INVITATION FOR BIDS



FOR CONSTRUCTING

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

CONTRACT NUMBER
C02096

ISSUED BY

CAPITAL PROJECTS ENGINEERING DIVISION
CITY OF SANTA ROSA, CALIFORNIA

2024

ATTENTION Prebid Conference See Page 1



STATE OF CALIFORNIA

INVITATION FOR BIDS

CONTAINING:

NOTICE TO BIDDERS

SPECIAL PROVISIONS

BID FORMS

CONTRACT

FOR

VALVE AND ACTUATOR REPLACEMENT

Contract No. C02096

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVUE AND ACTUATOR REPLACEMENT

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CITY OF SANTA ROSA STATE OF CALIFORNIA

NOTICE TO BIDDERS

A	For technical questions regarding this project, contact Liz Hanley at (707) 543-3862.
>	For direct access to plans, specifications and planholders' lists, go to www.srcity.org/bids and click on Bid/Proposal Opportunities or call (707) 543-3800.
A	For direct access to bid results, go to www.srcity.org/bids . Under Link to Capital Projects, click on Capital Projects Contracts .

- IMPORTANT – REVISED BIDDING PROCEDURES

All bids shall be submitted and opened according to the following procedure:

Bid Acceptance Deadline

Sealed bids will be accepted at the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California 95401 <u>until</u> 2:00 p.m., February 14, 2024, for Laguna Treatment Plant Filter Cells 9-14 Valve and Actuator Replacement, Contract No. C02096. (Engineer's Estimate: \$1,627,000).

Bids tendered after this deadline will not be accepted. The official time clock for accepting bids will be an electric date and time stamping clock, located in the Transportation and Public Works Department, 69 Stony Circle, Santa Rosa, California. In order to be accepted, bids must be received <u>prior to</u> 2:00 p.m. Therefore, a bid stamped in at 1:59 p.m. will be accepted, but one delivered at or after 2:00 p.m. is late and <u>will not be accepted</u>.

Bid Opening

Prospective bidders, subcontractors, and materials suppliers are invited to attend the Bid opening via Zoom video/teleconference or in person at 69 Stony Circle, Santa Rosa, California. The bid opening is scheduled to be held at 2:00 p.m., February 14, 2024.

The teleconference can be accessed at:

https://srcity-org.zoom.us/j/85947884282?pwd=RGInVWNNT1RxYjZMSEgyV2xzNnhHZz09

Phone: 1 669 219 2599 Meeting ID: 859 4788 4282

Passcode: 537363

Find your local number: https://srcity-org.zoom.us/u/kbleDY4FDx

Project Description/Scope of Work

This project will complete the procurement and installation of the remaining actuators and refurbish valves that control backwash for tertiary filtration at the Laguna Treatment Plant.

1

Pre-Bid Meeting

A pre-bid meeting will be held for the purpose of reviewing and answering questions regarding this project and a site visit will be conducted immediately following the pre-bid meeting. The pre-bid meeting is scheduled to be held at 10:00 a.m., January 30, 2024 at the Laguna Treatment Plant located at 4300 Llano Rd, Santa Rosa, California.

Site access not regularly available, additional site visits can be coordinated on a case-bycase basis. Contact project staff with requests.

Subcontractor Information; Department of Industrial Relations Registration

Bidders shall provide the names, business addresses and license numbers of all subcontractors listed on bidder's List of Subcontractors. No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

Contract #: C02096

Project Title: LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

Line #	Description	Unit	Quantity
1	Mobilization and Demobilization	LS	1
2	8-Inch Butterfly Valve	EA	6
3	24-Inch Butterfly Valve	EA	24
4	24-Inch Flange Coupling Adapter	EA	6
5	Actuator and Extension for 8-Inch Butterfly Valve	EA	6
6	Actuator and Extension for 24-Inch Butterfly Valve	EA	24
7	Guardrail Modifications	LS	1
8	Start-Up and Testing	LS	1

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the City of Santa Rosa does not expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, as may be deemed necessary or expedient by the Engineer.

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the Director of the DIR pursuant to Labor Code sections 1770 *et seq.*

Contractor shall be responsible for compliance with the Immigration Reform Control Act of 1986.

If the project requires the employment of workers in any apprenticeable craft or trade, once awarded, Contractor and subcontractors must apply to the Joint Apprenticeship Council unless already covered by local apprentice standards (see Labor Code section 1777.5).

All bids are to be compared on the basis of the Engineer's estimate of the quantities of work to be performed. No bid will be awarded to a contractor who is not licensed in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code. Contractor must hold a **Class A** license for this project.

Project plans, bid and contract forms for C02096 Laguna Treatment Plant Filter Cells 9-14 Valve and Actuator Replacement may be obtained through PlanetBids at www.srcity.org/bids. These documents can no longer be obtained at the Transportation and Public Works Department.

No bid will be accepted unless it is made on the contract bid forms furnished by the Transportation and Public Works Department through PlanetBids. The original of the completed bid forms bearing original signatures must be submitted. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at www.srcity.org/bids, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

The successful bidder will be required to hold a current City of Santa Rosa business tax certificate issued pursuant to Chapter 6.04 of the Santa Rosa City Code before commencing work on this project. For information regarding the business tax, contact Revenue and Collections at (707) 543-3170.

This Project is subject to the Community Workforce Agreement dated July 1, 2023, which is a Project Labor Agreement ("CWA" or "PLA") entered into between City, the North Bay Building and Construction Trades Council ("Council") and its affiliated local Unions that have executed this PLA, and the Contractors and subcontractors that perform work on this Project. Each Contractor and subcontractor must become signatory to the PLA by execution of an "Agreement To Be Bound" in the form of Appendix A to the PLA. A copy of the PLA is available at www.srcity.org/bids

For any moneys earned by Contractor and withheld by the City of Santa Rosa to ensure the performance of the Contract, Contractor may, at its request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Section 22300 of the California Public Contract Code.

The City of Santa Rosa reserves the right to reject any or all bids and the right to waive minor irregularities or informalities in any bid or bonds.

Tracy Duenas (Jan 10, 2024 13:48 PST)
TRACY DUENAS
Supervising Engineer

Jan 10, 2024

Date

SPECIAL PROVISIONS

General Specifications

CITY OF SANTA ROSA, CALIFORNIA

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

1 GENERAL

The work described herein shall be done in accordance with the "Contract Documents," which are the:

- 1. Special Provisions
- 2. City of Santa Rosa Design and Construction Standards (City Standards)
- 3. City of Santa Rosa Construction Specifications for Public improvements (City Specifications)
- 4. State of California Department of Transportation Standard Specifications 2010 (Standard Specifications), and

In the event of a conflict in any of these documents, the order of precedence shall be determined by Section 5-1.02 of these Special Provisions.

Whenever the Standard Specifications use the terms State of California, Department of Transportation, Director, Engineer, or Laboratory, the following terms shall be substituted therefor, and any reference to any of the foregoing terms shall be understood and interpreted to mean and refer to such substituted terms as follows:

For State of California - the City of Santa Rosa;

For Department - the City of Santa Rosa Department of Transportation and Public Works or the City of Santa Rosa Water Department;

For Director - the City Engineer of the City of Santa Rosa;

For Engineer - the City Engineer of the City of Santa Rosa or the City Engineer's authorized agents;

For Laboratory – Materials Engineering of the City of Santa Rosa Transportation and Public Works Department, or such other laboratory as may be authorized by the City.

Unless otherwise provided, whenever in these Special Provisions attention is directed to specific provisions in the Standard Specifications, such direction shall not be interpreted as excluding other applicable provisions of the Standard Specifications.

Unless otherwise provided, when sections and subsections of the Standard Specifications are used in these Special Provisions, such use is not exclusive and shall not be interpreted as excluding other applicable provisions of said sections and subsections but is only intended to add to or modify such sections or subsections.

Unless otherwise provided, full compensation for compliance with these Special Provisions is included in the contract price and no additional allowance will be made to Contractor therefor.

The Standard Specifications are hereby modified to delete any reference or incorporation of provisions providing for or requiring arbitration of any and all claims and disputes arising under this contract.

2 BIDDING

- **2-1.06 Bid Documents**: Prospective bidders will be furnished with an Invitation for Bids which will state the location and description of the contemplated public works project and will show the approximate estimate of the various quantities and kinds of work to be performed and materials to be furnished with a schedule of items for which unit prices are requested.
- **2-1.07 Approximate Estimate**: The quantities given in the Contract Documents are approximate only, being given as a basis for the comparison of bids, and the City does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or part of the work or to omit parts of the work, as may be deemed necessary or advisable by the Engineer.
- **2-1.31 Examination of Project Plans, Specifications, City Standards, Invitation for Bids and Work Site**: Prior to submitting a bid, the bidder shall carefully examine the Project Plans, Invitation for Bids, City Standards and the proposed work site. If any person contemplating submitting a bid for this public works project is in doubt as to the meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the Contract Documents, he or she may submit a <u>written</u> request for interpretation or correction to the Engineer. The written request must be received by the Engineer a minimum of **96** hours prior to bid opening. Any interpretation or correction of the Contract Documents prior to bid opening will be made only by written addendum issued by the City. A copy of such addendum will be mailed or faxed to each Planholder. The City will not be bound by any other explanations or interpretations of the Contract Documents.
- **<u>2-1.33 Bid Document Completion</u>**: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.
- **2-1.33A Bid Forms**: All bids shall be made on bid forms obtained from PlanetBids at www.srcity.org/bids. The bidder shall submit its bid on the original bid forms furnished by the City. Bids submitted on forms other than the forms furnished to the bidder by the City will not be considered.

The bid forms to be submitted at the time of and with the bid are:

- 1. Unit Price Schedule
- 2. List of Subcontractors
- 3. List of Previous Similar Jobs
- 4. Noncollusion Declaration
- 5. Bid Guaranty Information and Bidder's Information and Signature
- 6. Bid Guaranty (Bid Bond or alternate security)
- 7. Contractor Agreement to be Bound to the PLA

All bids shall give the proposed prices and must bear the original signature of the bidder. Bidders shall fill in all blanks on the bid forms where required. A bid will not be accepted unless the bidder registers as a vendor through PlanetBids at www.srcity.org/bids, downloads documents/attachments, and is added to the prospective bidders list for this project. If there is an addendum, bidders must log into PlanetBids and acknowledge the addendum to be eligible for bidding.

2-1.33B Registration with DIR: No contractor or subcontractor may be listed on a bid for this public works project unless registered with the Department of Industrial Relations (DIR) pursuant

to Labor Code section 1725.5. No contractor or subcontractor may be awarded a contract for this public works project unless registered with the DIR pursuant to Labor Code section 1725.5. This public works project is subject to compliance monitoring and enforcement by the DIR.

2-1.33C Subcontractors: The Subletting and Subcontracting Fair Practices Act, Public Contract Code sections 4100-4113, inclusive (the "Act") shall apply to all subcontracts in excess of one-half of one percent of the total amount of a bid. The Act requires subcontractors, if used for such work, to be listed in the contractor's bid and prohibits the substitution of subcontractors, except as authorized by the Act. Each bidder shall, with respect to the work of any subcontractor in excess of one-half of one percent of the total amount of the bid, include as part of the bid on the bid form provided:

- The name, business address and DIR registration number of each subcontractor who will perform work or labor or render services to the Contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Project Plans or other Contract Documents in an amount in excess of one-half of one percent of the Contractor's total bid; and
- 2. The portion of the work that will be done by each subcontractor. Only one subcontractor shall be listed for each portion.

The purchase of sand, gravel, crushed rock, batched concrete, aggregate, ready-mixed concrete, and/or any other materials produced and furnished by established and recognized commercial plants, together with the delivery of such materials to the work site by the source of the materials or by recognized commercial hauling companies, is not considered as subcontracting under this section.

- **2-1.33E Rejection of Bids Containing Alterations, Erasures or Irregularities**: Bids may be rejected if they show any alterations of forms, additions not called for, conditional bids, incomplete bids, erasures or irregularities of any kind.
- **2-1.34 Bid Guaranty**: All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's or certified check, or by a bidder's bond made payable to the City of Santa Rosa and executed as surety by a corporate surety authorized and admitted to transact a surety business in the State of California in an amount equal to ten percent of the amount of the bid. No bid shall be considered unless such cash, cashiers or certified check, or bidder's bond is enclosed with the bid. Any bidder's bond shall contain provisions for forfeiture consistent with California Public Contract Code section 20172.
- **2-1.40 Withdrawal of Bid**: A bid may be withdrawn prior to, but not after, the hour fixed in the public notice for the opening of bids, provided that a written request to withdraw the bid, executed by the bidder or the bidder's authorized representative, is filed with the Engineer before this deadline. The withdrawal of a bid shall not prejudice the right of a bidder to submit a new bid.
- **<u>2-1.43 Public Opening of Bids</u>**: Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.
- **2-1.46 Disqualification of Bidders**: Serial bids from the same bidder will not be accepted. This section shall not be interpreted to mean that the same contractor may not be the contractor in one bid and listed as a subcontractor in another bid, provided that no collusion exists.

2-1.48 Competency of Bidders: No bid will be accepted from or contract awarded to a contractor that is not licensed in accordance with the law, that does not hold a license qualifying it to perform work under this contract, to whom a bid form has not been issued by the Engineer, or that has not successfully completed projects of similar character, scope and cost to the proposed project. Bidders will be required to provide a list of previous similar jobs with their bids.

