

May 6, 2008

HNTB

Ms. Ruth Grady, E.I.
Department of Water Resources
St. Johns River Water Management District
975 Keller Road
Altamonte Springs, FL 32714

**Re: Hartwood Marsh Road Phase I
US 27 to 1500 feet East of Hancock Road
Application No. 40-069-114354-1
Response to Request for Additional Information**

Dear Ms. Grady:

Please find enclosed the following revised documents to the North Winter Park Drive Environmental Resource Permit Application.

- Three (3) copies of the Construction Plans
- Three (3) copies of the Response to Request for Additional Information

We offer the following responses to your comments.

Comment 1: Please provide revised pre, "interim", and post-development drainage basin maps that include sufficient on and off-site area topographical elevations. Clearly delineate the specific flow paths used in determining the time-of-concentrations for each basin. This information is necessary to validate the water quality and quantity calculations submitted with your application. [40C-4.301(1)(a)(b)(c)(e)(i); 40C-42.026(1), F.A.C.; 10.3, 11.2 A.H]

Response: *Please refer to the Flow Path plan sheets for the Pre and Post Development Condition located in the Appendix of the Response to the Request for Additional Information.*

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Comment 2: Please amend *PLAN SHEETS 18 through 28* of the set of construction plans submitted to depict the existing grade elevations. This information is necessary to verify the stormwater drainage patterns. [40C-4.301(1)(a)(b)(c)(e)(i), F.A.C.]

Response: *Please refer to the Flow Path plan sheets for the Pre and Post Development Condition located in the Appendix of the Response to the Request for Additional Information. These sheets show the existing one foot contours along the project and offsite areas.*

Comment 3: Section 7.1 of the Drainage Calculations submitted states, in part, “*In the post development condition, the basin area contributing to Pond 1 consists of the roadway (Sta. 103+43 to Sta. 138+50) and offsite basins directly adjacent to the road. Pond 1 is considered a separate basin. The runoff from the area surrounding the pond will be bypassed around the pond. Pond 1 will discharge to the unnamed lake.*”

Please note that this appears to be inconsistent with the post development *Pond 1 Nodal Diagram* submitted, which indicates that runoff from *BASIN 1 – 5 (INTERIM)* will be routed into *Pond 1*, in addition to the offsite basins directly adjacent to the road. Reference the following excerpts from the Drainage Calculations submittal.

- a. Accordingly, please revise the set of construction plans to clearly show the boundary limits of all areas draining to the proposed *Pond 1* system.
 - Ensure that these areas have been accounted for in the water quality and quantity calculations.
 - Be advised that stormwater treatment systems must be designed to provide the required treatment and attenuation from the entire contributing basin area (including the pond).
- b. For the proposed diversion of any off-site basin runoff flow around *Pond 1*, revise the set of plans to include a more detailed grading plan for the construction activity in its entirety.
 - Show how the proposed contour lines will tie into the existing contours along the outer perimeter of the proposed diversion area.
 - Include cross-section details, as needed, to clarify the proposed grades.

- Show the extent of any fill to be placed, if applicable.

Submit any revised plans and calculations. [40C-4.301(1)(a)(b)(c)(d)(e)(i); 40C-42.026(1), F.A.C.]

Response: *The nodal diagram has been revised to show Basin 1-5 discharging to the unnamed lake. The runoff from this area will be routed around Pond 1 through a swale that will be located on the north side of the pond. This swale is shown on the Pond 1 Detail Sheet and the Pond 1 cross sections.*

Comment 4: Staff is unable to determine, from the information provided on the set of construction plans received by the District on December 6, 2007, as to whether or not the proposed *Pond 2* surface water management system will function as an off-line system, as indicated in the water quality calculations.

Please note that, all surface water management systems currently classified as off-line treatment must incorporate a diversion device within the design. The diversion device creates storage of a specified portion (i.e., first flush) of the stormwater in such a manner so that subsequent (i.e., second flush) runoff in excess of the specified volume of stormwater does not flow into the area storing the initial stormwater. In other words, the off-line system must direct the remaining flow (after the water quality volume is reached) to a separate system. The off-line system cannot be utilized to treat subsequent flushes of stormwater runoff in tandem with the storage of the first flush runoff.

- a. Please demonstrate that the proposed off-line system is designed in accordance with the above information.
- b. Or, as an option, redesign the system to meet on-line treatment volume requirements.

Additionally note that proposed off-line systems that also serve to provide significant detention storage above the off-line treatment volume storage will be considered to function as on-line systems. [40C-4.301(1)(3)(i); 40C-42.026(1), F.A.C.]

