



SECTION 00843  
CHANGE ORDER

(Instructions on 00843-2)

No.

3

PROJECT: Bulldog Drive Improvements

DATE OF ISSUANCE 11/8/2012

EFFECTIVE DATE

11/20/2011

CITY OF PALM COAST

CITY Contract/Purchase Order No.: 20110463

CONTRACTOR N/A

ENGINEER/ARCHITECT

WilsonMiller

You are directed to make the following changes in the Contract Documents.

Description: Modification of existing project scope and associated task fees.

Reason for Change Order: Additional services for the completion of the final design activities and the preparation of the final engineering analysis and/or calculations to support the final design and construction plans. In addition, it includes fees for post design services for bidding assistance and construction engineering & inspection services.

Attachments: Exhibit 'A' Fee Task Summary Sheet. Exhibit 'B' Additional Scope of Services Description No. 3 dated November 8, 2012. Exhibit 'C' Proposed Improvements.

| CHANGE IN CONTRACT PRICE:  | CHANGE IN CONTRACT TIMES:-   |
|--|--|
| Original Contract Price<br>\$348,000.00  | Original Contract Times<br>Substantial Completion: _____ N/A<br>Ready for Final Payment: _____ N/A<br>(days or dates)                |
| Net Change from previous Change Orders No. ___0___ to No. ___2___<br>\$20,697.32 | Net change from previous Change Orders No. _____ to No. _____<br>(days)  |
| Contract Price prior to this Change Order<br>\$368,697.32                        | Contract Times Prior to this Change Order<br>Substantial Completion: _____<br>Ready for Final Payment: _____<br>(days or dates)      |
| Net Increase (decrease) of this Change Order<br>\$212,999.57                     | Net Increase (decrease) of this Change Order<br>(days)   |
| Contract Price with all approved Change Orders<br>\$581,696.89                   | Contract Times with all approved Change Orders<br>Substantial Completion: _____<br>Ready for Final Payment: _____<br>(days or dates) |

RECOMMENDED:

APPROVED:

ACCEPTED:-

By: \_\_\_\_\_  
Engineer/Architect (Authorized Signature)

By: \_\_\_\_\_  
City (Authorized Signature)

By: N/A \_\_\_\_\_  
Contractor (Authorized Signature)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

EXHIBIT 'A'

