

5.4 Prompt Payment

The District will make progress payments within thirty (30) days after receipt of an undisputed and properly submitted progress payment invoice pursuant to Section 20104.50 of the Public Contract Code. No such payment will be made when, in the judgment of the Engineer, (a) the work is not proceeding in accordance with the provisions of the Contract; (b) the Contractor is not complying with the requirements of the Contract; or (c) when the total value of the work done as shown on the invoice does not exceed Three Hundred Dollars (\$300.00). No such invoice or payment will be construed to be an acceptance of any work or materials. Before any progress payment or the final payment is made, the Contractor may be required to submit satisfactory evidence that he is not delinquent in payments to its employees, subcontractors, suppliers or other creditors for labor and materials incorporated into the work. Pursuant to Public Contract Code Section 20104.50, if the District fails to make a progress payment in a timely manner, it shall pay interest to the Contractor at the legal rate set forth in Section 685.010(a) of the California Code of Civil Procedure.

5.5 Non-Collusion Declaration

Pursuant to Public Contract Code section 7106, Contractor shall execute a Non-Collusion Declaration, in a form provided by the Agency, which is attached and incorporated herein.

5.6 Third-Party Claims

Pursuant to Public Contracts Code Section 9201, the District shall have full authority to compromise or otherwise settle any claim relating to the Agreement at any time. The District will provide for timely notification to the Contractor of the receipt of any third-party claim, relating to the Agreement. Notice shall be in writing and will be provided

within thirty (30) days. The District shall be entitled to recover its reasonable costs incurred in providing such notification.

5.7 Claims Procedures

Compliance with all change order procedures is a prerequisite to filing a Public Contract Code Claim pursuant to this section. Claims must be submitted no later than (a) 30 days after change order procedures are complete and the Contractor has notified the General Manager in writing that the work is being performed, or that the determination direction is being complied with, under protest as per General Conditions 30 and 31 or (b) 30 days after the occurrence of the event giving rise to the claim.

In accordance with the procedures set forth in Public Contract Code sections 9204 and 20104-20104.6, a Contractor may submit a claim by registered or certified mail with return receipt requested, for one or more of the following: (a) a time extension, including, without limitation, for relief from damages or penalties for delay assessed by the District; (b) payment by the District of money or damages arising from work done by, or on behalf of, the Contractor pursuant to this contract and payment for which is not otherwise expressly provided or to which the Contractor is not otherwise entitled; or (c) payment of an amount that is disputed by the District.

The Contractor shall furnish reasonable documentation to support the claim, including but not limited to: 1) a clear, concise recital of the basis upon which the claim is asserted, including a designation of the provisions of the Contract Documents upon which the claim is based, 2) a statement as to the amount of time and/or compensation sought pursuant to the claim; 3) whether the Contractor's claim arises from an ongoing occurrence, and if so a description of the specific Work activities affected by the claim, 4) a time impact analysis in the event that Contractor requests a time extension, 5) full and complete cost records supporting the amount of any claim for additional compensation, and 6) a notarized certification by the Contractor as follows: "Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et seq., the undersigned hereby certifies that the information contained herein is a true, accurate and complete statement of all features relating to the claim asserted." Failure by the Contractor to provide sufficient documentation will result in denial of the claim. The District reserves the right to request additional documentation, or clarification of the documentation provided.

Upon receipt of a claim, the District will conduct a reasonable review and provide a written statement to the Contractor identifying what portion of the claim is disputed and what portion is undisputed within 45 days of receipt of the claim. The District and Contractor may, by mutual agreement, extend the 45day time period. For any undisputed portion of a claim, the District must make payment within 60 days of its issuance of the written statement.

If the Contractor disputes the District's written statement, or if the District fails to respond, the Contractor may demand an informal conference to meet and confer for settlement of the issues in dispute. The District will then schedule the meet and confer conference within 30 days of the demand. Within 10 business days following the meet and confer conference,

the District will provide a written statement identifying the portion of the claim that remain in dispute. Any payment due on an undisputed portion of the claim will be made within 60 days of the meet and confer conference.

After the meet and confer conference, any disputed portion of the claim shall be submitted to non-binding mediation. Alternatively, upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable. If mediation is unsuccessful, the parts of the claim that remain in dispute shall be subject to applicable procedures set forth below.

Failure of a public entity to respond to a claim within the time periods described above shall result in the claim being deemed rejected in its entirety. Additionally, amounts not paid in a timely manner shall bear interest at 7 percent per year.

In the event that the mediation is unsuccessful, Contractor must file a government claim pursuant to Government Code section 910 et seq. in order to initiate a civil action.

In any civil action filed to resolve claims, the court shall submit the matter to nonbinding mediation within 60 days following the filing or responsive pleading, provided that the parties have not already participated in mediation of the claim as outlined above. If the matter remains in dispute after nonbinding mediation, the court shall submit the matter to judicial arbitration pursuant to Code of Civil Procedure section 1141.10 et seq. If the matter remains in dispute after judicial arbitration, the District or the Contractor may request a trial de novo.

5.8 Contractor's License Requirements

Contractor and any approved subcontractors shall hold such current and valid Contractor's Licenses as required by California Law and as applicable for the work to be performed under this contract. **Contractor must hold a Class A Contractor License.** License must be valid and active at time of award or project.

5.9 Payment of Workers' Compensation

Contractor shall sign and file with the Agency the following certification prior to performing the work of the Agreement:

"I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Agreement."

5.10 Examination and Audit of Records

Pursuant to Government Code Section 8546.7, Contractor shall retain all project-related records for a period of 3 years after final payment on this Agreement, which shall be subject to audit or inspection by the Agency or the State Auditor during this period.

5.11 **Anti-Trust Claim Assignment**

Pursuant to Public Contract Code 7103.5, the contractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to this Contract. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by the parties.

5.12 **Utility Relocation**

If applicable, pursuant to California Government Code Section 4215, if during the course of the work the Contractor encounters utility installations which are not shown or indicated in the contract plans or in the specifications or which are found in a location substantially different from that shown, and such utilities are not reasonably apparent from visual examination of the work site, then it shall promptly notify the District in writing. Where necessary for the work of the Contract, the District will amend the contract to adjust the scope of work and the compensation to allow the Contractor to make such adjustment, rearrangement, repair, removal, alteration, or special handling of such utility, including repair of the damaged utility. If the Contractor fails to give the notice specified above and thereafter acts without instructions from the District, then it shall be liable for any or all damage to such utilities or other work of the Contract which arises from its operations subsequent to the discovery, and it shall repair and make good such damage at its own cost.

5.13 **Public Works Registration**

The Contractor must be registered with the California Department of Industrial Relations pursuant to Labor Code Section 1725.5. **BIDDERS MUST SUBMIT PROOF OF CONTRACTOR REGISTRATION WITH THE DIR IN THE FORM OF A HARD COPY OF THE RELEVANT PAGE OF THE DIR'S DATABASE FOUND AT: <https://efiling.dir.ca.gov/PWCR/Search>.**

This Contract is subject to monitoring and enforcement by the DIR pursuant to Labor Code Section 1771.4. The Contractor must post job site notices, as prescribed by regulation. The Contractor shall furnish the records specified in Labor Code Section 1776 directly to the Labor Commissioner, monthly in a format prescribed by the Labor Commissioner.

5.14 **Compliance with All Applicable Laws**

The Contractor shall comply with all the applicable requirements of federal, state and local laws, statutes, and ordinances relative to the execution of the Construction Work. In the event Contractor fails to comply with these requirements, the District may stop any Construction Work until such noncompliance is remedied. No part of the time lost due to any such cessation of the Construction Work shall be made the subject of a claim for an extension of time or increase in the compensation.

5.15 Permit Compliance

The Contractor shall comply with all the applicable requirements of federal, state and local permits relative to the execution of the Construction Work. In the event Contractor fails to comply with these requirements, the District may stop any Construction Work until such noncompliance is remedied. No part of the time lost due to any such cessation of the Construction Work shall be made the subject of a claim for an extension of time or increase in the compensation.

5.16 Iran Contracting Act

The undersigned Bidder certifies that it is not, at the time of bidding, on the California Department of General Services (DGS) list of persons determined to be engaged in investment activities in Iran or otherwise in violation of the Iran Contracting Act of 2010 (Public Contract Code Section 2200-2208).

5.17 Safety Requirements

The Contractor shall promptly and fully comply with and carry out, and shall without separate charge therefore to the District, enforce compliance with the safety and first aid requirements prescribed by applicable State and Federal laws and regulations, rules and orders and as may be necessary to ensure that all Construction Work shall be done in a safe manner and that the safety and health of the employees, agents and the people of local communities is safeguarded. Compliance with the provisions of this Section by subcontractors shall be the responsibility of the Contractor. All installed, dismantled, and removed material, equipment and facilities, without separate charge therefore to the District, shall fully conform with all applicable State and Federal safety laws, rules, regulations and orders and it shall be the Contractor's responsibility to furnish only such material, equipment and facilities.

5.18 Retention on Progress Payments

If the Contract utilizes progress payments, five percent (5%) will be deducted from each progress payment and held in retention by the District. The remainder less any other deductions taken in accordance with this article will be paid to the Contractor as progress payments. The Contractor acknowledges and agrees that, pursuant to Public Contract Code section 7200, the percentage of retention amounts withheld by the Contractor from its Subcontractors may not exceed the percentage withheld by the District from the Contractor as specified herein.

Contractor shall release retention to a Subcontractor within 30 days of the Subcontractor satisfactorily completing all required work. Upon satisfactory completion of a Subcontractor's work, including provision of appropriate releases, certificates, evidence of the Subcontractor's compliance with all applicable requirements of the Contract Documents, and all other documents as may be required by the Contractor and the District to close-out the subcontract, the Contractor may submit an application to the District for the release of the portion of the retention attributed to the Subcontractor's work. The Contractor's application shall certify that the Subcontractor has:

- a) Completed all work required to be performed under its subcontract;
- b) The amount withheld by the Contractor under the subcontract; and
- c) That the Subcontractor has provided all backup information, stop payment notice, and lien releases required to close-out the subcontract.

Within 7 days following receipt of payment from the District for the completed Subcontractor Work, the Contractor shall release all monies withheld as retention from the Subcontractor, even if the Work to be performed by the Contractor or other Subcontractors is not completed and has not been accepted. The Contractor shall, by appropriate agreement with each Subcontractor, require each first tier Subcontractor to make payments to lower tier subcontractors in a similar manner.

5.19 Release of Retention

Upon the District's issuance of Notice of Final Acceptance the District will release the amount retained.

5.20 Securities in Lieu of Retention

Pursuant to Public Contract Code Section 22300, the successful Bidder may submit Securities in lieu of retention payments by the District. Upon Contractor's request, the District will make payment of funds withheld from progress payments, pursuant to the requirements of California Public Contract Code Section 22300, if Contractor deposits in escrow with the District or with a bank acceptable to the District, securities eligible for investment under California Government Code Section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and the District, upon the following conditions:

- (1) Contractor shall bear the expenses of the District and the escrow agent in connection with the escrow deposit made.
- (2) Securities or certificates of deposit to be placed in escrow shall be of a value at least equivalent to the amounts of retention to be paid to Contractor pursuant to this article.
- (3) Contractor shall enter into an escrow agreement satisfactory to the District, which agreement shall be substantially similar to the form provided in California Public Contract Code Section 22300.
- (4) Contractor shall obtain the written consent of the surety to such agreement.

SECTION 6. HAZARDOUS CHEMICALS AND WASTES

For the purposes of this Section only, the term "claims" shall include (a) all notices, orders, directives, administrative, or judicial proceedings, fines, penalties, fees, or charges imposed by any governmental agency with jurisdiction, and (b) any claim, cause of action,

or administrative or judicial proceeding brought against the District, its directors, or employees, or for any loss, cost (including reasonable attorney's fees), damage, or liability, sustained or suffered by any person or entity, including the District. The Contractor shall bear full and exclusive responsibility for any release of hazardous or nonhazardous chemicals or substances during the course of performance of this Contract. The Contractor shall immediately report any such release to the District. The Contractor shall be solely responsible for all claims and expenses associated with the response to, removal and remediation of the release, including, without limit, payment of any fines or penalties levied against the District by any agency as a result of such release and shall hold harmless, indemnify, and defend the District from any claims arising from such release.

If the performance of the work outlined by these Contract specifications creates any hazardous wastes, those wastes shall be properly disposed of according to federal, state, and local laws, at the expense of the Contractor. The Contractor shall dispose of the wastes under its own EPA generator number. In no event shall the District be identified as the generator. The Contractor shall notify the District of any such hazardous wastes and the District reserves the right to a copy of any test conducted on the wastes and, at its cost, to perform additional tests or examine those wastes, prior to disposition. The Contractor shall hold harmless, indemnify, and defend the District from any claims arising from the disposal of the hazardous wastes, regardless of the absence of negligence or other malfeasance by the Contractor.

SAN MATEO COUNTY HARBOR DISTRICT



Contract No. 2024-04

Oyster Point Marina West Basin Access Improvements

TECHNICAL SPECIFICATIONS

SAN MATEO COUNTY HARBOR DISTRICT



OYSTER POINT MARINA WEST BASIN ACCESS IMPROVEMENTS

SOUTH SAN FRANCISCO, CALIFORNIA

TECHNICAL SPECIFICATIONS 100% SUBMITTAL



moffatt & nichol

APRIL 2024

M&N FILE NO. 9673-13

TECHNICAL SPECIFICATIONS

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DIVISION 01 GENERAL REQUIREMENTS

SECTION 010000
SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Project Information
2. Work Covered by Contract Documents
3. Hours of Work, Notifications, and Work Restrictions
4. Permits and Environmental Protection

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. Work consists of the following:

1. Demolition and removal of the existing concrete access piers in the West Basin of Oyster Point Marina that serve Docks 1/2, 3/4, and 5/6.
2. Construction of three pile-supported dock access platforms to serve Docks 1/2, 3/4, and 5/6, including aluminum gangways and ramps.
3. Construction of three landing floats for supporting aluminum gangways serving Docks 1/2, 3/4, and 5/6.
4. Demolition and removal of existing water, electrical, and communication utilities installed on the existing access piers and gangways.
5. Installation of temporary potable water, fire water, electrical, and communication utilities to maintain dock utility service until permanent lines are installed. A temporary access float shall be furnished and installed between Docks 2 and 3 during construction to maintain access to Docks 1/2.
6. Construction of new potable water, fire water, electrical, and communication utilities between the existing landside utility points of connection and existing dockside utility points of connection.

B. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work.

C. Quality Assurance Testing: The Contractor shall perform all quality assurance sampling and testing as specified. Testing shall be performed by an Independent Testing Laboratory (ITL) selected by the Contractor and approved by the District. Submit company contact information, names of personnel to perform quality assurance testing, and proof of Certifications for the quality assurance tests to be performed.

1.3 PERMITS

- A. Permits for the project applied for by the District have been issued by the following regulatory agencies:
 - 1. U.S. Army Corps of Engineers (Corps) – Nationwide Permit, File SPN-2012-00151S.
 - a. U.S. Fish and Wildlife Service – Letter of Concurrence, File 2022-00060157-S7-001.
 - b. National Marine Fisheries Service – Letter of Concurrence, File No. WCRO-2022-01599.
 - 2. San Francisco Bay Regional Water Quality Control Board (RWQCB) – Section 401 Water Quality Certification and Order, WDID No. 2 CW447801.
 - 3. Bay Conservation and Development Commission (BCDC) – Permit No. 1977.001.19.

1.4 HOURS OF WORK NOTIFICATIONS AND WORK RESTRICTIONS

- A. A minimum of fourteen (14) days prior to starting construction, the District will notify tenants and occupants of the affected docks, of the proposed construction and its schedule.
- B. Construction activity, except for emergency situations, shall be confined to the hours 7:00 a.m. through 7:00 p.m. on Monday through Friday. Contractor may request an alternate schedule with at least seventy-two (72) hours prior notification to the District. Construction will not be allowed on Sundays or holidays.
- C. Contractor shall have limited use of project site for construction. Public access at all other docks of Oyster Point Marina shall remain open and not obstructed by Contractor operation. Existing structures affected by construction operations shall be maintained in a safe condition throughout the construction period and any damage caused by construction operations shall be repaired by Contractor at no additional cost to the District.
- D. Contractor shall not interrupt utilities serving facilities occupied by District or others. Obtain Districts' written permission before proceeding with disruptive operations.

1.5 PERMITS AND ENVIRONMENTAL PROTECTION

- A. The specification of specific permits applying to the Work shall not limit or restrict the obligation of the Contractor in the performance of the Work to comply with any and all other laws, regulations or permits which are described in the Contract Documents or which apply to the performance of the Work.
- B. Changes in Permit Conditions: Contractor acknowledges that the Work includes services not provided under specific Bid Items that are reasonably necessary to comply with permit conditions. In the event that an additional permit necessary for the performance of the Work is issued, or an existing permit is modified, after the Bid Submission date, the Contractor recognizes the terms, conditions and requirements of such permit or modification may require the Contractor to perform services or to

provide services or to provide materials which are different from the Work contained in the Contract Documents. In such event, the Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Terms unless such change in the Work materially differs from the Work in the Contract Documents and such change could not be reasonably expected by the Contractor given the ordinarily encountered and generally recognized implementation of similar permits. Contractor shall be responsible for its cost of evaluating the implications for the Work of the terms, conditions and restrictions of the permits, and of responding to any Requests for Proposals or Field Changes of the District which are issued in connection with the issuance of the permit(s).

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 011000

DEFINITION OF BID ITEMS

PART 1 - GENERAL

The intent of this section is to clarify, in general, what is and what is not included in a bid item, and the limits or cut-off points where one bid item ends and another begins. If no bid item exists for a portion of the work, include the costs in a related bid item. Measurement and Payment for all items of work shall be done in accordance with Section 012000 "Measurement and Payment." The lump sum or unit price for each item shall be full compensation for all labor, materials, equipment, tools, and incidentals to complete each bid item.

1.1 BID ITEM NO. 1 – MOBILIZATION, DEMOBILIZATION, BONDS & INSURANCE

- A. This bid item consists of mobilization and demobilization in accordance with the State of California Department of Transportation (Caltrans) Standard Specifications. This bid item includes mobilization of equipment, materials, and personnel; temporary facilities; temporary fencing; preparation of submittals; and demobilization.
- B. Unit of Payment: Lump Sum (LS)

1.2 BID ITEM NO. 2 – DEMOLITION

- A. This bid item consists of demolition and removal of three (3) West Basin access pier structures, including the concrete structure, timber railing and structures, concrete piles, aluminum gangway, and disposal of demolished materials, in accordance with Specification Section 024000 "Demolition." This bid item also includes furnishing, deploying, maintaining, and removing a debris containment system in accordance with Specification Section 024000 "Demolition."
- B. Unit of Payment: Lump Sum (LS)

1.3 BID ITEM NO. 3 – TEMPORARY FACILITIES

- A. This bid item includes furnishing and installing a temporary access float system between Dock 2 and Dock 3, and providing temporary utilities (potable water, fire water, and electrical) to maintain utility service at the docks during construction. This bid item shall also include all temporary work areas (temporary gravel crane pads) that may be required (at Contractor's option) to perform the work for demolition, pile driving, and access pier construction.
- B. Unit of Payment: Lump Sum (LS)

1.4 BID ITEM NO. 4 – GANGWAY LANDING FLOATS

- A. This bid item consists of furnishing and installing a floating dock system to support the new gangways, complete in place as shown on the Drawings, and in accordance with Specification Section 024800 “Gangway Landing Floats.” This bid item includes floats, dock bumpers, hardware, and all work required to construct the floating gangway support docks complete and in place.
- B. Unit of Payment: Each (EA)

1.5 BID ITEM NO. 5 – ACCESS PLATFORMS

- A. This bid item consists of all work related to constructing the concrete access platforms including all work related to the precast concrete and cast-in-place concrete elements of the access platforms shown on the Drawings and in accordance with Specification Section 033000 “Structural Concrete.” This bid item includes designing, casting, curing, transport and delivery, and installation of precast concrete elements, and all work required to complete the precast concrete portions of the access platform. This bid item also includes falsework, formwork, reinforcing steel, dowels, concrete infill for piles, embedments, placing concrete, finishing, and curing concrete, and all work required to construct the cast-in-place concrete portions of the access platform.
- B. Unit of Payment: Each (EA)

1.6 BID ITEM NO. 6 – RAMP ABUTMENTS

- A. This bid item consists of all work related to cast-in-place concrete ramp abutments shown on the Drawings and in accordance with Specification Section 033000 “Structural Concrete.” This bid item includes excavation, subgrade preparation, fiberglass reinforced polymer pipe foundation pins, formwork, reinforcing steel, placing concrete, finishing, and curing concrete, and all work required to construct the cast-in-place concrete ramp abutments.
- B. Unit of Payment: Each (EA)

1.7 BID ITEM NO. 7 – STEEL PIPE PILES

- A. This bid item consists of furnishing and installing steel pipe piles for the Access Platforms, including but not limited to steel pipe pile, pile coating, HDPE sleeve, filler, and sealant, complete in place as shown on the Drawings, and in accordance with Specification Section 316216 “Steel Pipe Piles.”
- B. Unit of Payment: Each (EA)

1.8 BID ITEM NO. 8 – ALUMINUM GANGWAYS

- A. This bid item consists of furnishing and installing aluminum gangways complete in place, including access platform and gangway lighting fixtures, as shown on the Drawings and in accordance with Specification Section 055100 “Aluminum Fabrications.”
- B. Unit of Payment: Square Foot (SF)

1.9 BID ITEM NO. 9 – ALUMINUM RAMPS

- A. This bid item consists of furnishing and installing aluminum ramps complete in place, including access platform and gangway lighting fixtures, as shown on the Drawings and in accordance with Specification Section 055100 “Aluminum Fabrications.”
- B. Unit of Payment: Square Foot (SF)

1.10 BID ITEM NO. 10 – SECURITY GATES

- A. This bid item consists of designing, fabricating, furnishing, and installing security gates, including proximity reader access system and lighting fixtures, at the access platforms as shown on the Drawings and in accordance with Specification Section 055100 “Aluminum Fabrications.”
- B. Unit of Payment: Each (EA)

1.11 BID ITEM NO. 11 – GUARDRAILS

- A. This bid item consists of installing guardrails and hardware at the access platforms as shown on the Drawings and in accordance with Specification Section 064000 “Plastic Lumber.”
- B. Unit of Payment: Linear Foot (LF)

1.12 BID ITEM NO. 12 – ELECTRICAL SYSTEM

- A. This bid item consists of installing the electrical system under the access platforms, ramps, and gangways, connecting to the existing electrical systems on land and on the existing docks, and providing service to the access platform & gangway lighting system, complete in place as shown on the Drawings and in accordance with Specification Section 260000 “General Electrical Provisions,” Section 260513 “Electrical System Cables and Conductors,” Section 260526 “Electrical System Grounding and Bonding,” and Section 260544 “General Conduit.”
- B. Unit of Payment: Lump Sum (LS)

1.13 BID ITEM NO. 13 – POTABLE WATER SYSTEM

- A. This bid item consists of installing a potable water system under the access platforms, ramps, and gangways, and connecting to the existing water system on land and on the existing docks, including piping, flexible connections, pipe hanger system (trapeze support system and seismic braces), water meters, and backflow preventers, complete in place as shown on the Drawings and in accordance with Specification Section 331000 “Water System.”
- B. Unit of Payment: Lump Sum (LS)

1.14 BID ITEM NO. 14 – FIRE WATER SYSTEM

- A. This bid item consists of installing a fire protection water system under the access platforms, ramps, and gangways, and connecting to the existing fire water system on land and on the existing docks, including piping, flexible connections, pipe hanger system (trapeze support system and seismic braces), backflow preventers, and fire department connections, complete in place as shown on the Drawings and in accordance with Specification Section 211000 “Fire Protection.”
- B. Unit of Payment: Lump Sum (LS)

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 012000

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section describes requirements and procedures for determining amount of work performed and for obtaining payment for work performed. This Contract included Work covered by both lump sum and unit prices.

1.2 DETERMINATION OF QUANTITIES

- A. Quantity of the work to be paid for under any item for which a unit price is fixed in the Contract Documents shall be the number, as determined by the District, of units of work satisfactorily completed in accordance with Contract Documents or as directed by the District. Unless otherwise provided, determination of number of units of work so completed will be based, so far as practicable, on actual measurement or count within prescribed or ordered limits, and no payment will be made for work done outside of limits. Measurements and computations will be made by methods as the District may consider appropriate for class of work measured. Contractor shall immediately inform the District of any disputes regarding quantity measurements, and shall immediately supply the District with any documentation supporting such disputed measurements.
- B. For material specified to be paid for by the linear foot, the unit shall be measured on a horizontal plane.
- C. For material specified to be paid for by the square foot or square yard, the unit shall be measured on the horizontal plane surface area.
- D. For material specified to be paid for by each, the unit shall be measured by number of individual units.
- E. Material specified to be measured and paid for by volume will be inspected, estimated and recorded by the District for comparison with quantities submitted with requests for payment.

1.3 SCOPE OF PAYMENT

- A. Payment to the Contractor at the unit price or other price fixed in the Contract for performing the Work required under any item, or at the lump sum price fixed in the Contract for performing all work required under the Contract Documents, and as either may be adjusted pursuant to any approved Change Order, shall be full compensation for completing, in accordance with the Contract Documents, all Work required under the item or under the Contract Documents, and for all expense incurred by the Contractor for any purpose in connection with the performance and completion of said Work, including all incidental work necessary for completion of the Work.

