



101 Lucas Valley Road, Suite 300
San Rafael, CA 94903
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MANAGEMENT TEAM
General Manager, Mike Prinz
Plant Operations, Mel Liebmann
Collections/Safety/Maintenance, Greg Pease
Engineering, Michael P. Cortez
Administrative Services, Dale McDonald

DISTRICT BOARD
Megan Clark
Rabi Elias
Craig K. Murray
Judy Schriebman
Crystal J. Yezman

**CONTRACT DOCUMENTS
REQUEST FOR INFORMAL BIDS
(UNIFORM PUBLIC CONSTRUCTION COST ACCOUNTING ACT)**

Bid Item: GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT (Job No. 21600-08)

Description: Concrete walls repair and coating and replacement of two grit screw conveyor systems.

Bid Opening Time, Date & Location: 11:00 AM, August 12, 2021

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Pursuant to UPCCAA procedures, interested bidders must be prequalified by the District prior to submitting an informal bid for projects under \$200,000. Failure to do so will disqualify the bidder. If you would like your company prequalified, please complete and sign a Contractor's Pre-Qualification Application available at <http://www.lgvsd.org> and submit to the District before the bid opening shown above.

Responses to this invitation from prequalified bidders must be received by District no later than the date and time and at the place shown above for consideration. Electronic copies are acceptable if followed by a phone call to the District at 415-472-1734 confirming receipt prior to the bid opening time. Email to: Michael P. Cortez at mcortez@lgvsd.org and cc: Irene Huang at ihuang@lgvsd.org.

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NOTICE INVITING INFORMAL BIDS (Prequalified Contractors Only)

1. The Las Gallinas Valley Sanitary District (District) hereby invites informal bids for the **GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT** Project pursuant to the Uniform Public Construction Cost Accounting Act (UPCCAA) Alternative Bidding Procedures established under Public Contract Code §§22000 et seq. and other applicable law, and the following:
2. Interested bidders must be prequalified by the District prior to submitting an informal bid. Failure to do so will disqualify the bidder. If you would like your company prequalified, please review, complete, and sign a Contractor's Pre-Qualification Application available at <http://www.lgvsd.org/document-library/current-construction-projects/> and submit to the District before the bid opening shown below.
3. All bids must be delivered to the **Las Gallinas Valley Sanitary District temporary office located at 101 Lucas Valley Rd, Suite 300, San Rafael, California 94903** on or before **11:00 AM, August 12, 2021**. Bids will be announced and read publicly at that time. Bids must be made on the bid forms included in the bid package. Bids that are submitted late according to the official time kept by the District Engineer or a designee will be rejected. Bids that are incomplete or that otherwise do not conform to the requirements specified in the bid package may be deemed non-responsive. Electronic copies are acceptable if **followed by a phone call** to the District at 415-472-1734 confirming receipt prior to the bid opening time. Email to: Michael P. Cortez at mcortez@lgvsd.org and cc: Irene Huang at ihuang@lgvsd.org no later than the date and time shown above for consideration.
4. A **non-mandatory** pre-bid meeting and site visit will be held on **July 22, 2021, at 11:00 a.m. at 300 Smith Ranch Rd, San Rafael, CA 94903**. The meeting will observe all COVID-19 best management practices. Protective personal equipment (e.g., face masks) and social distancing will be required. **Please call or email to RSVP**. Alternatively, a second virtual meeting using Zoom software will be available on **July 22, 2021 at 1:00 p.m.** for Bidders who cannot or do not wish to attend in person due to COVID-19. Bidders who wish to attend the virtual meeting must email Irene Huang at ihuang@lgvsd.org for the meeting information and RSVP. Special site visits to the job site may be scheduled in advance a minimum of five (5) working days before bid opening.
5. **SCOPE OF WORK.** The scope of work is generally described as: Concrete walls repair and coating and replacement of two grit screw conveyor systems.
6. Questions regarding the bid package should be directed in writing as soon as possible (but no later than five (5) working days prior to the opening of bids to: Irene Huang, PE at ihuang@lgvsd.org or 415-472-1734. Where appropriate, the District may respond to such questions by addenda transmitted to all bid package recipients.
7. The Project Contractor shall furnish all tools, equipment, apparatus, facilities, labor and material necessary to perform and complete in a good and workmanlike manner the construction of the **GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT** Project as shown in the Project Technical Specifications and Drawings and in accordance with the Contract Documents within **60 calendar days** of the Project commencement date specified in the Notice to Proceed for the Project. The Engineer's estimate is **\$125,000**.

8. In accordance with California Business and Professions Code Section 7028.15, all Project work must be performed by properly licensed contractors and subcontractors with active licenses in good standing as of the date and time specified for bid opening. A **Class A General Contractors** license would be required.
9. In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the project is to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in the California Labor Code shall be paid to all workers engaged in performing the project. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for work in the locality in which the project is to be performed.
10. In accordance with California Labor Code Section 1773, the District has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the project is to be performed for each craft, classification or type of worker needed to perform the project. A copy of wage rates is available online at www.dir.ca.gov/DLSR/PWD. In accordance with California Labor Code Section 1777.1, contractors and subcontractors that are found guilty of willfully violating Chapter 1 of Part 7 of Division 2 of the Labor Code (except for Section 1777.5), or that are found guilty of such violations with intent to defraud, and entities in which such contractors or subcontractors have any interest, may be ineligible to bid on, be awarded, or perform Project work as a subcontractor.
11. Department of Industrial Relations Registration of Contractors & Subcontractors:
 - a. Beginning on March 1, 2015, pursuant to Labor Code Sections 1772 and 1771.1(b) - all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations.
 - b. No bid will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations.
 - c. Beginning on April 1, 2015, pursuant to Labor Code Section 1725.5 - no Contractor or subcontractor may work on a public works project unless registered with the Department of Industrial Relations.
 - d. Pursuant to Labor Code Section 1771.4(a)(1) - all contractors and subcontractors must furnish Certified Payroll Records (CPRs) weekly to the Agency they are contracted with and file electronic 5 certified payroll records weekly directly to the Labor Commissioner, Division of Labor Standards Enforcement (DLSE).
 - e. Pursuant to Labor Code Section 1776(c) - the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or forms that contain the same information as the forms provided by the division.
 - f. Pursuant to Labor Code 1771.5 - the awarding agency shall withhold contract payments when payroll records are delinquent or inadequate.
 - g. Pursuant to Title 8 California Code of Regulations Section 16451(d)/Labor Code Section 1771.4(a) (2) - the contractor must post job Posters and Notices as required by Department of Industrial Relations and as required by other State agencies.
 - h. Pursuant to Labor Code Section 1773.3 - the Public Agency must file a PWC 100 Form with the DIR within 5 days of the award of a public works project. PWC Form 100 will be amended to reflect changes in contract time. The DIR will also be notified within 5 days of the completion of project. In bidding on this Project, it shall be the Bidders sole

responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law(s) in the Project bid.

12. Pursuant to Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors who are ineligible to perform work either as a contractor or subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations at www.dir.ca.gov/DLSE/Debar.html

13. Prior to starting work, the Contractor must furnish the following:

- a. Faithful Performance Bond in an amount not less than 100% of the amount of the contract.
- b. Labor and Material Bond in the sum of not less than 100% of the amount of the contract.
- c. A certificate of Worker's Compensation Insurance with waiver of subrogation in favor of the District.
- d. Commercial general liability insurance coverage is \$2 million each occurrence Bodily Injury and \$10 million each occurrence Property Damage, with defense costs payable in addition to policy limits.
- e. Automobile liability insurance is \$2 million each person Bodily Injury, \$2 million each occurrence Bodily Injury and \$2 million each occurrence Property Damage.
- f. Insurance policies shall contain an endorsement naming the District, their employees, representatives, and agents as additional insureds, but only with respect to liability arising out of the activities of the named insured.
- g. The policies shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.
- h. Written notice of cancellation or of any limits reduction or change in said policy shall be mailed to the District and the Project Manager thirty (30) days in advance of the effective date thereof. Insurance policies shall contain a Notice of Cancellation endorsement.
- i. Contractor's insurance shall be primary insurance and no other insurance or self-insured retention carried or held by District shall be called upon to contribute to a loss covered by insurance for the named insured.

14. All bids will remain valid for sixty (60) calendar days after the bid opening. Except as permitted by law and subject to all applicable remedies, including forfeiture of bidder's security, bidders may not withdraw their bid during the sixty (60) day period after the bid opening.

Las Gallinas Valley Sanitary District

By: /s/ Michael P. Cortez
Michael P. Cortez, P.E., District Engineer

Date: July 8, 2021

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BIDDER'S CHECKLIST

Name of Bidder: _____
(Contractor's Legal Name)

Did You:

- ___ Send a properly completed Acknowledgement form immediately after receiving the Contract Documents and before bid opening when applicable.
- ___ Include with your bid the following properly completed, accurate copies of the following documents in the following order using the forms included in the Contract Documents:
 - ___ Bidder's Check List
 - ___ Proposal and Bid Schedule
 - ___ Acknowledgement of each addendum issued by the District, if any, with signed and dated acknowledgement page.
 - ___ Executed Bid Bond
 - ___ Non-Collusion Affidavit
 - ___ Executed Bidder's Signature Page
- ___ Arrange to have the bid delivered to the Las Gallinas Valley Sanitary District offices at 101 Lucas Valley Rd, Suite 300, California 94903, or emailed to: Michael P. Cortez at mcortez@lgsd.org and cc: Irene Huang at ihuang@lgsd.org, before the time and day specified on the Notice Inviting Informal Bids.

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PROPOSAL AND BID SCHEDULE

TO THE BOARD OF DIRECTORS OF THE LAS GALLINAS VALLEY SANITARY DISTRICT:

Pursuant to the Notice Inviting Informal Bids for the **GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT**, the person signing the bidder's signature page contained in this proposal binds the entity listed on the bidder's signature page to submit complete, executed copy of the CONTRACTOR AGREEMENT within seven (7) calendar days of receiving written Notice of Award of the Project, and to fully perform the Project by the time for completion specified in the Contract Documents for the price specified in the bid schedule below in accordance with the terms of the Contract Documents and applicable law. This proposal cover page and bid schedule will be included as part of the CONTRACTOR AGREEMENT in accordance with the Contract Documents.

This bid includes properly completed, accurate copies of all the documents listed in the Bidder's Check List included in the Contract Documents in the order listed in the Bidder's Check List and using the forms included in the Contract Documents. This bid includes copies of each of the following addenda issued by the District. Each addendum has been signed and dated to confirm receipt on behalf of the entity listed on the bidder's signature page.

Addendum No. 1 dated _____

Addendum No. 2 dated _____

Addendum No. 3 dated _____

Addendum No. 4 dated _____

Addendum No. 5 dated _____

Addendum No. 6 dated _____

DESCRIPTION OF LUMP SUM BID ITEMS AND BID SCHEDULE:

For the construction of **GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT** complete in place and specified, including but not limited to:

1. Mobilization and demobilization, including preparatory work and operations, establishment of facilities necessary to work on the Project, prevailing wage compliance, all General Conditions requirements, and cleanup to the satisfaction of the District at the completion of the Project.
2. Furnish and install two (2) stainless steel submersible shafted grit screw conveyors compatible with the existing grit chambers.
 - a. See Exhibit A for shop drawings of the existing screw conveyor system.
 - b. See Exhibit B for relevant information on the existing grit chambers.
 - c. See Technical Specifications for detailed requirements.
3. Electrical and Mechanical Demolition
4. Removal and offsite disposal of the existing Grit Chamber 1 & 2 screw conveyor system and associated components.
5. Field verification of existing as-built dimensions prior to placing an order.
6. Freight Charges and Taxes
7. Shop Drawings
8. O&M Manuals
9. Testing & Startup
10. Staff Training

TOTAL BASE BID, LUMP SUM, BASIS OF AWARD:

\$ _____
(In figures)

BID BOND

(NOTE: Bidders must use this form, or use of any other bid bond form may render a bid non-responsive)

KNOW ALL MEN BY THESE PRESENTS:

That we, as PRINCIPAL, and _____, a (sole proprietorship /corporation/partnership/joint venture) organized and existing under and by virtue of the laws of the State of _____ and an admitted surety insurer authorized to do business in the State of California, as SURETY, are held and firmly bound unto the Las Gallinas Valley Sanitary District, as OBLIGEE, in a penal sum equal to ten-percent (10%) the total bid price including the base bid and alternates specified in the proposal of the PRINCIPAL, to the OBLIGEE for the work described below, which penal sum is _____ (\$ _____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the PRINCIPAL has submitted the accompanying proposal dated _____, _____ to the OBLIGEE, for the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT.

NOW THEREFORE, if the PRINCIPAL shall not withdraw said proposal within the ninety (90) day period following the opening of bids, and if the PRINCIPAL receives written notice that the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, is awarded to the PRINCIPAL and shall, within seven (7) calendar days of receiving such notice: enter into a written contract with the OBLIGEE in the form prescribed in the Contract Documents issued by the OBLIGEE concerning the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT; and give insurance and bond with good and sufficient sureties guaranteeing the faithful performance and proper fulfillment of such contract and guaranteeing payment for labor and materials used for performance of the contract as required by law; and file with the OBLIGEE all required documents and do all other thing required in accordance with the Contract Documents issued by the OBLIGEE concerning the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, for the contract between the PRINCIPAL and the OBLIGEE to become effective and for work to commence in accordance with the Contract Documents issued by the OBLIGEE concerning the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, or, in the event of withdrawal of the accompanying proposal within the sixty (60) day period following the opening of bids; or failure by the PRINCIPAL to enter into such contract with the OBLIGEE or to give the OBLIGEE such bonds or to file any other documents or to do any other things required in the Contract Documents issued by the OBLIGEE for the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, if the PRINCIPAL shall pay the OBLIGEE the difference between the total bid price in the accompanying proposal and the amount for which the OBLIGEE may procure the required performance, if the latter amount be in excess of the former, together with all costs incurred by the OBLIGEE in again attempting to let the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT and if the said PRINCIPAL shall fully reimburse and save harmless the OBLIGEE from any damage sustained by the OBLIGEE through failure of the PRINCIPAL to enter into the written contract or to file the required performance or labor and material bonds, or to file any other required documents or to do any other things required for the contract between the PRINCIPAL and the OBLIGEE to become effective and the work to commence in accordance with the Contract Documents issued by

the OBLIGEE concerning the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect.

SURETY, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the bid or contract for the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, or to the specifications included in the same, or to the work to be performed there under, or to the notice to bidders, or to any other documents concerning the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, shall in anywise affect SURETY's obligation under this bond, and SURETY hereby waives notice of any such change, extension of time, alteration or addition to such bid or contract.

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

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, _____, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by their undersigned representatives, pursuant to authority of their governing bodies.

(Corporate Seal)

PRINCIPAL _____

By _____

(Acknowledgement)

Title _____

(Corporate Seal)

SURETY _____

By _____

(Attorney-in-fact)

(Acknowledgement)

Title _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond.)

NON-COLLUSION AFFIDAVIT

TO BE EXECUTED BY BIDDER
AND SUBMITTED WITH BID

STATE OF CALIFORNIA)
)
COUNTY OF _____)

_____, being first duly sworn, deposes and says that he or she is _____ of _____, the party making the foregoing bid, that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Signature of Bidder

(Acknowledgement)
Subscribed and sworn before me by _____, this _____
day of _____, _____.

(SEAL) _____
Notary Public

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BIDDER'S SIGNATURE PAGE

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the information submitted with this proposal for the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, which information includes, but is not limited to, the Bidder's Check List, Proposal and Bid Schedule, Acknowledgement of Bid Addenda, Bid Bond, and Non-Collusion Affidavit, are accurate, true and correct, and are submitted in accordance with the requirements of the Contract Documents issued by the Las Gallinas Valley Sanitary District concerning the GRIT SCREW CONVEYOR SYSTEMS REPLACEMENT, and applicable law. By my signature on this proposal, I further certify that I am legally authorized to bind the bidder in accordance with the requirements of the Contract Documents.

Date: _____

Typed or Printed Name: _____

Signature: _____

Bidder: _____

Bidder Business Address (Street, City, State and Zip Code)

Bidder Business Phone No.: _____

Bidder Business Fax No.: _____

Bidder Email Address: _____

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CONTRACTOR AGREEMENT

(THE ATTACHED FORM MUST BE SIGNED BY AN AUTHORIZED OFFICIAL AFTER THE AWARD OF A CONTRACT BY THE DISTRICT.)

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CONTRACTOR AGREEMENT

PROJECT NAME

(JOB NO. _____)

THIS AGREEMENT made this _____ day of _____ 20____, by and between the **LAS GALLINAS VALLEY SANITARY DISTRICT** (hereinafter referred to as "DISTRICT"), and _____, whose address is _____, (hereinafter referred to as "CONTRACTOR").

WITNESSETH:

IN CONSIDERATION of the mutual covenants and conditions herein contained, the parties do hereby agree as follows:

1. **General**

DISTRICT engages CONTRACTOR to furnish the services hereinafter mentioned upon the covenants and conditions of this Agreement, at the compensation herein stipulated, and CONTRACTOR accepts said engagement upon said terms.

2. **Duties of Contractor: Services to be Performed by Contractor**

CONTRACTOR shall perform such duties and services as are listed on Exhibit A attached hereto, signed by the parties hereby referred to and made part hereof by reference. Said services shall be completed according to the time schedule contained in Exhibit A.

3. **Services or Materials to be Performed or Furnished by District**

DISTRICT shall perform such services or furnish such materials to CONTRACTOR in connection with this Agreement as are set forth on Exhibit B. If there are no entries on said Exhibit B, DISTRICT shall not be required to provide any services or furnish any materials to CONTRACTOR. Unless otherwise provided on Exhibit B, all said services and materials to be furnished by DISTRICT will be without cost to CONTRACTOR.

4. **Payment by District: Time and Manner of Payment**

DISTRICT shall pay CONTRACTOR, for all services to be rendered and all materials to be furnished under this Agreement, the amount specifically set forth and in the manner specifically set forth on Exhibit A. CONTRACTOR agrees to accept said sum as full compensation for all services under this Agreement.

5. **Additional Work**

CONTRACTOR shall only be entitled to extra compensation for services or materials not otherwise required under this Agreement, if DISTRICT shall first have identified the services or

materials as extra and requested such extra services or materials in writing; but, in no event shall DISTRICT be liable for payment unless the amount of such extra compensation shall first have been agreed to in writing by DISTRICT.

6. Professional Skill

CONTRACTOR represents that CONTRACTOR is skilled and licensed by the State of California in the professional calling necessary to perform the work agreed to be done under this Agreement. DISTRICT relies upon the skill of CONTRACTOR to do and perform its work in a skillful manner, and CONTRACTOR agrees to thus perform its work, and the DISTRICT'S acceptance of CONTRACTOR'S work shall not operate as a release of CONTRACTOR from this Agreement. For purposes of this Agreement, "skillful manner" shall mean the prevailing industry standard during the term of this Agreement.

7. Equal Employment Opportunity

CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, religion, creed, national origin, amnesty, physical handicap, medical condition, marital status or sex of such person except as provided in Section 12940 of the Government Code.

8. Compliance with Laws

CONTRACTOR shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations and the orders and decrees of any courts or administrative bodies or tribunals in any manner affecting the performance of the Agreement. Compliance with this section shall include, but not limited to, the following:

- a. CONTRACTOR shall set forth:
 1. The name and the location of the place of business of each subcontractor who will perform work or labor or render service to the CONTRACTOR pursuant to Public Contract Code § 4104.
 2. The name and location of the place of each subcontractor certified as a minority, women, or disabled veteran business enterprise who will perform work or labor or render service to the CONTRACTOR to fulfill minority, women, and disabled veteran business enterprise goals pursuant to Public Contract Code § 2001.
- b. CONTRACTOR and its subcontractors shall pay "prevailing wages" in compliance with Labor Code § 1773.

9. Independent Contractor

CONTRACTOR is acting as an independent contractor in furnishing the services or materials and performing the work required by this Agreement and is not an agent, servant or employee of DISTRICT.

10. Indemnity

CONTRACTOR agrees to indemnify, save harmless and defend DISTRICT, its officers and employees from all costs, expenses, claims, liabilities or damages to persons or property arising out of or in any way connected with the performance of the CONTRACTOR'S work by the CONTRACTOR, its officers, employees, agents, contractors, subcontractors or any officer, agent or employee thereof. However, this indemnity will not extend to any loss, damage, or expense arising out of the active negligence of the DISTRICT or the DISTRICT'S.

11. Insurance: Public Liability, Worker's Compensation

CONTRACTOR shall maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the CONTRACTOR, and their agents, representatives, or employees.

See Exhibit C for DISTRICT Insurance Requirements

12. Work Safety

CONTRACTOR shall provide adequate employee supervision and comply with all safety regulations while performing activities in connection with this Agreement. CONTRACTOR acknowledges that he has been provided and understands the DISTRICT'S safe work requirements listed as Exhibit D.

13. Notices

Unless otherwise provided herein, all notices required hereunder shall be given by certified mail, postage prepaid and addressed to the party at the address indicated in the opening paragraph of this Agreement provided however, that in lieu thereof, notice may be given by personal delivery to the party at said address.

14. Title to Documents

All original calculations, photographs, maps, drawings, plans, design notes and other material or documents developed or used in connection with the performance of this Agreement shall be the property of DISTRICT provided, however, that CONTRACTOR may provide DISTRICT with legible photostatic copies thereof in lieu of the originals upon approval by DISTRICT representative. Any plans and specifications shall bear the name of the CONTRACTOR.

15. Assignment

Neither party shall assign or sublet any portion of this Agreement without the written consent of the other party in writing.

16. Termination

Without limitation to such rights or remedies as DISTRICT shall otherwise have by law, DISTRICT shall also have the right to terminate this Agreement for any reason upon seven (7) days' written notice to CONTRACTOR. This Agreement may also be terminated by either party upon seven (7) days' written notice should the other party fail substantially to perform in accordance with this Agreement through no fault of the other or if the project is stopped by conditions beyond the control of the DISTRICT.

17. Venue

Venue for any action of any nature regarding this Agreement shall be in Superior Court in the County of Marin.

18. Miscellaneous

Failure on the part of either party to enforce any provisions of this Agreement shall not be construed as a waiver or the right to compel enforcement of such provisions or any other provision.

19. Additional Provisions, Exhibits

Additional provisions of this Agreement are set forth on Exhibit F. All Exhibits shall be attached to, signed by the parties, and are hereby referred to and made a part hereof by reference.

20. Attorneys' Fees

If any party to this contract resorts to an action or arbitration to enforce or interpret any provision of this contract, the prevailing party shall be entitled to recover reasonable attorneys' fees in addition to any other relief to which that party may be entitled.

21. Severability

If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

22. Entire Agreement: Amendment

This contract supersedes any and all other agreements, whether oral or in writing, between the parties with respect to the subject of this contract. Except as to those documents specifically incorporated by reference into this contract, this contract contains all of the covenants and agreements between the parties with respect to the subject of this contract, and each party acknowledges that no representations, inducements, promises, or agreements have been made by or on behalf of any party except the covenants and agreements embodied in this

contract. No agreement, statement, or promise not contained in this contract shall be valid or binding on the parties with respect to the subject of this contract. No modifications hereof shall be effective unless such modification is in writing signed by all parties to this Agreement.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

LAS GALLINAS VALLEY SANITARY DISTRICT

By _____
General Manager Date

CONTRACTOR COMPANY NAME

By _____
Signature Date

Print Name & Title

NOTE: The following exhibits are hereby incorporated into this Agreement by this reference:

- Exhibit A: Scope of Work
- Exhibit B: Services or Materials to be Performed or Furnished by District (Not Used)
- Exhibit C: General Conditions
- Exhibit D: District Safe Work Requirements
 - 1. Contractor/Consultant Safe Work Requirements
 - 2. Confined Space Entry Program
- Exhibit E: Contractor's License & Workers' Compensation Insurance Info
- Exhibit F: Performance Bond
 - Payment/Labor and Materials Bond
 - 3-Year Maintenance Bond (Not Used)

Exhibit A
Scope of Work
(Not Used)

Exhibit B

**Services or Materials to be Performed or Furnished by District
(Not Used)**

Exhibit C - General Conditions
LAS GALLINAS VALLEY SANITARY DISTRICT
300 Smith Ranch Road
San Rafael, California 94903

GENERAL CONDITIONS

1. DEFINITIONS:

The following terms as used in any agreement of which these General Conditions are a part are defined as follows:

- 1.1 Agreement: The agreement between the District and Contractor concerning the Project, as evidenced by and comprised of the Contract Documents.
- 1.2 Architect or Engineer: The person or persons so specified on the title sheet of the Technical Specifications and/or Drawings.
- 1.3 Bid Package: All of the documents listed as comprising the entire Bid Package as specified in the Notice Inviting Informal Bids and representing the full set of documents made available to bidders on the Project.
- 1.4 District: Las Gallinas Valley Sanitary District
- 1.5 Documents/Contract Documents: All those documents listed in the Project agreement as comprising the entire agreement between the District and the Contractor.
- 1.6 Construction Manager – The person, firm, designated in writing by the District to act as its representative at the construction site and to perform construction observation services and administrative functions relating to this Contract. All contact by the Contractor with the District shall be through the Construction Manager.
- 1.7 Contractor: The successful bidder for the Project and party to the Project agreement with the District as specified in the Project agreement.
- 1.8 Days: Unless otherwise specified in the Contract Documents, days mean working days. Where necessary for clarity, calendar days and working days are appropriately specified as such in the Contract Documents.
- 1.9 Project: The project as described in the Notice Inviting Informal Bids and the Technical Specifications and Drawings.
- 1.10 District Engineer: The District's authorized representative for administration and overall management of the Project agreement and Work. The District Engineer is the official point of contact between the District, the Architect and/or Engineer, and the Contractor.
- 1.11 Owner: Las Gallinas Valley Sanitary District
- 1.12 Drawings: The primarily graphic detailed requirements concerning the Project issued prior to bid opening, Equal Product Proposals accepted by the District and signed by authorized District representatives prior to bid opening, and change orders and other

amendment to the Drawings signed by authorized representatives of the District and the Contractor in accordance with the requirements of the Contract Documents.

- 1.13 Project Inspector: The party or parties charged by the District with inspecting the Work for compliance with the requirements of the Contract Documents and applicable laws and regulations. The Project Inspector acts under the direction of the District and shall coordinate with the District Engineer and Architect as directed by the District in accordance with the Contract Documents.
- 1.14 Subcontractor: A person, firm or corporation that is obligated as a party to a contract with the Contractor to perform part of the Project work. For purposes of these General Conditions Subcontractors include, but are not limited to, those that are obligated as parties to a contract with the Contractor to specially fabricate and install a portion of the Project Work according to the Technical Specifications and/or Drawings.
- 1.15 Technical Specifications: The detailed Project requirements contained in the Bid Package and any addenda to the Technical Specifications signed by authorized District representatives and issued prior to bid opening, Equal Product Proposals accepted by the District and signed by authorized District representatives prior to bid opening, and change orders and other amendments to the Technical Specifications signed by authorized representatives of the District and the Contractor in accordance with the requirements of the Contract Documents.
- 1.16 Work: The furnishing of all equipment, tools, apparatus, facilities, material, labor and skill necessary to perform and complete in a good and workmanlike manner the Project as shown in the Technical Specifications and Drawings in accordance with the Contract Documents and applicable law.
- 1.16 Written Notice: Will be deemed to have been duly served for purposes of these General Conditions and any agreement of which they are a part if delivered in person to the individual or to a member of the firm or to any office of the corporation for whom the notice is intended, or if sent by registered or certified mail to the last known business address known to the party giving notice. Unless otherwise specified in the Contract Documents, the last known address of the Contractor shall be that listed in the Contractor's Pre-Qualification Application.

2. SCOPE OF WORK

- 2.1 Documents Furnished by District. The District will furnish to the Contractor, free of charge, five (5) sets of half-size prints of the Drawings and Technical Specifications for execution of the Work. Throughout the performance of the Work the Contractor must keep one copy of the Drawings and Technical Specifications in good order and available for review by the District Engineer, the Engineer, the Architect, and any other District contractors or representatives.
- 2.2 Ownership of Documents Furnished by District. All documents furnished by the District, including, but not limited to, the Technical Specifications, Drawings, and any copies, are the property of the District. Documents furnished by the District may not be used on any other work. All documents furnished by the District must be returned to District upon completion of the Work.

2.3 Technical Specifications and Drawings.

- 2.3.1 The Technical Specifications and Drawings are complementary and intended to mutually describe the Work necessary to complete the Project in accordance with the Contract Documents.
- 2.3.2 In general, the Drawings indicate dimensions, position and kind of construction, and the Technical Specifications indicate qualities and methods. Any Work indicated on the Drawings and not mentioned in the Technical Specifications or vice versa must be furnished as though fully set forth in both. Work that is not particularly detailed, marked or specified shall be the same as similar Work that is detailed, marked or specified. The Contractor must furnish items necessary for the operation of equipment depicted in the Drawings or specified in the Technical Specifications that are suitable to allow such equipment to function properly at no extra charge.
- 2.3.3 The Contractor must notify the District Engineer and the Architect as soon as possible of any apparent errors or inconsistencies, including, but not limited to, typographical or notational errors in the Drawings, Technical Specifications, and/or in work done by others affecting the Work. The District Engineer will issue instructions concerning any such apparent errors or inconsistencies. If the Contractor proceeds with Work impacted by apparent errors or inconsistencies without instructions from the District Engineer, the Contractor shall do so at its sole risk and shall have all of the obligations and the District shall have all of the rights and remedies specified in Section 11 concerning any resulting damage or defect.
- 2.3.4 The General Conditions apply with equal force to all of the Work, including extra work authorized by the District Engineer in accordance with the Contract Documents. The Contractor must submit any required shop diagrams and/or drawings by the times and in the quantities indicated in the Technical Specifications. Any such shop diagrams and/or drawings must show completely the Work to be done, expanding on the Drawings concerning details not previously shown, field conditions and the condition of the Work. Architect or Engineer review of such shop diagrams and/or drawings will concern conformance with the requirements of the Contract Documents only. The Architect or Engineer assumes no responsibility for the correctness or accuracy of the dimensions or any other contents of any shop diagrams and/or drawings submitted by the Contractor. The Contractor must check all dimensions at the Work site. Shop diagrams and/or drawings must be clearly marked with the name of the Project and the name of the Contractor, subcontractor or supplier making the submittal, and must be stamped and signed by the Contractor and submitted under a signed transmittal letter from the Contractor certifying that all dimensions have been checked at the Work site. These requirements are mandatory. The Architect or Engineer will not review shop diagrams and/or drawings that do not satisfy these requirements. The Contractor will be responsible for any and all discrepancies between dimensions of the actual Project site and/or Work and those shown on shop diagram and/or drawings submitted by the Contractor, and for any other errors contained in or resulting from such shop diagrams and/or drawings, including, but not limited to, errors in

material and/or equipment quantities and any resulting errors, delays or additional cost in the performance of the Work. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any discrepancies or errors in shop diagrams and/or drawings submitted by the Contractor, and concerning any resulting errors, delays or additional costs in the performance of the Work.

