

SERVICES AUTHORIZATION #II ENGINEERING SERVICES AGREEMENT

THIS SERVICES AUTHORIZATION is made and entered into this _____ day of _____, 20____, by and between the **City of Orlando, Florida**, a municipal corporation existing under the laws of the State of Florida (CITY), and **Hazen and Sawyer P.C.**, doing business locally at 4767 New Broad Street, Orlando, Florida 32814 (ENGINEER).

WHEREAS, the CITY and the ENGINEER have previously entered into an agreement for the ENGINEER's professional services (Agreement) on June 22, 2012, concerning the Lift Station #3 Rehabilitation Design Project (Project); and

WHEREAS, the Agreement was approved and authorized by the City Council and signed by the Mayor Pro Tem and City Clerk, as Documentary #120618I01; and

WHEREAS, Services Authorization #1 in the not to exceed amount of \$592,000 providing for professional services for the final design, permitting, bidding and construction phase services was approved and authorized by the City Council and signed by the Mayor Pro Tem and City Clerk, as Documentary #131021I02; and

WHEREAS, as a result of configuration changes on the Project the CITY and the ENGINEER wish to amend the Agreement and Services Authorization #1 as set forth herein; and

WHEREAS, the CITY and the ENGINEER now wish to memorialize their understanding for the ENGINEER's additional professional services for the Project.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and given one to the other, the sufficiency of which is hereby acknowledged, the parties agree as follows:

I. SCOPE OF SERVICES

The scope of services for the additional services has been agreed to by the parties, and is attached hereto and incorporated herein, by reference, as EXHIBIT I.

II. FEE

The not-to-exceed fee of \$89,800 for the additional services set forth on EXHIBIT I has been agreed to by the parties, and is attached hereto and incorporated herein, by reference, as EXHIBIT II.

III. TERM

ENGINEER shall complete all work in accordance with the timeframes set forth in EXHIBIT I, if any, provided, however, that all work and the term of the Services Authorization shall be completed by the end of business (5:00 p.m.) on February 28,

2015. It is also agreed that the CITY shall have an option for extension of this Services Authorization as necessary to complete the present scope of Services (Exhibit I) or to provide additional services.

IV. ENTIRE AGREEMENT

This Services Authorization supersedes all previous services authorizations, amendments, agreements, or representations, either verbal or written, heretofore in effect between the CITY and the ENGINEER that may have concerned the matters covered herein, except that this Services Authorization shall in no way supersede or amend the Agreement or other services authorizations or amendments except as specifically provided herein. No additions, alterations, or variations to the terms of this Services Authorization shall be valid, nor can the provisions of this Services Authorization be waived by either party, unless such additions, alterations, or waivers are expressly set forth in writing in a document duly executed by both parties. ENGINEER acknowledges and agrees that any proposals or proposed agreements from subconsultants attached to this SERVICES AUTHORIZATION are attached solely to reflect the scopes of work to be performed and the fees to be charged by such subconsultants. By executing this SERVICES AUTHORIZATION, the CITY does not become a party thereto or bound by the terms thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Services Authorization on the day and year first written above.

City of Orlando, Florida

By: _____
Mayor Pro Tem

ATTEST:

Alana C. Brenner, City Clerk

(SEAL)

APPROVE AS TO FORM AND LEGALITY
for the use and reliance of the
City of Orlando, Florida, only.

_____, 20____.

Assistant City Attorney
Orlando, Florida

DRAFT

Hazen and Sawyer, P.C.

By: _____

(Print Name)

Title: _____

STATE OF FLORIDA }

COUNTY OF _____ }

PERSONALLY APPEARED before me, the undersigned authority, _____, [] well known to me or [] who has produced _____ as identification, and known by me to be the _____ of the corporation named above, and acknowledged before me that he/she executed the foregoing instrument on behalf of said corporation as its true act and deed, and that he/she was duly authorized to do so.

WITNESS my hand and official seal this ____ day of _____, 20____.

NOTARY PUBLIC

Print Name: _____

My Commission Expires: _____

EXHIBIT I

PROJECT SCOPE

Lift Station No. 3 Rehabilitation

Amended Final Design and Permitting Services

BACKGROUND

Hazen and Sawyer (CONSULTANT) agreed to perform Final Design, Permitting, and Bidding Services for Lift Station (LS) No. 3 pursuant to Services Authorization #I, dated October 24, 2013. Under Services Authorization #I, CONSULTANT completed the 90% drawings and specifications and submitted them to the CITY for review. CONSULTANT also prepared and submitted a Conditional Use Permit (CUP) application, based on the 90% complete drawings and specifications, to the City Planning Division for consideration by the Municipal Planning Board (MPB).

