



DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
10117 PRINCESS PALM AVENUE, SUITE 120
TAMPA, FLORIDA 33610

September 23, 2011

REPLY TO
ATTENTION OF

Tampa Permits Section
SAJ-2011-01659(NW-MEP)

Manatee County Board of County Commissioners
415 10th Street West
Bradenton, FL 34205

Ladies and Gentlemen:

Your application for a Department of the Army permit received on June 3, 2011, has been assigned number SAJ-2011-01659(NW-MEP). A review of the information and drawings provided shows the proposed work is to restore and create native wetland habitats on a 31.29-acre property owned by Manatee County, known as the Ungarelli Preserve. The proposed work consists of 0.48 acres of wetland creation, and 2.56 acres of wetland enhancement. In addition to activities within waters of the U.S., the project includes 2.05 acres of upland enhancement. In order to perform the upland enhancement, a temporary access will be required, which will result in 0.04-acres of temporary impacts to Corps jurisdictional wetlands. The project is located at 4000 Palma Sola Boulevard, Bradenton, in Section 16, Township 35 South, Range 15 East, Manatee County, Florida.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) Number 27. In addition, project specific conditions have been enclosed. This verification is valid until the NWP is modified, reissued, or revoked prior to March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are issued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit. Please access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory webpage to access web links to view the Final Nationwide Permits, Federal Register Vol. 72, dated March 12, 2007, the Corrections to the Final Nationwide Permits, Federal Register 72, May 8, 2007, and the List of Regional Conditions. The website address is as follows:

<http://www.saj.usace.army.mil/Divisions/Regulatory/sourcebook.htm>.

Please be aware this web address is case sensitive and should be entered as it appears above. Once there you will need to click on "Nationwide Permits." These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions, which apply specifically to this verification for NWP 27. Additionally, enclosed is a list of the six General Conditions, which apply to all Department of the Army

authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

1. Within 60 days of completion of the work authorized, the attached "Self-Certification Statement of Compliance" must be completed and submitted to the U.S. Army Corps of Engineers. Mail the completed form to the Regulatory Division, Special Projects and Enforcement Branch, 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610.

2. The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

3. No structure or work shall adversely affect or disturb properties listed in the National Register of Historic Places or those eligible for inclusion in the National Register. Prior to the start of work, the Applicant/Permittee or other party on the Applicant's/Permittee's behalf, shall conduct a search of known historical properties by contracting a professional archaeologist, contacting the Florida Master Site File at 850-245-6440 or SiteFile@dos.state.fl.us. The Applicant/Permittee can also research sites in the National Register Information System (NRIS). Information can be found at <http://www.cr.nps.gov/nr/research/>.

If, during the initial ground disturbing activities and construction work, there are archaeological/cultural materials unearthed (which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the permittee shall immediately stop all work in the vicinity and notify the Compliance and Review staff of the State Historic Preservation Office at 850-245-6333 and the Corps Regulatory Project Manager to assess the significance of the discovery and devise appropriate actions, including salvage operations. Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7.

In the unlikely event that human remains are identified, they will be treated in accordance with Section 872.05, Florida Statutes; all work in the vicinity shall immediately cease and the local law authority, the State Archaeologist (850-245-6444), and the Corps Regulatory Project Manager shall immediately be notified. Such activity shall not resume unless specifically authorized by the State Archaeologist and the Corps.

4. Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work has been completed and the site has been stabilized.

5. The Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated February 12, 2004 and provided an attachment to this permit."

6. This letter of authorization does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required. In Florida, projects qualifying for this NWP must be authorized under Part IV of Chapter 373 by the Department of Environmental Protection, a water management district under §. 373.069, F.S., or a local government with delegated authority under §. 373.441, F.S., and receive Water Quality Certification (WQC) and Coastal Zone Consistency Concurrence (CZCC) (or a waiver), as well as any authorizations required by the State for the use of sovereign submerged lands. You should check State-permitting requirements with the Florida Department of Environmental Protection or the appropriate water management district.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact Mark E. Peterson by telephone at 813-769-7065.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite

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you to take a few minutes to visit <http://per2.nwp.usace.army.mil/survey.html> and complete our automated Customer Service Survey. Your input is appreciated – favorable or otherwise. Again, please be aware this web address is case sensitive and should be entered as it appears above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark E. Peterson', with a long horizontal flourish extending to the right.