3. CONTROL OF WORK AND MATERIAL

- 3.1 District Engineer's Status. The District Engineer will administer the Project in accordance with the Contract Documents. After execution of the agreement and issuance of the Notice to Proceed, all correspondence and/or instructions concerning the Project between the Contractor and/or District shall be forwarded through the District Engineer. Except as otherwise provided in the Contract Documents, the District Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, or procedures or for safety precautions in connection with the Work. The District Engineer, however, will have authority to reject materials and/or workmanship that do not conform to the requirements of the Contract Documents. The District Engineer will also have the authority to require inspection or testing of the Work.
- 3.2 Architect or Engineer's Status. The Architect or Engineer will advise the District Engineer concerning decisions on all claims of the Contractor and all other matters relating to the execution and progress of the Work or the interpretation of the Contract Documents. The Architect or Engineer will also advise the Construction Manger concerning Work that does not conform to the Contract Documents. Whenever, in the Architect's or Engineer's opinion, it is necessary or advisable in accordance with the Contract Documents, the Architect or Engineer may recommend to the District Engineer inspection or testing of the Work, whether or not such Work is then fabricated, installed or completed.
- 3.3 Inspection and Testing of Work and Material.
- 3.3.1 The District, the District Engineer, the Architect or Engineer and their representatives will have access to the Work at all times wherever it is in preparation or progress. The Contractor must provide proper facilities for such access and for inspection.
- 3.3.2 The Contractor must inspect all materials as delivered and promptly return all defective materials without waiting for their rejection by the District Engineer or Architect or Engineer.
- 3.3.3 If the District Engineer, the Technical Specifications, or any laws, ordinances, or any public authority require any Work to be tested or approved, the Contractor must give the District Engineer timely notice of the Contractor's readiness for inspection. Inspections will be promptly made, and where practicable, at the source of supply. Any work subject to such testing that is covered up without timely notice to the District Engineer or without the approval or consent of the District Engineer must, if required by the District Engineer, be uncovered for examination at the Contractor's expense. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are

specified in Section 11 concerning any work subject to testing that is covered up without timely notice to the District Engineer and that is not uncovered for examination at the Contractor's Expense if required by the District Engineer.

3.3.4 Tests of materials or qualification tests required by the Contract Documents must be made in accordance with the Technical Specifications and the requirements of the California Building Standards Code as adopted by the District and other applicable law. Copies of all testing reports shall be distributed as required in the Technical Specifications.

3.3.5 The District or its representatives may order re-examination of questioned Work. If ordered to do so, the Contractor must uncover such Work. If such Work is found to be according to the Contract Documents, the District shall pay the cost of uncovering and restoring the Work, unless such Work was subject to testing and covered up without timely notice to or approval of the District Engineer. If re-examined Work is found not in accordance with the Contract Documents, the Contractor must pay the cost of uncovering and restoring the Work. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any re-examined Work not in accordance with the Contract Documents that the Contractor fails to uncover and restore at the Contractor's expense.

3.3.6 The Contractor must replace or correct without charge any material or workmanship found not to conform to the requirements of the Contract Documents, unless the District consents to accept such material or workmanship with an appropriate adjustment in the Contract Price. The Contractor must promptly segregate and remove non-conforming material from the Work site. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any failure by the Contractor to replace or correct without charge any material or workmanship that does not conform to the requirements of the Contract Documents and that the District has not consented to accept.

3.4 Samples Furnished by the Contractor. The Contractor must furnish all samples for approval as directed in sufficient time to permit the Architect or Engineer to examine, approve and select samples before they are required by the progress of the Work. Portions of the Work for which samples are required and for which the Architect or Engineer has selected samples must be in accordance with such approved samples. Samples must be sent prepaid to the office of the District Engineer or to such place as the District Engineer may direct.

3.5 Materials and Substitutions.

3.5.1 Materials used for the Work must be new and of the quality specified. When not particularly specified, materials must be the best of their class or kind. The Contractor must, if required, submit satisfactory evidence as to the kind and quality of materials.

3.5.2 If the Contractor submitted complete information to the District Engineer for products proposed as equals in accordance with the Bid Package, and the District approved such products proposed as equals in writing, the Contractor may either furnish such products approved as equals, or furnish the products

listed by manufacturer name, brand or model number in the Technical Specifications or Drawings. The District retains the right, in its sole discretion, to accept or reject any other proposed substitution. To be considered, proposals concerning products proposed as equals must include sufficient information to permit the District to determine whether the products proposed as equals will satisfy the same performance requirements as products listed by manufacturer's name, brand or model number. Such performance requirements may include, but are not limited to, size, strength, function, appearance, ease of maintenance and repair, and useful life requirements. If the District does not accept a proposed substitution, the Contractor must furnish the product specified in the Technical Specifications or Drawings for the Contract Price, regardless of whether the product is specified by manufacturer's name, brand or model number, or otherwise.

3.5.3. During the performance of the Work, all materials must be neatly stacked, properly protected from the weather and other adverse impacts, and placed so as to avoid interference with efficient progress of the Work, with other activities of the District, or with the use of existing District facilities by the public. All materials must be delivered so as to ensure efficient and uninterrupted progress of the Work. Materials must be stored so as to cause no obstruction and so as to prevent overloading of any portion of the Work. The Contractor will be responsible for damage or loss of materials delivered to and/or stored at the Work site due to weather or other causes. The Contractor must promptly remove from the Work site all materials rejected by the District or its representatives as failing to conform to the requirements of the Contract Documents, whether such non-conforming materials have been incorporated in the Work or not. If the District or its representatives so direct, the Contractor must promptly replace and re-execute Work performed by the Contractor and order the replacement and re-execution of Work performed by subcontractors using non-conforming materials with materials that satisfy the requirements of the Contract Documents without expense to the District. The Contractor will bear the expense of making good all Work destroyed or damaged by such removal. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any failure by the Contractor to replace or re-execute Work using non-conforming materials, and/or to make good all work destroyed or damaged by such removal and/or execution.

3.6 Audits and Examination of Records. The District may examine and audit at no additional cost to the District all books, estimates, records, contracts, documents, bid documents, bid cost data, subcontract job cost reports and other Project related data of the Contractor, subcontractors engaged in performance of the Work, and suppliers providing supplies, equipment and other materials required for the Work, including computations and projections related to bidding, negotiating, pricing or performing the Work or contract modifications and other materials concerning the Work, including, but not limited to, Contractor daily logs, in order to evaluate the accuracy, completeness, and currency of cost, pricing, scheduling and any other project related data. The Contractor will make available all such Project related data at all reasonable times for examination, audit, or reproduction at the Contractor's business office at or near the Work site, and at any other location where such Project related data may be kept until three years after final payment under the Agreement. Pursuant to California

Government Code Section 8546.7, if the amount of public funds to be expended is in excess of \$10,000, this Agreement shall be subject to the examination and audit of the State Auditor, at the request of the District, or as part of any audit of the District, for a period of three (3) years after final payment under the Agreement.

3.7 Advertising. No advertising signs of any kind may be displayed on the Work site, or on fences, offices or elsewhere adjacent to the Work site.

3.8 Project Schedule **(As Needed)**. Within seven (7) calendar days of the Notice to Proceed, the Contractor shall submit a schedule showing each task of Work, the sequence of each task, the number of days required to complete each task, and the critical path controlling the completion of the entire Work. The schedule shall allow for the completion of the entire Work within the Time for Completion.

3.8.1 District Review of Schedule. The District may review the Contractor's submitted schedule and may note any exceptions. The Contractor shall correct any exceptions noted by the District within five (5) working days of being notified of the exceptions.

3.8.2 Update of Schedule. After submission of a schedule to which the District has taken no exceptions, the Contractor shall submit an updated schedule on a biweekly basis until completion of the Work. The updated schedule shall show the progress of Work as of the date specified in the updated schedule.

3.8.3 Float. The schedule shall show early and late completion dates for each task. The number of working days between these dates shall be designated as "float". The Float shall be designated to the Project and shall be available to both the District and the Contractor as needed.

3.8.4 Failure to Submit Schedule. If the Contractor fails to submit the schedule within the time period specified in Section 3.8, or the updated schedule as specified in Section 3.8.2, or submit a schedule to which the District has taken uncorrected exceptions, **the District shall be entitled to withhold payment for the next application for payment submitted after the schedule or updated schedule becomes late.**

3.8.5 Responsibility for Schedule. The Contractor shall have sole and exclusive responsibility for creating the schedule and properly updating it. The District has no authority to approve the schedule. The District may note exceptions to any schedule submitted by the Contractor. However, it shall be the Contractor's sole responsibility to determine the proper method to address exceptions and the District's review of the schedule shall not serve to place any such obligation on the District.

4. CHANGES IN WORK

4.1 District Directed Change Orders. The District may at any time during the progress of the Work direct any amendments to the Work or any of the Contract Documents, including, but not limited to the Technical Specifications, or Drawings. Such amendments will in no way void the agreement, but will be applied to amend the Contract Price, if such amendments affect the Contract Price, the Project schedule, if

such amendments affect the Project schedule, or any other provision of the Contract Documents based on a fair and reasonable valuation of the amendment in accordance with this Section 4.

- 4.2 Writing Requirement. Change orders and other amendments to the Technical Specifications, the Drawings, or other Contract Documents may be made only by a writing executed by authorized representatives of the District and the Contractor.
- 4.3 Contractor Proposed Change Orders. Unless the District Engineer otherwise authorizes or the District and the Contractor otherwise agree, change order proposals submitted by the Contractor must be submitted to the District Engineer no later than the time of the proposed change.
- 4.4 All Change Orders. All change order proposals must be submitted on completed Change Order forms provided in the Contract Documents. All such change order proposals must itemize all cost impacts of the proposed change order and include a total price for that change order and the amended Contract Price that would become effective upon execution of the change order. All change order proposals must specify any change in the Project schedule, or in any project milestone including, but not limited to, the Time for Completion, under the change order. It is understood that change orders that do not specify a change in any milestone, including, but not limited to, the Time for Completion, may be accomplished by the Time for Completion then in effect.
- 4.5 Change Order Pricing. Change order pricing will be governed by the following:
 - 4.5.1 Unit prices specified in the Contract Documents will apply to cost impacts involving items for which the Contract Documents specify unit prices.
 - 4.5.2 Cost impacts involving items for which no unit prices are specified will be calculated by adding the itemized actual direct cost that would be added or reduced under the change order and an allowance for indirect costs in accordance with this Section. Itemization for direct costs for required labor must include the classifications of labor required, the total hours required for each classification, the hourly rate for each classification and other labor related costs such as liability and workers compensation insurance, social security, retirement and unemployment insurance. All other cost impacts for which no unit prices are specified must be itemized as appropriate, including the cost of tools, vehicles, phones and other equipment, and the cost of all required materials or supplies. Indirect costs added under a change order may not exceed an allowance of seven (7) percent of the total of combined Contractor and subcontractor direct costs added under the change order. Such allowance covers Contractor overhead and profit under the change order and includes the cost of insurance in addition to that required pursuant to Section 8.8, bond premiums, superintendent labor, clerical labor, home office expenses, worksite office expenses, and utility costs under the change order. Such costs may not be itemized as direct costs under a change order. Indirect costs deducted under a change order will be calculated in exactly the same way as indirect costs added under a change order, except indirect costs deducted under a change order may not exceed an allowance of seven and a half (7.5) percent of

the total of combined Contractor and subcontractor direct costs deducted under the change order.

- 4.6 Liability Under Unapproved Change Orders. The Contractor shall be solely responsible for any and all losses, costs, or liabilities of any kind incurred by the Contractor, any subcontractor engaged in the performance of the Work, any party supplying material or equipment for the Work or any third party that are incurred pursuant to Contractor-proposed change orders prior to issuance of an approved change order executed in accordance with this Section 4. The Contractor will have all of the obligations and the District will have all of the rights and remedies that are specified in Section 11 concerning any work or resulting losses, costs, or liabilities pursuant to a Contractor proposed change order before issuance of an approved change order executed in accordance with this Section 4.
- 1.7 Changes Subject to Contract Documents. Any changes in the Work and/or the Contract Documents pursuant to change orders and any other amendments issued in accordance with the Contract Documents, including this Section 4, will in all respects be subject to all provisions of the Contract Documents, including, but not limited to, the Technical Specifications and the Drawings, except as modified by such change orders or amendments.
- 4.8 Change Order Disputes.
- 4.8.1 Disputed District Directed Change Orders. If the Contractor disputes a District directed change order following a reasonable effort by the District and the Contractor to resolve the dispute including, at a minimum, a meeting between appropriate representatives of the Contractor and the District, the Contractor must commence performing the Work consistent with the disputed change order within five (5) working days of the last meeting between representatives of the Contractor and the District to resolve the dispute, or within the time specified in the disputed District directed change order, whichever is later. In performing Work consistent with a disputed District-directed change order pursuant to this provision the Contractor will have all of the Contractor's rights concerning claims pursuant to the Contract Documents and applicable law.
- 4.8.2 Disputed Contractor Proposed Change Orders. If the District disputes a Contractor proposed change order, the District and the Contractor will use reasonable efforts to resolve the dispute including, at a minimum, holding a meeting between appropriate representatives of the Contractor and the District. Regardless of and throughout any such efforts to resolve the dispute the Contractor must continue performing the Work irrespective of and unmodified by the disputed change order. In continuing to perform the Work, the Contractor will retain all of the Contractor's rights under contract or law pertaining to resolution of disputes and protests between contracting parties. Disputes between the District and the Contractor concerning any Contractor-proposed change order or other amendment do not excuse the Contractor's obligation to perform the Work in accordance with the Contract Documents excluding such Contractor-proposed change order or other amendment by the Time for Completion or waive any other Project milestone or other requirement of the Contract Documents.

5. TRENCHING AND UTILITIES

5.1 Excavation More Than Four Feet Deep. In accordance with California Public Contract Code Section 7104, if the Work involves excavation more than four feet deep the Contractor must promptly notify the District in writing before disturbing: any material that the Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law; any subsurface or latent physical conditions at the Work site differing from those indicated; or any unknown physical conditions at the Work site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents. The District will promptly investigate any such conditions for which notice is given. If the District finds that the conditions do materially differ, or involve hazardous waste, and would cause a decrease or increase in the cost or time of performance of the Work, the District will issue a change order pursuant to Section 4 of these General Conditions. If a dispute arises between the District and the Contractor concerning whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the cost or time of performance, the Contractor will not be excused from any completion date provided in the Contract Documents, but shall proceed with all Work to be performed. The Contractor will retain all rights under contract or law pertaining to resolution of disputes and protests between contracting parties.

5.2 Excavation of Five Feet or More. In accordance with California Labor Code Section 6705, contractors performing contracts exceeding \$25,000 in cost and involving excavation five or more feet deep must submit for the District's acceptance, prior to excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during excavation. If the plan varies from the shoring system standards, it must be prepared by a registered civil or structural engineer.

5.3 Existing Utilities.

5.3.1 General – The location of known existing utilities and pipelines are shown on the Plans in their approximate locations. However, nothing herein shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the project can be inferred from the presence of other visible facilities, such as buildings, cleanouts, meter and junction boxes, on or adjacent to the site of the Project.

The District will assume the responsibility for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Project site if such utilities are not identified by the District in the Contract Documents or which cannot reasonably be inferred from the presence of other visible facilities.

5.3.2 Utility Location – It shall be the Contractor's responsibility to determine the exact location and depth of all utilities, including service connections, which have been marked by the respective utility owners and which the Contractor believes may affect or be affected by the Contractor's operations. The Contractor shall not be entitled to additional compensation nor time extensions

for work necessary to avoid interferences nor for repair to damaged utilities if the Contractor does not expose all such existing utilities as required by this section.

The locating of utilities shall be in conformance with Government Code Section 4216 et seq. except for the District's utilities located on the District's property and not on public right-of-way.

A "High Priority Subsurface Installation" is defined in Section 4216 (e) as "high-pressure natural gas pipelines with normal operating pressures greater than 415kPA gauge (60psig) or greater than six inches nominal pipe diameter, petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to 60kv, or hazardous materials pipelines that are potentially hazardous to workers or the public if damaged."

A "Subsurface Installation" is defined in Section 4216 (l) as "any underground pipeline, conduit, duct, wire, or other structure, except non-pressurized sewer lines, non-pressurized storm drains, or other non-pressurized drain lines."

Pursuant to Government Code Section 4216.2 the Contractor shall contact the appropriate regional notification center at least two (2) working days but not more than fourteen (14) calendar days before performing any excavation. The Contractor shall request that the utility owners conduct a utility survey and mark or otherwise indicate the location of their service. The Contractor shall furnish to the Construction Manager written documentation of its contact(s) with the regional notification center prior to commencing excavation at such locations.

After the utility survey is completed, the Contractor shall commence "potholing" or hand digging to determine the actual location of the pipe, duct, or conduit. The Construction Manager and District Engineer shall be given notice prior to commencing potholing operations. The Contractor shall uncover all piping and conduits, to a point one (1) foot below the pipe, where crossings, interferences, or connections are shown on the Drawings, prior to trenching or excavating for any pipe or structures, to determine actual elevations. New pipelines shall be laid to such grade as to clear all existing facilities, which are to remain in service for any period subsequent to the construction of the run of pipe involved.

The Contractor's attention is directed to the requirements of Government Code Section 4216.2 (a)(2) which provides: "When the excavation is proposed within 10 feet of a high priority subsurface installation, the operator of the high priority subsurface installation shall notify the excavator of the existence of the high priority subsurface installation prior to the legal excavation start date and time, as such date and time are authorized pursuant to paragraph (1) of subdivision (a) of 4216.2. The excavator and the operator or its representative shall conduct an onsite meeting at a mutually-agreed-on time to determine actions or activities required to verify the location of the high priority subsurface installation prior to start time." The Contractor shall notify the Construction Manager and District Engineer in advance of this meeting.

- 5.3.4. Utility Relocation and Repair – If interferences occur at locations other than those indicated in the Contract Documents with reasonable accuracy, the Contractor shall notify the Construction Manager and District Engineer in writing. The Construction Manager will supply a method for correcting said interferences in accordance with the responsibilities of this section and Government Code Section 4215.

Care shall be exercised by the Contractor to prevent damage to adjacent existing facilities and public or private works; where equipment will pass over these obstructions, suitable planking shall be placed. If high priority subsurface installations are damaged and the operator cannot be contacted, the Contractor shall call 911 emergency services.

The District will compensate the Contractor for the costs of locating and repairing damage not due to the failure of the Contractor to exercise reasonable care, and for removing or relocating such main or trunk line utility facilities not indicated in the Contract Documents with reasonable accuracy, and for the cost of equipment on the Project necessarily idled during such work. The payment for such costs will be made as provided in Section 4, Change Orders. The Contractor shall not be assessed liquidated damages for delay in completion of the Project, when such delay is caused by the failure of the District or utility company to provide for removal or relocation of such utility facilities.

The public utility, where they are the owner of the effected utility, shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price. The right is reserved to the District and the owners of utilities or their authorized agents to enter upon the Work area for the purpose of making such changes as are necessary for the rearrangement of their facilities or for making necessary connections or repairs to their properties. The Contractor shall cooperate with forces engaged in such work and shall conduct its operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by such forces and shall allow the respective utilities time to relocate their facility.

When the Contract Documents indicate that a utility is to be relocated, altered or constructed by others, the District will conduct all negotiations with the utility company and the work will be done at no cost to the Contractor, unless otherwise stipulated in the Agreement.

Temporary or permanent relocation or alteration of utilities desired by the Contractor for its own convenience shall be the Contractor's responsibility and it shall make arrangements and bear all costs for such work.

6. PROJECT FACILITIES

- 6.1 Work Site Offices. Any Work site office facilities used by the Contractor and/or its privities must conform to all applicable codes, ordinances and regulations. The cost of such Work site office facilities shall be paid from the included in the Contract Price.

6.2 District Rights of Access and Ownership. The District and its authorized representatives will at all reasonable times while such office facilities are located at the Work site (including, at a minimum, all times during which the Work is performed), have access to any such Work site office facilities used by the Contractor and/or its privities. With respect to the right of access of the District and its authorized representatives, neither the Contractor nor its privities shall have a reasonable expectation of privacy pursuant to the Fourth Amendment to the Unites States Constitution or other applicable law concerning such Work site office facilities used by the Contractor and/or its privities. Without exception, any and all Project related materials located at such Work site facilities will be deemed at all times to be District property subject to inspection and copying by the District and its authorized representatives at all reasonable times while such facilities are located at the Work site (including, at a minimum, all times during which the Work is performed). Any interference by the Contractor or its privities with the District's rights of access and/or ownership pursuant to this Section 6 will constitute a material breach of the Agreement subject to any and all remedies available pursuant to the Contract Documents and at law and equity.

7. PROSECUTION AND PROGRESS OF THE WORK

7.1 Liquidated Damages (**As Needed**). Time is of the essence in the Agreement. The District and the Contractor agree that it will be difficult and/or impossible to determine the actual damage which the District will sustain in the event of the Contractor's failure to fully perform the Work or to fully perform all of the Contractor's obligations that have accrued pursuant to the Agreement by the Time for Completion. Accordingly, the District and the Contractor agree in accordance with California Government Code Section 53069.85 that the Contractor will forfeit and pay to the District liquidated damages in the sum of \$1,000 per day for each and every calendar day completion of the Work and/or performance of all of the Contractor's obligations that have accrued pursuant to the Agreement is delayed beyond the Time for Completion. The District and the Contractor further agree in accordance with California Government Code Section 53069.85 that the liquidated damages sum specified in this provision is not manifestly unreasonable under the circumstances existing at the time the Agreement was made, and that the District may deduct liquidated damages sums in accordance with this provision from any payments due or that may become due the Contractor under the Agreement.

7.2 No Damage for Delay Beyond District and Contractor Control. The Contractor will not be held responsible for delays in performance of the Work caused by delay beyond the control of both District and Contractor, such as by strikes, lockouts, or labor disturbances that are not within the control of the contractor to resolve, lack or failure of transportation, or acts of other government entities. This provision will not apply where the delay would not have occurred but for a previous contractor caused delay in the prosecution of the Work. The District will not be liable to the Contractor, any subcontractor or other entity engaged in the performance of the Work, any supplier, or any other person or organization, or to any surety or employee or agent of any of them, for damages arising out of or resulting from (i) delays beyond the control of the District and the Contractor including but not limited to fires, floods, epidemics, abnormal weather conditions, earthquakes and acts of God or acts or neglect by utility owners or other contractors performing other work, or (ii) delays caused by the District,

its officials, officers, employees, agents, or volunteers, or delays caused by the District Engineer or the Architect or Engineer, which delays are reasonable under the circumstances involved and/or are within the contemplation of the District and the Contractor. An extension of the Time for Performance in an amount equal to the time loss due to such delay(s) will be the Contractor's sole and exclusive remedy for such delay(s).

- 7.3 No Damage for Contractor Caused Delay. Contractor shall not be entitled to additional compensation for extended field or home office overhead, field supervision, costs of capital, interest, escalation charges, acceleration costs or other impacts for any delays to the extent such delays are caused by the failure of the Contractor or any subcontractor or other entity engaged in performance of the Work to perform the Work in accordance with the Contract Documents. Contractor may be eligible for additional compensation in excess of the Contract Price for delays caused by the District and/or its privities.
- 7.4 No Damage for Other Delay. Contractor will not be entitled to damages for delay to the Work caused by the following, which the District and Contractor agree will be deemed for purposes of California Public Contract Code Section 7102 either not caused by the District, and/or within the contemplation of the District and the Contractor, and/or reasonable under the circumstances:
- 7.4.1 Exercise of the District's right to sequence the Work in a manner that would avoid disruption to the District and other contractors based on: the failure of the Contractor or any subcontractor or other entity engaged in the performance of the Work to perform the Work in accordance with the Contract Documents, enforcement by the District or any other governmental agency of competent jurisdiction of any government act or regulation, or enforcement by the District of any provisions of the Agreement.
- 7.4.2 Requests for clarification or information concerning the Contract Documents or proposed change orders or modifications to the Contract Documents, including extensive and/or numerous such requests for clarification or information or proposed change orders or modifications, provided such clarifications or information or proposed change orders or modifications are processed by the District or its representatives in a reasonable time in accordance with the Contract Documents.
- 7.5 Delays Caused by the District and/or Its Privities. Either the District or the Contractor may propose a change in the Time for Completion for delays that are purported to be caused by the District and/or its privities and that are not reasonable under the circumstances involved and/or that are not within the contemplation of the District and the Contractor. Such proposed changes in the Time for Completion will constitute change order proposals subject to Section 4. In accordance with Section 4, the District and the Contractor may agree upon pricing for the cost impacts, if any, resulting from such delays. If such pricing is in anticipation of cost impacts that may, but have not yet occurred, the District will be obligated to pay the Contractor for such anticipated impacts in accordance with the Agreement and any applicable, approved change orders only to the extent the Contractor actually incurs the anticipated cost impacts. Notwithstanding anything to the contrary in Section 4.5.2, the District and the Contractor may agree to a daily rate or cap or lump sum that will apply to the cost impacts, if any, resulting from delay purportedly caused by the District and/or its

privities subject to this provision. However, if such daily rate or cap or lump sum is in anticipation of cost impacts that have not yet occurred, the District will be obligated to pay such daily rate or cap or lump sum only to the extent the Contractor actually incurs such cost impacts.

7.5.1 Weather Delays. Extensions of the Time for Completion will not be allowed for weather conditions that are consistent with the following list of anticipated rain days based on historical weather data of the National Oceanographic and Atmospheric Administration of the U.S. Department of Commerce for the record station that is nearest or most applicable to the Work site. Extensions of the Time for Completion for delays due to adverse weather will be allowed only if the number of rain days exceeds those listed in the following table and the Contractor can verify to the District's reasonable satisfaction that such adverse weather caused actual delay in the timely completion of the Work. No extensions of the Time for Completion will be granted for rain days in addition to those listed in the following table that merely result in delays that do not or would not, themselves, result in failure to complete the Work by the Time for Completion. Anticipated weather delays, which may include rain, strong wind, or other types of inclement weather conditions, are as follows:

August through October:	4 days
November through April:	40 days
May through July	4 days

7.6 Delay Claims. Whenever the Contractor claims a delay for which the Time for Completion may be extended, the Contractor must request an extension of time within five (5) working days of the start of the delay. The request must be in writing and describe in detail the cause for the delay, and, if possible, the foreseeable extent of the delay.

7.7 Contractor Coordination of the Work.

7.7.1 The District reserves the right to do other work in connection with or in the vicinity of the Project by contract or otherwise, and Contractor shall at all times conduct the Work so as to impose no hardship on the District, others engaged in the Work or other contractors working at the Work site. The Contractor will adjust, correct and coordinate the Work with the work of others so that no delays result in the Work or other work at or near the Work site.

7.7.2 If any part of the Work depends for proper execution or results upon the work of the District or any other contractor, the Contractor will, before proceeding with such Work, promptly report to the District any apparent discrepancies or defects in such other Work. Failure of the Contractor to promptly report any apparent discrepancy or defect will be deemed an acceptance of the District's or other contractor's Work as fit and proper.

7.7.3 The Contractor will anticipate the relations of the various trades to the progress of the Work and will ensure that required anchorage or blocking is furnished and set at proper times. Anchorage and blocking necessary for each trade shall be part of the Work except where stated otherwise.

7.7.4 The Contractor will provide proper facilities at all times for access of the District, the District Engineer, Architect or Engineer, and other authorized District representatives to conveniently examine and inspect the Work.

7.8 Suspension of Work

- 7.8.1 If the Contractor fails to correct defective work, or fails to carry out the Work in accordance with the Contract Documents or any other applicable rules and regulations, the District, by a written order of the District 's representative or signed personally by an agent specifically so empowered by the District, in writing, may order the Contractor to stop the work, in its entirety or any portion thereof. In the event of a suspension of only a portion of the work, the Contractor is obligated to perform the portion of the work not suspended. The Suspension of Work shall remain in effect until the condition or cause for such order has been eliminated. The District's concurrence that the condition or cause has been eliminated will be provided to the Contractor in writing. This right of the District to stop and suspend the Work shall not give rise to any duty on the part of the District to exercise this right for the benefit of the Contractor or any other person or entity. All delays in the Work occasioned by such stoppage shall not relieve the Contractor of any duty to perform the Work or serve to extend the time for its completion. Any and all necessary corrective work done in order to comply with the Contract Documents shall be performed at no cost to the District.
- 7.8.2 In the event that a suspension of Work is ordered, as provided in this paragraph, the Contractor, at its expense, shall perform all work necessary to provide a safe, smooth, and unobstructed passageway through construction for use by public, pedestrian, and vehicular traffic, during the period of such use by suspension. Should the Contractor fail to perform the Work as specified, the District may perform such work and the cost thereof may be deducted from partial payments and/or final payment due the Contractor under the Contract.
- 7.8.3 The District shall also have authority to suspend the Work wholly or in part, for such period as the District may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the Work. Such temporary suspension of the Work will be considered justification for time extensions to the Contract in an amount equal to the period of such suspension if such suspended work includes the current critical activity on the latest favorably reviewed progress schedule. The Contractor as directed by the District shall comply with the provisions in Section 7.8.2 above. Such additional work shall be compensated as provided for in Section 4, Changes in Work.

8. CONTRACTOR RESPONSIBILITIES

- 8.1. Eligibility. By executing the Agreement, the Contractor certifies that the Contractor is not ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7. In accordance with California Public Contract Code Section 6109(a), contractors who are ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7 may neither bid on, be awarded or perform the Work. The Contractor shall hold harmless and

indemnify the District from and against any and all damages, costs, and liability arising from or as a consequence of any violation of Public Contract Code Section 6109.

- 8.2 Supervision of the Work. The Contractor will be solely responsible for the performance of the Work, including portions of the Work to be performed by subcontractors. The Contractor is charged with ensuring that all orders or instructions from the District, District Engineer or Architect are disseminated to and followed by all subcontractors engaged in performance of the Work. The Contractor will supervise the Work using the Contractor's best skill and attention. At any time during the progress of the Work, the District, the District Engineer, or the Architect may require the Contractor and/or subcontractors engaged in performance of the Work to attend a project meeting and the Contractor will attend, and ensure the attendance of any subcontractors whose attendance is required by the District and/or advisable in light of the matters to be addressed at the meeting.
- 8.3 Contractor's Superintendent. The Contractor will keep on the Work, throughout its progress, a competent superintendent and any necessary assistants, all satisfactory to the District. The superintendent may not be changed without the consent of the District. The superintendent will represent the Contractor and all directions given by the District to the superintendent will bind the Contractor in accordance with the Agreement. Superintendent time included in Contractor's completed Bid Schedule and/or in approved change orders, if any, must be included in Contractor's approved overhead rate and may not be charged as a direct cost.
- 8.4 Competent Employees. The Contractor must at all times enforce strict discipline and good order among the Contractor's employees and may not employ on the Work any unfit person or anyone not skilled in the Work assigned, or anyone incompetent or unfit for the duties of that person. When the District determines that a Contractor employee does not satisfy the requirements of this provision, upon notice from the District, the Contractor must ensure that employee performs no further Work and is no longer present at the Work site. Any such Contractor employee may not again be employed on the Work without District approval.
- 8.5 Items Necessary for Proper Completion of the Work. Except as otherwise noted in the Contract Documents, the Contractor will provide and pay for all labor, materials, equipment, permits, fees, licenses, facilities and services necessary for the proper execution and timely completion of the Work in accordance with the Contract Documents.
- 8.6 Construction Reports. The Contractor must submit daily construction reports detailing the daily progress of the Work to the District Engineer on a weekly basis.
- 8.7 Subcontracting.
- 8.7.1 By executing the Agreement, the Contractor certifies that no subcontractor included on the list of proposed subcontractors submitted with the Contractor's bid is ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7. In accordance with California Public Contract Code Section 6109(a), subcontractors who are ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7 may neither bid on, be awarded or perform as a subcontractor

on the Work. In accordance with California Public Contract Code Section 6109(b), any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. The Contractor will ensure that no debarred subcontractor receives any public money for performing the Work, and any public money that may have been paid to a debarred subcontractor for the Work is returned to the District. The Contractor will be responsible for payment of wages to workers of a debarred subcontractor who has been allowed to perform the Work.

