

THE CITY OF LEMOORE
711 W. CINNAMON DRIVE
LEMOORE, CA 93245
March 5, 2019

THE CITY OF LEMOORE
WATER TREATMENT PLANT PROJECT

Addendum No. 4

This addendum forms a part of the Request for Qualifications (“RFQ”) seeking Statements of Qualifications (“SOQ”) from design-build teams to design and construct a water treatment plant (the “Project”). It modifies the original RFQ to incorporate answers to questions raised through February 28, 2019.

Questions and Answers

1. We would ask that the Fee Proposal be excluded from the page count as it is not typically included with alternative delivery proposals.(Page 8, F. Fee Proposal)

The City will not apply a strict page count. Instead, staff has expressed a desire that the proposal be short and concise, preferably under 30 pages total.

2. Preconstruction Fee relative to design phase - encompassing 70%? Full design effort? Including development of the GMP? The assumption is that 30% of the Engineering cost will be contained within the GMP and not captured within the preconstruction fee itself. (Section F, Item I)

The Preconstruction Fee is intended to compensate the selected Design-Builder for all services provided through approval of the GMP. Design fees for completing the final 30% will be included in the GMP.

3. Please clarify the nature/attribution of the Home Office Overhead and Profit Fee. Specifically, that the percentage requested is for the design-build entity only and excludes all other expenses (specifically engineering fees). (Section F, Item II)

The City intends the Home Office Overhead and Profit Fee to include all other expenses (excluding the actual base construction cost.) Any fees or costs not included in the Home Office Overhead and Profit Fee must be clearly identified.

4. Please issue a Microsoft Word (.doc) version of the contract. This will allow proposers to red line (track changes) edits and makes reviewing by the City easier overall.

Document is attached.

5. Traditionally, fees for alternative delivery projects in the past only include home office overhead and profit. On occasion they will include the cost of the bond. We would ask that

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you amend subsection ii to remove the following items, which are all variable based on the outcome of the preconstruction phase itself:

- a) Office labor cost (assuming this is a project based office, if not it should already be covered in home office overhead)
- b) Fringe benefits (this is based on labor dollars, not revenue so cannot be determined without adding a contingency which drives up the final project cost,
- c) Bonds (does this include subcontractors bonds? In the past we make joint decisions with the owner as to which subs to bond, to create a best value opportunity),
- d) Insurance (some insurance such as work comp are based on labor dollars not revenue dollars, similar to the fringe benefits), and
- e) General conditions (general conditions are a direct cost to the project and a cost that together with the owner can be reduced by effective partnering during preconstruction. To include this cost now would eliminate a potential savings on the project). (Page 8 Section F. Fee Proposal subsection ii)

There will be no changes to this item on the RFQ.

6. The Proposal Fee is worth 20%, please explain how this will be determined as there are two different numbers being requested. Will they be weighted differently? What is the unit of measurement? The Proposal fee (worth 20% of the scoring criteria) is comprised of the (i) Preconstruction Fee and (ii) Home Office Overhead and Profit Fee percentage. Of the 20% weighting, what is the individual weighting of the two items (I) and (II). [Section 6, Evaluation (Starting Page 9); and Subsection F, Items i and II (starting Page 8)]

The City will evaluate the Preconstruction Fee and Home Office Overhead and Profit Fee Percentages equally. Each Fee will receive 10% of the total weight.

7. Potentially 12 of the 30 pages in the SOOS will be dedicated to Project Approach, yet it appears there is no scoring given to this section. Please explain how this section will be evaluated; the total number of points allotted to this section as a whole and any potential sub-scoring or weighting that will occur when reviewing individual sub-items. (Section C, Page 7, Approach)

The Project Approach will not receive its own score. However, the information provided will be considered when evaluating the other factors as applicable.

8. Do 11 x 17 pages count as a single page if folded to achieve the target 8.5" x 11" size?

See question 1 above. The City has no preference between 11 x 17 and 8.5 x 11 size pages.

