

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is entered into this ____ day of _____ 2016, between the CITY OF STOCKTON, a municipal corporation ("City"), and HDR Engineering, Inc, whose address is 2365 Iron Point Road, Suite 300, Folsom, CA 95630 ("Consultant") for THE ASSET MANAGEMENT AND MASTER PLAN FOR THE GRAVITY SANITARY SEWER COLLECTION SYSTEM.

RECITALS

- A. Consultant is qualified to and experienced in providing Engineering Services for the purposes specified in this Agreement.
- B. City finds it necessary and advisable to use the services of the Consultant for the purposes provided in this Agreement.

NOW THEREFORE, in consideration of the mutual covenants and conditions in this Agreement, City and Consultant agree as follows:

1. **Consultant's Services.** Subject to the terms and conditions set forth in this Agreement, Consultant shall provide to City the services described in the Scope of Work (Exhibit A) Consultant shall provide said services at that time, place and in the manner specified in Exhibit A
2. **City Assistance, Facilities, Equipment and Clerical Support.** Except as set forth in Exhibit A, Consultant shall, at its sole cost and expense, furnish all facilities and equipment that may be required for furnishing services pursuant to this Agreement. City shall furnish to Consultant only the facilities and equipment listed in Exhibit A according to the terms and conditions set forth in Exhibit A.
3. **Term.** This Agreement shall commence on receiving of Notice To Proceed and according to Project Schedule (Exhibit C); provided, however the parties may agree to change either the commencement or expiration date.
4. **Compensation.** City shall pay Consultant for services rendered pursuant to this Agreement as described more particularly in Attachment A. The payments shall be made on a monthly basis upon receipt and approval of Consultant's invoice. Total compensation for services and reimbursement for costs shall not exceed \$332,000 per Fee Schedule (Exhibit B and B-1)
 - a. Invoices submitted by Consultant to City must contain a brief description of work performed, time used and City reference number. Payment shall be made within thirty (30) days of receipt of Consultant's invoice and approved by City.

- b. Upon completion of work and acceptance by City, Consultant shall have sixty (60) days in which to submit final invoicing for payment. An extension may be granted by City upon receiving a written request thirty (30) days in advance of said time limitation. The City shall have no obligation or liability to pay any invoice for work performed which the Consultant fails or neglects to submit within sixty (60) days, or any extension thereof granted by the City, after the work is accepted by the City.

5. Sufficiency of Consultant's Work. All reports, drawings, designs, plan review comments and work product of Consultant shall be adequate and sufficient to meet the purposes for which they are prepared.

6. Ownership of Work. All reports, drawings, designs, plan review comments, work product, and all other documents completed or partially completed by Consultant in the performance of this Agreement shall become the property of the City. Any and all copyrightable subject matter in all materials is hereby assigned to the City and the Consultant agrees to execute any additional documents that may be necessary to evidence such assignment. All materials shall be delivered to the City upon completion or termination of the work under this Agreement. If any materials are lost, damaged or destroyed before final delivery to the City, the Consultant shall replace them at its own expense. Consultant shall keep materials confidential. Materials shall not be used for purposes other than performance of services under this Agreement and shall not be disclosed to anyone not connected with these services, unless the City provides prior written consent.

7. Changes. City may request changes in the scope of services to be provided by Consultant. Any changes and related fees shall be mutually agreed upon between the parties and subject to a written amendment to this Agreement.

8. Consultant's Status. In performing the obligations set forth in this Agreement, Consultant shall have the status of an independent contractor and Consultant shall not be considered to be an employee of the City for any purpose. All persons working for or under the direction of Consultant are its agents and employees and are not agents or employees of City.

9. Termination for Convenience of City. The City may terminate this Agreement at any time by mailing a notice in writing to Consultant. The Agreement shall then be deemed terminated, and no further work shall be performed by Consultant. If the Agreement is so terminated, the Consultant shall be paid for that percentage of the work actually completed at the time the notice of termination is received.

10. Non-Assignability. The Consultant shall not assign, sublet, or transfer this Agreement or any interest or obligation in the Agreement without the prior written consent of the City, and then only upon such terms and conditions as City may

set forth in writing. Consultant shall be solely responsible for reimbursing subcontractors.

11. Indemnity and Hold Harmless. Design Professional agrees to indemnify, including the cost to defend, entity and its officers, officials, employees, and volunteers from and against any and all claims, demands, costs, or liability that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of Design Professional and its employees or agents in the performance of services under this contract, but this indemnity does not apply to liability for damages arising from the sole negligence, active negligence, or willful acts of the Public Entity; and does not apply to any passive negligence of the Public Entity unless caused at least in part by the Design Professional.

