

## CONSULTING SERVICE AUTHORIZATION

DATE:

CONSULTANT: Kimley Horn and Associates, Inc.

SERVICE AUTHORIZATION NO. \_\_\_\_\_ FOR CONSULTING SERVICES

CITY P.O. NO. \_\_\_\_\_ CITY EXPENSE CODE \_\_\_\_\_

TITLE: DELRAY BEACH 6-IN AND 8-IN WATERMAIN CONNECTIONS

CITY PROJECT NO. \_\_\_\_\_

This Service Authorization, when executed, shall be incorporated in and shall become an integral part of the “Agreement for General Consulting Engineering Services” Contract, dated February 22, 2012.

### **I. PROJECT DESCRIPTION**

Kimley-Horn and Associates, Inc. (“KHA”, “Consultant”) is pleased to submit this service authorization request to the City of Delray Beach (“Client” or “City”) for providing design, permitting, bid phase, and limited construction phase services for four (4) watermain projects. Our project understanding, scope of services and fee follow.

The City has identified four areas where they would like to construct new watermains to complete system loops and/or upsize existing pipes:

- 1) NW 1<sup>st</sup> Avenue/NW 2<sup>nd</sup> Avenue Watermain – Construct an 8-in watermain on NW 2<sup>nd</sup> Avenue between the existing 8-in watermain at NW 4<sup>th</sup> Street (Lake Ida Road) and 8-in watermain at NW 3<sup>rd</sup> Court, abandon the existing 2-in watermain in this corridor, and relocate services to the new 8-in watermain. This work also includes relocating existing services from an existing 2-in watermain to an existing 6-in watermain on the adjacent NW 1<sup>st</sup> Avenue (from NW 3<sup>rd</sup> Court to 220-ft south)
- 2) NW 17<sup>th</sup> Street Watermain – Construct an 8-in watermain on NW 2<sup>nd</sup> Avenue between the existing 12-in watermain at NW 17<sup>th</sup> Street and the 6-in watermain at NW 18<sup>th</sup> Street, relocate existing services from an existing 2-in watermain to an existing 12-in watermain on NW 17<sup>th</sup> Street (2<sup>nd</sup> Avenue to Swinton Avenue), and construct a new fire hydrant on NW 17<sup>th</sup> Street.
- 3) Prospect Street Watermain – Construct an 8-in watermain on Prospect Street between the 6-in watermain at Washington Avenue and the 8-in watermain on Roosevelt Avenue, abandon the existing 4-in watermain in this corridor, and relocate services to the new 8-in watermain. This work also includes constructing an 8-in watermain on Washington Avenue between the 6-in watermain at Prospect Street and the 6-in watermain at Lee Street.
- 4) SW 11<sup>th</sup> Street Watermain – Construct an 8-in watermain and fire hydrant on SW 11<sup>th</sup> Avenue between the 10-in watermain on SW 10<sup>th</sup> Street and the 6-in watermain on 8<sup>th</sup> Street, abandon the existing 4-in watermain in this corridor, and relocate services to the new 8-in watermain.

It is understood that the four (4) projects will be bid together as one set of plans and technical specifications and that all improvements will be designed within the right-of-way limits. Based on this understanding, the following scope of services will be performed by the Consultant:

## **II. SCOPE OF SERVICES**

### **TASK 1 – WATERMAIN DESIGN AND PERMITTING**

#### Data Collection

The Consultant will perform data collection for each of the project areas. We will coordinate with the City and franchise utility owners to collect information regarding the existing underground infrastructure. We will review the project corridors for the purpose of identifying opportunities and constraints that may affect the design of the improvements.

The Consultant will employ the services of a subconsultant to provide a route of line survey for each of the proposed watermain routes to develop base maps for use in the design. The survey will contain right-of-way and boundary lines along with aboveground improvements, topographic information, a stationed baseline, benchmarks, and marked subsurface utilities.

