



DeKalb County Government

Manuel J. Maloof Center

1300 Commerce Drive
Decatur, Georgia 30030

Agenda Item

File ID: 2017-0630

Substitute

12/5/2017

Purchasing Type: Change Order (CO)

Public Hearing: YES NO

Department: Purchasing & Contracting

AGENDA ITEM:

Commission District(s): All

CO - Change Order No. 2 to Contract No. 14-902800 Consent Decree Program Management Services: for use by the Department of Watershed Management (DWM). Awarded to CH2M Hill Engineers, Inc. Amount Not To Exceed: \$17,032,445.00.

Information Contact: Talisa Clark, CPPO

Phone Number: (404) 687-2797

PURPOSE:

Awarded by the BOC on January 28, 2014 for an amount not to exceed \$14,865,616.00. This contract consists of providing program management services to facilitate the Consent Decree Program through sewer assessment, hydraulic modeling, permitting, engineering, and document control for Consent Decree projects. This request is to revise the scope of work, extend the Contract Time to June 30, 2020, extend the Contract's Term until December 31, 2021 and add additional funding in the total amount of \$17,032,445.00, bringing the total Contract Price to \$33,376,230.00.

RECOMMENDATION:

Recommend approval of the attached Change Order #2 with CH2M Hill Engineering, Inc., 1000 Abernathy Road, Suite 1600, Atlanta, GA 30328 and authorize the CEO to execute the attached Change Order as approved by the County Attorney or her designee.

ADDITIONAL INFORMATION:

Notes:

1. LSBE Participation: 42%
2. Contract Effective Date: April 7, 2014
3. Contract Expiration Date: December 31, 2019
4. Amount Spent To Date: \$16,157,816.95
5. Funding: 2011 Bonds and Renewal & Extension (DWM)

STATE OF GEORGIA
COUNTY OF DEKALB

**CHANGE ORDER NO. 2
TO
CONTRACT NO. 14-902800**

THIS AMENDMENT, effective as of September 1, 2017, is made by and between **DeKalb County**, a political subdivision of the State of Georgia (hereinafter referred to as the “County”), and **CH2M Hill Engineers, Inc.**, a corporation organized and existing under the laws of the State of Delaware, with offices in Fulton County, Georgia (hereinafter referred to as the “Contractor”).

WITNESSETH:

WHEREAS, County and Contractor have previously entered into a certain Contract dated April 7, 2014, (**DeKalb County Contract No. 14-902800**), as amended by that First Change Order approved by the DeKalb Governing Authority on August 8, 2017 (as amended, the “Agreement” or “Contract”) entitled **Consent Decree Program Management Services** (hereinafter referred to as the “Project”); and,

WHEREAS, the County and Contractor desire to amend said contract to revise the scope of work to reflect modifications to the Project since the execution of the Agreement, extend the contract time to June 30, 2020, extend the contract’s term until December 31, 2021 and add additional funding in an amount not to exceed Seventeen Million Thirty-Two Thousand Four Hundred and Forty-Five Dollars and Zero Cents (\$17,032,445.00); and,

WHEREAS, the DeKalb County Governing Authority adopted and approved the terms of this Change Order No. 2 on _____; and,

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and in consideration of the mutual promises and undertakings contained herein, the parties hereto do hereby agree and consent to the following:

I. THE CONTRACT IS HEREBY AMENDED AS FOLLOWS:

A. ARTICLE I. CONTRACT TIME, DELETE ARTICLE I. CONTRACT TIME
in its entirety, **INSERT A NEW ARTICLE I. CONTRACT TIME** as follows:

The Contractor shall commence the work under this Agreement on April 7, 2014

("execution date"). Contractor shall fully complete the Work by June 30, 2020. The Contract Time may be extended only by Change Order approved and executed by the DeKalb County Governing Authority or the Chief Executive Officer, if exempted from Governing Authority adoption and approval in accordance with the express terms of this Contract.

B. ARTICLE II. CONTRACT TERM, DELETE ARTICLE II. CONTRACT

TERM in its entirety, **INSERT A NEW ARTICLE II. CONTRACT TERM** as follows:

The Contract shall commence immediately upon execution. As required by O.C.G.A. § 36-60-13, this contract shall (i) terminate without further obligation on the part of the County on each December 31st, as required by O.C.G.A. 36-60-13, as amended, unless terminated earlier in accordance with the termination provisions of this Contract; (ii) automatically renew on each January 1st, unless terminated in accordance with the termination provisions of this Contract; and (iii) terminate absolutely, with no further renewals on December 31, 2021, unless extended by Change Order adopted and approved by the DeKalb County Governing Authority and the Contractor in accordance with the terms of this Contract.

C. ARTICLE III. PAYMENT, DELETE ARTICLE III. PAYMENT in its entirety,

INSERT A NEW ARTICLE III. PAYMENT as follows:

As full payment for the faithful performance of this Contract, the County shall pay the Contractor the Contract Price, which is an amount not to exceed Thirty-Three Million Three Hundred Seventy-Six Thousand Two Hundred Thirty Dollars and Zero Cents (\$33,376,230.00), unless changed by written Change Order in accordance with the terms of this Contract. The term "Change Order" includes the term "amendment" and shall mean a written order authorizing a change in the Work, and an adjustment in Contract Price to Contractor or the Contract Term, as adopted and approved by the Contractor and the DeKalb County Governing Authority, or the Chief Executive Officer, if exempted from Governing Authority adoption and approval in accordance with the express terms of this Contract. The Chief Executive Officer or his/her designee shall have the authority to approve and execute a Change Order lowering the Contract Price or increasing the Contract Price so long as the amount of each Change Order increasing the Contract Price does not exceed One Hundred Thousand Dollars (\$100,000.00). Any other increase of the Contract Price shall be by Change Order adopted and approved by the DeKalb County Governing Authority and the Contractor in accordance with the terms of this Contract. Amounts paid to the Contractor for work performed from April 2014 through April 2017 shall comply with and not exceed Attachment

A to the Contract, the Contractor's Cost Proposal, consisting of five (5) pages attached thereto and incorporated therein. Amounts paid to the Contractor for work performed from May 2017 through August 31, 2017 shall comply with and not exceed Attachment A to Change Order No. 1, consisting of two (2) pages attached thereto and incorporated therein. Amounts paid to the Contractor for work performed from September 1, 2017 through June 30, 2020 shall comply with and not exceed Attachment A-1 to this Change Order No. 2, the Contractor's CH2M Cost Proposal for September 2017 through June 2020, consisting of three (3) pages attached hereto and incorporated herein.

Payment is to be made no later than thirty (30) days after submittal of undisputed invoice.

