Kimley»Horn

Exhibit "A"

Scope of Services

S.E. 6th Terrace Bridge Replacement

Project

The purpose of this Agreement is to outline the scope of services recommended by Kimley-Horn and Associates, Inc. ("Kimley-Horn") and accepted by the City of Pompano Beach ("City"), and to establish the contractual conditions between Kimley-Horn and City with respect to the proposed services.

The services include providing professional engineering services for the design and plans production for the S.E. 6th Terrace Bridge over the Old Pompano Canal (G-16) in Pompano Beach, Florida. The intent of the replacement is to address safety issues related to the current horizontal and vertical alignment of the bridge and roadway approaches.

Kimley-Horn proposes to contract with the following subconsultants:

- Currie Sowards Aguila Architects (Architectural Services)
- H2R Corp (Geotechnical Services)
- Keith and Associates, Inc. (Surveying & Subsurface Utility Engineering (SUE) Services)

Scope of Services

Kimley-Horn will provide the services specifically set forth below.

Task 1: Permitting

This task includes the work to be performed by Kimley-Horn for the permitting of the proposed bridge, connecting roadway, and necessary utility adjustments. Kimley-Horn does not guarantee the issuance of permits or approvals. If permits are issued for the project, the conditions and expiration dates are the sole responsibility of the City. Kimley-Horn is not responsible for extending time limited entitlements or permits. The City shall provide all permit fees.

A. Benthic Resource Survey and Wetland Delineation

Kimley-Horn will conduct a site visit at the bridge, which will include field flagging the wetlands in accordance with the State unified wetland delineation methodologies described in Chapter 62-340, Florida Administrative Code (FAC) and the United States Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual and regional supplement. Kimley-Horn will coordinate with the surveyor to incorporate the flags into the site plan.

Kimley-Horn will also conduct a benthic resource survey at the S.E. 6th Terrace Bridge during the appropriate survey period (April through September). The benthic surveys will be conducted in general accordance with the National Marine Fisheries Service

(NMFS) methodology recommendations for sampling Halophila johnsonii at large-area project sites. Prior to the field survey, Kimley-Horn will review updated GIS data regarding any recent surveys documented by the South Florida Water Management District (SFWMD) or Florida Department of Environmental Projection (FDEP) near the project site. The survey will employ a quantitative sampling of one square meter quadrats at regular intervals along a transect line throughout all three sites.

Each transect location will be accessed from the adjacent shoreline. Qualitative and quantitative sampling will be conducted by two biologists using a snorkel. The percent coverage of seagrass, species composition, substrate type, and other benthic resources (i.e. oysters) will be documented at each quadrat along the transect line. Environmental conditions including weather, visibility, and tide cycles at the start and end of the surveys will be noted.

Following the survey, a technical memorandum will be prepared summarizing the results of the survey. This will include a discussion of the methodology and results along with maps showing the location and percentage of seagrass by type within each bed (if seagrass is present). The technical memorandum will be coordinated with appropriate state and federal agencies during the environmental permitting process.

B. Federal Coordination and Permitting

A US Coast Guard (USCG) Bridge Permit will be required for the replacement of the bridge. As part of the USCG Bridge Permit, a survey will be prepared and mailed to all stakeholders who are currently residing near the bridge. A Bridge Permit application will be prepared including the findings from the mailed survey. Kimley-Horn will respond to all Requests for Available Information (RAIs). All permit application fees shall be paid by the City.

Kimley-Horn will attend the pre-application meeting with the USACE for the S.E. 6th Terrace Bridge. The bridge project should qualify for a Nationwide Permit 3 (Maintenance). Under this scope, Kimley-Horn will prepare a Nationwide Permit application. It is assumed that no mitigation will be required from the USACE, which is fully dependent on the wetland delineation and benthic resource survey. If it is determined that mitigation is required, an amendment to this scope will be required for the proposed mitigation plan and coordination that would be required. Once the application is submitted, Kimley-Horn will respond all RAIs. All permit application fees shall be paid by the City.

C. State Permitting and Coordination

Kimley-Horn will attend up to the pre-application meeting with the SFWMD. The S.E. 6th Terrace Bridge should qualify for a General Permit through the SFWMD. Kimley-Horn will prepare the General Permit application and will submit to the SFWMD. Once the application is submitted, Kimley-Horn will respond to all RAIs from SFWMD. All permit application fees shall be paid by the City.

