

4/2/13

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE ADMINISTRATOR OF THE DEPARTMENT OF PUBLIC WORKS TO ENTER INTO AN AGREEMENT WITH HDR ENGINEERING, INC. FOR PROFESSIONAL SERVICES RELATIVE TO CONTRACT NO. W-12-025-101, TANNERY FLATS INTERCEPTOR REHABILITATION, FOR AN AMOUNT NOT TO EXCEED TWO HUNDRED FOUR THOUSAND SEVEN HUNDRED FIFTY DOLLARS (\$204,750.00).

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby authorizing the Administrator of the Department of Public Works to enter into an agreement with HDR Engineering, Inc. for professional services relative to Contract No. W-12-025-101, Tannery Flats Interceptor Rehabilitation, for an amount not to exceed \$204,750.00.

ADOPTED: _____, 2013.

/mms

City of Chattanooga



Resolution/Ordinance Request Form

Date Prepared: 3/15/13

Preparer: Dennis Malone

Department: Public Works

Brief Description of Purpose for Resolution/Ordinance:

Res./Ord. # _____ Council District # 7

A Council Action is requested for the Administrator of the Department of Public Works to enter into an agreement with HDR Engineering, Inc., for professional services, relative to Contract No. W-12-025-101, Tannery Flats Interceptor Rehabilitation, in an amount not to exceed \$204,750.00.

Name of Vendor/Contractor/Grant, etc.	<u>HDR Engineering, Inc.</u>	New Contract/Project? (Yes or No)	<u>No</u>
Total project cost \$	<u>204,750.00</u>	Funds Budgeted? (YES or NO)	<u>Yes</u>
Total City of Chattanooga Portion \$	<u>204,750.00</u>	Provide Fund	<u>6011</u>
City Amount Funded \$	<u>204,750.00</u>	Provide Cost Center	_____
New City Funding Required \$	<u>0</u>	Proposed Funding Source if not budgeted	<u>ISS - CD</u>
City's Match Percentage %	_____	Grant Period (if applicable)	_____

List all other funding sources and amount for each contributor.

Amount(s)	Grantor(s)
_____	_____
_____	_____
_____	_____

Agency Grant Number _____

CFDA Number if known _____

Other comments: (Include contingency amount, contractor, and other information useful in preparing resolution)

Consent Decree Project - ISS

Approved by: _____

DESIGNATED OFFICIAL/ADMINISTRATOR

Reviewed by: FINANCE OFFICE

Please submit completed form to @budget, City Attorney and City Finance Officer

Revised: 1/26/09



CITY OF CHATTANOOGA
STANDARD AGREEMENT FOR ENGINEERING SERVICES

SOP 2003-9
Date of Issue 10-16-03
Rev. 11-13-12

THIS AGREEMENT, is between the City of Chattanooga, Tennessee, a municipal corporation in the state of Tennessee, hereinafter called Owner, and

HDR Engineering, Inc.,

Hereinafter called Engineer.

The Owner wishes to employ the Engineer to perform professional engineering services for

Contract Number: W-12-025-101, Tannery Flats Interceptor Rehabilitation,

hereinafter called Project.

In consideration of the provisions contained in this Agreement, the Owner and Engineer agree to the following:

1. **EFFECTIVE DATE**
The effective date of this Agreement shall be _____, 20_____.
2. **GOVERNING LAW**
This Agreement shall be governed by the laws of the State of Tennessee and the codes of the City of Chattanooga.
3. **SERVICES TO BE PERFORMED BY ENGINEER**
Engineer shall perform the Services described in Attachment A, Scope of Services, in accordance with applicable sections of the City of Chattanooga Design and Construction Standards in effect on the date of this agreement.
4. **COMPENSATION**
Owner shall pay Engineer in accordance with the Attachment B, Compensation.
5. **OWNER'S RESPONSIBILITIES**
Owner shall be responsible for all matters described in Attachment C, Owner's Responsibilities.
6. **SUPPLEMENTAL AGREEMENTS**
The provisions set forth in Attachment D, Supplemental Agreements, shall be incorporated into this Agreement
7. **PROJECT SCHEDULE**
The provisions set forth in the Attachment E, Project Schedule, shall be incorporated into this Agreement.
8. **RATE SCHEDULE**
The Engineer shall provide a schedule of standard hourly rates for all employees to be used in the performance of all contracts with a cost-not-to-exceed basis. This schedule shall be incorporated into the agreement as Attachment F.
9. **INVOICING**
The Engineer will use the format established in Attachment G, Standard Invoice, for all invoices submitted for services on the Project.



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10. STANDARD OF CARE

Engineer shall exercise the same degree of care, skill, and diligence in the performance of Services as is ordinarily possessed and exercised by a professional engineer under similar circumstances in the same area of practice. Engineer makes no warranty or guarantee, either expressed or implied, as part of this agreement.

11. INDEMNIFICATION

Engineer hereby agrees to fully indemnify and hold harmless Owner and any of its departments, divisions, agencies, officers, employees and elected officials from all loss, damage, cost, or expenses specifically including attorneys' fees and other expenses of litigation incurred by or on behalf of the Owner and any of its officers, employees or elected officials arising out of Engineer's actual negligent performance of Services under this Agreement, including errors or omissions.

Owner hereby agrees to fully indemnify and hold harmless Engineer and any of its officers, employees, or designated agents from all loss, damage, cost, or expenses specifically including attorneys' fees and other expenses of litigation incurred by or on behalf of the Engineer and any of its officers, employees or designated agents arising out of Owner's negligence to the extent provided by the Tennessee Governmental Tort Liability Act, T.C.A. 29-20-201 et seq.

