SCOPE OF WORK

FINAL DESIGN PLANS FOR INTERSECTION PROJECTS AT ARCHER ROAD AND SOUTHWEST 40TH BOULEVARD; SOUTHWEST 20TH AVENUE AND SOUTHWEST 43RD STREET AND A SMART BUS BAY ON SOUTHWEST 20TH AVENUE

SW 62ND BOULEVARD 4-LANE CONNECTOR

DESIGN OF THREE INTERIM PROJECTS – SW 62ND BOULEVARD CONNECTOR

SECTION I. ROADWAY PLANS PACKAGE

A. PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of HNTB Corporation (CONSULTANT) and Alachua County (COUNTY) in connection with the design and preparation of a complete set of construction contract plans and special provisions for:

1. Construction of additional turn-lanes and receiving lanes at Archer Road and Southwest 40th Boulevard

2. Construction of additional turn-lanes and receiving lanes at Southwest 20th Avenue and Southwest 43rd Street

3. Construction of a smart bus bay on Southwest 20th Avenue including bus shelters

The general objective is for the CONSULTANT to prepare a set of plans to be used by the contractor to build the project, and by the COUNTY to ensure the project is built as designed and to specifications. Elements of work shall include roadways, structures, intersections, interchanges, geotechnical activities, surveys, drainage, signing and pavement markings, signalization, lighting, utility relocation, landscaping and irrigation, right-of-way maps and legal descriptions, maintenance of traffic, cost estimates, environmental permits, environmental mitigation plans, quantity computation books, and all necessary incidental items for a complete project.

The Scope of Services establishes which items of work described in the Alachua County Unified Land Development Regulations, Florida Department of Transportation's (FDOT's) Plans Preparation Manual, and other pertinent manuals to accomplish the work are specifically included in this contract, and also which of the items of work will be the responsibility of the CONSULTANT or the COUNTY.

All plans and design documents are to be prepared with Standard English values in accordance with all applicable Alachua County and FDOT manuals and guidelines.

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the COUNTY 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 in accordance with COUNTY procedures. It shall be the CONSULTANT's responsibility to utilize the very best engineering judgment, practices, and principles possible during the prosecution of the work commissioned under this contract.

The CONSULTANT shall prepare the Roadway Plans Package. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of roadway plans, drainage plans, traffic control plans, environmental permits and other necessary documents limited to this scope of work.

The COUNTY will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of the contract plans.

The COUNTY will provide job-specific information and/or functions as outlined in this contract.

DESCRIPTION

The initial concepts to be used for the design of these projects are attached to this scope of work. Refinement and revision of these concepts shall be reviewed and approved by the COUNTY.

The CONSULTANT shall incorporate the following into the design of this facility:

- Archer Road at Southwest 40th Boulevard – Construction of an eastbound to northbound left-turn lane in the median of Archer Road to maximize the storage and efficiency of this movement to bypass queues that may form in the eastbound through lanes. Construction of a southbound right turn lane on Southwest 40th Boulevard. Construction of a receiving lane along Southwest 40th Boulevard in the northbound direction from the proposed double left turn from Archer Road. The project is anticipated to include the design of roadway, sidewalks, strormwater conveyance and management facilities and traffic signals.

- Southwest 20th Avenue at Southwest 43rd Street – Construction of a northbound to westbound right-turn lane on Southwest 20th Avenue to maximize the storage and efficiency of this movement. This lane will allow the two existing lanes on the south approach to this intersection to be converted to left-turn lanes. Construction of a receiving lane along Southwest 20th Avenue in the westbound direction from the proposed double left turn from Southwest 43rd Street. The project is anticipated to include the design of roadway, sidewalks, stormwater conveyance and management facilities and traffic signals.

- Smart Bus Bay – Construction of a bus turnout and mid-block pedestrian crossing that will include pedestrian countdown signal and detection areas in the merge lane for the bus turnout to activate the pedestrian signal when needed to achieve an acceptable gap for merging. This project is anticipated to include the design of roadway, sidewalks, stormwater conveyance and management facilities, traffic signals/ITS and a bus shelter.

B. Design Analysis

1. Typical Section Package – The Typical Section Package has been developed in previous phases by the CONSULTANT.

2. Geometrics - The CONSULTANT shall design the geometrics for the project in accordance with the classification for urban roads of the Alachua County Roadway Design Standards, the Manual of Uniform Minimum Standards for Design and MTPO policies, 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, drainage features, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, access management, and scope of work.

   The design elements shall include, but not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, cross slopes, borders, sight distance, side slopes and ditches, lane transitions, superelevation, features of intersections, utility conflicts, interchanges, and limited access points. The geometric design developed by the CONSULTANT shall be an engineering solution that is not merely an adherence to the minimum AASHTO and/or COUNTY standards.

3. Pavement Design Package – All required Pavement Designs will be provided by the COUNTY in accordance with the COUNTY's Standard Typical Section. The CONSULTANT shall, if applicable, recommend modifications to the pavement structure if such recommendations are expected to reduce the construction cost of the roadway while satisfying design criteria.

4. Design Documentation, Computation Book and Quantities - The CONSULTANT shall submit to the COUNTY design notes and computations to document the design conclusions reached during the development of the construction plans.

   The design notes and computations shall be recorded on standard size computation sheets, fully titled, numbered, dated, indexed and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to the standard size. The data shall be in a hardback folder for submittal to the COUNTY.

   One copy of the design notes and computations shall be submitted to the COUNTY at each plan review, unless otherwise directed by the Project Manager. When the plans are submitted for each subsequent review, the design notes and computations corrected according to COUNTY comments shall be resubmitted. At the project completion, a final set of design notes and computations, signed and sealed by the CONSULTANT, shall be submitted with the record set of plans and tracings.

   The design notes and calculations shall include, but not be limited to the following data:

a. Design standards used for the project.

b. Geometric design calculations for horizontal alignment that is not included in the quantity computation booklet.

c. Vertical geometry calculations.

d. Capacity analysis and intersection operational analysis.

e. Drainage computations.

f. Earthwork calculations not included in the quantity computation booklet.

g. Calculations showing cost comparisons of various alternatives considered.

h. Documentation of decisions reached resulting from meetings, telephone conversations or site visits.

i. Calculations of quantities.

j. All permit support packages.

k. Design criteria and variance report.

l. Pavement design calculations.

m. Signal timing calculations

5. Summary of Pay Items - A Summary of Pay Items computer output sheet shall be prepared at Interim and Final Plans phases.

6. Technical Special Provisions - The CONSULTANT shall provide Technical Special Provisions for all items of work not covered by FDOT Standard Specifications, Supplemental Specifications or Recurring Special Provisions.

7. Copy of correspondence or meeting minutes will be forwarded to the COUNTY within one week following the receipt/mailing of the correspondence or the date of the meeting.

C. Drainage Analysis

1. The CONSULTANT shall be responsible for designing a drainage and stormwater management system for each of the three (3) interim projects. All design work shall be in compliance with FDOT's drainage requirements and policies; Florida Administrative Code, Chapter 14-86; and the requirements of the regulatory agencies and/or local jurisdictions. There will be no Design Review Committee or applicable

Land Development Code This work will include the engineering analysis necessary to design any or all of the following: cross drains, french drains, roadway ditches, outfall ditches, storm sewers, retention/detention facilities, interchange drainage and stormwater management, other drainage systems and elements of systems as required for a complete analysis.
CONSULTANT's work shall be consistent with the stormwater management master plan.

Full coordination with all applicable permitting agencies, the COUNTY's Environmental Protection Department and the City of Gainesville where applicable will be required from the outset. Full documentation of all meetings and decisions shall be included in the Design Criteria Report. These activities and submittals should be coordinated through the COUNTY'S Project Manager.

2. The determination of exact number of drainage basins, outfalls and water management facilities will be the CONSULTANT's responsibility and will be documented in the Design Criteria Report.

3. The objective is to obtain an approved stormwater treatment/attenuation design from the St. Johns River Water Management District (SJRWMD). This service shall include, but is not limited to the following:

   a. Determination of volume of stormwater required to be treated and attenuated. Include critical storm analysis when making this determination. Justify any departure from Rule Chapter 14-86. Treatment areas, where required, shall be designed in accordance with COUNTY policies.

   b. Coordinate with local government offices regarding local regulations, restrictions, and possible joint use with the COUNTY. Obtain information concerning present or future development that could impact the design.

   c. Review preliminary design concepts with permitting agencies and finalize plans.

   d. Provide preliminary plans during Phase Submittals for review by the COUNTY and revise as necessary.

4. The CONSULTANT will be responsible for flagging and surveying the delineation of all wetlands as required by the permitting agencies.

5. The CONSULTANT shall design and compare the cost of alternative stormwater management systems including the utilization of underground retention/detention (i.e., french drains, water storage in pipes). Where the option will result in a reduction of total project costs, the COUNTY will decide on locations where this option will be exercised. This option shall be compensated for per system.

6. The CONSULTANT shall check all existing cross drains within the project limits on connecting roadways and determine if they are structurally sound and can be extended. Flood data requirements will be determined in accordance with COUNTY procedures and will be shown in the plans.

7. The CONSULTANT will consider alternate culvert materials as appropriate.

8. The CONSULTANT shall provide the COUNTY a signed and sealed Drainage Design Report for review and approval. It shall be a record set of all drainage computations, both hydrologic and hydraulic. The engineer shall include all support data such as soil borings and percolation tests. Soil borings and percolation tests may be performed by the CONSULTANT as a contract option, or may be provided by the COUNTY upon request.

D. Roadway Plans

The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Key Map, Typical Section sheet(s) with notes, Summary of Quantities sheet(s), Plan/Profile Sheet(s), Intersection Detail sheet(s), Intersection Profile sheet(s), Back of Sidewalk Profile sheet(s), Special Profile sheet(s), Soil Data Sheet(s), Cross Section Sheet(s), Summary of Pay Items, miscellaneous construction details, alignment control and curve data, and any other detail sheets necessary to convey the intent and scope of the project for the purposes of construction. The following items are anticipated

- Plan Type: Plan sheets at 1"=40'.

- Typical Section: Addition of turn lanes and bus turnouts.

- Pavement Design: One design for each project.

- Access Management Classification: Class 5

- Major Intersections/Interchanges: Archer Road and Southwest 40th Boulevard, Southwest 20th Avenue and Southwest 43rd Street, smart bus bay on Southwest 20th Avenue

- Level of TCP Plans: Identify Level 1, 2, or 3.

- Temporary Signals: The existing signals at Archer Road/Southwest 40^{th} Boulevard and Southwest 20^{th} Avenue/Southwest 43^{rd} Street shall be adjusted as needed during the construction of new mast arm signals and controllers. Temporary signalization shall be coordinated with City of Gainesville.

- Temporary Lighting: N/A

- Temporary Drainage: N/A

- Variations/Exceptions: N/A

- Back of Sidewalk Profiles: Shall be provided as needed.

- Driveway Profiles: Shall be provided.

E. Interchange Plans

NOT APPLICABLE.

F. Drainage Plans

The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Drainage Map sheet(s), Drainage Structure sheet(s), Summary of Drainage Structure sheet(s), Lateral Ditch and Outfall Plan sheet(s), Lateral Ditch and Outfall Cross Section sheet(s), Retention/Detention Plan sheet(s), Pond Cross Section sheet(s), Special Drainage Detail sheet(s), and SWPPP and erosion control details.

G. Traffic Control Plan

1. Traffic Control Analysis - The CONSULTANT shall design a safe and effective Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. The design shall include construction phasing of roadways ingress and egress to existing property owners and businesses, routing, signing and pavement markings, and detour quantity tabulations. Special consideration shall be given to the construction of the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

2. Traffic Control Plans - The CONSULTANT shall prepare plan sheets, notes, and details as applicable to include the following: Typical Section sheet(s), General Notes and Construction Sequence sheet(s), Typical Detail sheet(s), Tabulation of Quantities sheet(s), Traffic Control Plan sheet(s), Signing and Pavement Marking sheet(s), Temporary Signalization sheet(s).

   The CONSULTANT shall prepare additional plan sheets such as cross sections, profiles, drainage structures, retaining wall details and sheet piling as necessary for proper construction and implementation of the traffic control plan.

H. Utilities

The CONSULTANT shall identify and verify the following existing and proposed utilities, both horizontally and vertically, which may influence location and design considerations:

- Overhead – Utility (power, cable & telephone)

- Aboveground – Utility poles, fire hydrants, utility manholes and valve boxes microwave towers, etc.
- Underground water, gas, sanitary sewer, force mains, street lighting cables/conduit, power cables, telephone cables, etc.
- Bridge Attachments (No proposed bridge attachments are anticipated or included in work effort estimates).

The CONSULTANT shall be responsible for coordinating all design with the affected utility companies in order to minimize utility conflicts. The COUNTY or GRU will designate all existing utilities within the project limits.

Each utility provider will be responsible for the design of their respective underground utilities for this project, with the exception of irrigation stub-outs and facilities. These designs will be provided to the CONSULTANT by the utility provider or the COUNTY for inclusion into the Roadway Plans for this project. The CONSULTANT will be responsible for coordinating with GRU and other utility providers for all proposed construction elements such that utility conflicts are avoided. The utility providers will provide contract pay items, quantities and cost estimates for all contract utility items included in the plans not designed by the CONSULTANT.

All utility installations will be coordinated with GRU, Florida Gas, Bellsouth, Cox Cable and all other existing utilities located within the corridor.

1. Engineering Requirements and Documentation

   The CONSULTANT shall appoint a qualified person who shall act as a representative for the project and their name shall be provided to the COUNTY and utility providers as needed to coordinate utility relocations and design. This person shall become acquainted with all the utility owners, which may be impacted by the project construction. Prior to any contacts with the Utility owners, the appointed representative shall meet with the COUNTY and with each utility owner to receive guidance, as may be required, to assure that all necessary coordination is accomplished in accordance with COUNTY procedures. The representative shall be familiar with the proposed construction in order to provide information to GRU or to other Utility Owners, which they may need to prepare utility relocation schedules.

   The CONSULTANT shall conduct and keep minutes for distribution for all utility meetings. The CONSULTANT shall also maintain documentation relating to all conflict resolutions.

   The CONSULTANT shall maintain project files for each company, and a tracking log sheet for correspondence transmitted to each company.

   The CONSULTANT shall be prepared to summarize and tabulate by station, offset, type and size of facility any additional subsurface locates required after each Utility Design meeting.

2. Coordination with Utility Companies

The CONSULTANT will be responsible for conducting a Utility Pre-Design Meeting and a Utility Design Meeting. The existing utilities shall be shown on the plan sheets, profile sheets, drainage structure, and cross-section sheets. The purpose of these meetings will be to determine the effects the project has on existing and proposed facilities. This allows the utility representatives to provide input into the development of the roadway plans.

a. Utility Pre-Design Meeting: The CONSULTANT shall conduct a meeting with GRU and all other affected Utility Owners to discuss the utility information collected during the design survey. The purpose of this meeting is to discuss the accuracy of the underground and aboveground utility survey. The CONSULTANT may request additional surveys after this meeting. Upon conclusion of all utility location information within the plans, the CONSULTANT shall provide a complete set of Phase I plans to each utility owner having facilities located within the project limits.

b. Utility Design Review Meeting: The CONSULTANT shall conduct a Utility Design Review Meeting with GRU and all other affected Utility Owners approximately one (1) month following to the 60% plan review. The CONSULTANT shall be prepared to discuss drainage, traffic signalization, maintenance of traffic, etc., to the extent that they may have an affect on existing or proposed utility facilities. The intent of this meeting shall be to resolve all conflicts between utilities and proposed construction prior to completion of the plans, including utility adjustment details.

c. The CONSULTANT shall submit to GRU and each Utility Owner the necessary set of plans for utility coordination and be prepared to provide the project CADD files in electronic format to GRU and each Utility Owner upon their request.

d. The CONSULTANT shall, prior to and during design, obtain all available data from the Utility Owners that may be needed to determine the actual location and depth of all underground utilities.

3. Verification of Vertical and Horizontal Locations

The following utility verified vertical and horizontal data are anticipated.

Vvh Estimate
Archer Road & SW 40th

Location/Description	Number
Intersection Mast Arms	2
Intersection Drainage Structures	2
Archer Road	
Drainage Structures (LT)	0
Drainage Structures (Median)	4
Drainage Structures (RT)	2
Lighting Poles (LT)	0
Lighting Poles (RT)	0
SW40th	
Drainage Structures (LT) (10+00 - 19+00)	5
Drainage Structures (RT) (10+00 - 19+00)	5
Lighting Poles (LT) (10+00 - 24+00)	7
Lighting Poles (RT) (10+00 - 24+00)	7
Total Number of Anticipated Vvh's	34

Vvh Estimate
SW 20th & SW 43rd

Location/Description	Number
Intersection Mast Arms	2
Intersection Drainage Structures	2
SW 20th Avenue	
Drainage Structures (LT) (108+00 - 119+00)	5
Drainage Structures (Median)	0
Drainage Structures (RT) (109+00 - 116+00)	4
Lighting Poles (LT) (103+00 - 121+00)	9
Lighting Poles (RT) (103+00 - 121+00)	9
SW43rd Street	
Drainage Structures (LT) (28+00 - 32+00)	3
Drainage Structures (RT) (28+00 - 32+00)	3
Lighting Poles (LT) (23+00 - 32+00)	5
Lighting Poles (RT) (23+00 - 32+00)	4
Total Number of Anticipated Vvh's	46

Vvh Estimate
Smart Bus Bay

Location/Description	Number
Signal Mast Arms	1
Drainage Structures	2
Total Number of Anticipated Vvh's	3

Project Total for Vvh's: **83**

3. Prepare Utility Adjustment Plans

   The CONSULTANT shall prepare complete utility adjustments plans prior to the 90% submittal. Upon completion of these plans, the CONSULTANT shall send one (1) complete set of plans to each utility owner, the COUNTY and to each utility owner.

4. Prepare Utility Relocation Schedule

   The utility owners shall prepare utility relocation schedules. The CONSULTANT shall coordinate with each utility owner during this process and provide assistance as required.

5. Prepare Utility Relocation Agreements

   Utility Relocation Agreements shall be prepared by the COUNTY or by each utility owner as appropriate.

I. Environmental Services/Permits

1. Preliminary Field Review - The CONSULTANT shall perform a preliminary field review and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

2. Agency Coordination (Includes all Phases) - The CONSULTANT shall notify the COUNTY of all scheduled meetings with the regulatory agencies and shall copy in the Project Manager and the COUNTY's designated coordinator for Environmental activities on all permit related correspondence and meetings.

3. Establish Wetland Jurisdictional Lines - The CONSULTANT shall flag and survey the wetland jurisdictional lines in coordination with the regulatory agency.

4. Agency Field Review - The CONSULTANT shall be responsible for coordinating regulatory agency field reviews.

5. Permit Preparation - The CONSULTANT shall identify and prepare all Permit Packages necessary for project construction. The COUNTY shall acquire all permits based upon the packages provided by the CONSULTANT.

6. Stormwater Pollution Prevention Plan - The CONSULTANT shall prepare a project specific Stormwater Pollution Prevention Plan (SWPPP), details of which shall be included in the plans. In addition, a narrative of the SWPPP shall be submitted with the 60% design plans and subsequent submittals.

7. Mitigation Plans/Site Identification – The CONSULTANT shall identify off site locations for potential wetlands impacts mitigation. Sites selected by the

COUNTY for purchase (if not already COUNTY owned lands) shall be further evaluated and presented to the jurisdictional authorities for concurrence with mitigation proposals. As a CONTRACT OPTION, the CONSULTANT will prepare mitigation plans and details for each selected off-site area to be used for wetlands impact mitigation and obtain the necessary permits required for approval of the plans. County EPD permit shall be required with a mitigation plan.

8. Perform a Phase II Environmental Site Assessment for sites that have been identified as having for potential hazardous/petroleum contamination. These sites are associated with the intersection of Archer Road and Southwest 40th Boulevard and the intersection of Southwest 20th Avenue and Southwest 43rd Street.

SECTION II. SIGNING AND PAVEMENT MARKINGS

The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Key Sheet, Tabulation of Quantities sheet(s), General Note sheet(s), Plan Sheet(s), Guide Sign Detail sheet(s), Sign Cross Section and Layout sheet(s), Special Marking Detail sheet(s), Metal/Concrete Pole detail(s), and Service Point detail(s). Signs and pavement markings shall be designed in accordance with the elder road user policy. The CONSULTANT shall plot utilities on the plans where signs that are to have foundations are to be placed.

The CONSULTANT shall complete the design of all guide signs required for the project. Prior to preparing Guide Sign Worksheets, the CONSULTANT shall discuss the location, letter size and messages for all guide signs with the COUNTY. In addition, the CONSULTANT shall be responsible for determining the column size for all multi-post signs and present this information in the plans.

The CONSULTANT shall provide Technical Special Provisions for all items of work not covered by the FDOT Standard Specifications, Supplemental Specifications or Recurring Special Provisions.

SECTION III. SIGNALIZATION PLANS

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

New signal control systems and mast arm installations are proposed at all three interim project locations. The City of Gainesville shall provide technical specifications to support the change out of these intersections.

The CONSULTANT shall recommend changes to signal timing and phasing plans based on the proposed geometric conditions and traffic counts performed as part of the PD&E Study.

SECTION IV. LIGHTING PLANS

Before any initial design work is begun, the CONSULTANT shall meet with the COUNTY and GRU. At the meeting, all areas involving the lighting project shall be discussed. All lighting design criteria and aspects that are related to COUNTY, MTPO and GRU roadway and pedestrian level lighting requirements shall be addressed. For example, illumination levels, lighting design alternatives and limits, the processing of lighting shop drawings, and information regarding fixtures and bases. GRU will provide the basic design requirements (location and type) to the CONSULTANT based on the MTPO requirements. The CONSULTANT shall perform the calculations and provide the final plans and specifications for the lighting design.

SECTION V. STREETSCAPE PLANS

The CONSULTANT shall prepare the contract plan sheets, notes and details to include the following: Tabulation of Quantities sheet(s), Landscape Plan sheet(s), Irrigation Plan and Detail sheet(s), and Landscape Detail sheet(s). All landscape plans shall include all existing and proposed utility locations, all existing billboard locations and associated viewing zone(s), all roadway signs and associated viewing angles, and clear zone/horizontal clearance delineations. All plans shall be prepared in accordance with COUNTY requirements (BOCC and MTPO guidelines) and the approved product list from GRU for street lighting and MTPO guidelines (black painted light poles). Pavers shall be selected from the FDOT Qualified Product List (QPL).

Streetscape concepts and plans will be developed with the idea of connectivity of the communities in the vicinity of the project, and will be directed toward promoting gathering at specific locations. All streetscape designs will be coordinated with roadway alignments, pedestrian and street level lighting and traffic operations studies and designs such that a context sensitive design is achieved for the overall project, fitting the proposed improvements into the community in a manner that is not intrusive.

