

April 14, 2016

## City of San Antonio

Capital Improvement Management Services

# THE HOWARD W. PEAK GREENWAY TRAILS SYSTEM - ROGERS RANCH SEGMENT

### SCOPE OF WORK NARRATIVE

### **ADDITIONAL SERVICES**

#### PROJECT SCOPE

DETAILED DESIGN PHASE SERVICES	
1) ENGINEERING SERVICES	
	PROJECT INITIATION (3.1 THRU 3.8)
3.1	REVIEW AND BRIEFING OF SCOPE
A.	Attend Scope Development & Project Initiation Meeting
B.	Revise Scope, as needed
3.2	TDLR REVIEW AND COMPLIANCE
A.	Prepare TDLR Forms and Request TDLR Review Fee from Owner
	(TDLR FEES: \$850.00 for REVIEW, plus \$725.00 for INSPECTION = \$1,575.00)
B.	Submit Project Documents for TDLR Review
C.	Revise Plans per Comments, as necessary
D.	Request TDLR Inspection
E.	Attend TDLR Inspection
F.	Provide Contractor Punchlist of Items to be Addressed, if necessary
3.3	CONSULTANT RESPONSIBILITY
A.	Review Project Jurisdictions and Expected Reviewing Agencies
B.	Contact and Gather Points of Contacts and Submittal Requirements
3.4	CONSULTANT, CONTRACTOR, AND CITY COORDINATION
A.	Consultant Authority Modification, Processing, and Team Notification
3.5	SITE VISITS / MEETINGS
A.	Project Initiation ( 1 Site Walk-thru with Design Team)
B.	Schematic (3 Site Visits, 1 Site Meeting with City,1 Coordination Meeting with Property Owner)
C.	Construction Documents - 50%, 95% and 100% Submittals (3 Site Visits and 1 Owner Coordination Site Meeting)
D.	Construction Phase (See Construction Phase Services Section)
3.6	CONSTRUCTABILITY REVIEW (INCLUDED IN DESIGN)
3.7	CITY SERVICES AND COORDINATION

A.	Request Information from pertinent City Departments (such as Traffic, Drainage, and/or Public Works)
B.	Coordinate with such City Departments
3.8	VERIFY DESIGN CRITERIA; PROJECT MEETINGS; PRESENTATIONS TO OFFICIALS; PUBLIC HEARINGS; STAKEHOLDER MEETINGS
A.	Verify Applicable Design Criteria
В.	Project Team Meetings (1 per submittal, 4 submittals)
D.	Public Hearings (3 Hearings)
E.	Presentations to City Officials (2 Presentations)
	Subconsultant Participation
3.9	SCHEMATIC DESIGN PHASE SERVICES
3.9.1	PRELIMINARY EVALUATION OF CITY'S PROJECT PLAN
A.	Evaluate City's Program
B.	Evaluate City's Schedule
C.	Evaluate City's Budget
D.	Evaluate City's Project Site
E.	Evaluate City's Delivery Method and other Initial Information
F.	Provide Comments based on Evaluation
3.9.2	PRELIMINARY EVALUATION SUBMITTAL (INCLUDING DESIGN SUMMARY REPORT)
A.	Present Preliminary Evaluation
B.	Present Design Approaches
3.9.3	VALUE DESIGN / ENGINEERING
A.	Research Alternative Value Engineering and Materials
3.9.4	PRELIMINARY DESIGN PRESENTATION
A.	Prepare Presentation Exhibits
B.	Present to City
3.9.5	SCHEMATIC DESIGN DOCUMENTS
A.	Cover Sheet
B.	Prepare Preliminary Site Layout with Proposed Trail Alignments including alternatives
C.	Prepare Preliminary Trail Head and Parking Layouts
D.	Prepare Preliminary Typical Sections at Pertinent Locations
E.	Prepare Preliminary Drainage Area Maps (Existing Conditions)
F.	Prepare Preliminary Salado Creek Crossing Layouts
G.	Prepare Preliminary Utility Plan
3.9.6	HISTORICAL DESIGN REVIEW COMMISSION (HDRC)
3.9.7	ESTIMATED COST OF WORK
A.	Prepare Preliminary Cost Estimate
3.9.8	SCHEMATIC DESIGN PACKAGE SUBMITTAL
Α.	Quality Control/Quality Assurance
B.	Prepare Submittal Package
C.	Submit Package to City
3.10.3	PREPARE BIDDING DOCUMENTS (PERFORMED DURING FINAL SUBMITTAL)
A.	Bidding and Procurement Information
B.	Form of Agreement between City and Contractor
C.	Conditions of the Construction Contract and General, Supplementary, and other Conditions
D.	Prepare a Project Manual