3 CONTRACT AWARD AND EXECUTION

<u>3-1.04 Contract Award</u>: The City reserves the right to reject any or all bids. Bids are required for the entire work described herein. All bids will be compared with the Engineer's estimate of the quantities of work to be completed. Contract award, if any, will be made to the lowest responsible bidder within sixty days from the date bids are opened.

<u>3-1.05 Contract Bonds</u>: Within ten days after receipt of the Notice of Award, the successful bidder shall provide the following bonds to the City:

- a. <u>Performance Bond</u>: A performance bond to guarantee the faithful performance of the terms and conditions of the Contract by Contractor, which shall be executed in a sum of not less than one-half of the Contract price;
- b. <u>Labor and Materials Bond</u>: A labor and materials bond (payment bond) in accordance with Part 6 of Division 4, sections 8000 *et seq.* of the California Civil Code, to guarantee against any and all claims of subcontractors or other third parties furnishing labor, materials, or supplies for the Contract, which shall be executed in a sum of 100% of the Contract price; and
- c. <u>Material Guaranty Bond</u>: A material guaranty bond (warranty bond) to serve as surety for the guarantee requirements outlined in Section 6-3.01B, which shall be executed in a sum of not less than one-half of the Contract price.

The bond(s) shall be provided in a form acceptable to the City and issued by a corporate surety in good financial standing and authorized and admitted to transact a surety business in the state of California for the purposes and in the amount(s) stated above.

Whenever the financial or legal status of any surety on any such bond(s) is/are unacceptable to the City, it may make a demand to Contractor for further bond(s) or additional surety, not exceeding the sums originally required. Thereafter, no payment shall be made upon the Contract to Contractor or any assignees of Contractor until such bond(s) or additional surety has/have been provided to the City.

3-1.07 Indemnification and Insurance: Indemnification: Contractor shall defend, hold harmless and indemnify City, its officers, agents and employees, and each and every one of them, from and against any and all actions, damages, costs, liabilities, claims, demands, losses, judgments, penalties, costs and expenses of every type and description, including, but not limited to, any fees and/or costs reasonably incurred by City's staff attorneys or outside attorneys and any fees and expenses incurred in enforcing this provision (hereafter collectively referred to as "Liabilities"), including but not limited to Liabilities arising from personal injury or death; damage to personal, real or intellectual property or the environment; contractual or other economic damages, or regulatory penalties, arising out of or in any way connected with the performance of or the failure to perform the Contract by Contractor, any subcontractor or agent, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, whether or not such Liabilities are caused in part by a party indemnified hereunder, or such Liabilities are litigated, settled or reduced to judgment; provided, that the foregoing indemnity does not apply to liability for any damage or expense for death or bodily injury to persons or damage to property to the extent arising from (i) the sole negligence, or willful misconduct of, or defects in design furnished by City, its agents, servants, or independent contractors who are directly responsible to City (excluding Contractor), or (ii) the active negligence of City.

The existence of any of the insurance policies or coverages described in this Contract shall not affect or limit any of City's rights hereunder, nor shall the limits of such insurance limit Contractor's liability to the City hereunder. The provisions of this section shall survive any expiration or termination of the Contract.

<u>Insurance</u>: Contractor shall maintain in full force and effect all of the insurance coverage described in and in accordance with the insurance requirements set forth below. Maintenance of such insurance coverage during the entire performance of the Contract is a material element of the Contract. Failure by Contractor to (i) maintain or renew coverage, (ii) provide notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, if necessary, may be deemed a material breach of the Contract by Contractor, whereas the City shall be entitled to all rights and remedies at law or in equity. Notwithstanding the foregoing, any failure by Contractor to maintain required insurance coverage shall not excuse or alleviate Contractor from any of its other duties or obligations under the Contract. In the event Contractor retains or utilizes any subcontractors or sub-consultants in performance of the work, Contractor shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverage requirements herein set forth below.

Insurance Requirements:

A. Insurance Policies: Contractor shall maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with an AM Best rating of no less than A-:VI or a rating otherwise acceptable to the City.

	Insurance	Minimum Coverage Limits	Additional Coverage Requirements
1.	Commercial general liability	\$5 million per occurrence \$5 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include products liability and completed operations coverage which shall continue for a period of three years after acceptance of the work by the City. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. Coverage may be met by a combination of primary and umbrella or excess insurance, but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Completed Operations Coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 37 04 13. See endorsements below for other Additional Insured Requirements. Coverage shall not exclude subsidence.
2.	Business auto coverage	\$3 million	Coverage at least as broad as ISO Form Number CA 00 01 covering any auto (Code 1). Insurance shall cover owned, non-owned and hired autos.

3. Workers' \$1 million compensation and Employer's Liability

As required by the State of California, with Statutory Limits and Employer's Liability Insurance with limit of no less than \$1 million per accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by Contractor, its employees, agents and subcontractors.

B. Endorsements:

- 1. All policies shall provide or be endorsed to provide that coverage shall not be canceled by either party, except after prior written notice has been provided to the City in accordance with the policy provisions.
- 2. Liability policies shall provide or be endorsed to provide the following:
 - a. For any claims related to this Contract, Contractor's insurance coverage shall be primary, and any insurance or self-insurance maintained by City shall be in excess of Contractor's insurance and shall not contribute with it. Endorsements at least as broad as 20 01 04 13 or evidence of policy language will be required in non-ISO CGL policies.
 - b. The City of Santa Rosa, its officers, agents and employees are to be covered as additional insureds on the CGL policy. Additional Insured Endorsements at least as broad as 20 10 04 13 or 20 38 04 13 are required.
- C. Verification of Coverage and Certificates of Insurance: Contractor shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Contract. The City reserves the right to require complete copies of all required policies and endorsements during the duration of the Contract and for a period of three years following City's acceptance of the work.

D. Other Insurance Provisions:

- 1. No policy required by this Contract shall prohibit Contractor from waiving any right of recovery prior to loss. Contractor hereby waives such right with regard to the indemnitees.
- 2. All insurance coverage amounts provided by Contractor and available or applicable to this Contract are intended to apply to the full extent of the policies. Nothing contained in this Contract limits the application of such insurance coverage. Coverage for an additional insured shall NOT be limited to the insured's vicarious liability. Defense costs must be paid in addition to coverage amounts.
- 3. Self-insured retentions above \$10,000 must be approved by the City. At the City's option, Contractor may be required to provide financial guarantees.
- 4. City reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

<u>3-1.18 Contract Execution</u>: The fully executed Contract, original bonds and insurance certificates and endorsements required under the Contract shall be delivered to the City <u>within ten calendar days of Contractor's receipt of the Notice of Award.</u>

The Engineer will supply Contractor with up to ten sets of the Invitation for Bids and Project Plans. At least one complete set of the Invitation for Bids and Project Plans shall be kept at the construction site in good condition and made available to the Engineer at all times. Additional copies of the Invitation for Bids and Project Plans will be provided by the Engineer at Contractor's cost.

<u>3-1.20 Failure to Execute Contract</u>: Contractor's failure to deliver to the City the fully executed Contract within ten calendar days of Contractor's receipt of the Notice of Award shall be cause for the cancellation of the award and the forfeiture of the bid guaranty to the City. If the successful bidder refuses or fails to execute the Contract, the City may award the Contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the Contract, the City may award the Contract to the third lowest responsible bidder. The refusal or failure by the second or third lowest responsible bidder to deliver to the City the fully executed Contract within ten calendar days of receipt of the Notice of Award to the respective bidder shall likewise be cause for the cancellation of the award and the forfeiture of the bid guaranty of the respective bidder. In its discretion, the City may then re-advertise the project or construct it by day labor.

<u>3-1.21 Return of Bid Guarantees</u>: Within ten days after the opening of bids, the City will return the bid guarantees to all bidders except the three lowest responsible bidders. The bid guarantees of the three lowest responsible bidders will be retained until the Contract has been fully executed. In the event all bids are rejected, all bid guarantees will be returned to the respective bidders.

<u>3-1.22 Subcontractors</u>: The successful bidder shall furnish a list of all subcontractors as required under Sections 2-1.33C. The list shall include the name, business address, DIR registration number and the state contractor's license number of each subcontractor on the list and the names of the responsible managing employees whose names appear on the subcontractors' licenses.

4 SCOPE OF WORK

4-1.05 Changes and Extra Work: All changes to the Contract shall be made by written change order only.

All extra work shall be recorded by Contractor on a daily report signed by both the City and Contractor. The "daily reports" shall thereafter be considered the true record of extra work performed. A copy of the daily reports will be furnished to Contractor. Contractor is directed to Section 9-1.04 of this Invitation for Bids.

<u>4-1.05C Compensation for Altered Quantities</u>: Payment and compensation for altered quantities shall conform to the provisions of Section 9-1.06 of the Standard Specifications, except as modified herein.

5 CONTROL OF WORK

<u>5-1.02 Contractor's Copies of Contract Documents</u>: In the event of a conflict in any of the Contract Documents, the order of precedence from highest to lowest shall be as follows:

- 1. Special Provisions
- 2. City Standards
- 3. City Specifications
- 4. Standard Specifications

<u>5-1.05 Order of Work</u>: Contractor shall schedule the order of work such that work is complete prior to the expiration of the working days indicated in Section 8.1.04B.

<u>5-1.17 Character of Workers</u>: Contractor is directed to Section 5-1.17 of the Standard Specifications which states:

"If any subcontractor or person employed by the Contractor shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the request of the Engineer, and such person shall not again be employed on the work."

No additional compensation shall be granted to Contractor in the event City exercises any part of its rights under this section and any and all costs related to such exercise shall be borne by Contractor.

<u>5-1.20 Cooperation with Other Entities</u>: Attention is directed to Section 5-1.20 of the Standard Specifications.

Other construction including but not limited to utility, power, and pipe line relocation, may be in progress by other forces within and adjacent to the project area at the same time work is being performed under this Contract by Contractor.

Contractor shall cooperate with the forces performing other work, to the end that such forces may conduct their operations with as little inconvenience and delay as possible. Contractor shall grant such forces access to the project area as is reasonable and necessary to transport materials and equipment to the site of operations by the other forces.

<u>5-1.20B(4)(a) Offsite Staging Areas and Construction Yards</u>: Attention is directed to Santa Rosa City Code section 20-52.040, Temporary Use Permit.

A Temporary Use Permit shall be obtained for any offsite construction yard on private property to be used for any of the following:

- a. Stockpiling of equipment and/or materials;
- b. Staging of construction;
- c. Placement of work trailers or mobile offices:
- d. Storage of trench spoils; or
- e. Other construction related activities not specifically enumerated above.

<u>5-1.26 Lines and Grades</u>: Contractor shall carefully preserve all bench marks, grade stakes, and all other survey markers. In the case of willful or careless destruction, Contractor shall bear the cost of replacing the markers.

Contractor shall contact the Engineer directly for coordination of survey staking. Written staking requests must be submitted at least two working days in advance of the date and time stakes are needed.

<u>5-1.27B Examination and Audit</u>: Pursuant to California Government Code section 8546.7, any contract with the City involving expenditures in excess of \$10,000 shall be subject to the examination and audit of the California State Auditor for a period of three years after final payment is made to Contractor by City under this Contract. Any such examination and audit will be confined to those matters connected with the performance of this Contract.

<u>5-1.30A Inspection</u>: Contractor shall bear all costs associated with the re-inspection of any defective, rejected or unauthorized work as determined by the Engineer in Engineer's sole discretion. Such costs of re-inspection, including any costs incurred by the City for additional staff time or fees for third-party consultant inspectors, will be deducted from one or more progress payments hereunder.

<u>5-1.36A Property and Facility Preservation</u>: Attention is directed to Section 5-1.36 of the Standard Specifications.

At Contractor's sole expense, all fences, gates, landscaping, drainage ditches, sidewalks, irrigation systems, and any other improvements that are damaged, removed or destroyed because of Contractor's operations, shall be replaced in accordance with City Standards at a minimum and restored to the same or better condition. Concrete surface treatment and score marks shall match adjacent existing concrete improvements.

<u>5-1.36E Obstructions</u>: Attention is directed to Section 5-1.36 of the Standard Specifications and to the possible existence of underground gas mains, high voltage lines, telephone ducts, storm drains and water and sewers systems, the locations of which are not shown on the Project Plans. The determination of the location of these facilities and the cost of repair or replacement in the event of damage to such facilities are the sole responsibility of Contractor.

Should Contractor alter any public utility or private improvements to facilitate its operations or for its sole benefit, which alteration would not be otherwise required, Contractor shall make whatever arrangements are necessary with the owner or controlling authorities and shall bear all expenses in connection therewith. Any damages to any public utility or private improvement caused by Contractor shall be repaired by Contractor at its sole expense and to the full satisfaction of the Engineer or the controlling authority.

Any subsurface information and data furnished under any part of this Contract are not intended as a representation or warranty but are furnished for information only. It is expressly understood that the City will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn therefrom by Contractor. The information is made available so that Contractor may have ready access to the same information available to the City and is not part of this Contract.

PRIOR TO STARTING ANY EXCAVATION, CONTRACTOR SHALL (AT LEAST TWO WORKING DAYS IN ADVANCE) CALL UNDERGROUND SERVICE ALERT (USA) toll free at (800) 227-2600 and provide USA with all necessary data relative to the proposed excavation. USA will accept calls and process information to participating agencies who have underground facilities in the area between the hours of 7:30 a.m. and 5:00 p.m. daily, except Saturdays, Sundays, and holidays. Between the hours of 5:00 p.m. and 7:30 a.m., calls will be recorded and then processed after 7:30 a.m. For emergency situations, after hours, and on Saturdays, Sundays and holidays, Contractor shall contact the owner of the affected facility.

