

March 23, 2015

City of Orlando Public Works Department Capital Improvement & Infrastructure Division 400 South Orange Avenue Orlando, Florida 32801-3302

Attn: Hector Sanchez, P.E., Project Manager

RE: Continuing Professional Consulting Services -Engineering Services for Gore Street Sanitary Sewer Replacement

Dear Mr. Sanchez:

We are pleased to submit the attached revised proposal for providing Continuing Professional Consulting Services for Engineering Services for Gore Street Sanitary Sewer Replacement. The scope of services included herein, provides for preliminary engineering, topographic survey, final design, permitting, bidding assistance, construction phase services and associated tasks to provide for the replacement of the gravity sewer mains, laterals and manholes in the right-of-way of Gore Street from Woods Avenue to Avondale Avenue including approximately 2,500 LF 12" CI gravity sewer to be replaced with 16" or 18" PVC, replacement of active laterals with new cleanouts and replacement of 12 manholes; and for the replacement of the gravity sewer mains, laterals and manholes in the right-of-way of Parramore Avenue from Gore Street to Columbia Street including approximately 1,400 LF 16" CI gravity sewer, active laterals and 4 manholes.

For the services described above, the enclosed Attachment "A" is our Scope of Services; Attachment "B" is the proposed Compensation; Attachment "C" is our Project Schedule and Attachment "D" is our Proposed Project Team.

In accordance with the Continuing Professional Consulting Agreement between City of Orlando, Florida and Woolpert, Inc., the proposed compensation for the scope of services listed herein (hourly-not-to-exceed fee) is \$259,032.64. Including the 10% Owner Controlled Contingency (to be used only with written authorization by the City of Orlando) of \$25,903.26, the Total Contract Amount is **\$284,935.90**.

In conformance with the City's MBE/WBE participation goals, we have included a proposal from Epic Consulting Group for QA/QC review and permitting assistance, Buchheit & Associates for survey services and ASG Reprographics for printing services (see Exhibit 1). All other work on this project will be provided by Woolpert, Inc., with our own in-house forces. The level of M/WBE participation proposed for this project is 30.17%.

March 23, 2015 Mr. Hector Sanchez, P.E. Page 2

Also attached for reference are schematic maps, depicting the project limits, as Exhibit 2 and a conceptual construction cost estimate as Exhibit 3.

If in the event your understanding of the Scope of Services is different from that contained herein, or if you have any questions concerning this proposal, please let me know.

Sincerely, WOOLPERT, INC.

intline

R. Kent Veech, P.E. Senior Associate, Project Director

Attachments

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## ATTACHMENT A

# **SCOPE OF SERVICES**

## ENGINEERING SERVICES FOR GORE STREET SANITARY SEWER REPLACEMENT

## **PROJECT DESCRIPTION**

The City of Orlando Wastewater Division (City) has requested Woolpert to provide preliminary design, topographic survey, final design, permitting services, bidding assistance and construction phase services for the replacement of the sanitary sewer system trunk lines in the right-of-way Gore Street from Woods Avenue to Avondale Avenue. The project includes the replacement of approximately 2,500 linear feet of 12" gravity sewer trunk lines, 12 sanitary manholes and numerous service laterals. The project will also include the replacement of the existing 14" gravity sewer main, 4 sanitary manholes and several service laterals along Parramore Avenue from Gore Street, south to Columbia Street (approximately 1,400 linear feet).

## **SCOPE OF SERVICES**

## 1.0 PRELIMINARY ENGINEERING

The purpose of the Preliminary Engineering phase is to present project completion alternatives to the City in a manner that will allow the City to make informed decisions as to how the project shall proceed. The Preliminary Engineering services to be provided under this proposal include:

- 1. Project Initiation
- 2. Evaluate Constructability Issues
- 3. Preliminary Design Report

## TASK 1.1 – PROJECT INITIATION

- 1.1.1. Meet with City for a project initiation meeting to establish lines of communication, contract requirements, schedule, and reporting requirements.
- 1.1.2. Collect and review project related available information such as boundary surveys, easement descriptions, ROW records, record drawings, soils investigation reports, privately owned utility system data, zoning classification, building codes, and standards that may be pertinent to execution of the project. Review requirements of all regulatory agencies having jurisdiction over the project. Collect and review other information that may have a bearing and impact on the planning, design, approval, permitting, construction or operation of the project.
- 1.1.3. Meet with City of Orlando Planning Division to discuss potential development in contributing sanitary areas and determine if any such developments impact the sewer trunk line capacity. Evaluate existing pipe capacity and recommend if any upsizing appears to be necessary to accommodate future wastewater flows. Note: A formal capacity analysis will not be done as a part of this project.
- 1.1.4 Meet with Orange County Public Works Department to determine pavement restoration requirements, maintenance of traffic requirements and general coordination issues.

## TASK 1.2 – EVALUATE CONSTRUCTABILITY ISSUES

1.2.1 Walk existing trunk line corridors and identify potential construction problem areas. The City staff may attend the walk-thru to provide their input, if desired.

- 1.2.2 Request and evaluate existing utility maps as provided by other utility owners throughout the trunk line corridors. Woolpert will send requests for information to known utility owners within the Gore Street and Parramore Avenue corridors where open cut will be required.
- 1.2.3 Sanitary sewer mains, laterals and manholes in the Gore Street and Parramore Avenue corridors will be replaced. Manholes scheduled to remain, will be inspected and any evidence of defects will be noted in accordance with MACP guidelines. The pipes entering and leaving the manhole will be visually inspected and direction compared to GIS maps. Manhole inspections shall include the following type of information:
  - a. The casting/cone condition and manhole cover will be evaluated;
  - b. Manhole walls will be checked for integrity and signs of root intrusion, deterioration of mortar joints, loose or missing bricks, signs of surcharge level, etc;
  - c. Sewer lines entering and leaving the manhole will be inspected to determine the manhole-line connection condition and establish if any manhole settlement has separated or sheared pipelines; and
  - d. Silt deposition that reduces flow capacity will be noted and silt depth recorded. Observed defects (root intrusion, cracked pipe, obstructions, etc.) will be documented.
- 1.2.4 Observe vehicular and pedestrian traffic patterns and assess construction impact on public safety. A formal traffic study will not be done for this project. (See EPIC proposal)
- 1.2.5 Coordinate installation of four (4) temporary groundwater monitoring points, at the subject locations, for the purpose of obtaining a representative groundwater laboratory analytical sample. The groundwater monitoring wells will be installed by the City of Orlando. Samples will be transported by the City under proper chain of custody on wet ice to their environmental testing facility for laboratory analyses of the parameters required. The City will provide laboratory summary of the analytical results of the ground water samples for Woolpert design.

## TASK 1.3 – PRELIMINARY DESIGN REPORT

- 1.3.1 Prepare a preliminary design report including a preliminary cost estimate. Woolpert will make recommendations gained through information from the Planning Division, field walk-through, identification of potential construction problem areas, identification of existing utilities, drainage pipe and structures that may present construction problems, and identification of areas where pedestrian and vehicular traffic may present a construction problem. The PDR will also include the evaluation of innovative new construction methods, such as pipe bursting and microtunneling.
- 1.3.2 Prepare a preliminary layout of proposed construction alignment of the gravity sewer mains, which indicates major conflicts with existing utilities and areas where special construction techniques may or must be considered. Additionally, present other pertinent information necessary for the City to evaluate the overall project.
- 1.3.3 Submit four (4) copies of the draft PDR to the City. Meet with the City to discuss the PDR; revise and finalize the PDR following comments from the City and submit six (6) copies of the final PDR (hard copies and pdf).

## **DELIVERABLES**

- Woolpert will provide four (4) copies of the draft Preliminary Design Report (PDR) for review by the City of Orlando.
- After attending a review meeting at the City, Woolpert revise the PDR and will submit six (6) copies of the final PDR (including the groundwater sampling report) and six (6) CDs containing a pdf copy of the PDR.

## CITY RESPONSIBILITIES

- Schedule staff members for the constructability walk-thru, if so desired.
- Furnish laboratory summary of the analytical results of the ground water samples.
- Schedule staff members for review of the draft Preliminary Design Report.
- Schedule location and staff members for attendance to the PDR review meeting.