Prior to beginning the development of any landscape plans, the CONSULTANT shall discuss the overall landscape/streetscape concept with the COUNTY. Discussion shall include the expected types of plant materials, irrigation requirements and maintenance efforts expected.

It is the responsibility of the CONSULTANT to determine the number and size of landscaped areas that will be required based on the overall project design. In addition, it is the responsibility of the CONSULTANT to ensure compliance with all local and State ordinances or requirements governing the placement of plant material in rights of way. All landscape plans must be coordinated with other plans, including roadway, utility, signing and signalization.

Our Urban Designers and Landscape Architects will be involved throughout the planning and design process. They will assist in defining the final alignment, looking to balance community and environmental impacts. They will be involved in determining the location and shapes of the storm water management facilities to minimize environmental impacts and meet MTPO policies while maximizing aesthetic considerations. They will also work with the pavement designers to identify and design appropriate areas of special paving such as crosswalks and bus stop pads. Our Urban Designers and Landscape Architects will participate in the public involvement portion of the project by presenting comparable images, illustrative concept and final plans and facilitating community input into the work products.

Landscape designs, details and plans will be required for the following general locations:

- Stormwater Management Facilities
- Borders adjacent to sidewalks

The CONSULTANT shall provide Technical Special Provisions for all items of work not covered under FDOT Standard Specifications, COUNTY Specifications, or City of Gainesville specifications for plantings.

SECTION VI. PUBLIC INVOLVEMENT

The following activities are anticipated:

MTPO Design Team and MTPO Board Scope of Services Review
The CONSULTANT shall provide Scope of Services.

MTPO Design Team and MTPO Board 30% Plans Review
The CONSULTANT shall provide exhibits and a brief presentation to the design committee illustrating the proposed improvements, benefits and design standards employed.

MTPO Design Team and MTPO Board 60% Plans Review
The CONSULTANT shall provide exhibits and a brief presentation to the design committee noting any changes in the proposed design plans and how any comments provided during the 30% review were deposed.

Final Design Public Meeting
A Public Meeting is anticipated to occur in conjunction with the submission of the 90% design plans to provide for public review and comment on any changes that may have occurred as a result of design activities in the project. The general requirements for the public involvement program will remain unchanged from requirements outlined in the Phase 1, Corridor Study, scope of services.

Media Relations
The general requirements for the media relations requirements will remain unchanged from requirements outlined in the Phase 1, Corridor Study Phase scope of services. No additional media relations activities are anticipated as part of this phase.

Unscheduled Agency Meetings
A total of five (5) meetings are anticipated as part of this phase of work.

Web Site
The CONSULTANT shall provide continuing support to the COUNTY for the maintenance and updating of the project web site when requested. This information will be limited to providing exhibits for the purposes of posting on the web site as part of this phase of work.

SECTION VII. DESIGN/RIGHT-OF-WAY SURVEY

Design Survey will be the responsibility of the CONSULTANT based on the selected transportation improvement. 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 COUNTY Field books submitted to the COUNTY 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. The COUNTY may not accept field survey radial locations of section corners, platted subdivision lot and block corners, alignment control points, alignment control reference points and certified section corner references. The COUNTY may instead require that these points be surveyed by true line, traverse or parallel offset.

Survey Services

1. Horizontal Project Network Control (HPNC)

Establish or recover HPNC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System based on prior survey control work done by this office for this project; may include primary or secondary control points. Includes analysis and processing of all field collected data.

2. Vertical Project Network Control (VPNC) on NGVD88

Establish or recover VPNC, for the purpose of establishing vertical control on NGVD88; may include primary or secondary vertical control points; including analysis and processing of all field collected data.

3. Alignment and/or Existing Right of Way Lines

Establish project alignment. Also includes analysis and processing of all field collected data, existing maps, and/or reports for identifying mainline, ramp, offset, or secondary alignments. Depict alignment and/or existing R/W lines per DEPARTMENT R/W Maps, platted or dedicated County rights of way.

4. Aerial Targets

Not applicable.

5. Reference Points

Reference HPNC points, project alignment, and vertical control points.

6. Digital Terrain Model DTM/3D on NGVD88

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

All above grade improvements within the project limits will be located and identified. This will include all visible improvements within the additional 20 feet outside of the existing Right-of-Way lines defined above. Cross streets and driveways shall be located 50 feet outside existing right-of-way lines. This task will include all parking lots, driveway entrances, fences, signage and other visible improvements.

7. Topography (2D)

Locate all above ground features and improvements. Deliver in appropriate electronic format. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

A topographic and above grade improvement survey will be performed within the limits of the project 50 feet outside existing right-of-way lines along the side streets of the project roadways.

8. Roadway Cross Sections/Profiles

Perform field survey checks to verify the accuracy of the digital terrain model. Includes analysis and processing of all field-collected data for comparison with DTM.

Roadway cross-sections will be performed at a maximum of 100-foot intervals. In the area of visible vertical points of intersections (VPI), cross-sections will be performed on 50-foot intervals. For the safety of the Public and staff, the pavement spot elevations (lane striping) within the driving lanes of the major roadways will be performed using prismless Total Station. When possible, spot elevations will be measured conventionally to insure a high level of accuracy in these elevations. This task will also include all pavement markings.

9. Side Street Surveys

Sections will be taken at side roads and driveways to determine existing profiles. Refer to tasks of this document as applicable.

10. Underground Utilities

Designation includes 2-dimensional collection of existing visible utilities and selected 3-dimensional verification as needed for designation. Location includes non-destructive excavation to determine size, type and location of existing utility, as necessary for final 3-dimensional verification. Survey includes collection of data on points as needed for designates and locates. Includes analysis and processing of all field collected data, and delivery of all appropriate electronic files. Show underground utilities based on available utility maps.

11. Outfall Survey

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of a D.T.M. Survey with sufficient density of shots. Shoot all break lines, high and low points. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

12. Drainage Survey

Locate underground data at structures (XYZ, pipe size, type, condition and flow line) that relates to above ground data.
Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports. This effort shall include sufficient data on the existing accessible pond outfall structure and pipes to allow for an adequate design.

13. Bridge Survey (Minor/Major)

Not applicable

14. Channel Survey

Not applicable.

15. Pond Site Survey

15A. Existing Pond Survey and Cross-Sections

This task will provide for the survey of the pond located in the northwest quadrant of the Southwest 40th Boulevard and Southwest 42nd Street Intersection. This task will provide for a boundary survey, a topographic survey, a tree survey and the location of the wetland jurisdictional line as established by others (cost for wetland locations included in the cost of survey) for the infield area of the quadrant for the area established by Southwest 40th Boulevard and Southwest 42nd Street. A separate map will be prepared with existing legal descriptions of the proposed parcel taking parcels. The final Mapping of the project will be updated to show the new pond site boundary.

Task 15B. Proposed Off-Site Pond Surveys

Not applicable.

16. Mitigation Survey

Not applicable.

17. Jurisdiction Line Survey

Perform field location (2-dimensional) of jurisdiction limits as defined by respective authorities, also includes field edits, analysis and processing of all field collected data, preparation of reports.

18. Geotechnical Support

Perform 3-dimensional (X,Y,Z) field location, or stakeout, of boring sites established by geotechnical engineer. Includes field edits, analysis and processing of all field collected data and/or reports.

19. Sectional/Grant Survey

Not applicable.

20. Subdivision Location

Depict all existing recorded subdivision/condominium boundaries, tracts, units, phases, blocks, street R/W lines, and common areas where they intersect existing rights-of-way in the project area. Includes analysis and processing of all field collected data and/or reports. If unrecorded subdivision is on file in the public records of the subject county, tie existing unrecorded subdivision to the project survey data.

21. Maintained R/W

Perform field location (2-dimensional) of maintained R/W limits as defined by respective authorities. Also includes field edits, analysis and processing of all field collected data, preparation of reports.

22. Boundary Survey

Perform boundary survey as defined by Florida Minimum Technical Standards. Includes analysis and processing of all field-collected data, preparation of reports.

23. Water Boundary Survey

Not applicable.

24. Right of Way Staking / Right of Way Line

Perform field staking and calculations of existing/proposed R/W lines for on-site review purposes.

25. Right of Way Monumentation

Set R/W monumentation as depicted on final R/W maps for water retention area.

26. Line Cutting

N/A

27. Work Zone Safety

Provide work zone safety as required.

28. Miscellaneous Surveys

28A. Utility Survey
This task will field locate all above ground utilities and above ground indicators to underground utilities. This will include, but not be limited to, utility risers, power/utility poles and overhead wiring, gas and communication markers, water

valves/meters, fire hydrants, sanitary and storm structures. All sanitary and storm drainage structures will be detailed with the pipe size, material and invert elevations. All traffic signals and visible related equipment will be located.

28B. Tree Survey
As directed, a tree survey of all protected trees within the limits of the project will be performed. Each protected tree will be identified by species and diameter breast high (DBH). The results of this survey will be presented numerically on the survey map and a spread sheet will be prepared of the tree inventory.

28C. Soil Borings
This task will field locate both vertically and horizontally ground surface at each soil boring performed by others. This task will be performed on a unit price. Should staking for soil borings be requested, that task will be charged to Task 29 – Supplemental Surveys.

28D. Wetland Jurisdictional Line Survey

Where required, a wetland jurisdictional line survey will be performed. All flags established by the Client's environmental Consultant will be field located and a numbering system or other annotations marked on the flags will be provided on the final mapping of the project. A print of a "draft" map of the wetlands will be provided to the Environmental Consultant for their review. The fee for this task will be based on a unit price. After Agency review, any changes in the wetland line will be charged against Task 29 - Supplemental Surveys.

28E. Utility Designates

Immediately after Underground Utility Consultant has identified the subsurface utilities, CONSULTANT will field survey these locations. All annotations provided will be recorded and presented on the final survey map. A "draft" map of this survey will be provided to the Utility Consultant for their review prior to finalizing the survey map. The fee for this task will be based on a unit cost.

28F. Subsurface Utility Vacuum Excavations (SUE)

This task will field locate vertically and horizontally ground surface at all excavation holes performed by the Underground Utility Consultant. All annotations provided will be recorded and noted on the final mapping. A "draft" map of this survey will be provided to the Utility Consultant for their review prior to finalizing the survey map. The fee for this task will be based on a unit cost.

29. Supplemental Surveys

Supplemental survey days and hours are to be approved in advance by the Client. Refer to tasks of this document, as applicable, to perform surveys not described herein.

The purpose of this task is to provide a block of field and office related survey hours for the unexpected issues that always arise on a project of this magnitude. Approval of this task will prevent delays in the schedule while waiting for a change order(s). This task may not be utilized without written authorization by the Client. All survey data obtained while performing this task will be added to the map identified above.

30. Document Research

Perform research of documentation to support field and office efforts involving surveying and mapping.

31. Field Review

Perform verification of the field conditions as related to the collected survey data.

32. Technical Meetings

Attend meetings as required and negotiated by the Surveying and Mapping Department. Three (3) meetings should be used for the purposes of estimating.

33. Quality Control/Quality Assurance

Utilize established QA/QC process. Also includes subconsultant review, response to comments and any resolution meetings, preparation of submittals for review, etc.

34. Supervision

Perform all activities required to supervise and coordinate project. These activities must be performed by the project supervisor, a Florida Professional Surveyor.

SECTION VIII. RIGHT-OF-WAY MAP

The CONSULTANT shall prepare final right of way maps in accordance with FDOT procedures and requirements once the preferred alternative has been selected and all right of way requirements have been identified by the CONSULTANT and the COUNTY. The right of way maps will be submitted to the FDOT for review and approval.

The need for right-of-way acquisition will be avoided to the greatest extent possible.

Separate maps and legal descriptions will be prepared for approximately 12 Temporary Construction Easements. Six (6) signed and sealed maps of each TCE will be presented to the COUNTY for their use. All changes in geometric configuration will be considered a new TCE. This task will be performed at a unit cost.

Right-of-Way acquisition will be the responsibility of the FDOT. The CONSULTANT will coordinate with the FDOT and the COUNTY to provide the product they require for right-of-way acquisition.

SECTION IX. GEOTECHNICAL

The CONSULTANT shall be responsible for geotechnical investigations necessary to complete the roadway, traffic or drainage designs. Additionally, geotechnical investigations may be necessary for miscellaneous structures such as mast arms, retaining walls, temporary critical walls and other structural items necessary to complete design for the selected transportation improvement.

The following geotechnical samples are estimated for each project.

Soil Borings
Archer Road & SW 40th

Location/Description	Number
Archer Road	
N/A	0
N/A	0
SW40th	
Sta. 10+00 to Sta. 24+00 (200 ft spacing, roadway)	7
Sta. 10+00 to Sta. 24+00 (200 ft spacing/side, ditches)	14
4 infiltration tests	4
Total Number of Anticipated Soil Borings	25

Soil Borings
SW 20th & SW 43rd

Location/Description	Number
SW 20th Avenue	
Sta. 103+00 to Sta. 121+00 (200 ft spacing, roadway)	9
Sta. 103+00 to Sta. 121+00 (200 ft spacing/side, ditches)	18
2 infiltration tests	2
SW43rd Street	
Sta. 23+00 to Sta. 32+00 (200 ft spacing, roadway)	5

Sta. 23+00 to Sta. 32+00 (200 ft spacing/side, ditches) 2 infiltration tests	10
40-SBT Borings	2
Total Number of Anticipated Soil Borings	48

Soil Borings
Smart Bus Bay

Location/Description	**Number**
~1000 ft roadway improvements (200 ft spacing)	5
~1000 ft ditch improvements (200 ft spacing/side)	10
2 infiltration tests	2
40-ft SBT Borings	2
Total Number of Anticipated Soil Borings	19

Project Total for Soil Borings: 84

SECTION X. STRUCTURE PLANS

No bridge or structural design plans are anticipated as part of this project. Miscellaneous minor structures for drainage, such as headwalls at Southwest 20th Avenue and Southwest 43rd Street will be addressed through the use of FDOT standard indices.

SECTION XI. PROVISIONS FOR WORK

A. Governing Regulations

The services performed by the CONSULTANT shall be in compliance with all applicable COUNTY, City of Gainesville and FDOT Standards Guidelines. The current edition, including updates, of the following References and Guidelines shall be used in the performance of this work.

1. Alachua County Unified Land Development Regulations, Chapter 7, Article 9.

2. Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (USDOT)

3. FDOT Roadway Traffic and Design Standards

4. MTPO Design Policies, FDOT Plans Preparation Manual, FDOT Flexible Pavement Manual, FDOT Standard Specifications, Florida Green Book

5. FDOT Drainage Manual

6. FDOT Structures Design Guidelines for Load Factor Design

7. AASHTO's "A Policy on Geometric Design of Highways and Streets"

8. FDOT Structures Detailing Manual for Load Factor Design

9. FDOT Structures Standard Drawings for Load Factor Design

10. AASHTO Standard Specifications for Highway Bridges for Load Factor Design

11. Florida Manual on Uniform Traffic Studies (MUTS)

12. Manual on Uniform Traffic Control Devices (MUTCD)

13. AASHTO Guide for Bicycle Facilities Design

14. FDOT Roundabout Design Guidelines

The following provisions shall apply:

1. Surveying: All work shall be performed in accordance with DEPARTMENT and Alachua County standards, policies and procedures.

2. Roadway Improvements: All plans and design are to be prepared in accordance with the latest standards adopted by AASHTO, Alachua County, FDOT and the City of Gainesville, as appropriate, and shall be accurate, legible, complete in design, and drawn to the appropriate scale, furnished in reproducible form on material acceptable to the COUNTY.

3. Drainage Services: All drainage plans and designs are to be prepared in accordance with current COUNTY requirements, FEDERAL-AID POLICY GUIDE 23 CFR 650, and comply with the requirements of the appropriate regulatory agencies and the DEPARTMENT's Drainage Manual.

4. Environmental Services

   a. Stormwater and Surface Water: Environmental Resource Permit application packages shall be prepared in accordance with all applicable requirements for Environmental Protection (DEP), the St. Johns River Water Management District, the Suwannee River Water Management District, FDOT Environmental Management Office and US Army Corps of Engineers rules and regulations.

   b. Dredge and Fill Permits: All applicable data shall be prepared in accordance with Chapter 403, Florida Statutes, Chapters 62-3, 62-4

and 62-12, Florida Administrative Code; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with their specific regulations.

5. Geotechnical Services: Work shall be performed in accordance with the COUNTY's instructions and the FDOT Soils and Foundations Procedure Manual #697 with all tests performed as specified in the manual using the appropriate AASHTO and ASTM standard testing methods.

6. Structure Plans: Not applicable for this project.

7. Signing and Marking Plans: All plans are to be prepared in accordance with the latest design standards and practices (Manual on Uniform Traffic Control Devices), FDOT requirements, FDOT Indices, and instructions issued by the COUNTY to the CONSULTANT, and shall be accurate, legible, complete in design and drawn to the scale as directed by the COUNTY and furnished in reproducible form.

8. Traffic Signal Plans: All plans are to be prepared in accordance with the latest design standards and practices adopted by the COUNTY and City of Gainesville, the Manual on Uniform Traffic Control Devices, FDOT Standard Specifications, FDOT Indices and instructions issued by the COUNTY to the CONSULTANT, and shall be accurate, legible, complete in design and drawn to the scale as directed by the COUNTY and furnished in reproducible form.

9. Lighting Plans: GRU is responsible for all lighting plans.

10. Landscape Plans: All plans are to be prepared in accordance with FDOT requirements, FDOT Standard Specifications, and instructions issued by the COUNTY to the CONSULTANT, and shall be accurate, legible, complete in design and drawn to the scale as directed by the COUNTY, and furnished in reproducible form.

11. Right-of-Way Mapping: The CONSULTANT will be responsible for the preparation of control survey maps, right of way maps, maintenance maps, sketches, other miscellaneous survey maps, and legal descriptions as required for this project in accordance with all applicable FDOT Manuals, Procedures, Handbooks, and Florida Statutes. All maps, surveys and legal descriptions will be prepared under the direction of a Florida Professional Surveyor and Mapper (PSM) to FDOT size and format requirements utilizing FDOT approved software, and will be designed to provide a high degree of uniformity and maximum readability. The CONSULTANT will submit maps, legal descriptions, quality assurance check prints, checklists,

electronic media files and any other documents as required for this project to the COUNTY and FDOT for review at stages of completion as negotiated.

12. Utilities: All work shall be in accordance with FDOT requirements, GRU practices and requirements, and instructions as issued by the COUNTY to the CONSULTANT, and shall be accurate, legible, complete in design, drawn to the appropriate scale and furnished in reproducible form on material acceptable to the COUNTY.

B. Project Schedule

Within ten (10) days after the Notice-To-Proceed, the CONSULTANT shall provide a schedule of calendar deadlines in accordance with the specified time frame for completion provided by the COUNTY. The schedule shall be prepared using Microsoft Project. Project schedule is anticipated to last a minimum of ten (10) months from the Notice to Proceed (NTP) date that coincides with the receipt of a complete digital survey file from the COUNTY.

C. 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 COUNTY.

D. Progress Reporting

The CONSULTANT shall meet with the COUNTY on a monthly basis and provide written progress reports that describe the work performed on each task. Progress reports shall be delivered to the COUNTY concurrently with the monthly invoice. The COUNTY 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.

E. Meetings and Presentations

The CONSULTANT shall attend and estimated 15 meetings, as required by the COUNTY for the purpose of discussing project information, meeting with stakeholders, meetings with outside agencies, etc. These meetings do not include meetings associated with Public Involvement.

F. 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.

The CONSULTANT shall provide a Quality Control Plan that describes the procedures to be utilized to verify, independently check, and review all 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 may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project. A marked up set of prints from a Quality Control review will be sent in with each phase review submittal. The responsible Professional Engineer or Professional Surveyor that performed the Quality Control review will sign a statement certifying that the review was conducted.

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

G. Correspondence

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

H. Liaison Office

The COUNTY and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of the respective organizations for the Project. While it is expected the CONSULTANT shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the COUNTY.

The CONSULTANT's Liaison Office will be located at 7077 Bonneval Road, Suite 600, Jacksonville, Florida 32216. The CONSULTANT Project Manager will be Terrel Shaw, PE.

I. Optional Services

At the COUNTY'S option, the CONSULTANT may be requested to provide miscellaneous design services which may include expert witness testimony, plans update and post design services. The fee for these services shall be negotiated for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s). A supplemental agreement adding the additional services shall be executed at the appropriate time.

J. Submittals

The CONSULTANT shall provide copies of the required documents as listed below. These are the anticipated printing requirements for the project. This tabulation will be used for

estimating purposes, and the COUNTY Project Manager will determine the number of copies required prior to each submittal.

Engineering Items:

- 60% Roadway Plans and Calculations
- 90% Roadway Plans and Calculations
- Cost Estimates at 60%, 90% and Final Plans Stages
- 100% Roadway Plans and Calculations
- Presentation Graphics for Public Involvement Meetings
- Presentation Graphics for Small Group Meetings
- Presentation Graphics for Coordination Meetings
- Right of Way Plans and Legal Descriptions
- Signal Plans

K. Scales

Plans and other documents shall be developed at the scales indicated below for the project.

• Drainage Maps	1”=200’
• Plan and Profile Sheets	1”=40’ H; 1”=5’ V
• Cross Section Sheets (100 foot intervals)	1”=20’ H; 1”=5’V
• Signing and Marking Plans	1”=40’
• Utility Plans	1”=40’
• Intersection Details	1”=20’
• Structures Plans	per FDOT

L. Limitations

The scope of services is limited in the number of design scope changes that may result from review of engineering plans and designs. We anticipate to provide our recommendation as professional engineers as to the appropriate interpretation of accepted engineering standards and practices and with the limited scope of these projects. Any changes in the typical section (issues such as lane width, shoulder width, sidewalk width, bicycle lane widths, etc.) following the acceptance of these design decisions with the County Engineer will constitute a change in the scope of work.