Invoices must be submitted as follows:

- A. Original invoice(s) must be submitted to:

DeKalb County, Georgia
Accounting Services
1300 Commerce Drive, 3rd Floor
Decatur, Georgia 30030

- B. A copy of the invoice(s) must be submitted to:

Watershed Management
Attention: Project Manager for Consent Decree Program Management
1580 Roadhaven Drive
Stone Mountain, Georgia 30083

- C. A copy of the invoice(s) must be submitted with completed Prime Contractor LSBE (Local Small Business Enterprise) Utilization Report and LSBE Sub-Contractor Report to:

Contract Compliance Division
DeKalb County Purchasing & Contracting
1300 Commerce Drive, 2nd Floor
Decatur, Georgia 30030

The Contract Price of an amount not to exceed Thirty-Three Million Three Hundred Seventy-Six Thousand Two Hundred Thirty Dollars and Zero Cents (\$33,376,230.00) includes full and final payment in the total amount of \$1,913,967.00 for the following out of scope tasks performed during the time period of April 2014 through and including April 2017:

- Management of Inspection Staff for PASARP assessment work (2/8/2016 – 10/28/2016) - \$175,775.00

- Review and Analysis of Service Requests Related to SSO reporting (3/24/2016 – 1/16/2017) - \$140,531.00
- Provide Technical Services and Program Management of Design Build Gravity Collection System Projects (3/25/2016 – 4/28/2017) - \$118,653
- Cityworks Implementation Phase I (4/1/2016 – 12/31/2016) - \$701,445.00
- Rehab Packaging of Design Build Contracts (9/1/2016 – 4/28/2017) - \$222,777.00
- Provide Inspection Services to Supplement DWM Inspection Staff (9/19/2016 – 4/28/2017) - \$185,808.00
- Provide Support to DWM regarding Private I/I Program (10/1/2016 – 4/28/2017) - \$37,508.00
- Additional Modeling Services to Support DWM (10/7/2016 – 4/28/2016) - \$255,447.00
- Additional Cityworks Services (1/1/2017 – 4/28/2017) - \$76,023.00

Payment in the total amount of \$1,913,967.00 for these out of scope tasks has been made in full prior to execution of this Change Order No. 2.

The Contract Price of an amount not to exceed Thirty-Three Million Three Hundred Seventy-Six Thousand Two Hundred Thirty Dollars and Zero Cents (\$33,376,230.00) is full and final payment for all Consent Decree Program Management Services through and including June 30, 2020. The Contract Price includes, as described above, full and final payment for out of scope tasks performed during the time period of April 2014 through and including April 2017.

No additional compensation shall be made for any other work alleged to be out of scope performed prior to September 1, 2017, the effective date of this Change Order No. 2.

D. ARTICLE IV. SCOPE OF WORK, DELETE ARTICLE IV. SCOPE OF WORK in its entirety, **INSERT A NEW ARTICLE IV. SCOPE OF WORK** as follows:

The Contractor agrees to provide all consent decree program management services in accordance with the County's Request for Proposals (RFP) No. 13-500270 for Consent Decree Program Management Services, attached to the Contract as Appendix I and incorporated herein by reference, and the Contractor's response thereto, attached to the Contract as Appendix II and incorporated herein by reference. The Contractor's services shall include all things, personnel, and materials necessary to accomplish specific projects authorized by the County. For the purposes of this statement of work, the term "DWM" shall mean county employees designated by the chief executive officer, the executive assistant or the deputy chief operating officer for infrastructure to handle, supervise, or review the tasks set forth in this statement of work.

1. The Contractor shall perform the following Tasks:
 - a. Task 1 – Program Development and Management
 - i. Provide full-time management of the CD program, including all personnel included in the staffing plan not dedicated to Task activities.
 - ii. Develop specific and measurable goals for the development and execution of the program to ensure successful accomplishments of the CD requirements and milestones. (completed before execution of CO #1)
 - iii. Develop and implement a 90-day mobilization plan that identifies staffing, computer systems and other support services, early task deliverables, and other activities necessary to assure that any early CD milestones are achieved. (completed before execution of CO #1)
 - iv. Develop and implement a system that tracks and reports budget, schedule and costs against progress for the program management contract tasks identified herein. (completed before execution of CO #1)
 - v. Immediately begin developing a knowledge transfer plan that identifies the methods (on-the-job transfer of knowledge, informal and formal training) for transferring knowledge of the program task activities from Proposer staff to DWM staff. (completed before execution of CO #1)
 - vi. Implement the knowledge transfer plan developed pursuant to Task 1, subpart v.
 - vii. Schedule, plan and conduct and/or attend all Consent Decree Program Management Team (CDPMT) project status and other meetings
 - viii. Meet with appropriate DWM staff for monthly progress updates on CD program efforts
 - ix. Attend BOC meetings and other public meetings, regarding and related to the Consent Decree (CD), when and as requested by the DWM
 - x. Coordinate LSBE partner and other subcontractor activities, including periodic principal briefings

- xi. Provide other support, review, and oversight as required, of other issues that arise and are requested by the DWM throughout the duration of the program, such as rehabilitation program management services, including additional program management support for numerous Design/Build (D/B) construction contracts (Phase 1: 60% design and guaranteed maximum price development only) for recommended sewer rehabilitation
- b. Task 2 – CD Budget, Schedule and Cost
- i. Develop and implement, using commercial software, a system to comprehensively track and report budget, schedule and costs at the CD task and project level, rolled up to the program level.
 - ii. Track and report all interim and final CD milestone dates, as identified within the CD document, CMOM plans, or other reports and information as may be developed in the future.
 - iii. Reports shall be developed on a monthly basis, with transfer of data as necessary to the future CIP Program Management system. System features shall include but not limited to:
 - 1) Integrated master schedule;
 - 2) Baseline schedule and budget;
 - 3) Schedule and cost updates;
 - 4) Identification of schedule and cost variances;
 - 5) Forecasted schedule and cost thru completion;
 - 6) Evaluation and mitigation of schedule and cost variances;
 - 7) Work Breakdown Structures (WBS) and Critical Path Method (CPM);
 - 8) Detailed reporting features, with rollup to program level; and
 - 9) “Dashboard” type reporting capabilities to facilitate management reviews.
 - iv. The County does not require a particular software system. The County desires a cost-effective approach, considering the cost of software, licenses, and staffing to effectively manage the system. Cost-effectiveness will be inherently identified within the Proposer’s cost proposal.
 - v. Update program Master Schedule on a regular, monthly basis, by reviewing work accomplished, deadlines and milestones with Task Leads, and produce final program Master Schedule update for distribution to DWM and CDPMT. Provide immediate written notice of deadlines, milestones, etc. which impact compliance with the Consent Decree.
 - vi. Review all backup documents for CDPMT invoice packages on a regular, monthly basis, provide a summary report and respond to any DWM questions or inquiries.
 - vii. With DWM approval, issue new Subcontractor task orders when required; administer and maintain records and timesheets for Subcontractors, and track Subcontractor spending, payment and outstanding contract balances.
- c. Task 3 – CD Reporting
- i. For Annual and Semi-Annual Reports required by the CD, develop draft reports by working with CD Leads (both CDPMT and DWM), for submittal to DWM. Reports will then be finalized by the County’s Executive Assistant/Chief

Operating Officer, or as authorized by the Chief Executive Officer in writing, and submitted to EPA accordingly.