- B. The Contract Sum, which includes both lump sum and unit price, shall be deemed to include all costs necessary to complete the required Work, individual Work item or unit price item, and shall also include any costs for loss or damage arising from nature of Work or, prosecution of the Work, or from action of elements. Unless the Contract Documents expressly provide otherwise, the Contract Sum and each individual bid item and unit price item, respectively, shall be deemed to include:
1. Any and all costs which may arise from any unforeseen difficulties encountered during, and all risks of any description connected with, prosecution of work, bid item or unit price item, respectively, until acceptance by the District;
 2. All expenses which may be incurred due to suspension, or discontinuance of Work, bid item or unit price item, respectively, as provided in the Contract Documents;
 3. Escalation to allow for cost increases between time of Contract Award and completion of Work, bid item or unit price item, respectively.
- C. Whenever it is specified herein that the Contractor is to do work or furnish materials of any class for which no price is fixed in the Contract Documents, it shall be understood that the Contractor is to do such work or furnish such materials without extra charge or allowance or direct payment of any sort, and that cost of doing work or furnishing materials is to be included in price bid, unless it is expressly specified herein, in particular cases, that work or material is to be paid for as extra work.
- D. No payment shall be made for materials or equipment not yet incorporated into the Work.
- E. For the materials and equipment referenced as subject to payment prior to incorporation into the Work, where the Contractor requests payment on the basis of such materials and equipment not incorporated in the Work, the Contractor must satisfy the following conditions:
1. The materials and/or equipment shall be delivered and suitably stored at the site or at another local location agreed to in writing, for example, a mutually acceptable warehouse;
 2. Full title to the materials and/or equipment shall vest in the District at the time of delivery to the site, warehouse or other storage location;
 3. Stockpiled materials and/or equipment shall be available for the District's inspection, but the District shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve the Contractor of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to specifically identify this specific Contract Documents;
 4. After delivery of materials and/or equipment, if any inherent or acquired defects are discovered, defective materials and/or equipment shall be removed and replaced with suitable materials and/or equipment at the Contractor's expense;
 5. At its expense, the Contractor shall insure the materials and/or equipment against theft, fire, vandalism, and malicious mischief, as well as any other coverage's required under the Contract Documents;
 6. The Contractor's application for payment shall be accompanied by a bill of sale, invoice or other documentation warranting that the District has received the materials and equipment free and clear of all liens and evidence that the materials

and equipment are covered by appropriate property insurance and other arrangements to protect the District's interest therein, all of which must be satisfactory to the District. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop notices from all those providing materials and equipment as to which the application for payment relates, as well as unconditional releases of the same from the same as to the previous applications for payment for which they have not already been provided.

1.4 BASIS OF PAYMENT

- A. Unit Pay Quantities: When estimated quantity for specific portions of Work is listed in Bid Form, Quantity of work to be paid for shall be actual number of units satisfactorily completed in accordance with Contract Documents.
- B. Lump Sum: When estimated quantity for specific portion of Work is not indicated and unit is designated as Lump Sum, payment will be on a Lump sum basis for Work satisfactorily completed in accordance with Contract Documents.
- C. The District does not expressly, or by implication, agree, warrant, or represent in any manner, that actual amount of Work will correspond with amount shown or estimated and reserves right to increase or decrease amount of any class or portion of Work, to leave out entire Bid Item or Items, or to add Work not included in Bid, when in its judgment such change is in best interest of the District. No change in work shall be considered waiver of any other condition of the Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatever, except as otherwise expressly provided for in the Contract Documents, because of any differences between amount of Work actually done and estimated amount as set forth herein, or for elimination of extra Bid Items.
- D. Notwithstanding the above provisions, the unit prices set forth in the Bid Form shall be utilized where they are applicable. If the Contract Change Order increases or decreases the quantity of an item of work by more than twenty-five percent (25%), such that the application of unit prices in the Bid will cause substantial inequity of the District or Contractor, unit prices will be adjusted as follows:
 - 1. Increases of More Than 25 Percent. If the total pay quantity of work required under the Contract exceeds the estimated quantity set forth in the Bid therefore by more than 25 percent, no adjustment in unit price will be made unless the District or the Contractor so requests in writing not later than fifteen (15) days after substantial completion of the subject item of work. Such adjustment of the unit price will be the difference between the contract unit price and the actual unit cost of the total pay quantity of the item. If the costs applicable to such item of work include fixed costs, such fixed costs will be deemed to have been recovered by the Contractor by the payments made for 125 percent of the estimated quantity set forth in the Bid for such item, and in computing the actual unit cost, such fixed costs will be excluded.
 - 2. Decreases of More Than 25 Percent. If the total pay quantity of any item of work required under the Contract is less than 75 percent of the estimated quantity set forth in the Bid therefore, but the item of work is not entirely eliminated, an adjustment in unit price pursuant to this paragraph will not be made unless the Contractor so requests in writing not later than fifteen (15) days after substantial completion of the subject item of work. Such adjustment of the contract unit price

will be the difference between the contract unit price and the actual unit cost. The payment for the total pay quantity of such item of work shall in no case exceed the payment which would be made for the performance of 75 percent of the estimated quantity set forth in the Bid for such item at the contract unit price.

1.5 PROGRESS PAYMENTS

A. If requested by the Contractor, progress payments will be made monthly.

B. Payment Requests

1. Unless otherwise agreed, Contractor shall submit to the District, on or before the fifth (5th) day of each month, electronic (pdf) copy or five (5) hardcopies of a request for payment for the cost of the Work put in place during the period from the 1st day of the previous month to the 30th day of the previous month. If the Contractor is late submitting its payment request, that payment request may be processed at any time during the succeeding one-month period, resulting in processing of the Contractor's payment request being delayed for more than a day-for-day basis.
2. Payment requests may include, but are not necessarily limited to the following:
 - a. Material, equipment and labor incorporated into the Work, less any previous payments for the same;
 - b. Up to seventy-five percent (75%) of the actual cost (not bid cost) of major equipment if purchased and delivered to the site or stored off site, as may be approved by the District.
 - c. Up to fifty percent (50%) of the actual cost (not bid cost) of materials specifically fabricated for the Project that are not yet incorporated into the Work, provided such materials are located on the Site.
3. The Contractor shall, at the time any payment request is submitted, certify in writing the accuracy of the payment request.
4. No progress payment will be processed prior to the District receiving all requested, acceptable schedule update information. No progress payment will be made unless Project Record Documents are being kept up to date.
5. Each payment request shall list each Change Order executed prior to date of submission, including the Change Order Number, and a description of the Work activities, consistent with the descriptions of original Work activities. The Contractor shall submit a monthly Change Order status log to the District.
6. If the District requires substantiating data, the Contractor shall submit information requested by the District, with cover letter identifying Project, payment request number and date, and detailed list of enclosures. The Contractor shall submit one copy of substantiating data and cover letter for each copy payment request submitted.
7. The Contractor shall promptly pay each Subcontractor or Subconsultant the amount to which such Subcontractor or Subconsultant is entitled, and shall, by an appropriate agreement with each Subcontractor or Subconsultant, require each Subcontractor or Subconsultant to make payments to its Sub-subcontractors or Sub-subconsultants in a similar manner. The Contractor shall submit on its behalf

and on behalf of each Subcontractor or Consultant for which payment is being requested a conditional release of mechanics' lien in statutory form for the Work which is the subject of each progress payment request and an unconditional release of mechanics' lien in statutory form for the immediately preceding progress payment as to the Work of each.

C. Progress Payments

1. Upon receiving the Contractor's payment request, the District will review the payment request and make necessary adjustments to percent of completion of each activity. One copy (electronic/pdf or hardcopy) will be returned to the Contractor with description of adjustments made. All parties will update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.
2. The payment request may be reviewed by the District and/or inspectors, for the purpose of determining that the payment request is a proper payment request, and shall be rejected, revised or approved by the District pursuant to the cost breakdown prepared in accordance with this Section.
3. If it is determined that the payment request is not a proper payment request suitable for payment, the District shall return it to the Contractor as soon as practicable, but no later than five (5) days after receipt, together with a document setting forth in writing the reasons why the payment request is not proper. If the District determines that portions of the payment request is not proper or not due under the Contract Documents, then the District may approve the other portions of the payment request, and in the case of disputed item or defective work not remedied, may withhold up to 150% of the disputed amount from the progress payment.
4. As soon as practicable after approval of each request for progress payment, the District will pay to the Contractor in manner provided by law, an amount equal to ninety percent (90%) of the District's estimate, or a lesser amount if so provided in Contract Documents, provided that payments may at any time be withheld if, in judgment of the District, Work is not proceeding in accordance with the Contract Documents, or the Contractor is not complying with requirements of the Contract Documents, or to comply with stop notices or to offset liquidated damages accruing or expected.
5. Retention will not be reduced if the Contractor, in opinion of the District is behind schedule.
6. Before any progress payment or final payment is made, the Contractor may be required to submit satisfactory evidence that the Contractor is not delinquent in payments to employees, subcontractors, suppliers, or creditors for labor and materials incorporated into Work.
7. Progress payment for the mobilization and demobilization of the Contractor under Bid Item for mobilization and demobilization will be paid under Section 01500 "Mobilization and Demobilization."

1.6 FINAL PAYMENT

- A. As soon as practicable after all required Work is completed in accordance with the Contract Documents, including the Contractor's maintenance after Final Acceptance,

the District will pay to the Contractor, in manner provided by law, unpaid balance of contract price of Work, or whole contract price of Work if no progress payment has been made, determined in accordance with terms of the Contract Documents, less sums as may be lawfully retained under any provisions of the Contract Documents or by law.

- B. Prior progress payments shall be subjected to correction in the final payment. The District's determination of amount due as final payment shall be final and conclusive evidence of amount of Work performed by the Contractor under the Contract Documents, and shall be full measure of compensation to be received by the Contractor.
- C. The 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, Agreement and Release of Any and All Claims, discharging the District, its officers, agents, employees and consultants of and from liabilities, obligations, and claims arising under the Contract Documents.

END OF SECTION

SECTION 013300

SUBMITTALS

PART 1 - GENERAL

1.1 SUMMARY

- A. This section Includes:
 - 1. Definitions.
 - 2. Procedures.
 - 3. Schedule of Submittals.
 - 4. Shop Drawings, Product Data and Samples.
 - 5. Contract Closeout Submittals.

1.2 DEFINITIONS

- A. "Fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements.
- B. "Field sample" is a sample at the project site to demonstrate the final technique, finish, and construction quality by which the Work will be judged.
- C. "Manufactured" applies to standard units usually mass-produced.
- D. "Manufacturer's Instructions" shall mean the manufacturer's written instructions on the use or application of the product under conditions similar to those at the job site.
- E. "Samples" are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- F. "Shop drawings" are drawings, diagrams, schedules and other data specially prepared for the Work by Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some Portion of the Work.
- G. "Product data" are illustrations, specifications, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by Contractor to illustrate materials or equipment for some Portion of the Work.
- H. "Work description" is a detailed description of the means, methods, tools, equipment, materials, sequence, and any other pertinent information about performance of work.

1.3 PROCEDURES

- A. Deliver submittals to the District.
- B. Transmit each item under the following format:

1. Identify Project, Contractor, Subcontractor, Major Supplier.
 2. Identify pertinent Drawing sheet and detail number and Specification Section number, as appropriate.
 3. Identify deviations from Contract Documents. Note on transmittal any deviation from Contract Documents.
 4. Provide space for Contractor and District review stamps.
- C. Submit initial progress schedules and schedule of values in duplicate within 15 days after award of Contract.
- D. The District will review Contractor's submittals only for general conformance with the design concept of the Project and general compliance with the requirements of the Contract Documents. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of Contractor as required by the Contract Documents.
- E. The District's review of Contractor's submittals shall not relieve Contractor of the obligations to comply with the requirements of the Contract Documents. The District's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences or procedures. The District's acceptance of a specific item shall not indicate acceptance of an assembly of which the item is a component.
- F. After District's review of submittals, revise and resubmit as required identifying changes made since previous submittal.
- G. Distribute required number of copies of reviewed submittals to designated and concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
- H. Partial submittals will not be reviewed or returned. Make submittals in groups containing all associated items as complete packages of information for review. The District will reject partial submittals.
1. Provide submittal package in electronic (pdf) format.
 2. The District reserves the right to withhold action on submittals requiring coordination with other submittals until related submittals are furnished.
- I. No Portion of the Work requiring submission of a shop drawing, product data, or sample shall commence until the submittal has been reviewed and accepted by the District. All such Portions of the Work shall be executed in accordance with accepted submittals.
1. No Portion of the Work requiring submission of work description, transporter qualification or field sample shall be deemed complete until the submittal has been reviewed and accepted. All such Portions of the Work shall be executed in accordance with accepted submittals.

- J. If the submittal shows any variation from the Contract requirements because of standard shop practice or other reasons, Contractor shall make specific mention of each variation in its submittal.
- K. Submit adequate quantities required for review. No submittal will be processed unless the specified quantities are furnished.
- L. No change shall be made by Contractor in any submittal after it has been accepted by the District.

1.4 SCHEDULE OF SUBMITTALS

- A. Within ten (10) days after award of contract, Contractor shall prepare and submit a schedule of submittals which is coordinated with the Contractor's construction schedule. District shall have a reasonable length of time to review shop drawings and submittals as deemed necessary by the District's professional judgment, not to exceed fifteen (15) working day or (21 calendar days).

1.5 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. General:

1. Make all submittals ten (10) days prior to usage of drawing, product data and samples.
2. Commence no Portion of the Work requiring these submittals until the District has reviewed the submittals. All such Portions of the Work shall be in accordance with reviewed submittals.
3. Submittals are not Contract Documents, but are only instruments of convenience to further the progress of the work.
4. Contractor:
 - a. Solely responsible for all quantities of materials or equipment required to properly complete the work according to the Contract Documents, notwithstanding any information contained in the submittals.
 - b. Submittal represents that all materials, field measurements and related field construction criteria have been reviewed and verified and that information contained within the submittals meet the requirements of the Work and Contract Documents. Underline in red any changes or deviations from the Contract Documents.
5. District 's review: Does not relieve Contractor from responsibility for errors or omissions in the submittals.

B. Submittal Requirements:

1. Shop Drawings: For each drawing, submit one (1) electronic (pdf) copy or five (5) printed hardcopies. District will provide electronic (pdf) mark-ups or hardcopy markups and return to Contractor.
2. Product Data: Typically submit 1) electronic (pdf) copy or five (5) printed hardcopies unless the specific specification section requires more. District will provide electronic (pdf) mark-ups or hardcopy markups and return to Contractor.

3. Samples: Submit the number of samples specified in each of the Specification Sections. Where specific requirements are not given, submit samples in duplicate.
4. Bind shop drawings and product data in sets.
5. Submittals shall include:
 - a. Date and revision dates.
 - b. Project title and number.
 - c. The names of:
 - 1) Contractor and Subcontractor, if applicable
 - 2) Supplier
 - 3) Manufacturer
 - 4) Contractor's Detailer or Engineer, if applicable
 - 5) Identification of product material
 - 6) Field dimension, clearly identified as such
 - 7) Drawing sheet and detail, if applicable
 - 8) Specification Section number and paragraph
 - 9) Applicable standards, such as ASTM number
 - d. A blank 4" x 5" space for the District's stamp.
 - e. Identification of deviations from the Contract Documents.
 - f. Contractor's stamp, signed, verifying review of submittal, field measurements where applicable, and compliance with Contract Documents.

C. Shop Drawings:

1. Drawings, diagrams, schedules and other data prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor shall illustrate the Work.
2. Identify details on shop drawings by reference to sheet and detail numbers of Contract Drawings and/or specific reference to Sections and Paragraphs of the Specifications.
3. Shop drawings shall establish the actual detail of manufactured or fabricated items, indicate proper relation to adjoining Work, and amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure.

D. Product Data: Submitted information to include the following:

1. Illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some Portion of the Work.
2. Modify standard schematic drawings to delete information that is not applicable and supplement to provide additional information where required, or as requested.
3. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data shall:

- a. Have each copy marked to identify pertinent materials, products, models, finishes, etc.
- b. Show clearly all standard options included.
- c. Show dimensions and clearances required.
- d. Show performance characteristics and capabilities.
- e. Show wiring diagrams and controls and necessary rough-in requirements for utility services and connections (where applicable).

E. Samples:

1. Submit samples reports to illustrate characteristics of materials.
2. Include identification on each sample giving full information.

1.6 PROGRESS REPORTS

- A. Submitted by Contractor concurrently with requests for progress payments.

1.7 CONTRACT CLOSEOUT SUBMITTALS

- A. Submit the following at end of job:

1. Certificate of Occupancy and/or Inspection.
2. Project Record Documents.
3. Warranties and Bonds.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

END OF SECTION

SECTION 014100
REGULATORY REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. This section describes requirements respecting certain federal, state, and regional governmental agencies who have jurisdiction over portions of the Work and who have issued permits prior to the performance of the Work which is in the jurisdiction of such governmental agency. The specific referencing of such permits shall not limit or restrict the obligation of the Contractor to comply with the conditions of all permits affecting the Work, as set forth in the General Conditions.

1.2 PERMITS FROM GOVERNING AGENCIES

- A. Refer to Specifications Section 010000 "Summary of Work". The Contractor shall fully inform itself of and comply with all rules, regulations, and special conditions in the Permits.

1.3 REFERENCES TO REGULATORY REQUIREMENTS

- A. Codes, laws, ordinances, rules, and regulations referred to shall have full force and effect as though printed in full in these specifications. Codes, laws, ordinances, rules and regulations are not furnished to the Contractor because the Contractor is assumed to be familiar with their requirements. The listing herein of applicable codes, laws, and regulations for hazardous waste abatement work is supplied to the Contractor as a courtesy and shall not limit the Contractor's responsibility for complying with all applicable laws, regulations or ordinances having application to the Work. Where conflict among the requirements exists, the most stringent requirements shall be used.
- B. Conform to referenced codes, laws, ordinances, rules, and regulations.
- C. Precedence:
 - 1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
 - 2. Where the Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, the Plans and Specifications shall take precedence so long as such increase is legal.
 - 3. Where no requirements are identified in the Plans or Specifications, comply with all requirements of applicable codes, ordinances and standards of governing authorities having jurisdiction.

1.4 LAWS, ORDINANCES, RULES, AND REGULATIONS

- A. During prosecution of Work, comply with applicable laws, ordinances, rules, and regulations, including, but not limit to Federal, State of California, and Regional and Local Agencies.

B. Other Applicable Laws, Ordinance and Regulations:

1. Work shall be accomplished in conformance with all rules and regulations of public utilities and utility districts.
2. Where such laws, ordinances rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur after the execution date of the Agreement.

1.5 CONFLICTS

- A. Between referenced regulatory requirements: Comply with the one establishing the more stringent requirement.
- B. Between referenced regulatory requirements and the Contract Documents: Comply with the one establishing the more stringent requirement and in accordance with the General Conditions.

1.6 SUBMITTALS

- A. Submit all regulatory items as required in the Contract Documents.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 017113
MOBILIZATION AND DEMOBILIZATION

PART 1 GENERAL

1.1 SUMMARY

A. This section covers the contract item Mobilization and Demobilization.

1.2 RELATED SECTIONS

A. Supplementary General Conditions, General Conditions, Division 1 sections, and Drawings apply to this section.

1.3 DEFINITIONS

A. Mobilization and Demobilization: The contract item Mobilization and Demobilization includes:

1. Transporting to the work site and setting up the equipment required for the performance of the work.
2. Removing from the work site surplus and waste materials, as well as the equipment mobilized in Paragraph 1.3 A.1.

1.4 SUBMITTALS

A. Submit a list of equipment to be included in the mobilization and demobilization process.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.1 MOBILIZATION AND DEMOBILIZATION

- A. Notify the District a minimum of seven (7) calendar days prior to mobilization or demobilization for the project.
- B. The equipment shall be complete with accessories and support materials. The equipment shall be completely functional and in good working order.
- C. The mobilization portion of the contract item will be 80 percent of the total item for the purposes of payment calculation.
- D. The demobilization portion of the contract item will not be paid until the contract work has been completed and equipment has been removed from the work site. The demobilization portion of the contract item will be 20 percent of the total item for the purposes of payment calculation.

END OF SECTION

DIVISIONS 02 – 14
FACILITY CONSTRUCTION

SECTION 024000

DEMOLITION

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Removal and disposal of the existing metal gangways and ramps, concrete structures, and concrete access piers, including miscellaneous concrete slabs, railings, footings, and foundations, as shown on the Drawings and as specified herein.
- B. Disposal of materials resulting from demolition shall be the Contractor's responsibility. Materials shall be disposed of at an off-site disposal site in accordance with the approved Demolition Plan.
- C. Furnishing and installing temporary potable water, fire water, and electrical utility systems to maintain service to the docks during the time of construction.
- D. Furnishing and installing a temporary access float that connects Docks 2 and 3.
- E. Construction and complete removal of temporary gravel crane pads for use in demolition of existing access piers. Temporary crane pads may also be used for construction of new access platforms. Temporary crane pads shall be fully removed in accordance with permit conditions. Provide pre-construction and post-construction photo documentation of areas to be used for temporary crane pads.
- F. Protection of existing features and facilities to remain.

1.2 SUBMITTALS

- A. The contractor shall submit the following to the District for review and comment. No work shall commence pending District's review of all submittals.
 - 1. Demolition Plan: Submit proposed demolition methods, operations, schedule, and disposal site information for review prior to the start of work.
 - 2. Debris Containment System: The Contractor shall design and submit plans for materials, installation, and operations for a system to prevent demolished material from contacting the water.
 - 3. Proposed Temporary Utilities: The Contractor shall design and submit plans for materials, installation, and operations for a system to provide potable water, fire water, and electrical utility services to the docks during the time of construction.
 - 4. Proposed Temporary Access Float: The Contractor shall design and submit plans for materials, installation, and operations for a temporary access float during the time of construction. This float must comply with the design criteria specified in Section 024800 of these Specifications.
 - 5. Provide 10 working days for the District to review the submittal.

1.3 BACKGROUND INFORMATION

- A. Drawings: The following drawings are available for review and purchase from the San Mateo County Harbor District at the District Office.
 - 1. “Oyster Point Marina/Park – Site Improvements and Associated Work” prepared by DMJM. The drawings are stamped “Preliminary – Not for Construction” and dated 6-27-79. The drawings contain information regarding the site civil works, utilities, concrete ramps and access piers.
 - 2. “Oyster Point Marina – San Mateo County Harbor District” by Western Dock Enterprises dated 8-11-82. The drawings contain information regarding the gangways and floating docks including piles and utilities.
 - 3. “Oyster Point – Phase 1C Streets and Utilities Design” prepared for Kilroy Realty TRS Inc and City of South San Francisco dated November 18, 2019 by Wilsey-Ham, and dated June 17, 2020 by Alliance Engineering Consultants, Inc. The drawings contain information regarding the grading and utilities for the new West Harbor Dock Access.

1.4 JOB CONDITIONS

- A. Protection: Conduct operations to prevent damage to existing buildings, structures, improvements, curbs, pavement, and other facilities to remain. Prevent materials from contacting the water by the use of a Debris Containment System.
- B. Perform all operations to avoid breakage, marring, bending, or other damage to existing utilities, which are to remain.
- C. Explosives: The use of explosives is prohibited.
- D. Promptly repair damage to any adjacent facilities caused by demolition operations at no cost to the District. Do not overload structural elements.
- E. Utility Services:
 - 1. Contractor shall arrange with the District and utility provider to shut off utilities when necessary.
 - 2. Do not interrupt existing utilities serving occupied or active facilities, except when authorized in writing by the District.
- F. Environment: Comply with all federal, state, and local permits for the work.

1.5 PERMITS

- A. Per Section 010000 Summary of Work and Section 014100 Regulatory Requirements.
- B. Disposal of demolished material shall be done in accordance with applicable laws and regulations.
 - 1. The District will provide an EPA ID number per Department of Toxic Substances Control.

PART 2 - PRODUCTS

2.1 TEMPORARY UTILITIES

- A. All utilities and equipment should meet the latest codes and be suitable for a marina environment.
- B. All piping and hoses shall be National Sanitation Foundation rated for potable water.
- C. All materials and equipment used in the installation of the system shall be listed as approved by the Underwriters' Laboratories and Factory Mutual, and shall be the latest design of the manufacturer.

2.2 TEMPORARY ACCESS FLOAT

- A. Proprietary design per manufacturer. Temporary access float may be aluminum-framed, steel-framed, or timber-framed.
- B. Acceptable product: Unideck by Bellingham Marine Industries., Bellingham, WA; or approved equal.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Examine area affected by work to verify the following:
 - 1. Required access and utility disconnection procedure if required.
 - 2. Existing conditions are as generally represented by the contract documents.
 - 3. Work site has been vacated.
 - 4. Planned sequence of work fits actual field conditions.
 - 5. Debris Containment System is in approved by the District and installed prior to start of demolition.
 - 6. Place temporary gravel crane pads as necessary to perform demolition operations. Contractor shall provide pre-construction and post-construction photo documentation of the area used for temporary crane pads.

3.2 DEMOLITION

- A. Install and maintain the Debris Containment System per the Contractor Work Plan. Any debris that falls in the water shall be removed from the water by the Contractor.
- B. Remove/demolish and dispose of features shown on the Drawings to be demolished.
- C. Bring to the District's attention obstructions which are not noted or shown on the plans or described herein. Protect such facilities until further direction is received from the District. Additional work required due to unforeseen conditions shall be performed as directed by the District and will be paid for as extra work in accordance with the General Conditions.

- D. Do not disturb existing structures and utilities beyond the extent indicated or necessary for installation of new construction.

3.3 DISPOSAL

- A. Promptly remove from the property and legally dispose of all demolished materials.
- B. Remove debris and all other deleterious material resulting from demolition operations and legally dispose of at an approved disposal site.
- C. Prevent spillage along haul routes. All costs for cleanup and damage resulting due to Contractor's haul truck spillage shall be borne by the Contractor.

3.4 CLEANING

- A. All demolished material and debris resulting from work shall become property of the Contractor.
- B. Remove all equipment, debris, and rubbish from the property in a manner that will prevent spillage on streets or adjacent areas.
- C. Promptly repair any items damaged during the progress of this work, including any damage to pavement, curbs, sidewalks, haul routes, public roads, or adjacent ground caused by transporting materials or equipment.
- D. Regulations: Comply with federal, state, and local hauling and disposal regulations.

3.5 TEMPORARY UTILITIES

- A. Install temporary utilities to maintain utility services at the docks during construction. Comply with federal, state, and local regulations.

