

**SPECIFIC AUTHORIZATION NO. 3**

**SURFSIDE PARK RESIDENTIAL STREET DRAINAGE IMPROVEMENTS –  
PHASE II  
PROFESSIONAL DESIGN SERVICES**

**REF. RFQ No. 2019-027**

**SCOPE OF SERVICES**

Pursuant to the continuing agreement related to “RFQ No. 2019-027 – Engineering Services” (hereinafter referred to as “AGREEMENT”) between The City of Fort Pierce (hereinafter referred to as CITY”) and Kimley-Horn and Associates, Inc. (hereinafter referred to as “ENGINEER”) dated the \_\_\_\_ day of \_\_\_\_\_ 2021, CITY authorizes the ENGINEER to provide professional services as detailed herein.

The CITY desires professional engineering services related to the drainage improvements proposed for ten (10) residential streets located within the Surfside Park neighborhood, hereinafter referred to as the “PROJECT”

**Section 1 - Scope of Work and Schedule of Services**

ENGINEER will provide the following services in accordance with this AUTHORIZATION:

Professional contractual services are required for the preparation of engineering plans and specification package to support the design, permitting, and bidding of drainage improvements in the PROJECT area. The proposed improvements and scope of services are more particularly described in Exhibit “A”, attached hereto and incorporated by reference herein.

**Section 2 - Deliverables**

ENGINEER shall provide the following deliverables to the CITY as listed below and as described in Exhibit “A”, attached hereto and incorporated by reference herein:

|                                    |                    |
|------------------------------------|--------------------|
| Preliminary Construction Documents | 9 Months from NTP  |
| Final Construction Documents       | 12 Months from NTP |
| Bid and Specification Package      | 12 Months from NTP |

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**Section 3 - Method and Amount of Compensation**

CITY will compensate ENGINEER for services under this AUTHORIZATION in accordance with the payment method set forth in the attached Exhibit “B”, attached hereto and incorporated by reference herein.

The budget (or fee) for the services is not to exceed \$199,750.00

**Section 4 - CITY’s Responsibilities**

CITY hereby designates City Engineer or designee as CITY’s representative for matters related to this AUTHORIZATION.

**Section 5 - Other Provisions**

All applicable portions of the AGREEMENT not specifically modified herein shall remain in full force and effect and are incorporated by reference herein.

**IN WITNESS WHEREOF**, this AGREEMENT, consisting of three pages, Exhibit “A” and Exhibit “B” attached, has been fully executed on behalf of the ENGINEER by its duly authorized officer, and the CITY has the same to be duly executed in its name and in its behalf, effective as of the date herein above written.

**CITY OF FORT PIERCE, FLORIDA:**

By: \_\_\_\_\_  
Linda Hudson, Mayor

Date: \_\_\_\_\_


Attest: \_\_\_\_\_  
Linda Cox, City Clerk

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**REF. RFQ No. 2019-027**

**KIMLEY-HORN AND ASSOCIATES**

By:   
\_\_\_\_\_  
Brian Good, P.E., Senior Vice President

Date: November 5, 2021

**APPROVED AS TO FORM & CORRECTNESS:**

By: \_\_\_\_\_  
Tanya Earley, City Attorney

Date: \_\_\_\_\_

**EXHIBIT "A"**  
**DETAILED DESCRIPTION OF THE PROJECT**  
**AND**  
**ENGINEER SCOPE OF SERVICES**

**CITY OF FORT PIERCE SURFSIDE PARK RESIDENTIAL STREET DRAINAGE IMPROVEMENTS – PHASE II**


**PROJECT DESCRIPTION:**


The City desires to implement drainage improvements along ten (10) residential streets located within the Surfside Park neighborhood. The Surfside Park Neighborhood Unit 1 and Unit 2 were platted in the 1950's and were intended to be residential streets with roadside swales that were to collect and convey stormwater runoff. Over time required to phase construct the residential lots, the originally intended roadside swales were never constructed as designed or have been encroached upon through redevelopment and/or improvements constructed within each residential lot.

