TECHNICAL COORDINATING COMMITTEE MEETING

March 11, 2005
9:00 AM to 12:00 AM
Blueprint 2000 Office
Ellis Building – Koger Center
1311 Executive Center Drive
Suite 109

Facilitator: Jim Davis

Agenda

I. AGENDA MODIFICATIONS

Jim Davis

II. INFORMATION ITEMS

1. January 21, 2005 Technical Coordinating Committee Meeting Minutes
   Jim Davis
2. Capital Circle NW/SW EPD&E Study Status
   Jim Shepherd

III. PRESENTATIONS/DISCUSSION

2. Scope of Services for Capital Circle Southeast (Tram to Woodville)
   Doug Martin
3. Capital Cascade Trail Status
   David Bright
4. Addition of the Construction of the Segment 4 of Cascade Trail into Tier 1 of the Blueprint Program
   Jim Davis

CITIZENS TO BE HEARD
*Citizens desiring to speak must fill out a Speaker Request Form; the Chair reserves the right to limit the number of speakers or time allotted to each.

IV. DISCUSSION AND COORDINATION OF OTHER RELATED CITY AND COUNTY PROJECTS

V. ADJOURNMENT
Tony Park, Vice Chairperson, called meeting to order at 9:05 pm.

Committee Members present:

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<th>Rodney Cassidy</th>
<th>Michael Wright</th>
<th>Ben Fusaro</th>
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<tr>
<td>John Buss</td>
<td>John Kraynak</td>
<td>Sean McGlynn</td>
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<td>Theresa Heiker</td>
<td>Jim Davis</td>
<td>Hilda Gilchrist</td>
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<td>Jack Kostzewa</td>
<td>Wayne Tedder</td>
<td>Linda Jamison</td>
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<td>Tony Park</td>
<td>David Bright</td>
<td>Shelonda Gay</td>
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<td>Phil Maher</td>
<td>Tammy Peters</td>
<td>Ray Youmans</td>
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<td>Mark Llewellyn</td>
<td>Ed Ringe</td>
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<td>Maribel-Nicholson-Choice</td>
<td>Hilda Gilchrist</td>
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<td>Jerry Oshesky</td>
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I. Agenda Modifications

Master Plan

II. Information Items

**Item #1: Acquisition for Capital Circle Southeast**

Phil Maher gave a brief overview of the agenda item. Jerry Oshesky stated that they have a resolution coming before the Intergovernmental Agency (IA) for the acquisition of parcels for Capital Circle Southeast. There are thirteen parcels south of Tram Road required for the transition of this project. The right-of-way acquisition policy requires that we take resolution to the board, identify the parcels prior to starting the acquisitions process.

Theresa Heiker asked if there has been any discussion with the landowner. Mr. Oshesky stated no, they had just finished the right of way map. (See the attached exhibits) Jim Davis stated that according to how the real estate policies are setup, once the board approved the parcel they would not have to go back to the board for the acquisition.

**Item #2: Conservation Easement: Thompson Property (Headwaters of the St. Marks River)**

Dave Bright stated that the Sensitive Land working group and Blueprint 2000 prioritized, in 2004, approximately 9,000 acres in the eastern part of Leon County for total, conservation, or easement acquisition for the protection of the headwaters of the St. Marks River. At that time a few of the parcels, owned by Lex Thompson, came available. Mr. Thompson has
had discussions with the Northwest Florida Water Management District (NFWWMD) regarding the property. He currently has a timber contract on these parcels. Blueprint is trying to acquire the conservation easement at the value of the timber contract. (See map)

Mr. Davis stated that Mr. Thompson parcels falls within the agreement with the NFWWMD. Mr. Thompson contacted the District months ago; Mr. Thompson has a timber contract; the district contacted Mr. Thompson giving him the standard acquisition timeframe, which could possibly take in 6 months.

Mr. Thompson has previously stated he would not wait; the timber would be harvested as soon as it was mature. Blueprint, with the NFWWMD, is trying to acquire this priority 1 parcel. Blueprint only has seven priorities 1 parcels at this time.

The contract, which has been review by Debra Schiro, includes a sizeable refundable deposit and appraisal of the property. The contract price is $200,000 for 132 acres for a conservation easement over the entire parcel. If the property is appraised above the $200,000 mark, then Mr. Thompson gets 30% of the increase amount. If the appraisal is greater than $400,000, Mr. Thompson is entitle to an amount not less than 75% of the appraisal value. If it were below $200,000 then we would negotiate. Michael Wright asks what Mr. Thompson could do with the property. If Blueprint gets the conservation easement he could sell and put one resident per 40 acre.

If Mr. Thompson did sell, to Blueprint then NFWWMD could reimburse Blueprint. Blueprint staff has not ruled out NFWWMD coming on board with there 50% after the fact. If NFWWMD did not choose to participate, Blueprint staff would seek matching funds from The Florida Community Trust.

Mr. Thompson stated NFWWMD wanted to cap the price at $200,000. If it was less than $200,000 NFWWMD want him to sell at that price, if the appraisal is more than $200,000 Mr. Thompson get only the $200,000. If the district and our total cost end up being 210,000, the first option Blueprint would eat the extra 10,000, transfers the property easement to NFWWMD, and take the $100,000 credit with the district. If the district did not agree Blueprint would go to Florida Community Trust for matching dollars.

No motion needed information item only

| Consent Items |

| Item #3.; August 30, 04 Technical Coordinating Committee Meeting Minutes |

Theresa Heiker stated there was an issue with page 6 item 9 issues A. Ed Ringe stated that Leon County’s Lake Munson Environmental Protection Agency (EPA) contract required Lake Munson be converted to XP-SWMM. Ms. Hiker further stated she could not remember how that came up but there was not a requirement for the Lake Munson model to be converted. Mr. Davis stated that they would strike this from the August 2004 minutes.
The motion was made by Michael Wright and seconded to accept the changes to the August ‘04 minutes. It passed unanimously.

**Presentations/Discussion/Action**

**Item #4: Redefining the role the Technical Coordinating Committee**

Maribel stated due to the Sunshine Law it is necessary to redefine the role of Blueprint’s Technical Coordinating Committee (TCC) this is to revise the TCC rules of procedure to more accurately reflect that the TCC is a fact finding body with professional advise and with technical expertise to the Blueprint 2000 staff director.

Michael Wright asks if the TCC would adopt the changes. Mr. Davis stated that the IA would adopt the redefining roles; this was for their recommendation only. The changes involved the sunshine law; instead of being a voting body the TCC would become advisory body only. Mr. Davis would chair all meetings the committee would still make recommendation and comments to the IA and they would still receive minutes of the meetings, but, there would no be no voting. This information is on file at Blueprint. The motion was made and seconded. It passed unanimously.

**Item#5 Capital Cascade Trail Master Plan**

Mark Llewellyn, of the Genesis Group, presented the slideshow, from the November 30, 2004 public workshop, of the staff recommended concepts for each segment. Mr. Jim Davis discussed the public workshop; which many people from the community attended. The attendees shared their ideas and opinions on the concepts, some were very definitive ideas for the trail or park but the majority liked all alternatives. Their strongest feeling was to ensure something was done. Subsequent to that meeting Blueprint staff met with several community groups throughout the area to learn their positions as well. The information was reviewed and, where they could, Blueprint staff incorporated these desires and recommendations into one of the alternatives for each segment.

Jim Davis stated that they used the EECC report as their baseline document, for all segments. The project report for Franklin Boulevard, segment one, was more specific. (see attachment)

The EECC struggled with section one the most, and they recommended a four lane divided highway with bike lanes and sidewalks on each side. Staff saw a continued need for a trail network. They tried to see what they could do to create a multi-use trail. The compromise was the 10 ft inside lane and a 13 ft shared outside lane. This concept doesn’t have the four-foot necessary for dedicated bike lane; it does however, provides additional space for bikes, above and beyond what is there now, along with two box culverts, approx. 10 by 10 each. There are provisions for landscape easements along edges, or at least landscaping for owners to plant at their will. A question was asked about the existing right of way, which is 80 ft.
Another question was asked about the shared trail and 13 ft shared outside lane, and what they are trying to accommodate there. Mr. Davis stated that they are attempting to accommodate the commuter cyclist who might want to use the shared 13 ft lane and the recreational cyclist who will most likely want to use the multi-use trail. Also, clarified that they must have four feet for a stripped bike lane. It was stated that a motorist would not likely share the lane with a cyclist; the motorist would instead move over to the next lane. It was asked if they were satisfied with not having a dedicated bike lane. Staff responded that while it would be preferred, the multi-use lane accommodates the need. Additionally, the shared outside lane provided a “cushion” for cyclists. Mr. Bright responded that as a previous bike/ped coordinator, it was clear that he would strive to have more width, but they are also trying to provide some green between the sidewalk and outside lane. Additionally, the community requested to have a wide trail on this segment, so they would have a consistent trail throughout. Mr. Bright stated that with parents pushing strollers, etc, it would become very congested, and that they could reduce the multi-use trail and add some additional feet to the road for bike lanes (which is what the bike/ped committee recommended). However, it was a matter of having only 80 feet of right of way and it was a trade-off, 13 feet vs. 10,11, or 12 feet and having a large sidewalk. Mr. Davis again added that this was a compromise.

Another issue was raised about landscaping between the curb and sidewalk; that nothing would grow in the 2.5 foot allotted, nothing would survive or be maintained. Additionally, the 9-foot median raised concerns and what happened with turn lanes. Mr. Davis added that the median “goes away” at that point. A question was asked if the multi-use lane was reduced to 8 foot, would give the extra foot needed for each outside lane to have a stripped dedicated bike lane. Mr. Davis stated that Jennifer Carver (the MPO bike/ped Coordinator) would not argue over the bike lane issue because it was more than what was there currently.

A comment was made that multi-use lanes were inherently less safe than bike lanes because of the intersection treatments. It was added that this was because people do not pay attention- because people do not look to the left at intersections to make a right turn that is where cyclists are coming from. The intersections of the trail would be treated as a travel lane. It was stated that the bike/ped committee preferred the recommendation to the current situation, but they also wanted it “done right” and the bike lanes and shared use lanes would not provide safety to those in the community who are “hard-core” travelers. Mr. Davis reiterated the bottom line was the trade-off between which lane would actually receive more use, a dedicated bike lane or the multi-use trail. Mr. Davis listed the many different uses the families in the area will most likely want to pursue along the trail: roller-blade’s, cycling, walking, etc, will be better provided for by the 10 foot trail, rather than to a dedicated bike lane. He added that the Capital Cascade Council enthusiastically supports the wider multi-use trail, and select members of the EECC loved this concept and felt it was an improvement on what they originally proposed. Mr. Davis stated his preference was that the multi-use should be 12 foot wide.

Mr. Michael Wright asked about the landscaping, and what the minimum width was for landscaping, for something to grow. The response was four foot was needed for a tree, but
seven or eight foot was preferred. The goal for him was to have more landscaping, and therefore more separation between the curb and sidewalk. Mr. Wright stated that his preference would be five foot for landscaping on one side, with 0 on the other, to allow for things to grow and avoid a maintenance nightmare. It was added that if the 5 feet were on the trailside, it would make it more comfortable for users. However, purchasing right of way is not part of the equation, they have to stay within the 80 foot. It was also added that a new residential project was being constructed in the area, boosting the number of potential users.

A committee member brought up that having a trail was, and has been, a central tenet of this project, along with transportation, but that reducing the trail for “accessory” amenities like the dedicated bike lanes is not necessary. An example of Killearn cyclists was given; although it was certainly not ideal, people cycle there without any bike lanes. The idea to move the landscaping to one side completely was seconded, because people do NOT like being right up against traffic. The idea to take out the extra cushion of three feet on the outside lane was raised, but most supported leaving it at 13-foot, not widening to 14-foot. A question was asked on whether there was a gutter in the plan, the answer was no. There would be sewer inlets along the way. It was added that flexible pavement was not ideal because the pavement would become eroded, creating potholes.

Additional details were discussed, but it was advised to steer clear of designing the Greenway in this meeting, to instead look at the overall picture. Safety issues were top priority. An issue was raised on the language in the Comp Plan, requiring dedicated bike lanes, and if the multi-use trails will satisfy.

Right of way was looked at extensively by Blueprint, it was not affordable initially, and the cost has increased since then. Mr. Davis stated that approximately 10 million dollars would be needed to acquire additional right of way. The decision was made to reallocate the funds for downstream where it could be spent on more suitable water quality projects.

Theresa Heicker was concerned about the capture of storm water from the cross streets which have a substantial effect on the flooding, would plans create improvements. Ms. Heicker felt that after discussions with staff, a single box culvert would be sufficient to pass the flow of water on Franklin, and the second would be used to provide storage along the right of way for the peak flows. Mr. Davis stated that was essentially correct, but that the second box culvert would provide some conveyance. Ms. Heicker’s concern was that the second culvert represented a storage facility that would have maintenance hazards due to the confined space, utility crossings and limited access. Her significant concern was putting storage of this type within this right of way. She believed there were other solutions that need to be considered. She was informed that these concerns could be addressed in the design process.

Mr. Davis noted there was substantial work to be completed regarding storm water issues. He reiterated that these were concepts only, and all the details will be worked out at a later design process. A committee member stated they were not ready to move with the concepts as they stood, the major comparative things that have done yet been done to answer questions on whether one culvert or two is needed. Another committee member added that he does not
support the box culverts. The question was asked approximately how much capacity we could get from one boxed culvert. Mr. Llewellyn stated his analyses show that a single box culvert could convey the 25-year storm water. It was suggested that not enough time has been allowed for iterative questions, for this specifically and in general.

It was suggested that perhaps it would be better to have a single 12-foot culvert rather than two 10-foot culverts to handle with a 30-year storm, after all, the biggest problem was flash flooding. Mr. Davis reminded the committee that staff started with essentially a blank piece of paper, and this was still preliminary work. This is the first step in a multi-step process.

A committee member stated that underground storage was NOT preferred. Mr. Llewellyn stated that there were limitations to any of the options; a special concern was flooding at South Monroe. Mr. Davis added that the ultimate solution was to rebuild Lake Leon and catch the water upstream, but he recognized that there were parameters.

It was stated that there was a lot of discussion between the Science Advisory Committee that perhaps a combination open ditch/box culvert was still possible, and that the Citizens Advisory Committee concurred with that. However, Mr. Davis said that it was unrealistic because of the turn lanes; the stream would have to be underground anyway. Mr. Davis felt that, because of the limited right of way, it was impossible to leave any of the streams open. Mr. Davis felt that this was not a good option due to aesthetics additionally trail users would be better served by landscaping than the preservation of the stream. A question was asked about a small state owned green piece on the concept, due to large quantities of green space, could this area be used for residential space? The response was that the area was quite small, however, current urban development was occurring on smaller pieces of land.

Phil Maher stated that there had been discussion with the State of Florida, not about that piece of property, but about use of their property is segment 2 for storm water and accommodation for their parking. Mr. Llewellyn stated that this was right of way and not part of Management Services property.

Tony Park asked if Mr. Davis would take questions on each segments. Mr. Davis stated that he would.

Citizens to be heard

Sean McGlynn, representing himself and local residents (Segment 1)

Mr. McGlynn stated that he had live on Franklin Boulevard all his life, and his grandparents before him. No one is more concerned about the flooding than him. He would like to see a permanent solution. The stream does not flood the road, its the dip that floods the road (at Park and Franklin). If the culverts under the bridges were fixed, and the dip in the road, the stream could carry the flow of water. Other people have said that the solution lies beyond the basis; there is not a holding pond or retention pond or rate control any where in that stream.
valley. He said they needed storage at Leon and needed to start at the beginning. (He presented an article from the Feb 7, 2000 issue of the Tallahassee Democrat where it stated that the people of Franklin Boulevard would have a river-walk.) The stilling ponds should be at the beginning. He recommended everyone buy a copy of Between Two Rivers and read Julie Hauserman’s essay, ‘Florida’s Lost Waterfall.’

Hilda Gilchrist, Landscape PE Arc. W C.O.T.P.W Engineering

Ms. Gilchrist stated that the existing 80-foot right away in red (see attached map) She stated for comparison, the multi-use trail on Blairstone road was eight feet. That is useable by families therefore the extra foot could be use on landscape She would like to see the separation on both sides. The issues that have been mentioned with the 60% median there is a alternative which means that curbs there that allow water to flow in the low point or water that swells trees could grow in a swells it would be more apparent this way having swells this would keep up with the characteristic please keep in mind the fact that this is a flooding area. So I would like for you to consider that in regards of the underground culvert systems, whatever size that might be, 12x12, 14x14 whatever it end up being 16x10 in the maintain I think the maintain issue could be worked out in deed the if only way we could convey water which I agree would be the last resort and that in improvement, but to end up with under ground is there not away to engineer the under ground convert system faculty of cleaning, by taking the double convert over and create a wall that’s allows pedestrian to have control access much narrow culvert. so that is times up.