	Subconsultant Participation
3.11	CONSTRUCTION DOCUMENT PHASE SERVICES
Α.	Request and Attend a Schematic Design Comment Review Meeting
3.11.1	PREPARE CONSTRUCTION DOCUMENTS FOR CITY APPROVAL
3.11.2	FURTHER DEVELOPMENT PLAN
3.11.3	OTHER GOVERNMENTAL AGENCIES
Α.	San Antonio Water Systems (SAWS)
	a. Submit Plans and Specifications for Review (1 Submittal)
	b. Revise Plans per Comments and Resubmit
В.	CPS Energy
	a. Submit Plans and Specifications for Review (1 Submittal)
	b. Revise Plans per Comments and Resubmit
C.	TxDOT
	a. Submit Plans and Specifications for Review (1 Submittal)
	b. Revise Plans per Comments and Resubmit
D.	Rogers Ranch Property
	a. Meet with Developer Representative
	b. Submit Plans and Specifications for Review (1 Submittal)
	c. Revise Plans per Comments and Resubmit
E.	TCEQ
	a. Meet with TCEQ
	b. Submit Plans and Specifications for Review (1 Submittal)
	c. Revise Plans per Comments and Resubmit
F	HOA's (2 HOA's estimated)
	a. Meet with HOA Representative
	b. Submit Plans and Specifications for Review (1 Submittal)
	c. Revise Plans per Comments and Resubmit
	Subconsultant Participation
3.11.4	CONSTRUCTION DRAWINGS SUBMITTALS
A.	50% SUBMITTAL
	a. PLAN SHEETS
	1. Cover Sheet
	2. Site Survey
	3. Tree Catalog
	4. Index of Sheets
	5. Project Layout/Control
	6. General Notes
	7. Preliminary/Typical Sections
	8. Proposed Typical Sections, Retaining Wall Design, and Pavement Design
	9. Bid Item Summary
	10. Preliminary Grading Plan
	11. Drainage Area Map and Calculations
	12. Low Water Creek Crossing Layouts
	13. Traffic Control Standard Details
	14. SWPPP Plan (Coordination)
	b. PREPARE DESIGN SUMMARY REPORT