For the NW 1<sup>st</sup> Avenue/NW 2<sup>nd</sup> Avenue Watermain, the Consultant will employ the services of a title agent to perform an ownership/easement search for the project corridor on NW 2<sup>nd</sup> Avenue between NW 4<sup>th</sup> Street and NW 3<sup>rd</sup> Court to determine if the property is part of City right-of-way or if the property is part of the Cason United Methodist Property. If based on the results of the ownership/easement search, a utility easement is required for the proposed watermain, the Consultant will employ the services of the project surveyor to provide such easement. It is understood that the City will be responsible for all easement and other such coordination with the Cason United Methodist Property.

The Consultant will employ the services of a subconsultant to obtain up to 32 soft dig utility locations for known underground utilities in the four project corridors. This information will be used to develop the project base map of existing utilities to assist in the horizontal and vertical design of the proposed watermain.

After survey is obtained, the Consultant will attend up to one (1) meeting with the City to kick off the project, establish project goals, and discuss the design criteria.

#### Construction Documents

As part of developing the construction documents, the Consultant will perform the following services:

- Visit the sites up to two (2) times to gather information as it pertains to the observable existing conditions and utilities and to identify opportunities and constraints that may affect the design of the improvements.
- Coordinate and conduct one (1) utility coordination meeting with affected utility owners along the project corridors.
- KHA will create a base map for project corridors that combines the survey information, soft dig, and record drawing information that is obtained. These maps will serve as the base for the construction drawings for the project.

- KHA will prepare construction plans for the watermain improvements at a scale of 1"=20' (full size) for the project. The plans and specifications will be suitable for permitting, public bidding, and construction and will contain the following information:
  1. Cover Sheet
  2. General Notes (1 sheet)
  3. Overall Site Map (1 sheet)
  4. Watermain Plan and Profile (6 sheets) – Watermain Design
  5. Watermain Plan Sheets (3 sheets) – Service Relocations Only
  6. Watermain Connection Details (2 sheets)
  7. Watermain Construction Details (4 sheets)
- Prepare Technical Specifications.
- Submittal of plans and specifications for review at the 50%, 90% and final completion stages. The 50% specification submittal will consist of an index of the specifications.
- Meet with the City to review comments and accommodate reasonable requests for revisions after the 50% and 90% completion submittals. Plans will also be provided to the franchise utilities at these stages for coordination purposes. Final plans will be prepared after receipt of the comments from the 90% completion stage.
- Prepare an Opinion of Probable Construction Cost (OPC) at the 50%, 90% and final completion stage.

#### Permitting

It is anticipated that a Florida Department of Environment Protection General Permit for Construction of Watermain Extensions for PWSs will be required for the watermain improvements and it is assumed that one permit application can be used for all four (4) project areas. Kimley-Horn will submit the applicable permit application for the work to the Palm Beach County Health Department. The City will be listed on the application as the permittee and owner upon the completion of the project. Kimley-Horn will respond to a maximum of one (1) request for additional information from the Health Department for the permit application. Additional revisions or changes in response to subsequent review comments shall be provided as an Additional Service. It is understood that the \$650 permit application fee will be paid directly by the City.

It is understood that NW 4<sup>th</sup> Street is a Palm Beach County Road and a Palm Beach County Utility permit application will be required for the watermain improvements in this right-of-way. Kimley-Horn will submit the applicable permit application for the work to the Palm Beach County Land Development Division. The City will be listed on the application as the permittee and owner upon the completion of the project. Kimley-Horn will respond to a maximum of one (1) request for additional information from the Palm Beach County for the permit application. Additional revisions or changes in response to subsequent review comments shall be provided as an Additional Service. It is understood that any fees associated with this application will be paid directly by the City.

Any significant plan revisions caused by changing agency criteria after our initial design is reviewed with each appropriate agency and similar factors outside of Kimley-Horn's control, additional meetings, or additional coordination will be considered Additional Services.

## **TASK 2 – BID PHASE SERVICES**

The City will require limited bid phase services. The Consultant will:

- Attend the pre-bid meeting.
- Assist the City in answering bidder questions.
- Review of the apparent low bidder's bid proposal and submittal of a summary of our findings to the City.

