

August 15, 2023

Via Email fjiang@hollywoodfl.org

Feng (Jeff) Jiang, P.E. Assistant Director - ESSD Department of Public Utilities 1621 N. 14th Ave City of Hollywood, Florida 33022

Reference: CITY OF HOLLYWOOD STORMWATER PUMP STATION ANALYSIS AND DESIGN FOR DRAINAGE SYSTEMS BETWEEN IRIS TERRACE AND HOLLYWOOD BOULEVARD

Mr. Jiang:

Thank you for the opportunity to present this Work Order proposal for professional engineering services associated with the analysis of the required drainage improvements between Iris Terrace and Hollywood Boulevard, including the analysis, design, permitting, and bid support services for a stormwater pump station for the drainage areas between Iris Terrace and Daffodil Terrace (System 4). This Work Order will be an integral part of the City of Hollywood (City) Contract for Professional Engineering Continuing Services for Civil Engineer Roadway, dated December 7, 2021, (RFQ 4666-21-DCM) between the City and BCC Engineering, LLC (BCC). The following sections outline the project description, scope of work, schedule of work, compensation, support from the City, and scope of work exclusions for this project's professional engineering services.

I. PROJECT DESCRIPTION

The Florida Department of Transportation (FDOT) District 4 (D4) is currently in the process of designing two stormwater pump stations to address flooding along State Road (SR) A1A and sections of the City that discharge to the FDOT system. These two stormwater pump stations will collect runoff from the following SR A1A and City areas:

- Pump Station NO 1 Azalea Drainage System
 - Approximately between Eucalyptus Terrace and Daffodil Terrace on the south side to between Azalea Terrace and Jefferson Street on the north side
- Pump Station NO 2 Van Buren Drainage System
 - Approximately between Jackson Street and Virginia Street on the south side to the end of the northbound Hollywood Blvd off-ramp

Please see a project location map included in Exhibit A.

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 2 of 12

The areas of the City located between these two stormwater pump station locations, between the north end of Pump Station No 1 and the south end of Pump Station No 2, are not being addressed as part of the FDOT proposed improvements. These areas are subdivided into three separate drainage systems with outfalls to the Intracoastal Waterway (Systems 1 through 3). In addition, the area south of Pump Station No 1, between the south end of the FDOT Azalea drainage system to the south of Iris Terrace, is also not part of the FDOT proposed improvements. This area includes a separate drainage system with an outfall to the Intracoastal Waterway (System 4). Please refer to the location map included in Exhibit A for the location of these drainage systems.

As part of the design coordination between the City and FDOT, the City requested FDOT to interconnect System 4 to the Azalea Drainage system. FDOT stated that this interconnection would impact the Azalea Drainage system construction schedule and could jeopardize the FDOT grant for that project. Therefore, the City requested BCC to perform a basis of design report (BODR) to assess viable alternatives to improve the flood protection level of service for Systems 1 through 4 and design the recommended improvements outlined in the BODR for System 4.

II. SCOPE OF WORK

The Scope of Work is comprised of the following essential tasks:

- Task 1 Project Coordination and Data Collection
 - Task 1.1 Surveying and Utility Located
 - Task 1.2 Geotechnical Investigation
 - Task 1.3 Environmental assessment
- Task 2 Basis of Design Report (BODR)
- Task 3 60% Design Documents
- Task 4 90% Design Documents
- Task 5 Permitting
- Task 6 Final Design and Bid Documents
- Task 7 Bid and Award Services

Task 1 – Project Coordination and Data Collection

As part of this task, the BCC will attend up to 12 monthly progress meetings to provide general project coordination and work planning, assuming a 12-month project schedule. The status of all ongoing tasks and City reviews will be discussed during these meetings. It is assumed that these meetings will be via Teams or Zoom. An additional meeting will serve as a project kick-off meeting to collect readily available data from the City and obtain input from the City on the design process. This meeting will be in person.

As part of this task, BCC will also perform a one-day field reconnaissance site visit to help familiarize key BCC staff with the site and drainage conditions within the project limits, observe the conditions of the existing drainage systems, and verify available roadway conditions. BCC will prepare a field assessment report documenting the findings of the site visit.

BCC will also collect available data from the City, Broward County, FDOT, and CDM. BCC will review these data and develop a data catalog of the information collected.

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 3 of 12

Task 1.1 - Surveying and Utility Located

BCC will use the as-built and topographic data available for City Systems 1 through 4. BCC will retain Manuel G. Vera & Associated, Inc. (MGV) to perform a bathymetric survey within an approximate 20' x 20' area centered on the existing System 4 outfall. MGV will also identify the utilities within the System 4 area and perform utility locates in critical areas to be identified by BCC. MGV's detailed scope of work is included in Exhibit B.

Task 1.2 - Geotechnical Investigation

BCC will retain Universal Engineering Science, LLC. (UES) to perform the required geotechnical information to support the design of the recommended System 4 stormwater pump station. Soil borings and corrosivity testing will be collected as part of this effort. UES's detailed scope of work is included in Exhibit C.

Task 1.3 - Environmental assessment

BCC will retain EScience, Inc. (ESC) to perform a seagrass survey at the location of the existing System 4 outfall. ESC will also support with the permitting for the project. ESC's detailed scope of work is included in Exhibit D.

Task 2 – Basis of Design Report (BODR)

BCC will use the ICPR4 models developed as part of the FDOT Azalea and Van Buren drainage systems and will expand this model to assess the existing level of service of Systems 1 through 4 after the FDOT pump stations are in service. To perform this assessment, the hydrologic and hydraulic features of Systems 1 through 4 will be added to the FDOT stormwater pump station ICPR4 model to develop an overall model. The following design storm events will be evaluated with this model:

- 3-year, 1-, 8-, and 24-hour
- 5-year, 1-, 8-, and 24-hour
- 10-year, 1-, 8-, and 24-hour
- 25-year, 1-, 8-, and 72-hour
- 50-year, 1-, 8-, and 24-hour
- 100-year, 1-, 8-, and 72-hour

Inundation flood maps will be developed for the critical duration design storm events.

The overall ICPR4 model will then be used to evaluate up to two (2) improvement alternatives:

Alternative 1 – Identify the required stormwater pump station and drainage improvements needed to provide the required flood protection level of service for Systems 4.

Alternative 2 – Identify the required stormwater pump station and drainage improvements needed to provide the required flood protection level of service for Systems 1 through 3 as an interconnected system and a single stormwater pump station.

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 4 of 12

BCC will prepare conceptual design schematics and opinion of probable construction costs for each alternative. In addition, inundation flood maps for the critical duration design storms will be developed for each alternative. BCC will attend an in-person meeting with the City to present the findings of the alternative analyses. Based on this meeting, a preferred alternative will be identified for Systems 1 through 3 and System 4.

BCC will prepare a draft BODR summarizing the data collection results, the ICPR4 modeling, and the conceptual design of each alternative. BCC will provide the City with a draft copy of the BODR in electronic format for review and comment. BCC will incorporate applicable comments and will provide the City with the final BODR in electronic format. This report will be used to support the permitting efforts of Task 5.

Task 3 – 60% Design Documents

BCC staff will develop the detailed design 60% plans and technical specifications for the System 4 selected alternative outlined in the BODR. The 60% design submittal will include the following plans:

- Cover Sheet
- General Notes and Legend Sheets
- Pay Item Sheet
- Survey Control Plan Sheet
- Index of Plan Sheet
- Plan Sheets Plan Sheets for Stormwater Pipes and Outfall
- Plan Sheets Stormwater Pump Station and Valve vault plan view, cross sections, and details
- Plan Sheets Electrical with Load schedule, Panel, and Riser Diagrams
- Civil Detail Sheets
- Structural Detail Sheets
- Electrical Detail Sheets
- Pollution Control Plan Sheets

Design plans will be developed in 11"x17" format.

BCC will prepare the technical specifications using the City's specifications, if available, or BCC's technical specifications library. FDOT technical specifications and details will also be referenced when applicable. It is assumed that the City will provide Divisions 0 and 1 to complete the bid documents. BCC will revise those specifications to incorporate project-specific information.

BCC will update the probable opinion of construction cost included in the BDOR based on the 60% design plans. One in-person meeting is planned with City staff to review the 60% submittal. Comments provided by staff will be incorporated in the 90% design documents.

Task 4 – 90% Design Documents

BCC staff will advance the 60% design documents to the 90% stage. Comments from the 60% design submittal will be incorporated, and the drawings will be finalized and prepared for submission to the City for review and approval before submission to permitting agencies. One virtual meeting is planned

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 5 of 12

with City staff to review the 90% submittal. Comments provided by staff will be incorporated in the final design plans and bid documents.

BCC will update the probable opinion of construction cost included in the BDOR based on the 90% design plans.

Task 5 – Permitting

The following permits are anticipated to be a part of this project:

- Environmental Resouces Permit (ERP) modification from the SFWMD
- Surface Water Management (SWM) License from BCEPGMD
- Florida Department of Transportation (FDPT) Connection Permit
- Army Corps of Engineers (ACOE) 404 permit

BCC will attend a pre-application meeting with each of these three permitting agencies. BCC will use the information obtained and developed as part of Tasks 1 through 4 and pre-application meetings to prepare the permit application and obtain approval from the SFWMD, BCEPGMD, FDOT, and ACOE. BCC will review and address one (1) request for additional information (RAI) from each agency.

Payment of application and permit fees shall be the sole responsibility of the City. BCC staff will request checks from the City before the submittal of permit applications to cover any associated fees.

Task 6 – Final Design and Bid Documents

BCC will advance the 90% design documents to a final design and bid documents. Comments from the 90% design submittal and permitting agencies will be incorporated, and the drawings will be finalized. BCC will prepare the 100% design submittal for submission to the City. One virtual meeting is planned with City staff to review the final submittal. A final Engineer's opinion of probable construction cost will be provided to the City.