9. Traditionally, resumes fall outside of a procurement's page count in order to provide proposers to page count necessary to fully illustrate the team offered. Request that resumes be removed from the page count and be included as an appendix item.(Page 7, B. Project Team)

See question 1 above.

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10. Clarify what role Industrial Automation Group will play and limits of their scope/capabilities. Will they be providing the same proposal to all teams? How well do they know the City's existing systems?

Their proposal will be provided to all teams and it is attached to this Addendum. Industrial Automation installed SCADA for the City of Lemoore in 2017-2018.

11. Is CEQA documentation or any environmental permitting part of respondent's scope of work? Page 5 of RFQ says "being prepared by others". Page 32, Scope Summary, appears to include environmental approvals as part of respondent's scope. If by others, who is preparing it? If by the respondent, please clarify current state of CEQA documentation.

Notwithstanding page 5 of the RFQ, the CEQA documentation will be completed by the selected Design-Builder. The City has not yet commenced preparation of CEQA documentation.

12. What does the City envision for design workshops? At what milestones, and who will attend and provide input? This question is critical as it affects the scope and cost of the preconstruction fee proposal and thus could either positively (in the case of a proposer who provided the very minimum preconstruction services scope) or negatively (for a proposer who provides a fully partnered preconstruction services scope) affect the proposer's 20% scoring in this section. (Page 8, F. Fee Proposal)

The City envisions a quarterly workshop.

13. 100% approval by City Council is before we go to outside agencies (fire, building, DDW, etc.) for approvals. What if they require changes? Do we have to go to council again?

If changes are required to the Project after Council approval, the revisions may need to be approved/ratified depending on the nature of the changes and their impact on the GMP.

14. Are any permanent easements anticipated to be needed?

No.

15. Confirm AdEdge can provide the performance guarantee?

AdEdge will develop and provide a written process performance guarantee that will govern the technology for performance of the full scale system(s). It will lay out the treatment objectives and goals and performance monitoring to help assess that during the operation.

16. RFP says DDW was presented the proposed treatment project. Any documentation or details of that discussion?

Attached are the comments from the DDW.

17. Can design fee be calculated with fully burdened billing rates? How is the fee proposal evaluation category scored? Purely on lowest cost or "best value" basis, and in what way?

Design fees should be consistent with the RFQ and the City will score the fee proposal based on the best value considering the total cost and resources provided.

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18. Can Carollo's 3D model files be made available?

Yes, 3D model files can be made available.

19. Station 11 - New Pump Station to 40 G St Reservoirs: Clarify is this part of project?

Yes, it is part of the project.

20. Construction cannot begin until all permits/approvals secured at 100%. Any flexibility for early start of site civil work and buried utilities so we can compress the schedule? (Agreement Item)

The City may consider commencement before all permits/approvals are secured depending on the nature of the work.

21. For projects awarded on a best value basis such as design-build or construction manager at risk (CMAR), it is common practice to evaluate technical and cost proposals separately. Typically, the technical proposal is reviewed and scored before the cost proposal is opened and reviewed for final scoring. We would like to request that the cost proposal be submitted separately from the technical proposal in a sealed envelope and not count against the 30-page limit. This would allow for the standard separate scoring process.

The Fee Proposal may be submitted in a sealed envelope but the City reserves the right to review it simultaneously with the SOQ consistent with the RFQ.

22. Please confirm that it is acceptable to provide Project Team members' resumes as an attachment to the proposal not counting against the page limit.

See question 1 above.

23. Please confirm that it is acceptable use 11x17 sized pages within the body of the proposal to provide oversized information such as the Project Team organization chart.

The City has no preference between 11 x 17 and 8.5 x 11 size pages.

24. Please confirm that it is acceptable to provide additional project-related information such as drawings and the schedule as attachments to the proposal not counting against the page limit.

