

EAST BAY MUNICIPAL UTILITY DISTRICT

REQUEST FOR QUOTATION (RFQ) No. 1512 For CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS

For complete information regarding this project, see RFQ posted at <http://www.ebmud.com/business-opportunities> or contact the EBMUD representative listed below. Thank you for your interest!

Contact Person: Kelley K. Smith
Phone Number: (510) 287-0355
E-mail Address: ksmith@ebmud.com

Please note that prospective bidders are responsible for reviewing <http://ebmud.com/business>, during the RFQ process, for any published addenda regarding this RFQ.

RESPONSE DUE

By

1:30 p.m. PDT

On

May 27, 2015

At

EBMUD, Purchasing Division
375 Eleventh St., First Floor
Oakland, CA 94607



375 Eleventh Street, Oakland, CA 94607

Website: ebmud.com

EAST BAY MUNICIPAL UTILITY DISTRICT

RFQ No. 1512

For

CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS

TABLE OF CONTENTS

STATEMENT OF WORK	3
SCOPE	3
SPECIFIC REQUIREMENTS	3
DELIVERABLES.....	3
FAILURE TO MEET SPECIFICATIONS.....	3
INSPECTION	4
SUPPLIER'S QUALIFICATIONS	4
CALENDAR OF EVENTS	5
DISTRICT PROCEDURES, TERMS, AND CONDITIONS	6
RFQ ACCEPTANCE AND AWARD	6
BRAND NAMES, APPROVED EQUIVALENTS, DEVIATIONS, AND EXCEPTIONS	6
PRICING.....	7
PROTESTS.....	7
METHOD OF ORDERING	8
TERM / TERMINATION / RENEWAL	9
WARRANTY	9
SUPPLIER'S PERFORMANCE GUARANTEES.....	11
INVOICING	13
LIQUIDATED DAMAGES	13
PAYMENT OF DELAY AND PERFORMANCE DAMAGES	13
BONDS use	14
RFQ RESPONSE SUBMITTAL INSTRUCTIONS AND INFORMATION	14
DISTRICT CONTACTS	14
SUBMITTAL OF RFQ RESPONSE	15
RESPONSE FORMAT	17

ATTACHMENTS

EXHIBIT A - RFQ RESPONSE PACKET

EXHIBIT B - INSURANCE REQUIREMENTS

EXHIBIT C - SPECIFICATION SECTION 44 43 13 - ULTRAFILTRATION MEMBRANE SYSTEM

EXHIBIT D – FUTURE EXPANSION PURCHASE PRICE GUARANTEE

EXHIBIT E - BOND FORMS

EXHIBIT F – GENERAL REQUIREMENTS

STATEMENT OF WORK

SCOPE

It is the intent of this solicitation to procure two (2) ultrafiltration (UF) membrane skid systems for the purpose of treating raw water from the Camanche Reservoir and the Mokelumne Aqueducts to meet California drinking water standards. The membrane skids are to be installed at the East Bay Municipal Utility District's (the District) Camanche South Shore Water Treatment Plant to be located at the Camanche South Shore Recreation Area.

The RFQ specifications, terms, and conditions are for the procurement, installation, start-up, testing, and District staff training of two complete UF membrane skid systems.

The successful bidder will provide two (2) complete, fully operational UF skid systems, each with an average treated water production capacity of 250,000 gallons per day (gpd). The bid is to include all necessary control systems, instrumentation, pumps, piping, valves, electrical equipment, and appurtenances required for the membrane systems to be fully operational upon completion of the project.

The District intends to award a contract to the lowest cost, responsive bidder whose response conforms to the RFQ and meets the District's requirements.

SPECIFIC REQUIREMENTS

The product shall comply with the requirements of Specification Section 44 43 13 in Exhibit C.

DELIVERABLES

The deliverables shall comply with the requirements of Specification Section 44 43 13 in Exhibit C.

FAILURE TO MEET SPECIFICATIONS

In the event any shipment or shipments of a Supplier's product do not meet the specification or delivery requirements, the District may reject the shipment or shipments and, at its option, may purchase this material from any supplier on the open market who can meet the District's specification requirements or the District may

demand immediate replacement by the Supplier of the non-conforming product. Any costs over and above the original contract price will be charged back to the Supplier. In addition, the Supplier shall bear the costs of removal and disposition for any delivery, which fails to conform to the specifications.

INSPECTION

The District will inspect material after its arrival at the delivery point. If the rejection rate of a sample of components is 10% or higher, all components will be rejected. Supplier is solely responsible for ensuring the material arrives at the District's ship-to location free of defects and manufactured in strict conformance with the specifications.

The District reserves the right-of-access to the Supplier's facility to verify conformance to this specification at the District's expense.

SUPPLIER'S QUALIFICATIONS

1. Sole Responsibility: The Supplier is responsible for the system integration of the entire membrane system, including design, construction, and fabrication of the entire control system panel. The Supplier shall warrant all products provided. The Supplier shall provide a 'letter of compliance' on Company letterhead certifying compliance with the sole responsibility requirement.
2. Qualifications:
 - a. The Supplier has successfully designed and provided similar equipment for the proposed application for at least 5 years. The Supplier shall provide a 'letter of compliance' on company letterhead certifying compliance with the 5-year experience requirement.
 - b. The Supplier shall provide a list of at least five (5) potable water installations that are currently successfully using similar water treatment systems that were designed, assembled, and furnished by the Supplier. A minimum of two (2) of these installations shall be installed in the State of California and producing potable water in accordance with contract specifications. A minimum of two (2) installations shall be of similar size and capacity to this Project and are successfully being operated to produce

potable water in accordance with contract specifications. (See REFERENCES form in Exhibit A.) Each reference shall include the following:

- (1) General description of the UF system including design capacity, number of skids, and date of start-up.
 - (2) The list shall also include phone numbers and contact information for each user (name, title or position, e-mail address, role or relationship to the referenced installation).
- c. Bidder shall demonstrate to the District that it possesses all licenses and professional credentials necessary to supply the required membrane system and perform services as specified under this RFQ.

CALENDAR OF EVENTS

EVENT	DATE/LOCATION
RFQ Issued	May 8, 2015
Addendum (if needed)	
Response Due	May 27, 2015 by 1:30 p.m. PDT
Anticipated Contract Start Date	June 25, 2015
Anticipated Delivery Date	November 2, 2015

Note: All dates are subject to change.

Bidders are responsible for reviewing <http://ebmud.com/business> for any published addenda. Hard copies of addenda will not be mailed out.

DISTRICT PROCEDURES, TERMS, AND CONDITIONS

RFQ ACCEPTANCE AND AWARD

1. RFQ responses will be evaluated to determine that they are responsive, responsible, and that they meet the specifications as stated in this RFQ.
2. An award will be made, by schedule, to the lowest cost, responsive, and responsible bidder or bidders.
3. The District reserves the right to award to a single or to multiple Suppliers, dependent upon what is in the best interest of the District.
4. The District has the right to decline to award this contract or any part of it for any reason.
5. The District has the right to reject any or all bids.
6. Any specifications, terms or conditions, issued by the District, or those included in the Bidder's submission, in relation to this RFQ, may be incorporated into any PO or contract that may be awarded as a result of this RFQ.

BRAND NAMES, APPROVED EQUIVALENTS, DEVIATIONS, AND EXCEPTIONS

Any references to suppliers, trade names, brand names, and/or catalog numbers are intended to be descriptive, but not restrictive, unless otherwise stated, and are intended to indicate the quality level desired. Bidders may offer an equivalent product that meets or exceeds the specifications.

RFQ responses based on equivalent products must use Exhibit A "Exceptions, Clarifications, and Amendments" to:

- a. Clearly describe the alternate offered and indicate specifically how it differs from the product specified in this RFQ.
- b. Include complete descriptive literature and/or specifications as proof that the proposed alternate will be equal to or better than the product named in this RFQ.

The District reserves the right to be the sole judge of what shall be considered equal and/or acceptable, and may require the Bidder to provide additional information and/or samples. If the Bidder does not specify otherwise, it is understood that the brand and/or product referenced in this RFQ will be supplied.

Taking exception to the RFQ, or failure on the part of the Bidder to comply with all requirements and conditions of this RFQ, may subject the RFQ response to rejection. If no deviations are shown, the Bidder will be required to furnish the material exactly as specified. The burden of proof of compliance with the specifications will be the responsibility of the Bidder.

This RFQ is subject to acceptance only on the terms and conditions stated in this RFQ. Any additional or different terms and conditions proposed by the Bidder are hereby rejected, and shall be of no force or effect unless expressly assented to in writing by the District.

PRICING

1. All prices are to be F.O.B. destination. Freight/delivery charges are to be included.
2. All prices quoted shall be in United States dollars.
3. Price quotes shall include any and all payment incentives available to the District.
4. Bidders are advised that in the evaluation of cost, if applicable, it will be assumed that the unit price quoted is correct in the case of a discrepancy between the unit price and extended price.

PROTESTS

Protests must be in writing and must be received no later than seven (7) business days after either of the following: posting of the RFQ results on the District's website (www.ebmud.com), or notification of selection/non-selection, whichever is sooner. The District will reject the protest as untimely if it is received after this specified time frame. Protests will be accepted from bidders or potential bidders only.

If the protest is mailed and not received by the District, the protesting party bears the burden of proof to submit evidence (e.g., certified mail receipt) that the protest was

sent in a timely manner so that it would be received by the District within the RFQ protest period.

All protests must contain a detailed and complete written statement describing the reason(s) for protest and include the name, telephone number, and address of the protestor or the person representing the protestor. Protests must be mailed or hand delivered to the Manager of Purchasing, East Bay Municipal Utility District, 375 Eleventh Street, Oakland, CA 94607 or PO Box 24055, Oakland, CA 94623. Facsimile and electronic mail protests must be followed by a mailed or hand delivered identical copy of the protest.

The bid protester can appeal the determination to the requesting organization's Department Director. The appeal must be submitted to the Department Director no later than five working days from the date of receipt of the requesting organization's determination on the protest.

Such an appeal must be made in writing and must include all grounds for the appeal and copies of the original protest and the District's response. The bid protester must also send the Purchasing Division a copy of all materials sent to the Department Director. The Department Director will make a determination of the appeal and respond to the protester by certified mail in a timely manner. If the appeal is denied, the letter will include the date, time, and location of the Board of Directors meeting at which staff will make a recommendation for award and inform the protester it may request to address the Board of Directors at that meeting.

The District may transmit copies of the protest and any attached documentation to all other parties who may be affected by the outcome of the protest. The decision of the District as to the validity of any protest is final. This District's final decision will be transmitted to all affected parties in a timely manner.

METHOD OF ORDERING

1. POs and payments for products and/or services will be issued only in the name of the Supplier.
2. Any and all change orders shall be in writing and agreed upon, in advance, by the Supplier and the District.

TERM / TERMINATION / RENEWAL

1. The term of the contract, which may be awarded pursuant to this RFQ, will be based on the Bidder's schedule for supplying, installing, and making operational all required products and systems to complete the UF membrane skid system in accordance with contract performance requirements.
2. This Agreement may be terminated for convenience by the District provided the Supplier is given written notice of not less than 30 calendar days. Upon such termination, the District shall pay the Supplier the amount owing for the products ordered and satisfactorily received by the District. This shall be the sole and exclusive remedy to which the Supplier is properly entitled in the event of termination by the District.
3. This Agreement may be terminated for cause at any time, provided that the District notifies the Supplier of impending action.

WARRANTY

1. Mechanical Warranty: The Supplier warrants all material and equipment against defects for a period of two (2) years from the date of equipment acceptance by the District Engineer.
2. Bidder expressly warrants that all goods and services to be furnished pursuant to any contract awarded it arising from the Bid will conform to the descriptions and specifications contained herein and in supplier catalogs, product brochures and other representations, depictions or models, and will be free from defects, of merchantable quality, good material, and workmanship. Bidder expressly warrants that all goods and services to be furnished pursuant to such award will be fit and sufficient for the purpose(s) intended. This warranty shall survive any inspections, delivery, acceptance, payment, or contract termination for any reason, by the District. Bidder warrants that all work and services furnished hereunder shall be fully guaranteed for a period of 2 years from the date of acceptance by the District. Acceptance from the District will be conditional on the system having been successfully started up, all deliverables have been received by the District, and the system has been operating for a period of no less than 30 consecutive days while meeting all performance specifications as spelled out in the contract.

This warranty is expressly conditioned on the equipment being installed, operated, and maintained in accordance with the Supplier's specifications, operational and maintenance procedures, and good practice.

3. If the District notifies the Supplier, within two years from the date of equipment acceptance by the District, that any portion of the equipment fails to fulfill any of the requirements of the Contract Documents, the Supplier shall repair or replace the defective, non-conforming, or otherwise unsatisfactory equipment, without delay or further cost to the District. With regard to any defective equipment repaired or replaced by the Supplier, the two-year warranty will be measured from the date of the latest repair or replacement. Should the Supplier fail to act promptly in accordance with this requirement, or should the exigencies of the case require repairs or replacements to be made before the Supplier can be notified or can respond to the notification, the District may, at its option, make the necessary repairs or replacements, or perform the necessary Work, and the Supplier shall pay to the District the actual cost of such repairs.
4. If the equipment has repeatedly malfunctioned, is unreliable, requires excessive maintenance, or if repair of the equipment will not result in equipment that is equivalent to that required by the Contract Documents (both in functionality and useful life), the Supplier shall replace, rather than repair, the equipment under the warranty.
5. Bidder expressly warrants that all supplied membrane modules shall provide a 'useful service life' of minimum 7 years under normal operating conditions. The warranty shall provide for replacement of the membrane by the Supplier, which will be the successful bidder. For the first 5 years of the warranty, the membranes shall be replaced at no cost to the District. Thereafter, the replacement cost shall be prorated as follows: Membranes that fail during the 6th year of service shall be supplied to the District at a rate of 50% of their original purchase cost. Membranes that fail during the 7th year of service shall be supplied to the District at a rate of 75% of their original purchase cost. Useful service life is defined as meeting the required net design production capacity of the membrane system irrespective of the cause of loss of production capacity such as irreversible fouling resulting in reduced flux rate, more frequency and longer periods required to clean membranes resulting in reduced production output, excessive fiber breakage resulting in loss of module capacity, excessive leaks in the skid system resulting in reduced output, etc.

6. Bidder must provide a current purchase cost quote per individual membrane module as part of the initial overall quote for this project. Bidder must indicate recommended maximum service life of membrane modules (i.e.; number of years of operational service under normal conditions before membranes must be replaced.) Bidder must also specify environmental conditions required for storage, including specific preservation measures that must be taken to ensure the membranes do not degrade prior to being put into service (i.e.; cold room storage at specific temperature range, immersion in preservative solutions, etc.) Bidder must specify any impacts on warranty coverage of replacement membranes while being stored prior to being put into service assuming that recommended storage environmental conditions and preservation methods as specified are followed by the District.
7. The Supplier is responsible for all costs incidental to making good on all of its obligations under the warranty and the contract.

SUPPLIER'S PERFORMANCE GUARANTEES

1. The Supplier hereby guarantees that the UF membrane skid systems will perform in accordance with the Performance Guarantees in Exhibit C – Specification Section 44 43 13, Article 2.2 Performance Guarantees. The intent of the Performance Guarantees is to assure the District that the membrane systems will produce the required quantity of treated water for required durations under the source water quality conditions listed in this RFQ.
2. Guarantees are provided by the Supplier to the District relating to the hydraulic capacity and water quality performance of UF membrane skid systems as set forth herein.
 - a. These guarantees are subject to the membrane skid systems being operated and maintained in accordance with industry standards, O&M Manual instructions, and the Supplier's equipment recommendations during performance testing and after District acceptance.
 - b. The Supplier's performance guarantee includes the design, equipment, installation, and construction of all facilities required for operation and maintenance of the membrane skid systems.