Task 7 – Bid and Award Services

BCC will attend, record, and prepare minutes for the pre-construction meeting, which will be submitted to the City for review. BCC will also assist the City in addressing contractor questions and preparing an addendum if necessary. BCC will also assist the City in selecting the lowest responsive and responsible bidder.

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 6 of 12

III. SCHEDULE

BCC will perform the work outlined in the scope of work in accordance with the schedule depicted in the table below. Tasks 1 through 6 will be completed within nine (9) months after receiving notice to proceed (NTP). The work associated with Task 5 will be completed in accordance with the permitting agencies' review and approval schedule, but it is anticipated to be completed in 10 months from NTP. Task 7 duration will depend on the City's advertisement and award schedule (anticipated three months). BCC will prepare a detailed schedule after receiving NTP.

	Schedule of Deliverables						
Task(s)	Project Activity Description	Months from NTP					
1	Project Coordination & Data Collection	12 Months					
2	Basis of Design Report (BODR)	4 Months					
3	60% Design Documents	6 Months					
4	90% Design Documents	9 Months					
5	Permitting	10 Months					
6	Development of Final Design Documents	12 Months					
7	Bid and Award Services	15 Months					

IV. COMPENSATION

BCC will be compensated for the scope of work outlined in Task 1 through Task 7, \$396,195.78, on a lump sum basis, in accordance with the terms and conditions in the Contract for Professional Engineering Continuing Services for Civil Engineer Roadway, dated December 7, 2021, (RFQ 4666-21-DCM) between the City and BCC. The fee will include a Project Contingency lump sum of \$25,000.00 to address unforeseen conditions during the design and permitting phases. The table below outlines the estimated fee schedule per task. Exhibit E includes a detailed manhour estimate for each task and fee.

Summary of Compensation					
Task(s)	Project Activity Description	Fee			
1	Project Coordination & Data Collection	\$59,357.18			
2	Basis of Design Report (BODR)	\$67,969.17			
3	60% Design Documents	\$127,004.93			
4	90% Design Documents	\$66,807.38			
5	Permitting	\$36,503.62			
6	Development of Final Design Documents	\$30,975.30			
7	Bid and Award Services	\$7,578.20			
	Project Contingency	\$25,000.00			
	TOTAL	\$421,195.78			

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 7 of 12

BCC will submit to the City monthly invoices for the percentage of work completed during each month for the lump sum tasks.

V. SCOPE OF WORK EXCLUSIONS

The services outlined below are not included as part of the scope of work, although additional service orders can be executed to assist the City with these services if necessary:

- 1. Topographic survey:
 - The City provided a topographic survey and as-built plans for the System 4 Area.
- 2. Utility relocation design
- 3. Design of stormwater pump station for Systems 1 through 3
- 4. Water quality modeling
- 5. Seawall assessment and design
- 6. Title search or ownership determination
- 7. Prepare a public outreach program
- 8. Consumptive Use or dewatering permits
- 9. Tree disposition plans or tree permits
- 10. Irrigation design
- 11. Attend public workshops or meetings
- 12. Update the current Stormwater Master Plan
- 13. Advertise and administer bid and contract award
- 14. Reproduce construction contract documents for bidding purposes
- 15. Prepare and distribute Addendums
- 16. Construction Management services
- 17. CEI inspection services
- 18. Attend Commission meetings
- 19. Prepare as-built plans
- 20. Any work items not included in the Scope of Work

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 8 of 12

We look forward to assisting the City with this important project assignment. If you have any questions or need additional information, please do not hesitate to contact Victor Herrera, PE, or me at (305) 670-2350.

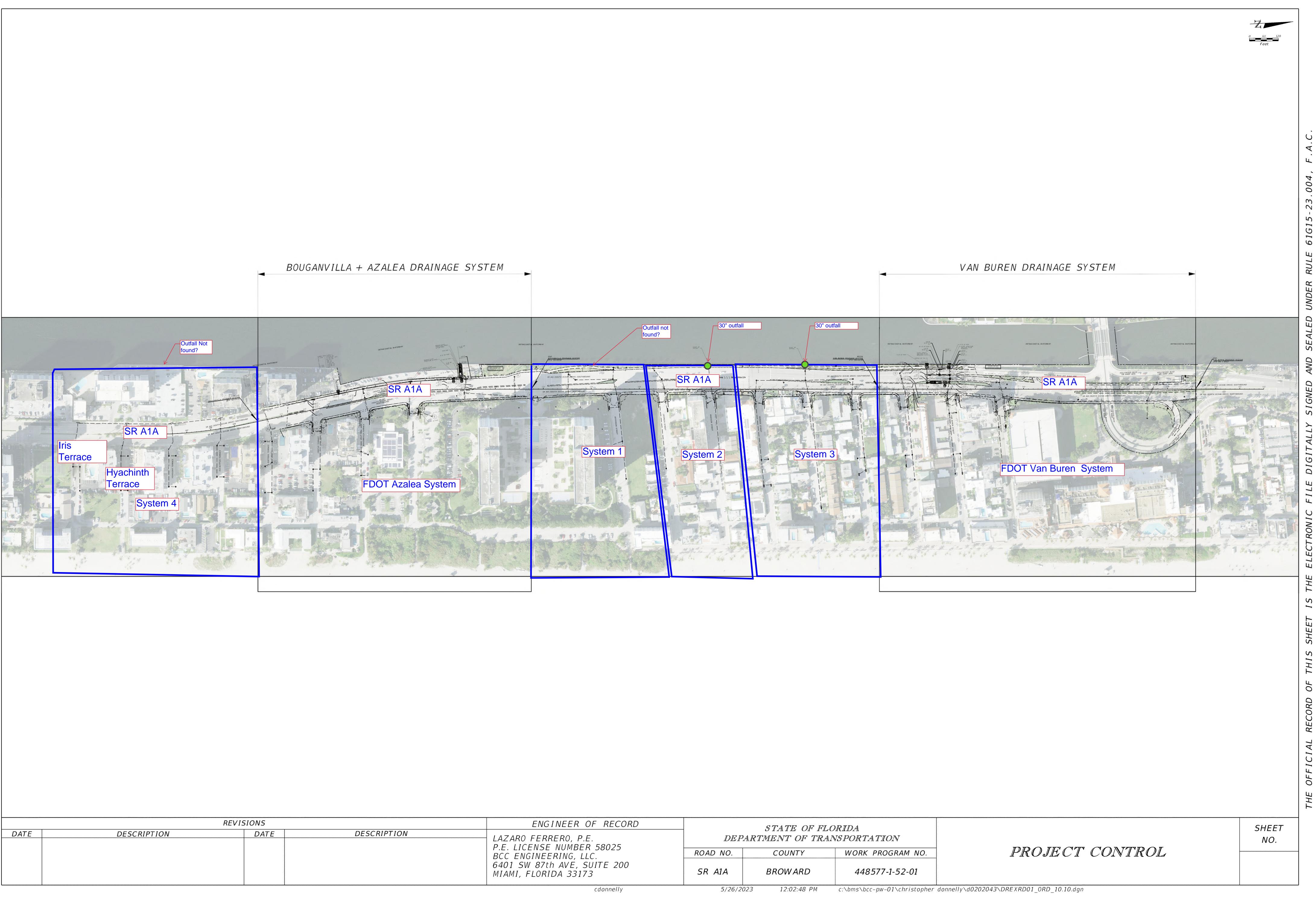
Sincerely **BCC ENGINEERING, LLC**.

Un

Alex Vazquez, PE, CFM Director of Water Resources/Project Manager

 Attachment: Exhibit A – Project Location Map Exhibit B – Manuel G. Vera & Associated, Inc. Proposal Exhibit C – Universal Engineering Science, LLC. Proposal Exhibit D – EScience, Inc. Proposal Exhibit E – Fee Estimate City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 9 of 12

> Exhibit A Project Location Map



DESCRIPTION	ENGINEER OF RECORD LAZARO FERRERO, P.E.	DEPA	STATE OF FI RTMENT OF TRA		
	P.E. LICENSE NUMBER 58025 BCC ENGINEERING, LLC.	ROAD NO.	COUNTY	WORK PROGRAM NO.	PROJ
	6401 SW 87th AVE, SUITE 200 MIAMI, FLORIDA 33173	SR A1A	BROWARD	448577-1-52-01	
	cdonnelly	5/26/202	23 12:02:48 PM	c:\bms\bcc-pw-01\christopher donnelly\	d0202043\DREXRD01_0R

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 10 of 12

> Exhibit B Manuel G. Vera & Associated, Inc. Proposal



July 7, 2023

Survey/SUE Scope of Service

Alex Vazquez, PE, CFM Director of Water Resources BCC 6401 SW 87th Avenue Suite 200 Miami, FL 33173

Project: City of Hollywood Stormwater Pump Station Survey Limits: See Attached Sketch

Below is the scope of services for the Design Survey and Subsurface Utility Engineering (SUE) services for the above referenced project. All scope items are based on Design Survey criteria and are derived from the FDOT Project Activity 27: Survey Staff-Hour spread sheet. In addition to the specific scope items, all work shall be accomplished in accordance with the Standards of Practices for Land Surveyors Rule 5J-17 F.A.C., Florida Statue 472.027.

Survey Scope of Services

Horizontal Control

Set secondary horizontal control as necessary to complete these scope of services utilizing GPS/RTK FPRN methods. Control will be placed in the survey CADD file. Datum: NAD 83/Latest Adjustment.

Vertical Control

Establish elevations on secondary horizontal control utilizing GPS/RTK FPRN methods. Datum: NAVD 88

Channel Survey

Perform a bathymetric survey within an approximate 20' x 20' area centered on an existing outfall. Includes outfall pipe size and invert elevation. See attached sketch for approximate limits.