3.6 TEMPORARY ACCESS FLOAT

- A. Install temporary access float between Docks 2 and 3 to maintain access to Docks 1/2 (via Dock 3 mainwalk) during demolition of Docks 1/2 Access Pier and construction of new access to Docks 1/2..
- B. Regulations: Comply with federal, state, and local regulations.

3.7 RELOCATION OF VESSELS

- A. If relocation of vessels is required to perform the work, the District will notify tenants to move their boats out of the area affected by demolition work or for moving the boats in the absence of tenant response. The Contractor shall inform the District at least fourteen (14) calendar days prior to the start of demolition. Demolition shall be sequenced to minimize disruption and displacement of Marina tenants. The Contractor shall inform the District immediately after completion of installation for each dock so the District may notify tenants that they may return their vessels.

END OF SECTION

SECTION 024800
GANGWAY LANDING FLOATS

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The work of this section consists of design, fabrication, and installation of gangway landing floats, complete and ready to use, including connection hardware, dock accessories, and all related appurtenances.
- B. The gangway landing floats shall be designed by the contractor to meet all requirements as shown and specified. All materials shall be compatible and suited for their intended use in the marine environment.

1.2 REFERENCES

- A. References shall be the latest edition available as of the date of the invitation to bid unless otherwise specified. The following standards are hereby incorporated in this Specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. Design Standards:
 - 1. Aluminum – Aluminum Association Design Guide for Aluminum Structures
 - 2. Floating Dock – California Division of Boating and Waterways (DBW) “Layout and Design Guidelines for Marina Berthing Facilities (2005).”
 - 3. Steel - American Institute of Steel Construction (AISC) "Steel Construction Manual – 13th Edition".
- C. American Society for Testing and Materials (ASTM)
 - ASTM A 36 Specification for Structural Steel
 - ASTM A 153 Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - ASTM A 276 Standard Specification for Stainless Steel Bars and Shapes
 - ASTM A 307 Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60,000 PSI Tensile Strength
 - ASTM B 209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
 - ASTM B 211 Standard Specification for Aluminum and Aluminum-Alloy Rolled or Cold Finished Bar, Rod, and Wire
 - ASTM B 221 Specifications for Aluminum Alloy Extruded Bars, Rods, Wire Shapes and Lubes

ASTM B 308	Standard Specification for Aluminum-Alloy 6061-T6 Standard Structural Profiles
ASTM B 429	Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube
ASTM B 574	Standard Specification for Low-Carbon Nickel-Chromium-Molybdenum, Low-Carbon Nickel-Molybdenum-Chromium, Low-Carbon Nickel-Molybdenum-Chromium-Tantalum, Low-Carbon Nickel-Chromium-Molybdenum-Copper, and Low-Carbon Nickel-Chromium-Molybdenum-Tungsten
ASTM C 272	Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions; 2001 (Re-approved 2007)
ASTM C 578	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2006
ASTM D 143	Standard Test Methods for Small Clear Specimens of Timber
ASTM D 198	Standard Test Methods of Static Tests of Lumber in Structural Sizes
ASTM D 792	Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
ASTM D 1037	Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials
ASTM D 1248	Specification for Polyethylene Plastics Molding and Extrusion Materials
ASTM D 1413	Standard Test Method for Wood Preservatives by Laboratory Soil-Block Cultures
ASTM D 1505	Test Method for Density of Plastics by the Density-Gradient Technique
ASTM D 1621	Test Method for Compressive Properties of Rigid Cellular Plastics
ASTM D 1693	Test Method for Environmental Stress-Cracking of Ethylene Plastics
ASTM D 1761	Standard Test Methods for Mechanical Fasteners in Wood and Wood-Based Materials
ASTM D 6109	Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastic Lumber and Related Products
ASTM D 6111	Standard Test Method for Bulk Density And Specific Gravity of Plastic Lumber and Shapes by Displacement
ASTM D 6341	Standard Test Method for Determination of the Linear Coefficient of Thermal Expansion of Plastic Lumber and Plastic Lumber Shapes Between -30 and 140°F (-34.4 and 60°C)
ASTM F 593	Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs

ASTM F 594	Specification for Stainless Steel Nuts
ASTM F 1679	Standard Test Method for Using a Variable Incidence Tribometer (VIT)
ASTM E 84	Standard Test Method for Surface Burning Characteristics of Building Materials

D. American Welding Society (AWS)

D 1.1	Structural Welding Code – Steel
D 1.2	Structural Welding Code – Aluminum

1.3 SYSTEM DESCRIPTION: DESIGN CRITERIA FOR FLOATS

- A. Information presented herein is based upon the Engineer’s best estimate of those factors which reasonably can be expected to affect the design, performance, and durability of the landing float system. These criteria shall be considered as minimum requirements for the proposed landing float system; however, mere conformance to the minimum sizes, strengths, and design parameters given herein will not automatically ensure approval of the proposed system. The proposed landing float system shall be subject to thorough engineering analysis using all relevant criteria that could affect the stability, structural integrity, and durability of the system.
- B. Final calculations shall demonstrate that the landing float system structure, using the criteria specified in this Section as a minimum standard, are designed to withstand the required loading, singularly or in combination, without damage to the system, throughout the system’s expected design life of 30 years. The design load combinations and allowable stresses are described herein. The design loads shall be applied at the locations and areas also described herein.
- C. The Contractor shall provide a system that conforms to the layout and dimensions as shown, and conform to the provisions as specified.
- D. The gangway landing float system shall be either:
1. Aluminum-framed with composite timber decking and polyethylene-encased polystyrene foam core pontoons.
 2. Timber-framed dock with steel-reinforced connections, timber decking, and polyethylene-encased polystyrene foam core pontoons.
 3. Concrete dock with polystyrene foam flotation and a structural timber waler system.
- E. Gangway float modules shall be connected to the existing timber dock to form a continuous floating dock capable of supporting and transferring all loads imposed by the gangway to the existing dock system.
- F. Freeboard
1. Per DBW “Layout and Design Guidelines for Marina Berthing Facilities (2005)” Section C3 except as modified herein.

2. Freeboard for gangway landing floats under dead load and transferred gangway dead load shall be designed to not exceed existing floating dock freeboard by more than 2 inches.
 3. Gangway landing floats shall be installed to have the same freeboard as the existing floating dock. Float modules shall be designed to provide support at points of concentrated loads and connection points to ensure that the completed floating dock system meets specified freeboard and tolerances.
- G. The gangway landing float system shall be designed to float level under dead load and transferred gangway dead load. The deck of the float modules shall be level and flush upon completion within the following tolerances.
1. Dead load deck surface slope:
 - a. Transverse Direction: Not more than 1/8 inch per foot.
 - b. Longitudinal Direction: Not more than 1 inch per 10 feet of length.
 2. Assembly gap between adjoining float modules:
 - a. Maximum 1/4 inch
 3. Vertical height difference between adjoining float modules, walers and deck:
 - a. Maximum 1/4 inch

1.4 DESIGN REQUIREMENTS - DESIGN LOADS

- A. Dead load shall consist of the weight of float modules, framing, wale system, attachment hardware, miscellaneous connection devices, and all other permanently attached accessories such as cleats, ramps, etc. The contractor shall exercise care to ensure that all dead loads are accurately determined and accounted for, including superimposed gangway loads, consideration of weight gain due to water absorption, and manufacturing tolerances that affect the final freeboard.
- B. Minimum Live Loads shall consist of:
1. Uniform Live Load (ULL) of 25 pounds per square foot of dock. ULL is applied vertically.
 2. Live Point Load (LPL) of 400 pounds applied at any location on the landing float not closer than 12-inches from an edge. LPL is applied vertically.
 3. Vertical Wave Load (VWL) applied as discussed in the DBW "Layout and Design Guidelines for Marina Berthing Facilities (2005)" Section C2.4.3 and the following.
 - a. Wave height of 1 foot.
 - b. Wave length equal to 50 feet.
- C. Superimposed Gangway Loads shall consist of:
1. Superimposed Gangway Dead Load (GDL) of the gangway structure tributary to dock.
 2. Superimposed Gangway Uniform Live Load (GLL) of 50 pounds per square foot from the gangway area tributary to the dock.

D. Combined loading cases for design:

1. Case 1 – Dead Load + superimposed GDL.
2. Case 2 – Dead Load + superimposed GDL + ULL + superimposed GLL.
3. Case 3 – Dead Load + superimposed GDL + LPL + superimposed GLL.

E. Design Calculations:

1. Calculations for loads imposed by the handling and lifting methods to be employed shall be provided based on the structures strength expected at the time of lifting or moving of the float modules.
2. The material strength properties, load factors and capacity reduction factors shall be as defined by the applicable code.
3. The design calculations shall include but not be limited to the following:
 - a. Determination of extreme fiber stresses in structural members for all load cases.
 - b. Stresses in the landing float system connections for all load cases.
 - c. Transfer of forces between gangway landing float to existing dock.
 - d. Freeboard calculations for the gangway landing floats.
 - e. Design life based on wasting or fatigue of structural elements.

1.5 SUBMITTALS

- A. Prior to the fabrication of the landing float system components, submit final design calculations signed and sealed by a Civil or Structural Engineer holding a valid Certificate of Registration in the State of California. The calculations shall demonstrate that the floating dock system, using the criteria specified herein as minimum requirements, is designed to withstand the specified loads without damage throughout the design life of the system.
- B. Prior to the fabrication of the landing float system components, submit shop drawings signed and sealed by a Civil Engineer holding a valid Certificate of Registration in the State of California. The shop drawings shall indicate the proposed layout and size, float dimensions, float construction details, connection details, and location and methods for attaching accessories. Submit shop drawings for all specially fabricated items including connections, railing, curbing, and catalog sheets for all standard manufactured items that are to be incorporated into the floating dock system.
- C. Prior to the fabrication of landing float system components, submit certified test reports:
 1. Aluminum
 2. Timber certifications
 3. Concrete Mix Design and test results
 4. Composite or Plastic Lumber
 5. Float Module Units or Materials

6. Fasteners
 7. Foam Water Absorption
- D. Prior to the fabrication of float system components, submit catalog cut sheets:
1. Rub Boards and Corner Bumpers
- E. Submit experience data verifying the landing float system supplier's required years of experience in the manufacture and installation of floating docks including the project location, date of installation, and Owner (including the name, address, phone number of a person who can be contacted for verification). A previous installation of the proposed system for this project shall be included.
- F. Submit quality control plan to be used during the manufacture and installation of the landing float system.
- G. Submit complete data, covering details of operation and maintenance procedures for all float system components. The manual shall include instructions, recommended frequencies of maintenance and maintenance procedures and materials by brand name and specification. All data shall be submitted in electronic pdf format. The binder external cover shall be identified as "Landing Float System Operation and Maintenance Procedures."

1.6 CONTRACTOR'S QUALIFICATIONS

- A. The Contractor's proposed landing float system shall be furnished and installed by a firm having a minimum of five (5) years of experience in the manufacture and installation of floating dock systems. The dock system design being proposed for this project shall have been successfully installed for a minimum of five (5) years at another location.
- B. Manufacturers considered qualified to furnish a dock system conforming to these requirements are:
1. Mantle Industries (CMI), Blaine, WA
 2. Gator Dock (CMI), Sanford, FL
 3. Topper Industries, Woodland, WA
 4. California Custom Docks, Santa Rosa, CA
 5. Bellingham Marine Industries, Bellingham, WA
 6. Kie-Con, Antioch, CA

1.7 DELIVERY, HANDLING AND STORAGE

- A. Use all means necessary to protect materials before, during, and after delivery to the Work site, and to protect the installed work and materials of all other trades. Use extreme care in the off-loading of materials to prevent damage.
- B. Deliver the materials to the Work site and store, all in a safe area, out of the way of traffic, and shored up off the ground surface.

- C. Place identification numbers on all float modules (such they are not covered up after assembly) that conforms to the shop drawing numbering system. Also identify hardware and framing and store separately from each other. Protect all metal products with adequate weatherproof outer wrappings.
- D. In the event of damage, immediately make all repairs and replacements necessary to the approval of the Engineer and at no additional cost.

1.8 WARRANTY

- A. The landing float system, including all structural components, shall carry warranty against defects in materials and workmanship for ten (10) years from the date from the date of project acceptance.

PART 2 - PRODUCTS

2.1 TIMBER FLOAT

- A. Proprietary design per manufacturer.
- B. Acceptable product: Unideck by Bellingham Marine Industries., Bellingham, WA; or approved equal.

2.2 CONCRETE FLOAT

- A. Proprietary design per manufacturer.
- B. Acceptable product: Unifloat by Bellingham Marine Industries., Bellingham, WA; Kie-Con Precast Concrete Float by Kie-Con, Antioch, CA; or approved equal.

2.3 ALUMINUM FLOAT

- A. Aluminum: Aluminum Alloy Series 5000 or Series 6000 and shall be in accordance with AA Specification for Aluminum Structures, ASTM B 209, ASTM B 211, ASTM B 221, ASTM B 308, ASTM B 429, and ASTM B 574 for various metals used. All welds shall be in accordance with AWS D1.2.
- B. Metal Accessories: Provide Aluminum or Stainless Steel. Stainless Steel shall conform to ASTM A 276, Type 316 or 316L as applicable. Dissimilar metals shall be electrically isolated with non-metallic insulators.
- C. Fasteners: ASTM F 593 and ASTM F 594. All bolts, screws, and nuts shall be 316 or 316L Stainless Steel. Washers shall comply with the requirements of ANSI B18.22.1 and shall be 316 Stainless Steel. Deck screws shall be square drive or torx drive.
- D. Flotation Units
 1. Foam core, as specified, shall be fully encapsulated in a polyethylene shell.
 2. Polyethylene Shell: All units shall be blow-molded. Flotation encapsulation material shall be manufactured from virgin polyethylene resin containing UV ray inhibitors and carbon black pigment. Nominal wall thickness shall be a minimum

of 0.150 inch. Flotation units shall be designed to maintain the desired buoyancy and freeboard even if punctured or cracked. Flotation unit and frame shall act as one integral unit.

3. Acceptable Product: Ace Versa-Float by Den Hartog Industries, or approved equal.

E. Composite Timber Decking: Decking shall be installed perpendicular to the float long axis. Composite timber decking shall be manufactured primarily with HPDE and shall be extruded into sizes and shapes indicated. Material shall contain UV inhibitor, be flame retardant, slip resistant and fungal resistant.

1. Acceptable Products:

- a. Moisture Shield (Oldcastle APG), Vision Marine 2x
- b. Wear Deck (Ocala FL), Standard Deck Board 2x
- c. Lumberock (CMI), Marine Grade Decking 2x
- d. Approved Equal.

2.4 FOAM CORE

A. Foam core for floats shall be closed-cell expanded polystyrene. The polystyrene foam shall have a unit weight between 0.95 pounds per cubic foot and 1.20 pounds per cubic foot. Properties of the foam shall conform to ASTM C 578, with maximum water absorption less than 3.0 percent as determined by ASTM C 272, Method C. The foam core shall not have more than 10 percent reground material, and reground foam pieces shall not exceed 3/8 inch diameter.

2.5 HDPE RUB BOARD

A. Rub Boards shall be yellow-colored fiber-reinforced High-Density Polyethylene (HDPE) conforming to the properties below:

Specific Gravity	ASTM D6111	0.90 min 0.95 max
Flexural Strength	ASTM D6109	2,700 psi min
Compressive Strength (perpendicular to grain)	ASTM D6108	1,450 psi min
Compressive Modulus (perpendicular to grain, secant, at 1% strain)	ASTM D6108	54 ksi min
Coefficient of Thermal Expansion	ASTM D6341	0.00005 in/in/°F max
Water Absorption	ASTM D570	0.3% max by weight
Screw Withdrawal	ASTM D6117	640 lbs min
Flame Spread Classification	ASTM E84	60
Ultraviolet (skin)	ASTM D4329	<10% change in Type D durometer at 500 hours

- B. Rub Boards shall be secured with Type 316 stainless steel fasteners. Fasteners shall be counterbored or countersunk to allow for a minimum wear of 1/2 inch.
- C. Acceptable Manufacturer: Tangent Materials, Aurora, IL; American Plastic Lumber, Shingle Springs, CA; or approved equal.

2.6 DOCK CORNER BUMPERS

- A. Outside corners shall be protected with a vinyl corner bumper, gray color, Item No. CB-G as supplied by Merco Marine, or approved equal.
- B. Install all bumpers per manufacturer's recommendations, using 316SS screws and finish washers.

2.7 HARDWARE

- A. Structural steel shall conform to ASTM A 36 and be a minimum 1/4 inch thick. Design, fabrication and erection of structural steel shall conform to AISC Steel Construction Manual. Hot dip galvanize after fabrication in accordance with ASTM A 123.
- B. Standard bolts and nuts shall conform to ASTM A 307. Washers shall be used with all nuts and bolts. Round plate washers shall be used for bearing on HDPE, Aluminum, and Fiberglass; cut washers shall be used for bearing on steel. Hot dip galvanize all steel fasteners in accordance with ASTM A 153.
- C. Stainless steel hardware shall be Type 316 unless otherwise noted. Bolts shall be ASTM F 593 Group 2. Nuts shall be ASTM F 594 Group 2.
- D. Fasteners for dock accessories shall be 316 stainless steel unless otherwise noted.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Installation shall be in accordance with approved shop drawings with connections tightened as required after complete installation of each unit of the work in the water and before final inspection.
- B. All welding shall be performed by properly certified welders and shall conform to the current specifications of the American Welding Society.
- C. Fasteners, except for deck fasteners and dock edging, shall be counterbored. Fasteners protruding above the surface of the deck shall have a low, rounded profile.
- D. Bolts shall be of the size required, with adequate thread length. Holes for all lag bolts and screws shall be pre-drilled and turned into place. Driving is not allowed.
- E. Decking shall be fabricated accurately to provide uniform gaps and butt joint connections. Splices in decking are prohibited.

- F. All walers, fascia, spacers, panels, or any other members, which are subject to foot traffic, shall be flush with the deck walking surface.

3.2 GANGWAY LANDING FLOAT SYSTEM TOLERANCES

- A. Install the gangway landing float system to the following tolerances from the planned dimensions as shown on the drawings. All floats exceeding the specified tolerance shall be removed and replaced.
- B. Float Fabrication Tolerances (allowable variation of construction dimension from nominal dimension shown on the Drawings):
 - a. Float Width and Length: +/- 3 inches from nominal float width and length
 - b. Float Depth: As required to satisfy freeboard requirements.

END OF SECTION

SECTION 033000
STRUCTURAL CONCRETE

PART 1 - GENERAL

1.1 SUMMARY OF WORK

- A. This section covers structural concrete for the following structures:
 - 1. Access Platforms
 - 2. Pile Concrete Infill
 - 3. Ramp Abutments

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. State of California, Department of Transportation (Caltrans), Standard Specifications
 - Section 48 "Temporary Structures"
 - Section 51 "Concrete Structures"
 - Section 52 "Reinforcement"
 - Section 90 "Portland Cement Concrete"
- C. American Society for Testing And Materials (ASTM)
 - ASTM A 36 Carbon Structural Steel
 - ASTM A 153 Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - ASTM A 706 Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement
 - ASTM A 970 Standard Specification for Headed Steel Bars for Concrete Reinforcement
 - ASTM B418 Standard Specification for Cast and Wrought Galvanic Zinc Anodes
 - ASTM C 33 Standard Specification for Concrete Aggregates
 - ASTM C 109 Compressive Strength of Hydraulic Cement Mortars (Using 2-in. Cube Specimens)
 - ASTM C 882 Standard Test Method for Bond Strength of Epoxy-Resin Systems Used With Concrete By Slant Shear
 - ASTM C1090 Measuring Changes in Height of Cylindrical Specimens of Hydraulic-Cement Grout
 - ASTM C 618 Coal Fly Ash and Raw or Calcined Natural Pozzolan in Concrete
 - ASTM C 1240 Silica Fume Used in Cementitious Mixtures

ASTM C 1582	Standard Specification for Admixtures to Inhibit Chloride-Induced Corrosion of Reinforcing Steel in Concrete
ASTM D 1751	Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)
ASTM F 609	Standard Test Method for Using a Horizontal Pull Slipmeter (HPS)

D. American Concrete Institute (ACI)

ACI 315 Details and Detailing of Concrete Reinforcement

1.3 SUBMITTALS

- A. Concrete Mix Design: The proportions of the concrete materials in the mix shall be the responsibility of the Contractor. At least 21 days prior to placement of concrete, the Contractor shall submit to the District, for approval, mixture proportions that will produce concrete of the quality required. Mixture proportions shall include dry weights of cementitious material, saturated surface-dry weights of fine and coarse aggregates, and quantities, type, and name of admixtures (if any) and quantity of water per cubic yard of concrete. Also, satisfactory evidence shall be given that the materials to be used and the proportions selected will produce concrete of the quality specified. All materials included in the mixture proportions shall be of the same type and from the same source as will be used on the project. No admixture containing chloride shall be used.
- B. Trial Batch Results: Test results for slump, air content, and strength of the proposed design mix shall be submitted to the District.
- C. Independent Testing Laboratory (ITL): The Contractor shall submit the company contact information, names of personnel to perform quality assurance testing, and proof of State Certification for the quality assurance tests to be performed under this contract.
- D. Headed Bar Reinforcing: The Contractor shall furnish Certificates of Compliance accompanied by a copy of the mill test report to the District in conformance with the provisions in Section 6-2.03C, "Certificates of Compliance," of the State Standard Specifications for each shipment of headed bar reinforcement delivered to the jobsite. Each unit of headed bar reinforcement shall be tagged in a manner such that production lots can be accurately identified at the jobsite. All unidentified headed bar reinforcement received at the jobsite will be rejected.
- E. Certificates of Compliance:
1. Reinforcing Steel: Certification from suppliers shall attest to the yield strength of the reinforcing steel.
 2. Corrosion Inhibiting Additive: Certification from manufacturer attesting that the proposed product has been in use for five years in waterfront concrete construction without harmful reactivity with cement, aggregate or reinforcing
 3. Skid Resistant Surfacing for steel surfaces.
- F. Shop Drawings:
1. Submit shop drawings for falsework per Section 48-2.01C(2) "Shop Drawings" of the State Standard Specifications.

- a. Falsework shall be designed to resist dead and live vertical loads per Section 48-2.02B(2) "Loads" of the State Standard Specifications,
 - b. Anticipated settlement of falsework shall not exceed 1/2 inch settlement.
2. Submit shop drawings in accordance with ACI 315 showing sizes and placement of reinforcement.
 3. Submit shop drawings for precast concrete members per Section 51-4 "Precast Concrete Members" of the State Standard Specifications.

G. Work Plans:

1. Precast Structural Concrete Work Plan: The Contractor shall submit a detailed work plan describing the methods and equipment to be employed to fabricate and install the precast structural concrete units. Precast structural concrete units are to be constructed offsite by a precaster approved by the District.
 - a. Precast Concrete Slabs: Provide detailed work plan per Section 51-4.03C "Slabs" of the State Standard Specifications.
2. Cast-in-Place Concrete Work Plan: The Contractor shall submit a detailed work plan describing the methods and equipment to be employed to fabricate and install cast-in-place concrete features.
 - a. Work Plan shall indicate planned construction joints.
3. Contractor Options: The Contractor may propose alternate methods of construction from the methodology described in this specification. The method of construction proposed by the Contractor shall not result in a lesser quality work product. Contractor-proposed methods shall be approved by the District prior to purchase of any products and prior to start of construction.

H. Precast Structural Concrete Manufacturer Qualifications:

1. The manufacturer shall have a minimum of five (5) years of experience in the manufacture and installation of precast structural concrete units.
2. Submit manufacturer's qualifications verifying the precast manufacturer's experience including the project location, date of installation, and Owner (including the name, address, phone number of a person who can be contacted for verification).

1.4 EVALUATION AND ACCEPTANCE

- A. Strength: The strength of the concrete will be considered satisfactory based on the average strength of each set. The average strength shall equal or exceed the required specified strength and no individual strength test falls below the specified strength by more than 500 pounds per square inch.
- B. Tolerances:
 1. Precast Panels: Finished dimensions (length, width, thickness) shall be within 1/4" of the dimensions shown on the approved shop drawings. Camber (if required) shall be within 1/2" of the dimensions shown on the approved shop drawings.
 2. Concrete Abutment:
 - a. Elevations: +1/4", -0"

- b. Horizontal Dimensions: +/- 1/4"
 - 3. Concrete Access Platform:
 - a. Elevations: +1/4", -0"
 - b. Horizontal Dimensions: +/- 1/4"
 - c. Deviation from 8-ft straightedge placed on planar surfaces in any direction shall not exceed 1/4"
 - d. No ponding of water shall occur.
 - C. Precast units having voids, segregated, or porous concrete, honeycombed concrete, or fractures will be rejected. Rejected units shall become the property of the Contractor and shall be disposed of off the District's property.
 - D. Precast units shall be approved by the District prior to installation.
- 1.5 QUALITY CONTROL AND QUALITY ASSURANCE
- A. Quality Control: The Contractor shall be solely responsible for quality control for all aspects of the project.
 - B. Quality Assurance: The Contractor shall obtain the services of an independent testing laboratory (ITL) to perform quality assurance sampling and testing. The ITL shall be licensed in the State of California to perform the tests specified herein.
 - C. No concrete shall be placed without written approval of the District. Approval shall be given only after passing a form and rebar inspection that the Contractor has requested in writing.
 - D. Field Inspections and Tests by the Contractor: The Contractor shall furnish all equipment, instruments, qualified personnel, and facilities necessary to inspect all work and perform all tests required by this specification and by applicable codes. All inspections and tests performed and test results received each day shall be reported to the District.
 - E. Concrete will be sampled and tested in accordance with the following:
 - 1. Sampling: Per California Test 539 (2013).
 - 2. Slump: Per California Test 556 (2013).
 - 3. Compressive Strength:
 - a. Molded and initially field cured under California Test 540 (2010).
 - b. Cured and tested under California Test 521 (2012) per Section 90-1.01D(5) "Compressive Strength" of the State Standard Specifications.
 - 4. The minimum number of Samples taken will be as follows:
 - a. One (1) sample set shall be taken from each truck load delivered.
 - b. Three specimens will be made for each sample set; two will be tested at 28 days, and one will be kept as a spare for additional testing, if needed. The Contractor may take additional test specimens in order to determine when falsework can be removed.