SECTION XII. AREAS OF RESPONSIBILITY

ITEM	CONSULTANT	COUNTY	REMARKS
Phase 3, Final Design			
Pond Siting Report	**X**		
Bridge Hydraulics Report			N/A
Bridge Development Report			N/A
Archaeological Reports			Use PD&E Assessment
Wetlands Impacts Memo	**X**		Use delineations from PD&E phase. Minor effort needed for documentation for ERP and COUNTY
Roadway Plans	**X**		
Typical Section Package	**X**		
Access Management Report	**X**		Minimum
Design Traffic Values			Performed in PD&E Phase
Intersection Analysis	**X**		Update signal timings for review by City of Gainesville
Pavement Design	**X**		
Utility Adjustment Plans		**X**	By Utility Owners
Underground Utility Design & Estimates		**X**	By Utility Owners
Railroad Crossing Details			N/A
Utility Relocation Agreements		**X**	CONSULTANT to support but Agreements between COUNTY and Utility Owner
Minor Structure/Retaining Walls	**X**		
Signing & Pavement Marking Plans	**X**		
Sign Foundations			N/A
O/H Sign Lighting Upgrades			N/A
Signalization Plans	**X**		
Signal Pole Foundations	**X**		
Traffic Monitoring Site Plans			N/A
Interconnect Plans	**X**		
Lighting Plans & Estimates	**X**		

ITEM	CONSULTANT	COUNTY	REMARKS
Underdeck Lighting Details			N/A
Landscape Plans	**X**		
Design Survey	**X**		
Underground Utility Location	**X**		
Right of Way Survey	**X**		
Right of Way Control Maps	**X**		
Maintenance Map		**X**	
Right of Way Maps	**X**		
Legal Descriptions	**X**		
Title Search & Report	**X**		
Title Search Map	**X**		
Parcel Sketches	**X**		
Roadway Geotechnical	**X**		
Structures Geotechnical	**X**		
Permit Sketches & Applications	**X**		Consultant can not guarantee permits will be granted. One (1) RAI anticipated for each permit.
Permit Fees		**X**	County to provide permit application fees or direct reimbursement to Consultant
Technical Special Provisions	**X**		
Pay Item List & Quantities	**X**		Except as Noted
SWPPP	**X**		
Public Involvement	**X**		
VE Review			N/A

SECTION XIII: MISCELLANESOUS SERVICES

A. Contract and Project Files

Includes complete setup and maintenance, developing monthly progress reports, invoicing, schedule updates, work effort to develop and execute sub-consultant agreements etc. Progress reports shall be delivered to the COUNTY in a format as prescribed by the COUNTY and no less than ten (10) days prior to submission of the corresponding invoice. Judgment on whether work of sufficient quality and quantity has been accomplished will be made by the Project Manager by comparing the reported percent complete against actual work accomplished.

Within ten (10) days after the Notice to Proceed, the CONSULTANT shall provide a schedule of calendar deadlines accompanied by an anticipated payout curve. Said schedule and anticipated payout curve shall be prepared in a format prescribed by the COUNTY.

B. Method of Compensation

Payment for the work accomplished will be in accordance with standard COUNTY payment policies as outlined in the executed contract. Invoices shall be submitted in to the COUNTY, in a format prescribed by the COUNTY, The COUNTY Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the COUNTY. Payments will not be made that exceed the percentage of work identified in the approved payout curve and schedule provided in accordance with this Scope of Services.

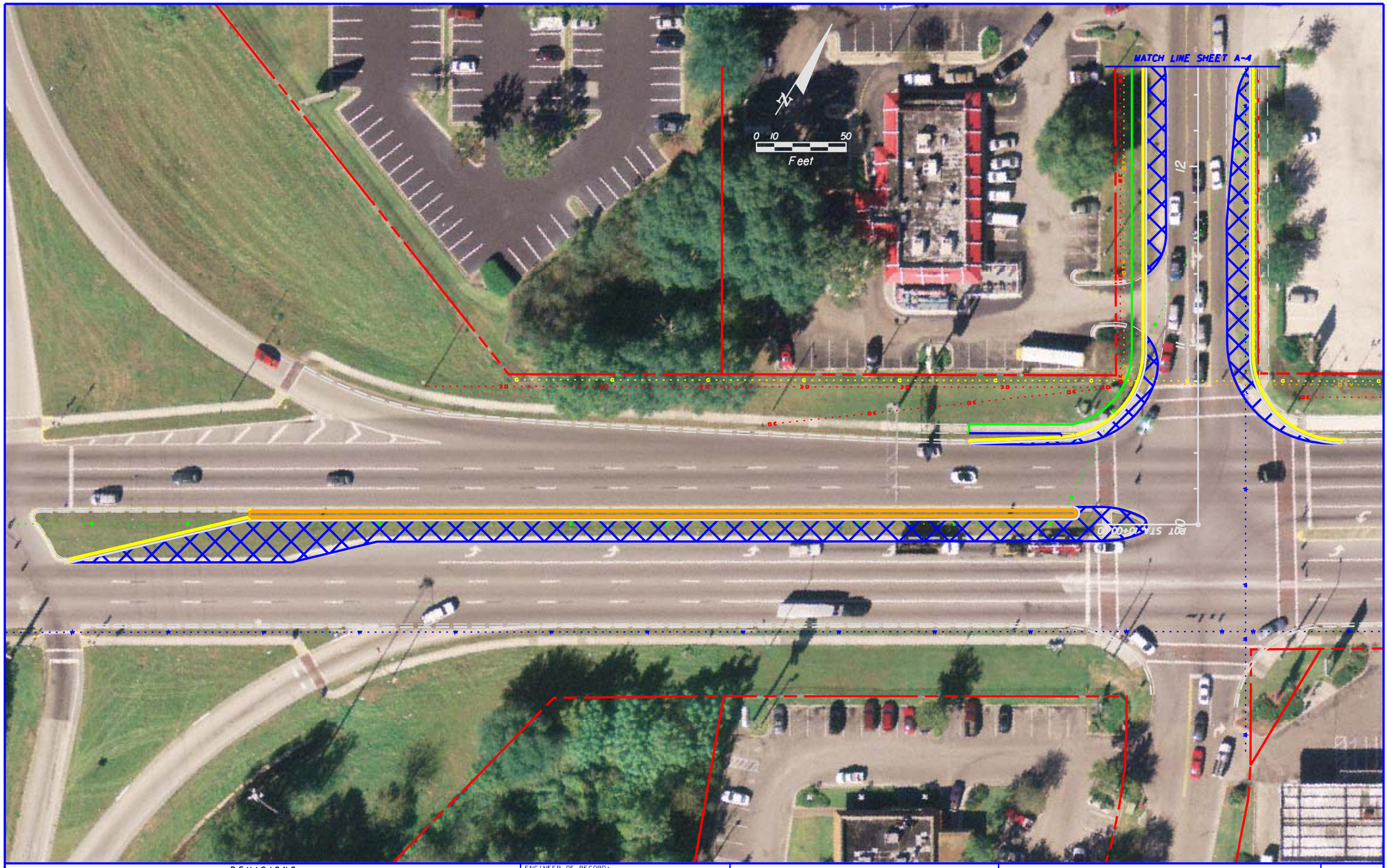
C. Services To Be Performed By The County

The COUNTY will provide those services and materials as set forth below:

- Project data currently on File.
- All future information that is in possession or may come to the COUNTY pertaining to development plans so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right-of-way
- All existing modeling available on the project will be provided by the COUNTY.

D. Contingency Services

A contingency budget will be established for the project at 10 percent of the estimated fee provided by the CONSULTANT. This contingency budget will address unanticipated services or changes in the scope of work that may arise that were not included as part of this scope of services. These services will the compensated on a reimbursable basis using the rates established in the fee proposal for labor and on a direct reimbursable basis for any direct expenses. Prior written authorization of the COUNTY's project manager is required before these services can be performed.



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 8600

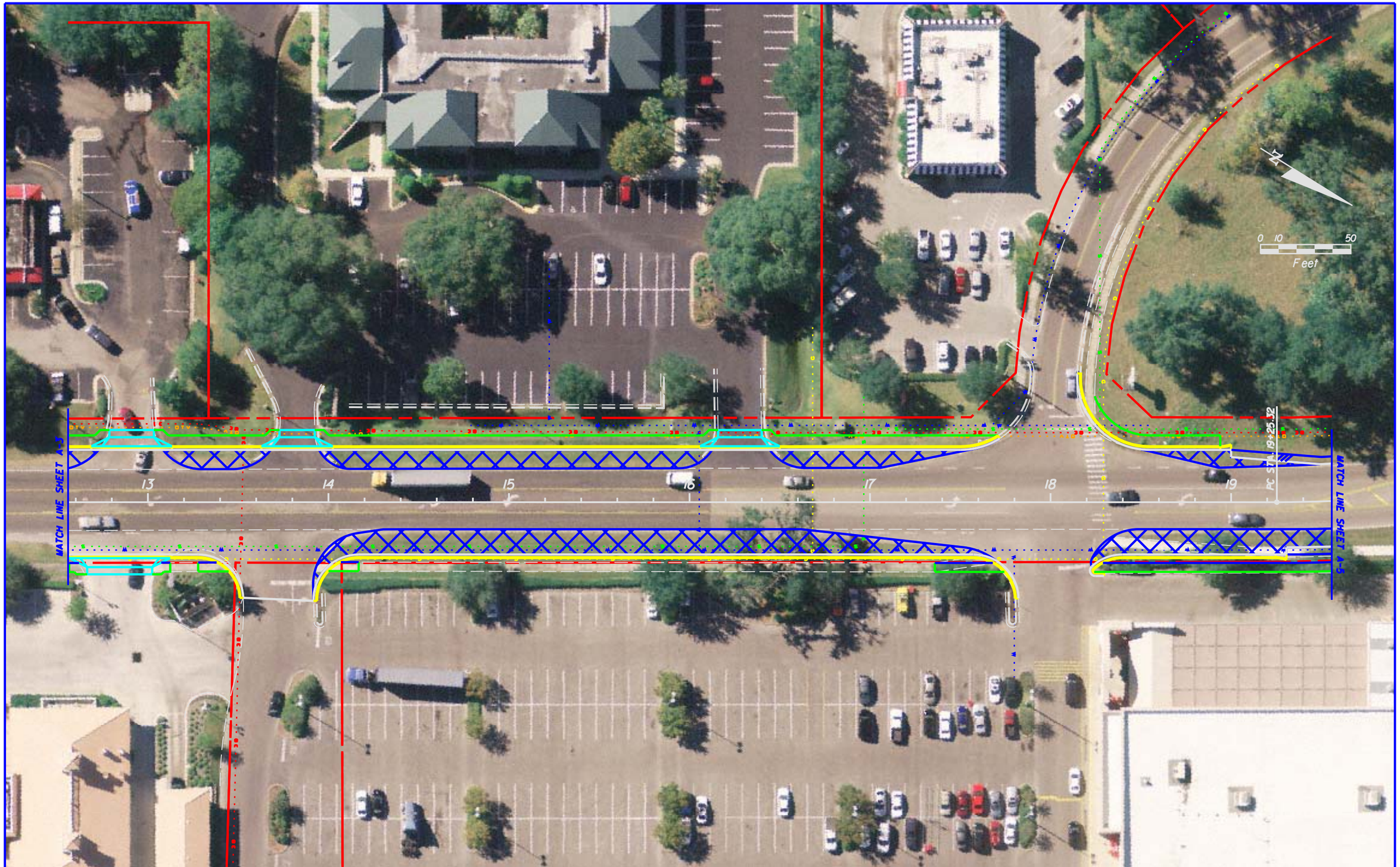
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

ARCHER ROAD/SW 40TH CONCEPT PLAN

SHEET NO. A-3

merwin 5/8/2008 3:45:58 PM J:\JOBS\43689_SW 62nd Blvd\Techprod\DS-001_Archer_Road_SW40th_Blvd\Concepts\PLANRD01_conc



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 6500

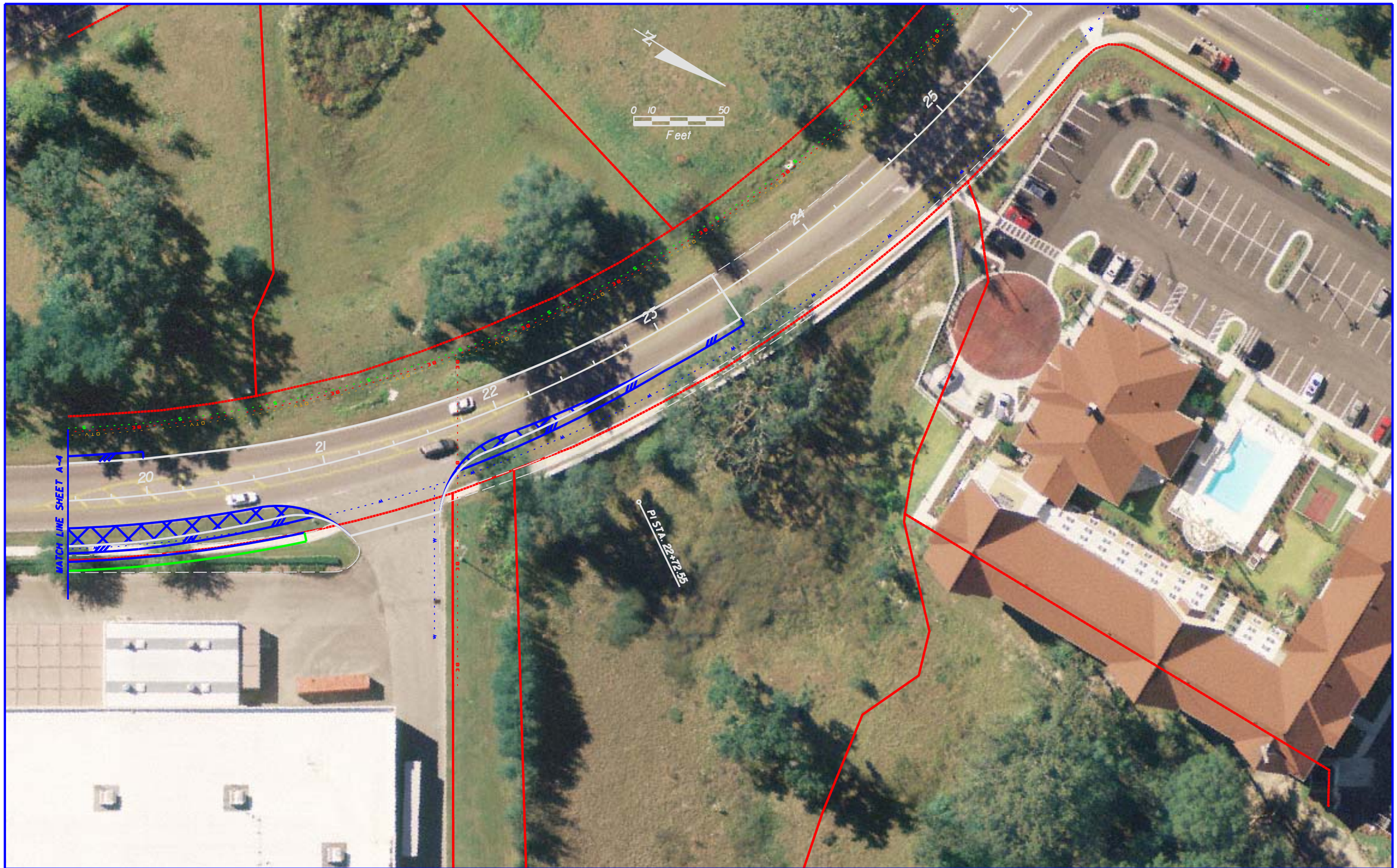
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

ARCHER ROAD/SW 40TH CONCEPT PLAN

SHEET NO. A-4

merwin 5/8/2008 3:49:10 PM J:\JOBS\43689_SW 62nd Blvd\Techprod\DS-001_Archer_Road_SW40th_Blvd\Concepts\PLANRD02_conc



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

ARCHER ROAD/SW 40TH CONCEPT PLAN

SHEET NO.
A-5

merwin 5/8/2008 3:50:04 PM J:\JOBS\43689_SW 62nd Blvd\Techprod\DS-001_Archer_Road_SW40th_Blvd\Concepts\PLANRD03_conc

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 60066
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 8500

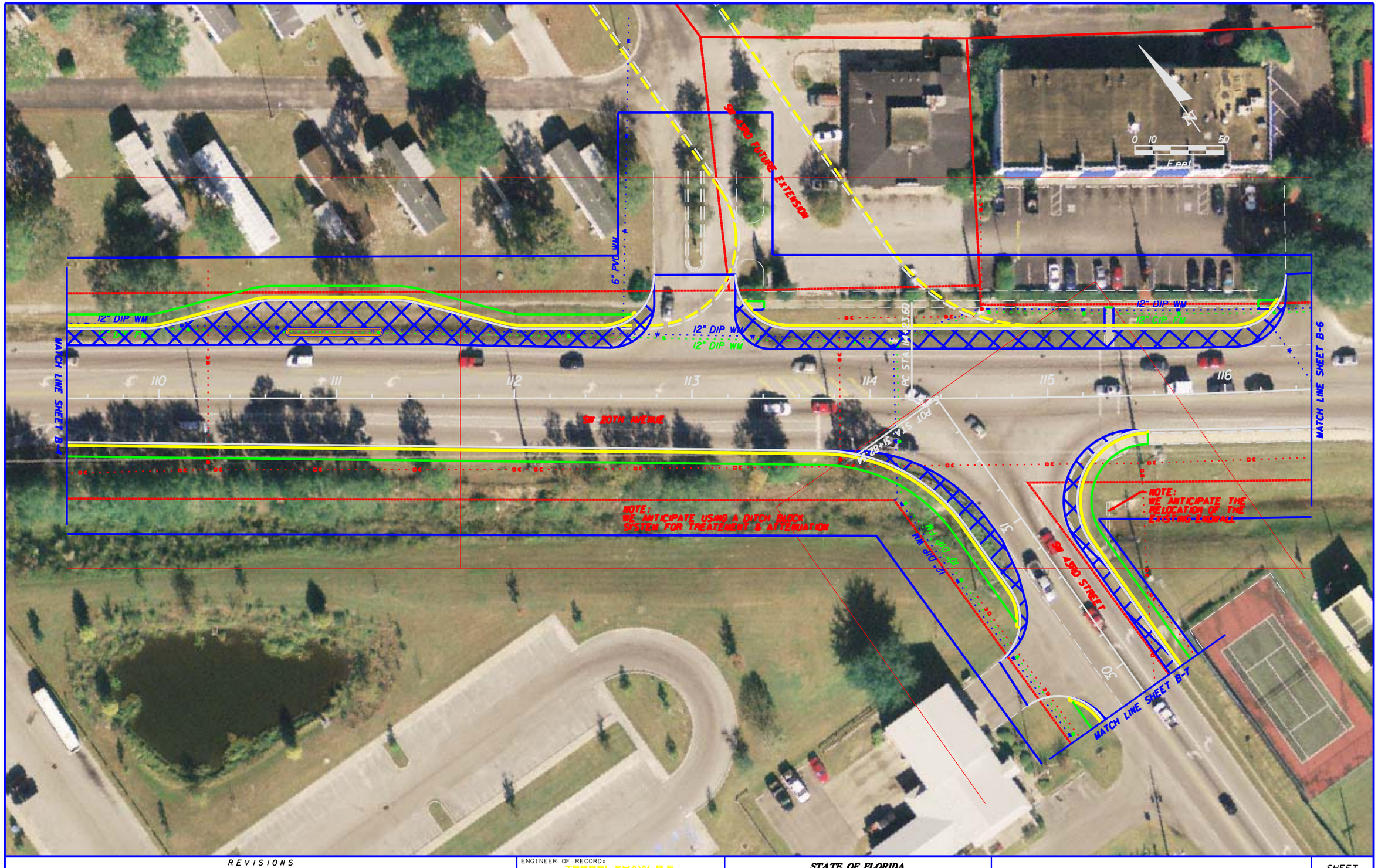
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

SW 20TH/SW 43RD CONCEPT PLAN

SHEET NO.
B-4

merwin 5/8/2008 3:27:21 PM J:\JOBS\43689_SW 62nd Blvd\Techprod\DS-002_SW43rd_Street_&_SW20th_Avenue\Concepts\PLANS



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 6500

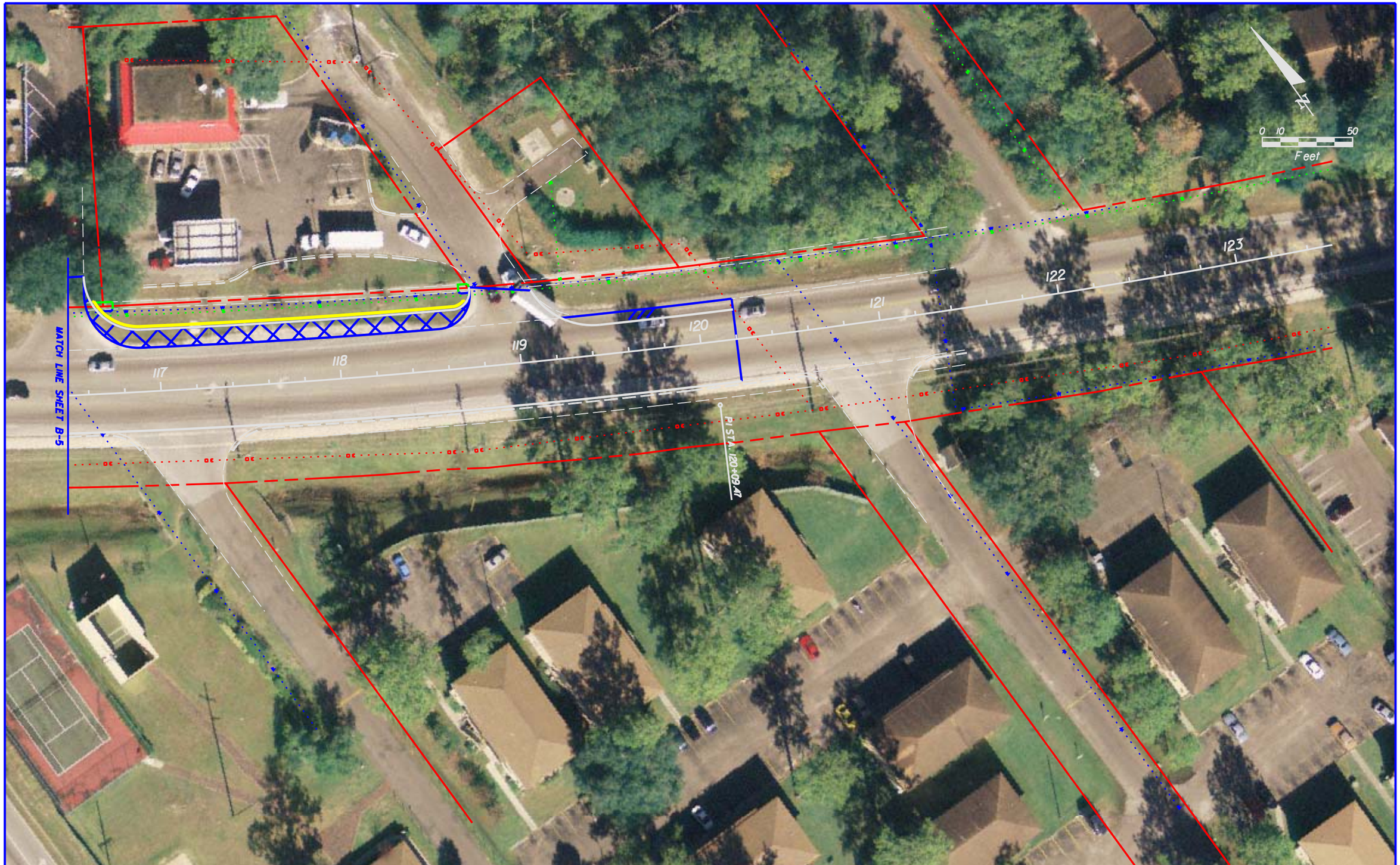
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