12. Insurance. During the term of this Agreement, Consultant shall maintain in full force and effect at its own cost and expense the insurance coverage as set forth in the attached Insurance Requirements (Exhibit D) and shall otherwise comply with the other provisions of Exhibit D.

13. Notices. All notices herein required shall be in writing and shall be sent by certified or registered mail, postage prepaid, addressed as follows:

To Consultant: HDR Engineering Inc. 2365 Iron Point Road Suite 300 Folsom, CA 95630 Attn: Alex Palmatier	To City: City of Stockton 2500 Navy Drive Stockton, CA 95206 Attn: Teri Chapa
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14. Conformance to Applicable Laws. Consultant shall comply with all applicable Federal, State, and Municipal laws, rules, and ordinances. Consultant shall not discriminate in the employment of persons or in the provision of services under this Agreement on the basis of any legally protected classification, including race, color, national origin, ancestry, sex or religion of such person.

15. Licenses, Certifications and Permits. Prior to the City's execution of this Agreement and prior to the Consultant's engaging in any operation or activity set forth in this Agreement, Consultant shall obtain a City of Stockton business license, which must be kept in effect during the term of this Agreement. Consultant covenants that it has obtained all certificates, licenses, permits and the like required to perform the services under this Agreement.

16. Records and Audits. Consultant shall maintain all records regarding this Agreement and the services performed for a period of three years from the date that final payment is made. At any time during normal business hours, the records shall be made available to the City to inspect and audit.

17. Confidentiality. Consultant shall exercise reasonable precautions to prevent the unauthorized disclosure and use of City reports, information or conclusions.

18. Conflicts of Interest. Consultant covenants that other than this Agreement, Consultant has no financial interest with any official, employee or other representative of the City. Consultant and its principals do not have any financial interest in real property, sources of income or investment that would be affected in any manner of degree by the performance of Consultant's services under this Agreement. If such an interest arises, Consultant will immediately notify the City.

19. Waiver. In the event either City or Consultant at any time waive any breach of this Agreement by the other, such waiver shall not constitute a waiver of any other or succeeding breach of this Agreement, whether of the same or of any other covenant, condition or obligation.

20. Governing Law. California law shall govern any legal action pursuant to this Agreement with venue for all claims in the Superior Court of the County of San Joaquin, Stockton Branch or, where applicable, in the federal District Court of California, Northern District, Sacramento Division.

21. No Personal Liability. No official or employee of City shall be personally liable to Consultant in the event of any default or breach by the City or for any amount due Consultant.

22. Exhibits. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.

23. Scope of Agreement. This writing constitutes the entire Agreement between the parties. Any modification to the Agreement shall be in writing and signed by both parties.

THIS AGREEMENT executed the date and year first above written.

CITY OF STOCKTON

CONSULTANT

City Manager

By:

Signature

Print name

Title:

VICE PRESIDENT

ATTEST:

City Clerk

[Note: If Consultant is a corporation
signature(s) must comply with
Cal. Corporations Code §313.]

APPROVED AS TO FORM:

City Attorney

CERTIFICATE

The undersigned hereby certifies that she is the Assistant Secretary of HDR Engineering, Inc., a Nebraska corporation (the "Corporation"), and that, as such, has custody of the minute books of the Corporation, and that, by Consent and Agreement of the Board of Directors dated May 18, 2016, the following resolution was unanimously adopted:

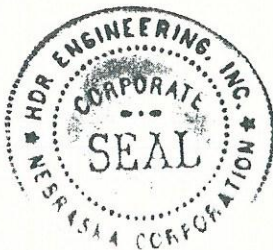
"RESOLVED, that effective immediately, and until June 20, 2017, or until termination of said individual from the Corporation, or until rescission by the Corporation's Board of Directors, whichever occurs first, the following individuals are hereby granted the nondelegable authority to execute or approve on behalf of the Corporation, contracts for engineering services and architectural services incidental to engineering services to be rendered by the Corporation, . . . , or releases of claim or lien in connection with such services, such contracts or releases so executed or approved shall be binding upon the Corporation:

. . . Holly L. Kennedy - Vice President . . .
. . . Graham D. Sharpe - Vice President . . ."

The undersigned further certifies that the foregoing resolution has been spread in full upon the minute books of the Corporation and is in full force and effect.

DATED June 16, 2016.