See question 1 above.

25. Why is the Well 7 plant sized for 3500 gpm when the well capacities that will supply the plant only add up to 3050 gpm?

The City has the ability to move water from other wells through a common blend line. We also want to oversize our treatment plants to allow for future growth.

26. Per BODR design criteria, why is there no standby booster pump? (Well 7)

Booster pumps will be added to well site # 11. Well site #7 will use existing booster pumps.

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27. Can we get further data regarding the statement in paragraph 3.4 that the plant will not operate at full capacity? (Well 7)

The City has the ability to move water from other wells through a common blend line. We also want to oversize our treatment plants to allow for future growth.

28. From a safety perspective, why did AdEdge combine the ozone generator with the control room? (Well 7)

Adge will be available at the March 6 meeting to answer question.

29. Can we be provided any further data on process design details regarding DBP removal and piloting results?(Well 7)

Adge will be available at the March 6, meeting to answer question.

30. Is CEQA documentation or any environmental permitting part of respondent's scope of work? Page 5 of RFQ says "being prepared by others". Page 32, Scope Summary, appears to include environmental approvals as part of respondent's scope. If by others, who is preparing it?(Page 32, Scope Summary)

Notwithstanding page 5 of the RFQ, the CEQA documentation will be completed by the selected Design-Builder. The City has not yet commenced preparation of CEQA documentation.

31. The footnote for Table 13 indicates that the plant is being designed with the intent of operating 55% of the time. How many times will the plant be started and shutdown over the period of a year? (Table 13)

It is the cities intent that the treatment plants will be running at 100%. Currently there is not a demand of 100% especially in the winter months.

32. Why is the Well 11 WTP sized for 7500 gpm, when the well capacities that will supply the plant only add up to 5820 gpm?

The City has the ability to move water from other wells through a common blend line. We also want to oversize our treatment plants to allow for future growth.

33. Please confirm that Construction GMP is to be agreed upon after award and that Construction Costs are not to be included in the SOQ

Yes.

34. The insurance requirements call out for \$5,000,000 in E&O and 10 years continued coverage. The industry standard is \$2,000,000. Can these requirements be reduced to the \$2,000,000 and a reduction in continued coverage be given?

Design-Builders who are unable to meet the E&O insurance requirements must specify what coverage may be provided. The City, in its discretion, will determine whether less coverage may be authorized when evaluating the SOQ.

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35. The Arsenic Absorber equipment shown on figure 16 / station 11 is not mentioned in the scope of supply for AdEdge. Is the relevant cost included in the total cost of the equipment supplied for station 11? If not, please advise.

This will be discussed with AdEdge at the March 6 meeting.

36. Please provide the pending info from Air Products or Praxair for LOX storage and GOX delivery unit at both 7 and 11 stations.

Depending on what supplier is chosen, a supplier will have to be picked during the Design/Build phase their equipment will determine the final plans and specs for the final design for both sites.

37. Please confirm that with the extension of the 70% design milestone to 115 days that the 100% design milestone is till an additional 30 days and that the contract time remains at 460 calendar days.

Yes.

38. Please confirm that the costs for Temporary Facilities, General Requirements, and Supervision is to be included in the Preconstruction Fee. It seems these costs should be part of the GMP as they are construction related costs and are not needed for the design phase.

The costs associated with the temporary facilities, general requirements, and supervision should be factored into the Home Office Overhead and Profit Fee Percentage. These percentage will then be used when calculating the GMP (see Section V(f)(ii).) These costs should not be included in the Preconstruction Fee.

39. Article I. A. of the agreement refers to an approved pilot program. Can a copy of the approved pilot program be made available to the bidders?

This will be discussed with AdEdge at the March 6 meeting.

40. Can the information on the raw water quality be made available to the bidders?

Yes, the raw water quality is attached.

41. Can the CAD files for both site be released to the bidders?

Yes, CAD files to be released.