It is our understanding that the City will administer the bid process and distribute addenda to bidders. The Bidding or Negotiation Phase will be considered complete upon contract award or upon cessation of negotiations with prospective contractors.

## **TASK 3 – LIMITED CONSTRUCTION PHASE SERVICES**

The City has requested that Kimley-Horn budget up to \$5,000 to provide limited construction phase services. It is understood that these services will be limited to assisting the City in reviewing shop drawings and responding to reasonable and appropriate Contractor requests for information as described below. These limited services could also include attending progress meetings if requested by the City. These services can be provided at the contract hourly rate schedule up to the \$5,000 requested by the City. Any additional hours beyond this will be considered Additional Services.

It is understood that the City will conduct all site visits and project observations, will review change orders and pay applications, will prepare and submit the watermain certification packages to the Palm Beach County Health Department, and will conduct the preliminary and final project walk through.

### Construction Services

If requested, Consultant will review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which the Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.

If requested, Consultant will respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to the City as appropriate to the orderly completion of the Contractor's work.

## **ADDITIONAL SERVICES**

Kimley-Horn believes the proposed scope of services to be generally inclusive of the required tasks. However, Kimley-Horn will provide additional services at the request of the City and upon receipt of written authorization to proceed. Kimley-Horn also will provide additional services that arise due to unforeseen circumstances with prior written authorization from the City. Additional services that we can perform upon request of the City include, but are not limited to, the following:

- Providing individual construction documents for each project area

- Additional construction phase services.
- Meeting attendance not specifically referenced in the above scope of services.
- Additional permitting not specifically referenced in the above scope of services.

Additional services will be performed based on proposals approved by the City in advance of the performance of those services.

## **SCHEDULE**

Kimley-Horn will begin work upon receiving a notice to proceed from the Client. We propose the following schedule:

- Client issues Notice to Proceed (NTP).
- Data Collection is anticipated to take six (6) weeks from notice to proceed to completion.
- Ten (10) weeks for 50% plans to be submitted to the City after receipt of survey.
- Three (3) weeks of City review time for 50% plans.
- Eight (8) weeks for 90% plans submittal to the City after City comments are received.
- Three (3) weeks of City review time.
- Three (3) weeks after City comments are received for final plan submittal to the City.

The permit applications will be submitted concurrently with preparation of the 90% plans. Bidding and Construction Phase Services in Tasks 2 will be generally commensurate with the City and selected contractor's schedule. The Consultant will work diligently to achieve this schedule.

## **III. BUDGET**

KHA will perform the Services in Tasks 1 – 2 on an hourly basis not to exceed the fees below without your permission. Fees will be invoiced monthly based on the actual amount of service performed and expenses incurred. Payment will be due within 25 days of your receipt of the invoice. Individual task amounts are informational only.

Reimbursable Expenses billed under this contract could include: in-house duplicating, facsimiles, postage, express delivery services, large-format color printing, construction drawing printing, specification printing, and other out-of house printing. Reimbursable expense will be billed as incurred and back up documentation will be provided for these expenses.

Additional services which may be identified as needed at a later time will be negotiated at that time.

TASK	DESCRIPTION	FEE
1	Watermain Design and Permitting	\$121,308.68
2	Bid Phase Services	\$4,482.00
3	Limited Construction Phase Services	\$5,000.00
	Estimated Reimbursable Expenses	\$200.00
Total (Including Reimbursable Expenses)		\$130,990.68

#### IV. COMPLETION DATE

This service authorization is approved contingent upon the City's acceptance of and satisfaction with the completion of the services rendered in the previous phase or as encompassed by the previous service authorization. If the City in its sole discretion is unsatisfied with the services provided in the previous phase or service authorization, the City may terminate the contract without incurring any further liability. The CONSULTANT shall commence work on any service authorization approved by the City to be included as part of the contract without a further notice to proceed.

