Kimley»Horn

CONSULTING SERVICE AUTHORIZATION

DATE:

CONSULTANT: Kimley-Horn and Associates, Inc.

SERVICE AUTHORIZATION NO. 12-28 FOR CONSULTING SERVICES

CITY P.O. NO. _____ CITY EXPENSE CODE 334-3162-541-69.37

TITLE: Lowson Boulevard Pedestrian Bridge

CITY PROJECT NO. 17-004

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.

PURPOSE

The purpose of this AGREEMENT is to describe the scope of work and the responsibilities of the ENGINEER and the CITY for the completion of necessary survey and geotechnical investigations, engineering design, permitting, a complete set of pedestrian bridge construction plans for the proposed Lowson Boulevard Pedestrian Bridge project (the "PROJECT). The pedestrian bridge design is part of the bicycle lane addition for Lowson Blvd. and the first phase of design. Upon confirmation of the feasibility of the bridge improvements at the 50% completion phase, the roadway design phase will be contracted with the ENGINEER under a separate Consulting Service Authorization.The PROJECT design will consist of the following elements:

1. Design of 2 (two) pedestrian bridges, one on either side of Lowson Boulevard over Lake Worth Drainage District (LWDD) E-4 Canal.
2. Field survey services necessary for pedestrian bridge design.
3. Subsurface utility targeting services
4. Geotechnical investigations as necessary for pedestrian bridge design.
5. Permitting of the pedestrian bridges with LWDD and coordinating with The Army Corps of Engineers
6. Preparation of the Type 1 Categorical Exclusion environmental document
7. This AGREEMENT does not include the following services:
    1. Post-design construction phase services
    2. Permitting of impacts to discovered listed species identified as part of this AGREEMENT.
    3. Post construction right of way field monumentation and preparation of a certified right of way map.
    4. Phase 1 environmental assessments.
    5. Design of the pedestrian bridge approaches. Approaching sidewalks and bike lanes shall be designed under a separate contract.
    6. Any other professional service not specifically described in the below Scope of Services.
    7. Bridge Development Report / 30% level submittal will not be included as part of this project.
    8. Stability analysis of the existing wall.

9. Bridge Asbestos testing.

10. Cultural resource assessment.

SCOPE OF SERVICES

Task 1 –Surveying and Mapping

A. The ENGINEER will contract with HSQ Group, Inc. (HSQ) to provide Survey information as needed for the pedestrian bridge design at Lowson Boulevard. HSQ's scope of services will consist of the following:

1) Prepare a 3D surface of the site, not including the bridge deck

2) Locate a maximum of ten test holes (soft digs) and provide X, Y, and Z values on test hole forms provided.

3) Locate the exposed exterior piles supporting the existing bridge and aerial crossings (X and Y only)

4) Locate surface utilities, designated subsurface utilities marked by others, aerial pipe crossings, and fences.

5) Run a close level loop and set benchmarks outside the limits of construction based on NGVD 1929

6) Collect vertical benchmarks and horizontal global positioning control data.

Task 2 – Geotechnical Explorations

A. The ENGINEER will contract with Tierra South Florida, Inc. (TSF) to provide geotechnical investigations needed for the pedestrian bridge design at Lowson Boulevard. TSF's scope of services will consist of the following:

1) Two (2) Standard Penetration Test (SPT) Borings to a depth 75' below existing grade.

2) Two (2) Bore Hole Permeability (BHP) tests.

Task 3 – Subsurface utility targeting services

A. The ENGINEER will contract with InfraMap Corp. (IMC) to provide subsurface utility targeting and test hole services investigations needed for the bridge design at Lowson Boulevard. IMC's scope of services will consist of the following:

1) A Maximum of 10 test holes will be performed.

Task 4 –Permitting

A. Notification to Army Corps of Engineers

B. Lake Worth Drainage District (LWDD)

C. Preperation and response to one round of FDOT comments for the Type 1 Categorical Exclusion environmental document

Task 5 – Lowson Boulevard Pedestrian Bridge Design

General/Project Administration

Project administration activities will be undertaken throughout the project that will include the following:

1. *Project Setup*: The ENGINEER will establish project files, project work plan, initiating accounting

system.

2. *Kick-off Meeting:* The ENGINEER will participate in a kick-off meeting with the CITY's Project Team and the project team.
3. *Aesthetics Meeting*: The ENGINEER will meet with the CITY's Project Team to review the aesthetic alternatives of the prefabricated steel truss pedestrian bridge.
4. *Meetings*: The ENGINEER will meet with the CITY's Project Team to review the City's submittal comments. For two (2) submittal meeting, the ENGINEER will prepare an agenda and meeting minutes.
5. *Progress Reports and Invoices*: The ENGINEER will prepare a monthly progress report to be included with the monthly invoice.
6. *Utility Coordination:* The ENGINEER will make initial contact and provide plans to utility agency owners in the project area. Coordinate to resolve potential above ground and underground utility conflicts with the pedestrian bridges. Subconsultant will provide subsurface utility exploration (SUE) services as applicable.
7. The ENGINEER will coordinate with one prefabricated steel truss manufacturer to determine prefabricated steel truss criteria and estimated design loads. The loads and criteria will be general in nature to allow the Contractor to solicit bids from multiple prefabricated steel truss manufacturers.
8. The ENGINEER will conduct a field review.