Response: *The Pond 2 calculations have been revised to show it as an on-line system.*

Comment 5: Section 7.2 of the Drainage Calculations submitted states, in part, *“in the post development condition, the basin area contribution to Pond 2 consists of the roadway (Sta. 138+50 to Sta. 152+39) and offsite basins directly adjacent to the road. Pond 2 is considered a separate basin. Pond 2 is located on the future First Baptist Church of Clermont property. The County has had discussions with the property owner to coordinate joint use opportunities. The County has designed this pond to accommodate the runoff from the First Baptists church site assuming that the future development will be no more than 80% impervious. In addition, Pond 2 has been designed to include runoff from a section of the future South Hancock Road extension.”*

Accordingly, please provide a draft copy of the joint use agreement between Lake County and the First Baptist Church of Clermont. Clearly identify, in the agreement, which components of the Pond 2 system each entity will maintain. [40C-4.301(1)(i); 40C-42.027(1)(2); 40C-42.025(6), F.A.C.]

Response: *The Pond 2 design has been revised to retain the entire volume of runoff from the storm event. There will be no discharge to the Regency Hills system.*

Lake County will utilize the eminent domain process to obtain drainage easements and right-of-way. The County will provide the pertinent documentation prior to construction.

Comment 6: Section 7.3 of the Drainage Calculations submitted states, in part, *“In the post development condition, the Basin 3 area consist of the roadway (Sta. 152+39 to Sta. 161+50) and offsite basins directly adjacent to the road. This runoff from this basin will be treated in the Hartwood Marsh Road Phase II project. In the interim condition, the runoff from this basin will discharge to the roadside swales. Ditch blocks paced 50 feet apart in the swales on both side of the road will retain a portion of the runoff. Because this is an interim condition and the roadway is transitioning to match the existing two lane road, a best management practices approach was taken to address storm water treatment and attenuation. Currently the roadside swales are very shallow or nonexistent. In the interim condition, better defined swales will be provided to retain as much runoff as possible without requiring the purchase of additional right of way that would not be needed in the future when the Phase II retention ponds are constructed.”*

Please be advised that there are no rule exemptions regarding the life of your project (i.e., temporary, interim or permanent) as a factor in determining as to whether or not the water quality and quantity requirements must be met.

Accordingly, please submit a revised design and calculations demonstrating that the water quality and quantity requirements for the *Basin 3* area have been met, pursuant to current District criteria. Include all pertinent geotechnical information to support the parameters utilized in the recovery analyses. [40C-4.301(1)(a)(b)(c)(e)(i); 40C-42.026, F.A.C.]

Response: *The Basin 3 treatment system consisting of swale blocks to retain all the required storm water treatment volume and water quantity volume has been modified. Please see the Appendix for updated drainage calculations.*

Comment 7: Please justify the *Pond 2* base of aquifer and seasonal high water table elevations of 85.00 and 101.90 feet, respectively, as utilized in the POND-3 Version 3.2.0145 Retention Pond Recovery Analysis. Based on the recommendations presented on Page 6 of the September 6, 2007 revised *Roadway Soil Survey* by Ardaman & Associates, Inc., the *Boring Nos. AB-P3* and *AB-P4* profiles, the maximum depth of the soil borings (i.e., 20.0 feet), it appears that the average base of aquifer and seasonal high water table elevations may be located at elevations 101.90 and 106.90 feet, respectively.

- a. Accordingly, please clarify. Provide revised calculations demonstrating that 1) the *Pond 2* required treatment volume will be recovered within 72-hours and 2) the *Pond 2* storage capacity will be recovered within 14 days following the design storm event.
- b. Or, as an option, provide additional geotechnical information to support the aquifer base and seasonal high water table elevations utilized in the analyses.

Submit any revised plans and calculations, as appropriate. [40C-4.301(1)(e)(i), F.A.C.]

Response: *To address comment, Ardaman & Associates, Inc. performed a 50-foot boring in March 2008 to determine the seasonal high ground water level. They determined that the seasonal high ground water level was approximately 35 feet below the existing ground surface. Based on a seasonal high ground water level of 92 feet, the pond recovers the 25 year/96 hour volume in less than 14 days. Please see the Appendix for a copy of the most recent boring data and the revised pond calculations.*

Comment 8: The time of concentration T_c parameters utilized in the pre, "interim", and post development design storm event analyses appear to be low, especially for the existing land condition. Accordingly, please clarify and provide additional

calculations that reconfirm the time of concentration parameters utilized, as follows:

- a. Provide revised calculations using the kinematic formula for the first drainage sheet flow length of 300 feet followed by shallow concentrated flow for the remaining flow lengths.
- b. Ensure consistency with the specific flow paths indicated on the revised pre, "interim", and post-development drainage basing maps.

[40C-4.301(1)(a)(b)(c)(e)(i), F.A.C.]