## 2.0 SURVEY SERVICES

## TASK 2.1 – PROJECT SURVEY CONTROL

- 2.1.1. Assist to a project setup meeting. Obtain available instruments of record and create a horizontal and vertical control network for the project for use as a basis of surveying and design of the project.
- 2.1.2. Establish horizontal GPS network control: Establish vertical control to network both Topographic survey and right-of-way monumentation. Plot data and adjust control networks. Revisit the project site after plotting data for quality control. Survey shall comply with the City's standards. (see Buchheit Assoc)

## TASK 2.2 – TOPOGRAPHIC SURVEY

- 2.2.1 Perform initial surveying to locate existing structures and obtain rough ground profiles in support of preliminary design efforts. Coverage will include center line of pavement shots, tops and inverts of all manholes and stormwater structures (including those upstream and downstream at intersecting streets) within the limits of the project, including Gore Street and Parramore Avenue. (see Buchheit Assoc.)
- 2.2.2 Perform topographic surveying over the project limits in support of design efforts. The limits of the topographic coverage will be the length of the subject alignments, including full coverage from right of way to right of way and extending approximately 20' outside the right of way at intersecting streets. Topographic coverage will include break line topography and spot shots at approximate 50' intervals, and the location of all above ground fixed improvements within the limits of topographic coverage along Gore Street. (see Buchheit Assoc)

## TASK 2.3 – SUBSURFACE UTILITY ENGINEERING (SUE)

- 2.3.1 Woolpert will provide Subsurface Utility Engineering services in accordance with ASCE 38-02 Quality levels C and D. Specifically, Woolpert will:
  - a. Contact all the utility stakeholders and request copies of all plats, plans and GIS information for the project area.
  - b. Pre-mark the project limits with white paint and contact Florida Sunshine One Call center.
  - c. Coordinate with the various utility owners, including one on-site meeting to facilitate than marking of the buried facilities.
  - d. Locate all the surface utility structures. (see Buchheit Assoc)
  - e. Compile all the utility data obtained from the various utility stake holders and label all utility lines with the utility type, size, owner and ASCE quality level.
  - f. Locate the paint and flagging from the various utility owners. (see Buchheit Assoc)
  - g. Review the compiled utility data with the results of the Sunshine mark-outs and note any apparent deviations or discrepancies.
  - h. Contact various utility owners in an attempt to facilitate resolution of discrepancies noted in the QA and QC reviews.
  - i. Furnish a Compiled Utility Plan in accordance with ASCE 38-02 Quality Levels C and D.

2.3.2 Once preliminary design is complete, Woolpert will provide up to 20 non-destructive vacuum excavation exploration holes (ASCE 38-02, Quality Level A).

All utility locating and mapping services will be in accordance with American Society of Civil Engineers Standard CI/ASCE 38-02. All work on the above described survey tasks will be performed in accordance with Chapter 61G17-6 of the Florida Administrative code (Minimum Technical Standards for Florida surveyors and Mappers), pursuant to Florida Statutes, Chapter 472.

## **DELIVERABLES**

- Woolpert will provide four (4) copies of a brief Survey Map Report.
- Woolpert will provide four (4) copies of a brief SUE Report.

## CITY RESPONSIBILITIES

• Provide existing monument documentation. (Woolpert will coordinate with Richard Allen @ (407) 246-2788 for available data)

## 3.0 FINAL DESIGN

## TASK 3.1 – PREPARATION OF CONSTRUCTION DOCUMENTS

3.1.1. Prepare project construction drawings to include required plan and profile views and necessary Construction Details and Notes. Prepare the technical specifications for the Project Manual. The construction documents shall be complete and meet the requirements for construction contract competitive bid formulation and subsequent construction of the project. All documents shall comply with current requirements of the City Standards and Construction Specifications Manual. Provide a quality assurance and "constructability" review prior to all submittals to the City.

#### TASK 3.2 – 60% COMPLETION SUBMITTAL

- 3.2.1. Submit six (6) sets of construction drawings and technical specifications at a 60% level of completion to the City. The minimum requirements of a 60% level of completion are defined as a complete set of plan and profile drawings, at 1"=20' horizontal scale and 1"=4' vertical scale for the Gore Street and Parramore Avenue corridors and where applicable indicating:
  - a. Survey and topographic information;
  - b. Existing utility locations;
  - c. Gravity sewer main, lateral and manhole replacements/improvements shown;
  - d. Applicable construction details and;
  - e. A preliminary draft of all sections of the technical specifications, and a draft of the bid schedules and other required bid documents.
- 3.2.2. Meet with the City to discuss the 60% submittal, prepare detailed meeting minutes, submit the minutes to the City for verification.
- 3.2.3. Revise the construction documents per the City's comments.

#### TASK 3.3 – 90% COMPLETION SUBMITTAL

3.3.1. Submit six (6) sets of construction drawings and technical specifications at a 90% level of completion to the City. The minimum requirements of a 90% level of completion are defined as the incorporation of all City comments received and verified after the City review of the 60%

submittal. At the 90% level of completion, the construction drawings and technical specifications shall be at a level of completion that will allow the project to be bid. Meet with the City to discuss the 90% submittal, prepare detailed meeting minutes submit the minutes to the City for verification.

- 3.3.2. Prepare and submit an Official Bid Form. The Official Bid Form shall appear as a separate itemization to be included in the Invitation for Bids. Coordinate with City departments for the latest requirements for the Official Bid Form.
- 3.3.3. Prepare and provide Engineer's Estimate of Probable Construction Costs. Submit six (6) copies for review by the City.
- 3.3.4. Revise the construction documents per the City's comments.

## TASK 3.4 - 100% COMPLETION SUBMITTAL

3.4.1. Submit six (6) sets of construction drawings and technical specifications at a 100% level of completion to the City for final acceptance and use during bidding phase. Submit all drawings and specifications in electronic format. Drawings shall be submitted in AutoCAD<sup>TM</sup> Release 14 format and in PDF. Specifications will be in Microsoft Word <sup>TM</sup>format and in PDF.

## **DELIVERABLES**

- Woolpert will provide six (6) copies of the 60% design level construction documents (plans and specifications) for review by the City of Orlando.
- After attending a review meeting at the City, Woolpert will revise the construction documents and will submit six (6) copies of the 90% design level construction documents including plans and specifications, bid form and cost estimate.
- After attending a review meeting at the City, Woolpert revise the construction documents and will submit six (6) copies of the 100% construction documents, ready for bidding.
- All submittals will include the appropriate number copies of documents in PDF, on disks and/or via e-mail.

## CITY RESPONSIBILITIES

- Schedule staff members for review of the 60%, 90%, and 100% submittals.
- Schedule location and staff members for attendance to each of the review meetings.

## 4.0 <u>PERMITTING SERVICES</u>

Permitting services will be provided including the payment of fees which will be reimbursed by the City. Based on this project's scope of work, the following services are anticipated:

#### TASK 4.1 - COORDINATE WITH CITY OF ORLANDO TRANSPORTATION ENGINEERING

- 4.1.1. Meet with City of Orlando Transportation Engineering Division to discuss permitting for potential road closures, maintenance of traffic requirements, SWPPP/Erosion Control and permit application submittals for the Parramore Avenue corridor.
- 4.1.2. Prepare and submit for a City of Orlando R/W Permit and SWPPP including permit application and required attachments. Respond to requests for additional information as needed.

## TASK 4.2 – COORDINATE WITH ORANGE COUNTY PUBLIC WORKS (OCPW)

4.2.1. Meet with OCPW, regarding the Orange County right-of-way of the Gore Street corridor (Woods Avenue to Avondale Avenue), to discuss permitting for potential road closures,

maintenance of traffic requirements and permit application submittals for the Gore Street corridor.

4.2.2. Prepare and submit for an OCPW R/W Utilization Permit including permit application and required attachments. Respond to requests for additional information as needed.

## TASK 4.3 – COORDINATE WITH FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION

- 4.3.1. Submit a Permit Determination request to FDEP to determine the permitting requirements. If, requested by FDEP, meet with them to discuss permitting requirements and permit application submittals in greater detail.
- 4.3.2. Prepare and submit Florida Department of Environmental Protection (FDEP) Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System and required attachments. Respond to requests for additional information as needed.
- 4.3.3. Prepare and submit Florida Department of Environmental Protection (FDEP) Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities (NPDES) including related permit application and supporting documentation necessary to obtain required permit for construction.
- 4.3.4. Pay fee for permit applications. The City will reimburse fees paid by the Engineer.

## **DELIVERABLES**

- Woolpert will provide draft permit applications for review by the City of Orlando.
- After approval by the City, Woolpert will submit the required number of copies for City signature.
- Woolpert will submit required permit applications with the respective attachments and associated fee to each of the regulatory agencies.

## CITY RESPONSIBILITIES

- Schedule staff members for review of the permit applications.
- Return signed permit applications to Woolpert for submittal to the respective regulatory agency.

## 5.0. **BIDDING ASSISTANCE**

## TASK 5.1 – PRE-BID SERVICES

- 5.1.1. Submit Bid Documents in accordance with the City's requirements for use during the bidding phase of the project.
- 5.1.2. Attend the pre-bid conference as scheduled by the City Purchasing Department, prepare minutes, and submit to City.
- 5.1.3. Respond to written questions from bidders related to the project and prepare all addenda as required to interpret, clarify or expand the Bidding Documents. Submit addenda to the City in a timely manner that allows reception of addenda by all bidders at least three (3) days prior to bid opening date.

## TASK 5.2 – BID REVIEW AND RECOMMENDATION OF AWARD

- 5.2.1. Review and evaluate the bidder's unit prices, prepare a tabulation of bids, review the bidders submittal documents.
- 5.2.2. Verify the three (3) low bidders' experience and references, and make recommendations to the City for an award of the construction contract.

## **DELIVERABLES**

- Woolpert will provide four (4) copies of the draft Recommendation of Award letter for review by the City of Orlando.
- After the City review, Woolpert revise the Recommendation of Award letter will submit four (4) copies of letter to the City.