(CORPORATE SEAL)




Laurie S. Vik, Assistant Secretary

EXHIBIT A SCOPE OF WORK

City of Stockton

Asset Management and Master Plan for the Gravity Sanitary Sewer Collection System (PUR 16-001)

This scope of work describes the consulting services to be provided by HDR Engineering, Inc., and its subcontractors collectively ("Consultant") to the City of Stockton Municipal Utilities Department (The City) for asset management and master plan for the gravity sanitary sewer collection system. Services will include the following tasks:

TASK 1 - PROJECT PLANNING, COMMUNICATION, AND MANAGEMENT

Task 1.1 – Project Management and Coordination

Activities to manage and administer the work, including project management, preparation of monthly progress reports, maintenance of a project schedule as directed by the City, overall coordination, and coordination with other tasks (including input) are included in each of the tasks of this project. The activities associated with project management include the following:

CONSULTANT RESPONSIBILITIES

- Prepare project control plan and updates.
- Develop project schedule for the Consultant project team and City staff members participating in contract activities.
- Provide project management and project administrative support.
- Be responsible for the management and coordination of the work defined in this scope, as directed by the City, including the labor and expenses associated with project tracking, scheduling, technical consultation, and quality control services for this work. Some of the deliverables will require information from other tasks.
- Provide monthly invoices with summary and percentages of work completed by task.
- Maintain project files.
- Provide deliverables in electronic format.

CITY RESPONSIBILITIES

- Overall project direction and contract management.
- Address policy considerations, issues, and decisions.
- Provide requested information to Consultant at agreed due dates.
- Review and provide comments on draft deliverables within 10 business days of receipt.

ASSUMPTIONS

- Invoicing shall comply with City of Stockton standards for payment and audit in accordance with the contract.
- Deliverable documents will be submitted in electronic form as draft and final once the City comments have been incorporated.
- The City will provide services or requested information described under general and task specific City Responsibilities.

DELIVERABLES

- Project schedule in electronic format.
- Monthly invoices and progress reports in electronic format.

Task 1.2 – Kick-off and Progress Meetings

Consultant will attend a kick-off meeting and conduct periodic progress meetings with City staff.

CONSULTANT RESPONSIBILITIES

- Prepare meeting summaries with concerns, issues, and assignments in electronic format.
- Schedule briefing meetings for draft and final deliverables.

CITY RESPONSIBILITIES

- Provide meeting coordination and scheduling support for meetings, including locations.
- Provide access to all needed staff, including attendance and participation in meetings, interviews, and workshops with Consultant staff as assigned and scheduled.

ASSUMPTIONS

- Up to one one-hour kick-off meeting is budgeted under this task.
- Up to 11 one-hour progress meetings are budgeted under this task.
- Some progress meetings will be held on the same day as workshops.

DELIVERABLES

- Meeting minutes in electronic format.

Task 1.3 – Quality Assurance/Quality Control (QA/QC) Program

Consultant will institute and maintain a QA/QC program for the work performed on this project. To ensure objectivity, senior technical staff, not involved in the project, will perform internal QA/QC upon completion of the deliverables before they are submitted to the City. QA/QC efforts are included in each of the tasks of this project.

CONSULTANT RESPONSIBILITIES:

- Provided internal QA/QC review of deliverables before they are submitted to the City

CITY RESPONSIBILITIES

- Review and provide comments on draft deliverables within 10 business days of receipt.

ASSUMPTIONS

- None.

DELIVERABLES

- None.

TASK 2 - DATA AND SOFTWARE EVALUATION**Task 2.1 - Data Collection and Evaluation**

The objective of this task is to collect existing data, in electronic format, related to the sewer collection system. Consultant will compile and submit a data needs list to the City shortly following Notice to Proceed. Consultant shall keep a log of the data received. Consultant shall meet with City staff to discuss operational procedures with respect to geographic information system (GIS), operations and maintenance (O&M), and engineering.

CONSULTANT RESPONSIBILITIES

- Obtain and review asset list of sewer assets available in GIS.
- Review functionality of existing POSM (Pipeline Observation System Management) closed-circuit television (CCTV) database system.
- Obtain a Pipeline Assessment and Certification Program (PACP) Exchange version of POSM database.
- Review options for getting copies of CCTV video.
- Review Cityworks operation/function.
- Obtain PM/Cleaning schedules.
- Obtain repair history from Cityworks.
- Obtain asset repair history completed by third party contractors (if not in Cityworks).
- Obtain recent bid tabs (past three years) and unit prices for sewer collection system improvement work.