Ben Fusaro

Mr. Fusaro stated that he came up with the modified design and the concept that Mr. Davis was talking about with minor changes. The last separation of the first flush of water was where most of the toxins and pollution would be it would use pipes. They could be separated from the side the first flush could carry out flow through the pipes that stop the polluted water in to the xxxx it’s much easy to clean pipes that culverts than dilution culverts. He did not care how large the box culverts were he felt it would not work. He suggested they leave the stream as it was. He further stated he did not think they needed turn lanes.

Mr. Davis stated they tried to come up with a comprised solution; this was not the perfect solution because segment one was the most difficult because it was such a constrained area. He further stated that Blueprint staff was concerned with the water flow in the box culverts. They would like to reduce the box culver to a size that they think is the minimum that provided no options in the future. With divide out the whole road way again, we have not talk about is blocking street here (see attached segment).

Mr. Davis added Mr. Wright was fine with moving to the next segment. Mr. Wright asked if the budget included utilities re-location. Mr. Davis stated that it did. Mark Llewellyn stated that all utilities would go under ground.
Ms. Linda Jamison, of the Big Bend Sierra Club, advocated for the stream also. She read a portion of their policy on flood plains, which is published nationally. “In flood protection, emphasis should be placed not on structural controls, but on floodplain management, including flood proofing … and zoning for compatible uses to control future development. To maximize environmental benefits, floodplains should be utilized for wetlands, agriculture, parks, greenbelts, groundwater recharge, buffer zones for protection of in stream uses, and other uses compatible with the flood hazard. Structural devices should not be used where they would encourage development in floodplains.” (Sierra Club Conservation policy on water can be found at http://www.sierraclub.org/policy/conservation/water.asp) Ms. Jamison further stated 50-80% of the water in St. Augustine Branch comes from the 341 acres north of Tennessee Street. Understanding this is outside of Blueprint’s boundaries, but it is imperative to address it in order to move forward in a viable fashion with plans for segment 1. Human interference destroyed the natural wetlands surrounding the old Lake Leon. Sierra Club advocates restoration of wetlands, as they are natural flood mitigates keeping excess water near the source of origin. Pervious surfaces need to be installed in that area to reduce the runoff load into St Augustine Branch. They hope that the time would be dedicated for a scientific search for an integrated solution, anything less would only be a band-aid. The article and essay were copied for distribution to the members.

Mr. Davis quickly reviewed the recommended concept for all segment.

Mr. Davis stated that staff met with the CAC and went through each of the segments. They had concerns with Segment one and did not recommend it. Their issue was that the solution must include storage and water treatment off site, to include Leon High School. The CAC thoroughly and completely endorse the staff recommendations.

Mr. Davis continued with segment two; this incorporated the desire citizens expressed the 2004 public workshop Mr. Wright asked what were the plans for the under-ground culvert. Mr. Davis stated there were no changes.

Theresa Heiker state that the there are some budget concerns I didn’t think that this was a Blueprint solely funded project the decision she had with the EECC the community would be involved that the city and the county and the school board and any government enteritis to provided assistant there are grants available.

Received the technical comments on the modeling that was completed 2-E, as your recommended concept was not submitted for one as a model segment to see for review. There were technical concerns raise regarding water clarity, flood plans, elevation of five to six feet at the stilling pool and a 20-foot elevation difference at Centennial Field. Additionally the railroad overpass did not provide the type of vertical different… The major flows will create the elevation changes that you introduction into the segment. She had some concerns about moving forward at that time.
Mr. John Buss stated that he agreed with Ms. Heiker; this should be transferred to segment three because it would be the under ground area. The committee felt that it was not ready for review. They need more information is not there to truly evaluate these concept.

Ms. Jamison expressed concern for the karst area on behalf of Sierra Club, with regards to the remediation site. She questioned how a sinkhole, for example, would be handled during the clean up process. Mr. Davis replied that Koren Taylor was the project manager for the City, which is the entity responsible for the remediation; she would be the person to elaborate on that scenario. He did state that he was aware of borings and attempts to identify areas that would be sensitive to that possibility. All groups involved with the remediation process would be sensitive to the possibility and exercise due diligence to ensure that does not happen. If it does, however, it would be repaired.

Hilda Gilchrist expressed more concern about the pedestrians she felt that they needed only one plaza and limited construction on the green space. She stated a site analysis should be performed to determine the “In” places that are pleasant to be in and preserve them. (Please see the attached article Tallahassee Democrat)

Ruth Horton, Rail Road Square manager, accepted whatever needed to be done when the EECC put the budget together they did envision construction as segments 1,2,3,4. Blueprint recommendation was to build 2,3,1,4. Segment 4 would not be done anytime soon, but if funds came available they would proceed with segment 4, they support segment 2,3,4,1

This was our staff recommendation Mr. Davis quoted: “from the biggest enemies of a good plan was a perfect plan.” Staff is trying to find the perfect plan. He stated if the TCC saw short falls help staff repair them instead of tying to find a way to kill the project. They needed to move it along. We do not need to study these for 10 years.

Theresa Heiker stated: the conference point with Lake Munson Slough the west drainage ditch and the central ditch have experience backup water condition, put the water in Lake Bradford. The treatments of the central drainage ditch is very important of protecting the water quality for Lake Bradford the flood level plans that are in the modeled based on the Jamie technical comments what he has seen at this points indicate you have a 5 foot existence of your channel within this range at Springhill road that’s a major problem with been able understand that there was a five-foot easement change for the channel. That’s a major problem you are missing 5 feet of water out of your model Springhill is 43”the one hundred year old flood plans are 48 inch where does the other 5 feet of water go. You have the model losing it you have instability that’s the concern with the adequacy with the recommendation. Ms. Heiker felt that there needs to be more research; this plan is just not ready to go forth.

We have seen under minding of our structure caused by water velocity along Springhill Road for road pond associated with Springhill Road. We have a treatment facilities to the North and South, the under minding at this facility makes it, for me, a safety concern by putting the trail under the road. The statement about the using the south facility; that south property was acquired with the construction Callen Street ditch. Callen Street was originally a smaller
cross section than it is currently experienced south of Orange Avenue. The geomorphology and analysis of stream condition...I did not see a discussion of the velocity that was anticipated within the design and how that is being addressed in this recommendation. Further concerns are that the velocity would not be enough to support a habitat restoration and she would like to see that particular design condition reflected in a design analysis. The karst features adjacent to the project raise substantial concerns with the proposed water level fluctuations. She felt it was premature to move forward with any concept. She would like to see a model that identifies all storm flows are captured, that you are aware of velocities within the channels and stability analysis, accounted for normal flow conditions, etc. The type of analyses that would represent to the public what could be expected for an average yearly event. Therefore they could determine if they would prefer recreational features or storm water management. Further discussion followed

There was a motion by Michael Wright and second stating that based on the committee’s recommendation that the above questions need to be addressed before the committee approved these concepts. The segment was not approved

**Item# 6 Blueprint 2000 Revised Master Plan**

Phil Maher presented this item to the committee. Mr. Maher stated that the Master Plan Blueprint being presented was the propose master plan presented to the IA at their September 20, 2004.

A question was posed regarding available resources and the totals in the columns of the Master Plan. John Buss asked if all projects netted interest and how it was determined whether to pay interest or not. Jim Davis explained that the IA approved a year ago, that if any entity received money early, interest was paid on that project. With the varying directions and fiscal restraints, Mr. Maher stated is unable to incorporate all the recommendations without further guidance. There are number of conflicting issues that need to be resolved prior to further development of the master plan. The following are several of the questions that need to be resolved:

1. Is Capital Cascade Trail (segment 1 thru 4) a higher fund priority than completing Capital Circle from HWY 20 to Springhill Road? Is this segment of Capital Circle dependent upon additional external funding?
2. Should dollars be placed on all segments of the roadway or should the goal be completing as many segments of the roadway as possible at the expense of other segments?
3. For budget purposes should the 230-foot typical section with meandering sidewalks be incorporated in all segments of Capital Circle (see attachment 2)?
4. Is the adopted strategy of “dollars follow production” one that Blueprint should continue to pursue?
5. Should the sensitive land projects continue to be fully funded as currently presented?
6. Is it critical that all the additional storm water retrofit and greenways cost associated with Capital Circle Northwest and Capital Circle Northwest/Southwest ($22,968,656) coincide with the construction of the roadway? Are all or part of these retrofit and greenway funds available for reallocation to other like projects?

7. Are the City and County water quality funds remaining, after the $10 million allocation each, available for relocation to other water quality projects?

8. Should funds currently slated for the construction of Hwy 90 to Hwy 20 be diverted to other projects anticipating SIS funding in the future?

Mr. Maher stated that based on the committee’s recommendation, the above questions need to be addressed by the IA before any further work was completed on the Master Plan. The committee noted this statement as a motion and it passed unanimously.

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<td>There being no further business, Tony Park, Vice Chairman, adjourned the meeting at approximately 12:10 pm</td>
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STATEMENT OF ISSUE:

This item provides the TCC an update on the status of the Capital Circle NW/SW EPD&E Study.

SUPPLEMENTAL INFORMATION:

H.W. Lochner (Lochner), the consultant for the project, received Notice To Proceed on May 10, 2004. There are two major deadlines for the project. The first occurs on May 10, 2006, at which time Lochner is to have completed the Expanded Project Development & Environment (EPD&E) Study; prepared approx. 60% design plans; prepared right-of-way maps; and submitted all necessary permits. The second occurs on May 10, 2007, at which time all permits should be obtained and any revisions to the right-of-way maps will be made based on negotiations with property owners.


Lochner has prepared a typical section package, an access management plan and conceptual drawings for the project. Lochner has conducted a Public Kickoff Meeting, three Project Advisory Group (PAG) meetings and is scheduled to conduct the Alternatives Public Meeting this summer.

RECOMMENDED ACTION:

No action requested, for TCC information only.

ATTACHMENT(S):

None
Agenda Item

SUBJECT/TITLE: Scope of Services for Capital Circle Southeast (Woodville to Tram)

Date: March 11, 2004  Requested By: Staff
Contact Person: Doug Martin  Type of Item: Discussion

STATEMENT OF ISSUE: This item presents, for review and comment, the Scope of Services for the Design of Capital Circle Southeast from Woodville Highway to Tram Road.

SUPPLEMENTAL INFORMATION:

The Scope of Services was derived from the standard scope of services process currently in use by the Department of Transportation. The primary modifications to the Scopes of Services was to update the Agency name and specific issues related to delivery requirements and aesthetic design requirements to concur with the Multimodal Design Guidelines for Blueprint 2000.

RECOMMENDED ACTION:

1. Provide advice and comment on the attached Scope of Services for the Design of Capital Circle from Woodville Highway to Tram Road.

ATTACHMENT(S):

Draft Scope of Services
EXHIBIT A

SCOPE OF SERVICES
FOR THE DESIGN OF
CAPITAL CIRCLE (STATE ROAD 261/263)
FROM WEST OF WOODVILLE HIGHWAY TO SOUTH OF TRAM ROAD

LEON COUNTY

DRAFT
1 PURPOSE

2 PROJECT DESCRIPTION

2.1 Roadway
2.2 Drainage
2.3 Utility Coordination
2.4 Permits
2.5 Signing and Pavement Markings
2.6 Signals
2.7 Lighting
2.8 Landscape Architecture
2.9 Survey
2.10 Mapping
2.11 Geotechnical
2.12 Architecture
2.13 Joint Project Agreements
2.14 Specifications Package
2.15 Project Schedule
2.16 Submittals
2.17 Provisions for Work
2.18 Services to be performed by the AGENCY

3 PROJECT GENERAL TASKS

3.1 Public Involvement
3.2 Joint Project Agreements
3.3 Specifications Package Preparation
3.4 Contract Maintenance
3.5 Prime Project Manager Meetings

4 ROADWAY ANALYSIS

4.1 Typical Section Package
4.2 Pavement Design Package
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SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES

HIGHWAY AND STRUCTURAL DESIGN

This Exhibit forms an integral part of the agreement between BluePrint2000, Intergovernmental Agency (hereinafter referred to as the AGENCY) and ___________________________ (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

Financial Project ID: 415782/5

Description:

E2: SR 261/263 from west of Woodville Highway to south of Tram Road

LEON County
1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the AGENCY in connection with the design and preparation of a complete set of construction contract plans and special provisions, if necessary, for:

- Roadway improvements to the transportation facility described herein

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 AGENCY to ensure the project is built as designed and to specifications. Elements of work may 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 Florida Department of Transportation’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 AGENCY. All plans and design documents are to be prepared with Standard English values in accordance with all applicable AGENCY manuals and guidelines. The CONSULTANT shall be aware that as a project is developed, certain modifications and/or improvements to the original recommendation may be required. The CONSULTANT is to incorporate these refinements into the design and will consider this effort to be an anticipated and integral part of the work. This will not be a basis for any supplemental fee request(s). The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the AGENCY 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 AGENCY 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 AGENCY will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of the contract plans. The AGENCY will provide job-specific information and/or functions as outlined in this contract.

2 PROJECT DESCRIPTION

The CONSULTANT shall investigate the status of the projects and become familiar with concepts and commitments (typical sections, alignments, etc.) developed from prior studies. It is the AGENCY’s intent that all of the Capital Circle is designed such that the aesthetics and general design remain constant. Therefore, the CONSULTANT shall coordinate with the appropriate parties to insure that the design remains consistent with adjacent rehabilitation projects. If a Preliminary Engineering Report is available from a prior or current Project Development and Environmental (PD&E) study, the CONSULTANT shall use the approved concepts as a basis for the design unless otherwise directed by the AGENCY.

The property along both ends of the project, at Woodville Highway and at Tram Road, is located in unincorporated Leon County. The central portion of the project is located within the Tallahassee City
Limits. The project is located between Milepost 0.000 and 2.12 of SR 261 and includes a short segment of SR 263 between milepost 0.0 and approximate milepost 0.2 for a transitional section west of the Woodville highway intersection. The proposed alignment is located within Sections 19, 20, 21, 28, 29 and 30, Range 1 East, Township 1 South. The Straight Line Diagram covering the project is presented in Exhibit 2 in the Capital Circle Southeast – Woodville Highway to Tram Road (E2) concept report.

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

2.1 Roadway

Plan Type: plan/profile

Typical Section/s:

E2, West of Woodville Highway to south of Tram Road: An urban typical section with curb and gutter, sidewalks, bicycle lanes, landscaped median, landscaped borders, utility strips and sufficient additional width for future Blueprint 2000 amenities will be constructed (refer to EXHIBIT 3 of the E2 Concept Report). The typical section will be consistent with all FDOT and FHWA safety criteria, with aesthetic improvements added that are consistent with Blueprint 2000’s Multi Modal (aesthetic) Design Guidelines.

This design is for a six (6) lane URBAN facility with curb and gutter and four (4) foot bike lanes. The sections will have a five (5) foot sidewalk on one side and a ten (10) foot sidewalk lane on the other side TBD. There will be a six (6) foot minimum utility strip on both sides of the facility between sidewalk and the back of the curb.

Limits:

E2: SR 261/263 from West of Woodville Highway to South of Tram Road.

Major Intersections/Interchanges:

A major intersection is located at Woodville Highway. Also note that the St. Marks Trail crosses at this intersection as well. Also, coordination will need to occur with St. Joe/Arvida/Southwood to determine if or when a signal will be warranted.

Variations/Exceptions:

Variations and Exceptions will be addressed on a case-by-case basis. Also, please reference the included PD&E and CONCEPT report.

Back of Sidewalk Profiles:

Not required for this project.

Level of TCP Plans:

Level II & III traffic control planes are required.
Temporary Signals:

Temporary signals will be required at the signalized intersection located at Woodville Highway.

2.2 Drainage

Although no wetlands areas were discovered during the field review for this concept report, an important restriction placed on the drainage design will be no drainage structure or facility will discharge directly into wetland areas. For additional information please refer to section 4.3 of the Project Concept Report for E2. The area in and around the proximity of the project is highly sensitive to KARST related and retention pond depth issues.

2.3 Utility Coordination

Although existing utility information has been provided, the design consultant will be solely responsible for the identification and surveying (verifying horizontal and vertical locations) of existing utilities, the coordination with utility owners, and the preparation of adjustment plans to resolve utility conflicts. Please refer to the E2 Concept Report for additional information.

It is recommended that the design consultant contact Sunshine State One-Call System at 1-800-432-4770 to verify the list of utilities with infrastructure within the project limits. Be advised that not all utilities are members of the One-Call System and may have to be contacted individually to obtain information on its facilities. With this information, the design consultant team can schedule a site visit to inventory the existing infrastructure and determine potential utility impacts.