#### **CITY RESPONSIBILITIES**

- Schedule staff members for review of the draft Recommendation of Award letter.
- Provide City comments.

## 6.0. CONSTRUCTION ADMINISTRATION SERVICES

#### TASK 6.1 – PRE-CONSTRUCTION SERVICES

- 6.1.1. Modify bidding documents, if required, and obtain City required and contractor executed documents; provide the City with one (1) set of the "Conformed" construction drawings and one (1) set of "Conformed" technical specifications.
- 6.1.2. Attend a pre-construction conference scheduled and conducted by the City of Orlando. Distribute Conformed Contract Documents at the meeting.
- 6.1.3. Attend up to three (3) City scheduled Community Meetings to discuss details of this project scope with concerned citizens form the construction area. As the City deems necessary, these Community Meetings might be scheduled in design phases, prior to the start of construction and/or during the construction duration.
- 6.1.4. Review shop drawings and product submittals for conformance with the Contract Documents. Forward the City copies of all notes and conclusions for these reviews. Keep an updated log of all shop submittals with review and distribution dates. Woolpert will assist the City in the preparation of materials for the meeting including, but not limited to, announcements/fliers, project display boards and/or MS Power Point slides, preliminary and/or final copies of construction drawings and other assistance that might be requested.

#### TASK 6.2 - CONSTRUCTION ENGINEERING AND OBSERVATION (assume 9 months duration)

- 6.2.1. Attend bi-monthly construction progress meetings, take meeting minutes and distribute minutes to all attendees. Assume 18 construction progress meetings.
- 6.2.2. Make periodic fields visits to observe the construction of the project, discuss concerns with the City inspector, and furnish the City a written summary of the visit. Assume nine (9) field visits.
- 6.2.3. Provide clarification and interpretation of the Contract Documents when requested. If requested by the City, evaluate any requests for changes in contract price and time made by the Contractor, and provide assistance with the preparation of change orders, if required.

#### TASK 6.3 – POST-CONSTRUCTION SERVICES

- 6.3.1. Conduct substantial and final completion inspections of the project and prepare appropriate "punch lists".
- 6.3.2. Prepare record drawings incorporating changes made during construction based on as-built information furnished by the Contractor; provide to the City three (3) set of prints of the record drawings and electronic files of the record drawings in AutoCAD<sup>TM</sup> Release 14 format. Additionally, provide electronic files of scanned images of the record drawings in the pdf file format.
- 6.3.3. Prepare necessary documents and submit the project certification of completion and necessary partial certifications to the FDEP to obtain approvals for release for use. Prepare and submit

other required certifications from regulatory agencies exercising control over any part of the project.

## **DELIVERABLES**

- Woolpert will provide one (1) set of the conformed construction documents to the City.
- Woolpert will review shop drawings and provide the City with two (2) copies of all approved sets.
- Substantial completion and final completion inspection "punch lists".
- Woolpert will prepare record drawings and submit three (3) sets to the City for review.
- Regulatory clearance documentation and submittals.
- All submittals will include a copy of documents in PDF, on a disk and/or via e-mail.

## **CITY RESPONSIBILITIES**

- Schedule location and staff members for attendance to the Pre-construction Conference.
- Schedule staff members for the substantial and final completion inspections.
- Schedule staff members for review of the record drawings.

#### ATTACHMENT B

# **COMPENSATION SUMMARY**

## **ENGINEERING SERVICES FOR GORE STREET SANITARY SEWER REPLACEMENT**

#### **Hourly Engineering Services:**

#### Task 1 – Preliminary Engineering:

Basis: Hourly, not to exceed. Amount: \$46,081.07

#### Task 2 – Survey Services:

Basis: Hourly, not to exceed. Amount: \$64,764.00

#### Task 3 – Final Design:

Basis: Hourly, not to exceed. Amount: \$74,569.65

#### Task 4 – Permitting Services: Basis: Hourly, not to exceed.

Amount: \$19,459.94

Task 5 – Bidding Assistance: Basis: Hourly, not to exceed. Amount: \$13,197.94

Task 6 – Construction Administration:Basis: Hourly, not to exceed.Amount:\$40,960.04

#### Estimated Subtotal Contract Amount:

10% Owner Controlled Contingency:\$ 25,903.26(to be used only with written authorization by the City of Orlando)

Estimated Total Contract Amount: \$284,935.90

"Labor categories and rates used herein are for the sole purpose of estimating time and calculating the overall not to exceed amount. Invoicing will be based on the actual hourly wage/salary rates of the personnel utilized to accomplish the work of the scope of services and the agreed upon multiplier."

\$ 259,032.64

FIRM	AMOUNT	PERCENT (%)
Epic Engineering & Consulting Group, LLC.	\$29,420.36	11.36
Buchheit Associates, Surveying and Mapping	\$46,914.00	18.11
ASG Reprographics, Inc.	\$1,818.47	0.70
TOTAL PARTICIPATION		30.17

#### **M/WBE PARTICIPATION**

## **ATTACHMENT B (continued)**

## COMPENSATION, MANHOUR AND COST DETAIL SPREADSHEETS

# TABLE 1 SUMMARY OF FEES

Engineering Services for

Gore Street Sanitary Sewer Replacement

Item Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTAL				
Total Manhours (See Tables 2a - 2f)	125	361	184	597	48	144	1,459				
Raw Labor Wage Rate (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16					
Total Raw Labor Cost	\$7,410.00	\$21,883.82	\$6,489.68	\$18,292.08	\$2,296.80	\$3,191.04	\$59,563.42				
Total Labor Cost	(Effective Cont	ract Multiplier =	=	3.00			\$178,690.26				
Reimbursable Expenses (See Table 3)							\$2,189.55				
Subconsultant Fees (See Table 4)							\$78,152.83				
SUBTOTAL - HOURLY, NOT TO EXCEED FEE	SUBTOTAL - HOURLY, NOT TO EXCEED FEE FOR ENGINEERING SERVICES										

TOTAL CONTRACT AMOUNT		\$259,032.64
MBE Participation as a percentage of the Total Contract Amount is (City Goal of 18%) :	12.06%	
WBE Participation as a percentage of the Total Contract Amount is (City Goal of 6%)	18.11%	

WBE Participation as a percentage of the Total Contract Amount is (City Goal of 6%) :18.11%M/WBE Participation as a percentage of the Total Contract Amount is (City Goal of 24%) :30.17%

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## TABLE 2a MANHOUR & COST ESTIMATES Task 1 - Preliminary Engineering

Engineering Services for

Task Number	Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
1.1	Project Initiation							
1.1.1	Kick-off Meeting	2	4		4		2	12
1.1.2	Collect and review project related information	2	8		6		2	18
1.1.3	Meet with Orlando Planning Division	2	6		4		2	14
1.1.4	Meet with Orange County Public Works	2	6		4		2	14
1.2	Evaluate Constructability Issues							
1.2.1	Constructability Walk-thru	2	6		6		2	16
1.2.2	Request and evaluate utility maps		4		6		2	12
1.2.4	Manhole inspections (only those to remain)	1	2		6	8	4	21
1.2.5	Observe vehicular and pedesrtian traffic (see EPIC)	2	4		4		2	12
1.2.3	Coordinate Groundwater Sampling	2	2		4		2	
1.3	Preliminary Design Report							
1.3.1	Prepare draft Preliminary Design Report (PDR)	8	20		16		8	52
1.3.2	PDR Review Meeting w/meeting minutes	4	6		8		2	20
1.3.3	Prepare and submit final PDR w/QA/QC reviews	6	10		6		4	26
Total Mar	hours - Task 1 - Preliminary Engineering	33	78	0	74	8	34	217
Raw Labo	or Wage Rate (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16	
	v Labor Cost	\$1,956.24	\$4,728.36	\$0.00	\$2,267.36	\$382.80	\$753.44	\$10,088.20
Total Lab	or Cost	(Effective Conti	ract Multiplier =	=	3.00			\$30,264.60
Reimburs	able Expenses (See Table 3)		•					\$26.00
	ultant Fees (See Table 4)							\$15,790.47
TOTAL C	OST - TASK 1 - PRELIMINARY ENGINEERING	-						\$46,081.07

# TABLE 2b MANHOUR & COST ESTIMATES

## Task 2 - Survey Services

Engineering Services for

Task Number	Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
2.1	Project Survey Control							
2.1.1	Project set-up meeting. Obtain records.	2	4		8		2	16
2.1.2	Establish network control (see Buchheit Assoc)	1	2		4		1	8
2.2	Topographic Survey							
2.2.1	Coordinate exist SS survey (see Buchheit Assoc)	1	2		6		1	10
2.2.2	Coordinate topographic survey (see Buchheit Assoc)	1	4		10		4	19
2.3	Subsurface Utility Engineering (SUE)							
2.3.1	SUE to ASCE 38-02 Quality level C and D	2	8		20		2	32
2.3.2	SUE/Vacuum excav. to ASCE 38-02 Quality level A	1	4		10	40	1	56
Total Mar	hours - Task 2 - Survey Services	8	24	0	58	40	11	141
Raw Labo	or Wage Rate (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16	
Total Rav	v Labor Cost	\$474.24	\$1,454.88	\$0.00	\$1,777.12	\$1,914.00	\$243.76	\$5,864.00
Total Lab	or Cost	(Effective Cont	ract Multiplier =	=	3.00			\$17,592.00
	able Expenses (See Table 3)							\$258.00
	Iltant Fees (See Table 4)							\$46,914.00
TOTAL C	OST - TASK 2 - SURVEY SERVICES							\$64,764.00