	c. UTILITY COORDINATION REPORT
	d. 50% COST ESTIMATE
	e. LIST OF GOVERNING AND SPECIAL SPECIFICATIONS
	f. PROJECT SCHEDULE
	g. GEOTECHNICAL REPORT (Coordination)
	h. WRITTEN RESPONSE TO SCHEMATIC DESIGN DOCUMENT COMMENTS
	i. QA/QC CERTIFICATION FORM
	j. SCHEDULE/ATTEND PUBLIC MEETING
	k. SCHEDULE/ATTEND 50% REVIEW MEETING
	I. 50% PACKAGE SUBMITTAL
	a. Quality Control/Quality Assurance
	b. Prepare Submittal Package
	c. Submit Package to City
	1. CD WITH PDF'S OF DELIVERABLES
	Subconsultant Participation
B.	95% SUBMITTAL
	a. PLAN SHEETS
	Finalize Cover Sheet
	2. Finalize Site Survey
	3. Finalize Tree Catalog
	4. Finalize Index of Sheets
	5. Finalize Project Layout/Control
	6. Finalize General Notes
	7. Finalize Typical Sections
	8. Finalize Typical Sections, Retaining Wall Design and Pavement Design
	9. Finalize Bid Item Summary
	10. Finalize Grading Plan
	11. Finalize Drainage Area Map and Calculations
	12. Finalize Low Water Creek Crossing Layouts
	13. Finalize Traffic Control Standard Details
	14. Standard Details, as required
	16. EPIC SHEET
	b. FINALIZE DESIGN SUMMARY REPORT
	c. FINALIZE UTILITY COORDINATION REPORT
	d. 95% COST ESTIMATE
	e. UPDATE LIST OF GOVERNING AND SPECIAL SPECIFICATIONS
	f. FINALIZE PROJECT SCHEDULE
	g. GEOTECHNICAL REPORT (Coordination)
	h. WRITTEN RESPONSE TO 50% DOCUMENT COMMENTS
	i. QA/QC CERTIFICATION FORM
	j. PREPARE TDLR SUBMITTAL
	k. SCHEDULE/ATTEND 95% REVIEW MEETING
	I. 95% PACKAGE SUBMITTAL
	a. Quality Control/Quality Assurance
	b. Prepare Submittal Package - Plans, Specifications and Front End Documents
	15. SWPPP Plan (Coordination)  16. EPIC SHEET  b. FINALIZE DESIGN SUMMARY REPORT  c. FINALIZE UTILITY COORDINATION REPORT  d. 95% COST ESTIMATE  e. UPDATE LIST OF GOVERNING AND SPECIAL SPECIFICATIONS  f. FINALIZE PROJECT SCHEDULE  g. GEOTECHNICAL REPORT (Coordination)  h. WRITTEN RESPONSE TO 50% DOCUMENT COMMENTS  i. QA/QC CERTIFICATION FORM  j. PREPARE TDLR SUBMITTAL  k. SCHEDULE/ATTEND 95% REVIEW MEETING  l. 95% PACKAGE SUBMITTAL  a. Quality Control/Quality Assurance

	and Cook and the Deadles are to City.
	m. Submit Package to City
	1. CD WITH PDF'S OF DELIVERABLES
244.0	Subconsultant Participation FINAL SUBMITTAL
3.11.6	
A.	WRITTEN RESPONSE TO 95% DOCUMENT COMMENTS
В.	FINAL CONSTRUCTION DOCUMENTS
	a. Submit (1) copy of Plans for Final Review
	b. Revise Plans per Comments
C.	FINAL SUBMITTAL
	a. Submit Final Package
24462	b. Revise Plans per Comments
3.11.6.2	ELECTRONIC SUBMITTAL  Submit Plans and Specifications in PDF format
A. 3.11.6.3	Submit Plans and Specifications in PDF format
A.	PERMITTING PACKAGE  Submit Parmit Application and Partinent Information along with Ease
3.12	Submit Permit Application and Pertinent Information along with Fees BIDDING PHASE
3.12.1	ASSIST IN:
A.	Obtaining Bids
B.	Confirming Responsiveness of Bids and Proposals
C.	Determining Successful Bid
D.	Preparing Construction Contract
3.12.2	BIDDING ASSISTANCE
Α.	Prepare Bid Packages
B.	Distribute Bid Packages and Maintain Distribution List
C.	Participate in Pre-Bid Conference
D.	Respond to Questions and Provide Clarification by Addenda
3.12.3	EVALUATE PRODUCT AND MATERIAL SUBSTITUTIONS
A.	Consider and Evaluate Substitution, if any
B.	Prepare Addenda for Substitutions
	Subconsultant Participation
3.14	CONSTRUCTION PHASE SERVICES
3.14.1	Pre-construction Meeting
3.14.2	PROVIDE ADMINISTRATION OF CONSTRUCTION CONTRACT (9 MONTHS)
3.14.3	REVIEW RFI'S (1.5 RFI'S PER MONTH, 9 MONTHS)
3.14.4	PROCESS AND RESPOND TO RFI'S
A.	RFI'S PROCESSING (1.5 RFI'S PER MONTH, 9 MONTHS)
3.14.5	COORDINATE AESTHETIC DECISIONS
A.	COORDINATION (4 INSTANCES)
3.14.6	ADVISE AND CONSULT WITH CITY
A.	CONSULTATIONS AND COMMUNICATION (2 PER MONTH, 9 MONTHS)
3.14.7	FINAL INSPECTIONS (SEE 3.17.2)
3.14.8	WARRANTY INSPECTION
A.	Produce Punchlist of Items to be Addressed
В.	Verify Punchlist of Items to be Addressed
3.14.9	CONSULTANT RESPONSIBILITY (INFORMATION ONLY NO TASKS)
3.14.10	EVALUATE SUBSTITUTIONS