CONSULTANT attended the June 17, 2014 MPB meeting and made a presentation in support of the CUP for LS No. 3. At that meeting, homeowners from the Rose Isle neighborhood objected to the proposed location of the new lift station. Based on those objections, the MPB requested the CITY to meet with the homeowners to provide information concerning the design features of the new lift station and to consider and discuss alternate configurations or locations for the new lift station in the immediate vicinity of the existing LS No. 3 at the southeast corner of the intersection of Lake Shore Drive and Mills Avenue (US 17-92). The MPB directed the CITY to submit a revised CUP at the August 2014 MPB meeting.

Subsequent to the June 2014 MPB meeting, CONSULTANT assisted the CITY in the preparation of alternative lift station configurations, renderings, and cost estimates for presentation to the Rose Isle Neighborhood Association (RINA) Board of Directors and general membership. CONSULTANT prepared a Power Point presentation for a public meeting on July 23, 2014 and assisted the CITY in presenting the alternatives to those in attendance.

As a result of the CITY's meetings with the RINA and the public meeting, an agreement was reached concerning the configuration and location of the new lift station. CONSULTANT prepared a revised CUP and submitted it to the City Planning Division for presentation at the August 19, 2014 MPB meeting. The revised CUP for LS No. 3 was approved at the August MPB meeting. The revised configuration of LS No. 3 is shown in the attached drawing.

The revised configuration and location of LS No. 3 will require CONSULTANT to re-design some aspects of the facility. Accordingly, this Scope of Services describes the additional services CONSULTANT will provide to complete the design of the lift station.

REVISED DESIGN FEATURES

The following specific design features will be revised to meet the requirements of the revised configuration and location of LS No. 3:

- Revise site plans to accommodate the approved lift station relocation.

- Conduct new soil borings to verify subsurface conditions at the revised locations of the wet well and electrical building and revise recommendations for foundations, backfill, and compaction as necessary.
- Revise tree protection and removal plans to accommodate the approved lift station relocation.
- Relocate and revise the orientation of gravity sewer lines and manholes connecting the existing gravity sewer lines to the relocated wet well.
- Relocate and revise the orientation of above-ground pump discharge piping, valves, and flow meter from the relocated wet well.
- Realign the new 24-inch diameter force main route to accommodate the approved lift station relocation.
- Relocate and realign the sanitary sewer from the relocated electrical building toilet routed back to the relocated wet well.
- Relocate of electrical power feed into the relocated electrical building and modify the existing OUC overhead lines on Lakeshore Drive.
- Relocate and revise the orientation of electrical connections to the pumps and other amenities requiring electrical power outside the relocated electrical building including the bridge crane, instruments and control systems, and site lighting.
- Add architectural treatments for the electrical building exposed walls that are no longer fully enclosed by the perimeter wall.
- Modify the layout and details for the revised perimeter wall, landscaping, relocated and modified irrigation system, cantilevered manually operated access gate, access driveway, relocated existing lake aeration system, and stormwater drainage amenities as a result of the relocation of the station.
- Modify the sequence of construction to allow for phased demolition of the existing lift station to allow construction of the relocated new lift station (now in close proximity to the existing station) that allows the existing station to remain in service until the new station is commissioned.

SCOPE OF SERVICES

The amended Phase 2 engineering services are revised as follows:

Task 202 – Final Design

- 90% Design Submittal: The CONSULTANT will revise the 90% submittal based on the revised configuration and location of the lift station. The 90% drawings to be revised will include:
 - G-004 Project Limits
 - G-005 Staging Plan
 - C-002 Tree Survey, Protection and Removal
 - C-101 Temporary Fencing, Erosion Control, Tree Protection

- C-301 Yard Piping Plan
 - C-302 New Lift Station Grading, Paving, and Drainage Plan
 - C-303 Civil Site Details (driveway detail)
 - C-304 Civil Perimeter Wall and Fence Details (access gate layout)
 - C-402 Force Main – North Segment
 - C-501 Landscape Plan
 - C-502 Irrigation Plan
 - C-601 Existing Lift Station Site Demolition Plan
 - C-602 Lift Station No. 3 Final Site Plan
 - M-001 Lift Station Bottom Plan (north arrow and gravity main orientation)
 - M-002 Lift Station Top Plan (discharge piping, fuel tank, and odor control location)
 - M-003 Lift Station Sections and Details (odor control orientation)
 - M-202 HVAC Plan (CU locations)
 - M-203 Fuel Piping Yard Plan (fuel tank orientation)
 - S-002 Roof Wind Load Plan (north arrow orientation)
 - S-003 Lift Station Plan (north arrow orientation)
 - S-006 Bridge Crane Plan (north arrow orientation)
 - S-007 Electrical Building Plan (north arrow orientation)
 - S-008 Roof Framing Plan (north arrow orientation)
 - A-001 Lift Safety Plan (north arrow orientation)
 - A-002 Roof Plan (north arrow orientation)
 - A-003 Architectural Elevations
 - E-2 Overall Electrical Site Plan
 - E-6 Electrical Plan View
 - E-7 Power Plan and Lighting Plan (north arrow orientation)
 - E-8 Lightning Protection Grounding Plan
 - Engineer's Opinion of Probable Construction Cost (+/- 10%), bound and indexed, with backup data and estimated quantities broken down by discipline trade.
 - Anticipated Construction Schedule for construction of the proposed facilities.
- Public Meetings: The CONSULTANT will prepare drawings and renderings to show the proposed design and attend up to two meetings set up by the CITY for public participation and input regarding landscaping and architectural treatments for the perimeter wall and buildings.