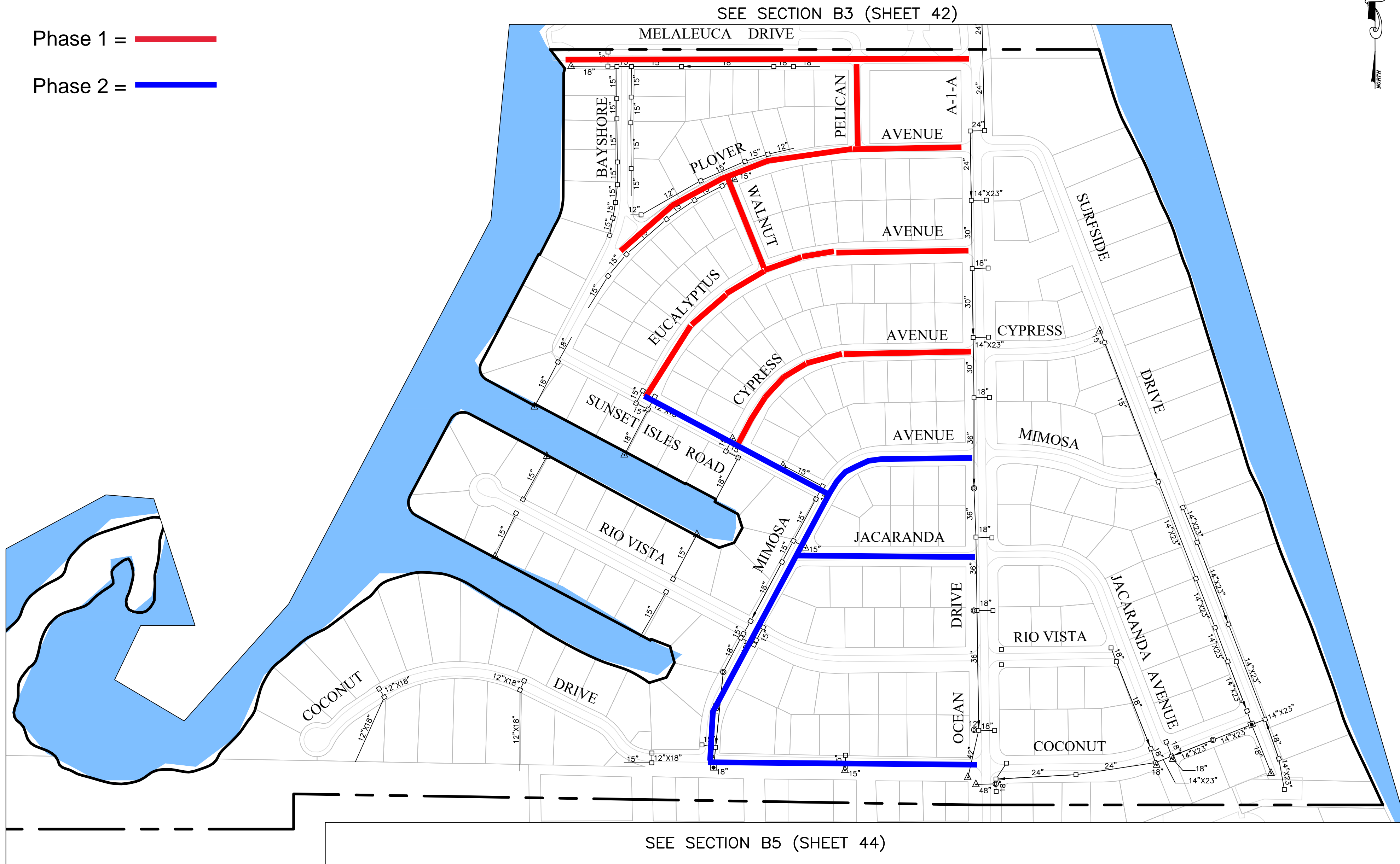
Today stormwater runoff from the residential streets and lots have been directed to the roadways themselves for means of conveyance. As a result, the roadways experience isolated flooding and are deteriorating at accelerated rates. To improve stormwater collection and address the degrading roadway pavement conditions, the City desires to have valley gutters to be added along three residential streets to direct stormwater runoff to existing catch basins. The streets identified for improvement consist of the following:

1. Melaleuca Drive – Bayshore Drive to SR A1A, 1,100 linear feet
2. Plover Avenue – Bayshore Drive to SR A1A, 1,150 linear feet
3. Pelican Drive – Plover Avenue to Melaleuca Drive, 250 linear feet
4. Walnut Court – Eucalyptus Avenue to Plover Avenue, 250 linear feet
5. Eucalyptus Avenue – Sunset Isles Road to SR A1A, 1,150 linear feet
6. Cypress Avenue – Sunset Isles Road to SR A1A, 800 linear feet
7. Sunset Isle Road – Eucalyptus Avenue to Mimosa Avenue, 600 linear feet
8. Jacaranda Avenue – Mimosa Avenue to SR A1A, 525 linear feet
9. Mimosa Avenue – Coconut Drive to SR A1A, 1,350 linear feet
10. Coconut Drive – Mimosa Avenue to SR A1A, 800 linear feet

Please refer to the Location Map on the following page for a visual depiction associated with the proposed Project Limits.