CITY RESPONSIBILITIES

- Provide input on reports and tracking milestones.
- Provide access to data sources.
- Provide access to staff that have knowledge of the data requested.

ASSUMPTIONS

- Cityworks will be fully implemented when this project starts.

- Data will not be queried from legacy systems.
- Data will be provided in electronic format and in native file formats when possible.

DELIVERABLES

- See Task 2.2.

Task 2.2 - Data Gap Analysis

The objective of this task is to gain an understanding of the data that will serve as the foundation for future task decisions. The data evaluated during this task will be the basis for decisions that may identify millions of dollars of improvements to the City's sewers. As such, level of detail, quality, and accuracy of the data needs to be understood and documented before additional steps can be taken.

CONSULTANT RESPONSIBILITIES

- Perform a detailed analysis on the data requested and identify gaps or inconsistencies in the data.
- Work with City staff to strategically identify 10 miles of the City's CCTV data to be reviewed.
- Review of 10 miles of CCTV data identified above to determine:
 - ✓ Quality and completeness of inspections conducted by different contractors and City crews.
 - ✓ Quantify significance of missed or miscoded defects.
 - ✓ Identify opportunities to extract defects identified in comments and not coded.
 - ✓ Estimate impacts of missed and miscoded defects to resulting capital improvement program (CIP).
- Identify potential changes to standards, specifications, or quality control programs to alleviate future coding issues.
- Prepare a technical memorandum (TM) documenting finding from data review and gap analysis in electronic format.

CITY RESPONSIBILITIES

- Provide access to data and systems needed to complete Consultant services.
- Providing input and review of the proposed CCTV for QC.
- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- Systems, reports, and data will be maintained on CITY servers.
- Consultant will review CCTV databases and video off site.

DELIVERABLES

- TM in electronic format.

Task 2.3 - Software Evaluation and Selection

The objective of this task is to identify and select a GIS-based software that can be used as a decision support tool for making asset and CIP decisions.

CONSULTANT RESPONSIBILITIES

- Hold a workshop with City staff to develop software requirements, including:
 - ✓ System requirements.
 - ✓ Platform requirements.
 - ✓ Custom versus Commercial-off-the-shelf (COTS).
 - ✓ Connectivity to other City enterprise systems.
- Work with City staff to select the appropriate software.
- Prepare TM documenting software selection process in electronic format.

CITY RESPONSIBILITIES

- Participate in workshop.
- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- Cityworks will have been fully implemented.
- One one-hour workshop is budgeted under this task and will occur on the same day as October 2016 progress meeting.

DELIVERABLES

- TM in electronic format.

TASK 3 - DEVELOPING LEVEL OF SERVICE GOALS

The purpose of this task is to identify, develop, and document City's level of service goals based on stakeholder expectations. Three levels of these goals operate in a feedback loop to develop the appropriate relationship between:

- Risk
- Construction Alternatives
- Cost of Service

Task 3.1 - Risk

The objective of this task is to develop a Priority Pipe Rating Model that assigns a risk score to each pipe based on probability and consequences of failure factors, and when combined with a condition score based on CCTV results, provides a means of prioritizing pipes for rehabilitation and replacement.

CONSULTANT RESPONSIBILITIES

- Consultant shall assess the City's risk exposure based upon both the probability and consequence of failure. Where appropriate, availability of redundancy will be incorporated.
- Work with City staff to develop probability scores (likelihood of failure values [LOF]) for each pipe.
 - ✓ These probability scores are determined by:
 - Physical attribute.
 - Age.
 - Historical condition data collected.
 - Sanitary sewer overflow (SSO)/stoppage history.
 - Cleaning schedule.
 - Cleaning findings.
- Work with City staff to identify areas that would be significantly impacted by SSOs (consequence of failure values [COF]) for each pipe.
 - ✓ Examples of factors or features typically used in a consequence of failure evaluation are:
 - Flow rate.
 - SSO history.
 - Proximity to hospitals.
 - Waterways.
 - Schools.
 - Business districts.
 - Major transportation corridors
- Utilizing the LOF and COF developed above, work with City staff to set parameters for overall risk weighting factors and overall Risk assessment scores.
- Develop risk model factors and obtain City input.

CITY RESPONSIBILITIES

- Provide access to data and systems needed to complete analysis.
- Participate in workshop.

ASSUMPTIONS

- One one-hour workshop is budgeted under this task.
- City data, documents, and staff will be readily available and able to participate.

- All asset attribute data is available in GIS.
- Age of pipelines is available in GIS.

