

ATTACHMENT 3. WORK PLAN

The following sections briefly describe the tasks necessary to construct and implement the projects contained in this application. For each of the three projects contained in this application, tasks are organized in the following four budget categories: (a) Direct Project Administration, (b) Land Purchase/Easement, (c) Planning/Design/Engineering/Environmental Documentation, and (d) Construction/Implementation as required by the PSP. The status of each task as of July 2015 is shown as a percentage under each task.

Project 1: Grant Administration

Implementing Agency: City of Modesto

Project description: The Regional Water Management Group for the East Stanislaus IRWM Region has authorized the City of Modesto (City) to act as the applicant and grant manager for the Proposition 84 2015 IRWM Implementation Grant. The City will administer the grant funds and respond to the Department of Water Resources' (DWR's) reporting and compliance requirements associated with the grant administration. The City will act in a coordination role, disseminating grant compliance information to the project managers responsible for implementing the projects contained in this agreement, obtaining and retaining evidence of compliance, obtaining data for progress reports from individual project managers, assembling and submitting progress reports to the State, and coordinating all invoicing and payment of invoices.

Budget Category (a): Direct Project Administration

Task 1 - Agreement Administration

The City of Modesto will assign a grant administrator for overall program coordination, to act as the primary point of contact for this grant, and to respond to DWR's reporting and compliance requirements associated with the grant administration. The grant administrator will be responsible for coordinating grant agreement execution, and for maintain grant-related records and notes. The grant administrator will also coordinate with the individual project managers responsible for implementing the projects contained in this agreement.

Percent Complete: 0%

Deliverables:

- Executed Grant Agreement

Task 2 - Invoicing

The City's grant administrator will be responsible for compiling invoices from individual project managers for submittal to DWR. This includes collecting invoice documentation from each of the project proponents and their contractors, and compiling the information into a DWR Invoice Packet. **Percent Complete: 0%**

Deliverables:

- Invoices and associated backup documentation

Task 3 - Progress Reports and Project Completion Report(s)

Task 3 consists of two subtasks as detailed below.

Subtask 3a: Progress Reports

The grant administrator will be responsible for compiling progress reports prepared by the project proponents for submittal to DWR. The City's grant administrator will coordinate with project proponent staff to prepare and submit progress reports. Progress reports will, at a minimum, explain the status of each project and will include the following information: summary of the work completed for the project during the reporting period;

activities and milestones achieved; and accomplishments and any problems encountered in the performance of work. **Percent Complete: 0%**

Deliverables:

- Quarterly Progress Reports

Subtask 3b: Grant Completion Reports

The City's grant administrator will coordinate with project proponent staff to prepare and submit draft and final project completion reports for each project, in addition to preparing and submitting grant completion reports. All reports will meet generally accepted professional standards for technical reporting and the requirements terms of the contract with DWR. Project completion reports will include documentation of actual work done, changes and amendments to each project, a final schedule showing actual progress versus planned progress, and copies of final documents and reports generated during the project. Grant completion reports will summarize all work completed relative to the funding agreement execution. **Percent Complete: 0%**

Deliverables:

- Draft and Final Project Completion Reports

Task 4 - Performance Monitoring and Tracking

In this task, the grant administrator will coordinate with project proponents during construction to ensure that the Project Performance Monitoring Plans are being implemented, that appropriate records are being maintained, and that project performance results are being included in the quarterly progress reports. **Percent Complete: 0%**

Deliverables:

- Project Performance Monitoring Data

Task 5 - Labor Compliance Tracking

Similar to Task 4, under this task, the grant administrator will coordinate with project proponents prior to project initiation to ensure that the approved Labor Compliance Program has been submitted to DWR. Additionally, during project implementation, the grant administrator will coordinate with project proponents to ensure that the Labor Compliance Programs are being implemented, that appropriate records are being maintained, and that any necessary documentation is included in the quarterly progress reports. **Percent Complete: 0%**

Deliverables:

- Labor Compliance Program documentation

Budget Category (b): Land Purchase/Easement

Not Applicable

Budget Category (c): Planning/Design/Engineering/Environmental Documentation

Not Applicable

Budget Category (d): Construction/Implementation

Not Applicable

Project 2: North Valley Regional Recycled Water Program

Implementing Agency: City of Modesto

Project Description:

The North Valley Regional Recycled Water Project (NVRWP) provides immediate regional drought relief and future drought preparedness through the delivery and application of recycled water. This project will create a regional solution to address south of the Sacramento-San Joaquin River Delta (Delta) water supply shortages and reliability concerns by utilizing recycled water produced by the Cities of Modesto and Turlock for beneficial use by augmenting surface water supplies and reducing groundwater pumping in the Del Puerto Water District (DPWD) service area. The project will deliver recycled water produced by the cities to DPWD, a Central Valley Project (CVP) agricultural water contractor that has seen significant shortages and decreased reliability in the quantity of water it receives annually under the terms of its federal water service contract and who is presently receiving 0% of its CVP contracted allocation. A portion of the supply will also be delivered to state and federal south of the Delta wildlife refuges that are not presently receiving water supplies necessary to meet the refuge's objectives for wildlife management.

Grant funding for the NVRWP would be used for project construction. In general, the NVRWP consists of two reaches of pipelines totaling 75,000 linear feet (see Figure 2-4 in Attachment 2). The south-north reach from the Harding Drain Bypass Pipeline would be 42 inches in diameter and would extend from the western end of the Harding Drain Bypass Pipeline near the existing standpipe structure on South Carpenter Road, then parallel South Carpenter Road north to West Main Street, then turn west on West Main Street to Jennings Road. At Jennings Road, the pipeline would then turn north for about 1.8 miles. From Jennings Road, the pipeline would then extend west along existing dirt roads through agricultural fields owned by Modesto and terminate at the existing Jennings Plant outfall pump station near the southeastern end of the Jennings Plant. Combined flows from the pumping facility at the Jennings Plant, which would be modified to meet capacity needs, would then travel in a 54-inch pipeline, cross under the San Joaquin River, and extend west to the DMC along Lemon Avenue, through farmland, and along Zacharias Road.

Flow from the Harding Drain Bypass Pipeline would be conveyed by gravity to a modified pump station at the Jennings Plant, where it would combine with flow from Modesto. Only the modified existing Jennings Plant outfall pump station would be required as part of the proposed project to convey combined flow to the DMC. Water would be discharged to the Delta Mendota Canal (DMC) at an outfall facility located adjacent to the east bank of the existing DMC. The footprint of the facility would be approximately 30 feet by 50 feet, and would be enclosed with security fencing. The structure itself would consist of a reinforced concrete, open-ended rectangular box, situated below and above grade, and would contain a fixed-point, sharp-crested weir for hydraulic stability. Downstream of the weir, the water would flow over a concrete slab and into the DMC; this would be designed so as to require little to no modification or alteration of the existing DMC concrete lining. The facility would also include metering in a concrete vault structure and telemetry devices for communicating flow and water quality data and remote monitoring of the discharge facility.

With the development of conveyance capability, the Cities of Modesto and Turlock could provide 27,540 AFY of recycled water upon start-up, and up to 53,100 AFY of tertiary-treated recycled water, produced from wastewater collected from the Cities of Ceres, Turlock, and Modesto, to DPWD lands to supplement their CVP supplies, and to the U.S. Bureau of Reclamation to supplement water supplies to wildlife refuges.

Once constructed and operations, the NVRWP will provide local and regional economic sustainability by improving non-potable water supply reliability to agricultural water users and disadvantaged communities (DACs) in the DPWD service area while providing an incremental water source to meet the environmental needs of south of the Delta wildlife refuges. This project will also optimize the use of recycled water, a valuable resource produced by the Cities of Turlock and Modesto, to promote regional economic growth through sustained and/or increased annual agricultural production, and will contribute toward the State's objective of increasing the beneficial use of recycled water. In summary, the NVRWP will contribute a local solution toward solving California's ever increasing water crisis and utilize local water resources to their highest and best use, reducing dependence on imported water supplies that flow through the Delta.