12. INSURANCE

Engineer shall purchase and maintain during the life of this Agreement, insurance coverage which will satisfactorily insure him against claims and liabilities which arise because of the execution of this Agreement, with the minimum insurance coverages as follows:

- a. Commercial General Liability Insurance, with a limit of \$1,000,000 for each occurrence and \$2,000,000 in the general aggregate.
- b. Automobile Liability Insurance, with a limit of \$1,000,000 for each accident, combined single limit for bodily injury and property damage.
- c.
- d. Worker's Compensation Insurance and Employer's Liability Insurance, in accordance with statutory requirements, with a limit of \$500,000 for each accident.
- e. Professional Liability Insurance, with a limit of \$1,000,000 for each claim and aggregate.

Prior to issuance of the Notice to Proceed by Owner, Engineer shall have on file with Owner certificates of insurance acceptable to Owner. Said certificates of insurance shall be filed with Owner in January of each year or may be submitted with each agreement. Upon completion of all Services, obligations, and duties provided for in this Agreement, or if this Agreement is terminated for any reason, the terms and conditions of this section shall survive.

Notwithstanding any other provision of the Agreement, Owner waives any claim against Engineer and, to the maximum extent permitted by law, agrees to defend, indemnify, and hold Engineer harmless from any claim, liability, and/or defense costs for injury or loss arising from Engineer's discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delay of the project and any cost associated with possible reduction of the property value.

13. LIMITATIONS OF RESPONSIBILITY

Engineer shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project, (2) the failure of



any contractor, subcontractor, vendor, or other Project participant, not under contract to Engineer, to fulfill contractual responsibilities to the Owner or to comply with federal, state or local laws, regulations, and codes; or (3) procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Attachment A, Scope of Services.

14. OPINIONS OF COST AND SCHEDULE

Since Engineer has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet Project construction schedules, Engineer's opinion of probable construction costs and of construction schedules shall be made on the basis of experience and qualifications as a professional engineer. Engineer does not guarantee that costs will not vary from Engineer's cost estimates or that actual construction schedules will not vary from Engineer's projected schedules.

15. REUSE OF DOCUMENTS

All documents, including, but not limited to calculations, drawings, specifications, and computer software prepared by Engineer pursuant to the Agreement are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by Owner or others on extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by Engineer for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Engineer. Any verification or adaptation requested by Owner shall entitle Engineer to compensation at rates to be agreed upon by Owner and Engineer.

16. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, engineering documents, calculations, drawings, specifications, and other documents prepared by Engineer as part of the Services shall become and be the sole property of Owner. However, both Owner and Engineer shall have the unrestricted right to their use. Engineer shall retain its rights in its standard drawing details, specifications, databases, computer software, and other proprietary property protected under the copyright laws of the United States. Rights to intellectual property developed, utilized, or modified in the performance of services shall remain the property of Engineer.

17. RECORDS RETENTION AND AUDIT PROVISION

The term "Engineer" is used interchangeably to describe signatories to contracts, grants, and agreements with the City and applies to reflect the relationship with the City (Engineer, Contractor, Licensee, Supplier, Vendor, Consultant, Grant Recipient, etc.).

- a. All records relating in any manner whatsoever to the Project, or any designated portion thereof, which are in the possession of the Engineer or the Engineer's consultants, shall be made available for inspection and copying upon written request to the Owner. Additionally, said records shall be made available, upon request by the Owner, to any state, federal or other regulatory authorities and any such authority may review, inspect and copy such records. Said records include, but are not limited to, all plans, specifications, submittals, correspondence, minutes, memoranda, tape recordings, videos, or other writings or things which document the Project, its design and its construction. Said records expressly include those documents reflecting the time expended by the Engineer and its personnel to perform the obligations of this Agreement and the records of expenses incurred by the Engineer in its performance under said Agreement. The Engineer shall maintain and protect these records for no less than seven (7) years after the completion of the Project, or for any longer period of time as may be required by applicable law, good engineering practice, and upon notice during the pendency of any claims or litigation arising from the Project.



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- b. The Owner or its assign may audit all financial and related records (including digital) associated with the terms of the contract or agreement including timesheets, reimbursable out of pocket expenses, materials, goods, and equipment claimed by the Engineer. The Owner may further audit any of Engineer's records to conduct performance audits (to identify waste and abuse or to determine efficiency and effectiveness of the contract or agreement) or to identify conflicts of interest.
- c. The Engineer shall at all times during the term of the contract or agreement and for a period of seven years after the end of the contract, keep and maintain records of the work performed pursuant to this Contract or Agreement. This shall include proper records of quotations, contracts, correspondence, invoices, vouchers, timesheets, and other documents that support actions taken by the Engineer. Documents shall be maintained by the Engineer, which are necessary to clearly reflect all work and actions taken. All such records shall be maintained in accordance with generally accepted accounting principles. The Engineer shall at its own expense make such records available for inspection and audit (including copies and extracts of records as required) by the Owner at all reasonable times and without prior notice.
- d. The obligations of this Section shall be explicitly included in any subcontracts or agreements formed between the Engineer and any subcontractors or suppliers of goods or services to the extent that those subcontracts or agreements relate to fulfillment of the Engineer's obligations to the Owner.
- e. Costs of any audits conducted under the authority of this section and not addressed elsewhere will be borne by the Owner unless the audit identifies significant findings that would benefit the Owner. The Engineer shall reimburse the Owner for the total costs of an audit that identifies significant findings that would benefit the Owner.
- f. This Section shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the Owner may have by Federal, State, or Municipal law, whether those rights, powers, or obligations are express or implied.

18. TERMINATION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party. Owner may terminate or suspend performance of this Agreement for Owner's convenience upon written notice to Engineer. If termination or suspension is for Owner's convenience, Owner shall pay Engineer for all Services performed prior to the date of the termination notice. Upon restart, an adjustment acceptable to Owner and Engineer shall be made to Engineer's compensation.