SW 20TH/SW 43RD CONCEPT PLAN

SHEET NO.
B-5

$USER$ $DATE$ $TIME$ $FILE$



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 8600

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

SW 20TH/SW 43RD CONCEPT PLAN

SHEET NO. B-6

merwin 5/8/2008 3:32:50 PM J:\JOBS\43689_SW 62nd Blvd\Techprod\DS-002_SW43rd_Street_&_SW20th_Avenue\Concepts\PLANR

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50086
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 8600

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

SW 20TH/SW 43RD CONCEPT PLAN

SHEET NO. B-7

merwin 5/8/2008 3:31:41 PM J:\JOBS\43689_SW 62nd Blvd\Techprod\DS-002_SW43rd_Street_&_SW20th_Avenue\Concepts\PLANR

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
FBPE NUMBER: 00006600

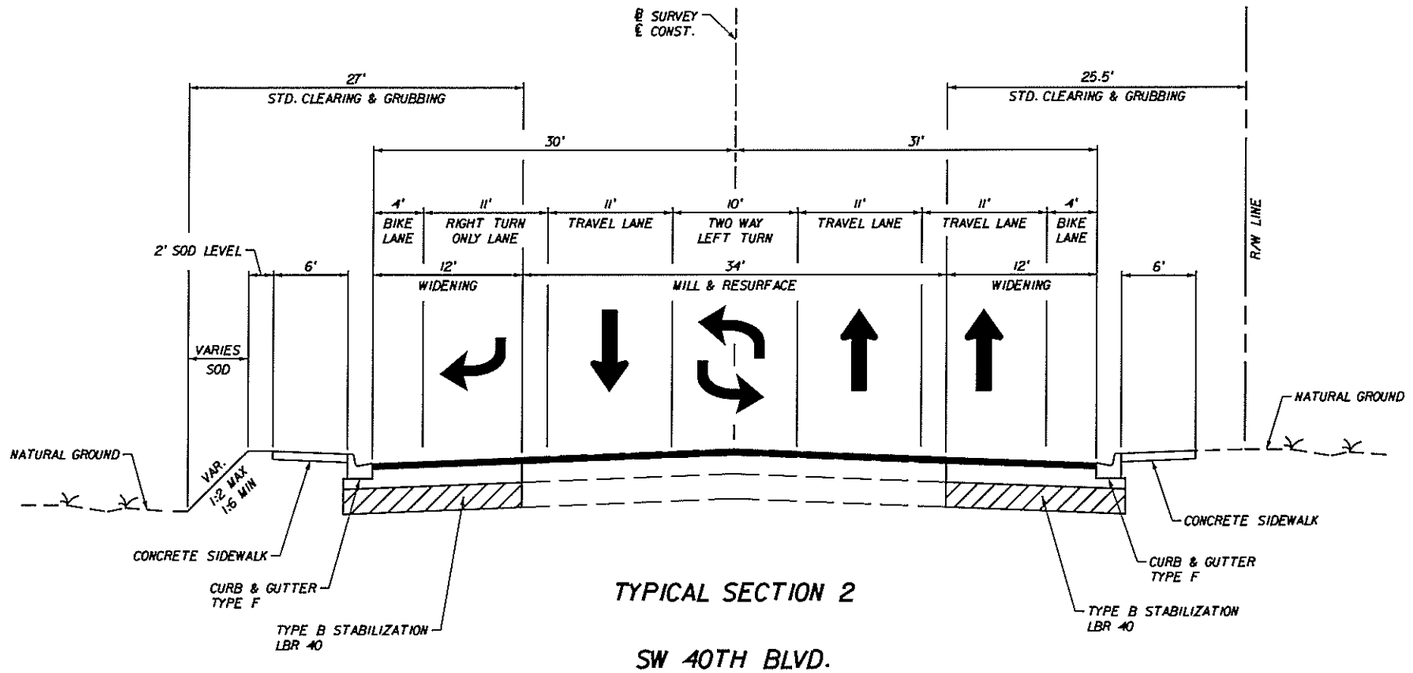
ALACHUA COUNTY
PUBLIC WORKS DEPARTMENT

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	- - -

CANDIDATE LOCATION FOR SMART BUS BAY ON SOUTHWEST 20TH AVENUE (ALT 3)

SHEET NO.

$USER$ 7/17/2008 3:27:11 PM F:\JOBS\43689_SW 62nd Blvd\Techprod\cadd\Roadway\TSM Improvements\Smart Bus B



TYPICAL SECTION 2

SW 40TH BLVD.
PROPOSED TYPICAL SECTION
STA. + . TO STA. + .

TRAFFIC DATA

CURRENT YEAR = AADT =
ESTIMATED OPENING YEAR = AADT =
ESTIMATED DESIGN YEAR = AADT =
K = % D = % T = % (24 HOUR)
DESIGN HOUR T = %
DESIGN SPEED = 35 MPH

MILLING

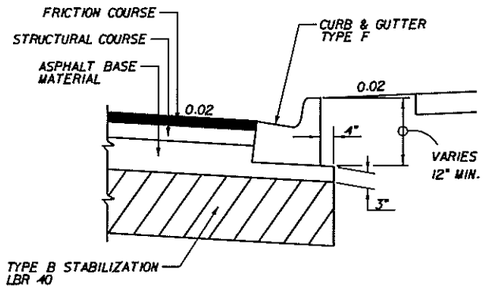
MILL EXISTING ASPHALT PAVEMENT (__" AVG. DEPTH)

RESURFACING

TYPE SP STRUCTURAL COURSE (TRAFFIC __)(__"),
AND FRICTION COURSE FC-12.5 (__")(RUBBER)

WIDENING

OPTIONAL BASE GROUP __ WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC __)(__")
AND FRICTION COURSE FC-12.5 (__")(RUBBER)



DETAIL OF ASPHALT BASE CURB PAD

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50095
HNTB
7077 BONNEVAL ROAD, SUITE 600
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 256-0207
CA NO.: 8600

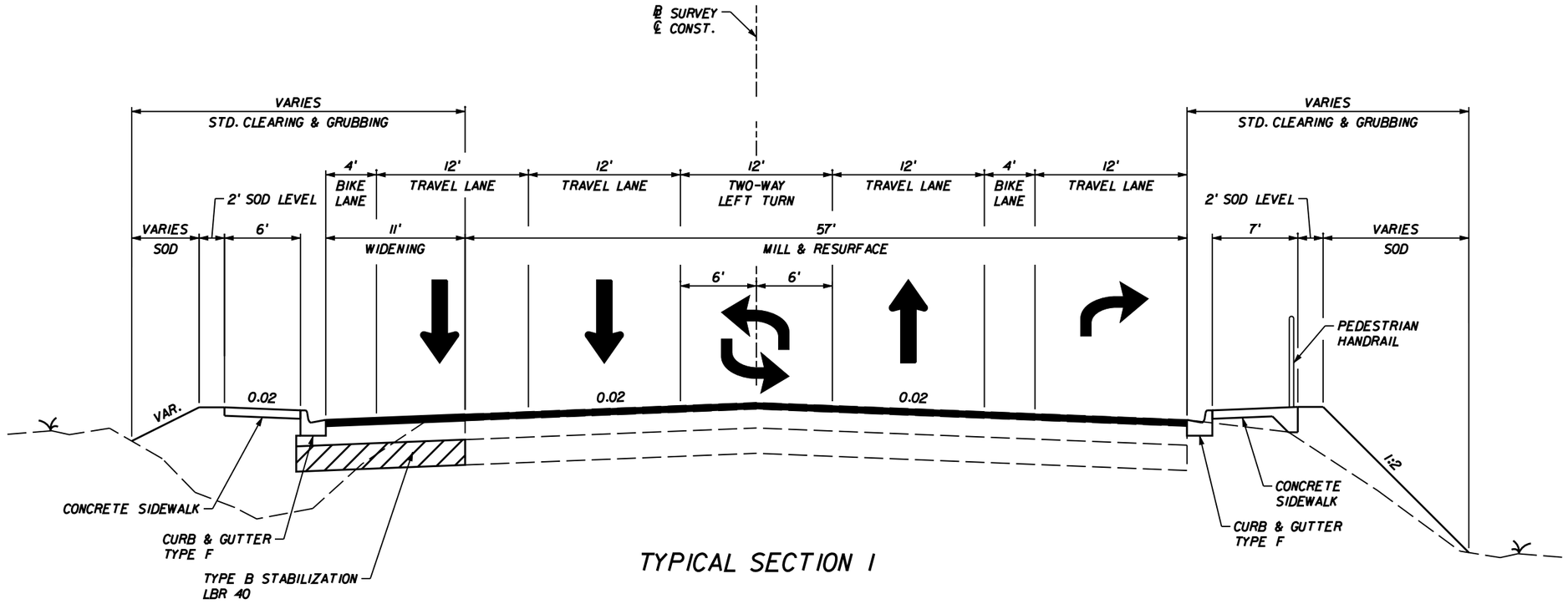
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

TYPICAL SECTION

SHEET NO.

#USER# 10/7/2008 12:09:06 PM F:\085\43689_SW 62nd Blvd\Technical\05-001_Archer_Road_SW40th_Blvd\roadway\TYPSRD02.DGN



TYPICAL SECTION 1

SW 20TH AVENUE
PROPOSED TYPICAL SECTION
STA. + . TO STA. + .

TRAFFIC DATA

CURRENT YEAR = AADT =
ESTIMATED OPENING YEAR = AADT =
ESTIMATED DESIGN YEAR = AADT =
K = % D = % T = % (24 HOUR)
DESIGN HOUR T = %
DESIGN SPEED = 35 MPH

MILLING

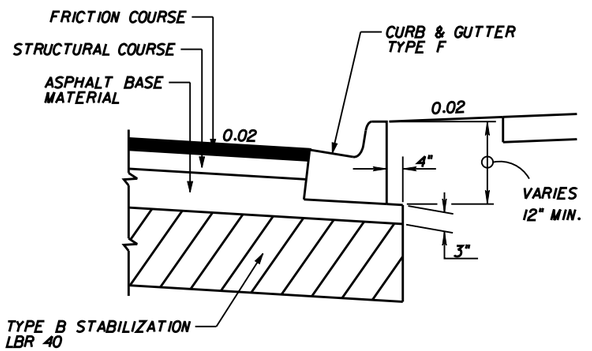
MILL EXISTING ASPHALT PAVEMENT (X" AVG. DEPTH)

RESURFACING

TYPE SP STRUCTURAL COURSE (TRAFFIC C)(X"),
AND FRICTION COURSE FC-12.5 (X")(RUBBER)

WIDENING

OPTIONAL BASE GROUP 9 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C)(X")
AND FRICTION COURSE FC-12.5 (X")(RUBBER)



DETAIL OF ASPHALT BASE CURB PAD

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

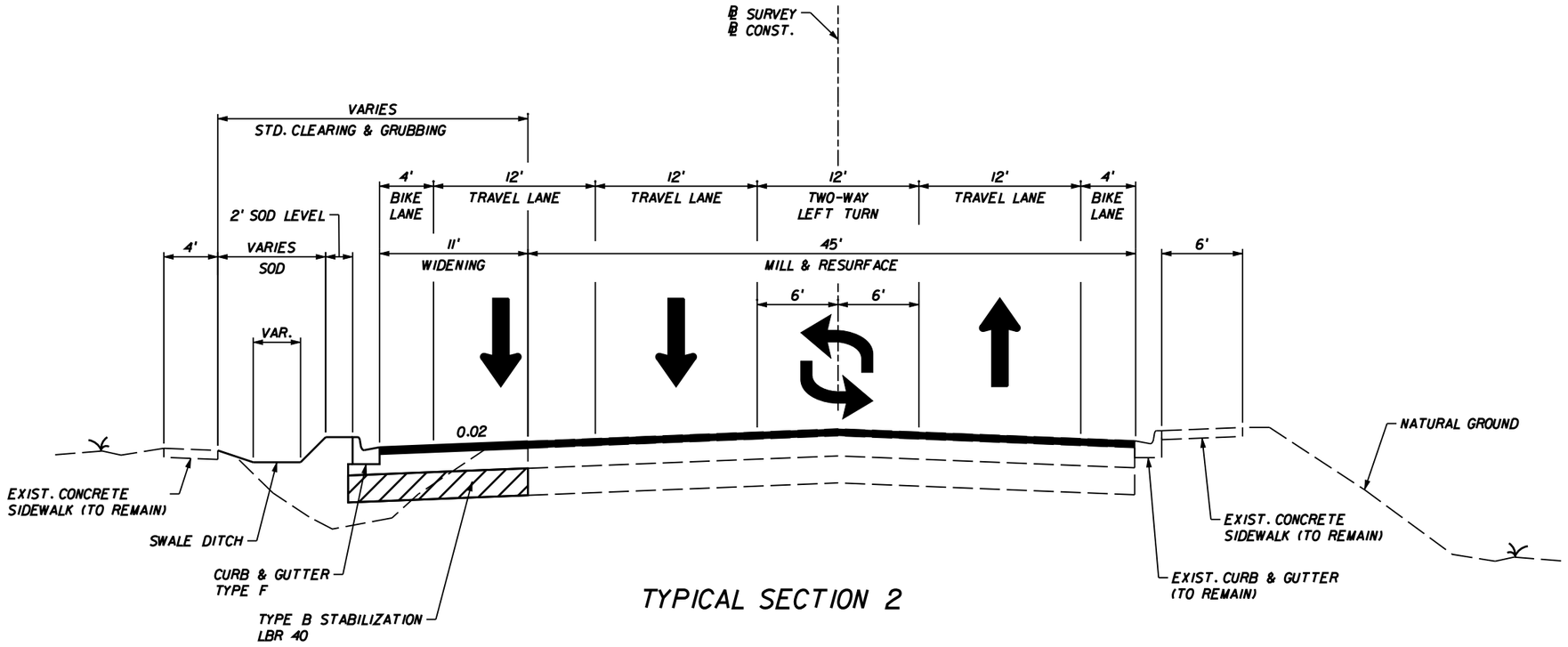
ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

TYPICAL SECTION

SHEET NO. 3



TYPICAL SECTION 2

SW 20TH AVENUE
PROPOSED TYPICAL SECTION
STA. + . TO STA. + .

TRAFFIC DATA

CURRENT YEAR = AADT =
ESTIMATED OPENING YEAR = AADT =
ESTIMATED DESIGN YEAR = AADT =
K = % D = % T = % (24 HOUR)
DESIGN HOUR T = %
DESIGN SPEED = 35 MPH

MILLING

MILL EXISTING ASPHALT PAVEMENT (X" AVG. DEPTH)

RESURFACING

TYPE SP STRUCTURAL COURSE (TRAFFIC C)(X"),
AND FRICTION COURSE FC-12.5 (X")(RUBBER)

WIDENING

OPTIONAL BASE GROUP 9 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C)(X")
AND FRICTION COURSE FC-12.5 (X")(RUBBER)

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 6500

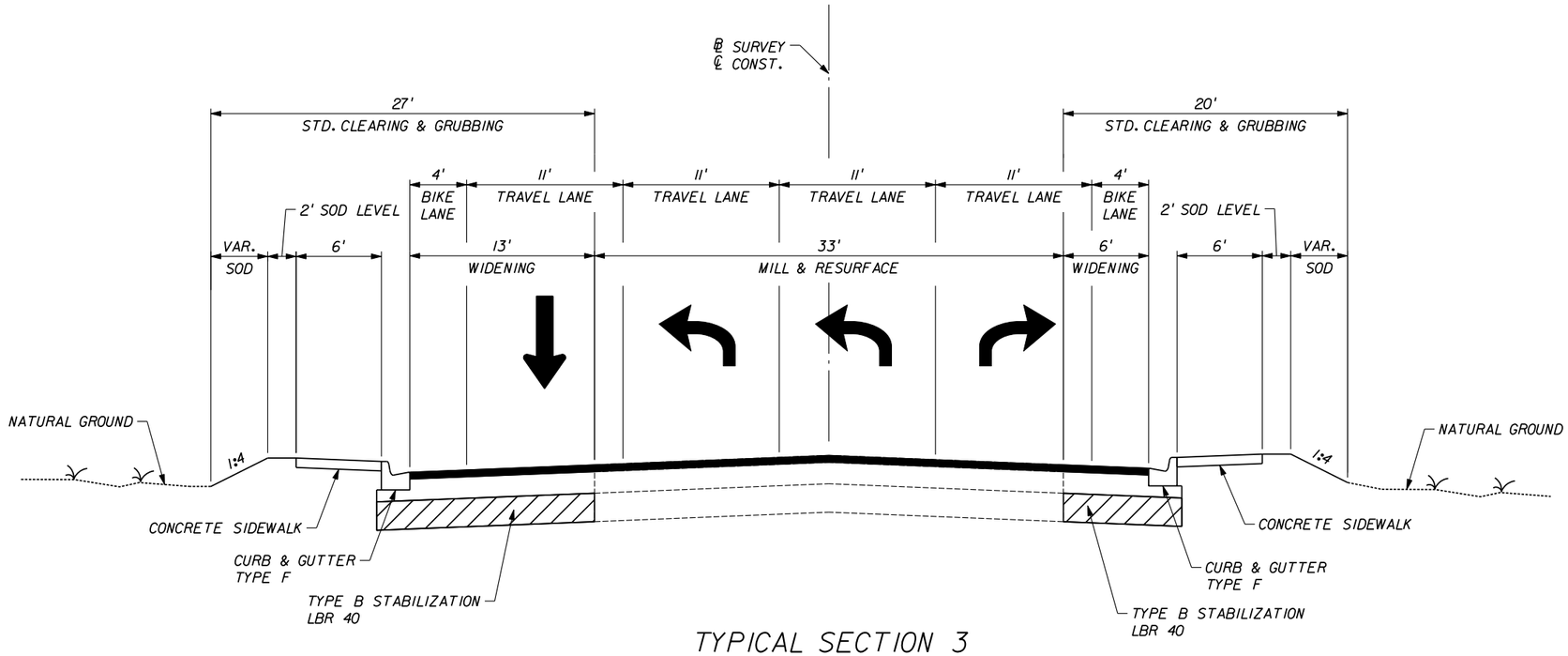
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

TYPICAL SECTION

SHEET NO. 4

$USER$ 9/24/2008 3:28:48 PM F:\JOBS\43689_SW 62nd Blvd\Techprod\DS-002_SW43rd_Street_&_SW20th_Avenue\roadway\TYPSR



TYPICAL SECTION 3

SW 43RD STREET
PROPOSED TYPICAL SECTION
STA. + . TO STA. + .

TRAFFIC DATA

CURRENT YEAR = AADT =
ESTIMATED OPENING YEAR = AADT =
ESTIMATED DESIGN YEAR = AADT =
K = % D = % T = % (24 HOUR)
DESIGN HOUR T = %
DESIGN SPEED = 35 MPH

MILLING

MILL EXISTING ASPHALT PAVEMENT (X" AVG. DEPTH)

RESURFACING

TYPE SP STRUCTURAL COURSE (TRAFFIC C)(X"),
AND FRICTION COURSE FC-12.5 (X")(RUBBER)

WIDENING

OPTIONAL BASE GROUP 9 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C)(X")
AND FRICTION COURSE FC-12.5 (X")(RUBBER)

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD:
TERREL SHAW, P.E.
LIC. No. 50096
HNTB
7077 BONNEVAL ROAD, SUITE 600
LIBERTY CENTER
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 296-0207
CA NO.: 6500

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	ALACHUA	N/A

TYPICAL SECTION

SHEET NO. B-3

Southwest 62nd Boulevard
Interim Projects Design Phase Summary of Fee Proposal

Archer Road at Southwest 40th Boulevard

A. Basic Services	
Lump Sum Items	$266,942.01
Limiting Amount Items	$15,385.00
Subtotal	$ 282,327.01
B. Contingency (LA)	$ 28,232.70
C. Total Fee	$ 310,559.71

Southwest 20th Avenue at Southwest 43rd Street

A. Basic Services	
Lump Sum Items	$226,260.58
Limiting Amount Items	$11,265.00
Subtotal	$ 237,525.58
B. Contingency (LA)	$ 23,752.56
C. Total Fee	$ 261,278.14

Smart Bus Bay on Southwest 20th Avenue

A. Basic Services	
Lump Sum Items	$151,837.46
Limiting Amount Items	$11,265.00
Subtotal	$ 163,102.46
B. Contingency (LA)	$ 16,310.25
C. Total Fee	$ 179,412.71
Total Contract Amount	**$ 751,250.56**

Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE C. KOPELOUSOS
SECRETARY

August 1, 2008

Siamak Kusha, PE
Vice President
HNTB CORPORATION
300 Primera Blvd., Suite 200
Lake Mary, Florida 32746

Dear Mr. Kusha:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to qualify your firm for the following types of work:

Group 2 - Project Development and Environmental (PD&E) Studies

Group 3 - Highway Design - Roadway

- 3.1 - Minor Highway Design
- 3.2 - Major Highway Design
- 3.3 - Complex Highway Design

Group 4 - Highway Design - Bridges

- 4.1.1 - Miscellaneous Structures
- 4.1.2 - Minor Bridge Design
- 4.2.1 - Major Bridge Design - Concrete
- 4.2.2 - Major Bridge Design - Steel
- 4.2.3 - Major Bridge Design - Segmental
- 4.3.2 - Complex Bridge Design - Steel

Group 5 - Bridge Inspection

- 5.1 - Conventional Bridge Inspection
- 5.2 - Movable Bridge Inspection
- 5.3 - Complex Bridge Inspection
- 5.4 - Bridge Load Rating

Group 6 - Traffic Engineering and Operations Studies

- 6.1 - Traffic Engineering Studies
- 6.2 - Traffic Signal Timing
- 6.3.1 - Intelligent Transportation Systems Analysis and Design
- 6.3.2 - Intelligent Transportation Systems Implementation
- 6.3.3 - Intelligent Transportation Traffic Engineering Systems Communications
- 6.3.4 - Intelligent Transportation Systems Software Development

Group 7 - Traffic Operations Design

- 7.1 - Signing, Pavement Marking and Channelization
- 7.2 - Lighting
- 7.3 - Signalization

Group 9 - Soil Exploration, Material Testing and Foundations

9.1 - Soil Exploration
9.4.1 - Standard Foundation Studies

Group 10 - Construction Engineering Inspection

10.1 - Roadway Construction Engineering Inspection
10.3 - Construction Materials Inspection
10.4 - Minor Bridge & Miscellaneous Structures CEI
10.5.1 - Major Bridge CEI - Concrete
10.5.2 - Major Bridge CEI - Steel
10.5.3 - Major Bridge CEI - Segmental

Group 11 - Engineering Contract Administration and Management

Group 13 - Planning

13.3 - Policy Planning
13.4 - Systems Planning
13.5 - Subarea/Corridor Planning
13.6 - Land Planning/Engineering
13.7 - Transportation Statistics

Group 14 - Architect

Group 15 - Landscape Architect

Your Unlimited Notice of Qualification shall be valid until June 30, 2009 at such time as your December 31, 2008 overhead audit will be due to comply with the Department's requirement on overhead audits. We will automatically notify your firm 45 to 60 days prior to your update deadline.

