



REQUEST FOR PROPOSALS

GATEWAY WATER TREATMENT PLANT CONSULTING SERVICES FOR CAPACITY ANALYSIS AND PLANNING PRELIMINARY ENGINEERING REPORT

Requested by:

John A. Gay, PE Director of Public Works

Prepared By:

Naomi Robles, MPA Administrative Analyst III

Deadline for Submissions: Monday, December 30, 2024 by 4:00 P.M to:

Naomi C. Robles, MPA, Administrative Analyst III Imperial County Department of Public Works 155 S. 11th Street El Centro, CA 92243

PROPOSALS MUST BE SUBMITTED ON THE SPECIFIED DATE AND TIME. THE COUNTY WILL NOT CONSIDER PROPOSALS RECEIVED AFTER THE DUE DATE. AN AMENDMENT IS CONSIDERED A NEW PROPOSAL AND WILL NOT BE ACCEPTED AFTER THE SPECIFIED DATE AND TIME.

Special Notice

Notification of Contractor Registration Requirements (where required)

Pursuant to the requirements of California Labor Code section 1771.1, all contractors and subcontractors that wish to engage in public work through a public works contract must be registered with the Department of Industrial Relations (DIR).

Beginning March 1, 2015, no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with DIR.

Beginning April 1, 2015, no contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the DIR, pursuant to Labor Code section 1725.5

All contractors, including subcontractors, listed in the proposal must be registered with the DIR at the time proposals are due, and must submit proof of registration with the proposal. Any proposals received listing unregistered contractors and/or subcontractors will be deemed non-responsive.

NOTE: DIR number is to be specified on the cover page of the consultant proposal. Proof of registration for consultant and sub consultant shall also be submitted as an exhibit of the proposal.

Application and renewal are completed online with a non-refundable fee of \$400. Read the Public Works Reforms (SB 854) Fact Sheet for requirements. Instructions for completing the form and additional information can be found on the DIR website.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (DIR).

SOURCES OF INFORMATION

INFORMATION	WEBSITE
Department of Industrial Relations (Public Works)	http://www.dir.ca.gov/Public-Works/PublicWorks.html
SB 854 Fact Sheet	<u>http://www.dir.ca.gov/Public-</u> Works/PublicWorksSB854.html
Senate Bill 854 Compliance	http://www.dir.ca.gov/Public-Works/SB854.html
Public Works Contractor (PWC) Registration	https://efiling.dir.ca.gov/PWCR/
Classifications and Minimum Labor Rates	http://www.dir.ca.gov/OPRL/Pwd/

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INTRODUCTION

Purpose

The Imperial County Department of Public Works (Department) is seeking a Consultant to complete a comprehensive study of the existing Gateway of the Americas Water Treatment Plant to meet current and projected future demand. The study will assess the water treatment plant's capacity and provide recommendations for system improvements, expansions, and/or operational optimizations in compliance with California water quality and environmental standards as required by California Department of Water Resources, State Water Resources Control Board, Imperial County Department of Public Health Division of Environmental Health, etc.

The Consultant shall consider both existing conditions, and an increase in future treatment capacity at the Gateway of the Americas Water Treatment Plant. Evaluation of actual flow estimates attributed by each discharging Gateway business customer and anticipated future flow forecasts, which can be provided by the Department. The Consultant shall also coordinate with planned developments such as tentative map phased projects and other projects known to be on the horizon. The PER shall recommend increased steps in capacity with required improvements that require additional land needs and include consideration of needed discharge and permitting requirements in accordance with the State Water Quality Control Board. ICDPW is requesting proposals from qualified and experienced engineering professionals with a strong background in preparing PER's, evaluating wastewater treatment facilities, layout, design, engineering and discharge permitting.

Background

The Department operates and maintains the Gateway of the Americas Water Treatment Plant (Gateway WTP) which treats and distributes water through Gateway County Service Area (Gateway CSA) development. The Gateway CSA comprises approximately 1,775 gross acres of land with a master planned mix of Industrial and Commercial uses in Imperial County, California. It lies adjacent to the International Border with Mexico and approximately six (6) miles east of the City of Calexico. The area is roughly bounded by the International Border (Calexico East Border Crossing) to the south, the Alamo River to the east, Ash Canal to the west, and by a line approximately one-quarter (1/4) mile north of and parallel to State Route 98 (SR98).

Gateway WTP is located at the terminus of Gateway Road next to South Alamo Canal, across the street from the Imperial Regional Detention Facility.

Raw water delivery is provided by the Imperial Irrigation District from the All-American Canal to the South Alamo Canal heading which then conveys water by gravity northwest approximately 1.2 miles to the WTP. The South Alamo Canal at this location is a concrete lined open channel from which an 18-inch PVC pipe flows into an onsite underground concrete cistern located at the northwest portion of the property. The South Alamo Canal continues north to serve agricultural lands for irrigation.

From the cistern, water normally flows into the adjacent 1.4-million-gallon raw water pond.

Gateway WTP utilizes two packaged treatment units: a PV-105 and PV-150. The maximum flow through each filter is 6 gpm/sq.ft. The PV-150 is designated as the primary plant unit, while the PV-105 is used during periods of high demand. To maintain the PV-105 in an operable condition, it is run at least 24 hours each month.

The current water treatment plant capacity has a design treatment capacity of 250 gpm and an average actual

Gateway Water Treatment Plant: Consulting Services for Capacity Analysis and Planning Preliminary Engineering Report

demand of 75 gpm. The WTP has been designed with modular units that can expand up to a capacity of 1.0 mgd as development occurs and water demand increases. The estimated minimum design water demand according to the Gateway Specific Plan is 1.8 mgd and a maximum design of 3.6 mgd at buildout. Gateway currently provides water and sewer services for more than 400 acres of existing development with an additional 138 acres of planned development that was approved 2022

On November 5, 2024, the Imperial County Board of Supervisors approved a contract award to Pacific Hydrotech Corporation as the successful bidder for the Gateway County Service Area Water Treatment Plant Improvement project. The proposed improvements consist of the replacement of the interim booster pumping system which conveys potable water to the water distribution pipeline system, improvements to the electrical system and installation of an emergency standby diesel generator set. The standby diesel generator set will provide an emergency powers supply for the new booster pumps to insure adequate fire protection. More information regarding this project can be found in the Notice to Bidders for the Gateway County Service Area Water Treatment Plant; County Project No. 6914GTW on the Department's Projects Out to

Bid website at https://publicworks.imperialcounty.org/projects-out-to-bid/

Schedule of Events

Issue Request for Proposal Deadline for Questions Proposal Due Consultant Selection Contract Award/Board Approval Notice to Proceed November 27, 2024 December 12, 2024 December 30, 2024 January/February 2025 February/March 2025 March 2025

SCOPE OF WORK

Services of the Consultant

The consultant shall develop a Preliminary Engineering Report (PER) to include a detailed review and analysis of existing permitting, capacities, and future proposed development flows and required capacities. The Consultant shall consider existing Gateway WTP lands and future land acquisition/expansion planning for increased capacity alternatives and associated infrastructure improvements. The Consultant shall also coordinate with planned developments such as tentative map-phased projects and other projects known to be on the horizon. The key issues for this Scope of Work includes consideration of fire flows, potable water production for need, and 7-day required water storage in the system. The Consultant shall consider future placement and need of water storage tank(s), and booster pumps and/or other infrastructure needs.

The Consultant shall also review existing WTP system, and the proposed improvements in process of implementation with Project No. 6914GTWTP which was bid on September 6, 2024, and will soon be awarded for construction. The PER shall consider both acquiring adjacent parcel(s) for as needed treatment plant expansion for storage and treatment. The scope includes conceptual layouts for discussion and meeting coordination with permitting agencies for their review. Preparing detailed design plans and full permitting for the selected expansion is not expected, nor part of this proposal, or the PER. However, sufficient information is necessary to determine the level of effort and costs associated with future permitting to be outlined in the PER.

The PER shall offer alternative options for the Department to consider with a goal to provide the County with a cost- effective methodology for increasing WTP capacity. The consultant shall prepare an Engineer's Opinion of Probable Project Costs for each alternative, including all permitting, soft and hard costs anticipated.

The PER recommendations provided by the Consultant will be used to determine next steps in the Gateway CSA budget for increased WTP capacity as new development occurs in the Gateway CSA.

Alternate Proposal Item

Since 2023, the Gateway landowners have expressed to the Gateway Service Area Committee a desire for a higher water pressure to their development sites. They have stated that to be able to construct and use certain stacking systems within proposed industrial developments, an Early Suppression Fast Response (ESFR) system is required. ESFR sprinkler systems are a form of fire protection that reacts quickly and suppresses fires by discharging a high volume of water onto the fire. ESFR systems are typically used in warehouses with high piled storage and are often used in place of in-rack sprinkler systems. Without such an ESFR system, it is likely materials would not be able to be stacked nearly as high within the buildings, likely resulting in an underutilization of space. An ESFR system apparently requires water to be provided to the building system at approximately **100 psi**. During a regularly scheduled meeting, the Committee voted to request that the high-pressure pump station option be presented to the Board for consideration (Alternative "B" below). In order to deliver water at 100 psi to the various sites, the pumps must pressurize water to 150 psi at the water plant.

Considering that much of the backbone water infrastructure was installed approximately 20 years ago, Consultant shall provide an analysis of existing infrastructure, resources and capacity to determine implementation of a dedicated water line specifically designed to accommodate higher water pressure. Consultant shall review land use and determine parcels likely to benefit from dedicated high pressure water line. This may include pressure zones, pipe loops and other strategies for upgrades and/or new facilities to implement under this alternate. The Consultant shall determine possible funding strategies for the development and installation of a dedicated high pressure water line. The scope includes conceptual layouts for discussion and meeting coordination with permitting agencies and Gateway landowners for their review. The Consultant shall prepare plans and specifications.

*Alternate Proposal Item Scope of Work is additive to the Scope and is contingent upon County selection and Gateway landowner contribution.

The Consultant shall adhere to the requirements, and comments provided by County and permitting and regulatory agencies and provide a detailed analysis of the necessary steps/measures needed for future capacity increase of the Gateway WTP.

If Consultant suggests testing, measuring, and/or installation of additional items, supporting detail i.e. (how long, what kind of testing, what equipment is needed, etc.) shall be provided in proposal.

The Consultant is to provide a detailed draft schedule planning, preliminary design, permitting and construction of the proposed alternatives mentioned in the proposal for a complete Preliminary Engineering Report.

All information shall be addressed to ICDPW in accordance with all provisions within this Request for Proposals (RFP). Consultant shall demonstrate through the submitted proposal, successful handling of previous WTP facility capacity design, engineering, forecast & estimating flows, permitting and coordination of such work and projects in accordance with the permitting and environmental regulatory agency requirements.

The scope of work, does not suggest that any items specifically not mentioned are precluded from the scope of work; nor does it suggest that all items will be required, some of which may depend on the final chosen alternative. Consultant is expected to be proactive in the prosecution of his duties

As requested by the County, provide services resulting from significant changes in the general scope of the project, but not limited to revisions of previously accepted studies, reports, design documents in accordance with County procedures.

RESPONSIBILITIES OF COUNTY

The County will direct the development of the project(s), provide management oversight, and conduct administrative arrangements only. The County will provide any other available WTP plans and records to Consultant as required. Consultant will be responsible for all activities and meetings associated with the project including meeting minutes and record keeping.

The County will pay an agreed upon amount normally within 30 days after receipt of invoice(s). Invoice(s) shall be submitted with a detailed accounting of staff hours attributed to specific tasks. Separate invoices shall be submitted for specific project billings, with clear notation of the County Project Number. The County will retain 5% of each invoice for services and will release final retention upon project completion.

The County will not provide dedicated workplace facilities, but upon request will provide a conference room for meetings with the Department, consultant and other appropriate agencies if needed.

The County reserves the right to perform any portion of the scope of work by County personnel or other consultants should the County determine it would be in the best interest of the County to do so.

PROPOSAL CONTENT

At a minimum, proposals should include:

- 1. <u>Letter of Interest:</u> Provide a cover letter expressing your interest in the project. Include name, address, phone number, and email address of the primary contact; identifying the capacity of this person.
- 2. <u>Statement of Qualifications/Understanding of Project:</u> Describe the company's qualifications and experience related to water treatment plants and capacity planning.
- 3. <u>Experience with similar project(s)</u>: Provide a list of at least three (3) or more similar projects that the firm and staff, proposed for assignment, have successfully completed.
- 4. <u>References:</u> Provide at least three (3) references, with contact information, for other similar work performed.
- 5. <u>Legal entity:</u> describe the legal entity with which the County would contract including the structure of the anticipated partnership agreement(s) and ownership interests in the project. Include length of time in business, and number of employees.
- 6. <u>Project Management</u>: Identify the members of the project team, including the project manager, key consultants, and sub-consultants; include their names and positions, their qualifications, list of similar projects in which they assumed substantial roles, and responsibilities related to the assignment. It is expected that individuals identified as the project team will be actively involved throughout the project.

- 7. <u>Analysis of Effort/Methodology:</u> Prospective consultants shall describe the overall approach to the project, specific techniques that will be used, and the specific administrative and operational management expertise that will be employed. A proposed schedule shall be included. The project schedule must be clearly stated with intermittent milestones. State what Consultant needs from Department and state what Consultant will provide for the information gathering needed.
- 8. <u>Approach</u>: Provide a narrative that explains your approach to realizing the specifications stated in the enclosed RFP. Include a description of the approach for the project, including, but not limited to:
 - Overall approach and recommendation for the comprehensive plan;
 - Detailed scope of work that incorporates the guidance provided in this RFP;
 - Schedule; Timeline
- 9. <u>Capacity:</u> a statement that the firm(s) has sufficient staff resources and capability to perform the work contained within this RFP within the specified timeframe.
- 10. <u>Taxpayers Identification Number</u>: Each consultant whether an individual, proprietor, partnership or a non-profit corporation or organization must obtain, complete and include, with the proposal submitted, an Internal Revenue Service Form W-9, "Request for Taxpayer Identification Number and Certification".
- 11. <u>Cost Proposal/Worksheet</u> Includes fee schedule on a time (by personnel) and materials basis; cost by task; and total cost to complete the project. The cost proposal shall be fully inclusive of all services, overhead, and direct expenses. If applicable, include fee structure for additional work/services outside the scope of work. Cost proposal must include statement that offer is valid for at least a ninety (90) day period. Costs for the Alternate Proposal Item shall be provided separate from the main Scope of Work.
 - All costs/fees proposed must accompany proposal *within a separate sealed envelope* clearly labeled with the name of the firm submitting and the title of the RFP.

QUESTIONS

Questions concerning this RFP will be responded to collectively, and made available for interested consultants via the Department's Projects Out to Bid website <u>https://publicworks.imperialcounty.org/</u> under "Projects out to Bid" as an addendum. *All inquiries must be submitted via email no later than close of business<u> on Thursday, December 12, 2024 at 4:00 p.m.</u> to the contact person below with the subject line "Request for Proposals Gateway Water Treatment Plant: Consulting Services for Capacity Analysis and Planning Preliminary Engineering Report". No oral questions will be taken or responded to except for administrative clarifications.*

Contact Person: Naomi C. Robles – MPA, Administrative Analyst III <u>naomirobles@co.imperial.ca.us</u> (for proposal questions) 442-265-1818 (for administrative questions ONLY)

PROPOSAL EVALUATION

The County will utilize a one-step selection process. The County reserves the right to include an oral interview process component. If an oral interview is considered, selected firms will be notified. A Sample Evaluation form is attached for review as Exhibit A

Gateway Water Treatment Plant: Consulting Services for Capacity Analysis and Planning Preliminary Engineering Report

Proposals received shall be reviewed according to the criteria and weighting shown in Table 2. In addition to the Department, the evaluation panel may include representatives from project stakeholders. A recommendation to award contract will be presented to the Imperial County Board of Supervisors for approval to enter into an agreement.

Please take note that the County reserves the right to select any consultant who is determined qualified and may not correlate to a number 1, number 2 or even number 3 ranked consultant. Additionally, the County reserves the right to reject any and all proposals submitted and/or request additional information for clarification.

*Note: Positive previous experience and no previous experience will constitute a score of zero (0). Negative experience points will be deducted from the overall score.

CONSULTING AGREEMENT

A sample agreement is attached for review as Exhibit B.

Prior to the start of work, the selected consultant will be required to execute an Agreement for Services with the County. The consulting firm must review the attached sample consulting agreement and minimum insurance amounts. No modification requests to material terms of agreement will be made. The agreement shall not be in force until contracting is approved by the Imperial County Board of Supervisors and after written authorization to proceed has been provided.

Any contract resulting from this RFP will be financed with funds available to the County from local Gateway of the America funds and/or other available funding.

PROPOSAL SUBMITTAL

One (1) original, three (3) copies, and one (1) electronic copy in Portable Document Format (PDF) on a USB Thumb Drive of the proposal must be received in person or by mail to Imperial County Department of Public Works no later than *4:00 p.m. on Monday, December 30, 2024*. Proposal must be clearly titled:

Gateway Water Treatment Plant Consulting Services for Capacity Analysis and Planning Preliminary Engineering Report

Proposals are to be delivered in a sealed envelope and addressed to:

Naomi C. Robles – MPA, Administrative Analyst III Imperial County Department of Public Works 155 S. 11th Street El Centro, California 92243

Note: Late proposals will not be considered.

CLOSING ITEMS

A pre-proposal conference has not been scheduled for this project.