Budget Category (a): Direct Project Administration

Task 1 - Project Management

Work to be completed under this task includes managing the requirements of the grant agreement, including but not limited to, compliance with grant requirements, preparation and submittal of supporting grant documents, and coordination with IRWM grant manager. Additionally, invoices will be prepared, including relevant supporting documentation, for submittal to DWR. This task also includes administrative responsibilities associated with the project, such as coordinating with partnering agencies and managing consultants/contractors. This task will be ongoing throughout the project. **Percent Complete: 0%**

Deliverables:

- Financial Statements-Invoices
- Other Applicable Project Deliverable

Task 2 - Labor Compliance Program

The City of Modesto is the construction contracting entity for this project. The City utilizes the State of California's CalTrans Labor Compliance Plan (LCP); therefore, this task is not applicable. Implementation of the LCP is included in Task 12. **Percent Complete: 100%**

Deliverables:

- Approved LCP

Task 3 - Reporting

In Task 3, quarterly progress reports will be prepared detailing the work completed during the reporting period. These reports will be submitted to the IRWM grant manager for review and inclusion in a progress report to be submitted to DWR. Also included under this task is preparation of draft and final Project Completion Reports, and submittal of those reports, via the IRWM grant manager, to DWR for comment and review. The final Report will address DWR comments. **Percent Complete: 0%**

Deliverables:

- Quarterly Progress Reports
- Draft and Final Project Completion Reports

Budget Category (b) - Land Purchase/Easement

Task 4 - Land Purchase

Identify and acquire 60 acres of permanent county and private easements. **Percent Complete: 10%**

Deliverables:

- Documentation supporting property value
- Copy of assessors maps

Budget Category (c) -Planning/Design/Engineering/Environmental Documentation

Task 5 - Feasibility Studies

The NVRWP has been evaluated in multiple feasibility and technical studies, including:

- NVRWP Feasibility Study (RMC, 2013);
- NVRWP: San Joaquin River Flow Analysis (RMC, 2013);
- Pipeline Corridor Study (RMC, 2013);
- Impact on Regional Income, Employment, and Output (Jeffrey Michael & Thomas Pogue, 2010);
- Assessment of Potential Effects of the NVRWP Reductions in Freshwater Discharges into the San Joaquin River on Fishery Habitat and Juvenile Salmon Survival (Hanson Environmental, 2013);
- Facilities Plan: North Valley Regional Recycled Water Program - Final Report (RMC/Carollo, 2015)

Percent Complete: 100%

Deliverables:

- Copies of the documents bulleted above

Task 6 - Environmental Documentation

As part the project due diligence, and Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was prepared and certified for the NVRRWP. Activities associated with the CEQA and NEPA evaluations included:

- Preparing and circulating a Notice of Preparation (including tribal notification to the California Native Heritage Commission).
- Preparing a draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and releasing the document for public review.
- Filing a Notice of Completion with State Clearinghouse.

The EIR/EIS was certified on June 30 2015 and a copy of the document submitted to the State Clearinghouse.
Percent Complete: 80%

Deliverables:

- No Legal Challenges letter

Task 7 - Permitting

Multiple permits will be required for the construction and operation of the NVRRWP; identified permits are summarized in Table 3-1, below. Applications for some of these permits are presently underway; Table 3-1 shows the status of each permit.

