April 15, 2021

EXHIBIT A

SCOPE OF SERVICES

FOR

INDIAN ROCKS ROAD RECONSTRUCTION (PHASE I)

FROM MEHLENBACHER ROAD TO NORTH OF POINSETTA ROAD

TOWN OF BELLEAIR

PUBLIC WORKS DEPARTMENT

Approved By:	**TOWN Project Manager**	**Consultant Project Manager**
	Signature	Signature
	Keith Bodeker	Vincent Shine, P.E.
	Printed Name	Printed Name
	04/15/2021	04/15/2021
	Date	Date

SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES

HIGHWAY AND BRIDGE/STRUCTURAL DESIGN

This Exhibit forms an integral part of the agreement between the Town of Belleair (hereinafter referred to as the TOWN) and RS&H, Inc. (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

Town Project ID: **N/A**

Federal Aid Project No.: **N/A**

TOWN Commissioner District No.: **N/A**

Name and Limits: ***Indian Rocks Road from Mehlenbacher Road to Poinsetta Road***

Speed Design/Posted: ***Indian Rocks Road has been posted 30 mph. Design speed to be the same as posted speed.***

Functional Classification: ***Indian Rocks Road is an Urban Collector.***

Design Vehicle: **WB-40**

Bridge No(s): **N/A**

Railroad Crossing No: **N/A**

1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the TOWN in connection with the final design for improvements to the transportation facility described herein.

Major work mix includes: *Reconstruction*
Major work groups include: *Roadway design.*
Minor work groups include: *Survey and Signing and Pavement Marking Design.*

The general objective is for the CONSULTANT to provide design services and prepare construction documents in accordance with the TOWN OF BELLEAIR policy, procedures and requirements. The final design and construction documents are to be based on the final engineering study and concept plans, supporting engineering analysis, calculations and other technical documents previously prepared for the project.

The Scope of Services establishes which items of work in the Florida Design Manual (FDM) and other pertinent manuals are specifically prescribed to accomplish the work included in this contract, and also indicate which items of work will be the responsibility of the CONSULTANT and/or the TOWN.

The CONSULTANT shall be aware that as a project is developed, certain modifications and/or improvements to the original concepts may be required. The CONSULTANT shall incorporate these refinements into the design and consider such refinements to be an anticipated and integral part of the work. This shall not be a basis for any supplemental fee request(s).

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the TOWN and others as necessary, management of time and resources, and documentation. The CONSULTANT shall set up and maintain throughout the design of the project a contract file. CONSULTANTs are expected to know the laws and rules governing their professions and are expected to

provide services in accordance with current regulations, codes and ordinances and recognized standards applicable to such professional services. The Consultant shall provide qualified technical and professional personnel to perform to TOWN standards and procedures, the duties and responsibilities assigned under the terms of this agreement. The Consultant shall minimize to the maximum extent possible the TOWN's need to apply its own resources to assignments authorized by the TOWN.

The TOWN will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of contract documents, including Construction documents. The TOWN's technical reviews are for high-level conformance and are not meant to be comprehensive reviews. The CONSULTANT shall be fully responsible for all work performed and work products developed under this Scope of Services. The TOWN may provide job-specific information and/or functions as outlined in this contract, if favorable.

2 PROJECT DESCRIPTION

The CONSULTANT shall investigate the status of the project and become familiar with concepts and commitments (typical sections, alignments, etc.) developed from prior studies and/or activities. If a Preliminary Engineering Report is available from a prior or current Project Development and Environment (PD&E) study, the CONSULTANT shall use the approved concepts as a basis for the design unless otherwise directed by the TOWN.

This project will provide paving and drainage improvements along Indian Rocks Road. The project is approximately 0.6 mile in length beginning at Mehlenbacher Road and continuing north to just north of Poinsetta Road. The roadway pavement and curbs will be reconstructed and regraded to provide positive drainage and extend pavement life. Existing sidewalk will remain on the westside and an 8-foot shared use path will be proposed on the east side. Drainage structures and an underdrain system along the east side will be added along Indian Rocks Road as needed to collect storm runoff and groundwater conveying it to the existing drainage system.

This project may be designed using Bentley MicroStation GEOPAK Corridor Modeler, or the TOWN's current MicroStation/GEOPAK Corridor Modeler standard and converted to Auto CADD; or may be designed in CADD. Coordinate with Project Manager for current versions of acceptable software. The project shall be designed, delivered and signed and sealed in compliance with the FDOTs CADD Manual published at: http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm.
FDOT provides a "State Kit" for Bentley product that can be downloaded from http://www.fdot.gov/cadd/downloads/software/software.shtm. Deliverables shall be in the form of Computer Aided Design and Drafting (CADD) compatible with the TOWN'S CADD system. The CADD files must include information necessary for engineering and environmental analysis, alternative alignment and design studies. If applicable, plans must be developed utilizing best drafting and plan preparation practices for transportation design projects and must follow FDOT latest Design Manual (Florida Design Manual) and CADD Manual.

2.1 Project General and Roadway (Activities 3, 4, and 5)

Public Involvement*:* N/A

County: Pinellas

Road Name/Number: CR 233 / Indian Rocks Road

Scope of Work: **Reconstruction**

Includes: ☐ addition of turn lanes ☒ pedestrian features ☐ new signals ☐ upgraded signals

☐ addition of medians ☐ realignment ☒ Other – Shared Use Path

Additional Information:

Engineer of Record: RS&H, Inc.

Community Awareness Plan

Fact Sheet (public distribution): N/A

☐ YES ☒ NO - Explain:

Elected Officials Design Phase Submittal Notification:
An email notification will be sent from the TOWN Project Management Manager to local elected officials at each phase review. ☐ YES ☒ NO - Explain:

Maintenance of Access Plan (business & residential): - Access to the Town's Highway System will be maintained. Local events will be considered when implementing the MOT plan.

Detour will be needed. ☒ NO ☐ YES If YES please provide details: _____

This Project Is Located Near:

Raymond James Stadium	☐ YES	☒ NO	Ybor City	☐ YES	☒ NO
Tropicana Field	☐ YES	☒ NO	Plant City	☐ YES	☒ NO
Downtown Tampa	☐ YES	☒ NO	Gulf Blvd. in Pinellas County	☐ YES	☒ NO
Downtown St. Petersburg	☐ YES	☒ NO	Florida State Fairgrounds	☐ YES	☒ NO

If YES to any of the above a special events traffic control plan will be needed.