3. The Supplier understands that if the Performance Guarantees are not achieved at the time of initial performance testing, the Supplier will be obligated to cause the Performance Guarantees to be met except as provided in Exhibit C. If, after Performance testing, the Performance Guarantees are not achieved as set forth in Exhibit C – Specification Section 44 43 13, Article 2.2 Performance Guarantees, then the Supplier shall follow the procedures set forth below.
4. If the Supplier's efforts within thirty (30) days following the initial failure to meet one or more of the Performance Guarantees do not succeed in resolving any failures to meet the Performance Guarantees, the District may allow the Supplier to continue for an additional thirty (30) days to attempt to correct any and all failures to meet the Performance Guarantees.
5. If the Supplier has not made substantial progress in correction of the deficiencies within the second thirty (30) day period (as extended by any delays in obtaining materials or equipment or additional time reasonably required for installation) at any time thereafter, upon demand of the District, the Supplier and the District shall agree to an amount which the Supplier shall pay to the District as damages (the Performance Damages) on account of each deficiency in meeting the Project Guarantees which amount may include the cost of correction of the deficiencies by others and the reduced value of the water treatment plant.
 - a. The Performance Damages may be based on some or all of the following factors, to the extent applicable: nature of the installation and testing of replacement equipment and changes in system controls required to deal with new components.
 - b. If the District and the Supplier are unable to agree on the amount of Performance Damages within thirty (30) days after the District's demand for determination of performance Damages, the District may pursue all legal remedies available to the District. In no event shall Performance Damages or any other damages attributable to failure of the Project to meet the Performance Guarantees exceed an amount equal to 90% of the Agreement price, separate and apart from any other amounts payable to the District under this Agreement.

INVOICING

1. Payment will be made within thirty (30) days following receipt of an approvable payment request. Payment request shall provide all required labor cost and expenses documentation and describe work completed in accordance with the contract Schedule of Values. Payments will be made upon complete satisfactory receipt of products and/or performance of services.
2. The District shall notify the Supplier of any payment request adjustments it proposes and the basis for such adjustments.
3. Payment requests shall contain, at a minimum, District PO number, invoice number, remit to address, and itemized products and/or services description.
4. The District will pay the Supplier in an amount not to exceed the total contract amount unless amended by change order.

LIQUIDATED DAMAGES

1. A deduction for liquidated damages of \$1, 250 per day will be assessed for not meeting the Substantial Completion date unless the District and Bidder agree in writing to a date extension.
2. It being impracticable or extremely difficult to fix the actual damage if the UF membrane skid systems are not in operation on the Substantial Completion date, the amount set forth above is hereby agreed upon as liquidated damages and will be deducted from any money due under the agreement arising from this RFQ.
3. In the event work performed and/or deliverables are deemed unsatisfactory, the District reserves the right to withhold future payments until the work, performance, and/or deliverables are deemed satisfactory.

PAYMENT OF DELAY AND PERFORMANCE DAMAGES

1. The Supplier shall pay any Delay Damages and Performance Damages monthly in arrears, within ten (10) days of receipt of notice from the District, delivered after the end of any month during which such damages were accrued or were determined. Each such notice shall specify the amount of Delay and Performance Damages due. The District will have the right to offset any liability of the Supplier

under this Article for Delay Damages against any amount due or to become due from the District to the Supplier under this Agreement.

2. Disputes regarding liability for or the amount of Delay and Performance Damages shall be submitted in writing. Delay Damages shall be the District's sole and exclusive remedy for failure by the Supplier to achieve Substantial Completion by the date shown in the Scope of Services, the Supplier's repair and replacement obligations under this Agreement, the obligations of the Supplier set forth in Exhibit C – Specification Section 44 43 13, Article 2.2 and the Performance Damages payments provided for by this Article, shall be the District's sole and exclusive remedy for the Project's failure to achieve the Performance Guarantees.
3. The remedies and damages set forth in this article shall constitute the Supplier's sole and exclusive liability in connection with delay in completion of the Schedule or performance, including the Performance Guarantees, of the project.
4. The foregoing shall not limit the District's remedies for breach of the warranties and guarantees set forth in other sections of this agreement.

BONDS

1. The successful bidder will be required to post and maintain a faithful performance Bond with the District. Bonds must be on District forms attached to this RFQ as **Exhibit E - Bond Forms**.

RFQ RESPONSE SUBMITTAL INSTRUCTIONS AND INFORMATION

DISTRICT CONTACTS

All contact during the competitive process is to be through the contact listed on the first page of this RFQ. The following persons are only to be contacted for the purposes specified below.

TECHNICAL SPECIFICATIONS:

Attn: John C. Johnson

EBMUD - Assistant Superintendent

E-Mail: johnson@ebmud.com

PHONE: (209) 772-8267

CONTRACT EQUITY PROGRAM:

Attn: Contract Equity Office

PHONE: (510) 287-0114

AFTER AWARD:

Attn: John C. Johnson EBMUD - Assistant Superintendent

E-Mail: johnson@ebmud.com

PHONE: (209) 772-8267

SUBMITTAL OF RFQ RESPONSE

1. Late and/or unsealed responses will not be accepted.
2. RFQ responses submitted via electronic transmissions will not be accepted. Electronic transmissions include faxed RFQ responses or those sent by electronic mail ("e-mail").
3. RFQ responses will be received only at the address shown below, must be SEALED, and must be received at the District Pardee Center by 3:00 p.m. PDT on the due date specified in the Calendar of Events. Any RFQ response received after that time or date or at a place other than the stated address cannot be considered and will be returned to the Bidder unopened.

All RFQ responses must be received and time stamped at the stated address by the time designated. The Pardee Center's timestamp shall be considered the official timepiece for the purpose of establishing the actual receipt of RFQ responses.

4. RFQ responses are to be addressed/delivered as follows:

Mailed:

Andrew Akelman, Manager of Purchasing

East Bay Municipal Utility District

RFQ-CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS

No. 1512

EBMUD–Purchasing Division
P.O. Box 24055
Oakland, CA 94623

Hand Delivered or delivered by courier or package delivery service:

Andrew Akelman, Manager of Purchasing
East Bay Municipal Utility District
RFQ-CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS
No. 1512
EBMUD–Purchasing Division
375 Eleventh Street, First Floor
Oakland, CA 94607

Bidder's name, return address, and the RFQ number and title must also appear on the mailing package.

5. Bidders are to submit one (1) original hardcopy RFQ response (Exhibit A – RFQ Response Packet, including Contract Equity Program forms and all additional documentation stated in the “Required Documentation and Submittals” section of Exhibit A), all with original ink signatures.
6. All costs required for the preparation and submission of an RFQ response shall be borne by the Bidder.
7. California Government Code Section 4552: In submitting an RFQ response to a public purchasing body, the Bidder offers and agrees that if the RFQ response 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 RFQ response. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the Bidder.
8. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms “claim” and “knowingly” are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act.

9. The RFQ response shall remain open to acceptance and is irrevocable for a period of one hundred eighty (180) days, unless otherwise specified in the RFQ documents.
10. It is understood that the District reserves the right to reject any or all RFQ responses.

RESPONSE FORMAT

1. **Bidders shall not modify any part of Exhibits A, B, C, D, or E, or qualify their RFQ responses. Bidders shall not submit to the District a re-typed or otherwise re-created version of these documents or any other District-provided document.**
2. In order for RFQ responses to be considered complete, the Bidder **must** provide responses to all information requested. See Exhibit A – RFQ Response Packet and Exhibit C - SPECIFICATION SECTION 44 43 13 Ultrafiltration Membrane System for a complete listing of required documentation.
3. RFQ responses, in whole or in part, are NOT to be marked confidential or proprietary. The District may refuse to consider any RFQ response or part thereof so marked. RFQ responses submitted in response to this RFQ may be subject to public disclosure. The District shall not be liable in any way for disclosure of any such records.



EXHIBIT A

RFQ RESPONSE PACKET

RFQ No. 1512 – CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS

To: The EAST BAY MUNICIPAL UTILITY District (“the District”)

From: _____
(Official Name of Bidder)

RFQ RESPONSE PACKET GUIDELINES

- AS DESCRIBED IN SECTION IV- RFQ RESPONSE SUBMITTAL INSTRUCTIONS AND INFORMATION, BIDDERS ARE TO SUBMIT ONE (1) ORIGINAL HARDCOPY RFQ RESPONSE WITH ORIGINAL INK SIGNATURES, ONE COPY, AND ONE (1) ELECTRONIC COPY (preferably in PDF format and on a CD or flash drive) CONTAINING THE FOLLOWING, IN THEIR ENTIRETY:
 - EXHIBIT A – RFQ RESPONSE PACKET, INCLUDING CONTRACT EQUITY PROGRAM FORMS AND ALL ADDITIONAL REQUIRED DOCUMENTATION AS DESCRIBED IN EXHIBIT A - “REQUIRED DOCUMENTATION AND SUBMITTALS”
 - EXHIBIT B- INSURANCE FORMS
 - EXHIBIT C- SPECIFICATION SECTION 44 43 13 – Ultrafiltration Membrane System
 - QUALIFICATIONS STATEMENTS
 - EXHIBIT D – FUTURE EXPANSION PURCHASE PRICE GUARANTEE
 - EXHIBIT E – BOND FORMS
- ALL PRICES AND NOTATIONS MUST BE PRINTED IN INK OR TYPEWRITTEN; NO ERASURES ARE PERMITTED; ERRORS MAY BE CROSSED OUT AND CORRECTIONS PRINTED IN INK OR TYPEWRITTEN ADJACENT, AND MUST BE INITIALED IN INK BY PERSON SIGNING THE RFQ RESPONSE.
- BIDDERS THAT DO NOT COMPLY WITH THE REQUIREMENTS, AND/OR SUBMIT AN INCOMPLETE RFQ RESPONSE MAY BE SUBJECT TO DISQUALIFICATION AND THEIR RFQ RESPONSE REJECTED IN TOTAL.
- IF BIDDERS ARE MAKING ANY CLARIFICATIONS AND/OR AMENDMENTS, OR TAKING EXCEPTION TO ANY PART OF THIS RFQ, THESE MUST BE SUBMITTED IN THE EXCEPTIONS, CLARIFICATIONS, AND AMENDMENTS SECTION OF THIS EXHIBIT A – RFQ RESPONSE PACKET. THE DISTRICT, AT ITS SOLE DISCRETION, MAY ACCEPT AMENDMENTS/EXCEPTIONS, OR MAY DEEM THEM TO BE UNACCEPTABLE, THEREBY RENDERING THE RFQ RESPONSE DISQUALIFIED.



BIDDER INFORMATION AND ACCEPTANCE

1. The undersigned declares that all RFQ documents, including, without limitation, the RFQ, Addenda, and Exhibits, have been read and that the terms, conditions, certifications, and requirements are agreed to.
2. The undersigned is authorized to offer, and agrees to furnish, the articles and services specified in accordance with the RFQ documents of RFQ No. 1512.
3. The undersigned acknowledges acceptance of all addenda related to this RFQ. List Addenda for this RFQ on the lines below:

Addendum #	Date

4. The undersigned hereby certifies to the District that all representations, certifications, and statements made by the Bidder, as set forth in this RFQ Response Packet and attachments, are true and correct and are made under penalty of perjury pursuant to the laws of California.
5. The undersigned acknowledges that the Bidder is, and will be, in good standing in the State of California, with all the necessary licenses, permits, certifications, approvals, and authorizations necessary to perform all obligations in connection with this RFQ and associated RFQ documents.
6. It is the responsibility of each bidder to be familiar with all of the specifications, terms, and conditions and, if applicable, the site condition. By the submission of an RFQ response, the Bidder certifies that if awarded a contract it will make no claim against the District based upon ignorance of conditions or misunderstanding of the specifications.
7. Patent indemnity: Suppliers who do business with the District shall hold the District, its Directors, officers, agents, and employees, harmless from liability of any nature or kind, including cost and expenses, for infringement or use of any patent, copyright, or other proprietary right, secret process, patented or unpatented invention, article, or appliance furnished or used in connection with the contract or purchase order.

8. Insurance certificates are not required at the time of submission. However, by signing Exhibit A – RFQ Response Packet, the Bidder agrees to meet the minimum insurance requirements stated in the RFQ. This documentation must be provided to the District prior to execution of an agreement by the District, and shall include an insurance certificate which meets the minimum insurance requirements, as stated in the RFQ.
9. The undersigned bidder hereby submits this RFQ response and binds itself on award to the District under this RFQ to execute in accordance with such award a contract and to furnish the bond or bonds and insurance required by the RFQ. The RFQ, subsequent Addenda, Bidder's Response Packet, and any attachments, shall constitute the Contract, and all provisions thereof are hereby accepted.
10. The undersigned acknowledges **ONE** of the following (please check only one box)*:

- ☐ Bidder is not an SBE and is ineligible for any bid preference; **OR**
- ☐ Bidder is an SBE as described in the Contract Equity Program (CEP) and Equal Employment Opportunity (EEO) Guidelines, is requesting a 5% bid preference, and has completed the Contract Equity Program and Equal Employment Opportunity forms at the hyperlink contained in the Contract Equity Program and Equal Opportunity section of this Exhibit A.

*If no box is checked, it will be assumed that the Bidder is ineligible for bid preference and none will be given. For additional information on SBE bid preference, please refer to the Contract Equity Program and Equal Employment Opportunity Guidelines at the above referenced hyperlink.