Task 204 – Project Management

- Revise contracts with subconsultants as noted herein.
- Attend public meetings, and provide updated layouts and renderings in support of revised City of Orlando Municipal Planning Board (MPB) Conditional Use Permit (CUP).
- Attend two additional public meetings after completion of revised final plans.

Task 300 – Permitting

- Prepare a revised application for exemption for an Environmental Resource Permit (ERP) for stormwater management submitted to FDEP.
- Prepare a revised City of Orlando CUP, and attend the MPB meeting.

SUBCONSULTANTS

CONSULTANT will prepare amendments to subcontracts with the following firms:

Civil/Site Design: CONSULTANT will amend the subcontract with Brindley Pieters & Associates for changes related to the revised civil site work associated with the relocation of the lift station.

Force Main Design: CONSULTANT will amend the subcontract with EPIC Engineering and Consulting Group for changes related to the revised force main alignment associated with the relocation of the lift station.

Electrical Design: CONSULTANT will amend the subcontract with Electrical Design Associates for changes related to the electrical systems associated with the relocation of the lift station.

Landscaping Design: CONSULTANT will amend the subcontract with Ruth Hamberg for changes related to the landscaping and irrigation system associated with the relocation of the lift station.

Geotechnical Investigations: CONSULTANT will amend the subcontract with Geotechnical and Environmental Consultants to perform two additional soil borings at the locations of the relocated wet well and electrical building to verify subsurface conditions.

COMPENSATION

A budget of \$69,800 for the amended Final Design and Permitting Services under this Service Authorization is shown in the attached Exhibit II, Amended Project Budget, and will not be exceeded without the CITY'S written approval.

At the request of the CITY, CONSULTANT has included a Contingency of \$20,000 to be used for additional and unanticipated work as identified and authorized by the CITY. The Contingency amount shall not be used by the CONSULTANT without prior written authorization by the CITY.

Accordingly, the Total Project Fee for Phase 2 of the Lift Station No. 3 Rehabilitation project will be increased \$89,800, and the Amended Total Project Fee will be \$681,800.

TIME SCHEDULE

Final Design Services under the original Services Authorization were anticipated to be completed by October 31, 2014. The overall project schedule will be increased by four (4) months pursuant to this Amendment. Accordingly, it is anticipated that the Final Design Services will be completed by February 28, 2015, and construction will be completed by April 15, 2016.



2600 Maitland Center Pkway
Suite 180
Maitland, FL 32751
407.830.8700 . Fax 407.830.8877
www.bpa-engineers.com

Date: Revised September 9, 2014
Project: City of Orlando Lift Station 3 Rehabilitation
Additional Civil Engineering Services Fee Proposal for Site Re-location
Prepared for: Hazen and Sawyer
Prepared by: Brindley Pieters & Associates, Inc. (Project No. 408A)

Civil Engineering for Revised 90% Submittal	Chief Engineer	Project Manager	Engineer	CAD Technician	Administrative		
	\$217.08	\$158.19	\$129.33	\$101.10	\$55.68	Total Hours	Total Cost
Plans	1	6	30	40		77	\$9,090.12
Cost Estimate		1	6	8		15	\$1,742.97
Obtain FDEP ERP	1	4	12	6	2	25	\$3,119.76
Total Hours	2	11	48	54	2	117	
Total Burdened Salary Costs	\$434.16	\$1,740.09	\$6,207.84	\$5,459.40	\$111.36		\$13,952.85



August 26, 2014

Robert B. Cadle, P.E.
Senior Associate
Hazen and Sawyer, P.C.
4767 New Broad Street
Orlando, Florida 32814

Re: City of Orlando - Lift Station No. 3 Rehabilitation
EPIC Engineering & Consulting Group, LLC – Proposal for Engineering Services
Force Main Replacement Design, Permitting, Bidding and Construction
Amendment 1

Dear Mr. Cadle:

In accordance with your request, EPIC Engineering & Consulting Group, LLC (EPIC) has prepared an amendment to the scope of services for the referenced project. At the 90% competition level the pump station was moved which will necessitate a change to the force main alignment. In addition, additional services are required for Florida Department of Transportation (FDOT) permitting.

Services associated with Amendment 1, schedule and compensation are provided in the following sections.

AMENDMENT 1 SERVICES

1. Force Main Realignment.

With the relocation of the pumping station and point of connection, it will be necessary to revise the drawings to change the force main alignment (plan and profile) and associated stationing.