Mark E. Peterson
Project Manager

Enclosures

Copy Furnished (email):

Elizabeth S. Andrews, REM, Senior Project Manager, Stantec Consulting Services, Inc.,
6900 Professional Parkway East, Suite 100, Sarasota, FL 34240-8414

bcc:

CESAJ-RD-PE

GENERAL CONDITIONS

33 CFR PART 320-330

PUBLISHED FEDERAL REGISTER DATED 13 NOVEMBER 1986

1. The time limit for completing the work authorized ends on **March 18, 2012**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: NW-27

Application Number: SAJ-2011-01659 (NW-MEP)

Permittee's Name & Address (please print or type): _____

Telephone Number: _____

Location of the Work: _____

Date Work Started: _____ Date Work Completed: _____

Description of the Work (e.g., bank stabilization, residential or commercial filling, docks, dredging, etc.): _____

Acreage or Square Feet of Impacts to Waters of the United States:

Describe Mitigation completed (if applicable): _____

Describe any Deviations from Permit (attach drawing(s) depicting the deviations): _____

I certify that all work, and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

Signature of Permittee

Date

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

PERMIT NUMBER: SAJ-2011-01659 (NW-MEP)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019.

(TRANSFEREE-SIGNATURE)

(SUBDIVISION)

(DATE)

(LOT)

(BLOCK)

(NAME-PRINTED)

(STREET ADDRESS)

(MAILING ADDRESS)

(CITY, STATE, ZIP CODE)

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

1. An eastern indigo snake protection/education plan shall be developed by the applicant or requestor for all construction personnel to follow. The plan shall be provided to the Service for review and approval at least 30 days prior to any clearing activities. The educational materials for the plan may consist of a combination of posters, videos, pamphlets, and lectures (*e.g.*, an observer trained to identify eastern indigo snakes could use the protection/education plan to instruct construction personnel before any clearing activities occur). Informational signs should be posted throughout the construction site and along any proposed access road to contain the following information:
 - a. a description of the eastern indigo snake, its habits, and protection under Federal Law;
 - b. instructions not to injure, harm, harass or kill this species;
 - c. directions to cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming clearing; and,
 - d. telephone numbers of pertinent agencies to be contacted if a dead eastern indigo snake is encountered. The dead specimen should be thoroughly soaked in water and then frozen.
2. If not currently authorized through an Incidental Take Statement in association with a Biological Opinion, only individuals who have been either authorized by a section 10(a)(1)(A) permit issued by the Service, or by the State of Florida through the Florida Fish Wildlife Conservation Commission (FWC) for such activities, are permitted to come in contact with an eastern indigo snake.
3. An eastern indigo snake monitoring report must be submitted to the appropriate Florida Field Office within 60 days of the conclusion of clearing phases. The report should be submitted whether or not eastern indigo snakes are observed. The report should contain the following information:
 - a. any sightings of eastern indigo snakes and
 - b. other obligations required by the Florida Fish and Wildlife Conservation Commission, as stipulated in the permit.

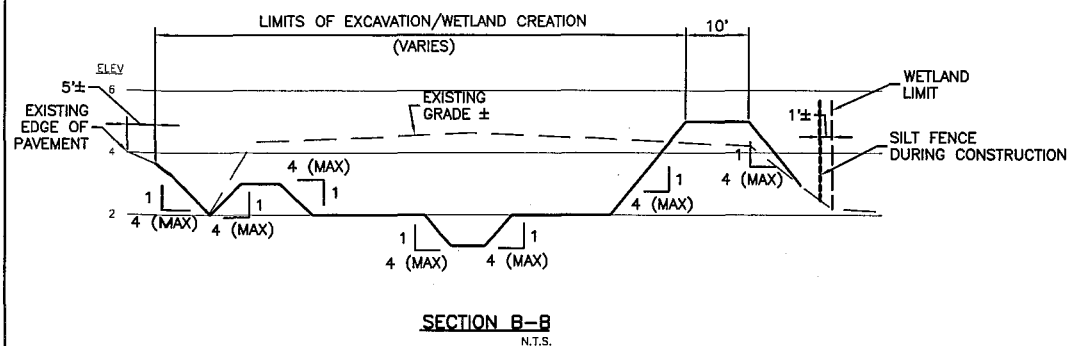
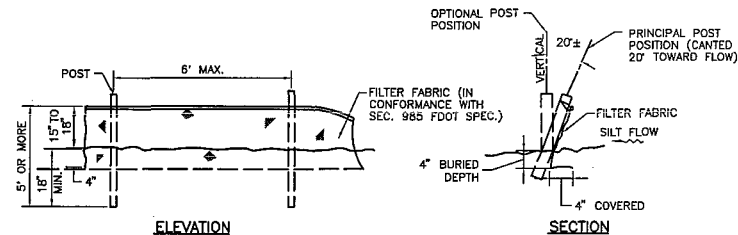
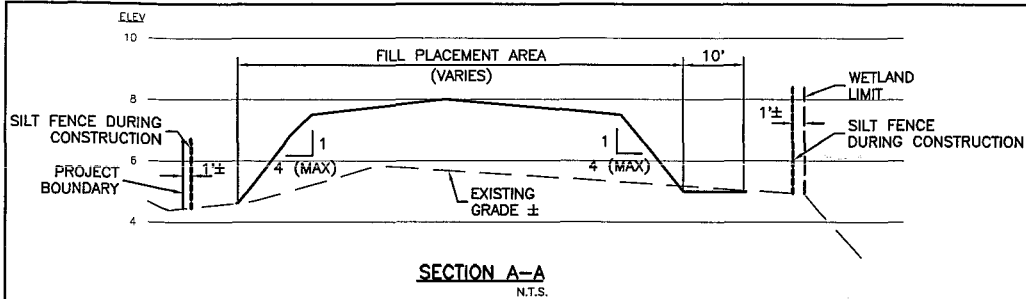
Revised February 12, 2004

