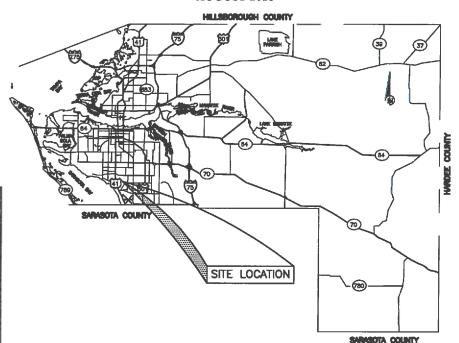


MANATEE COUNTY, FLORIDA STORMWATER DISCHARGE MAINTENANCE PROGRAM BOWLEES CREEK

AUGUST 2018



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MANATEE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

FEE COUNTY

1022 26th Avenue East
Bradenton, FL 34208

STORWATER DISCHARGE
MAINTENANCE PROGRAM
BOWLEES CREEK
COVER SHEET

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/KENNETH KOHN, P.E/ /FLORIDA P.E. # 1965

Signature & Date

PROJECT DESCRIPTION

DREDGE SEDIMENT FROM 205± LINEAR FEET AT BOWLES CREEK TOTAL VOLUME OF DREDGE = 500 CY...

GENERAL NOTES

- 1. A PRE-CONSTRUCTION MEETING SHALL BE REQUIRED BEFORE ANY DREDGING COMMENCES.
- 2. THE CONSTRUCTION ACTIVITIES PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION PLANS AND SPECIFICATIONS ARE ANTICIPATED TO HAVE A MINIMAL IMPACT AND WOULD BE DEEMED EXEMPT OR AS DEMINIMUS ACTIVITY. CONSTRUCTION ACTIVITIES MUST CEASE AND APPLICABLE REGULATORY STATE AND FEDERAL PERMITS/AUTHORIZATION MUST BE OBTAINED SHOULD CONSTRUCTION ACTIVITIES BE DEEMED NECESSARY TO DEVIATE FROM WHAT IS NOTED ON THE APPROVED PLANS AND SPECIFICATIONS.
- 3. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODE, ORDINANCE AND REGULATIONS. IT SHALL BE THE RESONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL REQUIRED PERMITS/AUTHORIZATIONS/EXEMPTIONS ARE OBTAINED IN HAND BEFORE BEGINNING ANY DREDGING.
- 4. CONTRACTOR SHALL PROTECT, STABILIZE AND MAINTAIN STRUCTURAL INTEGRITY OF SEA WALLS, DOCKS, OR OTHER STRUCTURES IN PROXIMITY OF PROPOSED DREDGING LIMITS THAT COULD BE COMPROMISED FROM THE DREDGING AND ASSOCIATED WORK. ANY IMPACTS TO EXISTING SEA WALLS, FENCES, REAR YARD, DOCKS, OR ANY PRIVATE/PUBLIC PROPERTY SHALL BE REPLACED AND RECONSTRUCTED TO THE SAME OR BETTER CONDITION BY CONTRACTOR AT NO CHARGE TO THE COUNTY.
- 5. ALL DISTRUBED AREAS NOT INCLUDING THE AREAS SHOWN ON THE PLANS WHERE DREDGING WILL OCCUR, WILL BE RESTORED TO THEIR PRE-DREDGED CONDITION.
- 6. THE CONTRACTOR SHALL CONTACT THE PROPERY OWNERS WHOSE PROPERTY ABUTS THE CANAL WHERE DREDGING WILL OCCUR NO LATER THAN 14 DAYS IN ADVANCE OF THE PROPOSED WORK. SUCH CONTACT SHALL INCLUDE WRITTEN NOTIFICATION OF THE PROPOSED WORK, DATES AND TIMES OF THE PROPOSED WORK AND ANYIMPACTS TO NAVIGATION, ROADS, AND/OR UTILITIES THAT MAY OCCUR. IN ADDITION CONTACT INFORMATION SHALL BE PROVIDED ON THE WRITTER NOTIFICTION INLCUDING CONTRACTOR AND COUNTY CONTACTS, PHONE NUMBERS AND BUSINESS HOURS.