Kimley-Horn will also prepare the Right-of-Way Occupancy permit for the S.E. 6th Terrace Bridge due to this bridge crossing the G-16 Canal, which is owned by the SFWMD. Once the application is submitted, Kimley-Horn will respond to all RAIs from SFWMD. All permit application fees shall be paid by the City.

Kimley-Horn will also prepare a General Dewatering Permit application and will submit to the DEP. Once the application is submitted, Kimley-Horn will respond to all RAIs from DEP. All permit application fees shall be paid by the City.

Task 2: Hydrologic/Hydraulic

This task includes the work to be performed by Kimley-Horn for the hydrologic and hydraulic components of the proposed bridge. In lieu of a Bridge Hydraulic Report, Kimley-Horn will prepare a Bridge Hydraulic Recommendations Memorandum to be submitted to the City for their records. This memorandum will summarize the work described below and will be used in the preparation of the Bridge Hydraulic Recommendations Sheet which will be included in the Plans.

A. Hydrologic Assessment – In accordance with the Florida Department of Transportation (FDOT) Drainage Manual (January 2020), the hydrologic data for freshwater flow (Riverine) conditions used for the design of the bridge will be based on one (1) of the following methods as appropriate for the particular site:
    1. A frequency analysis of observed (gage) data will be used when available. If insufficient or no observed data is available, one of the procedures below will be used as appropriate. However, the procedures below will be calibrated to the extent practical with available observed data for the drainage basin or nearby similar drainage basins.
        i. Regional or local regression equation developed by the USGS.
        ii. Rational Equation for drainage areas up to 600 acres.
    2. For regulated or controlled canals, hydrologic data will be requested from the controlling entity. Prior to use for design, this data will be verified to the extent practical.

B. Hydraulic Analysis – This task will include conducting a hydraulic analysis for the crossing. The hydraulic performance of the structure spanning the waterway will be analyzed using steady flow modeling within the US Army Corps of Engineers' HEC-RAS computer program. A tabular summary of the findings of the hydraulic analysis will be prepared. Water velocities and scour depths for the foundation components at the structure will be calculated for the following three (3) conditions:
    1. Mean High Water (considered to be equivalent to the mean annual flood).
    2. Worst case scour condition up through the 100-year frequency flood event (Design Scour Flood Event).
    3. Worst case scour condition up through the 500-year frequency flood event (Check Scour Flood Event).

C. Scour Analysis – Scour estimates for the events previously described will consist of the total scour resulting from the following:

1. Natural channel aggradation and degradation anticipated during the life of the structure.
2. Channel migration anticipated during the life of the structure.
3. Contraction scour.
4. Local scour, including pier scour and abutment scour.
5. Procedures presented in FHWA HEC-18 will be used in developing the scour depths, except that Sheppard's Pier scour equation and scour-resistant material approach will be used, where applicable, rather than the comparable procedures in HEC-18.

Task 3: Structural

This task includes the work to be performed by Kimley-Horn for the structural analysis and design of the proposed bridge and seawalls.

A. Bridge Design – Kimley-Horn will select the most appropriate bridge structure based on the site conditions, project objectives, and historical cost data. The structural design plans will be prepared in accordance with the City's standards. All structural designs will be in accordance with the following:

1. American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications, 8th Edition
2. FDOT Structures Manual (January 2020)
3. FDOT Design Manual (January 2020)
4. FDOT Standard Plans FY 2020-21
5. FDOT Standard Specifications for Road and Bridge Construction (Edition to be based on letting date)
6. FDOT Bridge Load Rating Manual (January 2020)

B. Seawall Design – The existing seawalls within the bridge limits and within the City's right-of-way will be replaced with either a similar post-and-panel type system or a steel sheet pile wall. The geometry of the new seawalls will match and tie-in to the existing seawalls located adjacent to the bridge and outside of the City's right-of-way. All structural designs and plans will be in accordance with the provisions set forth in Task 3A. Prior to beginning the design and plans preparation of the walls, Kimley-Horn will meet with the City to determine a single preferred wall system for design. This task also includes the design of temporary steel sheet pile walls required to construct the bridge and permanent walls.