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 NATIONWIDE PERMIT 27
 VERIFIED 23-SEPT-2011



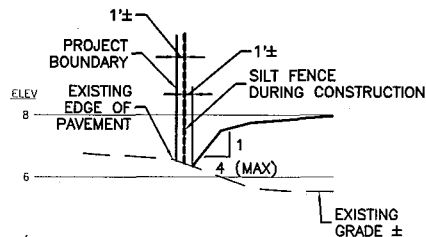
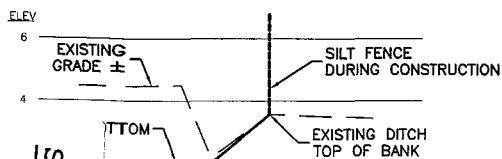
ECOLOGICAL ENHANCEMENTS ACREAGE SUMMARY TABLE	
Wetland Creation Area	0.48 ACRES
TOTAL WETLAND CREATION	0.48 ACRES
Wetland Enhancement "A"	0.82 ACRES
Wetland Enhancement "B"	1.29 ACRES
Wetland Enhancement "C"	0.45 ACRES
TOTAL WETLAND ENHANCEMENT	2.56 ACRES
Upland Enhancement "A"	0.61 ACRES
Upland Enhancement "B"	0.41 ACRES
Upland Enhancement "C"	0.05 ACRES
Upland Enhancement "D"	0.28 ACRES
Upland Enhancement "E"	0.01 ACRES
Upland Enhancement "F"	0.69 ACRES
TOTAL UPLAND ENHANCEMENT	2.05 ACRES

ACTIVITY: _____ DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____ CONTRACT ADMIN. BY: _____ REV. APPROVED BY: _____	NREPL/EMP. NO. _____ DATE: 03/19/11 ATO/ISSUED: _____	WilsonMiller <small>Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants</small> <small>WilsonMiller, Inc.</small>	CLIENT: BOARD OF COUNTY COMMISSIONERS MANATEE COUNTY, FLORIDA PROJECT: UNGARELLI PRESERVE HABITAT RESTORATION	DATE: MARCH 2011 SCALE: 1" = 300' SHEET NO.: 2 of 7	TITLE: SITE PLAN PROJECT NUMBER: 215500131-300 SHEET NUMBER: 2 of 7	R. GUNZ, SHELTON, P.C. LICENSE LICENSE NO. 13774 REG. NO. B-215500131-002
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NOTES:

1. PROJECT BENCHMARK (B-1) DESCRIPTION: SQUARE CUT IN NORTH RIM OF SEWER MANHOLE. ELEVATION = 6.67 (NGVD 1929)
2. ALL ELEVATIONS SHOWN ON THIS DRAWING SET ARE RELATIVE TO PROJECT BENCHMARK B-1.
3. ALL CLEARING, GRUBBING AND EXCAVATED DEBRIS MATERIAL WILL BE REMOVED FROM PROJECT SITE AND DISPOSED OF PROPERLY.
4. CLEAN EXCAVATED SOIL MATERIAL FROM WETLAND CREATION WILL BE PLACED ON THE FILL PLACEMENT AREA OF UPLAND 'F'.
5. ANY DISTURBED UPLAND AREAS WILL BE STABILIZED WITH NATIVE VEGETATION.
6. THE CONNECTION TO THE EXISTING DITCH WILL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED ECOLOGIST TO AVOID DAMAGE TO MANGROVE HABITAT.
7. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AS NECESSARY FOR WORK PERFORMED IN AREAS CONTAINING ON, ABOVE, OR BELOW GROUND.
8. EXISTING DESIRABLE VEGETATION LOCATED ADJACENT TO THE PROJECT AREA IS TO REMAIN UNDISTURBED DURING THE CONSTRUCTION PROCESS.
9. SILT FENCE/STAKED TURBIDITY BARRIER WILL BE INSTALLED AROUND THE ENTIRE PROJECT AREA AS SHOWN ON SHEET 3.
10. POST GRADING SOIL CONDITIONS SHALL BE APPROPRIATE FOR PLANTING WITH LIMITED COMPACTION AS DETERMINED BY PROJECT ECOLOGIST.
11. IF HUMAN REMAINS OR ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED DURING THE COURSE OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR MUST STOP WORK IMMEDIATELY AND PROMPTLY NOTIFY THE PROJECT MANAGER.
12. NOTIFY "SUNSHINE STATE ONE CALL (1-800-432-4770), MANATEE COUNTY PUBLIC WORKS DEPARTMENT, FLORIDA POWER & LIGHT, PEACE RIVER ELECTRIC, VERIZON AND ANY OTHER UTILITIES (GAS COMPANIES, CABLE TV, ETC.) PRIOR TO CONSTRUCTION OPERATION AND PRIOR TO ANY CONNECTION TO EXISTING UTILITIES. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE.