- 7. ALL DREDGED MATERIAL SHALL BE DISPOSED OF AT THE MANATEE COUNTY CLASS I LANDFILL (LENA ROAD). ALL DISPOSAL MATERIAL PLACED IN THE LANDFILL SHALL BE IN COMPLIANCE WITH "TEST METHODS FOR EVALUATING SOLID WASTE, PHYSICAL CHEMICAL METHOD" METHOD 9095 (PAINT FILTER LIQUIDS TEST) (EPA PUBLICATION NO. SW-846). CONTRACTOR TO MAINTAIN PRECISE RECORDS OF THE VOLUME OF MATERIAL DISPOSED OF THAT MEETS THE PAINT TEST. METHODOLOGY FOR QUANTITFYING DREDGED MATERIAL DISPOSED SHALL BE APPROVED BY THE COUNTY ENGINEER.
- 8. HAULING SHALL BE IN SEALED TRUCKS OVER A CONTRACTOR DESIGNATED, COUNTY APPROVED HAUL ROUTE TO MANATEE COUNTY LANDFILL. ANY ROADWAY DAMAGE ALONG THE HAUL ROUTE FROM SPOIL TRANSPORTATION SHALL BE REPAIRED PER FDOT OR COUNTY STANDARDS AT NO COST TO THE OWNER OR ENGINEER.
- DREDGING WILL OCCUR ONLY AT THE LOCATIONS, DEPTHS, AREAS AS SHOWN ON THE PLANS. A PRE AND POST DREDGING SURVEY WILL BE PROVIDED TO DEMONSTRATE DREDGING WAS CONSISTENT WITH THE DEPTH, AREAS AND LOCATIONS INDICATED ON THE PLANS.
- 10. THE CONTRACTOR SHALL NOT EXCAVATE, DREDGE, REMOVE OR OTHERWISE DISTURB ANY MATERIAL STRUCTURE OR PART OF A STRUCTURE WHICH IS LOCATED OUTSIDE THE DREDGING AREA INDICATED ON THE PLANS, EXCEPT WHERE SUCH EXCAVTIONS, DREDGING OR REMOVAL IS PROVIDED FOR IN THE CONTRACT, PLANS OR SPECIFICATIONS.
- 11. APPARENT ERRORS, DISCREPANCIES OR OMISSIONS ON THE DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION BEFORE BIDDING.
- 12. THE CONTRACTOR SHALL PERFORM SITE OPERATION AND CARE FOR THE REMOVAL OF ALL TRASH, DEBRI, EXCESS MATERIALS AND EQUIPMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESENT THE PROJECT CLEAN AND IN GOOD ORDER AT ALL TIMES UNTIL FINAL ACCEPTANCE.
- 13. THE CONTRACTOR SHALL COMPLY WITH THE LEGAL LOAD RESTRICTIONS IN HAULING MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT.
- 14. ALL EXISTING DRAINAGE STRUCTURES TO REMAIN UNLESS OTHERWISE NOTED.
- 15. THE CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED. CONTRACTOR MUST EXERCISE EXTREME CAUTION WHILE WORKING OR EXCAVATING NEAR NATURAL GAS LINES, UNDERGROUND ELECTRIC, AND GRAVITY SEWER. THIS MAY NECESSITATE HAND DIGGING TO AVOID DAMAGE OR SERIOUS INJURY.
- 16. THE CONTRACTOR TO NOTIFY SUNSHINE STATE ONE-CALL OF FLORIDA AT 1-800-432-4770, TWO FULL BUSINESS DAYS PRIOR TO CONSTRUCTION.
- 17. THE CONTRACTOR TO NOTIFY THE U.S. COAST GUARD AND ANY OTHER NAVIGATIONAL AUTHORITY REGARDING INGRESS AND EGRESS TO THE PROPOSED PROJECT INCLUDING ANY NAVIGATIONAL HAZARDS OR REQUIREMENTS FOR SUCH WORK THAT MAY EXIST.
- 18. ALL MANATEE PROCTECTION DEVICES AND CONTROLS SHALL BE MAINTAINED AS REQUIRED BY STATE LAW.
- 19. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88.
- 20. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PUBLIC WORKS DEPARTMENT, PROJECT MANAGEMENT DIVISION AND ENGINEERING SERVICES DIVISION.

EROSION AND TURBIDITY/SEDIMENT CONROL:

- CONTRACTOR SHALL INSTALL PRIOR TO AND MAINTAIN DURING THE DREDGING OPERATION ALL SEDIMENT CONTROL MEASURES TO MEET APPLICABLE STATE, FEDERAL AND LOCAL WATER QUALITY STANDARDS.
- 2. THE PROPOSED DUAL FLOATING TURBIDTY SCREENS WILL BE PLACED AS SHOWN ON THE PLANS AND WILL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE DREDGING OPERATION. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED AS REQUIRED TO MAINTAIN WATER QUALITY STANDARDS THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST, RELOCATE, AND MAINTAIN EROSION CONTROLS TO MEET APPLICABLE WATER QUALITY STANDARDS.
- 3. THE MAINTENANCE SCHEDULE FOR THE ERSION AND TURBIDITY/SEDIMENT CONTROL WILL BE DAILY.
- 4. EROSION AND TURBIDITY/SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THE PLANS SHALL BE IMPLMENETED AS NECESSARY TO PREVENT TURBIDITY OR OTHER WATER QUALITY VIOLATIONS. BMP'S SHALL BE MAINTAINED TO ENSURE THAT APPLICABLE SURFACE WATER QUALITY STANDARDS ARE MET.
- 5. THE CONTRACTOR SHALL FAMILARIZE WITH ALL APPLICABLE SURFACE WATER QUALITY STANDARDS (STATE, FEDERAL AND LOCAL) TO ENSURE THE DREDGING OPERATION DOES NOT RESULT IN APPLICABLE SURFACE WATER QUALITY VIOLATIONS. TURBIDITY WHICH EXCEEDS 29 NTU'S ABOVE BACKGROUND SHALL BE CORRECTED IMMEDIATELY AND SUCH INCIDENTS SHALL BE REPORTED TO THE COUNTY ENGINEER AND STATE WARNING POINT NO LATER THAN 24 HOURS AFTER THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE EXCEEDANCE AND CORRECTIVE ACTION TAKEN.
- WATER QUALITY SAMPLES FOR TURBIDITY WILL BE AT THE EXPENSE OF THE CONTRACTOR IF NECESSARY IN THE EVENT A WATER QUALITY VIOLATION OR TURBIDITY PLUME OCCURS OR EROSION AND SEDIMENT CONTROLS ARE COMPROMISED OR OTHERWISE NOT PROVIDING FOR THE REQUIRED PROTECTION NECESSARY TO MEET APPLICABLE SURFACE WATER QUALITY STANDARDS. IF REQUIRED, AN ADEQUATE MIXING ZONE MAY BE ESTABLISHED IN ACCORDANCE WITH FAC CHAPTERS 62-4 AND 62-302 AND WILL BE APPROVED BY THE APPLICABLE REGULATORY AGENCY. WHERE REQUIRED, MONITORING WILL OCCUR WITHIN THE AFFECTED AREA AND AT A DOWNSTREAM UNIMPACTED BACKGROUND LOCATION. SAMPLES WILL BE COLLECTED AT THE SURFACE AND AT MIDEPTH. MONITORING WILL CONTINUE ON NO LESS THAN A DAILY BASIS UNTIL WATER QUALITY STANDARDS ARE MET. ALL CONSTRUCTION/DREDGING ACITIVITY WILL CEASE IN EVENT WATER QUALITY VIOLATIONS OCCUR AS A RESULT OF THE PROJECT.
- 7. CONTRACTOR TO BE SOLELY RESPONSBILE FOR CONTROL OF EROSION WITHIN THE WORK SITE AND PREVENTION OF SEDIMENTATION AND TURBIDITY OF ANY ADJANCENT OR DOWNSTREAM WATERWAYS. THE EROSION AND SEDIMENT/TURBIDITY CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUREMENTS. THE CONTRACTOR'S METHOD OF OPERATION MAY DICTATE ADDITIONAL EROSION AND SEDIMENTATION/TURBIDITY CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND INSTALLING ADDITIONAL MEAURES.
- 8. TEMPORARY DEWATERING SHALL NOT OCCUR WITHOUT PRIOR APPROVAL FROM THE SWFWMD AND MANATEE COUNTY.
- 9. ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT.
- 10. REFER TO THE EROSION AND SEDIMENT CONTROL PLAN(S) FOR ADDITIONAL INFORMATION.

SURVEY NOTES

- THE ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) ESTABLISHED VIA THE MANATEE COUNTY BENCHMARKS LISTED IN THE CONTROL TABLE BELOW.
- THIS SURVEY IS REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE NAD 1983/2007 ADJUSTMENT, THE COORDINATE VALUES WERE OBTAINED WITH A TRIMBLE 5800 GPS RECEIVER WITH EGPS VRS CORRECTIONS.
- 3. THIS SURVEY IS SUBJECT TO PERTINENT EASEMENTS, RIGHTS-OF-WAY AND RESTRICTIONS OF RECORD, IF ANY.
- 4. TOPOGRAPHIC DATA WAS COLLECTED WITH A GEODIMETER 600 ROBOTIC TOTAL STATION AND A TRIMBLE 5800 RECEIVER WITH EGPS VRS CORRECTIONS AND THE HYDROGRAPHIC DATA WAS COLLECTED WITH AN ODOM HYDROTRAC FATHOMETER AND A SINGLE BEAM 200 kHz TRANSDUCER.
- 5. SPOT GRADES SHOWN ARE FOR GRAPHICAL PURPOSES ONLY.
 - THIS SURVEY DRAWING WAS PREPARED FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES CERTIFIED TO BELOW FOR THE EXPRESS PURPOSE STATED HEREON AND/OR CONTAINED IN THE CONTRACT BETWEEN HYATT SURVEY SERVICES, INC. AND THE CLIENT FOR THIS PROJECT. COPYING, DISTRIBUTING AND/OR USING THIS DRAWING, IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN ORIGINALLY INTENDED WITHOUT WRITTEN CONSENT FROM HYATT SURVEY SERVICES, INC. IS STRICTLY PROHIBITED AND RENDERS THE SURVEYOR'S CERTIFICATION, SIGNATURE AND SEAL NULL AND VOID. ANY QUESTIONS CONCERNING THE CONTENT OR PURPOSE OF THIS DRAWING SHOULD BE DIRECTED TO HYATT SURVEY SERVICES, INC.