# TABLE 2c MANHOUR & COST ESTIMATES

## Task 3 - Final Design

Engineering Services for

Task Number	Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
3.1	Preparation of Construction Documents							
	Prepare construction drawings and specifications	16	30	60	160		12	278
3.2	60% Completion Submittal							
3.2.1	Submit 60% level of completion documents		2	4	8		2	16
	60% review meeting with meeting minutes	2	8		6		2	18
	Revise construction documents	4	14	24	65		6	113
	90% Completion Submittal							
	Submit 90% level of completion documents		2	4	8		2	16
	90% review meeting with meeting minutes	2	6		5		2	15
	Prepare and submit Official Bid Form	2	6	8			2	18
3.3.4	Prepare and provide Engineer's Estimate of Cost	4	8	10			4	26
	Revise construction documents	4	10	12	40		4	70
	100% Completion Submittal							
-	Submit 100% level of completion documents		2	4	8		2	16
Total Mar	hours - Task 3 - Final Design	34	88	126	300	0	38	586
Labor Ra	te (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16	
Labor Co	st	\$2,015.52	\$5,334.56	\$4,444.02	\$9,192.00	\$0.00	\$842.08	\$21,828.18
Total Lab	or Cost	(Effective Cont	ract Multiplier =	-	3.00			\$65,484.54
Reimburs	able Expenses (See Table 3)		•					\$646.15
Subconsu	Iltant Fees (See Table 4)							\$8,438.96
TOTAL C	OST - TASK 3 - FINAL DESIGN							\$74,569.65

# TABLE 2d MANHOUR & COST ESTIMATES

## Task 4 - Permitting Services

Engineering Services for

Task Number	Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
4.1	City of Orlando Transportation Engineering							
	Meeting to discuss permitting requirements	1	3		3		1	8
4.1.2	Prepare and submit R/W Permit & SWPPP apps.	2	4	6	10		1	23
	Orange County Public Works (OCPW)							
	Meeting to discuss permitting requirements	1	3		3		1	8
	Prepare and submit R/W Utilization Permit app.	3	4	6	6		2	8
	FL Department of Environmental Protection (FDEP)							
4.3.1	Submit Letter of Permit Determination	1	2		1		1	5
4.3.2	Submit WW Collect/Transmission Permit app.	2	4	6	4		2	18
4.3.3	Submit NPDES Permit application	2	4	6	6		2	20
4.3.4	Pay fee for permit apps. (see Reimbursable Exp.)							
Total Mar	hours - Task 4 - Permitting Services	12	24	24	33	0	10	90
Raw Labo	or Wage Rate (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16	
Total Rav	v Labor Cost	\$711.36	\$1,454.88	\$846.48	\$1,011.12	\$0.00	\$221.60	\$4,245.44
Total Lab	or Cost	(Effective Cont	ract Multiplier :	=	3.00			\$12,736.32
Reimburs	able Expenses (See Table 3)							\$761.10
Subconsu	ultant Fees (See Table 4)							\$5,962.52
TOTAL C	OST - TASK 4 - PERMITTING SERVICES							\$19,459.94

# TABLE 2e MANHOUR & COST ESTIMATES

## Task 5 - Bidding Assistance

Engineering Services for

Task Number	Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
5.1	Pre-Bid Services							
5.1.1	Submit Bid Documents to Purchasing Dept.	1	2		4		2	9
	Attend Pre-Bid Conference. Prepare minutes.	2	4		4		2	12
5.1.3	Respond to written questions, prepare addenda	2	12		6		4	24
5.2	Bid Review and Recommendation of Award							
5.2.1	Review, evaluate & tabulate bids	2	10		12		2	26
5.2.2	Verify references and make award recommendation	4	8		10		2	24
								0
Total Mar	hours - Task 5 - Bidding Assistance	11	36	0	36	0	12	95
Labor Rat	te (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16	
Labor Co	st	\$652.08	\$2,182.32	\$0.00	\$1,103.04	\$0.00	\$265.92	\$4,203.36
Total Lab		(Effective Cont	tract Multiplier =	=	3.00			\$12,610.08
	able Expenses (See Table 3)							\$92.00
	Iltant Fees (See Table 4)							\$495.86
TOTAL C	OST - TASK 5 - BIDDING ASSISTANCE							\$13,197.94

## TABLE 2f MANHOUR & COST ESTIMATES Task 6 - Construction Administration

Engineering Services for

Task Number	Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
6.1	Pre-Construction Services							
6.1.1	Conform and furnish construction documents	1	2	4	8		2	17
6.1.2	Attend Pre-Construction conference		4		4			8
6.1.3	Attend up to three (3) Community Meetings	9	3	4	18		3	37
	Review shop drawings and distribute	2	16	8			2	28
6.2	Construction Engineering & Observation							
6.2.1	Bi-monthly progress meetings (assume 18 mtgs.)	4	18		4		8	34
	Periodic field visits w/report	2	24		12		10	48
6.2.3	Provide clarification of documents. CO review	4	16	4	8		6	38
6.3	Post-Constrction Services							
	Conduct substantial and final inspections	1	8		8		2	19
	Prepare and furnish record drawings	2	12	8	30		4	56
6.3.3	Prepare certifications of completion to agencies	2	8	6	4		2	22
								0
Total Mar	hours - Task 6 - Construction Administration	27	111	34	96	0	39	307
Labor Ra	te (\$/hr)	\$59.28	\$60.62	\$35.27	\$30.64	\$47.85	\$22.16	
Labor Co	st	\$1,600.56	\$6,728.82	\$1,199.18	\$2,941.44	\$0.00	\$864.24	\$13,334.24
Total Lab	or Cost	(Effective Cont	tract Multiplier :	=	3.00			\$40,002.72
Reimburs	able Expenses (See Table 3)							\$406.30
Subconsu	Iltant Fees (See Table 4)							\$551.02
TOTAL C	OST - TASK 6 - CONSTRUCTION ADMINISTRATION	ON						\$40,960.04

# TABLE 3 SUMMARY OF OTHER DIRECT COSTS Engineering Services for Gore Street Sanitary Sewer Replacement

Reimbursable Expenses			Tas	sk 1	Ta	sk 2	Ta	ask 3	Та	sk 4	Ta	sk 5	Tas	sk 6	T	otals
Unit Description	Unit Cost	Unit	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
Reproduction																
Full-size Bond Plots	\$9.00	EA		\$0.00	18	\$162.00	48	\$432.00		\$0.00		\$0.00	24	\$216.00	90	\$810.00
1/2 size Bond/Color Plots	\$3.00	EA		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Full-size Blackline Printing	\$1.50	EA		\$0.00	48	\$72.00		\$0.00		\$0.00		\$0.00	24	\$36.00	72	\$108.00
1/2 size Blackline Printing	\$1.00	EA		\$0.00		\$0.00	48	\$48.00	48	\$48.00		\$0.00		\$0.00	96	\$96.00
Photocopies	\$0.05	EA	440	\$22.00		\$0.00	1800	\$90.00	100	\$5.00	400	\$20.00	1200	\$60.00	3940	\$197.00
Subtotal Reproduction				\$22.00		\$234.00		\$570.00		\$53.00		\$20.00		\$312.00		\$1,211.00
Postage, Courier, Deliveries																
US Mail	1	LS		\$0.00	24	\$24.00	6.15	\$6.15	4.1	\$4.10	36	\$36.00	42.3	\$42.30	112.55	\$112.55
Express Courier	\$14.00	EA		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Package Deliveries	\$18.00	EA		\$0.00		\$0.00	3	\$54.00	3	\$54.00	2	\$36.00	2	\$36.00	10	\$180.00
Subtotal Postage, Courier, Deliveries				\$0.00		\$24.00		\$60.15		\$58.10		\$72.00		\$78.30		\$292.55
Miscellaneous																
FDEP Permit Fee	\$650.00	EA		\$0.00		\$0.00		\$0.00	1	\$650.00		\$0.00		\$0.00	1	\$650.00
CD's (PDF copy of PDR)	\$4.00	EA	1	\$4.00		\$0.00	4	\$16.00		\$0.00		\$0.00		\$16.00	9	\$36.00
				\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Subtotal Miscellaneous Items				\$4.00		\$0.00		\$16.00		\$650.00		\$0.00		\$16.00		\$686.00
Subtotal Cost per Task				\$26.00		\$258.00		\$646.15		\$761.10		\$92.00		\$406.30		\$2,189.55
Total Reimbursable Expenses																\$2,189.55