Any modifications to this solicitation will be issued by the County as a written addendum and posted to the Imperial County Department of Public Works website: <u>http://www.co.imperial.ca.us/publicwork/default.htm</u> under "Projects out to Bid"

The County will not consider proposals received after the specified date and time. An amendment is considered a new proposal and will not be accepted after the specified date and time.

This RFP does not commit the County of Imperial to award a contract or pay any costs associated with the preparation of a proposal. The County reserves the right to cancel, in part or in its entirety, this solicitation should this be in the best interest of the County.

EXHIBIT "A"

PROPOSAL EVALUATION FORM



EVALLUATOR:

EVALUATOR SIGNATURE: _____

RESPONDENT:

DATE:

GATEWAY WATER TREATMENT PLANT CONSULTING SERVICES FOR CAPACITY ANALYSIS AND PLANNING PRELIMINARY ENGINEERING REPORT COUNTY PROJECT NO. [NUMBER]

- 5 = excellent
- 4 = good
- 3 = above average
- 2 = average
- 1 = below average
- 0 = unsatisfactory

CRITERIA W	EIGHT FACTOR	X	RATING =	= WEIGHTED RATING
A. Relevant Experience	(0.35)			
 Responsiveness & understanding of work to be done, (i.e. scope of work). Low flow water crossing relevant 	(0.15)			
experience, key personnel, & staffBridge replacement with low flow water	(0.10)			
crossing experience, key personnel, & sta	ff (0.10)			
B. Project Management	(0.25)			
• Consultants ability to provide respective services within budget and on schedule.	(0.15)			
• Demonstrates organizational skills, and ability to meet client program requiremen and goals.	(0.10) ts			
C. References	(0.05)			
D. Understanding	(0.20)			
• Proposal specific to RFP scope of work. A additional items suggested beyond scope can be included but referenced separately				
E. Problem Solving	(0.15)			
Demonstrate creative problem solving and solution in dealing with difficult planning, programming, an evaluation analysis.				
			Subtotal Score	e
F. Previous Experience and performance working				

With County of Imperial Department of Public Works

(0 to -5)

Total Score

Note: Positive previous experience and no previous experience will constitute a score of zero (0). Negative experience points will be deducted from the overall score.

Comments:

EXHIBIT "B"

1	AGREEMENT FOR SERVICES					
2	SAMPLE					
3	THIS AGREEMENT FOR SERVICES ("Agreement"), made and entered into effective the					
4	day of, 2021, by and between the County of Imperial, a political subdivision of the					
5	State of California, by and through its Department of Public Works ("COUNTY") and [CONSULTANT],					
6	an active California corporation ("CONSULTANT") (individually, "Party;" collectively, "Parties") shall be					
7	as follows:					
8	RECITALS					
9	WHEREAS, COUNTY desires to retain a qualified individual, firm or business entity to provide					
10	updates to the ("Project"); and					
11	WHEREAS, CONSULTANT represents that it is qualified and experienced to perform the					
12	services; and					
13	WHEREAS, COUNTY desires to engage CONSULTANT to provide services by reason of its					
14	qualifications and experience for performing such services, and CONSULTANT has offered to provide the					
15	required services for the Project on the terms and in the manner set forth herein.					
16	NOW, THEREFORE, in consideration of their mutual covenants, COUNTY and CONSULTANT					
17	have and hereby agree to the following:					
18	1. <u>INCORPORATION OF RECITALS</u> .					
19	The Parties certify that, to the best of their knowledge, the above recitals are true and correct. The					
20	above recitals are hereby adopted and incorporated within this Agreement.					
21	2. <u>DEFINITIONS</u> .					
22	2.1. "Request for Proposal" or "RFP" shall mean that document that describes the Project and					
23	project requirements to prospective bidders entitled, [RFP] dated [RFP Date]. The Request					
24	for Proposal is attached hereto as Exhibit "A" and incorporated herein by this reference.					
25	2.2. "Proposal" shall mean CONSULTANT's document entitled, [Proposal] and submitted to					
26	COUNTY's Department of Public Works. The Proposal is attached hereto as Exhibit "B"					
27	and incorporated herein this by reference.					
28	3. <u>CONTRACT COORDINATION</u> .					

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- **3.1.** The Director of Public Works or his/her designee shall be the representative of COUNTY for all purposes under this Agreement. The Director of Public Works or his/her designee is hereby designated as the Contract Manager for COUNTY. He/she shall supervise the progress and execution of this Agreement.
- **3.2.** CONSULTANT shall assign a single Contract Manager to have overall responsibility for the progress and execution of this Agreement. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute Contract Manager for any reason, the Contract Manager designee shall be subject to the prior written acceptance and approval of COUNTY's Contract Manager.

4.

DESCRIPTION OF WORK.

CONSULTANT shall provide all materials and labor to perform this Agreement consistent with the RFP and the Proposal, as set forth in **Exhibits "A" and "B."** In the event of a conflict amongst this Agreement, the RFP, and the Proposal, the RFP shall take precedence over the Proposal and this Agreement shall take precedence over both.

5. WORK TO BE PERFORMED BY CONSULTANT.

- **5.1.** CONSULTANT shall comply with all terms, conditions and requirements of the Proposal and this Agreement.
- **5.2.** CONSULTANT shall perform such other tasks as necessary and proper for the full performance of the obligations assumed by CONSULTANT hereunder; including but not limited to any additional work or change orders agreed upon pursuant to written authorization as described in Paragraph 6.3, and as contemplated under Sections 13, 14, and 28. Proposed additional work or change order requests, when applicable, will be attached and incorporated herein under **Exhibit "B"** (as "B-1," "B-2," etc.).
 - **5.3.** CONSULTANT shall:
 - **5.3.1.** Procure all permits and licenses, pay all charges and fees, and give all notices that may be necessary and incidental to the due and lawful prosecution of the services to be performed by CONSULTANT under this agreement;
 - 5.3.2. Keep itself fully informed of all existing and proposed federal, state and local laws,

1			ordinances, regulations, orders and decrees which may affect those engaged or
2			employed under this Agreement;
3		5.3	3.3. At all times observe and comply with, and cause all of its employees to observe and
4			comply with all of said laws, ordinances, regulations, orders and decrees mentioned
5			above; and
6		5.3	3.4. Immediately report to COUNTY's Contract Manager in writing any discrepancy
7			or inconsistency it discovers in said laws, ordinances, regulations, orders and
8			decrees mentioned above in relation to any plans, drawings, specifications or
9			provisions of this Agreement.
10	6. <u>R</u>	EPRES	ENTATIONS BY CONSULTANT.
11	6	.1. CC	ONSULTANT understands and agrees that COUNTY has limited knowledge in the
12		mu	altiple areas specified in the Proposal. CONSULTANT has represented itself to be an
13		exj	pert in these fields and understands that COUNTY is relying upon such representation.
14	6	.2. CC	ONSULTANT represents and warrants that it is a lawful entity possessing all required
15		lic	enses and authorities to do business in the State of California and perform all aspects
16		of	this Agreement.
17	6	.3. CC	ONSULTANT shall not commence any work under this Agreement or provide any
18		otł	her services, or materials, in connection therewith until CONSULTANT has received
19		wr	itten authorization from COUNTY's Contract manager to do so.
20	6	.4. CC	ONSULTANT represents and warrants that the people executing this Agreement on behalf
21		of	CONSULTANT have the authority of CONSULTANT to sign this Agreement and bind
22		CC	ONSULTANT to the performance of all duties and obligations assumed by
23		CC	DNSULTANT herein.
24	6	.5. CC	DNSULTANT represents and warrants that any employee, contractor and/or agent who
25		wi	ll be performing any of the duties and obligations of CONSULTANT herein possess all
26		rec	uired licenses and authorities, as well as the experience and training, to perform such
27		tas	ks.
28	6	. 6. CC	ONSULTANT represents and warrants that the allegations contained in the Proposal are
	1		PW 21-0179 PW

true and correct.

- **6.7.** CONSULTANT understands and agrees not to discuss this Agreement or work performed pursuant to this Agreement with anyone not a party to this Agreement without the prior permission of COUNTY. CONSULTANT further agrees to immediately advise COUNTY of any contacts or inquiries made by anyone not a party to this Agreement with respect to work performed pursuant to this Agreement.
- **6.8.** Prior to accepting any work under this Agreement, CONSULTANT shall perform a due diligence review of its files and advise COUNTY of any conflict or potential conflict CONSULTANT may have with respect to the work requested.
- **6.9.** CONSULTANT understands and agrees that in the course of performance of this Agreement CONSULTANT may be provided with information or data considered by the owner or the COUNTY to be confidential. COUNTY shall clearly identify such information and/or data as confidential. CONSULTANT shall take all necessary steps necessary to maintain such confidentiality including but not limited to restricting the dissemination of all material received to those required to have such data in order for CONSULTANT to perform under this Agreement.
 - 6.10. CONSULTANT represents that the personnel dedicated to this project as identified in CONSULTANT's Proposal, will be the people to perform the tasks identified therein. CONSULTANT will not substitute other personnel or engage any contractors to work on any tasks identified herein without prior written notice to COUNTY.
 - **6.11.** CONSULTANT understands that COUNTY considers the representations made herein to be material and would not enter into this Agreement with CONSULTANT if such representations were not made.

TERM OF AGREEMENT.

This Agreement shall commence on the date first written above and shall remain in effect until the services provided as outlined in Section 4, ("DESCRIPTION OF WORK"), have been completed, unless otherwise terminated as provided for in this Agreement.

8 || 8. <u>COMPENSATION</u>.

Th c th

1 8.1. The total compensation payable under this Agreement shall not exceed [amount] unless 2 otherwise previously agreed to in writing by COUNTY, and shall be broken down as 3 follows: **8.1.1.** [Cost Proposal] 4 8.2. 5 The fee for any additional services required by COUNTY will be computed either on a 6 negotiated lump sum basis or upon actual hours and expenses incurred by CONSULTANT and based on CONSULTANT's current standard rates as set forth in the 7 Proposal. Additional services or costs will not be paid without a prior written agreement 8 9 between the Parties. 8.3. Except as provided under Paragraphs 8.1 and 8.2, COUNTY shall not be responsible to 10 11 pay CONSULTANT any compensation, out of pocket expenses, fees, reimbursement of 12 expenses or other remuneration. PAYMENT. 13 9. 9.1. CONSULTANT shall bill COUNTY on a time and material basis as set forth in Exhibit 14 15 "B." COUNTY shall pay CONSULTANT for completed and approved services upon 16 presentation of its itemized billing. 9.2. 17 COUNTY shall have the right to retain five percent (5%) of the total of amount of each 18 invoice, not to exceed five percent (5%) of the total compensation amount of the completed 19 project. "Completion of the Project" is when the work to be performed has been completed 20 in accordance with this Agreement, as determined by COUNTY, and all subcontractors, if 21 any, have been paid in full by CONSULTANT. Upon completion of the Project 22 CONSULTANT shall bill COUNTY the retention for payment by COUNTY. 23 10. METHOD OF PAYMENT. CONSULTANT shall at any time prior to the fifteenth (15th) day of any month, submit to COUNTY 24 25 a written claim for compensation for services performed. The claim shall be in a format approved by 26 COUNTY. No payment shall be made by COUNTY prior to the claims being approved in writing by 27 COUNTY's Contract Manager or his/her designee. CONSULTANT may expect to receive payment within 28 a reasonable time thereafter and in any event in the normal course of business within thirty (30) days after

the claim is submitted.

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11. <u>TIME FOR COMPLETION OF THE WORK</u>.

The Parties agree that time is of the essence in the performance of this Agreement. Program scheduling shall be as described in Exhibits unless revisions are approved by both COUNTY's Contract Manager and CONSULTANT's Contract Manager. Time extensions may be allowed for delays caused by COUNTY, other governmental agencies or factors not directly brought about by the negligence or lack of due care on the part of CONSULTANT.

8 || 12.

MAINTENANCE AND ACCESS OF BOOKS AND RECORDS.

- **12.1.** CONSULTANT shall maintain books, records, documents, reports and other materials developed under this Agreement as follows:
- **12.2.** CONSULTANT shall maintain all ledgers, books of accounts, invoices, vouchers, canceled checks, and other records relating to CONSULTANT's charges for services or expenditures and disbursements charged to COUNTY for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to CONSULTANT pursuant to this Agreement.
 - **12.3.** CONSULTANT shall maintain all reports, documents, and records, which demonstrate performance under this Agreement for a minimum period of five (5) years, or for any longer period required by law, from the date of termination or completion of this Agreement.
 - 12.4. Any records or documents required to be maintained by CONSULTANT pursuant to this Agreement shall be made available to COUNTY for inspection or audit at any time during CONSULTANT's regular business hours provided that COUNTY provides CONSULTANT with seven (7) days advanced written or e-mail notice. Copies of such documents shall, at no cost to COUNTY, be provided to COUNTY for inspection at CONSULTANT's address indicated for receipt of notices under this Agreement.
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13.

SUSPENSION OF AGREEMENT.

COUNTY's Contract Manager shall have the authority to suspend this Agreement, in whole or in part, for such period as deemed necessary due to unfavorable conditions or to the failure on the part of CONSULTANT to perform any provision of this Agreement. CONSULTANT will be paid the
 compensation due and payable to the date of suspension.

14. <u>TERMINATION</u>.

COUNTY retains the right to terminate this Agreement for any reason by notifying CONSULTANT in writing twenty (20) days prior to termination and by paying the compensation due and payable to the date of termination; provided, however, if this Agreement is terminated for fault of CONSULTANT, COUNTY shall be obligated to compensate CONSULTANT only for that portion of CONSULTANT's services which are of benefit to COUNTY. Said compensation is to be arrived at by mutual agreement between COUNTY and CONSULTANT; should the parties fail to agree on said compensation, an independent arbitrator shall be appointed and the decision of the arbitrator shall be binding upon the parties.

15. <u>INSPECTION</u>.

CONSULTANT shall furnish COUNTY with every reasonable opportunity for COUNTY to ascertain that the services of CONSULTANT are being performed in accordance with the requirements and intentions of this Agreement. All work done and materials furnished, if any, shall be subject to COUNTY's Contract Manager's inspection and approval. The inspection of such work shall not relieve CONSULTANT of any of its obligations to fulfill its Agreement as prescribed.

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16. <u>OWNERSHIP OF MATERIALS</u>.

All original drawings, videotapes, studies, sketches, computations, reports, information, data and other materials given to or prepared or assembled by or in the possession of CONSULTANT pursuant to this Agreement shall become the permanent property of COUNTY and shall be delivered to COUNTY upon demand, whether or not completed, and shall not be made available to any individual or organization without the prior written approval of COUNTY.

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INTEREST OF CONSULTANT.

17.1. CONSULTANT covenants that it presently has no interest, and shall not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the services hereunder.

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OV All mater Agree dema izatic <u>IN</u> 17.

- **17.2.** CONSULTANT covenants that, in the performance of this Agreement, no sub-contractor or person having such an interest shall be employed.
- **17.3.** CONSULTANT certifies that no one who has or will have any financial interest under this Agreement is an officer or employee of COUNTY.

18. <u>INDEMNIFICATION</u>.

- **18.1.** CONSULTANT agrees to the fullest extent permitted by law, in accordance with the limits required by California Civil Code § 2782.8, to indemnify, defend, protect and hold COUNTY and its representatives, officers, directors, designees, employees, successors and assigns harmless from any and all claims, expenses, liabilities, losses, causes of actions, demands, losses, penalties, attorneys' fees and costs, in law or equity, of every kind and nature whatsoever that arise out of, pertain to, or relate to CONSULTANT's negligence, recklessness, or willful misconduct under this Agreement ("Claims"), whether or not arising from the passive negligence of COUNTY, but does not include Claims that are the result of the negligence, recklessness, or willful misconduct of COUNTY.
 - 18.2. In accordance with the limits required by California Civil Code § 2782.8, if applicable, CONSULTANT agrees to defend with counsel acceptable to COUNTY, indemnify and hold COUNTY harmless from all Claims, including but not limited to:
 - **18.2.1.** Personal injury, including but not limited to bodily injury, emotional injury, sickness or disease or death to persons including but not limited to COUNTY's representatives, officers, directors, designees, employees, agents, successors and assigns, subcontractors and other third parties and/or damage to property of anyone (including loss of use thereof) arising out of, pertaining to, or relating to CONSULTANT's negligent or reckless performance of, or willful misconduct surrounding, any of the terms contained in this Agreement, or anyone directly or indirectly employed by CONSULTANT or anyone for whose acts CONSULTANT may be liable;

18.2.2. Liability arising from injuries to CONSULTANT and/or any of

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CONSULTANT's employees or agents arising out of, pertaining to, or relating to CONSULTANT's negligent or reckless performance of, or willful misconduct surrounding, any of the terms contained in this Agreement, or anyone directly or indirectly employed by CONSULTANT or anyone for whose acts CONSULTANT may be liable;

- **18.2.3.** Penalties imposed upon account of the violation of any law, order, citation, rule, regulation, standard, ordinance or statute caused by the negligent or reckless action or inaction, or willful misconduct of CONSULTANT or anyone directly or indirectly employed by CONSULTANT or anyone for whose acts CONSULTANT may be liable, including but not limited to:
 - (a) Any loss of funding, penalties, fees, or other costs resulting from CONSULTANT's failure to adhere to Disadvantaged Business Enterprise requirements and/or goals, as determined by COUNTY or such other lawful entity in charge of monitoring Disadvantaged Business Enterprise compliance;
 - (a) Any loss of funding, penalties, fees, or other costs resulting from CONSULTANT's failure to adhere to prevailing wage requirements, as determined by COUNTY, the California Department of Industrial Relations, or such other lawful entity in charge of monitoring prevailing wage compliance;
- **18.2.4.** Infringement of any patent rights which may be brought against COUNTY arising out of CONSULTANT's work;
- **18.2.5.** Any violation or infraction by CONSULTANT of any law, order, citation, rule, regulation, standard, ordinance or statute in any way relating to the occupational health or safety of employees; and
- **18.2.6.** Any breach by CONSULTANT of the terms, requirements or covenants of this Agreement.
- 18.3. These indemnification provisions shall extend to Claims occurring after this Agreement

is terminated, as well as while it is in force.