DELIVERABLES

- Workshop minutes in electronic format.

Task 3.2 - Alternatives and Sensitivity Analysis

The objective of this task is to develop a decision tree and rehabilitation plan based on the LOF, COF, and risk assessments developed in Task 3.1, industry experience, and input from City staff.

CONSULTANT RESPONSIBILITIES

- Conduct workshop with City staff to identify program goals, discuss current operating practices, and various rehabilitation methods preferred for use on City and public works projects.
- Develop a draft decision process for the City based on preferred rehabilitation methods, industry experience, and level of service goals.
- Conduct a workshop with City staff to review the results of the decision model, including miles of rehabilitation by method, and preliminary planning costs. Based on results of the preliminary decision outcomes, identify sensitivity analyses to perform.
- Conduct a workshop with City staff to discuss results of sensitivity analyses and finalize the City's decision process.
- Prepare TM that provide results and methodology used (including, but, not limited to criteria used, scoring factors and weighting factors) to develop the following:
 - ✓ Pipe Classifications:
 - LOF
 - COF
 - Overall Risk Assessment
 - ✓ Decisions and final decision process

CITY RESPONSIBILITIES

- Participate in workshops.
- Provide previous bid tabs, construction cost, and preferred rehabilitation processes.
- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- Current construction costs for Stockton rehabilitation projects will be used to forecast program costs.
- One two-hour workshop is budgeted under this task and will occur on the same day as the December 2016 progress meeting.

- Where diameter or rehabilitation method costs are not available, Consultant team will utilize professional experience to develop costs.

DELIVERABLES

- Meeting minutes in electronic format.
- TM in electronic format.

Task 3.3 - Cost of Service

The objective of this task is to develop an understanding of when to do a repair, rehabilitate, or replacement the cost of each, and the potential annual investment needed for remediation efforts. Understanding how current the previously developed decision guidelines impact both near-term capital program costs (10- to 20-year horizon) and long-term capital program needs (20- to 100-year horizon).

CONSULTANT RESPONSIBILITIES

- Compile bid tabs and other available data to develop a rehabilitation cost dataset.
- Develop a range of planning level cost estimates based on the most viable construction method for each potential solution for the identified deficiencies.
- Develop and estimate the overall extent and cost of the required near-term rehabilitation needs and develop long-term rehabilitation needs based on extrapolation of the results from existing data.
- Develop a statistical model to estimate deterioration rates based on system age, current condition, and definition of failure.
- Based on deterioration rate, estimate annual level of investment needed once initial backlog has been addressed.
- Conduct a workshop to discuss long-term investment needs.
- Prepare TM documenting remaining useful life of assets and proposed annual funding for remediation in electronic format.

CITY RESPONSIBILITIES

- Provide previous bid tabs, construction cost, and preferred rehabilitation processes.
- Participate in workshops and meetings.
- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- Current construction costs (past three years) of City of Stockton rehabilitation projects will be used to forecast program costs.
- Where diameter or rehabilitation method costs are not available, Consultant will utilize professional experience to develop costs.
- Escalation factors for future years will be based on Engineering Consumer Price Index (CPI).

- Asset age data is available in GIS.
- The recommended replace/rehabilitation program will be incorporated into the long-range CIP developed under CIP Development and Prioritization Task.
- One one-hour workshop is budgeted under this task.

DELIVERABLES

- TM in electronic format.
- Workshop minutes in electronic format.

TASK 4 - CIP DEVELOPMENT AND PRIORITIZATION

The decisions developed using the asset performance modeling software will be made on a pipe-by-pipe basis. Consultant will review CCTV video (up to 50 miles) for pipes that get a construction recommendation. Once the decision process has determined a potential solution for a pipe segment and engineering has confirmed or modified the decision, CIP projects will need to be created based on construction type, project size, and cost. Consultant will group projects in geographically concentrated areas. Evaluations will be performed to see if assets with differing construction recommendations can be grouped into a single project with a common construction method. Consultant will assist the City in developing a standard for prioritizing its CIP projects once they have been determined.

Task 4.1 - Validation of Algorithm Recommendations

The purpose of this task is to review and validate pipes that get a construction remediation recommendation from the asset performance modeling software.