SECTION C-C
N.T.S.

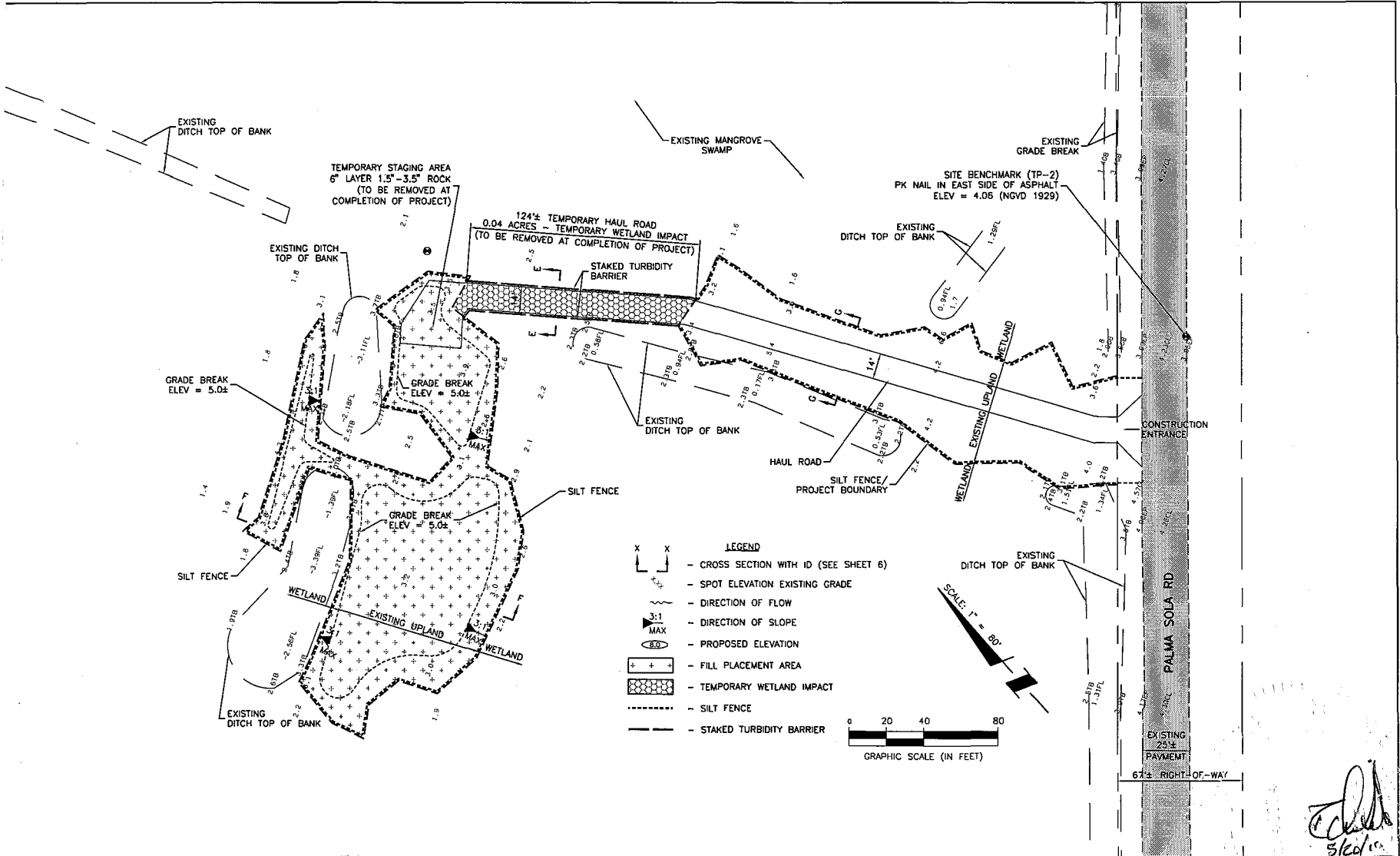
SECTION D-D
N.T.S.