- Response:**
- a. ***The TR-55 methodology was used to compute time of concentration. This methodology is acceptable per Section 13.5 in the District's Applicant's Handbook. For some of the small basin, the 300 foot length for overland is not applicable.***
 - b. ***Please refer to the Flow Path plan sheets for the Pre and Post Development Condition located in the Appendix of the Response to the Request for Additional Information.***

Comment 9: The water quantity calculations appear to have utilized infiltration during routing of the mean annual (2.3-year, 24-hour), the 10-year, 24-hour, the 25-year, 24-hour, and the 25-year, 96-hour (i.e., design) storm events.

- Please note that, when utilizing infiltration during routing of the storm events, the proposed pond area must contain a curve number that is representative of an impervious surface to the design high water elevation in the post-development calculations.
- Further note that, the analyses must exclude unsaturated flow.

Accordingly, please clarify and provide revised calculations demonstrating consistency with the above. [40C-41.063(2)(a); 40C-4.301(1)(a)(b)(c)(d)(i), F.A.C.]

- Response:** ***To address comment, Ardaman & Associates, Inc. performed a 50-foot boring in March 2008 to determine the seasonal high ground water level. They determined that the seasonal high ground water level was approximately 35 feet below the existing ground surface. Based on a seasonal high ground water level of 92 feet, the pond recovers the 25 year/96 hour volume in less***

than 14 days. Infiltration during the storm event was not used in the revised calculations to determine the recovery time. Please see the Appendix for a copy of the most recent boring data and the revised pond calculations.

Comment 10: Based on the incomplete water quantity analysis provided, it cannot be determined as to whether or not the proposed discharge from *Pond 2* will meet or exceed the discharge rates and volumes previously established by District Permit No. 40-069-82413-2 for the Regency Hills system. Reference the following notations provided on the excerpt below.

Accordingly, please clarify. Provide additional calculations demonstrating that the post-development discharge rates and volumes from *Pond 2* will not exceed those previously established for the Regency Hills system. Include all supporting information. [40C-4.301(1)(a)(b)(c)(i), F.A.C.]

Response: This comment is no longer applicable because the connection to Regency Hills was eliminated from the project.

Comment 11: Please provide revised calculations for each proposed surface water management system demonstrating recovery of the storage capacity within 14 days following the design (i.e., 25-year, 96-hour) storm event.

If back-to-back storm events are elected to satisfy this criteria, please input two repetitions into the PONDS model to simulate back-to-back storm events and the recovery period between each storm event. Please note that the analyses provided with this submittal did not consider this criteria. Provide the Detailed Results output file, as part of your response, in demonstrating that each pond is designed in accordance with this criteria. [40C-4.301(1)(a)(b)(c)(i), F.A.C.]

Response: Back-to-back storm events were not utilized in the recovery analysis for Pond 2. The pond is able to recover the 25 year/96 hour volume within 14 days. Please see the revised drainage calculations located in the Appendix.

Comment 12: Please address and/or provide the following with respect to *Sheet Nos. 67, 88, 91, 92, 93, and 94* of the set of construction plans submitted:

- a. Revise *Sheet No. 67* to include specifications for the proposed *Pond 1 S-128* outfall pipe. Include all pertinent information and invert elevations.
- b. The Storm sewer pipe connection between drainage structures *S-127* and the *Pond 1* mitered end section (*Sheet No. 67*), indicates a 36-diameter RCP is proposed. This appears to be inconsistent with the profile view

(Sheet No. 88), which indicates a 42-inch diameter RCP is proposed. Please clarify and revise where appropriate, for accuracy with the post development condition.

- c. The Sheet No. 88 plan view indicates 105 linear feet of 18-inch diameter RCP is proposed between drainage structure S-128 and the Pond 1 outfall. This appears to be inconsistent with the pond plan view (Sheet No. 91), which indicates 109 linear feet of 24-inch diameter RCP is proposed and the routing calculations, which indicate that 116 linear feet of 24-inch diameter RCP is proposed. Please clarify and revise where appropriate, for accuracy with the post development condition.
- d. The Pond 1 bottom elevation (95.0 feet) utilized in the calculations and delineated on Sheet Nos. 88 and 91, appears to be inconsistent with that (less than 95.0 feet) indicated by the vertical scale for STA 19+00.00 and 19+50.00 on Sheet No. 93. Please clarify and revise where appropriate, for accuracy with the post development condition.
- e. The Pond 1 bottom elevation (95.0 feet) utilized in the calculations and delineated on Sheet Nos. 88 and 91, appears to be inconsistent with that (greater than 95.0 feet) indicated by the vertical scale for STA 20+00.00 and 20+50.00 on Sheet No. 94. Please clarify and revise where appropriate, for accuracy with the post development condition.
- f. Amend Sheet No. 92 to include the SECTION A-A detail.
- g. Revise the Pond 1 and 2 section details to indicate that non-muck grown sod will be used for stabilization of the proposed retention ponds. Please note that the placement of muck-grown sod may impede the percolation of runoff into the ground and is, therefore, not recommended for the stabilization of retention pond bottoms. Provide notes, as necessary, for clarification.