- ii. Utilize program Master Schedule, in an abbreviated form showing activities from the last six-month period and also for the next six-month period, to serve as the basis of the Semi-Annual Report, thus reducing the volume of text developed for previous Semi-Annual Reports before the Master Schedule could be utilized for this purpose.
 - iii. Utilize the business intelligence (BI) software adopted for use by the DWM for development of the Annual Report Trends Analysis of SSOs.
 - iv. Provide support for DWM review and work plan developments of EPA-identified complaints related to sanitary sewer overflows (SSOs).
 - v. Assist in the development of the SSO trend analysis report for EPA.
 - vi. Provide technical support for EPA presentations and for DWM responses to requests for information from EPA.
- d. Task 4 – CMOM Programs – Implementation of Projects

Directly manage the implementation of the following CMOM programs, associated with implementing projects within the collection system:

- i. Sewer Mapping Program –The Contractor shall manage the sewer mapping contracts from the beginning of the CD Program Management contract to completion of mapping contracts. (completed before execution of CO #1)
 - Provide GIS update assistance as requested by DWM
- ii. System Wide Flow and Rainfall Monitoring Program – The Contractor shall be fully responsible for managing the rainfall and flow monitoring program as necessary to assure adequate data is collected and analyzed by the County; Contractor will conduct monthly reviews of the flow monitoring data and review the monthly flow meter reports prepared by the County; Contractor will subsequently process the flow and rainfall data to develop input for the computer-based dynamic hydraulic model of the sewer system (see Section 4.iii System Wide Hydraulic Modeling Program below); to support assessment of available capacity within the sewer system; to prioritize sanitary sewers for inspection, repair, rehabilitation or replacement; and to assure full compliance with the Consent Decree. The Contractor is responsible for making changes to the flow monitoring program based on hydraulic modeling needs and System-Wide Flow and Rainfall Monitoring Program. Any contracts associated with flow monitoring will be separately procured by the County, but managed by the Contractor.
 - Provide flow monitoring field services to supplement DWM flow monitoring staff including: flow meter site investigation, flow meter installation, maintenance of flow meters after installation and removal of flow meters.

iii. System Wide Hydraulic Modeling Program – The Contractor shall be directly responsible for completing the system wide hydraulic model, using the Infoworks software (required by Consent Decree) in full compliance with the requirements and schedule contained within the Consent Decree submittal approved by EPA/EPD. (Preliminary hydraulic model was submitted before execution of CO#2, Contractor shall continue to provide services associated with subparts included in Task 4iii). The overarching requirement for development of a system wide hydraulic model is compliance with the Consent Decree and the relevant program documents submitted thereunder. The following is a list of required steps as known at this time to reach such compliance, but is not intended to be exhaustive. The Contractor shall be responsible for working with the County to identify, and communicating to the County, additional steps necessary to ensure all CD and program requirements are satisfied.

- Meet regularly with DWM modeler for the purpose of communicating updates by each party to the model and/or the information related to the model, and to discuss and resolve any other issues and questions
- Complete static peak flow hydraulic model in accordance with Exhibit 1, attached hereto.
- Update the hydraulic model on a quarterly basis in 2018 based on available GIS updates from the County once the model is fully developed
- Conduct additional model runs under different scenarios as requested and required by DWM for particular areas of interest and as required for coordination of ongoing CIP projects
- Conduct additional model runs for the gravity collection system debottlenecking projects based on changes to the GIS
- Capacity upsizing of gravity sewer collection system pipelines within OSARP and PASARP as required by the CD and relevant program documents.
- Plan and develop a computer-based dynamic hydraulic model, based on updated flow monitoring data and GIS updates. Hydraulic models shall be developed through capacity assessment for each sewershed or basin, as appropriate. The County will make a determination as to when dynamic hydraulic modeling will begin.

iv. PASARP Assessment Projects

- Provide project management, implementation and contract administration duties related to field activity, submittals, financials and schedules of PASARP assessment contracts, with areas defined as PASARP within the CD
- Also develop SSO Escalation and EPA-identified project limits and associated work assignments

- Track and update progress of these projects on a regular basis, and make work assignments as appropriate for additional projects that arise, through coordination with existing PASARP and/or OSARP contracts as possible
 - For the PASARP Capacity Restoration projects; provide project management, implementation and contract administration related to this field activity, submittals, financials and schedules
- v. OSARP Assessment Projects
- Provide project management, implementation and contract administration duties related to field activity, submittals, financials and schedules of OSARP assessment contracts for the following contracts:
 - OSARP CCTV and Manhole Condition Assessment
 - Capacity Restoration of OSARP Areas
- vii. Assisting with Infiltration and Inflow Program
- Provide DWM with assessment databases that provide the smoke defect data and pictures
 - Provide training on the mobile map application that is used to review the smoke assessment data
 - Assist DWM with resolving incorrect addresses for identified smoke defects
 - Provide technical support for the infiltration and inflow program as requested by DWM
- viii. Rehabilitation Packaging
- Develop recommended rehabilitation projects resulting from collected PASARP and OSARP data and information, and assemble rehabilitation packages for implementation, including SSO Escalation and EPA-identified projects as appropriate, for implementation through D/B contracts
- ix. Design/Build RFP Development
- Develop RFPs for provision of design/build services for:
 - Gravity sewer collection system improvements
- x. Continuing Sewer Assessment and Rehab Program –
- The Contractor shall be fully responsible for developing and implementing a program to conduct a comprehensive and thorough evaluation of the sanitary sewer system. The program should specify various equipment and techniques to detect sewer pipe defects, blockages and capacity problems. This program must be in full compliance with the requirements of the Consent Decree to address priority areas. The Contractor will perform work associated with assessing the results of the cleaning and inspection activities. The contractor will develop the scope for all sewer cleaning, manhole inspection, smoke tests, dye tests, closed circuit TV (CCTV), flow monitoring, rain monitoring, sewer rehabilitation, manhole rehabilitation

and other contracts as may be required. Such contracts will be separately procured by the County, but managed by the Contractor.

xi. Supplemental Environmental Project –

- DWM is in the process of completing the scope for this project with the assistance from a contractor and is preparing to issue an ITB to implement the work. The Contractor is not responsible for managing this contract. (Completed before execution of C.O. #2).

xii. Capacity Request Program –

- Provide Technical and support services regarding development and implementation of the Capacity Request Program

e. Task 5 – CMOM Programs – Implementation of O&M Activities

i. DWM, has and will continue to be responsible for implementing the CMOM programs associated with the operation and maintenance of the collection system, and other associated non-capital improvements. The Contractor shall provide three (3) full time equivalents (FTE) engineering staff to assist DWM with continued development and implementation of the following CMOM programs:

- Contingency and Emergency Response Plan;
- Fats, Oil and Grease Management;
- Maintenance Management System;
- Collection and Transmission Systems Training Plan;
- Infrastructure Acquisition Program; and
- Financial Analysis Program.

