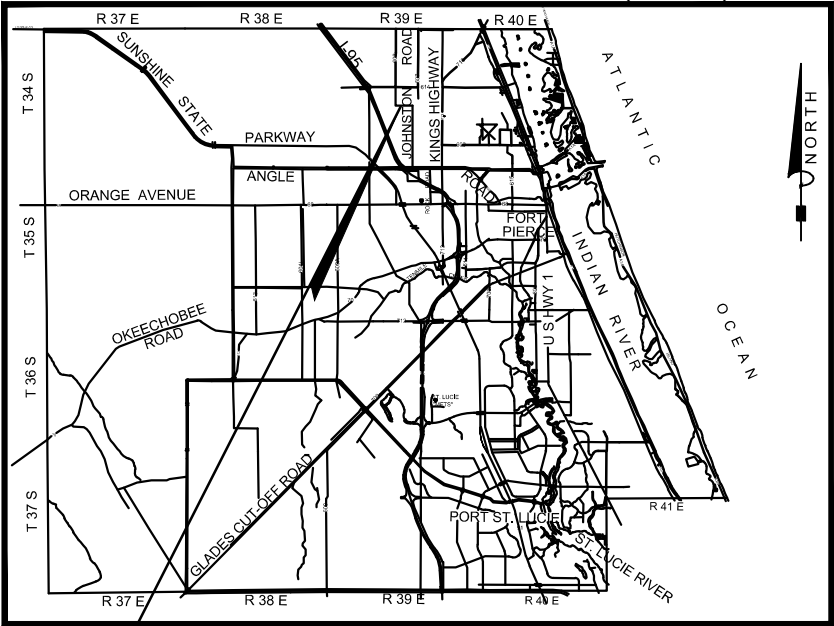
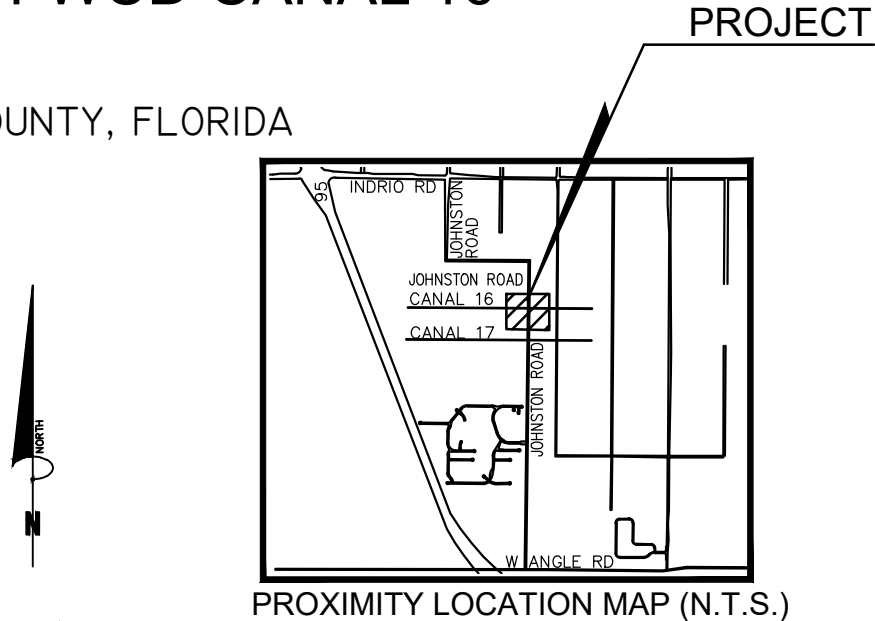


ST. LUCIE COUNTY
JOHNSTON ROAD CULVERT REPLACEMENT AT FPFWCD CANAL 16
CONSTRUCTION PLANS

SECTIONS 22, TOWNSHIP 34 SOUTH, RANGE 39 EAST ST. LUCIE COUNTY, FLORIDA
ST. LUCIE COUNTY PROJECT NO. 15200

INDEX OF PLANS

SHEET #	SHEET DESCRIPTION
C1.0	COVER SHEET
C2.0	GENERAL NOTES & TECHNICAL SPECIFICATIONS
C3.0	SUMMARY OF PAY ITEMS
C4.0	SURVEY OF EXISTING CONDITIONS-VERTICAL & HORIZONTAL CONTROL
C5.0	DRAINAGE MAP PLAN
C5.1	BOX CULVERT SECTION
C6.0	BOX CULVERT PLAN
C7.0	BOX CULVERT DETAILS
C8.0	EROSION CONTROL NOTES & DETAILS
C8.1	EROSION CONTROL PLAN
C9.0	MAINTENANCE OF TRAFFIC PLAN
C10.0	SIGNING & PAVEMENT MARKING PLAN



GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
STANDARD PLANS DATED 2022-23,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED JULY 2022-23,
AS AMENDED BY CONTRACT DOCUMENTS.