Approved by:

CITY OF DELRAY BEACH:

Date \_\_\_\_\_

Cary D. Glickstein, Mayor

Witness (Signature) \_\_\_\_\_

Witness (Printed) \_\_\_\_\_

Attest: \_\_\_\_\_

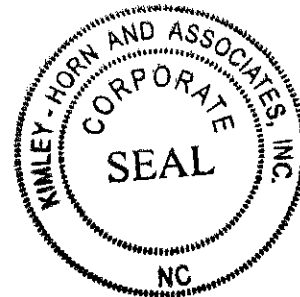
Approved as to Legal Sufficiency

City Attorney

KIMLEY-HORN AND ASSOCIATES, INC.

Date 10/28/15

By: [Signature]  
(Seal)



BEFORE ME, the foregoing instrument, this 28th day of October, 2015, was acknowledged by Kenn Schanen on behalf of the Corporation and said person executed the same free and voluntarily for the purpose there-in expressed.

Witness my hand and seal in the County and State aforesaid this 28th day of October, 2015.

[Signature]  
Notary Public  
State of Florida  
My Commission Expires: 5/18/19

## ESTIMATE FOR ENGINEERING SERVICES

<b>PROJECT:</b>	<b>Delray Beach 6-in and 8-in Watermain Connections</b>						<b>SHEET    1 of 1</b>			
<b>CLIENT:</b>	City of Delray Beach						<b>FILE NO.</b>			
<b>ESTIMATOR:</b>	Fannie Howard						<b>DATE:</b>	10/27/2015		
							<b>ALLOCA</b>	\$ -		
<b>DESCRIPTION:</b> See Scope of Services	<b>DIRECT LABOR   ( MAN-HOURS )</b>									
	Senior Principal		Senior Professional	Professional	Professional	Analyst	Support Staff	SUB	EXP	LINE TOTAL
	JP/MM	KS	FH	JFP	EG	TS/NB				
<b>Task 1 - Watermain Design and Permitting</b>										
<u>Data Collection</u>										
Data Collection and Franchise Utility Coordination			0.5	2.0		12.0	2.0			\$ 1,716.00
Kick off meeting			2.0	4.0			1.0			\$ 972.00
Coordinate with Utility Locator (32 digs)			2.0	2.0			1.0	\$ 8,800.00		\$ 9,502.00
Coordinate with Surveyor for Survey				2.0			1.0	\$ 22,932.44		\$ 23,274.44
Coordinate with Owner/Easement Search				1.0			1.0	\$ 550.00		\$ 757.00
Utility Easement				1.0			0.5	\$ 1,683.74		\$ 1,854.74
<u>Construction Documents</u>										
Site Visit (up to 2)			5.0	10.0		5.0	2.0			\$ 2,899.00
Utility Coordination Meeting			2.0	4.0			1.0			\$ 972.00
Review City of Delray Beach Record Information			1.0	8.0		4.0	1.0			\$ 1,736.00
<u>Construction Plan Prep</u>										\$ -
Cover Sheet				0.5		1.0				\$ 168.50
General Notes			2.0	4.0		6.0				\$ 1,506.00
Overall Site Map			0.5	1.0		4.0				\$ 629.00
Water Main Plans/Profile (6 sheets)			30.0	60.0		150.0				\$ 28,650.00
Water Main Plan Only (3 sheets)			9.0	18.0		30.0				\$ 7,080.00
Water Main Connection Details (2 Sheets)			16.0	16.0		24.0				\$ 7,464.00
Water Main Construction Details (4 sheets)			8.0	10.0		28.0				\$ 5,618.00
Water Main Technical Specifications			12.0	20.0		10.0				\$ 5,870.00
QC, 50%, 90% plan submittal, review meetings, and comment response		16.0	12.0	10.0		18.0	4.0			\$ 8,864.00
Final Plan Prep and submittal			4.0	4.0		6.0	2.0			\$ 2,010.00
60%, 95% and Final OPC			4.0	6.0		12.0				\$ 2,742.00