**BULLDOG DRIVE IMPROVEMENTS - DESIGN CONTRACT**

|                                   |                     |                          |  |  |            | Additional Scope Items |             |             |                 |                      |                   |
|-----------------------------------|---------------------|--------------------------|--|--|------------|------------------------|-------------|-------------|-----------------|----------------------|-------------------|
| Stantec                           | Budget 11-3-10      | Budget Remaining 11-8-11 | Revised Budget Change Order 1&2 Goal No. 1 | Revised Budget Change Order 3 Goal No. 2 |            | Stormwater             | High School | SR100       | Bulldog Phasing | Misc. Services (T/M) | Post Design (T/M) |
| <b>Project General</b>            | \$20,000.00         | \$2,442.09               | (\$2,442.09)                               |  |            |                        |             |             |                 |                      |                   |
| Stantec (4-lane)                  |                     |                          |  | \$0.00                                   | \$9,000.00 |                        |             |             | \$6,557.91      |                      |                   |
| <b>Roadway Analysis</b>           | \$110,000.00        | \$32,920.09              | (\$32,920.09)                              |  |            |                        |             |             |                 |                      |                   |
| Roadway                           |                     |                          | \$9,165.00                                 | \$33,750.00                              |            |                        |             |             | \$9,994.91      |                      |                   |
| Stantec (HS)                      |                     |                          | \$13,757.25                                | \$19,200.00                              |            |                        | \$32,957.25 |             |                 |                      |                   |
| Stantec (SR100)                   |                     |                          | \$24,898.25                                | \$17,125.00                              |            |                        |             | \$42,023.25 |                 |                      |                   |
| <b>Structures</b>                 | \$3,000.00          | \$3,000.00               | (\$3,000.00)                               | \$3,000.00                               |            |                        |             |             |                 |                      |                   |
| <b>S&amp;PM Analysis</b>          | \$4,000.00          | \$4,000.00               | (\$4,000.00)                               |  |            |                        |             |             |                 |                      |                   |
| Phasing                           |                     |                          | \$0.00                                     | \$3,000.00                               |            |                        |             |             | (\$1,000.00)    |                      |                   |
| <b>Signal Analysis</b>            | \$10,000.00         | \$6,743.50               | (\$6,743.50)                               |  |            |                        |             |             |                 |                      |                   |
| Signalization                     |                     |                          | \$0.00                                     | \$6,743.50                               |            |                        |             |             |                 |                      |                   |
| <b>Survey</b>                     | \$36,000.00         | \$28.60                  | (\$28.60)                                  |  |            |                        |             |             |                 |                      |                   |
| Survey (HS)                       |                     |                          | \$18,200.00                                | \$0.00                                   |            |                        | \$18,171.40 |             |                 |                      |                   |
| Survey (SR100)                    |                     |                          | \$6,000.00                                 | \$0.00                                   |            |                        |             | \$6,000.00  |                 |                      |                   |
| <b>Mapping</b>                    | \$3,500.00          | \$1,174.50               | (\$1,174.50)                               | \$0.00                                   |            |                        |             |             | (\$1,174.50)    |                      |                   |
| <b>ROW Acquis.</b>                | \$11,500.00         | \$11,305.00              | (\$11,305.00)                              | \$0.00                                   |            |                        |             |             | (\$11,305.00)   |                      |                   |
| <b>P&amp;LA Analysis</b>          | \$33,000.00         | \$16,288.50              | (\$16,288.50)                              |  |            |                        |             |             |                 |                      |                   |
| L/A Analysis and Plans            |                     |                          | \$0.00                                     | \$12,858.67                              |            |                        |             |             | (\$3,429.83)    |                      |                   |
| <b>P&amp;LA Gateway</b>           | \$10,000.00         | \$3,486.40               | (\$3,486.40)                               | \$3,486.40                               |            |                        |             |             |                 |                      |                   |
| <b>Misc. Services (T/M)</b>       | \$0.00              | \$0.00                   | \$0.00                                     | \$25,000.00                              |            |                        |             |             |                 | \$25,000.00          |                   |
| <b>Total:</b>                     | \$241,000.00        | \$77,902.28              | (\$9,368.18)                               | \$133,163.57                             |            |                        |             |             |                 |                      |                   |
| <b>Stone</b>                      | <b>Budget</b>       | <b>Budget Remaining</b>  |  |  |            |                        |             |             |                 |                      |                   |
| <b>Drainage Analysis</b>          | \$42,000.00         | \$2,100.00               | (\$2,100.00)                               |  |            |                        |             |             |                 |                      |                   |
| Stone (HS)                        |                     |                          | \$10,666.50                                | \$7,400.00                               |            |                        | \$15,966.50 |             |                 |                      |                   |
| Stone (SR100)                     |                     |                          | \$10,101.00                                | \$5,439.00                               |            |                        |             | \$15,540.00 |                 |                      |                   |
| Stone (Pumps)                     |                     |                          | \$20,993.00                                | \$8,997.00                               |            | \$29,990.00            |             |             |                 |                      |                   |
| Drainage - Phase One              |                     |                          | \$0.00                                     | \$9,800.00                               |            |                        |             |             | \$9,800.00      |                      |                   |
| <b>Utilities</b>                  | \$34,000.00         | \$6,800.00               | (\$6,800.00)                               | \$9,200.00                               |            |                        |             |             | \$2,400.00      |                      |                   |
| <b>Env Permit</b>                 | \$18,000.00         | \$2,700.00               | (\$2,700.00)                               |  |            |                        |             |             |                 |                      |                   |
| Stone (4-lane)                    |                     |                          | \$3,155.00                                 | \$0.00                                   |            |                        |             |             | \$455.00        |                      |                   |
| Env. Permit Mod                   |                     |                          | \$0.00                                     | \$3,200.00                               |            |                        |             |             | \$3,200.00      |                      |                   |
| <b>Geotech</b>                    | \$6,000.00          | \$0.00                   |  |  |            |                        |             |             |                 |                      |                   |
| Geotech (HS)                      |                     |                          | \$1,100.00                                 | 0.00                                     |            |                        | \$1,100.00  |             |                 |                      |                   |
| Geotech (SR100)                   |                     |                          | \$2,650.00                                 | 0.00                                     |            |                        |             | \$2,650.00  |                 |                      |                   |
| <b>Lighting Analysis</b>          | \$7,000.00          | \$7,000.00               | (\$7,000.00)                               |  |            |                        |             |             |                 |                      |                   |
| Lighting Analysis & Plans         |                     |                          | \$0.00                                     | \$7,000.00                               |            |                        |             |             | \$0.00          |                      |                   |
| <b>Total:</b>                     | \$107,000.00        | \$18,600.00              | \$30,065.50                                | \$51,036.00                              |            |                        |             |             |                 |                      |                   |
| <b>Post-Design Services (T/M)</b> | <b>Budget</b>       | <b>Budget Remaining</b>  |  |  |            |                        |             |             |                 |                      |                   |
| <b>Bidding Assistance (T/M)</b>   | \$0.00              | \$0.00                   | \$0.00                                     | \$3,800.00                               |            |                        |             |             |                 |                      | \$3,800.00        |
| <b>CEI</b>                        | \$0.00              | \$0.00                   | \$0.00                                     | \$25,000.00                              |            |                        |             |             |                 |                      | \$25,000.00       |
| <b>Total:</b>                     | \$0.00              | \$0.00                   | \$0.00                                     | \$28,800.00                              |            | \$29,990.00            | \$68,195.15 | \$66,213.25 | \$15,498.49     | \$25,000.00          | \$28,800.00       |
| <b>GRAND TOTAL:</b>               | <b>\$348,000.00</b> | <b>\$96,502.28</b>       | <b>\$20,697.32</b>                         | <b>\$212,999.57</b>                      |            |                        |             |             |                 |                      |                   |

EXHIBIT 'B'