Encroachment Letters:
Encroachment letters will be sent during design. ☐ YES ☒ NO

Other:

Other Agency Presentations/Meetings: The CONSULTANT shall attend and/or provide support to the TOWN for any agency meetings. See Section 3.1.11.

Joint Project Agreements: N/A

Supplemental Specification Preparation: ***Supplemental Specifications will be prepared if additions or revisions to the Standard Specifications are required.***

Plan Type: ***The roadway plans shall be prepared in a Plan format. Profile sheets shall be provided, if necessary, to show the vertical controls that are needed for the construction of these projects. The plan (and profile) sheets shall be plotted at a horizontal scale of 1" =40' on 11" x 17" plan format.***

Limits: ***Indian Rocks Road from Mehlenbacher Road to Poinsetta Road***

Typical Section:

Indian Rocks Road: Two-lane undivided urban section with open drainage.

Pavement Design: ***One pavement design to be provided for reconstruction.***

Cross Slope: **N/A**

Transit Route Features: ***Bus Stop location will be coordinated with Pinellas County.***

Major Intersections/Interchanges: ***N/A***

Roadway Alternative Analysis: **N/A**

Level of TCP Plans: **N/A**

Temporary Lighting: **N/A**

Temporary Signals: **N/A**

Temporary Drainage: **N/A**

Design Exceptions: **N/A**

Back of Sidewalk Profiles: ***Provide back of sidewalk profiles for 8-foot shared use path on east side of Indian Rocks Road.***

2.2 Drainage (Activities 6a and 6b)

The CONSULTANT shall check Pinellas County GIS Flooding Inventory to ensure no active nor inactive flooding complaints at the intersection location.

The CONSULTANT is responsible to determine drainage improvements needed to retrofit the existing drainage system to accommodate roadway improvements. The proposed drainage system is to minimize right-of-way impacts, floodplain, and/or wetland impacts. The CONSULTANT is responsible for submitting a Request for Verification of Exemption to SWFWMD for the roadway and drainage improvement.

2.3 Utilities Coordination (Activity 7)

The CONSULTANT is responsible for clearing the utilities on this project and shall coordinate with all existing utilities to determine location and mitigate conflicts. Utility information will be located on the utility adjustment sheets. The CONSULTANT is responsible to certify that all necessary arrangements for utility work on this project have been made and will not conflict with the physical construction schedule. The CONSULTANT should coordinate with TOWN personnel to coordinate transmittals to Utility Companies and meet production schedules.

The CONSULTANT shall start utility coordination early on this project to identify all Utilities Agency Owners (UAO's) within the project area and identify general locations of existing to assist in determining impacts during the preliminary design. The first utility contact is to be provided to UAO's as soon as the preliminary horizontal alignment is developed to request UAO's to provide an update of the PD&E green line markups for their existing utilities. The second utility contact is to be provided upon the submittal of Phase II plans to the TOWN to request UAO's to provide Red Green Brown (RGB's) markups showing their proposed utility relocations for areas of conflict.

TOWN water and sewer utilities that require relocation will be designed by CONSULTANT.

2.4 Environmental Permits, Compliances, and Clearances (Activity 8)

There are no wetland or other surface waters located along the corridor. As this is a highly urbanized roadway reconstruction project, there is no evidence of any threatened and endangered species within the limits of the corridor. Further, the proposed multi-use path will meet the criteria of Chapter 330.051 FAC.

Prepare and submit a request for permit exemption from the Southwest Florida Water Management District.

2.5 Structures (Activities 9 – 18) – N/A

Bridge(s): **N/A**

Retaining Walls: **N/A**

Miscellaneous: **N/A**

2.6 Signing and Pavement Markings (Activities 19 & 20)

The CONSULTANT shall prepare signing and pavement markings plans along Indian Rocks Road with a scale of 1" =40'. The CONSULTANT shall design new signs along Indian Rocks Road. The CONSULTANT shall not replace side street stop bar and stop signs.

2.7 Signalization (Activities 21 & 22) – N/A

Count Stations: N/A
Traffic Monitoring Sites: N/A

2.8 Lighting (Activities 23 & 24) The CONSULTANT will assist the TOWN with the lighting design for incorporation into the plans.

2.9 Landscape Architecture (Activities 25 & 26) - N/A

2.10 Survey (Activity 27)

Project Network Control (PNC): Establish sufficient Project Network Control (horizontal & vertical) to provide XYZ data for all survey coverage. Project horizontal values shall be established on the North American Datum of 1983, Adjustment of 2011, and the Florida State Plane Coordinate System, West Zone. Project vertical values shall be established on the North American Vertical Datum of 1988. PNC monumentation shall be set on 500' intervals and shall be established via redundant GPS observations and differential levelling techniques.

Alignment: Establish a construction alignment along the limits of the project. The alignment will be monumented between the westerly edge of pavement and the adjoining front of existing sidewalk so as not to be recovered by future surveyors as a boundary or property line control. This construction line shall be monumented on 1,000' intervals and referenced and the beginning of survey, end of survey, and any deflection points.

Utilizing a total station and electronic data collector, collect sufficient data to generate an above ground topographic survey and digital terrain model (DTM) of the existing roadway and features within the existing Right of Way. DTM shots/points should be taken, at a minimum, opposite of and perpendicular to each one-hundred-foot station on tangents. Locate changes in typical section, pavement (including pavement seams), survey driveways and curb cuts and major features. A full digital terrain model (Right of Way to Right of Way) will be created for the main corridor and extend 15' beyond the R/W line at all public side street intersections. Locate Surface Drainage structures (inlet grates, manhole, side drains, and mitered end sections); include the invert elevation, size, type, and condition of culverts. Closed drainage systems that cannot be accessed must include drainage data based on Final Plans if plans are available and clearly noted that the information is based on Final Plans. No subsurface utility engineering activities will be incorporated within this project scope.