8.7.2 The Agreement and the performance of the Work are subject to the requirements of the Subletting and Subcontracting Fair Practices Act codified at California Public Contract Code Section 4100 and following. If the Contractor fails to specify a subcontractor or specifies more than one subcontractor for the same portion of the Work in excess of one-half of 1 percent of the Contractor's total bid, the Contractor agrees that the Contractor is fully qualified to perform that portion of the Work with the Contractor's own forces, and that the Contractor will perform that portion of the Work with the Contractor's own forces. If after award of the Agreement the Contractor subcontracts, except as provided for in California Public Contract Code Sections 4107 or 4109, any such portion of the Work, the Contractor will be subject to the penalties set forth in California Public Contract Code Sections 4110 and 4111, including cancellation of the Agreement, assessment of a penalty of up to 10 percent of the amount of the subcontract, and disciplinary action by the Contractors State License Board.

8.7.3. No contractual relationship exists between the District and any subcontractor engaged in performance of the Work.

8.7.4 Incorporation of Contract Documents. The Contractor must incorporate the Contract Documents in each contract with a subcontractor engaged in the performance of the Work. The Contractor shall be solely responsible for any delay or additional costs incurred as a result of its failure to provide adequate or accurate project information to a subcontractor that results in improper submittals and/or work, or time or other impacts is the sole responsibility of the Contractor. The Contractor will have all of the obligations and the District will have all of the remedies that are specified in Section 11.

8.7.5 Coordination of Subcontract Work: The Contractor is responsible for scheduling the Work of subcontractors so as to avoid delay or injury to either Work or materials.

8.8 Insurance.

8.8.1 All required insurance shall be provided in the form of "occurrence"-type policies underwritten by admitted insurers in the State of California with a rating of A or better from the current year Best Rating Guide. All policies must be issued at the expense of the Contractor and must be maintained at the Contractor's expense throughout the performance of the Work. Coverage should be maintained for a minimum of five (5) years after contract completion.

8.8.2 The Contractor and any subcontractors engaged in performance of the Work must secure payment of workers compensation in accordance with California

Labor Code Section 3700 and other applicable law. The Contractor must verify that all Subcontractors comply with this requirement.

8.8.3 Within seven (7) calendar days following Notice of Award the Contractor must submit to the District along with executed copies of all other documents specified in the Contract Check List certificates of insurance and endorsements evidencing that the Contractor has in effect and will maintain throughout the performance of the Work the following kinds and amounts of insurance:

8.8.3.1 Worker's Compensation Insurance. In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860) and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the Labor Code of the State of California, the Contractor is required to secure the payment of compensation to its employees and for that purpose obtain and keep in effect adequate Workers' Compensation Insurance. If the Contractor, in the sole discretion of the District, satisfies the District of the responsibility and capacity under the applicable Workers' Compensation Laws, if any, to act as self-insurer, the Contractor may so act, and in such case, the insurance required by this paragraph need not be provided. The Contractor is advised of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, and shall comply with such provisions and have Employers' Liability limits of **\$1,000,000** per accident and per employee, and in the aggregate for injury by disease, before commencing the performance of the work of this Contract. Before the Notice to Proceed with the Work under this Contract is issued, the Contractor shall submit written evidence that the Contractor has obtained for the period of the Contract Workers' Compensation and Employer's Liability Insurance as required for all persons whom it employs or may employ in carrying out the work under this Contract. Such evidence of coverage shall be accompanied by an endorsement from the insurer agreeing to waive all rights of subrogation against the District, its officers, officials, employees, agents and volunteers, the Design Consultants, the Construction Manager and their agents, consultants and employees which might arise by reason of any payment under the policy. This insurance shall be in accordance with the requirements of the most current and applicable State Workers' Compensation Insurance Laws.

8.8.3.2 Commercial General Liability and Automobile Liability Insurance - This insurance shall protect the Contractor from claims for bodily injury, personal injury and property damage which may arise because of the nature of the work or from operations under this Contract. The Commercial General Liability Insurance shall be maintained for five (5) years after final completion and shall provide coverage on an occurrence basis.

a. Additional Insureds - The Commercial General Liability and Automobile Policies of insurance shall include as additional insureds or be endorsed to contain the following provisions the "entities" listed

below and each of their partners, officers, officials, employees, agents and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, occupied or used by the Contractor and or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the "entities" and each of their partners, officers, officials, employees, agents and volunteers and coverage provided to such additional insured. This policy shall provide coverage to each of the said insureds with respect to said work. Said policy shall provide primary coverage to the full limit of liability stated in the declarations.

Las Gallinas Valley Sanitary District
300 Smith Ranch Road
San Rafael, CA 94903

Design Engineer: TBD
Construction Manager: TBD
District Consultants: TBD
Other Public Agencies Having Jurisdiction

- b. (1) Amount of Coverage (General Contractor) - The bodily injury, personal injury and property damage liability of the Commercial General Liability insurance shall provide coverage in the following limits of liability: **\$3,000,000** on account of anyone occurrence for bodily injury and property damage, **\$3,000,000** personal and advertising injury limit with an annual general aggregate limit of not less than **\$3,000,000**, and **\$3,000,000** products and completed operations aggregate, combined single limit. The Automobile Liability insurance policy shall provide minimum limits of **\$3,000,000** per accident for bodily injury and property damage and **\$3,000,000** policy aggregate arising out of the ownership, maintenance, or use of any owned or non-owned vehicles.
- (2) Amount of Coverage for Subcontractors - The bodily injury, personal injury and property damage liability of the Commercial General Liability insurance shall provide coverage in the following limits of liability: **\$1,000,000** on account of anyone occurrence for bodily injury and property damage **\$1,000,000** personal and advertising injury limit with an annual general aggregate limit of not less than **\$1,000,000**, and **\$1,000,000** products and completed operations aggregate, combined single limit. The Automobile Liability insurance policy shall provide minimum limits of **\$1,000,000** per accident and **\$1,000,000** policy aggregate arising out of the ownership, maintenance, or use of any owned or non-owned vehicles.
- c. Subcontractors - The bodily injury and property damage liability insurance shall not be deemed to require the Contractor to have its subcontractors named as insureds in the Contractor's policy, but the

policy shall protect the Contractor from contingent liability which may arise from operations of its subcontractors.

d. Included Coverage - The above Commercial General Liability insurance shall also include the following coverage:

- Premises – Operations
- Independent Contractors
- Products - Completed Operations
- Personal Injury - (False Arrest, Libel, Wrongful Eviction, etc.)
- Advertising Injury
- Broad Form Property Damage, Including, Completed Operations
- Separation of Insureds/Cross-Liability Provision
- Duty to Defend all Insureds
- Deletion of any Limitation on Coverage for Bodily Injury or Property Damage Arising out of Subsidence or Soil or Earth Movement
- Separate Aggregate - A provision that the annual general aggregate and the products and completed operations annual aggregate shall apply separately to each project for which Contractor provides services away from premises owned by or rented to Contractor.
- XCU - (Explosion, Collapse, and Underground Damage) is applicable to operations performed by the Contractor or its subcontractors.
- Blanket Contractual Liability

8.8.3.3 Commercial Umbrella Policy. The Commercial policy is to insure losses above General liability, Employers liability, Auto liability, and Contractor's Pollution Legal liability limits. The Contractor may use an umbrella policy to meet the limit requirements of Section 8.8.3.2.b(1). However, any such umbrella/excess policy must be approved by the District and maintain an A.M. Best Rating of no less than A:VII.

8.8.3.4 Builders Risk. (Not Required)

8.8.3.5 Contractor's Pollution Legal Liability. Coverage for liability because of third-party claims for bodily injury and/or property damage, including insurance for remediation costs stemming from pollution incidents resulting from the contractor's operations.

8.8.4 The insurance furnished by the Contractor must be primary in the amount of any loss.

8.8.5 Any deductibles or self-insured retentions must be declared to and approved by the District.

8.8.6 Submit required insurance endorsement forms and other requirements.

8.8.7 For each insurance policy required under the Agreement except for the required workers compensation insurance policy, the Contractor must provide

endorsements that add the District, its officers, officials, employees, and volunteers, as an additional insured. Such endorsements must: provide that the insurance required to be furnished by the Contractor will be primary as regards the District, its officers, officials, employees, and volunteers, and that the District's insurance will be excess of and not contribute to the insurance required to be furnished by the Contractor; that the District will receive 30-calendar day written notice of any reduction or cancellation of such insurance required to be furnished by the Contractor; and include a severability of interest clause acceptable to the District. Said endorsement shall be at least as broad as Insurance Services Office form number CG20 10 11 85 (Modified).

- 8.8.8 Contractor hereby grants to District a waiver of subrogation which any insurer may acquire against District, its officers, officials, employees, and volunteers, from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation but this provision applies regardless of whether or not the District has received a waiver of subrogation endorsement from the insurer.
- 8.8.9 The Contractor shall not allow any subcontractor to commence work on its subcontract until all similar insurance required of the subcontractor, except Builder's Risk Insurance, has been obtained and verified by the Contractor and submitted to the Construction Manager for the District's review and records. Subcontractors shall furnish original certificates and required endorsements as verification of insurance coverage. The insurance liability limits specified in Sections 8.8.3.2.a(2), shall also apply for all subcontractors. The Contractor shall designate the required insurance liability limits for all other subcontractors.
- 8.8.10 Proof of Coverage - Before the Notice to Proceed with the Work under this Contract is issued, the Contractor shall furnish the District with certificate(s) evidencing issuance of all insurance mentioned herein, copies of the policy declaration or information page(s) and additional insured endorsements. The certificate(s) and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms or equivalent endorsement forms acceptable to the District. The certificate(s), policy declaration or information page(s), and endorsements are to be received and approved by the District before work commences. Except for the waiver of subrogation rights endorsements, no other endorsements are required for Workers Compensation or Builder's Risk Insurance. Such certificates of Insurance shall provide that the insurance policy shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or limits except after thirty (30) calendar days prior written notice by certified mail, return receipt requested, has been given to the District. Contractor shall also provide certificate(s) evidencing renewals of all insurance required herein, at least thirty (30) calendar days prior to the expiration date of any such insurance.

Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, the Design Consultants and the Construction Manager and their officers, officials, employees, agents and volunteers; or the Contractor shall procure a

bond guaranteeing payment of losses and related investigations, claim administration and defense expenses. In the event of the breach of any provision of this paragraph, or in the event of any notices received which indicates any required insurance coverage will be diminished or canceled, District, at its option, may, notwithstanding any other provisions of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work pursuant to this Agreement.

8.8.11 Insurance During Guarantee Period

For all work the Contractor or its subcontractors perform during the guarantee period, workers compensation, and commercial general liability insurance in the amounts and format required herein, shall remain in force and shall be maintained for five (5) years after final completion.

8.9 Indemnities.

- 8.9.1 The Contractor will take all responsibility for the Work, and will bear all losses and damages directly or indirectly resulting to the Contractor, any subcontractors engaged in performance of the Work, the District, its officials, officers, employees, agents, volunteers and consultants, and to third parties on account of the performance or character of the Work, unforeseen difficulties, accidents, or occurrences of other causes predicated on active or passive negligence of the Contractor or of any subcontractor engaged in performance of the Work. To the fullest extent permitted by law the Contractor will indemnify, defend and hold harmless the District, its officials, officers, employees, agents, volunteers and consultants from and against any or all loss, liability, expense, claims, costs (including costs of defense), suits, and damages of every kind, nature and description (including, but not limited to, penalties resulting from exposure to hazards in violation of the California Labor Code) directly or indirectly arising from the performance of the Work ("Claims").
- 8.9.2 The Contractor will indemnify, defend and hold harmless the District, the District's officials, officers, employees, volunteers, agents and the District Engineer and Architect for all liability on account of any patent rights, copyrights, trade names or other intellectual property rights that may apply to the Contractor's performance of the Work. The Contractor will pay all royalties or other charges as a result of intellectual property rights that may apply to methods, types of construction, processes, materials, or equipment used in the performance of the Work, and will furnish written assurance satisfactory to the District that any such charges have been paid.
- 8.9.3 The Contractor assumes all liability for any accident or accidents resulting to any person or property as a result of inadequate protective devices for the prevention of accidents in connection with the performance of the Work. The Contractor will indemnify, defend, and hold harmless the District and its officials, officers, employees, agents, volunteers and consultants from such liability.
- 8.9.4 Approval of the Contractor's certificates of insurance and/or endorsements does not relieve the Contractor of liability under this Section 8.9. The Contractor will defend, with legal counsel reasonably acceptable to the District,

any action or actions filed in connection with any Claims and will pay all related costs and expenses, including attorney's fees incurred. The Contractor will promptly pay any judgment rendered against the District, its officials, officers, employees, agents, volunteers or consultants for any Claims. In the event the District, its officials, officers, employees, agents, volunteers or consultants is made a party to any action or proceeding filed or prosecuted against Contractor for any Claims, Contractor agrees to pay the District, its officials, officers, employees, agents, volunteers and consultants any and all costs and expenses incurred in such action or proceeding, including but not limited to, reasonable attorneys' fees.

8.9.5 In accordance with California Civil Code Section 2782(a), nothing in the Agreement will be construed to indemnify the District for its sole negligence, willful misconduct, or for defects in design furnished by District. In accordance with California Civil Code Section 2782(b), nothing in the Agreement will be construed to impose on the Contractor or to relieve the District from liability for the District's active negligence. By execution of the Contract Documents the Contractor acknowledges and agrees that the Contractor has read and understands the insurance and other requirements of Agreement, and this Section 8.9, which is a material element of consideration.

8.10 Licenses/Permits. The Contractor must, without additional expense to the District, obtain all licenses, permits and other approvals required for the performance of the Work.

8.11 California Labor Code Requirements.

8.11.1 In accordance with California Labor Code Section 1810, eight (8) hours of labor in performance of the Work shall constitute a legal day's work under the Agreement.

8.11.2 In accordance with California Labor Code Section 1811, the time of service of any worker employed in performance of the Work is limited to eight hours during any one calendar day, and forty hours during any one calendar week, except in accordance with California Labor Code Section 1815, which provides that work in excess of eight hours during any one calendar day and forty hours during any one calendar week is permitted upon compensation for all hours worked in excess of eight hours during any one calendar day and forty hours during any one calendar week at not less than one-and-one-half times the basic rate of pay. However, if the prevailing wage determination requires a higher rate of pay for overtime than is required under Section 1815, then the overtime rate must be paid, as specified in California Code of Regulation Title 8, Group 3, Section 16200(a)(3)(F).

8.11.3 In accordance with California Labor Code Section 1813, the Contractor and its subcontractors will forfeit as a penalty to the District \$25 for each worker employed in the performance of the Work for each calendar day during which the worker is required or permitted to work more than eight (8) hours in any one calendar day, or more than forty (40) hours in any one calendar week, in violation of the provisions of California Labor Code Section 1810 et seq.

- 8.11.4 In accordance with California Labor Code Section 1773.2, the District has determined the general prevailing wages in the locality in which the Work is to be performed for each craft or type of work needed to be as published by the State of California Department of Industrial Relations, Division of Labor Statistics and Research, a copy of which is on file in the office of the District Engineer and shall be made available on request. The Contractor and subcontractors engaged in the performance of the Work shall pay no less than these rates to all persons engaged in performance of the Work.
- 8.11.5 In accordance with California Labor Code Section 1775, the Contractor and any subcontractors engaged in performance of the Work must comply with Labor Code Section 1775 which establishes a penalty of up to \$200 per day for each worker engaged in the performance of the Work that the Contractor or any subcontractor pays less than the specified prevailing wage. The amount of such penalty shall be determined by the Labor Commissioner. The Contractor or subcontractor shall pay the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate. If a subcontractor worker engaged in performance of the Work is not paid the general prevailing per diem wages by the subcontractor, the Contractor is not liable for any penalties therefore unless the Contractor had knowledge of that failure or unless the Contractor fails to comply with all of the following requirements:
- 8.11.5.1 The contract executed between the Contractor and the subcontractor for the performance of part of the Work must include a copy of the provisions of California Labor Code Sections 1771, 1775, 1776, 1777.5, 1813, and 1815.
- 8.11.5.2 The Contractor must monitor payment of the specified general prevailing rate of per diem wages by the subcontractor by periodic review of the subcontractor's certified payroll records.
- 8.11.5.3 Upon becoming aware of a subcontractor's failure to pay the specified prevailing rate of wages, the Contractor must diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for performance of the Work.
- 8.11.5.4 Prior to making final payment to the subcontractor, the Contractor must obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages employees engaged in the performance of the Work and any amounts due pursuant to California Labor Code Section 1813.
- 8.11.6 In accordance with California Labor Code Section 1776, the Contractor and each subcontractor engaged in performance of the Work, must keep accurate payroll records 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 performance of the Work. Each payroll record must contain or be verified by a written declaration that it is made under penalty

of perjury, stating that the information contained in the payroll record is true and correct and that the employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by the employer's employees on the public works project. The payroll records required pursuant to California Labor Code Section 1776 must be certified and must be available for inspection by the District and its authorized representatives, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations and must otherwise be available for inspection in accordance with California Labor Code Section 1776.

- 8.11.7 In accordance with California Labor Code Section 1777.5, the Contractor, on behalf of the Contractor and any subcontractors engaged in performance of the Work, will be responsible for ensuring compliance with California Labor Code Section 1777.5 governing employment and payment of apprentices on public works contracts.

Apprentices - Prior to commencing the Work, Contractor shall comply with the provisions of Labor Code 1777.5, including but not limited to the submission of contract award information to an applicable apprenticeship program that can supply apprentices to the site of the Work. Such information shall include an estimate of journeyman hours to be performed under this Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall be submitted to the District if requested by the District.

A determination by the Chief of the Division of Apprenticeship Standards that Contractor or its subcontractors have knowingly violated Labor Code 1777.5 shall forfeit as a civil penalty an amount not exceeding one hundred dollars (\$100) for each full calendar day of noncompliance. Contractor or its subcontractor, who knowingly commits a second or subsequent violation of Labor Code 1777.5 within a three-year period, where the noncompliance results in apprenticeship training not being provided as required, shall forfeit as a civil penalty the sum of not more than three hundred dollars (\$300) for each full calendar day of noncompliance. Upon the receipt of a determination that a civil penalty has been imposed by the Chief of the Division of Apprenticeship Standards, the District shall withhold the amount of the civil penalty from the next progress payment then due or to become due Contractor.

- 8.11.8 In case it becomes necessary for the Contractor or any subcontractor engaged in performance of the Work to employ on the Work any person in a trade or occupation (except executive, supervisory, administrative, clerical, or other non-manual workers as such) for which no minimum wage rate has been determined by the Director of the Department of Industrial Relations, the Contractor must pay the minimum rate of wages specified therein for the classification which most nearly corresponds to Work to be performed by that person. The minimum rate thus furnished will be applicable as a minimum for such trade or occupation from the time of the initial employment of the person affected and during the continuance of such employment.

- 8.11.9 Labor Discrimination. Attention is directed to Section 1735 of the Labor Code, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age or sexual orientation of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for violation of this chapter."

8.11.10 Receipt of Workers' Wages, Fee for Registering or Placing Persons In Public Works - Attention is directed to the provisions of sections 1778 and 1779 of the California Labor Code, which read as follows:

"Section 1778. Every person, who individually or as a representative of an awarding or public body or officer, or as a contractor or subcontractor doing public work, or agent or officer thereof, who takes, receives or conspires with another to take or receive, for its own use or the use of any other person any portion of the wages of any workman or working subcontractor, in connection with services rendered upon any public work is guilty of a felony."

"Section 1779. Any person or agent or officer thereof who charges, collects, or attempts to charge or collect, directly or indirectly, a fee or valuable consideration for registering any person for public work, or for giving information as to where such employment may be procured, or for placing, assisting in placing, or attempting to place, any person in public work, whether the person is to work directly for the state, or any political subdivision or for a contractor or subcontractor doing public work is guilty of a misdemeanor."

8.12 Laws and Ordinances. The Contractor and all subcontractors engaged in the performance of the Work must conform to the following specific rules and regulations as well as all other laws, ordinances, rules and regulations that apply to the Work. Nothing in the Technical Specifications or Drawings is to be construed to permit Work not conforming to these codes:

National Electrical Safety Code, U. S. Department of Commerce
National Board of Fire Underwriters' Regulations
California Building Standards Code as adopted by the District
Manual of Accident Prevention in Construction, latest edition, published by A.G.C. of America
Industrial Accident Commission's Safety Orders, State of California
Regulations of the State Fire Marshall (Title 19, California Code of Regulation) and Applicable Local Fire Safety Codes
Labor Code of the State of California - Division 2, Part 7, Public Works and Public Agencies.

8.13 Guaranty. The Contractor guarantees all of the Work for one year from the date the District accepts the Work. Upon receiving written notice of a need for repairs which are directly attributable to defective materials or workmanship the Contractor must make good any defects arising or discovered in any part of the Work by diligently commencing the necessary repairs within seven (7) calendar days from the date of notice from the District. If the Contractor fails to make good any defects in the Work in accordance with this provision, in addition to any other available remedy under the contract or at law or equity, the District may make good or have made good such

defects in the Work and deduct the cost from amounts that may be due or become due the Contractor, and for the cost of making good such defects and for the District's reasonable legal costs, if any, of recovering against the bond. The Contractor shall remain responsible for repairing any Work found to be defective regardless of when such defect is discovered by the District. See Drawings for other Guaranty/Warranty requirements for the project.

8.14 Safety.

8.14.1 Contractor's Safety Responsibility - The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons and property during performance of the Work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), the California Occupational Safety and Health Act (CalOSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, including but not limited to the requirements set forth below, and any regulations that may be detailed in other parts of these Contract Documents. In the event of conflicting requirements, the most stringent requirement as it pertains to the Contractor's safety responsibility, shall be followed by the Contractor.

No provision of the Contract Documents shall act to make the District, the Construction Manager, Design Consultant or any other party than the Contractor responsible for safety. The Contractor agrees that for purposes of California Labor Code Section 6400 and related provisions of law the Contractor, the Contractor's privities and any other entities acting pursuant to this contract will be "employers" responsible for furnishing employment and a place of employment that is safe and healthful for the employees, if any, of such entities acting pursuant to this contract and that neither the District nor the Construction Manager, Design Consultant or their respective officers, officials, employees, agents or volunteers or other authorized representatives will be responsible for having hazards corrected and /or removed at the location(s) where the work is to be performed. The Contractor agrees that neither the District nor the Construction Manager, Design Consultant or their respective officers, officials, employees, agents or volunteers or other authorized representatives will be responsible for taking steps to protect the Contractor's employees from such hazards, or for instructing the Contractor's employees to recognize such hazards or to avoid the associated dangers. The Contractor agrees that with respect to the work to be performed under this contract and the location(s) where such work is to be performed, the Contractor will be responsible for not creating hazards, and for having hazards corrected and/or removed. The Contractor agrees that through the safety obligations contained in this contract and the Contractor's own inspection of the site(s) where the contract work is to be performed, the Contractor is aware and has been notified of the hazards to which the Contractor's employees may be exposed in the performance of contract work. The Contractor has taken and/or will take appropriate, feasible steps to protect the Contractor's employees from such hazards, and has instructed and/or will instruct its employees to recognize such hazards and how to avoid the associated dangers. The Contractor agrees that neither the District nor the Construction Manager, Design Consultant or their respective officers, officials, employees, agents or volunteers or other

authorized representatives will be “employers” pursuant to California Labor Code Section 6400 and related provisions of law with respect to the Contractor, the Contractor's privities or other entities acting pursuant to this contract.

- 8.14.2 Review and inspection by the District, the District Engineer, the Architect or Engineer, and/or other representatives of the District of the Contractor's performance of the Work will not constitute review of the adequacy of the Contractor's safety measures in, on, or near the Work site. Such reviews and inspections do not relieve the Contractor of any of the Contractor's obligations under the Contract Documents and applicable law to ensure that the Work site is maintained and the Work is performed in a safe manner.
- 8.14.3 The Contractor will be solely responsible for the implementation and maintenance of safety programs to ensure that the Work site is maintained and the Work is performed in a safe manner in accordance with the Contract Documents and applicable law.
- 8.14.4 Safety Plan - Within seven (7) calendar days following Notice of Award the Contractor must submit to the District a copy of the Contractor's Safety Plan.

The Contractor shall establish, implement, and maintain a written injury prevention program as required by Labor Code Section 6401.7. Before beginning the Work, the Contractor shall prepare and file with the Construction Manager a written Contractor Safety Plan that provides for the implementation of all of the Contractor's safety responsibilities in connection with the Work at the Project site. The coordination of that program and its associated procedures and precautions with safety plans, precautions and procedures of each of its subcontractors and other Contractors performing work at the Project site. The Contractor shall be solely responsible for initiating, maintaining, monitoring, coordinating, and supervising all safety plans, precautions, and procedures in connection with the Work and for coordinating its programs, precautions, and procedures of the other contractors and subcontractors performing the Work at the Project site. The Safety Plan should contain all the necessary elements for the Contractor to administer its program on the Project site. At a minimum, this written Safety Plan shall address the elements required by Labor Code Section 6401.7.

The Contractor's compliance with requirements for safety and/or the Construction Manager's review of the Contractor's Safety Plan shall not relieve or decrease the liability of the Contractor for safety. The Construction Manager's review of the Contractor's Safety Plan is only to determine if the above listed elements are included in the program.

- 8.14.5 The Contractor must furnish and place proper guards and systems for the prevention of accidents, including, but not limited to, those systems required pursuant to Title 8, Section 1670 and following of the California Code of Regulations concerning safety belts and nets. The Contractor must provide and maintain any other necessary systems or devices required to secure safety of life or property at the Work site in accordance with accepted standards of the industry and applicable law. The Contractor must maintain during all night hours sufficient lights to prevent accident or damage to life or property.

8.14.6 The Contractor must comply with the District's Confined Space Entry Program shown in the Contract Documents.

8.14.7 The Contractor shall indemnify, defend and hold District and Construction Manager, Design Consultant and their respective officers, officials, employees, agents and volunteers or other authorized representatives harmless to the full extent permitted by law concerning liability related to the Contractor's safety obligations in accordance with the indemnification section of the Contract Documents.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Construction Manager and the District. In addition, the Contractor shall furnish the Construction Manager with a copy of the Employer's Report of Injury immediately following any incident requiring the filing of said report during the prosecution of the Work under this Contract. The Contractor shall also furnish the Construction Manager with a copy of the Employer's Report of Injury involving any subcontractors on this Project. The Contractor shall make all reports as are, or may be, required by any authority having jurisdiction, and permit all safety inspections of the Work being performed under this Contract.

If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Construction Manager, giving full details of the claim.

8.14.8 Safety Supervisor - The Contractor shall appoint an employee as safety supervisor who is qualified and authorized to supervise and enforce compliance with the Safety Program. The Contractor shall notify the Construction Manager in writing prior to the commencement of work of the name of the person who will act as the Contractor's Safety Supervisor and furnish the safety supervisor's resume to the Construction Manager.

Contractor will, through and with its Safety Supervisor, ensure that all of its employees, and its subcontractors of any tier, fully comply with the Project Safety Policies. The Safety Supervisor shall be a full-time employee of the Contractor whose responsibility shall be for supervising compliance with applicable safety requirements on the Project site and for developing and implementing safety training classes for all job personnel. The District shall have the authority to require removal of the Contractor's Safety Supervisor if the representative is judged to be improperly or inadequately performing the duties; however, this authority shall not in any way affect the Contractor's sole responsibility for performing this work safely, nor shall it impose any obligation upon the District to ensure the Contractor performs its work safely.

8.14.9 Safety and Protection - The Contractor shall take all necessary precautions to prevent damage, injury, and loss to:

- All employees on the Project, employees of all subcontractors, and other persons and organizations who may be affected thereby;

- All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, wetlands, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction, even if not shown on the Contract Drawings.

The Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and of underground facilities and utility districts when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor, supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the Contractor, and the Contractor shall be responsible for any direct or indirect costs resulting from such damage, injury or loss.

- 8.14.10 Excavation Safety - In accordance with the provisions of Section 6705 of the Labor Code, the Contractor shall submit, in advance of excavation of any trench or trenches five feet or more in depth, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plans vary from the shoring system standards set forth in the Construction Safety Orders of the Division of Industrial Safety in Title 8, Subchapter 4, Article 6, California Code of Regulations, the plans shall be prepared and signed by a registered civil or structural engineer employed by the Contractor, and all costs therefor shall be included in the price named in the Contract for completion of the work as set forth in the Contract Documents. Nothing in this section shall be deemed to allow the use of a shoring, bracing, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this section shall be construed to impose a tort liability on the District, the Design Consultant, the Construction Manager, nor any of their officers, officials, employees, agents, consultants or volunteers. The District's review of the Contractor's excavation plan is only for general conformance to the Construction Safety Orders.

Prior to commencing any excavation, the Contractor shall designate in writing to the Construction Manager the "competent person(s)" with the authority and responsibilities designated in the Construction Safety Orders.

- 8.14.11 Safety Emergencies - In emergencies affecting the safety or protection of persons or the Work or property at the Project site or adjacent thereto, the Contractor, without special instruction or authorization from the Construction Manager, is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Construction Manager prompt written notice if the

Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby.

- 8.14.12 Safety Violations - Should the Contractor fail to correct an unsafe condition, the District shall have the right to notify the Contractor through the Construction Manager that an unsafe condition may exist and must be corrected or the work in question can be stopped in accordance with Section 7.8, Suspension of Work until the condition is corrected to the satisfaction of the District. No extension of time or additional compensation will be granted as a result of any stop order so issued. The notification and suspension of such work or the failure to provide such notification and suspension by the District shall not relieve the Contractor of its sole responsibility and liability for safety and the correction of any unsafe conditions.

The District shall have the authority to require the removal from the project of any worker and the foreman and/or superintendent in responsible charge of the work where safety violations occur.

- 8.14.13 Equipment Safety Provisions - The completed Work shall include all necessary permanent safety devices, such as machinery guards and similar safety items, required by the State and Federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the Work, including District -selected equipment, subject to such safety regulations shall be fabricated, furnished, and installed in compliance with these requirements. All equipment furnished shall be grounded and provided guards and protection as required by safety codes. Where vapor-tight or explosion-proof electrical installation is required by safety codes, this shall be provided. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. The Contractor shall notify all equipment suppliers and subcontractors of the provisions of this paragraph.