CONTINUING SERVICES: RFQ-CD-07-01

CITY CAPITAL IMPROVEMENT PROJECT NO.: TB-CP-11-01

November 8<sup>th</sup>, 2012

Exhibit C

ADDITIONAL SERVICES DESCRIPTION NO. 3

SCOPE OF SERVICES

FOR

BULLDOG DRIVE IMPROVEMENTS PROJECT

CITY PROJECT NUMBER ITB-CP-11-01

CITY OF PALM COAST

SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES  
HIGHWAY AND SITE DESIGN

This Exhibit forms an integral part of the agreement between the City of Palm Coast (hereinafter referred to as the CITY) and WilsonMiller, Inc. (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

City CIP No.: ITB-CP-11-01

Description: Additional Services No. 3 - Bulldog Drive from State Road 100 north to Central Avenue  
Flagler County

## **1 PURPOSE**

The purpose of this Exhibit is to describe the additional scope of work and responsibilities of the CONSULTANT and the CITY in connection with the design and preparation of a set of construction plans for roadway improvements and on-site improvements associated with the transportation facility described herein.

The CONSULTANT understands the CITY'S Work Order #11-507 executed December 28, 2010, approved as a part of Resolution #2010-135 (Bulldog Drive Improvements Project / City Project Number ITB-CP-11-01), and included only "School Bus Circulation Analysis" as part of the initial work effort . The CONSULTANT provided Phase I Bulldog Drive, SR 100 Plans and a Conceptual Site Plan to the CITY & Flagler Palm Coast High School (SCHOOL), showing a preliminary layout of the improvements both on-site and off-site, and received subsequent approval of that concept. As part of Additional Services No. 1, the CITY suspended completion of the original scope of services and moved forward with preliminary design in order to attain an environmental resource permitting for these projects. The CONSULTANT used the approved Concept Plan as a basis for the effort. Throughout execution of Additional Services No. 1, the CONSULTANT received additional comments from both the CITY and SCHOOL on the Conceptual Site Plan, specifically as a result of a September 12<sup>th</sup> meeting and subsequent comments provided in month of October (EXHIBIT C). The CITY and the CONSULTANT have reviewed the comments together.

The CITY has directed the CONSULTANT to additional services and associated fees to design and obtain permits for an interim set of improvements to Bulldog Drive, improvements to SR 100, and improvements to the SCHOOL site. The specific improvements are detailed here-in and are a direct result of the September 12<sup>th</sup> meeting and October comments from the CITY and the SCHOOL – EXHIBIT C. The scope and fee estimate for these services is referred to as Additional Services No. 3.

The Fee Sheet page reflects all the professional services descriptions contained in work order #11-507, executed December 28, 2010, those suspended and executed under Additional Services No. 1, and those necessary to complete Additional Services No. 3.

All other terms and conditions of the original Agreement shall remain in full force and effect.

## **2 PROJECT DESCRIPTION – INTERIM BULLDOG DRIVE IMPROVEMENTS, ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS, OFF-SITE STATE ROAD 100 IMPROVEMENTS, and STORMWATER PUMP STATION DESIGN**

The INTERIM BULLDOG DRIVE IMPROVEMENTS project consists of Bulldog Drive Improvements from SR 100 north to Central Avenue. The interim 2-lane proposed typical section and improvements are no longer consistent with those reflected in the Continuing Services Contract , Work Order #11-507, executed December 28, 2010. While the intersection of SR 100 and Bulldog Drive will provide the infrastructure for the ultimate improvements, the typical section will taper down to two lanes north of the intersection but still provide a left turn lane for entrance into SCHOOL site.

The ON-SITE PROJECT includes site improvements consisting of a paved driveway and parking additions to accommodate the revised bus and passenger vehicle circulation – EXHIBIT C. All improvements are located on the SCHOOL site and are owned and maintained by the SCHOOL. The ON-SITE improvements are required as a result of the adjacent Bulldog Drive Roadway Improvements Project, and to address existing traffic safety issues.

The ON-SITE PROJECT will include stormwater conveyance design, as well as stormwater conveyance connection and permitting coordination with the SUB-CONSULTANT, Stone Engineering Group. Stormwater pond design and permitting, required as a result of the ON-SITE PROJECT, will be included in the Bulldog Drive Roadway Improvements Project, being designed and permitted by the SUB-CONSULTANT and managed by the CONSULTANT.

The OFF-SITE PROJECT consists of additional improvements to State Road 100 from the directional median opening east of Bulldog Drive through the directional median opening at Transportation Way, owned and maintained by the Florida Department of Transportation (FDOT). These off-site improvements are required as a result of the currently proposed improvements to the adjacent Bulldog Drive, as well as other CITY & FDOT requested changes/additions, and consistent with EXHIBIT C.

The STORMWATER PUMP STATION DESIGN IMPROVEMENTS consists of providing engineering design and hydraulic analysis in accordance with the SJRWMD rules for proposed drainage improvements including a stormwater pump station at the Flagler-Palm Coast high school directly adjacent to the northern end of Pond HS-1. The preliminary design of the stormwater pump station was included in Additional Services No. 1 in order to attain the required ERP. The intent of the pump station is to reduce the flooding impacts on the high school site as well as provide necessary drainage for the proposed improvements to Bulldog Drive by discharging the stormwater to an outfall ditch on the west side of the high school site adjacent to Pond HS-1. Remaining design effort for final design plans is to be accomplished under Additional Services No. 3.