Contractor shall coordinate all work with the appropriate City field personnel. When City work forces are required at the job site to perform Contract items of work, Contractor shall give a minimum of two working days advanced notification to the appropriate field office:

Water Division: (707) 543-4200 Sewer Division: (707) 543-4200 Street Division: (707) 543-3880 Survey Division: (707) 543-3834

5-1.43 Potential Claims and Dispute Resolution: "Claim" means a separate demand by Contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following: (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by the City under the Contract; (B) Payment by the City of money or damages arising from work done by, or on behalf of, Contractor pursuant to the Contract and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled; or (C) Payment of an amount that is disputed by the City.

Upon receipt of a Claim, the City shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed, provided, the parties may extend the 45 day time period by mutual agreement.

If the City needs approval from the City Council to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the Claim, and the Council does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim, the City shall have up to three days following the next duly publicly noticed meeting of the City Council after the 45-day period, or extension expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. If the City fails to issue a written statement, the Claim shall be deemed rejected in its entirety.

If a Contractor disputes the City's written response, or if the City fails to respond to a Claim within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the City shall conduct a meet and confer conference within 30 days for settlement of the dispute. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the City issues its written statement. Any disputed portion of the Claim, as identified by Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

6 CONTROL OF MATERIALS

<u>6-2.01 Source of Supply and Quality of Materials</u>: All materials required to complete the work under the Contract shall be furnished by Contractor and shall be free of hazardous substances.

6-3.01 General: Statistical means will not be used by the City for determination of Standard Specification compliance. Whenever both operating range test results and Contract compliance requirements are specified in these special provisions, the operating range requirements shall apply to the individual test results.

<u>6-3.01A Material Submittals</u>: Upon award of the Contract by City, Contractor shall submit to the Engineer a list of all materials proposed to be used on this project and any supporting documentation and/or samples required and source of supply.

For material listed on the "Engineer's List of Approved Items" which is located in the Sewer and Water sections only of the City Standards, the Engineer shall be provided with the name of the manufacturer and model/part number for all material proposed for this project, unless that item has been replaced as shown on the Project Plans or in the Invitation for Bids.

For all other materials used on this project, regardless of the type of work, Contractor shall provide to the Engineer the name of the manufacturer and model/part number along with supporting documentation and/or samples that will allow the Engineer to determine the material's acceptability.

The Engineer reserves the right to reject any proposed material, whether on the City's "Engineer's List of Approved Items" or not. If the City obtains information indicating that a listed item is not performing satisfactorily or is found to be defective, that item will be rejected and Contractor shall submit a replacement for review at no additional cost to the City.

<u>6-3.01B Material Guarantee</u>: Before any contract is awarded, the bidder may be required to furnish samples of materials and detailed descriptions of equipment to be used in the construction of the project. The materials samples may be subjected to the tests provided for in the Standard Specifications or in this Invitation for Bids to determine their quality and fitness for the project. The successful bidder shall unconditionally guarantee project materials and workmanship for a period of one year from the date of recording of the Notice of Completion. The guarantee shall cover 100% of all costs of repairs within the one year period, including all costs of labor, materials, equipment, and incidentals. Except as may be otherwise provided in Section 3-1.05, the successful bidder shall provide a surety bond executed by a corporate surety authorized and admitted to transact a surety business in the state of California in the minimum amount of one-half of the Contract price to cover this guarantee.

<u>6-3.05 Quality Assurance</u>: California Test 216 (Relative Compaction) testing will be modified as follows: A mechanical compactor (Ploog Engineering Co. Model M 100 or equivalent) with 10-pound hammer and split compaction molds shall be used in lieu of the specified manual compaction equipment.

California Test 231 (Nuclear Gage Determination of In-Place Density) will be modified as follows: In-place density and relative compaction may be determined on the basis of individual test sites in lieu of the area concept, at the discretion of the Engineer.

6-4 Water Utility

<u>6-4.01A Construction Water</u>: All water required for the performance of the work shall be provided by Contractor. Prior to obtaining water from the City's water system, Contractor shall obtain a Water Use Permit from the City of Santa Rosa Water Department and rent a hydrant or bridge meter. Contractor is responsible for the cost of all water and the cost of all deposits, permits and fees.

Contractor is prohibited from operating gate valves or fire hydrants on the City system.

The acquisition of water from the City's water system through un-metered hydrants or other facilities is a violation of City ordinance and State law. The use of water from sources other than the City's water system must be approved by the Engineer in advance of the use.

Citations and fines will be levied for violation of these and other utility regulations and deductions will be made from payments consistent with Section 7-1.02A(1) of the Standard Specifications.

<u>6-4.01B Water Utility Notification</u>: Contractors or parties requiring work of any kind by the City of Santa Rosa Water Department forces shall request such services a minimum of 48 hours in advance of the time such services are desired. Work requests which will involve the City of Santa Rosa Water Department forces for more than eight hours or an extensive number of City parts shall be requested a minimum of seven calendar days in advance.

If it is necessary to terminate or disrupt utility service to any customer, Contractor shall make the request for such work by City forces an <u>additional</u> 72 hours (three additional working days for a total of five working days advance notice) in advance of the time such services are desired to allow affected customers a minimum of 72 hours' notice. Contractors who fail to keep field appointments will be billed for scheduled City of Santa Rosa Water Department crew standby time which was used and the Contractor shall bear the costs incurred by the City of Santa Rosa's Water Department for re-notification of customers.

City of Santa Rosa Water Department crews work a 9/80 schedule. This schedule may prohibit shutdowns for tie-ins on alternating Fridays. After hours work or weekend work may be performed if prior authorization from the Engineer is obtained.

Other than the hours specified in this Invitation for Bids, requests by Contractor for after hours or weekend work is to be avoided whenever possible. Any overtime costs incurred by City for such work shall be borne by Contractor.

Interruption of utilities service to commercial customers shall be coordinated with the customer to minimize disruption to the enterprise to the greatest extent practicable. After notification by the Contractor of the need, the City of Santa Rosa Water Department will contact all commercial customers and inform Contractor accordingly.

<u>6-4.01C Water Facility Damage</u>: All damage caused to the City's water system shall be immediately reported to the Engineer.

Damage caused to the City's water system by Contractor's operations shall be repaired by the Contractor at <u>Contractor's sole expense</u> in a manner satisfactory to the City of Santa Rosa Water Department. Such repairs shall <u>not</u> be charged to the City or any City project. All repair work shall be witnessed and approved by the City of Santa Rosa Water Department <u>prior to</u> backfilling the excavation. The City will require re-excavation if backfilling occurs prior to inspection, which costs shall be borne by Contractor.

Contractor is responsible for, at its sole cost and expense, the repair and remediation of damage to property and facilities caused by any of the following circumstances:

- a. Contractor fails to make a written request for a markout or begins excavation without providing the City of Santa Rosa Water Department a reasonable opportunity to mark facilities;
- Contractor destroys markouts;
- c. Contractor fails to perform hand digging or probing for utilities near markouts; or
- d. Contractor fails to use reasonable caution, regardless of whether markouts are present or clear. Reasonable caution includes any efforts to avoid damaging existing facilities, such as when excavating in the vicinity of water mains.

City may, in its discretion, opt to make the repairs for which Contractor is responsible with its own forces. In such cases, the repairs will be made at Contractor's expense in accordance with the emergency repair rate schedule of the City of Santa Rosa Water Department. The City may make repairs whenever restoration of service requires extraordinary speed or special equipment. Contractor will be billed accordingly and City shall have the right and option to withhold payment hereunder, or a portion thereof, for any such costs billed but not promptly paid by Contractor.

<u>6-4.02 Salvage</u>: All valves, hydrants, and other appurtenances of the water system that are the property of City and removed by Contractor shall be delivered to the City's Municipal Services Center (55 Stony Point Road) unless Contractor has obtained specific written approval from the City of Santa Rosa Water Department to otherwise dispose of the materials.

6-4.03 Trade Names and Alternatives: Unless otherwise specified, material and equipment specifications that identify a particular patent, trade name or manufacturer, may be satisfied through substitute materials and equipment accepted by the City. Contractor may offer substitute materials and equipment of equal or better quality to the City. Any such offer shall be made in writing to the Engineer at least four weeks in advance of the time Contractor wishes to order the materials or equipment. Contractor shall include sufficient data which, together with any other information the Engineer may require, will enable the Engineer to determine the acceptability of the materials and equipment. When the substitute materials or equipment necessitate changes to any part of the work, the information shall include drawings and details showing all such changes and Contractor shall perform these changes as a part of any acceptance of substitute materials or equipment. The use of substituted materials and equipment will be permitted only after written acceptance of the materials and equipment by the Engineer. Such acceptance shall not relieve the Contractor from full responsibility for the sufficiency, quality and performance of the substitute materials and equipment.

The City will not, under any circumstances, acknowledge or consider any offers to accept substitute materials or equipment between the dates of public notice of advertisement and the bid opening.

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.02A(1) Forfeitures for Health and Safety Violations: Contractor shall comply with all applicable provisions of the Santa Rosa City Code and any failure to do so shall constitute a breach of the Contract. In the event of any violation of the Santa Rosa City Code that may impact public health and safety, including, but not limited to Chapter 17-12, "Storm Water" and Chapter 13-04, "Street Encroachments," City shall have the right to impose a charge against Contractor in an amount equal to \$500.00 per violation per day. Prior to the imposition of any charge hereunder, City shall first provide a written notice to Contractor of the violation and setting forth a reasonable period of time for Contractor to cure the violation(s). In the event Contractor fails to cure any such violation within the time provided, City shall have the right, in addition to all other rights and remedies available to City, to deduct and withhold as a permanent forfeiture by Contractor the appropriate amounts from any payment otherwise due Contractor under this Contract.

<u>7-1.02K(2) Wages</u>: Pursuant to Labor Code sections 1770 *et seq.*, each laborer or mechanic of Contractor or any subcontractor engaged in work on the project under this contract shall be paid not less than the hourly wage rate of per diem wages set forth in the prevailing wage rate schedule published by the Director of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor and such laborers and mechanics. A copy of the schedule of prevailing wage rates can be obtained online at www.dir.ca.gov or from the Department of Transportation and Public Works at 69 Stony Circle, Santa Rosa.

Any laborer or mechanic employed to perform work on the public works project under this Contract, which work is not covered by any of the foregoing classifications, shall be paid not less than the prevailing wage rate of per diem wages specified herein for the classification which most nearly corresponds to the work to be performed by the worker.

The foregoing specified prevailing wage rates are minimum rates only, and Contractor may pay any wage rate in excess of the applicable rate.

Pursuant to Labor Code Section 1775, Contractor as a penalty to the owner shall forfeit not more than \$200.00 for each calendar day, or a portion thereof, for each worker paid less than the prevailing wage rate established by the Department of Industrial Relations for such work or craft in which such worker is employed. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.

Contractor shall only provide prevailing wage reports upon written request from City. When requested, these prevailing wage reports must be redacted by the Contractor prior to providing them to City.

7-1.02K(4) Apprentices: Contractor agrees to comply with Chapter 1, Part 7, Division 2, sections 1777.5 *et seq.* of the California Labor Code. These sections require contractors and subcontractors to employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice work for each five hours of journeyman work (unless an exception is granted in accordance with Section 1777.5), and the contractors and subcontractors shall not discriminate among otherwise qualified employees as apprentices solely on the ground of sex, race, religion, creed, national origin, ancestry, or color. Only apprentices as defined in Labor Code section 3077, who are in training under apprenticeship standards and who have written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

<u>7-1.02K(6)(a)(1) Notice to Vendors</u>: Attention is directed to the current OSHA Standards. All equipment, tools and materials which are furnished and/or installed as part of this Contract shall meet or exceed the aforementioned standards in order to be considered acceptable.

<u>7-1.02K(6)(b)</u> Excavation Safety: When the digging or excavation occurs during project construction, Contractor shall:

- a. Promptly notify City in writing of the following conditions before any such conditions are disturbed:
 - 1. Material that the Contractor believes may be hazardous waste as defined in Health and Safety Code section 25117 that is required to be removed to a Class I, Class II or Class III disposal site in accordance with provisions of existing law;
 - 2. Subsurface or latent physical conditions at the site differing from those indicated in the Invitation for Bids; and
 - 3. Physical conditions at the site of any unusual nature, materially different from those ordinarily encountered and generally recognized as inherent in the type of work under the Contract.
- b. The City will investigate the conditions and will issue a change order under the terms of the Contract if it finds that the conditions warrant it.
- c. If a dispute arises between City and Contractor as to whether a change order is warranted, Contractor shall not be excused from any scheduled completion date provided for in the Contract but shall proceed with all work to be performed under the Contract.

7-1.02K(6)(b)(1) Trench Excavation Safety Plans: When the estimated cost for the excavation of any trench or trenches five feet or more in depth will exceed \$25,000.00, Contractor shall submit to the Engineer in advance of 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 the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the construction safety orders, or if the trench is anticipated to be greater than 20 feet, the plan shall be prepared by a registered civil or structural engineer.

A permit to do the above described work shall be obtained from the State of California, Division of Industrial Safety. Proof of such permit shall be submitted to the Engineer prior to starting the trench work.

Full compensation for complying with the provisions of this section shall be considered as included in the Contract price and no additional allowance will be made for the work.

