

EXHIBIT ‘A’

SCOPE OF WORK

WORK ORDER No. ____

Project Description

The proposed project will provide engineering services including evaluation and design for the construction of alteration of and/or addition to drainage infrastructure to prevent localized flooding in the Old Dixie Highway area (“Site”) in north Indian River County (“County”).

This project has been initiated based on complaints by local residents regarding flooding in their yards which, according to their testimonies, during substantial rainfall events, were due to upwelling of groundwater originating from the Sandridge, into their yards, and steady stream of stormwater free-flowing from the west to east streets west of ODH, which then collects and floods at the lowest point of ODH and floods many residential properties east of ODH.

Based on our preliminary visual on-site investigation, the probable modifications are as follows:

- Construct roadside swales with swale blocks along the west to east streets that lie west of Old Dixie Highway (“ODH”) that drain unabated into ODH,
- Construct similar swales along ODH Right-of-Way to capture, retain and convey run-off,
- Construct underdrain system along ODH to intercept the groundwater that is draining from the sand ridge, which is upwelling onto ODH and the yards of the home sites to the east of ODH, and
- Construct/Retrofit (existing) drainage conveyance facilities that drain to the Indian River Lagoon.

Scope of Work

Schulke, Bittle & Stoddard, L.L.C. (“SBS”) will provide services including site investigation/survey, document research, engineering design, hydraulic computations, preparation of construction plans, assist IRC in contractor procurement, preparation and submittal of permit applications as required to assess, analyze and design drainage system modifications and/or additions to prevent or mitigate localized flooding conditions that occur at the Site. (see Attachment **“A”** for **“Location Sketch”**).

The estimated construction cost of this project is: **\$ 1,338,761.63.**

In addition to the general engineering services outlined above,

- SBS will meet with Indian River County Public Works (“Public Works”) and local residents that will be affected by this project to discuss project goals, design assumptions and requirements for the proposed improvements within ODH and other County Right-of-Way and discuss potential improvements to the local residents’ private properties which may be critical components in the success of this project. Local residents will be requested to coordinate with SBS and the County to ensure legal rights (easement, etc) for the construction and maintenance of drainage infrastructures will be granted/guaranteed prior to the completion of Construction Plans.
- SBS will attend pre-application meetings with IRC and SJRWMD
- SBS will commission the services of a Geotechnical Engineer to assist in obtaining necessary data that will be pertinent in our evaluation, analysis and design including:
 - Field Investigation, Laboratory Testing, and Engineering Analysis:
 - Twelve (12) ±6-foot-deep auger borings for general soil investigation.
 - Five (5) ±20-foot-deep soil boring samples for permeability testing, seasonal ground water table elevation estimates, Hydrological Soil Group determination, and other required “percolation” data as defined in the County’s Land Development Code.
 - Recommendations for site preparation and earthwork considerations.
 - Conclusions as to the suitability of encountered soil to support proposed improvements.
 - Indian River County Right-of-Way Permitting required to perform field work
 - Maintenance of Traffic required to perform field work
- SBS will commission services of a Land Surveyor to assist in producing a topographic map of the Site which will include aboveground and underground structures and features that will be pertinent in evaluation, analysis and design including:
 - Topo survey for drainage evaluation and design:
 - General topographic survey by drone of the Site and adjacent areas
 - Detailed route/drainage survey and drawing of the Site to include details on drainage and other infrastructures including:
 - Locate the Right-of-Way lines and locate property lines adjacent to the Right-of-Way.
 - Locate underground drainage pipes/culverts (size/diameter, inverts & type).
 - Locate inlets (tops and inverts).
 - Locate observable utilities within the Site.
 - Locate readily observable utilities, pavement, sidewalks and other improvements within the Right-of-Way within the Site.
 - Follow up survey in support of design:
 - Additional data/details on a specific area/s may be necessary.

- Prepare Legal Descriptions & Sketches for drainage easements (as necessary)
 - Provide detailed topo survey of several lot lines where an easement may be placed.
- SBS will prepare permit applications for submittal to:
 - IRC PW (Drainage & ROW)
 - SJRWMD (ERP -Stormwater)
 - FDEP (SWPPP/NOI)

Together with plans, calculations, reports and coordinate the preparation of surveys and reports by its sub-consultants and other documentation needed to submit in support of the permit applications.

- SBS will assist IRC with contractor procurement: Provide assistance during bidding, including attending a pre-bid meeting, respond to RFI's, bid evaluation, assist IRC in preparation of addendum and prepare recommendation. (Bid and construction contract documents prepared by others)
- SBS will provide contract administration and construction phase services: Coordinate and chair a pre-construction meeting, shop drawing sample review, review progress payments, prepare minor plan modifications, Construction/Field Inspections, as-built review, review final documentation for close-out and prepare notice of substantial completion, and final recommendation for payment upon satisfactory job completion.