SAJ-2011-01659 (NW-MEP)
 NATIONWIDE PERMIT 27
 VERIFIED 23-SEPT-2011

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5/20/11

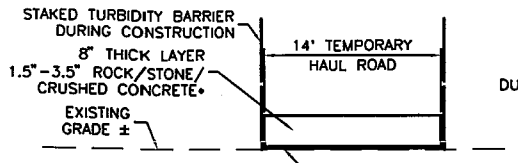
ACTIVITY:	INTS/EXP. NO.	DATE	 <small>Planners - Engineers - Ecologists - Surveyors - Landscape Architects - Transportation Consultants</small> Wilson Miller, Inc. <small>4850 Professional Parkway East, Suite 100 - Sarasota, Florida 34240-6464 • Phone 941-552-9800 • Fax 941-552-9802 • Web Site www.wilsonmiller.com</small>	CLIENT:	BOARD OF COUNTY COMMISSIONERS MANATEE COUNTY, FLORIDA	DATE:	MARCH 2011	TITLE:	SECTIONS AND DETAILS - UPLAND 'F' & WETLAND CREATION AREA
DESIGNED BY:				PROJECT:	UNGARELLI PRESERVE HABITAT RESTORATION	AS SHOWN:	AS SHOWN	CROSS REFERENCE FILE NO.:	215500131 300
DRAWN BY:	ATO/85520	03/18/11				DATE:	1/20/11	PROJECT NUMBER:	215500131 300
CHECKED BY:						DATE:	1/20/11	SHEET NUMBER:	4 of 7

SAJ-2011-01659 (NM-MEP)
 NATIONWIDE PERMIT 27
 VERIFIED 23-SEPT-2011



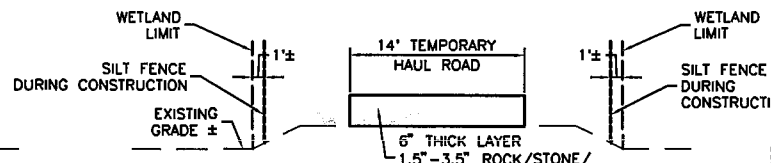
Wilson Miller <small>Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants</small> <small>Wilson Miller, Inc.</small>		CLIENT: BOARD OF COUNTY COMMISSIONERS MANATEE COUNTY, FLORIDA PROJECT: UNGARELLI PRESERVE HABITAT RESTORATION	DATE: MARCH 2011 PERIOD: 17-200 REVISION: N/A SHEET: 14/15 4 356 14/15 08333-008421	TITLE: SITE GRADING PLAN - UPLAND 'B' A. DANIEL SELLERS, P.E. FLORIDA LICENSE NO. 93212 8-218500131-002 5 of 7
DESIGNER: [blank] DRAWN BY: ASD/BSZD CHECKED BY: [blank] CONTRACT ADMIN. BY: [blank] DATE: [blank]	PERMITS/APP. NO.: [blank] DATE: [blank]	APPROVED BY: [blank]	PROJECT NUMBER: 215500131 300	SHEET NUMBER: 5 of 7

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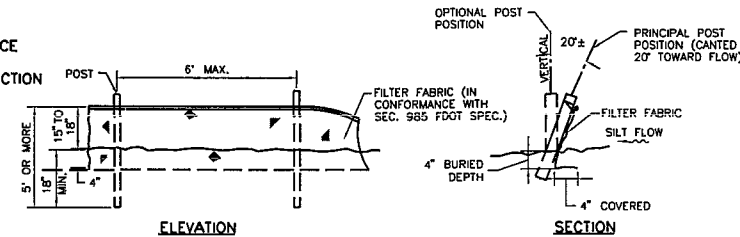
NOTE: TO BE REMOVED AT COMPLETION OF PROJECT.

SECTION E-E
N.T.S.

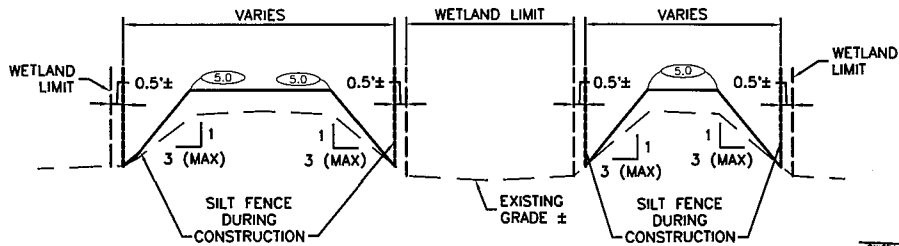


NOTE: TO BE REMOVED AT COMPLETION OF PROJECT.

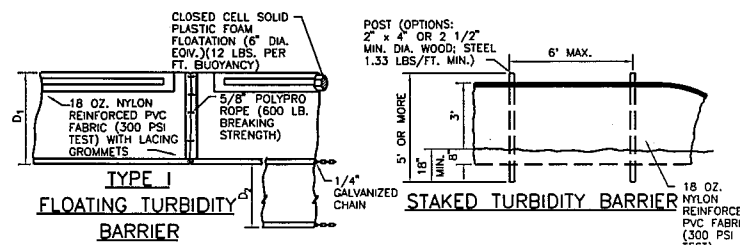
SECTION G-G
N.T.S.



TYPICAL SILT FENCE
N.T.S.