- 8.14.14 Confined Spaces – The Project requires work in confined spaces and requires compliance with CAL/OSHA and Federal OSHA requirements. Confined spaces for the purposes of this section shall be as defined by the Division of Industrial Safety. Notwithstanding any classifications relative to the Tunnel Safety Orders, work within confined spaces of this project is subject to the definitions and applicable provisions of Section 5156 et. seq., Title 8, Division 1, Chapter 4, Subchapter 7, Group 16, Article 108 of California Code of Regulations.

Entry into existing “permit” confined spaces as defined by OSHA shall be allowed only in compliance with a confined space entry permit program by the Contractor that meets the requirements of CAL/OSHA Section 5157. While the District has identified certain existing facilities as confined spaces other confined spaces may exist on the Project. It shall be the responsibility of the Contractor to identify and classify these confined spaces.

Sources of ignition, including smoking, shall be prohibited in any confined space.

It is anticipated that the Contractor may encounter hazardous conditions within these confined spaces which include, but are not limited to the following:

- A. Exposure to hydrogen sulfide, methane, carbon dioxide and other gases and vapors commonly found in municipal sewers which could have or has the potential of having Immediate Danger to Life or Health Conditions (IDLH).
- B. Exposure to atmosphere containing insufficient oxygen to support human life.
- C. Exposure to combustible, flammable and/or explosive atmosphere.
- D. Exposure to sewage which may contain bacteriological, chemical and other constituents harmful to humans.
- E. Work in conditions where engulfment or entrapment may occur.
- F. Work in environments which may be slippery and/or have uneven work surfaces.
- G. Work in structures which have limited and/or restricted access and egress.
- H. Work in structures where workers may trip, slip and/or fall several feet.
- I. See Appendices "Contractor Safe Work Requirements" and "Confined Space Entry Program" for additional requirements. Copies of confined space permits shall be submitted to the District weekly.

8.14.15 Construction Activity Permits - The Contractor must submit a copy of its respective current DOSH permit before beginning work on any the following construction activities:

- A. Construction of trenches or excavations which are five feet or deeper and into which a person is required to descend.
- B. Construction of any building, structure, scaffolding or falsework more than three stories high or the equivalent height (36 feet).
- C. Demolition of any building or structure, or dismantling of scaffolding or falsework more than three stories high or the equivalent height (36 feet).
- D. Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).

8.14.16 Public Safety and Convenience – In accordance with the provisions of Section 6500 of the Labor Code the Contractor shall conduct his work so as to ensure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the Work and to ensure the protection of persons and property. No road or street shall be closed to the public except

with the permission of the Construction Manager and the proper governmental authority. Fire hydrants on or adjacent to the Work shall be accessible to firefighting equipment. Temporary provisions shall be made by the Contractor to ensure the use of sidewalks, private and public driveways and proper functioning of gutters, sewer inlets, drainage ditches and culverts, irrigation ditches and natural water courses. To the maximum extent permitted by law, Contractor shall indemnify, hold harmless and defend District from any and all liability, including attorneys' fees and costs of litigation, arising from any failure to comply with this section by Contractor or its privities.

- 8.15 Assignment of Unfair Business Practice Claims. In accordance with California Public Contract Code Section 7103.5, the Contractor and any subcontractors offer and agree to assign to the District all rights, title, and interest in and to all causes of action the Contractor or any subcontractors may have under Section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 (commencing with § 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to this contract. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgement by the parties.

9. MEASUREMENT AND PAYMENT

- 9.1 F.O.B. All shipments must be F.O.B. destination to the Work site and/or other sites indicated in the Contract Documents. The Contract Price is all-inclusive (including sales tax). There shall be no additional compensation paid for containers, packing, unpacking, drayage or insurance.

9.2 Payment

- 9.2.1 On or about the first day of each calendar month the Contractor will submit to the District Engineer a verified application for payment and schedule of values supported by a statement showing all materials actually installed during the preceding month and the cost of labor actually expended in the performance of the Work. Unless otherwise provided in the Contract Documents, no allowances or payments will be made for material or equipment not placed at the Work site.
- 9.2.2 To be eligible for payment the Contractor's applications for payment must include certified payroll reports prepared in accordance with California Labor Code Section 1776 and the Agreement for each employee of the Contractor and any subcontractors engaged in the performance of the Work during the preceding months, applications for payment will not be processed without certified payroll reports.
- 9.2.3 In accordance with California Public Contract Code Section 20104.50, the District will review applications for payment as soon as practicable after receipt. Any application or part of an application that is determined to be improper will be returned to the Contractor as soon as practicable, but no later than seven (7) calendar days after receipt by the District, along with a written description of the reasons why the application is improper. The Contractor's failure to submit a schedule in the time specified in Section 3.8, or its submission of a schedule to

which the District has taken any uncorrected exception, shall serve as a basis for returning an application for payment in its entirety.

- 9.2.4 Unless the Contractor has elected to post securities in lieu of retention in accordance with California Public Contract Code Section 22300 and the Agreement, and the Contractor and the District have executed an escrow agreement in accordance with the Public Contract Code and the Agreement, the District will make progress payments to the Contractor in accordance with applicable law in the amount of 95 percent of the value of the labor actually performed and the material incorporated in the Work as specified in Contractor's verified application for payment upon approval by the District's authorized representative(s). Payment of progress payments will not be construed as acceptance of the Work performed. If the Contractor has elected to post securities in lieu of retention in accordance with Public Contract Code Section 22300 and the Agreement and the Contractor and the District have executed an escrow agreement in accordance with the Public Contract Code and the Agreement, the District will make payments to the Contractor or the Contractor's escrow agent in accordance with such escrow agreement.
- 9.2.5 The District will pay the Contractor's final invoice in accordance with applicable law and this Section 9 following acceptance of the Work provided that:
- 9.2.5.1 The Contractor has furnished evidence satisfactory to the District that all claims for labor and material have been paid, or the time for filing valid stop notices has passed and no stop notices have been filed, or all stop notices filed have been released by valid release or release bond acceptable to the District.
- 9.2.5.2 No claim has been presented to the District by any person based upon any acts or omissions of the Contractor or any subcontractor engaged in the performance of the Work.
- 9.2.5.3 No other claim or dispute exists under the Agreement or applicable law concerning payment of the Contractor's final invoice and/or release of the Agreement retention.
- 9.2.5.5 The Contractor's application for final payment contains a written waiver of all claims against the District of which the Contractor may not yet asserted at the time of the submission of the application for final payment.
- 9.2.5.6 In accordance with California Public Contract Code Section 7107, the final payment or release of retention shall not be due and payable until the expiration of 35 days from the date of recording the Notice of Completion by the District.
- 9.2.6 In accordance with California Public Contract Code Section 20104.50, if the District fails to make a progress payment within 30 calendar days of receipt of an undisputed, properly submitted application for payment, the District will pay the Contractor interest equivalent to the legal rate set forth in subdivision (a) of California Code of Civil Procedure Section 685.010. The number of calendar days available to the District to make a payment without incurring an interest

obligation pursuant to this provision and California Public Contract Code Section 20104.50 will be reduced by the number of calendar days, if any, by which the District has delayed return of an application for payment beyond the seven day return requirement set forth in Section 9.2.5.

- 9.3 Non-Allowable Direct Charges. The following costs are not allowable direct charges under the Agreement. The following costs may only be paid under the Agreement, if at all, as part of any allowance for contractor overhead and/or profit established under the Agreement.
- 9.3.1 Labor costs in excess of applicable prevailing wages pursuant to the Agreement and applicable law, liability and workers compensation insurance, social security, retirement and unemployment insurance and other employee compensation and benefits pursuant to bona fide compensation plans in effect at the time specified for the opening of Project bids for contractor and subcontractor employees engaged in the performance of the Work. However, in no event will allowable direct labor charges under the agreement include employee bonuses, employee vehicles or vehicle allowances, employee telephones or telephone allowances, or employee housing or housing allowances, whether or not such benefits are part of a bona fide compensation plan in effect at the time specified for the opening of Project bids.
 - 9.3.2 Superintendent labor and clerical labor.
 - 9.3.3 Bond premiums
 - 9.3.4 Insurance in excess of that required under Section 8.8
 - 9.3.5 Utility costs
 - 9.3.6 Work Site office expenses
 - 9.3.7 Home office expenses.
- 9.4 Withhold. The District or its agent may, in accordance with the Contract Documents and applicable law, withhold any payment of monies due or that may become due the Contractor because of:
- 9.4.1 Defective work not remedied or uncompleted work.
 - 9.4.2 Claims filed or reasonable evidence indicating probable filing of claims.
 - 9.4.3 Failure to properly pay subcontractors or to pay for material or labor.
 - 9.4.4 Reasonable doubt that the Work can be completed for the balance then unpaid.
 - 9.4.5 Damage to another contractor.
 - 9.4.6 Damage to the District.
 - 9.4.7 Damage to a third party.

- 9.4.8 Delay in the progress of the Work, which, in the District's judgment, is due to the failure of the Contractor to properly expedite the Work.
- 9.4.9 Liquidated damages or other charges that apply to the Contractor under the Agreement.
- 9.4.10 Any other lawful basis for withholding payment under the contract.
- 9.4.11 Failure of the Contractor to maintain record documents and as-built drawings (as-needed).
- 9.4.12 Cost of insurance arranged by the District due to cancellation or reduction of the Contractor's insurance.
- 9.4.13 Failure to submit, revise, resubmit or otherwise conform to the requirements herein for preparing and maintaining a construction schedule.
- 9.4.14 Failure to make proper submissions, as specified herein.
- 9.4.15 Stop Notice claims filed by Contractor's subcontractors, of any tier, or its material suppliers.
- 9.4.16 Provisions of law that enable or require the District to withhold such payments in whole or in part.
- 9.4.17 Failure to comply with environmental or other regulatory requirements.
- 9.4.18 Failure of Contractor to submit Operation and Maintenance Manuals.
- 9.5 Securities in Lieu of Retention.
 - 9.5.1 In accordance with Public Contract Code Section 22300, except where federal regulations or polices do not permit substitution of securities, the Contractor may substitute securities for any moneys withheld by the District to ensure performance of the Work. At the Contractor's request and expense, securities equivalent to the amount withheld will be deposited with the District, or with a state or federally chartered bank in California as the escrow agent, who will then pay those moneys to the Contractor under the terms of an Escrow for Security Deposit agreement. The Escrow for Security Deposit agreement is provided in the Contract Documents. Upon satisfactory completion of the Work, the securities will be returned to the Contractor.
 - 9.5.2 Alternatively, at the Contractor's request and expense, the District will pay retentions earned directly to the escrow agent. At the Contractor's expense, the Contractor may direct investment of the payments into securities. Upon satisfactory completion of the Work, the Contractor will receive from the escrow agent all securities, interest, and payments received by the escrow agent from the District pursuant to this provision and the terms of the Escrow for Security Deposit agreement. The Contractor will, within twenty (20) working days of receipt of payment, pay to each subcontractor the respective amount of interest earned, less costs of retention withheld from each Subcontractor, on monies withheld to ensure the Contractor's performance of the Work.

- 9.5.3 Securities eligible for investment in accordance with this provision include those listed in Government Code Section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the District.
- 9.5.4 The Contractor will be the beneficial owner of any securities substituted for moneys withheld and will receive any interest thereon.

10. PROJECT ACCEPTANCE AND CLOSEOUT

10.1 Occupancy. The District reserves the right to occupy or use any part or parts or the entire of the Work before the Work is fully performed. Subject to applicable law, exercising this right will in no way constitute acceptance of any part of the Work so occupied or used or acceptance of the entire Work, nor will such occupancy or use in any way affect the times when payments will become due the Contractor, nor will such occupancy or use in any way prejudice the District's rights under the Agreement, any Agreement bonds, or at law or equity. Occupancy or use shall not waive the District's rights to assess liquidated damages in accordance with Section 7 after the date of such occupancy or use.

10.2 Work Completion and Final Inspection.

10.2.1 Certificate of Completion. When the Contractor considers the Work is completed, the Contractor will submit written certification to the District Engineer specifying that: the Contract Documents have been reviewed; the Work has been inspected for compliance with the Contract Documents; the Work has been completed in accordance with the Contract Documents; and that equipment and systems have been tested in the presence of the District's representative and are operational. The District and/or the District's authorized representatives will make an inspection to verify that the Work is complete and will notify the Contractor in writing of any incomplete or deficient Work. The Contractor will take immediate steps to remedy the stated deficiencies and give notice of correction to the District Engineer. Upon receiving a notice of correction, the District or the District's authorized representatives will re-inspect the Work. The Contractor must correct all punch list items within 15 working days after the issuance of the punch list.

10.2.2 Project Record Drawings/As-Builts (**As Needed**). Before acceptance of the Work the Contractor must submit:

1. One set of Project Record Drawings, based on the Conformed Set, in 24 x 36 and 11 x 17 sheets.
2. Project Record Drawings, based on the Conformed Set, in AutoCad (.DWG) and portable document file (.PDF) formats.
3. Equipment operating and maintenance instructions and data: one set of hard copy, and one scanned set in portable document file (.PDF) format.
4. Miscellaneous construction-related documents, studies, reports, etc., obtained or developed by the contractor during construction of the project in portable document file (.PDF) format.
5. Warranties, etc.

10.3 Work Acceptance.

- 10.3.1 All finished Work will be subject to inspection and acceptance or rejection by the District, the District Engineer, and the Architect or Engineer and other government agencies having jurisdiction over the Work. Final acceptance of the Work will be at the discretion of the District.
- 10.3.2 The District will accept the Work in writing only when the Work has been completed to the District's reasonable satisfaction. Progress payments will in no way be construed as acceptance of any part of the Work.
- 10.3.3 In evaluating the Work, no allowance will be made for deviations from the Technical Specifications, Drawings or other Contract Documents unless already approved in writing in accordance with the requirements of Section 4, above.
- 10.3.4 The fact that the Work and materials have been inspected from time to time and that progress payments have been made does not relieve the Contractor of the responsibility of replacing and making good any defective or omitted work or materials in accordance with the requirements of the Contract Documents.

11. REMEDIES AND DISPUTES

- 11.1 Failure to Correct Work. Within ten (10) working days of receiving written notice from the District describing Work that is defective or that is otherwise not in accordance with the requirements of the Agreement and/or applicable law and directing that such Work be corrected, the Contractor and/or the Contractor's sureties must give the District written notice of the intent of the Contractor and/or the Contractor's sureties to correct such Work and commence correction of such Work in accordance with the District's notice and the Agreement. If the Contractor and/or the Contractor's sureties do not give the District written notice of intent to correct such Work and commence correction of such Work within ten (10) working days of receipt of the District's notice, then the District may correct such work and/or have such work corrected for the account and at the expense of the Contractor and/or its sureties, and the Contractor and/or its sureties will be liable to the District for any resulting excess cost. The District may, in addition to all other remedies that the District may have under the Agreement and at law or equity, deduct any such excess cost of completing the Work from amounts that are due or that may become due the contractor.

11.2 Termination.

- 11.2.1 In accordance with California Public Contract Code Section 7105, in addition to all other available remedies that the District may have under the Agreement, and at law or equity, the District may terminate the Contractor's control of the Work:
 - 11.2.1.1 If the Contractor or any of its subcontractors engaged in the performance of the Work fails to timely perform the Work and/or any of the Contractor's material obligations under the Contract Documents, including but not limited to submission of an acceptable schedule, that have accrued except for due to reasons beyond the control of the Contractor pursuant to the Contract Documents.
 - 11.2.1.2 If the Contractor is adjudged bankrupt, or if it should make a general assignment for the benefit of creditors, or if a receiver should be appointed on account of its creditors.

- 11.2.1.3 If the Contractor or any of the subcontractors engaged in the performance of the Work persistently or repeatedly refuses or fails to supply enough properly skilled workmen or proper materials for the timely completion of the Work.
- 11.2.1.4 If the Contractor fails to make prompt payment to subcontractors engaged in the performance of the Work or for material or labor used in the performance of the Work in accordance with the Contract Documents and applicable law.
- 11.2.1.5 If the Contractor or any subcontractors engaged in the performance of the Work persistently disregards laws or ordinances applicable to the performance of the Work, or the instructions of the District, the District Engineer, the Architect, or other authorized representatives of the District.
- 11.2.1.6 For any reason or for no reason, at the District's sole discretion.
- 11.2.2 If the District intends to terminate the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 through 11.2.1.5, above, the District will immediately serve written notice to the Contractor and its sureties in accordance with the Contract Documents. Notice of the District's intent to terminate the Contractor's control of the Work will be given by registered or certified mail and specify the grounds for termination, the required cure and the time by which the cure must be effected. Upon receipt of notice of the District's intent to terminate the Contractor's control of the Work for any of the reasons specified in provisions 11.2.1.1 through 11.2.1.5, above, the Contractor will have ten (10) working days from receipt of the notice or a longer time specified in the notice to cure its default. If the Contractor does not affect the required cure by the time specified in the notice, the District will issue a written notice of termination to the Contractor and its sureties by registered or certified mail. The notice of termination will specify: that upon receipt of the notice the Contractor's right to perform or complete the Work, including on behalf of the Contractor's sureties, is terminated; that the Contractor's sureties will have the right to take over and complete the Work and perform all of the Contractor's remaining obligations that have accrued under the Agreement; and that if the Contractor's sureties do not both give the District written notice of their intention to take over and perform the Agreement and commence completion of the Work and performance of all of the Contractor's remaining obligations that have accrued under the Agreement within ten (10) working days after receipt of notice of termination that the District may declare the Contractor's sureties in default and take over the completion of the Work or have the Work completed for the account and at the expense of the Contractor and its sureties, and the Contractor and its sureties will be liable to the District for any resulting excess cost. The District may, in addition to all other available remedies that the District may have under the Contract Documents and at law or equity, deduct any such excess cost of completing the Work from amounts that are due or that may become due the Contractor.

- 11.2.3 Upon termination of the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 - 11.2.1.5, the Contractor will, if so directed by the District, immediately remove from the Work site any and all materials and personal property belonging to the Contractor which have not been incorporated in the Work and the Contractor and its sureties will be liable upon their bond for all damages caused the District by reason of the Contractor's failure to complete the Work.
- 11.2.4 Upon termination of the Contractor's control of the Work for any of the reasons specified in provisions 11.2.1.1 through 11.2.1.5, above, the District reserves the right to refuse tender of the Contractor by any surety to complete the Work.
- 11.2.5 If the District completes or has completed any portion of, or the whole of the Work, following termination of the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 through 11.2.1.5, above, the District will neither be liable for nor account to the Contractor or the Contractor's sureties in any way for the time within which, or the manner in which such Work is performed, or for any changes made in such Work or for the money expended in satisfying claims and/or suits and/or other obligations in connection with completing the Work. If, following termination of the Contractor's control of the Work for any of the reasons specified in Sections 11.2.1.1 through 11.2.1.5, above, the unpaid balance of the Contract Price exceeds the expense of completing the Work, including compensation for additional legal, managerial and administrative services and all other amounts due for the completion of the Work and/or satisfaction of claims of the District and/or others arising out of the Agreement and any other charges that apply to the Contractor under the Agreement, the difference will be paid to the Contractor. If such expenses of completing the Work exceed the unpaid balance of the Contract Price, the Contractor or its sureties will pay the difference to the District.
- 11.2.6 If the Agreement or Contractor's control of the Work is terminated for any reason, no allowances or compensation will be granted for the loss of any anticipated profit by the Contractor.
- 11.2.7 In accordance with California Government Code Section 4410, in the event a national emergency occurs, and public work being performed by contract is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment or labor, as the result of an order or a proclamation of the President of the United States, or of an order of any federal authority, and the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the work, then the District and the Contractor may, by written agreement, terminate the Agreement. In accordance with California Government Code Section 4411, such an agreement will include the terms and conditions of the termination of the contract and provision for the payment of compensation or money, if any, which either party will pay to the other or any other person, under the facts and circumstances in the case. Compensation to the Contractor will be determined on the basis of the reasonable value of the work done, including preparatory work. As an exception to the foregoing, in the case of any fully completed separate item or portion of the Work for which there is a separate contract price, the contract price shall control. The parties may in any other case adopt

the contract price as the reasonable value of the work or any portion of the work done.

11.3 Disputes.

11.3.1 In accordance with California Public Contract Code Section 20104.2, the following procedures apply to claims of \$375,000 or less between the Contractor and the District:

11.3.1.1 The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

11.3.1.2 For claims of less than fifty thousand dollars (\$50,000), the District shall respond in writing to any written claim within forty five (45) calendar days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor.

11.3.1.2.1 If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the District and the Contractor.

11.3.1.2.2 The District's written response to the claim, as further documented, shall be submitted to the Contractor within fifteen (15) calendar days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

11.3.1.3 For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the District shall respond in writing to all written claims within sixty (60) calendar days of receipt of the claim, or may request, in writing, within thirty (30) calendar days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor.

11.3.1.3.1 If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the District and the Contractor.

11.3.1.3.2 The District's written response to the claim, as further documented, shall be submitted to the Contractor within thirty (30) calendar days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

- 11.3.1.4 If the Contractor disputes the District's written response, or the District fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within fifteen (15) calendar days of receipt of the District's response or within fifteen (15) calendar days of the District's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within thirty (30) calendar days for settlement of the dispute.
- 11.3.1.5 Following the meet and confer conference, if the claim or any portion remains in dispute, the Contractor may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.
- 11.3.1.6 This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 11.3.2 In accordance with California Public Contract Code Section 20104.4, the following procedures apply to civil actions to resolve claims greater than \$375,000 between the District and the Contractor:
- 11.3.2.1 Within sixty (60) calendar days, but no earlier than thirty (30) calendar days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within fifteen (15) calendar days by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) calendar days of the submittal, and shall be concluded within fifteen (15) calendar days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.
- 11.3.2.2 If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

11.3.2.2.1 Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

11.3.2.2.2 In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

11.3.2.3 The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

11.3.3 In accordance with California Public Contract Code Section 20104.6:

11.3.3.1 The District shall not fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

11.3.3.2 In any suit filed under Public Contract Code Section 20104.4 concerning this contract, the District shall pay interest at the legal rate on any arbitration award or judgment. Such interest shall accrue from date the suit was filed.

11.3.4 Dispute Resolution in accordance with California Public Contract Code Section 9204:

11.3.4.1 Claims. This Section applies to and provides the exclusive procedures for any Claim arising from or related to the Contract or performance of the Work.

(A) *Definition*. "Claim" means a separate demand by Contractor, submitted in writing by registered or certified mail with return receipt requested, for change in the Contract Time, including a time extension or relief from liquidated damages, or a change in the Contract Price, that has previously been submitted to District as a Change Order in accordance with the requirements of the Contract Documents, and which has been rejected or disputed by District, in whole or in part.

(B) *Limitations*. A Claim may only include the portion of a previously rejected demand that remains in dispute between Contractor and District. With the exception of any dispute regarding the amount of money actually paid to Contractor as Final Payment, Contractor is not

entitled to submit a Claim demanding a change in the Contract Time or the Contract Price, which has not previously been submitted to District in full compliance with this Section, and subsequently rejected in whole or in part by District.

- (C) *Scope of Section.* This Section is intended to provide the exclusive procedures for submission and resolution of Claims of any amount, and applies in addition to the provisions of Public Contract Code Section 9204 and Sections 20104 et seq., which are incorporated by reference herein.
- (D) *No Work Delay.* Notwithstanding the submission of a Claim or any other dispute between the parties related to the Project or the Contract Documents, Contractor must perform the Work and may not delay or cease Work pending resolution of the Claim or other dispute, but must continue to diligently prosecute the performance and timely completion of the Work, including the Work pertaining to the Claim or other dispute.

11.3.4.2 Claims Submission. The following requirements apply to any Claim subject to this Section:

- (A) *Substantiation.* The Claim must be submitted to District in writing, clearly identified as a "Claim" submitted pursuant to this Section 11.3.4, and must include all of the documents necessary to substantiate the Claim including the Change Order request that was rejected in whole or in part, and a copy of District's written rejection that is in dispute. The Claim must clearly identify and describe the dispute, including relevant references to applicable portions of the Contract Documents, and a chronology of relevant events. Any Claim for additional payment must include a complete, itemized breakdown of all labor, materials, taxes, insurance, and subcontract, or other costs. Substantiating documentation such as payroll records, receipts, invoices, or the like, must be submitted in support of each claimed cost. Any Claim for an extension of time or delay costs must be substantiated with schedule analysis and narrative depicting and explaining claimed time impacts.
- (B) *Claim Format.* A Claim must be submitted in the following format:
 - (1) General introduction, specifically identifying the submission as a "Claim" submitted under this Section 11.3.4.
 - (2) Relevant background information, including identification of the specific demand at issue, and the date of District's rejection of that demand.
 - (3) Detailed explanation of the issue(s) in dispute. For multiple issues, separately number and identify each issue and include the following for each separate issue:

- (a) The background of the issue, including references to relevant provisions of the Contract Documents;
 - (b) A succinct statement of the matter in dispute, including Contractor's position and the basis for that position;
 - (c) A chronology of relevant events;
 - (d) The identification and attachment of all supporting documents (see subsection (A), above, on Substantiation); and
 - (e) Use of a separate page for each issue.
- (4) Summary of issues and damage.
- (5) The following certification, executed by Contractor's authorized representative:

"The undersigned Contractor certifies under penalty of perjury that its statements and representations in this Claim are true and correct. Contractor warrants that this Claim is comprehensive and complete as to the matters in dispute, and agrees that any costs, expenses, or delay claim not included herein are deemed waived. Contractor understands that submission of a Claim which has no basis in fact or which Contractor knows to be false may violate the False Claims Act (Government Code Section 12650 et seq.)."

(C) *Submission Deadlines.*

- (1) A Claim must be submitted within 15 days of the date that District notified Contractor in writing that a request for a change in the Contract Time or Contract Price has been rejected in whole or in part.
- (2) With the exception of any dispute regarding the amount of Final Payment, any Claim must be filed on or before the date of Final Payment, or will be deemed waived.
- (3) A Claim disputing the amount of Final Payment must be submitted within 15 days of the effective date of Final Payment.
- (4) Strict compliance with these Claim submission deadlines is necessary to ensure that any dispute may be mitigated as soon as possible, and to facilitate cost-efficient administration of the Project. *Any Claim that is not submitted within the specified deadlines will be deemed waived by Contractor.*

11.3.4.3 District's Response. District will respond within 45 days of receipt of the Claim with a written statement identifying which portion(s) of the Claim are disputed, unless the 45- day period is extended by mutual agreement of District and Contractor or as otherwise allowed under Public Contract Code section 9204. However, if District determines that the Claim is not adequately documented, District may first request in writing,

within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim that District may have against the Claim. If Contractor fails to submit the additional documentation to District within 15 days of receipt of District's request, the Claim will be deemed waived.

- (A) *Additional Information.* If additional information is thereafter required, it may be requested and provided upon mutual agreement of District and Contractor.
- (B) *Non-Waiver.* Any failure by District to respond within the times specified above may not be construed as acceptance of the Claim in whole or in part, or as a waiver of any provision of these Contract Documents.

11.3.4.4 Meet and Confer. If Contractor disputes District's written response, or District fails to respond within 45 days of receipt of the Claim with, Contractor may notify District of the dispute in writing of the sent by registered or certified mail, return receipt requested, and demand an informal conference to meet and confer for settlement of the issues in dispute. If Contractor fails to dispute District's response in writing within the specified time, Contractor's Claim will be deemed waived.

- (A) *Schedule Meet and Confer.* Upon receipt of the demand to meet and confer, District will schedule the meet and confer conference to be held within 30 days, or later if needed to ensure the mutual availability of each of the individuals that each party requires to represent its interests at the meet and confer conference.
- (B) *Location for Meet and Confer.* The meet and confer conference will be scheduled at a location at or near District's principal office.
- (C) *Written Statement After Meet and Confer.* Within ten working days after the meet and confer has concluded, District will issue a written statement identifying which portion(s) of the Claim remain in dispute, if any.
- (D) *Submission to Mediation.* If the Claim or any portion remains in dispute following the meet and confer conference, within ten working days after the District issues the written statement identifying any portion(s) of the Claim remaining in dispute, the disputed portion(s) will be submitted for mediation, as set forth below.

11.3.4.5 Mediation and Government Code Claims.

- (A) *Mediation.* Within ten working days after the District issues the written statement identifying any portion(s) of the Claim remaining in dispute following the meet and confer, District and Contractor will mutually agree to a mediator, as provided under Public Contract Code section 9204. Mediation will be scheduled to ensure the mutual availability of the selected mediator and all of the individuals that each party requires to represent its interests. The parties will share the costs of mediation

equally, except costs incurred by each party for its representation by legal counsel or any other consultants.

(B) *Government Code Claims.*

- (1) Timely presentment of a Government Code Claim is a condition precedent to filing any legal action based on or arising from the Contract.
- (2) The time for filing a Government Code Claim will be tolled from the time Contractor submits its written Claim until the time that Claim is denied in whole or in part at the conclusion of the meet and confer process, including any period of time used by the meet and confer process. However, if the Claim is submitted to mediation, the time for filing a Government Code Claim will be tolled until conclusion of the mediation, including any continuations, if the Claim is not fully resolved by mutual agreement of the parties during the mediation or any continuation of the mediation.

11.3.4.6 Tort Claims. This Section does not apply to tort claims and nothing in this Section is intended nor will be construed to change the time periods for filing tort-based Government Code Claims.

11.3.4.7 Arbitration. It is expressly agreed, under California Code of Civil Procedure Section 1296, that in any arbitration to resolve a dispute relating to this Contract, the arbitrator's award must be supported by law and substantial evidence.

11.3.4.8 Damages. Contractor bears the burden of proving entitlement to and the amount of any claimed damages. Contractor is not entitled to damages calculated on a total cost basis, but must prove actual damages. Contractor is not entitled to recovery of any alleged home office overhead. The Eichleay Formula or similar formula may not be used for any recovery under the Contract. Contractor is not entitled to consequential damages, including home office overhead or any form of overhead not directly incurred at the Worksite; lost profits; loss of productivity; lost opportunity to work on other projects; diminished bonding capacity; increased cost of financing for the Project; extended capital costs; non-availability of labor, material or equipment due to delays; or any other indirect loss arising from the Contract.

11.3.4.9 Multiple Claims. In the interest of efficiency, District, acting in its sole discretion, may elect to process multiple Claims concurrently, in which case the applicable procedures above will be based on the total amount of such Claims rather than the amount of each individual Claim. Any such election will not operate to change or waive any other requirements of this Section.

11.3.4.10 Other Disputes. The procedures in this Section 11.3.4 will apply to any and all disputes or legal actions, in addition to Claims,

arising from or related to this Contract, unless and only to the extent that compliance with a procedural requirement is expressly and specifically waived by District.