CONSULTANT RESPONSIBILITIES

- Perform condition remediation alternatives analysis for high priority pipe segments. Analysis will include the following activities:
 - ✓ Removal of pipe segments selected for a known capacity remediation capital improvement project.
 - ✓ CCTV video review of pipes that get a construction remediation recommendation from the asset performance modeling software. Review of CCTV data to validate preliminary condition remediation decision alignment with condition remediation guidelines. If Consultant changes a recommendation for a pipe from the algorithm recommendation, a record will be kept noting the reason for the change.
 - ✓ High-level review of feasibility and appropriateness of preliminary condition remediation alternative given available data.
 - ✓ Consideration of past history of pipe failure and pipe criticality.

CITY RESPONSIBILITIES

- Access to all requested data and responsible staff.

ASSUMPTIONS

- Construction remediation recommendations include repair, rehabilitation, and replacement recommendations determined by the asset performance modeling software.
- High priority pipe segments are pipes that are recommended for renewal within the next five years.

DELIVERABLES

- See Task 4.3

Task 4.2 - CIP Project Creation

The purpose of this task is to assist the City in developing CIP projects based on the individual pipe decisions derived from the CCTV decision process. Once the decision process has determined a potential solution for a pipe segment and engineering has confirmed or modified the decision, CIP projects will need to be created based on construction type, project size, and cost.

CONSULTANT RESPONSIBILITIES

- Create CIP projects based on construction type, project size, and cost.
- Perform project-level review of condition remediation outcomes and determine final planning level condition remediation alternative analysis outcome.
- Document planning level condition remediation alternatives analysis outcome for each pipe segment.

CITY RESPONSIBILITIES

- Access to all requested data and responsible staff.

ASSUMPTIONS

- No additional assumptions identified.

DELIVERABLES

- See Task 4.3

Task 4.3 - Prioritize

The purpose of this task is to assist the City in developing a standard for prioritizing their CIP projects once they have been determined. The results of the condition assessment may dictate that the City can execute projects in the order they were assessed. Should the condition findings lead to a backlog of projects being developed and to make sure projects with the most severe defects are repaired first, a method to prioritize the CIP projects will be developed.

CONSULTANT RESPONSIBILITIES

- Aggregate the individual asset risk scores to get a total project score for each project.
- Normalize the project scores based on project length.
- Prioritize the projects based on the normalize project scores.

- Prepare TM documenting the confirmation or rejection of asset-based recommendations based on CCTV review, grouping of CIP projects and prioritization of projects in electronic format.

CITY RESPONSIBILITIES

- Access to all requested data and responsible staff.
- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- No additional assumptions identified.

DELIVERABLES

- TM in electronic format.

TASK 5 - BUSINESS PROCESS TECHNICAL SUPPORT

This task is to provide business process technical support for City's gravity sewer cleaning activities and use of the CMMS Cityworks software that will correspond with the achievement of the City's system-wide maintenance and SSO reduction goals.

Task 5.1 - Cleaning Optimization Support

Consultant will work with City staff to implement cleaning optimization best management practices. This support will include the evaluation and assessment of existing processes in place for the collection, use, and storage of O&M data. This evaluation shall identify modifications to the existing business processes that can be implemented to improve and optimize the City's use of Cityworks.

CONSULTANT RESPONSIBILITIES

- Conduct up to two workshops/meetings with City staff to identify areas of improvement.
- Evaluate and assess the current business process pertaining to maintenance work order generation and management, work order prioritization, and work order distribution.
- Evaluate information collected on work orders and identify additional data collection methods and needs.
- Develop recommendations for business process improvement.
- Prepare TM identifying areas of improvement and recommendations.

CITY RESPONSIBILITIES

- Access to all requested data, systems, and responsible staff.
- Provide business process decisions pertaining to cleaning workflow and work order authorization.
- Provide input and review of business process modifications.
- Identify pipes that are on chemical root control treatment, if any.
- Participate in workshops and meetings.

- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- Work order, CCTV, and maintenance history data provided is current and accurate.
- City staff will review and implement business process recommendations.
- The City will provide current GIS data and information for all sewer assets that identifies critical attributes and characteristics such as, but not limited to, diameter, length, material, location (coordinates), easement, basin, sub-basin, owner (City; private, other, etc.), status (operational, abandoned, removed, etc.), and type (gravity, force main, lateral, etc.). The GIS data should also identify system type if applicable (sewer, storm water, etc.).
- All CCTV data and coding complies with NASSCO PACP guidelines.
- Up to two one-hour workshops are budgeted under this task. One of the workshops will be held on the same day as December 2016 progress meeting.
- Deliverables will be identified by the Consultant working with City's staff on an ongoing basis, and as directed by City staff up to the available hours budgeted for this task.

DELIVERABLES

- TM in electronic format.
- Workshop minutes.