PART 2 - PRODUCTS

2.1 CONCRETE

- A. Cementitious Material: Per Section 90-1.02B "Cementitious Materials" of the State Standard Specifications.
 - 1. Cement: Per Section 90-1.02B (2) "Cement" of the State Standard Specifications.
 - 2. Supplementary Cementitious Materials: Per Section 90-1.02B (3) "Supplementary Cementitious Materials" of the State Standard Specifications.
 - 3. Total cementitious material shall contain 20 percent pozzolan or fly ash conforming to ASTM C 618 Class F or N, and 5 percent Silica Fume conforming to ASTM C 1240 by weight.
- B. Aggregates:
 - 1. Materials: Per Section 90-1.02C "Aggregates" of the State Standard Specifications.
 - 2. Coarse Aggregate Gradation: Primary Aggregate Nominal Size 1 inch x No. 4 per Section 90-1.02C(4)(b) "Coarse Aggregate Gradation" of the State Standard Specifications.
- C. Water: Per Section 90-1.02D "Water" of the State Standard Specifications.
- D. Admixtures:
 - 1. Provide Corrosion Inhibiting Admixture, per ASTM C 1582, minimum 3 gallons per cubic yard. Acceptable product: Sika CNI, Grace DCI-S, or approved equal.
 - 2. Chemical Admixtures (optional): Type A or F, water-reducing, per Section 90-1.02E(2) "Chemical Admixtures" of the State Standard Specifications.
 - 3. Air-Entraining Admixtures: per Section 90-1.02E(3) "Air-Entraining Admixtures" of the State Standard Specifications. Air content shall be 4% (+/- 1%).
- E. Concrete Properties:
 - 1. Compressive strength: 5000 psi (minimum) at 28 days.
 - 2. Water-to-cementitious material ratio (w/c): 0.40 maximum.
 - 3. Slump: 3" min, 4" max.
 - 4. Air Content: 5% +/- 1.5%.
- F. Grout for filling precast unit lifting holes and connection blockouts shall be marine-grade epoxy grout suitable for underwater application. Acceptable products include the following (or approved equal):
 - 1. SeaShield 550 Epoxy Grout, Denso North America
 - 2. FX-70®-6MP, Simpson Strong-Tie
 - 3. Pile Jacket Epoxy Grout LV, Five Star Marine, Inc.

2.2 MORTAR

- A. Mortar shall conform to the requirements of Section 51-1.02F "Mortar" of the State Standard Specifications.

2.3 REINFORCING STEEL

- A. Per Caltrans Standard Specifications Section 52 "Reinforcement."

2.4 HEADED BAR REINFORCING

- A. Headed bar reinforcement shall consist of bar reinforcement with heads attached to one end. Reduced size, forged or welded headed bar reinforcement shall be used on this project and shall be on the Caltrans current Authorized Materials list (<https://mets.dot.ca.gov/aml/HeadedBarsList.php>), and shall conform to the provisions of Section 52, "Reinforcement," of the State Standard Specifications, the details shown on the plans, and these specifications. Threaded type headed bars shall not be accepted.
 1. Reduced size headed bar: ASTM A970 Class HA
 2. Steel: ASTM A706 Grade 80
 3. Acceptable Product: HRC 555, or approved equal.

2.5 EMBEDMENTS

- A. Steel plate and bar: ASTM A 36.
- B. Stainless Steel fabrications: Type 316.
- C. Hot-Dip Galvanizing: ASTM A 153.

2.6 SKID-RESISTANT SURFACE

- A. Steel surfaces to receive skid-resistant surfacing shall have a minimum coefficient of friction of 0.6 per ASTM F 609.
- B. Skid-resistant surfacing may be integral with the steel plates or may be a shop-applied or field applied coating placed on the prepared steel surface.

2.7 GALVANIC ANODE

- A. Embedded galvanic anodes shall have a nominal dimension of 5 inches long x 1 inch high x 1 inch wide. The anodes shall be pre-manufactured with a nominal 2 ounces of zinc (ASTM B 418 Type II) cast around a pair of 24-inch long uncoated, non-galvanized steel tie wires and encased in a highly alkaline cementitious shell with a pH of 14 or greater.
- B. The anode unit shall contain no added sulfate nor shall it contain chloride, bromide or other constituents that are corrosive to reinforcing steel. Anode units shall be supplied with integral unspliced wires for directly tying to the reinforcing steel. Embedded galvanic anodes shall be Galvashield® N available from Vector Corrosion Technologies (www.vector-corrosion.com) USA (813) 830-7566, or approved equal.

PART 3 - EXECUTION

3.1 READY-MIXED CONCRETE

- A. Ready-mixed concrete shall conform to the requirements of Section 90-1.02F "Proportioning Concrete" and Section 90-1.2G "Mixing and Transporting Concrete" of the State Standard Specifications.

3.2 PREPARATION FOR PLACING CONCRETE

- A. Falsework shall conform to the requirements of Section 48-2 "Falsework" of the State Standard Specifications.
- B. Formwork:
 - 1. Formwork shall be rigid forms constructed of plywood, hard plastic-finished plywood, or steel, and shall be in accordance with Section 51-1.03C(2) "Forms" of the State Standard Specifications.
 - 2. Forms shall be mortar-tight and closely fitted to prevent leakage.
- C. Reinforcing Steel shall conform to the requirements of Section 52 "Reinforcement" of the State Standard Specifications.
- D. Embedded items shall be firmly attached to the formwork to ensure proper location during concrete placement. Placement of embedded items into wet concrete shall not be allowed.
- E. Pile Dowel Bars: Install bar reinforcement as shown on the drawings. Immediately prior to placing the dowels, the interior of the pile shall be cleaned of dust and other deleterious materials and have all free water removed.
- F. Galvanic anodes:
 - 1. Install with spacing and clearances shown on the drawings.
 - 2. Secure the galvanic anodes using the anode tie wires per manufacturer requirements.
 - 3. Electrical Continuity: Confirm electrical connection between anode tie wire and reinforcing steel per manufacturer requirements.

3.3 PLACING

- A. Concrete placement operations shall conform to the requirements of Section 51-1.03D "Placing Concrete" of the State Standard Specifications.

3.4 FINISHING

- A. General: No finishing or repairs will be done when either the concrete or the ambient temperature is below 50°F.
- B. Concrete Surface Finishes shall conform to the requirements of Section 51-1.03F "Finishing Concrete" of the State Standard Specifications.
 - 1. Sides of access platforms, access platform pile caps, and sides of ramp abutments shall receive a Class 1 Surface Finish.
 - 2. Bottom of access platforms and top surfaces of ramp abutments shall receive an Ordinary Finish.
 - 3. Top surface of access platform and ramp abutment concrete subject to pedestrian traffic shall be given a medium-broom finish in the direction perpendicular to direction of travel.

3.5 CURING AND PROTECTION:

- A. Concrete curing shall conform to the requirements of Section 51-1.03H "Curing Concrete Structures" and Section 90-1.03B "Curing Concrete" of the State Standard Specifications.
- B. Formed surfaces shall be cured by the forms in place method per Section 90-1.3B(5) "Forms-in-place Method" of the State Standard Specifications.
- C. After finishing, the top surfaces of concrete shall be immediately cured using the curing compound method per Section 90-1.03B(3) "Curing Compound Method" of the State Standard Specifications. Non-pigmented curing compound shall be used.
- D. Following application of the curing compound, the top surface of the concrete shall be cured using the water method per Section 90-1.03B(2) "Water Method" of the State Standard Specifications.
- E. Pile dowels shall not be disturbed until the concrete infill has attained a minimum of 80% of the specified 28-day compressive strength.

3.6 CONSTRUCTION JOINTS

- A. Construction joints shall be allowed only where shown on the drawings.

3.7 PRECAST CONCRETE HANDLING, TRANSPORTING, AND STORAGE

- A. All precast concrete delivered to the project site shall be accompanied by certification of the date of casting and location.
- B. Precast units shall not be lifted or moved until the concrete has reached a minimum compressive strength of 4,000 psi and aged seven (7) days.
- C. Lifting points shown on the Plans are schematic only. Equipment and methods used for lifting, handling, and transporting to avoid damage to the units shall be designed by the Contractor and shall be submitted to the District for review as part of the precast concrete shop drawings.
- D. Lifting, handling, and transporting of precast panels shall be done in accordance with lifting configuration shown on the approved shop drawings.
- E. Store precast units at the plant and on the project site to avoid cracking, distortion, staining, or other physical damage. Damaged units will be rejected by the District and shall not be used on the project.

3.8 SEQUENCE OF DECK PLANK AND TOPPING SLAB CONSTRUCTION

- A. Install precast panels:
 - 1. Lift precast panels in accordance with lifting configuration shown on the approved shop drawings.
 - 2. Confirm fit-up of precast panels on beam seats for proper alignment and grade as shown on the drawings and approved shop drawings.
 - 3. Align panel ends square with no gaps or vertical discontinuities between adjacent panels.
- B. Grout panel joints.
- C. Construct cast-in-place concrete as required.

END OF SECTION

SECTION 055100

ALUMINUM FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. This section describes the requirements to design, furnish, and install aluminum gangways, ramps, security gate assembly, and associated railings and appurtenant structures as shown in the Drawings and as specified herein.

1.2 REFERENCES

- A. References shall be the latest edition available as of the date of the invitation to bid unless otherwise specified. The following standards are hereby incorporated in this Specification to the extent referenced. The publications are referred to in the text by the basic designation only.

B. Design Standards:

Accessibility: California Building Code (CBC) "Chapter 11B Accessibility to Public Buildings, Public Accommodations, Commercial Buildings and Public Housing"

Aluminum: The Aluminum Association, Inc. (AA) "Aluminum Design Manual ADM-1"; "Specifications for Aluminum Structures".

Marina: California Division of Boating and Waterways (DBW) "Layout and Design Guidelines for Marina Berthing Facilities", 2005 Edition.

Steel: American Institute of Steel Construction (AISC) "Steel Construction Manual – 13th Edition".

1. American Society for Testing and Materials (ASTM):

ASTM A 36 Specification for Structural Steel

ASTM A 123 Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A 153 Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A 276 Specification for Stainless Steel Bars and Shapes

ASTM A 325 Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength

ASTM A 666 Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar

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|-------------|---|
| ASTM B 221 | Specification for Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes |
| ASTM D 4976 | Specification for Polyethylene Plastics Molding and Extrusion Materials |
| ASTM F 436 | Specification for Hardened Steel Washers |
| ASTM F 593 | Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs |
| ASTM F 594 | Specification for Stainless Steel Nuts |
2. American Welding Society (AWS):

AWS D1.1	Welding for Steel Structures
AWS D1.2	Welding for Aluminum Structures
 3. The Society for Protective Coatings (SSPC):

SSPC SP6	Commercial Blast Cleaning
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1.3 SUBMITTALS

- A. Prior to ordering materials or starting fabrication of the gangway and ramps, submit final design calculations signed and sealed by a Civil or Structural Engineer holding a valid Certificate of Registration in the State of California. The calculations shall demonstrate that the fabrications, using the criteria specified herein as minimum requirements, is designed to withstand the specified loads without damage throughout the design life of the structure.
- B. Prior to ordering materials, or starting fabrication of the gangway and ramps, submit shop drawings signed and sealed by a Civil or Structural Engineer holding a valid Certificate of Registration in the State of California. The shop drawings shall indicate the proposed layout and connection details, sections, and methods for attaching accessories. Submit shop drawings for all fabricated items and catalog sheets for all standard manufactured items that are to be incorporated into the gangway/ramp system.
- C. Submit certification from manufacturers, or suppliers attesting that the following materials conform to the contract requirements:
 1. Fixtures and fittings
 2. Aluminum
 3. Fasteners
 4. Steel and Stainless Steel hardware items
 5. Non-skid surface coefficient of friction
 6. Other materials required as part of the Security Gate assemblies.
- D. Submit catalog cut sheets for all standard manufactured items.
- E. Submit samples for the non-skid decking.

- F. Submit quality control plan to be used during:
 - 1. The fabrication of the gangways/ramps
 - 2. Installation of the gangways/ramps:
 - a. Submit detail and notes on procedure and method how the Contractor is to lift the gangway/ramp to set in-place (location and number of picking points).
- G. Submit fabricator's qualifications verifying years of experience.

1.4 DESIGN REQUIREMENTS – GANGWAY AND RAMP

- A. The criteria presented in this Specification are based upon the best estimate of those environmental and physical factors which reasonably can be expected to affect the design, performance, and durability of the gangway and ramp. These criteria shall be considered as minimum requirements. Calculations shall furnish proof that the gangways and ramps, using the criteria specified herein, are designed to withstand the loading and motions without damage for a minimum design life of 30 years. Final design calculations shall be submitted to and approved by the District before starting fabrication.
- B. The completed gangways and ramps shall have a manufacturer's label plate attached in a conspicuous location. This label plate shall be brass or stainless steel. The following information shall be stamped or etched into this plate in letters not less than 1/4-inch high filled with black enamel:
 - 1. Manufacturer's name
 - 2. Date of Manufacturer
 - 3. Overall length (not including transition plate)
 - 4. Overall weight (including transition plate)
- C. The following minimum criteria shall be considered:
 - 1. The design shall be completed in accordance with the following documents:
 - a. California Building Code, current Edition.
 - 2. The length and width of the gangways and ramps shall be as shown on the Drawings. The Drawings show the general layout and configuration requirements as well as typical dimensions. Specific dimensions that conform to all requirements will be the responsibility of the Contractor.
 - 3. The vertical design load shall be the combination of the dead weight of the structure, including any attached utilities, and either live load case below, whichever governs.
 - a. Case A shall be a uniformly distributed live load of 100 pounds per square foot of deck surface area.
 - b. Case B shall be a concentrated live load of 400 pounds applied anywhere on the deck surface.

4. The horizontal design load shall be a uniformly distributed wind load of 20 pounds per square foot of profile area. The horizontal design load shall be applied in combination with the dead weight.
5. The maximum allowable deflection under the vertical design load shall equal the span divided by 240.
6. The deck and structural components shall be designed with a minimum safety factor on working stress as specified in AA "Specifications for Aluminum Structures" for bridge type structures. For non-aluminum structural components, similar safety factors shall apply.
7. The gangway walking surface shall allow a minimum of 40% light transmittance and shall be provided with an aggressively non-skid surface. Openings in the walkway surface shall conform to accessibility requirements.
8. The gangways and ramps shall be fitted with a guardrail on each side of the walking surface with a handrail extending a minimum of 1 foot beyond the ends of the structure, with required return at the ends in accordance with OSHA and accessibility requirements. The rails shall be fabricated of aluminum pipe or tubing. Openings in the guardrail shall not permit passage of a 4-inch diameter sphere. Kick plates shall be provided.
9. Design shall also consider stresses resulting from handling, installation, and clock motions. The gangways and ramps shall be designed to withstand dock motions including a vertical change in dock elevation due to water level fluctuation as shown on the Drawings (design high water and design low water) and horizontal drift due to wind loads without structure interference or overstress, including fatigue of gangway members and supports. Gangway wheels shall remain in contact with their tracks at all times.
10. The transition plate shall make a smooth, gap-free transition between the gangway deck and the floating dock walking surface. The transition plate shall be a minimum 1/4-inch material and shall be attached to the gangways by means of a continuous pipe hinge. The plate shall be the full width of the gangway and have a maximum slope not in excess of the maximum slope that occurs on the gangway itself. The lower edge shall be fitted with a continuous UHMW polyethylene wear block a minimum of 1/2-inch thick. The lower edge shall have a beveled edge conforming to code requirements for accessibility and safety.
11. Wheels shall be installed at the end of the gangway where shown. The wheels shall have an allowable load rating greater than required by the design loads. Wheels shall be aluminum with a molded polyurethane tread, minimum 10 inches diameter by 2-1/2 inches wide, and sealed roller bearings. Axle shall be stainless steel. The gangway design shall allow the wheels to be supported by the wheel track at all times regardless of dock motions.
12. The gangway wheels shall be restrained in the transverse direction by wheel guides for each wheel. The wheel guides shall be of such length to underlay the wheels at all times without contacting the gangway structure, or presenting trip hazards. Provide 1" gap between wheels and wheel guides on both sides.
13. The gangway hinge point shall be designed to permit rotation of the gangway in the vertical and horizontal planes as necessary to accommodate floating dock motions for all tide level and wave conditions.

14. The gangway hinge and ramp connections shall make a smooth, gap-free transition between the gangway/ramp walking surface and the access platform. If a hinge cover plate is provided, it shall be a minimum 1/4-inch material and shall be the full width of the walking surface.
15. The gangway and ramp design shall be coordinated with the floating dock system. Provide additional flotation on the floating dock system to support superimposed gangway dead load as required to maintain freeboard.
16. The gangways, ramps, and the hinge embedments shall conform in all respects to the design guidelines of the California DBW and CBC accessibility rules for marinas.

1.5 DESIGN REQUIREMENTS – SECURITY GATE SYSTEM

- A. Design shall meet the relevant requirements of the CBC, current edition.
- B. Horizontal Loads:
 1. Wind Load shall be assumed to result in a uniform 20 psf horizontal load on the security gate surfaces in the transverse and longitudinal directions.
 2. Horizontal point load shall be 200 pounds at any point in any direction, applied over a 4"x4" area.
- C. Seismic Loading: As shown on the Drawings for the Access Platform Structural Notes.
- D. Fasteners size and location shall be coordinated with the rebar layout of the cast-in-place concrete deck to avoid conflicts between security gate fasteners and deck rebar.
- E. Fabricator shall have a minimum of 5-years of experience designing and fabricating similar security gates for marina docks, and shall submit a minimum of three (3) similar projects demonstrating relevant previous experience, including photographs and previous project contact information (name, phone, email). Previous project experience shall include at a minimum, marine-grade aluminum gate/fence with proximity reader installation.

1.6 CONTRACTOR'S QUALIFICATIONS

- A. Certification of Fabricator Qualifications: The gangway system shall be provided by a firm having a minimum of ten (10) years of experience in the design and fabrication of aluminum marina gangways.

1.7 WARRANTY

- A. Gangway and Ramp: The gangway and ramp system shall carry a warranty against defects in materials and workmanship for ten (10) years from the date of project acceptance.
- B. Security Gate: The security gate system shall carry a warranty against defects in materials and workmanship for five (5) years from the date of project acceptance.

PART 2 - PRODUCTS

2.1 ALUMINUM

- A. Aluminum used in the fabrication shall be Alloy 6061-T6 or 6063 T6 conforming to the provisions of ASTM B 221. All welding of aluminum shall comply with AA Specifications for Aluminum Structures.

2.2 FASTENERS

- A. Any fasteners between aluminum components shall be stainless steel Type 316. Bolts shall be ASTM F 593, Group 2. Nuts shall be ASTM F 594, Group 2. Flat washers shall be cut from Type 316 stainless steel plate that conforms to the provisions in ASTM A 666.
- B. Materials for drill and bond fasteners shall be:
 - 1. Adhesive bonding material shall be Hilti HVA or approved equivalent.
 - 2. The anchor rod assembly shall be Hilti HAS or approved equivalent.

2.3 WELDING FILLER WIRE

- A. All welds shall be made with a filler metal alloy that will produce a weld that is compatible in corrosion resistance with the base metal.

2.4 STEEL ACCESSORIES

- A. All mild steel components shall conform to ASTM A 36 and be hot-dip galvanized after fabrication in accordance with ASTM A 123. All welding of steel shall comply with AWS D1.1. Fasteners shall conform to ASTM A 325 and be hot-dip galvanized in accordance with ASTM A 153.

2.5 DECKING

- A. Deck shall be fiberglass providing a minimum of 40% open area for light transmittance. Deck walking surface shall have an aggressive non-skid with a minimum static coefficient of friction of 0.8.
- B. Acceptable Product: 1" Mini Mesh, grey color.

2.6 SECURITY GATE

- A. Gate handle shall be lever-type.
- B. Dock designation sign panel shall be powder-coated aluminum; color to be determined by the District. Letters shall be etched and painted white or fully cut out from the panel.
- C. The Security Gate Access system shall include a Proximity Reader and Proximity Cards, programmable for up to a minimum of 25,000 users.
 - 1. Acceptable Product: Secura Key RK65K-DT Reader and HID Proximity Cards, or approved equal.

D. Plexiglass shall be marine-grade designed to support the specified loads.

2.7 DISSIMILAR MATERIALS

A. Where dissimilar metals are in contact, or where aluminum is in contact with concrete, masonry, wet or pressure-treated wood, or absorptive materials subject to wetting, the surfaces shall be protected with a coat of bituminous paint to prevent galvanic action.

PART 3 - EXECUTION

3.1 WORKMANSHIP

A. All work shall conform to the approved Shop Drawings, project drawings, and this specification. Construction details, finishing details, and colors shall be consistent throughout. Work shall be accurately set to establish lines and elevations, and securely fastened in place. Cutting, drilling, and punching shall produce clean true lines and surfaces. Exposed surfaces of work shall have a smooth finish.

B. Welding

1. Parts to be welded shall be free of dirt, grease, and other contaminants, and shall fit up properly for sound welding. Surfaces to be welded shall not be cut with oxygen. Sawing, shearing, or machining may be used.
2. All welding shall be with an inert gas shielded arc process. Machine settings shall be developed by making test welds of the same material alloy and geometry as the work pieces and testing the sample welds destructively.

3.2 FINISHING

A. All exposed surfaces of the gangways and ramps, except handrails, shall be sandblasted in accordance with Commercial Sand Blast SSPC-SP-6, which produces a coarse matte finish. The handrails shall have a rubbed or light brush finish and provide a smooth gripping surface.

3.3 INSTALLATION

- A. Contractor shall furnish all materials and equipment required for gangway and ramp installation. The aluminum fabrications shall not be dragged or skidded into place.
- B. Contractor shall provide, install, and remove when no longer required, all temporary supports used during installation.
- C. With the gangway secured in correct position, mark the location of the wheel guides and fasten in place.

END OF SECTION

SECTION 064000
PLASTIC LUMBER

PART 1 - GENERAL

1.1 SUMMARY

- A. This section consists of labor, materials, and equipment to complete the plastic lumber guardrails.

1.2 REFERENCES

- A. References shall be the latest edition available as of the date of the invitation to bid unless otherwise specified. The following standards are hereby incorporated in this Specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. American Society for Testing and Materials (ASTM)

ASTM A 36	Carbon Structural Steel International
ASTM A 123	Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A 153	Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A 307	Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength
ASTM A 563	Carbon and Alloy Steel Nuts.
ASTM D 570	Standard Test Method for Water Absorption of Plastics
ASTM D 6108	Standard Test Method for Compressive Properties of Plastic Lumber and Shapes
ASTM D 6109	Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastic Lumber and Related Products
ASTM D 6111	Standard Test Method for Bulk Density and Specific Gravity of Plastic Lumber and Shapes by Displacement
ASTM D 6117	Standard Test Methods for Mechanical Fasteners in Plastic Lumber and Shapes
ASTM D 6341	Standard Test Method for Determination of the Linear Coefficient of Thermal Expansion of Plastic Lumber and Plastic Lumber Shapes Between -30 and 140°F (-34.4 and 60°C)

1.3 SUBMITTALS

A. Plastic Lumber

1. Submit the Manufacturer's Material Test Reports.
2. Submit the Manufacturer's Performance Data.
3. Submit SDSs.
4. Submit product literature for each product to be used.

5. Submit a certificate of compliance for each shipment of plastic lumber. The certificate must be accompanied by a laboratory test report.
6. Submit shop drawings for the plastic lumber for District's review. After review and revision (if required), submit approved shop drawings for use during construction. The shop drawings must show:
 - a. Details for component layout and connections;
 - b. Sequence of shop and field assembly;
 - c. Installation procedures.

1.4 QUALITY ASSURANCE

- A. Plastic Lumber will be inspected by the District at the District's discretion. Plastic Lumber that does not meet the requirements of this specification section will be rejected. No compensation for rejected plastic lumber will be made by the District.

1.5 DELIVERY AND STORAGE

- A. Ship and store plastic lumber in a way that minimizes scratching or damage to the outer surfaces.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Plastic Lumber:

1. Plastic lumber shall:
 - a. Be produced continuously and homogeneously without joints;
 - b. Be straight and true and free from twist, curvature, bulging, or other deformations;
 - c. Have a smooth outer layer with no visible voids (excluding ends and cut ends);
 - d. Not vary from the dimensions shown by more than 1/4 inch for cross-sectional dimensions;
 - e. Have total resistance to marine borers and dry rot;
 - f. Not swell, shrink, or crack;
 - g. Comply with the requirements shown in the following table:

Quality Characteristics	Test Method	Requirement
Specific Gravity	ASTM D 6111	0.92, min
Flexural Strength	ASTM D 6109	2750 psi, min
Compressive Strength Perpendicular to Grain	ASTM D 6108	1450 psi, min
Screw Withdrawal	ASTM D 6117	600 lbs, min
Water absorption	ASTM D 570	0.5%, max by weight
Coefficient of Thermal Expansion	ASTM D 6341	0.00006 in/in/ft, max

2. For the interior voids at each exposed end of plastic lumber:
 - a. Maximum dimension of any void must not exceed a half (1/2) inch.
 - b. Total number of voids with a maximum dimension greater than 1/4 inch must not exceed four (4).
 - c. Total area of voids in a cut section must not exceed five (5) percent of the total cross-sectional area.
 3. Acceptable Product:
 - a. Fiber Reinforced Molded Lumber, Tangent Materials (formerly Bedford Technologies), Aurora, IL.
 - b. Structural Lumber, American Plastic Lumber, Shingle Springs, CA.
- B. Hardware
1. Stainless Steel
 - a. Screws for attaching rails to posts shall be Stainless Steel Grade 316, square-drive or torx-drive, of the size and length shown on the Drawings.
 - b. Acceptable Product:
 - 1) Simpson Strong-Drive DWP Wood SS Screw, SS316, Model T14400WP or approved equal.
 2. Miscellaneous Fasteners
 - a. Provide bolts, nuts, washers, drift bolts and drift pins, dowels, nails, screws, spikes, and other fasteners. Bolts shall conform to ASTM A 307, nuts to ASTM A 563 of the and size shown unless otherwise indicated on the drawings. Bolts and lag screws shall have cast-iron ogee, malleable iron washers, or plate or cut washers under head and nut as indicated.
 3. Miscellaneous Connectors
 - a. Fabricate timber connectors from ASTM A 36 plate and hot dip galvanize after fabrication unless otherwise indicated on the drawings.
 4. Zinc-Coating
 - a. Galvanize all steel hardware by the hot-dip process in accordance with ASTM A 123 or ASTM A 153, as applicable.

