ADDENDUM NO. 2
DECEMBER 20, 2017

Solicitation Title: Roadway Improvements Project – NE 133rd Street

Solicitation No.: IFB 11-17-18 Opening Date: FRIDAY, DECEMBER 29, 2017 BY NO LATER THAN 3:30 PM

Attention all potential bidders:

☒ SHOULD Addendum: Information included in this Addendum is for clarification purposes. This Addendum SHOULD be acknowledged by checking the box indicated on the City’s Contract Form A-5, Acknowledgement of Addendum(s), and submitted as part of your Proposal.

To all prospective bidders, please note the following changes and clarifications:

1. Sheets RL-1, RL-2 and RL-3 which were missing from “Attachment A” of the original Solicitation are incorporated as “Attachment B” of the Solicitation and included with this addendum.

2. A copy of the Geotechnical Report for the locations where work will be completed under this contract is incorporated as “Attachment C” of the Solicitation and included with this addendum.

Request for Information Questions/Clarification:

Q.1 “Please clarify the payment method for the following items:

- Regular excavation
- 12" Subgrade
- 8” Limerock
- 1.5” Asphalt Pavement”

A.1 Regular excavation, base course, sub-base course and asphalt pavement shall be included in the unit cost.

Q.2 “We want to know if there’s a Geotechnical Report available for this job. Please clarify.”

A.2 Yes, Please see Paragraph 2 of this addendum.

Q.3 “We are missing the following information:

a) Trench Dimensions
b) Can we use directional bore?
c) Size of conduit?
d) Distance?
e) Type of wiring?
f) New service point needed?
g) Distance to hook-up power?”
h) Height of poles?
i) Type of material for poles?
j) Pull boxes needed?

A.3 Please see below for requested information:

a) Plans call for 24” minimum cover to the top of the conduit. The contractor will need to install the 2” conduit with the necessary trench width.

b) A directional bore is allowed but seems unnecessary. Since the road is getting resurfaced the conduit can be trenched and buried during roadwork.

c) The size of the conduit is 2”.

d) The distance is as indicated in the lighting plans which are included in this addendum (see Paragraph 1 of this addendum).

e) The wiring shall be 6” Copper THWN in 2” PVC-Sched 40 for all new circuits.

f) Yes, for this project the Contractor will need to contact FPL to coordinate the proposed location. Roadway Lighting Plans assume a worst case (one circuit will feed all the proposed lights) with the service point at one end.

g) Contractor will coordinate with FPL Service Planner for the proposed location.

h) The height of the poles is 15 feet.

i) The material for the poles shall be Fiberglass Pole (Mainstreet Windsor Series Catalog # FF1803 or equivalent). Bidders should indicate in their bid submittal if an equivalent is being proposed.

j) Yes, pull boxes will be needed at each pole location for new poles and circuits.

Q.4 “Plan cover (C-1) mentions sheets RL-1 and RL-2 pertaining to Roadway Lighting-Retrofit not included in the bid docs. Please advise.

A.4 The missing sheets are being included with this addendum (please see Paragraph 1 of this addendum).

For any other questions, clarification can be found in the specifications.
All other terms, conditions and specifications remain unchanged for this solicitation.

End of Addendum
Attachment “B”

Plans and Specifications:

Sheets RL-1, RL-2 and RL-3
LUMINAIRE AND POLE DETAILS AND SPECS

POLE FOUNDATION DETAIL

1. CONTRACTOR SHALL VERIFY POLE SIZE AND LOCATION WITH OWNER PRIOR TO INSTALLATION.
2. F.B.O.T. APPROVED POLES, S641-0700 & S641-0100.

ROADWAY LIGHTING SERVICE POINT DETAIL
Attachment “C”

Geotechnical Report
May 19, 2017

EBS Engineering, Inc.
4715 NW 157th Street, Suite #202
Miami, Florida 33014

Attention: Mr. Benjamin S. Essien

Re: Letter Report of Borehole Exfiltration Testing
    Drainage Improvements Along NE 133rd Street from West Dixie Highway to NE 11th Avenue and
    Drainage Improvements Along NW 130th Street from NW 10th Avenue to NW 12th Avenue
    Miami-Dade County, Florida
    GEOSOL Project No. 217117

Dear Mr. Essien:

GEOSOL, Inc. (GEOSOL) has completed the borehole exfiltration testing for the above-referenced project. The services were performed in accordance with our proposal P-217124-R1 dated March 10, 2017. Authorization for our services was provided by you via email on May 1, 2017.

