

March 27, 2023

Mr. Jeff Jiang, P.E.  
City of Hollywood  
Department of Public Utilities  
Engineering Support Services Division  
Post Office Box 229045  
Hollywood, Florida 33022

**RE: 2023 DRAINAGE IMPROVEMENTS  
CITY OF HOLLYWOOD WORK ORDER NO. CTA 23-02**

Dear Mr. Jiang,

As requested, Craven Thompson & Associates, Inc. (CTA) is pleased to submit our engineering scope of services for the year 2023 Drainage Improvements under Work Order CTA 23-02. The specific scope of services are as follows:

**SCOPE OF SERVICES**

CTA shall provide in-house engineering support services for the year 2023 Drainage Improvements based on the consultant's hourly rate schedule established in the Professional Services Agreement 17-1325 dated October 26, 2017. Services may include survey, design, permitting, construction support services, construction coordination, site visits, processing pay requests, etc. and other associated tasks for the following preliminary list of projects that may be revised in the future:

- 1179 Johnson Street - Outfall Replacement
- 12 Ave and N Southlake Drive - 60" Flap Gate Replacement
- 1000 Washington Street - 24" Flap Gate Replacement
- SW-09 Wet Well Retaining Wall Repair/Replacement
- 5130 Mc Kinley Street and Emerson Drive - Swale Restoration
- 724 Park Court - Drainage System Installation
- 2034 Thomas Street - Drainage System Installation
- 1200 Van Buren Street - Regrading
- Swale Restoration at Polk and N 14 Court
- 2722 Scott Street - Drainage and connection to an existing outfall
- 3621 N 52 Avenue - Drainage and connection to an existing outfall
- 3110 N 52 Avenue - Drainage and connection to an existing outfall
- Connection from Liberty Street Lake through Rotary Part to the C-10 Canal
- Hollywood Hills - Polk St Drainage Improvements - Phase I
- Sheridan Street Drainage Improvements Phase I - Detention Storage
- Sunset Park Drainage Improvements Phase I - West Ditch Improvements and Johnson Street Culvert
- 6333 Fillmore Street - Swale Regrade
- 5805 Plunket Street - Drainage Improvements
- 747 N Northlake Drive - Drainage Improvements

**CRAVEN THOMPSON**



**& ASSOCIATES INC.**

Engineers  
Planners  
Surveyors  
Landscape Architects

3563 NW 53<sup>rd</sup> Street  
Fort Lauderdale, FL 33309-6311  
Phone: (954) 739-6400  
Fax: (954) 739-6409

The following services may or may not be required for any or all of the referenced storm drainage improvements Projects:

### **SURVEYING SERVICES**

#### **Boundary & Topographic Survey**

Survey shall meet the current "Standards of Practice" surveying requirements of the Board of Professional Surveyors and Mappers of the State of Florida, as defined in Chapter 51-17, Florida Administrative Code and may include the following:

- Recovery of sufficient existing boundary and/or right of way monumentation to determine the right of way lines needed to tie all visible improvements.
- Locations of all aboveground and visible improvements, including pavement, pavement markings, slabs, fences, signs, overhead wires, utility poles, trees, and other utility features within the limits of the existing rights of way and up to 10 feet outside of right-of-way if easily accessible.
- Rims, inverts, and pipe sizes shall be measured on all sanitary structures found within the project limits, if accessible and physically unobstructed, otherwise they will be noted on the drawing.
- All Storm structures and pipes accessible will be shown on this survey.
- Coordinate with an Underground Utility Location Services to locate any underground utilities within the above limits. Locate underground utilities to the extent possible on the survey. Incorporate results of subsurface utility investigation in Survey.
- Existing trees, three (3) inches in diameter and above, at four (4) feet aboveground, shall be located and identified with diameter and common name.
- Elevations cross sections shall be taken at 100-foot intervals along each roadway, path, easement, etc. where accessible, permitted by the adjacent property owners, and can be done safely by the Survey crew in the field.
- The elevations shall be relative to the North American Vertical Datum of 1988 (NAVD88) and based on National Geodetic Survey (NGS) or Florida Department of Transportation benchmarks.
- The surveys shall be in the horizontal projection: State Plane, Florida East Zone, NAD 83(90), US Survey feet.
- Provide semi-permanent survey control and benchmarks along roadway at approximately 500-foot intervals. Provide benchmark references on Survey drawing.
- Provide ACAD drawing and signed/sealed boundary and topographic survey (drawing scale TBD to be consistent with Eng. Plans).