Table 3-1: Permits and Status for North Valley Regional Recycled Water Program

Agency	Regulatory Requirement	Status
CA State Lands Commission	State Lands Lease Agreement	To be acquired
RWQCB	401 Water Quality Certification	To be acquired
RWQCB	National Pollution Discharge Elimination System Permit	In progress
SWRCB	Wastewater Change Petition (Petition for Change)	In progress
US Army Corps of Engineers	404 Permit for any fill of wetlands or waters of the US	To be acquired
USBR	Warren Act Contract or Exchange Agreement (including Section 106 & Section 7 Consultation before action can be taken); Land Use Authorization for construction of facilities in DMC right-of-way	In progress
San Joaquin Valley Air Pollution Control District	Authority to Construct / Permit to Operate	To be acquired
County of Stanislaus	Encroachment, Grading, Building, and Tree Removal Permits	To be acquired
Caltrans	Encroachment Permit	To be acquired
RWQCB	NOI for Coverage under Statewide Construction Storm water Permit (Section 402 CWA)	To be acquired
RWQCB	NOI under Low-Threat Discharge Order for Coverage of Pipeline discharges for testing and startup	To be acquired
CA Dept. of Fish and Game	Streambed Alteration Agreement for pipeline crossings of creeks	To be acquired
CA Dept. of Fish and Game	Incidental Take Permit	To be acquired

Agency	Regulatory Requirement	Status
CalOSHA	Construction Permit / Tunnel Classification	To be acquired
Genesee & Wyoming Railroad Services	Utility Occupancy License	To be acquired

Percent Complete: 10%

Deliverables:

- Permits to construct and operate the NVERRWP as listed in Table 3-1

Task 8 - Design

Preliminary design in the form of facilities plans has been prepared for the NVERRWP, along with the following supporting work: geotechnical investigation, topographic survey, and basis of design report (BOD). The BOD will provide the overall project concept for use in development of final design, plans and specifications, including: preliminary earthwork calculations, preliminary design details for tank foundation, preliminary design details for and 100% (Final) design, plans, and specifications. The NVERRWP will be contracted as a design-build project. **Percent Complete: 10%**

Deliverables:

- Geotechnical Report
- Topographic Survey
- BOD Report
- Updated Project Cost Estimate
- 100% Design Package

Task 9 - Project Performance Monitoring Plan

In Task 9, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will include baseline conditions, a brief discussion of the monitoring plan, methodology of monitoring, frequency of monitoring, and a map showing monitoring locations. The Project Performance Monitoring Plan will also summarize the objectives of the monitoring program and present the metrics and methods that will be used to evaluate project performance. **Percent Complete: 0%**

Deliverables:

- Project Performance Monitoring Plan.

Budget Category (d) – Construction/Implementation

Task 10 - Contract Services

Task 10 covers activities necessary to secure a contractor and award the contract, including developing bid documents, preparing advertisement and contract documents for construction contract bidding, conducting pre-bid meeting, bid opening and exaltation, selection of the contractor, award of contract, and issuance of notice to proceed. The NVERRWP will be contracted as a design-build project. **Percent Complete: 0%**

Deliverables:

- Bid documents
- Proof of Advertisement
- Award of contract
- Notice to proceed.

Task 11 - Construction Administration

This task includes managing contractor submittal review, answering requests for information, and issuing work directives. A full time engineering construction inspector will be on site for the duration of the project. The inspectors duties include: documenting of pre-construction conditions, daily construction diary, preparing change orders, addressing questions of contractors on site, reviewing/ updating project schedule, reviewing contractor log submittals and pay requests, forecasting cash flow, notifying contractor if work is not acceptable. **Percent Complete: 0%**

Deliverables:

- Notice of Completion.
- Inspection Records
- Requests for Information and Responses

Task 12 - Construction/Implementation Activities

Task 12 is the construction of the Project. This task consists of several subtasks, as detailed below.

Subtask 12a: Mobilization and Demobilization

The contractor will mobilize its equipment and crew according to a pre-determined staging plan. Mobilization includes creating a temporary staging area and mobilizing large construction equipment, including dump trucks, and a backhoe, to the site. Demobilization includes removing or transferring the equipment from the job site when the work is completed, and job site cleanup.

Subtask 12b: Site Preparation

This subtask consists of site preparation prior to construction. Site preparation activities include clearing and grubbing along the pipeline alignments, pavement cutting and demolition, and site prep work at the DMC and wastewater treatment plant's existing pump station.