Deliverable: 3D Cadd file with DTM/elevations and outfall survey information.

Work Zone Safety

Work zone survey safety will be provided as required by applicable standards.

Subsurface Utility Engineering Scope of Services

Subsurface Utility Locates (test holes) – Quality Level A – Bank of 12 Test Holes

MGV will perform up to 12 utility locates (test holes) on utilities found with the project limits as directed by the EOR. Each locate (test hole) will include horizontal coordinates, depth of cover, elevation, size, type, material and general direction of each found utility. MGV will notify Sunshine One-Call 48 hours in advance of performing the utility locates (test holes). A nondestructive vacuum excavation system will be utilized to expose the utilities or perform exploratory test holes. Test holes performed will be of minimum size (usually 1' by 1'). Backfill of test holes will be performed utilizing material removed. Test holes performed in the street will be patched utilizing cold patch. Basic maintenance of traffic (signs, cones) will be included.

Subsurface Utility Designating and Locating Conditions and Understandings

The utility designates and locates are for design purposes only. The Florida One Call must be notified forty-eight (48) hours in advance of any excavation.

Accuracy of Geophysical Mapping techniques, although highly reliable, are subject to outside interference. A few examples are: Soil condition, material conductivity, depth of utility, and various other geological anomalies that may distort or hinder electromagnetic and GPR frequencies.

MGV will make every effort possible utilizing state of the art technology to designate and locate underground utilities; however there are no guarantees that all underground utilities or structures will be detected.

MGV will not access confined spaces and is not included in this fee estimate. If accessing confined spaces are required, MGV will notify the client to discuss options. Additional fees may be applicable.

Additional Clarifications and Understandings

If cap rock or an obstruction is encountered during the test hole phase and further vacuum excavation cannot be completed or performed without the potential for utility damage, MVG will consider the test hole completed, measure the depth to the top of the cap rock or obstruction reached, survey the location and consider the test hole completed and invoice accordingly.

The below fee includes only backfill of test holes utilizing material removed in natural ground or cold patch within asphalt pavement or concrete in sidewalks for the approximate 1' x 1' test hole. If additional restoration is required, MG Vera will provide an additional proposal to cover the additional expense.

Basic maintenance of traffic (signs, cones) is included, but if advanced MOT is required for lane closures, MGV will provide a cost estimate to cover these additional expenses.

This estimate does not include permit fees.

This estimate does not include fees for signed and sealed MOT plans.

Fees:

Survey (Lump SUM):	\$5,085.66
Test Holes (Limiting Amount) – 12 Test Holes \$600.00/test hole	\$7,200.00

We look forward to providing our services and please contact me if you have any questions or require additional information.

Sincerely, Manuel G. Vera & Associates, Inc.

Mark R. Sowers, PSM

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project:	City of Holly	vood Pump S	tation									Cor	nsultant Name:	MG Vera		
County:	Broward											C	Consultant No.:	enter consulta	ints proj. numbe	r.
FPN:	0												Date:	7/7/2023		
FAP No.:	1/0/1900												Estimator:	insert name		
Staff Classification	n Total Staff Hours From "SH Summary	SUR Chief Surveyor Home	SUR Principal Surveyor Home	SUR Senior Surveyor Home	SUR Survey/GIS/SU E Analyst 3 (Senior) Home	E Analyst 2	SUR Survey/GIS/SUE Analyst 1 (Entry) Home							SH	Salary Cost By	Average Rate Per
	Firm"	\$190.97	\$146.67	\$170.92	\$107.91	\$82.20	\$71.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Activity	Activity	Task
27. Survey (Field & Office Support)	14	1	2	3	1	7	0	0	0	0	0	0	0	14	\$1,680	\$120.03
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	14	1	2	3	1	7	0	0	0	0	0	0	0	14		
Total Staff Cost		\$190.97	\$293.34	\$512.76	\$107.91	\$575.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$1,680.38	\$120.03

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

\$0.00	\$0.00	\$0.00	\$0.00		\$1,680.38	\$120.03
				Check =	\$1,680.38	
SALARY RELATE	ED COSTS:					\$1,680.38
OVERHEAD:			0.00%			\$0.00
OPERATING MA	RGIN:		0.00%			\$0.00
FCCM (Facilities	Capital Cost Money):		0.000%			\$0.00
EXPENSES:			0.00%			\$0.00
SUBTOTAL ESTI	MATED FEE:					\$1,680.38
Survey (Field) 3 F	Person Crew					
SUR Party Chief	Home	16		\$ 95.49	/ hour	\$1,527.84
SUR Survey Tech	nnician 3 (Senior) Home	16		\$ 66.45	/ hour	\$1,063.20
SUR Survey Tech	nnician 2 (Junior) Home	16		\$ 50.89	/ hour	\$814.24
Survey (Field) 4 F	Person Crew					
SUR Party Chief	Home	0		\$ 95.49	/ hour	\$0.00
SUR Survey Tech	nnician 3 (Senior) Home	0		\$ 66.45	/ hour	\$0.00
SUR Survey Tech	nnician 2 (Junior) Home	0		\$ 50.89	/ hour	\$0.00
SUR Survey Tech	nnician 1 (Entry) Home	0		\$ 47.89	/ hour	\$0.00
Utility Designate/I	Locate (2 Person SUE Cre	ew)				
SUR SUE Techni	cian 3 (Senior) Home	0		\$ 96.98	/ hour	\$0.00
SUR SUE Techni	cian 2 (Junior) Home	0		\$ 59.87	/ hour	\$0.00
Utility Designate/I	Locate (3 Person SUE Cre	ew)				
SUR SUE Techni	cian 3 (Senior) Home	0		\$ 96.98	/ hour	\$0.00
SUR SUE Techni	cian 2 (Junior) Home	0		\$ 59.87	/ hour	\$0.00
SUR SUE Technician 1 (Entry) Home		0		\$ 59.87	/ hour	\$0.00
Geotechnical Field and Lab Testing						\$0.00
SUBTOTAL ESTI	MATED FEE:					\$3,405.28
Optional Services	6					\$0.00
GRAND TOTAL E	ESTIMATED FEE:					\$5,085.66



City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 11 of 12

> Exhibit C Universal Engineering Science, LLC. Proposal

Alex Vazquez

BCC Engineering, Inc. 6401 SW 87th Avenue Suite 200 Miami, FL 33173 Phone: 305-670-2350 Email: avazquez@bcceng.com

Proposal for Geotechnical Exploration

City of Hollywood GEC Hollywood, FL

Proposal No. 23-7049 Opportunity No. 0630.0623.00013

June 13, 2023



Materials Testing Geotechnical Engineering Environmental Building Sciences & Safety Inspections & Code Compliance Virtual Design Consulting

June 13, 2023

Alex Vazquez BCC Engineering, Inc. 6401 SW 87th Avenue Suite 200 Miami, FL 33173 Phone: 305-670-2350 Email: avazquez@bcceng.com

Reference: Proposal for Geotechnical Exploration City of Hollywood GEC Along Ocean Dr from Eucalyptus Terrace to Iris Terrace, Hollywood, FL 33019 Proposal No. 23-7049 Opportunity No. 0630.0623.00013

Dear Mr. Vazquez:

GFA International, Inc. d/b/a Universal Engineering Sciences (UES) appreciates the opportunity to become a part of your project team. Our team of professionals is dedicated to making this project a success, both on schedule and within budget. We are proud of our commitment to maintaining the highest levels of customer service and client satisfaction, and respectfully submit the following for your consideration.

PROJECT DESCRIPTION

It is UES's understanding that this project is to consist of the design for a stormwater pump station in system 4 along the above-mentioned streets in Miami Beach, Florida. An undated and unauthored site location plan was provided to UES.

GEOTECHNICAL EXPLORATION

At you request, exploration is to consist of three (3) Standard Penetration Test (SPT) borings as close as possible to the proposed construction for this geotechnical study. The borings will be completed with a truck or track-mounted drilling equipment. The depths are needed to evaluate the nature of the subsurface soils and general subsurface conditions for the proposed development. The borings will be performed to depths of 20 feet below grade.

Underground utility clearance will be required prior to commencing the drilling of the SPT borings. Therefore, UES will contact "Sunshine One-Call" Service to obtain underground public utility clearance. UES requests to be notified of the location of any existing private underground utilities and/or structures in the exploratory area prior to the fieldwork. UES will not be responsible for private and/or public underground utilities and/or structures not identified to the field crews.

PURPOSE

The purpose of the services on this project is to explore the subsurface soil/rock conditions and sit preparation recommendations of soil engineering parameters to be used in the evaluation of the site for the proposed construction.

PROPOSED SCOPE OF SERVICES

The geotechnical exploration and report shall include the following at a minimum:

- Perform three (3) standard penetration test (SPT) borings. The borings will be completed to depths of 20 feet below existing grade, utilizing a truck or track-mounted drilling equipment. The SPT borings will be used as an investigative tool.
- Perform one (1) set of corrosion testing in general accordance with FDOT standards on select water sample.
- UES will subcontract Maintenance of Traffic (MOT) services and obtain Right of Way (ROW) and MOT permits, if needed.
- > A software-generated and plotted log of each boring will be prepared.
- > Prepare a site plan showing the approximate test locations.
- Summarize the activities on this project in the form of a Geotechnical Report which will include test procedures used, data collected, evaluation of subsurface soil conditions, and engineering recommendations for the proposed construction.

An estimated LUMP SUM for the scope of services detailed above is \$5,535.