C. Structural Design Plans – The following structural plan sheets are anticipated:

1. General Sheets
    i. General Notes and Bid Items
    ii. Bridge Plan and Elevation
    iii. Bridge Hydraulic Recommendations (from Task 2)
    iv. Demolition Plan
    v. Rebar List
2. Substructure Sheets
    i. Foundation Layout
    ii. Pile Data Table
    iii. Pile Bent Plan and Elevation
    iv. Pile Bent Details
3. Superstructure Sheets
    i. Superstructure Plan
    ii. Framing Plan (If required)
    iii. Superstructure Details
    iv. Finish Grade Elevations
    v. Approach Slab Plan and Details
4. Wall Sheets
    i. Wall Geometry
    ii. Wall Details

D. Calculations – The structural design calculations submitted will adequately address the complete design of all structural elements.

Task 4: Utilities

This task includes the work to be performed by Kimley-Horn for the utility design in connection to the proposed bridge.

A. Utility Coordination – Kimley-Horn will be responsible for coordinating the proposed design with the affected utility companies, including FPL, in order to minimize utility conflicts. The individual utility owners will designate the existing utilities within the project limits.
    1. Kimley-Horn will, prior to and during design, obtain available data from the utility owners that may be needed to determine the location and depth of the underground utilities. No subsurface utility exploration is included in this task.

Utility owners are expected to provide schedules for any relocation to Kimley-Horn to include in the final construction documents.

2. Once received, existing utility information will be depicted in the roadway and utility plans.
3. Existing irrigation system information will not be obtained as part of this task. A new irrigation system for the proposed landscape architecture will be provided as part of Task 6.

B. Utility Plans – Based on information provided by the various utility providers in the corridor and existing utility alignments, proposed utility adjustments will be detailed. Design is to include proposed utility locations, relocations, elevations, and details.

Task 5: Roadway

This task includes the work to be performed by Kimley-Horn for the roadway design in connection to the proposed bridge. The proposed roadway extents are assumed to be between Pine Drive to the north and approximately 120 feet to the south of the existing bridge.

A. Roadway Design

1. Roadway Plans – Kimley-Horn will prepare roadway plans that will include dimension control and roadway layout. These plans will include pavement limits, curbing, concrete areas, sidewalks, sodding, and spot elevations for the roadway and green areas. The roadway design plans will be prepared in accordance with the City's standards.
2. Cross Sections – Roadway working cross sections will be developed at three (3) distinct locations: south of bridge, at bridge, and north of bridge.
3. Detail sheets – For those details not contained in the City, County, or FDOT standard indices, Kimley-Horn will prepare specific construction details necessary for construction and include them on these sheets, as needed.
4. Erosion Control / SWPPP Plans – Erosion control plans will be prepared depicting site specific erosion control measures, as well as general notes, details, and specifications for additional erosion control measures that may be needed depending on site conditions.
5. Demolition Plans – Demolition plans will be prepared indicating paving and utility removal for the proposed improvements.
6. Signing and Pavement Marking Plan Sheets – Signing and pavement marking plan sheets will be prepared to show the proposed project signage and striping with associated details. All signage within the project limits will be new signage.
7. Drainage improvements for this project will consist of modifying the existing infrastructure within the project limits to account for the roadway improvements when needed. No new inlets or stormwater infrastructure is anticipated for this project. We assume that only the public right-of-way within the project limits

will be included as part of the improvements and that no private off-site developments will be contributing to the drainage.

8. Design Exceptions/Variations – Kimley-Horn will review survey data and identify any areas as noted within the FDOT "Florida Greenbook" that would require a design exception/variation. These areas would include, but are not limited to, locations in which minimum shoulder width or maximum front slope criteria cannot be met due to existing right of way or wetland conditions. Kimley-Horn will also review existing above ground hazards (trees, power poles, walls, etc.) within the roadway clear zone and identify those existing features which must be removed or shielded with guardrail. In areas where the removal of the hazard is not practical and the use of guardrail is inappropriate, Kimley-Horn will prepare documentation for a design exception(s)/variation(s) which could support leaving the hazard in place if operational and safety characteristics are acceptable to the City.