[40C-4.301(1)(a)(b)(c)(e)(i); 40C-42.025(4); 40C-42.026(1), F.A.C.]

- Response:**
- a. ***The details for structure S-128 are shown on Plan Sheet 67 and 92A in the Construction Plans included in this response.***
 - b. ***The 36-inch pipe is correct. Sheet No. 88 has been revised.***
 - c. ***The pipe length is 109 feet. This length has been reflected in the AdICPR calculations.***

- d. *The pond cross sections were laid out on the cross section grid incorrectly. The updated plan sheets are include in the Construction Plans included in this response.*
- e. *The pond cross sections were laid out on the cross section grid incorrectly. The updated plan sheets are include in the Construction Plans included in this response.*
- f. *Section A-A was mislabeled on the plan sheet. The updated plan sheet is included in the Construction Plans included in this response.*
- g. *A note has been added to the Pond Detail Sheet.*

Comment 13: Please provide documentation from the appropriate entity allowing the connection of the *Pond 2* overflow into the existing Regency Hills surface water management system. Be advised that the previously permitted master system did not include the overflow discharge from the additional basin areas. References the following excerpts.

Be advised that this documentation is needed in order verify District presumptive criteria pursuant to 40C-42.025 (6) ***Design and Performance Criteria for Stormwater Management Systems***, which states that *the applicant must obtain sufficient legal authorization as appropriate prior to permit issuance for stormwater management systems which propose to utilize offsite areas to satisfy the requirements in subsection 40C-42.023(1), F.A.C. [40C-4.301(1)(i); 40C-42-025(6); 40C-42.026(1), F.A.C.]*

Response: *This comment is no longer applicable because the connection to Regency Hills was eliminated from the project.*

Comment 14: Please delineate and detail, on the set of revised plans, the physical locations of all erosion, sediment and turbidity control best management practices that will be utilized during construction of the proposed project.

- a. Include the erosion, sediment and turbidity control best management practices will be utilized during placement of the proposed *Pond 1* outfall pipe within the wetlands.
- b. Provide details, as appropriate.

[40C-4.301(1)(i); 40C-42.025(1), F.A.C.]

Response: *The erosion and control plans are included in the construction plans with this response.*

Comment 15: District staff needs to be able to determine the location of all wetlands and other surface waters within the project area and the extent of work proposed within wetlands and other surface waters. During a visit to the project site on December 11, 2007, staff could not locate the wetland flags in the field. It appears that widening of the roadway may result in impacts to the wetlands along the southern lobe of Johns Lake and other unnamed wetlands and surface waters within the project area. Note also that an environmental report included with the submittal also does not consider the location of the proposed retention ponds (s) for the road expansion in relation to existing wetlands. Please address the following:

- a. Reestablish the wetland flags and contact Gayle Albers at 407-659-4882 to set a site inspection. Provide a survey depicting the wetland flag numbers at a scale that is legible at the time of inspection.
- b. Provide an aerial map clearly labeling the onsite wetlands and other surface waters (e.g., Wetlands 1-X) and all associated impacts (e.g., Impacts 1-X).
- c. Describe how any temporarily disturbed areas will be revegetated after the proposed work is completed. Please note that the planting of non-native vegetation within these areas could adversely affect the surrounding wetland by encouraging the spread of nuisance species.
- d. Revise the construction plans to clearly depict the extent of the wetlands and other surface waters within and adjacent to the project area on a plan view. Crosshatch any proposed impact areas.
- e. Revise the application form (Sections A, C, and E, Tables 1-3), as necessary:
 - Total existing onsite wetland and other surface water acreages;
 - Proposed impact acreages for each and other surface water;
 - Proposed unaffected acreages for each wetland and other surface water;
 - Natural community type (e.g., FLUCCS code or list abundant canopy and groundcover species) of each wetland and other surface water;

- Type of impact (temporary or permanent) to each wetland and other surface water.

{40C-4.301 (1); 40C-4.302(1)(a), F.A.C.}

Response: *Please refer to the attached response prepared by Lotspeich and Associates, Inc.*

Comment 16: The submittal for the proposed road project does not include details on how you intend to address secondary impacts to wetlands or other surface waters that may be caused during and after construction. An applicant must provide reasonable assurance that a regulated activity will not cause unacceptable adverse secondary impacts to water resources (12.2.7, ERP A.H.). Reasonably expected activities (e.g., landscaping maintenance, increased traffic, litter) will diminish the ecological functions provided by the wetlands by destroying wildlife habitat and introducing nuisance plant species. Pursuant to subsection 12.2.7 (a), ERP A.H. one way to demonstrate the proposed project will not have adverse secondary impacts to water resources is to establish a 15-foot minimum, 25-foot average undisturbed upland buffer landward of wetlands and other surface waters. The present design does not specify upland buffers on the construction plans or clearly demonstrate that the proposed works are sufficiently distant from offsite water resources. Please indicate how you will demonstrate that the proposed project will not have adverse unacceptable secondary impacts to water resources. Alternatively, secondary impacts will be assessed. Provide the linear extent of all impacted wetlands where adverse secondary impacts are expected to occur. Additional mitigation may be required to offset these impacts.