(Completed before execution of CO #1. Contractor may assist the Department of Watershed Management with continued development and implementation. Any work associated performed pursuant to Task 5i shall be billed under Task 12.)

ii. Maintenance Management System (MMS) Program

- Provide services as requested and required by DWM and includes the following activities:
 - Database management of the assessment data and media collected from the PASARP and OSARP programs
 - Assist with the transfer of the assessment data and media files collected during the PASARP and OSARP contracts to DWM's new Computerized Maintenance Management System (CMMS) referred to as CityWorks.
 - Develop reporting dashboards for the assessment data using Business Intelligent software

iii. Cityworks CMMS Implementation

- Phase 1 was completed in December 2016 and met or exceeded Consent Decree deadlines. This phase included the implementation of Cityworks for wastewater collection, water distribution, large water meters, and customer support. At the County's request, Phase 1 included hosting the Cityworks application in the cloud. As presently configured, Cityworks uses a copy of the County's GIS data rather than a live connection because at the time of implementation the County lacked the required infrastructure to support the required number of users.
- Phase 2 of CMMS implementation will deepen DWM's internal support of Cityworks and extend the use of Cityworks to other areas including backflow preventer inspections, FOG inspections, water meters (excluding integration with water billing software), capacity request tracking, flow monitoring, and construction inspection. Phase 2 also covers the transition of responsibility for the cloud hosting solution to the County, linking the County's live GIS to Cityworks (instead of a copy), additional training for County staff, additional Consent Decree KPI reports, and ongoing support. Transition to the County shall be completed ninety (90) days prior to the expiration date of the contract.

f. Task 6 – Document Management

Contractor shall procure and implement a commercial off-the-shelf (COTS) electronic document management system (EDMS) to capture all documents and records required for the CD program in a central repository for retrieval and viewing, and shall meet the specific requirements of the Consent Decree. The system shall capture all documents and records at the program, task and project level. DWM has an installed system (SharePoint) which is available to the Contractor, but not required to be used. Maintain Microsoft Access database for incoming and outgoing documents.

g. Task 7 – Risk Management

The Contractor has developed a formal risk management plan to identify, assess, monitor, track, respond to and mitigate risks at the CD program, task and project level. The Contractor shall directly implement the plan at the CD program and task level and manage the plan at the project level. The risk management program will continue through the life of the CD program.

h. Task 8 – Quality Control

The Contractor shall develop a formal quality control (management) plan to assure quality deliverables at the CD program, task and project level and shall directly implement the plan at the CD program and task level and manage the plan at the project level.

i. Task 9 – Real Estate Acquisition and Permitting

- i. Project design consultants are responsible for preparing all necessary information for real estate and easement acquisitions, with the actual acquisition activities being performed by the County. The flow monitoring,

cleaning, inspection and rehabilitation of the sewer system for the CD program will require services in excess of the County's capacity to perform, and in many cases there will not be a design consultant associated with the activity. The Contractor will provide real estate acquisition services for the CD program including an evaluation of the current process for acquisitions and provide recommendations for process improvements.

- ii. Project design consultants are responsible for securing all necessary environmental and other associated permits for a given project. The Contractor shall develop a formal plan to:
 - Identify all necessary environmental and other associated permits for the CD program;
 - Develop procedures for securing all necessary environmental and other associated permits for the CD program; and
 - Manage and execute the plan, except when design consultants are available to implement at the project level.
- iii. Any on-going support after execution of CO #1 shall be billed under Task 11.

j. Task 10 – Community Outreach and Public Relations

The Contractor shall develop and implement a community outreach and public relations program to educate internal and external stakeholders on the requirements, goals, schedule, costs, progress, and merits and benefits of the CD program. Contractor shall respond to internal and external stakeholder and media inquiries and requests for public information. All said responses shall be coordinated with and approved by DWM. (completed before execution of CO #1)

k. Task 11— Consent Decree Projects Technical Services

i. Technical Services for CD-Related Design Build Contracts

DWM intends to provide Construction Management services through other contracts for consent decree (CD)-related D/B Construction projects. CH2M will provide technical services as requested and program management of the D/B contracts required by DWM to meet CD goals which include the following:

- Implement PASARP prioritized rehabilitation measures by June 2020
- Track and inventory ongoing and completed PASARP rehabilitation projects
- Integrate select capacity assurance upsizing projects with PASARP rehabilitation projects to maximize SSO reduction potential

As CH2M developed the technical requirements for the D/B bid packages, CH2M is uniquely qualified to provide the following technical services—based upon this specific technical knowledge—that may include but not limited to the items listed below. CH2M will provide technical services during Phase 1 (60% Design and Guaranteed Maximum Price Development) of the

D/B contracts only. DWM will provide management of the D/B contracts during Phase 2 (Final design and Construction) of the D/B contracts through other contracts.

ii. Technical Development of Needed Services

- Provide technical information for RFP document preparation
- Provide technical information in the pre-proposal meetings for the Design Build RFPs
- Prepare responses to technical questions on requests for information regarding the RFP
- Assist in review of proposals from design-build firms and partnerships

iii. Design Support

- Support of design review and review meetings
- Assistance with technical design Issues
- Progress meetings
- Review of progressive construction estimates
- Review pay applications

xiii. Construction Phase Support

- Assist with technical details for responses to Requests for Information (RFI)

I. TASK 12 — Additional Services

- i. This task is intended to provide services for work not anticipated at this time, but requested and required by DWM for needs related to CD compliance throughout the term of this contract. This could include but is not limited to services in the following areas:
- Emergency Response Services Related to CERP
 - Develop and regularly update one-page work plans for SSO Escalation and EPA-identified projects resulting from assessments previously described, through resolution.
 - SSO Escalation Projects
 - Attend monthly DWM SSO meetings and provide support for development of rehabilitation project definition and implementation.
 - PASARP Fieldwork Inspection
 - Provide inspection of PASARP fieldwork activities in support of CDPMT needs.
 - Other Professional Services
 - Other professional services related to CD compliance and reporting not previously covered.

From the date of execution of Change Order No. 2 forward, the standard of care applicable to Contractor's services will be the degree of skill and diligence normally employed by professional contractors or consultants performing the same or similar Services at the time said services are performed. Contractor will re-perform any services not meeting this standard without additional compensation.

Contractor's services shall include all things, personnel, and materials necessary to accomplish specific projects authorized by the County.

II. NO ADDITIONAL MODIFICATION. All other terms and conditions of the Contract remain unchanged and in full force and effect. The terms and conditions contained in this Change Order No. 2 shall govern over any inconsistent terms and conditions contained in the Agreement.

IN WITNESS WHEREOF, the parties hereto have set their hands and caused their seals to be affixed hereupon in four (4) counterparts, each to be considered as an original by their authorized representatives.

[SIGNATURES ON FOLLOWING PAGE]

CH2M HILL ENGINEERS, INC.