Official Name of Bidder (exactly as it appears on Bidder's corporate seal and invoice): _____

Street Address Line 1: _____

Street Address Line 2: _____

City: _____ State: _____ Zip Code: _____

Webpage: _____

Type of Entity / Organizational Structure (check one):

- | | |
|--|--|
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Joint Venture |
| <input type="checkbox"/> Limited Liability Partnership | <input type="checkbox"/> Partnership |
| <input type="checkbox"/> Limited Liability Corporation | <input type="checkbox"/> Non-Profit / Church |
| <input type="checkbox"/> Other: _____ | |

Jurisdiction of Organization Structure: _____

Date of Organization Structure: _____

Federal Tax Identification Number: _____

Primary Contact Information:

Name / Title: _____

Telephone Number: _____ Fax Number: _____

E-mail Address: _____

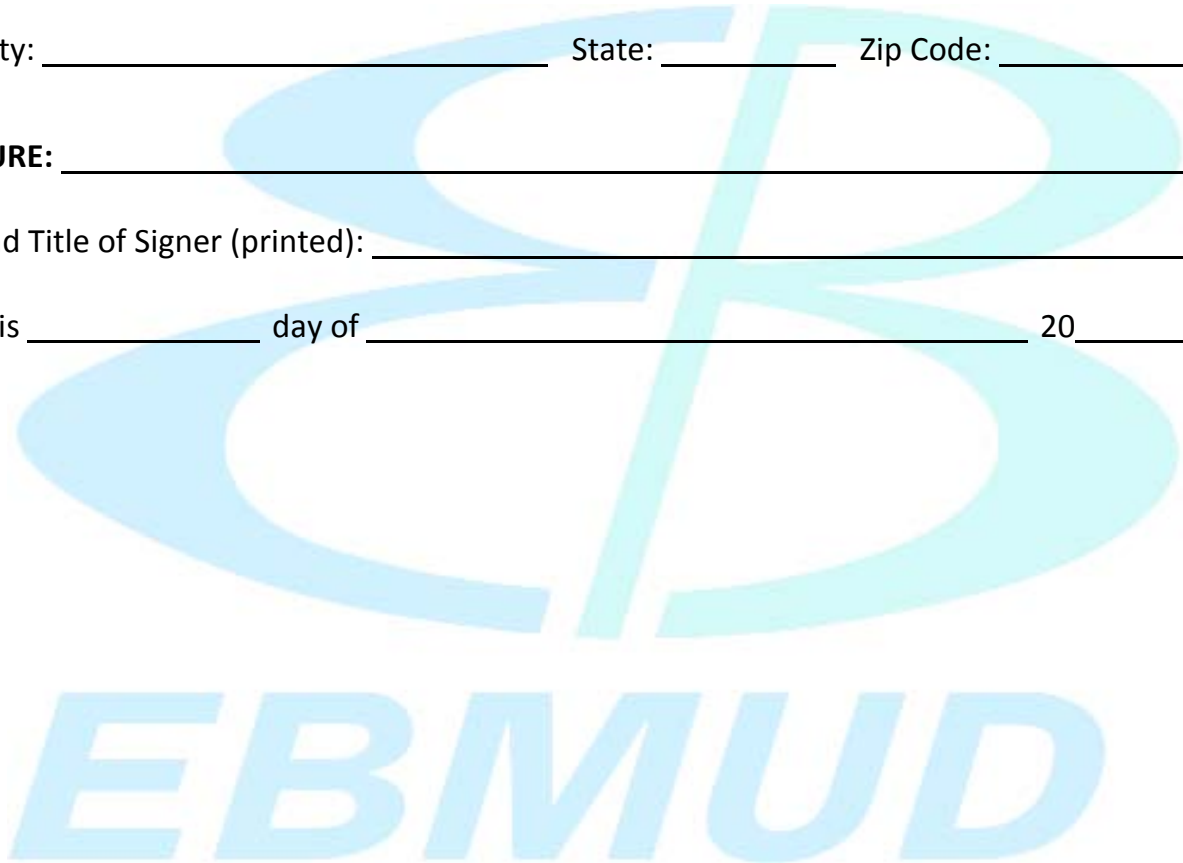
Street Address Line 1: _____

City: _____ State: _____ Zip Code: _____

SIGNATURE: _____

Name and Title of Signer (printed): _____

Dated this _____ day of _____ 20_____





BID FORM

Cost shall be submitted on this Bid Form as is. The prices quoted shall not include Sales Tax or Use Tax; said tax, wherever applicable, will be paid by the District to the Supplier, if licensed to collect, or otherwise directly to the State.

No alterations or changes of any kind to the Bid Form(s) are permitted. RFQ responses that do not comply may be subject to rejection in total. The cost quoted below shall be the cost the District will pay for the term of any contract that is a result of this RFQ process.

Quantities listed herein are annual estimates based on past usage and are not to be construed as a commitment. No minimum or maximum is guaranteed or implied.

Description	Unit of Measure	Estimated Quantity	Unit Cost	Extended Cost
Ultrafiltration Membrane System Skid, including O&M Manuals, and spare parts per Exhibit C	EA	2	\$	\$
Freight and delivery to Camanche South Shore Recreational Area	LS	1	\$	\$
Start-up Assistance and Training per Exhibit C, 3.3-SUPPLIER'S FIELD SERVICES	LS	1	\$	\$
TOTAL COST				\$



REQUIRED DOCUMENTATION AND SUBMITTALS

All of the specific documentation listed below is required to be submitted with the Exhibit A – RFQ Response Packet in order for an RFQ response to be deemed complete. Bidders shall submit all documentation, in the order listed below, and clearly label each section of the RFQ response with the appropriate title (i.e. Table of Contents, Letter of Transmittal, Description of the Proposed Equipment, etc.).

1. **Description of the Proposed Equipment/System:** RFQ response shall include a description of the proposed equipment/system, as it will be finally configured during the term of the contract. The description shall specify how the proposed equipment/system will meet or exceed the requirements of the District and shall explain any advantages that this proposed equipment/system would have over other possible equipment/systems. The description shall include any disadvantages or limitations that the District should be aware of in evaluating the RFQ response. Finally, the description shall describe all product warranties provided by Bidder.
2. **Implementation Plan and Schedule:** The RFQ response shall include an implementation plan and schedule. The plan for implementing the proposed equipment/system and services shall include an Acceptance Test Plan. In addition, the plan shall include a detailed schedule indicating how the Bidder will ensure adherence to the timetables for the final equipment/system and/or services.
3. **Evidence of Qualification Testing:** RFQ response provides evidence that the proposed equipment/system has successfully completed the qualification test standard requirements defined in this RFQ. Evidence shall include a statement from an Independent Testing Authority (ITA) that both the hardware elements and the software elements of the proposed equipment/system comply with the requirements of the qualification standard. If the equipment/system specified requires the addition of components or features not previously tested by the ITA, the District will determine, in its sole discretion, whether qualification testing of such components or features will be required prior to the award of a contract.
4. **EXHIBIT C-SPECIFICATION SECTION 44 43 13,** pages 27-33 shall be completed and submitted with your response packet.
5. **Non-Competitive Costs:** The RFQ response shall include a list of non-competitive costs for the items below. These costs will not be evaluated for the purpose of the bid.
 - (1) Replacement membranes
 - (2) Extended service contract (including travel costs, per diem, etc.)
 - (3) Extended performance warranty (from 1 to 2 years)

6. **Faithful Performance Bond Requirements:** See Exhibit E (FAITHFUL PERFORMANCE BOND)
7. **References:**
- (a) Bidders must use the templates in the “References” section of this Exhibit A – RFQ Response Packet to provide references.
 - (b) References must be satisfactory as deemed solely by the District. References should have similar scope, volume, and requirements to those outlined in these specifications, terms, and conditions.
 - Bidders must verify the contact information for all references provided is current and valid.
 - Bidders are strongly encouraged to notify all references that the District may be contacting them to obtain a reference.
 - (c) The District may contact some or all of the references provided in order to determine Bidder’s performance record on work similar to that described in this RFQ. The District reserves the right to contact references other than those provided in the RFQ response and to use the information gained from them in the evaluation process.
8. **Exceptions, Clarifications, Amendments:**
- (a) The RFQ response shall include a separate section calling out all clarifications, exceptions, and amendments, if any, to the RFQ and associated RFQ documents, which shall be submitted with Bidder’s RFQ response using the template in the “Exceptions, Clarifications, Amendments” section of this Exhibit A – RFQ Response Packet.
 - (b) **THE DISTRICT IS UNDER NO OBLIGATION TO ACCEPT ANY EXCEPTIONS, AND SUCH EXCEPTIONS MAY BE A BASIS FOR RFQ RESPONSE DISQUALIFICATION.**
9. **Contract Equity Program:**
- (a) Every bidder must fill out, sign, and submit the appropriate sections of the Contract Equity Program and Equal Employment Opportunity documents located at the hyperlink contained in the last page of this Exhibit A. **Special attention should be given to completing Form P-25, "Contractor Employment Data and Certification"; and Form P-46, "Designation of Subcontractors."** Any bidder needing assistance in completing these forms should contact the District's Contract Equity Office at (510) 287-0114 prior to submitting an RFQ response.



REFERENCES

RFQ No. 1512 – CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS

Bidder Name: _____

Bidder must provide a minimum of FIVE references.

Company Name:	Contact Person:
Address:	Title or Position:
City, State, Zip:	Role or Relationship to ref. project:
Telephone Number:	E-mail Address:
UF System General Description / Date of Customer Acceptance:	

Company Name:	Contact Person:
Address:	Title or Position:
City, State, Zip:	Role or Relationship to ref. project:
Telephone Number:	E-mail Address:
UF System General Description / Date of Customer Acceptance:	

Company Name:	Contact Person:
Address:	Title or Position:
City, State, Zip:	Role or Relationship to ref. project:
Telephone Number:	E-mail Address:
UF System General Description / Date of Customer Acceptance:	

Company Name:	Contact Person:
Address:	Title or Position:
City, State, Zip:	Role or Relationship to ref. project:
Telephone Number:	E-mail Address:
UF System General Description / Date of Customer Acceptance:	

Company Name:	Contact Person:
Address:	Title or Position:
City, State, Zip:	Role or Relationship to ref. project:
Telephone Number:	E-mail Address:
UF System General Description / Date of Customer Acceptance:	



EXCEPTIONS, CLARIFICATIONS, AMENDMENTS

RFQ No. 1512 - CAMANCHE RECREATION AREA ULTRAFILTRATION MEMBRANE SKIDS

Bidder Name: _____

The list below requests clarifications, exceptions, and amendments, if any, to the RFQ and associated RFQ Documents, and shall be submitted with Bidder's RFQ response. **The District is under no obligation to accept any exceptions and such exceptions may be a basis for RFQ response disqualification.**

Reference to:			Description
Page No.	Section	Item No.	
p. 23	D	1.c.	<i>Bidder takes exception to...</i>

*Print additional pages as necessary



CONTRACT EQUITY PROGRAM & EQUAL EMPLOYMENT OPPORTUNITY

The District's Board of Directors adopted the Contract Equity Program (CEP) to enhance equal opportunities for business owners of all races, ethnicities, and genders who are interested in doing business with the District. The program has contracting objectives, serving as the minimum level of expected contract participation for the three availability groups: white-men owned businesses, white-women owned businesses, and ethnic minority owned businesses. The contracting objectives apply to all contracts that are determined to have subcontracting opportunities, and to all contractors regardless of their race, gender or ethnicity.

All business enterprises and their subcontractors performing work for the District must be Equal Employment Opportunity (EEO) employers, and shall be bound by all laws prohibiting discrimination in employment. There shall be no discrimination against any person, or group of persons, on account of race, color, religion, creed, national origin, ancestry, gender including gender identity or expression, age, marital or domestic partnership status, mental disability, physical disability (including HIV and AIDS), medical condition (including genetic characteristics or cancer), genetic information, or sexual orientation.

All business enterprises and their subcontractors shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin in the performance of this contract. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

All business enterprises shall include the nondiscrimination provisions above in all subcontracts. Please include the required completed forms with your bid.

Non-compliance with the Guidelines may deem a bid non-responsive, and therefore, ineligible for contract award. Your firm is responsible for:

- 1) Reading and understanding the CEP guidelines at the following direct link:
[Contract Equity Program Guidelines](#)
- 2) Filling out and submitting with your bid the appropriate forms at the following direct link:
[Contract Equity Program Forms](#)

The CEP guidelines and forms can also be downloaded from the District website at the following link:

<http://www.ebmud.com/business/contract-equity-program/contract-equity-guidelines-and-forms>

If you have questions regarding the Contract Equity Program please call (510) 287-0114.



EXHIBIT B

INSURANCE REQUIREMENTS

Insurance certificates are not required at the time of submission; however, by signing Exhibit A – RFQ Response Packet, the Bidder agrees to meet the minimum insurance requirements stated in the RFQ. This documentation must be provided to the District, prior to award.

The following are the minimum insurance limits, required by the District, to be held by the Supplier performing on this RFQ:

INDEMNIFICATION AND INSURANCE

A. Indemnification

SUPPLIER expressly agrees to defend, indemnify, and hold harmless the District and its Directors, officers, agents, and employees from and against any and all loss, liability, expense, claims, suits, and damages, including attorneys' fees, arising out of or resulting from SUPPLIER's, its associates', employees', subcontractors', or other agents' negligent acts, errors or omissions, or willful misconduct, in the operation and/or performance under this Agreement.

B. Insurance Requirements

SUPPLIER shall take out and maintain during the life of the Agreement all the insurance required in this section, and if requested shall submit certificates for review and approval by the District. The Notice to Proceed shall not be issued, and SUPPLIER shall not commence work until such insurance has been approved by the District. The certificates shall be on forms approved by the District. Acceptance of the certificates shall not relieve SUPPLIER of any of the insurance requirements, nor decrease the liability of SUPPLIER. The District reserves the right to require SUPPLIER to provide insurance policies for review by the District.

C. Workers Compensation Insurance

SUPPLIER shall take out and maintain during the life of the Agreement Workers Compensation Insurance for all of its employees on the project. In lieu of evidence of Workers Compensation Insurance, the District will accept a Self-Insured Certificate from the State of California. SUPPLIER shall require any subcontractor to provide it with evidence of Workers Compensation Insurance.

D. Commercial General Liability Insurance

SUPPLIER shall take out and maintain during the life of the Agreement Automobile and General Liability Insurance that provides protection from claims which may arise from operations or

performance under this Agreement. If SUPPLIER elects to self-insure (self-fund) any liability exposure during the contract period above \$50,000, SUPPLIER is required to notify the District immediately. Any request to self-insure must first be approved by the District before the changed terms are accepted. SUPPLIER shall require any subcontractor to provide evidence of liability insurance coverages.

The amounts of insurance shall be not less than the following:

\$2,000,000/Occurrence, Bodily Injury, Property Damage -- Automobile.

\$2,000,000/Occurrence, Bodily Injury, Property Damage -- General Liability.

The following coverages or endorsements must be included in the policy(ies):

1. The District, its Directors, officers, and employees are Additional Insureds in the policy(ies) as to the work being performed under the contract.
2. The coverage is *Primary and non-contributory* to any other applicable insurance carried by the District.
3. The policy(ies) covers *contractual liability*.
4. The policy(ies) is written on an *occurrence* basis.
5. The policy(ies) covers the District's Property in Consultant's care, custody, and control.
6. The policy(ies) covers *personal injury* (libel, slander, and wrongful entry and eviction) liability.
7. The policy(ies) covers explosion, collapse, and underground hazards.
8. The policy(ies) covers *products and completed operations*.
9. The policy(ies) covers the use of *owned, non-owned* and hired automobiles.
10. The policy(ies) and/or a separate pollution liability policy(ies) shall cover pollution liability for claims related to the release or the threatened release of pollutants into the environment arising out of or resulting from Consultant's performance under this agreement.
11. The policy(ies) will not be canceled nor the above coverages/endorsements reduced without 30 days written notice to East Bay Municipal Utility District at the address above.



EXHIBIT C

SPECIFICATION SECTION 44 43 13

ULTRAFILTRATION MEMBRANE SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: The successful bidder shall provide two (2) complete, fully operational ultrafiltration (UF) membrane skid systems, each with a continuous treated water design capacity of 250,000 gallons per day (gpd). The bid shall include all necessary control systems, instrumentation, pumps, piping, valves, electrical equipment, and appurtenances required for the membrane systems to be fully operational upon completion of the Project. The skid systems will be integrated into the District's Camanche South Shore Water Treatment Plant located at the Camanche South Shore Recreation Area and will treat raw water from the Camanche Reservoir and Mokelumne Aqueducts.
- B. The successful bidder shall provide:
1. All required membrane modules for two (2) complete skid systems.
 2. Piping and control valves for the following processes:
 - a. Backwash.
 - b. Drain.
 - c. Influent.
 - d. Clean-in-place system.
 3. Membrane integrity testing system.
 4. Membrane Clean-In-Place system.
 5. Specialized tools and maintenance equipment required for disassembly.
 6. Spare Parts.
 7. All necessary instruction, controls, and process monitoring equipment required for a fully functional and operational system.