On the basis of data submitted the Department has approved your accounting system and considers the rates listed below as acceptable rates for qualification purposes.

	Home/Branch Office	Field Office	Facilities Capital Cost of Money	Overtime Premium	Direct Expense
Overhead Rate	155.26%	129.94%	0.480%	Excluded	10.60%(Home) 27.58%(Field)*

*Rent and utilities excluded from field office rate. These costs will be directly reimbursed on contracts that require the consultant to provide field office.

Should you have any questions, please feel free to contact me at 850/414-4485.

Sincerely,

Lorraine E. Odom

Lorraine E. Odom
Professional Services
Qualification Administrator

LEO/smr

P R O J E C T S C H E D U L E

INTERSECTION IMPROVEMENTS
ARCHER ROAD AND SOUTHWEST 40TH BOULEVARD
SOUTHWEST 20TH AVENUE AND SOUTHWEST 43RD STREET
SMART BUS BAY ON SOUTHWEST 20TH AVENUE

	Begin Task	End Task
P.E. BEGIN	10/21/2008	10/21/2008
DESIGN SURVEY	10/22/2008	12/17/2008
CORING (ROADWAY)	10/22/2008	12/17/2008
TYPICAL SECTION APPROVED	10/22/2008	12/3/2008
PHASE I PLANS (ROADWAY ONLY)	12/4/2008	3/12/2009
STORMWATER TREATMENT ANALYSIS	12/18/2008	2/12/2009
PAVEMENT DESIGN	12/18/2008	1/15/2009
CORING (POND)	2/13/2009	3/13/2009
PHASE I QC PROCESS	3/13/2009	3/20/2009
COUNTY/FDOT PHASE I PLANS REVIEW	3/21/2009	4/11/2009
INITIAL UTILITY COORDINATION	3/21/2009	4/25/2009
PHASE II PLANS (ALL COMPONENTS)	4/12/2009	6/21/2009
COUNTY/FDOT REVIEW OF R/W REQUIREMENTS	4/26/2009	5/17/2009
TITLE SEARCHES	5/18/2009	6/29/2009
ENGINEERS COST ESTIMATE	6/7/2009	6/21/2009
PHASE II QC PROCESS	6/22/2009	6/29/2009
COUNTY/FDOT PHASE II PLANS REVIEW	6/30/2009	7/21/2009
UTILITY RELOCATION COORDINATION	6/30/2009	8/4/2009
DRAFT R/W MAPS	6/30/2009	8/11/2009
PHASE III PLANS (ALL COMPONENTS)	7/22/2009	9/2/2009
PERMIT PROCESS	7/22/2009	11/11/2009
COUNTY/FDOT REVIEW OF DRAFT R/W MAPS	8/12/2009	9/2/2009
COMPUTATION BOOK/COST ESTIMATE	8/19/2009	9/2/2009
FINAL R/W MAPS	9/3/2009	9/24/2009
PHASE III QC PROCESS	9/3/2009	9/10/2009
COUNTY/FDOT PHASE III PLANS REVIEW	9/11/2009	10/2/2009
PHASE IV PLANS (ALL COMPONENTS)	10/3/2009	10/24/2009
SPECIFICATIONS	10/3/2009	10/24/2009
CONTRACT TIME ESTIMATE	10/3/2009	10/16/2009
FINAL COMPUTATION BOOK/COST ESTIMATE	10/17/2009	10/24/2009
PHASE IV QC PROCESS	10/25/2009	11/1/2009
COUNTY/FDOT PHASE IV PLANS REVIEW	11/2/2009	11/23/2009
SIGNED & SEALED PEDDS DELIVERY	11/24/2009	12/22/2009

SW 62nd Boulevard Interim Improvements

WAGE RATE DATA AS OF July 1, 2008

Classification/ Employee Name	Rate	Weight	Work Class Average	Escalation Factor 1.0086
Project Manager				
Terrel Shaw, P.E.	$67.60	100%	$67.60	
Manhour Rate		100%	$67.60	$68.18
Chief Engineer				
Paul Hiers, P.E.	$66.32	60%	$39.79	
Jim Drapp, P.E.	$86.64	20%	$17.33	
Luis Diaz	$76.40	20%	$15.28	
Weighted Manhour Rate		100%	$72.40	$73.02
Senior Engineer				
Toby Hemphill, PE	$50.64	100%	$50.64	
Manhour Rate		100%	$50.64	$51.08
Landscape Architect				
Craig Watson	$63.52	100%	$63.52	
Average Manhour Rate		100%	$63.52	$64.07
Engineer				
Eric Shimer, P.E.	$36.32	25%	$9.08	
Mary Holm, P.E.	$38.88	15%	$5.83	
Kim Dorsey, E.I.	$31.20	25%	$7.80	
Marc Erwin, E.I.	$29.81	35%	$10.43	
Weighted Manhour Rate		100%	$33.14	$33.43
CADD Tech				
Justin Cole, E.I,	$24.08	40%	$9.63	
Darryl LaBranche	$38.88	20%	$7.78	
Dave Vail	$30.56	40%	$12.22	
Weighted Manhour Rate		100%	$29.63	$29.88
Clerical / PA				
Kimberly Elbaba	$21.84	100%	$21.84	
Weighted Manhour Rate		100%	$21.84	$22.03

Increases are effective on or about July 1st of each year for staff employees

Escalation Capped at 3% per year
1.0000 (10 Months from 9/2008 through 6/2009)
1.0300 (4 Months from 7/2009 through 10/2009)

We hereby certify that these employees are currently earning the hourly rates as shown

ENVIRONMENTAL CONSULTING
GEOTECHNICAL ENGINEERING
MATERIALS TESTING
THRESHOLD INSPECTION
DRILLING SERVICES

NODARSE
& ASSOCIATES, INC.

July 31, 2008
N&A Proposal No. 10-08-0034-101

Terrel Shaw, P.E.
HNTB Corporation
7077 Bonneval Road, Suite 600
Jacksonville, Florida 32216

Proposal for Geotechnical Consulting Services
S.W. 62nd Boulevard Interim Projects
Alachua County, Florida

Dear Mr. Shaw:

Nodarse & Associates, Inc. (N&A) is pleased to present this Proposal for the performance of certain geotechnical engineering activities for the S.W. 62nd Boulevard Interim Projects under the current Agreement for Geotechnical Engineering and Testing Services between Alachua County and Nodarse & Associates, Inc.

Objective

The objective of our geotechnical engineering services at this time will be to perform the geotechnical explorations necessary to complete the roadway, traffic and drainage designs.

Project Information

We obtained relevant project information in communications with Terrel Shaw and Alachua County engineering personnel, and during our visits to the study sites. We were provided copies of the following documents prepared by HNTB:

- Aerial Photograph/Plan, Southwest 62nd Boulevard Corridor Study, Pond 1
- Aerial Photograph/Plans, Archer Road/SW 40th Concept Plan, Sheets A-3, A-4 and A-5
- Aerial Photograph/Plan, SW 20th/SW 43rd Concept Plan, Sheets B-4, B-5, B-6 and B-7
- Aerial Photograph/Plan, Candidate Location for Smart Bus Bay on Southwest 20th Avenue (Alt 3)

Site Visit

N&A engineering personnel visited the project sites for the preparation of this Proposal. We evaluated site access and conditions. Truck and ATV-mounted drilling equipment will be utilized for field work execution. It is apparent that there are buried underground structures and/or utility service lines within various portions of the project site; a copy of an existing Utility Site Plan, if available, would be helpful in the execution of our work.

Field Test Locations

N&A engineering personnel will stake the test locations in the field using survey tape and wheel equipment and measuring from existing landmarks. This Proposal is submitted with the understanding that the current project owner(s) will provide our field personnel and equipment the right of access, and that the same understand and accept nominal collateral damage to the existing grassy ground covers and site vegetation associated with our field work performance. Boreholes will be backfilled to grade with grouting protocols implemented if the natural limestone is penetrated.

Proposed Scope of Services

We believe that the scope of work summarized herein satisfies and is in general compliance with HNTB and ACPW design needs and guidelines, respectively. We will immediately advise HNTB and ACPW Engineering in the event of unusual field findings or site conditions. The geotechnical study will be managed by an experienced Geotechnical Engineer registered in the State of Florida and working out of the Nodarse Gainesville office.

The scope of field data collection presented below was provided to our office by HNTB, and **was modified to comply with the Alachua County Unified Land Development Code, adopted on December 8, 2005 and last amended on April 22, 2008, requirements as to boring depths and frequency in proposed basin bottom areas.**

The presence of shallow natural limestone will have an impact on the actual boring termination depths. Decisions as to the depth of exploration and quantity of data points will be made by the Geotechnical Engineer relying on real-time findings at the project site. This will provide us the opportunity to make strategic data collection and management decisions in order to both maximize the technical value of the collected data and the overall cost effectiveness of the geotechnical study.

Boring locations will be selected to yield a statistical significant data baseline for final design purposes, and so as to minimize damage to existing site vegetation. Soil test borings will be performed using the standard penetration test (ASTM D-1586) method to collect subsurface soil samples, and establish in-place relative densities and consistencies of the subsoils. Groundwater levels will be recorded when encountered; when appropriate 24-hour groundwater level readings will be recorded.

We propose the following soil test boring and double ring infiltration test quantities and depths of exploration:

Archer Road/SW 40th

Location	Quantity	Depth
Archer Road	0	---
Mast arm traffic signal structure	1	40 ft bls
SW 40th		
Sta. 10+00 to Sta. 24+00 (200 ft spacing, roadway)	7	10 ft bls
Sta. 10+00 to Sta. 24+00 (200 ft spacing/side, ditches)	14	10 ft bls
Proposed 2.5 acre pond	~~20~~ 10	15 ft bls
Double ring infiltration tests	4	1 ft bls

2 per ¼ Acre

SW 20th/SW 43rd

Location	Quantity	Depth
SW 20th Avenue		
Sta. 103+00 to Sta. 121+00 (200 ft spacing, roadway)	9	10 ft bls
Sta. 103+00 to Sta. 121+00 (200 ft spacing/side, ditches)	18	10 ft bls
Double ring infiltration tests	2	1 ft bls
Mast arm traffic signal structure	2	40 ft bls
SW 43rd Street		
Sta. 23+00 to Sta. 32+00 (200 ft spacing, roadway)	5	10 ft bls
Sta. 23+00 to Sta. 32+00 (200 ft spacing/side, ditches)	10	10 ft bls
Double ring infiltration tests	2	1 ft bls

Smart Bus Bay

Location	Quantity	Depth
Smart Bus Bay		
Approx. 1000 ft roadway improvements (200 ft spacing)	5	10 ft bls
Approx. 1000 ft ditch improvements (200 ft spacing/side)	10	10 ft bls
Double ring infiltration tests	2	1 ft bls
Mast arm traffic signal structure	2	40 ft bls

Additional geotechnical studies, not included in the scope of work and fee presented in this Proposal, may be necessary for miscellaneous structures such as retaining walls, temporary critical walls and other structural items necessary to complete design for the selected transportation improvement.

The laboratory geotechnical testing program will include percent fines, moisture content and permeability tests. The type and quantity of tests will be selected by the Geotechnical Engineer following visual examination of all the recovered soil specimens.

We will provide the following stormwater parameters for modeling in PONDS:

- Coefficient of vertical hydraulic conductivity (Kv in feet/day) for each soil stratum
- Coefficient of horizontal hydraulic conductivity (Kh in feet/day) for each soil stratum
- Seasonal high groundwater level
- Fillable porosity (in %) of soil strata in mobilized aquifer
- Base of effective or mobilized aquifer (feet bls)

We will prepare an engineering report that summarizes the subsurface exploration activities, engineering evaluations, technical discussions, and geotechnical engineering recommendations. We will address all questions posed by your office.

Geotechnical Work Schedule

Immediately upon receipt of authorization to proceed and authorization to enter and work on the project site we will schedule the start of the field work activities including the utility clearance process. We anticipate starting the field testing activities within five to ten working days after receipt of authorization. The entire scope of field exploration and laboratory testing activities are anticipated to require six to eight weeks to complete. In the interest of expediting the field work process we would be able to place two drill crews on the project at one time.

Geotechnical report preparation will require an additional two to three weeks after the completion of all the field and laboratory testing activities. In the interim and at your request, we will provide your office with relevant findings and conclusions as soon as these become available. We will also be available for technical discussions of the findings prior to finalizing the geotechnical report.

Compensation

We estimate we can complete the scope of services described in this Proposal while remaining within a **total project budget of $34,255.** Actual quantities of services performed will be shown on the itemized invoice in accordance with the **Attachment C – Fee Schedule** that is part of the current **Agreement for Geotechnical Engineering and Testing Services between Alachua County and Nodarse & Associates, Inc.** Below is the cost breakdown as per the Agreement.

Field Exploration and Testing Activities: $ 22,790.00 1,280

• Drill Crew and Equipment Mobilization, per trip	=	$ 400.00
• Standard Penetration Test Borings, 1,130 l.f. at $11.00/ l.f.	=	$12,430.00
• Double ring infiltration tests, 10 tests at $300.00/test	=	$ 3,000.00
• Sr. Field Engineering Technician, 40 hrs at $48.00/hour	=	$ 1,920.00
• Project Engineer, 48 hours at $80.00 per hour	=	$ 3,840.00
• Principal Engineer, 10 hours at $120.00 per hour	=	$ 1,200.00

Geotechnical Laboratory Testing: $ 2,225.00

• Percent Fines, 20 tests at $30.00 per test	=	$ 600.00
• Moisture Content, 20 tests at $10.00 per test	=	$ 200.00
• Atterberg Limits, 10 tests at $80.00 per test	=	$ 800.00
• Permeability, 5 tests at $125.00 per test	=	$ 625.00

Professional Services: $ 9,240.00

• Principal Engineer, 20 hours at $120.00 per hour	=	$ 2,400.00
• Project Engineer, 60 hours at $80.00 per hour	=	$ 4,800.00
• CADD Services, 24 hours at $45.00 per hour	=	$ 1,080.00
• Administrative Assistant, 24 hours at $40.00 per hour	=	$ 960.00

Work Authorization

Our services may be authorized via the executed N&A Agreement or HNTB Subconsultant Agreement.

Closure

We look forward to the opportunity to continue to assist your office on this project. We welcome any comments and discussions you may have concerning our proposed scope of services. Please do not hesitate to contact David Barreiro with any questions.

Sincerely,

NODARSE & ASSOCIATES, INC.

David Barreiro, P.E., CFEA
Project Manager

Francisco Alfaro, E.I.
Project Engineer

DB/FA/bnm

Attachment: **N&A Agreement**

Nodarse - Geotech Services

	Archer-40th	20th-43rd	Bus bay	Total
Drill Crew & Equipment Mobilization	$ 133.34	$ 133.33	$ 133.33	$ 400.00
Standard Penatration Borings	$ 6,050.00	$ 5,500.00	$ 2,530.00	$ 14,080.00
Double Ring Infiltraton Tests	$ 1,200.00	$ 1,200.00	$ 600.00	$ 3,000.00
Sr. Field Engineering Technician	$ 640.00	$ 640.00	$ 640.00	$ 1,920.00
Project Engineer	$ 1,280.00	$ 1,280.00	$ 1,280.00	$ 3,840.00
Principal Engineer	$ 400.00	$ 400.00	$ 400.00	$ 1,200.00
Geotechnical Laboratory Testing	$ 741.66	$ 741.67	$ 741.67	$ 2,225.00
Professional Services	$ 3,080.00	$ 3,080.00	$ 3,080.00	$ 9,240.00
	$ 13,525.00	$ 12,975.00	$ 9,405.00	$ 35,905.00

VOLKERT & ASSOCIATES, INC.

3501 South Main Street, Suite 2
Gainesville, Florida 32601
352.372.9594
Fax 352.371.3988
gainesville@volkert.com

www.volkert.com

August 5, 2008

Paul Hiers, P.E.
Transportation Manager
HNTB Corporation
7077 Bonneval Road, Suite 600
Jacksonville, Fl. 32216

Re: Proposal for surveying and mapping services for additional turn and receiving lanes at Archer Road and SW 40th Boulevard in Gainesville, Fl.

Dear Mr. Hiers:

Volkert & Associates, Inc. is pleased to present this proposal for professional survey services for the above referenced project. The scope of survey will include all necessary field survey, office drafting, and supervision to prepare the design survey, Boundary survey and TCE documents.

The survey will meet the survey standards as described and the Minimum Technical Standards for land surveying in the State of Florida, pursuant to section 472.027 of the Florida Statues, and the requirements of the "08-07-29 Letter Scope to Volkert" you emailed, and your responses to my questions emailed on 08-04-08. The survey limits will be those limits shown on your aerial emailed on 07-30-08.

Price

4-Person Field Crew – 20 days(10 hours) at $ 1600.00 per day = $ 32000.00
CADD Technician – 76 hours at $ 70.00 per hour = $ 5320.00
Professional Land Surveyor – 28 hours at $ 100.00 per hour = $ 2800.00

Lump Sum Price = $ 40,120.00

Mapping - Temporary Construction Easements (TCE)
Including Legal Description

CADD Technician – 9 hours at $ 70.00 per hour = $ 630.00
Professional Land Surveyor – 3 hours at $ 100.00 per hour = $ 300.00

Unit Cost = $ 930.00 per TCE

Items not included in the Lump Sum Survey Scope:

For clarification, the following items are not included in the scope of survey detailed above:

1. Surveying beyond the defined limits of survey.
2. Excavation of buried utilities or foundations by our survey crews.
3. Any Engineering services.

Any additional work which may arise that is not included in the original scope of work can be performed at our standard hourly rates which are listed below.

Professional Surveyor Supervision	- $100/hr.
Survey Field Crew – 4 man	- $160/hr.
CADD Drafting Time	- $70/hr.
Clerical Time	- $28/hr.

Delivery Time

The survey work can be commenced following written notice to proceed. The survey can be completed and delivered within eight weeks of commencement.

Method of Payment

The survey will be invoiced monthly, based on percent complete. Payment is expected within 30 days of receipt of invoice.

We appreciate this opportunity to be of assistance to you on this project. Please call if you have questions regarding this proposal.

Sincerely,

Duane Searle

Duane Searle, PLS
Assistant Vice-President
For Volkert & Associates, Inc

_____
For HNTB Date

VOLKERT & ASSOCIATES, INC.

3501 South Main Street, Suite 2
Gainesville, Florida 32601
352.372.9594
Fax 352.371.3988
gainesville@volkert.com

www.volkert.com

August 5, 2008

Paul Hiers, P.E.
Transportation Manager
HNTB Corporation
7077 Bonneval Road, Suite 600
Jacksonville, Fl. 32216

Re: Proposal for surveying and mapping services for additional turn and receiving lanes at SW 20th Avenue and SW 43rd Street in Gainesville, Fl.

Dear Mr. Hiers:

Volkert & Associates, Inc. is pleased to present this proposal for professional survey services for the above referenced project. The scope of survey will include all necessary field survey, office drafting, and supervision to prepare the design survey and TCE documents.

The survey will meet the survey standards as described and the Minimum Technical Standards for land surveying in the State of Florida, pursuant to section 472.027 of the Florida Statues, and the requirements of the "08-07-29 Letter Scope to Volkert" you emailed, and your responses to my questions emailed on 08-04-08. The survey limits will be those limits shown on your aerial emailed on 07-30-08.

Price

4-Person Field Crew – 12 days(10 hours) at $ 1600.00 per day = $ 19200.00
CADD Technician – 36 hours at $ 70.00 per hour = $ 2520.00
Professional Land Surveyor – 12 hours at $ 100.00 per hour = $ 1200.00

Lump Sum Price = $ 22,920.00

Mapping - Temporary Construction Easements (TCE)
Including Legal Description

CADD Technician – 9 hours at $ 70.00 per hour = $ 630.00
Professional Land Surveyor – 3 hours at $ 100.00 per hour = $ 300.00

Unit Cost = $ 930.00 per TCE

Items not included in the Lump Sum Survey Scope:

For clarification, the following items are not included in the scope of survey detailed above:

1. Surveying beyond the defined limits of survey.

2. Excavation of buried utilities or foundations by our survey crews.

3. Any Engineering services.

Any additional work which may arise that is not included in the original scope of work can be performed at our standard hourly rates which are listed below.

Professional Surveyor Supervision	- $100/hr.
Survey Field Crew – 4 man	- $160/hr.
CADD Drafting Time	- $70/hr.
Clerical Time	- $28/hr.

Delivery Time

The survey work can be commenced following written notice to proceed. The survey can be completed and delivered within eight weeks of commencement.

Method of Payment

The survey will be invoiced monthly, based on percent complete. Payment is expected within 30 days of receipt of invoice.

We appreciate this opportunity to be of assistance to you on this project. Please call if you have questions regarding this proposal.

Sincerely,

Duane Searle

Duane Searle, PLS
Assistant Vice-President
For Volkert & Associates, Inc

_____

For HNTB Date

VOLKERT & ASSOCIATES, INC.

3501 South Main Street, Suite 2
Gainesville, Florida 32601
352.372.9594
Fax 352.371.3988
gainesville@volkert.com

www.volkert.com

August 5, 2008

Paul Hiers, P.E.
Transportation Manager
HNTB Corporation
7077 Bonneval Road, Suite 600
Jacksonville, Fl. 32216

Re: Proposal for surveying and mapping services for a Smart Bus Bay on SW 20th Avenue (near the Lyons apartments) in Gainesville, Fl.

Dear Mr. Hiers:

Volkert & Associates, Inc. is pleased to present this proposal for professional survey services for the above referenced project. The scope of survey will include all necessary field survey, office drafting, and supervision to prepare the design survey and TCE documents.

The survey will meet the survey standards as described and the Minimum Technical Standards for land surveying in the State of Florida, pursuant to section 472.027 of the Florida Statues, and the requirements of the "08-07-29 Letter Scope to Volkert" you emailed, and your responses to my questions emailed on 08-04-08. The survey limits will be those limits shown on your aerial emailed on 07-30-08.

