

CRAIG A. SMITH & ASSOCIATES

PROPOSED SCOPE OF SERVICES, FEE REQUEST AND SCOPE OF WORK FOR

HALLANDALE BEACH FORCE MAIN IMPROVEMENTS PROJECT

CAS PROPOSAL NO.: 4091

ENGINEERING SERVICES PROPOSAL

April 27, 2021



CRAIG A. SMITH & ASSOCIATES

CONSULTING ENGINEERS • SURVEYORS • UTILITY LOCATORS • GRANTS SPECIALISTS
21045 Commercial Trail, Boca Raton, FL 33486
(561) 314-4445 • Fax (561) 314-4457

City of Hallandale Beach
Force Main Improvements
Proposal for Professional Services

CRAIG A. SMITH & ASSOCIATES

In accordance with Resolution No. 2020-054, RFP #FY 2018-2019-012 Continuing Professional Architectural and Engineering Services and Other Services, the following scope of services is provided by Craig A. Smith & Associates (CONSULTANT) as requested by the CITY to provide Engineering Services.

CAS PROJECT NO.: 4091

PROPOSAL DESCRIPTION:

Craig A. Smith & Associates (CAS) is pleased to provide this proposal to the City of Hallandale Beach for the preparation of engineering plans and specifications, survey, utility locates, engineering services during construction (ESDC), and construction observation services.

The purpose of this project is the construction of a new 20-inch diameter sanitary force main along NE 7th Street due south and east of the Hollywood Dog Track in Hallandale Beach.

The proposed construction of the 20-inch force main will begin at the intersection of NE 7th Street and the west side Dixie Highway where the proposed 20" force main will be installed beneath the railroad with a jack and bore to the east, for approximately 60 feet. The 20-inch force main will continue east along NE 7th Street for approximately 3,900 linear feet to the intersection of NE 7th Street and NE 12th Avenue where it will connect into the existing 20-inch diameter force main.

This engineering proposal is to authorize CAS to provide professional engineering services to the City of Hallandale Beach to assist the City by supplying contract documents and specifications to allow the City to publicly bid the proposed water and sewer project. Craig A. Smith & Associates proposes to provide professional engineering and management services during the construction phase of the project.

City of Hallandale Beach
Force Main Improvements
Proposal for Professional Services

OWNER/CLIENT: City of Hallandale Beach
Attn: Peter Kunen, P.E. (pkunen@hallandalebeachfl.gov)

ADDRESS: 630 NW 2nd Street, Hallandale Beach, FL 33009

PHONE: (954) 457 3042

GENERAL:

Craig A. Smith & Associates will provide professional services, engineering design, permitting, bidding services, and construction management during the construction phase of the project. More specifically, the scope of work for the City of Hallandale Beach Force Main Improvements Project includes the following tasks:

S86(B) ROUTE SURVEY

Survey will physically locate all above ground, visible improvements within the existing rights of way within the following streets:

NE 7th Street from North Dixie Highway to NE 12th Avenue.

Survey baseline will be established at 100-foot intervals and cross sections taken to ten (10) feet beyond each right of way at fifty-foot intervals. Plan view elevations will be shown as relative to North American Vertical Datum of 1988 at each section and at pertinent points for facilitation of Engineering Design. All visible, above ground improvements and utilities will be located and shown together with utilities as marked on the surface by the Craig A. Smith & Associates Locating Department. Sanitary sewer and drainage structures will be located and inverts, pipe sizes, materials and rim elevations shown as available. The locations of Forty (40) utility test holes will be shown with utility data, IE. type, size, material, inv., etc., for each based on reports provided to the Surveyor. Trees 3" or greater will be shown with diameter at breast height (DBH) and common name if known by the Surveyor's agent. A base map will be created in current software parameters and provided to the Engineering Department as well as a Certified Map of Specific Purpose Survey adhering to the Standards of Practice for Surveying, (Chapter 5J – 17) of the Florida Administrative Code, for submittal to entities of interest.