<u>7-1.02K(6)(d)</u> Confined Space Safety: Any confined space entry for this project, including but not limited to manhole or water storage tank entry, will require a confined space entry permit pursuant to Cal/OSHA regulations as set forth in title 8 California Code of Regulations (CCR) sections 5157 or 5158. Confined space entry shall have the meaning ascribed in title 8 CCR sections 5157 and 5158. For any confined space entry for construction operations regulated by title 8 CCR section 1502, Contractor shall comply with title 8 CCR section 5158, "Other Confined Space Operations." For any other confined space operations, Contractor shall comply with title 8 CCR section 5157, "Permit-Required Confined Spaces."

Attention is directed to the technical specifications in the Special Provisions for information regarding entry to any City maintained confined space. Pursuant to title 8 CCR section 5157, Contractor is required to obtain any available information regarding hazards and operations for any City maintained confined spaces. The City maintained Confined Space Entry Manual is available for viewing at the City of Santa Rosa Water Department or Transportation and Public Works Department office at 69 Stony Circle, Santa Rosa.

Contractor shall immediately inform the Engineer of any previously unidentified hazards confronted or created during confined space entry.

<u>7-1.02L(2)(a) Patents and Royalties</u>: All fees, royalties, or claims for any patented invention, article, process or method that may be used upon or in any manner connected with the work under this Contract shall be paid by Contractor. Contractor and its sureties shall protect and hold harmless City and its officers, agents, and employees from any and all demands made for such fees royalties or claims brought or made by any third party, and before the final payment is made on the account of the Contract, Contractor shall, if requested by City, furnish acceptable proof of a proper release from all such claims and liabilities.

Should Contractor, its officers, agents, or employees, or any one of them be enjoined from furnishing or using any invention, article, material, or plans supplied or required to be supplied or used under the Contract, Contractor shall promptly substitute other articles, materials, or appliances in lieu thereof of equal efficiency, quality, finish, suitability, and market value, and satisfactory in all respects to the Engineer. In the event that the Engineer elects, in lieu of such substitution, to have supplied and to retain and use any such invention, article, materials, or plans as may be required to be supplied by the Contract, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for City, its officers, agents, and employees, or any one of them to use such invention, article, materials, or appliance without being disturbed or in any way interfered with by any proceeding in law of equity on account thereof. Should Contractor neglect or refuse to make the substitution promptly or to pay such royalties and secure such licenses as may be necessary, then in that event the Engineer shall have the right to make such substitutions or City may pay such royalties and secure such licenses and charge Contractor even though final payment under the Contract may have been made.

<u>7-1.02M(3) Mined Materials</u>: California Public Contract Code section 20676 prohibits surface mining operators which are subject to the Surface Mining and Reclamation Act of 1975 (SMARA) from selling California mined construction material to the City unless the operator is identified in a list referred as the **3098 List**. The List, which is maintained by the Department of Conservation's Office of Mine Reclamation (OMR), changes throughout the year and can be viewed at the OMR website: http://www.consrv.ca.gov/OMR/ab_3098 list/index.htm. To confirm whether or not a specific operator is on the List at any given time, Contractor shall call the OMR at (916)323-9198.

<u>7-1.03A Maintaining Traffic</u>: Attention is directed to Sections 7-1.04 of the Standard Specifications and to the following modifications thereof.

If construction is within City owned right-of-way, provisions shall be made for the safe passage of public traffic through the work site at all times consistent with the requirements of Santa Rosa City Code Chapter 13-04.

Except for projects to be performed under a minor contract, Contractor shall install and maintain project identification signs at each end of the project or as directed by the Engineer two weeks prior to any construction activity. City shall furnish the appropriate sign panels upon request from Contractor. To mount the sign panels, Contractor shall furnish and install 4" X 4" posts or mount by

other appropriate methods as approved by the Engineer. These sign panels shall be returned to the City Corporation Yard at 55 Stony Point Road after completion of the project.

Two weeks prior to any construction activity, advance notice signs for road closures shall be furnished and installed by Contractor at each end of the project and shall remain in place throughout the duration of the subject closure. Details of panel construction and lettering shall be approved by the Engineer.

Contractor shall furnish, install, and maintain at its expense all barricades, signs, lights, and other devices necessary to adequately warn of any obstructions to the traveled and pedestrian way and provide flaggers as necessary for the safety of public traffic and pedestrians and to provide access to property adjacent to the work site and Contractor shall comply with the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et seq.) (ADA) and any regulations and guidelines issued pursuant to the ADA.

Contractor shall comply with the current edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) for all items related to traffic within the work site.

Rain and other occurrences that may cause the suspension or delay of the work shall in no way relieve Contractor of its responsibility to provide traffic control and public access through the work site as specified herein. At all times, Contractor shall keep at the work site such materials, forces and equipment as may be necessary to keep roads, streets, and driveways within the work site open to traffic and in good repair and shall expedite the passage of such traffic, using such forces and equipment as may be necessary.

Should Contractor fail, in the opinion of the Engineer, to provide all the materials, forces and equipment necessary to maintain traffic through the work site as set forth herein, City may take steps necessary to remedy any such failure, including but not limited to causing such work to be performed and/or suspending any further work under the Contract. Any such remedial cost and expense incurred by the City, plus an administrative charge of 15%, shall be immediately due and payable by Contractor and may be deducted from any amounts owed to Contractor hereunder. In the event there are insufficient sums owed to Contractor hereunder to cover the foregoing costs and charges, City shall have the right to pursue any other remedy to recover the same, including but not limited to, proceeding against any surety or bond in favor of City. City's rights under Section 7-1.02 are intended to be in addition to and not in lieu of any charges imposed by City against Contractor under Section 7-1.02A(1) above for violations of the Santa Rosa City Code.

Contractor shall be responsible for informing emergency response agencies operating within the area of the work of obstructions to either public or private roads caused by reason of Contractor's operations hereunder.

Contractor shall make provisions for the safe passage of pedestrians around the project work site at all times.

8 Prosecution and Progress

8-1.01A Assignments: Once awarded, this Contract shall not be transferred, assigned, or subcontracted, except as herein expressly provided without the prior written consent of the City in the City's sole and absolute discretion. See Section 5-1.12 of the Standard Specifications.

8-1.04C Materials Start: Notwithstanding any provisions of the Contract, in lieu of the requirement that Contractor begin work within ten days from the date of the Notice to Proceed, as provided in Section 8-1.04B of the Standard Specifications, Contractor shall furnish the Engineer with a statement from the vendor(s) that the order for the materials required for this Contract has been accepted by the vendor(s). The statement shall include the date that the materials will be shipped and shall be delivered to the Engineer within ten days after Contractor receives the Notice of Award.

Contractor shall not perform any above work at the work site until all materials are delivered to Contractor. Contractor shall notify the Engineer in writing of the date that all materials are received and shall begin work not more than ten days thereafter.

Contractor shall diligently prosecute the work to completion before the expiration of:

170 WORKING DAYS

<u>8-1.05 Time</u>: Filter cells 9-14 will be taken out of service by City staff in accordance with the following time restrictions:

- Between October 16 and June 30: Only one (1) filter cell out of cells 9-14 will be taken
 out of service at a time. The Contractor shall complete all work in one filter cell and the
 City shall be allowed up to 48 hours to place the filter cell back in service and take a
 subsequent filter cell out of service.
- 2. <u>Between July 1 and October 15</u>: Up to six (6) filter cells (cells 9-14) will be taken out of service at a time.

Unless otherwise directed by Engineer, Contractor shall not conduct any activities that generate noise earlier than 8:00 a.m. or later than 5:00 p.m.

8-1.05 Time: The Notice to Proceed is anticipated to be issued no later than March 8, 2024.

8-1.10 Liquidated Damages: Contractor hereby agrees that Contractor shall pay to the City liquidated damages for each and every calendar day delay over and above the number of working days prescribed above for finishing the work in the amount shown in Section 8-1.10 of the Standard Specifications.

9 MEASUREMENT AND PAYMENT

<u>9-1.04 Force Account Work</u>: All work done on a force account basis shall be recorded daily on report sheets prepared by Contractor and signed by both the Engineer and Contractor. Such reports shall thereafter be considered the true record of force account work performed during the project. Such reports shall be furnished to the Engineer and a copy retained by Contractor.

All extensions of labor, equipment, and material costs shall be completed by Contractor and submitted to the Engineer within 30 days of the completion of the extra work. Completed and extended extra work reports received later than the times herein prescribed may be deemed invalid and rejected without payment at the discretion of the Engineer.

9-1.07 Payment Adjustments For Price Index Fluctuations: Any references to Opt Out of Payment Adjustments for Price Index Fluctuations in the Standard Specifications are deleted in their entirety.

9-1.16 Progress Payments: Once each month for progress pay purposes, the City will prepare a written estimate of the total amount of completed work and accepted materials purchased by Contractor but not installed. The City shall retain five percent of such estimated value of the completed work and the unused materials and pay Contractor the balance after deducting all previous payments and all sums to be retained under the provisions of the Contract. No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract or when, in the Engineer's judgment, the total value of the completed work since the last estimate is less than \$500.00. No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

After Contract acceptance, the Engineer will prepare a written proposed final estimate of the proposed final quantities of work completed under the Contract and the value of such work and will submit such estimate to Contractor. The City shall retain five percent of such estimated value of the work done and shall pay to Contractor the balance after deducting all amounts to be retained under the provisions of the Contract.

The City may, at its option and at any time, retain out of any amounts due Contractor sums sufficient to cover any unpaid claims of City or others, provided that sworn statements of all non-City claims shall have been filed with the Director of Finance.

9-1.16E(6) Substitution of Securities for Withheld Amounts: Pursuant to Public Contract Code section 22300, securities may be substituted for any moneys withheld by City to ensure performance under this Contract, provided that substitution of securities provisions shall not be required in contracts in which there will be financing provided by the Farmer's Home Administration of the United States Department of Agriculture pursuant to the Consolidated Farm and Rural Development Act (7 USC sections 1921 *et seq.*), and where federal regulations or policies or both do not allow the substitution of securities. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank as the escrow agent, which shall then pay such moneys to Contractor. The Director of Finance is authorized to execute substitution of securities agreements on behalf of the City. The City will return the securities to Contractor upon satisfactory completion of the Contract as determined by City in its sole discretion and the resolution of all outstanding claims against the securities. Contractor shall be the beneficial owner of any securities substituted for moneys withheld and shall receive any interest thereon.

Securities eligible for investment under this section shall 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 Contractor and the City, provided that the substituted security is equal to or not less than five percent of the Contract amount.

Security substitutions must be submitted by Contractor and approved by City prior to the time of the first progress payment to be made under the Contract. No other method of substituting securities for retention will be accepted. The security substitution shall be done only upon execution of an agreement satisfactory to City which includes the following provisions:

- a. The amount of securities to be deposited;
- b. The terms and conditions of conversion to cash in case of the default of Contractor; and
- c. The procedure for return of securities upon completion of the Contract.

9-1.17D Final Payment and Claims: The processing of payment of the final estimate shall not be commenced less than 35 days after the date of recording of the Notice of Completion with the County Recorder's Office. Contractor is advised that it takes approximately ten days for a check to be issued following a request for payment.

Contractor shall submit its written statement of all claims for additional compensation under the Contract to the Engineer within 15 days after submission to Contractor of the proposed final estimate.

If Contractor does not file a claim within the 15 day period, or upon Contractor's approval, the Engineer will issue a final written estimate and the City shall pay to Contractor the entire sum due after deducting all previous payments, if any, and all amounts to be retained under the provisions of the Contract.

If Contractor files a claim within the 15 day period, the Engineer will furnish a semi-final estimate and pay the amount due under the semi-final estimate within 30 days. The semi-final estimate is conclusive as to the amount payable except as may be affected by claims and any amount retained. The Engineer shall then consider and investigate such claim and shall make such revision in the final quantities as the Engineer may find to be due and shall then make and issue a final written estimate. The City will pay the amount due, after deducting all previous payments, if any, and amounts to be retained under the provisions of the Contract.

Any and all prior partial estimates and payments shall be subject to correction in the final estimate and payment.

The final estimate shall be conclusive and binding against both parties to the Contract on all questions relating to the performance of the Contract and the amount of work done thereunder and compensation therefor, except in the case of gross error.

9-1.17D(3) Final Determination of Claims: Claims filed by Contractor shall be in sufficient detail to enable the Engineer to determine the basis and amount of the Claims. Contractor shall also furnish reasonable documentation to the City to support Claims. If additional information is required by the Engineer, Contractor shall provide such information to the Engineer no later than the 15th day after receipt of the written request from the Engineer. If the 15th day falls on a weekend, holiday, or day City offices are closed, then the information shall be provided to the Engineer no later than close of the next business day. Failure to submit the requested information to the Engineer within the time specified will be sufficient cause for denying the Claim.

Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated Claim investigator or auditor shall have access to those records and any other records as may be

reasonably required by the Engineer to determine the facts or contentions in each Claim. Failure to grant access to such records shall be sufficient cause for denying the Claims.

<u>9-1.22 Arbitration</u>: Any references to Arbitration in the Standard Specifications are deleted in their entirety.



TECHNICAL SPECIFICATIONS

FOR

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

CONTRACT NO. C02096

100% SUBMITTAL



OCTOBER 2023

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SECTION 01 11 00 SUMMARY OF WORK

PART 1 GENERAL

1.01 DESCRIPTION

A. The work to be performed under this Contract is associated with the Filter facility (specifically filter cells No. 9 thru 14) located at the City of Santa Rosa's Laguna Wastewater Treatment Plant (Plant) at 4300 Llano Road, Santa Rosa, California, 95407.

