

TASK ORDER No. 12

CONTINUING PROFESSIONAL SERVICES (Civil Engineering – Water)

THIS TASK ORDER FOR CONTINUING PROFESSIONAL SERVICES (“Task Order”) is made on the day of _____, between the **City of Lake Worth Beach**, a Florida municipal corporation (“City”) and **Holtz Consulting Engineers, Inc.**, a Florida CORPORATION (“CONSULTANT”).

1.0 Project Description:

The City desires the CONSULTANT to provide those services as identified herein for the Project. The Project is described in the CONSULTANT’s Proposal, dated 8/31/26 and services are generally described as: Gravity Sewer Cleaning (the “Project”).

2.0 Scope

Under this Task Order, the CONSULTANT will provide the City of Lake Worth Beach with civil engineering design services related to water consulting services for the Project as specified in the **CONSULTANT’s proposal attached hereto and incorporated herein as Exhibit “1”**.

3.0 Schedule

The services to be provided under this Task Order shall be completed within 90 calendar days from the City’s approval of this Task Order or the issuance of a Notice to Proceed.

4.0 Compensation

This Task Order is issued on a Time and Expense basis, not to exceed the amount of \$485,789.55. The attached proposal identifies all costs and expenses included in the not-to-exceed amount.

5.0 Project Manager

The Project Manager for the CONSULTANT is Stephen Fowler, P.E., phone (561) 575-2005; email: Stephen.Fowler@holtzconsulting.com; and, the Project Manager for the City is Vaughn Baker, P.E., phone: (561) 586-1798; email: Vbaker@lakeworthbeachfl.gov.

6.0 Progress Meetings

The CONSULTANT shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

7.0 Compliance with section 787.06, Florida Statutes.

By signing this Task Order before a notary public and taking an oath under the penalty of perjury, the CONSULTANT attests and warrants that the CONSULTANT does not use coercion for labor or services as defined in section 787.06, Florida Statutes (2024).

8.0 Authorization

This Task Order is issued pursuant to the Continuing Professional Services Agreement (Civil Engineering – Water) based on RFQ#23-300 between the City of Lake Worth Beach and the CONSULTANT, dated 3/28/2023 (“Agreement” hereafter). If there are any conflicts between the terms and conditions of this Task Order and the Agreement, the terms and conditions of the Agreement shall prevail.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 12 as of the day and year set forth above.

CITY OF LAKE WORTH BEACH, FLORIDA

By: _____
Betty Resch, Mayor

ATTEST:

By: _____
Melissa Ann Coyne, MMC, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL
SUFFICIENCY

By: _____
Glen J. Torcivia, City Attorney

By: _____
Yannick Ngendahayo, Financial Services Director

CONSULTANT: **HOLTZ CONSULTING ENGINEERS, INC.**

By: 

[Corporate Seal]

STATE OF FL
COUNTY OF Palm Beach

THE FOREGOING instrument was acknowledged before me by means of physical presence or online notarization on this 2 day of September 2020 by **HOLTZ CONSULTING ENGINEERS, INC.**, as the Vice President [title] of Holtz Consulting Engineers, a Corp. authorized to do business in the State of Florida, who is personally known to me or who has produced _____ as identification, and who did take an oath under penalty of perjury that the facts stated with regard to section 787.06, Florida Statutes, are true and correct, and that he or she is duly authorized to execute the foregoing instrument and bind **HOLTZ CONSULTING ENGINEERS, INC.** to the same.


Notary Public Signature

Notary Seal:

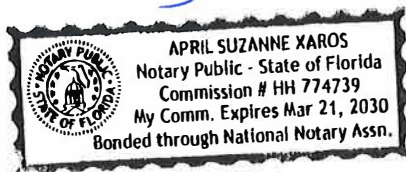


Exhibit “1”



HOLTZ CONSULTING ENGINEERS, INC

August 31, 2026

Vaughn Baker, P.E.
Water Utilities Director
City of Lake Worth Beach
Water Utilities Department
301 College Street
Lake Worth, FL 33460

Subject: **City of Lake Worth Beach
Gravity Sewer Cleaning**

Dear Ms. Baker,

We are pleased to offer the following proposal for the City of Lake Worth Beach gravity sewer cleaning. The project includes cleaning and closed-circuit televising (CCTV) of approximately 7,710 LF of gravity sewer ranging from 24" to 36" in diameter. This cleaning work is necessary for gathering flow information required for the Lantana Force Main Analysis project currently being performed.