Right of Way: Utilizing the latest deed of record and publicly available subdivision plats, the surveyor shall calculate the approximate Right of Way of Indian Rocks Road. It should be noted with emphasis that the surveyor shall rely most notably on platted property boundaries best fit to existing R/W monumentation. This is not a boundary survey and all R/W lines will be based on minimal property search and labelled "Approximate Right of Way" on the final survey. In the even that future boundary surveys or legal descriptions and sketches are required to support additional Right of Way for proposed design, these services shall be considered additional services beyond this scope.

Field Review/Field Edit: A field review/edit shall be performed prior to submittal of Final Deliverables. The review is to include improvements completed from initiation of survey and a verification of type and size for all drainage pipe.

Survey Deliverables: The Topographic Survey shall be prepared as a 3D design file using the Florida Department of Transportation Computer Aided Drafting (CAD) kit. The surveyor shall generate a Surveyor's Report documenting project information, methodology and other relevant survey notes as either an accompanying report or depicted graphically withing the final Topographic Survey Design File. The Topographic Survey must comply with the Standard of Practice for Land Surveyors Rule 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

2.11 Photogrammetry (Activity 28) - N/A

2.12 Mapping (Activity 29) – N/A

2.13 Terrestrial Mobile LiDAR (Activity 30) - N/A

2.14 Architecture (Activity 31) - N/A

2.15 Noise Barriers (Activity 32) - N/A

2.16 Intelligent Transportation Systems (Activities 33 & 34) - N/A

2.17 Geotechnical (Activity 35) – N/A

2.18 3D Modeling (Activity 36) – N/A

2.19 Project Schedule

Within fourteen (14) calendar days after the official notice of Notice-To-Proceed from the TOWN Project Manager, and prior to the CONSULTANT beginning work, the CONSULTANT shall provide a detailed project activity/event schedule for TOWN and CONSULTANT scheduled activities required to meet the current TOWN Production Date. The current production date is **12/13/21 (needs update)**. The schedule shall be accompanied by an anticipated payout and fiscal progress curve. For the purpose of scheduling, the CONSULTANT shall allow for 21 calendar day review at 60% submittal, and 14 calendar day reviews for all other submittals.

The schedule shall indicate all required plan submittals at 60%, 100% and Final.

All fees and price proposals are to be based on the negotiated schedule of 12 months for final construction contract documents. *However, the contract deadline is 48 months from the Notice to Proceed.*

Periodically, throughout the life of the contract, the project schedule and budget shall be reviewed and, with the approval of the TOWN, adjusted as necessary to incorporate changes in the Scope of Services and progress to date.

The approved schedule and schedule status report, along with progress and updated pay out curve, shall be submitted with the monthly progress report.

The schedule shall be submitted in a TOWN system-compatible format (PDF).

2.20 Submittals

The CONSULTANT shall furnish construction contract documents as required by the TOWN to adequately control, coordinate, and approve the work. The TOWN will distribute submittals for review. The TOWN will require a pdf of all project documents at each submittal.

2.21 Provisions for Work

All work shall be prepared with English units in accordance with the latest editions of standards and requirements utilized by the TOWN which include, but are not limited to, publications such as:

- General
  - Title 29, Part 1910, Standard 1910.1001, Code of Federal Regulations (29 C.F.R. 1910.1001) – Asbestos Standard for Industry, U.S. Occupational Safety and Health Administration (OSHA)
  - 29 C.F.R. 1926.1101 – Asbestos Standard for Construction, OSHA
  - 40 C.F.R. 61, Subpart M - National Emission Standard for Hazardous Air Pollutants (NESHAP), Environmental Protection Agency (EPA)
  - 40 C.F.R. 763, Subpart E – Asbestos-Containing Materials in Schools, EPA
  - 40 C.F.R. 763, Subpart G – Asbestos Worker Protection, EPA
  - Americans with Disabilities Act (ADA) Standards for Accessible Design
  - AASHTO – A Policy on Design Standards Interstate System
  - AASHTO – Roadside Design Guide
  - AASHTO – Roadway Lighting Design Guide
  - AASHTO – A Policy for Geometric Design of Highways and Streets
  - AASHTO – Highway Safety Manual

- Rule Chapter 5J-17, Florida Administrative Code (F.A.C.), Standards of Practice for Professional Surveyors and Mappers
- Chapter 469, Florida Statutes (F.S.) – Asbestos Abatement
- Rule Chapter 62-257, F.A.C., Asbestos Program
- Rule Chapter 62-302, F.A.C., Surface Water Quality Standards
- Code of Federal Regulations (C.F.R.)
- Florida Administrative Codes (F.A.C.)
- Chapters 20, 120, 215, 455, Florida Statutes (F.S.) – Florida Department of Business & Professional Regulations Rules
- Florida Department of Environmental Protection Rules
- FDOT Basis of Estimates Manual
- FDOT Computer Aided Design and Drafting (CADD) Manual
- FDOT Standard Plans for Road Construction
- FDOT Flexible Pavement Design Manual
- FDOT - Florida Roundabout Guide
- FDOT Handbook for Preparation of Specifications Package
- FDOT Instructions for Design Standards
- FDOT Instructions for Structures Related Design Standards
- FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways ("Florida Greenbook")
- FDOT Materials Manual
- FDOT Pavement Type Selection Manual
- FDOT Plans Preparation Manual Design Manual
- FDOT Procedures and Policies
- FDOT Project Development and Environmental Manual
- FDOT Project Traffic Forecasting Handbook
- FDOT Public Involvement Handbook
- FDOT Rigid Pavement Design Manual
- FDOT Standard Specifications for Road and Bridge Construction
- FDOT Utility Accommodation Manual
- Federal Highway Administration (FHWA) - Manual on Uniform Traffic Control Devices (MUTCD)
- FHWA – National Cooperative Highway Research Program (NCHRP) Report 672, Roundabouts: An Informational Guide
- FHWA Roadway Construction Noise Model (RCNM) and Guideline Handbook
- Florida Fish and Wildlife Conservation Commission - Standard Manatee Construction Conditions 2005
- Florida Statutes (F.S.)
- Florida's Level of Service Standards and Guidelines Manual for Planning
- Model Guide Specifications – Asbestos Abatement and Management in Buildings, National Institute for Building Sciences (NIBS)
- Quality Assurance Guidelines
- Safety Standards
- Any special instructions from the DEPARTMENT