2.4 Permits

This segment of Capital Circle SE runs through both the City of Tallahassee and Leon County, requiring separate stormwater permits from both the City and County. Having both permitting programs reviewing the same designs can lead to conflicts in direction and significant project delays. It is recommended that a delegation of authority from one of these entities to the other be pursued for review of this project. Such delegations have been granted in the past in similar circumstances. Fees for the required local stormwater permits will vary depending upon whether Leon County or the City of Tallahassee performs the review. Standard form stormwater permits from the City would be $1,170 for the first 5,000 square feet (SF) of impervious surface, $0.03 per SF for the next 45,000 SF, then $0.04 per SF for anything above 50,000 SF of impervious. County standard form stormwater permits are considerably higher in fees, with a base fee of $1,585 for the first 5,000 SF, plus $0.11 per SF for the next 95,000 SF, then $0.20 per SF for anything above 100,000 SF of impervious surface. For large road projects, the stormwater permit fees can become considerable.

The current fee for a FDEP Chapter 62-25 F.A.C. stormwater permit is $1000.

Environmental permits may be required for this segment of Capital Circle under Chapter 373 F.S., administered by the Florida Department of Environmental Protection (FDEP) and the Land Development Regulations (LDRs) of the City of Tallahassee and Leon County. It does not appear that there are any impacts to state regulated wetlands on this project. Tree removal permits are also likely to be required, costing $375 for the first 100 trees, plus $6.25 per tree for any additional (City of
Prior to applying for local environmental permits, it is required to complete the Environmental Analysis process, which consists of identifying protected natural features on the project site, called the Natural features Inventory (NFI), and then describing any impacts the project will have on those features and how those impacts will be minimized or offset, called the Environmental Impact Analysis (EIA). Both City and County have similar processes in this regard, but with Leon County fees being slightly higher. City NFI fees are $650 plus $15 per acre for sites over 5 acres, with County fees equaling $1,050 plus $23 per acre over 5 acres. City EIAs cost a flat $540, but Leon County’s are $1,130 plus $20 per acre over 5 acres. All of these fees are slightly higher if the site is within an identified 100-year floodplain. Both the City and County strongly recommend completion of the NFI process and initiation of the EIA process before completion of project design, to allow the project to avoid environmental impacts to the greatest extent practicable. Both city and county LDRs would consider the road widening project to fall under the provisions of Public Sector Linear Infrastructure (PSLI), which allows a greater percentage of the site to impact protected natural features. Other types of projects are restricted to impacting no more than 5% of a protected feature on the site. PSLI projects are allowed to impact up to 25% of the feature under county regulations, with a Board variance, or up to 100% of the feature within city rules. Due to past impacts of silviculture on both sides of this segment, there are few, if any, environmental features to be protected. Shallow karst features exist on both sides, but are primarily of interest relative to stormwater treatment and disposal. There is the potential for the occurrence of bent golden aster (Pityopsis flexuosa), a listed species which is globally rare, but sometimes locally abundant in south Leon County. The presence of this species should be inventoried and, if present, mitigation options will need to be explored. Permits shall be acquired from the City of Tallahassee, Leon County and FDEP. Refer to section 2.1 in the concept reports for additional information.

The AGENCY will direct use of mitigation site or Senate Bill.

2.5 Signing and Pavement Markings

The proposed signing and pavement markings will be in accordance with the FHWA Manual on Uniform Traffic Control Devices, the FHWA Standard Highway Signs and the Florida Department of Transportation Design Standards. The design will also incorporate Blueprint 2000’s Multi Modal Design Guidelines for signage into the proposed project.

2.6 Signals

Intersections:

New traffic signals will be required at the Woodville Highway Intersection. The design will also incorporate Blueprint 2000’s Multi Modal Design Guidelines for signal masts/poles into the proposed project. The St. Marks Trail may need special signalization as well.
Traffic Data Collection: Reference the E2 Concept Report and replicate the studies that were performed in 2001.

Traffic Studies: Reference the E2 Concept Report and replicate the studies that were performed in 2001.

Count Stations: Reference the E2 Concept Report and replicate the studies that were performed in 2001.

2.7 Lighting

The design will incorporate Blueprint 2000’s Multi Modal Design Guidelines for lighting into the proposed project.

2.8 Landscape Architecture

Planting Plans:

The design shall incorporate Blueprint 2000’s Multi Modal Design Guidelines for landscaping into the proposed project.

2.9 Survey

Design Survey: West of Woodville Highway to South of Tram Road.

Right of Way Survey: West of Woodville Highway to South of Tram Road.

2.10 Mapping

Control Survey Map: West of Woodville Highway to South of Tram Road.

Right-of-Way Map: West of Woodville Highway to South of Tram Road.
2.11 Geotechnical

Geotechnical services shall be required as per the developing design.

The following examples will require borings: roadway, structures, ponds, lighting, etc. This list will be developed during the design.

2.12 Architecture

N/A.

2.13 Joint Project Agreements

City Water and Sewer.

2.14 Specifications Package

The CONSULTANT shall prepare, sign and seal the project specifications package.

2.15 Project Schedule

Within ten (10) days after the Notice-To-Proceed, and prior to the CONSULTANT beginning work, the CONSULTANT shall provide a detailed project activity/event schedule for AGENCY and CONSULTANT activities required to meet the current AGENCY Production Date. The current production date is TBD. The schedule shall be accompanied by an anticipated payout and fiscal progress curve. The CONSULTANT shall submit all documents and inputs for the project schedule in accordance with the BluePrint2000 CONSULTANT CPM SCHEDULING REQUIREMENTS.

The schedule shall indicate all required submittals.

For purposes of scheduling, the CONSULTANT shall allow for the following AGENCY work activity and submittal review times, when applicable:

<table>
<thead>
<tr>
<th>Work Activity/Submittal Review</th>
<th>Time (Calendar Days)</th>
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<tbody>
<tr>
<td>(to be determined by AGENCY)</td>
<td>(to be determined by AGENCY)</td>
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<tr>
<td>Roadway Plans Review</td>
<td>28</td>
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<tr>
<td>Right of Way Maps Review</td>
<td>56</td>
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<tr>
<td>(Phase I, Phase II)</td>
<td>28</td>
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<tr>
<td>(Phase III)</td>
<td>28</td>
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<tr>
<td>(Phase IV)</td>
<td>28</td>
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Periodically, throughout the life of the project, the schedule and curves shall be reviewed and, with the approval of the AGENCY, adjusted as necessary to incorporate changes in the work concept and progress to date.

The approved schedule and schedule status report, along with progress and payout curves, shall be submitted with the monthly progress report.

The schedule shall be submitted in the latest version of P3,P3eC or Primavera.

2.16 Submittals

The CONSULTANT shall furnish plans and documents as required by the AGENCY to adequately control, coordinate, and approve the plans. The CONSULTANT shall distribute phase submittals as directed by the AGENCY.

The CONSULTANT shall provide copies of the required plans and documents as listed below. These are the anticipated printing requirements for the project. This tabulation will be used for estimating purposes. The Project Manager will determine the specific number of copies required prior to each submittal. All plan sheets shall be (11” x 17”) size.

**Plans Distribution Chart**
<table>
<thead>
<tr>
<th>Phase</th>
<th>I</th>
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<th>III</th>
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<tr>
<td>Access Management</td>
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<tr>
<td>Preliminary Estimates</td>
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<td>Design Services</td>
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<td>Traffic Signals</td>
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<td>Signing and Marking</td>
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<td>Structures</td>
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<td>Value Engineering</td>
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<td>Utilities (3 sets for AGENCY and 2 sets for each Utility Company)</td>
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<td>Preliminary Right-of-Way Review</td>
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<tr>
<td>AGENCY Land Surveyor</td>
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<td>AGENCY Modal Development Manager</td>
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<td>AGENCY Design Engineer</td>
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<td>AGENCY Right-of-Way Manager</td>
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<td>AGENCY Project Management Engineer</td>
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<td>AGENCY Drainage Engineer</td>
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<td>AGENCY Value Engineer</td>
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<td>AGENCY Utility Administrator</td>
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<td>Applicable City and/or County Engineering Dept.</td>
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<td>Mass Transit</td>
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## Plans Distribution Chart

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<tbody>
<tr>
<td>See Organization Chart</td>
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</table>

Contamination Reviews/Assessments

## Engineering Documents

(Documents and number of copies to be determined by AGENCY preference.)

<table>
<thead>
<tr>
<th>Document</th>
<th>No. of Copies Required</th>
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<tbody>
<tr>
<td><strong>Roadway Design</strong></td>
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<tr>
<td>Typical Section Package</td>
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<tr>
<td>Pavement Type Selection Report</td>
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<tr>
<td>Pavement Design Report</td>
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<td>Design Documentation</td>
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<tr>
<td>Computation Book</td>
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<tr>
<td>CES Input</td>
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<tr>
<td>Technical Special Provisions</td>
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<tr>
<td>Access Management Reports</td>
<td></td>
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<tr>
<td>Lane Closure Analysis Worksheets</td>
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</table>
## Engineering Documents

(Documents and number of copies to be determined by AGENCY preference.)

<table>
<thead>
<tr>
<th>Document</th>
<th>No. of Copies Required</th>
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<tbody>
<tr>
<td><strong>Drainage</strong></td>
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<tr>
<td>Preliminary Pond Siting Report</td>
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<tr>
<td>Final Pond Siting Report</td>
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<tr>
<td>Drainage Design Documentation Report</td>
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<td><strong>Traffic Operations</strong></td>
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<td>Traffic Report</td>
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<tr>
<td><strong>Bridge/Structural</strong></td>
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<tr>
<td><strong>Environmental Items</strong></td>
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<tr>
<td>Environmental Resource Permit Application Package</td>
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<tr>
<td>Mitigation Plan</td>
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<tr>
<td>Jurisdictional Determination Report</td>
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<tr>
<td>National Pollutant Discharge Elimination System (NPDES) Permit Application Package</td>
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Stage III
FEBURARY 6, 2005          A- 22          FPID(S): 415782/5
### Engineering Documents

(Documents and number of copies to be determined by AGENCY preference.)

<table>
<thead>
<tr>
<th>Document</th>
<th>No. of Copies Required</th>
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</thead>
<tbody>
<tr>
<td><strong>Design/Right-of-Way Surveys</strong></td>
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<tr>
<td>Map and Plat Copies</td>
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<tr>
<td>Certified Right-of-Way Control Survey Drawings</td>
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<tr>
<td>Aerial Photograph Original Negatives</td>
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<tr>
<td>Rectified Aerial Raster Image (HMR Format)</td>
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<tr>
<td>24&quot;x36&quot; Aerial Mylars (R/W Format)</td>
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<tr>
<td>Roadway Report – Preliminary</td>
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<td>Roadway Report – Final</td>
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<tr>
<td>Structures Report - Phase I</td>
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<td>Structures Report - Phase II</td>
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<tr>
<td><strong>Other</strong></td>
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<tr>
<td>Critical Path Method (CPM) Schedule</td>
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</tbody>
</table>
2.17 Provisions for Work

All maps, plans and designs are to be prepared with English values in accordance with all applicable current DEPARTMENT OF TRANSPORTATION manuals, memorandums, guidelines and other documents listed below:

- General
  - Florida Statutes
  - Florida Administrative Codes
  - Florida Department of Transportation Project Development and Environmental Manual
  - Florida Department of Transportation Plans Preparation Manual
  - Florida Department of Transportation Standard Specifications for Road and Bridge Construction
  - Florida Department of Transportation Handbook for Preparation of Specifications Package
  - Florida Department of Transportation Design Standards for Design, Construction, Maintenance, and Utility Operations on the State Highway System
  - Bicycle Facilities Planning and Design Manual, Rev. Ed. 1982
  - CADD Production Criteria Handbook
  - CADD Manual
  - Florida’s Level of Service Standards and Guidelines Manual for Planning
  - Equivalent Single Axle Load Guidelines
  - Design Traffic Procedure
  - K-Factor Estimation Process
  - Project Traffic Forecasting Guidelines
  - Florida Department of Transportation Basis of Estimates Manual
  - Quality Assurance Guidelines
  - Safety Standards
  - Rule 61G17-6, F.A.C., Minimum Technical Standards for Professional Surveyors and Mappers
  - Department of Environmental Protection Rules Governing Mean High Water and Jurisdictional Line Surveys
  - Any special instructions from the AGENCY
  - Utility Accommodations Guidelines
  - Policy for Geometric Design of Highways and Streets
  - Florida Department of Transportation Materials Manual
  - BluePrint2000 Multi-modal Design Guidelines
  - BluPrint2000 Document Control Procedures
  - BluePrint2000 Consultant CPM Scheduling Requirements
  - BluePrint2000 Public Involvement Plan
- Permits
  - Chapter 373, F.S.
  - Bridge Permit Application Guide, COMDT PUB P16591.3B

- Drainage
  - Drainage Manual
  - Drainage Handbooks
  - Storm Drain
  - Optional Pipe Materials
  - Stormwater Management Facility
  - Cross Drain
  - Erosion and Sediment Control
  - Hydrology
  - Temporary Drainage Handbook

- Survey
  - Location Survey Manual
  - Highway Field Survey Specifications
  - Automated Survey Data Gathering
  - Outline Specifications for Aerial Surveys and Photogrammetry for Transportation Projects
  - Standards for Consultant-Submitted G.P.S. Static Control Projects
  - EFB User Guide
  - Chapter 472, F.S.
  - Chapter 177, F.S.
  - FDEP Bureau of Surveying and Mapping

- Traffic Operation Manuals
  - American Disabilities Act
  - AASHTO - Guide for Development of Bicycle Facilities
  - Federal Highway Administration Standard Highway Signs Manual
  - Florida Department of Transportation Traffic Engineering Manual
  - Florida Department of Transportation Manual on Uniform Traffic Studies (MUTS)
  - National Electrical Code
  - National Electric Safety Code
  - Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCO)
  - Minimum Specifications for Traffic Control Signal Devices
  - Florida Department of Transportation - Florida Roundabout Guide
  - FHWA - Roundabouts: An Informational Guide
  - Florida Department of Transportation Median Handbook
  - AASHTO - An Information Guide for Highway Lighting

- Mapping
  - Right-of-Way Mapping
  - Florida Department of Transportation Right-of-Way Handbook
- Florida Department of Transportation Right-of-Way Manual

  Structures

  - AASHTO Standard Specifications for Highway Bridges and Interims (for curved steel bridges and pedestrian bridges only)
  - AASHTO LRFD Bridge Specifications and Interims
  - AASHTO LRFD Movable Highway Bridge Design Specifications and Interims
  - AASHTO LFD Guide Specifications for Steel Curved Girder Bridges
  - AASHTO Guide Specifications for Horizontally Curved Highway Bridges
  - AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code
  - AASHTO Guide Specifications for Design of Pedestrian Bridges
  - AASHTO Guide Specifications for Structural Design of Sound Barriers
  - Florida Department of Transportation Structures Design Guidelines
  - Florida Department of Transportation Structures Detailing Manual
  - Florida Department of Transportation Structures Standard and Semi-Standard Drawings
  - Florida Department of Transportation Structures Design Office Temporary Design Bulletins (available on Florida Department of Transportation Structures web site only)
  - Florida Department of Transportation Preferred Details (available on Florida Department of Transportation Structures web site only)
  - Florida Department of Transportation - New Directions For Florida Post-Tensioned Bridges Volumes 1-5
  - Florida Department of Transportation Bridge Load Rating Permitting And Posting Manual

  Geotechnical

  - Soils and Foundation Handbook
  - Manual of Florida Sampling and Testing Methods

  Landscape Architecture

  - Florida Highway Landscape Guide

  Architectural

  - Building Codes
    - Florida Building Code (includes the engineering design criteria contained in Section 1606; and excludes Chapter 11, Accessibility For People With Physical Disabilities and Appendix E, Energy Conservation)
  - Accessibility for Persons with Disabilities
    - Florida Accessibility Code for Building Construction
    - Chapter 13D-1, FAC
    - Section 255.21 and Chapter 553, Part V, F.S.
    - ANSI A117.1 - 1986
- Titles II and III, Americans With Disabilities Act (ADA), Public Law 101-336; and the ADA Accessibility Guidelines (ADAAG)

- Fire Codes and Rules
  - NFPA 70-1990 National Electrical Code
  - NFPA 10-1998 Standard for Portable Fire Extinguishers
  - NFPA 11-1999 Standard for Low-Expansion Foam Systems
  - NFPA 11A-1998 Standard for High- and Medium-Expansion Foam Systems
  - NFPA 12-1998 Standard for Carbon Dioxide Extinguishing Systems
  - NFPA 13-1996 Installation of Sprinkler Systems
  - NFPA 30-1996 Flammable and Combustible Liquids Code

Florida Fire Prevention Code as adopted by the State Fire Marshall

Consult with the Florida State Fire Marshal’s office for other frequently used codes.