8. Field Service, Start-up Manuals, Training, and Start-up Assistance.
9. O&M Manuals in both electronic and printed formats.
- C. The following components are specifically excluded and will be furnished and installed by the District:
 1. Pumps
 - a. All pumps are VFD controlled to maintain a pressure or level setpoint determined by the District process control system.
 - b. Raw water (3): 0 - 360 gallons per minute (gpm), 40 – 60 psi total.
 - c. Backwash water (3): 0 - 360 gpm, 70-80 psi total.
 2. Tanks
 - a. Backwash water supply surge tanks: 160 gallon useable capacity total.
 - b. Raw water surge tanks: 68 gallon useable capacity total.
 - c. 3,000 gallon effluent clear well.
 - d. 1,500 gallon backwash waste holding tank.
 - e. 330 gallon sodium hypochlorite storage tank.
 - f. Secondary containment pedestal(s) for storing clean-in-place chemical(s).
 - g. Clean-in-Place chemical neutralization tank(s)
 - 1) The Supplier shall recommend the number of tanks and minimum size(s)
 3. Process Instruments
 - a. Turbidimeters
 - 1) Raw water supply.
 - 2) Individual skid effluent (2).
 - 3) Combined effluent (of both skids).
 - b. Flow meters:
 - 1) Raw water supply.
 - 2) Individual UF skid treated water.

- 3) Total plant treated water flow.
- 4) Waste backwash water.
- c. Pressure Sensors
 - 1) Individual skid outlet.
 - 2) Combined effluent pressure.
- d. Chemical Analyzers
 - 1) Combined influent water pH
 - 2) Combined influent water total chlorine.
 - 3) Combined effluent water pH.
 - 4) Combined effluent water total chlorine.
 - 5) Backwash water pH.
 - 6) Backwash water total chlorine.
- 4. Self-backwashing 100 micron basket filters.

1.2 REFERENCES

- A. American National Standards Institute (ANSI).
- B. American Society for Testing and Materials (ASTM).
- C. D1.2-90 Structural Welding Code - American Welding Society
- D. National Sanitation Foundation (NSF) - 60/61 - Drinking Water System Components – Health Effects
- E. American Water Works Association (AWWA)
- F. ASCE 7 - 2013, American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures.
- G. National Electrical Manufacturer's Association (NEMA).
- H. Institute of Electrical and Electronics Engineering (IEEE).
- I. California Electric Code (CEC).
- J. International Society of Automation (ISA).

K. Underwriter's Label (UL).

1.3 DEFINITIONS

A. Substantial Completion

1. All equipment required for the UF membrane skids installed.
2. Supplier's Certificate of Proper Installation submitted to the District.
3. System Tests completed and required test forms submitted and approved by the District.
4. Performance Tests (see Article 3.2.G.4 of this exhibit) completed and required test forms submitted and approved by the District.

B. Final Completion

1. Ultrafiltration membrane skid systems accepted by the District as fully operational, meeting the requirements of this RFQ.
2. District personnel training completed satisfactorily.
3. Performance Acceptance Tests completed satisfactorily and required test forms submitted and approved by the District.
4. All punch list items completed satisfactorily.
5. All O&M manuals and As-built drawings, and other submittals submitted and approved by the District.
6. The Skids accepted for drinking water use by the State Water Control Board – Drinking Water Division.

1.4 SUPPLIER SOLE RESPONSIBILITY

- A. The Supplier of the two membrane skid systems system shall also be the Supplier of the key components of the skid systems and be solely responsible for the performance of the complete membrane skid system including design, manufacturing, procurement, and integration of all required equipment, construction, start up, and performance testing that meets the District's requirements. All products provided shall be warranted by the Supplier. The Supplier shall provide a 'letter of compliance' on Company letterhead certifying compliance with the sole responsibility requirement.

1.5 SUPPLIER SUBMITTALS

- A. Bill of Materials: A Bill of Material for all tagged devices and components supplied by the Supplier including the original part number identifying each piece of equipment. The Bill shall include at the minimum the original part number, the tag number of the equipment, the P&ID sheet

number, the functional name, size, materials, ranges, and other pertinent information for each piece of equipment to be supplied by the Supplier.

- B. Flow and Operating Conditions: Provide equipment showing calculated flow, flux, and transmembrane pressure for the minimum operating temperature.
- C. Computer Aided Design (CAD) Drawings: Within 6 – 8 weeks after the receipt and approval of purchase order, the Supplier shall submit five (5) copies of the drawing submittal for review and approval including the documents listed herein. All drawings shall be submitted electronically in AutoCAD format as well as in hard copy.
- D. Fabrication Drawings: Provide fabrication drawings drawn to scale showing all valves, piping, pipe size, fitting, and other appurtenances.
- E. Electrical and Control Drawings:
 - 1. Provide elementary and interconnection wiring drawings for all control systems.
 - 2. Three Phase or single-phase electrical load list for the Supplier supplied equipment, including motor horsepower and type of control.
 - 3. Process and Instrumentation Diagram (P&ID) using ISA standard symbols.
- F. Control Strategy Flowchart: A control strategy flowchart shall be submitted for review prior to commencing any programming.
- G. Lists of discrete and analog signals:
 - 1. Signals provided by the District required by the skid control system.
 - 2. Signals from the skid control system that are available to be monitored or controlled by the District-provided PLC.
- H. Calculations: Submit for approval complete design calculations for seismic anchorage of equipment certified by a Civil or Structural Engineer registered in the State of California.
- I. Warranty: The Supplier shall provide a warranty certificate meeting the requirements of the 'Request for Quotation'.
- J. List of Supplier approved coagulants and pretreatment chemicals.
- K. List of Supplier approved required Clean-in-Place chemical and maintenance equipment:
 - 1. Type, concentration, and volume of maintenance cleaning chemicals and Clean-in-Place chemicals.
 - 2. Caustic feed pump pressure.
 - 3. Acid feed pump pressure.

- 4. Size and number of tanks required for containing and neutralizing spent Clean-in-Place chemicals.
- L. Membrane storage requirements.
- M. List of equipment and systems provided by others that must be ready before the Supplier testing begins.
- N. Field Test Procedures and corresponding Test Results.
- O. Operations and Maintenance (O&M) Manuals.
- P. Certification of proper installation per codes (see form at the end of this section).

1.5 OPERATION AND MAINTENANCE (O&M) MANUALS

- C. When O&M manuals are required to be submitted covering items included in this work, prepare all such manuals in approximately 8-1/2" x 11" format in durable, three ring plastic binders. Each manual shall be identical and include at minimum the information identified on the attached O&M Manual Review Checklist.
- D. O&M Manual Review Checklist:
 - 1. The Supplier's representative shall fill out one O&M Manual Review Checklist form per submittal (see form at the end of this section for typical format) and include a copy in each submitted manual. Clearly identify the location in the O&M Manual for each element in the Technical Content section (O&M tab number and page number). If the content is in multiple locations or on multiple pages, identify each location in the space provided or in the Comments column on the form.
 - 2. Information on the form shall be word-processed, or typewritten.
 - 3. All portions of the form shall be completed prior to submittal, or the submittal may be returned unreviewed. Submittals may also be returned unreviewed if the O&M Manual Checklist form contains multiple errors and/or omissions.
 - 4. The O&M Manual Review Checklist will be provided in electronic format (MS Word) upon request.
- C. O&M Manual Hardcopies: provide five (5) identical manuals after approval.
- D. Electronic Files:
 - 1. After the District has approved the O&M Manual, two copies of an electronic version shall be supplied in addition to the required number of hard copies.

2. Electronic files shall be created using both Adobe Acrobat Version 10.0 and Microsoft Word 2010. The security features of all submitted files shall be disabled so that the District can perform future editing. Custom-developed drawings included in the O&M manuals (i.e. loop diagrams, system interconnection diagrams, etc.) shall also be submitted electronically in both Adobe Acrobat Version 10.0 format and the native CAD file format for future editing of the drawings by the District. For AutoCAD files, the associated Acrobat files shall be saved such that all AutoCAD layering is preserved in the Adobe Acrobat file.
3. Electronic versions shall match the hard copy page for page with blank pages deleted. Electronic files shall be converted to Adobe Acrobat directly rather than using optical scanning. For any document not already in electronic format, the documents shall be scanned using optical character recognition to provide searching capability in the document.
4. All electronic files shall be supplied to the Engineer on CD +/-R 700 MB CD or DVD +/-R4.7 GB DVD if the file is larger than 700 MB along with the approved O&M manuals.

E. Maintenance Summary Forms

1. Furnish a completed Maintenance Summary Form (see form at the end of this section for typical format) as part of the O&M Manual. Include all typical, routine, or preventive maintenance required to ensure satisfactory performance during the warranty period and longevity of the equipment. The Supplier's representative shall sign and date the form certifying accuracy of the information.
2. Briefly summarize each maintenance activity on the form. Specific references to more detailed maintenance information located elsewhere in the O&M manual may be placed in the "Comments" column. However, simply referencing other sections in the O&M manual without a brief description of the maintenance activity is not acceptable.
3. Information on the form shall be word-processed, or typewritten.
4. Maintenance Summary Forms shall be on 8-1/2" by 11" paper and may be as many pages as required to completely summarize the required maintenance. However, the order and format must be in accordance with the supplied form. The Maintenance Summary Forms will be provided in electronic format (MS Word) upon request.

PART 2 - PRODUCTS

2.1 OPERATING CONDITIONS AND SUPPLIER PERFORMANCE REQUIREMENTS

- A. Water Quality Conditions: The membrane system warranty shall guarantee to perform under all of the raw water quality parameters listed below.

Table 1: Source Water Quality Data			
Raw Water Quality Parameter	Average	Minimum	Maximum
Temperature (C)	13	5	22
pH	7.5	6.5	9.5
Calcium (mg/L)	3.8	2.6	9.4
Magnesium (mg/L)	1.134	0.75	2.07
Manganese (mg/L)	0.015	0.002	0.12
Total Silica (ug/L)	N/A	8,610*	10,400*
Soluble Silicon (ug/L)	N/A	3,640*	4,470*
Turbidity (NTU)	2.5	0.5	15
Aluminum (mg/L)	0.258	0.015	2.3
Total Organic Carbon (mg/L-C)	1.5	1.3	1.8
Total Dissolved Solids (mg/L)	34	9	78
Total Alkalinity (mg/L CaCO ₃)	21	14	92
Chlorine Residual (mg/L)	0	0	4.0
<p>The following peak values can occur less than 5% of the year:</p> <p>Calcium: 25 mg/L</p> <p>Iron: 0.645 mg/L</p> <p>Manganese: 0.215 mg/L</p> <p>Turbidity: 15 NTU</p> <p>* Total Silica and Soluble Silicon values were from a single set of grab-samples taken on February 17, 2015.</p>			

B. District-provided Pretreatment:

- a. Pre-filters: The raw water will be pre-filtered prior to reaching the UF system to remove suspended solids with diameters larger 100 microns. The Supplier may, as an alternative to the District providing the pre-filters, propose to include pre-filters as part of the complete skid treatment system in which case the District will not provide them.
- b. Coagulation: The District may use an aluminum-based coagulant (Aluminum Sulfate) dosed between a concentration range of 1 – 20 mg/L.
- c. Chlorination: The District may use sodium hypochlorite dosed between a concentration of 0 - 2 mg/L as Cl₂.

C. Raw Water Feed Pressure: The raw water feed pressure will be controlled by the District furnished system with a maximum operating pressure of 60 psig. The UF Supplier shall recommend the feed pressure of source water to the membrane system and provide pressure regulation valves as required to meet the recommended pressure.

D. Environmental Conditions:

1. Location: Indoor and wash-down rated.
2. Indoor Ambient Temperature Range: 40 - 90 ° F.
3. Elevation: 500 feet - Average Mean Sea Level Elevations.

E. Seismic Restraint: The concrete pad shall be constructed by others. The Supplier shall design seismic restraint per the following requirements:

1. Architectural elements, mechanical and electrical components, equipment housings and their attachments, supporting structures, and anchorages shall comply with the requirements of Section 13 of ASCE 7-10, using the following values:

Site	I _p	S _{DS}
Camanche Recreational Facility	1.5	0.452

2. Structural integrity and anchorage.

- a. Structural integrity and anchorage shall be certified by an approved calculation that demonstrates the adequacy of the anchorage system for seismic forces. This calculation may be based on principles of structural analysis and engineering mechanics, or based on similarity to approved shake table tests.
- b. The Supplier shall submit for review and approval test data or calculations certified by a Civil or Structural Engineer registered in the State of California to show compliance with the above requirements.

F. Membrane Filter Skid:

1. Skid Requirements:

- a. Connections: The system shall provide 2-inch corrosion resistant connections such as Victaulic or similar reusable type piping connectors for the feed, backwash, filtrate, and drain lines.
- b. Operating Conditions: The maximum differential pressure between feed-in and filtrate-out may reach up to 37 psi (2.5 bars).
- c. Assembly: The system shall be designed modularly so its single components fit through a standard 6-foot wide by 6-foot 8-inch high door. It shall be easily assembled by two people without using lifting equipment like forklifts or cranes.
- d. Dimensions: Both skids shall fit in an area 16-feet wide by 20-feet deep by 8.5-feet high and still leave adequate space on all sides for all maintenance, operations, and servicing. No more than removing a membrane module cap or cover should be required to remove a membrane module within the interior space of the room. All modules shall be able to be removed completely from the skid without having to bend, disassemble, or reposition any other element of the skid or module itself, and without having to reconfigure or reposition any part of the building structure or fixtures.
- e. Compressed Air: Compressed air for Direct Membrane Integrity Tests (DIT) shall be provided by the Supplier at the pressure required for the test. Plant air shall not be available.

2. Flow Rate:

- a. Production Flow Rate per UF Membrane Skid:
 - 1) Production Flow Rate: 250,000 gallons per day (gpd) (252 gallons per minute).
 - 2) Flow rate flux shall not exceed 60 gallons per day per square foot (gfd).

- 3) Peak Flow Rate: 275,000 gpd with flux not to exceed 70 gfd for 4 hours.
- 4) At the production flow rate, a skid shall not require more than one (1) enhanced backwash or maintenance wash in a 24-hour period. The wash shall not use a solution of sodium hypochlorite that exceeds a concentration of 200 ppm or a mineral acid that exceeds a concentration of 0.1%.
- 5) Net skid production capacity shall be based on not less than one membrane integrity test per skid per day.
- 6) Recovery (ratio of net filtrate flow over total feed flow) shall not be less than 95%.
- 7) At the production flow rate, a skid shall not require to be chemically cleaned more than once in a 30-day period or more than 12 times per year.

3. UF Membranes:

- a. Material: Hydrophilic Polyethersulfone (PESM) or Polyvinylidene Fluoride (PVDF).
- b. Area: The system must provide a minimum of 360 square-meters (3,875 square-feet) of active membrane surface area per membrane skid system.
- c. Chlorine and pH tolerance: Free chlorine tolerance of at least 200,000 parts per million-hours (ppmh) and for pH resistance from 1 to 13 for effective cleaning.
- d. Nominal pore-size: No greater than 20 nanometers.
- e. Removal: The membrane filters of the system must meet US EPA Filtration Guidance Manual Standard for removal of at least:
 - 1) Viral (MS2 Phage): 4-log (99.99%)
 - 2) Bacteria: 4-log (99.99%)
 - 3) Parasites: (Cryptosporidium oocysts): 4-log (99.99%)
- f. The filters must be listed under the Regulation of the State of California as Alternative Filtration Technology for use of greater than 4-log removal of Parasite and Bacteria from Surface Influenced drinking water sources.
- g. Turbidity Reduction: The filters must provide finished effluent turbidity of less than 0.05 NTU not less than 90% of the time and no greater than 0.1 NTU at any time.
- h. The membrane filters must consist of hollow fibers with an inner diameter of no less than 0.6 mm for allowing concentrations of Suspended Solids in the feed to up to 50 ppm.

- i. Flow during filtration must be inside out to allow effective application of forward flushes and backwashes during cleaning cycles and to prevent non-reversible fouling of the space in between fiber bundles, as happens with out-in systems.
- j. The system must be able to achieve an SDI fouling Index of 1 or less 90% of the time, and no greater than 3 at any time.
- k. The membrane filters must be operated with positive pressure.
- l. Membrane filters shall be mounted to the system in a way they can be easily removed by two people without any lifting tools.
- m. Membrane filters must be manufactured in compliance with ANSI/NSF Standard 61.