PROJECT BACKGROUND

Holtz Consulting Engineers, Inc. (HCE) is currently contracted to install four (4) flow monitors in the wastewater collection system as part of the Lantana Force Main Analysis project. During the initial deployment of field crews to complete the installation of these flow monitors, it was discovered that there is a large volume of grit accumulation, surcharged flow conditions, and a reduced capacity within the collection system that is prohibiting the installation of two (2) of the four (4) flow monitors.

Based on the site observations made, the HCE team recommended that the City take immediate action on these issues to restore hydraulic capacity, reduce operation risk, improve system resiliency, and allow the installation of these two flow monitors to complete the original scope of services.

Due to observations made on site, it is recommended that the HCE team conducts pipeline cleaning & CCTV of 7,710 linear feet of wastewater gravity mainlines from 24" to 36" in diameter, based on GIS information. The section of pipe suggested for cleaning begins at MH797A at the intersection of S Dixie Hwy and 15th Ave S and continues east and then north to Master Lift Station LS-01 at the intersection of 2nd Ave S and S Golfview Rd.

On-site observations estimate the volume of debris in the pipeline to occupy 26% of the pipeline capacity or more. Due to this, it is recommended that the City take immediate, emergency action to improve hydraulic performance, decrease overflow risk, reduce operational constraints, and limit environmental risk exposure to the parks and adjacent Lake Worth Lagoon.



HOLTZ CONSULTING ENGINEERS, INC

SCOPE OF SERVICES

The Scope of Services will consist of the following tasks:

Task 1 – Gravity Sewer Cleaning

HCE and their subconsultant, McKim & Creed, will provide the following services under Task 1.

Task 1.1 - Smart Cover Monitoring Program

Prior to pipeline cleaning activities, temporary Smart Cover level-only monitoring devices will be installed at strategic locations throughout the project area. This will include the installation of up to three (3) of these devices, on-going monitoring for the project duration, alarm notifications, and trend monitoring. The use of these devices during the cleaning process will help ensure emergency procedures can be put into place to prevent overflows from occurring should levels rise unknowingly.

Task 1.2 – Community Engagement

It is recognized that due to the location of these project activities, adjacent to residences, businesses, parks, and recreational facilities, community engagement will be a component of project success. Prior to project field activities commencing, the HCE team will develop and maintain:

- I. Door Hangers
 - a. Door hangers will be placed at immediate and adjacent residences and businesses that will be impacted by project activities.
 - b. Door hangers will be distributed approximately 72 hours prior to work commencing in an area and will be redistributed on a weekly basis until the work in that area is completed.
 - c. The door hanger will include information on the project purpose, benefits, anticipated schedule and hours, project team contact information.
- II. City-facing Dashboard
 - a. A secure dashboard developed and maintained by the HCE team will be created and be made accessible to City staff.
 - b. This dashboard will feature:
 - i. Overall program progress
 - ii. Segment completion status
 - iii. Daily production quantities
 - iv. Summary of debris removed totals
 - v. Active and upcoming work locations
 - vi. Daily field reports
 - vii. Budget tracking



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Task 1.3 – Gravity Main Capacity Restoration Program

The primary project objective is restoration of hydraulic capacity within approximately 7,710 linear feet of gravity sewer experiencing significant sediment accumulation.

The HCE team will provide the following equipment, accessories, and personnel/operators for the equipment:

- Two (2) combination cleaning trucks (CCT)
- One (1) dedicated CCTV truck
- One (1) support pickup truck

Based on the current knowledge of the area, the HCE team will conduct cleaning operations during overnight hours when flow rates through the pipeline will be at lowest levels. For this project, work hours will be 8pm through 7am.