2. FDOT Permitting

Prepare and submit an FDOT permit for the existing 20" FM that will be placed out of service. The permitting services will include:

- Preparation of an FDOT Utility Permit Application.
- Contacting all utility companies in the area of the proposed construction (Sunshine One Ticket).
- Pictures of the route
- Review of the draft application with the City.
- Upon City approval, submit the application to FDOT and respond to requests to additional information.

PROJECT SCHEDULE

EPIC will provide the above-listed services over the duration of the project to meet the schedule established by the City and H&S.

COMPENSATION

EPIC will be compensated for the Amendment 1 services described herein on an hourly basis in the not-to-exceed amount of **\$3,327.90**, which will bring the total contract amount to **\$26,955.36**. The fee estimate for the Amendment 1 services is enclosed as Attachment A.

We sincerely appreciate the opportunity to assist H&S in providing professional engineering services to the City of Orlando. If you have any questions or require additional information, please call me at 407-721-6954.

Sincerely,

A handwritten signature in blue ink, appearing to read 'RW', is positioned above the printed name of the signatory.

Richard Wilson, P.E.
Project Manager
EPIC Engineering & Consulting Group, LLC

cc: Prasad Chittaluru, Ph.D., P.E., EPIC

ATTACHMENT A

City Of Orlando
Lift Station No. 3 Rehabilitation
Force Main Replacement - Design, Permitting and Bidding (Amendment 1)

EPIC NOT-TO-EXCEED LABOR BUDGET

Task	Task Name	Senior Project Manager P8	Sr. Professional I P3	Tech III T3	Admin II A2	Total Hours	Total Raw Labor Cost (\$)	Billing Labor Cost (\$)
	Hourly Rate	\$61.20	\$43.40	\$25.00	\$22.30	---	---	---
1	Force Main Realignment.	2	0	6	0	8	\$272.40	\$803.58
2	FDOT Permitting	7	6	4	3	20	\$855.70	\$2,524.32
	Total	9	6	10	3	28	\$1,128.10	\$3,327.90

Labor Multiplier 2.95

TOTAL NOT-TO-EXCEED COST SUMMARY

Task	Task Name	Total
1	Project Initiation and Coordination	\$1,263.78
2	Construction Documents	\$16,352.46
3	Permitting	\$787.95
4	Bidding Assitance	\$361.08
5	Construction Phase Services	\$4,862.19
	Original Contract	\$23,627.46
	Amendment 1	\$3,327.90
	Total (including Amendment 1)	\$26,955.36



August 25, 2014

Electrical Design Associates

Mr. Robert B. Cadle, P.E.
Senior Associate
Hazen and Sawyer, P.C.
4767 New Broad Street
Orlando, Florida 32814

Re: Lift Station No. 3 Rehabilitation - Redesign
City of Orlando, FL

Dear Mr. Cadle,

We are pleased to submit our proposal for additional electrical engineering services for the above project. The following serves to provide an overview of the engineering services Electrical Design Associates (EDA) intends to furnish on the above referenced project to Hazen and Sawyer (H&S) and provides the agreed upon Hourly Not to Exceed sum. Our services shall include completed final design including drawings, load tabulations, and descriptions for the work in accordance with a format determined by you.

It is our understanding that the City intends to implement improvements to LS No. 3 to address several issues with the existing facility including but not limited to the replacement of the electrical equipment and the manner in which the station is controlled. The design is to be revised to reflect a new site location and orientation. Our scope of services shall include:

Task 2 - Final Design:

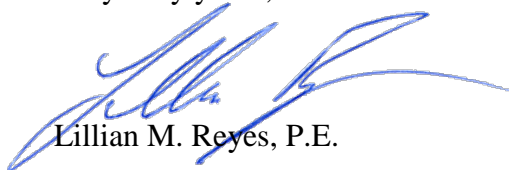
1. Electrical design associated with the new site location and orientation. The redesign will be based on the following:
 - a) Sheet E-1:
 - Date change in the title block
 - b) Sheet E-2:
 - Revise to reflect new station location and OUC coordination
 - Date change in the title block
 - c) Sheet E-3:
 - Date change in the title block
 - d) Sheet E-4:
 - Date change in the title block
 - e) Sheet E-5:
 - Date change in the title block
 - f) Sheet E-6:
 - Revise to reflect new station configuration and OUC coordination
 - Date change in the title block
 - g) Sheet E-7:
 - Revise North arrow
 - Revise layout to reflect additional space in the generator room

- Date change in the title block
 - h) Sheet E-8:
 - Revise to reflect new station configuration and OUC coordination
 - Date change in the title block
 - i) Sheet E-9:
 - Date change in the title block
2. Additional OUC coordination
 - a) Location new pad mounted transformer
 - b) Relocation of above grade Voltage Regulator
 - c) Conversion of overhead switches to pad mounted equipment.
 3. EDA shall prepare an opinion of costs using Hazen and Sawyer's format in MS Excel as part of the 90% redesign submittal.
 4. EDA shall provide QA/QC of our work prior to making the submittal.
 5. Deliverables:
 - a) 90% Design Drawings, Specifications and Opinion of Probable Cost
 6. EDA shall provide one (1) set of drawings and specifications to Hazen and Sawyer, all reproduction will be completed by others. Final documents will be provided in electronic format in addition to the hard copies. Drawings will be prepared in AutoCAD Release 2010 using 24x36 as the full page size and with a 22x34 layout for true scale when printing 11x17 for half size. Specifications will be prepared using CSI format, Divisions 2-17, in MS Word."