All structural designs will be in accordance with the following:

- AASHTO LRFD Bridge Design Specifications, 7th Edition, 2014 with Interim Revisions through 2016
- FDOT Structures Manual (January 2017)
- FDOT FY 2017-18 Design Standards
- FDOT Standard Specifications for Road and Bridge Construction (January 2017)
- FDOT Plans Preparation Manual (January 2017)

Structural design calculations will be on letter size format. Two signed and sealed hard copies of the structural design calculations and one signed and sealed PDF document will be submitted to the City for their records.

A. Contract Documents

In this task KHA will produce Structural Contract Plans utilizing 11"x 17" CADD format for Contract Plan sheets. Structural plans will be in MicroStation format. Structural Contract Plans will be in accordance with the following:

- FDOT FY 2017-18 Design Standards
- FDOT Standard Specifications for Road and Bridge Construction (January 2017)
- FDOT Plans Preparation Manual (January 2017)

B. Quantities and Probable Opinion of Construction Cost

In this task KHA will provide the estimated structural quantities based on the Contract Documents to the County. Contract Pay Items will be in accordance with FDOT Standard Pay Items. Utilizing FDOT Historic Cost, a Preliminary Opinion of Probable of Construction Cost (OPC) will be prepared and submitted to the City.

PROVISIONS FOR WORK

A. Governing Regulations

The services performed by The ENGINEER will be in compliance with all applicable CITY and FDOT Standards Guidelines. The current edition, including updates, of the following References and Guidelines will be used in the performance of this work.

1. AASHTO's "A Policy on Geometric Design of Highways and Streets"
2. FDOT Design Standards
3. FDOT Standard Specifications for Road and Bridge Construction
4. AASHTO Guide for Bicycle Facilities Design

B. Submittals

The ENGINEER will provide copies of the required documents as listed below. Five copies will be submitted to the BOARD and additional copies will be submitted to the regulating agencies as required for review and approval.

1. 50% structures plans and calculations
2. 100% structures plans and calculations, signed and sealed
3. Opinion of Probable Cost (OPC) at 50% and 100% plan stages

SCHEDULE

ENGINEER will begin work upon receiving authorization from the City in accordance with a mutually agreed upon schedule.

Design Survey	3 weeks
Preliminary Analysis	4 weeks
50% Plans	8 weeks
CITY Review	2 weeks
Utility coordination &Permits	8 weeks
100% Plans	8 weeks

FEE

The ENGINEER will perform the Services in of the below tasks 1 thru 5 on a labor fee plus expense basis. The ENGINEER will not exceed the total maximum labor fee shown without authorization from the CITY. Individual task amounts are provided for budgeting purposes only. The ENGINEER reserves the right to reallocate amounts among tasks as necessary. Labor fee will be billed on an hourly basis according to our then-current rates. 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, local mileage, facsimiles, postage, express delivery services, large-format color printing, construction drawing printing, specification printing, and other out-of house printing.

Optional services will be billed after written authorization from CITY to start those services or a portion thereof. Additional services which may be identified as needed at a later time will be negotiated at that time.

1	Surveying and Mapping	$8,795.13
2	Geotechnical Explorations	$10,965.00
3	Subsurface Utility Targeting	$4,500.00
4	Permitting	$12,456.00
5	Structures Plans	$52,434.00
	Reimbursable Expenses	$100.00
	Total Contract	$89,250.13

All permitting, application, and similar project fees will be paid directly by the CITY. Fees and expenses will be invoiced on a monthly basis, as applicable, upon the percentage of services performed or actual services performed and expenses incurred as of the invoice date. If additional efforts become necessary during the performance of the assignment, the ENGINEER will immediately advise the CITY of any budget revisions.

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 ENGINEER 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 3-1-17

By: _____
Marwan Mufleh, Sr. V.P.
(Seal)

KIMLEY-HORN AND ASSOCIATES, INC. CORPORATE SEAL NC

LORI D'AMICO
MY COMMISSION # FF 986756
EXPIRES: March 16, 2020
Bonded Thru Notary Public Underwriters

BEFORE ME, the foregoing instrument, this 1 day of March, 2017, was acknowledged by Marwan Mufleh 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 1 day of March, 2017.

Lori D'Amico
Notary Public Lori D'Amico
State of Florida
My Commission Expires: March 16, 2020