Exhibit D
1. Safe Work Requirements

LAS GALLINAS VALLEY SANITARY DISTRICT

CONTRACTOR SAFE WORK REQUIREMENTS

Revised June 8, 2017

SAFETY POLICY

Contractors and their subcontractors working for the Las Gallinas Valley Sanitary District shall comply with all applicable federal, state, and local safety orders in the performance of any work on District projects. In addition, Contractors and their subcontractors shall comply with all safety regulations and procedures listed in this Safe Work Requirements. Contractors shall take any additional precautions necessary to prevent injury or damage to persons, property, or interference with District operations.

Contractors shall be responsible for notifying employees, subcontractors, and invitees of these District Safe Work Requirements. No work within District facilities or on District contract work sites shall begin prior to such notification. Contractor shall not allow a new employee or new subcontractor to begin work on District projects without having conducted a full and proper safety orientation.

Contractors doing work at the Treatment Plant facility, lift stations or sewage conveyance systems shall schedule a safety orientation session for their site Superintendent and other Contractor-designated personnel with the Authorized District Representative prior to commencing work. The orientation session shall include emergency procedures, an explanation of applicable District safety policies, and any unique and inherent hazards of District facilities. It is then the responsibility of the Contractor's Superintendent or designated personnel to orient and so inform all personnel under the Contractor's supervision.

The District may, in its sole discretion, either temporarily or permanently remove a Contractor's employee from District work and/or terminate the Contractor's right to proceed for any violation of applicable Cal/OSHA Construction Safety Orders or these District Safe Work Requirements.

DEFINITIONS

As used in this Safe Work Requirement, the following definitions are applicable:

A. PARTS AND MATERIALS:

All products, materials, devices, systems, or installations installed by Contractor shall have been approved, listed, labeled, or certified as conforming to applicable governmental or other nationally recognized standards, or applicable scientific principles. The listing, labeling, or certification of conformity shall be based upon an evaluation performed by a person, firm, or entity with appropriate registered engineering

competence; or by a person, firm, or entity, independent of the manufacturer or supplier of the product, with demonstrated competence in the field of such evaluation.

- B. CONTRACTOR**
Designates “Contractor”, “Contractors”, “Sub-Contractors”, “Suppliers”, and all employees of each.
- C. AUTHORIZED DISTRICT REPRESENTATIVE**
The District’s Authorized Representatives shall be the employee(s) designated by the District to be responsible for communicating with the Contractor.
- D. DISTRICT JURISDICTION**
For the purposes of these regulations, “District” Shall mean the Las Gallinas Valley Sanitary District.
- E. TREATMENT PLANT AND FACILITIES**
For the purposes of these regulations, “Treatment Plant & Facilities” shall include the District's Wastewater Treatment Plant, lift stations and sewage conveyance systems located within the boundaries of the District.

EMERGENCY PROCEDURES

- A. FIRST AID**
Contractors shall be responsible for providing first aid and medical treatment for their employees and for compliance with the first aid requirements of all applicable Cal/OSHA Construction Safety Orders.
- Contractors shall be responsible for making prior arrangements for emergency medical care and for transportation of injured Contractor personnel.
- B. FIRE**
When work is being performed which generates sparks or open flames, the Contractor will provide a fire watch, a person trained in the use of appropriate fire fighting equipment, whose only task is to observe and extinguish fires. A District “Hot Works” permit must be filled out and turned into the Collection System / Safety Manager, or General Manager when the Safety Manager is not available, when work is completed. Contractor shall ensure that appropriate fire extinguisher(s) are available at the specific work site for use in case of a fire. All Contractor’s employees shall be properly trained to use them.
- In the event of a fire, Contractor shall immediately notify the nearest District employee and if possible, call emergency (911) and give the location of the plant, which is 300 Smith Ranch Rd. San Rafael. A map of the wastewater plant is included in this policy. Refer to Attachment A.

BASIC SAFETY RESPONSIBILITIES AT DISTRICT FACILITIES

A. COMMUNICATION

Contractor shall maintain close communication with the Authorized District Representative. Contractors should sign-in at the office at the beginning and end of each day along with a headcount of crew members.

B. RESPONSIBILITY

Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss, to:

1. All employees on the work site and other persons and organizations who may be affected thereby.
2. All the work, materials, and equipment to be incorporated therein, whether in storage or off the site.
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation, or replacement in the course of construction.

Contractor shall comply with all applicable laws and regulations (whether referred to herein or not) of any public agency having jurisdiction over the safety of persons or property, or the protection of persons from damage, injury, or loss, and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and facilities when performance of the work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property and facilities.

Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent unless otherwise designated in writing by the Contractor to the District.

C. GENERAL SAFETY REGULATIONS

Basic Rules:

- Work shall not begin until the Contractor's personnel have been informed of the District's Safe Work Requirements and potential hazards. The District employee responsible for the project is responsible for advising the Contractor of the District's Safe Work Requirements and potential hazards.
- All safety procedures applicable to the job being performed, including use of appropriate protection equipment, shall be followed.
- The Contractor's personnel shall **never** operate, use, adjust, modify or relocate any District equipment, switches, valves, or other controls. The Authorized

District Representative must be contacted should operation, adjustment, modification, or relocation of District equipment be necessary.

- Contractor's use of District instruments, tools, ladders, scaffolding or other equipment is not permitted except in cases of emergency as determined by a District supervisor or by permission from a senior Manager of the District.
- Drinking water shall be supplied by Contractor. **Do Not Drink Water from Hose Connections at any District Facility.**
 1. Hose bib connections are located throughout the treatment plant. Most of these supply treated wastewater and may or may not be posted with signs reading "Do Not Drink." In any case, **never** drink water from hose bibs or hoses.
 2. Water lines throughout the treatment plant are color coded (when not stainless steel) and labeled as follows:

Recycle Water Piping	Purple
Domestic Water Piping	Blue
Service Water Piping (Plant Effluent)	Gray
 3. Hose connections may be used to wash down equipment. Never hose down electrical or heated equipment of any kind. If an employee has used a gray or purple water hose for wash down, he/she should immediately wash their hands in domestic water with soap.
- NEVER make any connection to any water line without first verifying with the Authorized District Representative that contamination of the water lines will not occur.
- Use of alcoholic beverages and/or illegal drugs by Contractor or any employee is strictly prohibited. Smoking within the plant is prohibited. Use of prescription or non-prescription drugs which interfere with the individual's ability to work safely is also prohibited.
- Contractor shall advise the Authorized District Representative of any employee with any medical conditions that could put the employee in danger.

Personal Protection Equipment:

- Contractor shall be responsible for providing and assuring use by employees of all OSHA required protective equipment.
- Approved respiratory equipment shall be worn when the possibility of exposure to hazardous dusts, vapors, fumes, mists, or gases exists. In addition to all other safety regulations, pipes or conduit should be mechanically BLOCKED off when being worked on. District safety procedures shall be followed when working on, but not limited to, the following systems:
 - 1) Natural gas and sludge gas (Methane)

- 2) Ferrous Chloride
- 3) Polymer
- 4) Hypochlorite
- 5) Compressed Air
- 6) Sodium Bisulfite

- Contractor shall be responsible for determining the existence and location of such systems prior to commencement of work.

Power Tools and Welding Equipment:

- Gasoline and electrical powered hand tools shall be protected by approved ground fault circuit interrupters, or shall be double insulated. Cords shall be inspected daily prior to use. Damaged cords shall not be used on District work.
- Pneumatic driven power tools shall be disconnected from air lines when not in use. Hoses shall be inspected daily prior to use. Damaged hoses shall not be used on District work.
- Power tools shall be used only by trained personnel who have a valid license (when applicable, i.e, welding) in their possession. Proper warning signs shall be posted when these tools are in use.
- Electric and gas welding and cutting tools, including cords and gas hoses, shall be inspected daily prior to use. Damaged cords and gas hoses shall not be used on District work.
- Contractor and Contractor employees' tools and equipment used on District work sites shall be in safe operating condition and shall conform to the requirements of Cal/OSHA regulations. All personnel using such tools shall be properly trained.

D. BARRICADES AND SIGNS FOR TRAFFIC CONTROL

All Contractors, permittees, or agencies doing work for District which requires traffic control shall:

- 1) Install and maintain required traffic devices.
- 2) Provide appropriately equipped flag persons when required.
- 3) Provide adequate safeguards for workers and District personnel.
- 4) Maintain access for District personnel to all District facilities.

All work on streets, roadways, or similar thoroughfares shall comply with the Federal Highway Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways" and any local ordinances. District Plant speed is *maximum* 10 mph.

SPECIAL PROCEDURES AND UNIQUE HAZARDS

A. **CONFINED SPACE ENTRY**

Confined spaces of all types exist throughout the District and throughout the plant and range from open trenches and manholes, to tanks, clarifiers and digesters. Contractors are required to meet Cal/OSHA safety standards for CONFINED SPACE ENTRY OPERATIONS, Title 8 Article 108 (Sections 5156-5159), or the most current CAL/OSHA applicable standards, and to provide a safe working environment for their employees. All Contractors directing or working in confined spaces are required to notify the Authorized District Representative. Contractors are responsible for all operations, testing, equipment calibration, ventilation, and entry per the Cal/OSHA standards. Contractors are responsible for all confined space permits and all appropriate equipment. Completed confined space permits are to be turned in to the District's safety manager.

B. **ELECTRICAL SUPPLY SYSTEMS**

The treatment plant's Electrical Supply System consists of two 65kW Gas Microturbine Generators, one 500kW diesel oil engine driven standby generator and one 380 KW trailer mounted standby generator, and solar power. All electrical power generated in the plant and PG&E power (beyond their transformer) is 480 volt, 3 phase, 60 Hz electricity and is delivered to one 480 volt switchgear panel. This panel is interconnected by cables and protected by breakers, relays and monitoring devices.

Electricity is dispersed from the switchgear through breakers and cables to motor control centers (MCC's), to power panels, to transformers (voltage reducers), to lighting panels and to motor driven pumps and equipment. Lockable control stations are located at each piece of equipment. 480 volt, 208 volt and 120 volt electricity is used in the plant. Contact the duty operator prior to working on any piece of electrical equipment. Electricity is hazardous and can burn or kill people.

All work on electrical systems shall be done in accordance with the State of California, CAL/OSHA, Article 33, Electrical Requirements for construction work, Low Voltage Electrical Safety Orders.

C. **FERROUS CHLORIDE SYSTEMS -**

The Ferrous Chloride System consists of a positive displacement pump with feed rate adjustment. Shut-off valves are located before and after the pump. Before working on this system, close all valves and disconnect the pump from electricity.

Ferrous Chloride is a dangerous chemical which will attack the skin, eyes and the mucous membranes of the mouth, throat and lungs. Contact the plant duty operator prior to working on this system.

D. DIGESTER GAS SYSTEM

The Digester Gas System consists of one steel tank, associated piping, compressors, flare, etc. Sludge is bacterially reduced in the tanks creating principally methane (CH₄) and other combustible hazardous gases, including hydrogen sulfide (H₂S). Hydrogen sulfide is toxic at very low concentrations. These gases are contained by the tank covers and piping which is located on overhead racks, in pipe trenches and buried throughout the plant. The gases are burned in large engines driving generators to make electricity for the plant. Heat from the engines is captured and piped to the digesters to heat the sludge, speeding up the digestion process.

Digesters and the stored gases within them are hazardous. No smoking, cutting, or spark-generating equipment is allowed on or within ten feet of any digester. Contact the duty operator prior to working on digesters.

E. HYPOCHLORITE SYSTEM

Hypochlorite, or concentrated chlorine bleach (12.5%), is used to disinfect, or kill bacteria and virus in the final effluent (water) discharged from the plant. Two tanks, each 7,000 gallons are used to store hypochlorite. Piping, valves, pumps, strainers (filters) and flow measuring and control equipment make up the system. Hypochlorite will attack clothing, skin, eyes and mucous membranes of the nose, mouth, throat and lungs. Contact the duty operator prior to working on the hypochlorite system.

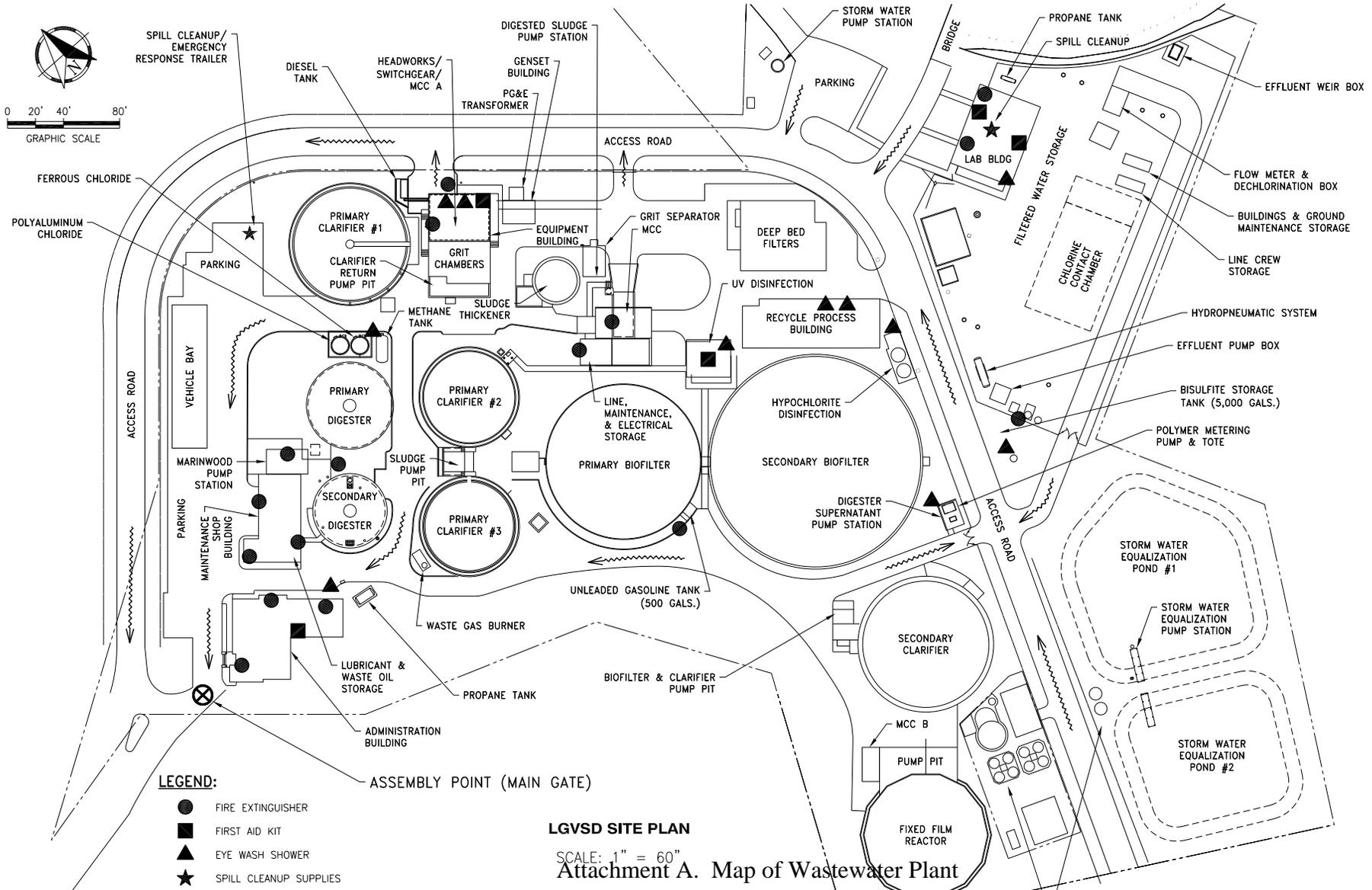
F. SODIUM BISULFITE

Sodium bisulfite is used when neutralizing sodium hypochlorite. Two tanks, each 4,000 gallons and one 2,500 gallons are used to store sodium bisulfite. Piping, valves, pumps, strainers (filters) and flow measuring and control equipment make up the system. Sodium bisulfite is an irritant to eyes, skin and mucous membranes. Inhalation of mist may cause irritation to respiratory tract. Contact the duty operator prior to working on the sodium bisulfite system.

G. GENERAL HAZARDS

Throughout District's treatment plant and facilities there are a number of extremely hazardous elements that are dangerous. They include, but are not limited, to:

- Flammable gas and petroleum.
- H₂S (hydrogen sulfite)
- Deep pools of liquid sewage which are rarely patrolled, and for which self-rescue is unlikely.
- Automatic start equipment.
- HBV (Hepatitis B Virus)



- LEGEND:**
- FIRE EXTINGUISHER
 - FIRST AID KIT
 - ▲ EYE WASH SHOWER
 - ★ SPILL CLEANUP SUPPLIES

LGVSD SITE PLAN

SCALE: 1" = 60'

Attachment A. Map of Wastewater Plant

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EMERGENCY EVACUATION ROUTES

D.1-8

Exhibit D
2. Confined Space Entry Program

Las Gallinas Valley
Sanitary District

Confined Space
Entry
Program

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**LAS GALLINAS VALLEY SANITARY DISTRICT
Confined Space Entry Program**

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LGVSD CONFINED SPACE ENTRY PROGRAM

INTRODUCTION

The purpose of Las Gallinas Valley Sanitary District's confined space entry program is to protect employees who work in manholes, pump stations, tanks, or any other confined space that could expose employees to hazardous conditions or substances. The program establishes an entry permit system and procedures to ensure that potential hazards of each confined space are identified and evaluated and that appropriate safety precautions are taken before an employee enters the space.

Employees will be given an opportunity to participate in the development and implementation of LGVSD's confined space procedures. The program will be revised or procedures will be modified whenever suggestions or recommendations from employees would improve confined space safety.

The policies and procedures in this program are consistent with the requirements of Cal/OSHA General Industry Safety Orders, Title 8, Sections 5156 and 5157 and supersede previous confined space policies and procedures. The program applies to all employees who work in, or in connection with LGVSD confined spaces.

Confined spaces at LGVSD have been identified based on the definitions in Section 5157 as follows:

Confined Space is a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work; and
2. Has limited or restricted means for entry or exit; and
3. Is not designed for continuous employee occupancy.

Permit-Required Confined Space is a space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section; or
4. Contains any other recognized serious safety or health hazard.

Non-Permit Confined Space is a space that does not contain (or with respect to atmospheric hazards, has no potential to contain) any hazard capable of causing death or serious physical harm.

Employees who work in or in connection with confined spaces are required to follow the procedures described in this program and to take all the appropriate precautions to ensure that the work is performed safely. At no time should an employee enter a confined space or perform work in the space unless it can be done safely.

PERMIT-REQUIRED CONFINED SPACES

The tables on pages 4 and 5 list confined spaces at LGVSD that require a permit to enter. Potential hazards associated with these spaces include engulfment, toxic gases, explosive or flammable gases, oxygen deficiency, electrical and mechanical hazards, and may under certain circumstances involve heat stress. Warning signs will be posted at wet wells and similar locations to inform employees that the space requires a permit to enter. To prevent unauthorized entry, each of these spaces will be secured.

Using the entry permit, a non-entry evaluation must be done so that potential hazards can be identified and the appropriate safety precautions taken. The types of hazards that may be encountered, pre-entry safety checks, and the types of safety equipment that will be used are entered on the permit. Only the person designated as the entry supervisor has the authority to authorize the entry permit. At least three employees are required for a permit-required confined space entry which would include an attendant and a standby rescuer.

The tables on pages 4 and 5 that list permit-required confined spaces at LGVSD are not all-inclusive. Other spaces may be determined to be permit-required after evaluating the conditions or circumstances of the entry. The type of work to be performed in the space could introduce hazards to an otherwise safe space. Working with flammable or toxic substances, welding or other hot work, or drifting vapors from outside sources would make a space hazardous or potentially hazardous and therefore require a permit to enter.

ALTERNATE ENTRY PROCEDURES

Alternate procedures are allowed in permit-required spaces where it can be demonstrated and documented that the only hazard or potential hazard is an atmospheric one, and that continuous forced air ventilation alone will maintain the space safe for entry. A trained, qualified employee may enter these confined spaces without an attendant or rescue preparations provided the following conditions are met.

1. All unsafe conditions are eliminated before the confined space cover is removed.
2. The entrance to the space is guarded with a railing or other type of barrier to prevent an accidental fall through the opening and to protect employee in the space.
3. The atmosphere is tested before entry in the following order: O₂, LEL/LFL, H₂S.
4. No entrance is made until hazardous atmosphere is eliminated.
5. There is no hazardous atmosphere when employees are in the space.
6. Continuous forced ventilation is used.
7. The air supply is clean and will not increase hazards.
8. The air supply is directed to area where employees are working.
9. The atmosphere is tested every 15 minutes to ensure a hazardous atmosphere is not developing.
10. Records of pre-entry and entry monitoring data and inspection data are maintained.
11. The entrant certifies, in writing, that the required pre-entry measures have been taken.
12. Monitoring and inspection data, and the certification information are made available to each employee entering the space.

If a hazardous atmosphere develops in the space, or other hazards arise, alternate procedures can no longer be used and the space must be reclassified as a fully permitted space.

SPECIAL ENTRY PROCEDURES

There are a few confined spaces at LGVSD that are not considered permit-required confined spaces. As far as can be determined, these spaces do not contain any known hazard. However, as a precautionary measure, employees are required to follow certain special procedures before entering these spaces.

1. Test the atmospheric conditions prior to entry.
2. If atmospheric conditions are acceptable, entry can be made.
3. If atmospheric conditions are not acceptable, use alternate procedures.
4. If any other hazardous condition exists, follow permit-required confined space procedures.

THE ENTRY PERMIT SYSTEM

Confined space entry permits are to be issued for a specific purpose, a specific work crew, and for a specified period of time. The entry permit is a written authorization of the location and type of work to be done. It also authorizes the personnel assigned to the job, and verifies that potential hazards have been evaluated and controlled or eliminated, that proper safety precautions have been taken, and it is safe for workers to enter. The permit must be kept at the work site (outside the space) for the duration of the work and cancelled after the work is completed.

HOT WORK PERMIT

A hot work permit must be issued for any work that produces heat, sparks or flame in a permit-required confined space. This includes but not limited to brazing, cutting, grinding, soldering, and welding.

Table 1: Main Plant Permit-Required Confined Spaces

MAIN PLANT	Permit-Required	Alternate or Special Procedure	MAIN PLANT	Permit-Required	Alternate or Special Procedure
Marinwood Pump Station			Deep Bed Filter		
Pre Wet Well Structure	•		Bypass Channel	•	
Wet Well	•		Wet Well/Supply Pumps	•	
Valve Pit		SP	Valve Pit		SP
Flow Meter Pit (F1)		SP	Tanks	•	
Primary Clarifier			Weir Overflow Pit	•	
Tank	•		Underdrain	•	
Scum Pit	•		Inlet Channel	•	
Weir Overflow Pit	•		Center Column	•	
Chemical Tank	•		F8 Flow Meter Manhole	•	
Sodium Hydroxide Tank	•		Effluent Channel	•	
Methane Tank	•		Backwash Return Wet Well	•	
Methane Scrubber Tank	•		Hypochlorite Storage Tank	•	
Primary Digester			Digester Supernatant Pump Station		
Tank	•		Wet Well	•	
Valve Pit			Valve Pit		SP
Secondary Digester			Secondary Clarifier		
Tank	•		Tank	•	
Valve Pit		SP	Flow Meter (F4)	•	
Intermediate Flow Meter Pit (F3)	•		Effluent Box	•	
Aerated Grit			Scum Pit	•	
Tank	•		Fixed Film Reactor		
Scum Pit	•		Tank	•	
Outlet Channel	•		Underdrain	•	
Inlet Channel	•		Center Column	•	
Clarifier Return Pit			F4 Diversion Box	•	
Wet Well	•		Influent and Effluent Wet well	•	
Influent Flow Meter Pit		SP	Filter Water Storage Tank	•	
Grease Storage Tank	•		Chlorine Sample Pump #2		
Intermediate Clarifier East			Wet Well	•	
Diversion Structure	•		Valve Pit	•	
Tank	•		Chlorine Contact Chamber/DBF Backwash		
Scum Pit	•		Tank	•	
Weir Overflow Pit (2)	•				
Intermediate Clarifier West			Pipe Inspection Manhole	•	
Tank	•		Plant Effluent Water Pump Wet Well	•	
			Bisulfite		
Scum Pit	•		Wet Well	•	
Weir Overflow Pit	•		Tanks	•	
Sludge Thickener			White Shack Effluent Box		
Influent Pit	•		Wet Well	•	
Tank	•		Flow Meter Pit (F5)		SP
Scum Pit	•		Effluent Pipe Inspection Manhole	•	
Primary Biofilter			Stormwater Pump Station		
Valve Pit			Wet Well	•	
Pump Pit Dry Well		SP	Flow Metet Pit (F9)		SP
Underdrain	•		Miller Creek Plant Effluent Box Wet Well	•	
Prim/Sec Biofilter Diversion Vault	•		Storm Ponds Pump Pit Wet Wells	•	
Secondary Biofilter			Centrifuge Pit Tank	•	
Effluent Box	•		Gardener's Building (ventilate before entry)		
Underdrain	•		F4 - DBF Effluent Box	•	
Pump Pit	•		DBF Effluent Weir Box/Plant Water Pump	•	
			MMWD Backwash Return Wet Wells (2)	•	

Table 2: Reclamation, Collection System, and Pump Stations Permit-Required Confined Spaces

Location	Permit-Required	Alternate Procedure	Location	Permit-Required	Alternate Procedure
RECLAMATION			PUMP STATIONS		
Diversion box			McInnis Park		
Wet Well	•		Wet Well	•	
Valve Pit	•		Valve Pit		•
Underdrain	•		Smith Ranch		
Transfer Box			Wet Well	•	
Wet Well	•		Valve Pit		•
Valve Pit	•		Flow Meter Pit		•
Underdrain	•		Industrial Park		
Meter Pit (F7)		•	Wet Well	•	
Reclamation Pump Station			Valve Pit		•
Wet Well	•		John Duckett		
Flow Meter Pit (F6)			Wet Well	•	
Sludge Supernatant Pump Station			Valve Pit		•
Wet Well	•		Flow Meter Pit		•
Dry Well	•		Comminutor Deck		•
Valve Pit		•	Civic Center North		
Pond Diversion Gate Boxes	•		Wet Well	•	
Pond Inflow/Effluent Boxes	•		Valve Pit		•
Sludge Ponds (3)	•		Marin Lagoon (9)		
			Wet Well	•	
			Valve Pit		•
COLLECTION SYSTEM			Mulligan		
All Manholes	•		Wet Well	•	
Air Release Valves		•	Valve Pit		•
Valve Boxes	•		Venetia Harbor		
			Wet Well	•	
			Valve Pit		•
			Hawthorne		
			Wet Well	•	
			Dry Well		•
			Adrian Way		
			Wet Well	•	
			Valve Pit		•
			Descanso Way		
			Wet Well	•	
			Valve Pit		•
			McPhail		
			Wet Well	•	
			Valve Pit		•
			San Rafael Meadows		
			Wet Well	•	
			Valve Pit		•
SPECIAL ENTRY PROCEDURES (SP)					
1. Test atmospheric conditions prior to entry.					
2. If atmospheric conditions are acceptable, entry can be made.					
3. If atmospheric conditions are not acceptable, use alternate procedures.					
4. If any other hazardous condition exists, follow permit-required confined space procedures.					

DUTIES OF ENTRY TEAM

A permit-required confined space entry team will include an entry supervisor, entrant(s), and at least one attendant. Before an employee begins confined space work, the work must be authorized by the District Manager or Plant Superintendent. In the absence of the District Manager and Plant Superintendent, the designated employee-in-charge may authorize the work.

As long as each individual can fully perform his/her duties, an entry supervisor may be the same person as the entrant or the attendant. The safety precautions that should be taken with a permit-required confined space entry will vary depending on the types of hazards or potential hazards involved. Regardless of the types of hazards, it is the District's policy that in addition to an attendant, a standby rescuer must be part of the entry team.

Duties of Entry Supervisor

1. Verifies that acceptable entry conditions exist.
2. Ensures acceptable entry conditions are maintained.
3. Verifies that the information and procedures on the entry permit are accurate and complete.
4. Verifies that the equipment specified on the permit is in place and in good condition.
5. Reviews permit conditions and procedures with entrants and attendants.
6. Ensures unauthorized persons do not enter the space.
7. Signs the permit to authorize entry.
8. Cancels and files permit.

Duties of Entrant

1. Properly uses the safety equipment and tools supplied.
2. Promptly notifies the attendant if any prohibited condition exists or any warning signs or symptoms appear.
3. Quickly evacuates space if an order is given by the attendant or entry supervisor, if any prohibited condition is detected, or if an alarm is activated.
4. Maintains communication with the attendant to enable attendant to monitor status of space conditions and the entrants.
5. Adheres to the procedures and precautions indicated on the permit and provided in training.

Duties of Attendant

1. Remains outside the permit space until relieved by another attendant.
2. Maintains communication with entrants.
3. Maintains accurate count and identification of entrants.
4. Monitors activities inside and outside the space.
5. Orders entrants to evacuate if a prohibited condition exists, or behavioral effects of hazardous exposure are detected, or activities outside space could endanger entrants, or attendant cannot effectively perform all required duties.
6. Ensures unauthorized persons stay away from the space.
7. Performs non-entry rescue procedures or initiates on-site rescue operations.
8. Summons additional rescue services, when needed.

ENTRY PROCEDURES

Pre-Entry

1. Notify other work groups or employees who may be affected by any interruption in service.
2. Determine (by entry supervisor or other qualified person) what hazards or potential hazards are within the confined space.
3. Check that all safety equipment is available and in good working condition.
4. Check that atmosphere monitoring equipment has been calibrated as recommended by manufacturer.
5. Without entering space:
 - a) Test atmosphere and record readings on permit.
Acceptable atmospheric conditions: Oxygen not less than 19.5% or more than 23.5%, LEL/LFL not more than 10%, H2S not more than 10 ppm, CO not more than 25 ppm.
 - b) Ventilate the space or check that ventilation system is operating properly.
6. Ensure that all affected employees observe pre-entry atmospheric testing.
7. Set up barrier around entrance to prevent accidental falls and to protect employees from vehicles, or falling objects.
8. Check for physical hazards such as poor footing, structures and equipment that hinder movement, and extreme temperatures or humidity that could affect worker safety.
9. Secure and lock out all energy sources (electrical, mechanical, hydraulic, pneumatic, chemical) that are potentially hazardous to confined space workers. Follow lockout/tagout procedures.
10. Disconnect, blind, or block lines to prevent development of hazardous conditions.
11. Use continuous forced air ventilation. Ensure that there is no recirculation of exhausted air from blowers or the introduction of contaminants from the outside, such as traffic exhaust, or vapors or toxic substances from other areas. Place blowers at least 10 feet away from opening of space.
12. Entry supervisor reviews and authorizes entry permit if the space is safe to enter, and all preparatory steps required for safe entry have been taken.

Entry

1. Only employees who have been trained on LGVSD's confined space entry and work procedures are allowed to work in or around confined spaces.
2. Only the work activity specified on the authorized permit is to be performed in the confined space.
3. At least one attendant is required for confined space work.
4. If at any time during the performance of confined space work, dangerous atmospheric conditions develop, work must stop and the space evacuate immediately.
5. An attendant must be stationed outside the space at all times during the confined space operations and remain in constant communication with workers in the space.
6. The attendant must order evacuation of the space whenever:
 - a) a condition not allowed on the permit is observed
 - b) unusual behavior is observed
 - c) an outside situation endangers the confined space workers
 - d) the attendant must leave the work station

7. The permit must be cancelled if the air becomes hazardous after entry.
8. Respiratory equipment must be worn whenever a safe atmosphere cannot be assured after implementing pre-entry procedures.