The HCE team will begin the cleaning process at structure MH648D and clean the pipeline segment upstream of this location using the 2 CCTs on a staggered schedule. CCT 1 will begin the night and CCT 2 will begin approximately one hour later. The intent is that CCT 1 will be full of debris and CCT 2 will arrive for CCT 1 to depart and travel to East Central Regional Water Reclamation (ECR) to dispose of the removed debris at the City drying bed(s). It is anticipated that when CCT 1 arrives back on site, CCT 2 will be full and ready to depart to the ECR to dispose of the removed debris at the City drying bed(s). This cycle will continue until approximately 7am when both vehicles will dispose of removed debris and be stored there until the next working shift. Both CCTs will decant at a convenient manhole downstream of where they are cleaning to ensure efficacy of the cleaning process.

During this process, a CCTV truck will be on-site for support personnel and to be able to attempt to televise a line segment should the need exist.

For the cleaning process, the CCTs will need access to a hydrant and hydrant meter to be supplied by City to access water for cleaning purposes. This meter will be a transient meter and be shared by both CCTs and the City shall provide the water at no cost to HCE.

Throughout the cleaning program, a Construction Manager from HCE will be on-site to document progress throughout the shift and be prepared to guide operations should any unforeseen issues arise.

Task 1.4 – Condition Assessment and Asset Verification

As cleaning is completed on each pipeline segment, the on-site CCTV crew will conduct a comprehensive condition assessment of the interior of the pipe. This assessment will be in conjunction with NASSCO Pipeline Assessment Certification Program (PACP) and will be coded by a 3rd party Artificial Intelligence (AI) platform. This approach will give the City assurance of the volume of capacity restored to each



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pipeline segment, provide the City with documentation of the interior of the pipeline, and provide rehabilitation recommendations should any be present.

To properly conduct the CCTV inspection, it is anticipated that temporary plugging of the upstream manhole may be necessary, and if so, a flow-through plug will be used. This approach will limit the volume of water flowing through the pipeline but still allow some flows through to limit the likelihood of needing to provide by-pass pumping of the line segment.

Task 1.5 –Engineering Oversight Management

A Construction Manager will be on-site during all field activities of this project. This individual will function as the City’s representative throughout construction activities and be responsible for interacting with the general public, documenting daily activities and progress, making or approving any decisions in the field for unexpected circumstances, coordinating any environmental or traffic needs that are projected.

Task 1.6 –Traffic Control and Parking Management

Traffic Control and Parking Management will be required throughout the project. Due to the location of the manhole structures, it is recommended that temporary no parking areas and lane closures be put into effect each working shift where the equipment will be. This will be coordinated on a weekly basis with City staff.

Deliverables

Within three (3) weeks of the conclusion of the field work, a Technical Memorandum (TM) will be provided to the City as a deliverable for this project. This TM will give a summary recap overview of the activities that took place, and an estimated total volume of debris removed from the pipeline system.

Assumptions

This proposal includes the following assumptions:

1. Permissions will be granted to access all easements and property necessary to perform the work.
2. Parking and staging equipment at LS-01 and the ECR.
3. Water for cleaning will be provided with a temporary construction meter at no cost to HCE0
4. No by-pass pumping will be required to complete the project.
5. Debris disposal will be available at the ECR 24hours per day, 7 days per week, at no cost to HCE.



HOLTZ CONSULTING ENGINEERS, INC

SCHEDULE

The above tasks will be completed according to the following schedule:

Task 1 – Gravity Sewer Cleaning	30 days from Notice to Proceed
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COMPENSATION

Compensation will be in accordance with the attached budget summary (Attachment A) on a Time and Expense (T&E) basis not to exceed \$485,789.55. Monthly progress payments will be authorized based on time spent and expenses incurred for that month.

Sincerely,

HOLTZ CONSULTING ENGINEERS, INC.

A handwritten signature in blue ink, appearing to read 'S. Fowler'.