1.02 SUMMARY OF WORK

- A. The work specifically includes all work as represented by these Specifications and all other Contract Documents issued for construction and subsequent approved revisions and addenda.
- B. The project includes, but is not limited to, the following elements:
 - 1. Remove and replace twenty-four (24) 24-inch butterfly valves and six (6) 8-inch butterfly valves serving six (6) filter cells (cells 9 thru 14) including valves, pneumatic valve actuators, floor stand, torque tubes and bonnet assemblies. The valves and actuators to be replaced at each filter cell are as follows:
 - a. 24-inch Filter Influent Valve (FIV)
 - b. 24-inch Filter Effluent Valve (FEV)
 - c. 24-inch Backwash Supply Valve (BSV)
 - d. 24-inch Backwash Waste Valve (BWV)
 - e. 8-inch Backwash Air Valve (BAV)
 - 2. Make modifications, adjustment and/or repairs to existing aluminum guardrails to accommodate new equipment and fill in any gaps.
 - 3. Perform startup and testing for all equipment provided and installed under the Contract.
 - 4. Coordinate with subcontractors, equipment suppliers, and the Engineer for commissioning, training startup and acceptance of all equipment.

1.03 DESCRIPTION OF BID ITEMS

- A. Bid Items are presented to indicate major categories of the work for purposes of comparative bid analysis and payment breakdown for monthly progress payments. Bid items are not intended to be exclusive descriptions of work categories and the Contractor shall determine and include in its pricing all materials, labor, and equipment necessary to complete each Bid Item (work phase) as shown and specified.
- B. Bid Item Descriptions:
 - Mobilization and Demobilization shall be paid for at the contract lump sum fixed price which includes all labor, materials, equipment, preparatory work, and operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of facilities and construction access as necessary; construction water and all work involved in its obtainment;

demobilization, and for all other work and operations which must be performed or costs incurred prior to beginning and required for finishing work on the items in the Bid Schedule, and no additional allowance will be made therefor.

The bid item amount for Mobilization and Demobilization shall not exceed 3% (three percent) of the total bid price. The first payment for Mobilization and Demobilization shall be no more than 50% (fifty percent) of the bid item amount indicated, contingent upon site mobilization of equipment, an approved Construction Schedule, and proof of acquisition of all required bonds, insurance, and permits. The second payment for Mobilization and Demobilization shall be the remainder of the bid item amount and shall be paid after completion of all contract items of work and completion of the final punch list.

- 2. 8-Inch Butterfly Valve shall be paid for at the contract per each price which shall include full compensation for furnishing all labor, materials, tools, equipment, coordination with City operations, and incidentals, and for performing all work involved with removing and disposing of the existing valve, procuring and installing the new valve, including but not limited to the valve, fittings, gaskets, nuts & bolts, tagging, temporary bling flanges and flange kits as necessary, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including project plans and these Technical Specifications, and no additional allowance will be made therefore.
- 3. 24-Inch Butterfly Valve shall be paid for at the contract per each price which shall include full compensation for furnishing all labor, materials, tools, equipment, coordination with City operations, and incidentals, and for performing all work involved with removing and disposing of the existing valve, procuring and installing the new valve, including but not limited to the valve, fittings, gaskets, nuts & bolts, tagging, temporary bling flanges and flange kits as necessary, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including the project plans and these Technical Specifications, and no additional allowance will be made therefore.
- 4. 24-Inch Flange Coupling Adapter shall be paid for at the contract per each price which shall include full compensation for furnishing all labor, materials, tools, equipment, coordination with City operations, and incidentals, and for performing all work involved with removing and disposing of the existing flange coupling adapter adjacent to the existing backwash supply valve, procuring and installing the new flange coupling adapter adjacent to the new backwash supply valve, including but not limited to the fitting, gaskets, nuts & bolts, tie rods, tie rod lugs, coatings, flange kits, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including the project plans and these Technical Specifications, and no additional allowance will be made therefore.
- 5. Actuator and Extension for 8-Inch Butterfly Valve shall be paid for at the contract per each price which shall include full compensation for furnishing all labor, materials, tools, equipment, coordination with City operations, and incidentals, and for performing all work involved with removing and disposing of

the existing actuator and extensions, procuring and installing the actuator and extensions, including but not limited to actuator, torque tube and bonnet assembly, manual operator and associated hardware, support hardware, fittings, nuts & bolts, gear engagement level upgrades, sunshield, electrical conductors and conduits, pneumatic piping, fittings and appurtenances, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including project plans and these Technical Specifications, and no additional allowance will be made therefore.

- 6. Actuator and Extension for 24-Inch Butterfly Valve shall be paid for at the contract per each price which shall include full compensation for furnishing all labor, materials, tools, equipment, coordination with City operations, and incidentals, and for performing all work involved with removing and disposing of the existing actuator and extensions, procuring and installing the actuator and extensions, including but not limited to actuator, torque tube and bonnet assembly, floor stand (pedestal), manual operator and associated hardware, support hardware, fittings, nuts & bolts, gear engagement level upgrades, sunshield, electrical conductors and conduits, pneumatic piping, fittings and appurtenances, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including project plans and these Technical Specifications, and no additional allowance will be made therefore.
- 7. Guardrail Modifications shall be paid for at the contract lump sum price which shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all work involved with procuring and installing guardrail segments and all associated hardware, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including project plans and these Technical Specifications, and no additional allowance will be made therefore.
- 8. Start-Up and Testing shall be paid for at the contract lump sum price which shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all work involved with testing valves, actuators, electrical equipment and pneumatic equipment associated with the actuators, and for the required manufacturer's services to be provided onsite, operational testing coordinated with the city operations personnel, and all other work and appurtenances incidental thereto, complete in conformance with the contract documents including project plans and these Technical Specifications, and no additional allowance will be made therefore.

1.04 COORDINATION

- A. Coordinate with operations and maintenance personnel to maintain uninterrupted operation of critical plant equipment.
- B. The work shall be completed in accordance with Section 8 Prosecution and Progress.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 20 00 PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SUBMITTALS

- A. Informational Submittals:
 - Submit a Schedule of Values in Excel on the Contractor's standard form.
 - 2. Submit application for payments.
 - 3. Final Application for Payment.

1.02 PERMIT

A. A City of Santa Rosa Building Permit is not required for this project.

1.03 CONTRACTOR'S SCHEDULE OF VALUES

- A. Prepare a separate Schedule of Values for all Work under the Agreement.
- B. Upon request of the Engineer, provide documentation to support the accuracy of the Schedule of Values.
- C. An unbalanced or front end loaded schedule will not be acceptable.
- D. Submit Schedule of Values in a spreadsheet format compatible with the latest version of Excel.
- E. For Unit Price work, reflect the unit price quantity and unit cost from the conformed Bid Forms.
- F. For work to be performed for a lump sum amount, the Contractor shall submit a Schedule of Values, as described in Caltrans Section 9-1.16B Schedule of Values, to the Engineer prior to the first payment and within fifteen (15) days after the Notice to Proceed. The Schedule of Values, as agreed upon by the Contractor and the Engineer, shall be used for preparing future estimates for partial payments to the Contractor, and shall list the major items of work with a price fairly apportioned to each item.
- G. The cost breakdown shall be generally in the same format as the Contract specifications divisions and subdivisions, with major items of work listed individually. The cost breakdown shall be by mechanical, electrical, or other logical division of work. The cost breakdown for mechanical and electrical work shall include separate items for identifiable portions of the Work. The cost breakdown shall include separate allowances for any inspection, testing, and startup work required. Measurable approximate quantities of work performed by the Contractor, or its subcontractors, shall be provided. For quantities that are the sum total of several individual quantities, backup summaries shall be provided which list the individual descriptions and quantities. These summaries then will be used to determine the quantities of work in place in subsequent progress payment requests.

- H. The above is a statement of the intent of the Contract Documents to provide a high level of detail, acceptable to the Engineer, to allow a fair and reasonable estimate to be made of the value of work installed. The detail of the cost breakdown must be sufficient to provide timely processing of the monthly progress payment request.
- I. The cost breakdown will be subject to the approval of the Engineer, and upon request, the Contractor shall substantiate the price for any or all items and provide additional level of detail, including quantities of work. The cost breakdown shall be sufficiently detailed to permit its use by the Engineer as one of the bases for evaluating requests for payments. The Engineer shall be the sole judge of the adequacy of the cost breakdown.

1.04 APPLICATION FOR PAYMENT

- A. Attach one transmittal summary form with each detailed application for payment for each schedule and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.
- B. Use a detailed Application for Payment Form suitable to Engineer.
- C. Include accepted Schedule of Values for each schedule portion of lump sum Work and the unit price breakdown for the Work to be paid on a unit priced basis.
- D. Include separate line items for each Change Order and Work Change Directive executed prior to date of submission. Provide further breakdown of such as requested by the Engineer.
- E. Submit Application for Payment, including a Transmittal Summary and detailed Application for Payment Form(s) for each schedule as applicable, a listing of materials on hand for each schedule and such supporting data as may be requested by the Engineer.

1.05 PAYMENT

A. Payment will be made at the contract price, which shall include full compensation for furnishing all labor, materials, tools and equipment and for performance of all the work required for Filter Valve Actuator and Valve Replacement, as summarized in Section 01 11 00, 1.02 SUMMARY OF WORK.

1.06 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

- A. Payment will not be made for the following:
 - 1. Loading, hauling and disposal of rejected equipment.
 - 2. Quantities of material wasted or disposed of in a manner not called for under the Contract Documents.
 - 3. Rejected loads of material, including material rejected after it has been placed.
 - 4. Material refused for unloading from transporting vehicle.
 - 5. Defective Work not accepted by Engineer.
 - 6. Material remaining on hand after completion of Work.

1.07 PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

- A. Partial Payment: No partial payments will be made for materials and equipment delivered or stored unless Shop Drawings and preliminary Operation and Maintenance data is acceptable to Engineer.
- B. Final Payment: will be made only for products incorporated in the Work. Remaining products, for which partial payments have been made, shall revert to Contractor unless agreed, and partial payments made for those items will be deducted from the final payment.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 40 27 02 PROCESS VALVES AND OPERATORS

PART 1 GENERAL

1.01 WORK

A. Work specified under this section includes removal and replacement of existing valves, pneumatic valve actuators, extensions, and floor stands, as identified below and as specified herein.

B. 8-Inch Butterfly Valves:

- 1. Summary of Work: Remove and replace existing valve, flexible conduit and conductors, torque tube and bonnet assembly, actuator assembly with specified equipment, air tubing, and air regulator.
- 2. Work is applicable to all the 8-inch Backwash Air Valves in filter cells 9-14.
- 3. Existing Valve Manufacturer and Model: Henry Pratt Co. model 2FII with Single Cylinder Style Actuators.

C. 24-Inch Butterfly Valves:

- 1. Summary of Work: Remove and replace existing valve, flexible conduit and conductors, torque tube and bonnet assembly, floor stands, actuator assembly with specified equipment, air tubing, and air regulator.
- 2. Work is applicable to all the 24-inch butterfly valves in filter cells 9-14.
- 3. Existing Manufacturer and Model: Henry Pratt Co. model Triton XR- 70 with Dura-Cyl Double Cylinder Style Actuators.

1.02 WORK CONSTRAINTS

- A. Excluding temporary shutdowns arranged by the Engineer, no more than the (6) six filter cells (9-14) shall be taken offline at a time. See Section 8-1.05 for restrictions in the number of filter cells that may be taken out of service at any one time depending on the time of year.
- B. Contractor shall coordinate each temporary shutdown of entire filter with Engineer as follows:
 - 1. Arrange pre-shutdown meeting with Engineer to discuss Contractor's shutdown plan and to coordinate requirements. Provide minimum two (2) days advance notice of intended shutdown.
 - 2. Temporary shutdown duration shall not exceed eight (8) hours.

C. Backwash Supply Valves:

- 1. Temporary shutdowns of Backwash Supply Pumps are required to open or remove the Backwash Supply Valves.
- If contractor does not plan on immediately installing new BSV's capable of isolation, then contractor shall provide and install temporary blind flanges in place of Backwash Supply Valves. Flanges allow for the backwash system to be operated for the other filter cells not in this contract.

D. Backwash Air Valves:

- 1. Temporary shutdowns of the backwash air system are required for replacement of Backwash Air Valves.
- 2. If new Backwash Air Valves are not immediately installed and capable of isolation following removal of existing valves, then the Contractor shall provide and install temporary blind flanges.
- E. All work sequencing should be included in the Contractor's Schedule, specified in Section 5-1.05.
- F. Continuous operation of Plant facilities is of critical importance. Schedule and conduct activities to enable existing facilities to operate continuously unless specified otherwise elsewhere.
- G. Perform work continuously during critical connections and changeovers, and as required to prevent interruption of Plant operations.
- H. When necessary, plan, design, and provide various temporary services, utilities, connections, temporary piping, access, and similar items to maintain continuous operations of the Plant facilities.
- I. Do not close lines, open or close valves, or take other action which would affect the operation of existing systems.
- J. The Contractor shall assume other public improvement projects will be concurrently in progress during the entire duration of the project. Contractor shall coordinate his activities with the requirements of the concurrent activities, including the adjacent Disinfection Improvements Project.