DEKALB COUNTY, GEORGIA

By: _____ (SEAL)

_____ by Dir. (SEAL)

Signature

MICHAEL L. THURMOND

Chief Executive Officer

Name (Typed or Printed)

Title

Date

Date

ATTEST:

ATTEST:

Signature

BARBARA SANDERS-NORWOOD, CCC

Clerk of the Chief Executive Officer

And Board of Commissioners of

DeKalb County, Georgia

Name (Typed or Printed)

Title

Date

Date

NOTARY:

Subscribed and Sworn before me on this the

_____ day of _____, 20 ____.

NOTARY PUBLIC

My Commission Expires:

APPROVED AS TO SUBSTANCE:

Department Director

APPROVED AS TO FORM:

Assist. County Attorney Signature.

Assist. County Attorney Name (Typed or Printed)

CERTIFICATE OF CORPORATE RESOLUTION

I, _____, certify the following:

That I am the duly elected and authorized Secretary of _____
(hereinafter referred to as the "corporation"), a corporation organized and incorporated to do
business under the laws of the State of _____;

That said corporation has, through lawful resolution of the Board of Directors of the
corporation, duly authorized and directed _____, in his official
capacity as _____ of the corporation, to enter into and execute
the following described agreement with DeKalb County, a political subdivision of the State of
Georgia:

Change Order No. 2 to Contract # 14-902800 Consent Decree Program Management

Services

That the foregoing Resolution of the Board of Directors has not been rescinded, modified,
amended, or otherwise changed in any way since the adoption thereof, and is in full force and
effect on the date hereof.

IN WITNESS WHEREOF, I have set my hand and corporate seal;

This the _____ day of _____, 20__.

(CORPORATE SEAL)
(Secretary)

This _____ day of _____ 20__.

Attachment A-1
CH2M Proposal
CONSENT DECREE PROGRAM MANAGEMENT SERVICES

Task 4 -- CMOM Programs - Implementation of Projects

	Sept 2017 - Aug 2018			Sept 2018 - Aug 2019			Sept 2019 - June 2020			
	FTE*	Labor Hours	Hourly Billable Rate (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)
Document Controls Consultant	0.4	820	95	0.2	300	97	0.1	80	99	7,907
Principal Technologist	0.5	916	190	0.4	748	194	0.2	304	198	60,094
Senior Technologist	0.6	1248	175	0.3	656	179	0.1	192	182	34,957
Project Technologist III	1.1	2128	140	0.4	764	143	0.1	192	146	28,465
Project Technologist I	1.0	1912	125	0.6	1200	128	0.1	160	130	20,808
Senior Engineer II	1.4	2708	155	0.9	1766	158	0.5	720	161	116,109
Senior Engineer I	1.0	2008	145	0.6	1208	148	0.2	320	151	48,275
Project Engineer III	4.9	9896	125	3.3	6532	128	1.5	2320	130	301,716
Project Engineer II	0.4	880	110	0.2	348	112	0.1	80	114	9,156
Project Engineer I	2.6	5116	95	1.2	2416	97	0.4	640	99	63,256
Staff Consultant II	0.1	192	95	0.0	96	97	0.0	32	99	3,163
Staff Consultant I	0.7	1380	70	0.3	600	71	0.1	160	73	11,652
Field Staff	0.6	1264	95	0.0	0	97	0.0	0	99	-
Subtotals -- by Yr	15.2	30468	3,793,540	8.3	16634	2,173,569	3.3	5200	705,558	705,558
Other Direct Costs										
Total Costs (Task 4)			3,793,540			2,173,569				705,558
SUB-TOTAL										6,672,667

Task 5 -- CMOM Programs - Implementation of O&M Activities

	Sept 2017 - Aug 2018			Sept 2018 - Aug 2019			Sept 2019 - June 2020			
	FTE*	Labor Hours	Hourly Billable Rate (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)
Principal Technologist	0.0	60	190	0.0	16	194	0.0	0	198	-
Senior Technologist	0.1	280	175	0.0	32	179	0.0	0	182	-
Project Technologist II	0.2	392	140	0.0	80	143	0.0	0	146	-
Project Technologist I	1.4	2760	125	0.6	1144	128	0.3	480	130	62,424
Subtotals -- by Yr	1.7	3492	460,280	0.6	1272	166,097	0.3	480	130	62,424
Other Direct Costs			46,000			8,000				62,424
Total Costs (Task 5)			506,280			174,097				62,424
SUB-TOTAL										742,801

Attachment A-1
CH2M Proposal
CONSENT DECREE PROGRAM MANAGEMENT SERVICES

Task 6 -- Document Management

	Sept 2017 - Aug 2018				Sept 2018 - Aug 2019				Sept 2019 - June 2020			
	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)
Document Controls Consultant	0.7	1328	95	126,160	0.5	1000	97	96,900	0.5	824	99	81,443
Admin Assistant/Accounting Specialist	0.2	384	70	26,880	0.2	384	71	27,418	0.2	320	73	23,305
Subtotals -- by Yr	0.9	1712		153,040	0.7	1384		124,318	0.7	1144		104,747
Other Direct Costs				153,040				124,318				104,747
Total Costs (Task 6)				153,040				124,318				104,747
SUB-TOTAL												382,105

Task 11 -- Consent Decree Technical Services

	Sept 2017 - Aug 2018				Sept 2018 - Aug 2019				Sept 2019 - June 2020			
	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)
Document Controls Consultant	0.9	1868	95	177,460	1.4	2700	97	261,630	1.5	2320	99	229,304
Senior Technologist	0.4	896	175	156,800	0.4	800	179	142,800	0.4	600	182	109,242
Project Technologist II	0.6	1232	140	172,480	0.7	1480	143	211,344	0.8	1280	146	186,440
Senior Engineer II	0.2	480	155	74,400	0.2	480	158	75,888	0.3	400	161	64,505
Senior Engineer I	1.4	2712	145	393,240	2.0	4000	148	591,600	2.0	3136	151	473,091
Subtotals -- by Yr	3.6	7188		974,380	4.7	9460		1,283,262	4.8	7736		1,062,581
Other Direct Costs				974,380				1,283,262				1,062,581
Total Costs (Task 11)				974,380				1,283,262				1,062,581
SUB-TOTAL												3,320,223

Task 12 -- Additional Services

	Sept 2017 - Aug 2018				Sept 2018 - Aug 2019				Sept 2019 - June 2020			
	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)	FTE*	Labor Hours	Hourly Billable Rate (\$)	Labor Cost (\$)
Senior Engineer II	1.0	2008	155	311,240	0.9	1760	158	278,256	0.5	800	161	129,010
Field Staff	2.0	4016	95	381,520	0.0		97	-	0.0		99	-
Subtotals -- by Yr	3.0	6024		692,760	0.9	1760		278,256	0.5	800		129,010
Other Direct Costs				692,760				278,256				129,010
Total Costs (Task 12)				692,760				278,256				129,010
SUB-TOTAL												1,100,026

Total of all Tasks by Task and Year

Year One (Sept 2017 - Aug 2018)	\$ 7,934,960
Year Two (Sept 2018 - Aug 2019)	\$ 5,701,727
Year Three (Sept 2019 - June 2020)	\$ 3,395,758
Total for Three Years	\$ 17,032,445

EXHIBIT 1

Scope of Services to Prepare a Fully-Developed Peak Flow Model

The following minimum technical and documentation requirements should be implemented to achieve a fully developed peak flow model. It is assumed that the Contractor will address technical issues within their control to develop the model as described herein. It is assumed that the GIS data and sewer mapping information provided by the County is accurate and does not require significant rework or delays because of inaccurate data or missing data. This list does not address the County's internal process that is a necessary component of having a fully developed model.