Note: Utility Easements along that vacated portion of NE 7th Street or any other portion of the survey must be provided to the Surveyor to be shown.

SURVEY \$35,350.00

S87(B) PROVIDE LOCATES – GPR/EM SERVICES

City of Hallandale Beach
Force Main Improvements
Proposal for Professional Services

Provide utility location and verification services within the area described in Task S86 above using AWWA standards for marking. A subsurface ground penetrating radar (GPR) unit shall be used in addition to electromagnetic induction (EM) to perform/verify horizontal locations of existing utility lines. Lines will be painted on the ground or pin flags set to show said lines on the surface.

LOCATES \$6,000.00

S90(B) UTILITY TEST HOLES (SOFT DIGS)

Utility test holes (soft digs) will be performed, and reports provided for each with utility depth, elevation, size, material and type. The test holes will be performed based on the direction of the Prime Consultant. Forty (40) utility test holes are estimated for this task.

TEST HOLES (40) \$19,800.00
UNIT PRICE = \$495.00 PER HOLE

TASK 4 ENGINEERING DESIGN SERVICES:

Preparation of construction plans for bidding Hallandale Beach Force Main Improvements. The scope of work includes the installation of the proposed 20-inch diameter force main that will begin by connecting into the existing force main located at the west side of North Dixie Highway at the intersection with NE 7th Street. The proposed force main will extend east along NE 7th Street approximately 3,900 feet to NE 12th Avenue where it will connect into the existing force main. The design drawings will include all required fittings and valves as required by the City. The proposed force main improvements will include complete road restoration along the proposed pipeline routes.

Lump Sum for Task: \$107,450.00

TASK 5 ENGINEERING PERMITTING SERVICES:

Preparation of sanitary sewer permit applications with supporting construction drawings sufficient for permitting by the Florida Department of Environmental Protection. In addition, the proposed 20-inch force main crossing beneath the railroad along Dixie Highway will require a separate jack and bore permit with the railroad. In addition, permit preparation will include necessary permits with FDOT for work to be completed within the US1/Federal Highway right-of-way. This task includes up to three (3) responses to request for additional information letter from each agency.

Lump Sum for Task: \$19,500.00

City of Hallandale Beach
Force Main Improvements
Proposal for Professional Services

TASK 6 SERVICES DURING BIDDING:

Preparation of contract documents, including bid specifications, bid schedule, general conditions, bid forms and the invitation to bid for the proposed Hallandale Beach Force Main Improvements Project. Provide services during bidding, including preparation of any bid addenda, preparation and attendance of pre-bid meeting, coordination with contractors, respond to bid questions, attend bid opening, preparation of bid tabulations, review and evaluate all bids after which, issue our letter of recommendation for the award of the Hallandale Beach Force Main Improvements Project.

Lump Sum for Task: \$7,300.00

TASK 7 PRE-CONSTRUCTION MEETING SERVICES:

CAS will attend the pre-construction meeting to answer questions and provide signed and sealed construction drawings and hard copies of the contract specifications to execute the contract and issue the Notice to Proceed to the contractor. CAS attendees shall include the Senior Supervising Engineer and our Senior Field Representative for observational services.

Lump Sum for Task: \$5,700.00

TASK 8 ENGINEERING SHOP DRAWING REVIEW

Project Engineer will review shop drawings and process the submittals from the contractor. Correspond with contractor on approval of all expected products to be installed on the project. Engineer will maintain a shop drawing log to document all submittals with dates submitted, reviewed, and returned.

Lump Sum for Task: \$7,400.00

TASK 9 ENGINEERING SERVICES DURING CONSTRUCTION (ESDC)

Provide, review, and process submittals from the contractor including review of the project's construction schedule, maintenance of traffic plan, construction materials and monthly contractor's pay requests. In addition, CAS will provide final engineering certification and project closeout documentation to confirm construction was completed in general conformance with the design documents. Review and approve the projects as-built record drawings, execute, and submit the FDEP Certification of Completion forms and as-built drawings if any design deviations occurred. Fees are based on an estimated construction time of nine (9) months to be invoiced \$8,334.44 per month. Should the construction duration extend

City of Hallandale Beach
Force Main Improvements
Proposal for Professional Services

beyond 9 months, compensation will be provided on an hourly basis in accordance with our contracted rate schedule.