Subtask 12c: Construction

Project construction consists of installing 75,000 linear feet of pipelines, modifying the existing Jennings Plant outfall pump station, and constructing an outfall facility (including a fixed-point, sharp-crested weir) located adjacent to the east bank of the existing DMC. The outfall facility would also include metering in a concrete vault structure and telemetry devices for communicating flow and water quality data and remote monitoring of the discharge facility. Pipelines would be installed within public roadways or other public ROW, private and municipal agricultural lands, and public open space areas. Pipelines would be installed using open-cut construction, except at specified crossings where trenchless construction methods will be utilized. The open-cut trenches would range from 6 to 8 feet wide and be approximately 8 to 10 feet deep. A construction corridor approximately 45 feet wide would be established during the project. Open trench pipeline construction would proceed at a rate of approximately 200 to 500 feet per day within rural areas. Microtunneling, jack and bore, or horizontal directional drilling will be used for crossing major roadway intersections and waterways (such as the San Joaquin River). Modifications to the existing outfall pump station at the City's Jennings Plant will require removal and replacement of the three existing outdoor pumps and motors, and a power transformer within the same footprint. The new pumps would be larger than existing pumps, requiring the existing openings in the top slab of the pump station to be enlarged. The existing switchgear and motor control center housed in the existing control building would need to be replaced with higher capacity equipment to accommodate the new pumps. Equipment would be accommodated adjacent to the project site during construction. The construction zone, including the footprint of the pump station, would be 50 by 50 feet, mainly for storage of equipment. Minimal excavation would be required. Finally, the outfall facility to be located on the DMC will consist of a facility approximately 30 feet by 50 feet. The structure would consist of a reinforced concrete, open-ended rectangular box, situated below and above grade. The box would contain a fixed-point, sharp-crested weir for hydraulic stability. Downstream of the weir, the water would flow over a concrete slab and into the DMC; this would be designed so as to require little to no modification or alteration of the existing DMC concrete lining. The facility would also include metering in a concrete vault structure and telemetry devices for communicating flow and water quality data and remote monitoring of the discharge facility.

Percent Complete: 0%

Deliverables:

- | | |
|-------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Contractor Notice to Proceed | <input type="checkbox"/> Project Punch List and Closeout |
| <input type="checkbox"/> Photographic Documentation | <input type="checkbox"/> As-Built Drawings |
| <input type="checkbox"/> Inspection Reports | <input type="checkbox"/> Post Construction |
| <input type="checkbox"/> Monitoring | |

Project 3: Modesto Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project

Implementing Agency: City of Modesto

Project Description: For the Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project, the City of Modesto proposes to capture, treat, and infiltrate stormwater to augment groundwater supplies, reduce flood-related damage, and improve water quality. The project is located in an area bound by Tully Avenue, West Orangeburg Avenue, the Virginia Corridor Trailway, and West Briggsmore Avenue, an area with persistent flooding. Stormwater runoff in the area is currently drained via five (5) sanitary sewer cross-connections which will be removed with this project. The Project will be implemented in four phases; Phase 1 of the project has been completed and funding is sought herein for Phase 2.

The Phase 2 Project will capture stormwater via ten (10) new curb bulb-outs at intersections along Granger Avenue. The bulb-outs will have bioretention planters (approx. 360 square feet each) to filter the stormwater. Overflows from the bio-retention planters will be directed to infiltration trenches, which will be trenched in the existing residential streets adjacent to Granger Avenue. Approximately 8,600 lineal feet of infiltration trenches (perforated pipe with granular backfill) are proposed to infiltrate runoff (86,000 cubic feet of retention volume). A larger infiltration basin will be constructed under Roosevelt Park (HDPE arch chambers) to capture and infiltrate the remainder of the 100-year event (175,360 cubic feet). The disturbed turf and irrigation systems at Roosevelt Park will be replaced. A level sensing manhole and maintenance access will also be installed in Roosevelt Park. The level sensing manhole will be connected to the existing SCADA system in the well house at Roosevelt Park. The level sensing well will relay real time volume information on the system's performance.

The City completed a 35% Preliminary Design Report (PDR) in 2010 that evaluated the feasibility and cost effectiveness of infiltrating stormwater close to its source. The PDR identified four areas centered on neighborhood parks for removing cross-connections and constructing infiltration systems instead. The proposed park (Roosevelt Park) is the second phase from the PDR. The PDR designed the retention system and stormwater conveyance system to a 35% level.