Phase 1 = 

Phase 2 = 



| DATE | BY | REVISIONS |
|------|----|-----------|
|      |    |           |
|      |    |           |
|      |    |           |

DATE 02-28-16  
SCALE 1" = 200'  
SURVEY BY CHACKWIDOR  
DWG. BY D.SUNNER  
DESIGN BY D.SUNNER  
APPROVE BY J.ANDREWS

B4  
DRAINAGE MAINTENANCE MAP

SHEET NO.  
43 OF 44  
PROJECT NO.  
W-0285

| LEGEND        |   |
|---------------|---|
| STORM MANHOLE | ⊙ |
| CATCH BASIN   | □ |
| BAFFLE BOX    | ■ |
| PIPE          | — |
| OUTFALL PIPE  | △ |

## **DESCRIPTION OF TASK DELIVERABLES:**

The ENGINEER agrees to perform professional roadway design and related services in connection with the project as required and set forth in the following:

### **A. General:**

1. The ENGINEER will endeavor not to duplicate any previous work done on the project. After issuance of written authorization to proceed, the ENGINEER shall consult with the CITY to clarify and define the requirements for the project and review available data.
2. The ENGINEER will attend conferences with the CITY and its representatives upon reasonable request.
3. In order to accomplish the work described under this Task Order in the time frames and conditions set forth, the ENGINEER will observe the following requirements:
  - a. The ENGINEER will complete his work on the project within the time allowed by maintaining an adequate staff of registered engineers, draftsmen, and other employees on the work.
  - b. The ENGINEER will design the project in such a manner as to be in reasonable conformance with applicable federal, state and local laws, and shall comply with the Florida Department of Transportation's Plans Preparation Manual Design Criteria, latest edition.
  - c. The ENGINEER will prepare all necessary sketches and completed application forms to accompany the CITY's applications for required federal, state, or local permits.
  - d. The ENGINEER will cooperate with the CITY in order that all phases of the work may be properly scheduled and coordinated.
  - e. The ENGINEER will send a complete preliminary set of construction plans to any city, county, state, regional or federal regulatory agency from which a permit or other approval is required prior to final approval of the design by the City Engineer, and will coordinate the project design with all applicable agencies.
4. Compensation to the ENGINEER for basic services shall be in accordance with Section IV – Compensation, of this Agreement, as mutually agreed upon by the

ENGINEER and CITY.

B. Design Topographic Survey:

The ENGINEER will provide topographic design survey services necessary to support and facilitate contemplated design and permitting activities associated with this project. This task will consist of the preparation of digital base map topographic surveys in accordance with the Professional Land Surveyors in Chapter 5J-17, Florida Administrative Code, pursuant to the intent of the Florida Standards of Practice set forth by the Florida Board of Professional Surveyors in Section 472.027, Florida Statutes.

The survey will include:

1. Records Research: Obtain information from St. Lucie County to acquire record evidence of parcel ownership and existing right-of-way limits.
2. Survey Control Horizontal/Vertical: Recover published horizontal and vertical control for the project. Establish horizontal and vertical control along the route and establish NAVD 88 elevation benchmarks and State Plane Coordinate control points along said route. Approximately 5 primary control points will be set and referenced on the digital Base Map control file.
3. Road Right of Way Retracement: Right of way lines will be calculated based upon existing plats and existing field monumentation.
4. Route Survey and Topography: Obtain cross-section elevations at 50-foot intervals along the route within the roadway right of way. Above-ground improvements, including the existing pavement, driveways, signs, power poles and surface evidence of buried utilities will be located. Drainage structures will be located. Invert elevations and pipe sizes will be obtained on the accessible structures within the existing right of way. All elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88).
5. Base Map Digital Control File: Create a master horizontal control file to be utilized throughout the planning and design of the roadway improvements. This map will include the location of the right-of-way lines and the improvements and elevations that were collected during the previous survey tasks.

### C. Geotechnical Investigation:

#### *Field Exploration*

The proposed field exploration program will include performing 20 pavement cores and auger borings to a depth of 2 feet below the existing ground surface within the subject roadway areas. The thicknesses of the asphalt and discernable base material will be measured within the core holes and recorded. The auger borings will be drilled using a 3-inch diameter, hand-held bucket auger. Samples of soil will be removed from the auger in the field and then examined and visually classified by our crew chief. Representative portions will be sealed and packaged for transportation to our laboratory for further analysis as required. The boreholes will be backfilled with accumulated cuttings and the core holes will be patched with cold patch asphalt.

#### *Engineering Analysis and Report*

Engineering analysis of all data obtained will be made to evaluate the existing roadway materials and to provide recommendations to resurface the asphalt roadway section for the roadways. The data developed during the exploration, will be submitted in a written report upon conclusion of the study.