Subconsultant Direct Cost Breakdown per Task	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Totals
Epic Engineering & Consulting Group, LLC	\$15,790.47		\$7,780.04	\$5,849.85			\$29,420.36
Buchheit & Associates, Inc.		\$46,914.00					\$46,914.00
ASG Reprographics			\$658.92	\$112.67	\$495.86	\$551.02	
							\$0.00
Subtotal Subconsultant Direct Cost	\$15,790.47	\$46,914.00	\$8,438.96	\$5,962.52	\$495.86	\$551.02	\$78,152.83
Total Subconsultant Direct Cost Breakdown							\$78,152.83

				TABLE 3k	<u></u>			
		0			, Breakdow	n		
		0						
			-	ring Serv				
		Gore S	treet Sani	itary Sew	ver Replac	ement		
	Preliminary Engineering Services				1			J. 1
	Preliminary Engineering Report Check set	2 8	sets @	40 45	sheets/set	80	8 1/2" x 11" copies	in house
	Submittal	8	sets @	45	sheets/set	360	8 1/2" x 11" copies	in house
	Survey Services			1	1		1	
Reproduct	Check plots of survey/raster image sheets	3	coto @	6	sheets/set	10	22" x 34" vellum/bond	in house
	Utility Company request for markups	8	sets @ sets @	6	sheets/set	18 48	22" x 34" vendrify bond	in house
Postage (	ouriers, Deliveries	0	3613 @	0	3112213/321	40		III IIOUSE
	Mail Utility Company requests	8	stamps @	\$3.00	per stamp	\$24.00	lump sum	in house
		0	stamps @	<i>\$</i> 3.00	per stamp	Ç24.00		in nouse
Phase 3 - F	inal Design Services		1	<u> </u>				
Reproduct	-							
	Plotting for 60% City submittal	1	sets @	12	sheets/set	12	22" x 34" bond	in house
	Printing 60% Tech Specs for dup & check	2	sets @	300	sheets/set	600	8 1/2" x 11" copies	in house
	Printing for 60% City submittal	5	sets @	12	sheets/set	60	22" x 34" bond	see subconsultant proposal
	Printing/binding 60% Tech Specs	5	sets @	300	sheets/set	1500	8 1/2" x 11" copies	see subconsultant proposal
	Plotting for 90% City submittal	1	sets @	12	sheets/set	12	22" x 34" bond	in house
	Printing 90% Tech Specs for dup & check	2	sets @	300	sheets/set	600	8 1/2" x 11" copies	in house
	Printing for 90% City submittal	8	sets @	12	sheets/set	96	22" x 34" bond	see subconsultant proposal
	Printing/binding 90% Tech Specs	8	sets @	300	sheets/set	2400	8 1/2" x 11" copies	see subconsultant proposal
	Plotting for 100% City submittal	1	sets @	12	sheets/set	12	22" x 34" bond	in house
	Printing 100% Tech Specs for dup & check	2	sets @	300	sheets/set	600	8 1/2" x 11" copies	in house
	Printing for 100% City submittal	8	sets @	12	sheets/set	96	22" x 34" bond	see subconsultant proposal
	Printing/binding 100% Tech Specs	8	sets @	300	sheets/set	2400	8 1/2" x 11" copies	see subconsultant proposal
	Plotting for Final City Bid Package	1	sets @	12	sheets/set	12	22" x 34" bond	in house
	ouriers, Deliveries							
	Mail general corespondence	15	stamps @	\$0.41	per stamp	\$6.15	lump sum	in house
	Deliver Review Submittal packages to City					3	deliveries	in house
Dhave 4 D								
	Permitting Services		1	r	1			
Reproduct	Printing for Permit Application submittal	8	sets @	12	sheets/set	96	22" x 34" bond	see subconsultant proposal
	Permit apps. & general correspondence	0	sets @	12	SHEELS/SEL	100	8 1/2" x 11" copies	in house
	ouriers, Deliveries					100		III IIOUSE
	Mail RFI responses & general corespondence	10	stamps @	\$0.41	per stamp	\$4.10	lump sum	in house
	Deliver Permit Apps to Agencies and copy City	10	stamps @	<i>90.</i> 41	per stamp	3	deliveries	in house
Miscellane						-		
	Permit application fees	1	ea @	\$650.00	per app.	\$650.00	lump sum	in house
Phase 5 - B	Bidding Assistance						•	•
Reproduct	ion							
	Printing for 100% Bidding submittal	15	sets @	12	sheets/set	180	22" x 34" bond	see subconsultant proposal
	Printing/binding 100% Tech Specs	15	sets @	400	sheets/set	6000	8 1/2" x 11" copies	see subconsultant proposal
	Addenda, bid tabs & general correspondence					400	8 1/2" x 11" copies	in house
_	ouriers, Deliveries							
	Mail Addenda documents	12	stamps @	\$3.00	per stamp	\$36.00	lump sum	in house
l	Deliver bid documents & bid tabs to City			ļ		2	deliveries	in house
Dhan C. T								L
	Construction Administration Services			1			T	
Reproduct		4		40	ah a at - /	40	22"	in herree
	Plot conformed construction plans	1	sets @	12	sheets/set	12	22" x 34" bond	in house
	Printing conformed Project Manuals	15	sets @	400	sheets/set	6000	8 1/2" x 11" copies	see subconsultant proposal
	Printing conformed construction plans Plot record drawings	15	sets @	12	sheets/set	180	22" x 34" bond	see subconsultant proposal
	5	1	sets @	12	sheets/set	12	22" x 34" bond 22" x 34" bond	in house see subconsultant proposal
	Printing record drawings Meeting minutes & general correspondence	3	sets @	12	sheets/set	36 1200	8 1/2" x 11" copies	
	ouriers, Deliveries			<u> </u>		1200	0 1/2 X 11 CODIES	in house
IIF USLAGE, U		30	stamps @	\$0.41	per stamp	\$12.30	lump sum	in house
			Latan IUS (W			J12.30	IIIIII JUIII	111 110430
	Mail meeting minutes & general corespondend Mail shop drawings to Contractor, copy City	10	stamps @	\$3.00	per stamp	\$30.00	lump sum	in house

# TABLE 4 SUBCONSULTANT FEES Engineering Services for Gore Street Sanitary Sewer Replacement

M/WBE Subconsultants	Task	Proposed Fee
Epic Engineering & Consulting Group, LLC	1, 3 & 4	\$29,420.36
Buchheit & Associates, Inc.	2	\$46,914.00
ASG Reprographics, Inc.	Misc	\$1,818.47
Total M/WBE Subconsultants Fees		\$78,152.83
Majority Subconsultants	Task	Proposed Fee
Total Majority Subconsultants Fees		\$0.00
Total Subconsultants Fees		\$78,152.83

MBE Participation as a percentage of the Total Contract Amount is (City Goal of 18%) :	12.06%
WBE Participation as a percentage of the Total Contract Amount is (City Goal of 6%) :	18.11%
M/WBE Participation as a percentage of the Total Contract Amount is (City Goal of 24%) :	30.17%