Sheets 1 and 2 present the approximate location of the exfiltration tests. The exfiltration tests were located in the field by a representative of GEOSOL utilizing normal taping procedures, existing landmarks and the project site description provided by you on March 7, 2017. The exfiltration testing was performed at a depth of 15 feet below existing grades in eight (8) locations (P-133-1 through P-133-4, and P-130-1 through P-130-4). The exfiltration testing was performed in general accordance with the South Florida Water Management District (SFWMD) “Usual Open-Hole” constant head method. The testing was performed to determine the hydraulic conductivity value (k) of the subsurface materials at a depth of 15 feet below the existing ground surface. The boreholes were drilled by means of a 5 7/8-inch diameter tri-cone bit and water. Upon drilling of the boreholes, a 6-inch diameter perforated PVC pipe was inserted in the ground and used a pump for purging the well prior the start of the test. After completion of the percolation testing, the boreholes were backfilled with grout and the site was cleaned as required. The hydraulic conductivity values (k) were determined from the test results and presented in Table 1. The hydraulic conductivity values are reported in units of cubic feet per second per square foot of seepage area per foot of head (cfs/ft²-ft.).

We appreciate the opportunity to work with you on this project. Please do not hesitate to contact our office if you have any questions about the report or if you need additional information.

Sincerely,

GEOSOL, INC.

Orlando Rosado, P.E.
Senior Geotechnical Engineer/President
Florida Registration No. 49324

cc: Addresses (1)
    File (1)

Attachments: Sheets 1 and 2 – Percolation Test Locations
              Table 1 - Summary of Constant Head Percolation Test Results and Subsurface Stratification
              Schematics of Constant Head Percolation Tests

5795-A NW 151st Street
Miami Lakes, FL 33014
Phone (305) 828-4367; Fax (305) 828-4235
E-mail: geosolusa@bellsouth.net
TEST LOCATION PLAN

LEGEND

P-1 APPROXIMATE PERCOLATION TEST LOCATION

TEST LOCATION PLAN
DRAINAGE IMPROVEMENTS ALONG NE 133RD STREET FROM WEST DIXIE HIGHWAY TO NE 11TH AVENUE AND DRAINAGE IMPROVEMENTS ALONG NW 130TH STREET FROM NW 10TH AVENUE TO NW 12TH AVENUE MIAMI-DADE COUNTY, FLORIDA

GRID
JG

SCALE
1:2,000

N.T.S.

PROJ. NO.
217117

CHECKED
OR

DATE
MAY, 2017

SHEET 1
TEST LOCATION PLAN

LEGEND

□ P-I APPROXIMATE PERCOLATION TEST LOCATION

TEST LOCATION PLAN
DRAINAGE IMPROVEMENTS ALONG NE 133RD STREET FROM WEST DIXIE HIGHWAY TO NE 11TH AVENUE AND DRAINAGE IMPROVEMENTS ALONG NW 130TH STREET FROM NW 10TH AVENUE TO NW 12TH AVENUE
MIAMI-DADE COUNTY, FLORIDA

DRMNN: JG
SCALE: N.T.S.
PROD. #: 217117

CHECKED: OR
DATE: MAY, 2017
SHEET: 2
TABLE 1 - SUMMARY OF CONSTANT HEAD PERCOLATION TEST RESULTS
DRAINAGE IMPROVEMENTS ALONG NE 133RD STREET FROM WEST DIXIE HIGHWAY TO NE 11TH AVENUE AND DRAINAGE IMPROVEMENTS ALONG NW 130TH STREET FROM NW 10TH AVENUE TO NW 12TH AVENUE MIAMI-DADE COUNTY, FLORIDA GEOSOL PROJECT No. 217117