4. Membrane Integrity Testing

- a. The system must be able to perform an automated Direct Membrane Integrity Test (DIT) daily as well as testing triggered by filtrate Turbidity, as required by US EPA Filtration Guidance Manual for Membrane Filtration Systems applied for pathogen removal.
- b. The DIT has to be able to detect membrane filter damages small enough so that the system can assure a greater 4-log removal for Bacteria and Parasites. This is typically achieved with a DIT resolution of 1 micron.
- c. Filtrate Turbidity will be monitored every 15 minutes by a District-provided Turbidity meter (not included in the Ultrafiltration system,) connected to skid's controls through a 4-20 mA signal.
- d. If Turbidity exceeds a threshold of 0.14 NTU, the system has to trigger an alarm and perform a DIT.
- e. The result of each DIT as well as of each Turbidity measurement, regardless whether it exceeds the threshold of 0.14 NTU or not, has to be stored in a data-logger for a period of least 3 months.
- f. The data-logger must be downloadable from the controls of the systems by a system operator to a PC in an open file-format such as CSV.
- g. DITs must be fully self-performing, without any user attention.
- h. If a DIT returns a log-removal-value for bacteria and parasites of lower than 4 log, the system must shut down automatically and must then notify the user either through a SMS message through the District's integrated SCADA system, and by cell phone or through other means of remote alerts subject to District approval.

- i. The DIT must be documented following US EPA Filtration Guidance Manual standards and must be approved by California SWRCB Division of Drinking Water (formerly the California Department of Public Health Office of Drinking Water).

5. Membrane Clean-In-Place Equipment:

- a. The membrane manufacture shall supply a complete clean-in-place (CIP) chemical system with batch tanks, pumps, meters, and all control equipment required for CIP cleaning. The CIP system shall be skid mounted with all control equipment and pumps located on the skid. The District shall perform the piping connections from the skid to the membrane modules. The Supplier shall supply a flange or quick connection to connect equipment to district piping and another connection on the membrane skid system. The Supplier shall supply all control, monitoring, pumping, tanks and all equipment listed below.
- b. Batch Tank with all connections including drain valve, vent, and overflow.
 - 1) Tank equipment shall fit into an 8-foot wide by 10-feet deep by 8.5-feet high room and through a standard 6-feet by 6-feet, 8-inch high door.
 - 2) All piping and valves shall be constructed of schedule 80 CPVC or HDPE.
- c. Ball Valves
 - 1) Ball valves shall be compatible with CIP chemical system. The ball valves shall be supplied by the following manufacture:
 - a) Asahi-American
 - b) Or equal as approved by the District.
- d. Level transmitter and switches.
- e. Vents.
- f. Tank immersion heaters and associated controls and temperature transmitter (if required by the Supplier).
- g. Pumps – one duty and one standby with suction ball valve, discharge check valves and sample valves.
- h. In-line manual strainer, inlet and outlet manual strainers, ball valves.
- i. Magnetic flow meter and transmitter.
- j. Acid chemical injection valve set.
- k. Sodium hypochlorite chemical injection valve set (if used in cleaning sequence).

- 1) CIP system can use feed from chlorine tank, control and isolation valves must be supplied by the Supplier.
 - l. Calibration columns.
 - m. All interconnecting pipework and valves.
 - n. CIP chemical feed shall be temporarily attached with quick disconnects during CIP operations with one isolation valve between the chemical system and the valve manifold at the membrane skid for cross-connection protection.
6. Control panel construction:
- a. All electrical and control enclosures shall be NEMA 4X.
 - b. If required, disconnect switches shall be non-fusible and lockable with a padlock.
 - c. All lockable enclosures provided shall be lockable with a common key.
7. System Controls
- a. The controls of the UF system must be capable of interfacing with a District-provided PLC through either discrete on/off relays, 4-20 mA signals, or a network protocol (see article 2.1.E.8.c).
 - b. The feed-pump (not a part of scope of delivery) has to be turned off by the system automatically through the District's PLC when required.
 - c. Additional pumps or automated valves required for proper operation which are not provided by the District shall be provided by the Supplier. This equipment shall be connected to the Skid system's switchboard directly and can draw up to 16A through each of the 3 phases, fed from the District's electrical system.
 - d. The controls must further be capable of sending a 4-20 mA flow-signal to a dosing pump (such dosing pump is not part of the scope of supply), dosing either into the feed- or filtrate-line of the system.
 - e. The controls of the system must further be capable of computing the permeability of the membrane filters. Such is achieved by continuous measurement of flow and differential pressure across the membrane filters. Permeability is a function of flow per installed membrane surface area per required driving pressure, normalized by water temperature, which the systems must measure continuously. Permeability is the only indicator for fouling of a membrane filter.
 - f. The controls must be able to trigger cleaning cycles, which consist of a combination of forward flush, using raw water, and a backwash, using filtrate, depending on the condition of fouling of the filters. The system must be able to automatically adapt the

frequency of applied cleaning cycles to the condition of fouling of the membrane, so it cleans less often in times of good raw water quality and therewith conserves water.

- g. The system must be able to perform CIPs and Chemically Enhanced Backwashes (CEBW) in intervals as requested by the operator with minimal Operator attention. The system must be able to apply two different cleaning chemicals during CIPs in sequence (e.g. Caustic and Acid) to achieve efficient removal of organic fouling and inorganic scaling.
 - h. The controls must be able to communicate and respond to a District-provided control panel and instruments for monitoring the water level in a District-provided filtrate- and/or feed-tank and must be able to suspend filtration once either the feed-tank runs empty or once the filtrate tank reaches full. It further must be able to adjust the filtration speed to the filling level of the feed-tank by adapting the 4-20 mA signal to the District-provided feed-pump's VFD, in order to adjust filtration performance to varying well flows.
 - i. The controls must be able to monitor a freely chosen peripheral (e.g. a level switch in a chemical tank) through its cold contact. Therefore, the system has to provide and monitor a 24 V potential. It must be able to program the system so it suspends filtration upon signaling of an alert and it resumes filtration as soon as the error resolves.
 - j. The control system programming documentation shall contain the following minimum components:
 - 1) Rung comments
 - 2) Subroutine titles
 - 3) Tag descriptions
8. Data Logging and Remote Connectivity:
- a. As required by the State Water Resources Control Board (SWRCB) Division of Drinking Water (formerly the California Department of Health Services Office of Drinking Water) as well as for the purpose of optimizing system performance during operation, the system must provide an automatic, retrievable data-logger, logging the following parameters: Turbidity every 15 min or any other programmable interval, results of DITs, user interaction, any actuator activity, flow, pressures, tank levels, alerts and changes of the system status. The data-logger has to be downloadable to the operators PC at site or through the internet, once a GPRS modem is installed.
 - b. Connectivity. The system shall provide the possibility to be controlled by a master-control, which might be installed on site. Therefore, the system shall provide a documented BUS interface. If several systems are installed in parallel, the systems shall be able to interact in order to co-ordinate so that no more than two systems perform DITs or cleaning cycles at the same time. If several systems are installed in parallel,

those systems must be able, through an upgrade, to share cleaning equipment and feed-pumps, if required.

- c. The control system shall be capable of communicating to the District-provided plant control system through Modbus or Ethernet IP network protocols for remote control and/or monitoring.
- d. Table 2 lists the minimum signals expected to be communicated between the District PLC and the UF skid control system.

Table 2: Skid Signals to/from District Furnished PLC	
I/O Type	Description
Analog Output to District PLC	Inlet Pressure
Analog Output to District PLC	Outlet Pressure
Analog Output to District PLC	Flow Meter (one signal for each module/SKID)
Discrete Output to District PLC	Daily Automated Integrity Test Pass/Fail (one signal for each module)
Discrete Output to District PLC	General Fault Signal
Discrete Output to District PLC	Module Status (On/Off/Standby)
Discrete Input From district PLC	Influent Pump on
Discrete Input from District PLC	Influent Pump off
Discrete Input from District PLC	Back Wash Pumps Power ON/OFF
Analog Input from District PLC	Influent Turbidity
Analog Input from District PLC	Effluent Turbidity (one for each skid)
Analog Input from District PLC	Storage Tank Level
Analog Input from District PLC	Dirty Backwash Tank Level
Analog Input from District PLC	Allow Cleaning

Analog Input from District PLC	Integrity Testing
Alarms to the District PLC	TBD
Alarms from the District PLC	TBD

9. Electrical requirements:

- a. Electrical supply to the control panel shall be 120 volts, 60 Hz.
- b. Electrical supply to additional equipment required by the Supplier shall be 480 volts three-phase 60 Hz or 120 volts single phase 60 Hz.

F. Finishes:

1. Coatings: The following materials shall be coated per the following schedule:

- a. High Solids Epoxy/Urethane top coat (to be factory coated): Carbon steel (including piping, valve bodies, and all other carbon steel materials).
 - 1) Thickness: 8 – 12 mil total thickness.
- b. Items not requiring coating: stainless steel, aluminum, and plastics.

2. Acceptable Products:

- a. High build epoxy coatings:
 - 1) Carboguard 890; Carboline Company.
 - 2) Hi-Build Epoxy V78 Series; Valspar Corporation.
 - 3) Bar-rust 235, Devoe Coatings Co.
 - 4) Or equal as approved by the District.
- b. Urethane Top Coat:
 - 1) Tnemec Co. Series 1075 Urethane.
 - 2) Carbothane 134 VOC Aliphatic Urethane.
 - 3) Or equal as approved by the District.

G. Spare Parts: The list below is a minimum list of spare parts. The Supplier shall also supply other spare parts required to maintain the membrane filters.

1. Hollow Fiber Membrane Repair Kit. The kit shall supply at a minimum of 50 repairs.
 2. All spare parts for at least one year of routine operating and maintenance requirements for the membrane system.
 3. All specialized tools and maintenance equipment required for the maintenance of the membrane system as a whole including any specialized lifting equipment required for removal, replacement, fiber plugging, and manipulation of the membrane modules or any other equipment.
 4. Spare Gaskets: 5 of each type.
 5. One spare membrane module complete with any required non-reusable ancillary parts and/or components required for its installation.
 6. Membrane Module Housing: 1 of each type used.
 7. Spare control valves: 1 of each size used.
 8. One spare, fully programmed controller.
- H. NSF 61: All materials, equipment, or products that will be in contact with drinking water (potable water) shall be tested and certified as meeting the specifications of NSF/ANSI 61 Standard in accordance with California Code of Regulations, Title 22, Section 64591. Examples include, but are not limited to, valves, pumps, flow meters, protective materials (coatings, linings, liners), joining and sealing materials, pipes, tanks, pipe fittings, filters, cleaning chemicals, and lubricants. All materials, equipment, or products that will be in contact with drinking water (potable water) and may contain lead shall be tested and certified as "lead-free" per California Health and Safety Code Section 116875. Until January 4, 2014, acceptable certification for "lead-free" is NSF 61 Annex G or NSF 372.

2.2 PERFORMANCE GUARANTEES

A. Drinking Water Standards Compliance Guarantee

1. If constituent concentrations in the raw water are between the minimum and maximum ranges in Table 1 and all other regulated constituents in the raw water remain below California Division of Drinking Water Maximum Concentration Levels (MCL) and Secondary Maximum Contamination Levels (SMCL), the Supplier guarantees that treated water from the membrane skid systems will comply with Drinking Water Standards.

B. Specific Treated Water Quality Guarantees

1. Turbidity: The membrane skid systems will produce drinking water with turbidity equal to or less than 0.05 NTU at least 95% of the time and will not exceed 0.1 NTU at any time, providing treatment facilities are operated in accordance with the Supplier's recommended ranges.

C. Hydraulic Capacity Performance Guarantee

1. Production – During any month of the year, the two combined membrane skid systems shall be able to produce 500,000 gallons per day (gpd) as determined by calculating net produced water to the distribution system over a continuous 30 day period.

2.2 ACCEPTABLE SUPPLIER

- G. The acceptable UF supplier shall provide information on two successfully operating (e.g. the system performs in accordance with design specifications) membrane systems in California. Typical suppliers meeting this requirement are:

1. Seccua (Phoenix 20 system)
2. Corix (equivalent system)
3. Memcor (equivalent system)
4. Or equal as approved by the District.

PART 3 - EXECUTION

3.1 PERFORMED BY OTHERS

- A. The following describes ancillary systems that will be provided by the District. The membrane Supplier shall integrate any necessary systems into the control strategy of the membrane skid system. The following systems will be provided by the District:

1. Pretreatment Chemical systems (provided by District):
 - a. Pre-chlorination. Sodium hypochlorite will be dosed at a rate of 0.5 mg/L – 2.0 mg/L-Cl₂ as pretreatment.
 - b. Coagulant Addition. Aluminum Sulfate may be fed at a rate of: 0 – 20 mg/L-Al as pretreatment to the membrane. The coagulant will be fed directly to the membrane influent feed. Sedimentation will not be provided. The District reserves the right to not add coagulant chemical.
 - c. Clean-in-Place Chemicals. The District will provide clean-in-place chemicals. All chemical wastes will be neutralized and off-hauled or piped to the District's wastewater treatment plant. The Supplier shall supply a CIP system that can work with the membrane process. The District will provide the following:
 - 1) Caustic Feed:
 - a) Volume: TBD based on the Supplier's recommendations.
 - b) Chemical Type: TBD based on the Supplier's recommendations.

- c) Concentration: TBD based on the Supplier's recommendation.
 - 2) Acid Feed (hydrochloric acid or citric acid assumed):
 - a) Volume: TBD based on the Supplier's recommendations.
 - b) Chemical Type: TBD based on the Supplier's recommendations.
 - c) Concentration: TBD based on the Supplier's recommendation.
 - d. Clean-in-Place neutralization system
 - 1) A system will be designed and maintained by the District that will neutralize the acid, chlorine, and caustic solutions from the cleaning process.
 - 2) The Supplier shall recommend the size of the holding tanks required to contain and neutralize the spent Clean-in-Place chemicals.
 - e. Backwash Pumping/Feed
 - 1) Backwash water will be provided at a pressure of 70-80 psig.
 - 2) The Supplier is responsible for providing pressure-reducing valves and control valves as required for backwash operations.
- 2. Monitoring:
 - a. Influent Turbidimeter
 - 1) Will be provided by District.
 - b. Individual Skid Effluent Turbidimeters (2)
 - 1) Will be provided by District.
 - c. Effluent Turbidimeter:
 - 1) Will be provided by District.
 - d. Master Control Programmable Logic Controller (PLC)
 - 1) The District will provide a master controller PLC that will interface with the Supplier's controller. The PLC will control all pretreatment systems, monitoring systems, chemical feeds, backwash pumps, and final water quality parameter monitoring.

B. The following work will be performed by others:

- 1. Installation of structural pad and anchor bolts.

2. Sodium Hypochlorite storage and feed system.
3. Coagulant feed system.
4. Supply and installation of CIP chemical neutralization tanks.
5. Supply and installation of District-provided PLC equipment.
6. Grounding: The District shall electrically ground the skid, panel equipment, and any other required equipment to the grounding ring around the slab. The Supplier shall provide grounding connections and connection details on equipment on drawings.
7. Raw Water Pumping.
8. Spent cleaning chemical storage/neutralization tank.