The Scope of Services described in the following paragraphs represents the additional services required to modify the existing SJRWMD ERP while utilizing the work effort previously completed as part of the final design for the PROJECT. The effort includes civil/site engineering, transportation, and permitting services strictly associated with the final design and permitting of the INTERIM BULLDOG DRIVE IMPROVEMENTS PROJECT, ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS PROJECT, OFF-SITE STATE ROAD 100 IMPROVEMENTS PROJECT within FDOT right-of-way, AND STORMWATER PUMP STATION.

### **3 PROJECT COMMON and PROJECT GENERAL TASKS**

Project Common Tasks, as listed below, are work efforts that are applicable to many project activities. These tasks are to be included in the project scope in each applicable activity when the described work is to be performed by the CONSULTANT.

Cost Estimate: The CONSULTANT shall be responsible for producing one (1) construction cost estimate at final submittal.

Field Reviews: Assumes the CONSULTANT has all the necessary field data collected as parts of initial phases, therefore no additional field reviews required.

Technical Meetings: Includes up to three (3) meetings or conference calls with CITY and/or Agency staff, between disciplines and subconsultants.

Quality Assurance/Quality Control: The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT under this contract.

Supervision: Includes all efforts required to supervise all technical design activities.

Coordination: Includes all efforts to coordinate with all disciplines of the project to produce a final set of construction documents.

#### Project General Tasks

Project General Tasks, described in Sections 3.1 through 3.3 below, represent work efforts that are applicable to the project as a whole and not to any one or more specific project activity.

##### 3.1 Specifications Package Preparation

The CONSULTANT shall prepare and provide a specifications package. The specifications package shall address all items and areas of work and include any Mandatory Specifications, Modified Special Provisions, and Technical Special Provisions.

##### 3.2 Contract Maintenance

Contract maintenance includes project management effort for complete setup and maintenance of files, developing progress reports, schedule updates, work effort to develop and execute subconsultant agreements, etc.

##### 3.3 Prime Consultant Project Manager Meetings

Includes only the Prime Consultant Project Manager's time for meetings are conference calls at Activity Technical Meetings and other meetings. Up to three (3) meetings are anticipated for this task.

##### 3.4 Submittals

The CONSULTANT shall submit a revised layout incorporating the interim set of improvements to Bulldog Drive, improvements to SR 100, and improvements to the SCHOOL site. The specific improvements are detailed here-in and are a direct result of the September 12<sup>th</sup> meeting and October comments from the CITY and the SCHOOL as depicted in EXHIBIT C. Include response to city and school district comments and revised parking calculations with submission. CONSULTANT shall not proceed until approval of revised layout is obtained.

The CONSULTANT shall submit a complete set of plans and documentation of a 60% complete design for review and comment by the City, School District & FPC.

The CONSULTANT shall submit a complete set of plans and documentation of a 100% complete design for review and comment by the City, School District & FPC.

#### **4 SCOPE OF SERVICES- INTERIM BULLDOG DRIVE IMPROVEMENTS PROJECT**

##### 4.1 FINAL DESIGN SERVICES

The CONSULTANT has submitted the Phase I design plans in kind with the Project Development Environmental (PD&E) Study and received approval of Phase I Submittal made to the CITY. The scope services to be executed under Additional Services No. 3 are preparation of the engineering plans and documents to support an "interim" design of Bulldog Drive. While in general conformance with the original scope of services, there are

changes to the design effort and plans as a direct result of the “interim” improvements approach.

The “interim” design, with exception of a proposed left turn lane into the SCHOOL’s east parking lot, will be consistent with the EXHIBIT C. The improvements will provide the infrastructure to support the ultimate improvements at intersection of SR 100 & Bulldog Drive, taper down to two lanes north of intersection and tie into the existing pavement at or prior to the access drive north of the SCHOOL.

The design and permitting include final design services to produce construction documents. The component sets of plans provided will be consistent with original scope of services:

- Roadway Analysis and Plans
- Drainage Analysis
- Structures
- Signalization Plans (SR 100 and Bulldog Drive only)
- Signing and Pavement Marking Plans
- Traffic Control Plans
- Lighting Analysis and Plans
- Landscape Architecture Gateway Plans
- Landscape Architecture Analysis and Plans
- Utility Plans (Water, Sewer, and Reuse Lines for Bulldog Drive only) – Portion of utility design already completed on east side of Bulldog Drive will require redesign in order to conform to INTERIM improvements. Efforts will be taken to minimize the re-design and/or reconstruction of utilities located on east side of road once ULTIMATE improvements are authorized.

It should be noted the design accomplished under the original scope of services requires re-design effort in order to accommodate the revised typical section and minimize re-design/reconstruction once the ultimate improvements are authorized.