1.03 SUBMITTALS

A. Action Submittals:

- 1. Shop Drawings:
 - a. Product data sheets for each make and model.
 - b. Complete catalog information, descriptive literature, specifications, and identification of materials of construction.
 - c. Power and control wiring diagrams, including terminals and numbers.
 - d. For each power actuator provided, manufacturer's standard data sheet, with application specific features and options clearly identified.
 - e. Sizing calculations for valve actuators.
 - f. Interior and exterior coating materials, including prime and finish coats, coating thickness, coating product data sheets, and surface preparation.

B. Informational Submittals:

- 1. Manufacturer's Certificate of Compliance for:
 - a. Pneumatic actuators; full compliance with AWA C541.
 - b. Butterfly valves; full compliance with AWWA C504.
- 2. Tests, inspection data, and reports.
- 3. Operation and Maintenance Data.

PART 2 PRODUCTS

2.01 GENERAL

- A. Valve shall include all accessories necessary for operation.
- B. Valve shall be suitable for intended service. Renewable parts shall not be of a lower quality than specified.
- C. Size operators and actuators to operate valve for full range of specified pressures and flows
- D. Valve shall open by turning counterclockwise, unless otherwise specified.

2.02 MATERIALS

- A. Bronze and brass valve components and accessories that have surfaces in contact with water shall be alloys containing less than 16 percent zinc and 2 percent aluminum.
 - Approved alloys are of the following ASTM designations: B61, B62, B98/B98M (Alloy UNS No. C65100, C65500, or C66100), B139/B139M (Alloy UNS No. C51000), B584 (Alloy UNS No. C90300 or C94700), B164, B194, and B127.
 - 2. Stainless steel Alloy 18-8 may be substituted for bronze.

2.03 FACTORY AND FIELD FINISHING

- A. Except where otherwise specified, interior and exterior coatings for valves and accessories shall be in accordance with AWWA C550 and as follows:
 - 1. Valves:
 - a. Provide interior and exterior factory coatings, minimum 8-mil dry film thickness except where limited by valve operating tolerances.
 - b. Either two-part liquid material or heat-activated (fusion) material, except only heat-activated material if specified as "fusion" or "fusion bonded" epoxy.
 - c. Exposed safety isolation valves and lockout valves with handles, handwheels, or chain wheels shall be "safety yellow."
 - 2. Accessories:
 - a. Factory prime coat interior and exterior surfaces as follows:
 - 1) Primer material shall be compatible with field finish coat material.
 - 2) Material: High-solids epoxy, 2-coats, 12-mil dry film thickness.
 - b. Field finish coat with aliphatic polyurethane enamel, 1 to 2 coats, minimum 3-mil dry film thickness, color to match existing, BSV & FEV green, BWV & FIV brown, and BAV orange.
 - c. Stainless steel accessory components do not require coatings.

2.04 VALVES

- A. Butterfly Valves:
 - 1. In full compliance with AWWA C504, Class 150B.
 - 2. Suitable for open-close and throttling operations, and infrequent operation after periods of inactivity.

- 3. Elastomer seats which are bonded or vulcanized to the body shall have adhesive integrity of bond between seat and body assured by testing, with minimum 75-pound pull in accordance with ASTM D429, Method B.
- 4. Elastomer seats shall be EPDM (ethylene propylene diene monomer).
- 5. Bubble-tight with rated pressure applied from either side.
- 6. No travel stops for disc on interior of body.
- 7. Self-adjusting V type or O ring shaft seals.
- 8. Isolate metal-to-metal thrust bearing surfaces from flow stream.
- 9. Short body type, flanged ends.
- 10. Cast-iron body, cast or ductile iron disc, Type 304 stainless steel shafts, and stainless-steel seating surface.
- 11. Provide epoxy lining and coating in compliance with AWWA C550.
- 12. Manufacturers and Products:
 - a. 8-inch Air Valves:
 - 1) DeZurik, Model BAW
 - 2) Henry Pratt Co.; Model 2FII
 - 3) No substitutions will be accepted.
 - b. 24-inch Water Valves:
 - 1) DeZurik, Model BAW
 - 2) Henry Pratt Co.: Model Triton XR-70
 - 3) No substitutions will be accepted.

2.05 OPERATORS AND ACTUATORS

- A. Pneumatic Vane Style Actuators:
 - Actuators complete with air sets, exhaust mufflers, speed controls, pilot solenoids, manual vent and bypass valves, safety vented isolation valves, and accessories specified.
 - 2. Suitable for full operation range of valve at air supply pressures of 65-85 psig.
 - 3. Position indication and stop limiting devices on all actuators.
 - 4. In compliance with AWWA C541.
 - 5. Pressure die-cast aluminum housing with corrosion resistant baked enamel or fusion bonded epoxy finish suitable for outdoor coastal environment, stainless steel bolting, and stainless-steel adjustable end stops. Housing rated for minimum 150 psi design pressure with safety factors of 3 for material yield strength, and 5 for material ultimate strength.
 - 6. Electroless nickel-plated steel shaft and vane, single component machined or cast part.
 - 7. Dual-opposed polyurethane lip seals with stainless-steel expander.
 - 8. Double Acting:
 - a. Complete with mounting hardware.
 - b. Suitable for use with non-lubricated air.
 - 9. Geared Manual Override: Geared type with de-clutchable handwheel, torque rated for application.

- 10. Pneumatic Manual Override: Manual vent valves and isolation valves configured to bypass pilot solenoid(s) and permit manual OPEN/CLOSE operation. Manual override shall not bypass air set or speed control valves.
- 11. Visual Indicator: High visibility, OPEN-CLOSED indication, color coded, chemical resistant, clear polycarbonate cover.

12. Manufacturer:

a. Supplier shall be K-Tork, Models KT-40 and KT-50, to match City standard. No substitutes will be accepted.

B. Pneumatic Actuator Accessories:

- 1. Air Set: Provided by actuator manufacturer and consisting of pressure regulator with internal relief, filter, outlet pressure gauge, and adjustable reduced pressure range as required by valve actuator.
 - a. Aluminum body and handwheel.
 - b. Safety vented lockout isolation valve.
 - c. Gauge range 1 1/2 to 2 times maximum operating pressure.
 - d. Manufacturers and Products: One of the following or approved equal:
 - 1) Fisher Controls; Type 67 AFR.
 - 2) Masoneilan; No. 77-4.

2. Air Exhaust Muffler:

- a. In the exhaust port of actuator pilot solenoid valves.
- b. Manufacturers and Products: One of the following or approved equal:
 - 1) Barry Wright Corp.
 - 2) Allied Witan Co.

3. Limit Switch:

- a. Factory installed NEMA 4X limit switch by actuator manufacturer.
- b. Single-pole, double-throw (SPOT) type, rated 10 amps at 120 volts ac.
- c. Housed in NEMA 4X enclosure.
- d. Adjustable for OPEN and CLOSED valve positions.

4. Solenoid Valve:

- a. Solenoid valve shall pilot control actuator in appropriate configuration for type of open-close actuator being controlled. Solenoid valve shall be single or dual coil type as required and configured for the failure mode shown on the Pneumatically Actuated Valve Schedule. Fail-last-position type shall be a dualcoil 4-way centerblock to hold the valve in last position on electrical failure, while fail-close type shall be single-coil.
- b. Solenoid valve shall be ISO/NAMUR VDINDE 3845 direct mounted to the actuator. If NAMUR mounting is not available, the controls shall be mounted to stainless-steel plates affixed to the actuator, and stainless-steel interconnecting tubing shall be used. Rubber hoses and hose clamps are not acceptable.
- c. Pilot operated diaphragm type solenoid valve with brass body and resilient seat. Valve with minimum operating pressure differential no greater than 10 psig and maximum operating pressure differential no less than 150 psig. Internal parts corrosion-resistant. Solenoid valve to have Class F molded coils, for operation on 120 volts ac, 60 Hz, unless otherwise indicated. Solenoid enclosure NEMA 250, Type 4X.

- d. The solenoid shall be protected by an aluminum sun shield similar to those previously installed on the actuators in cells 1-8. Contractor shall submit a proposed fabricated aluminum sun shield to the Engineer for review and approval.
- e. Solenoid shall have a manufacturer's warrantee of 10 years from the date of installation.
- f. Manufacturers:
 - Manufacturer shall be Versa CSG Series to match City standard. No substitutions will be accepted. Solenoid shall be supplied by actuator manufacturer (K-Tork).
- 5. Upgraded Gear Engagement Lever:
 - a. The manufacturer's standard ball (or head) for the Gear Engagement Lever is plastic and shall be replaced by the Contractor with a stainless steel one similar to those previously installed on the valve actuators in cells 1-8. Contractor shall provide a submittal for the replacement handles to the Engineer for review and approval.

2.06 ACCESSORIES

- A. Tagging: 1 1/2-inch diameter heavy stainless-steel tag attached with No. 16 solid stainless steel jack chain for each valve operator, bearing valve tag number shown on Pneumatically Actuated Butterfly Valve Schedule included herein.
- B. Floor Stand Assembly:
 - 1. Provided by and warranted by the valve manufacturer.
 - Coordinate floor stand height as required to utilize existing stainless steel stem
 extension. Provide stem adapter hardware as required for connection between
 existing stem and new actuator. Match new floor stand anchorage to existing floor
 stand anchorage.
 - 3. Floor stand shall be carbon steel, lined and coated as specified.
 - 4. Adapters and coupling components shall be stainless steel.
 - 5. Provide new stainless steel anchor bolts, nuts, and washers.
- C. Torque Tube and Bonnet Assembly:
 - 1. Provided by and warranted by the valve manufacturer.
 - Coordinate torque tube and bonnet assembly length as required to match height
 of existing valve operators. Provide stem adapter hardware as required for
 connection between valve stem, torque tube, and actuator. Match bonnet
 mounting flange to mounting flange at valve.
 - 3. Bonnet shall be carbon steel, lined and coated as specified.
 - 4. Torque tube, adapters, and coupling components shall be stainless steel.
 - 5. Provide new stainless-steel anchor bolts, nuts, and washers.
- D. Flange Hardware:
 - 1. Install new flange gaskets and flange bolting for all new valves.
 - Gaskets:
 - a. 24-inch valves, Full faced, EPDM elastomer with three bulb type rings molded into both faces of the gasket, 1/8 inch thick, per AWWA C207.

- b. 8-inch air valves, Full Faced, inorganic fiber reinforced with nitrile rubber binder suitable for air, steam, oils, and gases, minimum 1/16 inch thick.
- 3. Bolting: Type 316 stainless steel, ASTM A193/A193M, Grade B8M hex head bolts, ASTM A194/A194M Grade 8M hex head nuts.
 - a. Provide a washer for each bolt head and nut. Washer shall be of the same material as the nut.
 - Apply anti-seize compound, Huskey FG-1800, Weicon Anti-Seize High-Tech, or approved equal, on all bolts. Anti-seize shall be chloride-free and be NSF 61 compliant.

E. Flange Coupling Adapters

 Contractor shall supply and install new flange coupling adapters adjacent to the Backwash Supply Valves being replaced. Two (2) 1-inch diameter tie rods shall be provided at each flange coupling adapter and extend between new tie rod lugs installed on the downstream (filter side) of the valve and the existing anchor points on the upstream pipe.

2. Materials:

- a. Flange, body, and follower ring: Carbon steel meeting ASTM A36 requirements and having a minimum yield strength of 30,000 pounds per square inch.
- b. Bolting and Tie Rods: Type 316 stainless steel, ASTM A193/A193M, Grade B8M hex head bolts, ASTM A194/A194M Grade 8M hex head nuts.
 - 1) Apply anti-seize compound, Huskey FG-1800, Weicon Anti-Seize High-Tech, or approved equal, on all bolts. Anti-seize shall be chloride-free and be NSF 61 compliant.
- Gaskets: Nitrile Butadiene Rubber (NBR) meeting the requirements of ASTM D2000.
- 3. Flange: Class D steel ring in accordance with AWWA C207, compatible with ANSI Class 125 and 150 bolt circles.
- Tie-Rod Lugs: Tie-rod lugs shall be Romac Industries, Style 490 or approved equal. Lugs shall fusion bonded epoxy coated. Lugs shall be designed for installation on an ANSI B16.1 Class 125, ANSI B16.5 Class 150, or AWWA C207 Class D flange.
- 5. Coating: Fusion bonded epoxy, NSF 61 compliant.
- 6. Manufacturers: One of the following or approved equal:
 - a. Romac Industries, Style FC400,
 - b. Dresser Inc., Style 128-W.
 - c. Smith-Blair Inc., Series 913.

F. Electrical Conductors and Conduit:

- 1. Conductors:
 - a. Install new conductors between existing junction boxes and new valve actuators, length as required, size to match existing conductors.
 - b. Type: Stranded copper with Type THHN/THWN-2 insulation.
 - c. Splices: Install nylon self-insulated crimp connectors with dual-wall heat shrink.
- 2. Conduit:

- a. Install new flexible conduit between existing junction boxes and new valve actuators, length as required.
- b. Type: Liquid-tight flexible metal, UL 360 listed for 105 degrees C insulated conductors, galvanized steel with extruded PVC jacket, minimum ½-inch diameter.
- c. Fittings: Metal insulated throat connectors with integral nylon or plastic bushing rated for 105 degrees C, insulated throat and sealing O-rings.
- d. Manufacturers and Products: Thomas & Betts, Series 5331; O-Z/Gedney, Series 4Q.