- Roadway
  - FDOT – Florida Intersection Design Guide
  - FDOT - Project Traffic Forecasting Handbook
  - FDOT - Quality/Level of Service Handbook
  - Florida's Level of Service Standards and Highway Capacity Analysis for the SHS
  - Transportation Research Board (TRB) - Highway Capacity Manual
- Permits
  - Chapter 373, F.S. – Water Resources
  - US Fish and Wildlife Service Endangered Species Programs
  - Florida Fish and Wildlife Conservation Commission Protected Wildlife Permits

- Bridge Permit Application Guide, COMDTPUB P16591.3C
- Building Permit

- Drainage
  - FDOT Bridge Hydraulics Handbook
  - FDOT Culvert Handbook
  - FDOT Drainage Manual
  - FDOT Erosion and Sediment Control Manual
  - FDOT Exfiltration Handbook
  - FDOT Hydrology Handbook
  - FDOT Open Channel Handbook
  - FDOT Optional Pipe Materials Handbook
  - FDOT Storm Drain Handbook
  - FDOT Stormwater Management Facility Handbook
  - FDOT Temporary Drainage Handbook
  - FDOT Drainage Connection Permit Handbook
  - FDOT Bridge Scour Manual
- Survey and Mapping
  - All applicable Florida Statutes and Administrative Codes
  - Applicable Rules, Guidelines Codes and authorities of other Municipal, TOWN, State and Federal Agencies.
  - FDOT Aerial Surveying Standards for Transportation Projects Topic 550-020-002
  - FDOT Right of Way Mapping Handbook
  - FDOT Surveying Procedure Topic 550-030-101
  - Florida Department of Transportation Right of Way Procedures Manual
  - Florida Department of Transportation Surveying Handbook
  - Right of Way Mapping Procedure 550-030-015
- Traffic Engineering and Operations and ITS
  - AASHTO - An Information Guide for Highway Lighting
  - AASHTO - Guide for Development of Bicycle Facilities
  - FHWA Standard Highway Signs Manual
  - FDOT Manual on Uniform Traffic Studies (MUTS)
  - FDOT Median Handbook
  - FDOT Traffic Engineering Manual
  - National Electric Safety Code
  - National Electrical Code
- Traffic Monitoring
  - American Institute of Steel Construction (AISC) Manual of Steel Construction, referred to as "AISC Specifications"
  - American National Standards Institute (ANSI) RP-8-00 Recommended Practice for Roadway Lighting
  - AASHTO AWS D1.1/ANSI Structural Welding Code – Steel
  - AASHTO D1.5/AWS D1.5 Bridge Welding Code
  - FHWA Traffic Detector Handbook
  - FDOT General Interest Roadway Data Procedure
  - FHWA Traffic Monitoring Guide
  - FDOT's Traffic/Polling Equipment Procedures
- Structures
  - AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications and Interims
  - AASHTO LRFD Movable Highway Bridge Design Specifications and Interims

- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and Interims.
- AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code
- AASHTO Guide Specifications for Structural Design of Sound Barriers
- AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges
- FDOT Bridge Load Rating Manual
- FDOT Structures Manual
- FDOT Structures Design Bulletins (available on FDOT Structures web site only)

- Geotechnical
  - FHWA Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Specifications
  - Manual of Florida Sampling and Testing Methods
  - Soils and Foundation Handbook

2.22 Information provided by the TOWN when appropriate and /or available, the TOWN will provide project data including:

- Numbers for field books.
- Preliminary Horizontal Network Control.
- Access for the CONSULTANT to utilize the TOWN's Information Technology Resources.
- All TOWN agreements with Utility Agency Owner (UAO).
- All certifications necessary for project letting.
- Available traffic and planning data.
- All approved utility relocations.
- Engineering standards review services.
- All available information in the possession of the TOWN pertaining to utility companies whose facilities may be affected by the proposed construction.
- All future information that may come to the TOWN pertaining to subdivision plans so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right of way.
- Systems traffic for Projected Design Year, with K, D, and T factors.
- Existing right of way maps.
- PD&E Documents
- Design Reports
- Phase reviews of plans and engineering documents.
- Regarding Environmental Permitting Services:
  - Approved Permit Document when available.
  - Approval of all contacts with environmental agencies.
  - General philosophies and guidelines of the TOWN to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations, and time constraints will be completely defined by the Project Manager.
  - Appropriate signatures on application forms.

3 PROJECT COMMON AND PROJECT GENERAL TASKS

Project Common Tasks

Project Common Tasks, as listed below, are work efforts that are applicable to many project activities, 4 (Roadway Analysis) through 35 (Geotechnical). 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 Estimates: *The CONSULTANT shall be responsible for producing a design and construction cost estimate at the completion of each design phase submittal and reviewing and updating the cost estimate when scope changes occur and/or at milestones of the project.*

Field Reviews: *The CONSULTANT shall make as many trips to the project site as required to obtain necessary data for all elements of the project, but no less than one trip.*

Technical Meetings: *The CONSULTANT shall attend all technical meetings necessary to execute the Scope of Services of this contract. This includes meetings with TOWN and/or Agency staff, between disciplines and subconsultants, such as access management meetings, pavement design meetings, local governments, railroads, airports, progress review meetings (phase review), and miscellaneous meetings. The CONSULTANT shall prepare, and submit to the TOWN's Project Manager for review, the meeting minutes for all meetings attended by them. The meeting minutes are due within seven (7) calendar days of attending the meeting. For basis of estimates apply one meeting at 60%, one meeting at 100%, and one additional meeting.*

Quality Assurance/Quality Control: *It is the intention of the TOWN that design CONSULTANTS, including their subconsultant(s), are held responsible for their work, including plans review. The purpose of CONSULTANT plan reviews is to ensure that CONSULTANT plans follow the plan preparation procedures outlined in the FDOT Design Manual, that TOWN, state and federal design criteria are followed with the TOWN concept, and that the CONSULTANT submittals are complete. All subconsultant document submittals shall be submitted by the subconsultant directly to the CONSULTANT for their independent Quality Assurance/Quality Control review and subsequent submittal to the TOWN.*

It is the CONSULTANT'S responsibility to independently and continually QC their plans and other deliverables. The CONSULTANT should regularly communicate with the TOWN's Project Manager to discuss and resolve issues or solicit opinions from those within designated areas of expertise.