<u>Please Note</u>: This estimate is based on the site being accessible to a truck or track-mounted drilling equipment. If this is not the case, revisions will need to be made to this estimate to accommodate mobile drilling equipment or heavy-equipment to access boring locations. <u>In addition, this estimate assumes fieldwork to be performed during normal business hours.</u>

UES will not exceed the fee stated above unless the encountered soils are significantly different than those anticipated, the site is not accessible to truck-mounted drilling equipment and/or if the report will require additional hours for engineering analysis due to the encountered soils being significantly different than those anticipated. The additional services and their cost shall be negotiated.

ADD ALTERNATE # 1 – PRIVATE UTILITY LOCATES FOR TEST LOCATIONS

If private utility locates are needed, UES can provide Ground Penetrating Radar (GPR) services to locate utilities within the vicinity of the proposed exploration locations. Our boring locations will be based on the results of the GPR and Sunshine One-Call services. If requested, this option can be selected as an add alternate for an additional **LUMP SUM** price of **\$1,500**.

CONDITIONS AND QUALIFICATIONS

UES's terms are C.O.D. (credit cards are accepted) unless a credit application has been approved or credit has been previously established. If credit is established, the terms will be 2/10/net-30days. The pricing contained herein is subject to change if this proposal is not authorized within 90 days from the date of this proposal. If more than 90 days have passed since the date of this proposal, please contact us for an updated proposal. Additional items not listed in this proposal will be quoted upon request. A digitally signed and sealed .pdf report will be provided at no charge. Hard copies of reports can be provided upon request, at a unit rate of \$75.00 per report.

AUTHORIZATION

All services will be conducted in accordance with this proposal and attached Terms and Conditions. To initiate services, please complete and return the included Proposal Acceptance Agreement form. The Terms and Conditions are part of this agreement. The signed proposal acceptance agreement form must be received by UES via fax or email prior to any work being performed, and an original copy must be received before completed reports can be distributed.

CLOSING

UES appreciates the opportunity to submit this proposal and looks forward to working with you as a member of the project team. Please contact the undersigned at 561.347.0070 if you have any questions or comments.

From our team to yours,

Universal Engineering Sciences Registry No. 4930

Alberto J. Mercado, P.E. Geotechnical Department Manager

Carlos Mercado, M.S., P.E. Principal Geotechnical Engineer – South Florida Division

Attachments: Exhibit "A" – UES's Standard Terms & Conditions Exhibit "B" – Report Distribution Information Request For

Reinaldo Villa, M.S., P.E. Branch Manager

Project Name: City of Hollywood GEC **Project Locations:** Ocean Dr from Eucalyptus Terrace to Iris Terrace, Hollywood, FL 33019

Scope of Services and Understanding of Project (See attac	hed proposal or as indicated below)
UES Opportunity No.: 0630.062	3.00013
Geotechnical Exploration	\$5,535
Add ALTERNATIVE#1	TBD

APPROVAL & PAYMENT OF CHARGES

DI CERTIFY THAT THE CLIENT BILLING INFORMATION LISTED ON PAGE 2 OF THIS DOCUMENT IS ACCURATE

CLIENT BILLING INFORMATION: (if different from page 2 of this document)

Company:			
Attention:	Title:		
Address:			
City, State, Zip:			
Phone:	Fax:		
Email:			
Permit No.: (please fill in)			
PROPERTY OWNER IDENTIFICATION: (If other than above)			
Name:			
Address:			
Telephone:	Fax:		
PAYMENT METHOD: (Note: Credit card charges will include a 2.5%	6 administrative fee)		
Net30 (only if credit has been established) Cash Check Numbe			
Credit Card: 🗖 Visa 🗖 Master Card 🗖 Discover 🗖 American Express			
Credit Card Number		CVV Code	Exp. Date
Card Holder NameCa	ard Holder Signature		

Universal Engineering Sciences (UES) reserves the right to withhold all reports until such time as we receive a signed Proposal Acceptance Agreement or other written authorization referencing this in its entirety. This AGREEMENT, the proposal and terms and conditions constitute the entire agreement between the client and UES and supersede all prior written or oral understanding. Please note that pricing is valid for a period of ninety (90) days from proposal date.

The below signed, having full legal authority to bind the Client identified in the foregoing Proposal Agreement, has read the foregoing Proposal Agreement and hereby agrees to all of the terms and conditions contained in UES' Standard Terms and Conditions attached hereto as Exhibit "A" which are incorporated herein by reference as a fundamental and material pert of the Proposal Agreement. The Client agrees and understands that UES' Standard Terms and Conditions have been established in a large measure to allocate certain risks between Client and UES and UES will not initiate services without Client's execution of agreement to the terms of the Proposal Agreement and the Standard Terms and Conditions and other terms and conditions set forth in this Agreement.

PURSUANT TO FLORIDA STATUTE 558.0035, A DESIGN PROFESSIONAL, AS DEFINED IN FLORIDA STATUTE 558.002, ACTING AS AN INDIVIDUAL EMPLOYEE OR AGENT OF UNIVERSAL ENGINEERING SCIENCES MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

AUTHORIZED SIGNATURE:

PRINTED NAME & TITLE:

DATE ACCEPTED:

(See below for service line acceptance)

SERVICES ACCEPTED: GEO____ Add ALT#1____

(Check accepted service line{s}. If none are selected, UES assumes all services have been accepted.)

SECTION 1: RESPONSIBILITIES 1.1 Universal Engineering Sciences, LLC, and its subsidiaries and affiliated companies ("UES"), is responsible for providing the services described under the Scope of Services. The term "UES" as used herein includes all of UES's agents, employees, professional staff, and subcontractors. 1.2 The Client or a duly authorized representative is responsible for providing UES with a clear understanding of the project nature and scope. The Client shall supply UES with sufficient and adequate information, including, but not limited to, maps, site plans, reports, surveys, plans and specifications, and designs, to allow UES to properly complete the specified services. The Client shall also communicate changes in the nature and scope of the project as soon as possible during performance of the work so that the changes can be incorporated into the work product. 1.3 The Client acknowledges that UES's responsibilities in providing the services described under the Scope of Services section is limited to those services described therein, and the Client hereby assumes any collateral or allicities necessitated by or for those services. Such duties may include, but are to thimted to, reporting requirements imposed by any third party such as federal, state, or local entities, the provision of any required notices to any third party, or the securing of necessary permits or permissions from any third parties required for UES's provision of the services of described under where upon by both parties in writing.

SECTION 2: STANDARD OF CARE 2.1 Services performed by UES under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of UES's profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, express or implied, is made. 2.2 Execution of this document by UES is not a representation that UES has visited the site, become generally familiar with local conditions under which the work is to be performed, or correlated personal observations with the requirements of the Scope of Services. It is the Client's responsibility to provide UES with all information necessary for UES to provide the services described under the Scope of Services, and the Client assumes all liability for information not provide to UES that may affect the quality or sufficiency of the services described.

SECTION 3: SITE ACCESS AND SITE CONDITIONS 3.1 Client will grant or obtain free access to the site for all equipment and personnel necessary for UES to perform the work set forth in this Agreement. The Client will notify any possessors of the project site that Client has granted UES free access to the site. UES will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur, and the correction of such damage is not part of this Agreement unless so specified in the Scope of Services. **3.2** The Client is responsible for the accuracy of locations for all subterranean structures and utilities. UES will take reasonable precautions to avoid known subterranean structures, and the Client waives any claim against UES, and agrees to defend, indemnify, and hold UES harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

SECTION 4: BILLING AND PAYMENT 4.1 UES will submit invoices to Client monthly or upon completion of services. Invoices will show charges for different personnel and expense classifications. 4.2 Payment is due 30 days after presentation of invoice and is past due 31 days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1 ½ %) per month, or the maximum rate allowed by law, on past due accounts. 4.3 If UES incurs any expenses to collect overdue billings on invoices, the sums paid by UES for reasonable attorneys' fees, court costs, UES's time, UES's expenses, and interest will be due and owing by the Client.

SECTION 5: OWNERSHIP AND USE OF DOCUMENTS 5.1 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, as instruments of service, shall remain the property of UES. Neither Client nor any other entity shall change or modify UES's instruments of service. 5.2 Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used by the Client for any purpose. 5.3 UES will retain all pertinent records relating to the services performed for a period of five years following submission of the report or completion of the Scope of Services, during which period the records will be made available to the Client in a reasonable time and manner. 5.4 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, are prepared for the sole and exclusive use of Client, and may not be given to any other entity, or used or relied upon by any other entity, without the express written consent of UES. Client is the only entity to which UES owes any duty or duties, in contract or tort, pursuant to or under this Agreement.

SECTION 6: DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS 6.1 Client represents that a reasonable effort has been made to inform UES of known or suspected hazardous materials on or near the project site. 6.2 Under this agreement, the term hazardous materials include hazardous materials, hazardous wastes, hazardous substances (40 CFR 261.31, 261.32, 261.33), petroleum products, polychlorinated biphenyls, asbestos, and any other material defined by the U.S. EPA as a hazardous material. 6.3 Hazardous materials may exist at a site where there is no reason to believe they are present. The discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work. The discovery of unanticipated hazardous materials may make it necessary for UES to take immediate measures to protect health and safety. Client agrees to compensate UES for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials. 6.4 UES will notify Client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client will make any disclosures required by law to the appropriate governing agencies. Client will hold UES harmless for all consequences of disclosures made by UES which are required by governing law. In the event the project site is not owned by Client, Client it is the Client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials. 6.5 Notwithstanding any other provision of the Agreement, Client wives any claim against UES's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with possible reduction of the property's value. Client will be responsible for ultimate disposal of any samples secured by UES which are found to be contaminated.