19. DELAY IN PERFORMANCE

Neither Owner nor Engineer shall be considered in default of the Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonconforming party. For purposes of this Agreement, such circumstances include abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, or other civil disturbances; sabotage; judicial restraint; discovery of unanticipated hazardous wastes; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either Owner or Engineer under this Agreement. Should such circumstances occur, the nonconforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of the



Agreement. If the Engineer is delayed in the performance of the services for more than 365 calendar days, either by the Owner or circumstances beyond his control, an equitable adjustment to the contract amount can be made to compensate for additional costs incurred.

For delays in performance by Engineer, as set forth in Attachment E, Project Schedule, caused by circumstances which are within its control, such delays shall be documented on the Engineer's Project Performance Evaluation form. Said form shall be completed at the conclusion of Project and acknowledged by both Owner and Engineer. Completed form shall be retained by Owner for a period of seven years and reviewed prior to consultant selection for City projects. In the event Engineer is delayed in the performance of Services because of delays caused by Owner, Engineer shall have no claim against Owner for damages or contract adjustment other than an extension of time.

20. HAZARDOUS MATERIALS

Hazardous materials may exist at a site where there is no reason to believe they could or should be present. The Owner and Engineer agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. Owner and Engineer also agree that the discovery of unanticipated hazardous materials may make it necessary for the Engineer to take immediate measures to protect health and safety. Owner agrees to compensate Engineer for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials.

Engineer agrees to notify Owner when unanticipated hazardous materials or suspected hazardous materials are encountered. Owner agrees to make any disclosures required by law to the appropriate governing agencies, and agrees to hold Engineer harmless for any and all consequences of disclosures made by Engineer which are required by governing law. In the event the project site is not owned by Owner, the Owner agrees to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

21. COMMUNICATIONS

Any communication required by this Agreement shall be made in writing to the address specified below:

Engineer: HDR Engineering, Inc.
1201 C Market Street, Chattanooga, TN 37402-2714
Justin Bolender, P.E., Phone: 423-414-3559; email: justin.bolender@hdrinc.com

Owner: City of Chattanooga
Department of Public Works
Engineering Division
Suite 2100, Development Resource Center
1250 Market Street
Chattanooga, TN 37402
(423) 643- 6033

Nothing contained in the Article shall be construed to restrict the transmission of routine communications between representatives of Engineer and Owner.

22. WAIVER

A waiver by either Owner or Engineer of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.



23. DISPUTE RESOLUTION

Claims, disputes or other matters in question between the parties to this Agreement arising out of or relating to this Agreement or breach thereof shall be subject to mediation in Chattanooga, Tennessee, in accordance with the following provisions:

- a. The mediation shall be conducted by a mediator mutually acceptable to both parties.
- b. The parties agree to share equally in the expenses of mediations.
- c. Such mediation may include the Engineer or any other person or entity who may be affected by the subject matter of the dispute.
- d. Unless the parties agree otherwise, mediation shall be a condition precedent to the exercise of any legal remedy other than a proceeding seeking an immediate injunction or restraining order to protect the rights of a party pending litigation. Notwithstanding the issuance of an injunction or restraining order or the refusal of a court to issue such an order, the dispute shall continue to be subject to mediation.

24. SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

25. INTEGRATION

This Agreement represents the entire and integrated agreement between Owner and Engineer. All prior and contemporaneous communications, representations, and agreements by Engineer, whether oral or written, relating to the subject matter of this Agreement, as set forth in Attachment D, Supplemental Agreements, are hereby incorporated into and shall become a part of this Agreement.

26. SUCCESSORS AND ASSIGNS

Owner and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party of this Agreement and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this Agreement.

27. ASSIGNMENT

Neither Owner nor Engineer shall assign any rights or duties under this Agreement without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent Engineer from employing independent consultants, associates, and subcontractors to assist in the performance of the Services; however, other agreements to the contrary notwithstanding, in the event Engineer employs independent consultants, associates, and subcontractors to assist in performance of the Services, Engineer shall be solely responsible for the negligent performance of the independent consultants, associates, and subcontractors so employed.



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28. THIRD PARTY RIGHTS

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than Owner and Engineer.

29. RELATIONSHIP OF PARTIES

Nothing contained herein shall be construed to hold or to make the Owner a partner, joint venturer, or associate of Engineer, nor shall either party be deemed the agent of the other, it being expressly understood and agreed that the relationship between the parties is and shall at all times remain contractual as provided by the terms and conditions of this Agreement.

30. NON-DISCLOSURE

Engineer agrees not to disclose or to permit disclosure of any information designated by the Owner as confidential, except to the engineer's employees and subcontractors who require such information to perform the services specified in this agreement.

31. NON-DISCRIMINATION

Engineer agrees to comply with all federal, state, and local non-discrimination laws and regulations. Engineer agrees not to discriminate against any participant in this Agreement on the basis of race, color, religion, sex, age or national origin. Engineer further agrees to comply with all federal, state and local laws regarding treatment and accommodations for individuals with disabilities.

32. DRUG FREE WORKFORCE

Engineer certifies that it will provide a drug-free workplace and agrees to comply with the applicable requirements of the Drug-Free Workplace Act of 1988.

33. FEDERAL OR STATE FUNDING

In the event that the Project is funded in whole or in part by Federal or State grants, Engineer agrees to abide by all applicable Federal and State laws, regulations, grant conditions and procedures.

IN WITNESS WHEREOF, Owner and Engineer have executed this Agreement.

B. R. Eck 3/15/13
 HDR Engineering, Inc. Date

 Administrator of Public Works Date

Shane R. Whitcomb 3/15/13
 HDR Engineering, Inc. Date

 Director of Purchasing Date

Reviewed by City Attorney Office _____
 Initial Date



ATTACHMENT A

Owner: City of Chattanooga, Tennessee

Engineer: HDR Engineering, Inc.
Project Number & Name: W-12-025-101
Tannery Flats Interceptor Rehabilitation

SCOPE OF SERVICES

1. BASIC SERVICES

The project is specifically defined as: design and implementation for the rehabilitation of the Tannery Flats Interceptor.