Stephen Fowler, P.E.
Vice President

Attachment A: City Lake Worth Beach - Gravity Sewer Cleaning - Budget Summary

		Principal	Project Manager	Project Engineer (PE)	Senior Designer	Construction Manager	Administrative Assistant	Subconsultant	Item Cost (Note Subconsultant fee is marked up 7.5%)	Task Cost
	Rate	\$220	\$180	\$160	\$135	\$160	\$85	--		
Task	Item	Hours						Fees		
1. Gravity Sewer Cleaning	Smart Cover Monitoring Program							\$13,362.20	\$14,364.37	\$485,789.55
	Community Door Hangers and City Dashboard							\$5,603.00	\$6,023.23	
	Gravity Main Capacity Restoration							\$315,160.00	\$338,797.00	
	Condition Assessment and Asset Verification							\$35,451.50	\$38,110.36	
	Engineering Oversight Management and Onsite Construction Manager (15 nights, 12-hour shifts)	18				180	2	\$35,240.00	\$70,813.00	
	Traffic Control and Parking Management							\$16,448.00	\$17,681.60	
		18	0	0	0	180	2	\$421,264.70	Total Engineering Fee	\$485,789.55

8/25/2026

264081

Steve Fowler
Holtz Consulting Engineers, Inc.
stephen.fowler@holtzconsulting.com

RE: City of Lake Worth Beach Pipeline Cleaning

Mr. Fowler:

McKim & Creed (M&C) is currently contracted to install four (4) flow monitors on the wastewater collection system as part of the Lantana Force Main Analysis project for Holtz Consulting Engineers, Inc. (HCE) for the City of Lake Worth Beach, FL (City). During the initial deployment of field crews to complete the installation of these flow monitors, it was discovered that there is a large volume of grit accumulation, surcharged flow conditions, and a reduced capacity within the collection system that is prohibiting the installation of two (2) of the four (4) flow monitors.

Based on the site observations made, the M&C team is recommending that the City take immediate action on these issues to restore hydraulic capacity, reduce operation risk, improve system resiliency, and allow the installation of these two flow monitors to complete the original scope of services.

Due to observations made on site, it is recommended that the City authorize M&C to conduct Pipeline Cleaning & CCTV on 7,710 linear feet of wastewater gravity mainlines from 24" to 36" in diameter, based on GIS information. The section of pipe suggested for cleaning begins at MH797A at the intersection of S Dixie Hwy and 15th Ave S and continues east and then north to Master Lift Station LS-01 at the intersection of 2nd Ave S and S Golfview Rd.

On-site observations estimate the volume of debris in the pipeline to occupy 26% of the pipeline capacity or more. Due to this, it is recommended that the City take immediate, emergency action to improve hydraulic performance, decrease overflow risk, reduce operational constraints, and limit environmental risk exposure to the parks and adjacent Lake Worth Lagoon. Taking action now will increase capacity and reduce the risk of sanitary sewer overflows (SSO's) during peak tourist season and the peak of hurricane season.

SCOPE OF SERVICES

SMARTCOVER MONITORING PROGRAM

Prior to pipeline cleaning activities, temporary SmartCover level-only monitoring devices will be installed at strategic locations throughout the project area. This will include the installation of up to three (3) of these devices, on-going monitoring for the project duration, alarm notifications, and trend monitoring. The use of these devices during the cleaning process will help ensure emergency procedures can be put into place to prevent overflows from occurring should levels rise unknowingly.

Deliverables from this will include:

- Weekly Monitoring Summaries
- Post project capacity analysis

COMMUNITY ENGAGEMENT

It is recognized due to the location of these project activities, adjacent to residences, businesses, parks, and recreational facilities, community engagement will be a component of project success.

Prior to project field activities commencing, M&C will develop and maintain:

- Door Hangers
 - Door hangers will be placed at immediate and adjacent residences and businesses that will be impacted by project activities.
 - Door hangers will be distributed approximately 72 hours prior to work commencing in an area and will be redistributed on a weekly basis until the work in that area is completed.
 - The door hanger will include information on the project purpose, benefits, anticipated schedule and hours, contact information to a M&C office.
- City facing dashboard
 - A secure dashboard developed and maintained by M&C will be created and be made accessible to City staff and HCE.
 - This dashboard will feature:
 - Overall program progress
 - Segment completion status
 - Daily production quantities
 - Summary of debris removed totals
 - Active and upcoming work locations
 - Daily field reports
 - Budget tracking
 - This platform gives the project management team a real-time operational view of the status of the project and success of the project.