SECTION 7: RISK ALLOCATION 7.1 Client agrees that UES's liability for any damage on account of any breach of contract, error, omission, or professional negligence will be limited to a sum not to exceed \$50,000 or UES's fee, whichever is greater. If Client prefers to have higher limits on contractual or professional liability, UES agrees to increase the limits up to a maximum of \$1,000,000.00 upon Client's written request at the time of accepting UES's proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or \$400.00, whichever is greater. If Client prefers a \$2,000,000.00 limit on contractual or professional liability, UES agrees to increase the limits up to a maximum of \$2,000,000.00 upon Client's written request at the time of accepting UES's proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or \$400.00, whichever is greater. The additional charge for the higher liability limits is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance. 7.2 Client shall not be liable to UES and UES shall not be liable to Client for any incidental, special, or consequential damages (including lost profits, loss of use, and lost savings) incurred by either party due to the fault of the other, regardless of the nature of the fault, or whether it was committed by Client or UES, their employees, agents, or subcontractors; or whether such liability arises in breach of contract or warranty, tort (including negligence), statutory, or any other cause of action. 7.3 As used in this Agreement, the terms "claim" or "claims" mean any claim in contract, tort, or statute alleging negligence, errors, omissions, strict liability, istatutory liability.

SECTION 8: INSURANCE 8.1 UES represents it and its agents, staff and consultants employed by UES, is and are protected by worker's compensation insurance and that UES has such coverage under public liability and property damage insurance policies which UES deems to be adequate. Certificates for all such policies of insurance shall be provided to Client upon request in writing. Within the limits and conditions of such insurance, UES agrees to indemnify and save Client harmless from and against loss, damage, or liability arising from negligent acts by UES, its agents, staff, and consultants employed by it. UES shall not be responsible for any loss, damage or liability beyond the amounts, limits, and conditions of such insurance or the limits described in Section 7, whichever is less. The Client agrees to defend, indemnify, and save UES harmless for loss, damage or liability arising from acts by Client, Client's agents, staff, and others employed by Client. 8.2 Under no circumstances will UES indemnify Client from or for Client's own actions, negligence, or breaches of contract. 8.3 To the extent damages are covered by property insurance, Client and UES waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance.

SECTION 9: DISPUTE RESOLUTION 9.1 All claims, disputes, and other matters in controversy between UES and Client arising out of or in any way related to this Agreement will be submitted to mediation or non-binding arbitration, before and as a condition precedent to other remedies provided by law. 9.2 If a dispute arises and that dispute is not resolved by mediation or non-binding arbitration, then: (a) the claim will be brought in the state or federal courts having jurisdiction where the UES office which provided the service is located; and (b) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, expert witness fees, and other claim related expenses.

SECTION 10: TERMINATION 10.1 This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof, or in the case of a force majeure event such as terrorism, act of war, public health or other emergency. Such termination shall not be effective if such substantial failure or force majeure has been remedied before expiration of the period specified in the written notice. In the event of termination, UES shall be paid for services performed to the termination notice date plus reasonable termination expenses. **10.2** In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by the Agreement, UES may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expense of termination or suspension shall include all direct costs of UES in completing such analyses, records, and reports.

SECTION 11: REVIEWS, INSPECTIONS, TESTING, AND OBSERVATIONS 11.1 Plan review, private provider inspections, and building inspections are performed for the purpose of observing compliance with applicable building codes. Threshold inspections are performed for the purpose of observing compliance with applicable building codes. Threshold inspections are performed for the purpose of observing compliance with applicable testing standards. UES's performance of plan reviews, private provider inspections, building inspections, threshold inspections, or CMT, or UES's presence on the site of Client's project while performing any of the foregoing activities, is not a representation or warranty by UES that Client's project is free of errors in either design or construction. 11.2 If UES is retained to provide construction monitoring or observation, UES will report to Client any observed work which, in UES's opinion, does not conform to the plans and specifications provided to UES. UES shall have no authority to reject or terminate the work of any agent or contractor of Client. No action, statements, or communications of UES, or UES's site representative, can be construct as modifying any agreement between Client and others. UES's performance of onstruction monitoring or observation is not a representation or warranty by UES that Client's project is free of errors in either design or construction. 11.3 Neither the activities of UES pursuant to this Agreement, nor the presence of UES or its employees, representatives, or subcontractors on the project site. Client acknowledges that Client or its contractor is solely responsible for project jobsite safety. 11.4 Client is responsible for scheduling all inspections at the project site. All testing and inspection services will be performed on a will-call basis. UES will not be responsible for tests and inspections that are not scheduled or performed due to Client's failure to schedule UES's services on the project, or for any claims or damages arising from tests and inspections th

SECTION 12: ENVIRONMENTAL ASSESSMENTS Client acknowledges that an Environmental Site Assessment ("ESA") is conducted solely to permit UES to render a professional opinion about the likelihood or extent of regulated contaminants being present on, in, or beneath the site in question at the time services were conducted. No matter how thorough an ESA study may be, findings derived from the study are limited and UES cannot know or state for a fact that a site is unaffected by reportable quantities of regulated contaminants as a result of conducting the ESA study. Even if UES states that reportable quantities of regulated contaminants may be present or may migrate to the site after the ESA study is complete.

SECTION 13: SUBSURFACE EXPLORATIONS 13.1 Client acknowledges that subsurface conditions may vary from those observed at locations where borings, surveys, samples, or other explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by UES will be based solely on information available to UES at the time of service. UES is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed or provided by UES. 13.2 Subsurface explorations may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous body not previously contaminated. UES is unable to eliminate totally cross-contamination risk despite use of due care. Since subsurface explorations may be an essential element of UES's services indicated herein, Client shall, to the fullest extent permitted by law, waive any claim against UES, and indemnify, defend, and hold UES harmless from any claim or liability for injury or loss arising from crosscontamination allegedly caused by UES's subsurface explorations. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

SECTION 14: SOLICITATION OF EMPLOYEES Client agrees not to hire UES's employees except through UES. In the event Client hires a UES employee within one year following any project through which Client had contact with said employee, Client shall pay UES an amount equal to one-half of the employee's annualized salary, as liquidated damages, without UES waiving other remedies it may have.

SECTION 15: ASSIGNS Neither Client nor UES may delegate, assign, sublet, or transfer its duties or interest in this Agreement without the written consent of the other party.

SECTION 16: GOVERNING LAW AND SURVIVAL 16.1 This Agreement shall be governed by and construed in accordance with the laws of the jurisdiction in which the UES office performing the services hereunder is located. 16.2 In any of the provisions of this Agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired and will survive. Limitations of liability and indemnities will survive termination of this agreement for any cause.

SECTION 17: INTEGRATION CLAUSE 17.1 This Agreement represents and contains the entire and only agreement and understanding among the parties with respect to the subject matter of this Agreement and supersedes any and all prior and contemporaneous oral and written agreements, understandings, representations, inducements, promises, warranties, and conditions among the parties. No agreement, understanding, representation, inducement, promise, warranty, or condition of any kind with respect to the subject matter of this Agreement shall be relied upon by the parties unless expressly incorporated herein. 17.2 This Agreement may not be amended or modified except by an agreement in writing signed by the party against whom the enforcement of any modification or amendment is sought.

SECTION 18: WAIVER OF JURY TRIAL Both Client and UES waive trial by jury in any action arising out of or related to this Agreement.

SECTION 19: INDIVIDUAL LIABILITY PURSUANT TO FLORIDA STAT. 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT OF UES MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

UES DOCS No. 1823094 Revised 12/04/2020

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 12 of 12

> Exhibit D EScience, Inc. Proposal



Corporate Headquarters 6575 West Loop South, Suite 300 Bellaire, TX 77401

Main: 713.520.5400



June 13, 2023

Alex Vazquez, PE, CFM Director of Water Resources BCC Engineering 6401 SW 87th Avenue, Suite 200 Miami, Florida 33173

Subject: Proposal for Marine Resource Survey and Permitting Support City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems Between Greenbriar Terrace and Eucalyptus Terrace Hollywood, Broward County, Florida RES Proposal Number PRJ109426

Dear Mr. Vazquez:

RES Florida Consulting, LLC d/b/a E Sciences (RES) is pleased to submit this proposal for conducting a marine resource survey and providing permitting support for design of a stormwater pump station located between Iris Terrace and Hollywood Boulevard in Hollywood, Broward County, Florida. RES' understanding of the project is based on communication between Mr. Vazquez of BCC Engineering (the client) and Ms. Nadia Locke of our Dania Beach office. We were also provided with the project location and extent of the seagrass survey.

The following outlines our understanding of the project.

The client was tasked by the City of Hollywood (City) to provide a design proposal for a stormwater pump station in System 4, located between Iris Terrace and Hollywood Boulevard. The client requested the assistance of RES to perform a marine resource survey at the outfall location, prepare a summary report, provide Environmental Resource Permitting support and lead U.S. Army Corps of Engineers (USACE) Section 404 permitting efforts.

Our proposed scope of services and deliverables, the schedule, our fee and the terms and conditions governing the project can be found in the attached Services Agreement.

As our written authorization, please complete, sign and return one copy of the attached Services Agreement. A scanned version of the executed Services Agreement can be emailed to us. Please note that the terms and conditions contained within the Services Agreement are a part of this proposal.

We appreciate the opportunity to offer our professional services on this project. If you have any questions concerning this proposal, please contact us at 954-484-8500.

Sincerely,

RES Florida Consulting, LLC d/b/a E Sciences

Jenifer Lavas

Jennifer Savaro, CA Scientist IV <u>jsavaro@res.us</u> | 954-484-8500

Bayle L. Stone

Gayle Stone Scientist V <u>gstone@res.us</u> 954-484-8500

SERVICES AGREEMENT

THIS SERVICES AGREEMENT (this "**Agreement**") is entered into effective as of _____ (the "Effective Date"), by and between BCC Engineering (BCC), with offices located at 6401 SW 87th Avenue, Suite 200, Miami, Florida 33173 (hereinafter called "Customer"), and RES Florida Consulting, LLC d/b/a E Sciences (RES), with its principal place of business located at c/o Resource Environmental Solutions, LLC, 6575 West Loop South, Suite 300, Bellaire, Texas 77401 (hereinafter called "**RES**" and, together with Customer, the "**Parties**" and, each individually, a "**Party**").