19. <u>INDEPENDENT CONTRACTOR</u>.

In all situations and circumstances arising out of the terms and conditions of this Agreement, CONSULTANT is an independent contractor, and as an independent contractor, the following shall apply:

- **19.1.** CONSULTANT is not an employee or agent of COUNTY and is only responsible for the requirements and results specified by this Agreement or any other agreement.
- **19.2.** CONSULTANT shall be responsible to COUNTY only for the requirements and results specified by this Agreement and except as specifically provided in this Agreement, shall not be subject to COUNTY's control with respect to the physical actions or activities of CONSULTANT in fulfillment of the requirements of this Agreement.
- **19.3.** CONSULTANT is not, and shall not be, entitled to receive from, or through, COUNTY, and COUNTY shall not provide, or be obligated to provide, CONSULTANT with Workers' Compensation coverage or any other type of employment or worker insurance or benefit coverage required or provided by any Federal, State or local law or regulation for, or normally afforded to, an employee of COUNTY.
- **19.4.** CONSULTANT shall not be entitled to have COUNTY withhold or pay, and COUNTY shall not withhold or pay, on behalf of CONSULTANT, any tax or money relating to the Social Security Old Age Pension Program, Social Security Disability Program, or any other type of pension, annuity, or disability program required or provided by any federal, State or local law or regulation.
 - **19.5.** CONSULTANT shall not be entitled to participate in, nor receive any benefit from, or make any claim against any COUNTY fringe program, including, but not limited to, COUNTY's pension plan, medical and health care plan, dental plan, life insurance plan, or any other type of benefit program, plan, or coverage designated for, provided to, or offered to COUNTY's employees.
 - **19.6.** COUNTY shall not withhold or pay, on behalf of CONSULTANT, any Federal, State, or local tax, including, but not limited to, any personal income tax, owed by

1			CONSULTANT.
2		19.7.	CONSULTANT is, and at all times during the term of this Agreement, shall represent
3			and conduct itself as an independent contractor, not as an employee of COUNTY.
4		19.8.	CONSULTANT shall not have the authority, express or implied, to act on behalf of, bind
5			or obligate COUNTY in any way without the written consent of COUNTY.
6	20.	<u>INSU</u>	RANCE.
7		20.1.	CONSULTANT hereby agrees at its own cost and expense to procure and maintain,
8			during the entire term of this Agreement and any extended term therefore, insurance in a
9			sum acceptable to COUNTY and adequate to cover potential liabilities arising in
10			connection with the performance of this Agreement and in any event not less than the
11			minimum limit set forth in the "Minimum Insurance Amounts" attachment to RFP
12			(Exhibit "A") which are incorporated as if set forth fully herein.
13		20.2.	Special Insurance Requirements. All insurance required shall:
14			20.2.1. Be procured from California admitted insurers (licensed to do business in
15			California) with a current rating by Best's Key Rating Guide, acceptable to
16			COUNTY. A rating of at least A-VII shall be acceptable to COUNTY; lesser
17			ratings must be approved in writing by COUNTY.
18			20.2.2. Be primary coverage as respects COUNTY and any insurance or self-insurance
19			maintained by COUNTY shall be in excess of CONSULTANT's insurance
20			coverage and shall not contribute to it.
21			20.2.3. Name The Imperial County Department of Public Works and the County of
22			Imperial and their officers, employees, and volunteers as additional insured on all
23			policies, except Workers' Compensation insurance and Errors & Omissions
24			insurance, and provide that COUNTY may recover for any loss suffered by
25			COUNTY due to CONSULTANT's negligence.
26			20.2.4. State that it is primary insurance and regards COUNTY as an additional insured
27			and contains a cross-liability or severability of interest clause.
28			20.2.5. Not be canceled, non-renewed or reduced in scope of coverage until after thirty
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1		(30) a	lays written notice has been given to COUNTY. CONSULTANT may not
2		termi	nate such coverage until it provides COUNTY with proof that equal or better
3		insura	ance has been secured and is in place. Cancellation or change without prior
4		writte	en consent of COUNTY shall, at the option of COUNTY, be grounds for
5		termi	nation of this Agreement.
6		20.2.6. If this	s Agreement remains in effect more than one (1) year from the date of its
7		origin	nal execution, COUNTY may, at its sole discretion, require an increase to
8		liabili	ity insurance to the level then customary in similar COUNTY Agreements
9		by giv	ving sixty (60) days notice to CONSULTANT.
10	20.3.	Additional In	surance Requirements.
11		20.3.1. COU	NTY is to be notified immediately of all insurance claims. COUNTY is also
12		to be	notified if any aggregate insurance limit is exceeded.
13		20.3.2. The c	comprehensive or commercial general liability shall contain a provision of
14		endor	sements stating that such insurance:
15		(a)	Includes contractual liability;
16		(b)	Does not contain any exclusions as to loss or damage to property caused
17			by explosion or resulting from collapse of buildings or structures or
18			damage to property underground, commonly referred to by insurers as the
19			"XCU Hazards;"
20		(c)	Does not contain a "pro rata" provision which looks to limit the insurer's
21			liability to the total proportion that its policy limits bear to the total
22			coverage available to the insured;
23		(d)	Does not contain an "excess only" clause which require the exhaustion of
24			other insurance prior to providing coverage;
25		(e)	Does not contain an "escape clause" which extinguishes the insurer's
26			liability if the loss is covered by other insurance;
27		(f)	Includes COUNTY as an additional insured.
28		(g)	States that it is primary insurance and regards COUNTY as an additional
			PW 21-0179 PW

1			insured and contains a cross-liability or severability of interest clause.
2		20.4.	Deposit of Insurance Policy. Promptly on issuance, reissuance, or renewal of any
3			insurance policy required by this Agreement, CONSULTANT shall, if requested by
4			COUNTY, provide COUNTY satisfactory evidence that insurance policy premiums have
5			been paid together with a duplicate copy of the policy or a certificate evidencing the
6			policy and executed by the insurance company issuing the policy or its authorized agent.
7		20.5.	<u>Certificates of Insurance</u> . CONSULTANT agrees to provide COUNTY with the following
8			insurance documents on or before the effective date of this Agreement:
9			20.5.1. Complete copies of certificates of insurance for all required coverages including
10			additional insured endorsements shall be attached hereto as Exhibit "C" and
11			incorporated herein.
12			20.5.2. The documents enumerated in this Paragraph shall be sent to the following:
13			County of Imperial
14			Risk Management Department Re: County Project No. [Project Number]
15			940 Main Street, Suite 101
16			El Centro, CA 92243
17	/// ///		
18	///		
19			County of Imperial Department of Public Works
20			Re: County Project No.[Project Number] 155 South 11th Street
21			El Centro, CA 92243
22			
23		20.6.	Additional Insurance. Nothing in this, or any other provision of this Agreement, shall be
24			construed to preclude CONSULTANT from obtaining and maintaining any additional
25			insurance policies in addition to those required pursuant to this Agreement.
26	21.		AILING WAGE.
27		21.1.	CONSULTANT acknowledges that any work that qualifies as a "public work" within the
28			meaning of California Labor Code section 1720 shall cause CONSULTANT, and its sub-
			PW 21-0179 PW

1			consultants, to comply with the provisions of California Labor Code sections 1775 et seq.
2		21.2.	When applicable, copies of the prevailing rate of per diem wages shall be on file at
3			COUNTY's Department of Public Works and/or Clerk of the Board of Supervisors, and
4			available to any interested party upon request. CONSULTANT shall post copies of the
5			prevailing wage rate of per diem wages at the Project site.
6		21.3.	CONSULTANT hereby acknowledges and stipulates to the following:
7			21.3.1. CONSULTANT has reviewed and agrees to comply with the provisions of Labor
8			Code section 1776 regarding retention and inspection of payroll records and
9			noncompliance penalties; and
10			21.3.2. CONSULTANT has reviewed and agrees to comply with the provisions of Labor
11			Code section 1777.5 regarding employment of registered apprentices; and
12			21.3.3. CONSULTANT has reviewed and agrees to comply with the provisions of Labor
13			Code section 1810 regarding the legal day's work; and
14			21.3.4. CONSULTANT has reviewed and agrees to comply with the provisions of Labor
15			Code section 1813 regarding forfeiture for violations of the maximum hours per
16			day and per week provisions contained in the same chapter.
17			21.3.5. CONSULTANT has reviewed and agrees to comply with any applicable
18			provisions for those Projects subject to Department of Industrial Relations (DIR)
19			Monitoring and Enforcement of prevailing wages. COUNTY hereby notifies
20			CONSULTANT that CONSULTANT is responsible for complying with the
21			requirements of Senate Bill 854 (SB854) regarding certified payroll record
22			reporting. Further information concerning the requirements of SB854 is available
23			on the DIR website located at: <u>http://www.dir.ca.gov/Public-</u>
24			Works/PublicWorksEnforcement.html.
25	22.	<u>WOR</u>	KERS' COMPENSATION CERTIFICATION.
26		22.1.	Prior to the commencement of work, CONSULTANT shall sign and file with COUNTY
27			the following certification: "I am aware of the provisions of California Labor Code
28			§§3700 et seq. which require every employer to be insured against liability for workers'

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1 compensation or to undertake self-insurance in accordance with the provisions of that 2 code, and I will comply with such provisions before commencing the performance of the 3 work of this contract." 22.2. This certification is included in this Agreement and signature of the Agreement shall 4 5 constitute signing and filing of the certificate. 6 **22.3.** CONSULTANT understands and agrees that any and all employees, regardless of hire 7 date, shall be covered by Workers' Compensation pursuant to statutory requirements prior to beginning work on the Project. 8 9 **22.4.** If CONSULTANT has no employees, initial here: 23. 10 ASSIGNMENT. 11 Neither this Agreement nor any duties or obligations hereunder shall be assignable by 12 CONSULTANT without the prior written consent of COUNTY. CONSULTANT may employ other 13 specialists to perform services as required with prior approval by COUNTY. 24. 14 **NON-DISCRIMINATION**. 24.1. During the performance of this Agreement, CONSULTANT and its subcontractors shall 15 16 not unlawfully discriminate, harass or allow harassment against any employee or 17 applicant for employment because of sex, race, color, ancestry, religious creed, national 18 origin, physical disability (including HIV and AIDS), mental disability, medical 19 condition (cancer), age (over forty (40)), marital status and denial of family care leave. 20 CONSULTANT and its subcontractors shall insure that the evaluation and treatment of 21 their employees and applicants for employment are free from such discrimination and 22 harassment. 23 24.2. CONSULTANT and its subcontractors shall not discriminate on the basis of race, color, 24 national origin, or sex in the performance of this Agreement. CONSULTANT shall carry out applicable requirements of 49 CFR 26 in the award and administration of DOT-25 26 assisted contracts. Failure by CONSULTANT to carry out these requirements is a 27 material breach of this Agreement, which may result in the termination of this Agreement, 28 or such other remedy as COUNTY deems appropriate.

1 24.3. CONSULTANT and its subcontractors shall comply with the provisions of the Fair 2 Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable 3 regulations promulgated thereunder (California Code of Regulations, Title 2, §7285 et 4 seq.). 5 24.4. The applicable regulations of the Fair Employment and Housing Commission implementing Government Code §12990 (a-f), set forth in Chapter 5 of Division 4 of 6 7 Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. 8 9 24.5. The applicable regulations of §504 of the Rehabilitation Act of 1973 (29 U.S.C. §794 (a)) are incorporated into this Agreement by reference and made a part hereof as if set forth 10 11 in full. 12 24.6. CONSULTANT and its subconsultants shall give written notice of their obligations under 13 this clause to labor organizations with which they have a collective bargaining or other 14 agreement. 15 24.7. CONSULTANT shall include the nondiscrimination and compliance provisions of this 16 clause in all subcontracts to perform work under this Agreement. 25. 17 DISADVANTAGED BUSINESS ENTITY COMPLIANCE. When applicable, CONSULTANT represents and warrants that it has fully read the 18 25.1. 19 applicable Disadvantaged Business Enterprise ("DBE") requirements pertaining to this 20 Project and has fully and accurately completed any and all required DBE forms. 21 25.2. CONSULTANT represents and warrants that it will comply with all applicable DBE 22 requirements for this Project. 23 **25.3.** CONSULTANT shall comply with any applicable DBE provisions attached hereto as 24 Exhibit "D" and incorporated by this reference as though fully set forth herein. 25 25.4. If any state or federal funds are withheld from COUNTY or not reimbursed to COUNTY 26 due to CONSULTANT's failure to either comply with the DBE requirements set forth in 27 the RFP and this Agreement, or to meet the mandatory DBE goals as determined by 28 COUNTY, Caltrans, the Federal Highway Administration, and/or any other state or

1			federal agency contributing funds to the Project, then CONSULTANT shall fully
2			reimburse COUNTY the amount of funding lost. COUNTY reserves the right to deduct
3			any such loss in funding from the amount of compensation due to CONSULTANT under
4			this Agreement.
5		25.5.	In addition to the above, CONSULTANT's failure to comply with DBE
6			requirements/goals shall subject it to such sanctions as are permitted by law, which may
7			include, but shall not be limited to the following:
8			25.5.1. Termination of this Agreement;
9			25.5.2. Withholding monthly progress payments;
10			25.5.3. Compensatory, special, incidental, liquidated and other damages; and/or
11			25.5.4. Designation of CONSULTANT as "nonresponsible," and disqualification from
12			bidding on future public works projects advertised by COUNTY.
13	26.	NOT	ICES AND REPORTS.
14		26.1.	Any notice and reports under this Agreement shall be in writing and may be given by
15			personal delivery or by mailing by certified mail, addressed as follows:
15 16			COUNTY CONSULTANT
			COUNTY CONSULTANT Director of Public Works
16			COUNTY CONSULTANT Director of Public Works Re: County Project No.[Project Number] 155 South 11th Street 155 South 11th Street
16 17			COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243
16 17 18			COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243County of Imperial Clerk of the Board of Supervisors
16 17 18 19			COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243County of Imperial
16 17 18 19 20			COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243County of ImperialClerk of the Board of SupervisorsRe: PW County Project No.[Project Number]
16 17 18 19 20 21		26.2.	COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243County of ImperialClerk of the Board of SupervisorsRe: PW County Project No.[Project Number]940 W. Main Street, Suite 209
 16 17 18 19 20 21 22 		26.2.	COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243County of ImperialClerk of the Board of SupervisorsRe: PW County Project No.[Project Number]940 W. Main Street, Suite 209El Centro, CA 92243
 16 17 18 19 20 21 22 23 		26.2.	COUNTYCONSULTANTDirector of Public WorksRe: County Project No.[Project Number]155 South 11th StreetEl Centro, CA 92243County of ImperialClerk of the Board of SupervisorsRe: PW County Project No.[Project Number]940 W. Main Street, Suite 209El Centro, CA 92243Notice shall be deemed to have been delivered only upon receipt by the Party, seventy-
 16 17 18 19 20 21 22 23 24 		26.2. 26.3.	COUNTYCONSULTANTDirector of Public Works Re: County Project No.[Project Number] 155 South 11th Street El Centro, CA 9224311th Street El Centro, CA 92243County of Imperial Clerk of the Board of Supervisors Re: PW County Project No.[Project Number] 940 W. Main Street, Suite 209 El Centro, CA 9224311th Street, Suite 209 El Centro, CA 92243Notice shall be deemed to have been delivered only upon receipt by the Party, seventy- two (72) hours after deposit in the United States mail or twenty-four (24) hours after
 16 17 18 19 20 21 22 23 24 25 			COUNTYCONSULTANTDirector of Public Works Re: County Project No.[Project Number] 155 South 11th Street El Centro, CA 92243155 South 11th Street El Centro, CA 92243County of Imperial Clerk of the Board of Supervisors Re: PW County Project No.[Project Number] 940 W. Main Street, Suite 209 El Centro, CA 92243111111111111111111111111111111111
 16 17 18 19 20 21 22 23 24 25 26 			COUNTYCONSULTANTDirector of Public Works Re: County Project No.[Project Number] 155 South 11th Street El Centro, CA 92243[South 11th Street El Centro, CA 92243]County of Imperial Clerk of the Board of Supervisors Re: PW County Project No.[Project Number] 940 W. Main Street, Suite 209 El Centro, CA 92243[South 11th Street, Suite 209 El Centro, CA 92243]Notice shall be deemed to have been delivered only upon receipt by the Party, seventy- two (72) hours after deposit in the United States mail or twenty-four (24) hours after deposit with an overnight carrier.The addressees and addresses for purposes of this Section may be changed to any other

Section, the addressee and address set forth in this Agreement shall continue in effect for all purposes hereunder.

27. <u>ENTIRE AGREEMENT</u>.

This Agreement contains the entire Agreement between COUNTY and CONSULTANT relating to the transactions contemplated hereby and supersedes all prior or contemporaneous agreements, understandings, provisions, negotiations, representations, or statements, either written or oral.

28. <u>MODIFICATION</u>.

No modification, waiver, amendment, discharge, or change of this Agreement shall be valid unless the same is in writing and signed by both Parties.