GRAVITY MAIN CAPACITY RESTORATION PROGRAM

The primary project objective is restoration of hydraulic capacity within approximately 7,710 linear feet of gravity sewer experiencing significant sediment accumulation.

M&C will provide the following equipment, accessories, and personnel/operators for the equipment:

- Two (2) combination cleaning trucks (CCT)
- One (1) dedicated CCTV truck
- One (1) support pickup truck

Based on the current knowledge of the area, M&C recommends an approach to conduct cleaning operations during overnight hours when flow rates through the pipeline will be at lowest levels. For this project, work hours will be 8pm through 7am.

M&C will begin the cleaning process at structure MH648D and clean the pipeline segment upstream of this location using the 2 CCTs on a staggered schedule. CCT 1 will begin the night and CCT 2 will begin approximately one hour later. The intent is that CCT 1 will be full of debris and CCT 2 will arrive for CCT 1 to depart and travel to East Central Regional Water Reclamation (ECR) to dispose of the removed debris at the City drying bed(s). It is anticipated that when CCT 1 arrives back on site, CCT 2 will be full and ready to depart to the ECR to dispose of the removed debris at the City drying bed(s). This cycle will continue until approximately 7am when both vehicles will dispose of removed debris and be stored there until the next working shift. Both CCTs will decant at a convenient manhole downstream of where they are cleaning to ensure efficacy of the cleaning process.

During this process, a CCTV truck will be on-site for support personnel and to be able to attempt to televise a line segment should the need exist.

For the cleaning process, the CCTs will need access to a hydrant and hydrant meter to be supplied by City to access water for cleaning purposes. This meter will be a transient meter and be shared by both CCTs. All water utilized will be at no cost to M&C.

Throughout the cleaning program, a Professional Engineer (PE) or an experienced Construction Inspector from HCE will be on-site or readily available to be on-site. This individual will document progress throughout the shift and be prepared to guide operations should any unforeseen issues arise.

BY-PASS PUMPING PROGRAM

Due to environmental hazards, community disruption, and costs, it is recommended to attempt the cleaning program without by-pass pumping. By-pass pumping introduces an opportunity for a SSO during the operation, the hoses/piping system will be disruptive to the community, and the costs to conduct a full-system or staggered partial-system by-pass will be significant. If after the first week of cleaning operations it is evident that by-pass pumping would be more economical, this will be discussed with the City and a plan proposed.

CONDITION ASSESSMENT AND ASSET VERIFICATION PROGRAM

As cleaning is completed on each pipeline segment, the on-site CCTV crew will be utilized to conduct a comprehensive condition assessment of the interior of the pipe. This assessment will be in conjunction with NASSCO Pipeline Assessment Certification Program (PACP) and will be coded by a 3rd party Artificial Intelligence (AI) platform. This approach will give the City assurance of the volume of capacity restored to each pipeline segment, provide the City with documentation of the interior of the pipeline, and provide rehabilitation recommendations should any be present.

To properly conduct the CCTV inspection, it is anticipated that temporary plugging of the upstream manhole may be necessary, and if so, a flow-through plug will be used. This approach will limit the volume of water flowing through the pipeline but still allow some flows through to limit the likelihood of needing to provide by-pass pumping of the line segment.

PROJECT MANAGEMENT PLAN

ENGINEERING OVERSIGHT MANAGEMENT (COMPLETED BY HCE)

As previously stated, a PE or Construction Inspector will be on-site or readily available during all field activities of this project. This individual will function as the City's representative throughout construction activities and be responsible for interacting with the general public, documenting daily activities and progress, making or approving any decisions in the field for unexpected circumstances, coordinating any environmental or traffic needs that are projected.

TRAFFIC CONTROL AND PARKING MANAGEMENT

Traffic Control and Parking Management will be required throughout the project. Due to the location of the manhole structures, it is recommended that temporary no parking areas and lane closures be put into effect each working shift where the equipment will be. This will be coordinated on a weekly basis with City staff.