RECITALS

WHEREAS, Customer desires to engage RES to provide the Services (defined below), and RES is willing to perform such Services, subject to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants herein contained and of other good and valuable consideration, the Parties agree as follows:

AGREEMENTS

1. <u>Scope of Services</u>. RES shall perform the services described on <u>Exhibit 1</u> attached hereto (collectively, the "**Services**"). The Parties may agree in writing to amend <u>Exhibit 1</u> from time to time. If any provision of an Exhibit is inconsistent or conflicts with any provision of this Agreement, the terms of the Exhibit shall control.

2. <u>Prime Contracts</u>. From time to time, Customer may enter into a contract or contracts (each, a "**Prime Contract**") with an end customer (each such customer, an "**End Customer**") for the provision of certain services specified therein, a copy of which contract has been provided to RES prior to the Effective Date of this Agreement. If permitted under a Prime Contract, Customer may subcontract to RES its obligation to perform a portion of the services under the Prime Contract. To the extent that the terms of a Prime Contract are agreeable to RES, such terms shall be incorporated into the terms of this Agreement.

3. <u>Term</u>. The term of this Agreement (the "**Term**") shall commence on the Effective Date and shall continue until the date upon which the Services are completed by RES, unless sooner terminated pursuant to <u>Section 4</u>.

4. <u>Termination.</u>

(a) Either Party may terminate this Agreement, effective upon written notice to the other Party (the "**Defaulting Party**") in the event the Defaulting Party materially breaches this Agreement, and such breach is incapable of cure, or with respect to a material breach capable of cure, the Defaulting Party fails to commence curing of such breach after receipt of written notice of such breach and thereafter fails to diligently continue curing such breach, subject to any delays or interruptions which may occur as a result of unseasonal conditions for planting or any Force Majeure event (as defined in <u>Section 14(a)</u>) in which case the applicable cure period shall be tolled until the unseasonal conditions or Force Majeure Event has subsided.

(b) Notwithstanding anything to the contrary herein, if Customer fails to pay any amount when due hereunder and such failure continues for ten (10) days after Customer's receipt of written notice of nonpayment, then RES (1) may retain all prior payments received from Customer in relation to the Services (even if such Services have not yet been performed) (2) cease providing Services unless and until such

breach is cured to RES's reasonable satisfaction, and (3) in addition to its other remedies at law or in equity, terminate this Agreement by written notice to Customer.

(c) Upon expiration or earlier termination of this Agreement, Customer shall pay RES for (i) all Services satisfactorily performed prior to the effective date of termination, including any milestone payments, and (ii) all costs, including court costs, any attorney's or expert's fees, incurred by RES prior to, and up to, the effective date of termination.

5. <u>Payment to RES</u>.

(a) Customer shall pay RES the amounts set forth on <u>Exhibit 2</u>, which amounts shall become fully due and payable within thirty (30) days after the receipt by Customer of an invoice. Except for invoiced payments that Customer has successfully disputed, all late payments shall bear interest at the lesser of the rate of 1.5% per month or the highest rate permissible under applicable law, calculated daily and compounded monthly.

(b) All amounts required to be paid by Customer under this Agreement shall be in US Dollars and paid by check or wire transfer in accordance with instructions to be provided by RES, in good and sufficient funds, or by other method reasonably acceptable to RES.

(c) Customer shall be responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state or local governmental entity on any amounts payable by Customer hereunder; provided, that, in no event shall Customer pay or be responsible for any taxes imposed on, or with respect to, RES's income, revenues, gross receipts, personnel or real or personal property or other assets.

(d) Customer will not retain any amounts from or set-off against any payment due and payable to RES.

6. <u>Customer's Responsibilities</u>. The Customer shall:

(a) timely respond to any reasonable requests from RES for instructions, information or approvals required by RES to provide the Services.

(b) reasonably cooperate with RES in its performance of the Services and provide access to Customer's premises, employees, contractors, and equipment as required to enable RES' timely provision of the Services, including the right to enter and exit the property on which the Services will be performed (the "**Property**") at such reasonable times to allow such parties to perform the Services.

(c) take all steps necessary, including fully cooperating with RES and obtaining any required licenses, permits or consents, to prevent delay of RES's provision of the Services and to allow RES access to the Property.

7. <u>RES Warranties</u>.

(a) RES warrants that it shall perform the Services (x) in accordance with the terms and subject to the conditions set out in this Agreement; (y) using personnel of required skill, experience and

qualifications; and (z) in a timely, workmanlike, and professional manner in accordance with generally recognized industry standards for similar services.

(b) RES's sole and exclusive liability and Customer's sole and exclusive remedy for breach of the warranties set forth in <u>Section 7(a)</u> shall be as follows:

i. RES shall use commercially reasonable efforts to promptly cure any such breach; provided, that if such breach is incapable of cure, or with respect to a material breach capable of cure, RES fails to commence to cure such breach after receipt of written notice from the Customer of such breach, or thereafter fails to continue curing such breach with diligence, Customer may, at its option, terminate this Agreement in accordance with <u>Section 43</u>.

ii. The foregoing remedy shall not be available unless Customer provides written notice of such breach within 30 days following completion of the Services by RES.

(c) EXCEPT FOR THOSE WARRANTIES EXPRESSLY PROVIDED FOR IN THIS <u>SECTION 7</u>, RES MAKES NO OTHER ORAL OR WRITTEN WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OR TRADE, AND ALL OTHER ORAL OR WRITTEN WARRANTIES, EXPRESS AND IMPLIED, ARE HEREBY EXPRESSLY DISCLAIMED. CUSTOMER FURTHER ACKNOWLEDGES THAT IT HAS NOT RELIED UPON ANY REPRESENTATIONS OR WARRANTIES (OTHER THAN THOSE SET FORTH IN THIS <u>SECTION 7</u>) MADE BY ANY OTHER PERSON IN ENTERING INTO THIS AGREEMENT.

8. <u>Limitation of Liability</u>.

(a) IN NO EVENT SHALL RES OR ANY OF ITS AFFILIATES BE LIABLE TO CUSTOMER, OR ANY OTHER THIRD PARTY OR PERSON, FOR CLAIMS OR LOSSES ARISING OUT OF THIS AGREEMENT WHICH EXCEED THE AMOUNT OF RECOVERABLE INSURANCE, REGARDLESS OF WHETHER ANY ACTION OR CLAIM IS BASED UPON CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE) OR STRICT LIABILITY.

(b) NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT TO THE CONTRARY, NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO THE OTHER PARTY OR TO ANY THIRD PARTY FOR ANY LOSS OF USE, REVENUE, OR PROFIT, BUSINESS OPPORTUNITY OR DIMINUTION IN VALUE, LOSS OF FACILITIES OR RIG DOWNTIME, OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL, OR PUNITIVE DAMAGES WHETHER ARISING OUT OF BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, REGARDLESS OF WHETHER SUCH DAMAGE WAS FORESEEABLE AND WHETHER OR NOT RES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE.

9. <u>Insurance</u>. Both Parties shall, during the Term of the Agreement, obtain and maintain the following minimum types and limits of insurance: (i) commercial general liability insurance, including bodily injury and property damage, with coverage limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate, which policy shall include contractual liability coverage insuring the activities of each respective

Party under this Agreement; (ii) Worker's Compensation insurance as required by statute, with no less than the greater of (i) \$1,000,000 per occurrence, or (ii) the minimum amount required by applicable law; (iii) commercial automobile liability insurance, including bodily injury and property damage, for vehicles used in connection with the performance of the Services, whether owned, leased, or hired by either Party, with limits no less than \$1,000,000, combined single limit per occurrence; and (iv) if RES is supplying engineering and/or design services, professional liability insurance with limits no less than \$1,000,000.00, combined single limit per occurrence; and omissions. All insurance policies of a Party, excluding Workers' Compensation and professional liability, shall name the other Party as an additional insured but only to the extent of those liabilities assumed by a Party under this Agreement, and shall be primary and non-contributory to any insurance otherwise carried in the name of and/or for the benefit of the other Party. Each Party shall require its insurer to waive all rights of recovery from or subrogation against the other Party.

10. <u>Confidentiality</u>. From time to time during the Term of this Agreement, either Party (as the "**Disclosing Party**") may disclose or make available to the other Party (as the "**Receiving Party**"), nonpublic, proprietary, and confidential information of Disclosing Party, including, but not limited to, any reports, plans, drawings, specifications, calculations, maps, surveys, plats, blueprints, sketches, notes, data and samples of Disclosing Party ("**Confidential Information**"). The Receiving Party shall protect and safeguard the confidentiality of the Disclosing Party's Confidential Information with at least the same degree of care as the Receiving Party would protect its own Confidential Information and not disclose any such Confidential Information to any person or entity, except to the Receiving Party's employees who need to know the Confidential Information to perform its obligations under this Agreement.

11. <u>Indemnification</u>.