PROJECT:	Delray Beach 6-in and 8-in Watermain Connections						SHEET 1 of 1			
CLIENT:	City of Delray Beach						FILE NO.			
ESTIMATOR:	Fannie Howard						DATE:	10/27/2015		
							ALLOCA	\$ -		
DESCRIPTION: See Scope of Services	DIRECT LABOR (MAN-HOURS)									
	Senior Principal	Principal	Senior Professional	Professional	Professional	Analyst	Support Staff	SUB	EXP	LINE TOTAL
	JP/MM	KS	FH	JFP	EG	TS/NB				
<u>Permitting</u>										
Prepare and Submit WM application to City			2.0	6.0		6.0	4.0			\$ 2,064.00
FDEP submittal and comment response			2.0	4.0		4.0	2.0			\$ 1,448.00
Prepare and Submit PBC Utility application to City			2.0	6.0		6.0	4.0			\$ 2,064.00
PBC submittal and comment response			2.0	4.0		4.0	2.0			\$ 1,448.00
<b>Task 2 - Bid Phase Services</b>										
Attend Pre-bid meeting			4.0				2.0			\$ 864.00
Assist the City in answering Bidder questions			4.0	10.0			2.0			\$ 2,214.00
Review of low bid and summary of findings			4.0	4.0			2.0			\$ 1,404.00
<b>Task 3 - Limited Construction Phase Services</b>										
Budget for Limited Construction Phase Services									\$5,000	\$ 5,000.00
Reimbursable Expenses									\$200	\$ 200.00
										\$ -
	0	16	130	218	0	330	35	\$ 33,966.18	5,000	\$ 34,694.18
	244.00	203.00	180.00	135.00	135.00	101.00	72.00	\$ 1.00	1.0	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$ -	0.00	
	0.00	3,248.00	23,400.00	29,362.50	0.00	33,330.00	2,484.00	\$ 33,966.18	5,200.00	\$ 130,990.68





**HSQ GROUP, INC.**  
**Engineers • Planners • Surveyors**  
1489 West Palmetto Park Road, Suite 340  
Boca Raton, Florida 33486  
(561) 392-0221 Phone • (561) 392-6458 Fax

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**City of Delray Beach  
Specific Purpose Surveys  
For Water Main Design**

**SURVEY SCOPE OF SERVICES**

October 27, 2015 (revised 10/28/15)

**PROJECT LIMITS**

Four Sites (per sketches provided):

- 1) Prospect Street (1,100 l.f.),
- 2) SW 11<sup>th</sup> Avenue (1,040 l.f.)
- 3) NW 17<sup>th</sup> Street (1,540 l.f.)
- 4) NW 1<sup>st</sup> Avenue/NW 2<sup>nd</sup> Avenue (1,280 l.f.).

Total estimated length is 4,960 feet.

**SCOPE OF SERVICES**

1. Review Palm Beach County record plats to establish existing right-of-ways.
2. Collect vertical benchmarks and horizontal global positioning control data.
3. Set control points tied to state plane coordinates using NAD 83, 1990 adjustment.
4. Run a closed level loop and set benchmarks at each block outside the limits of construction on NGVD 1929 datum.
5. Locate subdivision corners, section corners, and other existing control monuments that will assist in the determination of the location of the right-of-way lines for this project.
6. Locate above ground features with elevations at 50' intervals within the a right of way line, obtaining break lines and high and low break points.
7. Locate water meters, valves, fire hydrants, utility boxes, cleanouts, utility poles, pavement striping, driveways (with type), and fences.
8. Obtain rim and invert elevations with invert pipe sizes, materials, and directions for storm and sanitary structures (where accessible).
9. Locate trees with size and type, and locate hedgerows within right of way.
10. Prepare legal description and sketch for a utility easement for NW 2<sup>nd</sup> Avenue at Lake Ida Road.
11. Prepare a Specific Purpose Survey of each site.

**Survey Deliverables**

- Two copies of each Specific Purpose Survey showing labeled right-of-ways, easements, adjacent parcels, and the existing features mentioned above prepared on 24" x 36" sheets at a scale of 1"=20', signed and sealed.
- One copy of each survey in Microstation digital CADD format and AutoCAD format.
- An ASCII file of points to be used for elevations in terms of x,y,z, description.
- A 3-D surface model in AutoCAD format and a XML file of the surface (for Microstation).