- Energy Conservation
  - Rule 13D-10, FAC, Rules for Construction and Leases of State-Owned Buildings to Ensure Energy Conservation
  - Section 255.251, F.S., Florida Energy Conservation Act of 1974
  - Section 255.255, F.S., Life-Cycle Costs

- Glass
  - Chapter 553, F.S., Part III, Glass

- Elevators
  - Chapter 7C-5, Florida Elevator Code
  - Chapter 399, F.S., Elevators

- Flood Plain Management Criteria
  - Section 255.25, F.S., Approval Required Prior to Construction or Lease of Buildings
  - Rules of the Federal Emergency Management Agency (FEMA)

- Extinguishing Systems
  - NFPA 10 Fire Extinguishers
  - NFPA 13 Sprinkler
  - NFPA 14 Standpipe and Hose System
  - NFPA 17 Dry Chemical
  - NFPA 20 Centrifugal Fire Pump
  - NFPA 24 Private Fire Service Mains
- NFPA 200 Standard on Clean Agent Fire Extinguishing Systems

  o Detection and Fire Alarm Systems
    - NFPA 70 Electrical Code
    - NFPA 72 Standard for the installation, maintenance and use of local protective signaling systems
    - NFPA 72E Automatic Fire Detectors
    - NFPA 72H Testing procedures for remote station and proprietary systems
    - NFPA 72G Installation, Maintenance, and Use of Notification Appliances
    - NFPA 74 Household Fire Warning Equipment
    - NFPA 75 Protection of Electronic Computer Equipment

  o Mechanical Systems
    - NFPA 90A Air Conditioning and Ventilating Systems
    - NFPA 92A Smoke Control Systems
    - NFPA 96 Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment
    - NFPA 204M Smoke and Heating Venting

  o Miscellaneous Systems
    - NFPA 45 Laboratories Using Chemicals
    - NFPA 80 Fire Doors and Windows
    - NFPA 88A Parking Structures
    - NFPA 105 Smoke and Draft-Control Door Assemblies
    - NFPA 110 Emergency and Standby Power Systems
    - NFPA 220 Types of Building Construction
    - NFPA 241 Safeguard Construction, Alteration, and Operations
    - SFM Rule 4A-47 Elevators
    - SFM 4A-51 Boilers

  o Other
    - Chapter 10D-6 FAC On Site Sewage Disposal Systems (Septic Tanks)
    - Chapter 17-6.070 FAC Wastewater Facilities (Treatment Plants)
    - Chapter 17-761 FAC Underground Storage Tank Rules

These documents are revised periodically by the responsible agencies and adopted by authorities having jurisdiction on building projects. The design consultant and the project manager are advised to obtain applicable versions of these documents from the responsible agency prior to use.

- American Concrete Institute
- American Institute of Architects - Architect’s Handbook of Professional Practice
- American Society for Testing and Materials - ASTM Standards
- Southern Building Code Congress International - Standard Building Codes
- Brick Institute of America
2.18 **Services to be performed by the AGENCY**

When appropriate the AGENCY will provide those services and materials as set forth below:

- **Regarding Environmental Permitting Services:**
  - Approve all contacts with environmental agencies.
  - Provide general philosophies and guidelines of the AGENCY to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations, and time constraints will be completely defined by the Project Manager.
  - Provide the appropriate signatures on application forms.

- Provide letters of authorization designating the CONSULTANT as an agent of the AGENCY.
- Provide phase reviews of roadway plans.
- Furnish an approved Environmental Document when available.
- Furnish all future information that may come to the AGENCY during the term of the CONSULTANT’s Agreement, which in the opinion of the AGENCY is necessary for the prosecution of the work.
- Furnish available traffic and planning data.
- Furnish all approved utility relocation information.
- Provide project utility certification to the AGENCY’s Office.
- Provide acquisition of any necessary title searches.
- Provide project data currently on file.
- Provide all available information in the possession of the AGENCY pertaining to utility companies whose facilities may be affected by the proposed construction.
- Provide all future information that may come to the AGENCY pertaining to subdivision plans so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right-of-way.
- Provide systems traffic for Projected Design Year, with K, D, and T factors.
• Provide existing right-of-way maps.
• Provide existing PD&E documents.
• Provide existing Design Reports
• Provide existing LIDAR Data
• Provide existing GIS Data
3 PROJECT GENERAL TASKS

Project General Tasks are applicable to the project as a whole and are described in Sections 3.1 through 3.6 of this Scope of Service.

PROJECT COMMON TASKS

Project Common Tasks are included in most activities, 4.0 Roadway Analysis through 22.0 Architectural Development, of the project. The tasks described here are to be performed by the CONSULTANT when included in each Activity’s section of the Scope of Services.

Cost Estimates: The CONSULTANT shall be responsible for producing a construction cost estimate and reviewing and updating the cost estimate when scope changes occur and/or at milestones of the project. Prior to 60% plans and completion of quantities, the CONSULTANT shall produce a conceptual estimate. Once the quantities have been developed (beginning at 60% plans and no later than 90% plans) the CONSULTANT shall be responsible for updating the pay items and quantities. A Summary of Pay Items sheet shall be prepared with all required Phase II, III, and IV Plans submittals.

Technical Special Provisions: The CONSULTANT shall provide Technical Special Provisions for all items of work not covered by the Standard Specifications for Road and Bridge Construction and the workbook of implemented modifications.

A Technical Special Provision shall not modify the first nine sections of the Department of Transportation’s Standard Specifications and implemented modifications in any way. All modifications to other sections must be justified to the appropriate Department of Transportation AGENCY’s Specifications Engineer to be included in the project's specifications package, typically as special provisions and not as technical special provisions.

The Technical Special Provisions shall be technical in nature and shall provide a description of work, materials, equipment and specific requirements, method of measurement and basis of payment. Proposed Technical Special Provisions will be submitted to the AGENCY’s Specifications Engineer for initial review at the time of the Phase III plans review submission to the AGENCY’s Project Manager. This timing will allow for adequate processing time prior to final submittal. The Technical Special Provisions will be reviewed for suitability in accordance with the Handbook for Preparation of Specification Package. The AGENCY’s Specifications Engineer will forward the Technical Special Provisions to the AGENCY for their review and comment. All comments will be returned to the CONSULTANT for correction and resolution. Final Technical Special Provisions shall be electronically signed and sealed in accordance with applicable Florida Statutes.

The CONSULTANT shall contact the AGENCY’s Specifications Engineer for details of the current format to be used before starting preparations of Technical Special Provisions.

Field Reviews: Includes all trips required to obtain necessary data for all elements of the project.

Technical Meetings: Includes meetings with AGENCY and/or Agency staff, between disciplines and subconsultants, such as access management meetings, pavement design meetings, local governments, railroad companies, progress review meetings (phase review), and miscellaneous meetings.

Quality Assurance/Quality Control: It is the intention of the AGENCY that design CONSULTANTS are held responsible for their work, including plans review. Detailed checking of CONSULTANT
plans or assisting in designing portions of the project for the CONSULTANT is not the intent of having external design consultants. The purpose of CONSULTANT plan reviews is to ensure that CONSULTANT plans follow the plan preparation procedures outlined in the Plans Preparation Manual, that state and federal design criteria are followed with the AGENCY concept, and that the CONSULTANT submittals are complete.

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 maps, design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project. The CONSULTANT shall submit a Quality Control Plan for approval within 20 (twenty) calendar days of the written Notice to Proceed. A marked up set of prints from a Quality Control Review indicating the reviewers for each component (structures, roadway, drainage, signals, geotechnical, signing and marking, lighting, surveys, etc.) and a written resolution of comments on a point-by-point basis will be required with each phase submittal (written comments and written resolution of comments may be provided at the CONSULTANT’s option). The responsible Professional Engineer, Landscape Architect, 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, maps, drawings, specifications and/or other services.

Independent Peer Review: Not Required

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

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

3.1 Public Involvement

Public involvement is an important aspect of the project development process. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the project. The CONSULTANT shall continue the public involvement begun in previous studies through implementing the AGENCY’s Community Awareness Plan. Property owners adjacent to the project, including those not subject to right-of-way acquisition shall be informed about the project.

3.2 Joint Project Agreements

The CONSULTANT services shall include all coordination, meetings, etc., required to include Joint Project Agreement (JPA) plans (prepared by others) in contract plans package including all necessary revisions/modifications to contract documents to ensure plans compatibility.

3.3 Specifications Package Preparation
The CONSULTANT shall prepare and provide a complete specifications package, including applicable Technical Special Provisions, for all items and areas of work.

The AGENCY will provide the necessary Florida Department of Transportation workbook and electronic files, in Microsoft Word 2000 format, for proper completion of the specifications package. The actual work effort will entail utilization of the supplied electronic files, including updates of new files that may be issued from time to time as mandatory specifications changes, and assembling the package in accordance with the Florida Department of Transportation’s Specification Package Preparation Training. The AGENCY may also require inclusion of special provisions necessary to convey particular AGENCY needs.

The Standard Specifications, for Road and Bridge Construction and, Special Provisions or Supplemental Specifications from the applicable workbook of implemented modifications may not be modified unless absolutely necessary to control project-specific requirements. Proposed modifications to these listed documents must be drafted in redline strikethrough format along with justification of the project specific need, and coordinated with the AGENCY’s Specifications Engineer prior to inclusion in the final project specifications package.

The specifications package must be submitted for initial review to the AGENCY’s Specifications Engineer at least 30 days prior to the contract package to Tallahassee due date, or sooner if required by the AGENCY’s Specifications Engineer. This submittal does not require signing and sealing and shall be coordinated through the AGENCY’s Project Manager. Submittal material shall consist of (1) the complete specifications package, (2) a copy of the marked-up workbook used to compile package, (3) a copy of the final project plans, and (4) a copy of the Contract Estimating System sheet utilized with the project.

Final submittal of the complete specifications package must occur at least 10 working days prior to the contract package to AGENCY due date. This submittal shall be electronically signed, dated, and sealed in accordance with applicable Florida Statutes. The submittal materials shall consist of two CDs. The first CD shall contain an electronic specification project file that includes the specification package, and if applicable, all individual electronically signed and sealed Technical Special Provisions, electronically signed, sealed and secured using PEDDS. The second CD shall contain a “print file” of the specification package combining, if necessary, all Technical Special Provisions, in a consecutively numbered package secured using PEDDS.

3.4 Contract Maintenance

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

3.5 Prime Project Manager Meetings

These meetings include Prime CONSULTANT Project Manager staff hours for phase review, progress review, all technical meetings, and other coordination activities, including any travel time. Meetings required for each activity are included in the meetings section for that specific activity.

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

4.1 Typical Section Package

The CONSULTANT shall provide an approved Typical Section Package prior to the Phase I plans submittal date.

4.2 Pavement Design Package

The CONSULTANT shall provide an approved Pavement Design Package prior to the Phase II plans submittal date.

4.3 Access Management

The CONSULTANT shall incorporate access management standards for each project in coordination with AGENCY staff. The CONSULTANT shall review adopted access management standards and the existing access conditions (interchange spacing, signalized intersection spacing, median opening spacing, and connection spacing). Median openings that will be closed, relocated, or substantially altered shall be shown on plan sheets and submitted with supporting documentation for review with the Phase I plans submittal. This is a proposed Class 5 facility.

The AGENCY shall provide access management classification information and information derived from PD&E studies and public hearings to be used by the CONSULTANT.

4.4 Horizontal/Vertical Master Design Files

The CONSULTANT shall design the geometrics using the design standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, access management, PD&E documents and scope of work.

4.5 Cross Section Design Files

The CONSULTANT shall establish and develop cross section design files in accordance with the Florida Department of Transportation’s CADD manual.

4.6 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. The design shall include construction phasing of roadways to accommodate the construction of utilities when the contract includes Joint Project Agreements (JPAs).
The CONSULTANT shall investigate the need for temporary traffic signals, temporary lighting, alternate detour roads, and the use of materials such as sheet piling in the analysis. The Traffic Control Plan shall be prepared by a certified designer who has completed training as required by the AGENCY. Prior to proceeding with the Traffic Control Plan, the CONSULTANT shall meet with the appropriate AGENCY personnel. The purpose of this meeting is to provide information to the CONSULTANT that will better coordinate the Preliminary and Final Traffic Control Plan efforts.

4.7 Master TCP Design Files

CONSULTANT shall develop master Traffic Control Plan (TCP) files (for Level II and Level III only) showing each phase of the Traffic Control Plan.

4.8 Design Variations and Exceptions

If available, the AGENCY shall furnish the Variation/Exception Report. The CONSULTANT shall prepare the documentation necessary to gain AGENCY approval of all appropriate Design Variations and/or Design Exceptions.

4.9 Design Report

The CONSULTANT shall prepare all applicable report(s) as listed in the Project Description section of this scope.

The CONSULTANT shall submit to the AGENCY design notes, data, and calculations to document the design conclusions reached during the development of the contract plans.

The design notes, data, and computations shall be recorded on size 8½"x11" 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 8½"x11" size. The data shall be in a hardback folder for submittal to the AGENCY.

4.10 Computation Book and Quantities

The CONSULTANT shall prepare the Computation Book and various standard Florida Department of Transportation summary of quantities sheets. This includes all efforts required to develop the Computation Book and the supporting documentation, including construction days when required.

4.11 Cost Estimate


4.13 Field Reviews

4.14 Technical Meetings

4.15 Cross Section Design Files
The CONSULTANT shall establish and develop cross section design files in accordance with the Department of Transportation’s CADD manual.

4.16 Independent Peer Review

4.17 Supervision

4.18 Coordination

5 ROADWAY PLANS

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

5.1 Key Sheet

5.2 Summary of Pay Items Including Quantity Input

5.3 Drainage Map

5.4 Interchange Drainage Map

5.5 Typical Section Sheets

5.6 General Notes/Pay Item Notes

5.7 Summary of Quantities

5.8 Summary of Drainage Structures

5.9 Optional Pipe/Culvert Material

5.10 Project Layout

5.11 Plan/Profile Sheet

5.12 Profile Sheet

5.13 Plan Sheet

5.14 Special Profile

5.15 Intersection Layout Details

5.16 Miscellaneous Detail Sheets

5.17 Drainage Structure Sheet
6 DRAINAGE ANALYSIS

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

The CONSULTANT shall be responsible for designing a drainage and storm water management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the Florida Department of Transportation’s Drainage Manual.
The CONSULTANT shall coordinate fully with the appropriate permitting agencies and the AGENCY’s staff. All activities and submittals should be coordinated through the AGENCY’s Project Manager. The work will include the engineering analyses for any or all of the following:

6.1 Determine Base Clearance Water Elevation

Analyze, determine, and document high water elevations which will be used to set roadway profile grade. Determine surface water elevations at cross drains, floodplains, outfalls and adjacent storm water ponds. Determine groundwater elevations at intervals between the above-mentioned surface waters.

6.2 Pond Siting Analysis and Report

Evaluate pond sites using a preliminary hydrologic analysis. Document the results and coordination for all of the project's pond site analyses. The Drainage Manual provides specific documentation requirements.

6.3 Design of Cross Drains

Analyze the hydraulic design of cross drains. Check existing cross drains to determine if they are structurally sound and can be extended. Document the design as required. Determine and provide flood data as required.

6.4 Design of Roadway Ditches

Design roadway conveyance ditches. This includes determining ditch cross sections, grades, selecting suitable channel lining, designing the side drain pipes, and documentation.

6.5 Design of Outfalls

Analyze and document the design of ditch or piped outfalls. (Pond outlet structure included in task 6.6)

6.6 Design of Stormwater Management Facility (Offsite Pond)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed curvilinear pond layout (shape, contours, slopes, etc.), perform routing calculations, and design the outlet control structure.

6.7 Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed pond layout (shape, contours, slopes, etc.), perform routing calculations, and design the outlet control structure.

6.8 Design of Flood Plain Compensation Area

Determine flood plain encroachments, coordinate with regulatory agencies, and develop proposed compensation area layout (shape, contours, slopes, etc.). Document the design following the requirements of the regulatory agency.
6.9 Design of Storm Drains

Develop a “working drainage map”, determine runoff, inlet locations, and spread. Calculate hydraulic losses (friction, utility conflict and, if necessary, minor losses). Determine Design Tailwater and, if necessary, outlet scour protection.

6.10 Optional Culvert Material

Determine acceptable options for pipe materials.

6.11 Drainage Design Documentation Report

Compile drainage design documentation into report format. Include documentation for all the drainage design tasks and associated meetings and decisions, except the Pond Siting Analysis Report and Bridge Hydraulics Report.

6.12 Temporary Drainage Analysis

Evaluate and address drainage to adequately drain the road and maintain existing offsite drainage during all construction phases. Provide documentation.

6.13 Cost Estimate


6.15 Field Reviews

6.16 Quality Assurance/Quality Control

6.17 Independent Peer Review

6.18 Supervision

6.19 Coordination

7 UTILITIES

The CONSULTANT shall identify utility facilities and secure agreements, utility work schedules, and plans from the Utility Agency Owners (UAO) ensuring no conflicts exist between utility facilities and the AGENCY’s construction project. The CONSULTANT shall certify all utility negotiations have been completed with arrangements made for utility work to be undertaken.

7.1 Kickoff Meeting
Prior to any contact with the UAO(s), the CONSULTANT shall meet with the City Utility Office (DUO) to receive guidance, as may be required, to assure that all necessary coordination will be accomplished in accordance with AGENCY procedures. CONSULTANT shall bring a copy of the design project work schedule reflecting utility activities.