3.2 TESTING

- A. Systems Testing: The Supplier shall provide a fully working control system for the membrane filters. System Testing shall demonstrate the equipment meets the operational requirements.
 1. When the skids are installed at the site, a representative of the Supplier shall be available to test the control system inputs and outputs, controls, alarms, and all other electronic controls systems required for a fully functional system.
 2. The Supplier representative shall work with the District to ensure that the membrane skid control system works properly with the District-provided control system.
 3. Copies of test data sheets or software logging shall be provided before the test and shall log the following:
 - a. Feed temperature.
 - b. Membrane module pressure (psig) inlet and outlet.
 - c. Transmembrane pressure calculated (psig).
 - d. Raw water flow rate (gpm).
 - e. Reject water flow rate (gpm).
 - f. Permeate flow rate (gpm).
 - g. Backwash water flow rate (gpm).
 - h. pH: raw water and permeate.
 - i. Turbidity: raw water and permeate.

j. All performance data shall be logged at a minimum of every 5 seconds.

B. Pressure Testing (in field):

1. The District reserves the right to perform additional non-destructive tests on any weld at any time at District expense.
2. Pneumatic tests shall not be conducted on thermal plastic piping.
3. Test Pressure: 150 psig on all piping and appurtenances.

C. Field Test Procedures performed by the Supplier:

1. Conduct a preliminary leak test at 150 psig as a means of detecting major leaks and examine the entire pipe segment by means of soap solution. The Supplier will repair any leaks formed during this test and a retest will be conducted. The tester shall gradually increase the test pressures to no more than half the maximum test pressure when re-inspecting the test segment for leakage.

D. Performance tests:

1. Prior to the Performance Test, the Supplier shall submit a Certificate of Proper Installation (see form at the end of this section) stating that the membrane filtration system has been installed correctly.
2. Performance tests will be initiated after Substantial Completion and process optimization of the two membrane skid systems are completed by the Supplier. The District and the Supplier shall agree on the dates for test periods before testing is initiated.
3. Performance tests shall demonstrate all membrane skid system equipment provided by the Supplier meets the equipment specifications and performance requirements.
4. Performance Tests:
 - a. Average Flow Rate – The test shall demonstrate that the UF membrane system can produce the required average flow rate during the 120-hour testing period and comply with the California Division of Drinking Water potable standards. The membrane skid system shall operate as designed in automatic mode. Test operating conditions throughout the test shall be consistent with requirements specified in the RFQ. Any conditions that result in the membrane systems malfunctioning or prevent the required production flow rate from being achieved shall be corrected during the test and a determination made as to whether the test can be completed as planned or be restarted because of the time required to make the correction. Test results from an interrupted test must meet the specified requirements.
 - b. Peak Flow Rate – The test shall demonstrate that the ultrafiltration membrane system can produce the required peak flow rate during a 4-hour testing period and comply

with California Division of Drinking Water potable standards. The membrane skid system shall operate as designed in automatic mode. Test operating conditions throughout the test shall be consistent with requirements specified in the RFQ. Any conditions that result in the membrane systems malfunctioning or prevent the required production flow rate from being achieved shall be corrected during the test and a determination made as to whether the test can be completed as planned or be restarted because of the time required to make the correction. Test results from an interrupted test must meet the specified requirements.

E. Performance Acceptance Tests:

1. Performance Acceptance Tests will be initiated after the Performance Tests are completed by the Supplier during the seasons listed below. The District and the Supplier shall agree on the dates for test periods before testing is initiated.
2. This section describes two Performance Acceptance Tests to be conducted by the Supplier of the completed Membrane System to demonstrate compliance with the Acceptance Standards set forth in this section. The Supplier shall provide the District with an Acceptance Test Plan which shall include proposed dates for the two Acceptance Tests. All tests are to be completed within a year of Substantial Completion.
 - a. Initial 20-Day Performance Acceptance Test:
 - 1) An initial 20-day performance test will be conducted to demonstrate compliance with water quality and hydraulic performance guarantees. The production rate for each skid shall average no less than 250,000 gpd for a period of 20 continuous days during either the late spring, summer, or fall seasons following Substantial Completion.
 - b. 7-Day Winter Performance Acceptance Test:
 - 1) A 7-day winter storm performance test will be conducted to demonstrate compliance with water quality and hydraulic performance guarantees. The production rate for each skid shall average no less than 250,000 gpd for 7 continuous days. The 7-Day Winter Acceptance Test is to be conducted during the first winter period following Substantial Completion. The test is to demonstrate plant compliance with performance guarantees during winter season raw water low temperature range, and ideally, following a major rainstorm event when it is anticipated that there will be an increase in suspended solids or turbidity in reservoir raw water quality due to storm runoff and strong wind effects.

3.3 SUPPLIER'S FIELD SERVICES

- A. The services below shall not overlap; installation, field-testing, and training shall be performed separately.
- B. Supplier's Representative: the Supplier shall furnish the services of a factory trained field representative(s) designated by the equipment/system Supplier, who shall be present at the project site to provide installation assistance and certification, startup, and field-testing. The Supplier's representative(s) shall have superior knowledge of all aspects of the equipment/system

being furnished in this section. The Supplier, through their field representative(s), shall advise the District of the proper procedures for each of the services listed below.

- C. Training Services: the Supplier's representative(s) shall be present at the site and classroom designated by the District, for the minimum number of days listed in Table 3 below. Training shall include a review of the final O&M Manual, general theory of operation of each system, recommended startup and shutdown procedures, emergency operating procedures, and routine and preventive maintenance. Up to 15 District staff persons are required to be trained. Some elements of training may need to be performed more than once to accommodate different staff shift schedules and ongoing operational demands. The Supplier's representative(s) shall go over the following topics and shall include demonstrations where specified or when possible:
1. System Overview/Review of Unit Operations
 2. Facility Walk Through
 3. Control System (1 day minimum)
 4. Pretreatment Unit Operations
 5. Operation/ Pumps /Instrumentation
 6. Post Treatment
 7. Chemical Cleaning (1 day minimum)
 8. Integrity Testing (4 hour minimum)
 9. Module Isolation and Repair (4-hour minimum)
 - a. Membrane manufacture shall bring a spare module for demonstration purposed and perform a repair demonstration.
 10. Monitoring / Troubleshooting / Data Normalization
 11. Details of Control System / Remote Monitoring.
- D. Table 3 lists the minimum person-days required for startup, installation assistance, certification, field testing, and training.

Table 3: Field Representative Services	
Minimum Total Time (Person-Days*)	Supplier's Service
10	Installation assistance and certification.
10	Field testing and startup
5	Training of District personnel
<p>* The person-days shown are total days for each service listed. One person-day is equivalent to 8 hours. The person-days shown are the minimum days required for each service, and travel time to and from the site and/or classroom is not included. If the Supplier chooses to send two (2) or more people to site simultaneously, the extra person's time does not count individually towards the minimum total person-days.</p>	

- E. On Call Technical Service Support: Provide one year (12 months) of product support, including unlimited telephone and email support, plus up to 3 separate trips by technical support personnel to site of up to two days duration each to be included and provided as required to ensure continuously compliant operation. Whenever significant operational problems arise, every attempt will be made by the District and the Supplier to correct the matter cooperatively by telephone or email correspondence. In the event the problem cannot be corrected in this way, a service call trip shall immediately be scheduled by the Supplier and in no case less than 3 calendar days from request.

3.4 EBMUD FIELD CALIBRATION TAGS

- A. Complete and install Field Calibration Tags on all instruments, pilot valves, relief valves, and other devices with ranges, setpoints, deadbands, and/or offsets. A minimum of one Field Calibration Tag must be completed and installed for each skid, each skid control panel, and each automatic, self-flushing pre-filter. Record the verified settings on the "EBMUD Field Calibration Tag" with a black extra-fine point permanent marker and affix to the instrument with an 18 lb nylon cable tie. The blank tags are furnished by the District. The District will provide the Equipment Tag IDs based on the equipment shown in the Supplier provided P&ID(s). Below is an example of the blank tag:



Field Calibration Tag



Equipment Tag ID: _____

Input: LRV= _____ URV= _____ Units= _____

Output(scale):LRV= _____ URV= _____ Units= _____

Setpoints: 1= _____ 2= _____ Units= _____

Deadband= _____ Offset= _____

Remarks: _____

Technician: _____ Inspector: _____ Date: _____



SUPPLIER'S CERTIFICATE OF PROPER INSTALLATION

OWNER: _____ EQPT SERIAL NO.: _____
EQPT TAG NO.: _____ EQPT/SYSTEM: _____
PROJECT NO.: _____ SPEC. & SECTION: _____

I hereby certify that the above-referenced equipment/system has been:

Complete Not Applicable

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Installed in accordance with the Supplier's recommendations. |
| <input type="checkbox"/> | <input type="checkbox"/> | Inspected, checked, and adjusted. |
| <input type="checkbox"/> | <input type="checkbox"/> | Electrical and mechanical connections meet quality and safety standards. |
| <input type="checkbox"/> | <input type="checkbox"/> | All system instruments are calibrated. |

Comments: _____

I, the undersigned the Supplier's Representative, hereby certify that I am (i) a duly authorized representative of the Supplier, (ii) empowered by the Supplier to inspect, approve, and operate the equipment and (iii) authorized to make recommendations required to assure that the equipment furnished by the Supplier is complete and ready for startup and operations. I further certify that all information contained herein is true and accurate.

Date: _____

Supplier: _____

By Supplier's Authorized Representative: _____
(Authorized Signature)

TYPICAL MAINTENANCE SUMMARY FORM

(Use as many pages as necessary. This form is available in MS Word format upon request)

1. Equipment Name: _____

2. Supplier: _____

3. Identification Numbers:

Tag: _____

Model: _____

Serial: _____

4. Nameplate Data (HP, voltage, speed, flow rate, head, etc) _____

5. Supplier's Local Representative:

Name: _____

Telephone: _____

Address: _____

6. LUBRICANT LIST

<u>Reference Symbol</u> List symbols used in Item 7? below	<u>Lubricant Description</u> List equivalent lubricants: brand name(s), type, grade, viscosity, etc.

7. SPARE PARTS (Recommendation spare parts with part numbers; if any.)

<u>OEM Part#</u>	<u>Part Name-Description</u>

8. Equipment Replacement Cost [\$] _____

9. MAINTENANCE REQUIREMENTS

[illegible]

I, _____ certify that the information on this form is an accurate and complete summary of all typical, routine, and preventive maintenance tasks required to ensure satisfactory performance during warranty period and the overall longevity of the equipment or systems.

(Supplier's Representatives Signature)

(Date)

O&M MANUAL REVIEW CHECKLIST
(Supplier's Representative to complete one form per submittal)

SPEC. SECTION TITLE & NO:	
MFR Name, Address, Phone:	
Local Rep Name, Address, Phone:	

GENERAL FORMAT)			
DESCRIPTION	PROVIDED?		COMMENTS
	YES	NO	
Specified copies provided			
Binder cover clearly labeled			
Spine Label			
System/Equipment type clearly identified			
District facility or facilities name(s) identified			
Specification number & title shown			
Title page provided			
Equipment tag numbers correctly shown			
Supplier's name, address, phone number provided			
Local Representative's name, address, phone number provided			
Table of contents provided			
Heavy section dividers w/ numbered or lettered plastic tabs provided			
Pages punched for 3-ring binder			
Info larger than 8-1/2 x 11 folded showing title block			
Original quality copies provided			

TECHNICAL CONTENT				
DESCRIPTION	LOCATION IN O&M			COMMENTS
	TAB#	PAGES	N/A	
Equipment Descriptions				
• Equipment names, model numbers & tag numbers				
• Equipment & major component functions				
• Drawings, diagrams & illustrations				
• Equipment Specification				
• Bill of materials				

TECHNICAL CONTENT				
DESCRIPTION	LOCATION IN O&M			COMMENTS
	TAB#	PAGES	N/A	
Performance Information				
• Nameplate data				
• Performance test data/curves				
Installation Instructions				
• Installation procedures & drawings				
• Equipment tolerances				
• Adjustment procedures				
Operating Instructions				
• Startup procedures				
• Normal & routine operations				
• Control functions				
• Alarms description and settings				
• Shutdown procedures				
• Emergency operations				
Electrical Information				
• Nameplate data				
• Relay, control, alarm contact settings				
• Motor test data				
Electrical Drawings				
• Single-line diagrams, three-line diagrams				
• Interconnection wiring diagram				
• Schematic and elementary diagrams				
• Panel layout drawings				
Instrumentation & Control				
• P&IDs				
• Control diagrams				
• Panel layout drawings				
• Instrument data sheets (specification forms)				
• Calibration Procedures				
• Final settings for adjustable control devices				
• Block diagrams and riser diagrams				
• Loop diagrams				
• Pneumatic/Hydraulic piping				

TECHNICAL CONTENT				
DESCRIPTION	LOCATION IN O&M			COMMENTS
	TAB#	PAGES	N/A	
drawings				
• Hard copy printouts of control programs				
• Field calibration data sheets				
• Programming software (licensed to EBMUD) with user manuals				
Shipping and Storage Instructions				
Testing				
• Factory Test Report (procedures and results)				
• Field Test Procedures				
• Supplier's Certificate of Proper Installation (where specified)				
• Field Test Results				
Troubleshooting guide				
Safety				
• Safety procedures/Lockout discussion				
• CAUTION, WARNING, DANGER text				
• Material Safety Data Sheets (MSDS)				
• Special safety equipment				
Preventive Maintenance				
Maintenance Summary Forms				
Lubrication Information				
• Location of lube points & frequency				
• Recommended type & grade, state specific MFR				
• Recommended viscosity & temperature range				
Overhaul Instructions				
• Detailed assembly drawings w/OEM part numbers				
• Tear down/rebuild instructions				
Spare Parts for Equipment & Components				
• Predicted life of parts subject to wear or aging				
• Recommended spare parts list w/ part numbers				

TECHNICAL CONTENT				
DESCRIPTION	LOCATION IN O&M			COMMENTS
	TAB#	PAGES	N/A	
• Complete instructions for obtaining parts				
• Long-term storage requirements				
• Special tools				
Long-term Shutdown/Lay-up Instructions				
Warranty/Guarantee				

END OF SECTION



EXHIBIT D

FUTURE EXPANSION PURCHASE PRICE GUARANTEE

Background:

The ultrafiltration membrane system being purchased and installed under this procurement represents the first phase of the upgrade and capacity expansion of the Camanche South Shore Regional Water Treatment Facility. The District anticipates two future phases of capacity expansion using the same membrane system that is to be provided in Phase 1.

The District is party to a multi-agency agreement with two contiguous public water agencies for potential future capacity expansions of the Camanche South Shore Regional Water Treatment Facility. These future expansion(s) would provide treated water to these water agencies' existing customers and/or future customers based on anticipated residential growth in their service areas.

Requirement:

Under the multi-agency agreement, the District will be responsible for adding additional production capacity and operating and maintaining the larger Camanche South Shore Regional Water Treatment Facility. For ease of operations and maintenance, and efficient inventory management of parts, accessories and tools, the District wants to have the option to purchase and install up to six (6) additional ultrafiltration membrane skids and related equipment which will be the same as the skids and equipment that will be purchased and installed in Phase 1.