In connection with this project, the County will provide SBS with a copy of any pertinent Preliminary Data or Reports; all available drawings in electronic AutoCAD format; all surveys, maps and other documentation in the possession of or reasonably available to the County that are pertinent to the project, including plans, reports, as-builts and other documents.

Services not included in this Scope of Services are listed as follows:

- Any services associated with assisting the County in review and evaluation of patent related disputes, issues, or claims including preparing to serve or serving as a consultant or witness for the County in litigation, arbitration, public or private hearings, or other legal administrative proceedings involving patent related disputes, issues or claims.
- Any services in connection with the project not otherwise provided for in this Scope of Services.

**EXHIBIT ‘B’
RATE SCHEDULE
WORK ORDER No. ____
AMENDMENT No. ____**

Method and Amount of Compensation

Schulke, Bittle & Stoddard, L.L.C. (“SBS”) will provide Indian River County (“County”) the following schedule of services as further described in the above Scope of Services based on the following compensation:

	Original Contract Amount	Change Order	New Contract Amount
1. Preliminary plan review and evaluation: SBS will review plans, reports and other pertinent data to be provided by the County, topographic survey from our commissioned Land Surveyor, geotechnical data from our commissioned Geotechnical Engineer, and other data readily available to the public meet with jurisdictional agencies (IRC, SJRWMD), and provide a preliminary plan that will be presented to the County staff for approval to proceed with the Final Design.	\$15,000	\$0	\$15,000
2. Final Design: Engineering design, preparation of Construction Plans and Specifications, preparation and submittal of permit Applications.	\$15,000	\$8,725	\$23,725
3. Contractor Procurement	\$1,500	\$0	\$1,500
4. Contract Administration and Construction Phase Services	\$25,000	\$0	\$25,000
5. Reimbursable Expenses: Payment of direct costs, including reproduction costs (prints and copies), application fees, mail and delivery, mileage during construction phase services. (See below for actual costs)	\$10,000 (estimate)	\$0	\$10,000 (estimate)

6. **Sub-Consultants**

a. Geotechnical Consultant:

- Field Investigation, Laboratory Testing, and Engineering Analysis	\$10,200	\$0	\$10,200
- County Right-of-Way Permitting	\$1,000	\$0	\$1,000
- Maintenance of Traffic	\$4,400	\$0	\$4,400

b. Land Surveyor:

- Topo Survey for Drainage Evaluation and Design	\$18,000	\$0	\$18,000
- Follow up Survey as needed (Not to exceed)	\$5,000	\$0	\$5,000

c. Environmental Consultant

-As needed, if needed – (Not to exceed)	\$6,500	\$0	\$6,500
---	---------	-----	---------

Total	\$111,600	\$8,725	\$120,325
--------------	------------------	----------------	------------------

Printing and Reproduction

The County shall reimburse* our office for the cost of printing project plan sheets required for coordination and for copies of reports, drawings, specifications and other pertinent items required by federal, state and local agencies from whom approval of the project must be obtained, material suppliers, and other interested parties, based on the following tabulation:

8 ½" x 11"	\$ 0.12 / sheet	Blue Line Prints	\$ 0.333 / SF
11" x 17"	\$ 0.50 / sheet	Reproducible Sepias	\$ 0.75 / SF
3 ½" diskette	\$ 2.00 / each	Reproducible Mylars	\$ 1.00 / SF
CD	\$ 4.00 / each		

* Reimbursement cost to IRC included in rate schedule, Exhibit 'B', item No 5, "Reimbursable Expenses."

Application Fees

The County shall reimburse* our office for the actual cost of all construction permit application fees paid to jurisdictional agencies, including but not limited to:

F.D.E.P., I.R.C. Engineering (Right-of-Way), S.J.R.W.M.D.

* Reimbursement cost to IRC included in rate schedule, Exhibit 'B', item No 5, "Reimbursable Expenses."

- Remainder of Page Intentionally Left Blank -

EXHIBIT 'C'
TIME SCHEDULE
WORK ORDER No. ____
AMENDMENT No. ____

Time of Performance

The estimated time frame for completion of services from the approval of this Work Authorization is as follows:

		Original Contract	Change Order	New Contract
1.	NTP	Start Day 1	n/a	Start Day 1
2.	Geotechnical Consultant work	Complete Day 30	n/a	Complete Day 30
3.	Land Surveyor	Complete Day 75	n/a	Complete Day 75
4.	Preliminary Plan Review and Evaluations	Complete Day 120	n/a	Complete Day 120
5.	Submit Permit Applications	On and After Day 150	n/a	On and After Day 150
6.	Engineering Design & Preparation of Construction Plans	Complete Day 180	+30 Days	Complete Day 210
7.	Receipt of Permits and Bidding/Contract Award (Done Concurrently)	Complete Day 240	n/a	Complete Day 270
8.	Construction	Start Day 270	n/a	Start Day 300

- Remainder of Page Intentionally Left Blank -