EQUIPMENT STAGING MANAGEMENT

It is assumed that parking for all project equipment can be accommodated at the ECR near the drying beds. Additionally, should parking of vehicles be necessary or beneficial at LS-01 it is assumed that will be accommodated by the City.

RISK MANAGEMENT

Recognizing the risks associated with the undertaking of this project, M&C has proposed putting the following mitigations and redundancies in place:

- Continuous flow monitoring with alarming capabilities
- Overnight operations
- Two CCTs
- Standby CCTV Truck
- Dashboard for City monitoring
- Phone number for public questions or concerns operated during normal business hours, Monday through Friday

ASSUMPTIONS

This proposal has been prepared with the following assumptions in place:

- Any and all required permits will be provided to M&C at no cost to M&C
- Permissions will be granted to access all easements and property necessary to perform the work
- Parking and staging equipment at LS-01 and the ECR
- Water for cleaning will be provided with a temporary construction meter to M&C at no cost to M&C
- No by-pass pumping will be required to complete the project
- Debris disposal will be available at the ECR 24hours per day, 7 days per week, at no cost to M&C
- Engineering Oversight Management will be provided by HCE

DELIVERABLES

Within three week of the conclusion of the field work, a Technical Memorandum (TM) will be provided to the City as a deliverable for this project. This TM will give a summary recap overview of the activities that took place and an estimated total volume of debris removed from the pipeline system.

SCHEDULE

The intent is to begin field work within two weeks of Notice to Proceed. A detailed schedule will be established prior to pre-construction meeting.

BUDGETARY FEE ESTIMATE

Due to the unknowns in this project, a Time & Material, Not To Exceed fee of \$421,264.70 is proposed. A detailed breakdown of this is provided in the Attachments.

ATTACHMENTS

The following documents are attached hereto and incorporated herein by reference:

- Appendix A – Sequence of Cleaning
- Appendix B – Project Map
- Appendix C – Fee Estimate Spreadsheet

ACCEPTANCE

If acceptable, sign and return one (1) copy of this document and all attachments for our files. Our receipt of the executed copy of this proposal will serve as our Notice to Proceed. This proposal is valid for thirty (30) days from the date of the proposal. If the proposal is not accepted within thirty (30) days, we reserve the right to revise or withdraw the proposal entirely at our discretion.

Sincerely,
McKim & Creed, Inc.



Regional Manager

I hereby authorize McKim & Creed, Inc. to proceed with the work described above.

Holtz Consulting Engineers, Inc.