Field Survey and Topographic File

4-Person Field Crew – 9 days(10 hours) at $ 1600.00 per day = $ 14400.00
CADD Technician – 27 hours at $ 70.00 per hour = $ 1890.00
Professional Land Surveyor – 18 hours at $ 100.00 per hour = $ 1800.00

Lump Sum Price = $ 18,090.00

Mapping - Temporary Construction Easements (TCE)
Including Legal Description

CADD Technician – 9 hours at $ 70.00 per hour = $ 630.00
Professional Land Surveyor – 3 hours at $ 100.00 per hour = $ 300.00

Unit Cost = $ 930.00 per TCE

Items not included in the Lump Sum Survey Scope:

For clarification, the following items are not included in the scope of survey detailed above:

1. Surveying beyond the defined limits of survey.
2. Excavation of buried utilities or foundations by our survey crews.
3. Any Engineering services.

Any additional work which may arise that is not included in the original scope of work can be performed at our standard hourly rates which are listed below.

Professional Surveyor Supervision	- $100/hr.
Survey Field Crew – 4 man	- $160/hr.
CADD Drafting Time	- $70/hr.
Clerical Time	- $28/hr.

Delivery Time

The survey work can be commenced following written notice to proceed. The survey can be completed and delivered within eight weeks of commencement.

Method of Payment

The survey will be invoiced monthly, based on percent complete. Payment is expected within 30 days of receipt of invoice.

We appreciate this opportunity to be of assistance to you on this project. Please call if you have questions regarding this proposal.

Sincerely,

Duane Searle

Duane Searle, PLS
Assistant Vice-President
For Volkert & Associates, Inc

_____
For HNTB Date

AEROSTAR
ENVIRONMENTAL SERVICES, INC.

September 25, 2008

Mr. Terry Shaw, P.E.
HNTB Corporation
7077 Bonneval Road, Suite 600
Jacksonville, Florida 32216

RE: **Cost Estimate for a Phase II Environmental Site Assessment**
SW 62nd Boulevard Connector
SW 20th Avenue/SW 43rd Street and
Southwest Archer Road/SW 40th Boulevard Intersections
Gainesville, Alachua County, Florida

Dear Mr. Shaw:

As requested, Aerostar Environmental Services, Inc. (AEROSTAR) is pleased to provide a cost estimate to perform a Phase II Environmental Site Assessment (Phase II ESA) along the above-referenced intersections.

The following scope of work has been prepared based on the results of the preliminary comparative analysis completed September 16, 2008. The preliminary comparative analysis was completed on a corridor to connect West Newberry Road to Southwest Archer Road. A total of 19 sites were identified as having the potential for hazardous/petroleum contamination to impact the subject corridor and/or the proposed pond sites. These sites were evaluated and rated either "No," "Low," "Medium," or "High" for having potential petroleum or hazardous materials contamination.

At the request of Mr. Shaw, this Phase II ESA scope of work has been prepared to address the potential concerns associated with the intersections located at SW 20th and SW 43rd and Southwest Archer Road and SW 40th.

The proposed Phase II ESA scope of work includes advancing up to 13 soil borings at the intersections of Southwest Archer Road/SW 40th Boulevard and SW 20th Avenue/SW 43rd Street; collecting soil samples from each boring at one-foot intervals for visual analysis and field screening with an Organic Vapor Analyzer (OVA); collecting up to four soil samples for laboratory analyses; installing six temporary groundwater wellpoints; collecting groundwater samples from the wellpoints for laboratory analyses, and preparing a letter report summarizing the results of the investigation. A detailed Scope of Work and Cost Estimate is presented herein.

PHASE II ESA

AEROSTAR will have a utility locate ordered from Sunshine State One-Call for each intersection. A site specific Health and Safety Plan (HASP) will be prepared for each site and included in the Phase II ESA report. All AEROSTAR personnel are 40-hour Occupation Safety and Health Administration (OSHA) trained and maintain their 8-hour annual OSHA refresher.

11181 St. Johns Industrial Parkway, N. • Jacksonville, Florida 32246 • 904-565-2820 • Fax 904-565-2830

Task 1: Soil Boring Advancement & Soil Vapor Screening

AEROSTAR will advance up to 13 soil borings at the intersections of Southwest Archer Road/SW 40th Boulevard and SW 20th Avenue/SW 43rd Street. The soil borings will be advanced in the following locations:

Up to three (3) soil borings will be installed at the intersection of Southwest Archer Road/SW 40th Boulevard in the area of Sprint 1302.

Up to five (5) soil borings will be installed along the right of way of SW 20th in the area of the former Alamar Gardens to evaluate the potential contamination from a known discharge of hydraulic fluid.

A total of two (2) soil borings will be installed along the right of way of SW 20th in the area of the former Ed's Cleaners to evaluate potential off-site impacts.

A total of three (3) soil borings will be installed along the right of way of SW 20th adjoining Sprint 1138 to evaluate potential off-site impacts.

Samples will be collected at each boring location at one-foot intervals using a 3.5-inch diameter, stainless steel hand auger or a Geoprobe direct-push sampling device and screened with a calibrated OVA equipped with Flame Ionization Detector (OVA-FID). The OVA-FID results will be used as a screening tool to indicate the presence of volatile organic compounds at each boring location. The samples will also be inspected for unusual odors and visual signs of contamination, discoloration and staining. Each boring will be advanced to the water table surface, estimated to be approximately 25 to 30 feet below land surface (BLS).

Task 2: Soil Sample Collection and Analyses

AEROSTAR will collect up to four soil samples, representative of potential impacts such as elevated OVA readings, soil staining, or unusual odors, for laboratory analyses at the intersections of Southwest Archer Road/SW 40th Boulevard and SW 20th Avenue/SW 43rd Street.

One soil sample, collected along the right of way adjoining Sprint 1302, will be analyzed for the parameters listed in EPA Method 8021 for Volatile Organic Aromatics (VOAs), EPA Method 8310 for Polynuclear Aromatic Hydrocarbons (PAHs), and Total Recoverable Petroleum Hydrocarbons (TRPH) by the FL-PRO Method.

One soil sample, collected along the right of way adjoining the former Alamar Gardens, will be analyzed for the parameters listed in EPA Method 8021 for VOAs, EPA Method 8310 for PAHs, TRPH by the FL-PRO Method, and 4 RCRA Metals.

One soil sample, collected along the right of way adjoining the former Ed's Cleaners, will be analyzed for the parameters listed in EPA Method 8021 for VOAs/Volatile Organic Halocarbons (VOHs).

One soil sample, collected along the right of way adjoining the Sprint 1138, will be analyzed for the parameters listed in EPA Method 8021 for VOAs, EPA Method 8310 for PAHs, and TRPH by the FL-PRO Method.

Sample collection will be conducted in accordance with the requirements established in the Florida Department of Environmental Protection (FDEP) Standard Operating Procedures FS1000 and FS3000.

Task 3: Temporary Wellpoint Installation

As part of this investigation, AEROSTAR will install up to six temporary groundwater wellpoints at the intersections of Southwest Archer Road/SW 40th Boulevard and SW 20th Avenue/SW 43rd Street to evaluate groundwater quality. One wellpoint will be installed in the right of way adjoining Sprint 1302; two shallow wellpoints and two intermediate wellpoints will be installed in the right of way adjoining the former Ed's Cleaners; and one wellpoint will be installed in the right of way adjoining Sprint 1138. The shallow wellpoints will be advanced using a Geoprobe direct-push sampling device to approximately three feet into the static water table to evaluate the shallow interval. Additionally, two intermediate wellpoints will be advanced along the right of way adjoining the former Ed's Cleaners using a Geoprobe direct-push sampling device to approximately 15 feet below the shallow groundwater interval. The wellpoints will consist of a decontaminated, 1.25-inch diameter, stainless steel, 0.01-inch slotted screen. The screen will be advanced inside a 1.5-inch diameter, steel barrel, and capped with a disposable stainless steel drill point. Upon reaching the desired depth, the drill point will be released and the barrel will be withdrawn four feet to expose the wellpoint screen to the formation. The wellpoints will be developed after completion to ensure hydraulic communication with the aquifer.

Task 4: Groundwater Sample Collection and Analyses

Groundwater samples will be collected from the temporary wellpoints using a peristaltic pump. Dedicated tubing will be placed through the piping into the well screen in order to develop the well and obtain a groundwater sample. Well development will be accomplished using an adjustable flow peristaltic pump which creates a water flow of approximately 0.5-gallons per minute. Samples will be collected after the fine sediments in the well are removed, and the groundwater shows little or no turbidity. Groundwater samples will be collected from the proposed temporary wellpoints in accordance with AEROSTAR's Quality Manual.

The groundwater samples collected from the wellpoints associated with Sprint 1302 and Sprint 1138 will be submitted to a State-approved laboratory for analyses of the parameters listed in EPA Method 8021 for VOAs, EPA Method 8310 for PAH, and TRPH by the FL-PRO Method. The groundwater samples collected from the two shallow wellpoints associated with the former Ed's Cleaners will be submitted to a State-approved laboratory for analyses of the parameters listed in EPA Method 8021 for VOAs/VOHs, and the groundwater samples collected from the two intermediate wellpoints will be submitted for analyses of the parameters listed in EPA Method 8021 for VOH.

Task 5: Report Preparation

A report will be prepared documenting the results of our investigation. If additional investigations are warranted, the report will describe, in general, the activities we recommend.

COST ESTIMATE

Utility Locates	$279.20
Preparation of HASPs	$909.85
Intersection of SW Archer Road and SW 40th	$3,836.53
Intersection of SW 20th and SW 43rd	$6,805.95
Report Preparation	$2,960.25
Total	$14,791.79

The Phase II ESA will be billed on a time and materials basis not to exceed $14,791.79. AEROSTAR will obtain your approval before proceeding with the proposed work. AEROSTAR will complete the project within 20 working days of your authorization to proceed. If this cost estimate meets with your approval, please sign the enclosed agreement. Retain one copy for your files and return the second copy (fax or mail) to our office with your authorization to proceed.

We look forward to assisting you on this and future projects. If you have any questions or comments concerning this or other matters, please contact us.

Sincerely,

AEROSTAR ENVIRONMENTAL SERVICES, INC.

M. Chris McNees
Senior Project Manager

AGREEMENT

Phase II Environmental Site Assessment
SW 62nd Boulevard Connector
SW20th/SW 43rd and Archer/SW 40th Intersections
Gainesville, Alachua County, Florida

Invoicing and Payment Schedule

Aerostar Environmental Services, Inc., (hereinafter referred to as AEROSTAR), will invoice for work completed on a lump sum basis of $14,791.79 upon completion of the report. Invoicing will begin at the end of the first month of work on a project and continue monthly to the conclusion of the project. AEROSTAR reserves the right to charge late invoices at a rate of 1-1/2% per month beyond 30 days. AEROSTAR reserves the right to add reasonable attorney's fees and collection fees if either an attorney or collection agency is used to secure pay for any outstanding invoices.

Authorization to Proceed

If you are in agreement with the proposed scope of work and payment schedule, please return one signed copy of the cost estimate to our office and retain the other copy for your records. Upon receipt of authorization to proceed, AEROSTAR will begin work.

This document constitutes a legal contract under the laws of the State of Florida. The undersigned parties have reviewed this document and agree to the scope of work to be provided and the terms of the contract.

DATE: September 25, 2008

Aerostar Environmental Services, Inc.

M. Chris McNees
Vice President

DATE:

HNTB Corporation

Mr. Terry Shaw, P.E. or
Authorized Representative

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SW 62 Boulevard 4-Lane Connector - Phase 2 ESA
County: Alachua
FPN: RFP #07-322
FAP No.: 0

Consult. Name: Aerostar Environmental Services, Inc.
Consult. No. enter consultants proj. number
Date: 9/30/2008
Estimator: Chris McNees

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Program Manager	Sr. Eng/Geo	Proj Eng/Geo	Proj Scientist	Eng/Field Technician	Clerical	Staff Classi-fication 7	Staff Classi-fication 8	Staff Classi-fication 9	Staff Classi-fication 10	Staff Classi-fication 11	Staff Classi-fication 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$54.37	$34.39	$25.40	$20.51	$18.64	$14.31	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
Public Involvement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Engineering Analysis & Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Environmental Analysis & Reports	100	4	9	48	0	32	7	0	0	0	0	0	0	100	$2,443	$24.43
Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
Total Staff Hours	100	4	9	48	0	32	7	0	0	0	0	0	0	100		
Total Staff Cost		$217.48	$309.51	$1,219.20	$0.00	$596.48	$100.17	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$2,442.84**	**$24.43**

Check = $2,442.84

Notes:

1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:			$2,442.84
OVERHEAD:	171%		$4,167.97
OPERATING MARGIN:	26%		$635.14
FCCM (Facilities Capital Cost Money):	0.47%		$11.46
EXPENSES:	69.32%		$1,693.38
SUBTOTAL ESTIMATED FEE:			**$8,950.79**
Survey (Field) 0.00	4-man crew day	$ - / day	$0.00
Geotechnical Field and Lab Testing			$5,841.00
SUBTOTAL ESTIMATED FEE:			$14,791.79
Optional Services			$0.00
GRAND TOTAL ESTIMATED FEE:			**$14,791.79**

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: SR 24 (ARCHER ROAD) @ SW 40TH BLVD
County: ALACHUA
FPN: 0
FAP No.: 1/0/1900

Consultant Name: HNTB
Consultant No.:
Date: 9/24/08
Estimator: Paul Hiers

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Engineer	Senior Engineer	Engineer	Landscape Architect	CADD Tech	Eng Technician	Clerical	#REF!	#REF!	#REF!	#REF!	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$68.18	$73.02	$51.08	$33.43	$64.07	$29.88		$22.03	$0.00	$0.00	$0.00	$0.00			
3. Project General Tasks	180	63	36	54	14	0	0	0	13	0	0	0	0	180	$10,437	$57.98
4. Roadway Analysis	254	13	13	89	64	0	76	0	0	0	0	0	0	255	$10,792	$42.32
5. Roadway Plans	387	19	0	97	97	0	174	0	0	0	0	0	0	387	$14,692	$37.96
6. Drainage Analysis	120	6	0	72	42	0	0	0	0	0	0	0	0	120	$5,491	$45.76
7. Utilities	54	3	0	27	11	0	14	0	0	0	0	0	0	55	$2,370	$43.09
8. Environmental Permits	151	8	91	0	30	0	23	0	0	0	0	0	0	152	$8,880	$58.42
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
10. Structures - BDR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
12. Structures - Short Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
13. Structures - Medium Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
14. Structures - Structural Steel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
15. Structures - Segmental Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
19. Signing & Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
20. Signing & Marking Plans	156	0	0	47	62	0	47	0	0	0	0	0	0	156	$5,878	$37.68
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
22. Signalization Plans	108	0	0	32	43	0	32	0	0	0	0	0	0	107	$4,028	$37.65
23. Lighting Analysis	109	0	33	33	44	0	0	0	0	0	0	0	0	110	$5,566	$50.60
24. Lighting Plans	70	0	0	21	28	0	21	0	0	0	0	0	0	70	$2,636	$37.66
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
26. Landscape Architecture Plans	88	0	0	26	35	0	26	0	0	0	0	0	0	87	$3,275	$37.64
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
32. Noise Wall Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
Total Staff Hours	1,677	112	173	498	470	0	413	0	13	0	0	0	0	1,679		
Total Staff Cost		$7,636.16	$12,632.46	$25,437.84	$15,712.10	$0.00	$12,340.44	$0.00	$286.39	$0.00	$0.00	$0.00	$0.00		**$74,045.39**	**$44.10**

Check = $74,045.39

Form Revised 3/28/05

Survey Field Days by Subconsultant
4 - Person Crew:

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:				$74,045.39
OVERHEAD:	155.26%			$114,962.87
OPERATING MARGIN:	30.00%			$22,213.62
FCCM (Facilities Capital Cost Money):	0.48%			$355.42
EXPENSES:	10.60%			$7,848.81
Survey (Field - if by Prime)	4-man crew days @	$ -	/ day	$0.00
SUBTOTAL ESTIMATED FEE:				**$219,426.11**
Subconsultant: Survey				$40,120.00
Subconsultant: R/W Mapping (TCEs)				$1,860.00
Subconsultant: Geotech				$13,525.00
Subconsultant: Aerostar Environmental Services				$7,395.90
Subconsultant: Sub 5				$0.00
Subconsultant: Sub 6				$0.00
Subconsultant: Sub 7				$0.00
Subconsultant: Sub 8				$0.00
Subconsultant: Sub 9				$0.00
Subconsultant: Sub 10				$0.00
Subconsultant: Sub 11				$0.00
Subconsultant: Sub 12				$0.00
SUBTOTAL ESTIMATED FEE:				**$282,327.01**
Geotechnical Field and Lab Testing				$0.00
SUBTOTAL ESTIMATED FEE:				**$282,327.01**
Contigency Fee (Optional Services)				$28,232.70
GRAND TOTAL ESTIMATED FEE:				**$310,559.71**

Project Activity 3: General Tasks

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
3.1	Public Involvement / MPO	LS	1	40	40	Public meetings (City, County, MPO)
3.2	Joint Project Agreements	EA	1	24	24	
3.3	Specifications Package Preparation	LS	1	40	40	prepare bid package
3.4	Contract Maintenance	LS	1	28	28	8 hrs + 2hrs/month
3.5	Value Engineering (Multi-discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	48	48	
3.7	Post Design Services	LS	1	0	0	
3.8	Other Project General Tasks	LS	1	0	0	
				3. General Tasks Total	**180**	

Project Activity 4: Roadway Analysis

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	
4.2	Pavement Design Package	LS	1	14	14	
4.3	Access Management	LS	1	0	0	
4.4	Horizontal /Vertical Master Design Files	LS	1	60	60	
4.5	Cross Section Design Files	LS	1	36	36	
4.6	Traffic Control Analysis	LS	1	16	16	
4.7	Master TCP Design Files	LS	1	0	0	
4.8	Design Variations and Exceptions	LS	1	16	16	
4.9	Design Report	LS	1	8	8	
4.10	Computation Book & Quantities	LS	1	40	40	
4.11	Cost Estimate	LS	2	8	16	
4.12	Technical Special Provisions	LS	1	0	0	
4.13	Other Roadway Analysis	LS	1	0	0	
Roadway Analysis Technical Subtotal					**206**	
4.14	Field Reviews	LS	1	16	16	
4.15	Technical Meetings	LS	1	0	0	
4.16	Quality Assurance/Quality Control	LS	%	5%	10	
4.17	Independent Peer Review	LS	%	0%	0	
4.18	Supervision	LS	%	5%	10	
Roadway Analysis Nontechnical Subtotal					**36**	
4.19	Coordination	LS	%	5%	12	
4. Roadway Analysis Total					**254**	

Project Activity 5: Roadway Plans

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Scale	Units	No. of Units	Hours / Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	1	10	1	10	
5.2	Summary of Pay Items-including Quantity Input		Sheet	1	8	1	8	
5.3	Drainage Map		Sheet	1	16	1	16	
5.4	Interchange Drainage Map		Sheet	0	0	0	0	
5.5	Typical Section Sheets		Sheet	1	12	1	12	
5.6	General Notes/Pay Item notes		Sheet	1	12	1	12	
5.7	Summary of Quantities		Sheet	1	12	1	12	
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0	
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	
5.10	Summary of Drainage Structures		Sheet	1	12	1	12	
5.11	Optional Pipe/ Culvert Material		Sheet	0	0	0	0	
5.12	Project Layout		Sheet	0	0	0	0	
5.13	Plan/Profile Sheet		Sheet	5	6	5	30	
5.14	Profile Sheet		Sheet	0	0	0	0	
5.15	Plan Sheet		Sheet	0	0	0	0	
5.16	Special Profile		Sheet	0	0	0	0	
5.17	Back of Sidewalk Profile Sheet		Sheet	0	0	0	0	
5.18	Interchange Layout Sheet		Sheet	0	0	0	0	
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	
5.20	Intersection Layout Details		Sheet	0	0	0	0	
5.21	Miscellaneous Detail Sheets		Sheet	0	0	0	0	
5.22	Drainage Structure Sheet (per Structure)		EA	18	4		72	
5.23	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours / Unit	No. of Sheets	Total Hours	Comments
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	
5.25	Lateral Ditch Cross Sections		EA	0	0		0	
5.26	Retention/Detention Ponds Detail Sheet		Sheet	1	24	1	24	
5.27	Retention Pond Cross Sections		EA	0	0		0	
5.28	Cross-section Pattern Sheet		Sheet	0	0	0	0	
5.29	Roadway Soil Survey Sheet		Sheet	0	0	0	0	
5.30	Cross Sections		EA	34	0.5		17	
5.31	Traffic Control Plan Sheets		Sheet	10	6	10	60	two phases
5.32	Traffic Control Cross Section Sheets		EA	6	4		24	
5.33	Traffic Control Detail Sheets		Sheet	0	0	0	0	
5.34	Utility Adjustment Sheets		Sheet	5	4	5	20	
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0	
5.36	Erosion Control Plan		Sheet	5	2	5	10	
5.37	SWPPP		Sheet	1	6	1	6	
5.38	Project Control Network Sheet		Sheet	2	1	2	2	provided by surveyor
5.39	Interim Standards		LS	1	4		4	
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	
Roadway Plans Technical Subtotal						**36**	**351**	
5.41	Quality Assurance/Quality Control		LS	%	5%		18	
5.42	Supervision		LS	%	5%		18	
5. Roadway Plans Total						**36**	**387**	

Project Activity 6: Drainage Analysis

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Location	0	0	0	
6.2	Pond Siting Analysis and Report	Per Basin	1	16	16	Modify existing Pond
6.3	Design of Cross Drains	EA	0	0	0	
6.4	Design of Roadway Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Outfalls	EA	0	0	0	
6.6	Design of Stormwater Management Facility (Offsite Pond)	EA	0	0	0	
6.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond or Infield Pond)	Per System	1	32	32	
6.8	Design of Flood Plain Compensation Area	Per Encroachment	0	0	0	
6.9	Design of Storm Drains	EA	18	2	36	
6.10	Optional Culvert Material	LS	0	0	0	
6.11	French Drain Systems	Per 1000 Feet of French Drain	0	0	0	
6.12	Drainage Wells	EA	0	0	0	
6.13	Drainage Design Documentation Report	LS	1	12	12	
6.14	Bridge Hydraulic Report	EA	0	0	0	
6.15	Temporary Drainage Analysis	LS	1	0	0	
6.16	Cost Estimate	LS	1	0	0	
6.17	Technical Special Provisions	LS	1	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
6.18	Other Drainage Analysis	LS	1	0	0	
Drainage Analysis Technical Subtotal					**96**	
6.19	Field Reviews	LS	1	8	8	
6.20	Technical Meetings	LS	1	0	0	
6.21	Quality Assurance/Quality Control	LS	%	5%	5	
6.22	Independent Peer Review	LS	%	0%	0	
6.23	Supervision	LS	%	5%	5	
Drainage Analysis Nontechnical Subtotal					**18**	
6.24	Coordination	LS	%	5%	6	
6. Drainage Analysis Total					**120**	