PART 3 - EXECUTION

3.1 CONSTRUCTION

A. General

1. Install plastic lumber according to manufacturer's instructions and recommendations.
2. Cut, bevel, drill, counterbore, and otherwise fabricate plastic lumber under the manufacturer's instructions. Fabricate lumber in the manufacture's plant to the greatest extent possible.
3. Holes for bolts in plastic lumber must be bored 1/8 inch larger in diameter than the bolt to be placed. Holes for lag screws must be bored to a diameter under the

manufacturer's instructions. Recess bolts and lag screw heads 1/2 inch from the surface of the face of the plastic lumber fenders. Screws attaching rails to posts shall be flush with rail surface or nominally recessed.

4. Exposed edges and corners of rails along pedestrian paths of travel shall be rounded with 1/4-inch radius. Provide smooth continuous edges along rails and rail butt joints.
 5. Reject plastic lumber elements that are split, broken, warped, damaged, or otherwise unsuitable.
- B. Framing
1. Cut and frame so that joints will fit over contact surface. Countersink hardware wherever smooth faces are indicated.
 2. Open joints are unacceptable. Shimming is not allowed.
- C. Fastening
1. Vertical bolts shall have nuts on the lower end. Where bolts are used to fasten timber to timber, timber to concrete, or timber to steel, bolt members together when they are installed and retighten immediately prior to final acceptance of contract. Provide bolts having sufficient additional threading to provide at least 3/8 inch per foot thickness of timber for future retightening.
- D. Guard Railing
1. Set railing posts, as indicated on the Contract Drawings. Butt splices in rails shall occur only at support posts. Stagger rail splices by a minimum of 4 ft. Lay cap rail with tight joints.
 2. Tolerances:
 - a. Dimensions of guardrail shall be per Contract Drawings.
 - b. Height of guardrail: +1/2", -0"
 - c. Tolerances in construction shall not result in failure to meet CBC guidelines for guardrail height or gap dimensions.

3.2 FIELD TREATMENT

A. Galvanized Surfaces

1. Repair and recoat zinc coating which has been field or shop cut, burned by welding, abraded, or otherwise damaged to such an extent as to expose the base metal. Thoroughly clean the damaged area by wire brushing and remove traces of welding flux and loose or cracked zinc coating prior to painting. Paint cleaned area with two coats of zinc oxide-zinc dust paint.

END OF SECTION 064000

DIVISION 21 – 28
FACILITY SERVICES

SECTION 211000
FIRE PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this section covers includes all labor, materials, tools, and equipment required to furnish and install the fire protection system complete in place and ready for service to the entire satisfaction of the Fire Marshal, as indicated on the Drawings and described herein, including all required testing, certificates, and spare parts.
1. System shall be designed for the occupancy load as determined by the District in conjunction with their Insurance Service Office, the local Fire Marshal, and the Underwriters checking agency.
 2. The system shall be designed, fabricated, and erected in accordance with all engineering, codes, standards, and governmental regulations applicable to the specified service.
 3. The final installed fire protection system shall meet the minimum standards of NFPA as determined by the Fire Marshal and the District.

1.2 RELATED SECTIONS

- A. General Conditions, Specification sections from Divisions 0 and 1, and the Drawings apply to this section. This section may require direct correlation with the following sections of these Specifications:
- B. Section 013300 – Submittals
- C. Section 331000 – Water System

1.3 REFERENCES

- A. References shall be the latest edition available as of the date of the invitation to bid unless otherwise specified. The following standards are hereby incorporated in this Specification to the extent referenced. The publications are referred to in the text by the basic designation only.
1. Underwriters' Laboratories (UL) Publication – List of inspected Fire Protection Equipment and Materials.
 2. National Fire Code, latest edition.
 3. California Fire Code, latest edition.
 4. National Fire Protection Association (NFPA):
 - NFPA 14 Standard for the Installation of Standpipes and Hose Systems
 - NFPA 24 Standard for the Installation of Private Fire Service Mains and their Appurtenances

- NFPA 303 Fire Protection Standard for Marinas and Boatyards
5. American Society for Testing and Materials (ASTM)
- ASTM D 746 Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact
- ASTM D 792 Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
- ASTM D 1004 Standard Test Method for Tear Resistance (Graves Tear) of Plastic Film and Sheeting
- ASTM D 1603 Standard Test Method for Carbon Black Content in Olefin Plastics
- ASTM D 3035 Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter
- ASTM D 4833 Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products
- ASTM D 5199 Standard Test Method for Measuring the Nominal Thickness of Geosynthetics
- ASTM D 6693 Standard Test Method for Determining Tensile Properties of Nonreinforced Polyethylene
6. American Water Works Association (AWWA) AWWA C104 Cement Mortar Lining for Ductile Iron Pipe and Fittings for Water
- AWWA C110 Ductile Iron and Gray Iron Fittings, 3 in. Through 48 in., for Water and Other Liquids
- AWWA C111 Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings
- AWWA C115 Flanged Ductile Iron Pipe with Ductile Iron or Gray Iron Threaded Flanges
- AWWA C116 Protective Fusion-Bonded Epoxy Coatings for the Interior and Exterior Surfaces of Ductile-Iron and Gray-Iron Fittings for Water Supply Service
- AWWA C150 Thickness Design of Ductile Iron Pipe
- AWWA C151 Ductile Iron Pipe, Centrifugally Cast for Water
- AWWA C600 Standard for the Installation of Ductile Iron Water Mains and Their Appurtenances

1.4 QUALITY ASSURANCE

- A. Provide compliance with all national, local, and state codes and ordinances.
- B. It is the intent of these Specifications to provide for complete and operating fire protection system in full compliance with the standards of the National Fire Protection Codes & Standards for the purpose of obtaining maximum fire protection at the minimum insurance rate. The work must also be in accordance with all local, national, or state requirements, which apply.

1.5 QUALIFICATIONS OF BIDDERS

- A. Bidders shall present evidence satisfactory to the District that they are regularly engaged in the manufacture and installation of fire protection systems approved by the Underwriters' Laboratories, Inc. (UL), and Factory Mutual (FM). In addition, the manufacturers of such equipment shall also be approved by UL and FM.

1.6 SUBMITTALS

- A. The Contractor shall prepare and furnish complete detail drawings, calculations, and specifications for the installation of all fire suppression systems, complete with seismic bracing. The design shall be prepared by and signed and sealed by a Fire Protection Engineer, licensed as such in the State of California.
- B. Systems shall be designed and installed so as to meet with the inspection and approval of NFPA. Shop drawings shall be submitted to the District for underwriters checking, for approval prior to any installation of work. Six (6) copies of the approved shop drawings shall be submitted to the District for approval.
- C. The shop drawings shall be submitted to the District for approval before work on the system begins. This shall include changes made to the fire protection system as requested by the insurance carrier.
- D. At the completion of the project the contractor shall submit two printed sets and one electronic copy of the as-builts on AutoCAD of the completed installation, showing location, pipe size, head location, drain lines, pumps if required, and other required information. One set of material and drawings shall be submitted to the District.
- E. One set of technical and operating manuals shall be submitted to the District.

1.7 PROJECT CONDITIONS

- A. Installation of the system shall not be started until complete plans and specifications (including water supply information) have been approved by the local Fire Marshal.
- B. At various stages and upon completion, the system must be inspected and tested in the presence of the enforcing agency.
- C. The Contractor shall field check the routing of all fire protection piping prior to release of material for fabrication. This is to establish locations of interference and miscellaneous adjustments to specific pipe/detection locations. Should interfaces occur then the Contractor shall notify the General Contractor and interferences resolved before proceeding.

1.8 REQUIREMENTS OF REGULATORY AGENCIES AND PUBLICATIONS

- A. Provide work and materials in full accordance with the latest rules and regulations of the following:
 - 1. All pertinent National Fire Protection Association Standards (NFPA).
 - 2. City of South San Francisco.

3. State of California and National Fire Codes

- B. Any conflict between the above referenced codes or standards, or between the standard and these specifications, shall be referred immediately to the Fire Marshall, who shall determine which standard, or specification requirements shall govern.

1.9 MAINTENANCE AND OPERATING INSTRUCTIONS

- A. Submit operations and maintenance instructions per Section 013300 "Submittals".

PART 2 - PRODUCTS

2.1 GENERAL

- A. The equipment to be furnished under this Specification shall be new and essentially the standard product of the manufacturer. Where two (2) or more units of the same class of equipment are required, these units shall be products of a single manufacturer; however, the component parts of the system need not be the products of the same manufacturer unless required to maintain UL or FM certification.
- B. Both FM and UL agencies must approve and certify all products specified to be used on this project for fire protection use. All products or valves that do not meet the above requirements shall not be used on this project, unless approved by the Fire Marshal.

2.2 MATERIALS AND EQUIPMENT

- A. Unless otherwise shown on the Drawings, specified, or directed by the District, all materials and equipment used in the installation of the system shall be listed as approved by the Underwriters' Laboratories and Factory Mutual, and shall be the latest design of the manufacturer.
- B. Each wet-pipe system shall be furnished complete with the following equipment:
1. Double check backflow preventer.
 2. Isolation gate valve.
 3. Fire Department connections.

2.3 INSTALLATION STANDARDS

- A. For installation of above ground piping comply with the requirements of NFPA No. 14 and other applicable NFPA Standards.
- B. For installation of below ground piping comply with the requirements of NFPA No. 24 and other applicable NFPA Standards.

2.4 PIPE

- A. Firewater Piping: The pipe material is noted on Drawings. Fitting, flanges, and appurtenances must be compatible with the pipe. All fire water piping material and installation must be in accordance with applicable NFPA code and standards.

1. Stainless Steel (SS) Piping: SS piping must be Schedule 40, Type 316 Stainless Steel per ASTM A312/A312M.
 2. Polyethylene (PE) Plastic Pipe: Polyethylene (PE) Pressure Pipe and Fittings for underwater installation shall be AWWA C906 SDR 9. HDPE shall be IPS type per ASTM D3035, material per Specification Section 330000 "Water System". HDPE piping shall be inspected internally for smoothness at pipe joints to avoid excessive weld beads.
 3. Ductile Iron (DI) Underground Pipe: Buried DI pipe shall be in accordance with NFPA codes and standards. Specifically, DI pipe shall be per AWWA C115 and C151, with thickness specified for the minimum pressure rating per AWWA C150. Cement mortar lining shall be provided per AWWA C104. Flanged fittings shall be provided per AWWA C110, with gaskets per AWWA C111. All buried DI piping shall be protected with epoxy coating per AWWA C116, and installed per AWWA C600.
 4. Flexible Hose:
 - a. Flexible Hose and fitting materials must be compatible with firewater and suitable for 24-hour contact seawater and sunlight on the hose exterior.
 - b. Factory assembled lengths with 250 psi working pressure and marine stainless-steel couplings each end.
 5. Hangers and supports must be 316 stainless-steel, and as specified on Drawings.
 6. Pipe supports at the docks/piers must conform to MSS SP-58. Support materials may be stainless steel or as noted on Drawings. Manufacturer's listed maximum load ratings must not be exceeded. Pipe must not exceed spacing noted on Drawings or manufacturer's recommendation whichever is smaller.
- B. Fire Hose Standpipe Riser: Fire hose connection valve must be Potter Roemer 4065 or approved equal.
- C. The length of shop fabricated sections shall be the maximum allowed within the limitations of handling and shipping. Whenever possible, field joints shall be placed in convenient locations. Locations of field joints shall be acceptable to the District.
- D. For installation below ground comply with NFPA No. 24.

2.5 VALVES

- A. All valves shall be identified by permanent brass tags or in accordance with NFPA requirements. The District will assign the number to the tags.
- B. Water supply valves shall be UL approved Outside Screw and Yoke (OS&Y) valves with flanged ends. Valves shall be sealed open with approved seals.

2.6 BACKFILL AND BEDDING MATERIAL

- A. Engineered Fill: Compacted backfill shall meet the requirements of a standard California Department of Transportation 3/4" maximum Class 2 Aggregate Base.

- B. Bedding Material: Bedding material shall be sand free from clay or organic material, suitable for the purpose intended, and shall conform to the following gradation requirements:

Bedding Material	
Sieve Size	% Passing
No. 4	90 - 100
No. 200	0 - 5

2.7 GEOMEMBRANE LINER

- A. Geomembrane trench liner shall be linear low density polyethylene (LLDPE) smooth liner, manufactured by Agru America Inc. or approved equal. The required nominal liner thickness shall be 40-mil. The geomembrane sheets shall be uniform in color, thickness, and surface texture.
- B. The geomembrane liner shall be shipped in rolls, free of and resistant to fungal or bacterial attack, and free of cuts, abrasions, holes, blisters, contaminants, and other imperfections.
- C. The geomembrane liner used shall meet, at a minimum, the requirements below:

LLDPE (40-mil) Geomembrane Liner		
Property	Test Method	Value
Thickness, Mil, per roll (min.)	ASTM D 6693 Type IV	36/40*
Sheet Density/Specific Gravity, g/cm ³ (max.)	ASTM D 792 Method B	0.939
Tensile Properties, lb/in (Each Direction)	ASTM D 6693 Type IV	-
1. Strength at Break, lb/in.	2 in/min	160
2. Elongation at Break, %	5 specimens in each direction	800
Tear Resistance, lbs (min.)	ASTM D 1004	25
Low Temperature Brittleness, °F (max.)	ASTM D 746 (Procedure B)	-103
Puncture Resistance, lbs (min.)	ASTM D 4833	60
Allowable Carbon Black Content, %	ASTM D 1603	2.0 – 3.0
* Thickness – First value represents lowest individual value. Second value represents average across roll.		

2.8 PIPE SUPPORT SYSTEM

- A. The pipe support system shall be trapeze type, with embedded threaded rod inserts cast into the precast concrete panels. Drilled and epoxied threaded rods are not allowed. Provide minimum 3" clear spacing from inserts to rebar.

- B. The pipe support and bracing system shall be designed by the Contractor, and include plan layout, brace selection and specification, plan layout and calculations. The design shall be submitted to the Fire Marshall for approval.
- C. Pipe hangers shall be installed per NFPA requirements and local building codes for seismic bracing.
- D. All components of the pipe support shall be Stainless Steel Grade 316 or 316L.

2.9 CONCRETE THRUST BLOCKS

- A. Concrete thrust blocks shall meet the requirements of NFPA 24 and shall be of adequate size, placement, and construction to prevent movement of pipes and transfer of excessive stress to pipe joints.

PART 3 - EXECUTION

3.1 EXECUTION

- A. At various stages and upon completion, the system must be inspected, accepted, and tested in the presence of the local enforcing agencies.
- B. Verify applicable dimensions at the jobsite.
- C. Coordinate the work of this Section with related trades.

3.2 UNDERGROUND SUPPLY SYSTEM

- A. Supply connections shall be provided as shown on the Drawings and shall be used to service the Fire Protection systems only.
- B. Installation shall conform to the applicable NFPA requirements, the local fire department, and City of South San Francisco standards.
- C. Trenching
 1. A four (4) inch layer of sand or fine gravel shall be placed and tamped below the trench (below the geomembrane liner as shown in the drawings) to provide a relatively smooth surface free of sharp projections, obstructions, depressions, debris, and soft or low density pockets of material.
 2. The geomembrane liner shall be stored, handled, installed, and secured in place per manufacturer instructions and recommendations. At the time of installation, the liner shall be rejected if it has defects, rips, holes, flaws, deterioration, or damage incurred during manufacturing, transportation, or storage.
 3. A four (4) inch layer of sand or fine gravel shall be placed and tamped in the trench to provide a uniform bedding for the pipe. The trench floor shall be completely cleared of stones and rocks. The entire trench shall be evenly backfilled with a similar material as the bedding in 6-inch compacted layers to a minimum height of six (6) inches above the top of the piping system. The remaining trench shall be evenly and continuously backfilled in uniform layers.

4. Additional geomembrane liner shall be placed over the finished backfill surface of the trench to prevent drainage into the trench.
5. Proper implements, tools and equipment should be used for placement of pipe in the trench to prevent damage. In no case should pipe or accessories be dropped into the trench. Additional handling and joining procedures may be provided by the pipe manufacturer.
6. Encountered unstable soil conditions requiring trench wall shoring should follow local, state, and federal regulations for shoring. As the shoring is removed, it should be replaced with backfill soil. Organic soils or plastic clays and silts with high liquid limits may be encountered that are incapable of supporting the pipe. The poor soil is to be removed and replaced with the proper bedding soil to a depth that will provide a firm and stable foundation. The minimum recommended trench width is 18 inches for a single pipe.
7. Special Trench Conditions
 - a. There exists a clay cap covering a landfill at this site. Construction (including trenching) associated with the system installation shall be done without damaging this cap. The location and depth of the clay cap shall be verified by the Contractor in the areas to be removed for trench installation prior to installation.
 - b. Trench Through Clay Cap:
 - 1) Trenching through the clay cap, if required, shall be in accordance with details shown on project Drawings, with particular attention to installing a low permeability flexible geomembrane liner along sides and bottom of trench, extending underneath bedding material (as described in Paragraph 3.2.C.1).
 - c. Asphalt Concrete and Concrete Paving above Trench Through Clay Cap:
 - 1) The low permeability layer shall have a minimum thickness of one (1) foot above the foundation/bedding layer for the system installation. A layer of compacted backfill shall be installed between the asphaltic concrete paving and the low permeability layer.
 - d. Rip-rap:
 - 1) A portion of the trenching will be located along the shoreline. This may require removal of the rip-rap and replacement of the rip-rap after installation. The existing rip-rap may be re-used. Additional rip-rap, if required, shall be of the same size, gradation, and quality.
 - e. Rock Bottom Trench:
 - 1) A rocky or uneven trench foundation should be covered with a firm soil or gravel before bedding is constructed.
 - f. Unstable Soil:
 - 1) Pipe shall not be laid in unstable soil until the trench walls are stabilized with shoring. Replace and compact the soil as the shoring is removed.
 - g. Granular Soil:
 - 1) The trench wall should be sloped at the natural angle of repose.

h. Over-Excavation:

- 1) Any accidental over-excavation should be filled with bedding material and compacted to 90-95 percent using the modified proctor test method.

D. Backfilling

1. Prior to backfilling, foreign materials such as shoring, braces, and support blocks shall be removed. Sod, cinders, or stones greater than 1/4-inch in diameter shall not be used as primary backfill. The adjacent area shall be carefully compacted in 6-inch layers.
2. Primary backfilling of selected earth shall be packed and tamped to six (6) inches minimum over the top of the pipe. Compact in 6-inch layers to 90 to 95 percent using the modified proctor test method. If surface conditions exist, backfill to grade in this manner. Do not use wheeled or tracked equipment.
3. The final backfill operation can be completed by any convenient means, provided that items 3.2.D.1 and 3.2.D.2 are completed. The remainder of the backfill shall be free of large boulders and rocks larger than six (6) inches in diameter, frozen earth, or foreign matter. After placement and compaction of pipe embedment materials, the balance of backfill materials may be mechanically placed.
4. Although the use of mechanical compaction equipment to complete the final backfill is suggested, the mechanical compactors shall not be used until the conduit is covered with at least 12 inches of firmly compacted soil. Under normal conditions, backfill to grade in one (1) foot lifts and compact to 85 percent using the proctor test method. Native soil can be used, provided it is non-organic, and all particles are less than one (1) inch in size.

E. Bracing and Clamping: Bends shall be braced or clamped in accordance with the requirements of NFPA Standards. The clamp rods at the flange and spigot piece shall be long enough to pass through flange.

F. Flushing: Before connecting to the system, supply connection shall be flushed out thoroughly through an unrestricted opening not less than four (4) inches in diameter.

G. Fire protection contractor shall verify water pressure at the job site prior to design of system.

3.3 PIPE AND FITTINGS ABOVE GROUND AND BELOW WATER

A. Pipe fittings, and hangers shall be installed where shown on the Drawings and in accordance with the requirements of NFPA Standards.

B. Cutting structural members for pipe hanger fastening will not be permitted except with the approval of the District.

C. Expansion and Contraction: Long runs of pipe shall be provided with suitable means to permit free movement.

D. Piping shall be assembled and supported to resist hydrodynamic forces.

3.4 FIRE DEPARTMENT CONNECTION (FDC)

- A. Install FDC per plan.
- B. FDC shall be unobstructed and shall identify the dock number they are servicing.

3.5 FLUSHING

- A. Before acceptance of the fire protection system, each unit of the completed system shall be flushed with clean water.

3.6 TESTS

- A. Upon completion and prior to acceptance of the installation, the Contractor shall subject the entire new system to the tests required by NFPA and shall furnish the District with a certificate as required by his underwriter.
- B. Test shall be done in the presence of the District and local Fire Marshal.
- C. The District shall be contacted at least three (3) days in advance to schedule inspection and testing of systems.

3.7 COORDINATION

- A. All piping, valves, and connection work associated with the fire system shall be coordinated with the new dock, access platform, and utility Work. Exposed piping shall be placed as approved by the District prior to installation. Fabrication of piping system shall not be started until the Fire Marshall has approved plans.
- B. Any differences or disputes concerning coordination, interference, or extent of work shall be decided by the District and the District's decision shall be final.

3.8 CLEANING UP

- A. Upon completion of test, clean all equipment, piping, etc., installed under this section of the Specifications.

3.9 AS-BUILT DRAWINGS

- A. The contractor shall submit as-built drawings at the conclusion of the project indicating the location of the back flow preventer, hose connections, valves, and other required information to properly transmit the completed system to the District per the requirements of this section as noted in Paragraph 1.6.

3.10 PORTABLE FIRE EXTINGUISHERS

- A. The contractor shall provide certified, appropriate fire extinguishers to the site during construction and installation of fire protection systems.

END OF SECTION

SECTION 260000

GENERAL ELECTRICAL PROVISIONS

PART 1 - GENERAL

1.1 SECTIONS INCLUDED

- A. Division 26 – Electrical includes all 260000 series sections.

1.2 DESCRIPTION

- A. The work of this Section consists, in general, of providing all electrical systems complete and in place, and shall include all components necessary for proper operation of the system. If components are indicated on the drawings or inferred from the system requirements but not specified by catalogue number, such components shall be furnished by the manufacturer furnishing the remainder of the system.
- B. When catalog or series numbers are shown they are intended to indicate the type and quality of product. The product furnished shall meet all specification requirements even if the product conforming to the given catalog number does not.
- C. In the event of conflict between requirements, shown on the plans or specified the most stringent requirement shall govern.
- D. Wherever tables or schedules show quantities of materials, they shall not be used as the final count. These figures serve only as a guide to the Contractor. The Contractor shall be responsible for furnishing all material noted.
- E. A minimum size or performance requirement specified shall be superseded by requirements specified in other technical specification sections.
- F. When short circuit currents or interrupting capacities are indicated they shall be considered as R.M.S. Symmetrical unless otherwise stated.
- G. The electrical plans show the general arrangement of all raceways, equipment, and appurtenances. They shall be followed as closely as actual construction and the work of other trades will permit. The electrical work shall conform to the requirements shown on all the plans.
- H. General and civil plans indicated shall take precedence over electrical plans in the matter of location of equipment. Because of the small scale of the electrical plans, it is not possible to indicate all offsets, fittings, and accessories which may be required. The Contractor shall investigate the structural and finish conditions affecting the work and shall arrange his work accordingly, providing such fittings, and accessories as may be required to meet such conditions.
- I. When specific connections and home runs are not shown on the plans the Contractor may make these connections as he desires provided all specification requirements are met and that circuiting shown on the plans is observed.

1.3 SITEWORK

- A. Major items of work and equipment to be furnished by the Contractor include but are not limited to the following:
1. Distribution equipment and circuit breakers, switches, etc.
 2. Wire and cable.
 3. Conduit and pull boxes.
 4. Marine grade distribution panels and enclosures.
 5. Communication system conduits, cabinets, and backboards.
 6. Temporary power connection to docks during construction.
 7. Conduit and Cable support systems.
 8. Access Platform and Gangway Lighting system.

1.4 CODES AND STANDARDS

A. Compliance

1. Installation shall conform with all applicable State and local codes, rules, ordinances, and regulations which will govern the quality and the character of work, style and size of materials.
2. In case of difference between building codes, state laws, local ordinances, industry standards, utility company regulations and the Contract Documents, the most stringent shall govern. The contractor shall promptly notify the District in writing of any such difference.
3. Should the Contractor perform any work that does not comply with the requirements, ordinances, and industry standards, he shall bear all costs arising in correcting the deficiencies.

B. Building Codes

1. The latest editions of the following Codes shall apply.
 - a. California Electrical Code
 - b. NFPA 101A. Life Safety Code.
 - c. NFPA 303. Fire Protections Standard for Marinas and Boatyards

C. Industry Codes

1. All electrical equipment shall be listed by Underwriter's Laboratories, Inc. and shall meet all requirements established by NEC, NEMA, NFPA, and ANSI and as specified hereinafter.
2. Materials and installation procedures shall comply with all applicable requirements of the following nationally accepted codes and standards:
ANSI American National Standards Institute, Inc.
ASA American Standards Associations

ASTM	American Society of Testing Materials
CBM	Certified Ballast Manufactures
ETL	Electrical Testing Laboratories
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
IPCEA	Insulated Power Cable Engineers Association
ITL	Independent Testing Laboratories
NBS	National Bureau of Standards
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
UL	Underwriter's Laboratories

1.5 WORK AND WORKMANSHIP

- A. These specifications are not intended to include every detail or operation considered to be required, and the Contractor shall be familiar with these procedures. In the absence of specified details in the Contract Documents regarding installation procedure, the National Electrical Contractors Association "Standard of Installation" manual and the latest edition of Croft's "American Electricians' Handbook" shall be considered as minimum requirements.
- B. Locations of all equipment connections are shown for bidding purposes only. Contractor shall verify all equipment connections with the respective suppliers prior to rough-in.
- C. The Contractor shall take all field measurements as necessary for his work and shall be responsible for the accurate location and size of all openings, recesses, slots, ferrules, and the like.
- D. Should any structural difficulties prevent the running of conduits, etc., at points shown on drawings, necessary minor deviations therefrom, as determined by the District, may be permitted only if authorized in writing. These changes shall be made without additional costs.
- E. Specific emphasis must be made that if the equipment other than that which the drawings were designed around does not properly adapt itself to the space allotted or lend itself readily accessible for repair or maintenance, the Contractor is responsible for providing all additional access panels, pipe, fittings, all materials, labor, and other required items to provide the same end results.
- F. Any extra costs which might result from deviations from the drawings, so as to avoid interferences, shall be considered a "Job Condition" and no additional compensation will be considered applicable. In the event that any such interferences occur in the course of the work, due to an error, omission or oversight by the Contractor, no additional compensation shall be allowed.