29. <u>CAPTIONS</u>.

Captions in this Agreement are inserted for convenience of reference only and do not define, describe or limit the scope or the intent of this Agreement or any of the terms thereof.

30. PARTIAL INVALIDITY.

If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

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31.

GENDER AND INTERPRETATION OF TERMS AND PROVISIONS.

- **31.1.** As used in this Agreement and whenever required by the context thereof, each number, both singular and plural, shall include all numbers, and each gender shall include a gender.
- **31.2.** CONSULTANT as used in this Agreement or in any other document referred to in or made a part of this Agreement shall likewise include the singular and the plural, a corporation, a partnership, individual, firm or person acting in any fiduciary capacity as executor, administrator, trustee or in any other representative capacity or any other entity.
 - **31.3.** All covenants herein contained on the part of CONSULTANT shall be joint and several if more than one person, firm or entity executes the Agreement.
- **32.** <u>WAIVER</u>.

No waiver of any breach or of any of the covenants or conditions of this Agreement shall be construed to be a waiver of any other breach or to be a consent to any further or succeeding breach of the same or any other covenant or condition.

33. <u>CHOICE OF LAW</u>.

This Agreement shall be governed by the laws of the State of California. This Agreement is made and entered into in Imperial County, California. Any action brought by either Party with respect to this Agreement shall be brought in a court of competent jurisdiction within said County.

- **<u>AUTHORITY</u>**.
 - **34.1.** Each individual executing this Agreement on behalf of CONSULTANT represents and warrants that:
 - **34.1.1.** He/She is duly authorized to execute and deliver this Agreement on behalf of CONSULTANT;
 - 34.1.2. Such execution and delivery is in accordance with the terms of the Articles of Incorporation or Partnership, any by-laws or Resolutions of CONSULTANT and;
 34.1.3. This Agreement is binding upon CONSULTANT accordance with its terms.
 - 2 CONSULTANT shall deliver to COUNTY evidence accertable to COUNTY of th
 - **34.2.** CONSULTANT shall deliver to COUNTY evidence acceptable to COUNTY of the foregoing within thirty (30) days of execution of this Agreement.
- **35.** <u>COUNTERPARTS</u>.

This Agreement (as well as any amendments hereto) may be executed in any number of counterparts, each of which when executed shall be an original, and all of which together shall constitute one and the same Agreement. No counterparts shall be effective until all Parties have executed a counterpart hereof.

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6. <u>REVIEW OF AGREEMENT TERMS</u>.

- **36.1.** Each Party has had the opportunity to receive independent legal advice from its attorneys with respect to the advisability of making the representations, warranties, covenants and agreements provided for herein, and with respect to the advisability of executing this Agreement.
 - 36.2. Each Party represents and warrants to and covenants with the other Party that:

1			36.2.1. This Agreement in its reduction to final written form is a result of extensive good
2			faith negotiations between the Parties and/or their respective legal counsel; and
3			36.2.2. The Parties and/or their legal counsel have carefully reviewed and examined this
4			Agreement for execution by said Parties.
5		36.3.	Any statute or rule of construction that ambiguities are to be resolved against the drafting
6			party shall not be employed in the interpretation of this Agreement.
7	37.	<u>NON-</u>	APPROPRIATION.
8		37.1.	All obligations of COUNTY are subject to appropriation of resources by various federal,
9			State, and local agencies, including but not limited to the U.S. Department of
10			Transportation ("DOT") and the California Department of Transportation ("Caltrans").
11		37.2.	This Agreement is valid and enforceable only if sufficient funds are made available to
12			COUNTY for the purposes of this Project. In addition, this Agreement is subject to any
13			additional restrictions, limitations, conditions, or any statute enacted by Congress, State
14			Legislature, or COUNTY, and any regulations prescribed therefrom, that may affect the
15			provisions, terms, or funding of this Agreement.
16		37.3.	If sufficient funds for the Project are not appropriated, this Agreement may be amended
17			or terminated in order to reflect said reduction in funding.
18	38.	<u>APPE</u>	NDIX E OF THE TITLE VI ASSURANCES.
19		During	g the performance of this contract, the CONSULANT, for itself, its assignees, and
20		succes	ssors in interest agrees to comply with the following nondiscrimination statutes and
21		author	ities; including but not limited to:
22		38.1.	Pertinent Nondiscrimination Authorities:
23			(a) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq, 78 stat. 252),
24			(prohibits discrimination on the basis of race, color, national origin); and 49 CFR
25			Part 21.
26			(b) The Uniform Relocation Assistance and Real Property Acquisition Policies Act
27			of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or
28			whose property has been acquired because of Federal or Federal-Aid programs
			PW 21-0179 PW

20

		and projects);
	(c)	Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), prohibits
		discrimination on the basis of sex);
	(d)	Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.) as
		amended, (prohibits discrimination on the basis of disability); and 49 CFR Part
		27;
,	(e)	The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.),
		(prohibits discrimination on the basis of age);
)	(f)	Airport and Airway Improvement Act of 1982, 949 U.S.C. § 4 71, Section 4
)		7123), as amended, (prohibits discrimination based on race, creed, color, national
		origin, or sex);
	(g)	The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope,
		coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age
-		Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by
		expanding the definition of the terms "programs or activities" to include all the
		programs or activities of the Federal-aid recipients, subrecipients and contractors,
,		whether such programs or activities are Federally funded or not);
	(h)	Titles II and III of the Americans with Disabilities Act, which prohibit
)		discrimination on the basis of disability in the operation of public entities, public
)		and private transportation systems, places of public accommodation, and certain
		testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of
		Transportation regulations at 49 C.F.R. parts 37 and 38;
	(i)	The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. §
		47123) (prohibits discrimination on the basis of race, color, national origin, and
		sex);
)	(j)	Executive Order 12898, Federal Actions to Address Environmental Justice in
'		Minority Populations and Low-Income Populations, which ensures discrimination
		against minority populations by discouraging programs, policies, and activities

with disproportionately high and adverse human health or environmental effects on minority and low-income populations; (k) Executive Order 13166, Improving Access to Services for persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100); (l) Title IX of the Education Amendment of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq). [Signatures to Follow on Next Page] IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first above written.

1				
2	County of Imperial	[Consultant]		
3 4				
4 5	By:			
6	Michael W. Kelly, Chairman Imperial County Board of Supervisors	[Signatory]		
7				
8	ATTEST:			
9				
10	Blanca Acosta, Clerk of the Board,			
11	County of Imperial, State of California			
12				
13	APPROVED AS TO FORM:			
14	Eric Havens, County Counsel			
15				
16	By: Faye Winkler,			
17	Faye Winkler, Deputy County Counsel			
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		PW 21-0179 PW		

INSURANCE COVERAGE AND LIMITS:

Liability coverage shall be at least as broad as Insurance Services Office (ISO) CGL Policy CG 00 01. No modifications or endorsements are allowed that would reduce, limit, restrict, or exclude coverage under the standard unmodified ISO CGL policy coverages.

Insurance	Minimum Limit*
Professional Liability (Errors and Omissions)	Insurance appropriates to the Contractor's profession, with limit no less than \$2,000,000 per occurrence or claim, \$2,000,000 aggregate.
Workers Compensation, Coverage A	as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
Employers Liability, Coverage B	\$1 million
Commercial General Liability (including Contractual Liability):	Insurance Services Office Form CG 00 01covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
Comprehensive Automobile Liability (owned, hired & non-owned vehicles) Bodily Injury Property Damage	ISO Form Number CA 00 01 covering any auto (Code 1), or if Contractor has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.

ADDITIONAL ENDORSEMENT REQUIRED:

- 1. Waiver of Subrogation (Rights of Recovery) endorsement of Workers' Compensation
- 2. Additional Insured Endorsement for "ongoing operations" at least as broad as ISO CG 2010 Scheduled form, or Automatic form CG 2038.
- 3. Additional Insured Endorsement for "completed operations" at least as broad as ISO CG 2037 Scheduled form, or Automatic form CG 2040.
- 4. Primary & non-contributory coverage (at least as broad as ISO CG 20 01)

Special Risks or Circumstances

The COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

EXHIBIT "C"

GATEWAY OF THE AMERICAS -WATER TREATMENT PLANT TECHNICAL REPORT

March 21, 2023

THG #542.116

Prepared by:

The Holt Group, Inc.

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GATEWAY OF THE AMERICAS WATER TREATMENT PLANT TECHNICAL REPORT

I. <u>Background</u>

The Gateway of the Americas (Gateway) Water Treatment Plant (WTP) booster pump station is 23 years old. The booster pumps are constant speed pumps and are not energy efficient. The constant speed booster pumps were recently replaced along with a new control panel as a temporary measure, until such time as a larger variable speed booster pump station with an emergency power generator set backup electrical supply can be installed. The prior 2,000 gallon per minute backup diesel fire pump failed while operating approximately four (4) years ago and was not salvageable. The backup diesel fire pump is no longer operable.

The design of a new Gateway WTP Improvement Project, hereafter termed "Project", consisting of the installation of a new variable speed booster pump station and new electrical system including an emergency standby power generator set electrical supply was commenced in September 2020. The Project was for the installation of a new variable speed booster pump station and new electrical system with an emergency standby power generator electrical supply. The Project did not include expanding the capacity of the water treatment plant, improvements to the raw water storage or conveyance system, filtering systems, water storage tanks, disinfection system, installation of a SCADA system or other water treatment plant improvements. The Project did not include improvements to the Gateway water distribution system. The Project scope of work was listed on the April 13, 2021 Project improvement plan title sheet description as follows:

Scope of Work

- Install a bypass pumping system to convey treated water from the tanks to the distribution system during the demolition and construction of the existing and new distribution pumps, piping and electrical system.
- Complete the demolition of the distribution pumps, piping, a portion of the existing electrical system and existing parking area. The new electrical system will occupy the location of the existing parking area.
- 3. Install new variable frequency drive booster pumping system, piping, valves, flowmeter and electrical VFD and control panel. The variable frequency drive booster pumping system shall be capable of providing 2,800 gallons per minute at 70 psi pressure to the pipeline distribution system.
- The Imperial Irrigation District is to install a new electrical transformer, new secondary conductors from the transformer to the new service entrance section (SES) and install a new meter in the SES.
- 5. Install a new pcc parking area to replace the demolished parking area to accommodate the new electrical panels.
- Install new electrical concrete pad in the location of the new electrical panels.
 Place a shade structure over the electrical panels.
- 7. Install a new electrical system including the 277/480 Volt, 3 phase, 4 wire, 800 amp SES Panel, Automatic Transfer Switch and 3 phase and 1 phase load centers. Existing electrical panels and transformers to remain operable are to be connected to the new electrical system. Connect existing circuitry to the new electrical system. Install new circuitry to the VFD electrical and control panels. Install alarm, monitoring and signal circuitry. Install flowmeter converter and circuitry, new generator set circuitry and generator set annunciator panel circuitry. Complete relocation of existing electrical circuitry. Complete other miscellaneous electrical work.
- Install a new standby diesel emergency 350 Kw generator set on prepared pcc support pad. Extend conduits and conductors from the standby emergency generator to the new automatic transfer switch.

- Complete minor grading work before and after the installation of the electrical pcc pad, new pcc parking lot and new standby diesel emergency generator set pcc pad.
- 10. Complete a satisfactory start-up of the electrical, new variable frequency drive pumping system and all other system components. Place the new variable frequency drive pumping system in operation.

The design was completed as a cooperative effort between the United States General Services Administration (GSA) and the County of Imperial. The Gateway WTP Project coupled with improvements to the Gateway water distribution pipeline system, as designed by Berg Engineering, were to provide a fire flow capacity of 2,500 GPM at 20 psi residual pressure to the Calexico East Port of Entry operated by the GSA. The GSA intended to retire the existing Port of Entry WTP and and obtain water from the Gateway WTP and distribution system. The new Gateway WTP Project design was nearing completion when the GSA requested that all design work on the project cease in April of 2021. Apparently, it became apparent to GSA that it would not be possible to secure funding for the Gateway WTP and water distribution system pipeline improvements. GSA therefore ordered the project design work to cease.

In March of 2022 the County of Imperial authorized the Holt Group to complete the Gateway WTP Project design plans and specifications. The Holt Group completed the Gateway WTP Project plans, specifications, and Engineers Opinion of Probable Cost (EOOPC) in accordance with the previously listed GSA design provisions. The plans, specifications and EOOPC were forwarded to the County of Imperial for initial review on August 8th, 2022.

After the Gateway WTP Project improvement plans were forwarded to the County of Imperial it was requested that an alternate Gateway WTP Project be considered. Similar to the project designed on August 8, 2022, the alternate WTP Project would include installing a new booster pump station and replacing the existing electrical system. The alternate WTP Project would also include the installation of an

emergency power generator set. The alternate WTP Project would provide the same discharge flow of 2,800 GPM as the August 8, 2022 Project; however, the pump discharge would be increased from 70 psi to 150 psi. The pump discharge pressure of 150 psi would provide a minimum 100 psi pressure at the Gateway of the Americas user point of connections (POC's). It had been requested that a 100 psi pressure be provided at the large Industrial Building POC's to provide sufficient pressure for the buildings fire sprinkler systems.

To determine whether the Imperial Irrigation District (IID) Energy Division could supply the electrical power to the Gateway WTP it was necessary for the Holt Group Electrical Engineering Consultant to complete a revised one line diagram taking into account a total pump horsepower load of 450 HP from the previous pump horsepower load of 240 HP. A revised electrical one line diagram was completed with the increased pump horsepower load of 450 HP. The Electrical Service Entrance Load increased from 277/480 Volt, 3 phase, 4 wire, *800 amps* to 277/480 Volt, 3 phase, 4 wire, *1,600 amps*. It should also be noted that the Emergency Power Generator set increased from 277/480 Volt, 3 phase, 4 wire, <u>350 KW</u> to 277/480 Volt, 3 phase, 4 wire, <u>800 KW</u>.

The revised one line diagram was forwarded to the IID Energy Division to evaluate whether the IID could supply the required electrical power to the Gateway WTP for the alternative Project. The IID Energy Division responded with an e-mail on November 4th, 2022. The e-mail stated that after reviewing the increased electrical load demand it had been determined that the IID could supply the required increased electrical load with no off-site improvements required (no expensive primary power line improvements). The IID noted that the Customer Service Proposal (CSP) re-design and cost of Labor & Materials for the scope change would be \$16,000. The CSP cost quoted is only for the IID design fee. The IID connection and construction fees would be included in the IID completed CSP, in addition to the \$16,000 design fee.

Barrett Pumps forwarded Pump Data information illustrating pump skids and variable frequency drive recommended pumps for the alternate Project in December 2022 and January 2023. It was recommended that three (3) 150 GPM/20 HP/350 TDH (150 psi)

pumps be provided for low flow conditions and three (3) 1,250 GPM/125 HP/350TDH (150 psi) pumps be provided for high flow conditions. Under normal conditions two (2) of the 150 GPM pumps and two (2) of the 1,250 GPM pumps would deliver the required 2,800 GPM at 150 psi pressure into the Gateway water distribution pipeline system.

It was requested that a Technical Memorandum be prepared to review the feasibility and costs to construct the Gateway alternate WTP Project consisting of a variable frequency drive booster pump station capable of delivering 2,800 GPM at *150 psi* pressure; a *800 KW* emergency power generator set and a 277/480 Volt, 3 phase, 4 wire, *1,600 amps* electrical system versus a 2,800 GPM at *70 psi* pressure; *350 KW* emergency power generator set and a 277/480 Volt, 3 phase, 4 wire, *1,600 amps* electrical system versus a 2,800 GPM at *70 psi* pressure; *350 KW* emergency power generator set and a 277/480 Volt, 3 phase, 4 wire, *800 amp* electrical system.

II. <u>Water Treatment Plant Improvements</u>

The Gateway WTP Project can be accomplished with either the originally designed project or the alternate project. The originally designed project plans, specifications, project schedule and Engineers Opinion of Probable Cost (EOOPC) were completed and forwarded to the Imperial County Department of Public Works (ICDPW) on August 8th, 2022. The plan check review was suspended shortly after the design documents were forwarded to ICDPW to allow the alternate project to be considered.

The Alternate WTP Project will require the originally designed Project plans be modified to accommodate the high pressure booster pump station, electrical panels (electrical service entrance, motor control center, automatic transfer switch, load centers and other electrical panels) and larger generator set. The upstream and downstream piping, fittings and valve configurations extending from and to the high pressure booster pump station will be required to be modified. The piping details and sections as illustrated on the plans will require modification. Barrett Engineering confirmed that the high pressure booster pump station length could be constructed at a length of 20 feet which will allow the high booster pump station to be placed within the existing Control Building room without requiring the removal of interior partitions and allowing for minimum national electric code horizontal distance clearance compliance in front of electrical panels.

The electrical panels will be larger, and the plans will be required to be revised to accommodate the electrical panels along the east exterior wall of the Control Building. The electrical plans will require revisions to illustrate larger circuitry and power requirements. The IID electrical design drawings will require modification by the IID electrical engineering department. A new IID Customer Service Proposal (CSP) application and fee (\$16,000) will be required to be forwarded to the IID energy division to initiate the required electrical design work. The emergency power generator set will be much larger; however, there is sufficient area in the vicinity the proposed emergency power generator set to accommodate the larger emergency power generator set.

The high pressure booster pump station Alternate Project can be physically constructed at the Gateway WTP. The IID can provide sufficient power to the Gateway WTP to service the high pressure booster pump station Alternate Project. It will require the originally designed improvement plans be revised and the IID CSP electrical design drawings be revised. The initial capital expense of the project will also increase.