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 and their subconsultant(s) under this contract.

The CONSULTANT shall provide a Quality Control Plan that describes the procedures to be utilized to verify, independently check, and review all maps, design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan shall be one specifically designed for this project. The CONSULTANT shall submit a Quality Control Plan for approval within twenty-one (21) calendar days of the written Notice to Proceed and it shall be signed by the CONSULTANT's Project Manager and the CONSULTANT QC Manager. The Quality Control Plan shall include the names of the CONSULTANT's staff that will perform the quality control reviews. The Quality Control reviewer shall be a Florida Licensed Professional Engineer fully prequalified under F.A.C. 14-75 in the work type being reviewed. A marked up set of prints from a Quality Control Review indicating the reviewers for each component (structures, roadway, drainage, signals, geotechnical, signing and marking, lighting, surveys, etc.) and a written resolution of comments on a point-by-point basis will be required, if requested by the TOWN, with each phase submittal. The responsible Professional Engineer, Landscape Architect, or Professional Surveyor & Mapper that performed the Quality Control review will sign a statement certifying that the review was conducted and found to meet required specifications.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, maps, drawings, specifications and/or other products and services.

Supervision: The CONSULTANT shall supervise all technical design activities.

Coordination: The CONSULTANT shall coordinate with all disciplines of the project to produce the Final Design and Construction Documents.

Project General Tasks

Project General Tasks, described in Sections 3.1 through 3.13 below, represent work efforts that are applicable to the project as a whole and not to any one or more specific project activity. The work described in these tasks shall be performed by the CONSULTANT when included in the project scope.

3.1 Public Involvement – N/A

3.1.1 Community Engagement Plan - N/A

3.1.2 Notifications - N/A

3.1.3 Preparing Mailing Lists - N/A

3.1.4 Median Modification Letters - N/A

3.1.5 Driveway Modification Letters – N/A

3.1.6 Newsletters - N/A

3.1.7 Renderings and Fly-Throughs – N/A

3.1.8 PowerPoint Presentations – N/A

3.1.9 Public Meeting Preparations – N/A

3.1.10 Public Meeting Attendance and Follow-up – N/A

3.1.11 Other Agency Meetings

The CONSULTANT may be required to participate in meetings with local governing authorities and/or Metropolitan Planning Organization (MPO). The CONSULTANT's participation may include, but not be limited to, presentations during the meeting, note taking, and summarizing the meeting in a memo to the file. It is estimated for this project there will be 2 meetings with local governing authorities and/or MPOs during the design.

3.1.12 Web Site - N/A

3.2 Joint Project Agreements - N/A

3.3 Specifications Package Preparation

The CONSULTANT will review the specifications package prepared by TOWN.

3.4 Contract Maintenance

3.5 Value Engineering (Multi-Discipline Team) Review - N/A

3.6 Prime Consultant Project Manager Meetings

Includes only the Prime Consultant Project Manager's time for travel and attendance at Activity Technical Meetings and other meetings listed in the meeting summary for Task 3.6 on tab 3 Project General Task of the staff hour forms. Staff hours for other personnel attending Activity Technical Meetings are included in the meeting task for that specific Activity. For basis of estimating time for project manager assume project involvement to perform general tasks, invoicing, updates as necessary, etc. for a period of 12 months.

3.7 Plans Update - N/A

3.8 Post Design Services – N/A

3.9 Digital Delivery

The CONSULTANT shall deliver final contract plans and documents in digital format. The final contract plans, and documents shall be digitally signed, and sealed files delivered to the TOWN on acceptable electronic media, as determined by the TOWN.

3.10 Risk Assessment Workshop - N/A

3.11 Railroad, Transit and/or Airport Coordination

The CONSULTANT shall coordinate with Pinellas County transit (PSTA) to determine bus stop locations.

3.12 Landscape and Existing Vegetation Coordination - N/A

3.13 Other Project General Tasks - N/A

4 ROADWAY ANALYSIS

The CONSULTANT shall analyze and document Roadway Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

4.1 Typical Section Package - N/A

4.2 Pavement Type Selection Report - N/A

4.3 Pavement Design Package

4.4 Cross-Slope Correction – N/A

4.5 Horizontal/Vertical Master Design Files

The CONSULTANT shall design the geometrics using the Standard Plans that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, existing vegetation to be preserved, pedestrian and bicycle concerns, ADA requirements, Safe Mobility For Life Program, access management, PD&E documents and scope of work. The CONSULTANT shall also develop utility conflict information to be provided to project Utility Coordinator in the format requested by the TOWN, and shall review Utility Work Schedules

4.6 Access Management - N/A

4.7 Roundabout Evaluation - N/A

4.8 Roundabout Final Design Analysis – N/A

4.9 Cross Section Design Files

The CONSULTANT shall establish and develop cross section design files in accordance with the CADD manual, as applicable.

4.10 Traffic Control Analysis – N/A

4.11 Master TCP Design Files – N/A

4.12 Selective Clearing and Grubbing – N/A

4.14 Design Exceptions – N/A

4.15 Design Report – N/A

4.16 Quantities

The CONSULTANT shall develop accurate quantities, the required plans sheets and their supporting documentation, including construction days when required.

4.17 Cost Estimate

4.18 Technical Special Provisions - N/A

4.19 Other Roadway Analysis - N/A

4.20 Field Reviews

4.21 Monitor Existing Structures - N/A

4.22 Technical Meetings

4.23 Quality Assurance/Quality Control

4.24 Independent Peer Review - N/A

4.25 Supervision

4.26 Coordination

5 ROADWAY PLANS

The CONSULTANT shall prepare Roadway, Traffic Control, and Utility Adjustment Sheets. The plans shall include the following sheets necessary to convey the intent and scope of the project for the purposes of construction.

5.1 Key Sheet

5.2 Summary of Pay Items Including Quantity Input

5.3 Typical Section Sheets

5.3.1 Typical Sections

5.3.2 Typical Section Details

5.4 General Notes/Pay Item Notes

5.5 Summary of Quantities Sheets – N/A

5.6 Project Layout – N/A

5.7 Plan/Profile Sheet - N/A

5.8 Profile Sheet

5.9 Plan Sheet

5.10 Special Profile

5.11 Back-of-Sidewalk Profile Sheet

5.12 Interchange Layout Sheet - N/A

5.13 Ramp Terminal Details (Plan View) - N/A

5.14 Intersection Layout Details – N/A

5.15 Special Details - N/A

5.16 Cross-Section Pattern Sheet(s) – N/A

5.17 Roadway Soil Survey Sheet(s) – N/A

5.18 Cross Sections

Based on cross sections plotted at 100 ft. spacing.