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## DELRAY BEACH WATERMAINS DESIGN SURVEY

Summary Surveying fee proposal

Description	Two-Man Crew		Senior Surveyor and Mapper		Surveyor and Mapper		Cadd Technician		Total	Total
	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HOURS	HR. RATE	STAFF HRS. ACTIVITY	COST BY ACTIVITY
Basic Survey Services	98.00	\$ 45.00	6.00	\$ 52.00	30.00	\$ 38.57	78.00	\$ 27.00	212.00	\$ 7,985.10
Optional Survey Services	0.00	\$ 45.00	0.00	\$ 52.00	4.00	\$ 38.57	16.00	\$ 27.00	20.00	\$ 586.28

### HSQ FEE CALCULATIONS

Type of services	Cost by activity	Overhead multiplier	Overhead cost	Subtotal (cost by activity + overhead cost)	Profit (%)	Total
Basic services	\$ 7,985.10	156.42%	\$ 12,490.29	\$ 20,475.39	12.00%	\$ 22,932.44
Optional Services	\$ 586.28	156.42%	\$ 917.08	\$ 1,503.34	12.00%	\$ 1,683.74
Reimbursables (basic services)						\$ -
TOTAL						\$ 24,616.18

# DELRAY BEACH WATERMAINS DESIGN SURVEY

Basic Survey Services

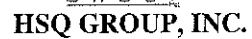


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Item No.	Work Task	Estimated Work Hours				Notes
		Two-Man Field Crew	Senior Surveyor and Mapper	Surveyor and Mapper	Survey/CADD Technician	
1	Review Palm Beach County Plats to establish existing right-of-ways.	0	2	8	12	Numerous old plats
2	Collect vertical benchmarks and horizontal global positioning control data.			1		
3	Set control points tied to State Plane using NAD 83, 1990 adjustment.	8		1		
4	Run a closed level loop and set benchmarks at for each block outside the limits of construction based on NAVD 1988 datum.	16		2		
5	Locate subdivision corners, section corners, and other existing control monuments that will assist in the establishment of the location of the right-of-way lines for this project.	32		8		
6	Locate above ground features with elevations at 50' intervals from adjacent edge of pavement to the right of way, obtaining break lines and high and low break points.	22		1	8	
7	Locate water meters, valves, fire hydrants, utility boxes, cleanouts, utility poles, pavement striping, driveways (with type), and fences.	4			2	
8	Obtain rim elevations and invert elevations with pipe sizes, material and direction of storm and sanitary.	10		1	10	
9	Locate all trees with size and type and hedgerows, (with width) within right of way.	6			6	
10	Prepare Specific Purpose Surveys (4).		4	4	24	
11	Prepare 3-D surface models			4	16	AutoCAD and Microstation
12						
TOTAL HOURS		98	6	30	78	

### Optional Survey Services



Item No.	Work Task	Estimated Work Hours				Notes
		Two-Man Field Crew	Senior Surveyor and Mapper	Surveyor and Mapper	Survey/CADD Technician	
1	Prepare Sketch and Legal Description for utility easement for N.W. 2nd Avenue at Lake Ida Road.			4	16	
2						
3						
<b>Total</b>						



Date: October 28, 2015

Presented to: Kimley-Horn  
1920 Wekiva Way, Suite 200  
West Palm Beach, Florida 33411  
Phone No.: (561) 840-0870

Attn: Julie Flint Parham, P.E.

Project name: Utility Test Hole Services  
City of Delray Beach Water Main

As requested, we have prepared this proposal for underground utility test hole services for the above referenced project. This proposal is based upon an email received at our office on 10/21/2015.

#### **SUBSURFACE UTILITY LOCATING BY AIR/VACUUM TEST HOLE**

The intent of the proposed test hole service is to provide the actual horizontal and vertical location of existing utilities or structures at the point of interest by air/ vacuum excavation to facilitate the identification and resolution of potential design conflicts and aid in the protection of these facilities during construction.

During the performance of test hole operations, IMC will perform the following functions.