Task 6: Landscape Architecture Conceptual Design

After the roadway alignment is finalized in Task 5, Kimley-Horn will provide landscape architectural services for the project, limited to the design of ground-based elements within the Right of Way and City-owned parcels adjacent to the bridge. Landscape architectural services are limited to the following:

A. Site Visit: Site visit to observe existing conditions and assess potential design integration with surrounding spaces and to confirm the project tree survey.

B. CD's/Permit Documents: After an initial client design input meeting, Kimley-Horn will prepare the following permit/construction documents, in compliance with the City of Pompano Beach Land Development Code:

    1. Tree Disposition Plan: Kimley-Horn will use the project tree survey and field observations to produce a plan that indicates existing tree locations keyed to a chart that describes species, height, Diameter at Breast Height (DBH), canopy spread. This plan will tabulate trees to remain, to be removed, and/or to be relocated. Kimley-Horn will provide notes and details to support the trees' disposition, and in accordance with code requirements, as well as mitigation calculations based on tree valuation appraisal to be prepared by the project landscape architect.

    2. Planting plans for this package will delineate plant material, plant quantities, plant schedules, specifications, project-specific planting details, and code required planting calculations for bridge property planting spaces.

    3. Irrigation plans, designed to provide 100% irrigation coverage for all exterior proposed landscaped areas. Kimley-Horn will provide the following irrigation design services:

        i. Calculation of irrigation system requirements based on water application per week and water window availability.

ii. Water source(s) evaluation for irrigation system and integration options with existing irrigation system.

iii. Irrigation mainline and sub-mainline sizing with recommended routing.

iv. Sleeve and mainline routing, as applicable.

v. Master central control evaluation and recommendation, including analysis of system operation. If client requests a new well as a water source, Kimley-Horn will provide manufacturer's specification for pump equipment and a performance specification for the well.

4. Material legend of all components.

5. Ancillary notes, calculations, and labels required to develop a master irrigation system.

C. Meetings: Kimley-Horn will attend up to two meetings (Initial design meeting with Client and meeting with City Forester). Coordination between project milestones or meetings may be facilitated through phone conversations and emails.

Task 7: Geotechnical

Kimley-Horn will contract with H2R Corp (H2R) to provide geotechnical engineering services. All work performed by H2R will be in accordance with City standards, or as otherwise directed by Kimley-Horn. Kimley-Horn will make interpretations and changes regarding geotechnical standards, policies and procedures and provide guidance to H2R if necessary.

Before beginning each phase of investigation and after the Notice to Proceed is given, H2R will submit an investigation plan for approval and meet with Kimley-Horn to review the project scope and City requirements. The investigation plan will include the proposed boring locations and depths, and all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site. Additional meetings may be required to plan any additional field efforts, review plans, resolve plans/report comments, resolve responses to comments, and/or any other meetings necessary to facilitate the project.

H2R will notify Kimley-Horn in adequate time to schedule a representative to attend all related meetings and field activities.

A. Document Collection and Review – H2R will review printed literature including topographic maps, county agricultural maps, aerial photography (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field reconnaissance, H2R will review U.S.G.S., S.C.S. and potentiometric maps, and identify areas with problematic soil and groundwater conditions.

   H2R will be responsible for coordination of all geotechnical related field work activities. H2R will retain all samples until acceptance. Rock cores will be retained as directed by Kimley-Horn.

   H2R will obtain pavement cores as directed by Kimley-Horn.

H2R will perform specialized field-testing as required by project needs and as directed in writing by Kimley-Horn.

All laboratory testing and classification will be performed in accordance with applicable City's standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