Our scope of services shall include the Electrical engineering services associated with the proposed pump station improvements. Attached please find a breakdown of our project man-hours for this project. Our fee for this work shall be billed hourly and payable as follows:

Task No.2 – Redesign	\$ 4,011.32
Total:	\$ 4,011.32

Very truly yours,



Lillian M. Reyes, P.E.



Landscape Architecture & Urban Design
Green Town Planning

1573 George St.
Orlando, FL 32806
FL LA #0001273
Phone: 407.896.9656
www.greentownplan.com

Sept. 9, 2014

Mr. Daniel Schmidt
Mr. Robert Cadle, PE
Hazen & Sawyer, Inc.

Via Email

Re: Proposal for Professional Services for the City of Orlando Lift Station 3 Design Project – Revised Site Plan

Dear Dan and Bob,

I am pleased to continue as a sub-consultant to Hazen & Sawyer Inc. for the City of Orlando's Lift Station 3 Design Project. Per your request, I have revised the scope of work and hourly estimate to accommodate the revised site plan. We propose additional fee of \$5,516.48 to complete revisions. This proposed scope and fee is added to the previous agreement for Phase 2 Final Design to complete the provision of landscape architectural services. The additional scope is attached as Schedule A. I will continue to sub-contract the irrigation design to Certified Irrigation Design Inc., which is included in this proposal. Please let me know if the fee proposal for the additional landscape architectural tasks, including the additional fees for changes to the irrigation design, is acceptable you.

As usual, I look forward to continuing to work with you on this project.

Sincerely,

A handwritten signature in black ink that reads 'Ruth Hamberg' in a cursive script.

Ruth Hamberg RLA ASLA AICP

Attachments

Prepared by Ruth Hamberg RLA ASLA AICP, President

Exhibit I

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SCHEDULE A
REVISED SCOPE OF SERVICES
PHASE 2 FINAL DESIGN REVISED SITE PLAN
City of Orlando, Florida
Lift Station No. 3 Final Design
September 9, 2014

The scope of work to be provided by **CONSULTANT** Ruth Hamberg Landscape Architecture & Urban Design includes professional services for the elements listed below.

See attached pages of Schedule A.

TIME OF COMPLETION

Per City of Orlando service agreement with Hazen & Sawyer for Phase 2 Final Design. Plans are anticipated to be completed around March 2015.

SCHEDULE A

REVISED SCOPE OF SERVICES AND HOURLY ESTIMATE **September 9, 2014**

City of Orlando, Florida

Lift Station No. 3 Rehabilitation

Prime Consultant: Hazen & Sawyer, Inc. (H&S) (Client)
4767 New Broad Street
Orlando, FL 32814

Subconsultant: Ruth Hamberg RLA ASLA AICP (Sub-Consultant)
Ruth Hamberg Landscape Architecture & Urban Design
1573 George St.
Orlando Florida 32806
407.896.9656
www.greentownplan.com

WBE: Ruth Hamberg Landscape Architecture and Urban Design is a City of Orlando Certified Woman Owned Business (WBE), certification number: 20096768.

ROLE on the Team: Landscape Architecture.

Ruth Hamberg, Professional Licensed Florida Landscape Architect #0001273, is a Sub-Consultant to Hazen & Sawyer, Inc., Client, and will provide the following ADDITIONAL scope of services for the City of Orlando Lift Station 3 Design Project Final Design.

Scope of Work

PHASE 2 – Final Design Plans for the REVISED SITE PLAN dated Aug. 18, 2014

The site plan for the Lift Station 3 project was changed due to public input in July and direction from Municipal Planning Board earlier this month. The changes will require additional work and fees to complete. The following description details the additional professional services needed to revise the landscape and irrigation plans. Hand drawings prepared by the Sub-Consultant will be drafted by the Client in AutoCAD Release 2012 using 24 x 36 inch sheets as the full page size and with a 22 x 34 inch layout for true scale when printing 11 x 17" sheets.

TASK 2 – Final Design – REVISED PLAN

The following sheets will be revised by the LA Sub-consultant with AutoCAD work being done by H&S.

C-002 Landscape Tree Survey, Protection and Removal

C-501 Landscape Plan

C-502 Irrigation Plan (via sub-consultant Certified Irrigation Design Inc.)

C-503 Landscape Details

C-502 Irrigation Details (via Certified Irrigation Design Inc.)