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Date Performed</th>
<th>Diameter</th>
<th>Depth of Casing (Inches)</th>
<th>Depth of Hole (Feet)</th>
<th>Depth to Groundwater Level Below Ground Surface (Feet)</th>
<th>SATURATED HOLE DEPTH Ds (Feet)</th>
<th>Corrected Depth of Hole (Feet)</th>
<th>Average Flow Rate (gpm)</th>
<th>K, Hydraulic Conductivity (cfs/ft²-fft Head)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-133-1</td>
<td>05/18/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>7.2</td>
<td>6.20</td>
<td>7.80</td>
<td>8.80</td>
<td>17.0</td>
</tr>
<tr>
<td>P-133-2</td>
<td>05/18/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>6.9</td>
<td>5.90</td>
<td>8.10</td>
<td>9.10</td>
<td>16.0</td>
</tr>
<tr>
<td>P-133-3</td>
<td>05/18/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>6.7</td>
<td>5.70</td>
<td>8.30</td>
<td>9.30</td>
<td>17.3</td>
</tr>
<tr>
<td>P-133-4</td>
<td>05/18/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>6.4</td>
<td>5.40</td>
<td>8.60</td>
<td>9.60</td>
<td>18.5</td>
</tr>
<tr>
<td>P-130-1</td>
<td>05/17/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>9.7</td>
<td>5.30</td>
<td>15.00</td>
<td>0.9</td>
<td>1.28E-05</td>
</tr>
<tr>
<td>P-130-2</td>
<td>05/17/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>9.3</td>
<td>0.00</td>
<td>5.70</td>
<td>15.00</td>
<td>0.9</td>
</tr>
<tr>
<td>P-130-3</td>
<td>05/17/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>8.7</td>
<td>0.00</td>
<td>6.30</td>
<td>15.00</td>
<td>1.1</td>
</tr>
<tr>
<td>P-130-4</td>
<td>05/17/17</td>
<td>6</td>
<td>6.75</td>
<td>15</td>
<td>8.0</td>
<td>0.00</td>
<td>7.00</td>
<td>15.00</td>
<td>1.2</td>
</tr>
</tbody>
</table>

NOTES:

(1) The above hydraulic conductivity values are for a French drain installed to the same depth as the borehole test. The values represent an ultimate value. The designer should decide on the required factor of safety.

(2) The hydraulic conductivity values were calculated based on the South Florida Water Management District's USUAL OPEN HOLE CONSTANT HEAD percolation test procedure as shown on the following page.

(3) The CASING diameter was used in the computation of the hydraulic conductivity values presented in the above table, except at tests P-133-1, P-133-2, P-133-3, and P-133-4 where HOLE diameter was used.

(4) No loss of circulation was encountered during the performance of the borehole percolation tests, except at test locations P-133-1, P-133-2, P-133-3, and P-133-4.

SUMMARY OF SUBSURFACE STRATIFICATION

<table>
<thead>
<tr>
<th>Test No.</th>
<th>DEPTH (FEET)</th>
<th>FROM</th>
<th>TO</th>
<th>GENERAL MATERIAL DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-133-1</td>
<td>0.00</td>
<td>0.17</td>
<td>Dark Brown Organic Silty Fine Sand with Grass (Topsoil)</td>
<td></td>
</tr>
<tr>
<td>P-133-2</td>
<td>0.00</td>
<td>0.50</td>
<td>Brown Slightly Silty Fine to Medium SAND with Trace of Limerock Fragments (FILL)</td>
<td></td>
</tr>
<tr>
<td>P-133-3</td>
<td>0.00</td>
<td>2.80</td>
<td>Brown Fine to Medium SAND (FILL)</td>
<td></td>
</tr>
<tr>
<td>P-133-4</td>
<td>0.00</td>
<td>2.50</td>
<td>Brown Sandy LIMESTONE</td>
<td></td>
</tr>
<tr>
<td>P-130-1</td>
<td>0.00</td>
<td>0.50</td>
<td>Brown Slightly Silty Fine to Medium SAND with Trace of Limerock Fragments (FILL)</td>
<td></td>
</tr>
<tr>
<td>P-130-2</td>
<td>0.00</td>
<td>1.60</td>
<td>Brown Fine to Medium SAND (FILL)</td>
<td></td>
</tr>
<tr>
<td>P-130-3</td>
<td>0.00</td>
<td>1.60</td>
<td>Brown Slightly Silty Fine to Medium SAND with Trace of Limerock Fragments (FILL)</td>
<td></td>
</tr>
<tr>
<td>P-130-4</td>
<td>0.00</td>
<td>1.60</td>
<td>Brown Fine to Medium SAND (FILL)</td>
<td></td>
</tr>
</tbody>
</table>
USUAL OPEN-HOLE TEST

\[ K = \frac{4Q}{\pi d (2H_2^2 + 4H_2D_s + H_2d)} \]

**K** = HYDRAULIC CONDUCTIVITY (CFS/FT.$^2$ - FT. HEAD)
**Q** = "STABILIZED" FLOW RATE (CFS)
**d** = DIAMETER OF TEST HOLE (FEET)
**H_2** = DEPTH TO WATER TABLE (FEET)
**D_s** = SATURATED HOLE DEPTH (FEET)
**ELEV. "A"** = PROPOSED TRENCH BOTTOM ELEV.
**H_1** = AVERAGE HEAD ON UNSATURATED HOLE SURFACE (FT. HEAD)

Reference: SFWMD Management and Storage of Surface Waters
Permit Information Manual Vol. IV, Figure 3, Page 12.