5.19 Temporary Traffic Control Plan Sheets – N/A

5.20 Temporary Traffic Control Cross Section Sheets – N/A

5.21 Temporary Traffic Control Detail Sheets

5.22 Utility Adjustment Sheets

5.23 Selective Clearing and Grubbing Sheet(s) - N/A

5.25 Project Network Control Sheet(s)

5.26 Environmental Detail Sheets - N/A

5.27 Utility Verification Sheet(s) (SUE Data) – N/A

5.28 Quality Assurance/Quality Control

5.29 Supervision

6a DRAINAGE ANALYSIS

The CONSULTANT shall analyze and document Drainage Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

The CONSULTANT shall be responsible for providing a final drainage and stormwater management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the TOWN's Drainage Manual.

The CONSULTANT shall coordinate fully with the appropriate permitting agencies and the TOWN's staff. All activities and submittals should be coordinated through the TOWN's Project Manager. The work will include the engineering analyses for any or all of the following:

6a.1 Drainage Map Hydrology

Create a post-condition working drainage basin map to be used in defining the system hydrology. This map shall incorporate drainage basin boundaries, existing survey and/or LiDAR and field observations, as necessary, to define the system. Basin delineations shall also include any existing collection systems in a logical manner to aid in the development of the hydraulic model. Include coordination hours needed to convey drainage hydrologic features onto produced drainage maps.

6a.2 Base Clearance Report – N/A

6a.3 Pond Siting Analysis and Report - N/A

6a.4 Design of Cross Drains - N/A

6a.5 Design of Ditches – N/A

6a.6 Design of Stormwater Management Facility (Offsite or Infield Pond) - N/A

6a.7 Design of Stormwater Management Facility (Roadside Ditch as Linear Pond) - N/A

6a.8 Design of Floodplain Compensation - N/A

6a.9 Design of Storm Drains

Provide inlets, manholes, and other closed collection system drainage structures as necessary to connect to the existing collection system infrastructure.

6a.10 Optional Culvert Material - NA

6a.11 French Drain Systems - N/A

6a.12 Drainage Wells - N/A

6a.13 Drainage Design Documentation Report

Final document will be a technical memorandum with closed collection system calculations attached. Full report not anticipated.

6a.14 Bridge Hydraulic Report - N/A

6a.15 Temporary Drainage Analysis

Identify any temporary drainage measures based on phased construction.

6a.16 Cost Estimate

6a.17 Technical Special Provisions - N/A

6a.18 Other Drainage Analysis - N/A

6a.19 Field Reviews

6a.20 Technical Meetings

6a.21 Environmental Look-Around Meetings - N/A

6a.22 Quality Assurance/Quality Control

6a.23 Independent Peer Review - N/A

6a.24 Supervision

6a.25 Coordination

6b DRAINAGE PLANS

6b.1 Drainage Map

Provide a Drainage Map at a scale of 1" = 200' depicting basin boundaries and flow patterns in the vicinity of the intersection. Provide an existing drainage structures sheet with drainage structure type, size, and inverts for structures within the project limits.

6b.2 Bridge Hydraulics Recommendation Sheets – N/A

6b.3 Summary of Drainage Structures

6b.4 Optional Pipe/Culvert Material – N/A

6b.5 Drainage Structure Sheets

6b.6 Miscellaneous Drainage Detail – N/A

6b.7 Lateral Ditch Plan/Profile – N/A

6b.8 Lateral Ditch Cross-sections – N/A

6b.9 Retention/Detention Pond Detail Sheets – N/A

6b.10 Retention Pond Cross Sections – N/A

6b.11 Erosion Control Plan Sheets – N/A

Erosion control will be incorporated into the roadway plan sheets. Separate erosion control sheets will not be generated as part of this scope of services.

6b.12 SWPPP Sheets

6b.13 Quality Assurance/Quality Control

6b.14 Supervision

7 UTILITIES

The CONSULTANT shall identify utility facilities and secure agreements, utility work schedules, and plans from the Utility Agency Owners (UAO) ensuring all conflicts that exist between utility facilities and the TOWN's construction project are addressed. The CONSULTANT shall certify all utility negotiations have been completed and that arrangements have been made for utility work to be undertaken.

7.1 Utility Kickoff Meeting - N/A

7.2 Identify Existing Utility Agency Owner(s) – N/A

7.3 Make Utility Contacts

The utility contact will be made following the 60% plans submittal to the TOWN. Request Red Green-Brown markups (RGB's) providing proposed relocations of the existing utilities required to avoid conflicts with the proposed roadway improvements. Send UAO requests for reimbursement to HILLSBOROUGH TOWN for a legal opinion. Include the meeting schedule (if applicable) and the design schedule. Include typical meeting agenda. If scheduling a meeting, allow four (4) weeks advance notice.

7.4 Exception Processing - N/A

7.5 Preliminary Utility Meeting - N/A

7.6 Individual/Field Meetings - N/A

7.7 Collect and Review Plans and Data from UAO(s) – Preliminary Plan, 60% and 100% Submittal

The CONSULTANT shall review utility marked plans and data individually as they are received for content. Ensure information from the UAO (utility type, material and size) is sent to the designer for inclusion in the plans. Forward all requests for utility reimbursement and supporting documentation to the TOWN Project Manager.