Therefore, the District is requesting that all bidders offer a Future Expansion Purchase Price Guarantee for a minimum of five (5) years and potentially for up to a maximum of ten (10) years. This agreement for future purchase(s) and installation of equipment is to be incorporated into the purchase agreement resulting from this current procurement, and is to include the following provisions:

1. For additional purchases by the District of one (1) to six (6) ultrafiltration membrane skids and related equipment within five (5) years and no more than ten (10) years after the date of completion of all Phase 1 work, the Supplier will provide the same or similar ultrafiltration skids and appurtenances, spare parts, tools and accessories as provided under this procurement. Facilities offered by the Supplier are to be of the same design, size, configuration, and provide the same level of treatment and production capacity.
2. The Supplier agrees to provide these additional skids and equipment at a guaranteed price based on the following:
 - a. The purchase price for the skids and equipment will be the same as accepted by the District under this procurement, plus an inflationary adjustment based on the appropriate ENR (Engineering News Record) Cost Index for Northern California at the date of additional skids and equipment purchase; or

- b. The purchase price for the same skids and equipment sold within the United States within two (2) years previous of the District's proposed purchase date if that price is lower than that determined in 2.a. above including freight and delivery. The Supplier agrees to provide copies of the relevant sections of all finalized purchase orders for sales within the United States for that subject period if requested by the District. The District agrees that all confidential material or information not willing to be disclosed by another purchaser will not be provided to the District. If there has been a reduction in the pricing for the skids and equipment since the District's Phase 1 purchase, the Supplier agrees to provide the additional skids and equipment at a lower price consistent with prices from the previous two year's sales in the United States.

EXHIBIT E



DATE _____

FAITHFUL PERFORMANCE BOND

CONTRACTOR (Name and California address where service may be effected)

SURETY (Name and California address where service may be effected)

AMOUNT OF BOND (Sum in words and figures)

CONTRACT DOCUMENTS (As named in the Contract)

SAMPLE ONLY

KNOW ALL PERSONS BY THESE PRESENTS:

THAT, the contractor named above, hereinafter called the Contractor, as Principal, and the Surety named above, as Surety, are held and firmly bound unto the East Bay Municipal Utility District, hereinafter called the District, in the sum entered above, lawful money of the United States of America, for the payment of which sum well and truly to be made to the District, we, and each of us, 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 Contractor and the District entered into a Contract of even date herewith, by the terms and conditions of which the Contractor agreed to perform and complete the work, or manufacture, complete, and deliver the material or equipment, set forth in the Contract Documents named in the Contract, all now on file in the office of the Secretary of the District, as will more fully appear by reference to said Contract, which is made a part of this bond;

FAITHFUL PERFORMANCE BOND

NOW, THEREFORE, if the Contractor shall well and truly carry out, execute and perform all things by the Contractor to be carried out, executed and performed, according to the terms and conditions of said Contract, including any and all warranty and guaranty obligations contained therein, then this obligation shall become null and void, otherwise to remain in full force and effect throughout the period of performance, including any warranty or guaranty period.

No prepayment or delay in payment, and no change, extension, addition, or alteration of any provision of said Contract or Contract Documents agreed to between the Contractor and the District, and no forbearance on the part of the District shall operate to release the Surety from liability on this Bond, and consent to make such alterations without further notice to or consent by the Surety is hereby given, and the Surety hereby waives the provisions of Section 2819 of the Civil Code and Section 359.5 of the Code of Civil Procedure of the State of California.

Each signator to this bond hereby declares under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated the day and year entered on the first page hereof.

SAMPLE ONLY

Contractor

By _____

*Title _____

By _____

**Title _____

(SEAL OF SURETY)

Surety

By _____

Title _____

Note: The signature of the Surety on this bond must be acknowledged before a Notary Public. An executed Power of Attorney indicating that the Surety's representative is authorized to bind the Surety must accompany this bond.

The foregoing Bond was accepted and approved this _____ day of _____, 20 _____

_____, East Bay Municipal Utility District

Specifications / Proposal No. _____

*If corporation, Corporate President or CEO; if Partnership, Partner.

**Corporate Secretary or financial officer.

EXHIBIT F

Effective: 1 Apr 15
Supersedes: 1 Apr 88

GENERAL REQUIREMENTS

CONTENTS

1. DEFINITIONS
2. BOND
3. CONTRACTOR'S FINANCIAL OBLIGATION
4. SAMPLES OR SPECIMENS
5. MATERIAL AND WORKMANSHIP
6. DEFECTIVE WORK
7. WARRANTY OF TITLE
8. WARRANTY OF FITNESS
9. SAFETY AND ACCIDENT PREVENTION
10. CHARACTER OF WORKFORCE
11. PREVAILING WAGES
12. PAYROLL RECORDS
13. HOURS OF LABOR
14. EMPLOYMENT OF APPRENTICES
15. CHANGES
16. EFFECT OF EXTENSIONS OF TIME
17. DELAYS
18. TERMINATION
19. DAMAGES
20. ORDER OF PRECEDENCE
21. INDEMNIFICATION/RESPONSIBILITY
22. ASSIGNMENTS
23. NEWS RELEASES
24. TRANSFER OF INTEREST
25. SEVERABILITY
26. COVENANT AGAINST GRATUITIES
27. RIGHTS AND REMEDIES OF THE DISTRICT
28. WAIVER OF RIGHTS
29. CONFIDENTIALITY

1. DEFINITIONS

The following terms shall be given the meaning shown, unless context requires otherwise or a unique meaning is otherwise specified.

- a. **Change Order** A Change Order is a written instrument used for modifying the contract with regards to the scope of Work, contract sum, and/or Contract Time. An approved Change Order is a Change Order signed by the District. An executed Change Order is a Change Order signed by both the District and the Contractor.

- b. **“Contract”** means the agreement between the District and Contractor as memorialized in the Contract Documents.
- c. **“Business Entity”** means any individual, business, partnership, joint venture, corporation, sole proprietorship, or other private legal entity recognized by statute.
- d. **“Buyer”** means the District’s authorized contracting official.
- e. **“Contract Documents”** comprise the entire agreement between the District and the Contractor and can include the District’s contract form if used, any purchase order, RFP, RFQ or Contractor response packet, and any addenda, appendices and District approved changes or amendments. The Contract Documents are intended to be complementary and include all items necessary for the Contractor’s proper execution and completion of the Work. Any part of the Work not shown or mentioned in the Contract Documents that is reasonably implied, or is necessary or usual for proper performance of the Work, shall be provided by the Contractor at its expense.
- f. **“Contractor”** means the Business Entity with whom the District enters into a contractual agreement. Contractor shall be synonymous with “supplier”, “vendor”, “consultant” or other similar term.
- g. **“Day”** unless otherwise specified, days are calendar days, measured from midnight to the next midnight.
- h. **“District”** means the East Bay Municipal Utility District, its employees acting within the scope of their authority, and its authorized representatives.
- i. **“Goods”** means off the shelf software and all types of tangible personal property, including but not limited to materials, supplies, and equipment.
- j. **“Project Manager”** shall be the District designated individual responsible for administering and interpreting the terms and conditions of the Contract Documents, for matters relating to the Contractor’s performance under the Contract with the District, and for liaison and coordination between the District and Contractor.
- k. **“Work”** means all labor, tasks, materials, supplies, and equipment required to properly fulfill the Contractor’s obligations as required in the Contract Documents.
- l. **“Work Day”** Unless otherwise specified, work day includes all days of the year except Saturdays, Sundays and District holidays.

2. BOND

- a. When required in the District’s bid or proposal solicitation documents, the Contractor to whom award is made shall furnish a good and approved faithful performance bond and/or payment bond within ten business days after receiving the forms for execution.
- b. The bonds shall be executed by a sufficient, admitted surety insurer (i.e.: as listed on website [http://interactive.web.insurance.ca.gov/webuser/idb_co_list\\$.startup](http://interactive.web.insurance.ca.gov/webuser/idb_co_list$.startup)) admitted to transact such business in California by the California Department of Insurance. After acceptance of the bond(s) by the District, a copy of the bond(s) will be

returned to the Contractor.

- c. If, during the continuance of the Contract, any of the sureties, in the opinion of the District, are or become irresponsible, the District may require other or additional sureties, which the Contractor shall furnish to the satisfaction of the District within ten days after notice. If the Contractor fails to provide satisfactory sureties within the ten-day period, the Contract may be terminated for cause under Article 18.

3. CONTRACTOR'S FINANCIAL OBLIGATION

The Contractor shall promptly make payments to all persons supplying labor and materials used in the execution of the contract.

4. SAMPLES OR SPECIMENS

The Contractor shall submit samples or prepare test specimens of such materials to be furnished or used in the work as the Project Manager may require.

5. MATERIAL AND WORKMANSHIP

- a. All goods and materials must be new and of the specified quality and equal to approved sample, if samples have been required. In the event any goods or materials furnished or services provided by the Contractor in the performance of the Contract fail to conform to the requirements, or to the sample submitted by the Contractor, the District may reject the same, and it shall become the duty of the Contractor to reclaim and remove the item promptly or to correct the performance of services, without expense to the District, and immediately replace all such rejected items with others conforming to the Contract. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from these specifications or the drawings, and it shall be the duty of the Contractor to call attention to apparent errors or omissions and request instructions before proceeding with the work. The Project Manager may, by appropriate instructions, correct errors and supply omissions, which instructions shall be binding upon the Contractor as though contained in the original Contract Documents.
- b. All materials furnished and all Work must be satisfactory to the Project Manager. Work, material, or machinery not in accordance with the Contract Documents, in the opinion of the Project Manager, shall be made to conform.

6. DEFECTIVE WORK

The Contractor shall replace at its own expense any part of the work that has been improperly executed, as determined by the Project Manager. If Contractor refuses or neglects to replace such defective work, it may be replaced by the District at the expense of the Contractor, and its sureties shall be liable therefor.

7. WARRANTY OF TITLE

Contractor shall warrant to the District, its successors and assigns, that the title to the materials, 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.

8. WARRANTY OF FITNESS

Contractor hereby warrants that all materials furnished shall meet the requirements and conditions of the Contract Documents; shall be fit for the purposes intended and fulfill its design functions; 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 the materials or supplies to be manufactured or assembled pursuant to these specifications, the 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.

9. SAFETY AND ACCIDENT PREVENTION

In performing work under the Contract on District premises, Contractor shall conform to any specific safety requirements contained in the Contract or as required by law or regulation. Contractor shall take any additional precautions as the District may reasonably require for safety and accident prevention purposes. Any violation of such rules and requirements, unless promptly corrected, shall be grounds for termination of this Contract or Contractor's right to precede in accordance with the default provisions of the Contract Documents.

10. CHARACTER OF WORKFORCE

The Contractor shall employ none but skilled competent qualified personnel to perform the Work, and shall maintain discipline and order in the conduct of the Work at all times.

11. PREVAILING WAGES & DIR REGISTRATION

- a. Please see www.dir.ca.gov for further information regarding the below.
- b. All Contractors and Subcontractors of any tier bidding on, or offering to performing work on a public works project shall first be registered with the State Department of Industrial Relations (DIR) pursuant to Section 1725.5 of the Labor Code. No bid will be accepted nor any contract entered into without proof of the Contractor and Subcontractors' current registration with the DIR (LC § 1771.1).
- c. All public works projects awarded after January 1, 2015, are subject to compliance monitoring and enforcement by the DIR (LC § 1771.4) and all Contractors are required post job site notices, "as prescribed by regulation" (LC § 1771.4).
- d. To the extent applicable, pursuant to Section 1773 of the Labor Code, the District has obtained from the Director of Industrial Relations of the State of California, the general prevailing rates of per diem wages and the general prevailing rates for holiday and overtime work in the locality in which the Work is to be performed, for each craft, classification, or type of worker needed to execute the contract. Pursuant to Section 1773.2 of the Labor Code, a copy of the prevailing wage rates is on file with the District and available for inspection by any interested party at www.dir.ca.gov.
- e. The holidays upon which such rates shall be paid shall be all holidays recognized in the collective bargaining agreement applicable to the particular craft, classification, or type

of worker employed on the Work.

- f. The Contractor shall post a copy of the general prevailing rate of per diem wages at the jobsite pursuant to Section 1773.2 of the Labor Code.
- g. Pursuant to Section 1774 of the Labor Code, the Contractor and any of its Subcontractors shall not pay less than the specified prevailing rate of wages to all workers employed in the execution of the contract.
- h. As set forth with more specificity in Section 1773.1 of the Labor Code, "per diem" wages include employer payments for health and welfare, pension, vacation, travel, subsistence and, in certain instances, apprenticeship or other training programs, and shall be paid at the rate and in the amount spelled out in the pertinent prevailing wage determinations issued by the Director of Industrial Relations.
- i. The Contractor shall, as a penalty to the State or the District, forfeit not more than the maximum set forth in Section 1775 of the Labor Code for each calendar day, or portion thereof, for each worker paid less than the prevailing rates for the work or craft in which the worker is employed under the contract by the Contractor or by any Subcontractor under him. The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which such worker was paid less than the stipulated prevailing wage rate shall be paid to such worker by the Contractor.
- j. The specified wage rates are minimum rates only and the District will not consider and shall not be liable for any claims for additional compensation made by the Contractor because of its payment of any wage rate in excess of the general prevailing rates. All disputes in regard to the payment of wages in excess of those specified herein shall be adjusted by the Contractor at its own expense.
- k. General prevailing wage determinations have expiration dates with either a single asterisk or a double asterisk. Pursuant to California Code of Regulations, Title 8, Section 16204, the single asterisk means that the general prevailing wage determination shall be in effect for the specified contract duration. The double asterisk means that the predetermined wage modification shall be paid after the expiration date. No adjustment in the Contract Sum will be made for the Contractor's payment of these predetermined wage modifications.

12. PAYROLL RECORDS & ELECTRONIC SUBMISSION

- a. The Contractor and each 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 in connection with the Work. The payroll records shall be certified and shall be available for inspection in accordance with the provisions of Section 1776 of the Labor Code. Certified payroll records shall be on the forms provided by the DIR or contain the same information required on the Department's form.

- b. The Contractor shall submit for each week in which any contract Work is performed a copy of all payroll records to the Engineer. The Contractor shall be responsible for submission of copies of payroll records of all Subcontractors.
- c. The Contractor or Subcontractor shall certify the payroll records as shown on the DIR form. In addition, the records shall be accompanied by a statement signed by the Contractor or Subcontractor certifying that the classifications truly reflect the Work performed and that the wage rates are not less than those required to be paid.
- d. For public works projects awarded on or after April 1, 2015, or that are still ongoing after April 1, 2016, no matter when awarded, each Contractor and Subcontractor shall furnish the certified payroll related records as more specifically described above and in Labor Code section 1776 directly to the Labor Commissioner (see LC § 1771.4). These records shall be provided to the Labor Commissioner at least monthly or more frequently if required by the terms of the Contract. For exception on projects covered by collective bargaining agreements like a PLA, please see Labor Code section 1771.4.
- e. In the event of noncompliance with the requirements of Section 1776 of the Labor Code, the Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects such Contractor must comply with said Section. Should noncompliance still be evident after such 10-day period, the Contractor shall, as a penalty to the State or the District, forfeit the amount set forth in Section 1776 of the Labor Code 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.
- f. The Contractor and every Subcontractor shall post at the workplace and comply with all required wage related workplace postings. Copies of the required postings may be downloaded or ordered electronically from the Department of Industrial Relations website at <http://www.dir.ca.gov/wpnodb.html>.

13. HOURS OF LABOR

Pursuant to the provisions of Sections 1810, et seq. of the Labor Code and any amendments thereof:

- a. Eight hours of labor constitutes a legal day's Work under the contract.
- b. The time of service of any worker employed upon the work shall be limited and restricted to eight hours during any one calendar day, and forty hours during any one calendar week except as provided in Article 13.iv below.
- c. The Contractor shall, as a penalty to the State or the District, forfeit the amount set forth in Section 1813 of the Labor Code for each worker employed in the execution of the contract by the Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any calendar day and forty hours in any one calendar week in violation of this Article and the provisions of Labor Code, Sections 1810, et seq.
- d. Work performed by employees of the Contractor in excess of eight hours per day, and forty hours during any one calendar 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.