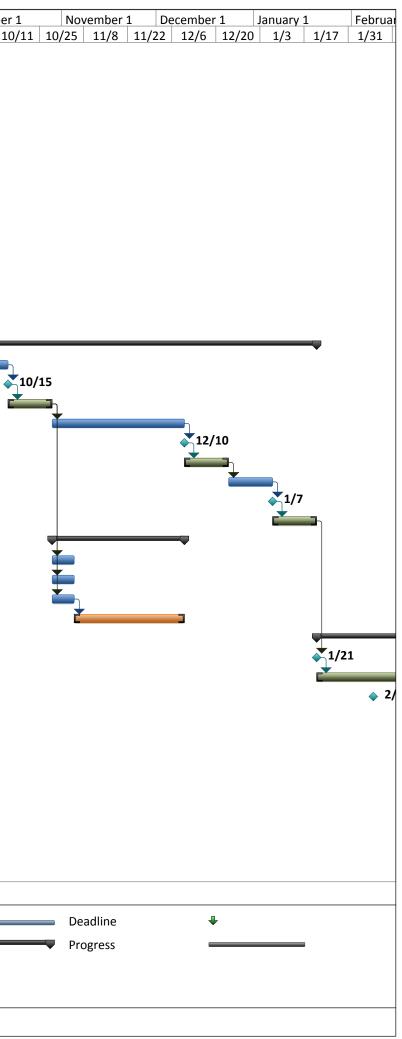
## ATTACHMENT C

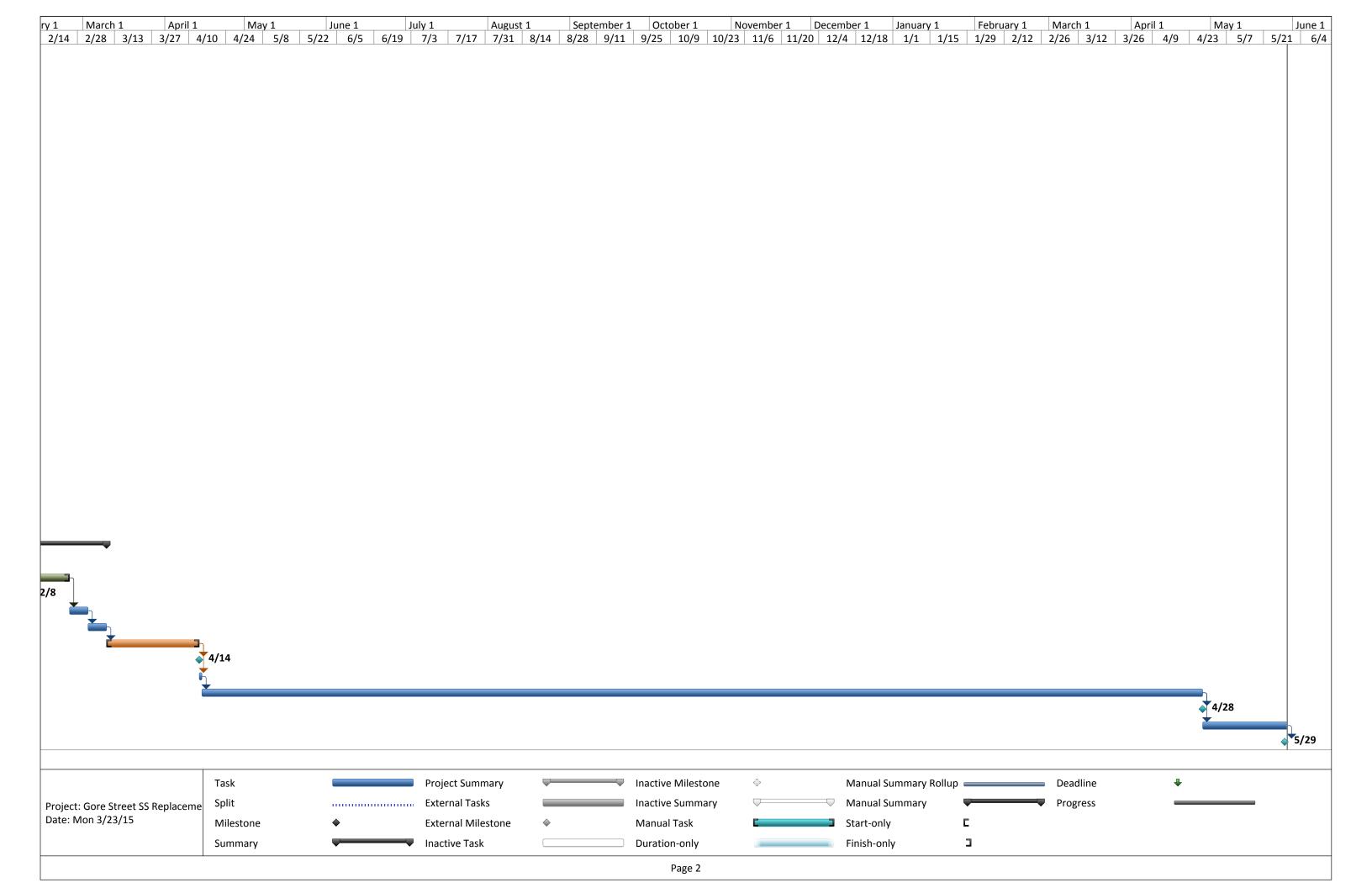
# **SCHEDULE**

# ENGINEERING SERVICES FOR GORE STREET SANITARY SEWER REPLACEMENT

The schedule assumes a start date of April 30, 2015 and extends to a construction completion on April 28, 2017 and final completion and closeout date of May 29, 2017. See attached schedule.

ID	0	Task Name	Duration	Start	Finish Predeces	May 4/12 4/26		July 1 6/21 7/5	August 7/19 8/2	1         September 1           8/16         8/30         9/13	October 1 9/27 10/
1		Preliminary Engineering	60 days	Thu 4/30/15	Wed 7/22/15						
2		Project Kickoff Meeting	0 days	Thu 4/30/15	Thu 4/30/15	<b>▲_</b> 4/3	80				
3		Project Inititaion Tasks	10 days	Thu 4/30/15	Wed 5/13/15 2						
4		Evaluate Constructability	20 days	Thu 5/14/15	Wed 6/10/15 3						
5		Preliminary Design Report	20 days	Thu 6/11/15	Wed 7/8/154		¥				
6		PDR Review	10 days	Thu 7/9/15	Wed 7/22/15 5				հ		
7		Survey & Geotech Investig		Thu 4/30/15		Buc	hheit Associates		2		
8		Survey Control	2 days	Thu 6/11/15	Fri 6/12/15 4		Г. International Internationa				
9		Topographic Survey	27 days	Mon 6/15/15	Tue 7/21/15		<u>+</u>		2		
10		Existing SS MH Survey	5 days	Mon 6/15/15	Fri 6/19/15 8						
11		Topographic Survey	10 days	Mon 6/22/15	Fri 7/3/15 10						
12		Provide Base Drawings	12 days	Mon 7/6/15	Tue 7/21/15 11				'n		
13		Subsurf Util Eng (SUE)	6 days?	Mon 6/22/15	Mon 6/29/15						
14		Sunshine One call	1 day?		Mon 6/22/15 10			Ĩ,			
15		GPR/Vacuum Excav.	5 days	Tue 6/23/15	Mon 6/29/15 14						
16		Final Design	130 days	Thu 7/23/15	Wed 1/20/16			l.			
17		Prepare Drawings & Specs	60 days		Wed 10/14/15 12,6						
18		60% Submittal	0 days		Thu 10/15/15 17						
19		60% Review/ 60% Meeting	10 days	Thu 10/15/15	Wed 10/28/15 18						C
20		<b>Revise Drawings &amp; Specs</b>	30 days	Thu 10/29/15	Wed 12/9/15 19						
21		90% Submittal	0 days	Thu 12/10/15	Thu 12/10/15 20						
22		90% Review / 90% Meetin <sub></sub>	10 days	Thu 12/10/15	Wed 12/23/15 21						
23		<b>Revise Drawings &amp; Specs</b>	10 days	Thu 12/24/15	Wed 1/6/16 22						
24		100% Submittal	0 days	Thu 1/7/16	Thu 1/7/16 23						
25		100% Review / Bid Ready	10 days	Thu 1/7/16	Wed 1/20/16 24						
26		Permitting Services	30 days	Thu 10/29/15							
27		City Transportation Eng	5 days		Wed 11/4/15 19						
28		Orange County PW	5 days		Wed 11/4/15 19						
29		FDEP	5 days		Wed 11/4/15 19						
30		Permit Agency Review	25 days		Wed 12/9/15 29						
31		Bidding Assistance	35 days	Thu 1/21/16							
32		Submit Bid Documents	0 days	Thu 1/21/16							
33		Bidding Period	25 days		Wed 2/24/16 32						
34		Attend Prebid Meeting	0 days	Mon 2/8/16	Mon 2/8/16						
35		Review/Evaluate Bids	5 days	Thu 2/25/16							
36		Recommend of award	5 days	Thu 3/3/16							
37	_	City Notice of Award	25 days		Wed 4/13/16 36						
38		City Notice to Proceed	0 days	Thu 4/14/16							
39		Preconstruction Conference	1 day	Thu 4/14/16							
40		Construction Period	270 days	Fri 4/15/16							
		Substantial Completion	0 days	Fri 4/28/17	Fri 4/28/17 40						
41		Cleanup and Closeout	22 days		Mon 5/29/17 40						
41 42	_		0 days	Mon 5/29/17	Mon 5/29/17 42						
41		Final Completion	0 0073								
41 42			0 days								
41 42		Final Completion Task	0 ddys		Project Summary		Inactive Mile	estone $\diamond$		Manual Summary Rollup	
41 42 43	t: Gore				· ·		Inactive Mile			Manual Summary Rollup Manual Summary	<b>•</b>
41 42 43 Projec	t: Gore Mon 3/2	Task Street SS Replaceme Split	<u> </u>	•		÷		imary 🗸			
41 42 43 Projec		Street SS Replaceme Split	<u> </u>	¢	External Tasks	¢	Inactive Sum	imary C		Manual Summary	с э

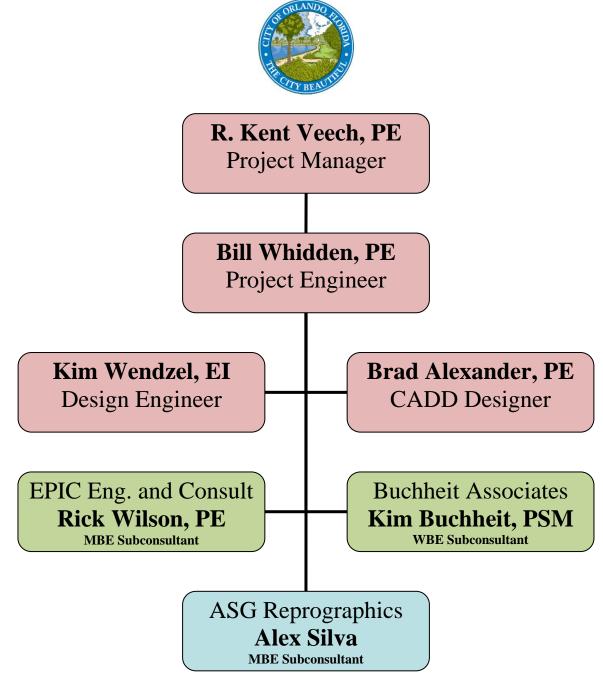




## ATTACHMENT D

# **PROJECT TEAM**

# ENGINEERING SERVICES FOR GORE STREET SANITARY SEWER REPLACEMENT



## EXHIBIT 1

# SUBCONSULTANT PROPOSALS

Epic Engineering & Consulting Group, LLC

**Buchheit Associates Surveying and Mapping** 

ASG Computer & Reprographics, Inc.