The City of Chattanooga desires to achieve and maintain compliance with regulatory authorities by reducing inflow and infiltration. This project involves the inspection, design and implementation of the Tannery Flats Interceptor. The portion of the sanitary sewer scheduled for rehabilitation is approximately 6,400 linear feet of 36-inch diameter gravity sewer. Sonar and Closed Circuit Television (CCTV) sanitary sewer inspections will be performed to determine appropriate rehabilitation methods. This project incorporates sewer system inspection, evaluation and recommendation of rehabilitation methods, design, bidding, and construction administration. Supplemental services may include preparation of easements, surveying and mapping and resident project representation.

The Engineer agrees to provide the following services:

Task 1 – Data Gathering and Project Management

- a. Project Initiation – HDR will coordinate and perform a project kick-off meeting. The purpose of the meeting is to establish project procedures and communication.
- b. Project Management Plan – HDR will prepare a Project Management Plan that includes communication protocols, Safety Management Plan and Quality Management Plan.
- c. HDR will prepare a Detailed Project Schedule and provide monthly updates according to project activities. The schedule will be provided originally in MS Excel format and updated on the Program Managers PIMS website.
- d. Data Gathering– HDR will obtain relevant project information from the City and other agencies including GIS data, 2-foot contours, aerial photography, site specific information, etc. and will review this information for completeness and if additional information is required for completion of the project, HDR will notify the City and PM requesting the information. Only relevant data related to this project will be requested.
- e. HDR will prepare a list of the required permits for completion of the sewer rehabilitation in the Tannery Flats Interceptor Rehabilitation project.
- f. HDR will prepare invoices and progress reports as required by the City and PM.
- g. Project management tasks will be performed throughout the life of the contract.

Task 2 – Sanitary Sewer Evaluation Study (SSES)

- a. HDR will coordinate with Hydrostructures, P.A. to conduct sanitary sewer pipeline investigations and to conduct sanitary sewer manhole investigations pursuant to City Standards. HDR will observe and monitor the SSES investigation procedures.



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- b. HDR will monitor quality control measures related to inspection media and procedures to perform the SSES evaluation. The media will be submitted to the City and the Program Manager (PM) for their review and recommendations for improvements.
- c. HDR will prepare a SSES Report, detailing findings of SSES inspections. This report will include the findings of the SSES vendor and procedures taken to acquire the information. Recognized problem areas will be acknowledged and the City and PM notified.
- d. HDR will monitor the SSES firm in compliance with the City's SSES Standard Specifications.
- e. HDR will submit SSES Report to the City and PM for analysis and prioritization of repairs. HDR will review the gathered data with the City and PM and make recommendations for rehabilitation procedures.
- f. The SSES Report Deliverable will include the following: Reports, forms and data from the SSES vendor plus a summary of the sewer line investigation presented in two hard copies the report in a 3-ring binder along with 2 DVD's containing the sewer videos in .mpg format and the report in PDF format.
- g. SSES work will consist of manhole inspection (National Association of Sewer Service Companies (NASSCO) level 2) on the 14 manholes in the sub-basin (manhole quantity provided by City's GIS data), combined sonar/closed circuit television (CCTV) inspection of the 36" diameter sewer lines (See Tables 1 and 2 below) including some areas of rough-easement, sonar pipeline inspection.

Pipe Size	Pipe Segments	Linear Feet
36"	14	6,418

Table 1 – SSES Pipe Information

- h. The preferred SSES vendor for this project is Hydrostructures, PA, one of the five pre-approved vendors. The fee for the SSES work is based on their knowledge of the site and experience with similar projects. Scope items and quantities to be performed by Hydrostructures, P.A. includes the following:

Item Description	Quantity
MACP Manhole Inspection (NASSCO Level 2)	15
Sonar/CCTV Combined Inspection	3209 LF
Rough Easement – Sonar/CCTV Combined Inspection	3209 LF

Table 2 – SSES Scope Items and Quantities

- i. The SSES vendor's prices are based on estimated units and quantities. It is the intention of this contract to pay the SSES vendor for actual work performed based on actual quantities, however the "total subcontract price" for the SSES vendor is considered a not-to-exceed amount unless additional services are approved in writing by the City.
- j. All SSES work will be performed in accordance with the requirements of the following City of Chattanooga Standard Specification Sections:
 - a. 33 01 33.14 - Precondition and Cleaning of Sewers
 - b. 33 01 30.16 – Close Circuit TV Inspection of Sewers
 - c. 33 01 30.22 – Flow Isolation Inspection of Underground Sewer Pipelines
 - d. 33 01 30.24 – Smoke Testing of Underground Sewer Pipelines
 - e. 33 01 30.26 – Dye Water Testing of Underground Sewer Pipelines
 - f. 33 01 30.27 – Sonar Inspection of Sewers
 - g. 33 01 30.28 – Laser Profile Inspection of Sewers
 - h. 33 01 30.29 – Inspection of Sanitary Sewer Manholes



Task 3 – Preliminary Engineering Report / State Revolving Fund Loan Plan (SRFLP) Report

- a. HDR will consult with the City and PM to review pipes, manholes, and the recommended rehabilitation methods based on the SSES, and review for constructability.
- b. HDR will prepare conceptual level cost estimates at the 30% mark and provide those to the City and the PM.
- c. HDR will prepare 30% conceptual plans based on pipes and manholes selected for rehabilitation by the City and PM.
- d. HDR will address State Revolving Fund (SRF) requirements as listed: create a site specific Facility Plan based on a template provided by the City and the table of contents available on the SRF website, SRF present worth analysis, SRF environmental review, address SRF Environmental Justice Issues, and respond to SRF comments. SRF documents will be incorporated in the bid specifications.
- e. HDR will prepare a Preliminary Engineering Report (PER) and submit it to the City and PM for review and approval. An electronic PDF version and two (2) copies of the PER will be printed and delivered to the City for distribution to the other city departments. The report will detail the SSES findings and include the recommendations of the City and PM. The PER will include information relevant to the project including findings, recommendations and procedures.
- f. HDR will attend a 30% Design Review with the City and PM.
- g. HDR will assist in conducting a public meeting to present alternatives. Production of presentation materials is not included in this scope. Note that only one public meeting is included in this scope of work.