- G. Interferences which may occur during construction shall be brought to the immediate attention of the District, and the District's decision confirmed in writing shall be final as to which trade shall take preference.
- H. The finished job shall be functional and complete in every detail, including all such items required for a complete system whether these items are specified or shown on the plans.
- I. Special attention shall be given to the accessibility of working and controlling parts. Adjustable parts shall be within easy reach. Removable parts shall have space for removal.

1.6 ELECTRICAL EQUIPMENT

- A. Electrical equipment shall be new and shall be listed by and conform to standards and codes noted herein.
- B. Materials used for like service conditions shall be by the same manufacturer.
- C. Unless noted as field fabricated all equipment shall be delivered completely factory assembled and wired.
- D. A specification followed by one or more manufacturers "or approved equal" is open to all equal products or materials, unless otherwise noted. However, the Contractor shall supply equipment from one of the listed manufacturers at no additional cost if the District finds the substituted product unsatisfactory.
- E. Provide suitable protection from weather and vandalism for all materials and equipment to be installed. Storage shall be dry, clean, and safe. Any materials or equipment damaged, deteriorated, rusted, or defaced due to improper storage shall be fully repaired, refinished, or replaced, as directed by the District.

1.7 SHOP DRAWINGS

- A. These requirements are supplemental to the general conditions of contract.
- B. Drawings shall be accurately drawn large drawings, adequately dimensioned, showing external and internal features, mechanical provisions, materials, gauges, electrical characteristics, wiring diagrams and such other information necessary to show compliance with the intent of the specifications and plans.
- C. Generalized diagrams having several alternate methods of connection will not be acceptable.
- D. Catalog data, in lieu of certified prints, shall be submitted for standard specialties, wire and cable, switches, starters, insulation and similar items.
 - 1. All catalog data covering electrical equipment shall be submitted at one time.
- E. Contractor shall check all shop drawings for correct performance, size, capacity, finish and fit prior to submittal to the District. Drawings shall be signed to indicate Contractor has reviewed these drawings.

1.8 SUBMITTALS

- A. The District will review submitted shop drawings as a further check and as a service to the Contractor. Such review does not relieve the Contractor of responsibility for the correct ordering of material and equipment.
- B. Contractor shall submit shop drawings of the following systems or equipment within thirty (30) calendar days after the award of Contract:
 - 1. Panel Boards and Service Distribution Equipment
 - 2. Pull Boxes and Enclosures
 - 3. Cable/Conductor
 - 4. Conduits and Conduit Sleeves
 - 5. Dock Power Connectors
 - 6. Communication Cabinets
 - 7. Conduit and Cable Support Systems
- C. The Contractor shall submit, upon request, a schedule listing the equipment and materials required to complete the installation, quantity ordered, the date of placing the order and the promised delivery date.

1.9 COORDINATION

- A. The Contractor shall acquaint himself with details of all work to be performed by all trades and as required by the serving utilities and take necessary steps to integrate and coordinate the work.
- B. It is the responsibility of the Contractor to coordinate the space required for all trades. No extra compensation will be allowed to cover the cost of removing piping, conduit, ducts, or equipment found encroaching on space required by others.
- C. Special attention shall be given to points where conduit crosses other conduit or piping or where pipes and conduit pass through bulkheads.
- D. Each Contractor shall be responsible for informing himself of the nature and arrangement of the materials and construction to which his work attaches or passes through.

1.10 PROVISIONS FOR LATER INSTALLATIONS

- A. Where any electrical work cannot be installed as the structure is being erected, Contractor shall provide and arrange for the building-in of boxes, sleeves, inserts, fixtures or devices as necessary to permit installation of the omitted work during later phases of construction. The Contractor shall arrange for any layout, any chases, hole, or other openings which must be provided in the Dock, concrete or other work.

1.11 PROTECTION AND REPAIR

- A. In addition to the provisions and stipulations of the General Conditions of the Contract, the Contractor shall provide protection for work and equipment in his contract.

- B. Repair or replace all property damaged in the installation of Electrical & Communication lines to meet approval of the District and the authorities having jurisdiction.

1.12 SITE CLEANUP

- A. All rubbish resulting from the work herein specified shall be removed from the premises as fast as it accumulates.
- B. On completion of his work, the Contractor shall remove from the site all tools, equipment, surplus materials, and rubbish pertaining to his operations. The Contractor shall pay all costs for such removal and disposition.

1.13 ELECTRICAL CONNECTIONS TO EQUIPMENT

- A. In the event that a supplier of equipment other than that furnished under Division 16 requires a larger starter, disconnect, circuit protector or wiring than those indicated in the Contract Documents, he will be required to reimburse the Contractor supplying these items for the difference.
- B. Connections and wiring diagrams shown on drawings or described in the Specifications are typical and are for bidding purposes only. Detailed diagrams and instructions will be required from the Contractor supplying the equipment if connections are different from those shown on the plans.
- C. TEMPORARY POWER CONNECTIONS TO DOCKS: Temporary power connections from existing distribution equipment shall be provided to the docks until permanent power can be provided from new distribution equipment. Coordinate shutdowns and cut-over times with Harbor Master's office.

1.14 PROJECT CLOSE-OUT

- A. Furnish all labor and material required to make the final inspection and tests.
- B. Final inspection and all tests, signed by the Contractor, shall be made by Contractor in the presence of the District.
- C. The tests shall be made under conditions simulating those obtained in operation and shall show conclusively that the requirements of the specifications have been fulfilled. All instruments required for the tests shall be furnished by Contractor, but subject to the approval and check by the District.

1.15 REPORTS

- A. Reports of all the tests are to be signed by the Contractor and submitted to the District upon completion of testing.
- B. Each report shall list:
 - 1. The purpose of the test.
 - 2. The instruments used.
 - 3. Last date the instrument was calibrated.

4. Test performed.
5. Test results.
6. Date of test.
7. All reports shall be signed by the contractor.

1.16 TEST AND ADJUSTMENTS

- A. Feeders and Branch Circuits: Upon completion of work, test the insulation resistance of all feeders and branch circuits using a 500 volt megger.

1.17 CLEANING AND TOUCH-UP

- A. All service equipment, panelboards, cabinets, and other enclosures shall be cleaned and the paint touched up as necessary to duplicate a factory finished appearance. Touch up paint shall match the color, composition and quality of the factory applied finish.
- B. Label all electrical equipment by means of engraved laminated plastic plates screwed or riveted to device. Height of letters to be not less than 1/4" unless otherwise specified or directed.
- C. Items to be labeled shall include the following:
 1. Main service equipment, circuit breakers and switches.
 2. All circuit breakers and switches in switchboards and distribution panels.
 3. All panel boards (labeled on inside).
 4. Printed card labels may be used on items of equipment furnished with plastic windows.
 5. Directories inside of panel boards shall be type-written and shall show list of circuits and points, equipment or areas supplied.

1.18 RECORD DRAWINGS

- A. At the end of the project, the Contractor's working drawings shall be brought up to date and a set of prints delivered to the District with written material certification that all corrections are true and accurately noted installed thereon. Each drawing shall be labeled Record Drawings, dated and signed by the Contractor. Record drawings shall be subject to the approval of the District before further processing.
- B. After all corrections have been made and approved by the District, the Contractor shall be responsible for providing, to the District, two (2) complete sets of prints and an electronic (pdf) copy prior to certification of final payment on the contract.

1.19 MAINTENANCE AND OPERATING MANUALS AND INSTRUCTION

- A. These requirements are supplemental to those listed or referred to in any foregoing sections of these specifications.

- B. Contractor shall prepare suitable bound volumes pertaining to the installed systems and equipment. Submit one (1) copy to the District for approval. After approval, provide three (3) hardcopies and one (1) electronic (pdf) copy to the District.
- C. Hardcopy volumes shall be properly bound, indexed and contained in hard heavy duty 3 ring binders. The following shall be clearly printed on the front cover:
 - 1. Project name, address, and date.
 - 2. Name and address of the Contractor.
 - 3. Telephone number of the Contractor, including night or emergency.
 - 4. Bind the written operating instructions, shop drawings, equipment catalogue cuts and manufacturer's instructions into the binder. Material to be assembled as follows:
 - a. First Section - Written description of system contents, where actually located, how each part functions individually, and how system works as a whole. Conclude with a list of items requiring services and either state the service needed or refer to the manufacturer's data in the binder that describes the proper service.
 - b. Second Section - A copy of each approved shop drawing, (clearly marked for item furnished) with an index at the beginning of the section.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 260500

DOCK ELECTRICAL WORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work of this Section consists, in general, of furnishing all labor, materials, tools, equipment, and incidentals and in doing all the work involved in constructing dock and electrical systems complete in place, as specified, as indicated on the plans and as directed by the District.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- ASTM B 1 Hard-Drawn Copper Wire
ASTM B 8 Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

- NEMA AB 1 Molded Class Circuit Breakers
NEMA ICS 6 Industrial Control and Systems Enclosures
NEMA KS 1 Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum)
NEMA PB 2 Dead Front Distribution Switchboards
NEMA RN 1 Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit
NEMA TC 2 Electrical Plastic Tubing (EPT) and Conduit (EPC-40 and EPC-80)
NEMA TC 14 Filament-Wound Reinforced Thermosetting Resin Conduit and Fittings
NEMA WD 1 Wiring Devices

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 70 National Electrical Code
NFPA 303 Fire Protection Standard for Docks and Boatyards

UNDERWRITERS LABORATORIES INC. (UL)

- UL 50 Safety Enclosures for Electrical Equipment
UL 67 Panelboards
UL 83 Thermoplastic-Insulated Wires and Cables
UL 467 Grounding and Bonding Equipment

- UL 486A Wire Connectors and Soldering Lugs for Use With Copper Conductors
- UL 489 Molded-Case Circuit Breakers and Circuit-Breaker Enclosures
- UL 498 Attachment Plugs and Receptacles
- UL 510 Chloride, Polyethylene, and Rubber Insulating Tape
- UL 514B Fittings for Conduit and Outlet Boxes
- UL 514C Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers
- UL 651 Schedule 40 and 80 Rigid PVC Conduit
- UL 886 Outlet Boxes and Fittings for Use in Hazardous (Classified) Locations
- UL 891 Dead Front Electrical Switchboards
- UL 943 Ground-Fault Circuit-Interrupters
- UL 1569 Metal-Clad Cables

1.3 RELATED REQUIREMENTS

- A. Section 260000 "General Electrical Provisions" applies to this section with additions and modifications specified herein.

1.4 SUBMITTALS

- A. Submit the following in accordance with Section 013300 "Submittals."
 - 1. Manufacturer's Catalog Data
 - a. Enclosed circuit breakers
 - b. Disconnect switches
 - c. Conduit and fittings (each type)
 - d. Grounding and bonding equipment
 - e. Wires and cables
 - f. Panel boards and distribution equipment
 - g. Splice and termination components
 - h. Cabinets, junction boxes, and pull boxes
 - i. Conduit supports
 - B. Operation and Maintenance Manuals
 - C. Field Test Reports
 - 1. 600-volt wiring test
 - 2. Grounding system test
 - 3. Submittal shall include written results of each test and conditions at the time measurements were made.
 - a. Format: Submit test results for approval in report format.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Materials, equipment, and devices shall, as a minimum, meet requirements of UL where UL standards are established for those items, and requirements of NFPA 70 and NFPA 303.

2.2 CONDUIT AND FITTINGS

- A. Rigid steel, galvanized with 40 mil PVC coating.
- B. Rigid Non-Metallic Conduit, PVC Schedule 80.
- C. Flexible conduit, liquid-tight non-metallic smooth wall (Carlton "Carflex Kellums" or approved equal).
- D. Minimum Conduit Size: Minimum size of conduit shall be 1" unless noted otherwise on the plans.
- E. Fittings for Metal Conduit and Flexible Metal Conduit UL 514B. Ferrous fittings shall be cadmium or zinc coated in accordance with UL 514B.
- F. Fittings for Rigid Metal Conduit Threaded type. Split couplings unacceptable.
 - 1. Fittings for Rigid Nonmetallic Conduit UL 514B and UL 651.
- G. Expansion Joints: Install as recommended by the manufacturer for the temperature conditions at time of installation.

2.3 WIRES AND CABLES

- A. General: Shall meet applicable requirements of NFPA 70 and UL for type of insulation, jacket, and conductor specified or indicated. Do not provide wires manufactured more than 12 months prior to date of delivery to site.
- B. Conductors
 - 1. No. 8 AWG and larger diameter shall be stranded; No. 10 AWG and smaller shall be solid, except that conductors for remote control, alarm, and signal circuits, Classes 1, 2, and 3, shall be stranded. Conductors shall be copper. Conductor sizes and ampacities shown are based on copper.
 - a. Minimum Conductor Sizes: Minimum size for branch circuits shall be No. 12 AWG; for Class 1 remote-control and signal circuits, No. 14 AWG; for Class 2 low-energy, remote-control and signal circuits, No. 18 AWG; and for Class 3 low-energy, remote-control, alarm, and signal circuits, No. 22 AWG.
- C. Color Coding
 - 1. Provide for service, feeder, branch, control, and signaling circuit conductors. Color shall be green for grounding conductors and white for neutrals; except where neutrals of more than one system are installed in same raceway or box, other neutral shall be white with colored, except green, stripe. Color of ungrounded conductors in different voltage systems shall be as follows:

a. 120/240 volt, single phase:

- 1) Phase A – black
- 2) Phase B – red
- 3) Neutral - white

D. Insulation

Unless otherwise required by NFPA 70, power and lighting wires shall be 600-volt, Type THWN, except that grounding wire may be Type TW; remote-control and signal circuits shall be Type THWN. Conductors shall conform to UL 83. Where lighting fixtures require 90-degree C conductors, provide only conductors with 90-degree C insulation or better. Type G or Type W cable shall be used on the ramp, access platform, and gangway. Provide wire mesh cable grip where shown on the Drawings.

E. Bonding Conductors

ASTM B 1, solid bare copper wire for sizes No. 8 AWG and smaller diameter; ASTM B 8, Class B, stranded bare copper wire for sizes No. 6 AWG and larger diameter.

F. Splice and Termination Components

UL 486A, for wire connectors, and UL 510 for insulating tapes. Connectors for No. 10 AWG and smaller diameter wires shall be insulated, pressure type in accordance with UL 486A, twist-on splicing connector. Provide solderless terminal lugs on stranded conductors.

2.4 MARINA DISTRIBUTION UNITS:

- A. Panelboard Distribution Units shall be factory assembled and prewired units specifically designed and constructed for marina applications. The units shall be free standing type in a single, double-walled, NEMA 3R, powder coated SS316L or aluminum cabinet enclosure. The hardware shall be stainless steel 316/316L. All access doors shall be weather tight. Circuit breaker and transformer sizes and ratings shall be as shown in the construction documents. The units shall be manufactured by Eaton, Square D, or approved equal.
- B. Panelboards shall comply with UL 67 and UL 50 having a short-circuit current rating of 22,000 amperes symmetrical minimum. Panelboards for use as service disconnecting means shall additionally conform to UL 869. Panelboards shall be circuit breaker equipped. Design shall be such that individual breakers can be removed without disturbing adjacent units or without loosening or removing supplemental insulation supplied as means of obtaining clearances as required by UL. Where "spare only" is indicated, make provisions for future installation of breakers. Key panelboard locks the same. Directories shall indicate load served by each circuit in panelboard and main source of service to panelboard, such as Panel "DDP" served from Panel "MSB." Type directories and mount in holder behind transparent protective covering.
- C. Panelboard buses shall be copper. Support bus bars on bases independent of circuit breakers. Design main buses and back pans so that breakers may be changed without machining, drilling, or tapping.
- D. Circuit breakers shall be UL 489 thermal magnetic 100% rated type having a minimum short-circuit current rating equal to the short-circuit rating of the panelboard in which the circuit breaker will be mounted. Each distribution unit circuit breaker shall be equipped with adjustable 30mA minimum ground fault protection (GFP). Breaker terminals shall

be UL listed as suitable for type of conductor provided. Plug-in circuit breakers and series rated circuit breakers are unacceptable.

1. Multiple Breakers: Provide common trip type with single operating handle. Breaker design shall be such that overload in one pole automatically causes all poles to open. Maintain phase sequence throughout each panel so that any adjacent breaker poles are connected to Phases A and B respectively.

E. Distribution unit enclosures shall be NEMA 3R. Hardware shall be stainless steel 316/316L.

2.5 CABINETS, JUNCTION BOXES, AND PULL BOXES

A. As indicated on plans.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General

Electrical installations shall conform to requirements of NFPA 70 and to requirements specified herein.

B. Distribution Equipment and Panel Board Identification

1. Labels

Label, at minimum, shall indicate breaker size and dock it serves. Provide laminated plastic labels with letters no less than 0.25 inch in height; and engrave on black-on-white matte finish.

2. Wiring Methods

a. General

Provide insulated conductors installed in rigid conduit, except where specifically indicated or specified otherwise or required by NFPA 70 to be installed otherwise. Grounding conductor shall be separate from electrical system neutral conductor. Provide insulated, green equipment grounding conductors for circuits installed in conduit and raceways. Minimum conduit size shall be 1 inch in diameter for low-voltage lighting and power circuits.

b. Plastic-Coated Galvanized Rigid Steel

Use only for service entrance conduit and as required by NFPA for hazardous locations.

c. Rigid Nonmetallic conduit and PVC Schedule 80 on gangways

C. Conduit Installation

Run conduit structure sleeves. Install conduit parallel with or at right angles to structural members.

1. Conduit Support

Support conduit by stainless steel (316), wall brackets, hangers, or trapeze. Fasten by stainless steel wood screws to wood and by concrete inserts or expansion bolts on concrete. Threaded C-clamps may be provided on rigid steel conduit only. Load applied to fasteners shall not exceed one-fourth proof test load. Where conduit crosses expansion joints, provide suitable watertight expansion fitting that maintains conduit electrical continuity by bonding jumpers or other means.

2. Directional Changes in Conduit Runs

Make changes in direction of runs with symmetrical bends or molded fittings. Make field-made bends and offsets with conduit-bending machine suitable for type of conduit used. Do not install crushed or deformed conduits. Avoid trapped conduits. Prevent dirt or trash from lodging in conduits, boxes, fittings, and equipment during construction. Free clogged conduits of obstructions.

3. Expansion Joints

Install as recommended by the manufacturer for the temperature conditions at time of installation.

4. Pull Wire

Install in empty conduits in which wire is to be installed by others. Pull wire shall be plastic having minimum 200-pound tensile strength. Leave minimum 12 inches of slack at each end of pull wire.

5. Locknuts and Bushings

Fasten conduits to sheet metal boxes and cabinets with two locknuts where required by California Electrical Code, where insulated bushings are provided, and where bushings cannot be brought into firm contact with the box; otherwise, provide minimum single locknut and bushing. Locknuts shall have sharp edges for digging into wall of metal enclosures. Install bushings on ends of conduits, and provide insulating type where required by California Electrical Code.

D. Utility Pull Boxes

Provide boxes in wiring or raceway systems wherever required for pulling of wires, making connections, and mounting of devices or fixtures. Each box shall have volume required by California Electrical Code for number of conductors enclosed in a box.

1. Pull Boxes

Construct of at least minimum size required by California Electrical Code compatible with nonmetallic raceway systems. Furnish boxes with covers. Where several feeders pass through common pull box, tag feeders to indicate clearly electrical characteristics, circuit number, and panel designation. Pull boxes not subjected to vehicle traffic shall be parkway rated. Boxes subjected to vehicle traffic shall be rated for traffic loads.

E. Mounting Heights

Mount panelboards, circuit breakers, and disconnecting switches Per NEC requirements. Equipment shall be mounted to comply with NFPA 303 datum plane requirements.

F. Conductor Identification

Provide within each enclosure where tap, splice, or termination is made. For conductor sizes No. 6 AWG and smaller diameter, color coding shall be by factory-applied, color-impregnated insulation. For conductor sizes No. 4 AWG and larger diameter, color coding shall be by plastic-coated, self-sticking markers; colored nylon cable ties and plates; or heat shrink-type sleeves. Identify control circuit terminations.

G. Splices

Make splices in accordance with CEC Article 555. Make splices in conductor sizes No. 10 AWG and smaller diameter with insulated, pressure-type connector. Make splices in conductor sizes No. 8 AWG and larger diameter with solderless connector, and cover with insulation material equivalent to conductor insulation. Splices in wet locations shall be rated submersible.

3.2 FIELD QUALITY CONTROL

A. General

Furnish test equipment and personnel. Notify District five (5) working days prior to each test.

B. Devices Subject to Manual Operation

Operate each device subject to manual operation at least five times, demonstrating satisfactory operation each time.

C. 600-Volt Wiring Test

Test wiring rated 600 volts and less to verify that no short circuits or accidental grounds exist. Perform insulation resistance tests on wiring No. 6 AWG and larger diameter using instrument which applies voltage of approximately 500 volts to provide direct reading of resistance. Minimum resistance shall be 250,000 ohms.

D. Grounding System Test

Test grounding system to ensure continuity and resistance to ground is not excessive. Test each ground bus for resistance to ground before making connections to the bus; tie grounding system together and test for resistance to ground. Make resistance measurements in dry weather.

END OF SECTION

SECTION 260513

ELECTRICAL SYSTEM CABLES AND CONDUCTORS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work of this Section consists, in general, of furnishing, installing, and testing wire, cables, connectors and associated devices.

1.2 SUBMITTALS

- A. Catalog Data for the following:
 - 1. Conductors
 - 2. Cable lugs and taps
 - 3. Wire connectors

PART 2 - PRODUCTS

2.1 GENERAL

- A. All wire and cable shall meet the minimum requirements of NEC and shall be of a larger size if indicated on the plans or specified herein.
- B. All conductors of a given type shall be a product of the same manufacturer in unbroken containers marked with the date of production.
- C. Insulation shall be not more than 2 years old.

2.2 APPROVED MANUFACTURERS

- A. Conductors:
 - 1. Coleman Cable (Southwire Company)
 - 2. Anaconda (Prysmian Group)
 - 3. General Cable (Prysmian Group)
 - 4. Triangle
 - 5. Okonite
 - 6. BICC
- B. Cable, Lugs, and Taps:
 - 1. Burndy
 - 2. Penn Union
 - 3. Thomas and Betts

- C. Wire Connectors:
 - 1. King Technology, Inc. "ONE STEP"

2.3 CONDUCTORS

- A. Conductors shall be soft drawn copper with each strand individually tinned or coated with approved alloy.
- B. All conductors shall conform with latest requirements of NEC.
- C. All conductors shall be 600 volt rated with thermoplastic type insulation.
- D. Minimum size (unless otherwise specified or shown on Drawings):
 - 1. General #12
 - 2. Over 100' run #10
 - 3. Over 150' run #8
- E. Material (Unless otherwise specified or shown on Drawings):
 - 1. Copper
 - 2. Stranded conductors shall be used for:
 - a. Conductors #8 and larger
 - b. Final connections to equipment subject to movement or vibration
 - c. Solid conductors may be used for all other locations and applications.

2.4 INSULATION

<u>Application</u>	<u>Type</u>
Dock Distribution	In accordance with NEC Art. 555
Feed from Land to Dock	In accordance with NEC Art. 555

2.5 WIRE CONNECTORS

- A. Splices, taps and other connections involving not more than four conductors - #10 AWG maximum, shall be made with screw-on type waterproof connectors with flexible plastic jacket and waterproof sealant.

2.6 CABLE LUGS & TAPS

- A. Cable lugs and taps shall be sized to carry full capacity and shall be suitable for the conductor material to be used.
- B. Lugs and taps shall be compression or indenter type.

2.7 FIELD TESTS

A. General

After installation has been completed, and the District has been given five (5) days notice of each proposed test, conduct tests demonstrating that all equipment and devices operate in accordance with the requirements of the plans and specifications. Provide the District with copies of field test report forms.

1. Measure the insulation resistance of each phase bus, phase to phase and phase to ground for one minute each, minimum acceptable value for insulation resistance is 2 megohms.
2. Check tightness of accessible bolted bus joints using calibrated torque wrench.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. All wire and cable shall be brought to the site in unbroken packages and reels.
- B. All wiring shall be installed in approved raceway. Install all taps in outlet boxes. Install junction boxes only as required.
- C. All phase conductors of a given circuit and, where used, the neutral and equipment grounding conductors, shall be grouped together in the same raceway.
- D. Use approved pull-in compound (similar to "Wire-Lube" or "Y-Er'Eas" or equal) to facilitate pulling of wire. No plastic covered wire shall be pulled at temperatures below 33 degrees F. If any pull-in compound comes in contact with a wall, the wall shall be thoroughly cleaned or repainted as directed by the Owner.
- E. Wires shall not be pulled until all mechanical work which is liable to injure the wires has been completed. All unused conduits shall remain capped. Remove all foreign matter and dirt from the conduits and boxes before installing conductors or devices.

3.2 SUPPORTS

- A. Install stainless steel (316/316L) supports as required by the NEC and as indicated on Drawings.

3.3 COLOR CODING

- A. Shall be as stated in the NEC. All wires of sizes larger than #8 AWG shall be color coded by a strip around the conductor at all junctions, pull boxes and terminating points.