#### 4.2 PERMITTING

- Florida Department of Transportation (FDOT) Access Driveway/Drainage Connection Permit. The permit plans will include the INTERIM BULLDOG DRIVE IMPROVEMENTS PROJECT , OFF-SITE STATE ROAD 100 IMPROVEMENTS PROJECT within FDOT right-of-way, AND applicable portions of ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS PROJECT & STORMWATER PUMP STATION.
- Florida Department of Environmental Protection (FDEP) Water and Sewer Permits
- St. John’s River Water Management District (SJRWMD) Environmental Resource Permit (ERP) Modification.

### 5 SCOPE OF SERVICES – ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS PROJECT

#### 5.1 FINAL DESIGN SERVICES

The CONSULTANT will perform final design services for the civil/site work based on a revised Layout Plan to be approved by the CITY/SCHOOL based upon the plan developed during the



Conceptual Design Phase executed under Additional Services No. 1 (consistent with Exhibit 'C' discussed during September 12<sup>th</sup> meeting and subsequent October comments).

Completion of Final design activities will also include preparation of the final engineering analysis and/or calculations to support the final design and construction plans. Technical notes and material specifications for the civil/site improvements will be provided on the plans and in a separate set of written specifications as required. It is assumed that the CITY will incorporate the civil/site engineering plans into the contract documents.

The CONSULTANT will prepare final civil construction plans for the proposed on-site improvements. All construction drawings will be prepared in accordance with development criteria for the SCHOOL, St. John's River Water Management District (SJRWMD) and the Florida Department of Education (FDOE) standards. Plans will be prepared on eleven inch by seventeen inch (11"x17") sheet size at an appropriate scale. The design of the following improvements will be included in this task:

#### 5.1.1 Civil Site Analysis & Construction Plans

- *Demolition* – This service will be provided by a Contractor. The CONSULTANT will provide existing condition maps for use by the contractor in implementation of this task.
- *Paving and Grading* – The CONSULTANT will develop a paving and grading plan for the proposed site improvements. This service will include establishing lines, grades and slopes necessary to provide adequate surface drainage from the improved areas.
- *Stormwater* – This SUB-CONSULTANT task will include the design of an on-site stormwater conveyance system for routing to an existing stormwater pond system on site.
- *Coordinate Control Plan* – The CONSULTANT will furnish the final site plan in a digital format (AutoCAD, Release 2009), which will contain all information necessary to geometrically locate the proposed improvements.
- *Details* – Included in the construction plans will be additional information needed to permit and construct the proposed improvements. This will include construction details, typical sections, construction notes, etc. relative to the above design tasks.

EXHIBIT C calls out need for relocation of existing guard shack to proposed entrance. Final Construction Plans will reflect relocation of existing guard shack or replacement with new in proposed location. If new, the CONSULTANT will assist the CITY in selection of a pre-fabricated guard shack or approved equivalent. In either case, the CONSULTANT will provide a plan note making contractor responsible for power, structures, permitting, and final certification. Power source location will be provided by CONSULTANT in plans.

#### 5.1.2 Drainage Analysis

The SUB-CONSULTANT shall be responsible for designing a stormwater conveyance system to support the proposed on-site high school improvements and in accordance with SJRWMD policies and procedures.

The SUB-CONSULTANT shall provide drainage analysis and necessary back-up data to support SJRWMD permit modification of the existing permit per F.A.C. Chapter 40C-42.

## 5.2 PERMITTING

- SCHOOL Permit
- FDOT Access Driveway/Drainage Connection Permit referenced in Section 4.2
- St. John's River Water Management District (SJRWMD) Environmental Resource Permit (ERP) Modification

## 6 SCOPE OF SERVICES – OFF-SITE STATE ROAD 100 IMPROVEMENTS

The CONSULTANT will perform final design services for the off-site work based on a revised Layout Plan to be approved by the CITY/SCHOOL based upon the plan developed during the Conceptual Design Phase executed under Additional Services No. 1 (consistent with Exhibit 'C' discussed during September 12<sup>th</sup> meeting and subsequent October comments).

### 6.1 FINAL DESIGN SERVICES

Construction plans will be prepared in an AutoCAD, Version 2009 format and digital CAD files will be provided to the design team as appropriate. If FDOT requires the construction plans to be submitted digitally in Microstation, additional services may be required.

Final design activities will also include preparation of the final engineering analysis and/or calculations to support the final design and construction plans.

All construction plans will be prepared in accordance with FDOT and St. John's River Water Management District (SJRWMD) standards. Plans will be prepared on eleven inch by seventeen inch (11"x17") sheet size as required by FDOT. The design of the following improvements will be included in this task:

The SUB-CONSULTANT shall be responsible for designing a drainage and stormwater conveyance system to support the proposed off-site improvements in accordance with FDOT policies and procedures.

The SUB-CONSULTANT shall provide analysis and necessary back-up data to support SJRWMD Letter of Determination for permit exemption per F.A.C. Chapter 40C-42.025.

### 6.2 PERMITTING

St. John's Water Management District: The CONSULTANT & SUB-CONSULTANT will submit new design reflecting proposed improvements as result of execution of Additional Services

No. 1 and request exemption from SJRWMD Environmental Resource Permit, per F.A.C. Chapter 40C-42.0225. It is presumed, based upon the nature of the improvements (auxiliary lanes and safety improvements), that SJRWMD will agree to exemption. A formal Letter of Permit Determination will be sent to SJRWMD for concurrence. If the Water Management District rejects the request, additional services may be required.