1. Incorporate significant GIS data and updates into the model and:
 - a. Explain in the model documentation what criteria were applied to determine what is significant and list the model updates.
 - b. Include the results of GIS field requests generated by DWM modelers that are properly documented and are provided in a timely manner.
 - c. Of the total list of field verification requests from 2015-present, identify what field verification requests are still outstanding.
2. Incorporate into the model updated lift station parameters, including those lift stations that have been upgraded or eliminated.
3. Develop an interim hydraulic model of Intrenchment Creek using existing data provided by the County and the City of Atlanta by December 15, 2017. In 2018, complete a hydraulic model of Intrenchment Creek similar in standards and practices to the other sewershed or basin models by incorporating the results of a future proposed flow study.
4. Model Calibration.
 - a. Include in the model documentation:
 - i. A detailed explanation of the model calibration performed for the peak flow model (wet weather events);
 - ii. The rationale for the peak flow calibration approach selected; and
 - iii. The extent to which the peak flow calibration meets the requirements of the Consent Decree and the Hydraulic Model Program document.
 - b. Respond to requests for information from the County regarding methods used for model calibration.

5. Sensitivity Analysis.

- a. Include in the model documentation
 - i. A detailed explanation of the sensitivity analysis performed for the peak flow model;
 - ii. The rationale for the approach to the sensitivity analysis; and
 - iii. The extent to which the sensitivity analysis meets the requirements of the Consent Decree and the Hydraulic Model Program document.
- b. Respond to requests for information from the County regarding methods used for sensitivity analysis.

6. Verification.

- a. Conduct a model approach verification analysis using at least one storm event that is different from the storm event used to build the model.
- b. Perform the verification analysis for at least for the Snapfinger basin.
- c. Include in the model documentation
 - i. A detailed discussion of the model verification done;
 - ii. The rationale for the verification approach; and
 - iii. The extent to which the verification meets the requirements of the Consent Decree and the Hydraulic Model Program document.
- d. Respond to requests for information from the County regarding methods used for verification.

7. Describe and document in the model report how the Cobb Fowler dynamic model was used as a comparison with the static model in that sewershed and provide the results of that comparison.

8. Include in the model documentation the distinction between the planning model and the model used for connections purposes and why this model is now capable for use in supporting connections.

9. Include in the model documentation the appropriateness of the maximum month average daily flow (MMADF) input parameters.

10. Identify and develop any procedures needed for the County to adequately execute and maintain the model. These procedures should include any limitations of the model and how it should be used in the context of capacity connections analyses.

11. Review the County's interim protocols and provide any recommendations for how these policies can be improved to fully incorporate the model to support capacity analyses.

12. Address additional specific comments the County will provide on the draft model documents.

Red-lined version of Scope of Work Tasks

1. The Contractor shall perform the following Tasks:

a. Task 1 – Program Development and Management

- i. Provide full-time management of the CD program, including all personnel included in the staffing plan not dedicated to Task activities.
- ii. Develop specific and measurable goals for the development and execution of the program to ensure successful accomplishments of the CD requirements and milestones. **(completed before execution of CO #1)**
- iii. Develop and implement a 90-day mobilization plan that identifies staffing, computer systems and other support services, early task deliverables, and other activities necessary to assure that any early CD milestones are achieved. **(completed before execution of CO #1)**
- iv. Develop and implement a system that tracks and reports budget, schedule and costs against progress for the program management contract tasks identified herein. **(completed before execution of CO #1)**
- v. ~~Within the first year, develop~~ **Immediately begin developing** a knowledge transfer plan that identifies the methods (on-the-job transfer of knowledge, informal and formal training) for transferring knowledge of the program task activities from Proposer staff to DWM staff. **(completed before execution of CO #1)**
- vi. **Implement the knowledge transfer plan developed pursuant to Task 1, subpart v.**
- vii. **Schedule, plan and conduct and/or attend all Consent Decree Program Management Team (CDPMT) project status and other meetings**
- viii. **Meet with appropriate DWM staff for monthly progress updates on CD program efforts**
- ix. **Attend BOC meetings and other public meetings, regarding and related to the Consent Decree (CD), when and as requested by the DWM**
- x. **Coordinate LSBE partner and other subcontractor activities, including periodic principal briefings**
- xi. **Provide other support, review, and oversight as required, of other issues that arise and are requested by the DWM throughout the duration of the program, such as rehabilitation program management services, including additional program management support for numerous Design/Build (D/B) construction contracts (Phase 1: 60% design and guaranteed maximum price development only) for recommended sewer rehabilitation**

b.

e.b. Task 2 – CD Budget, Schedule and Cost

- i. Develop and implement, using commercial software, a system to comprehensively track and report budget, schedule and costs at the CD task and project level, rolled up to the program level.
- ii. Track and report all interim and final CD milestone dates, as identified

within the CD document, CMOM plans, or other reports and information as may be developed in the future.

- iii. Reports shall be developed on a monthly basis, with transfer of data as necessary to the future CIP Program Management system. System features shall include but not limited to:
 - 1) Integrated master schedule;
 - 2) Baseline schedule and budget;
 - 3) Schedule and cost updates;
 - 4) Identification of schedule and cost variances;
 - 5) Forecasted schedule and cost thru completion;
 - 6) Evaluation and mitigation of schedule and cost variances;
 - 7) Work Breakdown Structures (WBS) and Critical Path Method (CPM);
 - 8) Detailed reporting features, with rollup to program level; and
 - 9) "Dashboard" type reporting capabilities to facilitate management reviews.

~~iv.~~ The County does not require a particular software system. The County desires a cost-effective approach, considering the cost of software, licenses, and staffing to effectively manage the system. Cost-effectiveness will be inherently identified within the Proposer's cost proposal.

v. Update program Master Schedule on a regular, monthly basis, by reviewing work accomplished, deadlines and milestones with Task Leads, and produce final program Master Schedule update for distribution to DWM and CDPMT. Provide immediate written notice of deadlines, milestones, etc. which impact compliance with the Consent Decree.

vi. Review all backup documents for CDPMT invoice packages on a regular, monthly basis, provide a summary report and respond to any DWM questions or inquiries.

vii. With DWM approval, issue new Subcontractor task orders when required; administer and maintain records and timesheets for Subcontractors, and track Subcontractor spending, payment and outstanding contract balances.