Project Activity 7: Utilities

Estimator: Paul Hiers

SR 24 (ARCHER ROAD) @ SW 40TH BLVD

Date: 9/24/08

0

Task No.	TASK	Units	No of Units	Hours / Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	0	0	
7.2	Identify Existing UAOs	LS	6	1	6	Assume 6 utilities
7.3	Make Utility Contacts	LS	6	2	12	Assume 2 contacts, 1 hr/contact
7.4	Exception Coordination	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	0	0	no meeting
7.6	Individual/Field Meetings	LS	1	0	0	
7.7	Collect and Review Plans and Data from UAO(s)	LS	6	1	6	
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	0	0	
7.10	Review Utility Markups, Work Schedules, Processing of Schedules and Agreements	LS	1	0	0	
7.11	Utility Coordination / Followup	LS	6	4	24	
7.12	Utility Constructability Review	LS	1	0	0	
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	6	1	6	
7.16	Certification/Close-out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
				7. Utilities Total	**54**	

Project Activity 8: Environmental Permits

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.1	Preliminary Project Research	LS	1	8	8	Modifying existing ponds
8.2	Complete Permit Involvement Form	LS	1	0	0	
8.3	Establish Wetland Jurisdictional Lines	LS	1	4	4	
8.4	Agency Verification of Wetland Data	LS	1	0	0	
8.5	Complete And Submit All Required Permit Applications	LS	1	40	40	SJRWMD, ACOE
8.6	Prepare Dredge and Fill Sketches	LS	1	0	0	
8.7	Prepare USCG Permit Sketches	LS	1	0	0	
8.8	Prepare Easement Sketches	LS	1	0	0	
8.9	Prepare R/W Occupancy Sketches	LS	1	0	0	
8.10	Prepare Coastal Construction Control Line (CCCL) Permit Sketches	LS	1	0	0	
8.11	Prepare Tree Permit Information	LS	1	18	18	
8.12	Mitigation Coordination and Meetings	LS	1	8	8	
8.13	Mitigation Design	LS	1	16	16	
8.14	Environmental Clearances	LS	1	0	0	
8.15	Other Environmental	LS	1	30	30	FDOT Connection Permit, County EPD permit
Environmental Permits Technical Subtotal					**124**	
8.16	Technical Meetings	LS	1	8	8	
8.17	Quality Assurance/Quality Control	LS	%	5%	6	
8.18	Supervision	LS	%	5%	6	
Environmental Permits Nontechnical SubTotal					**20**	
8.19	Coordination	LS	%	5%	7	
8. Environmental Permits Total					**151**	

Project Activity 20: Signing and Pavement Marking Plans

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	1	6	1	6	
20.2	Summary of Pay Items-including CES Input		LS	1	2		2	
20.3	Tabulation of Quantities		Sheet	1	17	1	17	15hrs calcualtions plus 2 hrs per sheet
20.4	General Notes / Pay Item Notes		Sheet	1	6	1	6	
20.5	Project Layout		Sheet	0	0	0	0	
20.6	Plan Sheet		Sheet	5	15	5	75	60 hrs set up plus 3 hrs per sheet
20.7	Typical Details		EA	1	8		8	
20.8	Guide Sign Work Sheet (s)		EA	2	8		16	
20.9	Traffic Monitoring Site		EA	0	0		0	
20.10	Cross Sections		EA	2	4		8	
20.11	Special Service Point Detail		EA	0	0		0	
20.12	Special Details		LS	1	0		0	
20.13	Interim Standards		LS	1	4		4	
Signing & Pavement Marking Plans Technical Subtotal						**8**	**142**	
20.14	Quality Assurance/Quality Control		LS	%	5%		7	
20.15	Supervision		LS	%	5%		7	
20. Signing & Pavement Marking Plans Total						**8**	**156**	

Project Activity 22: Signalization Plans

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	1	6	1	6	
22.2	Summary of Pay Items-including CES Input		Sheet	1	2	1	2	
22.3	Tabulation of Quantities		Sheet	1	12	1	12	includes calculating the quantities
22.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
22.5	Plan Sheet		Sheet	1	30	1	30	22 set up plus 8 hrs per sheet
22.6	Interconnect Plans		Sheet	0	0	0	0	
22.7	Traffic Monitoring Site		EA	0	0		0	
22.8	Guide Sign Work Sheet		EA	1	0		0	
22.9	Special Details		Sheet	1	8	1	8	
22.10	Special Service Point Details		EA	1	4		4	
22.11	Mast Arm / Monotube Tabulation Sheet		PI	1	8		8	
22.12	Strain Pole Schedule		PI	0	0		0	
22.13	TCP Signal (Temporary)		EA	1	16		16	
22.14	Temporary Detection Sheet		PI	1	4		4	
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	
22.16	Interim Standards		LS	1	4		4	
Signalization Plans Technical Subtotal						**6**	**98**	
22.17	Quality Assurance/Quality Control		LS	%	5%		5	
22.18	Supervision		LS	%	5%		5	
22. Signalization Plans Total						**6**	**108**	

Project Activity 23: Lighting Analysis

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	24	24	
23.3	Aeronautical Evaluation	LS	1	0	0	
23.4	Voltage Drop Calculations	LS	1	16	16	
23.5	FDEP Coordination & Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	40	40	
23.7	Temporary Lighting	LS	1	0	0	
23.8	Design Documentation	LS	1	8	8	
23.9	Quantities	LS	1	0	0	
23.10	Cost Estimate	LS	1	0	0	
23.11	Technical Special Provisions	LS	1	0	0	
23.12	Other Lighting	LS	1	0	0	
Lighting Analysis Technical Subtotal					**88**	
23.13	Field Reviews	LS	1	8	8	
23.14	Technical Meetings	LS	1	0	0	
23.15	Quality Assurance/Quality Control	LS	%	5%	4	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	5%	4	
Lighting Analysis Nontechnical Subtotal					**16**	
23.18	Coordination	LS	%	5%	5	
23. Lighting Analysis Total					**109**	

Project Activity 24: Lighting Plans

Estimator: Paul Hiers
Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD
0

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	1	6	1	6	
24.2	Summary of Pay Items - including CES Input		Sheet	1	2	1	2	
24.3	Tabulation of Quantities		Sheet	1	12	1	12	includes calculating the quantities
24.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
24.5	Pole Data, Legend & Criteria		Sheet	1	4	1	4	
24.6	Service Point Details		Sheet	1	4	1	4	
24.7	Project Layout		Sheet	0	0	0	0	
24.8	Plan Sheet		Sheet	5	4	5	20	
24.9	Special Details		Sheet	1	8	1	8	
24.10	Temporary Lighting Data & Details		Sheet	0	0	0	0	
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	1	4		4	
Lighting Plans Technical Subtotal						**12**	**64**	
24.13	Quality Assurance/Quality Control		LS	%	5%		3	
24.14	Supervision		LS	%	5%		3	
24. Lighting Plans Total						**12**	**70**	

Project Activity 26: Landscape Architecture Plans

Estimator: Paul Hiers

Date: 9/24/08

SR 24 (ARCHER ROAD) @ SW 40TH BLVD

0

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
26.1	Key Sheet		Sheet	1	6	1	6	
26.2	Tabulation of Quantities		Sheet	1	8	1	8	
26.3	General Notes		Sheet	1	6	1	6	
26.4	Tree and Vegetation Inventory, Protection and Relocation Plans		Sheet	0	0	0	0	
26.5	Planting Plans For Linear Roadway Projects		Sheet	5	10	5	50	
26.6	Planting Plans (Interchanges & Toll Plazas)		Sheet	0	0	0	0	
26.7	Planting Details and Notes		Sheet	1	6	1	6	
26.8	Irrigation Plans for Linear Roadway Project		Sheet	0	0	0	0	
26.9	Irrigation Plans for Interchange and Toll Plazas		Sheet	0	0	0	0	
26.10	Irrigation Details and Notes		Sheet	0	0	0	0	
26.11	Hardscape Plans		Sheet	0	0	0	0	
26.12	Hardscape Details and Notes		Sheet	0	0	0	0	
26.13	Cost Estimate		LS	1	4		4	
Landscape Architecture Plans Technical Hours Subtotal						**9**	**80**	
26.14	Quality Assurance/Quality Control		LS	%	5%		4	
26.15	Supervision		LS	%	5%		4	
26. Landscape Architecture Plans Total						**9**	**88**	

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: SW 20th Ave & SW 43rd St Intersection Improvements
County: ALACHUA
FPN: TBD
FAP No.: 1/0/1900

Consultant Name: HNTB
Consultant No.:
Date: 9/24/2008
Estimator: Paul Hiers

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Engineer	Senior Engineer	Engineer	Landscape Architect	CADD Tech	Eng Technician	Clerical	#REF!	#REF!	#REF!	#REF!	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$68.18	$73.02	$51.08	$33.43	$64.07	$29.88		$22.03	$0.00	$0.00	$0.00	$0.00			
3. Project General Tasks	160	56	32	48	13	0	0	0	11	0	0	0	0	160	$9,283	$58.02
4. Roadway Analysis	208	10	10	73	52	0	62	0	0	0	0	0	0	207	$8,732	$42.18
5. Roadway Plans	427	21	0	107	107	0	192	0	0	0	0	0	0	427	$16,211	$37.97
6. Drainage Analysis	46	2	0	28	16	0	0	0	0	0	0	0	0	46	$2,101	$45.68
7. Utilities	27	1	0	14	5	0	7	0	0	0	0	0	0	27	$1,160	$42.95
8. Environmental Permits	151	8	91	0	30	0	23	0	0	0	0	0	0	152	$8,880	$58.42
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
10. Structures - BDR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
12. Structures - Short Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
13. Structures - Medium Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
14. Structures - Structural Steel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
15. Structures - Segmental Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
19. Signing & Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
20. Signing & Marking Plans	140	0	0	42	56	0	42	0	0	0	0	0	0	140	$5,272	$37.66
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
22. Signalization Plans	122	0	0	37	49	0	37	0	0	0	0	0	0	123	$4,634	$37.67
23. Lighting Analysis	109	0	33	33	44	0	0	0	0	0	0	0	0	110	$5,566	$50.60
24. Lighting Plans	70	0	0	21	28	0	21	0	0	0	0	0	0	70	$2,636	$37.66
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
26. Landscape Architecture Plans	88	0	0	26	35	0	26	0	0	0	0	0	0	87	$3,275	$37.64
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
32. Noise Wall Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
Total Staff Hours	1,548	98	166	429	435	0	410	0	11	0	0	0	0	1,549		
Total Staff Cost		$6,681.64	$12,121.32	$21,913.32	$14,542.05	$0.00	$12,250.80	$0.00	$242.33	$0.00	$0.00	$0.00	$0.00		**$67,751.46**	**$43.74**

Check = $67,751.46

Form Revised 3/28/05

Survey Field Days by Subconsultant
4 - Person Crew:

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:				$67,751.46
OVERHEAD:	155.26%			$105,190.92
OPERATING MARGIN:	30.00%			$20,325.44
FCCM (Facilities Capital Cost Money):	0.48%			$325.21
EXPENSES:	10.60%			$7,181.65
Survey (Field - if by Prime)	4-man crew days @	$ -	/ day	$0.00
SUBTOTAL ESTIMATED FEE:				**$200,774.68**
Subconsultant: Survey				$18,090.00
Subconsultant: R/W Mapping (TCEs)				$1,860.00
Subconsultant: Geotech				$9,405.00
Subconsultant: Aerostar Environmental Services				$7,395.90
Subconsultant: Sub 5				$0.00
Subconsultant: Sub 6				$0.00
Subconsultant: Sub 7				$0.00
Subconsultant: Sub 8				$0.00
Subconsultant: Sub 9				$0.00
Subconsultant: Sub 10				$0.00
Subconsultant: Sub 11				$0.00
Subconsultant: Sub 12				$0.00
SUBTOTAL ESTIMATED FEE:				**$237,525.58**
Geotechnical Field and Lab Testing				$0.00
SUBTOTAL ESTIMATED FEE:				**$237,525.58**
Contigency Fee (Optional Services)				$23,752.56
GRAND TOTAL ESTIMATED FEE:				**$261,278.14**

Project Activity 3: General Tasks

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
3.1	Public Involvement / MPO	LS	1	40	40	Public meetings (City, County, MPO)
3.2	Joint Project Agreements	EA	1	24	24	
3.3	Specifications Package Preparation	LS	1	40	40	prepare bid package
3.4	Contract Maintenance	LS	1	24	24	4 hrs + 2hrs/month
3.5	Value Engineering (Multi-discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	32	32	
3.7	Post Design Services	LS	1	0	0	
3.8	Other Project General Tasks	LS	1	0	0	
3. General Tasks Total					**160**	

Project Activity 4: Roadway Analysis

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	
4.2	Pavement Design Package	LS	1	14	14	
4.3	Access Management	LS	1	0	0	
4.4	Horizontal /Vertical Master Design Files	LS	1	40	40	
4.5	Cross Section Design Files	LS	1	20	20	
4.6	Traffic Control Analysis	LS	1	0	0	
4.7	Master TCP Design Files	LS	1	16	16	
4.8	Design Variations and Exceptions	LS	1	16	16	
4.9	Design Report	LS	1	10	10	
4.10	Computation Book & Quantities	LS	1	40	40	
4.11	Cost Estimate	LS	2	8	16	
4.12	Technical Special Provisions	LS	1	0	0	
4.13	Other Roadway Analysis	LS	1	0	0	
Roadway Analysis Technical Subtotal					**172**	
4.14	Field Reviews	LS	1	8	8	
4.15	Technical Meetings	LS	1	0	0	
4.16	Quality Assurance/Quality Control	LS	%	5%	9	
4.17	Independent Peer Review	LS	%	0%	0	
4.18	Supervision	LS	%	5%	9	
Roadway Analysis Nontechnical Subtotal					**26**	
4.19	Coordination	LS	%	5%	10	
4. Roadway Analysis Total					**208**	

Project Activity 5: Roadway Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Scale	Units	No. of Units	Hours / Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	1	10	1	10	
5.2	Summary of Pay Items-including Quantity Input		Sheet	1	8	1	8	
5.3	Drainage Map		Sheet	1	16	1	16	
5.4	Interchange Drainage Map		Sheet	0	0	0	0	
5.5	Typical Section Sheets		Sheet	1	12	1	12	
5.6	General Notes/Pay Item notes		Sheet	1	8	1	8	
5.7	Summary of Quantities		Sheet	1	16	1	16	
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0	
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	
5.10	Summary of Drainage Structures		Sheet	1	8	1	8	
5.11	Optional Pipe/ Culvert Material		Sheet	0	0	0	0	
5.12	Project Layout		Sheet	0	0	0	0	
5.13	Plan/Profile Sheet		Sheet	7	6	7	42	
5.14	Profile Sheet		Sheet	0	0	0	0	
5.15	Plan Sheet		Sheet	0	0	0	0	
5.16	Special Profile		Sheet	0	0	0	0	
5.17	Back of Sidewalk Profile Sheet		Sheet	0	0	0	0	
5.18	Interchange Layout Sheet		Sheet	0	0	0	0	
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	
5.20	Intersection Layout Details		Sheet	0	0	0	0	
5.21	Miscellaneous Detail Sheets		Sheet	0	0	0	0	
5.22	Drainage Structure Sheet (per Structure)		EA	18	4		72	
5.23	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours / Unit	No. of Sheets	Total Hours	Comments
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	
5.25	Lateral Ditch Cross Sections		EA	0	0		0	
5.26	Retention/Detention Ponds Detail Sheet		Sheet	1	16	1	16	roadside ditches
5.27	Retention Pond Cross Sections		EA	0	0		0	
5.28	Cross-section Pattern Sheet		Sheet	0	0	0	0	
5.29	Roadway Soil Survey Sheet		Sheet	0	0	0	0	
5.30	Cross Sections		EA	46	0.5		23	
5.31	Traffic Control Plan Sheets		Sheet	14	6	14	84	two phases
5.32	Traffic Control Cross Section Sheets		EA	6	4		24	
5.33	Traffic Control Detail Sheets		Sheet	0	0	0	0	
5.34	Utility Adjustment Sheets		Sheet	7	4	7	28	
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0	
5.36	Erosion Control Plan		Sheet	7	2	7	14	
5.37	SWPPP		Sheet	1	6	1	6	
5.38	Project Control Network Sheet		Sheet	2	1	2	2	provided by surveyor
5.39	Interim Standards		LS	1	0		0	
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	
Roadway Plans Technical Subtotal						**46**	**389**	
5.41	Quality Assurance/Quality Control		LS	%	5%		19	
5.42	Supervision		LS	%	5%		19	
5. Roadway Plans Total						**46**	**427**	

Project Activity 6: Drainage Analysis

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Location	0	0	0	
6.2	Pond Siting Analysis and Report	Per Basin	1	0	0	
6.3	Design of Cross Drains	EA	0	0	0	
6.4	Design of Roadway Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Outfalls	EA	0	0	0	
6.6	Design of Stormwater Management Facility (Offsite Pond)	EA	0	0	0	
6.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond or Infield Pond)	Per System	1	24	24	Roadside Ditches
6.8	Design of Flood Plain Compensation Area	Per Encroachment	0	0	0	
6.9	Design of Storm Drains	EA	4	2	8	
6.10	Optional Culvert Material	LS	0	0	0	
6.11	French Drain Systems	Per 1000 Feet of French Drain	0	0	0	
6.12	Drainage Wells	EA	0	0	0	
6.13	Drainage Design Documentation Report	LS	1	8	8	
6.14	Bridge Hydraulic Report	EA	0	0	0	
6.15	Temporary Drainage Analysis	LS	1	0	0	
6.16	Cost Estimate	LS	1	0	0	
6.17	Technical Special Provisions	LS	1	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
6.18	Other Drainage Analysis	LS	1	0	0	
Drainage Analysis Technical Subtotal					**40**	
6.19	Field Reviews	LS	1	0	0	
6.20	Technical Meetings	LS	1	0	0	
6.21	Quality Assurance/Quality Control	LS	%	5%	2	
6.22	Independent Peer Review	LS	%	0%	0	
6.23	Supervision	LS	%	5%	2	
Drainage Analysis Nontechnical Subtotal					**4**	
6.24	Coordination	LS	%	5%	2	
6. Drainage Analysis Total					**46**	

Project Activity 7: Utilities

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	TASK	Units	No of Units	Hours / Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	0	0	
7.2	Identify Existing UAOs	LS	3	1	3	Assume 3 utilities
7.3	Make Utility Contacts	LS	3	2	6	Assume 2 contacts, 1 hr/contact
7.4	Exception Coordination	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	0	0	no meeting
7.6	Individual/Field Meetings	LS	1	0	0	
7.7	Collect and Review Plans and Data from UAO(s)	LS	3	1	3	
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	0	0	
7.10	Review Utility Markups, Work Schedules, Processing of Schedules and Agreements	LS	1	0	0	
7.11	Utility Coordination / Followup	LS	3	4	12	
7.12	Utility Constructability Review	LS	1	0	0	
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	3	1	3	
7.16	Certification/Close-out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
				7. Utilities Total	**27**	

Project Activity 8: Environmental Permits

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.1	Preliminary Project Research	LS	1	8	8	Modifying existing ponds
8.2	Complete Permit Involvement Form	LS	1	0	0	
8.3	Establish Wetland Jurisdictional Lines	LS	1	4	4	
8.4	Agency Verification of Wetland Data	LS	1	0	0	
8.5	Complete And Submit All Required Permit Applications	LS	1	40	40	SJRWMD, ACOE
8.6	Prepare Dredge and Fill Sketches	LS	1	0	0	
8.7	Prepare USCG Permit Sketches	LS	1	0	0	
8.8	Prepare Easement Sketches	LS	1	0	0	
8.9	Prepare R/W Occupancy Sketches	LS	1	0	0	
8.10	Prepare Coastal Construction Control Line (CCCL) Permit Sketches	LS	1	0	0	
8.11	Prepare Tree Permit Information	LS	1	18	18	
8.12	Mitigation Coordination and Meetings	LS	1	8	8	
8.13	Mitigation Design	LS	1	16	16	
8.14	Environmental Clearances	LS	1	0	0	
8.15	Other Environmental	LS	1	30	30	FDOT Connection Permit, County EPD permit
Environmental Permits Technical Subtotal					**124**	
8.16	Technical Meetings	LS	1	8	8	
8.17	Quality Assurance/Quality Control	LS	%	5%	6	
8.18	Supervision	LS	%	5%	6	
Environmental Permits Nontechnical SubTotal					**20**	
8.19	Coordination	LS	%	5%	7	
8. Environmental Permits Total					**151**	

Project Activity 20: Signing and Pavement Marking Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	1	6	1	6	
20.2	Summary of Pay Items-including CES Input		LS	1	2		2	
20.3	Tabulation of Quantities		Sheet	1	18	1	18	16hrs calculations plus 2 hrs per sheet
20.4	General Notes / Pay Item Notes		Sheet	1	6	1	6	
20.5	Project Layout		Sheet	0	0	0	0	
20.6	Plan Sheet		Sheet	7	10	7	70	49 hrs set up plus 3 hrs per sheet
20.7	Typical Details		EA	1	8		8	
20.8	Guide Sign Work Sheet (s)		EA	2	6		12	
20.9	Traffic Monitoring Site		EA	0	0		0	
20.10	Cross Sections		EA	2	3		6	
20.11	Special Service Point Detail		EA	0	0		0	
20.12	Special Details		LS	1	0		0	
20.13	Interim Standards		LS	1	0		0	
Signing & Pavement Marking Plans Technical Subtotal						**10**	**128**	
20.14	Quality Assurance/Quality Control		LS	%	5%		6	
20.15	Supervision		LS	%	5%		6	
20. Signing & Pavement Marking Plans Total						**10**	**140**	

Project Activity 22: Signalization Plans

Estimator: Paul Hiers SW 20th Ave & SW 43rd St Intersection Improvements
Date: 9/24/2008 TBD