END OF SECTION

SECTION 260526

ELECTRICAL SYSTEM GROUNDING AND BONDING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work of this Section Consists, in general, of furnishing all labor, materials, tools, equipment, and incidentals and in doing all the work involved in constructing bonding and grounding complete in place, as specified, as indicated on the plans and as directed by the District.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C2 National Electrical Safety Code

ANSI C135.30 Zinc-Coated Ferrous Ground Rods for Overhead or Underground Line Construction

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM B 1 Hard-Drawn Copper Wire

ASTM B 8 Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE)

IEEE 80 Guide for Safety in AC Substation Grounding

IEEE 837 Permanent Connections Used in Substation Grounding

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)

NETA ATS Electrical Power Distribution Equipment and Systems

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 National Electrical Code

UNDERWRITERS LABORATORIES INC. (UL)

UL 83 Thermoplastic-insulated Wires and Cables

UL 467 Grounding and Bonding Equipment

1.3 SUBMITTALS

- A. Submit the following in accordance with Section 013300, "Submittals" and Section 260000 "General Electrical Provisions – Shop Drawings", 260000 "General Electrical Provisions - Submittals"
 - 1. Manufacturer's Catalog Data
 - a. Grounding and bonding connectors
 - b. Grounding and bonding conductors
 - 2. Field Test Reports
 - a. Submit report of results of acceptance checks and tests specified by paragraph entitled "Field Quality Control".
 - 1) Ground resistance tests: Upon completion and before final acceptance of the work, submit the measured ground resistance of the grounding system and conditions at the time the measurements were taken.

PART 2 - PRODUCTS

2.1 GROUNDING AND BONDING CONNECTORS

- A. IEEE 837 UL 467, pressure-type connector (bolted, compression, clamp). Provide type and size of connectors required for the installation.
- B. Ground rods shall be copper 10'L x 5/8" diameter.

2.2 GROUNDING AND BONDING CONDUCTORS

- A. General

Solid bare copper wire meeting the requirements of ASTM B 1 for sizes No. 8 AWG and smaller and stranded bare copper wire meeting the requirements of ASTM B 8, for sizes No. 6 AWG and larger. Insulated conductors shall have 600-volt, Type TW insulation meeting the requirements of UL 83.

- B. Flexible Jumper Cable

Provide flexible cable in areas where movement or vibration requires a grounding connection.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General

Grounding installation shall conform to the requirements of NFPA 70, NFPA 780, and ANSI C2.

B. Grounding and Bonding

NFPA 70. Ground noncurrent carrying metal parts of equipment or enclosure, metallic raceway systems, grounding conductor in metallic and nonmetallic raceways, and neutral conductor of wiring systems. Make ground connection at main service equipment.

C. Ground Resistance

1. Grounding other metal enclosures of primary voltage electrical and electrically-operated equipment: 5 ohms
2. Grounded secondary distribution system neutral and noncurrent-carrying metal parts associated with distribution systems and grounds not otherwise covered: 5 ohms
3. Shall be as indicated, and as required by NFPA 70 and ANSI C2.

3.2 FIELD QUALITY CONTROL

A. Performance of Acceptance Checks and Tests: Perform in accordance with the manufacturer's recommendations, NETA ATS, and referenced standards specified herein. Include the following visual and mechanical inspections and electrical tests, performed in accordance with NETA ATS.

B. Grounding System

1. Visual and mechanical inspection: Inspect ground system for compliance with contract plan and specifications.
2. Electrical tests: Perform ground-impedance measurements.

END OF SECTION

SECTION 260544
GENERAL CONDUITS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The work of this Section consists, in general, of all conduit and cable sleeves on the access pier and dock systems, including primary feeders on dock, as indicated on the plans and required for a complete and operable electrical system, and as required for power centers on dock.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Conduit
 1. Rigid steel, galvanized with 40 mil PVC coating.
 2. PVC conduit, Schedule 40, and Schedule 80.
 3. Flexible conduit, liquid-tight non-metallic smooth wall (Carlon "Carflex Kellums" or approved equal).
 4. Minimum Conduit Size: Minimum size of conduit shall be 1" unless noted otherwise on the plans.
- B. All conduits and equipment shall meet the requirements for a marina environment.

PART 3 - EXECUTION

3.1 RACEWAY USAGE

- A. For mechanical protection on docks: Schedule 40 PVC. For conduit sleeves on gangway use schedule 80 PVC.

3.2 GENERAL REQUIREMENTS

- A. Cut conduit ends square and ream smooth. Install coated steel conduit and fittings in accordance with manufacturer's instructions, taking all precautions not to damage coating and repair damaged coating immediately. Use factory approved bonding compound for PVC conduits and duct.

3.3 CONDUIT SLEEVES

- A. Provide sleeves as required for conduits and cables.
- B. Sleeves shall be sized as indicated on the plans but in no case sized smaller than what is adequate to provide 1/4" clearance between sleeve and conduit or cables.

3.4 FITTINGS AND TERMINATIONS

- A. Fittings shall be constructed materials of the same type, size, and finish as the conduit on which installed.
- B. Furnish expansion fittings where raceways cross expansion joints, and for straight runs of over 200' or at intervals as required by conduit manufacturers installation instructions.
- C. Conduit shall be sealed where entering or leaving spaces having ambient temperature differentials of 10 degrees F or greater.

3.5 SUPPORTS

- A. Support raceways by means of brackets or straps spaced not more than allowed by the NEC. Supports shall be secured by means of toggle bolts, expansion bolts or inserts in concrete. The conduit shall be allowed to slip in either direction for expansion.
- B. No conduit shall rest on or be supported from any mechanical piping or similar installation.
- C. Provide additional supports at junction and outlet boxes when conduit is used to support other electrical equipment.

3.6 GROUNDING

- A. Provide ground wires in non-metallic conduits.
- B. Provide separate code sized green ground wire in all power branch circuit feeders.

3.7 PULL WIRES

- A. Leave a 14-gauge pull wire in all empty conduits.

3.8 SPECIAL INSTALLATION REQUIREMENTS

- A. Install PVC conduit in strict accordance with manufacturer's recommendations.
- B. Make all bends by means of electrical heating unit approved by conduit manufacturer.
- C. Provide a code sized equipment ground conductor in all PVC raceways, in accordance with N.E.C., unless otherwise noted on plans.

END OF SECTION

DIVISION 31 – 35
SITE AND INFRASTRUCTURE

SECTION 316216
STEEL PIPE PILES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section provides the requirements for fabrication, testing, inspection, pile coating, and installation of all steel pipe piles as indicated on the Drawings and specified herein.

1.2 REFERENCES

- A. The latest edition of the publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic definition only.
1. American Welding Society (AWS)
 - AWS A5.1 - Carbon Steel Covered Arc Welding Electrodes
 - AWS D1.1 - Structural Welding Code
 2. American Society for Testing and Materials (ASTM)
 - ASTM A36/A36M - Standard Specification for Carbon Structural Steel
 - ASTM A252 - Standard Specification for Welded and Seamless Steel Pipe Piles
 - ASTM A972 - Standard Specification for Fusion Bonded Epoxy-Coated Pipe Piles
 - ASTM D412 – Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomers – Tension
 - ASTM D3350 - Standard Specification for Polyethylene Plastics Pipe and Fittings Materials
 3. Plastics Pipe Institute
 - TR-4 - PPI Listing of Hydrostatic Design Basis (HDB), Strength Design Basis (SDB), Pressure Design Basis (PDB), and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials for Pipe
 4. State of California (Caltrans) – Standard Specifications

1.3 PERMITS

- A. Piles shall be installed in compliance with the environmental permits.

1.4 SUBMITTALS

- A. All submittals shall be in accordance with Specifications Section 013300 - Submittals.

B. Pile Installation Plan

1. Describe the method of transporting, lifting, and installation including equipment to be used, and sequence of installation. Other restrictions as shown on the Drawings shall be included in the plan.

C. Pile Cutoff

1. Describe method to be used to cut off the top (sacrificial) of pile.

D. Product Data

1. Pile Installation Equipment:
 - a. 30 days prior to commencement of pile installation, submit three (3) copies of the description of the pile installation equipment and hammer specifications to be employed in the work.
2. Pile Coating System
3. HDPE Pipe

E. Test Reports

1. Certified mill test reports, which show compliance of materials with referenced standards and the requirements herein, shall be submitted to the District.

F. Certifications:

1. Steel Pipe Piles
2. Steel Plate Fabricator's Association (SPFA) certification when plates are used to fabricate pipe.
3. Welders' Qualification
4. Pile Coating System per ASTM standards.

G. Shop Drawings:

1. Contractor shall submit Shop Drawings as noted below. Submittals for the following shall be included.
 - a. Steel pipe piles: Show all locations, markings, layouts, materials, sizes, and shapes and indicate all methods of connection and bracing.
 - b. Field splice details: Stabbing points, blocks, shims, welds, etc. required to align pile sections when working flat and in the leads.
 - c. Pile Coating Limits
 - d. Pile installation template and installation procedure.

H. Pile installation record:

1. Submit to the District complete pile installation records as specified in paragraph 3.7 entitled "Pile Installation Records" within fifteen (15) calendar days after completion of installation.

- I. Welder qualifications:
 - 1. Submit copy of welder qualification certificates to the District for all welders.
- J. Welding procedures:
 - 1. Submit welding procedures to the District, including weld preparation and alignment tolerances for approval.
- K. Submit shop fabricator's written procedural and quality control manuals.
- L. Submit Pile Delivery and Handling Plan at least thirty (30) days prior to delivery.

1.5 TESTING AND INSPECTION

- A. Testing and inspection shall be done by the Contractor unless otherwise specified and in accordance with the requirement in AWS D1.1.
- B. Welder Qualifications:
 - 1. All welding operators shall have been qualified and certified as described in "Welding Operator Qualifications" of AWS D1.1. Any welder found to be producing unsatisfactory work even though he has passed qualification tests shall be immediately recertified or shall be replaced.
- C. Shop Inspection:
 - 1. The fabricator shall perform, at his expense, normal quality control procedures in accordance with AWS D1.1, industry standards and his quality control manual. District Representative shall be allowed access to all parts of the Work at all times and shall be furnished such information and assistance by the Contractor and fabricator as may be required for a complete and detailed inspection.
- D. Field Inspection:
 - 1. The District will perform 100% visual inspection of welding, in accordance with AWS D1.1. After welds are completed, the Contractor shall thoroughly clean by hand or power-brush all welds prior to visual inspection by the District.
 - 2. The Contractor shall perform 100% ultrasonic testing of field welds in accordance with AWS D1.1 and the requirements herein including the visual inspection of all pile welds. The Contractor shall engage the services of an independent inspector/laboratory to perform the ultrasonic testing.
- E. Correction of Defective Welds:
 - 1. Weld areas which contain defects which exceed the standards of acceptance in AWS D1.1 shall be repaired in accordance with AWS D1.1 paragraph 5.26 by the Contractor at the Contractor's expense.
- F. Repair of the Coating System:
 - 1. Field repair of the Coating System shall be at Contractor's expense and in accordance with coating manufacturer's instructions.

G. Pile Installation Observation:

1. All pile installation shall be done under the observation of the District.

1.6 PRODUCT HANDLING

- A. Protection: Use all means necessary to protect steel piles before, during, and after installation and to protect the installed work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacement necessary and at no additional cost to the District.

PART 2 - PRODUCTS

2.1 PIPE PILES-MATERIAL

- A. Steel pipe piles shall be of the size and type shown on the Drawings. Acceptable material specifications and mandatory additional requirements are as follows:
- B. Steel pipe piles per ASTM A252 Grade 3 (Mod) - 50 ksi minimum yield strength.
- C. All pipe material shall be new. Provide mill certificates for pipe pile materials. One material specification shall be used for all piles.

2.2 PIPE PILES-LENGTH

- A. The Drawings indicate the pile tip elevation. The piles shall be driven to the tip elevation shown on the plans.
- B. Additional Sacrificial Pile Length: Pipe piles shall include a minimum of 1-foot of additional pipe length to allow for pile cutoff of the pile top that is damaged during driving.

2.3 PIPE PILES-FABRICATION

- A. Steel pipe piles per ASTM A252 Grade 3 (mod) - 50 ksi minimum yield strength.
- B. Pipe piles may be manufactured with longitudinal seam or helical (spiral) seam.
- C. Perform all welding for piles in accordance with AWS D1.1.
- D. Welds:
 1. Welds shall be complete joint penetration groove welds using ASW D1.1 prequalified joint details.
 2. Weld Reinforcement (Bead Height): The weld reinforcement (bead height) shall not be greater than 3/16 inch.
- E. No more than 1 shop splice shall occur in any length of pile delivered to the project site. Shop splice shall be a minimum of 20-ft from the pile end.

- F. No more than 1 field splice shall be made in each pile. Field splice shall be located a minimum of 40-ft from the pile end.

2.4 PILE COATING SYSTEM

- A. The coating system for all piles shall be marine-grade fusion bonded epoxy coating applied by the pile manufacturer or supplier, in accordance with ASTM A972 Standard Specification for Fusion Bonded Epoxy-Coated Pipe Piles.
 - 1. Acceptable Coating: 3M Scotchkote Fusion Bonded Epoxy 6233, or approved equal.
- B. Piles shall be coated from the top of pile to a minimum of 10-ft below the mudline.

2.5 HDPE SLEEVE

- A. Material:
 - 1. All material shall be manufactured from a PE 4710 resin listed with the Plastic Pipe Institute (PPI) as TR-4. The resin material shall meet the specifications of ASTM D3350 with a minimum cell classification of 445474C or 445574C.
 - 2. No recycled compounds except that generated in the manufacturer's own plant from resin from the same raw material.
 - 3. UV Protection: minimum 2% carbon black.
 - 4. Color: Black.
- B. Minimum wall thickness: 0.5 Inches
- C. Minimum Inside Diameter: 16.5 inches
- D. Maximum Outer Diameter: 20 Inches
- E. Acceptable Products:
 - 1. PE4710 DR32.5 18" dia IPS
 - 2. PE4710 DR21 18" dia IPS
 - 3. PE4710 DR26 18" dia IPS
 - 4. PE4710 DR17 20" dia IPS
 - 5. Approved equal

2.6 SLEEVE FILLER MATERIAL

- A. 30-mesh Sand.

2.7 SEALANT

- A. Marine-Grade Polyurethane Sealant and backer rod (if required).
 - 1. Backer Rod: Per Caltrans Standard Specifications 41-5.02D "Backer Rods."

2. Sealant:
 - a. Tensile Strength: Minimum 300 psi per ASTM D412.
 - b. Elongation at Break: Minimum 600% per ASTM D412.
 - c. Acceptable Product: Polyurethane Sealant 540 by 3M, or approved equal.

PART 3 - EXECUTION

3.1 PILE INSTALLATION PROCEDURE

A. General

1. All work shall be done using land-based equipment. All pile driving shall be conducted in compliance with noise and vibration thresholds defined by the permit documents. The Contractor shall provide a template to guide the piles during installation. The template shall be constructed to achieve the installation tolerances listed in this specification.

3.2 LAYOUT AND CONTROL

- A. Pile locations shall be laid out by the Contractor in accordance with the Drawings and approved Shop Drawings.
- B. The Contractor shall provide a template to guide the piles during installation. The template shall be constructed to achieve the tolerances listed in Paragraph 3.8.
- C. Piles shall be marked with lines of high visibility paint at one-foot intervals from bottom to top. Number every five feet. Markings shall be clearly visible and legible to the naked eye at a distance of 75 feet. Paint markings on coated pile sections shall be of material approved by the coating manufacturer. Piles not properly marked will be rejected.

3.3 INSTALLATION

- A. The top 1'-0" (sacrificial length) of piles shall be cut-off as necessary after installation due to damage during pile driving, as described elsewhere in these specifications.
- B. All piles shall be driven to tip elevation as shown on drawings.
- C. Develop and submit a pile placement plan which shows the installation sequence and the method proposed for controlling the location and alignment of piles.
- D. All piles shall be installed in their design location, alignment both laterally and longitudinally, and tip elevations shown on the drawings.
- E. Notify the District at least 14 calendar days prior to the date pile installation is to begin. Notify the District at least 48 hours prior to pile driving. Operate equipment at all times at the speed and under the conditions recommended by the manufacturer. Prior to installation and with the pile head seated in the hammer, check each pile to ensure that it has been aligned correctly. Once pile installation has begun, keep conditions such as alignment constant.

F. Obstructions:

1. When resistance to driving or obstruction is encountered above the desired tip elevation, the Contractor shall immediately notify the District. Appropriate action to be taken by the Contractor based on the information available must be agreed with the District Representative prior to proceeding.

G. Survey Piles: The Contractor shall survey the final location of the driven piles (after cut-off) and provide the information to the District.

H. Damaged Piles:

1. Do not install piles damaged or suspected of damage until inspected and approved by the District. All repair costs for pile and coating including additional materials and labor required, shall be at the Contractor's expense.

3.4 PILE INSTALLATION CRITERIA

A. Installation Equipment: Use equipment that is generally used in standard pile installation practice. Install and remove piles with a vibratory hammer. A driving hammer shall be of suitable size to install piling to tip elevations shown on Drawings. The size or capacity of hammers must be as recommended by the hammer manufacturer. Operate at manufacturer's recommended speeds and pressures. Use suitable means for holding pile firmly in position. Take special precautions to ensure against buckling of pile or leaning away from plumb position. Care should be taken during installation to prevent and correct any tendency of piles to deviate or walk.

B. Modifications: The District reserves the right to modify the above criteria if conditions are encountered in the field which, in their opinion, makes it necessary to do so.

C. Hard Driving: The Contractor is alerted that piles must be installed per the requirements of the permitting agencies. Refusal criteria will be determined by the District after the contractor selects the driving hammer.

D. Pulled Piles: Pull and replace piles damaged or impaired for use during driving with new piles or cut off and abandon and drive new piles as directed without additional cost to the District. The District may require that any pile be pulled for inspection. Re-drive piles pulled as directed and found to be in suitable condition at another location as directed. Replace piles pulled as directed and found to be damaged with new piles at the Contractor's expense.

3.5 FIELD SPLICES

A. Field splices, if required, shall be approved by the District prior to installation.

B. Use a minimum of 3/8 in. backing rings for all field splices. Attachment of the rings to the pipe shall be done by using the minimum size and spacing of tack welds that will securely hold the backing ring in place. Tack welding shall be done in the root area of the weld splice. The gap between the backing ring and the pipe shall be no greater than 5/64 inch.

- C. Construct splices to maintain the true alignment and position of the pile section. Splices shall be made with complete penetration welds and shall develop the full combined strength of the pile in bending, tension, and bearing. Non-destructive testing of pile splice welds, if required, shall be in accordance with AWS D1.1/D1.1M. Perform 100 percent visual inspection of all pile field welds.
- D. Limit the variation in edge alignment for abutting steel pipe pile ends to 0.185 times the wall thickness, with a maximum allowable variation of 0.063 inch.

3.6 PILE CUTOFF

- A. A minimum of 1-ft sacrificial length shall be provided at the top of the pile to allow for damaged pile cut-off in the event that damage to the pile top occurs during pile driving. The sacrificial length shall be cut-off at the end of the pile driving. The Contractor is responsible for confirming the cut-off elevation of the piles to ensure that the required depth of the pile caps and the finished grades of the deck as shown in the Construction Drawings can be achieved. Where driving to grade is not possible due to refusal, the District shall be notified. When directed by the District, the piles may be cut-off in the field. Modification to the pile details may be required. The proposed method of cutting piles shall be approved by the District and shall not damage the pile. Piles shall be cut off at the elevation indicated on the Drawings by burning followed by grinding to obtain a clean, neat edge.
- B. Pile coating damaged by cutoff operations shall be repaired in accordance with coating manufacturer's recommendations.

3.7 PILE INSTALLATION RECORDS

- A. The Contractor shall maintain a pile installation log showing the following:
 - 1. Reference: All piles shall be referenced per the numbering system shown on Contractor's Shop Drawings.
 - 2. Dimensions: Record all pile lengths as furnished and the length of pile in place. Include elevations of tip and butt before and after cutting off.
 - 3. Survey: Provide as-driven survey drawing showing actual location (coordinates and elevations) of all piles. This shall be a drawing prepared by the Contractor (i.e., not a copy of the Contract Drawings).
 - 4. Pile Penetration: Record the pile penetration log and the rate of penetration.
 - 5. Vibratory Hammer: Include in the record the type and size of hammer used. Record any unusual occurrence during pile installation.

3.8 TOLERANCES

- A. Install pipe piling within the following tolerances from the planned locations as shown on the Drawings.
 - 1. Plan Location: 2.0 Inches
 - 2. Elevation: 0.5 Inch
 - 3. Plumb: 0.5 Percent

- B. Piles may be pulled laterally not more than 4 inches into position on written request of Contractor and written approval of the District.

3.9 HDPE SLEEVE

- A. HDPE sleeve shall not be installed until the driven steel pipe pile records (location, elevation, plumbness, penetration log) have been reviewed and accepted by the District to ensure compliance with the elevations shown on the Drawings and these specifications.
- B. Install HDPE sleeve as shown on the Drawings.
- C. Install filling material and sealant in the annular space between the pile and sleeve as shown on the Drawings.
 - 1. Filler shall extend through the full height of the sleeve above the mudline. Ensure sand fills the annular space by sounding with a rubber mallet or similar means.
 - 2. Clean all surfaces of pile and sleeve prior to placement of backer rod (if required) and sealant.
- D. Pile cap falsework shall not be constructed until filling and sealant have been completed and approved by the District.

END OF SECTION

SECTION 331000

WATER SYSTEM

PART 1 - GENERAL

1.1 SCOPE

- A. Marina piping and equipment systems consists of furnishing transportation, labor, materials, and equipment to furnish, install, and test the potable water and fire water systems, including piping, valves, gangway piping, flexible hose connections, and pipe hanger systems as specified and as indicated on the mechanical Drawings for the Project.
- B. The Work includes all work for connection to existing water system per the City of South San Francisco standards.

1.2 RELATED WORK

- A. General Conditions, Specification sections from Divisions 0 and 1, and the Drawings apply to this section. This section may require direct correlation with the following sections of these Specifications:
 - 1. Section 211000 – Fire Protection
 - 2. Section 024800 – Gangway Landing Floats
 - 3. Section 260000 – General Electrical Provisions

1.3 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. Unless otherwise indicated, the most recent edition of the publication, including any revisions, must be used.

B. ASTM International (ASTM)

ASTM B88	(2022) Standard Specification for Seamless Copper Water Tube
ASTM A312/A312M	(2022) Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes
ASTM D1785	(2021) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120
ASTM D2239	(2022) Standard Specification for Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter
ASTM D2464	(2015) Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

ASTM D2466	(2021) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40
ASTM D2467	(2020) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80
ASTM D2665	(2020) Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D3035	(2022) Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter
ASTM F714	(2022) Standard Specification for Polyethylene (PE) Plastic Pipe (SDR- PR) Based on Outside Diameter
ASTM F891	(2016) Standard Specification for Coextruded Poly(Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core

C. American Water Works Association (AWWA)

AWWA C651	(2014) Disinfecting Water Mains, Includes Addendum (January 2020)
AWWA C800	(2021) Underground Service Line Valves and Fittings
AWWA C906	(2021) Polyethylene (PE) Pressure Pipe and Fittings, 4 In. Through 65 In. (100 mm Through 1650 mm), for Waterworks

D. Factory Mutual (FM)

E. Manufacturers Standardization Society (MSS)

MSS SP-58	(2018) Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application, and Installation
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F. National Fire Protection Association (NFPA)

NFPA 14	(2019) Installation of Standpipe and Hose Systems
NFPA 303	(2021) Fire Protection Standard for Marinas and Boatyards

G. Underwriters Laboratories (UL)

1.4 SUBMITTALS

- A. The following must be submitted to the District in accordance with the Contract Documents. Note that approval of the submittals by the District must not be construed as relieving the Contractor from responsibility for compliance with the specification nor from responsibility of errors of any sort in the submittals.
- B. Provide manufacturer's data including but not limited to drawings, connection details, manuals, UL listings, FM approvals, disinfection reports, bacteriological reports, installation instructions and/or catalog cut sheets for the following:
1. Pipe, fittings, and valves
 2. Joints and couplings

3. Hoses and hose connections
4. Pipe hangers and supports

1.5 DELIVERY, STORAGE AND HANDLING

- A. Inspect materials delivered to site for damage. Unload and store with minimum handling. Keep inside of pipes, fittings, and equipment free of dirt and debris.
- B. Pipes:
 1. Store pipe in stockpiles built on a flat base.
 2. Keep rubber gaskets from excessive heat and free from oil and grease.
- C. Store fittings and valves on wooden platforms above ground.
- D. Handle pipe, fitting, valves, and other accessories in such manner as to ensure delivery to the docks and installation location in a sound undamaged condition.

PART 2 - PRODUCTS

2.1 WATER SYSTEMS MATERIALS

- A. The materials and equipment to be furnished under this Section must be standard products of the manufacturer. Where two or more units of the same equipment are required, units must be the product of a single manufacturer. Materials must be delivered to the jobsite new and unused. All materials must be weatherproof and suitable for a corrosive marine environment. No ferrous materials must be used unless specified or indicated on the plans.
- B. Hangers, straps, brackets, fasteners, and appurtenances must be 316 stainless steel or galvanized steel, or as indicated on the Drawings. Piping in contact with pipe supports of a dissimilar metal must be insulated by an isolating barrier for the full length of contact between the pipe and support.
- C. Potable Water Piping: The pipe material for installation is noted on Drawings. Fittings, flanges, and appurtenances must be compatible with the pipe.
 1. Stainless Steel (SS) Piping: SS piping must be Schedule 40, Type 316 Stainless Steel per ASTM A312/A312M. Provide SS piping where piping is subject to UV degradation and / or impact from debris.
 2. High Density Polyethylene (HDPE) Piping: HDPE piping and fittings must be Standard Dimension Ratio (SDR) 11, per ASTM D3035 or ASTM D2239 with a minimum working pressure of 150 pounds per square inch (psi). Plastic pipe and fittings must bear the seal of the National Sanitation Foundation for potable water service. HDPE piping shall not be installed where subject to UV.
 3. Polyvinyl Chloride (PVC) Piping: PVC piping and fittings must be Schedule 40, per ASTM D1785, ASMT D2464, ASTM D2466 and ASTM D2467.
 4. Copper (CU) Tubing: Copper tube, buried or aboveground, per ASTM B88 type K. Provide fittings per AWWA C800.