TASK 6 - ORGANIZATIONAL EVALUATION

This task is to conduct an organizational study for the City. Consultant will look at current tasks, workloads, performance goals, and organizational charts to see if the City could modify its organization to achieve its system-wide maintenance and SSO reduction goals.

Task 6.1 - Organizational Evaluation

The result of this project will be the identification of system deficiencies and the implementation of new processes and software. These changes will likely radically change the way the system is viewed and maintained. Based on this, Consultant will evaluate staffing levels and assignments to gauge if the City is appropriately staffed to support these changes.

CONSULTANT RESPONSIBILITIES

- Conduct up to two on-site interviews and up to two follow-up phone interviews of City staff to document and develop the rationale and logic for the split of common operations.
- Prepare a TM on the results of the organizational study. TM will document the current and proposed tasks, workloads, performance goals, and organizational charts.
- Incorporate comments from City staff as appropriate.

CITY RESPONSIBILITIES

- Access to all requested data and responsible staff.
- Participate in workshops and meetings.

- Review and provide comments on draft TM within 10 business days of receipt.

ASSUMPTIONS

- No additional assumptions identified.

DELIVERABLES

- TM in electronic format.

City of Stockton
Asset Management and Master Plan for the Gravity Sanitary Sewer Collection System

TASK HOURS BREAKDOWN

	HDR INC. STAFF										Staff Budget	Other Direct Costs Budget	Sub- consulta nt*	TOTAL BUDGET (Rounded)
	Principal	QA/QC	Project Manager	Technical Specialist 2	Technical Specialist 1	Engineer 3	Engineer 2	Controller	Admin					
PROJECT TASKS														
1.0 Project Planning, Communication and Management	12	24	48		16			12	48	\$ 32,012	\$ 960		\$ 32,972	
1.1 Project Management and Coordination	4		16					12	24	\$9,148	\$274		\$9,422	
1.2 Kick-off (1) and Monthly Meetings (up to 12)	4		24						16	\$8,652	\$260		\$8,912	
1.3 QA/QC Program	4	24	8		16				8	\$14,212	\$426		\$14,638	
2.0 Data and Software Evaluation			40	12		40			68	\$ 29,623	\$ 889		\$ 30,509	
2.1 Data Collection and Evaluation			8			12			12	\$5,720	\$285		\$5,892	
2.2 Data Gap Analysis			16			16			32	\$11,440	\$343		\$11,783	
2.3 Software Evaluation and Selection			16	12		12			24	\$12,460	\$374		\$12,834	
3.0 Developing Level of Service Goals		32	72		64	240				\$ 78,560	\$ 2,357		\$ 80,917	
3.1 Risk		16	16			80				\$20,992	\$630		\$21,622	
3.2 Alternatives and Sensitivity Analysis		16	32		40	80				\$33,760	\$1,013		\$34,773	
3.3 Cost of Service			24		24	80				\$23,808	\$714		\$24,522	
4.0 CIP Development and Prioritization			48				160		240	\$ 80,144	\$ 2,404	\$ 38,850	\$ 121,398	
4.1 Validation of Algorithm Recommendations							120		160	\$48,360	\$1,451	\$ 38,850	\$88,661	
4.2 CIP Project Creation			24				24		40	\$16,656	\$500		\$17,156	
4.3 Prioritize			24				16		40	\$15,128	\$454		\$15,582	
5.0 Business Process Technical Support	1	4	20	40					80	\$ 932	\$ 932		\$ 932	

EXHIBIT B-1

FEE SCHEDULE-KSN

**City of Stockton
Asset Management and Master Plan for the Gravity Sanitary Sewer
Collection System**

TASK HOURS BREAKDOWN

	KJELSEN, SINNOCK & NEUDECK INC. STAFF				Staff Budget	Other Direct Costs Budget	TOTAL BUDGET (Rounded)			
	Principal Engineer	Junior Engineer	Tech/GIS/ CAD III							
PROJECT TASKS										
1.0	Project Planning, Communication and Management				16	44	8	\$ 9,980	\$ -	\$ 9,980
1.1	Research and Gather Local Central Valley Sewer Rehab Cost Data				4	16		\$2,940	\$0	\$2,940
1.2	Compile Historic Cost Data and Develop Unit Costs for Rehabilitation				6	12	8	\$3,630	\$0	\$3,630
1.3	Develop Unit Costs for 6-84 inch Sewer Segments for Rehabilitation Methods				4	10		\$2,190	\$0	\$2,190
1.4	Present Unit Cost Data				2	6		\$1,220	\$0	\$1,220
2.0	Existing CCTV Data Evaluation and Recommendations				20	120	80	\$ 26,900	\$ 120	\$ 27,020
2.1	Review Approx. 100,000 ft of CCTV Video Inspection Video (<24 inch pipe)				4	40	80	\$13,140	\$120	\$13,260
2.2	Confirm Construction Recommendation or Proposed Alternative				16	80		\$13,760	\$0	\$13,760
PROJECT TOTALS					36	164	88	\$ 36,880	\$ 120	\$ 37,000