264081

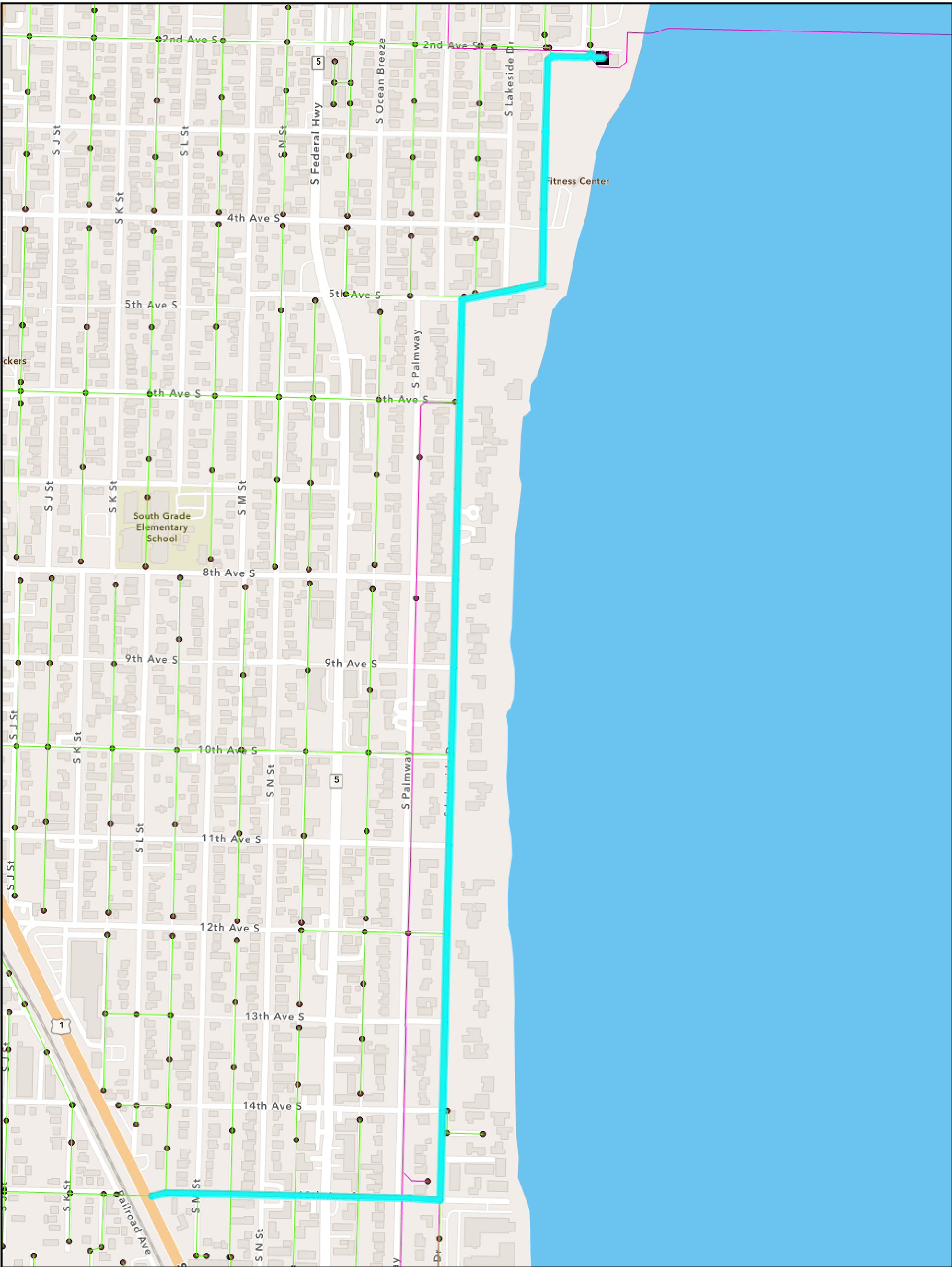
By: _____ Date: _____
(Print or Type Name)

Title: _____
(Signature)

Appendix A

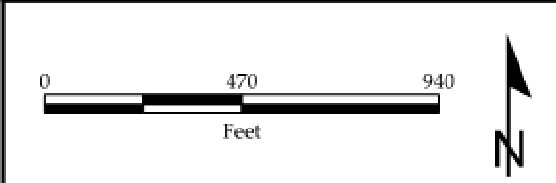
Sequence	OBJECTID	DIAMETER	Debris Depth	MATERIAL	SHAPE Length	CY Debris	Night					
1	931	36	10	FRP	67.2	4.0	1					
2	1584	36	10	PVC	19.2	1.1	1					
3	990	36	10	PVC	175.1	10.4	1				CCT1	CCT2
4	992	36	10	PVC	30.7	1.8	1		Hour	8	Clean	
5	1068	36	10	PVC	354.8	21.1	2		Hour	9	Dump	Clean
6	1067	36	10	PVC	386.2	22.9	3		Hour	10	Clean	Dump
7	1066	36	10	PVC	367.3	21.8	3		Hour	11	Dump	Clean
8	1086	36	10	PVC	101.7	6.0	4		Hour	12		Dump
9	1675	36	10	PVC	29.5	1.8	4		Hour	1	Clean	
10	1085	36	10	PVC	274.1	16.3	4		Hour	2	Dump	Clean
11	1537	36	10	FRP	125.5	7.4	4		Hour	3	Clean	Dump
12	1443	36	10	FRP	378.8	22.5	5		Hour	4	Dump	Clean
13	626	30	10	RCP	440.2	23.4	6		Hour	5	Clean	Dump
14	639	30	10	RCP	448.5	23.8	7		Hour	6	Dump	Clean
15	1149	30	10	RCP	437.0	23.2	8		Hour	7		Dump
16	1148	30	10	RCP	431.8	22.9	9					
17	1178	30	10	RCP	448.8	23.8	10					
18	1188	30	10	RCP	439.5	23.3	11			Dumps Per Night	3	3
19	1186	30	10	RCP	440.6	23.4	12			Avg Dump (CY)	6	6
20	752	30	10	RCP	436.9	23.2	13					
21	753	30	10	RCP	443.3	23.5	13			CY Per Night	18	18
22	2022	24	5	VCP	151.8	2.7	14					
23	2106	24	5	VCP	256.0	4.5	14					
24	2108	24	5	VCP	314.1	5.5	14					
25	2107	24	5	VCP	319.3	5.6	15					
26	743	24	5	VCP	163.5	2.9	15					
27	1445	24	5	VCP	156.7	2.8	15					
28	742	24	5	CAS	72.1	1.3	15					