RES' INDEMNITY. RES AGREES TO PROTECT, DEFEND, INDEMNIFY, AND (a) AND HOLD HARMLESS CUSTOMER, ITS AFFILIATES, ITS CONTRACTORS SUBCONTRACTORS (OTHER THAN THOSE FALLING UNDER THE UMBRELLA OF THE RES GROUP), AND ITS AND THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, REPRESENTATIVES AND INVITEES ("CUSTOMER GROUP") FROM AND AGAINST ALL CLAIMS, DEMANDS, LOSSES, AND CAUSES OF ACTION (OF EVERY KIND AND CHARACTER AND WITHOUT LIMIT AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF) (COLLECTIVELY "CLAIMS") THAT ARISE OUT OF OR ARE RELATED TO THIS AGREEMENT AND ARE BEING ASSERTED BY ANY PERSON ON ACCOUNT OF THE BODILY INJURY OR DEATH OF A MEMBER OF RES, ITS AFFILIATES AND SUBCONTRACTORS, AND ITS AND THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, REPRESENTATIVES AND INVITEES ("RES GROUP"), OR DAMAGE TO OR LOSS OF PROPERTY OF RES GROUP, REGARDLESS OF WHETHER SUCH DAMAGE OR LOSS IS CAUSED BY THE NEGLIGENCE (SOLE, JOINT, CONCURRENT, ACTIVE OR PASSIVE) OR FAULT, OR STRICT LIABILITY, OF CUSTOMER GROUP, EXCEPTING ONLY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF CUSTOMER GROUP.

(b) <u>CUSTOMER'S INDEMNITY</u>. CUSTOMER AGREES TO PROTECT, DEFEND, INDEMNIFY, AND HOLD HARMLESS RES GROUP FROM AND AGAINST ALL CLAIMS THAT ARISE OUT OF OR ARE RELATED TO THIS AGREEMENT AND ARE BEING ASSERTED BY ANY PERSON ON ACCOUNT OF THE BODILY INJURY OR DEATH OF A MEMBER OF CUSTOMER GROUP, OR DAMAGE TO OR LOSS OF PROPERTY OF CUSTOMER GROUP, REGARDLESS OF WHETHER SUCH DAMAGE OR LOSS IS CAUSED BY THE NEGLIGENCE (SOLE, JOINT, CONCURRENT, ACTIVE OR PASSIVE) OR FAULT, OR STRICT LIABILITY, OF RES GROUP, EXCEPTING ONLY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF RES GROUP.

(c) SUBJECT TO <u>SECTION 11(A)</u> AND <u>SECTION 11(B)</u> ABOVE, EACH PARTY AGREES THAT IT SHALL PROTECT, DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OTHER PARTY FROM AND AGAINST ANY THIRD-PARTY CLAIM TO THE EXTENT CAUSED BY THE NEGLIGENCE (SOLE, JOINT, CONCURRENT, ACTIVE OR PASSIVE) OR FAULT, OR STRICT LIABILITY OF THE INDEMNIFYING PARTY'S GROUP (INCLUDING ANY INTENTIONAL OR WILLFUL MISCONDUCT) IN CONNECTION WITH THE PERFORMANCE OF ITS OBLIGATIONS UNDER THIS AGREEMENT.

12. <u>RES Subcontractors</u>. RES, at its sole cost and expense, may subcontract, delegate, or otherwise engage the services of any third-party contractor or subcontractor (each, a "**Subcontractor**") to perform all or any portion of the Services.

13. <u>Intellectual Property</u>. All intellectual property rights, including copyrights, patents, patent disclosures and inventions (whether patentable or not), trademarks, service marks, trade secrets, know-how and other confidential information, trade dress, trade names, logos, corporate names and domain names, together with all of the goodwill associated therewith, derivative works and all other rights (collectively, "**Intellectual Property Rights**") in and to all documents, work product and other materials that are delivered to Customer under this Agreement or prepared by or on behalf of the RES in the course of performing the Services (collectively, the "**Deliverables**") shall be owned by RES. RES hereby grants Customer a license to use all intellectual property rights in the Deliverables free of additional charge and on a non-exclusive, worldwide, non-transferable, non-sublicensable, fully paid-up, royalty-free and perpetual basis to the extent necessary to enable Customer to make reasonable use of the Deliverables and the Services.

14. <u>Miscellaneous</u>.

(a) Force Majeure. Except for the payment of monetary amounts due pursuant to Section 5 hereof, any delay or failure of either Party to perform its obligations under this Agreement will be excused to the extent that the delay or failure was caused directly by an event beyond such Party's reasonable control, without such Party's fault or negligence, and that by its nature could not have been foreseen by such Party or, if it could have been foreseen, was unavoidable, which events may include natural disasters, floods, fires, or explosions, strikes, riots, acts of God, diseases, epidemics, pandemics, including the Covid-19 pandemic, or quarantines, shortages of labor or materials, war, terrorist acts or activities, orders, laws, regulations, or restrictions, national, or regional, or local emergencies, governmental shutdowns or disturbances, or adverse determinations from any governing authority (each, a "Force Majeure Event"). In addition, RES may (b) cancel the project and any Services performed in connection therewith, without liability, if such cancellation is (i) recommended or required by any recognized governmental or regulatory body or non-governmental organization having at least a city-wide reputation for protecting public health and welfare, or (ii) in the judgment of RES required to protect the health and well-being of any employees, officers, directors, agents or representatives of RES. The Party alleging a Force Majeure Event shall give the other Party prompt written notice of any event or circumstance resulting in a Force Majeure Event, and the anticipated duration of such Force Majeure Event. The Party affected by a Force Majeure Event shall

use all diligent efforts to end the Force Majeure Event, ensure that the effects of any Force Majeure Event are minimized, and resume full performance under this Agreement.

(b) <u>Amendments</u>. This Agreement may not be changed, amended or modified except by an instrument in writing signed by all Parties.

(c) <u>Governing Law</u>. This Agreement shall be governed by and construed under the laws of the state in which the project site is located, without reference to choice of law provisions.

(d) <u>Counterparts; Execution</u>. This Agreement may be executed in multiple counterparts, including a facsimile or PDF scanned version thereof, each of which when so executed will constitute an original, but all of which taken together will constitute one and the same instrument. The Parties agree that the electronic signature of a Party to this Agreement shall be as valid as an original signature of such Party and shall be effective to bind such Party to this Agreement. Each Party represents that the person signing this Agreement on its behalf is duly authorized to sign.

(e) <u>Notices</u>. All notices required or permitted hereunder shall be in writing and shall be served on the Parties at the physical or electronic mail addresses set forth on their signature pages hereto (or to such other address that the receiving Party may designate from time to time in accordance with this Section).

(f) <u>Severability: Waiver: Entire Agreement</u>. If any portion of this Agreement is held invalid or inoperative, then so far as is reasonable and possible the remainder of this Agreement shall be deemed valid and operative, and, to the greatest extent legally possible, effect shall be given to the intent manifested by the portion held invalid or inoperative. No waiver by any Party of any of the provisions of this Agreement shall be effective unless explicitly set forth in writing and signed by the Party so waiving. This Agreement (including any schedule, exhibits, or amendments) embodies the entire agreement between the Parties and supersedes all prior agreements and understandings relating to the provision of the Services.

(g) <u>No Third-Party Beneficiaries</u>. This Agreement benefits solely the Parties to this Agreement and their respective permitted successors and assigns and nothing in this Agreement, express or implied, confers on any other person any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement

(h) <u>Assignment; Successors and Assigns</u>. This Agreement shall be binding upon the Parties and their respective successors and assigns; however, this Agreement may not be assigned by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed. The foregoing restriction shall not be deemed to prohibit (i) the assignment or transfer of this Agreement by either Party to (A) any third party that controls, is controlled by, or is under common control with, the assigning Party, or (B) any purchaser of all, or substantially all, of the assigning Party hereunder, or (ii) the pledge or collateral assignment of this Agreement, or any rights and/or remedies hereunder, by any Party to its primary lender(s) as collateral for such Party's obligations under any secured credit facility.

(i) <u>Relationship of the Parties</u>. The relationship between the Parties is that of independent contractors. Nothing contained in this Agreement shall be construed as creating any agency, partnership,

joint venture or other form of joint enterprise, employment or fiduciary relationship between the parties, and neither party shall have authority to contract for or bind the other party in any manner whatsoever.

(j) Equal Opportunity Clause. To the extent not exempt, Customer and RES will comply with the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a), and 60-741.5(a). These regulations prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, or status as a qualified individual with a disability. These regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or status as a qualified individual with a disability. To the extent not exempt, Customer and RES will also comply with the requirements of 29 CFR Part 471, Appendix A.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, Customer and RES have executed this Agreement effective as of the Effective Date.

RES:

RES Florida Consulting, LLC d/b/a E Sciences (RES)

By:	
Name:	
Title:	

Address:

200 E Dania Beach Boulevard, Suite 106

Dania Beach, FL 33004

 Attn:
 Jennifer Savaro_____

 Email:
 jsavaro@res.us_____

With copies of all notices to:

c/o Resource Environmental Solutions, LLC 6575 West Loop South, Suite 300 Bellaire, Texas 77401 Attn: Legal Department Email: <u>contracting@res.us</u> IN WITNESS WHEREOF, Customer and RES have executed this Agreement effective as of the Effective Date.

CUSTOMER:

DOOD		
BCC Engineerin	וסר	
Dee Engineern	-8,	

By:	
Name:	
Title:	

Address:

6401 SW 87 th Avenue	
Suite 200	
Miami, Florida 33173	
Attn: Alex Vazquez, PE, CFM	_
Email: avazquez@bcceng.com	

EXHIBIT 1

SERVICES

1. Services.

• Task 1 – Marine Resource Survey

RES will review client and online data regarding the survey area. RES marine biologists will conduct a marine resource survey at the Site in accordance with the Florida Department of Environmental Protection (FDEP) Guidance on Surveys for Potential Impacts to Submerged Aquatic Vegetation, dated December 8, 2020 and generally accepted standards following federal, state and local regulations, to identify the presence of benthic communities and estuarine resources that may be present (i.e. mangroves, seagrasses, corals, sponges and oysters beds, etc.). Our scientists will use SCUBA equipment and mapping of applicable benthic resources will be accomplished using a Trimble handheld Global Positioning System (GPS) receiver and mapped in ArcGIS. Seagrass beds larger than one square meter will be identified and mapped.