G. Air Piping and Appurtenances:

- Contractor shall supply and install all necessary air piping and fittings, from the existing air isolation valve to the new actuator, as recommended by the actuator manufacturer.
- 2. Install all required pneumatic appurtenances to the air supply piping as recommended by the actuator manufacturer including pressure reducers, valves, and other appurtenances.

2.07 VALVE SCHEDULE

PNUEMATICALLY ACTUATED BUTTERFLY VALVE SCHEDULE LAGUNA TREATMENT PLANT FILTER CELL NUMBERS 9-14										
Valve Tag Number	Valve Name	Valve Qty	Valve Size	Original Valve Model	K-Tork Actuator Model	Max Delta P (psi)	Travel Time (sec)	Approx Extension Length ²		
IV1514 (1 thru 6) 1	Filter Influent (FIV)	6	24"	Pratt XR-70	KT-50	5	60	9.75'		
FEV1514 (1 thru 6) 2	Filter Effluent (FEV)	6	24"	Pratt XR-70	KT-50	8	60	12.50'		
BV1514 (1 thru 6) 3	Backwash Supply (BSW)	6	24"	Pratt XR-70	KT-50	25	60	6.00'		
WV1514 (1 thru 6) 5	Backwash Waste (BWV)	6	24"	Pratt XR-70	KT-50	5	60	17.43'		
AV1514 (1 thru 6) 4	Backwash Air (BAV)	6	8"	Pratt 2FII	KT-40	7.5	30	4.75'		

^{1.} Actuator Control Features:

a) Double-acting (open-close).

b) Valve shall fail-last-position upon loss of electrical power or air pressure.

^{2.} Approximate extension lengths shown are measured from the centerline of the valve to the center of the handwheel and are for bid purposes only. Height of handwheel above deck shall match existing installations in filter cells 1 thru 8 installed in 2016 (36" for BAV valves and 42" for FIV, FEV, BSW, and BWV). Contractor shall field verify lengths and provide submittal that accounts for bonnet, actuator, and linkage dimensions prior to ordering. No additional compensation will be made for modifications to extension lengths.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Flanged Ends: Where valves are specified to be removed or replaced, clean flange faces, insert new gaskets and stainless-steel bolts, and tighten nuts progressively and uniformly.
- B. Install valves per manufacturer's recommendations.
- C. Electrical Conductors and Conduit:
 - 1. Do not make bends that exceed allowable conductor bending radius, or that significantly restrict conduit flexibility.
 - 2. Comply with NECA Installation Standards.

3.02 TESTS AND INSPECTION

- A. Test that valves open and close smoothly under operating pressure conditions. Test that two-way valves open and close smoothly under operating pressure conditions from both directions.
- B. Count and record number of turns to open and close valve, account for discrepancies with manufacturer's data.
- C. Automatic valves to be tested in conjunction with control system testing. Set opening and closing speeds, limit switches, as required or recommended by Engineer.

3.03 MANUFACTURER'S SERVICES

A. Manufacturer's Representative: Present at site for a minimum of 3 person-days, travel time excluded, for functional and performance testing and completion of Manufacturer's Certificate of Proper Installation.

3.04 SUPPLEMENTS

- A. The supplements listed below, included at the end of the technical specification sections, are part of this Specification.
 - 1. Reference Drawings:
 - a. Figure 1, FILTER PLAN
 - b. Figure 2, FILTER SECTION

END OF SECTION

SECTION 05 05 20 MISCELLANEOUS METAL

PART 1 GENERAL

1.01 WORK

- A. The work covered by this section of the specifications consists of furnishing all plant, labor, equipment, appliances, and materials, and in performing all operations in connection with the installation of miscellaneous metal work, complete in accordance with the plans and as specified herein.
- B. Metals shall be free from defects impairing strength, durability and appearance and be of the best commercial quality for the purpose specified.
- C. All exposed fasteners shall be made of the same material, color, and finish as the metal to which applied unless otherwise shown.

1.02 MISCELLANEOUS SHAPES, PLATES AND BARS

- A. The Contractor shall provide and install all miscellaneous shapes, plates, and bars including connections complete as shown on the plans and as specified herein.
- B. The Contractor shall fabricate, provide holes for proper installation, and set accurately in place all miscellaneous metal work, complete as shown on the plans and as specified herein.
- C. The Contractor shall furnish and install additional miscellaneous braces, clips, connections etc., as may be required to provide a stable, rigid installation.

1.03 BOLTS, NUTS AND ANCHORS

A. General

- 1. All bolts, nuts and anchors shall be of adequate size and length for their intended use.
- 2. All bolts shall be standard Hex head with cold pressed nuts and locking washers or cut washers, unless otherwise indicated on the plans.
- 3. The length of all bolts and anchors shall be such that after joints are made up, the bolt protrudes through the nut one-eight (1/8) to one half (1/2) inch. Bolts protruding through the nut more than one-half (1/2) inch shall be cut back (no torches) and ground smooth.
- 4. Anchor bolts shall be imbedded to the depth shown on the plans, or a minimum of 6-inches if not specifically shown.

B. Materials

 All bolts, including anchor bolts, shall be stainless-steel meeting the requirements of ASTM A320 Grade B8M (AISI Type 316). Nuts shall be austenitic alloy nuts conforming to ASTM A194 Grade 8M. Stainless steel concrete anchors shall be

Hilti drop-in anchors or approved equivalent. All bolts, nuts and anchors located below any design water surface level shall be stainless steel.

1.04 ALUMINUM GUARDRAILS AND HANDRAILS

- A. The existing filter operating deck and walkway is surrounded by an aluminum guardrail. The top two (2) horizontal rails are missing for short segments to accommodate the existing actuator assemblies for the Filter Influent Valves in each of the filter cells 9-14. These gaps in the guardrailing will no longer be required for the new actuators on the Filter Influent Valves, and these rails shall be replaced during this contract. The Contractor shall replace the two (2) horizontal rails in each of these gaps with new rails that extend uninterrupted from one vertical rail post to another. The new rails shall be from the same manufacture as the existing guardrail system, or an approved equal.
 - 1. Guardrails and handrails shall be manufactured by a single supplier normally engaged in the manufacture of such equipment. All components shall be constructed of aluminum alloy with stainless steel fasteners.
 - 2. The design of guardrails and handrails shall comply with Cal OSHA standards.
 - 3. Guardrails shall be designed to withstand 200-pound concentrated load applied in any direction to the top rail.
 - 4. Guardrails and handrails shall be made of pipes joined together with component fittings. Components that are pop-riveted or glued at the joints will not be acceptable. All components must be mechanically fastened with stainless steel hardware.
 - 5. Finish shall be Aluminum Association M10-C22-A41. The pipe shall be plastic-wrapped. The plastic wrap is to be removed after erection.
 - 6. Aluminum surfaces in contact with concrete, grout or dissimilar metals will be protected with a coat of bituminous paint, mylar isolators or other approved material.

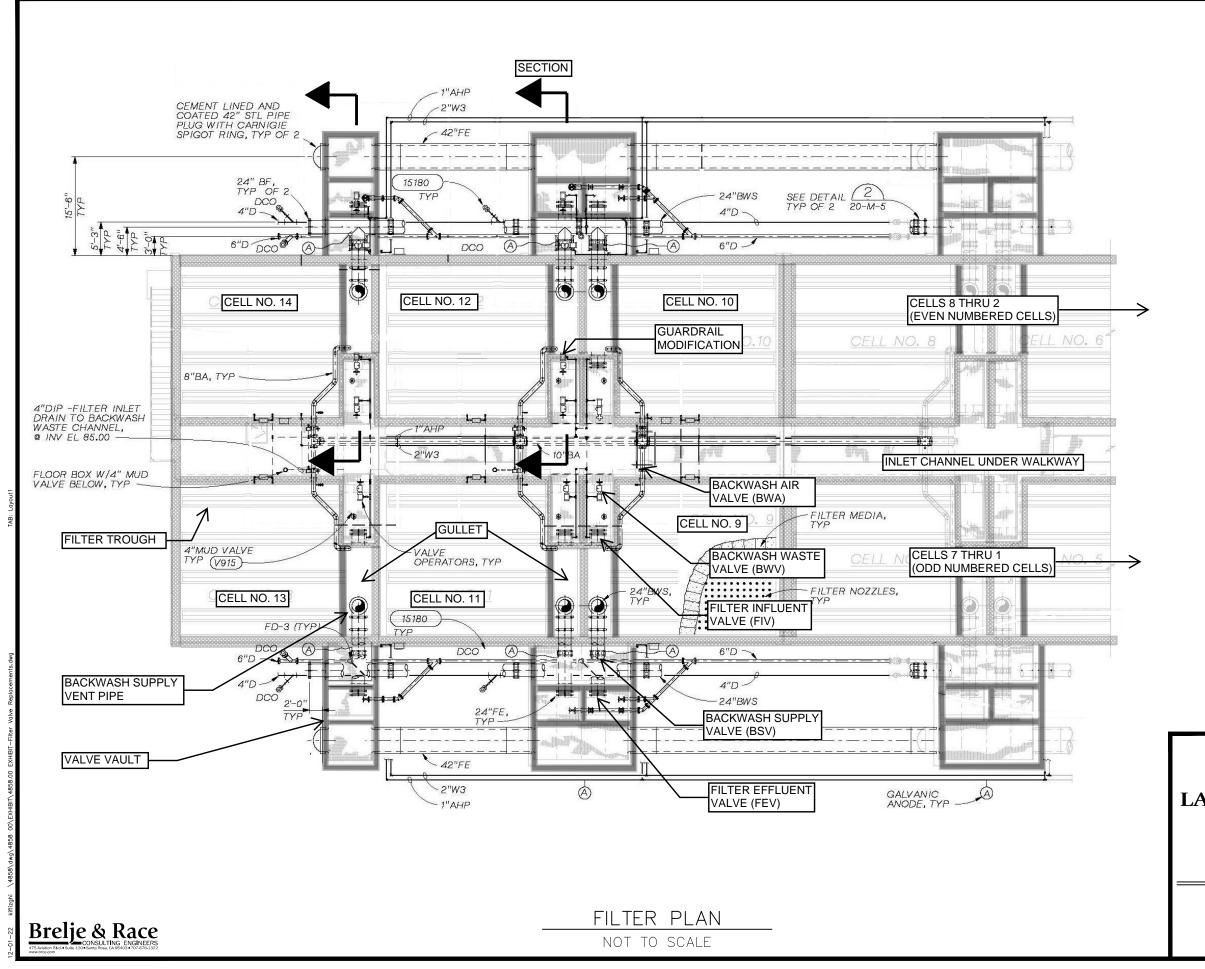
1.05 FABRICATION

- A. Insofar as possible, the work shall be fitted and shop assembled, ready for erection. Work shall be executed in strict accordance with the plans, details, and approved shop drawings.
- B. Shop and field connections shall be bolted or welded, as required. No welding of stainless steel to carbon steel shall be allowed without prior approval from the Engineer.
- C. Jointing and intersection of metals shall be accurately made, tightly fitted, and made in true planes, with adequate fastenings.
- D. Holes and connections shall be made for work of other trades and connection shall be made thereto, unless otherwise indicated or directed by the Engineer.
- E. Welding and welding equipment shall conform to the requirements of the American Welding Society's Code of Welding in Building Construction.
- F. Fabricators and welders shall be licensed operators. Welding shall conform to the best modern practice. All welds shall be of adequate strength and durability, with jointing made tight, flush, in true planes with base metals and shall be clean and ground smooth.

G. All field welding of steel shall be done by an unvarying arc welding process which excludes the atmosphere during the process of deposition and while the metal is in a molten state. The type and size of electrode used, and the current and voltage required shall in all cases be of common acceptable practice. Previously used or otherwise damaged electrodes shall not be used, and violation of this provision shall be sufficient cause for rejection of the work. All welds shall be of uniform composition, neat, smooth, full strength, and ductile; shall be free from undercut, porosity and clinker; and shall be made with a technique which will ensure uniform distribution of load throughout the welded section with a minimum tendency to produce eccentric stress or distortion of the weld or in the metal adjacent thereto. Welding shall be continuous along the entire line of contact.

1.06 GALVANIZING

A. All exposed ferrous metal except stainless steel, including supports, clips, braces, hangers, bolts, washers, and nuts shall be fabricated as shown on the approved shop drawings and hot dip galvanized after fabrication in accordance with ASTM A 123 "Specification for Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, Forged Steel Shapes, Plates, Bars, and Strips" and ASTM A 153 "Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware."



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NOTES

- 1. THE BACKGROUND GRAPHICS OF THIS DRAWING WERE TAKEN FROM THE RECORD DRAWINGS OF THE "LAGUNA SUBREGIONAL WATER RECLAMATION FACILITY ADVANCED TREATMENT UPGRADE", DATED NOVEMBER 1996.
- 2. THIS DRAWING DEPICTS EXISTING VALVES, EXTENSIONS, AND ACTUATORS TO BE REPLACED.
- 3. THE ORIENTATION OF THE NEW ACTUATORS SHALL FOLLOW THE PATTERN OF THE ACTUATORS IN FILTER CELLS 1-8 INSTALLED IN 2016.
- 4. BOXED CALLOUTS ARE TYPICAL FOR EACH FILTER CELL, NUMBERS 9-14.