B. Roadway

1. Develop Detailed Boring Location Plan – H2R will develop a detailed boring location plan. If the drilling program expects to encounter artesian conditions, H2R will submit a methodology(s) for plugging the borehole to the Kimley-Horn and the City for approval prior to commencing with the boring program. It is anticipated that a total of five (5) roadway borings will be required.
2. Stake Borings/Utility Clearance – H2R will stake borings and obtain utility clearance.
3. Coordinate and Develop TTCP for Field Investigation – H2R will coordinate and develop Temporary Traffic Control Plan (TTCP). All work zone traffic control will be performed in accordance with the FDOT's Standard Plans Index 102 series.
4. Drilling Access Permits – H2R will obtain all State, County, City, and Water Management City's permits for performing geotechnical borings, as needed.
5. Coordination of Field Work – H2R will coordinate all field work required to provide geotechnical data for the project.
6. Soil and Rock Classification – Roadway – H2R will refine soil profiles recorded in the field, based on results of laboratory testing.
7. Laboratory Data – H2R will tabulate laboratory test results for inclusion in the geotechnical report, the report of tests sheet (Roadway Soil Survey Sheet), and for any necessary calculations and analyses.
8. Geotechnical Recommendations – H2R will provide geotechnical recommendations regarding the proposed roadway construction project including the following: description of the site/alignment, design recommendations and discussion of any special considerations (i.e. removal of unsuitable material, consolidation of weak soils, groundwater control, evaluation and recommendation of types of geosynthetics and properties for various applications, as required.
9. Pavement Condition Survey and Pavement Evaluation Report – After pavement evaluation is performed, H2R will submit the report in accordance to the Materials Manual: Flexible Pavement Coring and Evaluation. Pavement cores will be taken at tie-in points between proposed and existing roadways.
10. Final Report – The Final Roadway Report will include the following:
    i. Copies of U.S.G.S. and S.C.S. maps with project limits shown.

ii. A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Plans.

iii. The results of all tasks discussed in all previous sections regarding data interpretation and analysis.

iv. An appendix that contains stratified soil boring profiles, laboratory test data sheets and other pertinent calculations.

v. H2R will respond in writing to any changes and/or comments from the City and submit any responses and revised reports.

11. SPT Boring Drafting – H2R will draft SPT borings as directed by Kimley-Horn.

C. Structures

1. Develop Detailed Boring Location Plan – H2R will develop a detailed boring location plan and meet with Kimley-Horn for boring plan approval. It is not expected that artesian conditions will be encountered during the field geotechnical investigation. It is anticipated that a total of three (3) SPT borings will be required at the proposed bridge.
2. Stake Borings/Utility Clearance – Prior to commencement of geotechnical investigation, H2R will stake all the borings planned locations and obtain utility clearance.
3. Coordinate and Develop TTCP for Field Investigation – H2R will coordinate and develop TTCP plan. All work zone traffic control will be performed in accordance with the FDOT's Standard Plans Index 102 series.
4. Drilling Access Permits – H2R will obtain all State, County, City, and Water Management City's permits for performing geotechnical borings, as needed.
5. Collection of Corrosion Samples – H2R will collect corrosion samples for determination of environmental classifications.
6. Coordination of Field Work – H2R will coordinate all field work required to provide geotechnical data for the project.
7. Soil and Rock Classification – Structures – Soil profiles recorded in the field will be refined by H2R based on the results of laboratory testing.
8. Tabulation of Laboratory Data – Laboratory test results will be tabulated for inclusion in the geotechnical report and for the necessary calculations and analyses.
9. Estimate Design Groundwater Level for Structures – H2R will review encountered groundwater levels, estimate seasonal high groundwater levels, and evaluate groundwater levels for structure design.
10. Selection of Foundation Alternatives – Evaluation and selection of foundation alternative, including the following:

i. Prestressed concrete piling - various sizes

ii. Drilled shafts

iii. Foundation analyses will be performed using approved FDOT methods. H2R will assist in selection of the most economical, feasible foundation alternative.

11. Detailed Analysis of Selected Foundation Alternate(s) – Detailed analysis and basis for the selected foundation alternative. Foundation analyses will be performed using approved City methods and will include:

    i. For pile and drilled shaft foundations, H2R will provide graphs of ultimate axial soil resistance versus tip elevations. Calculate scour resistance and/or downdrag (negative skin friction), if applicable.

    ii. H2R will assist Kimley-Horn in preparing the Pile Data Table (including test pile lengths, scour resistance, downdrag, minimum tip elevation, etc.)

    iii. H2R will provide the design soil profile(s), which include the soil model/type of each layer and all soil-engineering properties required for Kimley-Horn to run the FBPier computer program. Review lateral analysis of selected foundation for geotechnical compatibility.

    iv. H2R will estimate maximum driving resistance anticipated for pile foundations.

    v. H2R will provide settlement analysis.