CITY will be responsible for all application, connection and impact fees.

## **7 SCOPE OF SERVICES – STORMWATER PUMP STATION IMPROVEMENTS**

The engineering design and hydraulic analysis includes geotechnical services, updated hydraulic modeling, improvements to Pond HS-1 and the adjacent swale, and the proposed pump station to provide capacity to efficiently convey storm water runoff volume for the 25-year storm reoccurrence. The proposed scope includes 100 linear feet of outfall pipe discharging from the pump station to the adjacent swale and concrete ditch paving in the swale to prevent erosion. At the request of the City, the engineering design will be based on design/as-built information provided by the School District, as such, this proposal does not include survey services. Wetland or surface water impacts are not anticipated, and a permit application has been submitted with supporting information to the SJRWMD in accordance with Additional Services #1.

The pump station will include two pumps of approximately 15 cfs, and a third smaller pump of approximately 5 cfs. The pumps will be vertical turbine type and mounted on a concrete slab on top of the wetwell without an enclosure. A permanent standby generator is required. The wetwell will be a precast structure, and a separate electrical service will be provided from FP&L or the school electrical system and will be coordinated by the City. A stabilized drive will be included for maintenance purposes.

### **7.1 HYDRAULIC ANALYSIS AND CALCULATIONS**

Update the hydraulic calculations for the proposed drainage improvements to Bulldog Drive including the high school site. The hydraulic modeling will be performed using the ICPR model and incorporate the latest SJRWMD permitted Town Center ICPR model. The hydraulic modeling is for the High School Site and Bulldog Drive and any downstream analysis required by SJRWMD resulting from the removal of the existing weir at pond HS-1. The analysis will include the pump station and pipe capacity and drainage basin analysis based on the 25-year storm event.

### **7.2 POND/SWALE MODIFICATIONS**

Prepare Final design plans for the drainage improvements including drainage plan showing modifications to the outfall weir and berm at Pond HS-1 and along east side of outfall swale along school district property line, cross sections showing modifications to the outfall swale adjacent to Pond HS-1, outfall pipe layout and erosion protection. The final design does not include any swale design downstream of the weir but may include the enlarging of the existing pond HS-5 on the east side of Bulldog Drive.

### **7.3 STORMWATER PUMP STATION DESIGN**

Prepare calculations and Final design plans including electrical and structural for a typical vertical turbine type stormwater pump station located at Pond HS-1 adjacent to the outfall weir. Attend one (1) meeting with SJRWMD staff to review the design and updated hydraulic calculations.

7.4 PERMITTING

Prepare Final design plans and technical specifications for the drainage improvements including the stormwater pump station and submit modifications to the permit application and supporting documents submitted to SJRWMD under Additional Services #1. Scope and Fee includes addressing one (1) set of review comments from the SJRWMD, Town Center, and High School. Should any of the reviewing agencies require additional rounds of review comments, beyond the one (1), or require additional reports/studies not reasonably anticipated; addressing additional comments or preparation of additional reports/studies shall be provided as an additional service.

**8 SCOPE OF SERVICES – MISCELLANEOUS SERVICES**

8.1 MISCELLANEOUS SERVICES

If requested, the CONSULTANT will provide other assistance and support to the CITY or SCHOOL on an as needed basis. This may include, but not be limited to coordination with the reviewing agencies, hydraulic modeling beyond the SCHOOL site and Bulldog Drive, stormwater and drainage design services beyond the SCHOOL and Bulldog Drive, additional site visits or office support, design modifications during construction, electrical service coordination, legal descriptions and associated exhibits, etc. An allowance is provided for these services, but any additional services required over and above this allowance may require additional fees

**9 SCOPE OF SERVICES – POST DESIGN SERVICES**

9.1 BIDDING ASSISTANCE

At the CITY's direction, the CONSULTANT and SUBCONSULTANT (if necessary) will assist the CITY in answering questions from perspective bidders during the bidding process.

After submittal of price proposals, the CONSULTANT and SUBCONSULTANT will assist the CITY in review of the bid package(s) and advise the CITY.

The scope and fee under this specific task assumes up to 20 hours of effort necessary.

9.2 LIMITED CONSTRUCTION ADMINISTRATION

The CONSULTANT will provide limited construction administration services for the PROJECT. By providing limited (part-time) construction administration services, the CONSULTANT will augment the actual, full-time construction administration being conducted by the CITY and/or Contractor. The limited construction administration services to be provided are

described below. At this time, it is assumed the CONSULTANT will provide the following services based upon a six (6) month construction duration.

#### 9.2.1 Shop Drawing Review

The CONSULTANT will review shop drawings and pipe material submittals made by the contractor and coordinate review with CITY and SUB-CONSULTANTS as may be appropriate.