END OF ADDENDUM

City of Lemoore - Station 7 Well Analyses

Water Systems Engineering, Inc.

Report Date: 05 Jan 17

Values denoted in Red Font & Cell are above or below the WQ Limit on right

Updated: 04 Jun 18

Updated: 11 Jun 18	Units	Well No. 7	Well No. 13	Well No. 14	Weighted Average	WQ Limit (MCL, etc.)
Flow Rate	gpm	750	1,150	1,150	3,050	= Total Flow
pH	SU	9.15	9.10	8.91	9.04	8.80
Electrical Cond'y	µS/cm					
ORP	mV	192.7	73.8	85.9	107.6	
Total Dissolved Solids	mg/L	516	518	524	520	
Langelier Sat. Index		0.04	-0.56	0.12	-0.16	-0.50
^A Turbidity	NTU	4.8	4.2	3.1	3.9	2.5
Alkalinity, Carbonate	mg/L	8	8	8	8	
Alkalinity, Bicarbonate	mg/L	256	292	268	274	
Alkalinity, Total	mg/L	264	300	276	282	
^A Ammonia as NH ₃	mg/L	0.27	0.30	0.46	0.35	0.50
^A Arsenic	ug/L	2.1	2.0	1.0	1.6	9.0
^A Boron	mg/L	0.47	0.46		0.29	
Bromide	mg/L	0.45	0.44	0.47	0.45	0.3
Calcium	mg/L	4	2	8	5	
Chloride	mg/L	96	95	99	97	
Hardness	mg/L	4	4	12	7	
Iron, Dissolved	ug/L	15	15	15	15	300
Iron, Suspended	ug/L	5	50	70	46	
Magnesium	mg/L	2	4	4	4	
Manganese	ug/L	10	10	10	10	50
Nitrate as NO ₃ -N	mg/L	0.5	0.5	0.5	0.5	10.0
Phosphate as PO ₄	mg/L	0.34	0.46	0.37	0.40	0.80
Potassium	mg/L	0.8	0.5	0.5	0.6	
Silica as SiO ₂	mg/L	24.6	19.6	24.9	22.8	40.0
Sodium	mg/L	159	155	163	159	
Sulfate	mg/L	2	2	2	2	
Color	SU	28	27	23	26	15
Tannin/Lignin	mg/L	1.0	0.9	0.9	0.9	
Total Organic Carbon	mg/L	1.6	4.9	2.4	3.1	1.2
Plate Count	colonies/mL	>1,500	>1,500	>1,500		
Anaerobic Growth	%	15	<10	<10		

^A Analyses from Earlier Reports (BSK, 09 May 16, etc.) - All Values in Red except for Flags

City of Lemoore - Station 11 Well Analyses

Water Systems Engineering, Inc.