Lump Sum for Task: \$75,010.00

Task 10 CONSTRUCTION OBSERVATION SERVICES

Provide construction observation services to include examination of the contractor's monthly pay applications, coordination with contractor and owner, site observation sufficient to ensure contractor compliance with approved construction plans, permits and standards, resolve field conflicts and aid the owner during construction. Fees are based on an estimated construction time of nine (9) months to be invoiced \$14,444.44 per month. Should the construction duration extend beyond 9 months, compensation will be provided on an hourly basis in accordance with our contracted rate schedule.

Lump Sum for Task: \$130,000.00

CAS proposes to accomplish the professional engineering services listed within nine (9) months of the issued Work Authorization for the following total fees, which is the sum of the fees for each phase and its specific work task:

Task S86 ROUTE AND TOPOGRAPHIC SURVEY (60 days)\$35,350.00

Task S87B LOCATES - GPR / EM SERVICES (10 days).....\$6,000.00

Task 90B UTILITY TEST HOLES (SOFT DIGS) (12 days).....\$19,800.00
Total Of (40) Test Holes Proposed

Task 4 ENGINEERING DESIGN SERVICES (180 days).....\$107,450.00

Task 5 ENGINEERING PERMITTING SERVICES (120 days)\$19,500.00

Task 6 SERVICES DURING BIDDING (60 days)\$7,300.00

Task 7 PRE-CONSTRUCTION MEETING SERVICES(30 days).....\$5,700.00

Task 8 ENGINEERING SHOP DRAWING REVIEW SERVICES(45 days) \$6,000.00

Task 9 ENGINEERING SERVICES DURING CONST. (270 days).....\$75,010.00

Task 10 CONSTRUCTION OBSERVATION SERVICES(270 days).....\$130,000.00

TOTAL ENGINEERING FEES\$412,110.00

(Plus hourly services in accordance with CAS's General Services Agreement)

HALLANDALE BCH F.M. OPINION OF PROBABLE COST

Item No.	Description	Qty.	Unit	Unit Cost	Total
1	Mobilization @ 4%	1	LS	\$ 59,092	\$ 59,092
2	MOT @ 1,5%	1	LS	\$ 22,160	\$ 22,160
3	Survey @ 2 %	1	LS	\$ 29,546	\$ 29,546
4	Testing @ 1 %	1	LS	\$ 14,773	\$ 14,773
5	Videos @ 4000	1	LS	\$ 4,000	\$ 4,000
6	Erosion @ 1,5%	1	LS	\$ 22,160	\$ 22,160
7	20" PVC FM	4,000	LF	\$ 155	\$ 620,000
8	MJ Fittings	2.2	TN	\$ 15,000	\$ 33,000
9	20" PLUG VALVE W/Concr. Collar	7	EA	\$ 20,000	\$ 140,000
10	Connect into Existing 20" FM	1	LS	\$ 11,500	\$ 11,500
11	20" Jack & Bore ,w/30" casing @ tracks	76	LF	\$ 525	\$ 39,900
12	Dewatering Due to 20" pipe depth	1	LS	\$ 15,750	\$ 15,750
13	Protect & Support Utility Poles	15	EA.	\$ 5,500	\$ 82,500
14	Driveway Concrete Restoration	95	Yd2	\$ 85	\$ 8,075
15	Driveway Asphalt Restoration	20	YD	\$ 60	\$ 1,200
16	Driveway (Conc. Pavers) Restoration	275	YD	\$ 100	\$ 27,500
15	Dewatering due to depth of 20"WM & FM	1	LS	\$ 20,000	\$ 20,000
16	20" Mechanical Joint Restraint for PVC	100	EA.	\$ 650	\$ 65,000
17	Restrain existing PVC Pressure Pipe	30	EA	\$ 1,100	\$ 33,000
16	Directional Bore Under N. Federal Hwy.	120	LF	\$400	\$ 48,000
17					
18	Road Restoration Complete				
17	12" Base Rock	6,701	SY	\$ 10	\$ 67,010
18	8" Shellrock	6,668	SY	\$ 20	\$ 133,360
19	1.5 " S-3 Asphalt	6,626	SY	\$ 16	\$ 106,016
18	Sod Installation	3,000	SY	\$ 6	\$ 18,000
19	Irrigation & Landscape Repair	1	LS	\$ 7,500	\$ 7,500
20					
19					
20					
21					
CONSTRUCTION GRAND TOTAL				\$	1,629,042
Construction Contingency@ 20% =				\$	325,808
Total Proposed Construction =				\$	1,954,851