1. Supply qualified personnel and provide them with the appropriate equipment, resources, transportation and field supplies to perform the requested services.
2. Coordinate with the client to determine what test holes are needed and their expected locations.
3. Coordinate with inspectors, property owners, "ONE CALL" and others as required. Comply with all laws and regulations concerning excavation. Obtain all permits needed to perform the test holes.
4. Determine in the field the actual location of the proposed improvements in possible conflict with existing utilities. This shall be accomplished by using the plan supplied by the client.
5. At the approximate point of possible conflict with the proposed improvement, excavate a test hole using air/ vacuum excavation. Provide all measures necessary to perform the work safely and to cause no damage to the utility structure. The test hole will be of the minimum size required to expose the utility of interest and record the following information:

- a. Depth below grade (cover).
  - b. Utility material, shape and overall condition.
  - c. Approximate diameter of pipes, cables, conduits and the configuration of multiple conduit systems.
  - d. The general directional trend of the utility.
  - e. Thickness, type and condition of paving material.
  - f. General soil conditions.
6. Install a permanent survey marker directly over the centerline of pipes or edge of concrete structures or conduit banks at grade. Indicate on the Test Hole Form the placement of the marker relative to the utility cross section.
7. Backfill test hole with excavated material in 6" lifts by air pneumatic tamping. Soil placed within 1 foot of the exposed utility will be clean and tamped carefully. Backfill materials will be adequately compacted to prevent later subsidence of the test hole. Provide select backfill materials, such as insulating sands and gravels, when needed. Restore test hole area to original condition. Ribbon of appropriate APWA/ULCC color will be installed in the backfill from utility to grade.
8. Repair and restore all pavement cuts to insure a long lasting, permanent repair. Guarantee patch for 1 year and return to repair within that time if test hole sinks more than 1/2" below original grade (permanent marker). In the event that the permitting agency does not accept cold patch as permanent repair, it is the responsibility of the client/permit holder to provide for restoration and compaction of the hole to the complete satisfaction of the permitting agency.
9. Record the location of the permanent marker with a minimum of three (3) swing tie measurements to convenient existing permanent structures on site.
10. Provide project surveyors with copies of field test hole forms and field sheets to aid survey of the test hole locations.
11. Cadd Test Hole Forms. Also, provide a Test Hole Inventory report to list numerically the test holes completed/ attempted.
12. Technical limitations of small hole Air/Vacuum excavation:

In order to provide a cost effective service that causes minimal disturbance to site amenities and utilities, and is acceptable to permitting agencies, the size of the test hole excavation is kept to a minimum. A nominal size of 64 square inches (8" x 8") is the assumed size of the average test hole. Given this size excavation, the following limitations are stated for the benefit of the designer in choosing test hole locations.

  - a. The bottom/invert of pipes and large diameter cables and conduits is not directly available in most test holes. The point of measurement of these utilities is typically the crown or shallowest point on the utility. Invert information is derived from crown cover plus diameter.
  - b. The diameter of most pipes greater than 24" cannot be recovered directly from the test hole. The diameter of pipes less than 24" is determined by exposing half or all of the pipe, as needed, and directly measuring the outside diameter with a wooden rule to the nearest 1/2". If pipe diameter is critical on larger than 24" pipes, it may be necessary to perform additional

holes. This type of investigation falls outside of the normal scope of test hole services and needs to be requested specifically.

- c. Encased systems and non-encased conduit banks are typically exposed on one edge. This allows the test hole to be excavated down the side of the utility until a discernable bottom edge can be evaluated. Although it is usually possible to determine the bottom edge of these systems, it is not possible to determine conditions under these or other utility systems, such as concrete overpour and other utilities. It is important for the designer to remember that the bottom edge of an encased system or unencased conduit bank may not represent its lowest point, and that the shape of the system may not be the same on both sides. The width of these systems may not be determined from a single test hole. Encased systems and unencased conduit banks may require two test holes to document the width (and both sides top and bottom elevations).