Report Date: 05 Jan 17

Values denoted in **Red Font & Cell** are above or below the WQ Limit on right

Updated: 04 Jun 18

Updated: 11 Jun 18	Units	Well No. 4	Well No. 5	Well No. 6	Well No. 10	Well No. 11	Weighted Average	WQ Limit (MCL, etc.)
Flow Rate	gpm	1,850	1,850	1,100	2,500	800	8,100	= Total Flow
pH	SU	9.17	9.20	9.20	8.89	8.94	9.07	8.80
Electrical Cond'y	µS/cm	373	500	481	617	434	498	
ORP	mV	Need Wells 4-6 Data			200.6	204.9	#VALUE!	
Total Dissolved Solids	mg/L	259	170	299	444	312	306	
Langelier Sat. Index					-0.32	-0.20	-0.12	-0.50
^A Turbidity	NTU	1.9	2.2	2.4	5.6	6.1	3.6	2.5
Alkalinity, Carbonate	mg/L				24	16	9	
Alkalinity, Bicarbonate	mg/L	201		293	180	220	163	
Alkalinity, Total	mg/L	175	117	210	204	236	181	
^A Ammonia as NH ₃	mg/L	0.10	0.20	0.09	0.45	0.34	0.25	0.50
^A Arsenic	ug/L	15.4	24.8	7.4	5.7	10.8	13.0	9.0
^A Boron	mg/L	0.45		0.51	0.50	0.43	0.37	
Bromide	mg/L	0.12	0.01	0.09	0.27	0.16	0.14	0.3
Calcium	mg/L	2	2	2	4	4	3	
Chloride	mg/L	39		30	76	44	41	
Hardness	mg/L	4	1	3	4	4	3	
Iron, Dissolved	ug/L	220		220	70	15	103	300
Iron, Suspended	ug/L				190	80	67	
Magnesium	mg/L				2	2	1	
Manganese	ug/L				10	10	4	50
Nitrate as NO ₃ -N	mg/L	2.2		1.5	0.4	0.8	0.9	10.0
Phosphate as PO ₄	mg/L				1.30	0.83	0.48	0.80
Potassium	mg/L	0.5	0.6	1.8	0.6	0.6	0.7	
Silica as SiO ₂	mg/L	33.0			21.9	28.6	17.1	40.0
Sodium	mg/L	86		111	133	105	86	
Sulfate	mg/L	9		8	2	2	4	
Sulfide	ug/L							0.5
Color	SU	19	16	33	45	52	32	15
Tannin/Lignin	mg/L				1.0	1.1	0.4	
Total Organic Carbon	mg/L	0.7	0.4	1.2	1.9	1.3	1.1	1.2
Plate Count	colonies/mL				60	>1,500		
Anaerobic Growth	%				<10	<10		

^A Analyses from Earlier Reports (BSK, 09 May 16, etc.) - All Values in Red except for Flags

State Water Resources Control Board

Division of Drinking Water

March 22, 2018

Mr. Nathan Olson, City Manager
City of Lemoore – 1610005
711 W. Cinnamon Drive
Lemoore, CA 95834

Dear Mr. Olson:

REVIEW COMMENTS FOR: CITY RESPONSE TO DDW COMMENTS – CITY OF LEMOORE TTHM REMOVAL

The City of Lemoore's (City) public water system is required to achieve regulatory compliance for Total Trihalomethane (TTHM) MCL as required in TTHM Compliance Order (CO) No. 03-12-14R-004 that was issued on October 27, 2014. The original compliance deadline was October 31, 2017. This deadline was extended on November 2, 2017 via CO Amendment No. 03_12_17R_007_A1 to **October 31, 2018**.

The State Water Resources Control Board – Division of Drinking Water (Division) local office, Visalia District, and the Division's Water Treatment Committee (WTC) has received and reviewed the City March 5, 2018 City Response to DDW Comments – City of Lemoore TTHM Removal (Letter) to the Division.

Based on the City's Letter, it is the Division's impression that the City of Lemoore (including the City Council) has decided to select the piloted AdEdge treatment solution (ATS) as the City's treatment train to return the City's water system back to compliance for TTHMs.

For the record, the City has received recommendations from their City Engineers (QK), Corona Environmental Consulting, Division, and the Division's WTC to conduct additional testing to address concerns about the ATS and to explore if a simpler more cost effective treatment solution is available. The Division also made it clear that additional time would be granted to the CO if the City pursued these recommendations. The City's Letter indicates that the City is confident that the ATS will achieve TTHM MCL compliance and does not seem interested in further evaluations or conducting cost analysis of other potential treatment solutions, such as the Armona treatment plant that was recently toured.

It is the Division's understanding that the City will be self-funding this project 100% and that no State funds will be requested or used in the construction or operation of this project. The requirements provided below are based on this assumption. If for some reason this is incorrect, then the Division will have a greater role in the evaluation and selection of the treatment technology due to the use of State funds.