City of Hallandale Beach
Force Main Improvements
Proposal for Professional Services

ADDITIONAL SERVICES

Any service not specifically included in the agreement will be considered as an additional service. CAS will accomplish additional services upon proper written authorization of the client. The fees for additional services will be billed at our standard hourly rates or at a mutually agreed upon Lump Sum Fee.

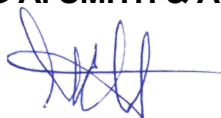
If you agree with the above scope of services and the terms, please sign in the authorization space provided below and return one (1) executed copy of this proposal via email (ssmith@craigasmith.com) or mailed to our Boca Raton Office at 21045 Commercial Trail, Boca Raton, FL 33486 as notice to proceed.

Should you have any questions or need additional information, please do not hesitate to contact this office.

AGREED TO AND ACCEPTED BY:

CRAIG A. SMITH & ASSOCIATES

City of Hallandale Beach, Florida



Stephen C. Smith, P.E.
President

Authorized Signature

Printed Name

Date

City of Hallandale Beach
Proposed FM Improvements
CAS Proposal #4091

City of Hallandale Beach 20" FM																
Scope of Services																
4/26/2021																
PROJECT NO: P4091																
CAS SERVICES																
SURVEYING, LOCATES & SOFT DIGS	\$61,150.00															
ENGINEERING DESIGN	\$139,950.00															
ENGINEERING CONSTRUCTION OBSERVATION	\$211,010.00															
TOTAL	\$412,110.00															
		HOURLY RATES	155	115	85	200	150	495	65	200	180	140	85	85	125	
			Survey Crew	Survey Coordinator	CADD Technician	Senior Registered Surveyor	Utility Locates	Soft Dig	Clerical	Engineering Director	Engineering Associate	Project Engineer	CADD Tech	Permit Administrator	Senior Field Rep	Totals
Task1 MAP OF SPECIFIC PURPOSE SURVEY	\$35,350.00		120	30	100	24										35350
Task2 PROVIDE LOCATES – GPR/EM SERVICES	\$6,000.00						40.00									6000
Task3 PROVIDE SOFT DIGS	\$19,800.00							40.00								19800
Task4 ENGINEERING DESIGN SERVICES	\$107,450.00								60.00	50.00	160.00	250.00	350.00			107450
Task5 ENGINEERING PERMITTING SERVICES	\$19,500.00										80.00		40.00	20.00		19500
Task6 SERVICES DURING BIDDING	\$7,300.00								20.00		10.00	30.00				7300
Task7 PRE-CONSTRUCTION MEETING SERVICES	\$5,700.00										20.00	15.00				5700
Task8 ENGINEERING SHOP DRAWING REVIEW SERVICES	\$6,000.00										10.00	30.00				6000
Task9 ENGINEERING SERVICES DURING CONSTRUCTION	\$75,010.00								90.00	90.00	180.00	134.00				75010
Task10 CONSTRUCTION OBSERVATION SERVICES	\$130,000.00														1040.00	130000
		TOTAL HOURS	120.00	30.00	100.00	24.00	40.00	40.00	170.00	140.00	460.00	459.00	390.00	20.00	1040.00	412110.00