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	1	6	1	6	
22.2	Summary of Pay Items-including CES Input		Sheet	1	2	1	2	
22.3	Tabulation of Quantities		Sheet	1	18	1	18	16hrs calculations plus 2 hrs per sheet
22.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
22.5	Plan Sheet		Sheet	1	40	1	40	32 set up plus 8 hrs per sheet
22.6	Interconnect Plans		Sheet	0	0	0	0	
22.7	Traffic Monitoring Site		EA	0	0		0	
22.8	Guide Sign Work Sheet		EA	1	0		0	
22.9	Special Details		Sheet	1	8	1	8	
22.10	Special Service Point Details		EA	1	4		4	
22.11	Mast Arm / Monotube Tabulation Sheet		PI	1	8		8	
22.12	Strain Pole Schedule		PI	0	0		0	
22.13	TCP Signal (Temporary)		EA	1	16		16	
22.14	Temporary Detection Sheet		PI	1	4		4	
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	
22.16	Interim Standards		LS	1	0		0	
Signalization Plans Technical Subtotal						**6**	**110**	
22.17	Quality Assurance/Quality Control		LS	%	5%		6	
22.18	Supervision		LS	%	5%		6	
22. Signalization Plans Total						**6**	**122**	

Project Activity 23: Lighting Analysis

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	24	24	
23.3	Aeronautical Evaluation	LS	1	0	0	
23.4	Voltage Drop Calculations	LS	1	16	16	
23.5	FDEP Coordination & Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	40	40	
23.7	Temporary Lighting	LS	1	0	0	
23.8	Design Documentation	LS	1	8	8	
23.9	Quantities	LS	1	0	0	
23.10	Cost Estimate	LS	1	0	0	
23.11	Technical Special Provisions	LS	1	0	0	
23.12	Other Lighting	LS	1	0	0	
Lighting Analysis Technical Subtotal					**88**	
23.13	Field Reviews	LS	1	8	8	
23.14	Technical Meetings	LS	1	0	0	
23.15	Quality Assurance/Quality Control	LS	%	5%	4	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	5%	4	
Lighting Analysis Nontechnical Subtotal					**16**	
23.18	Coordination	LS	%	5%	5	
23. Lighting Analysis Total					**109**	

Technical Meetings

Project Activity 24: Lighting Plans

Estimator: Paul Hiers SW 20th Ave & SW 43rd St Intersection Improvements
Date: 9/24/2008 TBD

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	1	6	1	6	
24.2	Summary of Pay Items - including CES Input		Sheet	1	2	1	2	
24.3	Tabulation of Quantities		Sheet	1	12	1	12	includes calculating the quantities
24.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
24.5	Pole Data, Legend & Criteria		Sheet	1	4	1	4	
24.6	Service Point Details		Sheet	1	4	1	4	
24.7	Project Layout		Sheet	0	0	0	0	
24.8	Plan Sheet		Sheet	5	4	5	20	
24.9	Special Details		Sheet	1	8	1	8	
24.10	Temporary Lighting Data & Details		Sheet	0	0	0	0	
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	1	4		4	
Lighting Plans Technical Subtotal						**12**	**64**	
24.13	Quality Assurance/Quality Control		LS	%	5%		3	
24.14	Supervision		LS	%	5%		3	
24. Lighting Plans Total						**12**	**70**	

Project Activity 26: Landscape Architecture Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Ave & SW 43rd St Intersection Improvements
TBD

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
26.1	Key Sheet		Sheet	1	6	1	6	
26.2	Tabulation of Quantities		Sheet	1	8	1	8	
26.3	General Notes		Sheet	1	6	1	6	
26.4	Tree and Vegetation Inventory, Protection and Relocation Plans		Sheet	0	0	0	0	
26.5	Planting Plans For Linear Roadway Projects		Sheet	5	10	5	50	
26.6	Planting Plans (Interchanges & Toll Plazas)		Sheet	0	0	0	0	
26.7	Planting Details and Notes		Sheet	1	6	1	6	
26.8	Irrigation Plans for Linear Roadway Project		Sheet	0	0	0	0	
26.9	Irrigation Plans for Interchange and Toll Plazas		Sheet	0	0	0	0	
26.10	Irrigation Details and Notes		Sheet	0	0	0	0	
26.11	Hardscape Plans		Sheet	0	0	0	0	
26.12	Hardscape Details and Notes		Sheet	0	0	0	0	
26.13	Cost Estimate		LS	1	4		4	
Landscape Architecture Plans Technical Hours Subtotal						**9**	**80**	
26.14	Quality Assurance/Quality Control		LS	%	5%		4	
26.15	Supervision		LS	%	5%		4	
26. Landscape Architecture Plans Total						**9**	**88**	

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: SW 20th Avenue Smart Bus Bay
County: ALACHUA
FPN: TBD
FAP No.: 1/0/1900

Consultant Name: HNTB
Consultant No.:
Date: 9/24/2008
Estimator: Paul Hiers

Staff Classification	Total Staff Hours From "SH Summary Firm"	Project Manager	Chief Engineer	Senior Engineer	Engineer	Landscape Architect	CADD Tech	Eng Technician	Clerical	#REF!	#REF!	#REF!	#REF!	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$68.18	$73.02	$51.08	$33.43	$64.07	$29.88		$22.03	$0.00	$0.00	$0.00	$0.00			
3. Project General Tasks	160	56	32	48	13	0	0	0	11	0	0	0	0	160	$9,283	$58.02
4. Roadway Analysis	170	9	9	60	43	0	51	0	0	0	0	0	0	172	$7,297	$42.42
5. Roadway Plans	223	11	0	56	56	0	100	0	0	0	0	0	0	223	$8,471	$37.98
6. Drainage Analysis	46	2	0	28	16	0	0	0	0	0	0	0	0	46	$2,101	$45.68
7. Utilities	27	1	0	14	5	0	7	0	0	0	0	0	0	27	$1,160	$42.95
8. Environmental Permits	46	2	28	0	9	0	7	0	0	0	0	0	0	46	$2,691	$58.50
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
10. Structures - BDR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
12. Structures - Short Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
13. Structures - Medium Span Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
14. Structures - Structural Steel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
15. Structures - Segmental Concrete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
19. Signing & Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
20. Signing & Marking Plans	82	0	0	25	33	0	25	0	0	0	0	0	0	83	$3,127	$37.68
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
22. Signalization Plans	96	0	0	29	38	0	29	0	0	0	0	0	0	96	$3,618	$37.69
23. Lighting Analysis	74	0	22	22	30	0	0	0	0	0	0	0	0	74	$3,733	$50.45
24. Lighting Plans	52	0	0	16	21	0	16	0	0	0	0	0	0	53	$1,997	$37.69
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
26. Landscape Architecture Plans	44	0	0	13	18	0	13	0	0	0	0	0	0	44	$1,654	$37.60
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
32. Noise Wall Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	
Total Staff Hours	1,020	81	91	311	282	0	248	0	11	0	0	0	0	1,024		
Total Staff Cost		$5,522.58	$6,644.82	$15,885.88	$9,427.26	$0.00	$7,410.24	$0.00	$242.33	$0.00	$0.00	$0.00	$0.00		**$45,133.11**	**$44.08**

Check = $45,133.11

Form Revised 3/28/05

Survey Field Days by Subconsultant
4 - Person Crew:

SALARY RELATED COSTS:				$45,133.11
OVERHEAD:	155.26%			$70,073.67
OPERATING MARGIN:	30.00%			$13,539.93
FCCM (Facilities Capital Cost Money):	0.48%			$216.64
EXPENSES:	10.60%			$4,784.11
Survey (Field - if by Prime)	4-man crew days @	$ -	/ day	$0.00
SUBTOTAL ESTIMATED FEE:				**$133,747.46**
Subconsultant: Survey				$18,090.00
Subconsultant: R/W Mapping (TCEs)				$1,860.00
Subconsultant: Geotech				$9,405.00
Subconsultant: Sub 4				$0.00
Subconsultant: Sub 5				$0.00
Subconsultant: Sub 6				$0.00
Subconsultant: Sub 7				$0.00
Subconsultant: Sub 8				$0.00
Subconsultant: Sub 9				$0.00
Subconsultant: Sub 10				$0.00
Subconsultant: Sub 11				$0.00
Subconsultant: Sub 12				$0.00
SUBTOTAL ESTIMATED FEE:				**$163,102.46**
Geotechnical Field and Lab Testing				$0.00
SUBTOTAL ESTIMATED FEE:				**$163,102.46**
Contingency Fee (Optional Services)				$16,310.25
GRAND TOTAL ESTIMATED FEE:				**$179,412.71**

Notes:
1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.
2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Project Activity 3: General Tasks

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
3.1	Public Involvement / MPO	LS	1	40	40	Public meetings (City, County, MPO)
3.2	Joint Project Agreements	EA	1	24	24	
3.3	Specifications Package Preparation	LS	1	40	40	prepare bid package
3.4	Contract Maintenance	LS	1	24	24	4 hrs + 2hrs/month
3.5	Value Engineering (Multi-discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	32	32	
3.7	Post Design Services	LS	1	0	0	
3.8	Other Project General Tasks	LS	1	0	0	
				3. General Tasks Total	**160**	

Project Activity 4: Roadway Analysis

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	
4.2	Pavement Design Package	LS	1	14	14	
4.3	Access Management	LS	1	0	0	
4.4	Horizontal /Vertical Master Design Files	LS	1	32	32	
4.5	Cross Section Design Files	LS	1	16	16	
4.6	Traffic Control Analysis	LS	1	0	0	
4.7	Master TCP Design Files	LS	1	12	12	
4.8	Design Variations and Exceptions	LS	1	12	12	
4.9	Design Report	LS	1	6	6	
4.10	Computation Book & Quantities	LS	1	32	32	
4.11	Cost Estimate	LS	2	8	16	
4.12	Technical Special Provisions	LS	1	0	0	
4.13	Other Roadway Analysis	LS	1	0	0	
Roadway Analysis Technical Subtotal					**140**	
4.14	Field Reviews	LS	1	8	8	
4.15	Technical Meetings	LS	1	0	0	
4.16	Quality Assurance/Quality Control	LS	%	5%	7	
4.17	Independent Peer Review	LS	%	0%	0	
4.18	Supervision	LS	%	5%	7	
Roadway Analysis Nontechnical Subtotal					**22**	
4.19	Coordination	LS	%	5%	8	
4. Roadway Analysis Total					**170**	

Project Activity 5: Roadway Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Scale	Units	No. of Units	Hours / Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	1	10	1	10	
5.2	Summary of Pay Items-including Quantity Input		Sheet	1	8	1	8	
5.3	Drainage Map		Sheet	1	12	1	12	
5.4	Interchange Drainage Map		Sheet	0	0	0	0	
5.5	Typical Section Sheets		Sheet	1	12	1	12	
5.6	General Notes/Pay Item notes		Sheet	1	8	1	8	
5.7	Summary of Quantities		Sheet	1	12	1	12	
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0	
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	
5.10	Summary of Drainage Structures		Sheet	1	6	1	6	
5.11	Optional Pipe/ Culvert Material		Sheet	0	0	0	0	
5.12	Project Layout		Sheet	0	0	0	0	
5.13	Plan/Profile Sheet		Sheet	2	6	2	12	
5.14	Profile Sheet		Sheet	0	0	0	0	
5.15	Plan Sheet		Sheet	0	0	0	0	
5.16	Special Profile		Sheet	0	0	0	0	
5.17	Back of Sidewalk Profile Sheet		Sheet	0	0	0	0	
5.18	Interchange Layout Sheet		Sheet	0	0	0	0	
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	
5.20	Intersection Layout Details		Sheet	0	0	0	0	
5.21	Miscellaneous Detail Sheets		Sheet	0	0	0	0	
5.22	Drainage Structure Sheet (per Structure)		EA	8	4		32	
5.23	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours / Unit	No. of Sheets	Total Hours	Comments
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	
5.25	Lateral Ditch Cross Sections		EA	0	0		0	
5.26	Retention/Detention Ponds Detail Sheet		Sheet	1	16	1	16	roadside ditches
5.27	Retention Pond Cross Sections		EA	0	0		0	
5.28	Cross-section Pattern Sheet		Sheet	0	0	0	0	
5.29	Roadway Soil Survey Sheet		Sheet	0	0	0	0	
5.30	Cross Sections		EA	16	0.5		8	
5.31	Traffic Control Plan Sheets		Sheet	4	6	4	24	two phases
5.32	Traffic Control Cross Section Sheets		EA	6	4		24	
5.33	Traffic Control Detail Sheets		Sheet	0	0	0	0	
5.34	Utility Adjustment Sheets		Sheet	2	4	2	8	
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0	
5.36	Erosion Control Plan		Sheet	2	2	2	4	
5.37	SWPPP		Sheet	1	6	1	6	
5.38	Project Control Network Sheet		Sheet	1	1	1	1	provided by surveyor
5.39	Interim Standards		LS	1	0		0	
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	
Roadway Plans Technical Subtotal						**20**	**203**	
5.41	Quality Assurance/Quality Control		LS	%	5%		10	
5.42	Supervision		LS	%	5%		10	
5. Roadway Plans Total						**20**	**223**	

Project Activity 6: Drainage Analysis

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Location	0	0	0	
6.2	Pond Siting Analysis and Report	Per Basin	1	0	0	
6.3	Design of Cross Drains	EA	0	0	0	
6.4	Design of Roadway Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Outfalls	EA	0	0	0	
6.6	Design of Stormwater Management Facility (Offsite Pond)	EA	0	0	0	
6.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond or Infield Pond)	Per System	1	24	24	Roadside Ditches
6.8	Design of Flood Plain Compensation Area	Per Encroachment	0	0	0	
6.9	Design of Storm Drains	EA	4	2	8	
6.10	Optional Culvert Material	LS	0	0	0	
6.11	French Drain Systems	Per 1000 Feet of French Drain	0	0	0	
6.12	Drainage Wells	EA	0	0	0	
6.13	Drainage Design Documentation Report	LS	1	8	8	
6.14	Bridge Hydraulic Report	EA	0	0	0	
6.15	Temporary Drainage Analysis	LS	1	0	0	
6.16	Cost Estimate	LS	1	0	0	
6.17	Technical Special Provisions	LS	1	0	0	

Project Activity 6: Drainage Analysis

Task No.	Task	Units	No of Units	Hours / Unit	Total Hours	Comments
6.18	Other Drainage Analysis	LS	1	0	0	
Drainage Analysis Technical Subtotal					**40**	
6.19	Field Reviews	LS	1	0	0	
6.20	Technical Meetings	LS	1	0	0	
6.21	Quality Assurance/Quality Control	LS	%	5%	2	
6.22	Independent Peer Review	LS	%	0%	0	
6.23	Supervision	LS	%	5%	2	
Drainage Analysis Nontechnical Subtotal					**4**	
6.24	Coordination	LS	%	5%	2	
6. Drainage Analysis Total					**46**	

Project Activity 7: Utilities

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	TASK	Units	No of Units	Hours / Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	0	0	
7.2	Identify Existing UAOs	LS	3	1	3	Assume 3 utilities
7.3	Make Utility Contacts	LS	3	2	6	Assume 2 contacts, 1 hr/contact
7.4	Exception Coordination	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	0	0	no meeting
7.6	Individual/Field Meetings	LS	1	0	0	
7.7	Collect and Review Plans and Data from UAO(s)	LS	3	1	3	
7.8	Subordination of Easements Coordination	LS	1	0	0	
7.9	Utility Design Meeting	LS	1	0	0	
7.10	Review Utility Markups, Work Schedules, Processing of Schedules and Agreements	LS	1	0	0	
7.11	Utility Coordination / Followup	LS	3	4	12	
7.12	Utility Constructability Review	LS	1	0	0	
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	3	1	3	
7.16	Certification/Close-out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
				7. Utilities Total	**27**	

Project Activity 8: Environmental Permits

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.1	Preliminary Project Research	LS	1	0	0	
8.2	Complete Permit Involvement Form	LS	1	0	0	
8.3	Establish Wetland Jurisdictional Lines	LS	1	0	0	
8.4	Agency Verification of Wetland Data	LS	1	0	0	
8.5	Complete And Submit All Required Permit Applications	LS	1	16	16	SJRWMD
8.6	Prepare Dredge and Fill Sketches	LS	1	0	0	
8.7	Prepare USCG Permit Sketches	LS	1	0	0	
8.8	Prepare Easement Sketches	LS	1	0	0	
8.9	Prepare R/W Occupancy Sketches	LS	1	0	0	
8.10	Prepare Coastal Construction Control Line (CCCL) Permit Sketches	LS	1	0	0	
8.11	Prepare Tree Permit Information	LS	1	10	10	
8.12	Mitigation Coordination and Meetings	LS	1	0	0	
8.13	Mitigation Design	LS	1	0	0	
8.14	Environmental Clearances	LS	1	0	0	
8.15	Other Environmental	LS	1	6	6	FDOT Connection Permit
Environmental Permits Technical Subtotal					**32**	
8.16	Technical Meetings	LS	1	8	8	
8.17	Quality Assurance/Quality Control	LS	%	5%	2	
8.18	Supervision	LS	%	5%	2	
Environmental Permits Nontechnical SubTotal					**12**	
8.19	Coordination	LS	%	5%	2	
8. Environmental Permits Total					**46**	

Project Activity 20: Signing and Pavement Marking Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	1	6	1	6	
20.2	Summary of Pay Items-including CES Input		LS	1	2		2	
20.3	Tabulation of Quantities		Sheet	1	10	1	10	8hrs calcualtions plus 2 hrs per sheet
20.4	General Notes / Pay Item Notes		Sheet	1	6	1	6	
20.5	Project Layout		Sheet	0	0	0	0	
20.6	Plan Sheet		Sheet	2	23	2	46	40 hrs set up plus 3 hrs per sheet
20.7	Typical Details		EA	1	4		4	
20.8	Guide Sign Work Sheet (s)		EA	0	0		0	
20.9	Traffic Monitoring Site		EA	0	0		0	
20.10	Cross Sections		EA	0	0		0	
20.11	Special Service Point Detail		EA	0	0		0	
20.12	Special Details		LS	1	0		0	
20.13	Interim Standards		LS	1	0		0	
Signing & Pavement Marking Plans Technical Subtotal						**5**	**74**	
20.14	Quality Assurance/Quality Control		LS	%	5%		4	
20.15	Supervision		LS	%	5%		4	
20. Signing & Pavement Marking Plans Total						**5**	**82**	

Project Activity 22: Signalization Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	1	6	1	6	
22.2	Summary of Pay Items-including CES Input		Sheet	1	2	1	2	
22.3	Tabulation of Quantities		Sheet	1	16	1	16	includes calculating the quantities
22.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
22.5	Plan Sheet		Sheet	1	40	1	40	32 set up plus 8 hrs per sheet
22.6	Interconnect Plans		Sheet	0	0	0	0	
22.7	Traffic Monitoring Site		EA	0	0		0	
22.8	Guide Sign Work Sheet		EA	1	0		0	
22.9	Special Details		Sheet	1	8	1	8	
22.10	Special Service Point Details		EA	1	4		4	
22.11	Mast Arm / Monotube Tabulation Sheet		PI	1	8		8	
22.12	Strain Pole Schedule		PI	0	0		0	
22.13	TCP Signal (Temporary)		EA	0	0		0	
22.14	Temporary Detection Sheet		PI	0	0		0	
22.15	Utility Conflict Sheet		Sheet	0	0	0	0	
22.16	Interim Standards		LS	1	0		0	
Signalization Plans Technical Subtotal						**6**	**88**	
22.17	Quality Assurance/Quality Control		LS	%	5%		4	
22.18	Supervision		LS	%	5%		4	
22. Signalization Plans Total						**6**	**96**	

Project Activity 23: Lighting Analysis

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	8	8	
23.3	Aeronautical Evaluation	LS	1	0	0	
23.4	Voltage Drop Calculations	LS	1	8	8	
23.5	FDEP Coordination & Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	32	32	
23.7	Temporary Lighting	LS	1	0	0	
23.8	Design Documentation	LS	1	8	8	
23.9	Quantities	LS	1	0	0	
23.10	Cost Estimate	LS	1	0	0	
23.11	Technical Special Provisions	LS	1	0	0	
23.12	Other Lighting	LS	1	0	0	
Lighting Analysis Technical Subtotal					**56**	
23.13	Field Reviews	LS	1	8	8	
23.14	Technical Meetings	LS	1	0	0	
23.15	Quality Assurance/Quality Control	LS	%	5%	3	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	5%	3	
Lighting Analysis Nontechnical Subtotal					**14**	
23.18	Coordination	LS	%	5%	4	
23. Lighting Analysis Total					**74**	

Project Activity 24: Lighting Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
24.1	Key Sheet		Sheet	1	6	1	6	
24.2	Summary of Pay Items - including CES Input		Sheet	1	2	1	2	
24.3	Tabulation of Quantities		Sheet	1	12	1	12	includes calculating the quantities
24.4	General Notes/Pay Item notes		Sheet	1	4	1	4	
24.5	Pole Data, Legend & Criteria		Sheet	1	4	1	4	
24.6	Service Point Details		Sheet	1	4	1	4	
24.7	Project Layout		Sheet	0	0	0	0	
24.8	Plan Sheet		Sheet	2	4	2	8	
24.9	Special Details		Sheet	1	8	1	8	
24.10	Temporary Lighting Data & Details		Sheet	0	0	0	0	
24.11	Traffic Control Plan Sheets		Sheet	0	0	0	0	
24.12	Interim Standards		LS	1	0		0	
Lighting Plans Technical Subtotal						**9**	**48**	
24.13	Quality Assurance/Quality Control		LS	%	5%		2	
24.14	Supervision		LS	%	5%		2	
24. Lighting Plans Total						**9**	**52**	

Project Activity 26: Landscape Architecture Plans

Estimator: Paul Hiers
Date: 9/24/2008

SW 20th Avenue Smart Bus Bay
TBD

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
26.1	Key Sheet		Sheet	1	6	1	6	
26.2	Tabulation of Quantities		Sheet	1	8	1	8	
26.3	General Notes		Sheet	1	0	1	0	
26.4	Tree and Vegetation Inventory, Protection and Relocation Plans		Sheet	0	0	0	0	
26.5	Planting Plans For Linear Roadway Projects		Sheet	2	10	2	20	
26.6	Planting Plans (Interchanges & Toll Plazas)		Sheet	0	0	0	0	
26.7	Planting Details and Notes		Sheet	1	6	1	6	
26.8	Irrigation Plans for Linear Roadway Project		Sheet	0	0	0	0	
26.9	Irrigation Plans for Interchange and Toll Plazas		Sheet	0	0	0	0	
26.10	Irrigation Details and Notes		Sheet	0	0	0	0	
26.11	Hardscape Plans		Sheet	0	0	0	0	
26.12	Hardscape Details and Notes		Sheet	0	0	0	0	
26.13	Cost Estimate		LS	1	0		0	
Landscape Architecture Plans Technical Hours Subtotal						**6**	**40**	
26.14	Quality Assurance/Quality Control		LS	%	5%		2	
26.15	Supervision		LS	%	5%		2	
26. Landscape Architecture Plans Total						**6**	**44**	