Post-Entry

The entry supervisor:

1. Cancels the permit by entering date and time of cancellation and signature.
2. On the reverse side of the permit, makes note of any problems encountered during entry operations.
3. Places the cancelled permit in the safety files.
4. Notifies the Plant Superintendent if any equipment, safety gear or tools need to be repaired or replaced.

RESCUE PROCEDURES

It is the District's policy that all employees who work in or in connection with confined spaces must be trained in rescue procedures. Members of a permit space entry team must be knowledgeable of the hazards or potential hazards, be able to recognize the signs and symptoms of exposure, be trained in the selection and use of personal protective equipment, and be certified in first-aid and cardiopulmonary resuscitation. Prior to each entry the team will plan and prepare for non-entry and entry rescues and ensure that at least one standby is immediately available to provide rescue services.

Self-Rescue

If possible, entrants should immediately leave the confined space:

1. When an alarm sounds.
2. At the first sign of any exposure symptoms.
3. When ordered to evacuate by attendant or entry supervisor.

Non-Entry Rescue

If entrants cannot immediately evacuate the space at the first sign of trouble, the attendant should attempt a non-entry rescue by retrieving the entrant using a harness and hoisting equipment. The attendant must not enter the space unless relieved by another attendant. Retrieval systems must be used in vertical permit spaces more than 5 feet deep.

Entry Rescue

Rescuers are to assume that a hazardous atmosphere exists if an entrant has slurred speech, appears dizzy, disoriented, confused, unconscious, or displays any unusual behavior, or if communication with the entrant is lost. A self-contained breathing apparatus must be worn for entry rescues if a hazardous atmosphere is suspected or if there is any chance that it can develop. Call 911 for assistance or if specialized equipment is needed to remove a worker.

Outside Rescue Services

Although outside rescue services may be present at the time of the entry or summoned to give assistance and support in an emergency, members of the entry team must be prepared to give immediate assistance to any of the entrants who may need it.

NON-PERMIT CONFINED SPACES

All confined spaces are considered permit-required until pre-entry procedures demonstrate otherwise. A confined space may be designated a non-permit space, or a permit-required confined space may be reclassified a

non-permit space if all hazards have been eliminated. Because atmospheric hazards are controlled with ventilation and not eliminated in spaces, these spaces cannot be classified as non-permit spaces.

CONTRACTORS

Contractors and subcontractors who plan to work in LGVSD confined spaces will be given all available information on LGVSD confined space hazards, the permit system, and entry procedures. Contractors are required to use a permit system for entry into LGVSD permit-required confined spaces. Contractors are also required to coordinate work and entry activities whenever LGVSD employees and contractor employees will be working in or near the permit spaces.

At the conclusion of the contractor's work, the LGVSD supervisor in charge will debrief the contractor to determine if any hazards were encountered or created during entry.

TRAINING

All employees who work in or around confined spaces must be trained before performing any confined space work. At a minimum, the training will include:

1. Hazards of confined spaces.
2. Signs and symptoms of hazard exposure.
3. Duties of entrant, attendant, and entry supervisor.
4. Pre-entry and entry procedures.
5. LGVSD confined space permit system.
6. Selection and use of personal protective equipment.
7. Atmosphere test equipment.
8. Rescue procedures and equipment.
9. CPR/First Aid.

In addition, employees involved in confined space work will participate in simulated rescue operations at least once per year. Review training will be provided whenever the need is indicated, such as changes in procedures, introduction of new equipment, the hiring of new employees or whenever deficiencies in implementing the program are observed.

Training records will be maintained which will include names and signatures of trainees and trainers, dates and content of training. These records will be made available for inspection to employees or their representatives

LGVSD CONFINED SPACE ENTRY PERMIT

Date issued: _____ Permit Expiration Date/Time: _____ Location/Description of Space: _____ Street Address of Entry _____ Reason for Entry: _____	Work Site Permit: Authorized entry permit and monitoring data must remain at the work site until the job is complete.
	Fire Dept. Notified 472-0911 Before entry _____ initials After exiting _____ initials

Entry Supervisor: _____

Authorized Attendants and Initials	Authorized Entrant and Initials:
_____	_____
_____	_____
_____	_____

Note: Indicate which attendant is assigned standby rescue duties. Initial of attendants and entrants indicate they understand their assignments, responsibilities and duties.

Pre-Entry Checks (complete before obtaining work authorization): <input type="checkbox"/> Notified other work groups. N/A _____ <input type="checkbox"/> Notified office personnel. N/A _____ <input type="checkbox"/> Checked that entry team training is current. N/A _____ <input type="checkbox"/> Reviewed entry procedures with team. N/A _____ <input type="checkbox"/> Set up barrier at entrance to space. N/A _____ <input type="checkbox"/> Checked that gas detection equipment calibration is current. N/A _____ <input type="checkbox"/> Performed pre-entry atmosphere tests. N/A _____ <input type="checkbox"/> Checked ventilation system. N/A _____ <input type="checkbox"/> Checked for physical hazards. N/A _____ <input type="checkbox"/> Secured and locked out energy sources. N/A _____ <input type="checkbox"/> Blocked or disconnected lines. N/A _____ <input type="checkbox"/> Discussed potential hazards with team. N/A _____ <input type="checkbox"/> Reviewed emergency response procedures. N/A _____ <input type="checkbox"/> Checked condition of safety equipment. N/A _____ <input type="checkbox"/> Obtained work authorization signatures. N/A _____	Potential Hazards: <input type="checkbox"/> Oxygen deficiency N/A _____ <input type="checkbox"/> Oxygen enrichment N/A _____ <input type="checkbox"/> Flammable gases or vapors N/A _____ <input type="checkbox"/> Toxic gases or vapors N/A _____ <input type="checkbox"/> Mechanical hazards N/A _____ <input type="checkbox"/> Electrical hazards N/A _____ <input type="checkbox"/> Engulfment/entrapment N/A _____ <input type="checkbox"/> Noise N/A _____ <input type="checkbox"/> Heat/Cold N/A _____ <input type="checkbox"/> Falls N/A _____ <input type="checkbox"/> Falling objects N/A _____ <input type="checkbox"/> Other N/A _____ Safety Equipment: <input type="checkbox"/> Gas detection equipment N/A _____ <input type="checkbox"/> Safety harness N/A _____ <input type="checkbox"/> Safety line N/A _____ <input type="checkbox"/> Wristlets N/A _____ <input type="checkbox"/> Hoisting equipment N/A _____	<input type="checkbox"/> Manhole hook N/A _____ <input type="checkbox"/> Barricades, cones, tape N/A _____ <input type="checkbox"/> Portable blower and hose N/A _____ <input type="checkbox"/> Explosion-proof lighting N/A _____ <input type="checkbox"/> Non-sparking tools N/A _____ <input type="checkbox"/> Tool bucket and line N/A _____ <input type="checkbox"/> Ladder N/A _____ <input type="checkbox"/> First aid kit N/A _____ <input type="checkbox"/> Fire extinguisher N/A _____ <input type="checkbox"/> Radio communication equipment N/A _____ <input type="checkbox"/> Cell phone N/A _____ <input type="checkbox"/> SCBA N/A _____ <input type="checkbox"/> Hard hat N/A _____ <input type="checkbox"/> Goggles, face shield N/A _____ <input type="checkbox"/> Gloves N/A _____ <input type="checkbox"/> Rain suit N/A _____ <input type="checkbox"/> Rubber boots N/A _____ <input type="checkbox"/> Other _____ _____
--	---	---

Hot Work:
 Does the entry involve hot work? Yes No If Yes, complete and attach a hot work permit.

Special Instructions:

Monitoring Data: Record monitoring data at 15-minute intervals on the reverse side of this permit.
Acceptable Atmospheric Conditions: Oxygen not less than 19.5% or more than 23.5%, LEL/LFL/not more than 10%, H₂S not more than 10 ppm.

Work Authorization Signatures All confined space work must be authorized by the General Manager, Plant Manager or Collection Crew Manager Work authorized by: _____ Date/Time: _____	Entry Authorization I certify that the confined space work authorized by this permit has been reviewed with the entry team and that acceptable entry conditions exist and the necessary equipment for safe entry has been provided. Entry supervisor signature: _____	Permit Cancellation Date: _____ Time: _____ Entry supervisor signature: _____
---	---	--

LGVSD CONFINED SPACE ALTERNATE PROCEDURES

Location/Description of Confined Space: _____

Entry into this confined space without an entry permit is allowed if the only potential hazard posed by the space is a hazardous atmosphere and the following measures are taken:

1. Any condition making it unsafe to remove the entrance cover is eliminated before the cover is removed.
2. The atmosphere is tested prior to entry.
3. No entry is made if there is a hazardous atmosphere.
4. Continuous forced ventilation is used.
5. The opening of the space is guarded by a railing or other temporary barrier.
6. The air supply is clean and is directed to where employees will be working.
7. The atmosphere is periodically tested and monitoring data is recorded.
8. Employees will immediately evacuate the space if a hazardous atmosphere is detected.

Certification: *I certify that on the date indicated, the conditions and pre-entry measures described above existed or were implemented and this space was determined to be safe for entry.*

<i>Signature</i>	<i>Date</i>	<i>Signature</i>	<i>Date</i>

Monitoring Data: Record the pre-entry test data, monitor the space continuously and record the readings every 15 minutes.

Date	Time	%O ₂	CO	%LEL	H ₂ S	Initials	Date	Time	%O ₂	CO	%LEL	H ₂ S	Initial

P:\Safety\Alternate Permit
 Revised September 2008

LGVSD HOT WORK PERMIT

This form is to be filled out by employee before performing hot work.

Name: _____

Date: _____ Time: _____ Location of job: _____

Detailed description of job: _____

	YES	NO
1. If the job is planned to be done indoors, can it be done outdoors or in the welding shop? If yes, move to one of these locations.	<input type="checkbox"/>	<input type="checkbox"/>
2. Have all combustible materials (solids, liquids, gases) been removed from the work area?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are there any gas lines or other lines carrying combustible/flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>
4. If yes, have all lines be disconnected, blanked or otherwise protected?	<input type="checkbox"/>	<input type="checkbox"/>
5. Has atmospheric test data been collected in the work area?	<input type="checkbox"/>	<input type="checkbox"/>
6. Is a fire watch needed for this job?	<input type="checkbox"/>	<input type="checkbox"/>
7. Is a fire extinguisher or water hose available and ready to use at the job site?	<input type="checkbox"/>	<input type="checkbox"/>
8. Can flame or sparks ignite materials in work area or on lower floors or levels?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are non-flammable tarps used to cover combustibles in the work area?	<input type="checkbox"/>	<input type="checkbox"/>
10. Have affected employees reviewed or given specific safety instructions?	<input type="checkbox"/>	<input type="checkbox"/>
11. Have screens been set up in the work area?	<input type="checkbox"/>	<input type="checkbox"/>

Special precautions to be taken: _____

I have reviewed and approved this permit: Date: _____ Time: _____ _____ Signature of District Manager	Please make note of any actions taken based on the above responses.
--	---

Revision: February 2006

P:\Safety\Hot Work Permit

LGVSD CONFINED SPACE ENTRY PROCEDURES SUMMARY

Pre-Entry

1. Obtain work authorization from the District Manager or District Superintendent.
1. Perform non-entry evaluation of the space to identify potential hazards.
2. Test atmosphere, check ventilation system and check for physical hazards in and around work area.
3. Ensure affected employees observe pre-entry testing.
4. Gather appropriate safety equipment and check that all of it is in good working condition.
5. Without entering the space, secure and lockout energy sources and disconnect or block lines.
6. Place barricade or railing around opening to space.
7. Make sure there are no ignition sources near the confined space.
8. Complete pre-entry checks.
9. Have the Entry Supervisor authorize the entry permit.
10. Test atmosphere of space again. If there is no air contamination or O₂ deficiency, entry may proceed provided permit conditions and appropriate safety procedures are in effect.
11. If there is contamination or O₂ deficiency, ventilate 10 minutes and test again. If contamination persists, do not enter. Notify the Entry Supervisor.
12. Prior to entry, ventilate manholes and other confined spaces known or suspected to be hazardous.
13. Maintain continuous ventilation. Existing ventilation must be augmented whenever there is a potential for hazardous atmosphere or initial tests indicate contamination.
14. Keep the entry permit and monitoring data at the work site until the job is complete. Entry permits are valid only for the duration indicated on the permit.

Entry

1. Do not work in or around confined spaces if you are not properly trained or experienced in safe entry and rescue procedures.
2. Wear respiratory equipment whenever a safe atmosphere cannot be ensured.
3. Attendant must be in constant communication and visual contact with entrant and must monitor activities inside and outside of space.
4. Attendant must order evacuation if he/she observes any activity not on the permit, unusual behavior, or an outside situation that endangers the entrant.
5. Perform only the work authorized on the permit.

Rescue

1. Attendant never performs entry rescue unless relieved by another attendant.
2. Perform rescue from outside the space whenever possible.
3. Use respiratory equipment if entry rescue is performed.
4. Call 911 for rescue assistance.

Post-Entry

1. Note on back of permit and notify the District Superintendent of any unsafe or unusual conditions encountered during the confined space work.
2. Have Entry Supervisor cancel and file the permit.
3. Submit the cancelled permit to the Safety chairperson for review and filing.
3. Notify the Plant Superintendent if any equipment, safety gear or tools need to be repaired or replaced.

Exhibit E

Contractor's License & Workers' Compensation Insurance Info

Exhibit F
Performance Bond
Payment/Labor and Materials Bond
3-Year Maintenance Bond

LAS GALLINAS VALLEY SANITARY DISTRICT
300 Smith Ranch Road
San Rafael, California 94903

PERFORMANCE BOND

BOND NO. _____

PREMIUM: _____

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, LAS GALLINAS VALLEY SANITARY DISTRICT, (hereinafter designated as "Obligee") and _____ (hereinafter designated as "Principal") have entered into an agreement whereby principal agrees to install and complete certain designated public IMPROVEMENT, which said agreement, dated _____, and identified as project _____, is hereby referred to and made a part hereof; and

WHEREAS, Said principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement;

NOW, THEREFORE, We, the principal and _____ as surety, are held and firmly bound unto the hereinafter called "The Obligee," in the penal sum of _____ dollars (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally firmly by these presents.

The condition of this obligation is such that if the above bound principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the said agreement and any alteration thereof made as therein provided, on his or their part, to be kept and perform and at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Obligee, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by county in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specification accompanying the same shall in any wise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their

several seals this _____ day of _____, the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by their undersigned representatives, pursuant to authority of their governing bodies.

(Corporate Seal)

PRINCIPAL

(Acknowledgement)

By: _____
Title: _____

(Corporate Seal)

SURETY

(Acknowledgement)

By: _____

(Attorney-in-fact)

Title: _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond.)

LAS GALLINAS VALLEY SANITARY DISTRICT
300 Smith Ranch Road
San Rafael, California 94903

PAYMENT/LABOR AND MATERIALS BOND

BOND NO.: _____

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ Principal, and _____, incorporated under the laws of the State of _____ and authorized to execute bonds and undertakings as sole surety, as Surety, are held and firmly bound unto any and all persons named in California Civil Code Section 1181 whose claim has not been paid by the contractor, company or corporation, in the aggregate total of _____ dollars (\$ _____), for the payment whereof, well and truly to be made, said Principal and Surety bind themselves, their heirs, administrators, successors and assigns, jointly and severally, firmly by these present.

The Condition of the foregoing obligation is such that; whereas the above bounden Principal has entered into a contract, dated _____, with the LAS GALLINAS VALLEY SANITARY DISTRICT to do the following work, to-wit: _____.

NOW, THEREFORE, if the above bounden Principal contractor, person, company or corporation, or his or its subcontractor, fails to pay any claimant named in Section 3181 of the Civil Code of the State of California, or amounts due under the Unemployment Insurance Code, with respect to work or labor performed by any such claimant, that, the Surety on this bond will pay the same, in an amount not exceeding the aggregate sum specified in this bond, and also in case suit is brought upon this bond, a reasonable attorney's fee, which shall be awarded by the court to the prevailing party in said suit, said attorney's fee to be taxes as costs in said suit. This bond shall inure to the benefit of any person named in Section 3181 of the Civil Code of the State of California so as to vie a right of action to them or their assignees in any suit brought upon this bond.

This bond is executed and filed to comply with the provisions of the act of Legislature of the State of California as designated in Civil Code Sections 3247-3252 inclusive, and all amendments thereto.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, _____ the name and corporate seals of each corporate party being hereto affixed and these presents duly signed by their undersigned representatives, pursuant to authority of their governing bodies.

(Corporate Seal)

LGVSD CONTRACTOR'S AGREEMENT
PAYMENT/LABOR AND MATERIALS BOND

PRINCIPAL

(Acknowledgement)

By:
Title: _____

(Corporate Seal)

SURETY

By: _____

(Attorney-in-fact)

(Acknowledgement)

Title: _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond.)

LAS GALLINAS VALLEY SANITARY DISTRICT
300 Smith Ranch Road
San Rafael, California 94903

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS the Board of the Las Gallinas Valley Sanitary District (designated as the "OBLIGEE"), has awarded to _____, (designated as the "PRINCIPAL") a contract for the SEWER MAIN REHABILITATION 2018 project, Job No. 19200-01, which contract and all of the Contract Documents as defined therein (designated as the "Contract") are hereby made a part hereof;

WHEREAS, the PRINCIPAL is required under the terms of the Contract to furnish a bond for the correction of any defects due to defective materials or workmanship in the work performed under the Contract, for a period of THREE (3) YEARS from the date of acceptance by the OBLIGEE of the contracted work.

NOW, THEREFORE, we the PRINCIPAL and the undersigned _____, as surety (designated as "SURETY"), an admitted surety insurer authorized to do business in the State of California, are held and firmly bound unto the Las Gallinas Valley Sanitary District, in the penal sum of _____ Dollars (\$_____), lawful money of the United States, being a sum not less than ten percent (10%) of the final Contract price, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if, during a maintenance period of THREE (3) YEARS from the date of acceptance by the OBLIGEE of the contracted work, the PRINCIPAL upon receiving written notice of a need for repairs which are directly attributable to defective materials or workmanship, shall diligently take the necessary steps to correct said defects within seven (7) calendar days from the date of said notice, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

If any action shall be brought by the OBLIGEE upon this bond, a reasonable attorney's fee, to be fixed by the Court, shall be and become a part of OBLIGEE's judgment in any such action. No right of action shall accrue on this bond to, or for the use of, any person or corporation other than the OBLIGEE named herein or the heirs, executors, administrator or successor of the OBLIGEE.

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

LGVSD CONTRACTOR'S AGREEMENT
PAYMENT/LABOR AND MATERIALS BOND

(Corporate Seal)

PRINCIPAL

(Acknowledgement)

By: _____
Title: _____

(Corporate Seal)

SURETY

(Acknowledgement)

By: _____

(Attorney-in-fact)
Title: _____

(NOTE TO SURETY COMPANY: A certified copy of unrevoked resolution of authority for the attorney-in-fact must be submitted with and attached to the executed bid bond)

TECHNICAL SPECIFICATIONS

SUBMERSIBLE GRIT SCREW CONVEYORS

PART 1. GENERAL

1.1 INTENT

- A. This section covers two (2) submersible spiral screw grit conveyors and for installation inside the retrofitted aerated Grit Chamber Nos. 1 to 2 for transporting grit slurry to a grit box at the end of the grit tanks as shown on the drawings. Furnish and install grit screw conveyors with all appurtenant work and accessories, tools, and spare parts for all complete and operational unit as specified herein, in accordance with the requirements of the Contract Documents.
- B. The contract drawings that show the submersible screw conveyor equipment are general in nature and are not intended to show exact detail. The Manufacturer shall work closely with the Contractor to resolve the detailed features and dimensions of the equipment and associated equipment in the existing tanks.
- C. The equipment and accessories located in the grit tanks and equipment room shall be suitable for use in Class 1, Division 1, Group C & D area. The equipment and accessories located in the piping galleries shall be suitable for unclassified environment.

1.2 QUALITY ASSURANCE

- A. The materials covered by these specifications are intended to be standard equipment of proven reliability and as manufactured by a reputable Manufacturer having experience in the production of specified equipment. The equipment furnished shall be designed and constructed in accordance with the best practices and methods and shall operate satisfactorily when installed as shown on the Contract Documents and operated per the Manufacturer's recommendations.
- B. Provide all equipment in this Section by one and the same Manufacturer.
- C. The Manufacturer shall have a minimum of five (5) installations in Canada and the United States of similar size conveyors for similar application.
- D. Factory Testing
 - 1.) The conveyor drive arrangement, flange adaptor, wall box, shaft and the first grit screw spiral section, and alignment module equipment shall be factory assembled and factory run tested with the gear drive and motor installed. Prior to shipment to the jobsite, the gear drive and motor assembly shall be dismantled and shipped in a separate container. The Owner shall be permitted to witness the above shop test if he chooses to. The main control panel shall also be factory tested prior to shipment.
 - 2.) Inspections and tests performed shall confirm the equipment provided it meets all established quality assurance standards set for similar materials.
- E. Acceptable Manufacturers:
 - 1.) MLM Conveying Systems, Inc.
 - 2.) Or approved equal

1.3 STANDARDS

- A. The equipment included in this specification shall comply with the latest edition of the

applicable codes and regulations including the following:

- 1.) American Gear Manufacturers Association (AGMA)
- 2.) American National Standard Institute (ANSI)
- 3.) American Society of Mechanical Engineers (ASME)
- 4.) American Society for Testing and Materials (ASTM)
- 5.) Canadian Standards Association (CSA)
- 6.) Canadian Electrical Manufacturing Association (CEMA)
- 7.) National Electrical Manufacturers Association (NEMA)
- 8.) Anti-Friction Bearing Manufacturers Association (AFBMA)

1.4 SUBMITTALS

A. Shop Drawings

- 1.) Show on the shop drawings the products, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for proper performance of the work. Where products attached or connect to other products, indicate that such items have been coordinated. Identify by cross references to design drawings and specifications.
- 2.) Submit the following additional information:
 - (A) Certified shop and erection drawings showing important details of construction dimensions, anchor bolt locations and field connections.
 - (B) Descriptive literature, bulletins, and catalogs of the equipment, including details of the motor, gear reducer and lubrication points.
 - (C) Installation, operation and start-up procedures including lubrication requirements.
 - (D) Complete motor data.
 - (E) Total weight of the equipment including the weight of the single largest item.
 - (F) A list of spare parts that are supplied with the project.
 - (G) Details and integrating plan with the other equipment operation.
 - (H) Design calculations, including capacity and torque calculations at normal and peak-load operating conditions.
 - (I) Test results that demonstrate that the proposed trough liners are four (4) times more resistant to abrasion-wear than Hardox Bar.
- 3.) Instrumentation and Control Shop Drawings:
 - (A) Shop drawings, catalogue material, and dimensional layout drawings for local control panels and enclosure.
 - (B) Elementary diagrams of pre-wired panels. Include in diagrams, control devices and auxiliary devices, for example, relays, alarms, fuses, lights. The diagrams are to be fully comprehensive so that every circuit loop can be followed completely. Indicate the types of loads, switches, transducers and power supplies such as motors, relays, lights, indicators, switches, isolators, signal selectors, power supplies, etc. Number and identify each component circuit and terminal. Also show wiring terminals and devices which are external to the panel including items supplied by Contractors. Identify all wires/cables enclosures, terminals and devices. Show tag numbers.
 - (C) Configuration/parameters sheets including settings, parameters settings. Show factory default setting and proposed settings.

(D) Manufacturer's required installation and testing instructions.

B. Product Data

- 1.) Product data sheets are defined as catalogue sheets brochures, literature, technical data, performance charts, diagrams, specifications, instructions books, lubrication charts, maintenance instructions/schedule, spare parts lists and similar data used to illustrate quality, characteristics, capacity, maintenance, replacement parts, and performance of the specified, manufactured products.
- 2.) Factory Test Report
 - (A) Provide a written statement attesting that the above factory testing has been performed and completed satisfactorily.

C. Operation and Maintenance Manuals

- 1.) Submit Operation and Maintenance Manuals, and data covering each item of equipment.
 - (A) Name, address, and telephone of the nearest competent service representative who can furnish parts and technical service.
 - (B) Descriptive literature, including illustrations, covering the operational features of the equipment, specific for this particular installation, with all inapplicable information omitted or marked out.
 - (C) Operating, maintenance and troubleshooting information.
 - (D) Complete maintenance parts list.
 - (E) Complete connection, interconnecting and assembly diagrams.
 - (F) Approved shop drawings complete with electrical information.

D. Training

- 1.) The Manufacturer shall conduct a **minimum of 1-day** training session for the plant operating personnel to instruct the staff on the proper operation, care and maintenance of the equipment and systems supplied under this contract. Training shall include both classroom and field training.
- 2.) A day trip is defined as eight (8) on-site working hours.

1.4 UNIT RESPONSIBILITY

- A. Where specified in the Contract Documents, unit responsibility requires that the specified equipment or package, complete with all accessories and appurtenances, be the end product of a single equipment Manufacturer, as specified.
- B. Unless otherwise indicated in the Contract Documents, the Contractor shall obtain all equipment and materials from the responsible Manufacturer of the system, who shall furnish all components and accessories of the package. The Manufacturer is responsible for providing the systems as specified herein.

1.5 GUARANTY/WARRANTY

- A. The Contractor guarantees all of the Work for one year from the date the District accepts the Work. Upon receiving written notice of a need for repairs which are directly attributable to defective materials or workmanship the Contractor must make good any defects arising or discovered in any part of the Work by diligently

commencing the necessary repairs within seven (7) calendar days from the date of notice from the District. If the Contractor fails to make good any defects in the Work in accordance with this provision, in addition to any other available remedy under the contract or at law or equity, the District may make good or have made good such defects in the Work and deduct the cost from amounts that may be due or become due to the Contractor, and/or call on the Contractor's maintenance bond for the cost of making good such defects and for the District's reasonable legal costs, if any, of recovering against the bond. The Contractor shall remain responsible for repairing any Work found to be defective regardless of when such defect is discovered by the District.

- B. The supplied equipment shall be unconditionally guaranteed to meet or exceed design criteria detailed in Part 2 of this specification.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. The Contractor shall store and temporarily support equipment prior to installation in strict accordance with the Manufacturer's recommendation and instructions. Protect all exposed surfaces. Keep Records of the storage parameters and the dates that storage procedures were performed. The Contractor shall be responsible for work, equipment, and materials until inspected, tested and finally accepted.
- B. Protect the equipment from being contaminated by dust, dirt, vibrations and moisture.
- C. Construct equipment of fabricated assemblies, when applicable, march marked, painted and knocked down for shipment. Sections for shipment shall be as large as practicable.
- D. Carefully pack and crate equipment for shipment. Protect polished and machined metal surfaces from corrosion and damage during shipment and installation. Cover equipment having exposed bearings and glands to exclude foreign matter. Carefully pack machines for shipment and protect electrical equipment from moisture damage. Protect bearings, seals and glands from grit and dirt.
- E. All equipment shall be skid mounted or crated to protect against damage during shipment. All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed, and equipment are ready for operation.
- F. Identify each component with durable identifying labels or tags securely attached to each piece of equipment, crate or container.
- G. Finished surfaces of all exposed flanges shall be protected by fiberboard blank flanges strongly built and securely bolted thereto.
- H. Temporary shipping braces if required shall be clearly identified for removal after assembly.
- I. Lifting lugs shall be shop installed, as required, to permit safe handling during shipping and erection with conventional hooks or slings.
- J. Furnish unloading, handling, storage and maintenance requirements for equipment prior to start-up and operation.
- K. Shipment is not to be made until the Manufacturer's coordinates shipment to the Site with the Contractor, ensuring that the equipment will be properly received and stored.
- L. Contractor shall provide all equipment, materials and labour necessary for off-loading equipment. Use methods acceptable to the equipment Manufacturer and to the District.
- M. Contractor shall examine to damage. Any damage that occurs to equipment in storage

or handling shall be corrected prior to installation or operating and testing of the equipment.

- N. Contractor shall maintain shafts and bearings in good condition by rotating weekly.

PART 2 PRODUCTS

2.1 PERFORMANCE AND DESIGN REQUIREMENTS

- A. The submersible screw conveyors shall be a fully automated grit slurry extracting system suitable for use in aerated grit tanks. The conveyors shall be shafted extracting conveyors. The grit slurry collected inside the trough shall be conveyed into a slurry hopper at the end of the grit tanks.
- B. The submersible screw conveyors shall be capable of operating in all specified flow conditions without operator's assistance and require minimal in-tank maintenance.
- C. The conveyors shall be designed suitable for integrated operation with other relevant equipment.

2.2 MATERIALS AND CONSTRUCTION

- A. The conveyor rotor and trough assembly shall be Type 304 stainless steel approximately 17' long, designed for orienting parallel to the length of aerated grit tank length, complete with a drive station and a wall penetration sleeve, one alignment module for accurate alignment and allowing discharge of grit into the grit pit, hanger bearing assemblies and supports, anchors and hold down bars.
- B. Manufacturer shall provide a removable alignment module for the purpose of a perfect wall box, drive, and spiral alignment. Wall box, drive, and spiral shall be at the correct relative elevation as well as vertically and horizontally aligned. Relative elevation alignment tolerance of the wall box and drive vs. spiral centerlines shall be + 3 mm. Horizontal alignment tolerance is 0 mm. Contractor shall be responsible for the dismantling of an incorrectly aligned system and for the reinstallation of the system, including re-pouring of concrete. Attempted correction of alignment by means of wall box shimming and other improvisational means after concrete pour will not be acceptable due to the risk of leakage and spiral detachment/breakage from shaft coupling.
- C. Wall box shall be equipped with 2 water stops and external anchor bars. Wall box shall have a triple flange arrangement with drive adaptor plate containing greased packing box, specified seal, and labyrinth seal. Provide seals to allow for adjustment and/or replacement of packing material without draining of grit tanks.
- D. Conveyor coupling disk and shaft coupling disk shall be easily accessible from inside of the tank and shall not require gear drive disconnection. Coupling disks shall be located outside of the wall sleeve and above the grit pit. Coupling disks shall not be recessed within the wall sleeve.
- E. Drive, wall box, coupling, and spiral arrangement shall include design features that prevent grit from entering and damaging the wall box and seals.
- F. A flushing line system sized by the vendor shall be provided in the wall box in order to remove all grit accumulation from the wall box automatically. Manual systems are not acceptable.
- G. Provide one wall sleeve with a drive plate and a flanged adaptor with packing box and seals for embedding in concrete for each conveyor unit. The complete wall sleeve assembly with drive plate shall be factory-tested prior to shipment and test results to be submitted to the District.