[40C-4.301 (1); 40C-4.302(1)(a), F.A.C.]

Response: *Please refer to the attached response prepared by Lotspeich and Associates, Inc.*

Comment 17: Should you choose to utilize upland buffers as the recourse for addressing secondary impacts to water resources, you must provide reasonable assurance that the upland buffers and unaffected onsite wetlands will remain in an undisturbed condition and that the buffers it will be sufficient to prevent secondary impacts to water resources in perpetuity. Pursuant to Subsection 12.2.7 (a), Applicant's Handbook, one way to provide such assurance is to place the upland buffer and wetland areas under a conservation easement (CE) dedicated to the District that will adequately preserve buffer structure and function. If you choose to establish a

conservation easement, please specify the acreage for the preservation of onsite wetlands and uplands separately in the supporting documentation.

Please submit a draft conservation easement that is consistent with Section 704.06, Florida Statutes, and that contains restrictions ensuring the ecological viability of the site. The draft easement must (i) identify the grantor of the easement and include an appropriate signature block for the grantor, (ii) include a "Return Recorded Original to:" block in the top left corner of the first page of the conservation easement indicating the recorded original easement should be returned to the Office of General Counsel, St. Johns River Water Management District, 4049 Reid Street, Palatka, Florida 32177-2529, and (iii) the permit number for the proposed project in the opening recitals. Please note that if the mitigation areas are owned in fee simple by different entities or individuals, a draft conservation easement must be submitted for each mitigation area owned by each entity or owner. Be sure to attach Exhibits. Additionally, please **submit** the following documentation in support of each conservation easement:

a) Proof of ownership of the real property described in the conservation easement area by the grantor. Examples of such documents include, but are not limited to, an attorney's title opinion, title certificate, owners and encumbrance report or warranty deed.

b) An attorney's title opinion, title certificate, or ownership and encumbrance report to demonstrate that the conservation easement area is not subject to any encumbrance(s) (e.g. utility easements and right of way easements) which may impair the ecological value of the area subject to the conservation easement. If encumbrances exist or will exist at the time the conservation easement is recorded, please provide a copy of the instrument creating each such encumbrance and depict the location of the encumbrance within the conservation easement area on the mitigation plans and/or surveyor's sketch.

c) Is the property that will be encumbered by a conservation easement subject to a mortgage? If so, please submit a draft Consent and Joinder of Mortgagee containing the name of the mortgagee, the title of the mortgage documents(s), including any amendments and UCC financing statements, and the official record book and page number(s) of the public records of the county where the mortgage is recorded. The Consent and Joinder of Mortgagee will need to be executed by the lending institution in the presence of two witnesses.

d) The conservation easement must be executed by an individual who has the authority to transfer interests in the real property being encumbered by the conservation easement. Therefore, please identify the person who will be

executing the easement on behalf of the grantor. If the grantor is a business entity (corporation, limited liability company, limited partnership, etc.), please identify the name and title or position of the signatory in the signature block appearing at the end of the conservation easement. Please also submit documentation of the signatory's authority to convey property interests on behalf of the business entity. Examples of such documents include, a corporate resolution, partnership or limited liability company affidavit, or partnership/operating agreement.

e) The draft conservation easement should include as an attachment: (1) a metes and bounds legal description of the area to be placed under conservation easement, and (2) a surveyor's sketch with the easement area clearly delineated and labeled, with the acreage of the easement area noted on the sketch. Please clearly label the pages as Exhibit "___", page _ of _. The District will need to review these documents and approve them in writing before the easement may be recorded. Please provide the acreages for the uplands and wetlands for each easement separately.

f) If the conservation easement area will be described by reference to a plat, please provide a copy of the plat. The conservation easement must reference the book and page number in a recorded plat. If the plat has not yet been recorded, please provide a preliminary or draft plat with the following note added to the face of the plat:

Tracts _____ are subject to a Conservation Easement in favor of the St. Johns River Water Management District pursuant to Section 704.06, Florida Statutes.

g) Please submit a USGS quadrangle map depicting the area to be preserved by conservation easement. Please ensure that the official quad map name is included on your submittal.

h) The District must be assured of access to mitigation areas that will be encumbered by the conservation easement. Please provide information confirming the District's right of access via public road or, if not available, a draft access easement conveying a right of access to the District.