~~d.c.~~ Task 3 – CD Reporting

~~Develop and submit formal reports to the regulatory agencies in full compliance with Section X of the Consent Decree (see Attachment A to RFP).~~

i. For Annual and Semi-Annual Reports required by the CD, develop draft reports by working with CD Leads (both CDPMT and DWM), for submittal to DWM. Reports will then be finalized by the County's Executive Assistant/Chief Operating Officer, or as authorized by the Chief Executive Officer in writing, and submitted to EPA accordingly.

ii. Utilize program Master Schedule, in an abbreviated form showing activities from the last six-month period and also for the next six-month period, to serve as the basis of the Semi-Annual Report, thus reducing the volume of

text developed for previous Semi-Annual Reports before the Master Schedule could be utilized for this purpose.

- iii. Utilize the business intelligence (BI) software adopted for use by the DWM for development of the Annual Report Trends Analysis of SSOs.
- iv. Provide support for DWM review and work plan developments of EPA-identified complaints related to sanitary sewer overflows (SSOs).
- v. Assist in the development of the SSO trend analysis report for EPA.
- vi. Provide technical support for EPA presentations and for DWM responses to requests for information from EPA.

e.d. Task 4 – CMOM Programs – Implementation of Projects

Directly manage the implementation of the following CMOM programs, associated with implementing projects within the collection system:

- i. Sewer Mapping Program ~~—The system has a total of 32 sewer basins, with 20 completely mapped, and Notice to Proceeds were issued to three firms on February 25, 2013 to complete the mapping of remaining 12 sewer basins within 12 months.~~ The Contractor shall manage the sewer mapping contracts from the beginning of the CD Program Management contract to completion of ~~Mapping contract.~~ mapping contracts. (completed before execution of CO #1)
 - Provide GIS update assistance as requested by DWM
- i. ~~System Wide Flow and Rainfall Monitoring Program~~ – The Contractor shall be fully responsible for managing the rainfall and flow monitoring program as necessary to assure adequate data is collected and analyzed by the County; Contractor will conduct monthly reviews of the flow monitoring data and review the monthly flow meter reports prepared by the County; Contractor will subsequently process the flow and rainfall data to
 - i. develop the input for the computer-based dynamic hydraulic model of the sewer system (see Section 4.iii System Wide Hydraulic Modeling Program below); to assess support assessment of available capacity availability within the sewer system; to prioritize sanitary– sewers for inspection, repair, rehabilitation or replacement; and to assure full compliance with the Consent Decree. The Contractor is responsible for making changes to the flow monitoring program based on hydraulic modeling needs. and System-Wide Flow and Rainfall Monitoring Program. Any contracts associated with flow monitoring will be separately procured by the County, but managed by the Contractor.
 - Provide flow monitoring field services to supplement DWM flow monitoring staff including: flow meter site investigation, flow meter

installation, maintenance of flow meters after installation and removal of flow meters.

ii. System Wide Hydraulic Modeling Program —~~3 of the 32 sewer basins~~ ~~basins have been modeled, using the Infoworks dynamic hydraulic model.~~

The Contractor shall be directly responsible for completing the system wide hydraulic model, using the Infoworks software (required by Consent Decree) in full compliance with the requirements and schedule contained within the Consent Decree submittal approved by EPA/EPD. (Preliminary hydraulic model was submitted before execution of CO#2, Contractor shall continue to provide services associated with subparts included in Task 4iii). The overarching requirement for development of a system wide hydraulic model is compliance with the Consent Decree and the relevant program documents submitted thereunder. The following is a list of required steps as known at this time to reach such compliance, but is not intended to be exhaustive. The Contractor shall be responsible for working with the County to identify, and communicating to the County, additional steps necessary to ensure all CD and program requirements are satisfied.

- Meet regularly with DWM modeler for the purpose of communicating updates by each party to the model and/or the information related to the model, and to discuss and resolve any other issues and questions
- Complete static peak flow hydraulic model in accordance with Exhibit 1, attached hereto.
- Update the hydraulic model on a quarterly basis in 2018 based on available GIS updates from the County once the model is fully developed
- Conduct additional model runs under different scenarios as requested and required by DWM for particular areas of interest and as required for coordination of ongoing CIP projects
- Conduct additional model runs for the gravity collection system debottlenecking projects based on changes to the GIS
- Capacity upsizing of gravity sewer collection system pipelines within OSARP and PASARP as required by the CD and relevant program documents.
- Plan and develop a computer-based dynamic hydraulic model, based on updated flow monitoring data and GIS updates. Hydraulic models shall be developed through capacity assessment for each sewershed or basin, as appropriate. The County will make a determination as to when dynamic hydraulic modeling will begin.

i. PASARP Assessment Projects

- Provide project management, implementation and contract administration duties related to field activity, submittals, financials and

schedules of PASARP assessment contracts, with areas defined as PASARP within the CD

- Also develop SSO Escalation and EPA-identified project limits and associated work assignments
- Track and update progress of these projects on a regular basis, and make work assignments as appropriate for additional projects that arise, through coordination with existing PASARP and/or OSARP contracts as possible
- For the PASARP Capacity Restoration projects; provide project management, implementation and contract administration related to this field activity, submittals, financials and schedules

ii. OSARP Assessment Projects

- Provide project management, implementation and contract administration duties related to field activity, submittals, financials and schedules of OSARP assessment contracts for the following contracts:
 - OSARP CCTV and Manhole Condition Assessment
 - Capacity Restoration of OSARP Areas

vii. Assisting with Infiltration and Inflow Program

- Provide DWM with assessment databases that provide the smoke defect data and pictures
- Provide training on the mobile map application that is used to review the smoke assessment data
- Assist DWM with resolving incorrect addresses for identified smoke defects
- Provide technical support for the infiltration and inflow program as requested by DWM

viii. Rehabilitation Packaging

- Develop recommended rehabilitation projects resulting from collected PASARP and OSARP data and information, and assemble rehabilitation packages for implementation, including SSO Escalation and EPA-identified projects as appropriate, for implementation through D/B contracts

ix. Design/Build RFP Development

- Develop RFPs for provision of design/build services for:
 - Gravity sewer collection system improvements

x. Continuing Sewer Assessment and Rehab Program –

- The Contractor shall be fully responsible for developing and implementing a program to conduct a comprehensive and thorough

evaluation of the sanitary sewer system. The program should specify various equipment and techniques to detect sewer pipe defects, blockages and capacity problems. This program must be in full compliance with the requirements of the Consent Decree to address priority areas. The Contractor will perform work associated with assessing the results of the cleaning and inspection activities. The contractor will develop the scope for all sewer cleaning, manhole inspection, smoke tests, dye tests, closed circuit TV (CCTV), flow monitoring, rain monitoring, sewer rehabilitation, manhole rehabilitation and other contracts as may be required. Such contracts will be separately procured by the County, but managed by the Contractor. ~~Approximately \$300 million of undefined projects associated with this work is included within the CIP.~~

xi. Supplemental Environmental Project –

~~iv.~~ DWM is in the process of completing the scope for this project with the assistance from a contractor and is preparing to issue an ITB to implement the work. The Contractor is not responsible for managing this contract. (Completed before execution of C.O. #2).

xii. Capacity Request Program –

• Provide Technical and support services regarding development and implementation of the Capacity Request Program

f.e. Task 5 – CMOM Programs – Implementation of O&M Activities

i. DWM, ~~through various upper level managers,~~ has and will continue to be responsible for implementing the CMOM programs associated with the operation and maintenance of the collection system, and other associated non-capital improvements. The Contractor shall provide three (3-) full time equivalents (FTE) engineering staff to assist DWM with continued development and implementation of the following CMOM programs:

- i. Contingency and Emergency Response Plan;
- ii. Fats, Oil and Grease Management;
- iii. Maintenance Management System;
- iv. Collection and Transmission Systems Training Plan;
- v. Infrastructure Acquisition Program; and
- vi. Financial Analysis Program.