The following Specification Sections will be revised as needed by the LA Sub-Consultant:

02441 Irrigation (via sub-consultant Certified Irrigation Design Inc.)

02930 Trees, Shrubs, Groundcover and Sod

The following plan sheets will require coordination between sub-consultant and H&S:

- G-004 General Project Limits
- G-005 Staging Plan
- G-006 General Notes
- C-101 and C-102 Temporary fencing, erosion control, tree protection fence
- C-301 Yard Piping Plan
- C-302 Grading, Paving and Drainage Plan
- C-401 and C-402 Civil Force Main South Segment
- C-601 Demolition Plan (Coordination re: tree removal/ protection plan)
- C-602 Final Site Plan
- E-2 Electrical Overall Site Plan
- E-5 Electrical Irrigation Details

2.2 Prepare REVISED 90% Plans

H&S will provide the Sub-Consultant with a revised scaled site plan plot showing the new lift station in its revised location. Existing trees in the vicinity of the new site will be evaluated for protection, removal or relocation to accommodate the lift station, grading and main piping work.

2.2.1 Tree Survey, Protection and Removal Plan

The tree inventory plan will be revised, with consideration of Orlando Landscape Code requirements. A hand drawn plan update will be provided to H&S, who will then transfer the changes into CAD. The Sub-consultant will review and comment on the CAD work. The tree inventory table and notes will be revised in MS Word and provided to H&S to insert in the plan sheet. Meetings and/or telephone discussions with City Parks staff and/or team members are anticipated in order to complete this task.

- Calculate code requirements regarding tree protection and removal due to the revised site plan, which is impacting several existing trees. 3 hours.
- Revise the Tree Removal and Protection Table with re-quantified data entered into revised database in MS Word: 3 hours
- Revise Tree Protection and Removal Plan. Prepare and deliver hand drawn and marked revised tree survey/plan to be drafted into CAD by H&S; review CAD work: 4 hours
- Attend meetings or phone calls as required to coordinate tree protection. 2 hours.

Total Hours Task 2.2.1: 12.0 hours

2.2.2 Landscape Plan, Irrigation Plan and Detail Sheets

The Sub-Consultant will revise the 90% landscape and irrigation Sheets. The Sub-Consultant will coordinate with the irrigation sheets being prepared by Certified Irrigation Design. The sub-consultant will refer to the City of Orlando Landscape Code and recalculate code requirements, updating plans and notes. The plant list will also be updated. Revised plans will be prepared by hand and provided to H&S to draft into AutoCAD. The

sub-consultant will then review the CAD work. The sub-consultant will attend meetings and make phone calls as needed to Parks Div. and the team. The sub-consultant will review and comment on related drawings prepared by the Client for coordination.

- Calculate code requirements regarding the landscape design that may have to change due to the revised site plan. Prepare code calculations. 3 hours.
- Revise the landscape notes as needed with re-quantified data: 3 hours
- Revise Landscape Plan and Details. Prepare and deliver hand drawn and marked revised landscape plan and detail sheet revisions to be drafted into CAD by H&S; review CAD work: 5 hours
- Attend meetings or phone calls as required to coordinate tree protection. 3 hours.
- Coordinate, review and comment on Irrigation Plans and details provided by Certified Irrigation Design, Inc. 2 hours.

Total Hours Task 2.2.2: 16 hours

Certified Irrigation Design Estimate for Revised 90% Irrigation Plans, Details and Specifications is estimated at \$850.00.

2.2.3 90% Landscape and Irrigation Specifications

The sub-consultant will revise the following specifications as needed to accommodate the revised site plan.

- 02980 Landscape
- 02990 Irrigation (Coordinate with Irrigation Consultant)

Total Hours 2.2.3: 2 hours

2.2.4 90% Cost Estimate: The Sub-Consultant will prepare a revised cost estimate for tree removal, landscape materials and installation. The cost estimate will be prepared using Hazen and Sawyer's format in MS Excel. Materials cost and availability will be freshly researched to keep up with changing market conditions.

Total Hours 2.2.4: 6 hours

Irrigation Plans and Specifications by others: The irrigation plan sheet(s) and specifications will be prepared by a separate consultant, Certified Irrigation Design Inc., who is contracted to the Sub-Consultant. The irrigation consultant will also provide a 90% cost estimate.

2.2.5 QC Reviews: The sub-consultant shall confer with the Client to review submittals and incorporate team comments prior to completing 100% final design plans.