A.	Review Substitution Requests (1 per month, 9 months)
В.	Make Recommendations (1 per month, 9 months)
3.15	EVALUATION OF THE WORK
3.15.1	INITIAL START UP
011011	Observe Initial Start Up and Necessary Performance Tests as required by Specs, if
A.	any
3.15.2	SITE VISITS AND INSPECTIONS
A.	Site Visits (3visits per month, 9 months)
B.	Prepare Site Visit Reports (3 per month, 9 months)
C.	Prepare Monthly Progress Report (9 months)
	a. Subconsultant Participation
	Structural Subconsultant
	a. Monthly Reports of site visits (6)
3.15.3	ASSESS CONFORMITY TO PLANS AND SPECIFICATIONS
A.	Report Non-Conforming or Deficient Work (4 cases)
3.15.4	SUBMITTALS
A.	Review and Respond to Submittals (Approx 9 Submittals)
3.15.5	INSPECTION, TESTING, AND REQUIRED APPROVALS
A.	Review and Process Certificates of Inspection
B.	Review and Process Testing Results
C.	Review and Process Any Additional Required Approvals
3.15.6	SUBSTANTIAL COMPLETION AND FINAL INSPECTION
A.	Participate in Substantial Completion Inspection
B.	Prepare Substantial Completion Punchlist
C.	Final Inspection
3.15.7	CHANGE ORDER REQUESTS BY CITY
A.	Develop Change Orders (6 Change Orders)
B.	Submit to Contractor for Acceptance (6 Change Orders)
C.	Submit to City for Approval (6 Change Orders)
3.15.8	NON CONFORMING WORK
A.	Assess Work for Acceptance (3 Instances)
_	Provide City Opinion of Acceptance or Rejection of Non-Conforming Work (3
B.	Instances) APPLICATION FOR PAYMENT BY CONSTRUCTION CONTRACTOR (INCLUDED IN
3.16	CONSTRUCTION PHASE SERVICES
3.16.1	SCHEDULE OF VALUES
A.	Review and Comment on Contractor Schedule of Values (9 Submittals)
3.16.2	PAYMENT SUBMITTAL TO CITY PORTAL
A.	Monitor Portal and Retrieve Applications (Weekly, 9 months)
3.16.3	APPLICATIONS OF PAYMENT
A.	Review Monthly Applications of Payment (9 Applications)
3.16.4	PROCESS OF APPLICATION
A.	Process Application as Approved or Rejected (9 Applications)
B.	Provide Reasons for Rejections (3 Rejections Estimated).
3.16.5	APPROVAL OF APPLICATION
A.	Inform City of Application Approval (9 Applications)
B.	Provide Remaining Balances, Retained Balances, and Sum to be Paid (9 Applications)