(Completed before execution of CO #1. Contractor may assist the Department of Watershed Management with continued development and implementation. Any work associated performed pursuant to Task 5i shall be billed under Task 12.)

i. Maintenance Management System (MMS) Program

• Provide services as requested and required by DWM and includes the following activities:

- o Database management of the assessment data and media collected from the PASARP and OSARP programs
- o Assist with the transfer of the assessment data and media files collected during the PASARP and OSARP contracts to DWM's new Computerized Maintenance Management System (CMMS) referred to as CityWorks.
- o Develop reporting dashboards for the assessment data using Business Intelligent software

ii. Cityworks CMMS Implementation

- Phase 1 was completed in December 2016 and met or exceeded Consent Decree deadlines. This phase included the implementation of Cityworks for wastewater collection, water distribution, large water meters, and customer support. At the County's request, Phase 1 included hosting the Cityworks application in the cloud. As presently configured, Cityworks uses a copy of the County's GIS data rather than a live connection because at the time of implementation the County lacked the required infrastructure to support the required number of users.
- Phase 2 of CMMS implementation will deepen DWM's internal support of Cityworks and extend the use of Cityworks to other areas including backflow preventer inspections, FOG inspections, water meters (excluding integration with water billing software), capacity request tracking, flow monitoring, and construction inspection. Phase 2 also covers the transition of responsibility for the cloud hosting solution to the County, linking the County's live GIS to Cityworks (instead of a copy), additional training for County staff, additional Consent Decree KPI reports, and ongoing support. Transition to the County shall be completed ninety (90) days prior to the expiration date of the contract.

g.f. Task 6 — Document Management

Contractor shall procure and implement a commercial off-the-shelf (COTS) electronic document management system (EDMS) to capture all documents and records required for the CD program in a central repository for retrieval and viewing, and shall meet the specific requirements of the Consent Decree. The system shall capture all documents and records at the program, task and project level. DWM has an installed system (~~Sharepoint~~SharePoint) which is available to the Contractor, but not required to be used. Maintain Microsoft Access database for incoming and outgoing documents.

g.g. Task 7 – Risk Management

The Contractor ~~shall develop~~has developed a formal risk management plan to

identify, assess, monitor, track, respond to and mitigate risks at the CD program, task and project level. The Contractor shall directly implement the plan at the CD program and task level and manage the plan at the project level. ~~It is anticipated that the~~ The risk management program will continue through the life of the CD program.

j.h. Task 8 – Quality Control

The Contractor shall develop a formal quality control (management) plan to assure quality deliverables at the CD program, task and project level and shall directly implement the plan at the CD program and task level and manage the plan at the project level.

k.i. Task 9 – Real Estate Acquisition and Permitting

i. Project design consultants are responsible for preparing all necessary information for real estate and easement acquisitions, with the actual acquisition activities being performed by the County. The flow monitoring, cleaning, inspection and rehabilitation of the sewer system for the CD program will require services in excess of the County's capacity to perform, and in many cases there will not be a design consultant associated with the activity. The Contractor will provide real estate acquisition services for the CD program including an evaluation of the current process for acquisitions and provide recommendations for process improvements.

ii. Project design consultants are responsible for securing all necessary environmental and other associated permits for a given project. The Contractor shall develop a formal plan to:

1) Identify all necessary environmental and other associated permits for the CD program;

2) Develop procedures for securing all necessary environmental and other associated permits for the CD program; and

3) Manage and execute the plan, except when design consultants are available to implement at the project level.

i. Any on-going support after execution of CO #1 shall be billed under Task 11.

t.j. Task 10 – Community Outreach and Public Relations

The Contractor shall develop and implement a community outreach and public relations program to educate internal and external stakeholders on the requirements, goals, schedule, costs, progress, and merits and benefits of the CD program. Contractor shall respond to internal and external stakeholder and media inquiries and requests for public information. All said responses shall be coordinated with and approved by DWM. (completed before execution of CO

#1)

k. Task 11— Consent Decree Projects Technical Services

i. Technical Services for CD-Related Design Build Contracts

DWM intends to provide Construction Management services through other contracts for consent decree (CD)-related D/B Construction projects. CH2M will provide technical services as requested and program management of the D/B contracts required by DWM to meet CD goals which include the following:

- Implement PASARP prioritized rehabilitation measures by June 2020
- Track and inventory ongoing and completed PASARP rehabilitation projects
- Integrate select capacity assurance upsizing projects with PASARP rehabilitation projects to maximize SSO reduction potential

As CH2M developed the technical requirements for the D/B bid packages, CH2M is uniquely qualified to provide the following technical services—based upon this specific technical knowledge—that may include but not limited to the items listed below. CH2M will provide technical services during Phase 1 (60% Design and Guaranteed Maximum Price Development) of the D/B contracts only. DWM will provide management of the D/B contracts during Phase 2 (Final design and Construction) of the D/B contracts through other contracts.

ii. Technical Development of Needed Services

- Provide technical information for RFP document preparation
- Provide technical information in the pre-proposal meetings for the Design Build RFPs
- Prepare responses to technical questions on requests for information regarding the RFP
- Assist in review of proposals from design-build firms and partnerships

iii. Design Support

- Support of design review and review meetings
- Assistance with technical design Issues
- Progress meetings
- Review of progressive construction estimates
- Review pay applications

xiii. Construction Phase Support

- Assist with technical details for responses to Requests for Information (RFI)

1. TASK 12 — Additional Services

i. This task is intended to provide services for work not anticipated at this time, but requested and required by DWM for needs related to CD compliance throughout the term of this contract. This could include but is not limited to services in the following areas:

- Emergency Response Services Related to CERP
 - Develop and regularly update one-page work plans for SSO Escalation and EPA-identified projects resulting from assessments previously described, through resolution.
- SSO Escalation Projects
 - Attend monthly DWM SSO meetings and provide support for development of rehabilitation project definition and implementation.
- PASARP Fieldwork Inspection
 - Provide inspection of PASARP fieldwork activities in support of CDPMT needs.
- Other Professional Services
 - Other professional services related to CD compliance and reporting not previously covered.