### **CIVIL ENGINEERING SERVICES**

#### **Prepare Paving Grading and Drainage 60% Plans**

- Areas of work to be improved will be identified (swales, pipes, inlets, and outfalls).
- Prepare preliminary opinion of probable construction costs based upon rough quantities.
- Prepare drainage design information for the design scenario proposed conditions. Flood routings, if necessary, will utilize ICPR or equivalent software to determine flood stages and discharges.
- The storm sewer system will be designed to comply with minimum crown of road criteria associated with either a 5-year 1-day storm event per SFWMD design criteria

- Prepare Preliminary Drainage Report of findings during the 60% design phase of the Project.
- Prepare preliminary design plans and details.
- Identify permit requirements from all applicable agencies having jurisdiction

#### **Prepare and Process Engineering Permit Applications**

Prepare and process permit applications and supporting documents through state and local agencies. Town shall pay all permit fees. CTA will complete all engineering permit applications and coordinate the applications to be executed by City for processing.

#### **Prepare Final Contract Documents (100%)**

- Based upon City approval, CTA will prepare 100% construction documents, including plans and calculations.
- Final specifications and bid tabulations for the proposed improvements. The construction documents will include description of work and measurement and payment for all items proposed as part of the Project.

#### **Meetings with Client, Architect and Agencies**

Prepare for and attend coordination meetings, preconstruction meetings and conference calls regarding the proposed project.

#### **CONSTRUCTION SERVICES**

- Shop drawing review - Log, track, review and process shop drawings, maintenance of traffic plans and other submittals the Contractor is required to submit.
- Construction meeting attendance - Prepare for and attend preconstruction meeting as well as construction progress meetings. CTA will prepare and distribute meeting minutes.
- Construction coordination with Contractor and City.
- Review and respond to RFI's - CTA will review, research, compile and prepare a response to the Contractor's RFI's. A log of the submittals and responses will be available to the City and Contractor.
- Review of schedule - Review and comment on Contractor's schedule. Provide comments to Contractor to revise schedule based on available information. Once the schedule is approved and revisions will be reviewed and processed until all parties can agree on the schedule.
- Review of pre versus post video of the sanitary sewer system - Review of pre-post video for sanitary sewer system to determine the extent of rehabilitation that has taken place as part of the work product. Prepare a memorandum documenting the pre - post conditions and conclusions.
- Process pay requests - Review of documents submitted by Contractor depicting completed portions of the project. Once the documents have been approved for quantities and associated fees, CTA will recommend payment.
- Construction observation services - Includes serving as construction liaison with Contractor and City, assist in obtaining additional details required, conduct observation services, document progress of work, including locations, equipment, quantities, inform Contractor when the work appears to be not in compliance with the Contract Documents, prepare and submit daily reports, accompany other agencies have jurisdiction (AHJ) during inspections, etc.
- Project closeout services - Attend and document substantial completion walkthrough. Review corrective measures performed by Contractor to prepare a substantial and final completion certification.

- Review of Record Drawings - Review and comment on record drawings prepared and provided by the Contractor for the purpose of project certification to the AHJ.

Contractor shall be responsible for fees and scheduling of inspections through the City and CTA. Coordination with contractor regarding work activities, scheduling, RFI's, pay requests, etc. are included in the overall fee for this Project.

#### **COMPENSATION**

Services shall be on an as-needed basis per the consultant's hourly rate schedule established in the Professional Services Agreement dated October 26, 2017, but shall not exceed \$500,000.00.

#### **SCHEDULE**

These services shall be rendered by CTA over an estimated 2-year period. These services will be provided on an as-needed basis. We are ready to proceed immediately upon authorization.

Engineering services for the project will be performed as part of our Professional Services Agreement for General Engineering Consultant Services (Agreement) dated October 26, 2017. Services provided by CTA shall be limited to those services specifically identified in this work order.

We appreciate the opportunity to offer these services to the DPU. Please contact us if you have any questions or comments concerning this proposal.

Sincerely,

**CRAVEN THOMPSON & ASSOCIATES, INC.**



PATRICK J. GIBNEY, P.E.  
Vice President, Engineering

PJG/tg