- H. The special shaft seals shall allow for adjustment and/or replacement of packing material without need to drain the grit tanks. The seals shall be designed for maintaining water tight conditions up to 10 meters of water head and shall be composed of AISI Type 316 stainless steel component parts and EPDM seal.
- I. A wall thimble, an alignment module, and a collection trough shall be supplied loose for each conveyor unit and must be interconnected with each other in order to ascertain proper alignment prior to embedment in concrete.
- J. The spiral section near the gear drive shall be provided with coupling disk for matching the drive shaft.
- K. Motor and gear drive: Motors shall be premium efficiency motors with a minimum service factor 2.0. Drive stations shall be selected by the conveyor Manufacturer to enable grit slurry transport with the conveyor fully filled with grit and shall be composed of hollow shaft mount gear drive, clincher type, TEFC, 575/3/60 motor; drive shaft with coupling disk, fixing element, flange adaptor, drive plate with greased packing box and seal as specified in this section. All wetted parts shall be in AISI 316L stainless steel. Refer to Table 1 for suggested motor sizes.

2.3 ACCESSORIES

- A. All bolts, nuts, brackets, bars and other hard wares shall be 316 stainless steel.
- B. Manufacturer shall provide appropriate start-up lubricants.

2.5 PAINTING

- A. All non-machined surfaces other than plastic or stainless steel shall be shop painted with high solids epoxy. The stainless steel structural components and enclosure panels shall be head blasted and passivated as required after fabrication to remove embedded iron, surface rust and weld burn.
- B. Surface preparation, mixing and application and safety requirements shall be in accordance with the paint Manufacturer's printed instructions.
- C. Ferrous surfaces not to be painted shall be given a shop applied coat of grease or rust resistant coating.
- D. Provide additional shop paint coating for touch-up to all surfaces per Division 9 requirements after installation and testing is completed and equipment accepted.

2.6 NAMEPLATES AND NAME TAG

- A. Supply equipment with corrosion-resistant metal nameplates fitted securely in an easily readable location complete with impressed type inscriptions giving the following information as applicable.
 - 1. For Equipment:
 - a. Equipment name
 - b. Manufacturer's name
 - c. Year of Manufacturer
 - d. Model # and Serial #
 - e. Rated Capacity
 - f. Weight
 - 2. For Electric Motors, Nameplate marking shall meet the following requirements:
 - a. Manufacturer's name
 - b. Year of Manufacture

- c. Model # and Serial #
- d. Size
- e. Type
- f. Premium Efficiency
- g. Electrical Requirements
- h. Current draw and frame number
- i. Rated temperature rise
- j. Continuous service factor
- k. Bearing details
- l. Weight

PART 3. EXECUTION

3.1 MANUFACTURER'S SERVICE

- A. The Manufacturer is to provide only a factory trained, licensed and experienced service technician for start-up testing, commissioning.
- B. The Manufacturer shall provide, and allow for in his quotation, the service of a factory-trained technical representative to provide the following on-site services;
 - 1. Pre-installation site visit (8 hrs) to check that all required steps have been done by the contractor to the satisfaction of the manufacturer prior to the equipment installation and to advise the contractor on the installation procedures and details.
 - 2. Installation support site visit (8 hrs) to ensure that the equipment has been installed consistent with the installation instructions to the Contractor. Recommend and subsequently check any corrective measure undertaken by the Contractor, if required.
 - 3. Certification of Proper Installation as specified herein.
 - 4. Field testing and start-up site visit. (8 hrs). Provide process start-up, and/or process stabilization, balancing assistance and commission for the equipment supplied.
 - 5. Commissioning site visit (8 hrs).
 - 6. Training as specified herein and in specification section 01850.
 - 7. Warranty inspection site visit (4 hrs).
- C. Within (10) days of completing these services, the technical representative shall submit a written report (in duplicate), directly to the District, covering the following:
 - 1. Name
 - 2. Business Address
 - 3. Telephone Number
 - 4. Date of Visit
 - 5. Findings, including list of items checked, problems encountered, corrective measures taken if required.
 - 6. Confirm that equipment has been found to be satisfactorily installed and in

- proper working order.
- D. The Manufacturer's representative shall review the installation of all related process equipment and shall notify the Contractor and District of any installation deficiencies, conflicts or conditions detrimental to the operation of the equipment.
 - E. The Manufacturer shall submit a Commissioning Report including the following:
 - 1. List of deficiencies found and recommended corrective action.
 - 2. Field testing reports
 - 3. Start-up data report

3.2 INSTALLATION

- A. In accordance with Manufacturer's written instructions.
- B. Contractor to position grit spiral troughs at elevations shown on approved submittal drawings, align wall box with the other conveyor sections using alignment module, anchor troughs using furnished anchors, and embed the troughs in concrete.
- C. Contractor to provide rough concrete trench opening in the existing tank, along the length of tank to allow for installation, levelling, and grouting in place of new grit troughs. Troughs shall be equipped with levelling system and anchor bolts.

3.3 CERTIFICATE OF PROPER INSTALLATION

- A. On satisfactory completion of installation, start-up, Commissioning, testing and training, submit to the District the Equipment Supplier's certification of the correctness of installation for each piece of equipment. Certification from the Equipment Suppliers to state that the equipment is installed correctly, and within the specified wall box, drive, & spiral alignment tolerances; demonstrates no leakages at the wall penetration, is in full operating condition, and is operating in accordance with its design rating. Submit the original certificates to the District. Certificates to include a statement to the effect that any adjoining pipe is properly and independently supported so as not to cause undue stress that would, otherwise, be detrimental to the equipment performance.

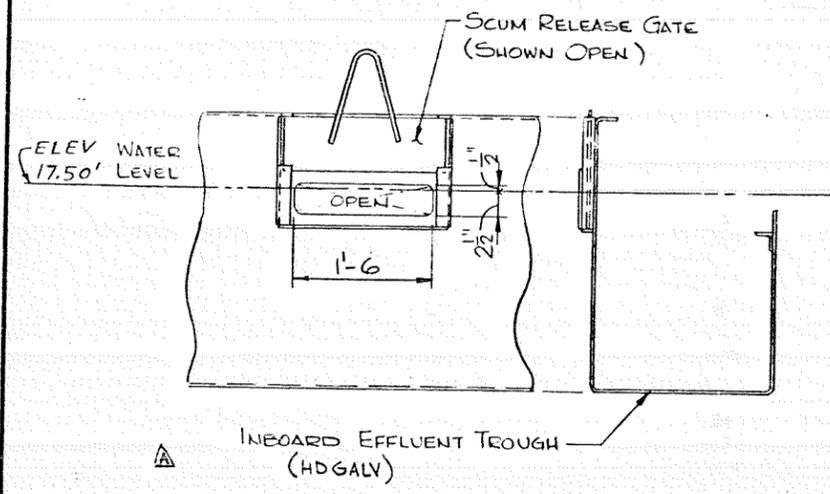
3.4 FIELD TESTING

- A. After installation of equipment, and after inspection, operation, testing and adjustment have been completed by Manufacturer's field service engineer, conduct running test in presence of District representative to determine that the performance of the equipment and controls are as specified and indicated. During tests, observe and record motor inputs, noise, vibration, overheating and motor overload. Promptly correct or replace all defects revealed or noted during tests at no additional cost to the Owner and repeat tests until specified results are obtained. Contractor to provide all labor, equipment, and materials for conducting tests. Equipment supplier shall certify proper installation prior to start-up.

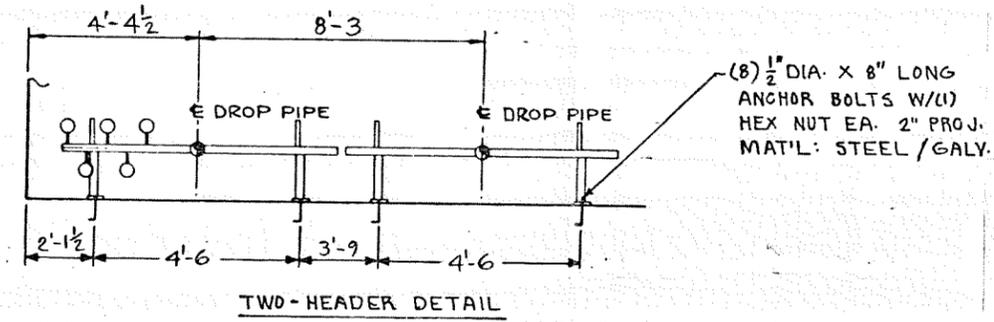
DRAWINGS

Exhibit A – Original EIMCO Equipment Submittal
Exhibit B – Grit Chamber 1 & 2 As-built Drawings

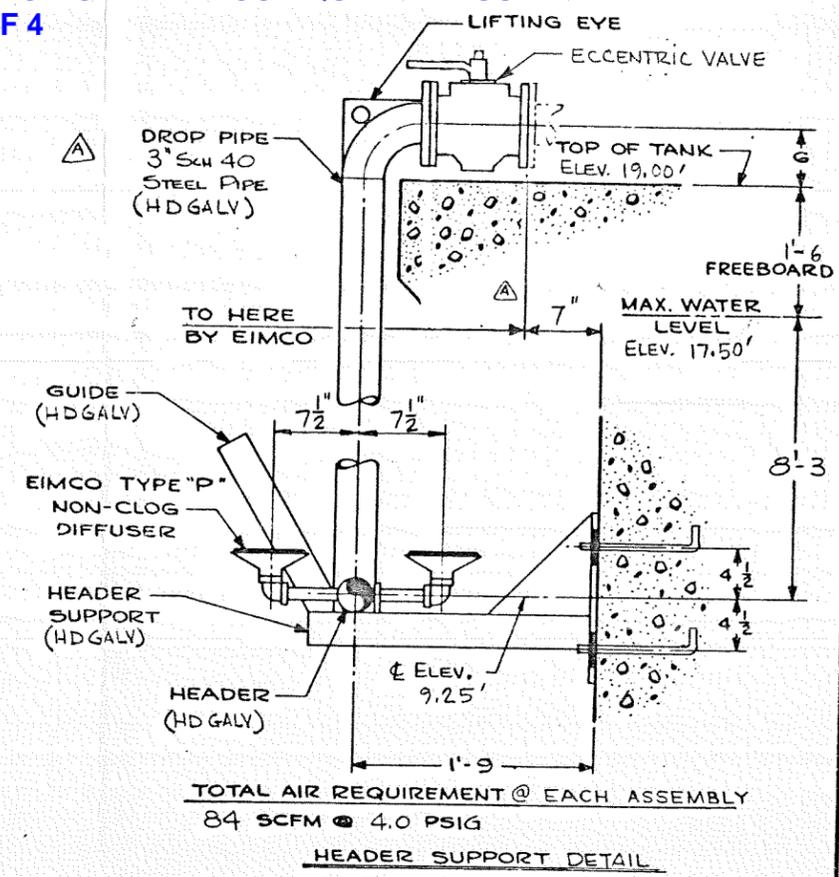
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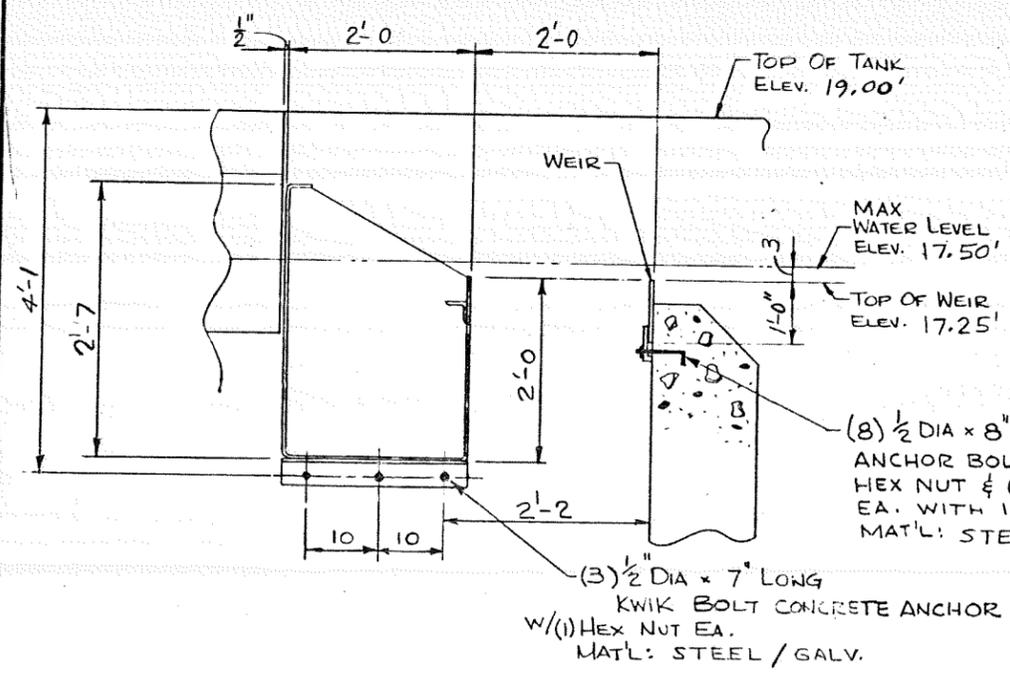
SECTION D-D



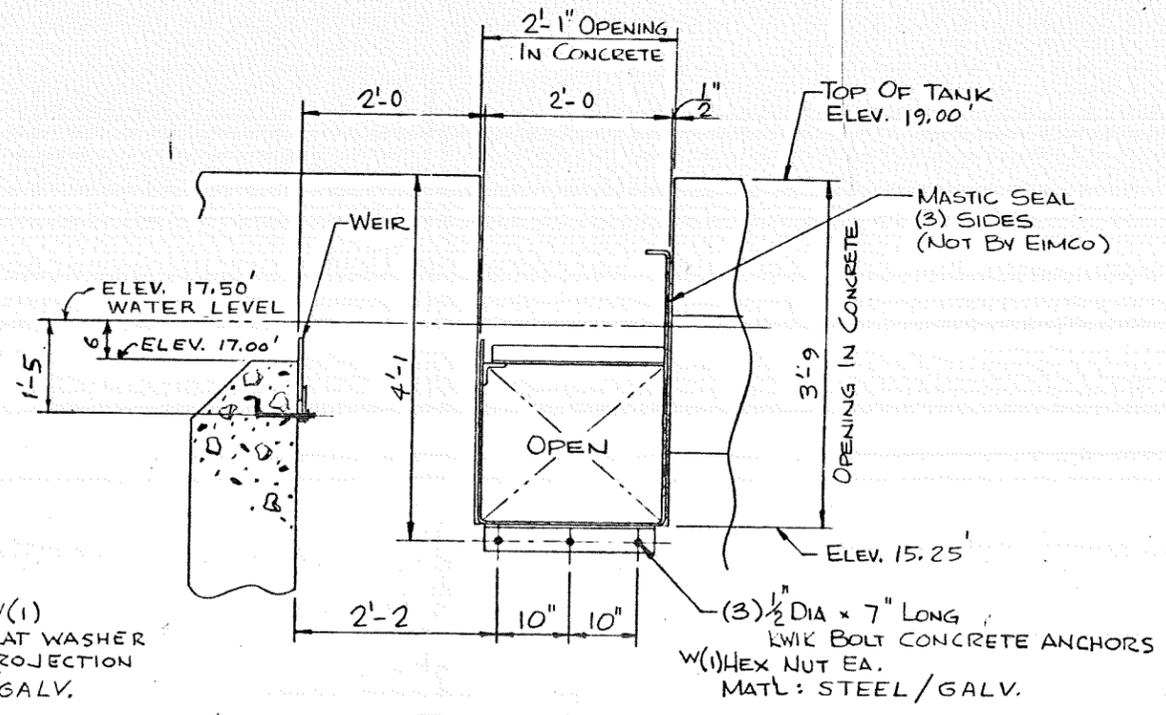
TWO-HEADER DETAIL



HEADER SUPPORT DETAIL



SECTION E-E



SECTION G-G

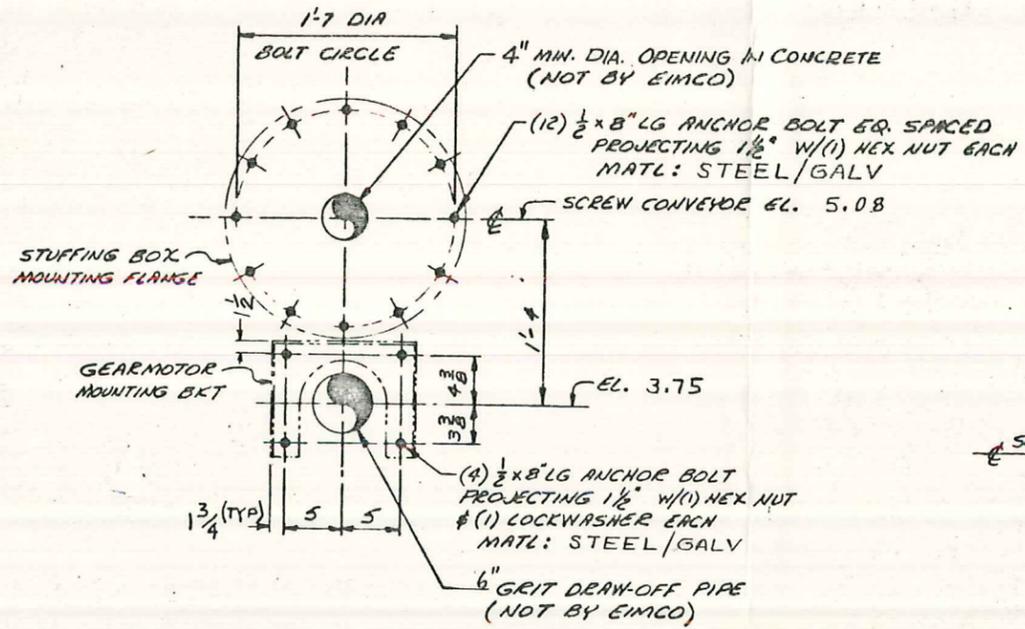
- NOTES:
1. THE INBOARD EFFLUENT TROUGH IS SHOWN FOR GRIT CHAMBER NO. 2, NO. 1 CHAMBER IS OPPOSITE
 2. WORK THIS DRAWING WITH DRAWINGS 22933D1 & 22933D3 & 22933B4.

THIS DRAWING IS CERTIFIED FOR	
CUSTOMER	UNITED ENGINEERS INC.
CUSTOMER ORDER NUMBER	U-515
EIMCO ORDER NUMBER	22933-01
PROJECT LOCATION	LAS GALLINAS WASTEWATER TREATMENT PLANT
PROJECT LOCATION	SAN RAFAEL, CA.
CONSULTING ENGINEER	NUTE ENGINEERING
BY	JOE MILES
DATE	10-19-82
EIMCO PMD, ENVIROTECH CORPORATION	

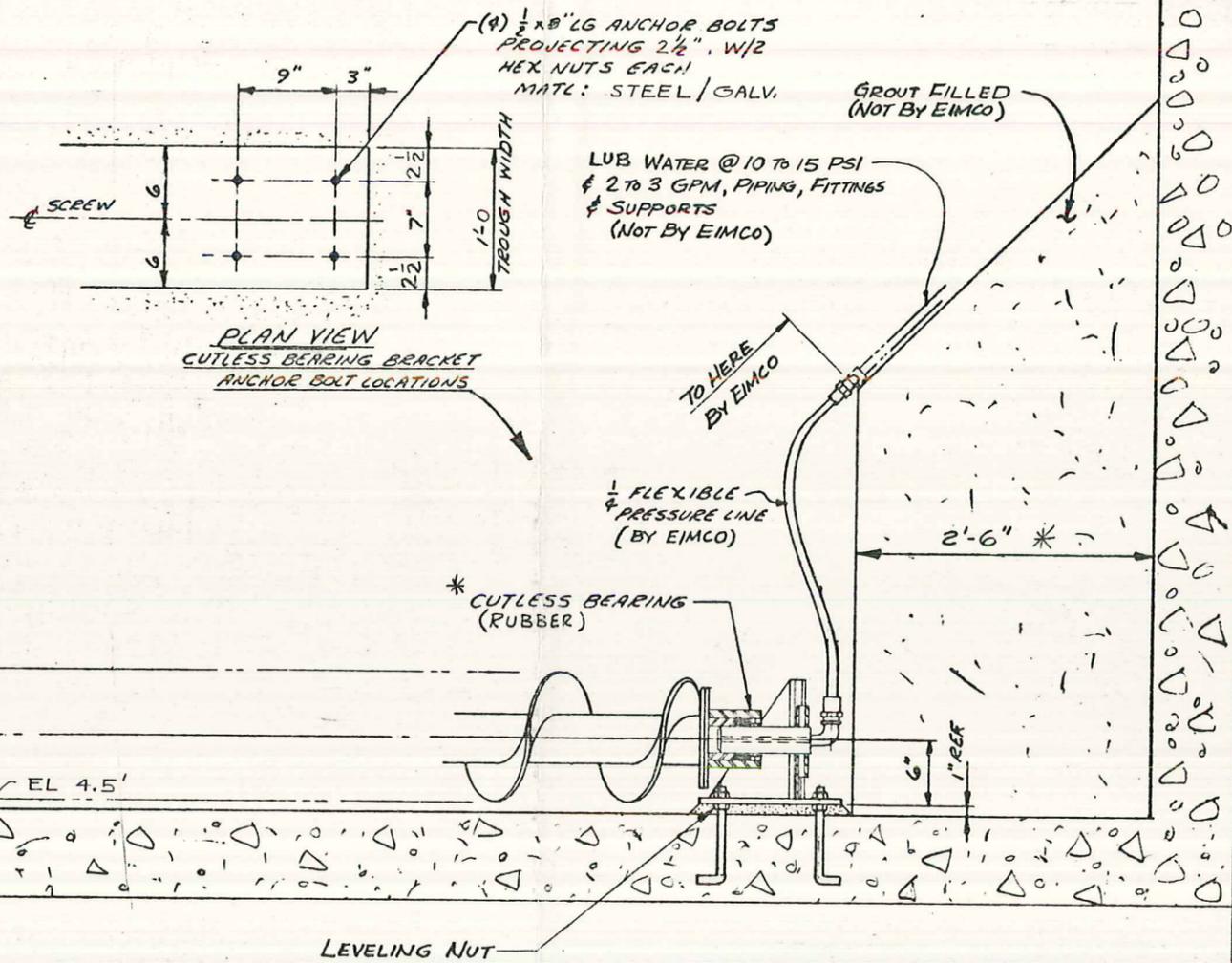
SEPIA FROM 22843D102	
ENVIROTECH	EIMCO PMD - ENVIROTECH CORPORATION - Salt Lake City, Utah
DO NOT SCALE PRINTS	This drawing and all information thereon is the property of Eimco PMD and is confidential and must not be made public or copied. This drawing is loaned subject to return upon demand and is not to be used directly or indirectly in any way detrimental to our interests.
DATE	8-27-82
DRAWN	H.J.
CHECKED	
APPROVED	
AERATED GRIT CHAMBER SIZE: 12 MGD DETAILS	
DATE	120 of 126

3" DROP PIPE WAS 2 1/2" LDED HD GALV NOTE

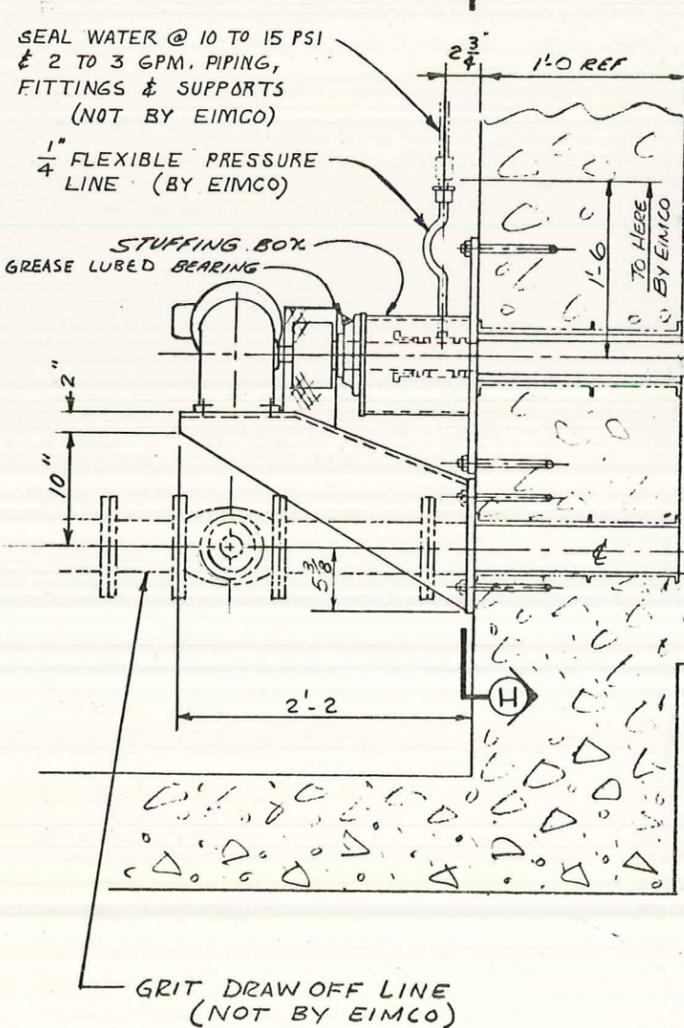
**EXHIBIT A - ORIGINAL EIMCO EQUIPMENT SUBMITTAL
SHEET 3 OF 4**



**ILLUSTRATIVE VIEW H-H
STUFFING BOX & GEARMOTOR BKT
ANCHOR BOLT LOCATIONS**



**PLAN VIEW
CUTLESS BEARING BRACKET
ANCHOR BOLT LOCATIONS**



**ILLUSTRATIVE VIEW
SCREW CONVEYOR**

- * CUSTOMER TO VERIFY DIMENSION.
- WORK THIS DRAWING WITH DRAWINGS 22933D1 & 22933D2

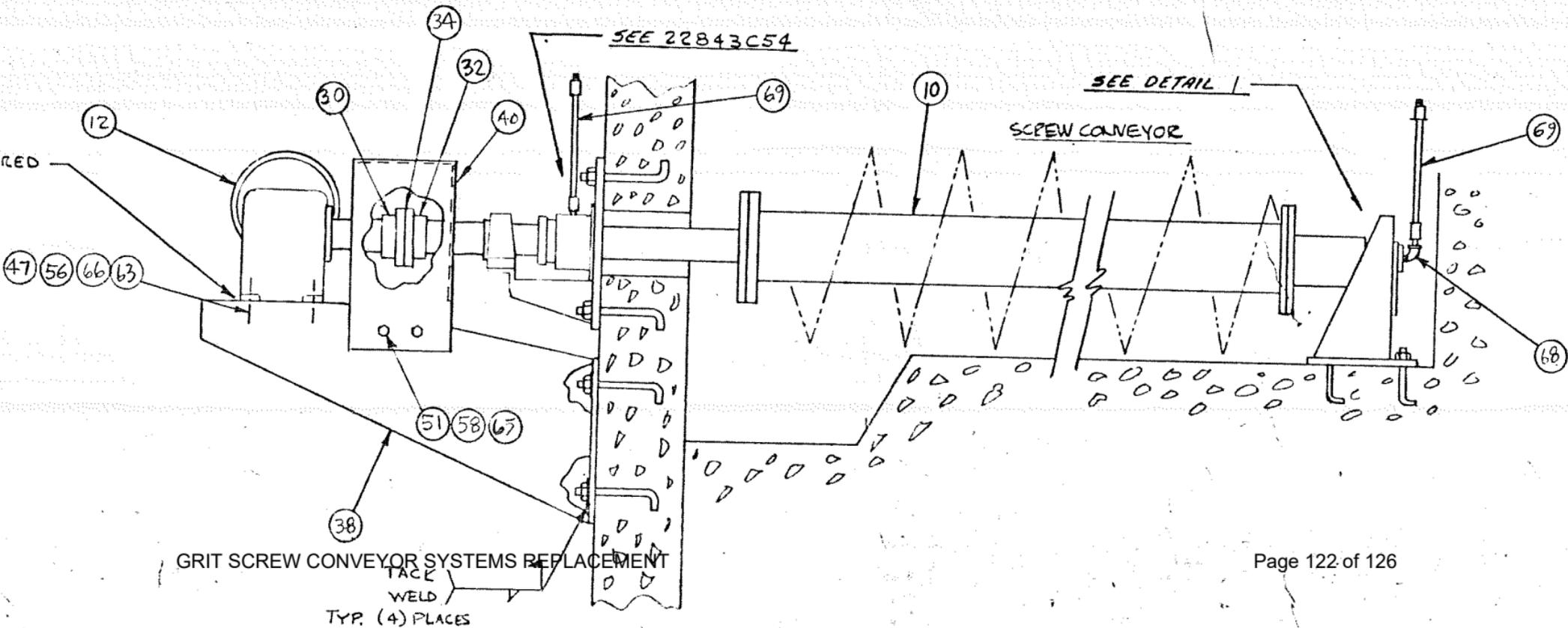
THIS DRAWING IS CERTIFIED FOR	
CUSTOMER	UNITED ENGINEER INC.
CUSTOMER ORDER NUMBER	U-515
EIMCO ORDER NUMBER	22933-01
PROJECT	LAS GALLINAS WASTEWATER TREATMENT PLANT
PROJECT LOCATION	SAN RAFAEL, CA
CONSULTING ENGINEER	NUTE ENGINEERING
BY	J. MILES DATE 10-12-82
EIMCO PMD, ENVIROTECH CORPORATION	

