#### **TASK ORDER No. 1**

Dated this \_\_\_\_ day of \_\_\_\_ , 2015

**CITY PROJECT No. 12058** 

# FORT LAUDERDALE PUBLIC WORKS DEPARTMENT FEASIBILITY STUDY OF TUNNEL TOP PLAZA AT THE HENRY E. KINNEY TUNNEL

#### PROFESSIONAL SERVICES

This task order is pursuant to the agreement between the City of fort Lauderdale, a Florida Municipality, (CITY) and Lakdas/Yohalem Engineering, Inc. (CONSULTANT) in accordance with the terms of the agreement for professional services dated August 19, 2014 between CITY and CONSULTANT ("MASTER AGREEMENT") and approved by City Commission on August 19, 2014. The contract between the City and the consultant will expire on August 19, 2016.

#### PROJECT BACKGROUND

Project is generally described as follows: feasibility study of constructing a plaza above the E. Kinney Tunnel. The scope of the study also includes improvements to the traffic intersection at Las Olas Boulevard and Federal Highway. This would improve pedestrian safety through a reduction of pedestrian/vehicle conflicts. The project has the potential to incorporate sustainability components and be an iconic attraction. After the feasibility study a State Historic Preservation Office approval of the project site should be acquired.

The scope of the feasibility study also includes the modification of the tunnel north side to incorporate the proposed plaza, the work required to do so and the estimated cost.

#### PROJECT DESCRIPTION

This project is to provide a feasibility study for the construction of a pedestrian friendly plaza as well as the improvement of the intersection of Las Olas Boulevard and Federal Highway over the E. Kinney Tunnel.

The ultimate goal of this project is to design and construct a tunnel top plaza that would include a pedestrian walkway and improvements to the traffic intersection at the Kinney Tunnel. This will improve pedestrian safety through a reduction of pedestrian/vehicle conflicts.

The following tasks to be performed by the consultant are as follows:

- A) Structural Engineering (minimum of possibly two structural framing systems to support new open air seating and pedestrian crosswalk over the tunnel).
- B) Study of the surface water drainage system at Las Olas Blvd. level and at US1 tunnel road.
- C) Study of the existing utilities for the proposed area of expansion of the deck and the ramp roads on both east and west sides.
- D) Study of the roadway on east and west side of the tunnel up to convergence to US1 on North and South bound traffic.

- E) Evaluation of the geotechnical condition for possible use of existing retaining walls to support the new deck.
- F) Design the plaza with adequate vertical clearance at the north of the tunnel as not to impede vehicular traffic.
- G) Design for effect of sea level rise of 9 inches.

#### SCOPE OF SERVICES AND DELIVERABLES

This task order will cover the services of Structural Engineering required to complete the Engineering Feasibility Study of north deck extension on the Henry E. Kinney Tunnel.

THE CONSULTANT is responsible for all work of their sub consultants/subcontractors to meet the deliverables included on this task order.

CONSULTANT shall provide all Engineering services described on the tasks below:

#### Task No.1 Feasibility Study of Tunnel Top Plaza at The Henry E. Kinney Tunnel

This task consists of

- 1. Structural Engineering (minimum of two structural framing systems to support new open air seating and pedestrian crosswalk over the tunnel).
- 2. Study of the surface water drainage system at Las Olas Blvd. level and at US1 tunnel road.
- 3. Study of the existing utilities for the proposed area of expansion of the deck and the ramp roads on both east and west sides.
- 4. Study of the roadway on east and west side of the tunnel up to convergence to US1 on North and South bound traffic.
- 5. Evaluation of the geotechnical condition for possible use of existing retaining walls to support the new deck.
- 6. Preliminary option of cost.
- 7. Sub-consultant to Yohalem Lakdas will perform all geotechnical study under this task order.

#### **Deliverables**

CONSULTANT shall provide the following for CITY review and written acceptance:

- Memo describing the review of existing Construction documents of the tunnel and all relevant affected elements such as:
  - Structural System
  - Roadway Structural System and Clearances
  - Structural System of Sanitary
  - Structural System of Water Supply
  - Structural System of Surface Water Draining
- Memo describing the on site evaluation of the existing condition of the reference elements and items of each discipline.
- 3. A written analysis of the findings.
- 4. A finite element analysis to be performed on the following elements
  - Existing tunnel walls due to load from the proposed deck extension

- Soil deflection/settlement behind the existing tunnel wall due to the proposed plaza deck
  extension as well as the foundation reaction and possible settlement due to new load on the wall
  and load on the mat foundation at the median
- 5. Compile a report with findings, cost estimates and recommendations.

#### **PROJECT ASSUMPTIONS**

Specific assumptions for the project:

References to be used (USGS, County, SFWMD, FDEP, FDOT, etc.)

- □ CONSULTANT shall coordinate with City and send all deliverables of this task order to CITY.
- As-builts are accurate.
- ✓ Vertical datum to be used for design is NAVD88.
- CONSULTANT to convert NGVD datum to NAVD datum for design.

#### **CITY'S REPONSIBILITIES**

Include any data or assistance to be provided by the City:

- ☑ The City's project manager, or a designated representative, will coordinate the project for the CITY.
- The City's project manager, or a designated representative, will coordinate all necessary meetings and meeting attendance.
- The City's project manager, or a designated representative, will timely review all submittals from the consultant.

#### PERFORMANCE SCHEDULE

The CONSULTANT shall perform the services identified in Task 1 within 55 working days of written Notice to Proceed.