NGS & MANATEE COUNTY BENCHMARKS NAD 1983 FLORIDA WEST ZONE / NAVD 1988							
MON. ID	NORTHING	EASTING	ELEVATION				
SWEET GUM	1132275	474163	18.17				
BAKER	1125820	462803	10.19				
TEXAS	1117287	471712	23.02				
SOUTH DAKOTA	1112673	473960	23.44				

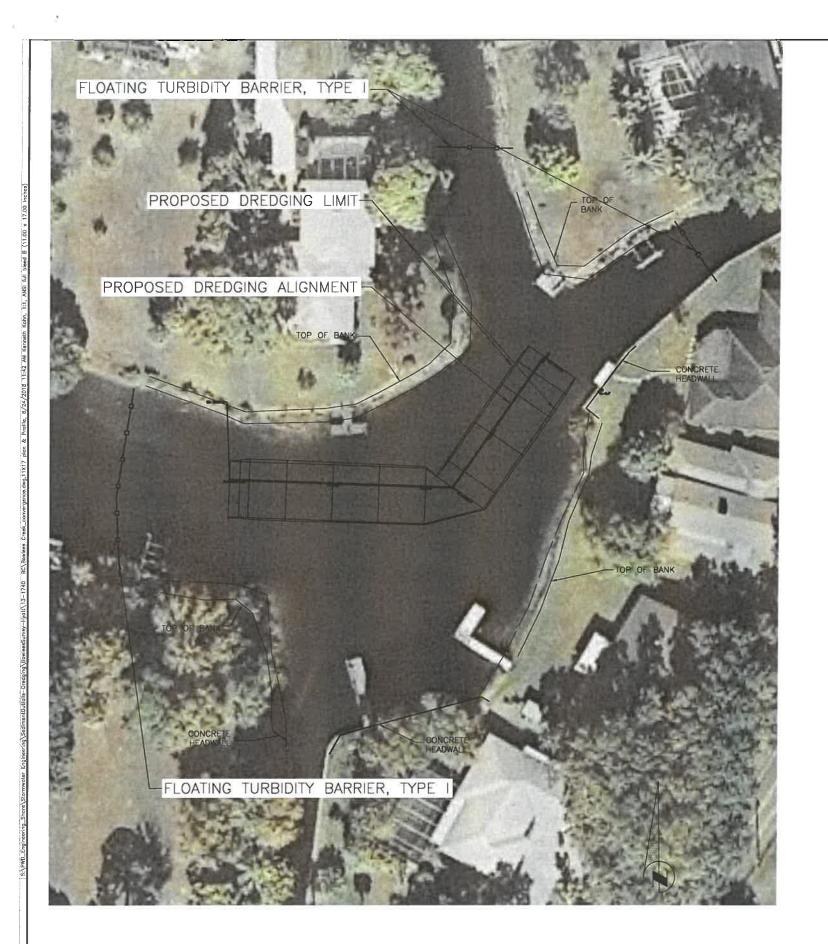


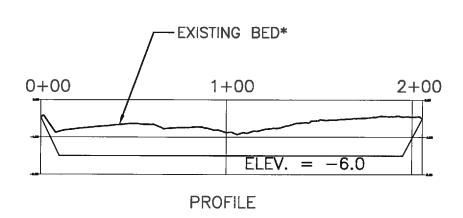
STORMWATER DISCHARGE MAINTENANCE PROGRAM BOWLEES CREEK

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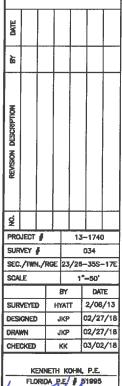




*BASED ON HYDROGRAPHIC SURVEY COMPLETED BY HYATT SURVEY ON 2/8/13.



STORMWATER DISCHARGE MAINTENANCE PROGRAM BOWLEES CREEK



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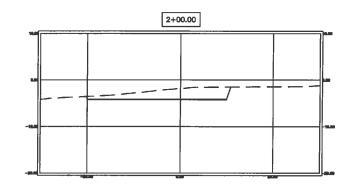
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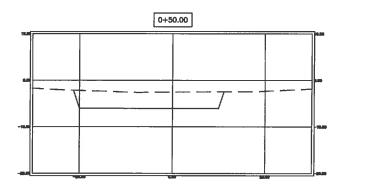
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KENNETH KOHN, P.E.
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