12. Bridge Construction and Testing Recommendations – H2R will provide construction and testing recommendations including potential constructability problems. H2R will provide recommendations for the monitoring of existing structures during construction in accordance with FDOT Specifications Section 108. These recommendations will be included in the project specifications and plans.

13. Lateral Load Analysis – H2R will perform a lateral load analyses.

14. Final Report - Bridge and Associated Walls – The final structures report will include the following:

    i. Copies of U.S.G.S. and S.C.S. maps with project limits shown.

    ii. Summary of structure background data, S.C.S., U.S.G.S., geologic and potentiometric data.

    iii. The results of all tasks discussed in all previous sections regarding data interpretation and analysis.

    iv. Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.

v. Any special provisions required for construction that are not addressed in the City's Standard specification.

vi. An Appendix which includes SPT profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

15. SPT Boring Drafting – H2R will prepare a complete set of drawings to include all SPT borings, auger borings and other pertinent soils information in the plans. Include these drawings in the Final Geotechnical Report. Draft borings, location map, S.C.S. map and U.S.D.A. map as directed by Kimley-Horn. Soil symbols must be consistent with those presented in the latest Florida Department of Transportation Soils and Foundations Handbook.

Task 8: Survey & Subsurface Utility Engineering (SUE)

Kimley-Horn will contract with Keith and Associates, Inc. (KEITH) to provide survey and subsurface utility engineering services.

A. Topographic Survey – KEITH shall prepare a Topographic Survey of the SE 6th Terrace bridge. Survey of SE 6th Terrace shall extend 200 feet south of the bridge and 100 feet north of the intersection with Pine Drive. Survey of Pine Drive shall extend 100 feet east and west of the intersection with SE 6th Terrace. Survey of the waterways shall extend 100 feet west and 150 feet east of the bridge with cross sections observed at 50-foot intervals. Survey shall also include the City-owned parcel at the northwest quadrant of the bridge.

   Survey shall include surface features such as roadways, sidewalks, driveways, traffic striping, surface utilities, etc. Trees shall be noted by common name and trunk diameter. Storm and Sanitary structures will be noted with invert elevation, diameter, material and direction. Underground utilities designated in previous subtask shall be included on the survey. Bridge elements such as joints, bents, pilings, endwalls, etc, shall be detailed. Surfaces shall be created for the roadway and the waterway. Survey shall be referenced to the Florida State Plane Coordinate System (NAD83/11) and the North American Vertical Datum of 1988 (NAVD88). Elevations shall be shown at an interval of approximately 50 feet, including intermediate changes in grade.

B. Subsurface Utility Engineering (SUE) Services – KEITH will follow ASCE Standard 38-02 – "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data" during the field and office operations for this project. The quality levels discussed below are defined within the standard. KEITH will provide professional services associated with designation of existing subsurface utilities. KEITH shall designate all known tone able and non-tone able utilities. Gravity systems, service laterals, irrigation or overhead facilities are not included in this investigation. Soft-digs are not anticipated for the project.

Horizontal Designation Services - (Quality Level 'B') – KEITH will horizontally mark any known tone able and non-tone able underground utilities that are represented on as-built plans, above ground appurtenances, and other miscellaneous utility records (to be provided by the City). Conductive utilities will be marked on the surface utilizing active geophysical prospecting techniques in conjunction with electromagnetic equipment utilizing passive radio and audio frequencies. Known non-conductive utilities and/or structures will be marked on the surface utilizing Ground Penetrating Radar (GPR), above ground features, professional judgment, utility plats and/or as-builts. This task does not include identifying gravity systems, service laterals, irrigation, or overhead facilities unless specifically requested by the City and included in the scope of services.

Subsurface Utility Engineering Conditions and Understandings – KEITH is required by law to contract Sunshine State One Call of Florida forty-eight (48) hours in advance of any City excavation. KEITH will not access confined spaces. If confined spaces need to be accessed for locating purposes, then the City will be notified, and further arrangements will be made for said access. Additional fees may be applicable. If additional MOT is required beyond the capability of KEITHS standard MOT operations, KEITH will notify the City. Additional requests outside the scope of services, when requested by City and/or City's representative, will be invoiced on an hourly basis (hourly rates included in Attachment 2). This proposal assumes site access is available and work can be performed between the hours of 8:00 AM and 5:00 PM Monday through Friday.