[Sections 40C-4.301(1)(d)(f), F.A.C.; 40C-4.302(1)(a)2,7, F.A.C., 12.3.8, A.H.]

Response: *Please refer to the attached response prepared by Lotspeich and Associates, Inc.*

Ms. Ruth Grady, E.I.

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If you have any questions or need further information, please do not hesitate to contact our office.

Sincerely,

HNTB Corporation



Karen Van den Avont, P.E.

Project Manager

cc: File

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Lotspeich and Associates, Inc.
ECOLOGICAL CONSULTANTS

5 March 2008
L&A No. 2005-118.23
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Ms. Gayle Albers
St. Johns River Water Management District
975 Keller Road
Altamonte Springs, FL 32714-1618

RE: Hartwood Marsh Road Widening
Lake County, Florida
SJRWMD File # 40-069-114354-1
Response to Request for Additional Information

Dear Ms. Albers:

Lotspeich and Associates, Inc. (L&A) is in receipt of your Request for Additional Information (RAI) dated 4 January 2008. For convenience, we have restated each comment/question regarding ecological issues, followed by our response. The remainder of the responses will be prepared by HNTB, Inc., and submitted under separate cover.

15. District staff needs to be able to determine the location of all wetlands and other surface waters within the project area and the extent of work proposed within wetlands and other surface waters. During a visit to the project site on December 11, 2007, staff could not locate the wetland flags in the field. It appears that widening of the roadway may result in impacts to the wetlands along the southern lobe of Johns Lake and other unnamed wetlands and surface waters within to the project area. Note also that an environmental report included with the submittal also does not consider the location of the proposed retention pond(s) for the road expansion in relation to existing wetlands. Please address the following:

- a. **Reestablish the wetland flags and contact Gayle Albers at 407-659-4882 to set up a site inspection. Provide a survey depicting the wetland flag numbers at a scale that is legible at the time of inspection.**
- b. **Provide an aerial map clearly labeling the onsite wetlands and other surface waters (e.g., Wetlands 1 -X) and all associated impacts (e.g., Impacts 1 -X).**
- c. **Describe how any temporarily disturbed areas will be revegetated after the proposed work is completed. Please note that the planting of non-native vegetation within these areas could adversely affect the surrounding wetland by encouraging the spread of nuisance species.**

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- d. **Revise the construction plans to clearly depict the extent of wetlands and other surface waters within and adjacent to the project area on a plan view. Crosshatch any proposed impact areas.**
- e. **Revise the application form (Sections A, C, and E, Tables 1-3), as necessary:**
- **total existing onsite wetland and other surface water acreages;**
 - **proposed impact acreages for each wetland and other surface water,**
 - **proposed unaffected acreages for each wetland and other surface water;**
 - **natural community type (e.g., FLUCCS code or list abundant canopy and groundcover species) of each wetland and other surface water;**
 - **type of impact (temporary or permanent) to each wetland and other surface water. [40C-4.301 (1); 40C-4.302(1)(a), F.A.C.]**

Response: L&A staff has had several conversations with Ms. Gayle Albers of the SJRWMD regarding the limits of the currently proposed work. The current project extends from U.S. Highway 27 to just east of South Hancock Road. As such, the wetland and surface water impacts referenced above are not part of the currently proposed work. Work adjacent to the referenced wetlands or surface waters, and any impacts that may be associated with that work, will occur in future phases of the project.

- a. There is only one (1) surface water (designated SW-1) associated with this phase of the project, and it is located adjacent to proposed Pond 1. This surface water/wetland was flagged by L&A staff during the summer of 2007. The flags associated with this surface water should still be in place.
- b. No wetlands are located within the roadway corridor. As noted above, there is a surface water located south of the roadway, adjacent to which a retention pond will be constructed. Please find attached an aerial photo depicting the location of the surface water/wetland relative to the roadway corridor and the proposed Pond 1. No impacts are currently proposed.
- c. Please refer to HNTB's erosion control plans for details regarding the re-vegetating of areas disturbed by construction activities.
- d. Plan Sheet 91 as originally submitted depicts the portion of SW-1 adjacent to the proposed Pond 1. Please refer to HNTB's submittal for an overall plan view that depicts the exact location of the surface water/wetland with regard to the roadway corridor.



- e. Although no impacts are proposed to wetlands or surface waters, L&A has prepared ERP Table 1 for the purpose of providing additional details regarding Surface Water 1 (attached).