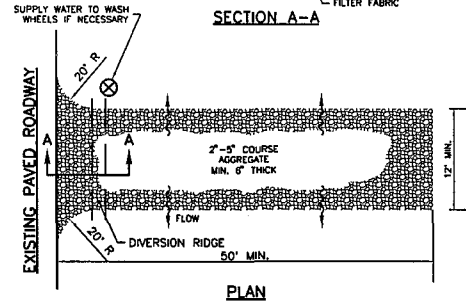
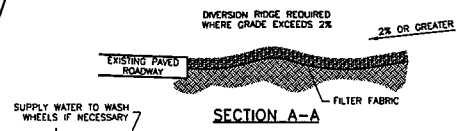


SECTION F-F
N.T.S.



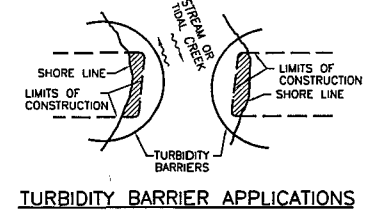
STAKED TURBIDITY BARRIER
N.T.S.

- NOTES:
- PROJECT BENCHMARK (B-1) DESCRIPTION: SQUARE CUT IN NORTH RIM OF SEWER MANHOLE. ELEVATION = 6.67 (NGVD 1929)
 - ALL ELEVATIONS SHOWN ON THIS DRAWING SET ARE RELATIVE TO PROJECT BENCHMARK B-1.
 - ALL CLEARING, GRUBBING AND EXCAVATED DEBRIS MATERIAL WILL BE REMOVED FROM PROJECT SITE AND DISPOSED OF PROPERLY.
 - CLEAN SOIL MATERIAL WILL BE PLACED ON THE PLACEMENT AREA.
 - ANY DISTURBED UPLAND AREAS WILL BE STABILIZED WITH NATIVE VEGETATION.
 - CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AS NECESSARY FOR WORK PERFORMED IN AREAS CONTAINING ON, ABOVE, OR BELOW GROUND.
 - EXISTING DESIRABLE VEGETATION LOCATED ADJACENT TO THE PROJECT AREA IS TO REMAIN UNDISTURBED DURING THE CONSTRUCTION PROCESS.
 - SILT FENCE/STAKED TURBIDITY BARRIER WILL BE INSTALLED AROUND THE ENTIRE PROJECT AREA AS SHOWN ON SHEET 5.



- NOTE:
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY CONSTRUCTION
ENTRANCE DETAIL
N.T.S.



TURBIDITY BARRIER APPLICATIONS

D₁ = 5' STD. (SINGLE PANEL FOR DEPTH 5' OR LESS).
D₂ = 5' STD. (ADDITIONAL PANEL FOR DEPTHS >5').
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET.
TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

NOTICE:
COMPONENTS OF TYPE I MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPE I SHALL BE AS APPROVED BY THE ENGINEER.

- NOTE:
TURBIDITY BARRIERS FOR FLOWING STREAMS AND TIDAL CREEKS MAY BE EITHER FLOATING, OR STAKED TYPES OR ANY COMBINATION OF TYPES THAT WILL SUIT SITE CONDITIONS AND MEET EROSION CONTROL AND WATER QUALITY REQUIREMENTS. THE BARRIER TYPE(S) WILL BE AT THE CONTRACTOR'S OPTION UNLESS OTHERWISE SPECIFIED IN THE PLANS. HOWEVER PAYMENT WILL BE UNDER THE PAY ITEM(S) ESTABLISHED IN THE PLANS FOR FLOATING TURBIDITY BARRIER AND/OR STAKED TURBIDITY BARRIER. POSTS IN STAKED TURBIDITY BARRIERS TO BE INSTALLED IN VERTICAL POSITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- NOTES:
- TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF WATER DEPTH.
 - NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
 - DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
 - NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.

TURBIDITY BARRIERS
N.T.S.

ING SOIL CONDITIONS SHALL BE APPROPRIATE FOR PLANTING WITH LIMITED N AS DETERMINED BY PROJECT ECOLOGIST.

REMAINS OR ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED DURING THE COURSE OF ION ACTIVITIES, THE CONTRACTOR MUST STOP WORK IMMEDIATELY AND PROMPTLY E PROJECT MANAGER.

UNSHINE STATE ONE CALL (1-800-432-4770), MANATEE COUNTY PUBLIC WORKS NT, FLORIDA POWER & LIGHT, PEACE RIVER ELECTRIC, VERIZON AND ANY OTHER GAS COMPANIES, CABLE TV, ETC.) PRIOR TO CONSTRUCTION OPERATION AND PRIOR ONNECTION TO EXISTING UTILITIES. IT IS THE CONTRACTORS RESPONSIBILITY TO EXISTING UTILITIES FROM DAMAGE.

ACTIVITY	MTWS/IMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:	ATO/26520	03/18/11
CHECKED BY:		
CONTRACT ADMIN. BY:		
DATE	Drawn by / Cpk. No.	Checked by / Cpk. No.