7.2 Identify Existing UAO(s)

Identify all utilities in the corridor; check with The City of Tallahassee for Permits, Sunshine State One Call, Subsurface Utility Engineering (SUE) Report, Design Location Survey, and Existing Plans.

7.3 Make Utility Contacts

First Contact: Send letters and two sets of plans to each utility, one set for the utility office, one set each to construction and maintenance if required. Includes contact by phone for meeting coordination. Request type, size, location, easements, cost for compensable relocation, and justification for any utility exceptions. Include the meeting schedule (if applicable) and the design schedule. Include typical meeting agenda.

Second Contact: At a minimum of 4 weeks prior to the meeting, the CONSULTANT shall transmit two complete sets of Phase II plans to each UAO having facilities located within the project limits, and one set to the AGENCY Offices as required by the City.

Third Contact: Identify agreements and assemble packages. Send agreements, letters and two sets of plans to the UAO(s) including all component sets, one set for the utility office, one set to construction and maintenance if required. Include the design schedule. Not all projects will have all contacts as described above.

7.4 Exception Coordination

The CONSULTANT shall be responsible for transmitting/coordinating the appropriate design reports including, but not limited to, the Resurfacing, Restoration and Rehabilitation (RRR) report, Project Scope and/or the Concept Report (if applicable) to each UAO in order to identify any clear and control zone violation that may require a Utility Exception. The CONSULTANT shall coordinate the processing of design exceptions involving Utilities with the UAO and the AGENCY. Coordinate and process per the UAM.

7.5 Preliminary Utility Meeting

The CONSULTANT shall schedule (time and place), notify participants, and conduct a preliminary utility meeting with all affected UAO(s) for the purpose of presenting the project, review the current design schedule, evaluate the utility information collected, provide follow-up information on compensable interest requests, discuss the utility work by highway contractor option with each utility, and discuss any future design issues that may impact utilities. This is also an opportunity for the UAO(s) to present proposed facilities. The CONSULTANT shall keep accurate minutes and distribute a copy to all attendees.

7.6 Individual/Field Meetings

The CONSULTANT shall meet with each UAO separately throughout the project design duration to provide guidance in the interpretation of plans, review changes to the plans and schedules, optional clearing and grubbing work, and assist in the development of the UAO(s) plans and work schedules.
The CONSULTANT is responsible for motivating the UAO to complete and return the necessary documents after each Utility Contact or Meeting.

7.7 Collect and Review Plans and Data from UAO(s)

Make Determinations (Compensable Interest, Easements, Coordinate, Analyze). Ensure information (utility type, material and size) is sent to the designer for inclusion in the plans. Coordinate programming of funds.

7.8 Subordination of Easements Coordination

The CONSULTANT, if requested by the AGENCY, shall transmit to and secure from the UAO the executed subordination agreements prepared by the appropriate AGENCY office. The CONSULTANT shall coordinate with the DUO the programming of the necessary work program funds to compensate the UAO.

7.9 Utility Design Meeting

At a minimum of 3 weeks prior to the meeting, the CONSULTANT shall transmit two complete sets of Phase II plans to each UAO having facilities located within the project limits, and one set to the AGENCY Offices as required. The CONSULTANT shall schedule (time and place), notify participants, and conduct a Utility meeting with all affected UAO(s). The CONSULTANT shall be prepared to discuss drainage, traffic signalization, maintenance of traffic (construction phasing), review the current design schedule and letting date, evaluate the utility information collected, provide follow-up information on compensable interest requests, discuss the utility work by highway contractor option with each utility, discuss any future design issues that may impact utilities, etc., to the extent that they may have an effect on existing or proposed utility facilities with particular emphasis on drainage and maintenance of traffic with each UAO. The intent of this meeting shall be to identify and resolve conflicts between utilities and proposed construction prior to completion of the plans, including utility adjustment details. Also recommend resolution between known utility conflicts with proposed construction plans as practical. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees.

7.10 Review Utility Markups and Work Schedules and Processing of Schedules and Agreements

Review utility marked up plans individually as they are received for content and coordinate review with the designer. Send color markups and schedules to the appropriate AGENCY office(s) for review and comment if required by the AGENCY. Coordinate with the AGENCY for execution. Distribute Executed Final Documents. Prepare Work Order for UAO(s). Coordinate programming of funds.

7.11 Utility Coordination/Followup

This includes follow-up, interpreting plans, and assisting and the completion of the UAO(s) work schedule and agreements. Includes phone calls, face-to-face meetings, etc., to motivate and ensure the UAO(s) complete and return the required documents in accordance with the project schedule. Ensure the resolution of all known conflicts. This task can be applied to all phases of the project.

7.12 Utility Constructability Review

Review utility schedules against construction contract time, and phasing for compatibility. Coordinate with construction office.
7.13 Additional Utility Services

Preparation and coordination of Utility Design Plans when the AGENCY participates in cost of utility work. This item is not usually included in the scope at the time of negotiation. It is normally added as a supplemental agreement when the need is identified.

7.14 Processing Utility Work by Highway Contractor (UWHC)

Formerly called Utility Joint Participation Agreement (JPA). This includes coordination of utility design effort between the AGENCY and the UAO(s). Determine the AGENCY’s cost participation, additional coordination meetings, prepare, negotiate, and process the agreements, review tabulation of quantities, prepare Summary of Pay Items - UWHC, perform UWHC constructability and bidability review, Technical Special Provisions (TSP) review. This does not include utility design effort. This item is not usually included in the scope at the time of negotiation. It is normally added as a supplemental agreement when the need is identified.

7.15 Contract Plans to UAO(s)

This includes transmittal of the contract plans as processed for letting. Transmittals to UAO(s) are by certified mail, return receipt requested.

7.16 Certification/Close-Out

This includes hours for transmitting utility files to the DUO and preparation of the Utility Certification Letter. The CONSULTANT shall certify to the appropriate AGENCY representative the following:

All utility negotiations (Full execution of each agreement, approved Utility Work Schedules, technical special provisions written, etc.) have been completed with arrangements made for utility work to be undertaken and completed as required for proper coordination with the physical construction schedule.

OR

An on-site inspection was made and no utility work will be involved.

OR

Plans were sent to the Utility Companies/Agencies and no utility work is required.

8 ENVIRONMENTAL PERMITS

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

8.1 Preliminary Project Research
The CONSULTANT shall perform preliminary project research and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

8.2 Complete Permit Involvement Form

The CONSULTANT shall document permit involvement in coordination with the City of Tallahassee Permit Coordinator and AGENCY Project Manager. To be done upon completion of preliminary project research.

8.3 Establish Wetland Jurisdictional Lines

The CONSULTANT shall collect all data and information necessary to determine the boundaries of wetlands and surface waters defined by the rules or regulations of each agency processing or reviewing a permit application necessary to construct an AGENCY project.

The CONSULTANT shall be responsible for, but not limited to, the following activities:

- Determine landward extent of state waters as defined in Chapter 62-340 FAC as ratified in Section 373.4211 FS
- Determine the jurisdictional boundaries of wetlands and surface waters as defined by rules or regulations of any other permitting authority that is processing a AGENCY permit application.
- Prepare aerial maps showing the jurisdictional boundaries of wetlands and surface waters. Aerial maps shall be reproducible, of a scale no greater than 1”=200’ and be recent photography. The maps shall show the jurisdictional limits of each agency. Xerox copies of aerials are not acceptable. All jurisdictional boundaries are to be tied to the project’s baseline of survey. When necessary, jurisdictional maps shall be signed and sealed by either a Registered Professional Engineer or a Registered Land Surveyor.
- Acquire written verification of jurisdictional lines from the appropriate environmental agencies.
Prepare a written assessment of the current condition and relative value of the function being performed by wetlands and surface waters. Prepare data in tabular form which includes ID number for each wetland impacted, size of wetland to be impacted, type of impact and identify any wetland within the project limits that will not be impacted by the project.

8.4 Agency Verification of Wetland Data

The CONSULTANT shall be responsible for verification of wetland data identified in Section 8.3 and coordinating regulatory agency field reviews, including finalization of wetland assessments with applicable agencies.

8.5 Complete and Submit All Required Permit Applications

The CONSULTANT shall prepare permit packages as identified in the Project Description section.

The CONSULTANT shall collect all of the data and information necessary to obtain the environmental permits required to construct a project.

The CONSULTANT shall prepare each permit application for AGENCY approval in accordance with the rules and/or regulations of the environmental agency responsible for issuing a specific permit and/or authorization to perform work.

8.6 Prepare Dredge and Fill Sketches

8.7 Prepare USCG Permit Sketches

8.8 Prepare Easement Sketches

8.9 Prepare Right-of-Way Occupancy Sketches

8.10 Prepare Coastal Construction Control Line (CCCL) Permit Sketches

8.11 Prepare Tree Permit Information

8.12 Mitigation Coordination and Meetings

The CONSULTANT shall coordinate with AGENCY personnel prior to approaching any environmental permitting or reviewing agencies. Once a mitigation plan has been reviewed and approved by the AGENCY, the CONSULTANT will be responsible for coordinating the proposed mitigation plan with the environmental agencies.

8.13 Mitigation Design

If wetland impacts cannot be avoided, the CONSULTANT shall prepare a mitigation plan to be included as a part of the Environmental Resource or Wetlands Resource Permit applications.
Prior to the development of alternatives, the CONSULTANT shall meet with the Project Manager to determine the AGENCY’s policies in proposing mitigation. The CONSULTANT shall proceed in the development of a mitigation plan based upon the general guidelines provided by the AGENCY.

The CONSULTANT will be directed by the AGENCY to investigate the following methods of mitigation:

- Payment to DEP/WMD per acre of wetlands impacted as defined in CH 373.4137 FS
- Monetary participation in offsite regional mitigation plans
- Monetary participation in a private mitigation bank
- Creation/restoration on public lands
- Creation/restoration on right-of-way purchased by the AGENCY
- Creation/restoration on existing AGENCY right-of-way

In the event that physical creation or restoration is the only feasible alternative to offset wetland impacts, the CONSULTANT shall collect all of the data and information necessary to prepare alternative mitigation plans that may be acceptable to all permitting agencies and commenting agencies who are processing or reviewing a permit application for an AGENCY project.

Prior to selection of a final mitigation site, the CONSULTANT will provide the following services in the development of alternative mitigation plans:

- Preliminary jurisdictional determination for each proposed site
- Selection of alternative sites
- Coordination of alternative sites with the AGENCY/all environmental agencies
- Written narrative listing potential sites with justifications for both non-recommended

### 8.14 Environmental Clearances

The CONSULTANT shall prepare clearances for all pond and/or mitigation sites identified after the PD&E was completed.

**Archaeological and Historical Features**: The CONSULTANT shall collect data necessary to completely analyze the impacts to all cultural and historic resources by the pond and/or mitigation sites and prepare a Cultural Resource Assessment Request Package.

**Wetland Impact Analysis**: The CONSULTANT shall analyze the impacts to wetlands for the pond and/or mitigation sites and complete the Wetlands Evaluation Report.

**Wildlife and Habitat Impact Analysis**: The CONSULTANT shall collect data necessary to perform an Endangered Species Biological Assessment, and analyze the impacts to wildlife and habitat by the pond and/or mitigation sites.

**Contamination Impact Analysis**: The CONSULTANT shall perform the necessary analysis to complete the Contamination Screening Evaluation for the pond and/or mitigation sites and complete the Contamination Screening Evaluation Report.
8.15 Technical Meetings

8.16 Quality Assurance/Quality Control

8.17 Supervision

8.18 Coordination

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS

The CONSULTANT shall analyze and design all structures in accordance with applicable provisions as defined in Section 2.17, Provisions for Work. Individual tasks identified in Sections 9 through 18 are defined in the Staff Hour Estimation Handbook and within the provision defined in Section 2.19, Provisions for Work. Contract documents shall display economical solutions for the given conditions.

The CONSULTANT shall provide Design Documentation to the AGENCY with each submittal consisting of structural design calculations and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all structural elements. These calculations shall be neatly and logically presented on 8½"x11" paper (where possible) and all sheets shall be numbered. The final design calculations shall be signed and sealed by a Florida-registered professional engineer. A cover sheet indexing the contents of the calculations shall be included and the engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

9.1 Index of Drawings

9.2 Project Layout

9.3 General Notes and Bid Item Notes

9.4 Incorporate Florida Department of Transportation Standards

9.5 Incorporate Report of Core Borings

9.7 Computation Book and Quantities

9.8 Cost Estimate

9.9 Technical Special Provisions

9.10 Field Reviews

9.11 Technical Meetings

9.12 Quality Assurance/Quality Control

9.13 Independent Peer Review
9.14 Supervision

9.15 Coordination

10 STRUCTURES - MISCELLANEOUS

The CONSULTANT shall prepare plans for Miscellaneous Structure(s) as specified in Section 2.5.

10.1 Mast Arms

11 SIGNING AND PAVEMENT MARKING ANALYSIS

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

11.1 Traffic Data Analysis

The CONSULTANT shall review the approved preliminary engineering report, typical section package, traffic technical memorandum and proposed geometric design alignment to identify proposed sign placements and roadway markings. Perform queue analysis.

11.2 No Passing Zone Study. *** Not applicable to this project ***

11.3 Reference and Master Design File

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

11.4 Multi-Post Sign Support Calculations

The CONSULTANT shall determine the appropriate column size from the Department of Transportation’s Multi-Post Sign Program(s).

11.5 Sign Panel Design Analysis

Establish sign layout, letter size and series for non-standard signs.
11.6 **Sign Lighting/Electrical Calculations**

Includes the verification of photometrics on lighted, load center and voltage drop calculations.

11.7 **Quantities**

11.8 **Computation Book**

11.9 **Cost Estimates**

11.10 **Technical Special Provisions**

11.11 **Field Reviews**

11.12 **Technical Meetings**

11.13 **Quality Assurance/Quality Control**

11.14 **Independent Peer Review**

11.15 **Supervision**

11.16 **Coordination**

12 **SIGNING AND PAVEMENT MARKING PLANS**

The CONSULTANT shall prepare a set of Signing and Pavement Marking Plans in accordance with the Plans Preparation Manual that includes the following.

12.1 **Key Sheet**

12.2 **Summary of Pay Items**

12.3 **Tabulation of Quantities**

12.4 **General Notes/Pay Item Notes**

12.5 **Project Layout**

12.6 **Plan Sheet**

12.7 **Typical Details**

12.8 **Guide Sign Work Sheet(s)**

12.9 **Traffic Monitoring Site**

12.10 **Cross Sections**
12.11 Special Service Point Details

12.12 Special Details

12.13 Interim Standards

12.14 Quality Assurance/Quality Control

12.15 Supervision

13 SIGNALIZATION ANALYSIS

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

13.1 Traffic Data Collection

The CONSULTANT shall perform all effort required for traffic data collection, including crash reports, 24 hr. machine counts, 8 hr. turning movement counts, 7 day machine counts, and speed & delay studies.

13.2 Traffic Data Analysis

The CONSULTANT shall determine signal operation plan, intersection geometry, local signal timings, pre-emption phasing & timings, forecasting traffic, and intersection analysis run.

13.3 Signal Warrant Study

13.4 Systems Timings

The CONSULTANT shall determine proper coordination timing plans including splits, force offs, offsets, and preparation of Time Space Diagram.

13.5 Reference and Master Signalization Design File

The CONSULTANT shall prepare the Signalization Design file to include all necessary design elements and all associated reference files.

13.6 Reference and Master Interconnect Communication Design File

The CONSULTANT shall prepare the Interconnect Communication Design file to include all necessary design elements and all associated reference files.

13.7 Overhead Street Name Sign Design

The CONSULTANT shall design Signal Mounted Overhead Street Name signs.

13.8 Pole Elevation Analysis
13.9 Traffic Signal Operation Report

(As defined by the Agency)

13.10 Quantities

13.11 Cost Estimate


13.13 Field Reviews

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include, but is not limited to, the following:

- Existing Signal and Pedestrian Phasing
- Controller Make, Model, Capabilities and Condition/Age
- Condition of Signal Structure(s)
- Type of Detection as Compared With Current Florida Department of Transportation Standards
- Interconnect Media
- Controller Timing Data
13.14  Technical Meetings
13.15  Quality Assurance/Quality Control
13.16  Independent Peer Review
13.17  Supervision
13.18  Coordination

14  SIGNALIZATION PLANS

The CONSULTANT shall prepare a set of Signalization Plans in accordance with the Florida Department of Transportation Plans Preparation Manual, which includes the following.