- e. The Contractor and every Subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the Work; the record shall be kept open at all reasonable hours to the inspection of the District and to the Division of Labor Standards Enforcement of the State of California.

14. EMPLOYMENT OF APPRENTICES

- a. In the performance of the contract, the Contractor and any Subcontractor shall comply with the provisions concerning the employment of apprentices in Section 1777.5 of the Labor Code and any amendments thereof.
- b. In the event the Contractor or any Subcontractor willfully fails to comply with the aforesaid section, such Contractor or Subcontractor shall be subject to the penalties for noncompliance in Labor Code, Section 1777.7.

15. CHANGES

- a. Changes in the Work can only be made in writing signed by an authorized employee of the District. If the change causes an increase or decrease in the contract sum, or a change in the time for performance under the Contract, an adjustment may be made as determined by the Project Manager.
- b. The District reserves the right to make changes in the design of materials, equipment, or machinery, to make alterations or additions to or deviations or subtractions from the Contract and any specifications and drawings, to increase or decrease the required quantity of any item or portion of the Work or to omit any item or portion of the Work, as may be deemed by the Project Manager to be necessary or advisable and to order such extra work as may be determined by the Project Manager to be required for the proper execution and completion of the whole Work contemplated. Any such changes will be ordered in writing by the Project Manager. The determination of the Project Manager on all questions relating to changes, including extra work, shall be conclusive and binding.
- c. Prior to issuing an amendment or change to the Contract, the Project Manager may request that the Contractor submit a proposal covering the changes. Within 10 business days of receiving the request, the Contractor shall submit its proposal to the Project Manager of all costs associated with the proposed amendment or change and any request for an extension of Contract time. Contractor's proposal shall include detailed estimates with cost breakdowns, including labor, material, equipment, overhead, and profit. Labor shall be broken down into hours and rate per hour. If applicable, the proposal shall include a breakdown for off-site labor (including factory labor, engineering, etc.). The Contractor's proposal shall include an analysis of schedule impact when the Contractor is requesting an adjustment in contract time. The Contractor shall be responsible for any delay associated with its failure to submit its change proposal within the time specified. If the Project Manager decides not to issue an amendment or change after requesting a proposal from the Contractor, the Contractor will be notified in writing. The Contractor is not entitled to reimbursement for Change Order

preparation costs if the Contractor's proposal is not accepted by the Project Manager.

- d. If the Contractor agrees with the terms and conditions of the approved Change Order, the Contractor shall indicate its acceptance by signing the original copy and returning it to the Project Manager within 10 Work Days after receipt or with reasonable promptness and in such sequence as to not delay the Work or activities of the District or of separate contractors, whichever is sooner. If notice of any change is required to be given to a surety by the provisions of any bond, the Contractor shall provide notice and the amount of each applicable bond shall be adjusted separately. Payment in accordance with the terms and conditions set forth in the executed Change Order shall constitute full compensation for all Work included in the Change Order and the District will be released from any and all claims for direct, indirect, and impact expenses and additional time impact resulting from the Work. If the Contractor disagrees with the terms and conditions of the approved Change Order, the Contractor shall indicate specific areas of disagreement and return the approved Change Order to the Project Manager with a detailed written dispute. No payment will be made on the disputed work until the approved Change Order is returned to the Project Manager. However, whether or not the Contractor agrees with the terms and conditions of an approved Change Order, the Contractor shall immediately revise its sequence of operations as required to facilitate timely completion of the changed work and shall proceed with the revised work sequence.
- e. The Project Manager may, after having received a written cost quotation from the Contractor, order the Contractor, in writing, to proceed with the work prior to issuance of an approved Change Order through a change directive. The change directive will authorize the Contractor to proceed with the work subject to the cost quotation submitted by the Contractor. Within five days following receipt of the change directive, the Contractor shall submit a detailed change proposal documenting the amount of compensation. The Project Manager will review the change proposal and, at its option, will either issue an approved Change Order for the work or direct the Contractor to perform the work through Force Account. Until the method of compensation is determined and the approved Change Order is received, the Contractor shall keep full and complete time and material records of the cost of the ordered work and shall permit the Project Manager to have access to such records. An approved Change Order shall supersede any previously issued written change directive covering the same Work.

16. EFFECT OF EXTENSIONS OF TIME

The 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 of Contractor or the surety on Contractor's faithful performance bond.

17. DELAYS

- a. The Contractor shall take reasonable precautions to foresee and prevent delays to the Work. When the Contractor foresees a delay event, and upon the occurrence of a delay event, the Contractor shall immediately notify the Project Manager of the probability or the actual occurrence of a delay, and its cause. With respect to all delays (compensable, excusable or inexcusable), the Contractor shall reschedule the Work and revise its operations, to the extent possible, to mitigate the effects of the delay. Within 15 days from the beginning of a delay the Contractor shall provide the Project Manager with a

detailed written description of the delay, its cause, its impact and the Contractor's mitigation plans. Failure to provide the notification required above waives the Contractor's right to any additional time or compensation resulting from the delay for whatever cause. The Project Manager will investigate the facts and ascertain the extent of the delay, and the Project Manager's findings thereon shall be final and conclusive, except in the case of gross error. An extension of time must be approved by the Project Manager to be effective, but an extension of time, whether with or without consent of the sureties, shall not release the sureties from their obligations, which shall remain in full force until the discharge of the contract.

- b. For inexcusable delays (delays caused by circumstances within the Contractor's control, the control of its subcontractors or supplies of any tier, or within the scope of the Contractor's contract responsibilities) the Contractor shall not be entitled to an extension of time or additional compensation for any loss, cost, damage, expense or liability resulting directly or indirectly from the inexcusable delay.
- c. For excusable delays (delays to completion of the Work within the time limits set forth in the Contract Documents directly caused by events beyond the control of both the Contractor and the District, which delay is not concurrent with an inexcusable delay and which could not have been avoided by the Contractor through reasonable mitigation measures).
- d. For compensable delays (delays to completion of the Work within the time limits set forth in the Contract Documents that could not be avoided by Contractor mitigation, caused directly and solely by the District or by causes within the exclusive control of the District, and which were not concurrent with any other type of delay) the Project Manager will grant the Contractor an extension of the time to perform under the Contract and compensation in an amount that represents the Contractor's actual direct costs incurred as a direct result of the compensable delay. The Contractor may recover its direct costs only and may not recover (and waives) all other types of indirect, consequential, special and incidental damages.
- e. For concurrent delays (two or more independent causes of delay directly preventing the Contractor from completing the Work within the time limits set forth in the Contract Documents where the delays occur at the same time during all or a portion of the delay period being considered, and where each of the delays would have caused delay to the Contractor even in the absence of any of the other delays, and none of the delays could have been avoided by Contractor mitigations) the following rules apply:
 - i. One or more of the concurrent delays are excusable or compensable, then the period of concurrent delay will be treated as an excusable delay; and
 - ii. All of the concurrent delays are inexcusable, then the period of concurrent delay will be inexcusable.

18. TERMINATION

- a. Termination by the District for Cause:

- i. District may terminate the Contractor's right to proceed under the Contract, in whole or in part, for cause at any time after the occurrence of any of the following events, each of which constitutes a default:
 - 1. The Contractor becomes insolvent or files for relief under the bankruptcy laws of the United States.
 - 2. The Contractor makes a general assignment for the benefit of its creditors or fails to pay its debts as the same become due.
 - 3. A receiver is appointed to take charge of the Contractor's property.
 - 4. The Contractor fails to supply skilled supervisory personnel, an adequate number of properly skilled workers, proper materials, or necessary equipment to prosecute the Work in accordance with the Contract Documents.
 - 5. The Contractor fails to make progress so as to endanger performance of the Work within the contractually required time.
 - 6. The Contractor disregards legal requirements of agencies having jurisdiction over the Work, the Contractor, or the District.
 - 7. The Contractor fails to provide the District with a written plan to cure a District identified default within five business days after the District's request for a plan to cure; the District does not accept the Contractor's plan for curing its default; or the Contractor does not fully carry out an accepted plan to cure.
 - 8. The Contractor abandons the Work. Abandonment is conclusively presumed when the District requests a written plan to cure a default and the Contractor does not submit the plan within five business days of the District's request.
 - 9. The Contractor materially fails to meet its obligations in accordance with the Contract Documents.
 - 10. The Contractor is in default of any other material obligation under the Contract Documents.
- ii. If any of the above events occur, the District may, in its discretion, require that the Contractor submit a written plan to cure its default, which plan must be provided to the District within 5 business days of the request and must include a realistic, executable plan for curing the noted defaults.

- iii. Upon any of the occurrences referred to in Article 18.a.i. above, the District may, at its election and by notice to the Contractor, terminate the Contract in whole or in part; accept the assignment of any or all of the subcontracts; and then complete the Work by any method the District may deem expedient. If requested by the District, the Contractor shall remove any part or all of the Contractor's materials, supplies, equipment, tools, and machinery from the site of the Work within seven days of such request; and, if the Contractor fails to do so, the District may remove or store, and after 90 days sell, any of the same at the Contractor's expense.
- iv. No termination or action taken by the District after termination shall prejudice any other rights or remedies of the District provided by law or by the Contract Documents.
- v. Conversion: If, after termination for other than convenience, it is determined that the Contractor was not in default or material breach, or that the default or material breach was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for convenience pursuant to Article 18.b. below.

b. Termination by the District for Convenience:

- i. The District may, at its option, and for its convenience, terminate the Contract at any time by giving written notice to the Contractor specifying the effective date of termination. Upon such termination, the Contractor agrees to comply with the notice and further agrees to waive any claims for damages, including loss of anticipated profits, on account of the termination; and, as the sole right and remedy of the Contractor, the District shall pay the Contractor as set forth below.
- ii. Upon receipt of a notice of termination for convenience, the Contractor shall, unless the notice directs otherwise, do the following:
 - 1. Immediately discontinue its performance of the Contract to the extent specified in the notice.
 - 2. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for completion of a portion of the Work that is not discontinued or that is necessary for an orderly cessation of the Work.
 - 3. Promptly cancel, on the most favorable terms reasonably possible, all subcontracts to the extent they relate to the performance of the discontinued portion of the Work.
 - 4. Thereafter, do only such Work as may be necessary to preserve and protect Work already in progress and to protect materials,

plants, and equipment in transit to or on the site of performance.

- iii. Upon such termination for convenience, the District will pay to the Contractor the sum of the following:
 - 1. The amount of the contract sum allocable to the portion of the Work properly performed by the Contractor as of the effective date of termination, less sums previously paid to the Contractor.
 - 2. Previously unpaid costs of any items delivered to the project site that were already fabricated for subsequent incorporation into the Work.
 - 3. Any proven losses with respect to materials and equipment directly resulting from the termination.
 - 4. Reasonable demobilization costs.
- iv. The above reimbursement is the sole and exclusive remedy to which the Contractor is entitled in the event the contract is terminated for convenience; and the Contractor expressly waives any other claims, damages, demands, compensation or recovery related to this contract or project. The Contractor agrees to sign a general release incorporating this waiver.
- f. Effect of Termination: Upon termination, the obligations of the Contract shall continue as to portions of the Work already performed and, subject to the Contractor's obligations under Article 18.b.ii, as to bona fide obligations assumed by the Contractor prior to the date of termination.
- g. Force Majeure: If the contract is suspended or terminated by the District because Contractor's performance is prevented or delayed by an event including an irresistible, superhuman cause, or by the act of public enemies of the State of California or of the United States ("Force Majeure") , the Contractor will be paid for Work performed prior to the Force Majeure event at either (i) the unit prices named in the Contract; or (ii) in the event no unit prices are named, a sum equal to the percentage of the total contract amount that matches the percentage of the total contract Work performed prior to the Force Majeure event.

19. DAMAGES

All losses or damages to material or equipment to be furnished pursuant to the Contract Documents occurring prior to receipt and final acceptance of the Work shall be sustained by the Contractor. The Contractor shall sustain all losses arising from unforeseen obstructions or difficulties, either natural or artificial, encountered in the prosecution of the Work, or from any action of the elements prior to final acceptance of the work, or from an act or omission on the part of the Contractor not authorized by the Contract Documents.

20. ORDER OF PRECEDENCE

- a. In the case of conflicts, errors, or discrepancies in any of the Contract Documents, the order of precedence is as follows. Within the same order of precedence, specific requirements shall take precedence over general requirements.
 - i. Approved Change Orders.
 - ii. Addenda.
 - iii. RFQ or RFP.
 - iv. Referenced Standard Specifications and Drawings.
 - v. Contractor's Response Packet
- b. With reference to drawings:
 - i. Numerical dimensions govern over scaled dimensions.
 - ii. Detailed drawings govern over general drawings.
 - iii. Addenda/Change Order drawings govern over contract drawings.
 - iv. Contract drawings govern over standard drawings.
 - v. Notes apply only to the drawing where the notes appear, unless classified as "typical" or intended to apply elsewhere in which case they apply to all drawings where the conditions or circumstance noted occurs.
 - vi. Typical details apply to all drawings unless a specific different detail is shown

21. INDEMNIFICATION/RESPONSIBILITY

- a. Contractor shall indemnify, keep and save harmless the District and each of its directors, officers, agents and employees against any and all suits, claims or actions arising out of any of the following:
 - i. Any injury to persons or property that may occur, or that may be alleged to have occurred, arising from the performance or implementation of this Contract; or
 - ii. Any allegation that materials or services developed, provided or used for this Contract infringe or violate any copyright, trademark, patent, trade secret, or any other intellectual-property or proprietary right of any third party.
- b. Contractor further agrees to defend any and all such actions, suits or claims and pay all charges of attorneys and all other costs and expenses of defenses as they are incurred. If any judgment is rendered, or settlement reached, against the District or any of the other agencies or individuals enumerated above in any such action, Contractor shall, at its expense, satisfy and discharge the same.
- c. This indemnification shall survive termination or expiration of the Contract.

22. PROHIBITION OF ASSIGNMENT

The Contractor shall not assign, transfer, or otherwise dispose of any of its rights, duties or obligations under this Contract.

23. NEWS RELEASES

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.

24. TRANSFER OF INTEREST

Contractor shall not assign, transfer or otherwise substitute its interest in the Contract or any of the contract obligations without prior written consent from the District.

25. SEVERABILITY

Should any part of the Contract be declared by a final decision by a court or tribunal of competent jurisdiction to be unconstitutional, invalid or beyond the authority of either party to enter into or carry out, such decision shall not affect the validity of the remainder of the Contract, which shall continue in full force and effect, provided that the remainder of the Contract can be interpreted to give effect to the intentions of the parties.

26. COVENANT AGAINST GRATUITIES

The Contractor warrants that no gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the District with a view toward securing the Contract or securing favorable treatment with respect to any determinations concerning the performance of the Contract. For breach or violation of this warranty, the District shall have the right to terminate the Contract, either in whole or in part, and any loss or damage sustained by the District in procuring on the open market any items which Contractor agreed to supply shall be borne and paid for by the Contractor. The rights and remedies of the District provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or in equity.

27. 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.

28. WAIVER OF RIGHTS

Any action or inaction by the District or the failure of the District on any occasion, to enforce any right or provision of the Contract, shall not be construed to be a waiver by the District of its rights and shall not prevent the District from enforcing such provision or right on any future occasion. Rights and remedies are cumulative and are in addition to any other rights or remedies that the District may have at law or in equity.

29. CONFIDENTIALITY

Contractor agrees to maintain in confidence and not disclose to any person or entity, without the District's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of the District. Contractor further agrees to maintain in confidence and not to disclose to any person or entity, any data, information, technology, or material developed or obtained by Contractor during the term of the Contract. The covenants contained in this paragraph shall survive the termination of this Contract for whatever cause.