WilsonMiller
 Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants
 6000 Professional Parkway, Suite 200 - Sarasota, Florida 34230-4461 • Phone 941-557-9000 • Fax 941-557-9001 • Web Site www.wilsonmiller.com

CLIENT: BOARD OF COUNTY COMMISSIONERS MANATEE COUNTY, FLORIDA	DATE: MARCH 2011 PROJECT SCALE: AS SHOWN SHEET NO.: AS SHOWN SHEET TOTAL: 5 OF 7	TITLE: SECTIONS AND DETAILS - UPLAND 'B'	PROJECT NUMBER: 215500131 300 DRAWING NUMBER: 49374 DATE: 3/20/11
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SAJ-2011-01659 (NW-MEP)
 NATIONWIDE PERMIT 27
 VERIFIED 23-SEPT-2011

[Signature]
 3/20/11
 49374

SAJ-2011-01659 (NW-MEP)
 NATIONWIDE PERMIT 27
 VERIFIED 23-SEPT-2011

UPLAND ENHANCEMENT AREAS:

THE GOAL IN THESE AREAS IS TO RESTORE THE COASTAL UPLAND HABITAT THAT WILL PROVIDE MUCH NEEDED UPLAND SUPPORT FOR EXISTING ONSITE WETLANDS. CURRENTLY THESE AREAS ARE VEGETATED WITH RUDERAL VEGETATION THAT HAS RECRUITED SINCE EXOTIC SPECIES OVERGROWTH WAS REMOVED IN DECEMBER 2009. FOLLOW UP HERBICIDE TREATMENTS WILL BE PERFORMED TO REMOVE REGROWTH OF NUISANCE AND EXOTIC VEGETATION. THESE AREAS WILL BE SMOOTHED OUT WITH GRADING EQUIPMENT AND THE MATERIAL FROM THE EXCAVATION OF THE WETLAND CREATION AREA WILL BE SPREAD THROUGHOUT THE UPLAND "F" (REFER TO SHEET 3). NO FILL WILL BE PLACED OR GRADED IN AREAS CONTAINING DESIRABLE VEGETATION. FOLLOWING GRADING THESE AREAS WILL BE PLANTED WITH NATIVE COASTAL UPLAND SPECIES. NATURAL RECRUITMENT OF NATIVE DESIRABLE GROUND COVER SPECIES IS EXPECTED IN MOST AREAS WITH SELECTIVE REMOVAL OF NUISANCE AND EXOTIC VEGETATION. AREAS WITHIN THE UPLAND ENHANCEMENT AREA THAT RECEIVE FILL FROM THE WETLAND CREATION EXCAVATION SHOULD BE SEEDED BY HYDRO-SEEDING, SEED DRILL OR DIRECT APPLICATION WITH A MIXTURE OF NATIVE SEED AT A RATE OF 12 TO 15 LBS OF SEED PER ACRE AS DETERMINED APPROPRIATE BY A QUALIFIED ECOLOGIST. REFER TO THE SUGGESTED PLANTING PALETTE BELOW:

Upland Enhancement Areas Planting Palette		
Common Name	Scientific Name	Relative Elevation/Area
Buttonwood	<i>Conocarpus erectus</i>	lowest elevations
Christmasberry	<i>Lycium carolinianum</i>	lowest elevations
Red Cedar	<i>Juniperus virginiana</i>	low to middle elevations
Wild Cotton	<i>Gossypium hirsutum</i>	low to middle elevations
Jamaica Caper	<i>Capparis cynophallophora</i>	middle elevations
Myrsine	<i>Rapanea punctata</i>	middle elevations
Cabbage Palm	<i>Sabal palmetto</i>	middle elevations
White Stopper	<i>Eugenia axillaris</i>	middle elevations
Spanish Stopper	<i>Eugenia foetida</i>	middle elevations
Marlberry	<i>Ardisia escallontoides</i>	middle elevations
Sea Grape	<i>Coccoloba uvifera</i>	middle elevations
Yellow Necklacepod	<i>Sophora tomentosa</i>	middle elevations
Gumbo Limbo	<i>Bursera simaruba</i>	highest elevations
Wax Myrtle	<i>Myrica cerifera</i>	highest areas "F & B" only
Saw Palmetto	<i>Sereinoa repens</i>	highest areas "F & B" only
Live Oak	<i>Quercus virginiana</i>	highest areas "F & B" only
South Florida Slash Pine	<i>Pinus elliotii var. densa</i>	highest areas "F & B" only

USACE WATERS OF THE U.S.
TEMPORARY FILL IMPACTS

TOTAL AREA TOTAL FILL
0.04 AC 43 CY ±

WETLAND CREATION AREA:

THIS AREA WILL BE EXCAVATED FROM EXISTING GRADE AT A 4:1 SLOPE TO A BOTTOM ELEVATION THAT WILL VARY BETWEEN 0.0' AND 3.0' NGVD. THIS AREA WILL HAVE A DIRECT HYDROLOGIC CONNECTION TO THE EXISTING MANGROVE SWAMP ON THE NORTHERN EDGE OF THE WETLAND CREATION AREA VIA AN EXISTING DITCH IN THE AREA (REFER TO SHEET 3) AREAS DEEPER THAN 2.0' WILL NOT BE PLANTED. THE ELEVATED AREAS LOCATED WITHIN THE CREATED WETLAND WILL BE PLANTED WITH BUTTONWOOD (*CONOCARPUS ERECTUS*) TO PROVIDE INCREASED VEGETATION STRUCTURE FOR THE CREATION AREA. AREAS AT OR ABOVE 2.0' NGVD WILL BE PLANTED WITH NATIVE HIGH MARSH VEGETATION. SIDE SLOPES OF THE WETLAND CREATION AREA WILL ALSO BE PLANTED WITH SALT TOLERANT NATIVE SPECIES. REFER TO THE SUGGESTED PLANTING PALETTE BELOW:

Wetland Creation Area Planting Palette		
Common Name	Scientific Name	Specified Elev. NGVD
Seashore Paspalum	<i>Paspalum vaginatum</i>	2'
Dropseed	<i>Sporobolus virginicus</i>	2'
Saltgrass	<i>Distichlis spicata</i>	2'
Marsh Hay Cordgrass	<i>Spartina patens</i>	2.1'-3'
Marsh Elder	<i>Iva frutescens</i>	2.1'-3'
Sea Oxeye Daisy	<i>Borrchia frutescens</i>	2.1'-3'
Buttonwood	<i>Conocarpus erectus</i>	3'-5'
Scorpions Tail	<i>Heliotropium anaglosspermum</i>	3'-5'
Dune Sunflower	<i>Helianthus debilis</i> sbsp. vestitus	3'-5'
Gulf Muhlygrass	<i>Muhlenbergia capillaris</i>	4'-5'
Florida Privet	<i>Forestiera segregata</i>	4'-5'

WETLAND ENHANCEMENT AREAS:

CURRENTLY EXOTIC VEGETATION AND LITTER IS SCATTERED THROUGHOUT THE WETLAND ENHANCEMENT AREAS. LITTER AND EXOTIC AND NUISANCE PLANTS AND WILL BE REMOVED IN THESE AREAS AS THE FIRST STEP IN ENHANCING THE WETLANDS. (REFER TO SHEET 2) HEAVY EQUIPMENT WILL BE NEEDED TO REMOVE DEBRIS AND PULL STUMPS OF LARGE BRAZILIAN PEPPER TREES. THIS WILL BE DONE FROM THE UPLAND PORTIONS OF THE SITE USING A TRACK HOE WITH A THUMB BUCKET. OTHER NUISANCE SPECIES WILL BE REMOVED BY HAND. AFTER VEGETATION AND DEBRIS IS REMOVED ANY NECESSARY RE-GRADING AND RE-PLANTING WILL BE DONE. ALL WORK PERFORMED IN WETLANDS WILL BE SUPERVISED BY A QUALIFIED ECOLOGIST TO ENSURE MINIMAL DAMAGE IS DONE TO EXISTING DESIRABLE VEGETATION DURING WETLAND ENHANCEMENT. REFER TO THE SUGGESTED PLANTING PALETTE BELOW:

Wetland Enhancement Areas Planting Palette		
Common Name	Scientific Name	Relative Elevation/Area
Giant Leather Fern	<i>Acrostichum danaeifolium</i>	near freshwater inputs
Sea purslane	<i>Sesuvium portulacastrum</i>	lower areas
Needlerush	<i>Juncus roemerianus</i>	lower areas
Saltgrass	<i>Distichlis spicata</i>	higher areas
Dropseed	<i>Sporobolus virginicus</i>	higher areas
Seashore Paspalum	<i>Paspalum vaginatum</i>	higher areas

[Handwritten Signature]
5/20/11
49374

ACTIVITY		PERMITS/EUP. NO.	DATE	 <small>Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants</small> Wilson Miller, Inc. <small>4800 Professional Parkway Blvd., Suite 207 - Sarasota, Florida 34230-2484 - Phone 941-557-8800 - Fax 941-557-8802 - Web Site www.wilsonmiller.com</small>	CLIENT: BOARD OF COUNTY COMMISSIONERS MANATEE COUNTY, FLORIDA	DATE: MARCH 2011 PERIOD: 2011 AS SHOWN PROJECT: PLANTING NOTES AND PALETTES	TITLE: PLANTING NOTES AND PALETTES	P. OUNCE, SELLERS, P.E. FLORIDA LICENSE NO. 49374
DESIGNED BY:		ATO/389520	03/17/11		PROJECT: UNGARELLI PRESERVE HABITAT RESTORATION	DATE: 03/20/11 PERIOD: 2011 AS SHOWN PROJECT: PLANTING NOTES AND PALETTES	PROJECT NUMBER: 215500131 300	PROJECT: 215500131 300
CHECKED BY:								
CONTRACT ADMIN. BY:								
DATE:		04/20/11	ATO/89520					
REVISED BY:								