General Note: This costs allocation represents our best estimate at this time and may change subject to future developments during the project. It is possible that some of the estimated manpower requirements for specific task items may increase while others may not require the entire anticipated effort.

**EXHIBIT C
PROJECT SCHEDULE**

**City of Stockton
Asset Management and Master Plan for the Gravity Sanitary Sewer Collection System**

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
Notice to Proceed									
Task 1 - Project Planning, Communication, and Management									
Project Management and Coordination									
QA/QC Program									
Task 2 - Data and Software Evaluation									
Data Collection and Evaluation									
Data Gap Analysis									
Software Evaluation and Selection									
Task 3 - Develop Level of Service Goals									
Risk									
Alternatives and Sensitivity Analysis									
Cost of Service									
Task 4 - CIP Development and Prioritization									
Validation of Algorithm Recommendations									
CIP Project Creation									
Prioritize									
Task 5 - Business Process Technical Support									
Cleaning Optimization Support									
Task 6 - Organization Evaluation									
Organization Evaluation									

Exhibit D
Insurance Requirements for Professional Services

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

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$1,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Consultant has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **\$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance 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. *(Not required if consultant provides written verification it has no employees)*
4. **Professional Liability (Errors and Omissions)** Insurance appropriate to the Consultant's profession, with limit no less than **\$1,000,000** per occurrence or claim, \$1,000,000 aggregate. (If Claims-made, see below.)

If the Consultant maintains higher limits than the minimums shown above, the City of Stockton requires and shall be entitled to coverage for the higher limits maintained by the consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City of Stockton.

Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status

The City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers are to be covered as additional insureds on the CGL policy and AL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in

the form of an endorsement to the Consultant's insurance (**at least as broad as** ISO Form CG 20 10 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).

Primary Coverage

For any claims related to this contract, the **Consultant's insurance coverage shall be primary** insurance as respects the City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers. Any insurance or self-insurance maintained by the City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers shall be excess of the Consultant's insurance and shall not contribute with it. The City of Stockton does not accept primary endorsements limiting the Consultant's insurance coverage to sole negligence.

Notice of Cancellation

Each insurance policy required above shall state that **coverage shall not be canceled, except with notice to the City of Stockton.**

Waiver of Subrogation

Consultant hereby grants to City of Stockton a waiver of any right to subrogation which any insurer of said Consultant may acquire against the City of Stockton by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City of Stockton has received a waiver of subrogation endorsement from the insurer.

Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the City of Stockton Risk Services. The City of Stockton may require the Consultant to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII if admitted to do business in the State of California; if not admitted to do business in the State of California, insurance is to be placed with insurers with a current A.M. Best's rating of no less than A+:X.

Claims Made Policies

If any of the required policies provide coverage on a claims-made basis:

1. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
2. If Claims Made policy form is used, a three (3) year discovery and reporting tail period of coverage is required after completion of work.

Verification of Coverage

Consultant shall furnish the City of Stockton with original certificates and amendatory endorsements required by this clause. All certificates and endorsements are to be received and approved by the City of Stockton Risk Services before work commences. Failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The City of Stockton reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time, for any reason or no reason.

Consultant shall, prior to the commencement of work under this Agreement, provide the City of Stockton with a copy of its Declarations Page and Endorsement Page for each of the required policies.

Certificate Holder Address

Proper address for mailing certificates, endorsements and notices shall be:

- o City of Stockton
- o Attention: Risk Services
- o 425 N El Dorado Street
- o Stockton, CA 95202

City of Stockton Risk Services Phone: 209-937-5037

City of Stockton Risk Services Fax: 209-937-8558

Maintenance of Insurance

If at any time during the life of the Contract or any extension, the Consultant fails to maintain the required insurance in full force and effect, all work under the Contract shall be discontinued immediately. Any failure to maintain the required insurance shall be sufficient cause for the CITY to terminate this Contract.

Subcontractors

Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that City of Stockton is an additional insured on insurance required from subcontractors.

Special Risks or Circumstances

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