Appendix B



Lantana Force Main Analysis Pipeline Cleaning

Map Disclaimer: This product is for informational purposes only and is based on some unverified information provided by others. This product has not been prepared for nor is it suitable for legal, engineering, or surveying purposes. It represents only the approximate relative location of property boundaries. McKim & Creed, Inc. assumes no liability or damages due to inaccuracies, errors or omissions.



- Mainline to Clean
- LW_SANITARY_GRAVITY_MAINS_PIPES
- LW_SANITARY_FORCE_MAINS_PIPES
- LW_SANITARY_MANHOLES
- LW_SANITARY_LIFT_STATIONS



McKIM & CREED
6501 Congress Ave, Suite 160
Boca Raton, FL 33487
Tel: (561) 910-8630

City of Lake Worth Beach
Prepared For:
Holtz Consulting Engineers, Inc.

August 2026

Appendix C

APPENDIX C
FEE ESTIMATE SPREADSHEET
LANTANA FORCE MAIN ANALYSIS PIPELINE CLEANING
AUGUST 25th, 2026
CITY OF LAKE WORTH BEACH, FL

	Engineering Hours									Labor	Expenses								
TASK	Principal in Charge	Technical Specialist III	Project Manager III	GIS Data PM	GIS Analyst II	Field Services Manager	Field Technician II	Field Technician I	Project Administrator - Senior	Sub	Mileage		Sewer Cleaning Truck	CCTV Truck	SmartCover	Meals & Lodging	Copies & Plans	Expenses Sub	
Labor Code										Total	\$0.85	\$	\$ 1,440.00	\$ 1,500.00	\$450	\$250	\$0.43	Total	Total
	\$348	\$324	\$267	\$175	\$145	\$162	\$134	\$101	\$122										
SmartCover Monitoring Program		1		2	2	24		24	2	\$7,520.00	932	\$792.20			\$ 4,050.00	\$ 1,000.00		\$5,842.20	\$13,362.20
Community Door Hangers and City Dashboard								40	4	\$4,528.00		\$0.00					\$ 1,075.00	\$1,075.00	\$5,603.00
Gravity Main Capacity Restoration Program	14	52	18	8	30	240	480	480	12	\$185,420.00	8,400	\$7,140.00	\$ 57,600.00	\$ 30,000.00		\$ 35,000.00		\$129,740.00	\$315,160.00
By-Pass Pumping Program										\$0.00		\$0.00						\$0.00	\$0.00
Condition Assessment and Asset Verification Program		24		3	5	40		80	4	\$24,074.00	150	\$127.50		\$ 7,500.00		\$ 3,750.00		\$11,377.50	\$35,451.50
Engineering Oversight Management	8	5	108	2	2					\$33,880.00	1,600	\$1,360.00						\$1,360.00	\$35,240.00
Traffic Control and Parking Management	8	12	16					40	12	\$16,448.00		\$0.00						\$0.00	\$16,448.00
												\$0.00							
Total Hours	30	94	142	15	39	304	480	664	34	1802									
Total Cost	\$10,440	\$30,456	\$37,914	\$2,625	\$5,655	\$49,248	\$64,320	\$67,064	\$4,148	\$271,870	11,082	\$9,420	\$57,600	\$37,500		\$39,750	\$1,075	\$149,395	\$421,264.70