5. Flexible Hose:
 - a. Flexible Hose and fitting materials must be compatible with potable water and suitable for 24-hour contact with chlorine sterilization solution in the hose interior, and with seawater and sunlight on the hose exterior.
 - b. When hose is used at transitions from shore to floating dock it must be factory assembled lengths with 150 psi working pressure and marine stainless-steel couplings each end.
 - c. Connection to pedestal may be done using flexible hose, Alfacoma T405, Goodyear "Plicord Gray" food grade or approved equal in lieu of rigid piping.
6. Hangers and supports must be 316 stainless-steel, and as specified on Drawings.
7. Pipe supports at the docks/piers must conform to MSS SP-58. Support materials may be stainless steel or as noted on Drawings. Manufacturer's listed maximum load ratings must not be exceeded. Pipe must not exceed spacing noted on Drawings or manufacturer's recommendation, whichever is smaller.
8. Branch isolation valves must be Ball valve type compatible with piping material of placement.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Material and equipment must be worked into a complete, convenient, and economical system or systems; all apparatus, parts, materials, and accessories which are necessary to accomplish this result must be furnished and worked into place. Manufacturer's instructions, written or otherwise, must be followed, unless superseded herein.
- B. Piping must follow the general arrangement shown on Drawings. Provision for expansion and contraction of pipelines must be made where necessary. Piping must be run essentially as indicated on Drawings, care being taken to avoid interference with other piping, conduit, or equipment. The location of piping to be run on gangways and docks must be carefully coordinated with electrical conduits specified, other utility piping and equipment locations. Before jointing and erection of piping, thoroughly clean interiors of pipe and components. Before making final equipment connections, blow out each system with compressed air at 100 psig or more.
- C. The fire water system material, equipment and installation must comply with NFPA 14, and NFPA 303. Signage for the fire department connections must be as indicated on the Drawings and as approved by the Engineer and the Fire Marshal.
- D. Pipe, fittings, valves, and accessories will be carefully inspected by the District before and after installation and those found defective must be replaced. Remove fins and burrs from pipe and fittings. Before placing in position, clean pipe, fittings, valves, and accessories and maintain in a clean condition. Cut pipe accurately to measurements established at the site and work into place without springing or forcing. Replace by one of the proper dimensions any pipe or fitting that does not allow sufficient space for proper installation of jointing material. Provide proper facilities for positioning piping

into installation location. Provide anchors and supports where necessary for fastening work into place. Make proper provision for expansion and contraction of piping.

3.2 FIELD TESTS AND INSPECTIONS

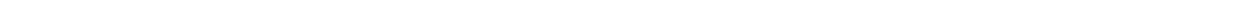
- A. The potable water and firewater systems must be subjected to hydrostatic test. Each system may be tested as a unit or in sections, subject to approval by the Engineer. Prior to application of the test pressure, install a calibrated test pressure gage in each system to indicate any loss in pressure occurring during the test. Apply and maintain the test pressure as noted on the Drawings and in conformance with the agencies having jurisdiction, during which time there must be no evidence of leakage as detected by a reduction in test pressure. Should a reduction occur, leaks must be located, repaired, and the test repeated. Test pressure must be as stated on Drawings. All equipment and apparatus required for the tests must be furnished by the Contractor.
- B. In the event of a line test failure, identify the leak or leaks, repair them in an approved manner and re-test the line to the engineer's satisfaction.
- C. The Engineer will conduct field inspections and witness field tests specified in this section. The Contractor must perform field tests and provide labor, equipment, and incidentals required for testing, except that water and electric power needed for field tests will be furnished as set forth in the utility applicable section. The Contractor must be able to produce evidence, when required, that each item of work has been constructed in accordance with the Drawings and Specifications.

3.3 STERILIZATION OF POTABLE WATER SYSTEMS

- A. A solution of chlorine and water containing not less than 50 parts per million of free chlorine must be injected into the potable water system in such a manner as to ensure that the entire system is completely filled with the solution. Disinfection must be in conformance with AWWA C651. After injection, the system must be isolated, and the solution held in retention for a minimum period of 24 hours. After satisfactory sterilization has been affected, the system must be flushed with fresh water until the chlorine level is within acceptable limits as determined by the Health Department. The Contractor must arrange for sampling and testing water for sterilization/chlorination and system flush with the Health Department. It must be the Contractor's responsibility to ensure that the water in the system is not used for human consumption during the sterilization process.
- B. Chlorine solution must not be injected into the fire water system.

END OF SECTION

BID FORM



BID FORM

**TO: SAN MATEO COUNTY HARBOR DISTRICT
EL GRANADA, CA**

Pursuant to the Notice Inviting Bids, the undersigned bidder herewith submits a bid on the bidding form or forms attached hereto and made a part hereof and binds itself on award by the San Mateo County Harbor District under this bid to execute a contract in accordance with its bid, the bid documents and the award. The attached Notice Inviting Bids, General Conditions and Instructions for Bidders, Special Provisions, Technical Specifications, Bid Forms, and Addenda, if any, are made a part of this bid and all provisions thereof are accepted, and all representations and warranties required thereby are hereby affirmed.

Bids below include all applicable charges, including labor, insurance, bonding, and other costs necessary for the furnishing of all equipment and the performance of all services called for under the Contract. Prices quoted shall include all sales or use taxes.

BIDDER SHALL SUBMIT QUOTES FOR ALL ITEMS

CONTRACT NO. 2024-04

Oyster Point Marina West Basin Access Improvements

The Bid Form must be signed below in accordance with the General Conditions and Special Provisions. Bids submitted in any other form will be considered non-responsive and may be rejected.

OPM West Basin Access Improvements					
Item	Bid Description	Qty	Units	Unit Cost	Sub Total
1	Mobilization, Demobilization, Bonds & Insurance	1	LS		
2	Demolition	1	LS		
3	Temporary Facilities	1	LS		
4	Gangway Landing Floats	3	EA		
5	Access Platforms	3	EA		
6	Ramp Abutments	3	EA		
7	Steel Pipe Piles	12	EA		
8	Aluminum Gangways	910	SF		
9	Aluminum Ramps	550	SF		
10	Security Gates	3	EA		
11	Guardrails	180	LF		
12	Electrical System	1	LS		
13	Potable Water System	1	LS		
14	Fire Water System	1	LS		
Bid Subtotal				\$	

Name Under Which Business is Conducted: _____

Business Address: _____

Telephone Number: _____ Fax Number: _____

E-Mail Address: _____

MANDATORY SIGNATURE(S)
(See General Condition 3 and Special Provision 1.3)

IF SOLE OWNER, sign here: I sign as sole owner of the business named above.

Entity Name: _____

By: _____ Title: _____

Signature: _____

IF PARTNERSHIP, one or more partners sign here: The undersigned certify that we are partners in the business named above and that we sign this Contract proposal with full authority to do so.

Entity Name: _____

By: _____ Title: _____

Signature: _____

IF CORPORATION OR LCC, sign here: The undersigned certify that they sign this Contract proposal with full and proper authorization to do so.

Entity Name: _____

By: _____ Title: _____

Signature: _____

* By: _____ Title: _____

Signature: _____

Incorporated under the laws of the State of _____

* If the Bidder is a corporation, this Bid Form must be executed by two corporate officers, consisting of: (1) the president, vice president or chair of the board; and (2) the secretary, assistant secretary, chief financial officer or assistant treasurer. In the alternative, this Bid Form may be executed by a single officer or a person other than an officer provided that evidence satisfactory to the District is provided, demonstrating that such individual is authorized to bind the corporation (e.g. a copy of a certified resolution from the corporation's board or a copy of the corporation's bylaws).

IF JOINT VENTURE, officers of each participating firm sign here: The undersigned certify that they sign this Contract proposal with full and proper authorization to do so:

Joint Venture Name composed of: _____

By _____ Title _____

Signature: _____

DOCUMENTS TO ACCOMPANY BID:

- _____ The Bidder's Bond or certified or cashier's check required by Section 14 of the General Conditions and Special Provision 1.10, in an amount equal to at least ten percent (10%) of the Total Bid Price
- _____ List of Subcontractors
- _____ Acknowledgment of Addenda, if any
- _____ Qualification Questionnaire
- _____ Proof of DIR Registration in accordance with Special Provision 5.14
- _____ Non-Collusion Declaration

BIDDER'S BOND

KNOW ALL PERSONS BY THESE PRESENTS:

That _____, as Principal, and _____, as Surety, are held and firmly bound unto the SAN MATEO COUNTY HARBOR DISTRICT, hereinafter called the District, in the sum of _____ (\$ _____) being at least ten percent (10%) of the total amount of the bid of the Principal above named for **CONTRACT NO. 2024-04, Oyster Point Marina West Basin Access Improvements**, for the payment of which sum in lawful money of the United States, well and truly to made to the District, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

The condition of the above obligation is such that, whereas the Principal has submitted said bid to the District;

NOW THEREFORE, if the Principal is awarded a contract by the District and, within the time and in the manner required by the Specifications, enters into a written contract with the District and furnishes the requisite bond or bonds, then this obligation shall become null and void, otherwise to remain in full force and effect.

In the event suit is brought upon this bond by the District and Judgment is recovered, the Surety shall pay all costs incurred by the District in such suit, including a reasonable attorney's fee to be fixed by the Court.

Dated _____ 2024

(SEAL)

SEAL AND NOTARIAL
ACKNOWLEDGEMENT OF
SURETY)

Principal:

By: _____

By: _____

Surety:

By: _____

By: _____

Note: Signatures of those executing for surety must be properly notarized.

SAMPLE CERTIFICATE OF INSURANCE

CERTIFICATE OF INSURANCE					CERTIFICATE NUMBER		
PRODUCER - S A M P L E -		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER OTHER THAN THOSE PROVIDED IN THE POLICY. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES DESCRIBED HEREIN.					
INSURED NAMED INSURED AND ADDRESS		COMPANIES AFFORDING COVERAGE					
		COMPANY A					
		COMPANY B					
		COMPANY C					
		COMPANY D					
COVERAGES This certificate supersedes and replaces any previously issued certificate for the policy period noted below.							
THIS IS TO CERTIFY THAT POLICIES OF INSURANCE DESCRIBED HEREIN HAVE BEEN ISSUED TO THE INSURED NAMED HEREIN FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS		
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT				GENERAL AGGREGATE \$ PRODUCTS - COM/OP AGG \$ PERSONAL & ADV INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE (Any one fire) \$ MED EXP (Any one person) \$		
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS				COMBINED SINGLE LIMIT \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$		
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EACH ACCIDENT \$ AGGREGATE \$		
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$		
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/PARTNERS/EXECUTIVE OFFICERS ARE: <input type="checkbox"/> INCL <input type="checkbox"/> EXCL				<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; border: none;">WC STATUTORY LIMITS</td> <td style="width: 40%; border: none;">OTHER</td> </tr> </table> EL EACH ACCIDENT \$ EL DISEASE-POLICY LIMIT \$ EL DISEASE-EACH EMPLOYEE \$	WC STATUTORY LIMITS	OTHER
WC STATUTORY LIMITS	OTHER						
	OTHER <input type="checkbox"/> PROFESSIONAL LIABILITY				EACH OCCURRENCE \$ AGGREGATE \$		
DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS							
CERTIFICATE HOLDER			CANCELLATION				
			SHOULD ANY OF THE POLICIES DESCRIBED HEREIN BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL <u>30</u> DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER AFFORDING COVERAGE, ITS AGENTS OR REPRESENTATIVES, OR THE ISSUER OF THIS CERTIFICATE.				
			BY: CATEGORY ____				
					VALID AS OF: _____		

LIST OF SUBCONTRACTORS

The Bidder is required to furnish the following information in accordance with the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code of the State of California. This list and information shall include all subcontractors that will perform work, provide labor or render services to the Bidder in connection with the project in an amount in excess of one-half of one percent of the total amount of Bidder's proposal.

Do not list alternative subcontractors for the same work. Use additional sheets if necessary.

NAME OF SUBCONTRACTOR	LICENSE NUMBER	LOCATION OF/ PLACE OF BUSINESS	PORTION OF WORK
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			

ACKNOWLEDGMENT OF ADDENDA

Oyster Point Marina West Basin Access Improvements

The undersigned Bidder acknowledges receipt of the following addenda, if issued, to the Bid Documents. If none received, write "None Received".

Addendum No. _____, dated _____

Addendum No. _____, dated _____

Addendum No. _____, dated _____

Date: _____

Firm: _____

Signature: _____

Print Name: _____

Title: _____

**QUALIFICATION QUESTIONNAIRE AND
FINANCIAL STATEMENT WITH BUSINESS REFERENCES**

Name of Applicant or Firm

()

Telephone

()

Facsimile

Street Address (NOTE: If using a P.O. Box, please list both P.O. Box No. AND Street Address)

City, State, Zip

Date Submitted:

Fiscal Year Ending:

The above applicant or firm is:

A parent firm of: _____

A subsidiary division of: _____

1. How many years has your organization been in business as a contractor under your present name?

2. How many years' experience:

a) As a prime contractor: _____

b) As a subcontractor: _____

3. Are you registered as a contractor or subcontractor with the California Department of Industrial Relations? _____

Registration No.: _____ Registration expiration date: _____

****BIDDER MUST SUBMIT PROOF OF CONTRACTOR REGISTRATION WITH THE DIR IN THE FORM OF A HARD COPY OF THE RELEVANT PAGE OF THE DIR'S DATABASE FOUND AT: <https://efiling.dir.ca.gov/PWCR/Search>****

4. List below at least three contracts your organization has performed in the last five years involving the demolition of structures in a marine environment.

CONTRACT \$ AMOUNT	PERCENT COMPLETED	CONTRACTING AGENCY AND ADDRESS, NAME AND PHONE OF OWNER/AGENCY REPRESENTATIVE

(Use separate sheet if more listing space is needed.)

5. Have you ever failed to complete any work awarded to you, or have you ever been disqualified, removed, or otherwise prevented from bidding on or completing any federal, state or local government project because of a violation of law or safety regulation?

() Yes () No

If so, where and why? _____

10. References: Give only engineers, architects, or owners, including public bodies, for whom you have done work.

NAME	ADDRESS	BUSINESS

REFERENCES

1. Please list 3 bank references familiar with the Bidder's accounts:

a) Name of Bank: _____

Street Address: _____

City and State: _____ Telephone: _____

Officer Familiar with Bidder's Account: _____

b) Name of Bank: _____

Street Address: _____

City and State: _____ Telephone: _____

Officer Familiar with Bidder's Account: _____

c) Name of Bank: _____

Street Address: _____

City and State: _____ Telephone: _____

Officer Familiar with Bidder's Account: _____

**NON-COLLUSION DECLARATION TO BE EXECUTED BY BIDDER
AND SUBMITTED WITH BID**

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signature of Bidder

Title

Date

SAMPLE CONTRACT

THIS CONTRACT is made and entered into this _____ day of _____, by and between SAN MATEO COUNTY HARBOR DISTRICT (referred to as "District") and _____ (referred to as "Contractor").

The Contractor and the District, for the consideration hereinafter named, agree as follows:

Scope of Work. The Contractor shall furnish the District all the labor, materials and equipment required to complete the work more particularly described in the specifications approved by the District entitled:

CONTRACT NO. _____
[INSERT CONTRACT TITLE]

and which are appended hereto and made part of the Contract.

The Contractor shall perform the following work listed on the Bid Form.

The District has the right to inspect the ongoing installation process on a daily basis, if necessary, and there will be a final inspection by a District representative.

Time of Performance. The Contractor shall begin work upon issuance of the Notice to Proceed, and shall diligently prosecute all of the work under this Contract in all parts and requirements to completion by **[INSERT TIME OF PERFORMANCE]**, as provided in the Specifications.

Contract Price. The Contractor shall faithfully perform each and every item required of it in this Contract for the sum of _____ Dollars (\$ _____), which includes all applicable charges, including taxes, freight and delivery charges, insurance and all other costs necessary for the furnishing of all material and the performance of all the services called for under the Contract. Payments to Contractor shall be made at the time and in the manner provided in the Contract.

Term of Contract. The term of this Contract shall commence upon District's issuance of a Notice to Proceed. Following District's final acceptance of the replacement of a **[INSERT WORK TO BE PERFORMED]**, all work, including all installation work or repairs, is guaranteed by the Contractor against failure, damage, defect, or non-compliance with the Contract of any kind for a period of one (1) year from the date of District's final acceptance. **[UPDATE WARRANTY REQUIREMENT AS DESIRED]**

Component Parts. This Contract shall consist of the following documents, each of which is on file in the Office of the Secretary and all of which are incorporated herein and made a part hereof by reference thereto:

- A. Contract
- B. Bid Documents: Notice Inviting Bids, General Conditions and Instructions for Bidders, Special Provisions and Technical Specifications
- C. Bid Form (As Accepted by the District)
- E. Addenda No. _____ to _____

- F. Performance Bond
- G. Payment Bond
- H. Insurance Certificates

Service Notice. Any notice required or permitted to be given by this Contract shall be deemed given when personally delivered to recipient thereof or mailed by registered or certified mail, return receipt requested, postage prepaid, to the appropriate recipient thereof, in the case of the Contractor, at the business address specified in its proposal, and in the case of the District, at PO Box 1449, El Granada, CA, 94018, or at any other address which either party may subsequently designate in writing to the other party.

Publicity. The Contractor, its employees, subcontractors, and agents shall not refer to the District, or use any logos, images, or photographs of the District for any commercial purpose, including, but not limited to, advertising, promotion, or public relations, without the District's prior written consent. Such written consent shall not be required for the inclusion of the District's name on a customer list.

Governing Law. This Contract shall be governed and construed in accordance with the laws of the State of California. Any action relating to, and all disputes arising under, this Contract shall be instituted and prosecuted in a court of competent jurisdiction in the State of California. Each party hereby appoints the individual listed opposite its name to act as its initial agent for service of process relating to any such action.

SAMPLE CONTRACT

IN WITNESS WHEREOF, the District has caused these presents to be executed by the District's officer thereunto duly authorized, and the Contractor has subscribed same, all on the day and year first above written.

FOR THE CONTRACTOR:

Name Under Which Business is Conducted: _____

Business Address: _____

City/State/Zip: _____

Telephone No. _____ Facsimile No. _____

If SOLE OWNER, sign here:

I sign as sole owner of the business named above.

If PARTNERSHIP, sign here:

The undersigned certify that they are partners in the business named above and that they sign this contract bid proposal with full authority to do so (One or more partners sign).

If CORPORATION OR LLC, execute here:

The undersigned certify that they sign this contract bid proposal with full and proper authorization to do so.

Entity name: _____

By: _____ Title: _____

* By: _____ Title: _____

Incorporated under the laws of the State of: _____

** If the Contractor is a corporation, this Contract must be executed by two corporate officers, consisting of: (1) the president, vice president or chair of the board; and (2) the secretary, assistant secretary, chief financial officer or assistant treasurer. In the alternative, this Contract may be executed by a single officer or a person other than an officer provided that evidence satisfactory to the District is provided demonstrating that such individual is authorized to bind the corporation (e.g. a copy of a certified resolution from the corporation's board or a copy of the corporation's bylaws.)*

If JOINT VENTURE, Sign Here:

The undersigned certify that they sign this contract bid proposal with full and proper authorization to do so.

Joint Venture Name Composed of: _____

By: _____ Title: _____

By: _____ Title: _____

Incorporated under the laws of the State of: _____

FOR THE SAN MATEO COUNTY HARBOR DISTRICT:

General Manager

San Mateo County Harbor District

504 Avenue Alhambra, 2nd Floor, PO Box 1449
El Granada, CA 94018

For Immediate Release

DATE: April 11, 2024

**Contact: Oyster Point Marina West Basin Improvements
San Mateo County Harbor District
(650) 583-4962**

El Granada, CA

PUBLIC NOTICE

INVITATION TO BID

NOTICE IS HEREBY GIVEN that the San Mateo County Harbor District will receive sealed bids for the **Oyster Point Marina West Basin Access Improvements**. for the replacement of the Dock 1-6 access piers. Prospective Bidders are directed to the San Mateo County Harbor District's website for construction documents and further information.

Sealed Bid Proposals shall be submitted to the San Mateo County Harbor District, Administration Office, **no later than 2:00 p.m. local time on May 30, 2024**, at 504 Avenue Alhambra, 2nd Floor, El Granada, CA 94018.

PROJECT BID SPECIFICATIONS ARE IMMEDIATELY AVAILABLE at the San Mateo County Harbor District, 504 Avenue Alhambra, 2nd Floor, El Granada, CA 94018 or on the District's website at www.smharbor.com. Phone 650-583-4962.

A MANDATORY pre-bid conference will be held on **April 25, 2024 at 10:30 a.m.** at the **Oyster Point Marina Harbor Master Office**.

Bid and Material & Labor Bonds are required as part of this agreement.

The District reserves the right to reject any and all bids and to waive any irregularities therein. The award of this contract shall be made to the lowest responsible and responsive bidder. No proposals will be accepted by facsimile or electronic mail.

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS, that

WHEREAS THE SAN MATEO COUNTY HARBOR DISTRICT, (hereinafter referred to as "District") has entered into a Contract with (Contractor Name) (hereinafter referred to as "Principal") for the **CONTRACT NO. 2024-04, Oyster Point Marina West Basin Access Improvements** ("Contract"); and

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond of faithful performance of said Contract;

NOW, THEREFORE, we, the Principal, and _____, as Surety are held and firmly bound unto the District, in the penal sum of _____ Dollars (\$ _____)

lawful money of the United States, being a sum equal to one hundred percent (100%) of the total amount payable under the Contract, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above-bound Principal, or its heirs, executors, administrators, successors, or assigns approved by the District, shall promptly and faithfully perform the covenants, conditions and agreements in the Contract during the original term and any extensions thereof as may be granted by the District, with or without notice to Surety, and during the period of any guarantees or warranties required under the Contract, and shall also promptly and faithfully perform all the covenants, conditions, and agreements of any alteration of the Contract made as therein provided, notice of which alterations to Surety being hereby waived, on Principal's part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify, defend, protect, and hold harmless the District as stipulated in the Contract, then this obligation shall be removed; otherwise it shall be and remain in full force and effect.

No extension of time, change, alteration, modification, or addition to the Contract, or of the work required thereunder, shall release or exonerate Surety on this bond or in any way affect the obligation of this bond; and Surety does hereby waive notice of any such extension of time, change, alteration, modification, or addition.

Whenever Principal shall be and declared by the District to be in default under the Contract, Surety shall promptly remedy the default, or shall promptly do one of the following at District's election:

1. Undertake through its agents or independent Contractors, reasonably acceptable to the District, to complete the Contract in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including without limitation, all obligations with respect to warranties, guarantees, and the payment of liquidated damages.
2. Reimburse the District for all costs the District incurs in completing the Contract, including consequential damages and costs associated with resoliciting the Contract, if applicable, negotiation, and completion of the project, and in correcting, repairing, or replacing any defects in

materials or workmanship and/or materials and workmanship which do not conform to the specifications in the Contract.

Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing the District's rights against the others.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the District or its successors or assigns.

In the event suit is brought upon this bond by the District, Surety shall pay reasonable attorney's fees and costs incurred by the District in such suit.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their seals this _____ day of _____, 2024, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(Principal)

NOTE:
To be signed by Principal
and Surety and acknowledgement
and notarial seal attached.

By: _____

By: _____

(Surety)

(Address)

By: _____

By: _____

STATE OF CALIFORNIA)
)
CITY AND COUNTY OF _____) ss.

On _____, 2024 before me, _____, Notary Public, personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature _____
Notary Public

TO BE CONSIDERED COMPLETE, BOTH THE BIDDER AND AN ADMITTED SURETY INSURER AUTHORIZED BY THE CALIFORNIA INSURANCE COMMISSIONER TO TRANSACT SURETY BUSINESS IN THE STATE OF CALIFORNIA MUST SIGN THIS PERFORMANCE BOND. IN ADDITION, BOTH THE PRINCIPAL'S AND THE SURETY'S SIGNATURES MUST BE NOTARIZED AND A COPY OF THE SURETY'S POWER OF ATTORNEY MUST BE ATTACHED.

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that _____ called the PRINCIPAL, and _____ a corporation duly organized under the laws of the State of _____, having its principal place of business at _____ in the State of _____, and authorized to do business in the State of California, hereinafter called the SURETY, are held and firmly bound unto the San Mateo County Harbor District (District), hereinafter called the OBLIGEE, or order in the sum of _____ (\$ _____) lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the PRINCIPAL has entered into a Contract with the OBLIGEE for **CONTRACT NO. 2024-04, Oyster Point Marina West Access Improvements** and said PRINCIPAL is required under the terms of said Contract to furnish a bond securing payment of claims to which reference is made in Section 9554 of the Civil Code.

NOW, THEREFORE, if said PRINCIPAL or any of its subcontractors fails to pay any of the persons named in Section 9100 of the Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or any amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of the Contractor and his subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work and labor, the SURETY, will pay for the same, in an amount not exceeding the sum specified in this bond, and also will pay, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court.

This bond will inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

This bond is given to comply with Sections 9550 and 9554 of the Civil Code. The liability of the PRINCIPAL and SURETY hereunder is governed by the provisions of said Code, all acts amendatory thereof, and all other statutes referred to therein.

SURETY, for value received, hereby agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or to the Contract Documents accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the other portions of the Contract Documents.

IN WITNESS WHEREOF the above-bounded parties have executed this instrument this _____ day of _____, 2024, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representatives, pursuant to authority of its governing body.

(Principal)

NOTE:
To be signed by Principal
and Surety and acknowledgement
and notarial seal attached.

By: _____

By: _____

(Surety)

(Address)

By: _____

By: _____

STATE OF CALIFORNIA)
) ss.
CITY AND COUNTY OF _____

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