III. Water Distribution System Considerations

The construction of the Gateway of the Americas water distribution system started around the year 2000. The water distribution system includes a large 18 inch diameter water distribution pipeline extending from the Gateway Water Treatment Plant along Maggio Road to Rood Road on the east side of SR 7. This 18 inch water pipeline is the only water pipeline extending to the east side of SR 7. If the 18 inch water pipeline extending beneath SR 7 fails, or is taken out of service, the water distribution system pipelines on the east side of SR 7 have no water source and are rendered non-functional. It is recommended that the installation of a second water pipeline from the

water distribution pipeline system on the west side of SR 7 to the east side of SR 7 be prioritized to reduce the possibility of water outages at the east Gateway Service Area.

It appears most of the Gateway water distribution system is comprised of pvc pipe. A large portion of the water distribution pipeline system is over 20 years old. The condition of most of the ductile or cast iron water fittings, water valves and hardware connecting the fittings and valves at pipeline junction points is not known. It was reported by one contractor that excavations around water pipeline connections, witnessed recently by the contractor, revealed that the hardware connecting the fittings and valves was corroded and in poor condition. It was the opinion of the Contractor that if the connections were subjected to 150 psi sustained pressure that the connections would fail. It should be noted that the connections observed by the contractor represented a small percentage of the overall gateway water pipeline connections. It is not possible to know the condition of the overall gateway water system connections without excavating and observing the connections.

The Gateway water treatment plant lead operator was contacted regarding the condition of the water distribution pipeline system. The Gateway water treatment plant lead operator was of the opinion that the existing Gateway water distribution system would not sustain a continuous hydraulic pressure of 150 psi.

If it is determined to install a high pressure booster pump station at the Gateway water treatment plant delivering a 150 psi sustained pressure to all, or a portion of, the existing water distribution system, then it would be necessary ensure the existing water distribution system subject to the 150 psi continuous pressure could operate under the pressure without failure. It would be recommended that the existing water distribution pipeline sections be hydraulicly tested according to the following procedure prior to being subjected to a 150 psi sustained pressure.

1. Isolate the water pipeline section and connection fittings to be hydrostatically pressure tested from the remainder of the water distribution pipeline system.

Complete all saw cutting, demolition, excavations and removal work to access the endpoints of the water pipeline section to be tested.

- Install a bypass line (high line) to distribute water flow to the remainder of the water distribution system while individual pipeline sections are being pressure tested.
- Pressure test the isolated pipeline section including all fittings, valves and water services up to the water meter corporation stops at 225 psi pressure for four (4) hours. Replace any pipelines, fittings, valves, or water services up to the angle meter stop which fail. Retest the pipeline section to 225 psi pressure for four (4) hours after each pipeline failure is satisfactorily addressed.
- 4. After each pipeline section is satisfactorily hydrostatically tested, disinfect the pipeline section. After the pipeline section is disinfected and the disinfection tests are satisfactory to the Gateway water treatment plant lead operator the hydrostatically tested pipeline section can be connected to the Gateway water distribution system.
- 5. Backfill all excavations per County of Imperial Department of Public Works Department Standards and requirements after the pipeline section is placed back in service. Replace all A.C. pavement and PCC infrastructure which was destroyed or damaged to accomplish the water pipeline section hydrostatic and disinfection testing.

It would be necessary to determine whether all, or a portion of the existing gateway water distribution system would be pressured to 150 psi on a continuous basis. If it is determined that a 150 psi booster pump station is to be installed at the Gateway Water Treatment Plant, then it would be recommended that only the portion of the Gateway water distribution system operate at 150 psi pressure. It would be recommended that most of the existing and proposed Gateway water distribution system west of SR 7 and the existing 18 inch pipeline section along Maggio Road east of SR 7 operate at 150 psi. The remainder of the existing water pipeline distribution system would operate at the current water distribution pressure. It would be necessary to install pressure reduction valves within the water distribution system to separate the high pressure zones from the lower

pressure zones. A Gateway of the Americas Water Distribution System Map is included with this Technical Memorandum as Attachment A. The recommended pressure reduction valve locations are illustrated on Attachment A. As previously noted, the water pipeline distribution system configuration/layout accuracy would be required to be verified during the initial design stages. After an accurate water pipeline distribution system map is prepared the exact number and locations of pressure reduction valves could be determined. A review of the Gateway Water Distribution Map illustrates that initially it appears pressure reduction valves 1 through 5 would be required to isolate the high pressure pipeline system from the low pressure pipeline system. The proposed new pipeline sections to be constructed in the future could be high pressure pipelines. Initially it appears that pressure reduction valves 6 through 10 would be required to isolate the future high pressure water pipelines from the low pressure pipeline system.

It would be recommended that the hydrostatic testing of the water pipeline distribution system be completed as a separate project. It would be recommended that the following items be completed as a part of the project:

1. Prior to starting the design phase of the project, verify that the existing Gateway of the Americas water distribution system map is accurate. Complete a review of existing water improvement maps and review the existing water distribution system in the field with the assistance of the Gateway water treatment plant operations staff to insure the water distribution system map is accurate. Review the location of all valves, fire hydrants, blowoffs and water meter services which are observable on the map. If there are "unknown" water pipeline sections within the Gateway water distribution system, it would be possible for these "unknown" water pipeline sections to be subjected to 150 psi water distribution system pressure after the new pump station was activated. These pipeline sections and the downstream Gateway water distribution pipeline system would be subject to failure without warning.

The Gateway water distribution system map is be revised and updated as required.

2. Prepare contract documents, bidding documents, specifications and plans for the hydrostatic testing and disinfection of all or a part of the existing Gateway water distribution system. Include a sequence of construction section identifying each pipeline section to be hydrostatically tested and disinfected and the order the pipeline sections are to be hydrostatically tested. Include a description of the order of construction for each pipeline section to be hydrostatically tested including demolition, excavation, isolation of pipeline sections to be hydrostatically tested, installation of temporary pipeline "highline" sections to maintain the remainder of the Gateway water distribution system operational during the hydrostatic testing process, hydrostatic testing requirements, replacement of pipeline valves, fittings, pipeline o-rings, water services and other components should failures occur during the hydrostatic testing process, disinfection of the pipeline section after the successful hydrostatic testing is completed, backfilling of trenches and replacement of A.C. pavement and PCC concrete infrastructure and other construction related items. It would be necessary to forward the plans to utility companies for utility location verification and to illustrate existing known utilities on the plans for conflict avoidance. Traffic Control Plans would be included with the design drawings to provide traffic control for pipeline connection point excavations within County of Imperial right of way. County of Imperial encroachment permit requirements would be included with the design. Improvement plan sheets illustrating the existing water pipelines, valves, fire hydrants, blowoffs and water services, including the areas to be excavated at pipeline connection points, would be prepared. The County of Imperial Department of Public Works plan check of the improvement plans and traffic control plans would be accomplished during the design phase. If physical construction work is required within Caltrans Right of Way a Caltrans Encroachment Permit Application and plan check would be included with the design work.

- 3. The County of Imperial Department of Public Works (ICDPW) would complete the procurement process to select a contractor to conduct the existing pipeline testing, disinfection and any necessary water pipeline upgrades.
- 4. The ICDPW would complete the construction management and inspection services to monitor the contractor while completing the existing pipeline hydrostatic testing, disinfection and any necessary water pipeline upgrades.
- 5. The new 150 psi high pressure Gateway water treatment plant booster pump station could be activated after the high pressure distribution system pipelines are successfully pressure tested and disinfected and after any low pressure pipelines are separated from the high pressure pipelines with pressure reduction valves.

IV. <u>Gateway of the Americas - Water Treatment Plant Low Pressure Booster</u> <u>Pump Station Engineers Opinion of Probable Cost</u>

ENGINEERS OPINION OF PROBABLE COST

ltem <u>No</u>	<u>ltem</u>	<u>Unit</u>	Unit <u>Cost</u>	Quantity	<u>Total</u>
1	MOBILIZATION OF EQUIPMENT AND MATERIAL; SUBMITTALS; TAXES; PERFORMANCE BOND; PAYMENT BOND; INSURANCE; POTABLE DRINKING WATER; FREIGHT; COMPLIANCE WITH NEPA/CEQA REQUIREMENTS, AS APPLICABLE; CONDITIONAL USE PERMIT, AS APPLICABLE; GENERAL NOTES ON PLAN SHEET 1; POTHOLING OF EXISTING UNDERGROUND UTILITIES; PROJECT MEETINGS; PROJECT SIGNS; AS APPLICABLE; RESTROOM FACILITIES; TEMPORARY FACILITIES PER TC #01520; PROTECTION OF EXISTING FACILITIES PER TC #01530; SITE ACCESS AND STORAGE PER TC #01550; PROJECT CLOSEOUT PER TC #01700; OPERATION AND MAINTENANCE MANUALS PER TC #01730; AS-BUILT DRAWING PREPARATION PER TC #01783 AND ITEMS NOT INCLUDED WITH THE REMAINING BID ITEM LIST.	LUMP SUM			198,000
2	IMPERIALIRRIGATIONDISTRICTCUSTOMER SERVICE PROPOSAL (CSP) PERSPECIAL CONDITION SECTION 00840-2				40,685

DEMOLITION WITHIN THE PARKING LOT AND GENERATOR SET AREAS

3	REMOVE AND DISPOSE OF EXISTING P.C.C. SIDEWALK AND P.C.C. SLAB PER DEMOLITION KEYNOTE NO. 1 AND 2 ON PLAN SHEET 3, THE SPECIFICATIONS AND ANY ADDENDUM(A).		\$50.00	14	700
4	REMOVE AND DISPOSE OF EXISTING NATIVE MATERIAL AND EXISTING UNDERLYING MATERIAL BENEATH P.C.C. SIDEWALK AND P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB TO SUB- BASE DESIGN GRADE PER KEYNOTES NO. 1, 2 AND 3 ON PLAN SHEET 3, THE SPECIFICATIONS AND ANY ADDENDUM(A).	CYD	\$40.00	96	3,840
5	REMOVE AND DISPOSE OF EXISTING P.C.C. PARKING CURB STOP PER DEMOLITION KEYNOTE NO. 4 ON PLAN SHEET 3, THE SPECIFICATIONS AND ANY ADDENDUM(A).	EACH	\$23.00	2	46
6	REMOVE AND DISPOSE OF EXISTING WALL MOUNTED HANDICAP PARKING SIGN PER DEMOLITION KEYNOTE NO. 6 ON PLAN SHEET 3, THE SPECIFICATIONS AND ANY ADDENDUM(A).	EACH	\$10.00	1	10

7 SCARIFY AND COMPACT THE EXISTING SF \$2.40 2,158 5,179 NATIVE MATERIAL FOR A DEPTH OF 12-INCHES BENEATH NEW P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB AND NEW P.C.C. GENERATOR SET SLAB PER SECTIONS A-A THROUGH D-D ON SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A).

CONSTRUCTION WITHIN THE PARKING LOT AND GENERATOR SET AREAS

CONSTRU			JET ANEAS		
8	INSTALL NATIVE MATERIAL WITHIN THE GENERATOR SET GRADING PLAN AREA TO SUB-BASE DESIGN GRADE PER SECTIONS C-C AND D-D ON PLAN SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A).	CYD	\$54.00	3	162
9	INSTALL GRANULAR SAND MATERIAL TO SUB-BASE DESIGN GRADE BENEATH NEW P.C.C. SIDEWALK PER CONSTRUCTION KEYNOTE 2 ON SHEET 4 AND DETAIL D ON SHEET 7, THE SPECIFICATIONS AND ANY ADDENDUM(A).	TONS	\$60.00	3.50	210
10	INSTALL CLASS 2 BASE MATERIAL TO SUB- BASE DESIGN GRADE BENEATH NEW P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB, NEW P.C.C. GENERATOR PAD, FINISH GRADE AT GENERATOR SET SERVICE PAD AREAS AND CLASS 2 BASE AREA AROUND THE NEW P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB PER CONSTRUCTION KEYNOTES 1, 6, 7 AND 8 ON SHEETS 4 AND 5, SECTIONS A-A, B-B, C- C AND D-D ON SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A).	TONS	\$70.00	188	13,160

11	INSTALL 8-INCH REINFORCED P.C.C CONCRETE PARKING LOT/DELIVERY/ELECTRICAL SLAB PER CONSTRUCTION KEYNOTE 1 ON PLAN SHEET 4 AND 5, SECTIONS A-A, B-B, C-C AND D-D ON SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A).	SF	\$24.00	1,546	37,104
12	INSTALL 4-INCH P.C.C SIDEWALK PER CONSTRUCTION KEYNOTE 2 ON PLAN SHEET 4, SECTIONS A-A AND D-D ON SHEET 6 THE SPECIFICATIONS AND ANY ADDENDUM(A).	SF	\$16.00	96	1,536
13	INSTALL 3 INCH ADDITIONAL ELECTRICAL PANEL HOUSEKEEPING P.C.C. PAD OVER 8 INCH UNDERLYING PCC ELECTRICAL SLAB PER CONSTRUCTION KEYNOTE 3 ON PLAN SHEET 4 AND 5, SECTIONS B-B AND D-D ON SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A). ELECTRICAL PANEL HOUSEKEEPING PAD TO BE POURED MONOLITHIC WITH THE UNDERLYING PCC ELECTRICAL SLAB.	SF	\$8.00	65.50	524
14	INSTALL CONCRETE CURB STOPS IN PARKING SPACES PER CONSTRUCTION KEYNOTE 4 ON PLAN SHEET 4, DETAIL B ON SHEET 7, THE SPECIFICATIONS AND ANY ADDENDUM(A).	EACH	\$290.00	2	580
15	INSTALL STEEL BOLLARDS PER CONSTRUCTION KEYNOTE 5 ON PLAN SHEET 4 AND 5, DETAIL A ON SHEET 7, THE SPECIFICATIONS AND ANY ADDENDUM(A).	EACH	\$1,200.00	3	3,600

16	INSTALL GENERATOR PCC PAD PER CONSTRUCTION KEYNOTE 8 ON PLAN SHEET 5, SECTIONS C-C AND D-D ON SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A).	SF	\$40.00	160	6,400
17	INSTALL NATIVE MATERIAL 2 INCHES BELOW THE GENERATOR SET P.C.C. PAD SURFACE AND FLUSH WITH THE GENERATOR SET CLASS 2 BASE SERVICE PAD FOR A HORIZONTAL DISTANCE OF 5 FEET AT THE REQUIRED SLOPE PER CONSTRUCTION KEYNOTE 9 ON PLAN SHEETS 4 AND 5, SECTIONS C-C AND D-D ON SHEET 6, THE SPECIFICATIONS AND ANY ADDENDUM(A).	CYD	\$54.00	8.50	459
18	INSTALL 4-INCH WIDE BLUE HANDICAP STRIPING PER CONSTRUCTION KEYNOTE 10 ON PLAN SHEET 4, THE SPECIFICATIONS AND ANY ADDENDUM(A).	LF	\$7.00	120	840
19	INSTALL BLUE HANDICAP SYMBOLS PER CONSTRUCTION KEYNOTE 11 ON PLAN SHEET 4, THE SPECIFICATIONS AND ANY ADDENDUM(A).	EACH	\$585.00	1	585
20	INSTALL NEW WALL MOUNTED R99C (CA) HANDICAP SIGN R7-8B VAN ACCESSIBLE SIGN PER CONSTRUCTION KEYNOTE 12 ON PLAN SHEET 4. THE SPECIFICATIONS AND ANY ADDENDUM(A).	EACH	\$520.00	1	520
21	INSTALL NEW 4-INCH WIDE WHITE PARKING STRIPING PER CONSTRUCTION KEYNOTE 13 ON PLAN SHEET 4, THE SPECIFICATIONS AND ANY ADDENDUM(A).	LF	\$7.00	21	147

22	INSTALL NEW RISER AND COVER ON THE EXISTING SANITARY SEWER CLEANOUT PER CONSTRUCTION KEYNOTE 15 ON PLAN SHEETS 4 AND 5, DETAIL C ON SHEET 7, THE SPECIFICATIONS AND ANY ADDENDAUM(A).	EACH	\$900.00	1	900
23	EXTEND EXISTING CONDUIT AND CONDUCTORS TO CONNECT TO THE APPROPRIATE NEW ELECTRICAL PANEL PER CONSTRUCTION KEYNOTE 16 ON SHEETS 4 AND 5, THE SPECIFICATIONS AND ANY ADDENDUM(A).	LUMP SUM			500
24	INSTALL NEW 2-INCH BY 6-INCH TREATED HEADER BOARD PER CONSTRUCTION KEYNOTE 18 ON SHEETS 4 AND 5, THE SPECIFICATIONS AND ANY ADDENDUM(A).	LF	\$36.00	64	2,304
25	INSTALL NEW ELECTRICAL PANEL SHADE STRUCTURE PER CONSTRUCTION KEYNOTE 19 ON SHEETS 4 AND 5, DETAIL E ON SHEET 7, THE SPECIFICATIONS AND ANY ADDENDAUM(A).	LUMP SUM			12,750

DEMOLITION WITHIN THE OPERATIONS CONTROL BUILDING AND WALL REPAIRS

26	REMOVE AND DISPOSE OF EXISTING SKID-	LUMP	 	60,000
	MOUNTED PUMP STATION, PIPING,	SUM		
	VALVES, CONTROL PANELS, CIRCUTRY,			
	FIBERGLASS GRATING OVER PIPE CHASE,			
	NON-OPERABLE FIRE FLOW PUMP,			
	ELEVATED FUEL TANK, FITTINGS, 18" X 18"			
	SHEET ROCK WALL SEGMENT, AND ALL			
	OTHER ITEMS PER DEMOLITION			
	KEYNOTES 1 THROUGH 55 EXCEPT FOR			
	KEYNOTES 1, 19, 23 THROUGH 30, 46, 47			
	AND 52 ON SHEET 8, THE SPECIFICATIONS			
	AND ANY ADDENDUM(A).			