Task 4 – Finalize Design Drawings and Specifications

- a. HDR will perform design and conduct design meetings with City and PM. The design will be to a level to provide prospective contractors the extent and scope of work to be performed. HDR will regularly brief the City and PM on the status of the design and discuss design components as described in this section.

Task 4.1 90% Design

- b. HDR will prepare 90% design documents including:
 - Plans conforming to the example set provided by the City, Appendix VI of the scope and Fee Negotiations document.
 - Technical Specifications will be produced based on standard and guide specifications provided by the City and supplemented with HDR standard specifications where necessary.
- c. HDR will submit the 90% Design Package to the City and PM for review. An electronic PDF version and two (2) copies of the 90% Design Package will be printed and delivered to the City for distribution to the other city departments.
- d. HDR will attend a 90% design review meeting with the City and PM.
- e. HDR will incorporate City and PM 90 % comments

Task 4.2 Final Design

- f. HDR will prepare the Final Bid Documents for submittal to State Revolving Fund (SRF) including plans, technical and front end specifications, final Opinion of Probable Cost and bid schedule. Six (6) copies will be prepared for submittal to SRF.
- g. A Bid Schedule utilizing standardized Division 00 and 01 specifications will be provided by City and PM.
- h. HDR will submit Final Bid Documents to SRF for approval and for the purpose of receipt of a Notice to Bid. HDR will incorporate SRF final comments into the bid documents in the preparation of the Bid Package.



Task 5 – Bid Phase Services

- a. Advertisement/Distribution Assistance – HDR assumes City will pay and place ads in appropriate locations. HDR will prepare the advertisement and deliver 20 full size (22" x 34") copies of the plans and specifications to the City for distribution during bidding. The City will be the "Plan Holder" during the bidding phase.
- b. Pre-Bid Conference - This task assumes HDR attends but does not lead/conduct meeting, rather HDR will present project elements and answer questions.
- c. Addendums – HDR will prepare pre-bid conference meeting minutes and up to three (3) addendums if needed.
- d. HDR will assist in submitting MBE/WBE documentation as provided by the bidding contractors to SRF for the purpose of acquiring an Approval to Award. The responsibility for acquiring MBE/WBE approval is the responsibility of the bidding contractor.
- e. Bid Opening/Evaluation of Bids - HDR will attend bid opening, City to conduct opening. HDR to compile bid tab, and evaluate low bidder and prepare recommendation of award. HDR will perform limited research into low bidder's qualifications through discussions with their references, other consultants, city staff, and their surety, and prepare a letter of recommendation for project award
- f. HDR will prepare 5 sets of Contract Documents (Full Size Plans and Specifications) for execution by the City. Three (3) sets of conformed drawings will be provided for use by contractor as construction sets and an as-built markup set.

Task 6 – Construction Phase Services

- a. HDR will provide Construction Administration and coordination for the construction phase which includes:
 - Preparing for and conducting a Pre-construction conference. The Preconstruction conference's intent is to establish procedural and communication guidelines for the construction phase of the project. Record notes from the meeting will be provided to the City, PM and contractor.
 - Shop drawing review: HDR will review the required submitted shop drawings for the purpose of providing the proper materials for the project.
 - Site visits during observance of Construction progress: HDR will make periodic visits to the construction site to monitor job progress and consistency. The site visits may include the Project Manager, Project Engineer and staff level engineer.
 - Responding to up to 10 RFIs and process up to 10 Change Orders as required. All RFIs and change orders will be submitted on approved forms. Copies will be provided to the City and PM. HDR will respond to the best of their knowledge.
 - Process monthly pay requests and final pay request. HDR will review each monthly pay request and submit to the City and PM a recommendation for payment.
- b. Conduct monthly construction progress meetings, 1 per month for a total of 5.
- c. Project close-out procedures will include a Substantial Completion inspection, preparation of a punch list and Final Inspection. HDR will coordinate Project Closeout documentation that complies with City and SRF requirements.
- d. HDR will prepare record drawings. The record drawings will be prepared from the contractor's set of marked-up as-built drawings. 5 copies of the record drawings will be prepared and delivered to the City along with a CD of CADD files (AutoCAD 2011) and specifications (Microsoft Word Files)

Assumptions:

- 1) All permit fees to be paid by the City.
- 2) Rehabilitation Design scope and fee is based on all 6,400 LF of 36" diameter sewer.
- 3) 201 Facility Plan Amendments are not included as a part of this project work scope.
- 4) SSES vendor price assumes the procedure of Sonar / CCTV combined inspection can be used. Pipe



cleaning is not expected to be required for this work, however, an estimated length of 500 LF of heavy cleaning is provided as a place holder if heavy cleaning is ultimately required to provide adequate interpretation of the pipe conditions.

2. SUPPLEMENTAL SERVICES

Any work requested by the Owner that is not included in the Basic Services will be classified as Supplemental Services. Supplemental Services shall include, but are not limited to the following:

Task 7 – Easements and Permitting as Required

- a. HDR will identify requirements for easements and coordinate preparation of permanent and/or temporary construction easement documents. HDR's sub-consultant will prepare written easements and easement drawings as required for up to six (6) easement documents. HDR will provide the easement documents to the City and PM for execution.
- b. HDR will prepare and submit applications for necessary permits. Permits required include but are not limited to Railroad Crossing & TDEC. All permit fees will be paid by the City.