The Division has the following responses to the City's Letter:

Pilot Setup/Treatment Process/Sample Results Concerns

1. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
2. Provide 4-log virus inactivation following the biological treatment and filtration processes. The effluent turbidity of 0.3 NTU or less based on continuous turbidity monitoring recorded at 15 minute intervals will not be required at this time.
3. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
4. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
5. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
6. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
7. No comment, the City is responsible to be in compliance with all disinfection byproducts (DBP's) by October 31, 2018.
8. Post pH adjustment to raw water levels, approximately 9 is required.
9. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
10. No comment, however, the City is required to employ chief and shift operators that possess valid and appropriately classified operator certificates in accordance with the classification of the distribution system and treatment plant(s). Facility classification is determined in accordance with Title 22 California Code of Regulation (CCR) Section 64413.1, Classification of Water Treatment Facilities and Section 64413.3, Classification of Distribution Systems. As stated previously, the ATS treatment plants are anticipated to be classified as T4 plants that will require full time T4 treatment operators.
11. HPCs of less than 500 cfu/ml entering the distribution system will be required.
12. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
13. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.
14. Online nitrate analyzers will not be required at this time. However, nitrate grab sampling will be required. The sampling frequency will be determined at start-up and modified when appropriate based on sampling results.
15. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.

16. No comment, the City is responsible to achieve and maintain TTHM MCL compliance by October 31, 2018.

Wastewater Concerns

1. No comment, the City is responsible to be in compliance with the City's wastewater discharge permit.
2. No comment, the City is responsible to be in compliance with the City's wastewater discharge permit.
3. No comment, the City is responsible to be in compliance with the City's wastewater discharge permit.

Cost Concerns

1. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
2. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
3. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
4. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
5. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
6. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
7. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
8. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.
9. No comment since the City is self-funding this project 100% with no Division funds for construction or operation.

In summary, the Division will require the following conditions at this time for the ATS:

1. The treated effluent must meet all DBP MCLs to provide an adequate safety margin to account for additional formation in the distribution system, including the TTHM and bromate MCLs.
2. Provide 4-log virus inactivation following the biological treatment and filtration processes.
3. Post pH adjustment to raw water levels, approximately 9.

4. Since there is pH adjustment, a corrosion control study will be required in accordance with CCR Article 5, Corrosion Control, §64683 Corrosion Control Study Procedure. This will also require the City to conduct 2 rounds of 6 month lead and copper rule monitoring.
5. HPCs of less than 500 cfu/ml entering the distribution system.
6. The wastewater generated from treatment must comply with the City's wastewater discharge permit.
7. The ATS treatment plants are anticipated to be classified as T4 plants, which will require full time T4 treatment operators.

The Division reserves the right to revise requirements at a future date. It is common for the Division to add permit conditions during the start-up period for operation of new treatment plants, especially for new, treatment trains that are not already permitted in California. The City should anticipate a start-up process that will require the new treatment plants to run to waste until the Division approves their operation and delivery of compliant water to the distribution system. The permit conditions will be determined and finalized during commissioning.

Many typical items will be required in the future as this project progresses through all of the typical steps working towards receiving a permit amendment from the Division to operate and serve compliant water to distribution system.

The next steps are for the City to submit an updated CAP, a current schedule, and a statement of the project roles and responsibilities of the City, Carollo, and Adedge. As part of the CAP, the City is also required to submit project plans, specifications, and a draft operations plan to the Division for review and approval. The Division will schedule the next project meeting with the City after review of the submitted CAP and schedule. The Division anticipates only needing to meet with the City to discuss the submitted documents.

If you have any questions regarding this letter, please contact Eli McFarland at (559) 447-7101 or eli.mcfarland@waterboards.ca.gov.