Task 9: Architectural

Kimley-Horn will contract with Currie Sowards Aguila Architects (CSA) to provide professional architectural/engineering services. The services generally consist of architectural services only for the bridge replacement. The bridge is a fixed bridge span and will remain as a fixed bridge. It is CSA's understanding that the City wishes to provide architectural elements and enhancements that reflect the local community. CSA will coordinate with Kimley-Horn as needed so Kimley-Horn can prepare the structural documents for insertion into the master set of documents. Excluded from CSA's services are civil engineering services, MEP and structural engineering services. Landscaping/irrigation services will be provided by Kimley-Horn under Task 6. CSA will coordinate architectural lighting concepts with a lighting representative for the electrical engineer's construction documents. Bidding/permitting services are included. More specifically CSA proposes to provide the following architectural services:

A. One (1) to two (2) Public involvement meetings
B. Kick off meeting with city stakeholders
C. Three (3) to five (5) conceptual designs
D. Two (2) Final perspective renderings
E. Architectural construction documents once agreed on a design
F. Bidding

G. Permitting

Additional Services

Any services not specifically provided for in the above scope will be considered additional services and can be performed at our then current hourly rates or for a pre-negotiated fee. Additional services Kimley-Horn can provide include, but are not limited to, the following:

- Construction Phase Services
- Meetings and coordination beyond that specifically outlined above
- Utility relocation plans outside of the bridge limits
- Permit expediting services
- Services not specifically mentioned in the “Scope of Services”

Deliverables

The following is a summary of the deliverables to be provided to the City:

A. 60% Design Plans & Specifications – Structural, Utilities, Roadway, Landscape Architecture, Geotechnical, Architectural

B. Final Contract Documents

1. Design Permits and all necessary approvals
2. Tree Survey & Tree Valuation Appraisal
3. Final Plans (Signed and Sealed) – Structural, Utilities, Roadway, Landscape Architecture, Geotechnical, Architectural
4. Specifications (Signed and Sealed)
5. Bridge Design Calculations (Signed and Sealed)
6. Bridge Hydraulic Recommendations Memorandum (Signed and Sealed)
7. Bridge Hydraulic Recommendations Sheet (include in Final Plans)
8. Final Geotechnical Report (Signed and Sealed)

Each deliverable includes one (1) submittal to the City for review. This effort includes addressing one (1) round of comments at the submittal stage.

Contract Plans will be developed utilizing Computer Aided Drafting and Design (CADD) in AutoCAD (dwg) format. CADD files in AutoCAD (dwg) format will be provided to the City at project closeout. Plan submittals will be made in PDF format (11” x 17” page layout).

Reports, memorandums, and calculations will be submitted in PDF format (8½” x 11” page layout).

Schedule

Subsequent to the execution of this Agreement, Kimley-Horn shall commence work on the project. A schedule for each task will be provided that is mutually agreed to by both parties.

City's Responsibility

The City shall assist Kimley-Horn with the following items in order to expedite the completion of the project in an effective manner:

A. The City will provide access to and obtain permission for Kimley-Horn to enter upon public lands at no additional cost, to perform observations, or other necessary services under this Agreement.

B. The City will make available to Kimley-Horn all of its existing information which may in any way be pertinent to the project.

C. The City will review submittals and provide comments in a timely manner, as will Kimley-Horn.

D. The City will be responsible for the distribution of advertisement, RFIs and addendums.

E. The City will provide notification and venue for the public meetings

Fee and Billing

Kimley-Horn and its subconsultants will perform the services in Tasks 1-9 for the lump sum fee of **$335,400**. Billings will be monthly based on the progress of the Task.

Tasks	Descriptions	Fee
Task 1	Permitting	$28,250
Task 2	Hydrologic/Hydraulic	$20,090
Task 3	Structural	$104,870
Task 4	Utilities	$20,920
Task 5	Roadway	$41,840
Task 6	Landscape Architecture	$15,690
Subtotal	(Kimley-Horn, Tasks 1 thru 6)	$231,660
Task 7	Geotechnical (by H2R)	$55,740
Task 8	Survey & SUE (by Keith & Associates)	$16,500
Task 9	Architectural (by CSA)	$31,500
Total Lump Sum (Tasks 1 thru 9)		**$335,400**