**EPIC Engineering & Consulting Group, LLC** 



January 12, 2015

R. Kent Veech, PE Associate Woolpert, Inc 3504 Lake Lynda Drive, Suite 400 Orlando, Florida 32817-1484

Re: City of Orlando Public Works - Wastewater Division Gore Street Sanitary Sewer Replacement Scope of Services - Preliminary and Final Design (R1)

Dear Mr. Veech:

In accordance with your request, EPIC Engineering & Consulting Group, LLC (EPIC) has prepared a proposal for the referenced project. The overall project involves preliminary engineering, final design, permitting, and bidding and construction administration services for the replacement of sanitary sewer mains, manholes and laterals along the following:

- Gore Street from Avondale Avenue to Woods Avenue (approximately 2,500 feet)
- Parramore Avenue from Gore Street to Columbia Street (approximately 1,400 feet)

This scope of services has been developed based on assisting Woolpert with the project by providing assistance during the preliminary design, final design and permitting phases of the project.

Our scope of services, schedule and compensation are provided in the following sections.

## **SCOPE OF SERVICES**

EPIC will assist Woolpert by providing the following services:

## Task 1 Preliminary Engineering Assistance

- Meetings One kick-off meeting and two project review meetings.
- Participate is a site walk-thru and review of proposed alignments and site conditions, including site investigations regarding above grade features and utilities.
- Assess traffic conditions is the construction area to identify issues and solutions. It is anticipated that the extent of the assessment work will include general conditions along the pipeline routes and detailed conditions on up to three (3) intersections.

- Assess future development potential along the project (including two meetings with City Planning). Assessment will also include a planning-level comparison of previous and current population and flow projections within the pump station service areas s associated with these the collection systems.
- Document finding in brief letter report or in a section of the PDR.
- QA/QC review of the Preliminary Design Report (draft and final).

## Task 2 Survey Services

No EPIC services proposed for this task

## Task 3 Design Phase QA/QC

- Provide quality assurance and quality control (QA/QC), and "constructability" reviews for submittals at the 60%, 90%, and 100% levels of completion.
- The reviews will include plan and profile drawings, applicable construction details, technical specifications, and an opinion of the probable construction cost.
- Prepare for and attend three (3) review meetings with Woolpert and (3) three meetings with the City.
- The review will include "back-checking" to ensure that the previous review comments were addressed.

## Task 4 Permitting Assistance

- Identify permitting requirements for the following agencies: FDEP, City of Orlando Public Works, Orange County Public Works (Gore from Orange Blossom Trail to Avondale) and FDOT.
- Conduct up to four (4) permit coordination meetings to define permit requirements.
- Document findings in a memorandum and assist with preparation of permit applications.

## **PROJECT SCHEDULE**

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

January 12, 2015 Page 3

#### COMPENSATION

EPIC will be compensated for the services described herein on a not to exceed, hourly basis in the amount of **\$29,420.36**. The not to exceed fee estimate for the scope of services is enclosed as Attachment A.

We sincerely appreciate the opportunity to assist Woolpert 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,

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

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

#### ATTACHMENT A

#### EPIC Engineering & Consulting Group, LLC City of Orlando Public Works - Wastewater Division Gore Street Sanitary Sewer Replacement – Preliminary and Final Design (R1) EPIC NOT TO EXCEED LABOR BUDGET

		Senior Project Manager	Professional I	Tech III	Admin II	Total	Total Raw Labor Cost	
Task	Task Name	P8	P3	Т3	A2	Hours	(\$)	(\$)
	Hourly Rate	\$61.20	\$43.40	\$25.00	\$22.30			
1	Preliminary Design Assistance	62	27	11	5	105	\$5,352.70	\$15,790.47
3	Final Design QA/QC	42	0	0	3	45	\$2,637.30	\$7,780.04
4	Permitting Asisitance	26	8	0	2	36	\$1,983.00	\$5,849.85
	Total Not to Exceed Fee	130	35	11	10	81	\$ 4,620.30	\$29,420.36

Labor Multiplier 2.95

**Buchheit Associates Surveying and Mapping** 



#### Buchheit Associates, Inc. Surveyors & Mappers City of Orlando Gore Street Sanitary Sewer Replacement Fee Estimate February 16, 2015

TASK	Survey Proje	ct Manager	Survey	or &	Mapper	Survey	Cre	ew (Avg)	Office Te	echnician	Other Expenses	Sul	ototal Amount
	hours	rate	hours		rate	hours		rate	hours	rate			
Preliminary Design													
Property Research	4	\$ 150.00	4	\$	106.50	0	\$	150.00	4	\$ 90.00		\$	1,386.00
Project Vertical Control (Benchmarks 8 +/-)	2	\$ 150.00	4	\$	106.50	16	\$	150.00	8	\$ 90.00		\$	3,846.00
Project Horizontal Control and References	4	\$ 150.00	6	\$	106.50	16	\$	150.00	8	\$ 90.00		\$	4,359.00
Locate Existing Structures, Detail and Obtain Rough	4	\$ 150.00	6	\$	106.50	24	\$	150.00	12	\$ 90.00			
Ground Profile for Preliminary Design												\$	5,919.00
Final Design													
Right-of-way and Property Ties	4	\$ 150.00	6	\$	106.50	24	\$	150.00	12	\$ 90.00		\$	5,919.00
Topographic Survey (600' per field day)	8	\$ 150.00	12	\$	106.50	56	\$	150.00	30	\$ 90.00		\$	13,578.00
Locate Geotechnical Borings (assume 1 field day)	1	\$ 150.00	2	\$	106.50	8	\$	150.00	4	\$ 90.00		\$	1,923.00
Underground Utility-Data Collection of Location by	2	\$ 150.00	4	\$	106.50	20	\$	150.00	10	\$ 90.00			
Others												\$	4,626.00
Field Review, Misc QC/QA (Internal)	2	\$ 150.00	4	\$	106.50	8	\$	150.00	4	\$ 90.00		\$	2,286.00
Preliminary Deliverables/Address Misc. Comments	2	\$ 150.00	4	\$	106.50	0	\$	150.00	6	\$ 90.00		\$	1,266.00
Final Deliverables	2	\$ 150.00	4	\$	106.50	0	\$	150.00	12	\$ 90.00		\$	1,806.00
Total Fee Estimate												\$	46,914.00

#### Proposal History:

First Draft Fee Estimate 7/25/2014 Revised 2/16/15-Change Project Limits and Name

Project Limits are currently defined as follows:

W. Gore Ave. from Woods Ave. to Parramore and from Parramore to Avondale.Parramore Ave. from Gore to Columbia.Survey includes topography of full Right-of-way and Right-of-Way line determination.This estimate is being provided to aid in developing a budget and approach to the project.

It is based on the best information available at this time and is subject to change.

#### Kimberly A. Buchheit, P.S.M., President

2/16/2015

Kimberly A. Buchheit, P.S.M., President BUCHHEIT ASSOCIATES, INC. SURVEYORS & MAPPERS 427 Center Pointe Circle, Suite 1811 Altamonte Springs, FL 32701 Phone (407) 331-0505, Fax (407) 331-3266

Project Number: 2130012-0001

Approved By:

Kent Veech, PE Senior Associate Woolpert One Purlieu Place, Suite 122 Winter Park, FL 32792 Phone: 407-381-2192 kent.veech@woolpert.com ASG Computer & Reprographics, Inc.