Task 8– Surveying & Mapping as Required

- a. HDR will coordinate and manage the activities of the surveyor to provide site topographic surveying where required for up to 500 linear feet of sewer construction. The services of a surveyor will be used to gain information of pipe elevations, topographic information, existing utilities and related site grades.
- b. HDR will coordinate with the surveyor to perform a property/easement surveys as required for up to two (2) easement documents.

Task 9 – Resident Project Representative (RPR) as Required

- a. HDR will provide the services of a RPR prior to start date of the construction. The duties will involve site reconnaissance of the project area and will include taking photos and recording initial site conditions.
- b. HDR will provide RPR services during construction. The RPR services are to observe the construction and serve as a direct contact at the construction site. The RPR construction services will continue until substantial inspection. The RPR will assist in the development of a punch list and monitoring the construction. Construction RPR services are planned to be provided on a part time basis, 20 hours per week based on the construction schedule provided in Attachment E1.
- c. HDR will provide the RPR services from substantial inspection through the completion of the punch list and project close-out.

Assumptions:

- 1) Total number of easement drawings and descriptions: 2
- 2) Total linear footage for surveying: 500 LF
- 3) The RPR time is based on part time services at 20 hours per construction work week based on the construction schedule provided in Attachment E1



3. REIMBURSABLE EXPENSES:

Project specific reimbursable expenses and charges shall include the following:
Plan and Document Reproduction for deliverables, bidding and record drawings
Travel Expenses
Postal and Delivery
Teleconference.



ATTACHMENT B

Owner: City of Chattanooga, Tennessee

Engineer: HDR Engineering, Inc.
 Project Number & Name: W-12-025-101
 Tannery Flats Interceptor Rehabilitation

COMPENSATION

For the services covered by this Agreement, the Owner agrees to pay the Engineer as follows:

1. For the Basic Services described in Attachment A, a cost based on billing rates and expenses with a not to exceed limit of \$204,750.00 using the Rate Table in Attachment F. Payments shall be made monthly in amounts which are consistent with the amount of engineering services provided, as determined by the Engineer.

1. Task 1 – Data Gathering and Project Management	\$23,120.00
2. Task 2 – SSES	\$45,324.00
3. Task 3 – Preliminary Engineering Report	\$27,611.00
4. Task 4 – Design Drawings and Specifications	\$28,735.00
5. Task 5 – Bid Phase Services	\$13,660.00
6. Task 6 – Construction Phase Services	\$33,490.00

Subtotal \$171,940.00

2. Compensation for Supplemental Services shall be made as defined below, when authorized in writing by the Owner. The maximum limit for each item of additional service shall be established individually and specifically agreed to by the Owner as stated below, unless the service is included in a subsequent agreement.

7. Task 7 – Easements and Permitting	\$3,560.00
8. Task 8 – Surveying and Mapping	\$3,410.00
9. Task 9 – Resident Project Representative	\$25,840.00

Subtotal\$ 32,810.00

Grand Total\$204,750.00

3. Hourly rates for each classification as defined by the Engineer's rate schedule, see Attachment F. Overtime, when authorized by the Owner, will be billed at 1.5times the rates listed (non-engineer time only).

4. Reimbursable charges will be considered the amount of actual costs of project related expenses or charges times a markup of 5% for SSES Vendor Services and 10% for all other expenses and subcontractors. Charges for use of computer equipment or software, local travel, local telephone, project photographs, miscellaneous supplies, and reproduction are not considered reimbursable charges. Allowable project-specific reimbursable expenses shall be outlined in Attachment A.

5. The entire amount of each statement shall be due and payable 30 days after receipt by the Owner.

6. The Engineer shall keep records on the basis of generally accepted accounting practice of costs and expenses which records shall be available for inspection at all reasonable times.



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7. Invoices shall be submitted using the Standard Invoice form, Attachment G.



ATTACHMENT C

Owner: City of Chattanooga, Tennessee

Engineer: HDR Engineering, Inc.
Project Number & Name: W-12-025-101
Tannery Flats Interceptor Rehabilitation

OWNER'S RESPONSIBILITIES

The Owner will furnish, as required by the work and not at the expense of the Engineer, the following:

1. The Owner will provide the Engineer copies of all current and necessary permits and approvals from all federal, state and local regulatory agencies. These include air quality, water quality, storm water quality, solid waste, special wastes, and other regulatory permits that may be required.
2. The Owner will provide Engineer access to all of available NPDES reports as required.
3. The Owner will coordinate and facilitate meetings or the exchange of information between any other interested parties that may also prospectively participate in the project as required.
4. The Owner will coordinate for the Engineer the acquisition of future population and employment figures from regional planning institutions as required for the project as required.
5. The Owner will provide the Engineer copies of all available sewer reports related to sewer facility planning as required.
6. The Owner will provide access to the system wide hydraulic model outputs as required.
7. The Owner will provide the Engineer the most up-to-date GIS data available for all sewer system components as required.
8. The Owner will provide the Engineer access to all its pump station and CSOTF sites as required.
9. The Owner will provide Engineer access to all available plans and specifications for the facilities as required.
10. The Owner will provide the Engineer with documentation of existing O&M procedures related to the operation of the treatment works that may be relative to the project as required.
11. The Owner will provide the Engineer with documentation of existing standards and procedures related to the sewer system development and expansion as required.
12. The Owner will provide the Engineer with documentation of existing standards and procedures related to the treatment works as required.
13. The Owner will arrange for facilities for the Engineer and attend public information meetings as required. The Owner will prepare and mail invitations for public information meetings as



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- required. The Owner and the Engineer will conduct monthly project progress meetings as required.
14. The Owner will designate a project representative to be the liaison between the Engineer and the Owner on the project.
 15. Owner will make a reasonable effort to evaluate if hazardous materials are on or near the project site, and will inform Engineer of findings relative to the possible presence of such materials.