16. The submittal for the proposed road project does not include details on how you intend to address secondary impacts to wetlands or other surface waters that may be caused during and after construction. An applicant must provide reasonable assurance that a regulated activity will not cause unacceptable adverse secondary impacts to water resources (12.2.7, ERP A.H.). Reasonably expected activities (e.g., landscaping maintenance, increased traffic, litter) will diminish the ecological functions provided by the wetlands by destroying wildlife habitat and introducing nuisance plant species. Pursuant to subsection 12.2.7 (a), ERP A.H., one way to demonstrate that the proposed project will not have adverse secondary impacts to water resources is to establish a 15-foot minimum, 25-foot average undisturbed upland buffer landward of wetlands and other surface waters. The present design does not specify upland buffers on the construction plans or clearly demonstrate that the proposed works are sufficiently distant from offsite water resources. Please indicate how you will demonstrate that the proposed project will not have adverse unacceptable secondary impacts to water resources. Alternatively, secondary impacts will be assessed. Provide the linear extent of all impacted wetlands where adverse secondary impacts are expected to occur. Additional mitigation may be required to offset these impacts. [40C-.301(1)(d)(e)(f)(3); 40C-4.302(1)(a)2.,7.,(b), F.A.C.]

Response: This phase of the Hartwood Marsh Road Widening project does not propose impacts to wetlands or surface waters. It is acknowledged that future phases of the project will likely impact surface waters associated with the Tarmac sand mine facility, as well as potential impacts to wetland or surface waters areas associated with the southern lobe of Johns Lake. The surface waters associated with the Tarmac facility have little to no wildlife habitat value, and primarily provide water quantity and flood control functions for the portion of the Tarmac facility that drains to the pit. These functions will likely be replaced or enhanced by the proposed surface water management facilities associated with the improvements to Hartwood Marsh Road, in addition to those associated with the development proposed to occupy the Tarmac site once the sand mining operations have been relocated to the east. Any impacts to wetlands or surface waters associated with Johns Lake that cannot be avoided or minimized will need to be mitigated in accordance with state guidelines. There are two (2) large mitigation projects currently available (or soon to be available) to provide mitigation for the project area - the Emerald Marsh site and the Hammock Lake Mitigation Bank. Between the two, there should be sufficient mitigation available for any impacts to wetlands or surface waters that cannot be reduced or eliminated.



17. Should you choose to utilize upland buffers as the recourse for addressing secondary impacts to water resources, you must provide reasonable assurance that the upland buffers and unaffected onsite wetlands will remain in an undisturbed condition and that the buffers it will be sufficient to prevent secondary impacts to water resources in perpetuity. Pursuant to Subsection 12.2.7 (a), Applicant's Handbook, one way to provide such assurance is to place the upland buffer and wetland areas under a conservation easement (CE) dedicated to the District that will adequately preserve buffer structure and function. If you choose to establish a conservation easement, please specify the acreage for the preservation of onsite wetlands and uplands separately in the supporting documentation.

Please submit a draft conservation easement that is consistent with Section 704.06, Florida Statutes, and that contains restrictions ensuring the ecological viability of the site. The draft easement must (i) identify the grantor of the easement and include an appropriate signature block for the grantor, (ii) include a "Return Recorded Original to:" block in the top left hand corner of the first page of the conservation easement indicating the recorded original easement should be returned to the Office of General Counsel, St. Johns River Water Management District, 4049 Reid Street, Palatka, Florida 32177-2529, and (iii) the permit number for the proposed project in the opening recitals. Please note that if the mitigation areas are owned in fee simple by different entities or individuals, a draft conservation easement must be submitted for each mitigation area owned by each entity or owner. Be sure to attach Exhibits. Additionally, please submit the following documentation in support of each conservation easement:

- a) Proof of ownership of the real property described in the conservation easement area by the grantor. Examples of such documents include, but are not limited to, an attorney's title opinion, title certificate, owners and encumbrance report or warranty deed.**
- b) An attorney's title opinion, title certificate, or ownership and encumbrance report to demonstrate that the conservation easement area is not subject to any encumbrance(s) (e.g. utility easements and right of way easements) which may impair the ecological value of the area subject to the conservation easement. If encumbrances exist or will exist at the time the conservation easement is recorded, please provide a copy of the instrument creating each such encumbrance and depict the location of the encumbrance within the conservation easement area on the mitigation plans and/or surveyor's sketch.**
- c) Is the property that will be encumbered by a conservation easement subject to a mortgage? If so, please submit a draft Consent and Joinder of Mortgagee containing the name of the mortgagee, the title of the mortgage document(s),**



including any amendments and UCC financing statements, and the official records book and page number(s) of the public records of the county where the mortgage is recorded. The Consent and Joinder of Mortgagee will need to be executed by the lending institution in the presence of two witnesses.