P.O. Box 5601 Winter Park, FL 32793 Tel: 407·895·5670 Fax: 407·895·5669



Date	Estimate #
1/12/2015	1005

Name / Address 4073812192 Woolpert, Inc. 1 Perleiu Place Suite 122 Winter Park, FL 32792

		Terms	Rep	Projec	ct/Job
		Net 30	AS	Gore Street & I	Parramore Ave
Item	Description	Qty		Cost	Total
	Phase 3 - Final Design Services				
	60% City Subittal				
207	24" x 36" Digital Laser Bond Copies		60	0.90	54.00T
PDF	Process Charge for PDF		2	5.00	10.00T
10-1	8 <sup>1</sup> / <sub>2</sub> " x 11" Digital Copies	1	,500	0.04	60.00T
10-2	81/2" x 11" 110# Printed		5	0.25	1.25T
10-3	81/2" x 11" 110# Non-Printed		5	0.25	1.25T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole,		760	0.008	6.08
U	3-Hole, Wire, Etc				
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)		5	2.25	11.25T
Delivery	Delivery Fee		1	10.00	10.00
	90% City Submittal				
207	24" x 36" Digital Laser Bond Copies		96	0.90	86.40T
PDF	Process Charge for PDF		2	5.00	10.00T
10-1	8 <sup>1</sup> / <sub>2</sub> " x 11" Digital Copies	2	400	0.04	96.00T
10-2	81/2" x 11" 110# Printed		8	0.25	2.00T
10-3	8 <sup>1</sup> / <sub>2</sub> " x 11" 110# Non-Printed		8	0.25	2.00T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole,	1	,216	0.008	9.73
	3-Hole, Wire, Etc		,		
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)		8	2.25	18.00T
Delivery	Delivery Fee		1	10.00	10.00
		ן פ	Subtota	al	
			Sales T	ax (6.5%)	
		-	Total		



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Date	Estimate #
1/12/2015	1005

Name / Address 4073812192 Woolpert, Inc. 1 Perleiu Place Suite 122 Winter Park, FL 32792

		Terms	Rep	Proje	ect/Job
		Net 30	AS	Gore Street &	Parramore Ave
Item	Description	Qty		Cost	Total
	100% City Submittal				
207	24" x 36" Digital Laser Bond Copies		96	0.90	86.40T
PDF	Process Charge for PDF		2	5.00	10.00T
10-1	8½" x 11" Digital Copies	2	,400	0.04	96.00T
10-2	8½" x 11" 110# Printed	-	8	0.25	2.00T
10-3	8½" x 11" 110# Non-Printed		8	0.25	2.00T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole,	1	,216	0.008	9.73
Tible I unening	3-Hole, Wire, Etc	· ·	,210	0.000	0.10
GBC-Large	GBC Binding - 1 <sup>1</sup> / <sub>4</sub> " to 2" (230-450 Sheets)		8	2.25	18.00T
Delivery	Delivery Fee		1	10.00	10.00
Denvery				10.00	10.00
	Phase 4 - Permitting Services				
207	24" x 36" Digital Laser Bond Copies		96	0.90	86.40T
PDF	Process Charge for PDF		2	5.00	10.00T
Delivery	Delivery Fee		1	10.00	10.00
	Phase 5 - Bidding Assistance				
207	24" x 36" Digital Laser Bond Copies		125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies		55	0.54	29.70T
PDF	Process Charge for PDF		2	5.00	10.00T
10-1	8½" x 11" Digital Copies		,000	0.04	240.00T
10-1			,000	0.04	240.001
			Subtot	al	
			Sales Tax (6.5%)		
			Tatal		
			Total		



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Date	Estimate #
1/12/2015	1005

Name / Address 4073812192 Woolpert, Inc. 1 Perleiu Place Suite 122 Winter Park, FL 32792

		Terms	Rep	Proje	ct/Job
		Net 30	AS	Gore Street &	Parramore Ave
Item	Description	Qty		Cost	Total
10-2 10-3 Hole Punching	8 <sup>1</sup> / <sub>2</sub> " x 11" 110# Printed 8 <sup>1</sup> / <sub>2</sub> " x 11" 110# Non-Printed Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole,	2	15 15 ,030	0.25 0.25 0.008	3.75T 3.75T 24.24
GBC-Large	3-Hole, Wire, Etc GBC Binding - 11/4" to 2" (230-450 Sheets)		15	2.25	33.75T
Delivery	Delivery Fee		1	10.00	10.00
207	Phase 6 - Construction Administration Services 24" x 36" Digital Laser Bond Copies		125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies		55	0.54	29.70T
PDF	Process Charge for PDF		2	5.00	10.00T
10-1	8½" x 11" Digital Copies	6	,000	0.04	240.00T
10-2	81/2" x 11" 110# Printed		15	0.25	3.75T
10-3	81/2" x 11" 110# Non-Printed		15	0.25	3.75T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole, 3-Hole, Wire, Etc	3	,030	0.008	24.24
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)		15	2.25	33.75T
Delivery	Delivery Fee		1	10.00	10.00
207	Record Drawings		20	0.00	00 40T
207 PDF	24" x 36" Digital Laser Bond Copies Process Charge for PDF		36 2	0.90 5.00	32.40T 10.00T
			Subtot	al	
		5	Sales Tax (6.5%) Total		
		-			



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Date	Estimate #
1/12/2015	1005

Name / Address
4073812192 Woolpert, Inc. 1 Perleiu Place Suite 122 Winter Park, FL 32792

		Terms	R	ер	Pro	ject/Job
		Net 30	A	S	Gore Street	& Parramore Ave
Item	Description	Qty	•		Cost	Total
Delivery	Delivery Fee		1		10.00	10.00
				tota	\$1,716.27	
			Sales Tax (6.5%)			\$102.20
			Total			\$1,818.47

## EXHIBIT 2

**PROJECT SCHEMATIC MAPS** 







Can G

300 **398** 

W Columbia St

001013S11

W COTO St

## Replace 16" CI Gravity Sewer Main

10-0-0

Sn=400

05006

W Care 33

661

W Colugbia St

610

0052

1200

01800

150

701

Citrus St

704

791

006007

W Gore St

Piedmont St

050060056 813

10010

W Colembia St

05006

060072

Citrus St

998

0060059

0850060062

Carl Anderson Ct

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1001

181

## EXHIBIT 3

# **CONCEPTUAL CONSTRUCTION COST ESTIMATE**



One Purlieu Place, Suite 122

Preliminary Opinion of Probable Construction Cost

Engineer's Project No.: N/A

Project: Gore Street Sanitary Sewer Replacement

		Type of Estimate: Conceptual Take-Off By: BHA Date: 02-17-15 Estimated By: RKV Date: 02-17-15				
Item No.	Description		Unit	Unit Price	Estimated Amount	
S1	Mobilization/Demobilization/Bonds/Permits (Max. 5% of items S2 thru S24)	1	LS	\$85,000.00	\$85,000.00	
S2	Field Engineering, Survey and Controls	1	LS	\$20,000.00	\$20,000.00	
S3	Project Record Drawings	1	LS	\$10,000.00	\$10,000.00	
S4	Preconstruction Audio/Visual Documentation and Construction Photographs	1	LS	\$5,000.00	\$5,000.00	
S5	Maintenance of Traffic	1	LS	\$60,000.00	\$60,000.00	
S6	Utility Support and/or Protect	1	LS	\$25,000.00	\$25,000.00	
S7	By-Pass Pumping	1	LS	\$80,000.00	\$80,000.00	
S8	8" PVC Gravity Sanitary Sewer Main (6-8 ft) (Avondale stubout)	50	LF	\$75.00	\$3,750.00	
S9	8" PVC Gravity Sanitary Sewer Main (12-14 ft) (Miscellaneous stubouts)	200	LF	\$80.00	\$16,000.00	
S10	10" PVC Gravity Sanitary Sewer Main (12-14 ft) (Westmoreland stubout)	50	LF	\$85.00	\$4,250.00	
S11	12" PVC Gravity Sanitary Sewer Main (6-8 ft) (Gore from Avondale to Parramore)	500	LF	\$90.00	\$45,000.00	
S12	16" or 18" PVC Gravity Sanitary Sewer Main (12-14 ft) (Gore from Parramore to Woods)	2,000	LF	\$130.00	\$260,000.00	
S13	16" PVC Gravity Sanitary Sewer Main (0-6 ft) (Parramore from Columbia to Raleigh)	215	LF	\$80.00	\$17,200.0	
S14	16" PVC Gravity Sanitary Sewer Main (6-8 ft) (Parramore from Columbia to Raleigh)	215	LF	\$90.00	\$19,350.0	
S15	16" PVC Gravity Sanitary Sewer Main (8-10 ft) (Parramore from Rallegh to Piedmont)	740	LF	\$100.00	\$74,000.0	
S16	16" PVC Gravity Sanitary Sewer Main (10-12 ft) (Parramore from Piedmont to Gore)	140	LF	\$110.00	\$15,400.0	
S17	4' Dia. Sanitary Manhole (0-6 ft)	1	EA	\$5,500.00	\$5,500.0	
S18	4' Dia. Sanitary Manhole (6-8 ft)	1	EA	\$6,000.00	\$6,000.0	
S19	4' Dia. Sanitary Manhole (12-14-ft)	14	EA	\$6,500.00	\$91,000.00	
S20	4' Dia. Sanitary Manhole (14-16 ft)	1	EA	\$7,500.00	\$7,500.0	
S21	6" PVC Gravity Sewer Lateral w/Cleanout (Single)	28	EA	\$3,800.00	\$106,400.0	
S22	Initial Asphalt Pavement Restoration (estimate 20' wide trench)	9,000	SY	\$60.00	\$540,000.0	
S23	Milling Existing Asphalt Pavement	9,000	SY	\$4.00	\$36,000.0	
S24	1" Final Asphalt Overlay	18,000	SY	\$12.00	\$216,000.0	

SUBTOTAL GRAVITY SEWER REPLACEMENT \$1,748,350.00