ATTACHMENT D

Owner: Owner of Chattanooga, Tennessee

Engineer: HDR Engineering, Inc.
Project Number & Name: W-12-025-101
Tannery Flats Interceptor Rehabilitation

SUPPLEMENTAL AGREEMENTS

A. Engineers Responsibilities:

1. During Contract negotiation, the Engineer shall describe in detail its overall approach that will be used by its Engineer's Project Team to perform the scope of work described herein for the development of the project for the Owner.
2. The Engineer shall provide all labor, benefits, equipment, materials, fuel, utilities, insurance, out-of-pocket expenses, and other related services required in connection with development of the project.
3. The Engineer shall obtain all necessary permits and approvals from all federal, state, and local regulatory agencies related to development of the project as required. Furnish copies of all required permits and approvals to the Owner.
4. The Engineer shall provide and submit reports and certifications as required by all applicable EPA and/or State regulations of development of the project as required. Furnish a copy of all required reports to the Owner in a timely manner.
5. The Engineers shall coordinate its work with the operating schedule of the Owner as required.
6. The Engineers shall conduct the work for the development of the project in compliance with all applicable federal, state, and local laws, regulations, permits, and approvals.
7. The Engineer shall provide adequate supervision and technical and managerial oversight of the Engineer's employees, subcontractors, and agents
8. The Engineer shall support and utilize the Owner's Standard Operating Procedures developed for the Consent Decree (CD) Program. Specifically, the design of each project shall comply with CADD standards, standardized specifications, or approved design guidelines, cost estimating guidelines, and materials and functional layout and operation of equipment and systems as required.
9. The Engineer shall administer the project to comply with the scheduling goals established by the Program Manager (PM) to ensure that the CD milestones are being met. The Engineer shall timely report project information as prescribed by the PM.
10. The Engineer shall prepare an initial and minimum monthly update to its project schedule; updates can be more frequent or as significant activities change.



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11. The Engineer shall prepare, implement and execute a project quality management plan which complies with quality program guidelines and requirements and goals to be established by the PM, and the Engineer's own internal quality procedures/program requirements. The Engineer shall be fully responsible for the quality of their work products and associated quality assurance and quality control activities.
12. The Engineer shall prepare, implement and execute a written project safety management plan which following the Engineer's own internal safety procedures/program requirements and which will also reflect the goals of the safety program to be established by the PM for the CD program project.
13. The Engineer shall provide all documents in a timely manner and format prescribed by the PM to support a document management/imaging repository. All documents shall be maintained in this manner for general and financial record keeping, contract compliance, claims and litigation, warranty issues, and related purposes.
14. The Engineer may assist the PM in reviewing the preliminary project budget and provide recommendations relative to project updates for design, construction contract administration and inspection, contracting costs, and industry appropriate level of contingency as required. The Engineer shall assist the PM in coordinating the program budget with the plan schedule in order to ensure compliance with the CD needs and constraints regarding the overall budget as required. Engineer shall maintain and input pertinent information to account for all costs of the project in a form and manner prescribed by the PM as required.
15. The Engineer shall assist the PM with the preparation of project progress reports as required. Reports shall include, but not be limited to, all reports required to satisfy requirements of the CD.
16. The Engineer may be asked to provide technical support to the CD Public Relations Plan.
17. The Engineer shall utilize the Owner's standardized Division 00 and 01 specifications as in developing project specific specifications- In addition the PM will provide to the Engineer certain technical specifications, details and minimum design guidelines intended to provide consistency across the design deliverables from various Engineers on similar types of work as required.
18. The Engineer shall submit all Requests for Information (RFIs) and change order for their professional services agreement to the PM first for approval.
19. The Engineer shall submit all pay requests/invoices to PM first for approval.
20. Engineer shall identify any and all permits during the first month of project activity from Notice to Proceed (NTP). Likely easements and permanent real estate acquisitions shall be identified with special purpose survey exhibits depicting areas needed based on a schedule to be developed by the Engineer within the first month of project activity from NTP.
21. The PM may conduct monthly progress meetings, value engineering (VE) reviews and constructability review as required and include Owner and PM staff as needed.



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B. Owner and Engineer agree that the following communications, representations, and agreements by Engineer relating to the subject matter of the Agreement are hereby incorporated into and shall become a part of the Agreement.



ATTACHMENT E

Owner: Owner of Chattanooga, Tennessee

Engineer: HDR Engineering, Inc.
Project Number & Name: W-12-025-101
Tannery Flats Interceptor Rehabilitation

PROJECT SCHEDULE

Owner and Engineer recognize that time is of the essence of the Agreement and that Owner may suffer financial loss if the work is not completed within the times stipulated herein, plus any extensions thereof. Accordingly, Engineer will develop for this Agreement a preliminary schedule based on the schedule requirements specified in the Specific Scope of Work for this project and either provide it below or as Attachment E1.

A detailed schedule (project schedule) will be required as one of the Project Management deliverables as specified in the Specific Scope of Work for this project once the Agreement is executed. The Engineer will produce the project schedule using industry accepted scheduling software approved by the Owner.

It is understood and agreed that the Engineer shall start the performance of Services within 10 days of receipt of a written Notice to Proceed and shall complete the work in accordance with the contract times set forth herein.