#### METHOD OF COMPENSATION

The services performed shall be accomplished using the Not to Exceed method of compensation. Reimbursable expenses associated with these services are not included in the fees and will be itemized separately, subject to an established Not to Exceed limit. A cost breakdown for reimbursable expenditures is included on Exhibit A.

Hourly work and expenditures shall be submitted monthly.

## **TERMS OF COMPENSATION**

Services shall be provided for the following Not to Exceed amounts:

Task	Task Title	La			
No		Consultant	Sub consultant	Total	
1	Structural System	\$12,420.00	\$	\$12,420.00	
2	Roadway Structural System	\$3,036.00	\$	\$3,036.00	
3	Sanitary Structural System	\$3,036.00	\$	\$3,036.00	
4	Water Structural System	\$1,656.00	\$	\$1,656.00	
5	Surface Water Drainage Structural System	\$3,036.00	\$	\$3,036.00	
6	Geo-Technical Evaluation	\$	\$7,062.50	\$7,062.50	
7	Project Management	\$2,760.00		\$2,760.00	
			All to also	<b>6.00.000.50</b>	
			All tasks	\$ 33,006.50	
Task No	Description	Reimbursables Consultant Sub consultant		Total	
1	Printing	\$500.00	\$	\$500.00	
2	, thinking	\$	\$	\$	
			All reimbursables	\$ 500.00	
Task			her Cost	Total	
No		Consultant	Sub consultant		
1		\$	\$	\$	
2		\$	\$	\$	
			All other costs	\$0	
		•	TOTAL	\$33,506.50	

The total number of hours for the project is (244.5) for CONSULTANT.

#### **CITY CONTACTS**

Requests for payments should be directed to City of Fort Lauderdale Accounts Payable via e-mail to AcctsPayble@FortLauderdale.gov. All other correspondence and submittals should be directed to the attention of Raymond Nazaire at the address shown below. Please be sure that all correspondence refers to the City project number and title as stated above.

City of Fort Lauderdale
City Hall, 4th Floor – Engineering
100 North Andrews Avenue
Fort Lauderdale, FL 33301
Email: rnazaire@fortlauderdale.gov

Phone: 954-828-8954 Fax: 954-828-5074

#### **CONSULTANT CONTACTS**

CONSULTANT:

Lakdas/Yohalem Engineering, Inc.

Project Manager Name: Lakdas Nanayakkara, P.E., C Eng., G.C.

2211 NE 54th Street, Fort Lauderdale, Fl. 33308

Email: lye@lyengineering.com

Phone: 954-771-0630 Fax: 954-771-0519

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# **Department Signatures**

Approved by:	
Raymond Nazaire, P.E. Project Manager	Date
Approved by:	
Annalise Mannix, P.E. Senior Project Manager	Date
Approved by:	
Pedram Zohrevand, Ph.D., P.E. Division Manager	Date
Approved by:	
Talai Abi-Karam, P.E. Deputy Public Works Director – Eng	Date ineering
Approved by:	
Hardeep Anand, P.E. Public Works Director	Date

# **CITY**

IN WITNESS OF	THE FOREGOING,	the parties h	nave set their	hands and se	eals the day	<sup>,</sup> and
year first above w	ritten.					

	CITY OF FORT LAUDERDALE, a municipal corporation of the State of Florida:
	By LEE R. FELDMAN, City Manager
(CORPORATE SEAL)	ATTEST:
	JONDA K. JOSEPH, City Clerk
	Approved as to Legal Form:
	Rhonda M. Hasan Assistant City Attorney

# CONSULTANT

A A A	
WITNESSES:	Lakdas/Yohalem Engineering, Inc.
	By:
Signature SERGIO TRAPPER	TA Name: Lakows Joseph Local
Priht Name	Title: <u>Dre 308-17</u>
Ivan Maryen	ATTEST:
LUAN NGUYEN Print Name	By:
riint name	Name: Lalor dadajaklaza
(CORPORATE SEAL)	Title: Sease mey
foregoing instrument before me	Lakdas/Yohalem Engineering, Inc. acknowledged the this day of the day of the sonally known to me and did not take an oath.  Notary Public, State of Florida (Signature of Notary taking Acknowledgement)  Name of Notary Typed, Printed or Stamped  My Commission Expires  Commission No.

# TASK ORDER EXHIBIT A

# FEE SCHEDULE, REIMBURSABLES AND OTHER COSTS

# A. Task order Exhibit A Fee Schedule

# Consultant

Labor Category		Labor Category I – Senior Engineer		
Percent	Utilization	78.6% \$138.00/hr		
Labor Ra	ate			
Task No	Task Title	Hour	Subtotal (\$)	
1	Structural System	90	\$12,420.00	
2	Roadway Structural System	22	\$3,036.00	
3	Sanitary Structural System	22	\$3,036.00	
4	Water Structural System	12	\$1,656.00	
5	Surface Water Draining Structural System	22	\$3,036.00	
6	Project Management	20	\$2,760.00	
	Totals	188	\$25,944.00	

## **Sub-Consultant**

Labor Category Percent Utilization		Labor Category I 21.4%		
Task No	Task Title	Hours	Subtotal (\$)	
1	Geo-Technical Evaluation	56.5	\$7,062.50	
	Totals	56.5	\$7,062.50	

# B. Reimbursables (in accordance with Master Agreement)

Task No	Task Title	Reimbursable Description	Cost (\$)
1	Printing		500.00
		Reimbursables Subtotal	\$500.00

# C. Other Costs (in accordance with Master Agreement)

Task No	Task Description	Reimbursable Description	Cost (\$)
l,		Other Costs Subtotal	\$