It is the CONTRACTOR'S responsibility to provide all documentation required to prove substitute material is the same or better than the material specified in the contract documents. Significant changes/modifications, or negotiations with the agencies regarding material or equipment substitutions are not included. It is assumed all submittals will be made in a timely manner allowing the CONSULTANT a minimum of five (5) working days of review time. It is assumed that no more than three (3) submittal packages to review and no more than twenty-five (25%) percent of submittals will require re-submittal.

#### 9.2.2 Limited Construction Observation

The CONSULTANT will conduct up to twelve (12) field visits to monitor general progress and compliance of the work with the approved plans and specifications. Depending on the nature of the visit, a SUB-CONSULTANT may conduct the visit.

The CONSULTANT will not, during the site observation visits or as a result of such observations of the Contractor(s) work in progress, supervise, direct or have control over Contractor(s) work nor will the CONSULTANT have authority over or responsibility for means, methods, techniques, sequences or procedures of construction selected by the Contractor(s) to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor(s) furnishing and performing their work. Accordingly, the CONSULTANT can neither guarantee the performance of the construction contracts by the Contractor(s) nor assume responsibility for Contractor(s) failure to furnish and perform their work in accordance with the plans and specifications. The CONSULTANT will review any testing reports for compliance with the required specifications as provided, but makes no claim as to the Contractor's proper means and methods of construction operations that took place during construction by doing so.

#### 9.2.3 Assistance During Construction

The CONSULTANT will respond to official requests for information (RFI) from the contractor during construction. All RFI requests must be copied to the client. The CONSULTANT will attempt to clarify the intent of the plans and specifications, provide interpretation of the plans, and answer questions from the general contractor and the CITY's construction manager and offer opinions regarding proposed field changes. "Day-to-day" supervision of the site contractor is not included in this Scope of Services, however the CONSULTANT will review change orders or requests for material substitution as required.

#### 9.2.4 Final Inspection

Final Inspections – One (1) sitework punch list will be developed during a walk through with the Contractor, the CONSULTANT, and CITY representatives. A comprehensive list of items requiring repair, modification or replacement will be compiled (by others) prior to performing a final walk through. After the contractor completes the punch list, another walk through inspection will be performed to verify the modifications and corrections have been completed. Applicable government inspectors will be invited to attend this final walkthrough inspection. It is assumed that only two (2) Final Inspection site visits will be required. Any additional Final Inspection site visits will be considered as additional services.

#### 9.2.4 Review and Certification of As-builts

Record Drawings – The CONSULTANT will review as-built surveys, prepared and certified by a Registered Land Surveyor (in digital/AutoCAD format acceptable to the CONSULTANT). It is assumed the CITY or Contractor will be responsible for obtaining this information from a Registered Land Surveyor. The Record Drawings will be submitted to SJRWMD, FDEP, FDOT and the CITY as part of the Engineer's Certification.

Certifications – Following satisfactory completion of the improvements of the PROJECT, the CONSULTANT will certify to SWFWMD, FDEP, FDOT and the CITY that the work has been performed in accordance with the permit conditions and the approved plans upon successful and acceptable completion of the Work by the Contractor. Certifications will be signed and sealed by a Registered Engineer in the State of Florida. It is assumed that there will be no more than two (2) separate reviews of submitted as-builts prior to final certification. If more than two (2) reviews becomes necessary for final certification, additional services proposal will be presented.

**SUMMARY OF TASKS AND ESTIMATED FEES**

See attached

Notes/Assumptions:

|              |  |
|--------------|--|
| <i>Fixed</i> | <i>These services will be performed on a Fixed "Lump Sum" Fee basis.</i>   |
| <i>T/M</i>   | <i>These services will be performed on a Time/Material basis. All T/M fee amounts, where shown, are estimates only, and actual amount may be more or less than the amount shown.</i> |
| <i>N.I.</i>  | <i>Not Included</i>  |
| <i>TBD</i>   | <i>To be determined</i>  |

The compensation to be paid for services identified as T/M services on EXHIBIT A are based upon the following listed billing rates. Rates will be charged based on the continuing services agreement and additional classification listed below.

Billing Rates

|                                     |              |
|-------------------------------------|--------------|
| <i>Senior Project Manager</i>       | <i>\$196</i> |
| <i>Senior Professional Engineer</i> | <i>\$177</i> |
| <i>Professional Engineer</i>        | <i>\$167</i> |
| <i>Senior Designer</i>              | <i>\$133</i> |
| <i>Technician</i>                   | <i>\$80</i>  |
| <i>Clerical</i>                     | <i>\$65</i>  |
| <i>Senior Surveyor and Mapper</i>   | <i>\$145</i> |
| <i>Surveyor and Mapper</i>          | <i>\$130</i> |
| <i>Survey Technician</i>            | <i>\$90</i>  |