27 SAWCUT EXISTING P.C.C. CONCRETE FOR L.F. \$20.00 40 800 THE FULL DEPTH OF PCC CONCRETE PER DEMOLITION KEYNOTE 46 ON SHEET 8, THE SPECIFICATIONS AND ANY ADDENDA. 28 REMOVE AND DISPOSE OF 7 INCH HIGH, 6 CYD \$400.00 1 400 INCH WIDE P.C.C. CONTAINMENT CURB AND P.C.C. CONCRETE FLOOR BETWEEN THE CURB AND THE DEMOLITION SAWCUT LINES PER DEMOLITION KEYNOTE 47 ON SHEET 8, THE SPECIFICATIONS AND ANY

CONSTRUCTION WITHIN THE OPERATIONS CONTROL BUILDING

ADDENDUM(A).

29	INSTALL NEW 18" X 18" SECTIONS OF	LUMP	 	715
	SHEET ROCK ON BOTH SIDES OF THE WALL	SUM		
	PER PIPING REMOVAL AND KEYNOTE 45			
	ON SHEET 8, THE SPECIFICATIONS AND			
	ANY ADDENDUM(A). TAPE, SPACKEL,			
	SAND AND PAINT NEW SHEET ROCK			
	SECTION COMPATABLE WITH EXISTING			
	WALL.			

30

REMOVE EXISTING GROUT PATCHED LUMP -----MATERIAL SURROUNDING THE EXISTING SUM 8-INCH STEEL PIPE AND 18-INCH DUCTILE IRON PIPE TO THE EXISTING MASONRY UNITS IN THE EXTERIOR WEST WALL OF THE OPERATIONS BUILDING. INSTALL PLYWOOD OR STEEL FORMS ON EACH SIDE OF THE MASONRY WALL OPENING THROUGH WHICH THE NEW 8-INCH AND **18-INCH DUCTILE IRON PIPELINES ARE TO** PASS THROUGH. PLACE OR DRILL NO 4 REINFORCING BARS INTO EACH COURSE OF MASONRY WALL UNITS ON THE NORTH AND SOUTH SIDES OF THE OPENING FOR A LENGTH OF 4-INCHES. THE NO. 4 REINFORCING BARS SHALL EXTEND INTO THE OPENING AREA FOR A DISTANCE OF 1-FOOT. SECURE THE PLYWOOD OR STEEL FORMS WITH WHALERS, TIES, AND OTHER SUPPORT MEMBERS. PLACE 7-SACK, 5,500 PSI 3/8-INCH MAXIMUM AGGREGATE CONCRETE WITHIN THE FORMWORK FLUSH WITH THE INTERIOR AND EXTERIOR WALLS AFTER THE NEW PIPING HAS BEEN INSTALLED AND THE FORMWORK IS SECURE. TAMP THE FORM OR VIBRATE THE CONCRETE TO ENSURE THE CONCRETE FULLY OCCUPIES THE VOLUME WITHIN THE FORMWORK AND THE EXTERIOR CONCRETE WALLS ARE SMOOTH AND IN ALIGNMENT WITH THE MASONRY WALLS. COMPLETE THIS ITEM IN ACCORDANCE WITH KEYNOTE 53 ON SHEET 8, THE SPECIFICATIONS AND ANY ADDENDUM(A).

12,500

31	INSTALL PIPELINE SECTIONS AND SPOOLS, REDUCERS, FITTINGS, VALVES, TRANSITION COUPLINGS, PIPE SUPPORTS, BLIND FLANGES AND ALL OTHER PIPELINE COMPONENTS PER THE CONSTRUCTION KEYNOTES ON SHEET 9 WITH THE EXCEPTION OF KEYNOTES 2, 19, 21, 24, 25 AND 26. INCLUDE APPLICATION OF PRIMER COAT TO APPLICABLE PIPING, FITTINGS, ETC. INSTALL PIPING, REDUCERS, FITTINGS, VALVES, ETC. PER PLAN SHEETS 9, 10 AND 11, THE SPECIFICATIONS AND ANY ADDENDUM(A).				380,000
32	INSTALL 6 INCHES OF CLASS 2 BASE MATERIAL IN THE AREA WHERE THE NEW P.C.C. SLAB IS TO BE INSTALLED PER CONSTRUCTION KEYNOTE 19 ON SHEET 9, THE SPECIFICATIONS AND ANY ADDENDUM(A).	TONS	\$70.00	1.50	105
33	INSTALL 6-INCH P.C.C. SLAB WHERE EXISTING P.C.C. CONTAINMENT CURB AND P.C.C. SLAB WAS REMOVED PER CONSTRUCTION KEYNOTE 19 ON SHEET 9, THE SPECIFICATIONS AND ANY ADDENDUM(A).	SF	\$22.00	29	638
34	INSTALL NEW YELLOW FIBERGLASS GRATES PER CONSTRUCTION KEYNOTE 21	SF	\$70.00	168	11,760

ON SHEET 9, DETAIL H ON SHEET 12, THE SPECIFICATIONS AND ANY ADDENDUM(A).

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- 35 REPLACE SECTIONS OF WALL PANELS AS EACH \$800.00 2.00 1,600 NECESSARY AFTER REMOVAL OF PRIOR PIPELINES IN NORTH OPERATIONS **BUILDING WALL. INSTALL SEALANT IN PIPE** OPENING SPACES BETWEEN THE EXTERIOR OF THE NEW PIPE CIRCUMFERENCE AND WALL TO CREATE A SEAL TIGHT CONDITION PER KEYNOTE 2 ON SHEET 9, KEYNOTE 2 OF SECTION E-E ON PLAN SHEET 10, KEYNOTE 10 OF SECTION K-K ON SHEET 11, THE SPECIFICATIONS AND ANY ADDENDUM(A).
- 36 INSTALL ELECTROMAGNETIC LUMP ----- 17,500
 FLOWMETER, CONVERTER, CONTROL AND SUM
 POWER CIRCUITRY AND ALL OTHER
 REQUIRED ITEMS PER KEYNOTE 24 ON
 SHEET 9, TECHNICAL SPECIFICATION
 15400, ALL OTHER SPECIFICATIONS AND
 ANY ADDENDUM(A).
- 37 INSTALL PRESSURE GAUGE WITH BRASS EACH \$800.00 2 1,600 BALL VALVE PER KEYNOTE 25 ON SHEET 9, THE SPECIFICATIONS AND ANY ADDENDUM(A).
- 38 COAT PIPING, FITTINGS, VALVES, PIPE LUMP ----- 14,000 SUPPORTS AND ALL PIPING RELATED SUM ITEMS PER COATING SYSTEM NOTE ON SHEET 9.

39	INSTALL EXISTING FLOW DISCHARGE TUBING FROM THE CHLORINE ANALYZER IN A NEW 1 INCH SCHEDULE 40 PVC PIPELINE EXTENDING TO THE EXISTING SANITARY SEWER PIPELINE AT THE SOUTHWEST CORNER OF THE OPERATIONS BUILDING PER THE NOTES ON SHEET 9, SECTION M-M ON SHEET 12, THE SPECIFICATIONS AND ANY ADDENDUM(A).	LUMP SUM	 	9,500
40	REMOVE AND DISPOSE OF EXISTING 8 INCH PRESSURE RELIEF VALVE. INSTALL NEW 8 INCH PRESSURE RELIEF VALVE PER THE "CALL-OUT" NOTE ON SHEET 9, THE SPECIFICATIONS AND ANY ADDENDUM(A).	LUMP SUM	 	22,000

41 AN EXISTING JUNCTION BOX AND LUMP -----VERTICAL METALLIC CONDUIT EXTENDING SUM FROM THE JUNCTION BOX SHALL BE RELOCATED TO ALLOW THE INSTALLATION OF THE BYPASS PIPE SECTION PER KEYNOTE 6 OF BYPASS PIPE SECTION K-K ON SHEET 11, THE SPECIFICATIONS AND ANY ADDENDUM(A).

42 INSTALL NEW SKID-MOUNTED VARIABLE LUMP -----675,000 ____ FREQUENCY DRIVE BOOSTER PUMPING SUM SYSTEM CAPABLE OF DELIVERING 2,800 GPM AT 70 PSI PER NOTES ON SHEET 9, TECHNICAL SPECIFICATION SECTIONS 01660 AND 15380, ALL OTHER SPECIFICATIONS, ALL OTHER PLANS AND ANY ADDENDUM(A). INCLUDES VARIABLE FREQUENCY DRIVE AND CONTROL AND POWER ELECTRICAL SYSTEM, ELECTRICAL ENCLOSURE, ETC.

1,500

INSTALL A NEW ELECTRICAL SYSTEM INCLUDING THE 277/480 VOLT, 3 PHASE, 4 WIRE, 800 AMP SUM SES PANEL, AUTOMATIC TRANSFER SWITCH AND 3 PHASE AND 1 PHASE LOAD CENTERS. COMPLETE ALL REQUIRED ELECTRICAL WORK PER APPROVED IID CSP AND COORDINATE THE ELECTRICAL WORK WITH THE IID POWER DEPARTMENT. EXISTING ELECTRICAL PANELS AND TRANSFORMERS TO REMAIN OPERABLE ARE TO BE CONNECTED TO THE NEW ELECTRICAL SYSTEM. DISCONNECT EXISTING CIRCUITRY FROM EXISTING ELECTRICAL PANELS AND CONNECT TO THE NEW ELECTRICAL PANELS. INSTALL NEW POWER CIRCUITRY TO THE NEW BOOSTER PUMP STATION ELECTRICAL ENCLOSURE. INSTALL ALARM. MONITORING AND SIGNAL CIRCUITRY FROM THE COMMUNICATION INTERFACE UNIT IN THE PUMP BOOSTER STATION **ELECTRICAL** ENCLOSURE TO THE EXISTING DATA LOGGER AND CLOUD BASED ALARM AND MONITORING SYSTEM IN THE OPERATIONS BUILDING. INSTALL FLOWMETER CONVERTER IN THE BOOSTER PUMP STATION ELECTRICAL ENCLOSURE. INSTALL CIRCUITRY FROM NEW FLOWMETER TO FLOWMETER CONVERTER. INSTALL NEW 350 KW GENERATOR SET. INSTALL NEW GENERATOR SET CONDUITS AND CONDUCTORSFROM THE GENERATOR SET TO THE NEW ATS. INSTALL GENERATOR SET ANNUNCIATOR PANEL AND CIRCUITRY. ASSOCIATED COMPLETE RELOCATION OF EXISTING ELECTRICAL CIRCUITRY AS REQUIRED TO ACCOMODATE NEW FACILITIES CONSTRUCTED FOR THIS PROJECT. COMPLETE OTHER MISCELLANEOUS ELECTRICAL WORK. COMPLETE ALL ELECTRICAL WORK ILLUSTRATED AND REQUIRED ON ELECTRICAL PLAN SHEETS 13, 14 AND 15, CIVIL PLAN SHEETS 1 THROUGH 12, THE SPECIFICATIONS AND ANY ADDENDUM(A). THE 350 KW GENERATOR SET & ATS INSTALLED ESTIMATED COST IS \$310,000. THE ELECTRICAL PANELS & ELECTRICAL CIRCUITRY, ELECTRICAL CONTROL WORK, ETC. ESTIMATED COST IS \$380,000.

LUMP -----

690,000

44	GEOTECHNICAL AND CONCRETE TESTING PER EARTHWORK TECHNICAL SPECIFICATION SECTION 02200, SECTION 3.09 ON PAGE 02200-21 AND 02200-22 AND CAST-IN-PLACE CONCRETE TECHNICAL SPECIFICATION SECTION 03300, SECTION 1.05.A.4 ON PAGE 03300- 6.	-	 	20,000
45	CONSTRUCTION STAKING PER EARTHWORK TECHNICAL SPECIFICATION SECTION 02200, SECTION 3.11 ON PAGE 0200-23.	LUMP SUM	 	13,000
46	EROSION CONTROL	LUMP SUM	 	8,500
47	MAINTAINING WATER TREATMENT PLANT OPERATIONAL DURING THE CONSTRUCTION PERIOD. TEMPORARY PUMPING FACILITIES, TEMPORARY POWER FACILITIES, REQUIRED PUBLIC NOTIFICATIONS, PIPING RECONNECTION FOR EXISTING BOOSTER PUMPS TO TEMPORARY BOOSTER PUMPS AND SIMILAR ITEMS PER SPECIAL CONDITION SECTION 00840-1, REMAINING SPECIFICATIONS, PLANS AND ANY ADDENDUM(A).	LUMP SUM	 	90,000
48	BUILDING GRADING, ENVIRONMENTAL HEALTH PERMIT AND INSPECTION FEES PER SPECIAL CONDITION SECTION 00840- 4.	LUMP SUM	 	30,000

TOTAL ENGINEERS OPINION OF PROBABLE CONSTRUCTION COST	
CONTINGENCY – 10%	
TOTAL	

\$2,391,859.20 \$239,185.92 \$2,631,045.12 NOTE: PER SPECIAL CONDITION SECTION 00840-3, EMERGENCY POWER GENERATOR SET PERMITS, THE COUNTY OF IMPERIAL, AS OWNER OF THE GATEWAY TO THE AMERICAS WATER TREATMENT PLANT, IS TO PAY THE EMERGENCY POWER GENERATOR SET PERMIT FEES TO THE IID AND COUNTY OF IMPERIAL AIR POLLUTION CONTROL DISTRICT.

> PER SPECIAL CONDITIONS SECTION 00840-4, THE CONTRACTOR IS TO PAY THE BUILDING AND GRADING PERMITS, AND ALL COSTS RELATIVE TO THE ENVIRONMENTAL HEALTH, LPA APPROVAL. THE CONTRACTOR IS INSTRUCTED IN SPECIAL CONDITION, SECTION 00840-4, TO INCLUDE \$30,000 IN THE BID PROPOSAL FOR THESE PERMITS AND FEES. THE \$30,000 FEE IS INCLUDED AS ITEM 48 IN THE ABOVE EEOPC.

> THE CONTRACTOR IS TO PAY THE MAJORITY OF THE IID CUSTOMER SERVICE PROPOSAL FEE ESTIMATED TO BE \$40,685. THIS ESTIMATED FEE IS INCLUDED AS ITEM NO. 2 IN THE ABOVE EOOPC.

V. <u>Gateway of the Americas - Water Treatment Plant High Pressure Booster</u> <u>Pump Station Engineers Opinion of Probable Cost</u>

ENGINEERS OPINION OF PROBABLE COST

ltem <u>No</u>	<u>ltem</u>	<u>Unit</u>	Unit <u>Cost</u>	<u>Quantity</u>	<u>Total</u>
1	MOBILIZATION OF EQUIPMENT AND MATERIAL; SUBMITTALS; TAXES; PERFORMANCE BOND; PAYMENT BOND; INSURANCE; POTABLE DRINKING WATER; FREIGHT; COMPLIANCE WITH NEPA/CEQA REQUIREMENTS, AS APPLICABLE; CONDITIONAL USE PERMIT, AS APPLICABLE; GENERAL NOTES ON PLAN SHEET 1; POTHOLING OF EXISTING UNDERGROUND UTILITIES; PROJECT MEETINGS; PROJECT SIGNS; AS APPLICABLE; RESTROOM FACILITIES; TEMPORARY FACILITIES PER TC #01520; PROTECTION OF EXISTING FACILITIES PER TC #01530; SITE ACCESS AND STORAGE PER TC #01550; PROJECT CLOSEOUT PER TC #01700; OPERATION AND MAINTENANCE MANUALS PER TC #01730; AS-BUILT DRAWING PREPARATION PER TC #01783 AND ITEMS NOT INCLUDED WITH THE REMAINING BID ITEM LIST.				320,000
2	IMPERIAL IRRIGATION DISTRICT CUSTOMER SERVICE PROPOSAL (CSP) -	-			78,000

ANTICIPATED COST

3	REMOVE AND DISPOSE OF EXISTING P.C.C. SIDEWALK AND P.C.C. SLAB.	CYD	\$50.00	14	700
4	REMOVE AND DISPOSE OF EXISTING NATIVE MATERIAL AND EXISTING UNDERLYING MATERIAL BENEATH P.C.C. SIDEWALK AND P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB TO SUB- BASE DESIGN GRADE.	CYD	\$40.00	96	3,840
5	REMOVE AND DISPOSE OF EXISTING P.C.C. PARKING CURB STOP.	EACH	\$23.00	2	46
6	REMOVE AND DISPOSE OF EXISTING WALL MOUNTED HANDICAP PARKING SIGN.	EACH	\$10.00	1	10
7	SCARIFY AND COMPACT THE EXISTING NATIVE MATERIAL FOR A DEPTH OF 12- INCHES BENEATH NEW P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB AND NEW P.C.C. GENERATOR SET SLAB.	SF	\$2.40	2,158	5,179
CONST	RUCTION WITHIN THE PARKING LOT AND GEN	ERATOR	SET AREAS		
8	INSTALL NATIVE MATERIAL WITHIN THE GENERATOR SET GRADING PLAN AREA TO SUB-BASE DESIGN GRADE.	CYD	\$54.00	3	162
9	INSTALL GRANULAR SAND MATERIAL TO SUB-BASE DESIGN GRADE BENEATH NEW P.C.C. SIDEWALK .	TONS	\$60.00	3.50	210