3.16.6	REJECTION OF APPLICATION
0.10.0	Notify City of Rejected Applications Based on Criteria Outlined in 3.16.6.1 Thru 3.16.6.7 of
A.	Professional Services Agreement. (3 Rejections Assumed).
3.16.7	PROCESS OF APPLICATION RESUBMITTAL
A.	Review Resubmittal of Rejected Applications. (3 Resubmittals Assumed).
B.	Process Application As Applicable.
3.17	SUBSTANTIAL PROJECT COMPLETION
3.17.1	TASKS (CONSULTANT AND CITY)
A.	Inspect Project and Set a Date for Substantial Completion.
B.	Produce and Issue Certificate of Substantial Completion.
C.	Request Written Warranties and Related Documents from Contractor.
D.	Review Documents and Submit to City.
3.17.2	FINAL INSPECTION
A.	Process Final Completion Request from Contractor
B.	Set Date for Final Inspections
C.	Conduct Final Inspection with City and Contractor
D.	Produce Punchlist of Items That May Need to be Addressed
E.	Verify Punchlist Items were Addressed
F.	Review Close-Out of Documents
3.17.3	RECOMMENDATION OF PAYMENT
A.	Review Final Payment
B.	Review Record Drawings
3.17.4	REVIEW OF WARRANTIES, MANUALS, ETC
A.	Review Pertinent Warranties, Bonds, Manuals, Etc.
B.	Attend Operator Training of Systems and Equipment, As Applicable.
3.17.5	FINAL INFORMATION SUBMITTAL
A.	Forward Consent of Surety, Release Retainage, Affidavits, Releases and Waivers of Liens or Bonds.
ADDITIO	NAL SUBCONSULTANT PARTICIPATION SERVICES
	nental Services (See Attached Proposal and Fee by Adams Environmental, Inc., dated January
Geotechi	nical Engineering Services (See Attached Proposal and Fee by Burge Martinez Consulting, Inc., vised February 25, 2016)
C.	Final Inspection
BMB AD	DITIONAL SERVICES
A)	DRAINAGE STUDY
	Gather existing studies for Salado Creek Crossings, topography, and meet with City of San Antonio (COSA)
	Review SARA hydrologic computations for existing and ultimate conditions
	Review SARA hydraulic computations for existing and ultimate conditions
	Revise SARA hydraulics to include trail crossings
	5. Provide the City of San Antonio with digital files of hydrologic and hydraulic models
	6. Prepare a map with existing and ultimate floodplain based on existing site topographcy and proposed site topography
	7. Provide items required to satisfy City of San Antonio regulatory requirements
	8. Prepare and submit complete study following City of San Antonio requirements to City

	Revise reports per comments and resubmit
D)	STORMWATER MANAGEMENT REPORT
B)	
	Meet with City Drainage Department
	Determine & verify hydrology for the site and for downstream of the site based on existing conditions and developed conditions
	3. Determine if increase runoff significantly affects downstream conditions
	4. Prepare report and calculate appropriate fees if required
	5. Prepare a Storm Water Participation form
	6. Submit report to the City of San Antonio
	7. Revise report per comments and resubmit
	WATER POLLUTION ABATEMENT PLAN (WPAP)
	Subconsultant Participation
BMB S	urveying Services
PHASE	1 – Rogers Ranch
	_
A)	MOBILIZATION
	1) Gathering Maps, Plats, Surveys, Meta Data
B)	PROJECT CONTROL:
	Establish Primary Control - Horizontal     Stablish Primary Control - Horizontal
	2) Establish Primary Control - Vertical (Level Loops)
C)	3) Set Secondary Control RESEARCH
<u>C)</u>	Utilities, Right-of-Way, Ownership (Public and Private)
D)	FIELD SURVEY
<i>D</i> )	1) On-the-ground Traverse
	Set Preliminary Alignment - Topo, Tree, Utility
	Set Preliminary Alignment - Boundary and Improvements
E)	CADD AND ANALYSIS
,	1) From Control ties set boundaries: showing road right-of-ways, and Adjoiner Boundaries
	2) Add Utilities Locations from field ties & record locations
	3) Add topographic features, trees, fences, etc.
	4) Field check survey
	5) Create Control Point Sheet with description, northing, easting & elevations
F)	QUALITY ASSURANCE - QUALITY CONTROL
	1) Quality Assurance/Quality Control
	2) Respond to comments
	ADDITIONAL CONSULTANT SURVEYING SERVICES (BMB)
G)	PHASE 2 EASEMENTS – ROGERS RANCH
	Recover and verify existing horizontal & vertical control points
	2. Research property owners and adjoiners
	3. Recover sufficient boundary monuments to establish location of property lines
	Prepare easement plat & metes and bounds description (up to 9 easements)
	5. Set iron rods at all easement corners (at entry & exit, plus every 400', est. 120 monuments)
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H)	PHASE 3 EASEMENTS – SALADO NORTH
	Recover and verify existing horizontal & vertical control points
	2. Research property owners and adjoiners
	3. Recover sufficient boundary monuments to establish location of property lines
	4. Prepare easement plat & metes and bounds description (up to 4 easements)
	5. Set iron rods at all easement corners (at entry & exit, plus every 400', est. 80 monuments)