Total hours Task 2.2.5: 2 hours

TOTAL Additional Hours for Task 2.2: 38 hours

TASK 2.3 - 100% Final Design Plans

- Sub-consultant will review comments received from other team members and the City from the 90% plans regarding the landscape related sheets, then incorporate revisions per comments into plans and specs and send to H&S to be drawn into CAD: 4 hours.
- Coordination with Irrigation Designer: 1 hours
- Prepare revisions to landscape related specifications in MS Word per comments. 2 hours
- Sub-consultant will review H&S CAD work and red-line plans with corrections or revisions to send back to H&S. 1 hour

- Coordination with team members: 2 hours
- Complete revisions to cost estimate; coordinate with Irrigation Designer on their cost estimate: 2 hours
- Quality Control Review: 2 hours

Complete 100% plans, specifications and submit to H&S

Total hours Task 2.3: 14.0 hours

TOTAL Additional hours for Tasks 2.2 and 2.3: 38 + 14 = 52 hours

Total ADDITIONAL Hourly Estimate for REVISIONS TO PHASE 2: 52.0 Hours

Total ADDITIONAL Landscape Architecture FEE for Revised PHASE 2: \$4,666.48

plus additional Irrigation design fee of \$850.00 = **\$5,516.48.**

TIME SCHEDULE

Services will commence upon receipt of an executed agreement between sub-consultant and client and after Client receives a Notice to Proceed (NTP) from the City. The sub-Consultant will provide the above listed services over the duration of the project to meet the schedule established by the City and Client (H&S).

COMPENSATION:

The Client shall pay the sub-consultant with the Wage Cost Multiplier method of compensation as stated in the City of Orlando's agreement with the Client. The amount of \$17,090.48 plus an Additional Fee of \$5,516.48 is budgeted for LA services under this revised sub-consultant Agreement. Irrigation design services is in addition to this fee. Payment of invoices shall constitute the Client's acceptance of services provided.

Hourly Rate:

Original Phase 2 Contract - Hourly Rate at \$89.74/ hour for a Senior LA x 152 hours + Additional Services – same hourly rate x 52 additional hours = total 204 hours (Irrigation design services are billed lump sum IN ADDITION to the LA fees.)

The estimated total fees for the Phase 2 Scope of Services plus Additional Services:
\$17,090.48 + \$5,516.48 = \$22,606.96



**Geotechnical
and
Environmental
Consultants, Inc.**

At the very foundation of our community

September 3, 2014

Hazen and Sawyer, P.C.
4767 New Broad Street
Orlando, Florida 32814

Attention: Mr. Robert B. Cadle, P.E.

Subject: Proposal for Additional Geotechnical Services
LIFT STATION NO. 3 REHABILITATION – CITY OF ORLANDO
US 17 – 92 and Lakeshore Drive
Orlando, Florida
GEC Proposal No. 7119GS

Dear Mr. Cadle:

Geotechnical and Environmental Consultants, Inc. (GEC) is pleased to provide this proposal for the above-referenced project. This proposal was requested by you and our scope of services is based on your email dated August 29, 2014 and the new preliminary design information you sent us. The purpose of this investigation will be to explore soil and groundwater conditions at the revised lift station location and to use the information obtained to provide geotechnical engineering recommendations for site preparation and design of the new lift station proposed for this site. This proposal presents our understanding of the project, a scope of services and a cost and schedule for providing those services.

Site Location and Scope of Services

The site is located on the southeast corner of US 17 – 92 (Mills Avenue) and Lakeshore Drive in Orlando, Florida. We understand that the existing lift station is over 50 years old and will likely need to be replaced. The new construction was previously proposed in the open area immediately east of the existing lift station and our geotechnical report dated October 11, 2012 (GEC Project No. 3447G) summarizes our recommendations for that proposed design. However, we understand the lift station is now proposed immediately behind, or south of, the existing lift station.

Our additional scope of services includes the following:

- ◆ Stake boring locations at the site.
- ◆ Clear utilities at the boring locations.
- ◆ Mobilize truck-mounted drilling equipment and personnel.
- ◆ Perform 1 Standard Penetration Test (SPT) boring to a depth of 40 feet below existing grade in the proposed new lift station location and 1 SPT boring to a depth of 10 feet for the electrical building.
- ◆ Perform routine laboratory soil classification tests to aid in visual soil classification.
- ◆ Issue a geotechnical engineering report, signed and sealed by a geotechnical engineer licensed in Florida.

The geotechnical engineering report will document subsurface conditions at the boring locations, provide current and estimated seasonal high groundwater levels and will present geotechnical engineering recommendations for site preparation and lift station and force main design.

Estimated Fee and Schedule

Our estimated fee to provide the described scope of services is a Not-to-Exceed Fee of \$3,399.00. Attachment 1 presents a breakdown of our Not-to-Exceed Fee. This fee includes 4 copies of our report sent via first class mail as well as an electronic copy emailed to you

Our schedule to complete the described work will be about 3 to 4 weeks from your written notice to proceed. If requested, advanced verbal recommendations can be provided after the field work is completed.

You may confirm your authorization by providing us with your notification to proceed.