10	INSTALL CLASS 2 BASE MATERIAL TO SUB- BASE DESIGN GRADE BENEATH NEW P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB, NEW P.C.C. GENERATOR PAD, FINISH GRADE AT GENERATOR SET SERVICE PAD AREAS AND CLASS 2 BASE AREA AROUND THE NEW P.C.C. PARKING LOT/DELIVERY/ELECTRICAL SLAB.	TONS	\$70.00	188	13,160
11	INSTALL 8-INCH REINFORCED P.C.C CONCRETE PARKING LOT/DELIVERY/ELECTRICAL SLAB.	SF	\$24.00	1,546	37,104
12	INSTALL 4-INCH P.C.C SIDEWALK PER CONSTRUCTION KEYNOTE 2 ON PLAN SHEET 4.	SF	\$16.00	96	1,536
13	INSTALL 3 INCH ADDITIONAL ELECTRICAL PANEL HOUSEKEEPING P.C.C. PAD OVER 8 INCH UNDERLYING PCC ELECTRICAL SLAB.	SF	\$8.00	65.50	524
14	INSTALL CONCRETE CURB STOPS IN PARKING SPACES.	EACH	\$290.00	2	580
15	INSTALL STEEL BOLLARDS.	EACH	\$1,200.00	3	3,600
16	INSTALL GENERATOR PCC PAD.	SF	\$40.00	250	10,000
17	INSTALL NATIVE MATERIAL 2 INCHES BELOW THE GENERATOR SET P.C.C. PAD SURFACE AND FLUSH WITH THE GENERATOR SET CLASS 2 BASE SERVICE PAD FOR A HORIZONTAL DISTANCE OF 5 FEET AT THE REQUIRED SLOPE.	CYD	\$54.00	14.00	756

18	INSTALL 4-INCH WIDE BLUE HANDICAP STRIPING.	LF	\$7.00	120	840
19	INSTALL BLUE HANDICAP SYMBOLS.	EACH	\$585.00	1	585
20	INSTALL NEW WALL MOUNTED R99C (CA) HANDICAP SIGN R7-8B VAN ACCESSIBLE SIGN.	EACH	\$520.00	1	520
21	INSTALL NEW 4-INCH WIDE WHITE PARKING STRIPING.	LF	\$7.00	21	147
22	INSTALL NEW RISER AND COVER ON THE EXISTING SANITARY SEWER CLEANOUT.	EACH	\$900.00	1	900
23	EXTEND EXISTING CONDUIT AND CONDUCTORS TO CONNECT TO THE APPROPRIATE NEW ELECTRICAL PANEL.	LUMP SUM			500
24	INSTALL NEW 2-INCH BY 6-INCH TREATED HEADER BOARD.	LF	\$36.00	64	2,304
25	INSTALL NEW ELECTRICAL PANEL SHADE STRUCTURE.	LUMP SUM			12,750

DEMOLITION WITHIN THE OPERATIONS CONTROL BUILDING AND WALL REPAIRS

26	REMOVE AND DISPOSE OF EXISTING SKID-	LUMP	 	60,000
	MOUNTED PUMP STATION, PIPING,	SUM		
	VALVES, CONTROL PANELS, CIRCUTRY,			
	FIBERGLASS GRATING OVER PIPE CHASE,			
	NON-OPERABLE FIRE FLOW PUMP,			
	ELEVATED FUEL TANK, FITTINGS, 18" X 18"			
	SHEET ROCK WALL SEGMENT, AND ALL			
	OTHER ITEMS.			

27	SAWCUT EXISTING P.C.C. CONCRETE FOR THE FULL DEPTH OF PCC CONCRETE.	L.F.	\$20.00	40	800
28	REMOVE AND DISPOSE OF 7 INCH HIGH, 6 INCH WIDE P.C.C. CONTAINMENT CURB AND P.C.C. CONCRETE FLOOR BETWEEN THE CURB AND THE DEMOLITION SAWCUT LINES.	CYD	\$400.00	1	400

CONSTRUCTION WITHIN THE OPERATIONS CONTROL BUILDING

29	INSTALL NEW 18" X 18" SECTIONS OF	LUMP	 	715
	SHEET ROCK ON BOTH SIDES OF THE WALL	SUM		
	AFTER PIPE REMOVAL. TAPE, SPACKEL,			
	SAND AND PAINT NEW SHEET ROCK			
	SECTION COMPATABLE WITH EXISTING			
	WALL.			

30

REMOVE EXISTING GROUT PATCHED LUMP -----MATERIAL SURROUNDING THE EXISTING SUM 8-INCH STEEL PIPE AND 18-INCH DUCTILE IRON PIPE TO THE EXISTING MASONRY UNITS IN THE EXTERIOR WEST WALL OF THE OPERATIONS BUILDING. INSTALL PLYWOOD OR STEEL FORMS ON EACH SIDE OF THE MASONRY WALL OPENING THROUGH WHICH THE NEW 8-INCH AND **18-INCH DUCTILE IRON PIPELINES ARE TO** PASS THROUGH. PLACE OR DRILL NO 4 REINFORCING BARS INTO EACH COURSE OF MASONRY WALL UNITS ON THE NORTH AND SOUTH SIDES OF THE OPENING FOR A LENGTH OF 4-INCHES. THE NO. 4 REINFORCING BARS SHALL EXTEND INTO THE OPENING AREA FOR A DISTANCE OF 1-FOOT. SECURE THE PLYWOOD OR STEEL FORMS WITH WHALERS, TIES, AND OTHER SUPPORT MEMBERS. PLACE 7-SACK, 5,500 PSI 3/8-INCH MAXIMUM AGGREGATE CONCRETE WITHIN THE FORMWORK FLUSH WITH THE INTERIOR AND EXTERIOR WALLS AFTER THE NEW PIPING HAS BEEN INSTALLED AND THE FORMWORK IS SECURE. TAMP THE FORM OR VIBRATE THE CONCRETE TO ENSURE THE CONCRETE FULLY OCCUPIES THE VOLUME WITHIN THE FORMWORK AND THE EXTERIOR CONCRETE WALLS ARE SMOOTH AND IN ALIGNMENT WITH THE MASONRY WALLS.

12,500

31	INSTALL PIPELINE SECTIONS AND SPOOLS, REDUCERS, FITTINGS, VALVES, TRANSITION COUPLINGS, PIPE SUPPORTS, BLIND FLANGES AND ALL OTHER PIPELINE COMPONENTS. INCLUDE APPLICATION OF PRIMER COAT TO APPLICABLE PIPING, FITTINGS, ETC.				380,000
32	INSTALL 6 INCHES OF CLASS 2 BASE MATERIAL IN THE AREA WHERE THE NEW P.C.C. SLAB IS TO BE INSTALLED.	TONS	\$70.00	1.50	105
33	INSTALL 6-INCH P.C.C. SLAB WHERE EXISTING P.C.C. CONTAINMENT CURB AND P.C.C. SLAB WAS REMOVED.	SF	\$22.00	29	638
34	INSTALL NEW YELLOW FIBERGLASS GRATES.	SF	\$70.00	168	11,760
35	REPLACE SECTIONS OF WALL PANELS AS NECESSARY AFTER REMOVAL OF PRIOR PIPELINES IN NORTH OPERATIONS BUILDING WALL. INSTALL SEALANT IN PIPE OPENING SPACES BETWEEN THE EXTERIOR OF THE NEW PIPE CIRCUMFERENCE AND WALL TO CREATE A SEAL TIGHT CONDITION.	EACH	\$800.00	2.00	1,600
36	INSTALL ELECTROMAGNETIC FLOWMETER, CONVERTER, CONTROL AND POWER CIRCUITRY AND ALL OTHER REQUIRED ITEM.				17,500
37	INSTALL PRESSURE GAUGE WITH BRASS BALL VALVE.	EACH	\$800.00	2	1,600

38	COAT PIPING, FITTINGS, VALVES, PIPE SUPPORTS AND ALL PIPING RELATED ITEMS.		 	14,000
39	INSTALL EXISTING FLOW DISCHARGE TUBING FROM THE CHLORINE ANALYZER IN A NEW 1 INCH SCHEDULE 40 PVC PIPELINE EXTENDING TO THE EXISTING SANITARY SEWER PIPELINE AT THE SOUTHWEST CORNER OF THE OPERATIONS BUILDING.		 	9,500
40	REMOVE AND DISPOSE OF EXISTING 8 INCH PRESSURE RELIEF VALVE. INSTALL NEW 8 INCH PRESSURE RELIEF VALVE.		 	22,000
41	AN EXISTING JUNCTION BOX AND VERTICAL METALLIC CONDUIT EXTENDING FROM THE JUNCTION BOX SHALL BE RELOCATED TO ALLOW THE INSTALLATION OF THE BYPASS PIPE SECTION.	-	 	1,500
42	INSTALL NEW SKID-MOUNTED VARIABLE FREQUENCY DRIVE BOOSTER PUMPING SYSTEM CAPABLE OF DELIVERING 2,800 GPM AT 150 PSI. INCLUDES VARIABLE FREQUENCY DRIVE AND CONTROL AND POWER ELECTRICAL SYSTEM, ELECTRICAL ENCLOSURE, ETC.	-	 	790,000

INSTALL A NEW ELECTRICAL SYSTEM INCLUDING THE 277/480 VOLT, 3 PHASE, 4 WIRE, 1,600 AMP SUM SES PANEL, AUTOMATIC TRANSFER SWITCH AND 3 PHASE AND 1 PHASE LOAD CENTERS. COMPLETE ALL REQUIRED ELECTRICAL WORK PER APPROVED IID CSP AND COORDINATE THE ELECTRICAL WORK WITH THE IID POWER DEPARTMENT. EXISTING ELECTRICAL PANELS AND TRANSFORMERS TO REMAIN OPERABLE ARE TO BE CONNECTED TO THE NEW ELECTRICAL SYSTEM. DISCONNECT EXISTING CIRCUITRY FROM EXISTING ELECTRICAL PANELS AND CONNECT TO THE NEW ELECTRICAL PANELS. INSTALL NEW POWER CIRCUITRY TO THE NEW BOOSTER PUMP STATION ELECTRICAL ENCLOSURE. INSTALL ALARM. MONITORING AND SIGNAL CIRCUITRY FROM THE COMMUNICATION INTERFACE UNIT IN THE PUMP BOOSTER STATION ELECTRICAL ENCLOSURE TO THE EXISTING DATA LOGGER AND CLOUD BASED ALARM AND MONITORING SYSTEM IN THE OPERATIONS BUILDING. INSTALL FLOWMETER CONVERTER IN THE BOOSTER PUMP STATION ELECTRICAL ENCLOSURE. INSTALL CIRCUITRY FROM NEW FLOWMETER TO FLOWMETER CONVERTER. INSTALL NEW 800 KW GENERATOR SET. INSTALL NEW GENERATOR SET CONDUITS AND CONDUCTORSFROM THE GENERATOR SET TO THE NEW ATS. INSTALL GENERATOR SET ANNUNCIATOR PANEL AND CIRCUITRY. ASSOCIATED COMPLETE RELOCATION OF EXISTING ELECTRICAL CIRCUITRY AS REQUIRED TO ACCOMODATE NEW FACILITIES CONSTRUCTED FOR THIS PROJECT. COMPLETE OTHER MISCELLANEOUS ELECTRICAL WORK. THE NEW 800 KW **GENERATOR SET & ATS INSTALLED ESTIMATED** COST IS \$480,000. THE ELECTRICAL PANELS & ELECTRICAL CIRCUITRY, ELECTRICAL CONTROL WORK, ETC. ESTIMATED COST IS \$490,000.

LUMP -----

970,000

44	GEOTECHNICAL AND CONCRETE TESTING PER EARTHWORK TECHNICAL SPECIFICATION SECTION 02200, SECTION 3.09 ON PAGE 02200-21 AND 02200-22 AND CAST-IN-PLACE CONCRETE TECHNICAL SPECIFICATION SECTION 03300, SECTION 1.05.A.4 ON PAGE 03300- 6.		 	20,000
45	CONSTRUCTION STAKING PER EARTHWORK TECHNICAL SPECIFICATION SECTION 02200, SECTION 3.11 ON PAGE 0200-23.	LUMP SUM	 	13,000
46	EROSION CONTROL	LUMP SUM	 	8,500
47	MAINTAINING WATER TREATMENT PLANT OPERATIONAL DURING THE CONSTRUCTION PERIOD. TEMPORARY PUMPING FACILITIES, TEMPORARY POWER FACILITIES, REQUIRED PUBLIC NOTIFICATIONS, PIPING RECONNECTION FOR EXISTING BOOSTER PUMPS TO TEMPORARY BOOSTER PUMPS AND SIMILAR ITEMS PER SPECIAL CONDITION SECTION 00840-1, REMAINING SPECIFICATIONS, PLANS AND ANY ADDENDUM(A).	LUMP SUM	 	90,000
48	BUILDING GRADING, ENVIRONMENTAL HEALTH PERMIT AND INSPECTION FEES PER SPECIAL CONDITION SECTION 00840- 4.	LUMP SUM	 	30,000

TOTAL ENGINEERS OPINION OF PROBABLE CONSTRUCTION COST	\$2,950,071.20
CONTINGENCY – 10%	\$295,007.12
TOTAL	\$3,245,078.32

NOTE: PER SPECIAL CONDITION SECTION 00840-3, EMERGENCY POWER GENERATOR SET PERMITS, THE COUNTY OF IMPERIAL, AS OWNER OF THE GATEWAY TO THE AMERICAS WATER TREATMENT PLANT, IS TO PAY THE EMERGENCY POWER GENERATOR SET PERMIT FEES TO THE IID AND COUNTY OF IMPERIAL AIR POLLUTION CONTROL DISTRICT.

> PER SPECIAL CONDITIONS SECTION 00840-4, THE CONTRACTOR IS TO PAY THE BUILDING AND GRADING PERMITS, AND ALL COSTS RELATIVE TO THE ENVIRONMENTAL HEALTH, LPA APPROVAL. THE CONTRACTOR IS INSTRUCTED IN SPECIAL CONDITION, SECTION 00840-4, TO INCLUDE \$30,000 IN THE BID PROPOSAL FOR THESE PERMITS AND FEES. THE \$30,000 FEE IS INCLUDED AS ITEM 48 IN THE ABOVE EEOPC.

> THE CONTRACTOR IS TO PAY THE MAJORITY OF THE IID CUSTOMER SERVICE PROPOSAL FEE ESTIMATED TO BE \$78,000. THIS ESTIMATED FEE IS INCLUDED AS ITEM NO. 2 IN THE ABOVE EOOPC.

VI. <u>Gateway of the Americas – Existing Water Distribution System Pressure Testing</u> and Pipeline Improvement Project Engineers Opinion of Probable Cost

An EOOPC to pressure test, chlorinate and repair/replace the pipeline system for that portion of the Gateway water distribution system to operate at a pressure of 150 psi on a continuous basis is presented below. The condition of the existing piping, valves, fittings and other pipe components is not known and therefore the below EOOPC is speculative and is not considered verifiably accurate. Worst case conditions will be assumed such as most valves and fittings require replacement. The EOOPC will attempt therefore to error on the high cost side of the pressure testing and pipeline improvement work required for this item of the Technical Memorandum.

ENGINEERS OPINION OF PROBABLE COST -PRESSURE TEST AND REPAIR/REPLACE A PORTION OF THE WATER DISTRIBUTION SYSTEM

ltem <u>No.</u>	<u>ltem</u>	<u>Unit</u>	Unit <u>Cost</u>	<u>Quantity</u>	<u>Total</u>
1	Pressure test sections of of the water distribution system. Place bypass pipeline "high line" sections to maintain the remainder of the water distribution system in service while the isolated section of pipeline is hydrostatically tested and disinfected. Excave each end of the pipeline segments. Replace valves, fittings, and all other pipeline components which fail during the hydrostatic pressure testing. Complete sawcutting, pavement removal and disposal, pipeline removal and disposal, new pipeline and fitting replacement, backfilling	Each	\$160,000	12	1,920,000

ltem <u>No.</u>	<u>ltem</u>	<u>Unit</u>	Unit <u>Cost</u>	<u>Quantity</u>	<u>Total</u>
	and compaction and) replacement of pcc infrastructure and A.C. pavement. Maintain traffic Control during pipeline excavations, repairs and backfilli Obtain Encroachment Permits fro the County of Imperial and Caltrans, as required.	ng.			
2.	Install pressure reduction valves to isolate the water distribution pipeline system to be pressured to 150 psi from the pipeline system to be pressured at a lower pressure.	Each	\$105,000	5	525,000
			Subto	otal	\$2,445,00
			Contingency	v 15%	<u>\$366,750</u>
				Total	\$2,811,750

VII. Low Pressure Booster Pump Station & High Pressure Booster Pump Station Cost Summary

The Section IV Low Pressure Booster Pump Station cost, including a 10 percent contingency is 2,631,045.12. The Section V High Pressure Booster Pump Station cost, including a 10 percent contingency is 3,245,078.32. Section VI, the existing water distribution system pressure testing and pipeline improvement project is 2,811,750. The High Pressure Booster Pump Station requires that the water distribution system pressure testing and pipeline improvements be completed prior to the activation of the High Pressure Booster Pump Station. The total cost of the High Pressure Booster Pump Station system pressure testing and pipeline improvements becompleted prior to the activation of the High Pressure Booster Pump Station. The total cost of the High Pressure Booster Pump Station system pressure testing and pipeline improvements is 3,245,078.32 + 2,811,750 = 6,056,828.32. See the table below:

High Pressure P.S. EOOPC w/10% Contingency	Water Distribution Pressure Testing <u>& Improvements</u>	High Pressure P.S. + Water Distribution Pressure Testing & Improvements
\$3,245,078.32	\$2,811,750	<u>\$6,056,828.32</u>

The difference between the High Pressure Booster Pump Station with water distribution system pressure testing and pipeline improvements and Low Pressure Booster Pump Station costs is 6,056,828.32 - 2,631,045.12 = 3,425,783.20. See the table below:

High Pressure P.S + Water Distribution Pressure Testing & Improvements	Low Pressure P.S. EOOPC w/10% <u>Contingency</u>	Difference between Low Pressure P.S. and High Pressure P.S. + Water Distribution Pressure Testing <u>& Improvements</u>
\$6,056,828.32	\$2,631,045.12	<u>\$3,425,783.20</u>

Many of the High Pressure and Low Pressure Variable Frequency Drive Pump Station item costs are the identical or nearly identical. The costs for the demolition of the parking area and construction of the new parking area, water treatment plant piping demolition and new piping installation, new magnetic flowmeter installation, maintaining the water treatment plant operational during the construction period and most cost estimate line items are identical or nearly identical.