7.8 Subordination of Easements Coordination - N/A

7.9 Utility Design Meeting – 60% Submittal

The CONSULTANT shall schedule (time and place), notify participants about, and conduct a Utility meeting with all affected UAO(s). The CONSULTANT shall be prepared to discuss drainage, traffic signalization, maintenance of traffic (construction phasing), review the current design schedule and letting date, evaluate the utility information collected, provide follow-up information on compensable property rights from Hillsborough Counties Legal Office, discuss with each UAO the utility work by highway contractor option, and discuss any future design issues that may impact utilities, etc. to the extent that they may have an effect on existing or proposed utility facilities with particular emphasis on drainage and maintenance of traffic with each UAO. The intent of this meeting shall be to assist the UAOs in identifying and resolving conflicts between utilities and proposed construction before completion of the plans, including utility adjustment details, and to work with the UAOs to recommend potential resolution between known utility conflicts with proposed construction plans as may be deemed practical by the UAO. The CONSULTANT shall be prepared to discuss all findings from Utility Designating and Locating efforts, and the possible need for additional verification. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees within three (3) calendar days. See Task 4.5. Horizontal/Vertical Master Design Files for utility conflict location identification and adjustments.

7.10 Review Utility Markups & Work Schedules and Processing of Schedules & Agreements – N/A

7.11 Utility Coordination/Follow-up

The CONSULTANT shall provide utility coordination and follow up. This includes follow-up, interpreting plans, and assisting the UAOs with completion of their work schedules and agreements. Includes phone calls, face-to-face meetings, etc. to motivate and ensure the UAO(s) complete and return the required documents in accordance with the project schedule. The CONSULTANT shall ensure the resolution of all known conflicts. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees. This task can be applied to all phases of the project.

7.12 Utility Constructability Review – N/A

7.13 Additional Utility Services - N/A

7.14 Processing Utility Work by Highway Contractor (UWHC) - N/A

7.15 Contract Plans to UAO(s)

7.16 Certification/Close-Out – N/A.

7.17 Other Utilities

The CONSULTANT will prepare lighting, watermain and/or forcemain relocations based on RGB's from the TOWN.

8 ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES

The CONSULTANT shall notify the TOWN Project Manager, Environmental Permit Coordinator and other appropriate TOWN personnel in advance of all scheduled meetings with the regulatory agencies to allow a TOWN representative to attend. The CONSULTANT shall copy in the Project Manager and the Environmental Permit Coordinator on all permit related correspondence and meetings.

8.1 Preliminary Project Research

The CONSULTANT shall perform preliminary project research and shall be responsible for regulatory agency coordination to assure that design efforts are properly directed toward permit requirements.

The CONSULTANT shall also review for any existing easements or other restrictions that may exist within proposed project boundary. Project research may include but should not be limited to review of available federal, state, and local permit files and databases, local government information including TOWN and property appraiser data. This information will be shown on the plans as appropriate.

8.2 Field Work - N/A

8.2.1 Pond Site Alternative – N/A

8.2.2 Establish Wetland Jurisdictional Lines and Assessments – N/A

8.2.3 Species Surveys – N/A

8.2.4 Archeological Surveys – N/A

8.3 Agency Verification of Wetland Data - N/A

8.4 Complete and Submit All Required Permit Applications - N/A

8.5 Prepare Dredge and Fill Sketches (as needed) - N/A

8.6 Prepare USCG Permit - N/A

8.7 Prepare Water Management District Right of Way Occupancy Permit - N/A

8.8 Prepare Coastal Construction Control Line (CCCL) Permit Application (as needed) - N/A

8.9 Prepare Tree Permit Information – N/A

8.10 Mitigation Design - N/A

8.11 Mitigation Coordination and Meetings - N/A

8.12 Other Environmental Permits

Obtain permit exemption from the Southwest Florida Water Management District.

8.13 Technical Support to the TOWN for Environmental Clearances and Re-evaluations - N/A

8.14 Preparation of Environmental Clearances and Reevaluations - N/A

8.15 Contamination Impact Analysis – N/A

8.16 Asbestos Survey - N/A

8.17 Technical Meetings

The CONSULTANT shall schedule and attend a pre-application meeting(s) with the appropriate regulatory agencies to determine the permitting requirements.

8.18 Quality Assurance/Quality Control

8.19 Supervision

8.20 Coordination

9 STRUCTURES - SUMMARY & MISCELLANEOUS TASKS & DRAWINGS – N/A

10 STRUCTURES - BRIDGE DEVELOPMENT REPORT - N/A

11 STRUCTURES - TEMPORARY BRIDGE - N/A

12 STRUCTURES - SHORT SPAN CONCRETE BRIDGE - N/A

13 STRUCTURES - MEDIUM SPAN CONCRETE BRIDGE - N/A

14 STRUCTURES - STRUCTURAL STEEL BRIDGE - N/A

15 STRUCTURES - SEGMENTAL CONCRETE BRIDGE - N/A

16 STRUCTURES - MOVABLE SPAN - N/A

17 STRUCTURES - RETAINING WALLS - N/A

18 STRUCTURES – MISCELLANEOUS - N/A

19 SIGNING AND PAVEMENT MARKING ANALYSIS

The CONSULTANT shall analyze, prepare and document, as necessary Signing and Pavement Markings plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memoranda.

19.1 Traffic Data Analysis - N/A

19.2 No Passing Zone Study – N/A

19.3 Reference and Master Design File

The CONSULTANT shall prepare the Signing & Pavement Marking Design files to include all necessary design elements and all associated reference files.

19.4 Multi-Post Sign Support Calculations - N/A

19.5 Sign Panel Design Analysis - N/A

19.6 Sign Lighting/Electrical Calculations – N/A

19.7 Quantities

The CONSULTANT shall provide quantity take off for the project at 60%, 100% and Final for the signing and pavement-marking component of the entire project.

19.8 Cost Estimate

The CONSULTANT shall be responsible for producing an accurate engineer's construction cost estimate for the signing and pavement marking component at 60%, 100% and Final.

19.9 Technical Special Provisions – N/A

19.10 Other Signing and Pavement Marking Analysis – N/A

19.11 Field Reviews

The CONSULTANT shall conduct field reviews of the project. This includes all trips required to obtain necessary data for all elements of the project.

19.12 Technical Meetings - N/A

19.13 Quality Assurance/Quality Control

19.14 Independent Peer Review – N/A

19.15 Supervision

19.16 Coordination

20 SIGNING AND PAVEMENT MARKING PLANS

The CONSULTANT shall prepare Signing and Pavement Marking Plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memoranda that includes the following.

20.1 Key Sheet – N/A (included with Roadway Plans)

20.2 Summary of Pay Items – N/A

20.3 Tabulation of Quantities

The CONSULTANT shall include all project quantities in the tabulation of quantities sheets and provide updating of the tabulation of quantities sheets.