See schedule Attachment E1



ATTACHMENT F

Owner: Owner of Chattanooga, Tennessee

Engineer: HDR Engineering, Inc.
 Project Number & Name: W-12-025-101
 Tannery Flats Interceptor Rehabilitation

RATE SCHEDULE

Please see the following rate schedule:

Rate ranges supplied are hourly rates for calendar year 2013. Rates may be increased annually upon mutual agreement of the parties. However, such adjustment shall not exceed a three percent (3%) annual adjustment

<u>Labor Category</u>	<u>2013 Hourly Rate Range (\$/hour)</u>	
	<u>Minimum</u>	<u>Maximum</u>
• Principal Engineer	\$200.00	\$245.00
• QA/QC	\$200.00	\$245.00
• Senior Project Manager	\$190.00	\$205.00
• Project Manager	\$110.00	\$150.00
• Senior Engineer	\$150.00	\$195.00
• Project Engineer/ GIS	\$100.00	\$150.00
• Environmental Engineer	\$100.00	\$130.00
• EIT	\$90.00	\$120.00
• Designer	\$100.00	\$130.00
• CADD Technician	\$80.00	\$100.00
• Administrative Support	\$80.00	\$100.00
• Resident Project Representative	\$100.00	\$130.00



ATTACHMENT G

STANDARD INVOICE

Indicates MANDATORY item

CONSULTANT LETTERHEAD

INVOICE

ATTN: City Project Manager
REF: Project Name
CODE: Consultant Project Number
PO: City Project Number in format S-02-001-101

Provided by City

TERMS: Net 25 days
DUE: 08/01/03

Must be Sequential Number

City Project Manager
City Project Manager Title
City of Chattanooga
Engineering Division/DRC
1250 Market Street, Suite 2100
Chattanooga TN 37402

Invoice Number 5
Dated 07/07/03

Invoice Must show Billing Period.

For Professional Services from May 31 to June 27, 2003

This Breakdown must list each item of the Contract.

Consultant Project No.	Description	Fee	Work Fee Basis	Percent to Date	Amount Billed	Previous Billed	This Invoice Billed
C03009-01	01 - Design	\$51,500.00	LS	55%	\$28,325.00	\$18,540.00	\$9,785.00
	02 - Survey	\$15,700.00	LS	0%	\$0.00	\$0.00	\$0.00
C03009-02	Barton Avenue and Brown Acres Golf Course Design	\$20,000.00	CP	12%	\$2,391.02	\$2,033.00	\$358.02
C03009-03	Permitting/Easement Assistance	\$5,000.00	CP	6%	\$291.08	\$0.00	\$291.08
C03009-04	Bidding/Construction Assistance	\$10,000.00	CP	0%	\$0.00	\$0.00	\$0.00
C03009-05	Misc. As-Requested Services	\$5,000.00	CP	7%	\$363.85	\$0.00	\$363.85
Total Contract Amount					\$107,200.00	\$31,370.95	\$20,573.00
TOTAL THIS INVOICE							\$10,797.95

Must Match Contract Amount

Prior Invoices	\$20,573.00
This Invoice	\$10,797.95
Payments	-\$20,573.00
Balance on Account	\$10,797.95

- NOTE**
- There shall be only one invoice per contract per billing period.
 - Any necessary details should be attached as backup.

Task	Description	Duration Working Days	WEEKS																											
			1	2	3	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
	NOTICE TO PROCEED	1																												
1	DATA GATHERING AND PROJECT MANAGEMENT																													
	PROJECT INITIATION	10																												
	KICK-OFF MEETING	1																												
	DATA COLLECTION	20																												
	COORDINATE WITH SSES VENDOR	10																												
	PROJECT MANAGEMENT TASKS	Ongoing																												
2	SANITARY SEWER EVALUATION STUDY (SSES)																													
	SSES ACTIVITIES	20																												
	PREPARE SSES REPORT	15																												
	SUBMIT SSES REPORT	1																												
	CITY REVIEW OF SSES REPORT	10																												
3	PRELIM. ENGR. REPORT / SRF REPORT																													
	PREPARE 30% CONCEPTUAL DESIGN	20																												
	CONDUCT REHAB WORKSHOP WITH THE CITY	1																												
	PREPARE PRELIM ENGR REPORT AND SRF DOCS	10																												
	SUBMIT SRF DOCUMENTS TO STATE	1																												
	SUBMIT 30% DESIGN DELIVERABLE	1																												
	CITY REVIEW OF 30% DESIGN DELIVERABLES	10																												
	ATTEND 30% DESIGN REVIEW MEETING	1																												
4A	60% DESIGN																													
	PREPARE 60% DESIGN	35																												
	SUBMIT 60% DESIGN DELIVERABLES	1																												
	CITY REVIEW OF 60% DESIGN DELIVERABLES	10																												
	ATTEND 60% DESIGN REVIEW MEETING	1																												
4B	90% DESIGN																													
	PREPARE 90% DESIGN	30																												
	SUBMIT 90% DESIGN DELIVERABLES	1																												
	CITY REVIEW OF 90% DESIGN DELIVERABLES	10																												
	ATTEND 90% DESIGN REVIEW MEETING	1																												
4C	FINAL DESIGN																													
	PREPARE FINAL DESIGN	20																												
	SUBMIT BID DOCUMENTS TO SRF	1																												
	CITY REVIEW OF FINAL DESIGN DELIVERABLES	5																												
	INCORPORATE CITY AND SRF COMMENTS	5																												
	PREPARE BID PACKAGE	5																												
5	BIDDING DOCUMENT SUBMITTAL	1																												
	BID PHASE																													
	ADVERTISE	20																												
	PREBID CONFERENCE	1																												
	BID OPENING	1																												
	BID EVALUATION AND RECOMMENDATION TO CITY	10																												
6	CITY APPROVAL AND AWARD	20																												
	CONSTRUCTION																													
	PRE-CONSTRUCTION SERVICES	40																												
	PRE-CONSTRUCTION CONFERENCE	1																												
	NTP	1																												
	SUBSTANTIAL COMPLETION	80																												
	FINAL COMPLETION	20																												
	CLOSE-OUT DOCUMENTS	10																												
RECORD DRAWINGS	20																													