14.1  Key Sheet
14.2  Summary of Pay Items
14.3  Tabulation of Quantities
14.4  General Notes/Pay Item Notes
14.5  Plan Sheet
14.6  Interconnect Plans
14.7  Traffic Monitoring Site
14.8  Guide Sign Worksheet
14.9  Special Details
14.10 Special Service Point Details
14.11 Mast Arm/Monotube Tabulation Sheet
14.12 Strain Pole Schedule
14.13 TCP Signal (Temporary)
14.14 Temporary Detection Sheet
14.15 Utility Conflict Sheet
14.16 Interim Standards
14.17 Quality Assurance/Quality Control
15 LIGHTING ANALYSIS

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

15.1 Lighting Justification Report

The CONSULTANT shall prepare a Lighting Justification Report. The report shall be submitted under a separate cover with the Phase I plans submittal, titled Lighting Design Analysis Report.

15.2 Lighting Design Analysis Report

The CONSULTANT shall prepare a Preliminary Lighting Design Analysis Report. The report shall be submitted under a separate cover prior to the Phase II plans submittal. The report shall provide analyses for each typical section of the mainline, typical section for the ramps (one and/or two lanes), interchanges, underdeck lighting, and arterial roads. Each lighting calculation shall be properly identified as to the area that it covers.

The report shall include the Lighting Design Criteria that will be used and shall include the evaluation of at least three lighting design alternatives and a recommendation on the alternative to use. Each alternative shall be properly described; the alternatives shall consider different pole heights, lamp wattage, and arm lengths. Each alternative shall be provided with a cost estimate that includes initial cost in addition to operations and maintenance cost for one year.

After approval of the preliminary report, the CONSULTANT shall submit a revised report including a detailed lighting design analysis for each submittal.

15.3 Aeronautical Evaluation

The CONSULTANT shall prepare an Aeronautical Evaluation/Airspace Analysis Report. It shall be submitted for approval by the AGENCY and by FAA prior to Phase II plans submittal.

The report shall include an evaluation of the glide slope of all adjacent airport runways (including future runways) and the preparation of the required FAA forms and special lighting calculations based on NO PENETRATION of the approach or transitional surfaces and coordination with the Airport Manager.

The report shall include a profile drawing for each condition affected by the runway approach and transitional surfaces. This drawing(s) shall show the roadway profile grade line at the edge of the shoulder pavement with proper baseline stations, the FAR Part 77 - 50:1 (or 34:1) approach surface line and the 7:1 transitional surface line. The scale of this drawing shall be 1”=100’ horizontal and 1”=10’ vertical. The proposed location of each light pole shall be properly shown at the respective station to clearly indicate that no penetration to either the approach surface or to the transitional surface is anticipated.
15.4 Voltage Drop Calculations

The CONSULTANT shall submit voltage drop calculations showing the equation or equations used along with the number of luminaries per circuit, the length of each circuit, the size conductor or conductors used and their ohm resistance values. The voltage drop incurred on each circuit (total volts and percentage of drop) shall be calculated, and all work necessary to calculate the voltage drop values for each circuit should be presented in such a manner as to be duplicated by the AGENCY.

Load analysis calculations shall be submitted for each branch circuit breaker and main breaker.

15.5 FDEP Coordination and Report

15.6 Reference and Master Design Files

The CONSULTANT shall prepare the Lighting Design file to include all necessary design elements and all associated reference files.

15.7 Temporary Lighting

The CONSULTANT shall provide temporary lighting for all affected phases of construction to light all detour roadways in areas where required. The temporary lighting shall be included with the Traffic Control Plans with proper notes, quantities and details.

15.8 Design Documentation

The CONSULTANT shall submit a Roadway Lighting Design Documentation Book with each lighting plans submittal under a separate cover and not part of the roadway documentation book. At a minimum, the design documentation book shall include:

- Lighting Calculations.
- Back up sheet for each bid item quantity total on each lighting plan sheet (Phase III and Phase IV submittals).
- Phase submittal checklist.
- Three-way quantity check list (Phase III and IV submittals).
- Structural calculations for special conventional pole concrete foundations.
- Structural calculations for the high mast pole foundations.
- Letter to the power company requesting service.
- Power company confirmation letter on the requested services (Phase III and Phase IV submittals).
- Voltage drop calculations (Phase III and Phase IV submittals).
- Load analysis calculations (Phase III and Phase IV submittals).
15.9 Quantities
15.10 Cost Estimate
15.11 Technical Special Provisions
15.12 Field Reviews

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include but is not limited to the following:

- Existing Lighting Equipment
- Load Center, Capabilities and Condition/Age
- Condition of Lighting Structure(s)

15.13 Technical Meetings
15.14 Quality Assurance/Quality Control
15.15 Independent Peer Review
15.16 Supervision
15.17 Coordination

16 LIGHTING PLANS

The CONSULTANT shall prepare a set of Lighting Plans in accordance with the Plans Preparation Manual, which includes the following:

16.1 Key Sheet
16.2 Summary of Pay Item Sheet
16.3 Tabulation of Quantities
16.4 General Notes/Pay Item Notes
16.5 Pole Data and Legend & Criteria
16.6 Service Point Details
16.7 Project Layout
16.8 Plan Sheet
16.9 Special Details
16.10 Temporary Lighting Data and Details

16.11 Traffic Control Plan Sheets

16.12 Interim Standards

16.13 Quality Assurance/Quality Control

16.14 Supervision

17 LANDSCAPE ARCHITECTURE ANALYSIS

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

17.1 Data Collection

All research required to collect data necessary to complete the initial design analysis. Includes identifying local ordinances and collection of other project data.

17.2 Site Inventory and Analysis

Includes identification of opportunities and constraints for the proposed project based on existing site conditions. Summary of analysis, if required, is included in conceptual design.

17.3 Planting Design

Conceptual Design: Includes delineation of all proposed planting types, scheme development and preliminary costs, and areas and reports. The design shall be submitted with the Phase I plans.

Final Design: Includes identifying the species/type, size, location, spacing, and quality of all plants.

17.4 Irrigation Design

Feasibility Report: Includes analysis of methods, materials and operation costs associated with proposed irrigation system design.

Conceptual Design: Typically not done in master design file. Includes determination of water and power sources. Phase I design level.

Final Design: Includes all work in master design files. Irrigation Design includes, but is not limited to, the locations and sizes of pumps, pump stations, mainlines, lateral lines, irrigation heads, valves, backflow and control devices.

17.5 Hardscape Design

Conceptual design - scheme development and preliminary costs: Typically not done in master design file. Delineation of areas and elements to be included in design. Select cut sheets, prepare image boards. Includes report, if required.
Final Design: Includes all work in master design files. Hardscape Design includes, but is not limited to, sidewalks, plazas, Steps, Fountains, Walls, Pedestrian bridges, non-regulatory signs or project graphics, roadway aesthetics, site furnishings.

17.6 Computation Book and Quantities
17.7 Cost Estimates
17.8 Technical Special Provisions
17.9 Field Reviews
17.10 Technical Meetings
17.11 Quality Assurance/Quality Control
17.12 Independent Peer Review
17.13 Supervision
17.14 Coordination

18 LANDSCAPE ARCHITECTURE PLANS

The CONSULTANT shall prepare a set of Landscape Plans which includes the following.

18.1 Key Sheet
18.2 Tabulation of Quantities
18.3 General Notes
18.4 Tree and Vegetation Inventory, Protection and Relocation Plans
18.5 Planting Plans for Linear Roadway Projects
18.6 Planting Plans (Interchanges and Toll Plazas)
18.7 Planting Details and Notes

The CONSULTANT shall include a written or graphic guide for care and maintenance of the irrigation system after the warranty period. This Maintenance Plan will be developed in coordination with the local government entity who assumes the maintenance obligation.

18.8 Irrigation Plans for Linear Roadway Project
18.9 Irrigation Plans for Interchange and Toll Plazas
18.10  Irrigation Details and Notes

18.11  Hardscape Plans

18.12  Hardscape Details and Notes

The CONSULTANT shall include a written or graphic guide for care and maintenance of the irrigation system after the warranty period. This Maintenance Plan will be developed in coordination with the local government entity who assumes the maintenance obligation.

18.13  Cost Estimate

18.14  Quality Assurance/Quality Control

18.15  Supervision

18.16  Technical Maintenance Plan

Written or graphic guide for care of the plantings, irrigation system and hardscape maintenance after the warranty period. Maintenance details and specifications shall recommend: a mowing schedule and maintained grass height; fertilization schedules, formulas, rates and methods of application; weeding schedule and method chemical, mechanical, or manual; edging schedule; herbicide schedules formulas, rates, methods of application, precautions; pruning schedule and methods to maintain health and clear sight requirements; mulching materials, thickness and replacement frequency; irrigation schedule and warranty period maintenance (flushing, adjustments, clean-up); litter pick-up; and hardscape care. This Maintenance Plan will be developed in coordination with the local government entity that assumes the maintenance obligation.

19  SURVEY

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 AGENCY. Field books submitted to the AGENCY 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 AGENCY 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 AGENCY may instead require that these points be surveyed by true line, traverse or parallel offset.

19.1 Horizontal Project Network Control (HPNC)

Establish or recover HPNC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System or datum approved by the AGENCY Location Surveyor (DLS); may include primary or secondary control points. Includes analysis and processing of all field collected data, and preparation of forms.

19.2 Vertical Project Network Control (VPNC)

Establish or recover VPNC, for the purpose of establishing vertical control on datum approved by the AGENCY Location Surveyor (DLS); may include primary or secondary vertical control points. Includes analysis and processing of all field collected data, and preparation of forms.

19.3 Alignment and/or Existing Right of Way Lines

Establish, recover or re-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 (in required format) per AGENCY R/W Maps, platted or dedicated rights of way.

19.4 Aerial Targets

Place, locate, and maintain required aerial targets and/or photo identifiable points. Includes analysis and processing of all field collected data, existing maps, and/or reports.

19.5 Reference Points

Reference HPNC points, project alignment, vertical control points, section, ¼ section, center of section corners and G.L.O. corners as required.

19.6 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.

19.7 Digital Terrain Model (DTM)

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.

19.8 Roadway Cross Sections/Profiles
Perform field survey check sections or profiles to verify the required accuracy of the digital terrain model and/or to determine existing cross slope. Includes analysis and processing of all field-collected data for comparison with DTM.

19.9 Side Street Surveys

Refer to tasks of this document as applicable.

19.10 Underground Utilities

Designation includes 2-dimensional collection of existing 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.

19.11 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.

19.12 Drainage Survey

Locate underground data (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.

19.13 Bridge Survey

Locate required above ground features and improvements for the limits of the bridge. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

19.14 Channel Survey

Locate all topographic features and improvements for the limits of the project by collecting the required data for the purpose of a D.E.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, maps, and/or reports.

19.15 Pond Site Survey

Refer to tasks of this document as applicable.

19.16 Mitigation Survey

Refer to tasks of this document as applicable.

19.17 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.

19.18 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.

19.19 Sectional/Grant Survey

Perform field location/placement of section corners, 1/4 section corners, and fractional corners where pertinent. Includes analysis and processing of all field-collected data and/or reports.

19.20 Subdivision Location

Survey all existing recorded subdivision/condominium boundaries, tracts, units, phases, blocks, street R/W lines, common areas. 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 monumentation of the beginning and end of unrecorded subdivision.

19.21 Maintained R/W

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

19.22 Boundary Survey

Perform boundary survey as defined by Department of Transportation standards. Includes analysis and processing of all field-collected data, preparation of reports.

19.23 Water Boundary Survey

Perform Mean High Water, Ordinary High Water and Safe Upland Line surveys as required by AGENCY standards.

19.24 Right of Way Staking

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

19.25 Right of Way Monumentation

Set R/W monumentation as depicted on final R/W maps for corridor and water retention areas.

19.26 Line Cutting

Perform all efforts required to clear vegetation from the line of sight.

19.27 Work Zone Safety
Provide work zone as required by Department of Transportation standards.

19.28 Miscellaneous Surveys

Refer to tasks of this document, as applicable, to perform surveys not described herein.

19.29 Supplemental Surveys

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

19.30 Document Research

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

19.31 Field Review

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

19.32 Technical Meetings

Attend meetings as required and negotiated by the Surveying and Mapping Department.

19.33 Quality Control/Quality Assurance

Establish and implement a QAQC plan. Also includes subconsultant review, response to comments and any resolution meetings if required, preparation of submittals for review, etc.

19.34 Supervision

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

19.35 Coordination

20 PHOTOGRAMMETRY

To be provided by the AGENCY

21 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 Department of Transportation 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 Department of Transportation size and format requirements.
utilizing Department of Transportation 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 AGENCY for review at stages of completion as negotiated.

**Master CADD File**

21.1 Alignment

21.2 Section and 1/4 Section Lines

21.3 Subdivisions

21.4 Existing Right of Way

21.5 Topography

21.6 Parent Tract Properties and Existing Easements

21.7 Proposed Right of Way Requirements

The ENGINEER OF RECORD (EOR) will provide the proposed requirements. The PSM is responsible for calculating the final geometry.

21.8 Limits of Construction

The limits of construction DGN file as provided by the EOR will be imported or referenced to the master CADD file. Additional labeling will be added as required. The PSM is required to advise the EOR of any noted discrepancies between the limits of construction line and the existing/proposed right of way lines, and for making adjustments as needed when a resolution is determined.

21.9 Jurisdictional/Agency Lines

These lines may include, but are not limited to, jurisdictional, wetland, water boundaries, and city/county limit lines.

**Sheet Files**

21.10 Control Survey Cover Sheet

21.11 Control Survey Key Sheet

21.12 Control Survey Detail Sheet

21.13 Right of Way Map Cover Sheet

21.14 Right of Way Map Key Sheet

21.15 Right of Way Map Detail Sheet
21.16 Maintenance Map Cover Sheet

21.17 Maintenance Map Key Sheet

21.18 Maintenance Map Detail Sheet

21.19 Reference Point Sheet

   This sheet(s) will be included with the Control Survey Map, Right of Way Map and Maintenance Map.

21.20 Project Network Control Sheet

   This sheet depicts the baseline, the benchmarks, the primary and secondary control points and their reference points including the type of material used for each point, their XYZ coordinates, scale factors and convergence angles. This sheet(s) may be included with the Control Survey Map, Right of Way Map and Maintenance Map.

21.21 Table of Ownerships Sheet

Miscellaneous Surveys and Sketches

21.22 Parcel Sketches

21.23 TIITF Sketches

21.24 Other Specific Purpose Survey(s)

21.25 Boundary Survey(s) Map

21.26 Right of Way Monumentation Map

21.27 Title Search Map

21.28 Title Search Report

21.29 Legal Descriptions

21.30 Final Map/Plans Comparison

   The PSM will perform a comparison of the final right of way maps with the available construction plans to review the correctness of the type of parcel to be acquired and the stations/offsets to the required right of way. The PSM will coordinate with the EOR to resolve any conflicts or discrepancies and provide documentation of the review.

21.31 Field Reviews

21.32 Technical Meetings
21.33 Quality Assurance/Quality Control
21.34 Supervision
21.35 Coordination

22 GEOTECHNICAL

The CONSULTANT shall, for each project, be responsible for a complete geotechnical investigation. All work performed by the CONSULTANT shall be in accordance with Department of Transportation standards, or as otherwise directed by the AGENCY Geotechnical Engineer. The AGENCY Geotechnical Engineer will make interpretations and changes regarding geotechnical standards, policies and procedures and provide guidance to the CONSULTANT.

Prior to beginning each phase of investigation and after the Notice to Proceed is given, the CONSULTANT shall submit investigation plan for approval and meet with the AGENCY’s Geotechnical Engineer or representative to review the project scope and AGENCY requirements. The investigation plan shall include, but not be limited to, the proposed boring locations and depths, and all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site. Additional meetings may be required to plan any additional field efforts, review plans, resolve plans/report comments, resolve responses to comments, and/or any other meetings necessary to facilitate the project.

The CONSULTANT shall notify the AGENCY in adequate time to schedule a representative to attend all related meetings and field activities.

22.1 Document Collection and Review

CONSULTANT will review printed literature including topographic maps, county agricultural maps, aerial photography (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field reconnaissance, CONSULTANT shall review U.S.G.S., S.C.S. and potentiometric maps, and identify areas with problematic soil and groundwater conditions.

Roadway

The CONSULTANT shall be responsible for coordination of all geotechnical related fieldwork activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the AGENCY’s Geotechnical Engineer.

Obtain pavement cores as directed in writing by the AGENCY’s Geotechnical Engineer.

If required by the AGENCY Geotechnical Engineer, a preliminary roadway exploration shall be performed before the Phase I plans submittal. The preliminary roadway exploration will be performed and results provided to the Engineer of Record to assist in setting roadway grades and locating potential problem areas. The preliminary roadway exploration shall be performed as directed in writing by the AGENCY Geotechnical Engineer.
CONSULTANT shall perform specialized field-testing as required by project needs and as directed in writing by the AGENCY Geotechnical Engineer.

All laboratory testing and classification will be performed in accordance with applicable Department of Transportation standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

22.2 Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with AGENCY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to the AGENCY for approval prior to commencing with the boring program.

22.3 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

22.4 MOT Plans for Field Investigation

Coordinate and develop Maintenance of Traffic (MOT) plan. All work zone traffic control will be performed in accordance with the Department of Transportation’s Roadway and Traffic Design Standards Index 600 series.