The major water treatment plant related cost differences between the High Pressure and Low Pressure Variable Frequency Drive Pump Station project costs are primarily due to the Generator and Transfer Switches, Electrical Switch Gear, IID CSP Costs and Variable Frequency Drive Booster Pump Station. The most impactful and significant cost difference between the High Pressure and Low Pressure Variable Frequency Drive Pump Stations is the need to pressure test the existing water distribution pipeline sections to be subject to a sustained 150 psi pressure prior to activating the High Pressure Variable Frequency Drive Pump Station.

VIII. <u>Schedule for remaining Design</u>, <u>Bidding and Construction of Low Pressure</u> <u>Booster Pump Station</u>

Item	Item	Schedule
1	ICDPW TO FINISH PLAN CHECK REVIEW. REVISE PLANS & SPECS TO A FINAL APPROVED STATUS.	4/10/23 — 5/19/23
2	PLANS TO BE SUBMITTED TO IMPERIAL COUNTY HEALTH DEPARTMENT FOR REVIEW AND APPROVAL. REVISE PLANS AND SPECS TO A FINAL APPROVED STATUS.	4/10/23 – 5/19/23
3	COUNTY OF IMPERIAL LEGAL COUNCIL TO REVIEW AND APPROVE SPECIFICATIONS AND PLANS.	5/19/23 – 6/15/23
4	COUNTY BOARD OF SUPERVISORS TO APPROVE PROJECT FOR BIDDING	6/27/23
5	PROJECT BIDDING PERIOD	7/12/23 - 8/30/23
6	COUNTY OF IMPERIAL TO REVIEW BID DOCUMENTS & RECOMMEND AWARD OF CONSTRUCTION	8/31/23 – 9/12/23
7	COUNTY BOARD OF SUPERVISORS TO APPROVE AWARD OF CONSTRUCTION ISSUANCE	9/26/23
8	AWARD OF CONSTRUCTION ISSUANCE. REVIEW OF CONTRACTOR BONDS, INSURANCE DOCUMENTS. APPROVAL OF BONDS AND INSURANCE DOCUMENTS BY COUNTY COUNCIL. APPROVAL TO ENTER INTO AGREEMENT WITH CONTRACTOR	9/27/23 – 10/13/23
9	ISSUANCE OF NOTICE TO PROCEED TO	10/17/23

CONTRACTOR. CONTRACTOR START WORK 10 DAYS AFTER THE ISSUANCE OF THE NOTICE TO PROCEED.

- 10CONSTRUCTION START DATE10/27/23
- 11 CONSTRUCTION SUBMITTAL REVIEW PERIOD 10/28/23 TO 12/15/23
- 12 WAITING PERIOD FOR DELIVERY OF PIPING, 12/16/23 TO VALVES, SKID MOUNTED VARIABLE SPEED 8/28/24 PUMP STATION, ELECTRICAL PANELS, EMERGENCY POWER GENERATOR SET AND AUTOMATIC TRANSFER SWITCH.
- 13COMPLETION OF DEMOLITION AND OTHER
MINOR CONSTRUCTION ITEMS12/16/23 TO
8/28/24
- 14COMPLETION OF MAJOR CONSTRUCTION9/9/24 TOWORK. BYPASS OF WTP POTABLE WATER12/6/24FLOW, POWERING WTP WITH EMERGENCYPOWER GENERATOR SET. INSTALLATIONOF SKID MOUNTED VARIABLE SPEEDBOOSTER PUMP STATION; PIPING, FITTINGSANDVALVES; ELECTRICAL PANELS;EMERGENCY POWER GENERATOR SETAND AUTOMATIC TRANSFER SWITCH.
- 15COMPLETE START UP, FINAL ELECTRICAL12/6/24 TOCONTROL WORK, FINAL PROJECT REVIEW12/20/24AND COMPLETION OF PUNCH LIST ITEMS.12/20/24
- 16PROJECT COMPLETION DATE12/20/24

IX. <u>Schedule for Design</u>, <u>Bidding and Construction of High Pressure Booster Pump</u> <u>Station</u>

Item	Item	Schedule
1	COMPLETE PREPARATION OF PLANS, SPECS AND COST ESTIMATE FOR THE HIGH PRESSURE BOOSTER PUMP STATION.	4/10/23 – 8/11/23
2	90 PERCENT WTP PLANS TO BE SUBMITTED TO IMPERIAL COUNTY HEALTH DEPARTMENT FOR REVIEW AND APPROVAL. REVISE PLANS AND SPECS TO A FINAL APPROVED STATUS.	6/9/23 - 8/11/23
3	30 PERCENT WTP PLANS AND CSP APPLICATION TO BE SUBMITTED TO IID ELECTRICAL DEPARTMENT. IID TO PREPARE CSP DESIGN PLANS.	4/20/23 – 10/6/23
4	90 PERCENT WTP IMPROVEMENT PLANS TO BE SUBMITTED TO ICDPW FOR PLAN CHECK REVIEW. REVISE PLANS AND SPECIFICATIONS TO A FINAL APPROVED STATUS.	6/9/23 – 8/11/23
5	FORWARD FINAL APROVED WTP PLANS AND SPECIFICATIONS TO COUNTY OF IMPERIAL LEGAL COUNCIL FOR REVIEW AND APPROVAL.	8/14/23 — 9/8/23
6	COUNTY STAFF TO PREPARE STAFF REPORTS & OTHER DOCUMENTS TO PLACE APPROVAL TO ADVERTISE PROJECT FOR BIDDING ON COUNTY BOARD OF SUPERVISORS AGENDA.	9/11/23 – 9/25/23
4	COUNTY BOARD OF SUPERVISORS TO APPROVE WTP IMPROVEMENT PROJECT FOR BIDDING	9/26/23

5	WTP IMPROVEMENT PROJECT BIDDING PERIOD	9/27/23 – 11/9/23
6	COUNTY OF IMPERIAL TO REVIEW BID DOCUMENTS & RECOMMEND AWARD OF CONSTRUCTION FOR THE WTP PROJECT	11/10/23 – 11/28/23
7	COUNTY BOARD OF SUPERVISORS TO APPROVE AWARD OF CONSTRUCTION ISSUANCE TO CONTRACTOR.	12/12/23
8	AWARD OF CONSTRUCTION ISSUANCE. REVIEW OF CONTRACTOR BONDS, INSURANCE DOCUMENTS. APPROVAL OF BONDS AND INSURANCE DOCUMENTS BY COUNTY COUNCIL. APPROVAL TO ENTER INTO AGREEMENT WITH CONTRACTOR	12/13/23 – 1/9/24
9	ISSUANCE OF NOTICE TO PROCEED TO CONTRACTOR. CONTRACTOR START WORK 10 DAYS AFTER THE ISSUANCE OF THE NOTICE TO PROCEED.	1/10/24
10	CONSTRUCTION START DATE	1/11/24
11	CONSTRUCTION SUBMITTAL REVIEW PERIOD	1/11/24 TO 3/15/24
12	WAITING PERIOD FOR DELIVERY OF PIPING, VALVES, SKID MOUNTED VARIABLE SPEED PUMP STATION, ELECTRICAL PANELS, EMERGENCY POWER GENERATOR SET AND AUTOMATIC TRANSFER SWITCH.	3/18/24 TO 11/15/24
13	COMPLETION OF DEMOLITION AND OTHER MINOR CONSTRUCTION ITEMS	3/18/24 TO 11/15/24
14	COMPLETION OF MAJOR CONSTRUCTION WORK. BYPASS OF WTP POTABLE WATER FLOW, POWERING WTP WITH EMERGENCY POWER GENERATOR SET. INSTALLATION OF SKID MOUNTED VARIABLE SPEED	11/18/24 TO 3/6/25

BOOSTER PUMP STATION; PIPING, FITTINGS AND VALVES; ELECTRICAL PANELS; EMERGENCY POWER GENERATOR SET AND AUTOMATIC TRANSFER SWITCH.

- 15COMPLETE START UP, FINAL ELECTRICAL3/6/25 TOCONTROL WORK, FINAL PROJECT REVIEW3/21/25AND COMPLETION OF PUNCH LIST ITEMS.
- 16WATER TREATMENT PLANT3/21/25PROJECT COMPLETION DATE3/21/25

X. <u>Schedule for Gateway Water Distribution System Pressure Testing and Pipeline</u> <u>Rehabilitation Project</u>

ltem	Item	Schedule
1	COMPLETE UPDATED GATEWAY OF THE AMERICAS WATER DISTRIBUTION SYSTEM MAP.	4/10/23 – 5/26/23
2	COMPLETE PREPARATION OF PLANS, SPECS AND COST ESTIMATE FOR THE PRESSURE TESTING OF PORTIONS OF THE GATEWAY WATER DISTRIBUTION SYSTEM AFTER THE WATER DISTRIBUTION MAP IS COMPLETED.	5/30/23 – 7/30/23
3	FORWARD PLANS TO ICDPW FOR PLAN CHECK REVIEW.	7/30/23 – 8/23/23
4	WATER DISTRIBUTION PRESSURE TESTING PLANS, SPECS AND COST ESTIMATE TO BE COMPLETED TO A FINAL APPROVED STATUS.	8/24/23 – 9/22/23
5	FORWARD WATER DISTRIBUTION PRESSURE TESTING PLANS, SPECS AND COST ESTIMATE TO THE COUNTY LEGAL COUNCIL FOR REVIEW AND APPROVAL.	9/25/23 – 10/17/23
6	COUNTY BOARD OF SUPERVISORS TO APPROVE PROJECT FOR BIDDING.	11/14/23
7	WATER DISTRIBUTION PRESSURE TESTING PROJECT BIDDING PERIOD.	11/14/23 – 12/19/23
8	COUNTY OF IMPERIAL TO REVIEW BID DOCUMENTS & RECOMMEND AWARD OF CONSTRUCTION FOR THE PROJECT.	12/20/23 – 1/12/24

- 9 COUNTY BOARD OF SUPERVISORS 2/6/24 TO APPROVE AWARD OF CONSTRUCTION FOR THE WATER DISTRIBUTION SYSTEM PRESSURE TESTING AND PIPELINE REHABILITATION PROJECT TO THE CONTRACTOR.
- 10 AWARD OF CONTRACT TO BE FORWARDED 2/7/24 2/22/24 TO THE CONTRACTOR FOR THE WATER DISTRIBUTION SYSTEM PRESSURE TESTING PROJECT. REVIEW OF CONTRACTOR BONDS AND INSURANCE DOCUMENTS. APPROVAL OF BONDS AND INSURANCE DOCUMENTS, BY COUNTY COUNCIL. APPROVAL TO ENTER INTO AGREEMENT WITH THE CONTRACTOR RECEIVED BY COUNTY COUNCIL.
- 11.ISSUANCE OF NOTICE TO PROCEED FOR
THE PROJECT. CONTRACTOR TO START
WORK 10 DAYS AFTER THE ISSUANCE OF
THE NOTICE TO PROCEED.2/23/24
- 12. CONSTRUCTION START DATE FOR THE 3/4/24 WATER DISTRIBUTION SYSTEM PRESSURE TESTING PROJECT.
- 13. CONSTRUCTION SUBMITTAL REVIEW PERIOD. 3/5/24 3/26/24
- 14. A WAITING PERIOD WILL OCCUR WHILE THE 3/27/24 9/26/24 CONTRACTOR OBTAINS VALVES, FITTINGS, PRESSURE REDUCTION FITTINGS, TRANSITION COUPLINGS AND OTHER PIPING MATERIALS FOR THE WATER DISTRIBUTION SYSTEM PRESSURE TESTING AND REHABILITATION PROJECT.
- 15. CONTRACTOR TO COMPLETE PRESSURE 9/27/24 2/21/25 TESTING AND PIPELINE REHABILITATION IMPROVEMENTS FOR THE WATER DISTRIBUTION SYSTEM PRESSURE TESTING PROJECT.

2/21/25

16. WATER DISTRIBUTION SYSTEM PRESSURE TESTING AND PIPELINE REHABILITATION PROJECT COMPLETION DATE.

XI. Summary

The following Gateway Water Treatment Plant Low Pressure and High Pressure Booster Pump Station Options, Electrical and Emergency Power Generator Set observations and conclusions are presented as follows:

- The Low Pressure Booster Pump Station design plans, specifications and cost estimates have been prepared and are ready for ICDPW plan check review. The IID Customer Service Proposal (CSP) is complete, except for paying for the CSP construction phase fees. The 2,700 GPM @ 70 psi variable frequency drive booster pump station, 800 amp service entrance section panel and 350 Kw Emergency Power Generator Set updated construction cost estimate is \$2,631,045.12. See Technical Report Section IV for the detail cost estimate.
- 2. Supply Chain issues continue to plague portions of the construction industry. Emergency power generator sets, and electrical service panels are taking between 8 to 9 months after an <u>approved submittal</u>. The delivery lag of these and other construction items severely impacts the construction schedules for both the Low Pressure Booster Pump Station Project or the High Pressure Booster Pump Station Project.
- The Low Pressure Booster Pump Station schedule VII illustrates a project completion date for the Low Pressure Booster Pump Station Project of December 20th, 2024.
- 4. The Imperial County Public Works Department requested that a Technical Report be prepared to review the viability and cost of constructing a High Pressure Booster Pump Station Project in lieu of a Low Pressure Booster Pump Station Project. The High Pressure Booster Pump Station would provide a flow of 2,800 GPM at 150 psi to the Gateway water distribution pipeline system. The High Pressure Booster Pump Station would provide a point of connection pressure of 100 psi to Industrial Facilities with fire sprinklers systems requiring high pressures.
- 5. A portion of the Gateway of the Americas water distribution pipeline system was constructed around the year 2000 and is now 23 years old. From conversations with a pipeline contractor who recently excavated portions of the existing pipeline

system and the Gateway Water Treatment Plant operators, it is their opinion that the existing water distribution system could not withstand a continuous, sustained pressure of 150 psi from the proposed High Pressure Booster Pump Station.

6. To increase the working pressure of all, or a portion of the Gateway water distribution pipeline system to 150 psi, it would be necessary to pressure test those sections of the water distribution system to operate at 150 psi pressure. The pressure testing would likely result in pipeline improvements in order for the pipeline section to operate at 150 psi pressure. The Gateway Technical Report recommends that only a portion of the Gateway water distribution pipeline system operate at 150 psi pressure. It would be necessary to install pressure reduction valves to isolate the 150 psi water distribution system pipelines from the lower pressure water distribution system pipelines.

It was recommended that the pressure testing of the Gateway water distribution pipeline system be completed as a separate project, and not a part of the Gateway Water Treatment Plant High Pressure Booster Pump Station Project. The Technical Report noted that it was not possible to determine the condition of the existing water distribution system to be operated at a pressure of 150 psi prior to pressure testing the distribution system. The Technical Report noted that it was not possible to determine a precise cost for improving the pipeline sections to operate at 150 psi pressure. The Technical Report did include a conservative cost for the pipeline improvements resulting from pressure testing based on worse case conditions.

It was estimated that the cost to pressure test and improve a portion of the Gateway water distribution pipeline system to operate at a working pressure of 150 psi would be \$2,811,750. Due to pipeline supply chain issues, the Section IX schedule indicated the gateway water distribution pipeline sections to operate at 150 psi would be pressure tested, improved and operational on February 21, 2025.

- 7. The High Pressure Booster Pump Station Project, including a variable frequency drive booster pump station capable of conveying 2,800 gallons per minute at 150 psi to the Gateway water distribution system, 1600 Amp service entrance section panel and an 800 Kw Emergency Power Generator Set was is estimated to cost \$3,245,078.32 in Section V of the Technical Report and be completed and fully operational on March 21, 2025 in Section IX of the Technical Report.
- 8. The High Pressure Booster Pump Station Project requires pressure testing and improvements to a portion of the existing Gateway water distribution pipeline system and its associated costs. The total cost of the High Pressure Booster Pump Station Project including the necessary water distribution pipeline system pressure testing and improvements is \$6,056,828.32 as included in Section VII of the Technical Report. Section VII also notes that the High Pressure Pump Station Project and Gateway water distribution pressure testing and pipeline improvements are more expensive that the Low Pressure Pump Station Improvements by \$3,425,783.20.

APPENDIX A

GATEWAY OF THE AMERICAS WATER DISTRIBUTION SYSTEM MAP WITH PROPOSED PRESSURE REDUCTION STATIONS