SEPIA FROM 22843D103

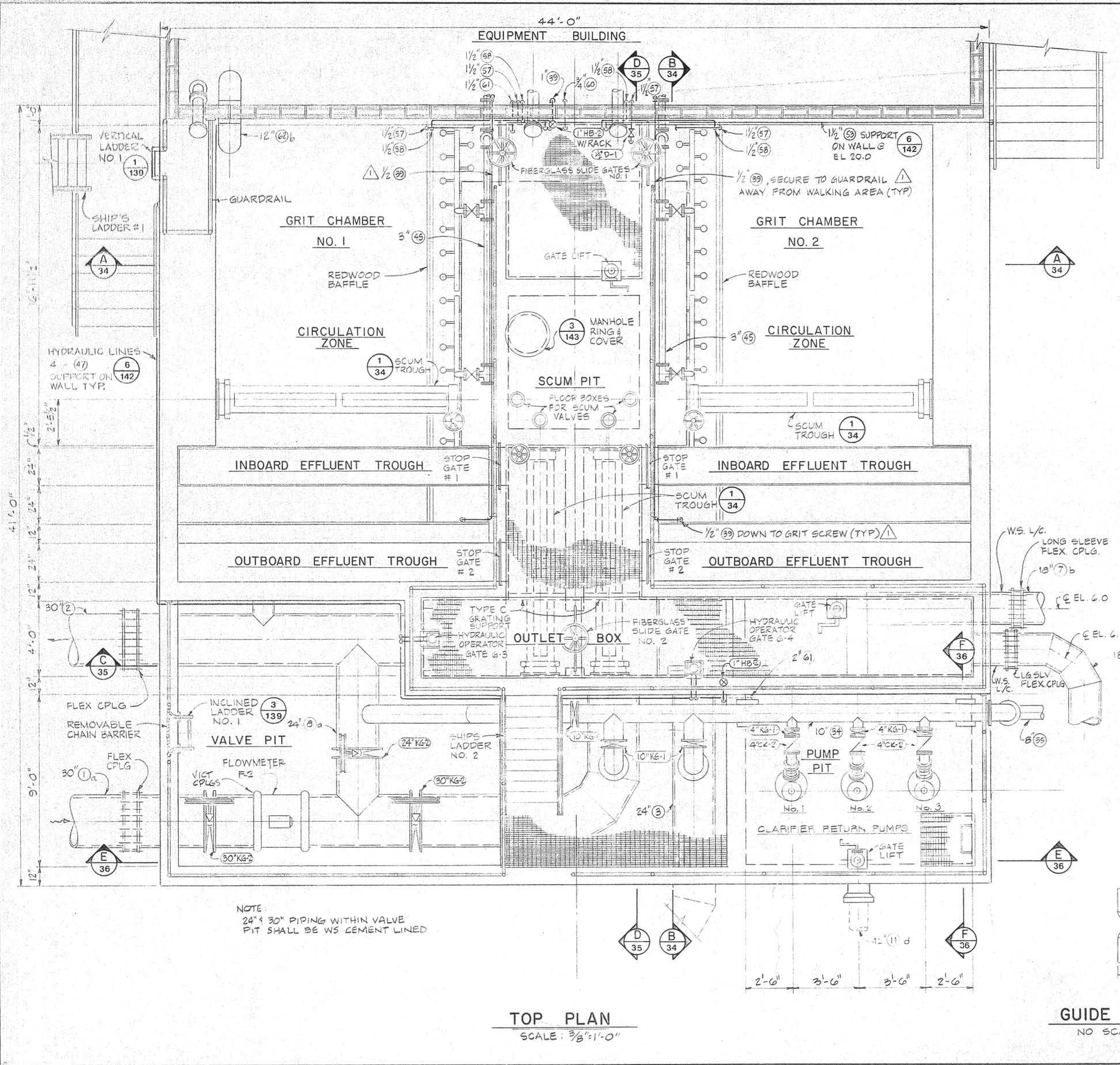
ENVIROTECH	EIMCO PMD - ENVIROTECH CORPORATION - Salt Lake City, Utah
DO NOT SCALE PRINTS	This drawing and all information thereon is the property of Eimco PMD and is confidential and must not be made public or copied. This drawing is loaned subject to return upon demand and is not to be used directly or indirectly in any way detrimental to our interests.
DATE	8-26-82
DRAWN	H.J.
CHECKED	J.M.
APPR	J.M.
REVISION	
BY	CHECKED
DATE	

**AERATED GRIT CHAMBER
SCREW CONVEYOR
DETAILS**

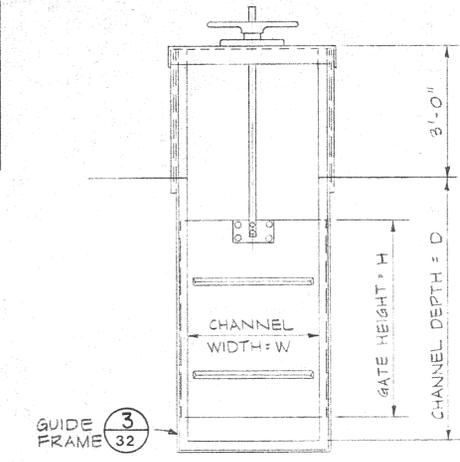
DWG 22933D3
Page 121 of 126



**EXHIBIT B - GRIT CHAMBER 1 & 2 AS-BUILT DRAWINGS
SHEET 1 OF 4**



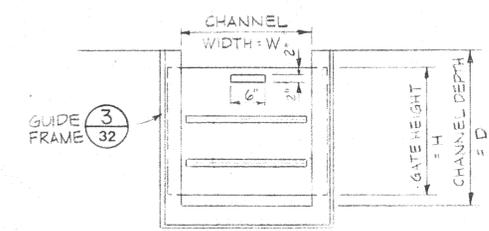
TOP PLAN
SCALE: 3/8"=1'-0"



FIBERGLASS SLIDE GATE SCHEDULE

NO.	QTY.	CHANNEL WIDTH = W	CHANNEL DEPTH = D	GATE HEIGHT = H
1	2	3'-0"	6'-0"	5'-0"
2	1	3'-0"	6'-0"	4'-6"

FIBERGLASS SLIDE GATES
NO SCALE

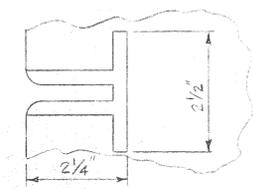


STOP GATE SCHEDULE

NO.	QTY.	CHANNEL WIDTH = W	CHANNEL DEPTH = D	GATE HEIGHT = H
1	2	2'-0"	3'-3"	2'-9"
2	2	2'-0"	5'-0"	4'-0"

STOP GATES
NO SCALE

GUIDE FRAMES
NO SCALE



PRINTED
JUL 03 1985
NUTE ENGINEERING

The Engineer's design for correction of errors, omissions, or changes in the basis of information compiled as a part of this project. The Engineer will not be responsible for any errors or omissions which have been incorporated into this document.

▲ ADDED SEAL WATER TO SCREW CONVEYOR PER ENO 18 4/6/84

LAS GALLINAS VALLEY SANITARY DISTRICT
Marin County, California

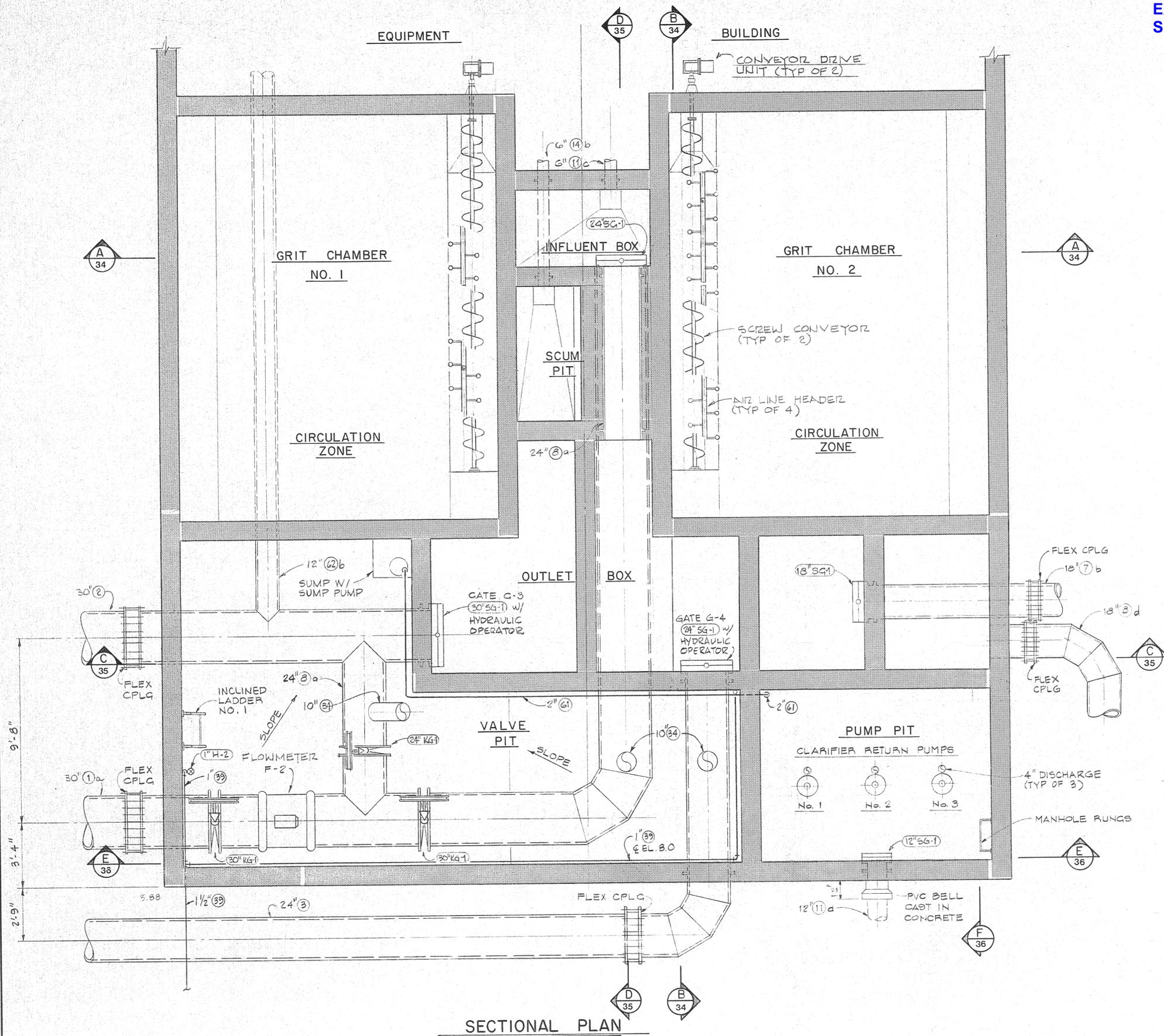
WASTEWATER TREATMENT PLANT IMPROVEMENTS

**GRIT CHAMBERS
PIPEWORK & EQUIPMENT
TOP PLAN**

NUTE ENGINEERING
SAN RAFAEL, CALIFORNIA

Drawn by: PMH
Des/Chkd by: WEN

Scale: AS SHOWN
Date: JAN 1982



NOTES

1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ANCHOR BOLTS AND ALL FABRICATED WIERS, CHANNELS, BAFFLES, AND DIFFUSER SUPPORTS FOR THE GRIT CHAMBER ANCHOR BOLTS SHALL BE INSTALLED AS SHOWN ON THE FAVORABLY REVIEWED DRAWINGS FROM THE MANUFACTURER.
2. ALL METAL WORK INCLUDING WEIRS, BAFFLES, CHANNELS, AND ANCHOR BOLTS AND NUTS SHALL BE GALVANIZED AFTER FABRICATION.

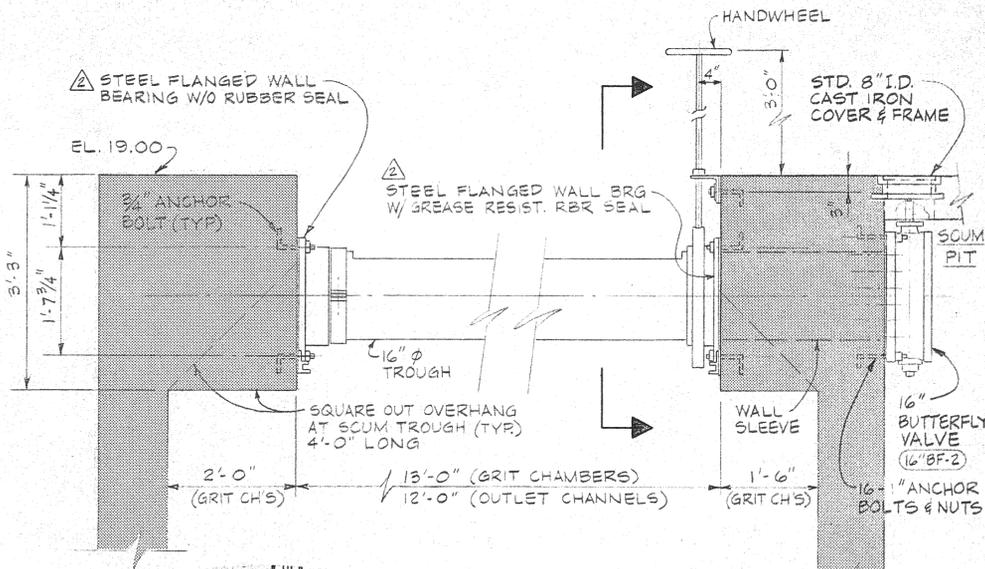
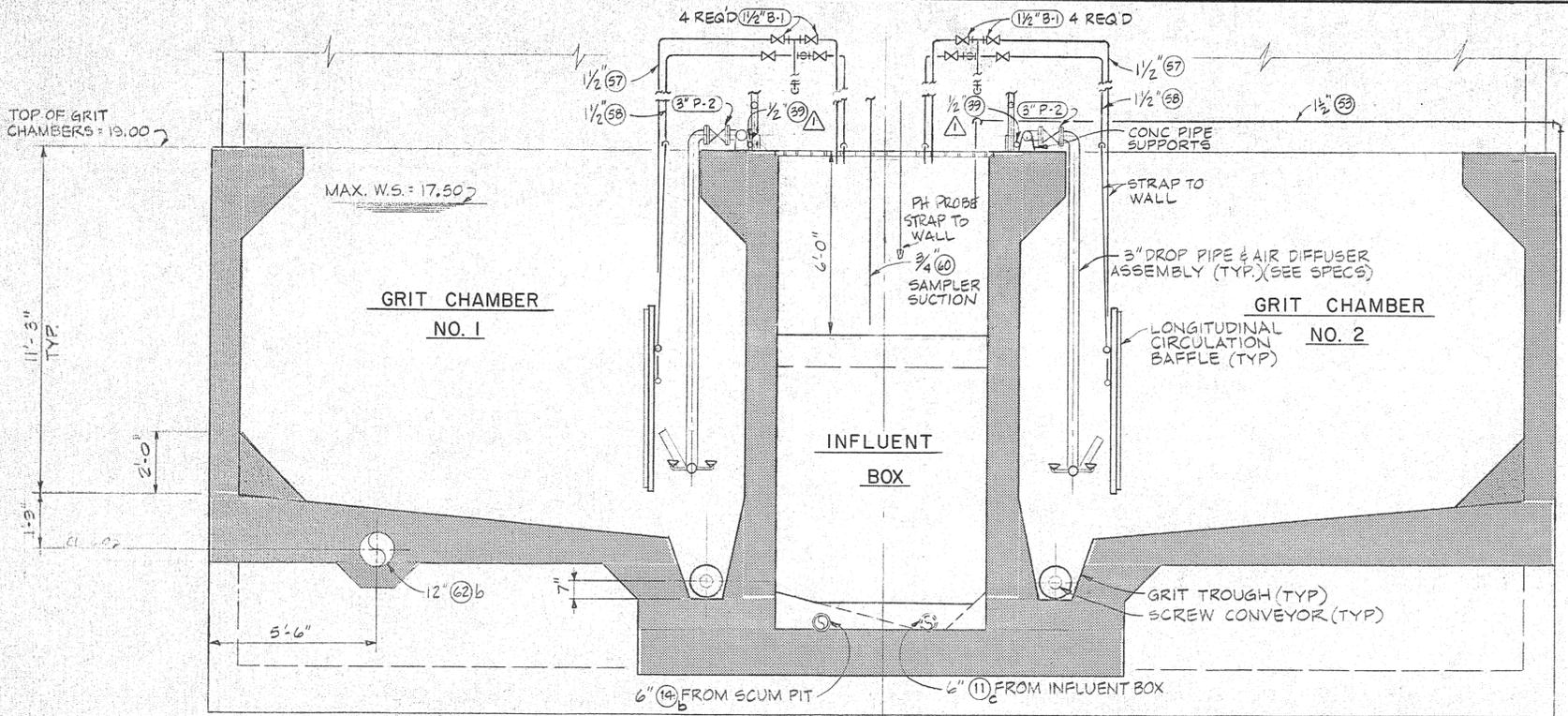
PRINTED
JUL 03 1985
NUTE ENGINEERING

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OF
180

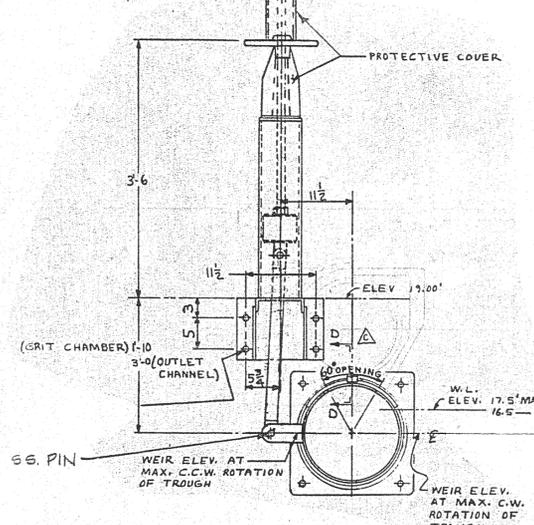
The contractor shall be responsible for providing (or correcting) any information that has been prepared by others. The Engineer will not be responsible for the accuracy or omission of such information. The contractor shall be responsible for providing (or correcting) any information that has been prepared by others. The Engineer will not be responsible for the accuracy or omission of such information.

LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
WASTEWATER TREATMENT PLANT IMPROVEMENTS	
GRIT CHAMBERS PIPEWORK & EQUIPMENT SECTIONAL PLAN	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by: P.H.	Scale: 3/8" = 1'-0"
Des/Chkd by: W.E.H.	Date: JAN. 1982

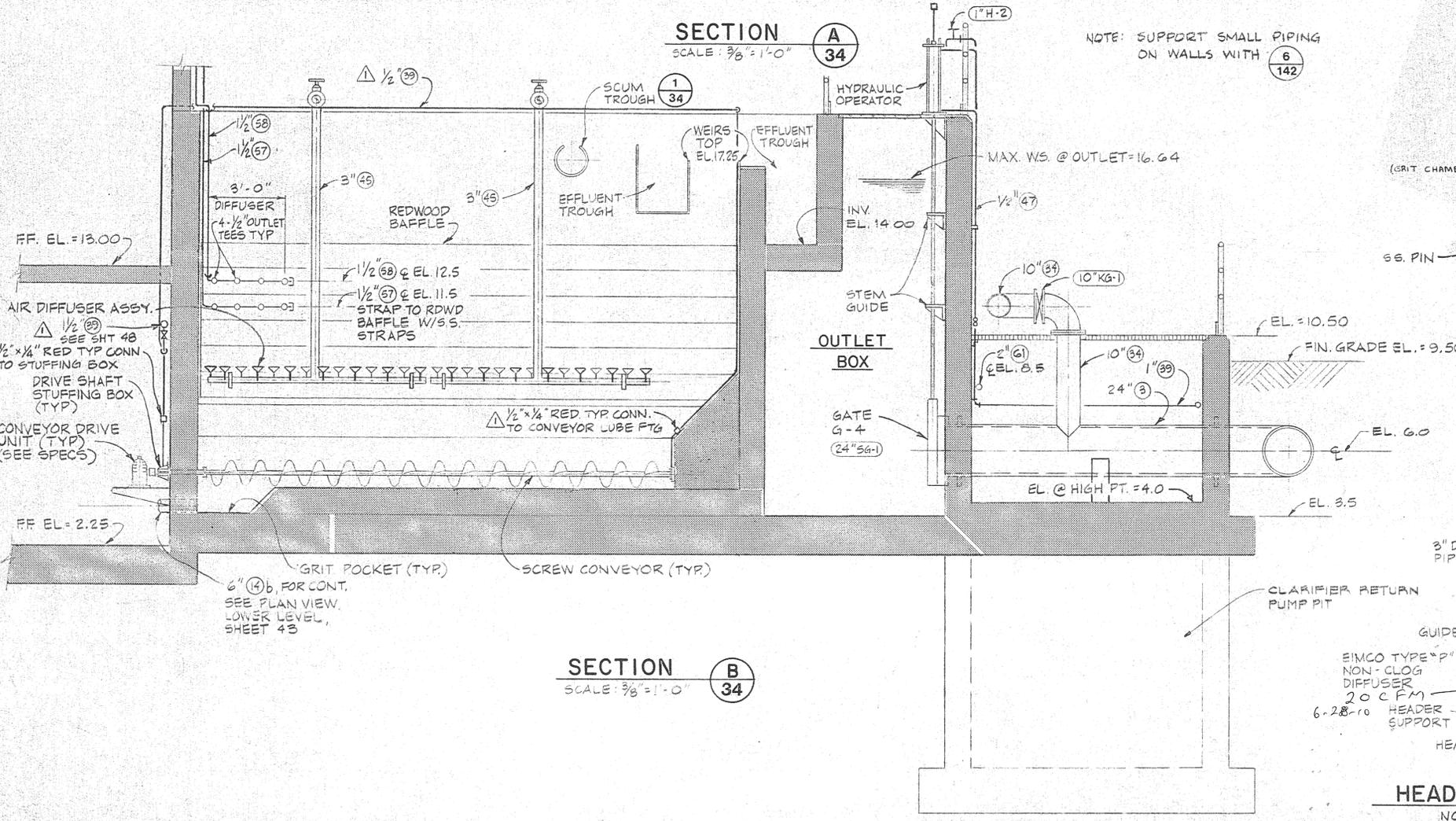
**EXHIBIT B - GRIT CHAMBER 1 & 2 AS-BUILT DRAWINGS
SHEET 3 OF 4**



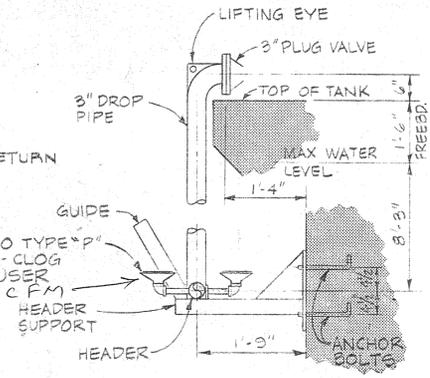
NOTE: TROUGH FOR GRIT CHAMBER NO. 1 SHOWN. GRIT CH. NO. 2 SIMILAR & OPPOSITE FOR CONFIGURATION AT OUTLET BOXES SEE SHEET 35.



SCUM TROUGH DETAIL 1
SCALE: 3/4" = 1'-0"



SECTION B
SCALE: 3/8" = 1'-0"



HEADER SUPPORT 2
NO SCALE

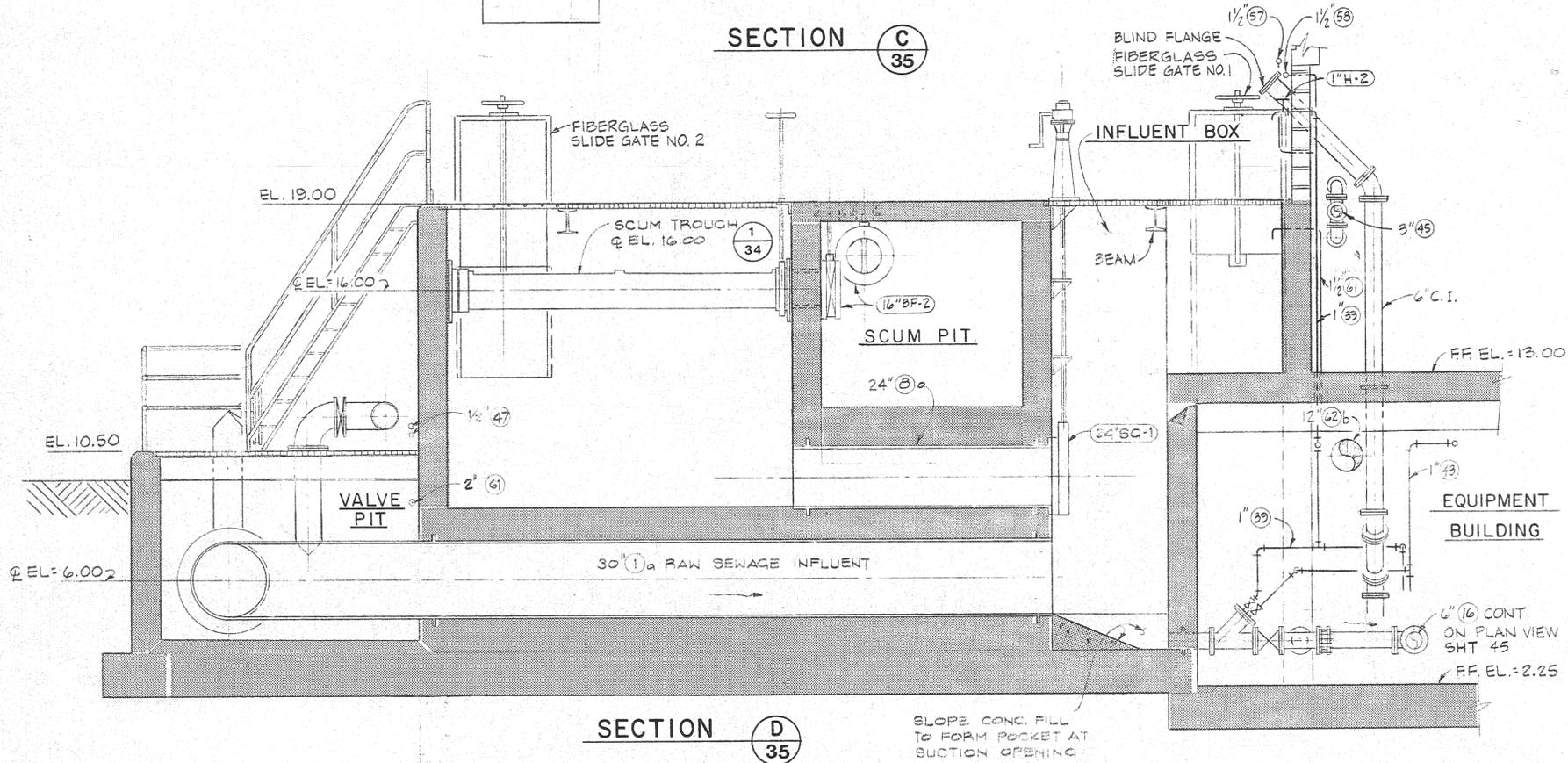
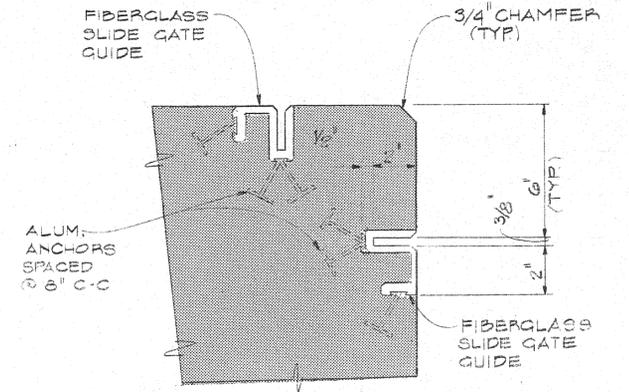
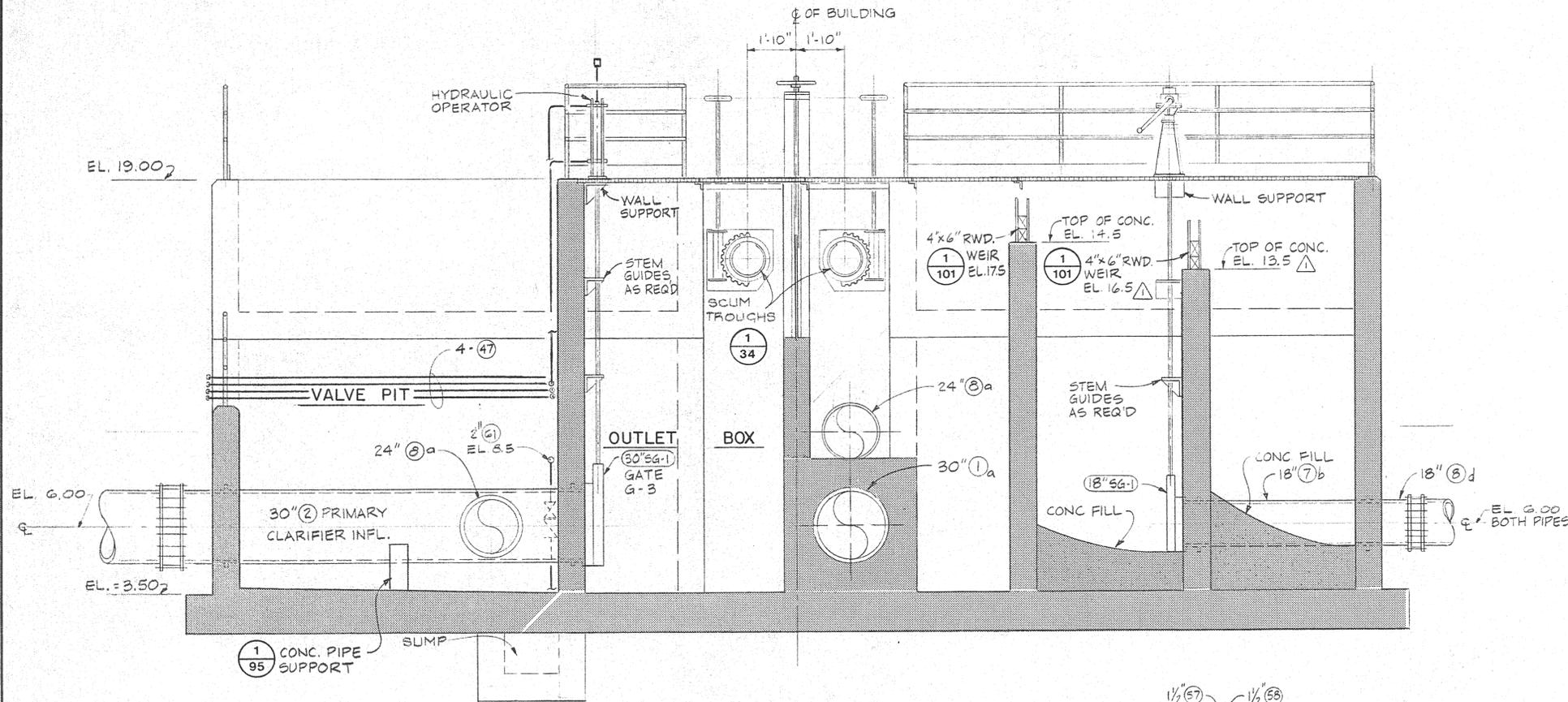
AS BUILT
ADDED SEAL WATER TO SCREW CONVEYOR PER EWO 18 4/6/84

LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
WASTEWATER TREATMENT PLANT IMPROVEMENTS	
GRIT CHAMBERS PIPEWORK & EQUIPMENT SECTIONS A & B	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by: P.M.	Scale: AS SHOWN
Des/Chkd by: WEL	Date: JAN 1982

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JUL 03 1985
NUTE ENGINEERING

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OF
180

**EXHIBIT B - GRIT CHAMBER 1 & 2 AS-BUILT DRAWINGS
SHEET 4 OF 4**



I have examined the above drawings for correctness of specifications and have prepared, in part, on the basis of information compiled and furnished by others. The Engineer will not be responsible for any errors or omissions which have been incorporated into this document as a result of such information.

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JUL 03 1985
NUTE ENGINEERING

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OF
180

REVISD PER RFI 48 1/2/84	
LAS GALLINAS VALLEY SANITARY DISTRICT Marin County, California	
WASTEWATER TREATMENT PLANT IMPROVEMENTS	
GRIT CHAMBERS PIPEWORK & EQUIPMENT SECTIONS C & D	
NUTE ENGINEERING SAN RAFAEL, CALIFORNIA	
Drawn by: P.M.	Scale: 3/8" = 1'-0"
Des/Chkd by: J.E.U.	Date: JAN. 1982