22.5 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

22.6 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the AGENCY’s Project Manager.

22.7 Groundwater Monitoring

Monitor groundwater, using piezometers.

22.8 LBR Sampling

Collect appropriate samples for Limerock Bearing Ratio (LBR) testing.

22.9 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

22.10 Soil and Rock Classification - Roadway

Refine soil profiles recorded in the field, based on results of laboratory testing.
22.11 **Design LBR**
Determine design LBR values from the 90% and mean methods.

22.12 **Laboratory Data**
Tabulate laboratory test results for inclusion in the geotechnical report, the report of tests sheet (Roadway Soil Survey Sheet), and for any necessary calculations and analyses.

22.13 **Seasonal High Water Table**
Review the encountered ground water levels and estimate seasonal high ground water levels. Estimate seasonal low ground water levels, if requested.

22.14 **Parameters for Water Retention Areas**
Calculate parameters for water retention areas, exfiltration trenches, and/or swales.

22.15 **Limits of Unsuitable Material**
Delineate limits of unsuitable material(s) in both horizontal and vertical directions. Assist the Engineer of Record with detailing these limits on the cross-sections. If requested, prepare a plan view of the limits of unsuitable material.

22.16 **ASCII Files for Cross-Sections**
Create ASCII files of boring data for cross-sections.

22.17 **Embankment Settlement and Stability**
Estimate the total magnitude and time rate of embankment settlements. Calculate the factor of safety against slope stability failure.

22.18 **Stormwater Volume Recovery and/or Background Seepage Analysis**
Perform stormwater volume recovery analysis as directed by the AGENCY.

22.19 **Geotechnical Recommendations**
Provide geotechnical recommendations regarding the proposed roadway construction project including the following: description of the site/alignment, design recommendations and discussion of any special considerations (i.e. removal of unsuitable material, consolidation of weak soils, estimated settlement time/amount, groundwater control, high groundwater conditions relative to pavement base, etc.) Evaluate and recommend types of geosynthetics and properties for various applications, as required.

If a preliminary roadway investigation is performed, a preliminary roadway report shall be submitted before the Phase I plans submittal. The purpose of the preliminary roadway report will be to assist in setting road grades and locating potential problems.

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- Results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the AGENCY and submit any responses and revised reports.

If a pavement evaluation is performed, the evaluation and report submittal shall be in accordance with Section 3.4 of the Materials Manual: Pavement Coring and Evaluation.

22.21 Final Report

The Final Roadway Report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- Results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the AGENCY and submit any responses and revised reports.
22.22 Auger Boring Drafting

Draft auger borings as directed by the AGENCY.

22.23 SPT Boring Drafting

Draft SPT borings as directed by the AGENCY.

Structures

The CONSULTANT shall be responsible for coordination of all geotechnical related fieldwork activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the AGENCY Geotechnical Engineer.

CONSULTANT shall perform specialized field-testing as required by needs of project and as directed in writing by the AGENCY Geotechnical Engineer.

All laboratory testing and classification will be performed in accordance with applicable AGENCY standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

The scope includes the following activities only as appropriate for: overhead signs, mast arm signals, strain poles, buildings, and other structures required on the project

22.24 Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with AGENCY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to Florida Department of Transportation for approval prior to commencing with the boring program.

22.25 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

22.26 MOT Plans for Field Investigation

Coordinate and develop MOT plan. All work zone traffic control will be performed in accordance with the Florida Department of Transportation’s Roadway and Traffic Design Standards Index 600 series.

22.27 Drilling Access Permits

Obtain all State, County, City, and Water Management AGENCY permits for performing geotechnical borings, as needed.

22.28 Property Clearances
Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the AGENCY’s Project Manager.

22.29 Collection of Corrosion Samples
Collect corrosion samples for determination of environmental classifications.

22.30 Coordination of Field Work
Coordinate all field work required to provide geotechnical data for the project.

22.31 Soil and Rock Classification - Structures
Soil profiles recorded in the field should be refined based on the results of laboratory testing.

22.32 Tabulation of Laboratory Data
Laboratory test results should be tabulated for inclusion in the geotechnical report and for the necessary calculations and analyses.

22.33 Design Groundwater Level for Structures
Review encountered groundwater levels, estimate seasonal high groundwater levels, and evaluate groundwater levels for structure design.

22.34 Selection of Foundation Alternatives (BDR)
Evaluation and selection of foundation alternative, including the following:

- Spread footings
- Prestressed concrete piling - various sizes
- Steel H- piles
- Steel pipe piles
- Drilled shafts

Foundation analyses shall be performed using approved Florida Department of Transportation methods. Assist in selection of the most economical, feasible foundation alternative.

22.35 Detailed Analysis of Selected Foundation Alternate(s)
Detailed analysis and basis for the selected foundation alternative. Foundation analyses shall be performed using approved Florida Department of Transportation methods and shall include:

- For pile and drilled shaft foundations, provide graphs of ultimate axial soil resistance versus tip elevations. Calculate scour resistance and/or downdrag (negative skin friction), if applicable.
- CONSULTANT shall assist the Engineer of Record in preparing the Pile Data Table (including test pile lengths, scour resistance, downdrag, minimum tip elevation, etc.)
- Provide the design soil profile(s), which include the soil model/type of each layer and all soil-engineering properties required for the Engineer of Record to run the FB Pier computer program. Review lateral analysis of selected foundation for geotechnical compatibility.
- Shallow foundation bearing capacity (including soil bearing capacity, minimum footing width, and minimum embedment depth).
- Estimated maximum driving resistance anticipated for pile foundations.
- Provide settlement analysis.

22.36 Bridge Construction and Testing Recommendations

Provide construction and testing recommendations including potential constructability problems.

22.37 Lateral Load Analysis (Optional)

Perform lateral load analyses as directed by the AGENCY.

22.38 Walls

Provide the design soil profile(s), which include the soil model/type of each layer and all soil engineering properties required by the Engineer of Record for conventional wall analyses and recommendations. Review wall design for geotechnical compatibility and constructability.

Evaluate the external stability of conventional retaining walls and retained earth wall systems. For retained earth wall systems, calculate and provide minimum soil reinforcement lengths versus wall heights, and soil parameters assumed in analysis. Estimate differential and total (long term and short term) settlements. Provide wall construction recommendations.

22.39 Sheet Pile Wall Analysis (Optional)

Analyze sheet pile walls as directed by the AGENCY.

22.40 Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations

Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.

22.40 Box Culvert Analysis

- Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.
- Provide lateral earth pressure coefficients.
- Provide box culvert construction and design recommendations.
- Estimate differential and total (long term and short term) settlements.
• Evaluate wingwall stability.

22.42 Preliminary Report - BDR

The preliminary structures report shall contain the following discussions as appropriate for the assigned project:

• Copies of U.S.G.S. and S.C.S. maps with project limits shown.
• Summary of structure background data, SCS, USGS, geologic and potentiometric data.
• The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
• Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
• Any special provisions required for construction that are not addressed in the Department of Transportation’s Standard specification.
• An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

22.43 Final Report - Bridge and Associated Walls

The final structures report shall include the following:

• Copies of U.S.G.S. and S.C.S. maps with project limits shown.
• Summary of structure background data, SCS, USGS, geologic and potentiometric data.
• The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
• Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
• Any special provisions required for construction that are not addressed in the Department of Transportation’s Standard specification.
• An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

22.44 Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights

The final reports shall include the following:

• Copies of U.S.G.S. and S.C.S. maps with project limits shown.
• Summary of structure background data, SCS, USGS, geologic and potentiometric data.
• The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
• Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
• Any special provisions required for construction that are not addressed in the Department of Transportation’s Standard specification.
• An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing
capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile
driving records (if available), and any other pertinent information.

Final reports will incorporate comments from the AGENCY and contain any additional field or
laboratory test results, recommended foundation alternatives along with design parameters and special
provisions for the contract plans. These reports will be submitted to the AGENCY Geotechnical
Engineer for review prior to project completion. After review by the AGENCY Geotechnical
Engineer, the reports will be submitted to the AGENCY Geotechnical Engineer in final form and will
include the following:

- All original plan sheets (11” x 17”)
- One set of all plan and specification documents, in electronic format, according to Department of
  Transportation requirements
- Two sets of record prints
- Six sets of any special provisions
- All reference and support documentation used in preparation of contract plans package
- Additional final reports (up to four), aside from stated above, may be needed and requested for
  the AGENCY’s Project Manager and other disciplines.
- The final reports, special provisions, as well as record prints, will be signed and sealed by a
  Professional Engineer registered in the State of Florida.
- Draft the detailed boring/sounding standard sheet, including environmental classification, results
  of laboratory testing, and specialized construction requirements, for inclusion in final plans.
22.45 Drafting

Prepare a complete set of drawings to include all SPT borings, auger borings and other pertinent soils information in the plans. Include these drawings in the Final Geotechnical Report. Draft borings, location map, S.C.S. map and U.S.D.A. map as directed by the AGENCY. Soil symbols must be consistent with those presented in the latest Florida Department of Transportation Soils and Foundations Handbook.

22.46 Technical Special Provisions

22.47 Field Reviews

Identify and note surface soil and rock conditions, surface water conditions and locations, and preliminary utility conflicts. Observe and note nearby structures and foundation types.

22.48 Technical Meetings

22.49 Quality Assurance/Quality Control

22.50 Supervision

22.51 Coordination

22.52 Optional Preliminary Contamination Assessment

When required, all work shall be performed in accordance with current Florida Department of Environmental Regulation (DER) and Federal OSHA and EPA standards. The following work shall be included, but not limited to:

- A minimum of four borings will be required per site.
- Soil gas analysis will be required by use of a flame ionization detector; e.g. Organic Vapor Analyzer (OVA).
- Installation of monitoring wells may be required.
- Water sampling and laboratory analysis may be required. The State of Florida Department of Health shall certify the laboratory performing the analysis.
- Four copies of the draft PCA report will be required for review and comment by the AGENCY. After comments have been addressed, six signed and sealed copies of the final PCA report shall be submitted to the AGENCY. Copies of all documents will be additionally transmitted to the AGENCY in electronic format in accordance with the Department of Transportation’s current standards.

23 PROJECT REQUIREMENTS

23.1 Liaison Office

The AGENCY and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of their 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 AGENCY Project Manager.

23.2 Key Personnel

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

23.3 Progress Reporting

The CONSULTANT shall meet with the AGENCY as required and shall provide a written progress and schedule status reports that describe the work performed on each task. Progress and schedule status reports shall be delivered to the AGENCY concurrently with the monthly invoice. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

23.4 Correspondence

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

23.5 Professional Endorsement

The CONSULTANT shall have a Registered Professional Engineer in the State of Florida sign and seal all reports, documents, and plans as required by Department of Transportation standards.

23.6 Computer Automation

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

23.7 Coordination With Other Consultants

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

23.8 Optional Services

At the AGENCY’s option, the CONSULTANT may be requested to provide post design services. The fee for these services shall be negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, 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 in accordance with paragraph 2.00 of the Standard Consultant Agreement. The additional services may
include Construction Assistance, Review of Shop Drawings, Final Bridge Load Rating, update (Category II) bridge plans electronically (CADD) for the Final "As-Built" conditions, based on documents provided by the AGENCY or other Post Design Services as required.

24 INVOICING LIMITS

Payment for the work accomplished will be in accordance with Method of Compensation of this contract. Invoices shall be submitted to the AGENCY, in a format prescribed by the AGENCY. The AGENCY 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 AGENCY.

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

The AGENCY will withhold retainage on all invoices and will release retainage only at milestones to be specified in the contract.

The AGENCY reserves the right to utilize a fee-loaded schedule for invoicing and payment purposes.
STATEMENT OF ISSUE: This item provides the TCC an update on the status of the Capital Cascade Trail Master Plan, review the issues raised by the TCC at their January 21, 2005, meeting, and lists actions taken at the January 31, 2005 Intergovernmental Agency meeting.

This item also requests the TCC’s comments and recommendations related to the IA’s action on January 31 to move construction of Capital Cascade Trail Segment 4 (Gamble Street to the confluence with Munson Slough) into Tier 1 of the Blueprint project priorities.

SUPPLEMENTAL INFORMATION:

IA Actions and project status: Considerable discussion occurred at the January 21, 2005 TCC meeting related to technical/stormwater modeling issues. As a result, the Capital Cascade Trail Master Plan agenda item presented by staff to the Intergovernmental Agency on January 31, 2005, did not request action on selecting a preferred concept. However, as noted below, the IA took the following action:

- Segment 1 (Franklin Boulevard): Recommended the 4-lane roadway concept with underground box culvert conveyance. The IA indicated that they want additional study done by the City and the County to investigate additional off site storage capacity (Leon High School), and indicated the issues of the TCC related to stormwater velocities, box culvert used for storage, etc. needed to be addressed.
- Segment 2 (Cascade Park): Recommended Concept E, with as flat and green a field as possible in the lower segment (versus the amphitheater); noted some concerns with putting the holding pond on the site of the contamination, and requested staff review this issue. (Staff noted that the pond is to be lined and EPA may have a say in this issue.)
- Segment 3 (FAMU Way/Gaines Street) and Segment 4 (Gamble Street south to the Munson Slough): Passed staff recommendation (Concept A and Concept C, respectively.)
- Project Phasing: the IA passed a motion to move Segment 4 construction into Tier 1. They also accepted a construction sequence of Segment 2, 4, 3, and 1. (Note: Franklin Boulevard is last.) "Capital Circle NW/SW, I-10 to the Airport, is to be funded before Segment 1 of the Capital Cascade Trail."

A TCC subcommittee was appointed at the January 21 meeting to help work through the TCC’s concerns and provide direction on completion of the study; (subcommittee membership: John Buss, Theresa Heiker, John Kraynak, and Rodney Cassidy.) Members of the subcommittee have
met with Blueprint and Genesis staff several times to address the issues and a recommended approach.

Correspondence from Genesis Group (Mark Llewellyn and Mark Thomasson) to Dave Bright is attached which describes the technical issue and provides the design approach resulting from the various meetings with the subcommittee and other City and County stormwater and growth management staff.

**IA action related to moving Segment 4 construction into Tier 1**: As noted above, the IA voted to move the construction of Segment 4 (Gamble Street to the confluence with Munson Slough) into Tier 1 of the Blueprint Program. Segment 4 is currently approved for right-of-way acquisition only. As a result, staff is developing/reviewing a scope for additional archeological/historic resources services and additional geotechnical services to obtain the information to evaluate pond locations, karst potential, and historic/cultural impacts, etc., within Segment 4, and for some additional information on Segment 3.

The Blueprint 2000 Interlocal Agreement, Section 9 (Amendment, Deletion or Additions to Projects) provides a process for making changes to the priority list of projects included in the Interlocal Agreement. Section 9 states:

“The above listed projects can only be significantly amended, deleted, or added to if unforeseen conditions, as determined by the Board of Directors, require such changes and if the City Commission and the Board of County Commissioners each approve such change by a supermajority vote (a majority plus one of the voting members of each body), after taking into consideration the recommendations of the Citizen Advisory Committee, the Blueprint 2000 Technical Coordinating Committee, and the Intergovernmental Management Committee. Such a vote will not be taken until the Blueprint 2000 Intergovernmental Agency holds at least two noticed public hearings with respect to such proposed change.”

It is anticipated that one public hearing will be scheduled for a City Commission meeting and one for a County Commission meeting.

**RECOMMENDED ACTION:**

No action requested, however, comments from the TCC related to moving Segment 4 construction into Tier 1 of the Blueprint Program will be compiled and provided to the CAC and the IA.

**ATTACHMENT(S):**

Correspondence dated March 2, 2005, from Genesis Group to Dave Bright.
March 2, 2005

Mr. David Bright
Blueprint 2000 & Beyond
The Koger Center, Ellis Building
1311 Executive Center Drive, Suite 109
Tallahassee, FL 32301

Re: Capital Cascade Trail Master Plan Direction

Dear Mr. Bright:

Based on meetings conducted last week with Theresa Heiker and John Kraynak (February 23, 2005 at Blueprint’s office), and with John Buss, Jodie Cahoon, and Jim Lee (February 25, 2005 at City of Tallahassee Stormwater Division’s office), we are proceeding with the stormwater re-modeling of all four (4) segments of the project based on items outlined in your letter dated February 14, 2005 and further clarified at the meetings as follows:

1. Segment 1:

   a. Issue – The design criteria for the Franklin Boulevard box culvert.

      Recommended Direction - the box culvert will be designed for conveyance only.

      Design Approach - The box culvert will have no surcharge for the 25 year, 8 hour storm event. In addition, the design discharge from the area above Tennessee Street will be based on the results of the initial double box culvert concepts peak discharge (541 cfs) for the 25 year, 8 hour event. This approach will allow for a reduction in the flooding at Leon High School.