In 2014, the City completed construction of Phase I of the project in Garrison Park; the system work flawlessly during a 100-year event that occurred on December 2, 2014. Based on lessons learned from Phase I, this Phase 2 project proposes to use bioretention planters to filter stormwater at the source instead of a centralized pre-treatment device. The size of the retention basin will also be reduced by providing infiltration trenches under residential streets.

As previously noted, the project's design is 35% complete including detailed topography, utility location, geotechnical investigations, cost estimates, and plan and profiles of proposed system. The City owns the street right-of-way for the project and Roosevelt Park. Necessary bid documents will be prepared using the Phase 1 documents as a foundation. Overall, the project is ready to proceed to construction.

The Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project, displayed in Figure 3-1, will provide multiple benefits once implemented. Specifically, the project will augment groundwater supplies by recharging 42 acre feet of runoff per year. This will directly benefit the local neighborhood as a drinking water well is located in Roosevelt Park and will benefit directly from additional groundwater recharge. The Project will also eliminate persistent street flooding along Granger Avenue, a heavily traveled local collector and route to Roosevelt Junior High School and Freemont Elementary School, and bioretention planters in curb bulb-outs at intersections along Granger Avenue will treat stormwater to remove possible pollutants prior to recharge, improving groundwater quality that has historically been impact through the use of rock wells and sewers for stormwater discharge.

Figure 3-1: Modesto Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project



Modesto Area 2 Stormwater to Sanitary Sewer Cross-Connection Removal Project



7/27/2015

rimdesigngroup

Budget Category (a): Direct Project Administration

Task 1 - Project Management

Work to be completed under Task 1 includes project management to meet the requirements of the grant agreement. Work items include complying with grant requirements, preparing and submitting monthly invoices, including relevant supporting grant documents, and coordinating with the IRWM grant manager. This task also includes administrative responsibilities associated with the project, including, but not limited to, coordination with partnering agencies, and management of consultants/contractors. This task will be ongoing throughout the project. **Percent Complete: 0%**

Deliverables:

- Invoices
- Other Applicable Project Deliverables

Task 2 - Labor Compliance Program

The City of Modesto is the construction contracting entity for this project. The City utilizes the State of California's CalTrans Labor Compliance Plan (LCP); therefore, this task is complete. Implementation of the LCP is included in Task 12. **Percent Complete: 100%**

Deliverables:

- Approved LCP

Task 3 - Reporting

Under Task 3, quarterly progress reports will be prepared detailing work completed during the reporting period. These reports will be provided to the IRWM Grant Manager for inclusion in a progress report to be submitted to DWR. Also included in this task is preparation of draft and final Project Completion Reports. The draft report will be submitted to DWR for comment and review; the final report addressing DWR comments.

Percent Complete: 0%

Deliverables:

- Quarterly Progress Reports
- Draft and Final Project Completion Reports

Budget Category (b) - Land Purchase/Easement

Task 4 - Land Purchase

The City of Modesto currently owns the road right-of-ways where the bioretention and infiltration facilities would be constructed. The City also owns Roosevelt Park where infiltration facilities are proposed. **Percent complete: 100%**

Deliverables:

- Copy of assessors maps

Budget Category (c) -Planning/Design/Engineering/Environmental Documentation

Task 5 - Feasibility Studies

A 35% Preliminary Design Report (PDR) was prepared, evaluating stormwater management alternatives for eliminating the existing cross-connections with the City's sanitary sewer. The PDR concluded that the proposed project is the most cost effective alternative (Area 2 Storm Drain to Sanitary Sewer Cross Connection Removal Preliminary Design Report, RRM Design Group, 2010). Preparation and completing of the PDR included three public outreach meetings to solicit local stakeholder input on the alternatives development and analysis.