20.4 General Notes/Pay Item Notes - N/A

20.5 Project Layout - N/A

20.6 Plan Sheet

The CONSULTANT shall prepare the Signing & Marking plan sheets utilizing the Design file to include all necessary information related to the project design elements and all associated reference files. All traffic plans shall be prepared at a scale of 1" = 40'.

20.7 Typical Details - N/A

20.8 Guide Sign Work Sheet(s) - N/A

20.9 Traffic Monitoring Site – N/A

20.10 Cross Sections – N/A

20.11 Special Service Point Details – N/A

20.12 Special Details - N/A

20.13 Interim Standards – N/A

20.14 Quality Assurance/Quality Control

20.15 Supervision

21 SIGNALIZATION ANALYSIS – N/A

23 LIGHTING ANALYSIS - N/A

24 LIGHTING PLANS – N/A

25 LANDSCAPE ARCHITECTURE ANALYSIS - N/A

26 LANDSCAPE ARCHITECTURE PLANS - N/A

27 SURVEY

The Design Topographic Survey will be obtained including horizontal and vertical control, construction alignment and approximate existing right-of-way lines, topography, and digital terrain model (DTM).

The CONSULTANT shall perform survey tasks in accordance with all applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memoranda.

The CONSULTANT shall submit all survey notes and computations to document the surveys. All field survey work shall be recorded in approved media and submitted to the TOWN. Field books submitted to the TOWN must be of an approved type. The field books shall be certified by the surveyor in responsible charge of work being performed before the final product is submitted.

The survey notes shall include documentation of decisions reached from meetings, telephone conversations or site visits. All like work (such as bench lines, reference points, etc.) shall be recorded contiguously.

27.1 Horizontal Project Control (HPC)

Establish horizontal project control at 500’ intervals throughout the project limits.

27.2 Vertical Project Control (VPC)

Establish vertical project control at 500’ intervals throughout the project limits.

27.3 Alignment and/or Existing Right of Way (R/W) Lines –

Establish a project construction line throughout the project limits. Approximate corridor R/W will be depicted based on platted geometry boundary information.

27.4 Aerial Targets - N/A

27.5 Reference Points

Reference Beginning of Survey, End of Survey, and deflection points along the project construction line.

27.6 Topography/Digital Terrain Model (DTM) (3D)

Locate all above ground features and improvements for the limits by collecting the required data with sufficient density for the purpose of a digital terrain model (DTM) survey.

27.7 Planimetric (2D)

27.8 Roadway Cross Sections/Profiles – N/A

27.9 Side Street Surveys

Six anticipated side street locations to be surveyed to 15’ beyond the main line corridor Right of Way.

27.10 Underground Utilities – N/A

27.11 Outfall Survey – N/A

27.12 Drainage Survey – N/A

27.13 Bridge Survey (Minor/Major) - N/A

27.14 Channel Survey - N/A

27.15 Pond Site Survey - N/A

27.16 Mitigation Survey - N/A

27.17 Jurisdiction Line Survey – N/A

27.18 Geotechnical Support – N/A

27.19 Sectional/Grant Survey - N/A

27.20 Subdivision Location - N/A

27.21 Maintained R/W – N/A

27.22 Boundary Survey – N/A

27.23 Water Boundary Survey - N/A

27.24 Right of Way Staking, Parcel / Right of Way Line – N/A

27.25 Right of Way Monumentation – N/A

27.26 Line Cutting - N/A

27.27 Work Zone Safety – N/A

27.28 Miscellaneous Surveys – N/A

27.29 Supplemental Surveys – N/A

27.30 Document Research – N/A

27.31 Field Review

Included in 27.6

27.32 Technical Meetings – N/A

27.33 Quality Assurance/Quality Control (QA/QC)

27.34 Supervision

Perform all activities required to supervise and coordinate project. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the TOWN Surveying Office.

27.35 Coordination

Coordinate survey activities with other disciplines. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the TOWN Surveying Office.

28 PHOTOGRAMMETRY - N/A

29 MAPPING - N/A

30 TERRESTRIAL MOBILE LiDAR - N/A

31 ARCHITECTURE DEVELOPMENT - N/A

32 NOISE BARRIERS IMPACT DESIGN ASSESSMENT IN THE DESIGN PHASE - N/A

33 INTELLIGENT TRANSPORTATION SYSTEMS ANALYSIS - N/A

34 INTELLIGENT TRANSPORTATION SYSTEMS PLANS - N/A

35 GEOTECHNICAL - N/A

36 3D MODELING – N/A

37 PROJECT REQUIREMENTS

37.1 Liaison Office - ***N/A***

37.2 Key Personnel

The CONSULTANT's work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by TOWN.

37.3 Progress Reporting

The CONSULTANT shall meet with the TOWN as required and shall provide a written monthly progress report with approved schedule, schedule status, and payout curve or by using the earned value method that describe the work performed on each task. The report will include assessing project risk through monthly documentation of identifying and updating the risk category and approach for monitoring those tasks. Invoices shall be submitted after the TOWN approves the monthly progress report and the payout curve or with earned value analysis. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

37.4 Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the TOWN for their records within one (1) week of the receipt or mailing of said correspondence.

37.5 Professional Endorsement

The CONSULTANT shall have a Licensed Professional Engineer in the State of Florida sign and seal all reports, documents, technical special provisions, and plans as required by TOWN standards.

37.6 Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. FDOT makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in FDOT's CADD Manual. The CONSULTANT shall submit final documents and files as described therein.

37.7 Coordination with Other Consultants

The CONSULTANT is to coordinate his work with any and all adjacent and integral consultants so as to effect complete and homogenous plans and specifications for the project(s) described herein.

37.8 Optional Services - ***N/A***

38 INVOICING LIMITS

Payment for the work accomplished shall be in accordance with Method of Compensation of this contract. Invoices shall be submitted to the TOWN, in a format prescribed by the TOWN. The TOWN Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to ensure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the TOWN.

The CONSULTANT shall provide a list of key events and the associated total percentage of work considered to be complete at each event. This list shall be used to control invoicing. Payments will not be made that exceed the percentage of work for any event until those events have actually occurred and the results are acceptable to the TOWN.