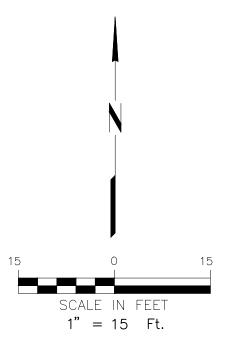


FIGURE 1 CITY CONTRACT NO. C02096

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE & ACTUATOR REPLACEMENT

> FILTER PLAN CITY OF SANTA ROSA

> > **DECEMBER 2022**

NOTES

- 1. THE BACKGROUND GRAPHICS OF THIS DRAWING WERE TAKEN FROM THE RECORD DRAWINGS OF THE "LAGUNA SUBREGIONAL WATER RECLAMATION FACILITY ADVANCED TREATMENT UPGRADE", DATED NOVEMBER 1996.
- 2. THIS DRAWING DEPICTS EXISTING VALVES, EXTENSIONS, AND ACTUATORS TO BE REPLACED.
- 3. THE ORIENTATION OF THE NEW ACTUATORS SHALL FOLLOW THE PATTERN OF THE ACTUATORS IN FILTER CELLS 1–8 INSTALLED IN 2016.
- 4. BOXED CALLOUTS ARE TYPICAL FOR EACH FILTER CELL, NUMBERS 9-14.
- 5. EXTENSION LENGTHS ARE FOR BID PURPOSES ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO ORDERING. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ADDITIONAL EXTENSION LENGTH.

FIGURE 2

CITY CONTRACT NO. C02096

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE & ACTUATOR REPLACEMENT

> FILTER PLAN CITY OF SANTA ROSA

> > **DECEMBER 2022**

FILTER SECTION

SCALE: 1"=5'

50

Brelje & Race

To Avistion Blod. * State 120+ Santa Ross, CA 95-403+707-876-1322

following language:	
Under the penalty of law for perjury or fa False Claims Act, Government Code sec	alsification and with specific reference to the California tions 12650 <i>et seq.</i> , the undersigned,
(Name)	
	of
(Title)	
(Contractor)	
	onal compensation made herein is supported by a true d time expended on this project and is fully documented
Dated	
/s/	
Subscribed and sworn before me this	day of
Notary Public	
My Commission Expires	

Claims submitted by Contractor shall be accompanied by a notarized certificate containing the

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead expenses, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the City at its discretion.

Any costs or expenses incurred by the City in reviewing or auditing any claims that are not supported by Contractor's cost accounting or other records shall be deemed to be damages incurred by the City within the meaning of the California False Claims Act.

BID FORMS

CITYOFSANTA ROSA

STATE OF CALIFORNIA

LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

The work to be performed and referred to herein is in the City of Santa Rosa, California and consists of improvements to be constructed in accordance with the provisions of the Invitation for Bids, containing the Notice to Bidders, the Special Provisions, the Project Plan(s), the Bid Forms and the Contract, all of which are by reference incorporated herein, and each Addendum, if any is issued, to any of the above which is also incorporated by reference herein.

TO THE AWARD AUTHORITY OF THE CITY OF SANTA ROSA

The undersigned, as bidder, declares that the only person or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any other person, firm, or corporation; that Contractor has carefully examined the Project Plans, Invitation for Bids and conditions therefor, and is familiar with all bid requirements, that Contractor has examined this Contract and the provisions incorporated by reference herein, and Contractor hereby proposes, and agrees that if its bid is accepted by the City, Contractor will provide all necessary machinery, tools, apparatuses, and other means of construction, and to do all the work and furnish all the materials and services required to complete the construction in accordance with the Contract, the Special Provisions, the Project Plan(s), and Addenda to any of the above as incorporated by reference, in the time stated herein, for the unit prices and/or lump sum prices as follows:

Contract #: C02096

Project Title: LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

Line #	Description	Unit	Quantity	Unit Price	Total Price
1	Mobilization and Demobilization	LS	1	\$	_\$
2	8-Inch Butterfly Valve	EA	6	\$	_\$
3	24-Inch Butterfly Valve	EA	24	\$	_\$
4	24-Inch Flange Coupling Adapter	EA	6	\$	_\$
5	Actuator and Extension for 8-Inch Butterfly Valve	EA	6	\$	_\$
6	Actuator and Extension for 24-Inch Butterfly Valve	EA	24	\$	_\$
7	Guardrail Modifications	LS	1	\$	_\$
8	Start-Up and Testing	LS	1	\$	_\$
				Total:	\$

In the case of any discrepancy between the unit price and the total set forth for the item, the unit price shall prevail; provided, however, that if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any reason, or is omitted, or in the case of lump sum items, is not the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

- 1. As to lump sum items, the amount set forth in the "Total" column shall be the unit price;
- 2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price.

The Total Base Bid shall be the sum of the "Total" column. In case of discrepancy between the sum of the "Total" column and the amount entered as Total Base Bid, the sum of the "Total" column shall prevail. The bid comparison will be based on the sum of the "Total" column for each bidder.

If this Contract Bid is accepted by the City and the undersigned fails to execute the Contract and to give all the bonds required under the Contract, with a surety satisfactory to the Award Authority of the City of Santa Rosa, within ten calendar days after bidder has received the Notice of Award from the Engineer, then the Award Authority may, at its option, determine that the bidder has abandoned the Contract, and thereupon this bid and the acceptance thereof shall be null and void, and the forfeiture of the security accompanying this bid shall be in accordance with California Public Contract Code section 20172.

The undersigned understands and agrees that the City is not responsible for any error or omissions on the part of the undersigned in making this bid.

The bidder to whom the Contract is awarded agrees to execute the Contract in favor of the City, in the form attached, and to deliver any and all required bond(s) and insurance certificates within ten calendar days from the date of Contractor's receipt of the Notice of Award. Following the award of the Contract, Contractor shall commence work within ten calendar days from the day authorized in the Notice to Proceed and diligently prosecute the same to completion in accordance with Section 8-1.04.

LIST OF SUBCONTRACTORS

The following is a list of each subcontractor who will perform work or labor or render services to the undersigned for the construction of the project in an amount in excess of $\frac{1}{2}$ of 1% of the total amount of this bid.								
			ess of $\frac{1}{2}$ of 1% of the tota be performed by the und					
SUBCONTRACTOR NAME	SUBCONTRACTOR LICENSE NUMBER	SUBCONTRACTOR DIR REGISTRATION NUMBER	SUBCONTRACTOR BUSINESS ADDRESS	DESCRIPTION OF WORK (ITEM NO.)				

NAME OF BIDDER:

LIST OF PREVIOUS SIMILAR JOBS

NAME OF BIDDER:		

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersi	gned declares:				
foregoing bid partnership, collusive or s put in a false or agreed with has not in ar with anyone cost element true. The bid thereof, or th partnership,	company, asso sham. The bidde or sham bid. The th any bidder or any manner, direct to fix the bid price, dder has not, direct company, asso effectuate a colluster.	of of t made in the interest ciation, organization, r has not directly or increase bidder has not directly or indirectly, sought ce of the bidder or any or of that of any other rectly or indirectly, sub of, or divulged informat ciation, organization, sive or sham bid, and	of, or on behalf of or corporation. The lirectly induced or statly or indirectly collected by agreement, corporated by agreement, corporated bidder. All statementated his or her better that it is on or data relative bid depository, or	ne bid is genuine a solicited any other bid luded, conspired, colain from bidding. The mmunication, or conforms any overhead, pents contained in the bid price or any breathereto, to any corporto any member or	derson, and not der to not der to not der to not derect the total derect t
venture, limit	ted liability compa	claration on behalf of a any, limited liability part to execute, and does ex	tnership, or any oth	er entity, hereby repr	esents
	t and that this	rjury under the laws of t s declaration is exe [city],	ecuted on		j is true te], at
NOTE:		oncollusion Declaration portion thereof shall a			

BID BOND AFFIDAVIT AND BIDDER'S SIGNATURE PAGE

Accompanying this bid is a guaranty in the form of (No Check," "Certified Check," or "Bidder's Bond" as the ca	
in an amount equal to at least ten percent of the total or	f this bid.
The undersigned further agrees that if Contractor does necessary bonds to the City within the period of timproceeds of the security accompanying this bid shall Rosa, California, and this bid and the acceptance the considered null and void.	e specified in this Invitation for Bids, the become the property of the City of Santa
The undersigned is licensed in accordance with an act placense No, Class, expiration dat	
The undersigned in registered with the Department	of Industrial Relations, Registration No.
IMPORTANT NOTICE: If bidder or other interested per corporation, also names of the president, secretary, treat a partnership, state true name of partnership, also the the bidder is a sole proprietor, state the business name	easurer, and manager of the corporation; if names of all partners in the partnership; if and the proprietor's name in full.
Secretary of State Business Entity Number:	·
	-
	-
	_
Business Address	
Telephone Number	-
I declare under penalty of perjury that the foregoing is t	rue and correct.
BIDDER'S SIGNATURE:	
TITLE:	
DATE:	

CITY OF SANTA ROSA COMMUNITY WORKFORCE AGREEMENT

CONTRACTOR AGREEMENT TO BE BOUND

- (1) Accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.
- (2) Agrees to be bound by the legally established local trust agreements as set forth in Article 17 of this Agreement.
- (3) Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor;
- (4) Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of the Agreement.
- (5) Agrees to secure from any Contractor(s) (as defined in said Agreement) which is or becomes a subcontractor (of any tier) to it, a duly executed Agreement to be Bound in form identical to this document.

The obligation to be a party to and bound by the Agreement shall extend to all work for the Covered Project undertaken by the Contractor.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR:
California Contractor State License No. or Motor Carrier (CA) Permit No.:
Name of Authorized Person (print):
Signature of Authorized Person:
Title of Authorized Person:
Telephone Number of Authorized Person:
Address of Authorized Person:
State Public Works Registration Number:

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

In witness whereof, the Parties have caused this Agreement to be executed as of the Effective Date.

SIGNATURES

CITY OF SANTA ROSA	NORTH BAY BULDING AND CONSTRUCTION TRADES COUNCIL
By: Title:	By: Michael Allen, Secretary/Treasurer
APPROVED AS TO FORM	
City Attorney	-
SIGNATORY UNIONS:	

CONTRACT

CITY OF SANTA ROSA

CALIFORNIA

CONTRACT NO. C02096 LAGUNA TREATMENT PLANT FILTER CELLS 9-14 VALVE AND ACTUATOR REPLACEMENT

This Cont	ract is mad	e and	l ente	red	into as	of date	to be	added	upon	award	at Sar	ıta F	⊀osa,
California,	between	the	City	of	Santa	Rosa	("City") and					_ of
	('	'Contr	actor").									

ARTICLE I - For and in consideration of the payment and agreement hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the required bonds hereunto annexed, Contractor agrees that for the benefit of City, at its own cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the Special Provisions to be furnished by City, necessary to construct and complete the work herein described in a good, workmanlike, and substantial manner. The work embraced herein shall be done in accordance with the Standard Specifications of the State of California Department of Transportation, dated 2010, insofar as the same may apply (Standard Specifications); in accordance with the City of Santa Rosa Construction Specifications for Public Improvements (City Specifications); in accordance with the City of Santa Rosa Design and Construction Standards, (City Standards); in accordance with the State of California Department of Transportation Standard Plans, dated 2010 (Standard Plans), (collectively, "Contract Documents") and in accordance with the Special Provisions hereinabove set forth, all of which are hereby incorporated into and made part of this Contract.

ARTICLE II - Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and doing all the work contemplated and embraced in this Contract; also for all loss or damages arising out of the nature of the work aforesaid, or from the acts of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by City and for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work, and the whole thereof in the manner and according to the Project Plans and Invitation for Bids therefor, and the requirements of the Engineer under them to wit:

ITEM NUMBER	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
			\$	\$
TOTAL BASE BIL	O (SUM OF "TO	ΓAL" COLUMN)	\$	

BID ITEMS IN THIS SECTION WILL BE INSERTED UPON AWARD OF THE CONTRACT AND SHALL BE THE SAME AS THOSE BID UPON.

ARTICLE III - City and Contractor hereby promise and agree that Contractor shall provide the materials and do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and City hereby agrees to pay for the same at the time, in the manner, and upon the conditions set forth; and the parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein stated.

ARTICLE IV - By execution of this Contract, Contractor hereby represents and certifies that Contractor is aware of the provisions of Labor Code section 3700 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 Contractor hereby agrees to comply with such provisions before commencing the performance of the work of this Contract.

ARTICLE V - It is further expressly agreed by and between the parties hereto that the Invitation for Bids, containing the Notice to Bidders including any required Bonds, the Contract Documents, and any Addenda are all essential parts of this Contract and are specially referred to and by such reference made a part hereof. In the event of any conflict in the provisions thereof, the terms of said documents shall control each over the other, in the following order:

- 1. Special Provisions
- 2. City Standards
- 3. City Specifications
- 4. Standard Specifications

ARTICLE VI - Contractor agrees to commence work pursuant to this Contract within ten calendar days from the date authorized in the Notice to Proceed and to diligently prosecute the same to completion in accordance with Section 8-1.04C of the Special Provisions.

This Contract shall not be transferred or assigned without the prior written consent of City, which may be withheld by City in its sole and absolute discretion.

If Contractor is a corporation, two corporate officers of Contractor, one from each of the following two groups shall execute this Contract: a) the chairman of the board, president or any vice-president; b) the secretary, any assistant secretary, chief financial officer, or any assistant treasurer. The name and title of the corporate officers shall be printed under the signature.

In witness whereof, the parties hereto have executed this Contract as of the date first written above.

City:	Contractor:
City of Santa Rosa, a Municipal corporation	Name of Contractor, Type of entity
Ву:	By:
Title:	Name:
ATTEST:	Title:
Ву:	Ву:
Title:	Name:
Approved as to form:	Title:
By:Office of City Attorney	