- d) The conservation easement must be executed by an individual who has the authority to transfer interests in the real property being encumbered by the conservation easement. Therefore, please identify the person who will be executing the easement on behalf of the grantor. If the grantor is a business entity (corporation, limited liability company, limited partnership, etc.), please identify the name and title or position of the signatory in the signature block appearing at the end of the conservation easement. Please also submit documentation of the signatory's authority to convey property interests on behalf of the business entity. Examples of such documents include, a corporate resolution, partnership or limited liability company affidavit, or partnership/operating agreement.
- e) The draft conservation easement should include as an attachment: (1) a metes and bounds legal description of the area to be placed under conservation easement, and (2) a surveyor's sketch with the easement area clearly delineated and labeled, with the acreage of the easement area noted on the sketch. Please clearly label the pages as Exhibit "___", page ___ of ___. The District will need to review these documents and approve them in writing before the easement may be recorded. Please provide the acreages for the uplands and wetlands for each easement separately.
- f) If the conservation easement area will be described by reference to a plat, please provide a copy of the plat. The conservation easement must reference the book and page number in a recorded plat. If the plat has not yet been recorded, please provide a preliminary or draft plat with the following note added to the face of the plat:
- Tracts _____ are subject to a Conservation Easement in favor of the St. Johns River Water Management District pursuant to Section 704.06, Florida Statutes,
- g) Please submit a USGS quadrangle map depicting the area to be preserved by conservation easement. Please ensure that the official quad map name is included on your submittal.
- h) The District must be assured of access to mitigation areas that will be encumbered by the conservation easement Please provide information confirming the District's right of access via public road or, if not available, a draft access easement conveying a right of access to the District. [Sections 40C-4.301(1)(d),(f), F.A.C.; 40C-4.302(1)(a)2,7, F.A.C., 12.3.8, A.H.]



St. Johns River Water Management District

Hartwood Marsh Road Widening

L&A No.2005-118.23

Doc: \2005-118-WMDRAI-05C08.wpd

5 March 2008

Page 6

Response: As no impacts to wetlands or surface waters are associated with this phase of the project, preservation of upland buffers within Conservation Easements should not be necessary.

Please feel free to contact me if you require any additional information.

Sincerely,

LOTSPEICH AND ASSOCIATES, INC.

Don J. Silverberg
Project Manager

DJS\amh

cc: Karen Van den Avont, P.E.; HNTB
FILE/Renee L. Thomas, President



Legend

Phase I Project Limits

Approximate Wetland Limits

Notes:
 2006 aerial photography provided in GIS format
 by Lake County government.

Lotspeich and Associates, Inc.
 ECOLOGICAL CONSULTANTS
 2711 West Fairbanks Avenue, Winter Park, Florida 32789
 407.740.8482 Fax: 645.1305 www.lotspeichandassociates.com

Hartwood Marsh Road Widening
 (from U.S. 27 to Orange County Line)
 in Sections 1, 2, 3, 9, and 10, Township 23 South, Range 26 East
 Lake County, Florida

Aerial Photo

File: 05118.MXD	Drawn By: BEH	Job No.: 2005-118.33	Date: 5 Mar 2008
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<p>↑ North</p>	<p>Scale: 1" = 800'</p>
<p>Figure 1</p>	

TABLE 1
PROJECT IMPACT SUMMARY
Hartwood Marsh Widening
 March 2008

WL & SW ID	WL & SW TYPE	WL & SW SIZE (ac.) ON-SITE	WL & SW (ac.) NOT IMPACTED	PERMANENT WL & SW IMPACTS		TEMPORARY WL & SW IMPACTS		MITIGATION ID
				IMPACT SIZE (ac.)	IMPACT CODE	IMPACT SIZE (ac.)	IMPACT CODE	
SW-1	533/641	32.05±	32.05±	—	—	—	—	—
PROJECT TOTALS		32.05±	32.05±	—	—	—	—	—

LEGEND

WL = Wetland; SW = Surface Water; ID = Identification number, letter, etc.
 WETLAND TYPE: Use an established wetland classification system and indicate which classification system is being used in the "Comment" section below.
 IMPACT CODE (Type): D = dredge; F = fill; H = change hydrology; S = shading; C = clearing; O = other. Indicate the final impact if more than one impact type is proposed in a given area. For example, show F only for an area that will first be denukked and then backfilled.

NOTE: Multiple entries per cell are not allowed, except in the "Mitigation ID" column. Any given acreage of wetland should be listed in one row only, such that the total of all rows equals the project total for a given category (column). For example, if Wetland No. 1 includes multiple wetland types and multiple impact codes are proposed in each type, then each proposed impact in each wetland type should be shown on a separate row, while the size of each wetland type found in Wetland No. 1 should be listed in only one row.

COMMENTS: Wetlands are classified in accordance with the Florida Land Use, Cover and Forms Classification System, Florida Department of Transportation, 1999

REVIEWER: _____

114354-1
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 MAY 07 2003
 PDS
 ALTAMONTE SVC CTR