Sincerely,



Carl L. Carlucci, P.E.
Supervising Sanitary Engineer, Central California Section
SOUTHERN CALIFORNIA BRANCH
DRINKING WATER FIELD OPERATIONS

District webpage: http://www.waterboards.ca.gov/drinking_water/programs/districts/visalia_district.shtml

CLC/EM

cc: Tricia A. Wathen, P.E., Senior Sanitary Engineer, Visalia District
Kings County Environmental Health Department
Greg Gilles, Vice President, with AdEdge Technologies
Penny Carlo, Associate Vice President, with Carollo Engineers

Support Quotation

Subject City of Lemoore Water Treatment Plant
Quotation Id Q-[IAG0163](#)
Date 3/5/2019
Customer

Introduction

This correspondence outlines the complete scope of work you requested, including estimated fees.

Scope of Services The scope of this quotation is based on past work performed for City of Lemoore and our subsequent discussions. Our services include programming and design to redevelop the Adedge HMI screens in Ignition as well as establish communications with Station 7 & 11. The system hardware will consist of (1) new GE MDS radio that will be connected to the existing controls network. Electrical installation and materials will be included in this quotation as a value added option.

1. Programming Support (Phase 1)
 - 1.1. Establish wireless communications for Station 11 via the GE MDS radio
 - 1.1.1. See Option 1 for electrical installation pricing
 - 1.2. Establish ethernet communications for Station 7
 - 1.2.1. Ethernet connectivity must be established prior to Automation Group performing any work to integrate the Station into the controls network
 - 1.3. Use the Adedge design template for the HMI screens to design, develop, and implement ten (10) screens for use in Ignition
 - 1.4. Update the given IP addresses for the OEM equipment provided by Adedge
 - 1.5. Add historical data for the user-defined tags
 - 1.6. Carry over security protocols that are currently in place on the controls network
2. Commissioning (Phase 2)
 - 2.1. Implement all programming and controls network changes
 - 2.2. Perform a Site Acceptance Test with required Adedge and City personnel
 - 2.3. Sixty (60) hours of on-site commissioning support is included for Phase 2 of the Water Treatment Plant project

Option 1

1. Electrical Installation
 - 1.1. Install antenna tower for the GE MDS radio
 - 1.2. Install Radio enclosure and verify connectivity to the antenna
 - 1.3. Antenna tower must be mounted on an existing structure to ensure Line of Sight and the proper antenna height

Hardware

1. (1) NEMA4X Fiberglass Enclosure
 - 1.1. (1) GE MDS Radio, 900mHz
 - 1.2. (1) YAGI Antenna, 10dB
 - 1.3. (1) Lightning Arrestor
 - 1.4. (1) 24VDC Power Supply

Schedule

This project is expected to be completed 6-8 weeks after receipt of purchase order. A firm schedule will be developed upon order acceptance.

Cost and fees

Controls Engineering	11,820.00
Hardware	4,798.00
Commissioning	7,200.00
Total (Less tax & freight)	23,818.00

Option 1

Terms A 50% deposit is required before we begin. Progress payments will be billed monthly to 90%. The balance of 10% is due upon completion. Net due in 30 days. A 1.5% service charge per month after 30 days of invoice (18%APR).

Exclusions Any electrical installation and materials.
Any tax or freight charges that may apply.
Any project permits.
Any warranty other than that stated in our "Standard Terms and Conditions."
Any work performed outside of normal business hours i.e. nights, weekends, holidays.
Any additional labor due to delays by other contractors or customer personnel.
Any devices or services not specifically listed above.
Additional devices or services will be added by submitting change estimates for your approval.

Responsibilities Ultimate success is highly dependent on your efforts and cooperation. To help achieve a successful control system implementation, it will be your responsibility to perform the following:

1. Provide key personnel as required
2. Provide accurate schedule information
3. Provide accurate drawings and updates when applicable
4. Provide scaling information for all instrumentation

Closing We appreciate the opportunity to offer you this quotation for your consideration. Please call with any questions.
Sincerely,
Bryce S. Philpot