It is important to note that seagrass surveys must be performed within the seagrass growing season of June 1 through September 30 as designated by the USACE and the National Marine Fisheries Service (NMFS). A seagrass survey performed outside of the designated growing season may be deemed invalid or inconclusive by the regulatory agencies.

• Task 2 – Marine Resources Summary Report

RES will prepare a marine resources summary report in support of ERP permitting upon completion of the field work. The report will include a description of our methods and findings of the benthic resources assessment, and maps of species composition and densities of regulated resources identified, and protected species observed. Our deliverable will be submitted to you in PDF format. We will also provide the data as GIS shapefiles, if requested. The Marine Resources Summary Report will present the findings, including a figure showing general distribution of benthic resources. RES will review the report with the client and answer any questions in regard to how the findings could affect permitting. This report will be submitted to you for you to include with the ERP permit application.

RES' deliverable will be prepared on behalf of our Primary Client for their exclusive use. If a third party is to rely on this report, then that party must execute a Secondary Client Agreement with RES. Use of this report for purposes beyond those reasonably intended by our Primary Client and RES will be at the sole risk of the user.

• Task 3 – Permitting Support

RES will provide permitting support for state ERP permitting and lead USACE Section 404 permitting efforts.

RES will initiate the permitting process with FDEP and USACE through pre-application discussions. Pre-application meetings will be held with each agency to present the project and to coordinate preliminary details.

RES will prepare the Section 404 permit application for the USACE. The client must provide RES with permittable plans, engineering documents (surveys, geotechnical investigations, turbidity control plans, drainage and structural design, etc.) and other engineering-related information as required for the application. RES will provide the client a list of surveys, drawings and documents that will be required.

RES will prepare narrative responses to environmental agency Requests for Additional Information (RAIs) regarding questions related to our marine resources survey. We have included time for responding to one RAI per agency. Response to the RAIs is limited to clarification of items previously submitted. If RAIs result from changes to the design of the project after submittal of the permit applications, require additional engineering calculations, details, or plans not provided in the original submittal, responding to those items is outside of the scope of services included herein. Additionally, if an agency requests an additional study that is not contemplated herein, this may also be beyond the scope of services.

The following assumptions and considerations pertain to the scope.

- The survey must be performed during the timeframe of June 1 through September 30.
- The City will be required to pay the application and permit fees as well as other fees assed by the regulatory agencies (mitigation fee).

2. **Project Schedule**.

RES is prepared to initiate the benthic survey between June 1 and September 30, 2023. Please note that in order for the agencies to consider the benthic survey to be valid, it must be conducted within this time frame. Our report will be available within three weeks of completion of the benthic survey. Permit application preparation and responses to RAIs will follow collaboration with you and the City and may take up to 30 days.

3. **Project Documentation**.

Customer has provided to RES the following documentation, plans, specifications, or other materials relating to the Project:

• Env Site Location pdf

EXHIBIT 2

COMPENSATION

1. **PAYMENT**.

Customer shall pay to RES the following amount(s):

[X] Lump Sum Basis equal to \$18,000.00 (Lump Sum), payable as follows:

Milestone/Date	Payment Amount					
Percent Complete invoiced monthly	Based on percent complete					

Tasks 1-3 will be conducted for a lump sum fee of \$18,000.00. We propose to perform the above scope of services for the following fees:

Task 1: Marine Resource Survey	\$5,100.00
Task 2: Marine Resources Summary Report	\$2,400.00
Task 3: Permitting Support	\$10,500.00
Total	\$18,000.00

If unforeseen conditions should require services beyond the scope of services described herein, RES will notify you promptly of additional costs necessary to complete the project, prior to proceeding. Services beyond those described herein would be invoiced in accordance with our standard schedule of fees at the applicable rates. Please note that payment of each invoice is due upon receipt.

2. **REIMBURSABLE EXPENSES**.

None.

3. INVOICING.

RES shall invoice Customer monthly based on percent complete.

City of Hollywood Stormwater Pump Station Analysis and Design for Drainage Systems between Iris Terrace and Hollywood Boulevard August 15, 2023 Page 13 of 13

> Exhibit E Fee Estimate



EXHIBIT E

CITY OF HOLLYWOOD CITY OF HOLLYWOOD STORMWATER PUMP STATION ANALYSIS AND DESIGN FOR DRAINAGE SYSTEMS BETWEEN IRIS TERRACE AND HOLLYWOOD BOULEVARD

FEE ESTIMATE

Date Estimated: 8/15/2023

BCC Staff by Category											
WORK ACTIVITY	Principal/QC	Project Manager	Senior Project Engineer, PE	Project Engineer, PE	Engineer, El	GIS Tech	CADD Technician	Clerical	TOTAL HOURS	LABOR COST	Comments/Assumptions
HOURLY RATE	\$269.25	\$224.81	\$180.79	\$146.98	\$118.86	\$122.60	\$87.20	\$50.00			
Task 1 – Project Coordination and Data Collection	0	21	43	45	24	10	4	0	147	\$59,357.18	
Kick-off meeting and minutes		3	3	5					11	\$1,951.70	In-person - 3 eng, 3 hours
Monthly progress meetings		12	12	6	6				36	\$6,462.24	12 meetings - virtual meeting and meeting minutes
Field site visit			8	8					16	\$2,622.16	1 day, 2 eng
Prepare field report		1	2	4		2			9	\$1,419.51	
Collect and review data from, City, FDOT, Broward County, and CDM		2	4	6	4	2	2		20	\$2,949.70	
Develop data catalog		1	2	4	2	4			13	\$1,902.43	
Task 1.1 - Surveying and Utility Located									0	\$12,285.66	See Exhibit B for MGV proposal
Task 1.2 - Geotechnical Investigation									0	\$5,535.00	See Exhibit C for UES proposal
Task 1.3 - Environmental assessment									0	\$18,000.00	See Exhibit D for ESC proposal
Coordinate with sub-consultants		2	12	12	12	2	2		42	\$6,228.78	Assume 12 hours per sub
Task 2 – Basis of Design Report (BODR)	0	27	74	196	96	35	46	0	474	\$67,969.17	
Develop ICPR4 models for Systems 1 through 4		4	24	80	40	8	8		164	\$23,429.40	Build off of the FDOT Azalea and Van Buren models
Perform design storm simulations and develop flood maps		2	4	8	12	8			34	\$4,755.74	5 critical design storms
Perform alternative analyses		6	16	40	12				74	\$11,547.02	2 alternatives
Develop conceptual design schematic		4	12	24	16	12	32		100	\$12,759.60	2 alternatives
Prepare opinion of probable construction cost		2	4	12					18	\$2,936.54	2 alternatives
Attend meeting with City to present findings		3	4						7	\$1,397.59	In-person - 2 eng, 3 hours
Prepare draft BODR		4	8	24	12	4	4		56	\$8,138.60	
Prepare final BODR		2	2	8	4	3	2		21	\$3,004.68	Electronic submittal
Task 3 – 60% Design Documents	0	33	156	312	140	8	320	0	969	\$127,004.93	
Prepare 60% design plan		24	120	240	120	8	320		832	\$105,513.44	Electronic submittal
Prepare 60% technical specifications		4	24	60	16				104	\$15,958.76	
Prepare 60% opinion of probable construction Cost		2	8	12	4				26	\$4,135.14	
Meeting to discuss comments on 60% plans		3	4						7	\$1,397.59	Virtual meeting and meeting minutes
Task 4 – 90% Design Documents	0	18	80	150	70	4	200	0	522	\$66.807.38	
Prepare 90% design plan		12	60	120	60	4	200		456	\$56,244.72	Electronic submittal
Prepare 90% technical specifications		2	12	24	8				46	\$7,097.50	
Prepare 90% opinion of probable construction Cost		1	4	6	2				13	\$2.067.57	
Meeting to discuss comments on 90% plans		3	4						7	\$1,397.59	Virtual meeting and meeting minutes
Task 5 – Permitting	0	18	80	44	52	18	36	0	248	\$36,503.62	
Attend pre-application meeting with SFWMD	-		2	2	4			-	8	\$1,130,98	Virtual meeting and meeting minutes
Attend pre-application meeting with BCEPGMD			2	2	4				8	\$1,130.98	Virtual meeting and meeting minutes
Attend pre-application meeting with FDOT			2	2	4				8	\$1,130.98	
Attend pre-application meeting with ACOE			2	2	4				8	\$1,130.98	
Prepare permit applications		2	8	4	4	2	4		24	\$3,553.30	Assume 4 applications
Address RAIs		2	8	4	4	2	4		24	\$3,553.30	Assume 4 RAIs-one per permit agency
Task 6 – Final Design and Bid Documents	0	4	30	76	38	2	100	0	250	\$30.975.30	
Prepare final design plans	•	2	24	60	32	2	100	Ŭ.	220	\$26,376.10	Electronic submittal
Prepare final technical specifications		1	4	12	4	2	100		220	\$3,187.17	
Prepare final opinion of probable construction Cost		1	2	4	2				9	\$1.412.03	
Task 7 – Bid and Award Services	0	7	15	10	8	0	10	0	50	\$7,578.20	
Attend pre-bid meeting	3	3	3	10	0		.0	5	50	\$1,216.80	2 eng in person, 3 hours
Respond to contractor questions		2	4	6	8		2		22	\$3.179.94	
Support with Addendum		2	8	4	0		8		22	\$3,181.46	1 addendum
		۷.	U	4			U		22	\$3,181.40 \$25,000.00	
Project Contingency	0	400	470	000	400	77	74.0	0		\$23,000.00	
Total Hours	0	128	478	833	428	77	716	0			
Total Fee	\$0.00	\$28,775.68	\$86,417.62	\$122,434.34	\$50,872.08	\$9,440.20	\$62,435.20	\$0.00	2660	\$421,195.78	