This service will be provided with due diligence and in a manner consistent with standards of the sub-surface utility locating industry. Every reasonable effort will be made to locate all utilities requested. However, we do not guarantee that all existing utility systems can be located or exposed. It may not be possible to detect utilities without prior knowledge, such as systems that are not depicted on records available to us. Further, this service is not intended to locate non-utility structures such as but not limited to: foundations, buried tanks, septic systems, wells, tunnels, concrete or metal structures etc., unless specifically mentioned in the SCOPE statement. This service represents the best available data on sub-surface utilities given a cost effective investigation using air/vacuum excavation. Use of this service does not relieve interested parties from their responsibility to make required notifications prior to excavation. Use of this service does not relieve utility owners of their responsibility to mark the location of their facilities prior to excavation. InfraMap Corp. will not be responsible for damages to utilities caused by others. InfraMap Corp. is not responsible for utilities located underneath other utilities. If records research is not part of the scope of services, utility owners or their field agent's marks will be used to identify utilities; we are not responsible for correcting mistakes made by other locators

### **SCOPE OF SERVICES**

Project limits/description: City of Delray Beach Water main. Area not yet depicted.

Survey to be performed by HSQ Group.

### **TEST HOLES:**

Test holes to be performed: As shown on client's request plans.

Utility systems and surface amenities to be investigated and documented: All utilities, including gravity storm and sanitary sewer systems.

Project schedule: To begin completed within (20) business days of NTP, weather permitting.

**PROJECT ESTIMATE**

Test Holes: 32 @ \$275.00/each = \$8,800.00

**Total Project Estimate: = \$8,800.00**

Billing will reflect actual number of test holes performed. The estimate is based upon the project limits described. Should the scope of the project change or field conditions unknown to us at this time warrant, we will request additional compensation for additional work beyond this estimate. This estimate will not be exceeded without prior authorization from the client.

**PAYMENT TERMS**

Terms of payment are subject to modification by seller (IMC). Buyer (client) agrees to make prompt payment of invoices due in accordance with Seller's approved terms, whether for complete or partial services. Terms: Net 30 days from completion of work and receipt of invoice. If payment is contingent upon Buyer being paid by a "Third Party" for services, InfraMap Corp. (IMC) must be notified immediately of the name and address of the "Third Party". Buyer will submit invoices to the "Third Party" in a timely manner and IMC will receive payments from Buyer within 15 days of Buyer being paid. If this is not the case then IMC reserves the right to modify this clause to reflect a revised payment schedule.

Late Charge: A late payment service charge equal to 1.5% per month or the maximum charge allowed by applicable law, whichever is lower, shall be assessed on all amounts not paid when due. All accounts are net 30 days unless specifically agreed upon in writing.

Delinquency Collections: In the event Buyer fails to pay for any services when due, or should Buyer's account become otherwise delinquent, or in the event of Buyer's bankruptcy or insolvency, or in the event of Buyer's breach of this Agreement, then in any such event Seller may, at its option: (i) terminate any or all existing contracts; (ii) refuse to perform services under this or any other order; and/or (iii) avail itself of any other further remedies available to it at law or in equity. Buyer agrees to pay all cost of collection, including reasonable attorney's fees.

Presented by: \_\_\_\_\_

Jay Scagliola, PLS  
InfraMap Corp

10-28-15  
\_\_\_\_\_  
Date

Accepted by: \_\_\_\_\_

Authorized Signature

\_\_\_\_\_  
Date



PARAMOUNT TITLE SERVICES, INC.  
7501 W. Oakland Park Boulevard, Suite 303  
Fort Lauderdale, Florida 33319  
(ofc)954-467-6607 (fax) 954-467-3280  
(e-mail) Info@paramounttitleservices.com

## Proposal

Date:  
10/22/2015

Quantity	Description	Unit Price	Total
1	Ownership and easements search.	550.00	550.00
Subtotal			550.00
Tax			n/a
Balance Due			550.00

To accept this quotation, sign here and return:

Quotation prepared by: Evelyn

**Note:**

Completion of the above described work will take approximately 2 to 3 weeks to complete from the date of acceptance of this quote.