      Finalized Design Approach - The design approach for this item as identified above was accepted by the City and County, with the following understanding:

         - Three different culvert sizes will be evaluated, with the flow, hydraulic grade lines, and velocities being compared.
         - As requested by Jodie Cahoon, the preferred box culvert size will be analyzed for the 25 year - 8 hour event, with the flow restriction at Tennessee Street being eliminated. A comparison of the flow, hydraulic grade line, and velocity will be compared with the results identified above.

   b. Issue – Leon High School flooding.

      Recommended Direction – The benefit at Leon High School that will be derived from the improvements to Franklin Boulevard will be quantified. No other analysis of a stormwater facility at Leon High School will be required.
Finalized Direction – The recommended direction identified above was acknowledged and accepted by both the City and County.

Note: A meeting was conducted with Bill Mumford, Superintendent of Leon County Schools, and Jim Davis to discuss potential options for Leon High School property. Based on this meeting, Genesis will prepare a schematic grading plan to identify the potential storage volume that could be provided at Leon High School without impacting the practice fields to any large extent.

c. Issue – The options associated with off line stormwater facilities including the use of underground storage vaults.

Recommended Direction – The approximate surface area and storage volume in acre feet using a five (5) foot storage depth will be provided for the properties that have been previously discussed as potential stormwater storage sites (Lafayette Park, Call-Cadiz, Leon High School, “Ho-Jo’s,” and Myers Park). Based on the direction provided at the Intergovernmental Agency meeting, no additional modeling will be required to consider potential stormwater projects outside of theBlueprint project limits.

Finalized Direction – The recommended direction identified above was accepted by the City and the County with the following understanding:

- A comparison will be completed of the capacity required versus the capacity available in Segment 2 for the various alternatives. The capacity required will be that which eliminates flooding at South Monroe Street. The deficit for each alternative will be noted.
- The potential sites will be identified in the report, along with the capacity that could be available at each site; however, it is anticipated that several of the sites may not provide the intended flood relief due to existing flow restrictions. An explanation will be provided regarding the potential use of each site. (See note under 1.b. above.)

d. Issue – The design criteria for the left turn lanes along Franklin Boulevard.

Recommended Direction – Since the presently proposed lengths are based on FDOT design criteria, we request that Leon County provide specific design criteria that will allow for the reduction of the left turn lane length along Franklin Boulevard.

Finalized Direction – Leon County recommended that the deceleration taper be eliminated, and that Genesis should provide left turn lane storage length recommendations for consideration by the County.
Mr. David Bright  
March 1, 2005  
Page 3

e. Issue – Side street storm sewer connections along Franklin Boulevard and the specific planning criteria.

Recommended Direction – Clearly designate this issue as a roadway design requirement and provide adequate “preliminary” costs in the Master Plan to address the anticipated improvements to the side street stormwater collection and conveyance system. The reduction in the hydraulic grade line for each box culvert concept alternative along Franklin Boulevard will be identified at each intersection and locations where major storm drainage systems connect to the box culvert.

Finalized Direction – The recommended direction identified above was accepted by the City and County, with the understanding that approximate costs would be included in the Conceptual Opinion of Probable Cost to provide improved conveyance at the intersections of each roadway with Franklin Boulevard.

2. Segment 2


Recommended Direction – Identify and tabulate the peak velocity at critical locations along the stream for each concept for the 2-year critical storm event, and discuss options to address velocities greater than 5 fps in the Alternatives Analysis. In addition, specific recommendations will be provided regarding recommended stream and channel improvements to create or enhance a sustainable habitat.

Finalized Direction – Leon County requested that velocities greater than 3 fps be identified as potential problem areas for stream morphology, and consideration should be given in the report for the expansion of channel modifications that could potentially reduce the velocities in the critical areas.

b. Issue – Lower Cascade Park peak stage for the design storm event.

Recommended Direction – Maximize the available stormwater capacity in the lower section to reduce the flooding of South Monroe to the greatest extent possible, while providing a “park like” joint use facility. The maximum acceptable stage must be identified. The peak stage shall not have a negative impact on the contributing storm sewer system and shall not flood adjacent buildings or the remaining portion of Bloxham Street.

Design Approach – The design will limit the maximum stage to be considered to a number that is acceptable to the City of Tallahassee, Leon County, and Blueprint based on hydraulic and public/social issues. As a reference, based on the most recent 25 year – 8 hour event modeling of the “Preferred Concept” for Segment 2 (prior to the elimination of the Franklin Boulevard box culvert storage), the lower section will stage up from a beginning elevation of 80.0 to
elevation 98.2 (rise of 18.2') in approximately 4 hours (4.6 feet/hour, 0.08 feet/minute, 1 foot every 13 minutes). The peak rate of rise is 1 foot every 7 minutes for a period of 1 hour. The stage will recede from elevation 98.2 to elevation 82.5 in approximately 10 hours (1.6 feet/hour, 0.03 feet/minute). The Technical Report narrative will provide design recommendations such as grading the area so as to not create areas that will become isolated before fully submerging, not siting potential refuge features such as a covered shelter in the flooding zone, and providing signage to warn and alert park users of the flooding that may occur during storm events. The frequency and depth of flooding at South Monroe Street will be provided for each alternate concept. In addition, the narrative will provide possible alternatives for flood reduction at South Monroe.

Finalized Design Approach – The design approach outlined above was accepted by both the City and the County with the following understanding:

- A request will be made to Greenways, Inc. regarding escape travel time evaluations for children to determine if the rate of rise was acceptable.
- The rough grading plan will be included in the report for the Lower Cascade Park to show how capacity will be achieved. In addition, a cross section will be provided for the upper, middle, and lower sections of Segment 2.
- Text will be included in the report that will address potential maintenance issues for the various storm events modeled.

c. Issue – Raising the elevation of Gaines Street.

Recommended Direction – Based on the criteria established for the lower section, the elevation of Gaines Street will need to be addressed in the sag area between Meridian Street and Suwanee Street. It is anticipated that approximately 350-400’ of roadway reconstruction (including the replacement of the existing culvert) will be required.

Finalized Direction – The recommended direction identified above was accepted by the City and the County with the following understanding:

- The required improvements should be identified on the concept plans.
- The extent of the impact at Gaines Street should be carefully reviewed and identified.

3. Segment 3
   a. Issue – The extent of stormwater capacity and water quality enhancement being provided in this segment.

Recommended Direction – The 100 year flood elevation shall be reduced to the maximum extent possible for lands adjacent to the St. Augustine Branch while
providing aesthetic, joint use facilities as envisioned in Task 3 of the Scope of Services.

Design Approach - The lateral extent with depth of flooding sufficient to delineate “serious flooding” areas outside the boundaries of proposed stormwater management facilities with durations indicated as short (<2 hour), moderate (2-4 hours) or extended (>4 hours) at critical locations will be tabulated and depicted on the alternate concepts for the 2-yr and 25-yr critical duration storm events.

Finalized Design Approach – The recommended direction and design approach was accepted by the City and the County with the following understanding:

- The term ‘serious flooding’ is intended to include both nuisance and hazard flooding.

Additional item identified: The City of Tallahassee indicated the desire to conduct additional meetings with the Florida Department of Environmental Protection to review the ability to utilize the capacity being provided in this system as water quality enhancements for adjacent projects. This meeting will be scheduled with Eric Livingston as early as possible. The purpose will be to obtain some flexibility from DEP regarding allowances for the additional capacity and additional water quality being provided in the system. In addition, the intent of this meeting will be to develop a strategy on how to best deal with the Total Maximum Daily Load (TMDL) requirements.

b. Issue – The potential for urban parks in this segment compared to the intent of the EECC.

Recommended Direction – Review the current alternatives in detail and request clarification from members of the EECC regarding the intent of Segment 3 facilities.

Finalized Direction – The recommended direction identified above is acceptable to both the City and County, with the City voicing an opinion that Concept B better meets the original intent of the EECC. Concept A provides expanded stormwater management facilities and expanded potential areas for adjacent recreational facilities. John Buss indicated that he would continue to object to the reduction of the facilities from Concept B to Concept A.

c. Issue – Conveyance adjacent to the electric sub-station.

Recommended Direction – Complete an evaluation of another alternative that will include both open and closed conveyance. The open conveyance will have reinforced side banks to provide the required capacity along with the space required for the trail and landscaping. The closed conveyance will consider
both full flow and the additional cost of a partially full concrete arch or box structure.

*Finalized Direction – The recommended direction identified above is acceptable to both the City and the County.*

d. Issue – The extent of stormwater facilities adjacent to Railroad Square.

Recommended Direction – Expand the “Preferred” Concept A stormwater facility located just west of Railroad Square by shifting the future Pinellas Street to the east into Railroad Square property and shifting the future alignment of FAMU Way to the south (as shown on Concept B). The goal should be to lower the 100-year flood elevation to below the finished floor elevation of (most of) the existing buildings located in Railroad Square. This approach was discussed with the majority property owners of Railroad Square. Additional conversations will be held with the owners as their redevelopment plans are being developed.

*Finalized Direction – The recommended direction identified above was accepted by both the City and the County, with the understanding that the City would continue to object based on the issues identified in 3b.*

e. Issue – Coordination with FAMU.

Recommended Direction – Genesis will schedule and conduct a final follow-up meeting with FAMU Administration Staff to review the “Preferred” concept and request a formal review and comment.

*Finalized Direction – The recommended direction identified above was accepted by both the City and the County, with the understanding that the contact person with the City of Tallahassee to clarify any questions about the FAMU agreement would be John Buss. The report will address the commitments made by the City in the Agreement with FAMU.*

4. Segment 4


Recommended Direction – The IA provided specific direction on the order of construction implementation, moving Segment 4 from an unfunded position to second priority. Genesis will address the extent of stormwater facilities in Technical Report 2 as it relates to the criteria established in the Scope of Services (adequacy in addressing stormwater flooding and improving water quality, benefits to habitat and stream morphology, ease of permitting or permitting issues needing to be resolved, lands to be acquired, and construction costs of the conveyance, retention, water quality improvements, and other amenities).
Finalized Direction – The recommended direction identified above was accepted by both the City and the County, with the understanding that the criteria will be identified and ranked in a matrix form to support the selection of a preferred alternative. It should be noted that all concept criteria will be indicated in matrix form to support the selection process.

b. Issue – Karst potential.

Recommended Direction – Environmental and Geotechnical Specialists, Inc. (EGS) will complete the “Likely Karst Features” analysis along with additional borings at the proposed pond facilities located in Segment 4 to provide an enhanced review of the Karst potential. Karst potential shall be addressed at this phase of the analysis in a manner similar to the County’s approach to Lake Henrietta (further evaluation will be conducted during the design phase, and additional analysis will be conducted if a sink hole is encountered during construction).

Finalized Direction – The recommended direction identified above was accepted by both the City and the County, with the understanding from the County that additional costs will be included in the Conceptual Opinion of Probable Cost to address the probability that a sinkhole would occur during construction in the amount of 10% of the stormwater facility construction cost. As clarification: a limited number of deep soil borings will be completed to address the Karst issue on a preliminary basis only.


Recommended Direction – Genesis will work with the County to clarify this issue, identify specific concerns, and develop a reasonable approach for addressing the concerns.

Finalized Direction – Leon County indicated that their concern is related to the backwater condition created by each alternative and the effect that that condition has on the time and extent of the peak stage at the confluence. In addition, the concern was raised about the effect of each concept alternative at Lakeview Drive. This concern will be addressed in the analysis.

5. General
a. Issue – Participation in the review process and the associated schedule.

Recommended Direction –

March 18, 2005 – Genesis will submit the updated modeling information and narrative to the City and County for review and comment.

April 8, 2005 – Comments will be issued from City and County and a roundtable review of the comments will be conducted.
April 25, 2005 – Genesis will resubmit the final Alternatives Analysis for final review prior to the May 2, 2005 TCC meeting.

May 16, 2005 – Present the Preferred Alternative to the IA with CAC and TCC acceptance.

_The finalized direction regarding the schedule is based on an understanding of the review responsibilities outlined under 5c. Based on the current status of the analysis and the time frame to conduct the meetings with the City and the County, the schedule identified above has been modified as follows:_

March 31, 2005 – Genesis will submit the updated modeling information and narrative to the City and County for review and comment.

April 15, 2005 – Comments will be issued from City and County and a roundtable review of the comments will be conducted.

April 29, 2005 – Genesis will resubmit the final Alternatives Analysis for review prior to the May 2, 2005 TCC meeting.

May 16, 2005 – Present the Preferred Alternative to the IA with CAC and TCC acceptance.


_Recommended Direction – Genesis will identify approximate physical size requirements and potential locations for “in-line” trash collection devices, review the locations with the City and County, and include the information in the final Alternatives Analysis. In addition, alternate storm sewer devices will be discussed in the Technical Report for connecting storm sewer systems._

_Finalized Direction – The recommended direction identified above was accepted by both the City and the County, with the understanding that consideration will be given to velocities at sites being considered._

c. Issue – Scope of Services – some specific requirements for data and comparative analysis presentation have not been provided

_Recommended Direction – Genesis will provide the information for each alternative in the format requested and in accordance with the project Scope of Services. Blueprint staff is responsible for ensuring that scope requirements have been complied with. However, it is hoped that any deficiencies noted by City of Tallahassee and Leon County staff will be brought to the attention of staff in sufficient time to correct and furnish information sufficiently in advance of the submittal and meeting dates. This understanding is based on the City and County receiving the documentation in an acceptable format and in a timely manner._
Finalized Direction – The recommended direction identified above was acknowledged by both the City and the County.

d. Issue – Alternatives Analysis Modeling Sequence

Recommended Direction – Based on the construction priority sequence established by the IA (Segments 2, 4, 3, 1), the modeling will be completed as follows:

Segment 2 – All Concepts will be modeled without any other improvements to any other Segment.

Segment 4 – All Segment 4 Concepts will be modeled with the results from the “Preferred” Segment 2 Concept model (Concept E – as selected by the IA) without any other improvements to Segments 3 or 1.

Segment 3 – All Segment 3 Concepts will be modeled with the results from the combined “Preferred” Segment 2 Concept (Concept E) and the “Preferred” Segment 4 model (Concept C) without any improvements in Segment 1.

Segment 1 – All Segment 1 Concepts will be modeled with the results from the combined “Preferred” Segment 2 Concept (Concept E), the “Preferred” Segment 4 model (Concept C), and the “Preferred” Segment 3 model (Concept A). Three (3) different box culvert size configurations will be modeled.

Note: Temporary features that may be necessary to allow for the phased implementation of the 4 segments will be identified in the Technical Report.

Finalized direction – The finalized direction was significantly altered from the recommended direction identified above. Genesis Group is proceeding with the alternatives analysis modeling as follows:

- All segments will initially be modeled independently of any other improvement. The outfall of Segment 1 will daylight into Segment 2 and will be modeled independently of any other Segment 2 improvements.
- Six (6) storm events will be modeled for each concept for each segment (2, 5, 10, 25, 50, and 100 year frequencies). This is a total of 78 model runs.
- The preferred concept will be selected based on the independent segment-by-segment model runs, along with the other factors considered during the public participation process.
- The preferred concept for Segments 1, 2, 3, and 4 will be combined into one model, and the six (6) storm events identified above will be modeled for the preferred, combined alternative. This modeling sequence approach will result in the completion of 84 model runs, with the appropriate results being tabulated.
e. **Added Issue: FEMA Approach**

*Finalized Direction – Genesis Group, along with Ed Ringe, will meet with the appropriate COT Stormwater staff to determine the City’s approach for the Central Drainage Ditch and to finalize the FEMA approach for the St. Augustine Branch.*

Thank you for the direction provided. Please notify us as soon as possible if there are any changes required to finalize the direction for each item. Due to the time constraints, we are pressing forward with the direction provided. We look forward to the successful completion of this master plan.

Sincerely,

**GENESIS GROUP**

Mark T. Llewellyn, P.E.  
President

Mark P. Thomasson, P.E.  
Associate Vice President
## Agenda Item

### SUBJECT/TITLE:
Addition of the Construction of Segment 4 of Cascade Trail into Tier 1 of the Blueprint Program

<table>
<thead>
<tr>
<th>Date: March 11, 2004</th>
<th>Requested By: Staff</th>
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</thead>
<tbody>
<tr>
<td>Contact Person: Jim Davis</td>
<td>Type of Item: Discussion</td>
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### STATEMENT OF ISSUE:
To receive the TCC recommendation on moving the construction of segment 4 of the Cascade Trail from Tier 2 to Tier 1 of the Blueprint Program.

### SUPPLEMENTAL INFORMATION:

The IA at the January 31, 2005 meeting voted to move the construction of segment 4 of the Cascade Trail into Tier 1 of the Blueprint Program. This action requires a supermajority vote of each Commission, after taking into consideration the recommendations of the Citizen Advisory Committee and the Technical Coordinating Committee.

### RECOMMENDED ACTION:

1. Provide a recommendation on moving the construction of segment 4 of the Cascade Trail from Tier 2 to Tier 1 of the Blueprint Program.

### ATTACHMENT(S):

None