## 10.0 CLARIFICATIONS AND UNDERSTANDING

1. CITY and/or SCHOOL will furnish the CONSULTANT with any available information pertaining to the subject property and any related site data needed to complete the Scope of Services.
2. The CONSULTANT has reviewed with the CITY the extent of the existing topographic survey. For the purposes of this proposal, it is assumed that no additional topographic survey will be required under Additional Services No. 3. Should supplemental survey be required, additional services may be necessary.
3. Any and all review application, permitting, impact and connection fees are to be paid by the CITY.
4. The drainage analysis and drainage design scope and fee assumes the existing SJRWMD permit that includes the Flagler Palm Coast High School site will require a minor modification only and includes only those improvements specifically referenced in this proposal.
5. Location of power source(s) for PROJECT to be provided by SCHOOL and called out in plans by CONSULTANT.
6. Section 8.1 provides provision for additional modeling, analysis, design, survey, or coordination. Should the provisional amount be extinguished as a result of the CITY or third party requested changes or information, additional fee authorization may be required. Any work associated with addressing SJRWMD RAI comments specifically related to this PROJECT's improvements is not considered additional services.
7. Minor modifications to two-lane geometry of Interim Bulldog Drive Improvements as reflected in EXHIBIT C may be required in order to avoid impact to adjacent properties. At the onset of Additional Services No. 3, the CONSULTANT will finalize the horizontal and vertical geometry of Interim Bulldog Drive and submit to the CITY for formal approval. The horizontal and vertical geometry impacts all disciplines as well as ON-SITE SCHOOL IMPROVEMENTS, therefore it is critical that the alignment is approved prior to proceeding with additional design efforts.
8. A retaining wall or On-Site fill will be required on west side of Bulldog Drive if horizontal and vertical geometry of two-lane roadway remains consistent with EXHIBIT C. Options to resolve this grading issue will be reviewed with the City and School early in the design process.
9. The CONSULTANT will be responsible for providing one (1) cost estimate of the project improvements.
10. Subsurface utility exploration (SUE) has not been performed on the high school site; therefore the location of utilities is based on existing as-built information. We do not anticipate any utility conflicts; therefore utility relocation on the high school site is not considered part of this scope and fee. If any services involving utilities are required, additional services may be necessary.
11. FDOT has required a minor traffic analysis to substantiate improvements within SR 100 right-of-way. Minor analysis includes queue length analysis and access management justification. It is assumed that the CONSULTANT has satisfied this requirement under Additional Services No. 1. If additional traffic analysis is requested, additional services may be required.
12. The CONSULTANT anticipates SJRWMD approval of permit exemption for improvements located within FDOT right-of-way given the nature of the improvements. If additional SJRWMD permitting is required, additional services may be necessary.
13. It is assumed that Gateway Features already designed will not require redesign as result of INTERIM BULLDOG DRIVE IMPROVEMENTS PROJECT.
14. Any and all improvements within FDOT Right-of-Way are subject to Department review and approval. The result of that review and approval may require additional improvements from those described in this scope of services which may result in additional services.
15. The State Road 100 connection location as well as traffic circulation of High School Main Student Parking Lot other than the Conceptual Plan as result of execution of Additional Services No. 1



and reflected in EXHIBIT C was not contemplated in the design engineering scope and fee. Additional design services may be required if CITY, SCHOOL, FDOT, or other agency decides to implement additional improvements.

#### **11.0 EXCLUDED SERVICES**

1. Public Involvement and/or Public Hearings
2. Traffic Control Plans for ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS PROJECT. CONSULTANT will include a phasing plan so as to minimize impacts to school and their day to day operations and to have project items that have the biggest impact to the school to be completed during the summer of 2013. It is assumed that CITY and SCHOOL will provide detailed input and clear direction on desired sequencing and that phasing plan along with notes can be provided on one or two sheets. It is not the intent of this phasing plan to provide means and methods to the Contractor.
3. Plumbing or potable water for guard shack.
4. Design of any improvements not specifically included herein including stormwater, traffic intersection and signalization improvements.
5. Construction plans or permit revisions, required as a result of program or design changes made by others after the CONSULTANT has made submittals to the agencies.
6. Landscape Plans, Irrigation System Design, decorative hardscape, roadside planting Areas, or decorative signage for ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS PROJECT
7. It is anticipated that limited landscape plans and irrigation for OFF-SITE STATE ROAD 100 IMPROVEMENTS PROJECT. The forecasted for SR 100 landscape improvements/modifications include callouts for placement of cord grass and minor irrigation modifications.
8. Lighting or electrical engineering/construction plans of any kind for ON-SITE FLAGLER PALM COAST HIGH SCHOOL IMPROVEMENTS PROJECT or OFF-SITE STATE ROAD 100 IMPROVEMENTS PROJECT.
9. FEMA floodplain permitting, including the preparation of applications for a Letter of Map Revision (LOMR) or a Conditional Letter of Map Revision (CLOMR).
10. Special negotiations or design plan modifications due to tree removal or preservation issues; this shall include additional landscape requirements or justification of tree removal, services of an arborist, contribution to a tree bank, design of special tree preservation provisions, tree health assessments, etc.
11. Preparation of colored renderings, special graphics, or exhibits for presentations to any governmental agency or third party for special design district guidelines
12. Other Services or Permits that are not specifically listed in the Scope of Services
13. Survey, Geotechnical, structural, mechanical or electrical related engineering services other than those specifically referenced in this proposal.
14. Permits that are not specifically listed in the Scope of Services.
15. Floodplain compensation or any stormwater modeling other than those specifically referenced in this proposal.