Percent Complete: 100%

Deliverables:

- Copy of 35% Preliminary Design Report

Task 6 - Environmental Documentation

The City's 2006 *Wastewater Master Plan Master Environmental Impact Report* analyzed the proposed Project. The MEIR was certified on March 13, 2007. The proposed Project must comply with the MEIR's mitigation monitoring program. It is anticipated that a Findings of Conformity (FOC) will need to be prepared. **Percent Complete: 90%**

Deliverables:

- Copy of 2006 *Wastewater Master Plan Master Environmental Impact Report*
- Findings of Conformity

Task 7 - Permitting

The Project will be required to obtain City Plan Check Approval, City Encroachment Permits, State Stormwater Construction Permits, and San Joaquin Valley Air Pollution Control District Permits. Applications for these permits have not yet been prepared, and the permits will be obtained under this task. **Percent Complete: 0%**

Deliverables:

- All required permits, including, but not limited to, City Plan Check Approval, City Encroachment Permits, State Stormwater Construction Permits, and San Joaquin Valley Air Pollution Control District Permits

Task 8 - Design

In Task 8, the preliminary design, as defined in the 35% PDR, will be refined. Included in this effort is supplemental geotechnical work, building on the preliminary Geotechnical (Infiltration Testing Area 2 Storm Drain Project, Blackburn Consulting, June 12, 2009). Once the supplemental geotechnical work has been completed, the 100% (Final) construction documents and specifications will be prepared. **Percent Complete: 35%**

Deliverables:

- Supplemental Geotechnical Report
- 100% Design Documents.
- Updated Project Cost Estimate

Task 9 - Project Performance Monitoring Plan

In Task 9, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will include baseline conditions, a brief discussion of the monitoring plan, methodology of monitoring, frequency of monitoring, and a map showing monitoring locations. The Project Performance Monitoring Plan will also summarize the objectives of the monitoring program and present the metrics and methods that will be used to evaluate project performance. **Percent Complete: 0%**

Deliverables:

- Project Performance Monitoring Plan

Budget Category (d) – Construction/Implementation

Task 10 - Contract Services

Task 10 includes activities necessary to secure a contractor and award the construction contract. Work items include: developing bid documents, preparing advertisements and contract documents for construction contract bidding, conducting a pre-bid meeting, bid opening and exaltation, selection of the contractor, award of contract, and issuance of notice to proceed. **Percent Complete: 0%**

Deliverables:

- Bid documents
- Proof of Advertisement
- Award of contract
- Notice to proceed

Task 11 - Construction Administration

This task includes managing contractor submittal review, answering requests for information, and issuing work directives. A full-time engineering construction inspector will be on site for the duration of the project. The inspectors duties include: documenting of pre-construction conditions, daily construction diary, preparing change orders, addressing questions of contractors on site, reviewing/ updating project schedule, reviewing contractor log submittals and pay requests, forecasting cash flow, notifying contractor if work is not acceptable. **Percent Complete: 0%**

Deliverables:

- Notice of Completion
- Copies of Requests for Information (RFIs) and responses

Task 12 - Construction/Implementation Activities

Task 12 is the construction of the Project. This task consists of several subtasks, as detailed below.

Subtask 12a: Mobilization and Demobilization

Upon receipt of the Notice to Proceed (NTP), the contractor will mobilize its equipment and crew according to a pre-determined staging plan. Mobilization includes creating a temporary staging area, and mobilizing large construction equipment, including an excavator, dump trucks, and a backhoe, to the site. Demobilization includes removing or transferring the equipment from the job site when the work is completed, and job site cleanup.

Subtask 12b: Site Preparation

This subtask consists of site preparation prior to construction. Site preparation activities include park demolition, sawcut and pavement removal, and cross-connection removal.

Subtask 12c: Construction

Project construction consists of installing the infiltration trenches, constructing the infiltration basin in park, constructing the bioretention planters, reconstructing curbs, gutters, and sidewalks, repaving roadways, and restriping, replacing park irrigation disturbed by construction, and replacing turf and landscaping in the park.

Percent Complete: 0%

Deliverables:

- Contractor Notice to Proceed
- Photographic Documentation
- Inspection Reports
- Project Punch List and Closeout
- As-Built Drawings
- Post Construction Monitoring