Limitations

This proposal is subject to the following limitations: 1) the site will be accessible to the drilling equipment assumed above. If other types of drilling equipment become necessary due to site and/or weather conditions, appropriate adjustments to the actual fees will be necessary, 2) undisturbed samples and consolidation tests are not included, unless stated above, 3) we assume no responsibility for damage to underground utilities and/or structures that are not located by the owner or Sunshine State One-Call, 4) exploration and/or evaluation of environmental conditions at the site is not included, and 5) this proposed exploration is a relatively shallow exploration and is not intended to be an evaluation for sinkhole potential.

Closure

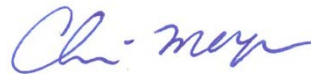
GEC appreciates the opportunity to work with you on this project. If you have any questions regarding this proposal, or if we can be of further assistance, please contact the undersigned.

Very truly yours,

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.



V. Eugene Williford IV, E.I.
Geotechnical Engineer



Christopher P. Meyer, P.E.
Geotechnical Services Manager

CPM/VEW/cew

ATTACHMENT 1
Estimated Scope of Services and Cost
LIFT STATION No. 3 REHABILITATION - CITY OF ORLANDO
US 17 - 92 and Lakeshore Drive
Orlando, Florida
GEC Proposal No. 7119GS

<u>Description of Work</u>	<u>Quantity</u>	<u>Units</u>	<u>Rate</u>	<u>Cost</u>
Field Services				
Mobilization of Truck Mount				
Drill and Crew	1	ls	\$500.00	\$500.00
Boring Layout, Site Recon, Utility Clearance (Senior Engineering Technician)	3	hr	\$75.00	\$225.00
Standard Penetration Test Borings (1 @ 40', 1 @ 10') 0-50'	50	ft	\$12.50	\$625.00
		Field Subtotal		\$1,350.00
Laboratory Testing				
Percent Fines	3	ea	\$40.00	\$120.00
Atterberg Limits	2	ea	\$80.00	\$160.00
Natural Moisture Content	2	ea	\$12.00	\$24.00
		Laboratory Subtotal		\$304.00
Engineering Analysis & Report				
Senior Professional	3	hr	\$150.00	\$450.00
Project Professional	8	hr	\$120.00	\$960.00
Draftsman	3	hr	\$75.00	\$225.00
Secretary	2	hr	\$55.00	\$110.00
		Engineering Subtotal		\$1,745.00
		TOTAL NOT-TO-EXCEED FEE		\$3,399.00

Exhibit II - Amended Project Budget													9/9/2014
City of Orlando													
Hazen and Sawyer Project Number: 45028-001													
Hazen and Sawyer Project Name: Lift Station #3 Rehabilitation													
Scope: Amended Final Design Services													
TASK NO.	TASK	Project Manager	Senior Associate	Associate	Architect	Sr CADD	Technician	Admin/Support	Total Man-Hours	Total Labor	Sub Fee (Expense)	Sub Fee with markup	Total for Each Task
		\$200.00	\$195.00	\$190.00	\$115.00	\$124.00	\$65.00	\$85.00					
202	90% Design	12	6	8	48	50	0	0	124	\$16,810		\$28,442	\$45,252
	G-004 Project Limits		2			4				\$886			
	G-005 Staging Plan	2				2				\$648			
	C-301 Yard Piping	2		4		8				\$2,152			
	C-303 and 304 (civil details)	2				4				\$896			
	C-601 Demolition Plan	2				4				\$896			
	C-602 Final Plan					4				\$496			
	M-001, 002, and 003 Lift Station Plans	2	2	4		24				\$4,526			
	A-001, 002, and 003 Architectural				48					\$5,520			
	Construction Sequence Specs	2	2							\$790			
	EPIC (C-402)										\$3,327.90	\$3,494	
	EDA (E-2, 6, 7, and 8)										\$4,011.32	\$4,212	
	Hamberg (C-002, 501, and 502)										\$5,516.48	\$5,792	
	BPA (C-101 and 302)										\$10,833.09	\$11,375	
	GEC (soil borings)										\$3,399.00	\$3,569	
204	Project Management	16	26	0	0	16	0	5	63	\$10,679		\$53	\$10,732
	Revise subcontracts	2	6					4		\$1,910		\$53.07	
	Public Meetings (prior to final design)	10	12							\$4,340			
	Public Meetings (as needed)	4	8			16		1		\$4,429			
300	Permitting Services	7	16	4	8	35	0	0	70	\$10,540		\$3,276	\$13,816
	Revised MPB Conditional Use Permit	7	16	4	8	35				\$10,540			
	BPA (revise ERP exemption)										\$3,119.76	\$3,276	
	SUBTOTAL (HOURS)	35	48	12	56	101	0	5	257				
	SUBTOTAL (\$)	\$7,000	\$9,360	\$2,280	\$6,440	\$12,524	\$0	\$425	\$38,029	\$38,029	\$30,208	\$31,718	\$69,800

Percent of Amendment for M/WBE: 43.3%

Percent of Total Project for M/WBE: 41.4%

Replenish Contingency: \$20,000

Original Budget: \$592,000

Amended Budget: \$681,800