### D. Culvert Inspections:

The ENGINEER will provide limited culvert inspections that will include the collection of baseline measurements that will aid in the evaluating of the existing culvert structural integrity and remaining useful lifespan. Typical baseline measurements include the following:

- Size of culvert — pipe diameter (if round) or span and rise dimensions
- Culvert elevation — invert elevation at both ends and at stations along culvert length
- External visual investigation looking for surface indicative of culvert failure (loss of embankment/fill, surface defects)
- Internal culvert visual investigation (automated camera or dive inspection)
- Length of culvert
- Type and configuration of end treatments
- Build-up of debris/sediment at ends of culvert affecting flow
- Alignment changes, culvert shape, or material changes along culvert length

Based upon deterioration such as corrosion, coating loss, perforations, cracks, joint deficiencies, culvert deformation; the ENGINEER will make pipe culvert rehabilitation recommendations along with estimated construction costs. It is intended that the

outfall culverts along Sunset Isles Road (3 outfalls) and Coconut Drive (2 outfalls) will be inspected.

E. Construction Documents:

The ENGINEER will develop construction documents to adequately define the horizontal and vertical location of the proposed improvements. The construction documents will consist of the following:

*Construction Documents:*

The ENGINEER will prepare engineering plans, profiles and cost estimates utilizing the survey data collected by the ENGINEER. The design shall be consistent with Federal, State and City standards for construction of a drainage system and conform to the City Land Development Regulation's Standards and Codes, where applicable. The ENGINEER will develop the construction cost estimate utilizing construction line items, quantities, unit prices and individual line item totals. Preliminary engineering plans will be submitted to City staff at the time of 60% completion and consist of the following, but not limited to:

- Cover Sheet
- General Notes and Specifications Sheet
- Summary of Pay Item Sheet
- Key Map Sheet
- Paving, Grading and Drainage Plan Sheets (minimum scale 1"=20' on 24"x36" sheets)
- Roadway Cross Section Sheets
- Detail Sheets

The ENGINEER will furnish two full size (24"x36") copies of the preliminary engineering plans, cost estimate and preliminary calculations to City staff at the predetermined deliverable date. All deliverables shall also be submitted in PDF format. The ENGINEER will submit plans to the City Staff at the 60% design milestone. Based upon comments provided by the City regarding the preliminary engineering plans (60% submittal), the ENGINEER will prepare final construction design plans and an updated construction cost estimate for bidding and construction. Final plans and calculations will be submitted to City staff. All changes resulting from comments will be addressed by the ENGINEER to finalize the engineering plans and construction cost estimate.

The ENGINEER shall include the City's boiler plate general agreement and conditions to the contract document and specifications and is to submit, for review and approval, a completed contract document to the City. The ENGINEER will

furnish two full size (24"x36") copies of the final design plans and construction cost estimate to City.

F. Bid & Specification Packages:

The ENGINEER will prepare the City's Standard Unit Price Construction Contract, inclusive of the project specification package and bid blank form (pay items and quantities) necessary to competitively bid the contemplated scope of work.

**TIME OF PERFORMANCE:**

|                                    |                    |
|------------------------------------|--------------------|
| Preliminary Construction Documents | 9 months from NTP  |
| Final Construction Documents       | 12 months from NTP |
| Bid and Specification Package      | 12 months from NTP |

**EXHIBIT "B"**

**COMPENSATION**

The CITY agrees to pay and the ENGINEER agrees to accept for services rendered pursuant to fees in accordance with the following:

- A. Professional Services Fee: The basic compensation mutually agreed upon by the ENGINEER and the CITY follows:

Lump Sum Tasks

| <u>Task Description</u>      | <u>Fee</u>               |
|------------------------------|--------------------------|
| Design Topographic Survey    | \$ <u>42,250</u>         |
| Geotechnical Investigation   | \$ <u>4,500</u>          |
| Culvert Inspections          | \$ <u>6,800</u>          |
| Construction Documents       | \$ <u>143,760</u>        |
| Bid & Specification Packages | \$ <u>2,440</u>          |
| <b><u>Grand Total</u></b>    | <b>\$ <u>199,750</u></b> |

Compensation will be computed at the hourly rates of

|                           |    |        |
|---------------------------|----|--------|
| Project Manager           | \$ | 225.00 |
| Assistant Project Manager | \$ | 175.00 |
| Senior Engineer           | \$ | 145.00 |
| Engineer                  | \$ | 125.00 |
| Engineering Technician    | \$ | 90.00  |
| Draftsperson              | \$ | 85.00  |
| Secretary                 | \$ | 50.00  |