BOARD OF COUNTY COMMISSIONERS

CHRIS DZADOVSKY	DISTRICT 1
LARRY LEET	DISTRICT 2
LINDA BARTZ	DISTRICT 3
JAMIE FOWLER	DISTRICT 4
CATHY TOWNSEND	DISTRICT 5

COUNTY ADMINISTRATION

GEORGE LANDRY
COUNTY ADMINISTRATOR

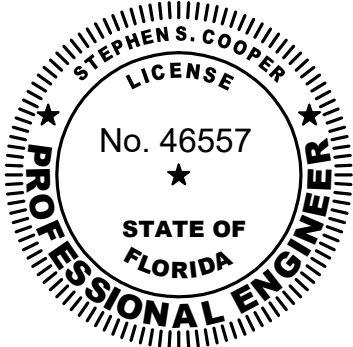
PUBLIC WORKS DEPARTMENT

PATRICK DAYAN, P.E.
PUBLIC WORKS DIRECTOR

DAN ZRALLACK, P.E.
COUNTY ENGINEER

STEPHEN COOPER P. E.
Associates, INC.
Consulting Engineers

7450 South Federal Highway - Port St. Lucie
FL 34952, Phone: (772) 336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856



ENGINEER OF RECORD
P. E. NO. 46557 STEPHEN COOPER., P.E.

SHEET No.
C1.0

NO.	DATE	BY	REVISIONS
4	03/16/23	DAD	REVISED PER COMMENTS
3	02/28/23	DAD	REVISED PER COMMENTS
2	11/29/22	DAD	REVISED PER COMMENTS
1	04/20/21	DAD	REMOVED SHEET PER SLC COMMENTS

COUNTY GENERAL NOTES

- A. GOVERNING SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" DATED 2023-24.
- B. CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" 2023-24.
- C. VERTICAL DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD - '88).
- D. NOTIFY ST. LUCIE COUNTY SURVEYOR IF SURVEY MONUMENTS ARE IN JEOPARDY OF BEING DISTURBED. THE CONTRACTOR SHALL BE LIABLE FOR REPLACEMENT OF DESTROYED OR DISTURBED SURVEY MARKERS. CONTACT PERSON:
ALEXEY GILEV, PSM 7079
TELEPHONE NO. (772) 462-1721
- E. ALL STATIONS AND OFFSETS ARE REFERENCED TO BASELINE OF CONSTRUCTION.
- F. PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATE CHAPTER 556 UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY.
- G. THE CONTRACTOR SHALL CONTACT THE OWNER'S OFFICE IMMEDIATELY IF CONFLICTS ARISE DURING CONSTRUCTION AT:
ST. LUCIE COUNTY ENGINEERING DIVISION
2300 VIRGINIA AVE.
2ND. FLOOR ANNEX
FT. PIERCE, FLORIDA 34982
TELEPHONE NO. (772) 462-1707
- H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH CURRENT OSHA, STATE, COUNTY, AND LOCAL REGULATIONS SUCH AS 54 CFR 45894 AND 29 CFR 1926.650,651.652 AND THE FLORIDA TRENCH SAFETY ACT.
- I. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY OWNER, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY ITS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF ITS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. THE CONTRACTOR SHALL DO ALL NECESSARY HIGHWAY OR DRIVEWAY, WALK AND LANDSCAPING WORK TO SATISFY ANY RESTORATION REQUIREMENTS AT HIS EXPENSE. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
- J. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY THIS CONSTRUCTION TO A CONDITION EQUAL TO OR BETTER THAN CURRENTLY EXISTING.
- K. THE LOCATION OF EXISTING AERIAL AND BURIED UTILITIES SHOWN ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT REMAIN IN PLACE.
- L. KNOWN UTILITIES:
AT&T LUKE FOLKERTS (407)496-6041
CROWN CASTLE MARHEW JONES (786)610-7059
FLORIDA POWER & LIGHT ARMEIGHT MARJAN (772)489-6204
- M. ALL EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
- N. THE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR TWO (2) BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION INVOLVING THEIR UTILITIES SO THAT COMPANY REPRESENTATIVES CAN BE PRESENT.
- O. ALL EXISTING DRAINAGE STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED. ALL STRUCTURES TO BE REMOVED SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.
- P. CONTRACTOR SHALL TAKE ALL NECESSARY ACTIONS TO ENSURE THE PROTECTION AND PRESERVATION OF EXISTING NATIVE TREES. THE CONTRACTOR SHALL BE RESPONSIBLE IN REPLACING TREES THAT ARE HARMED DURING CONSTRUCTION WITH THE SAME VARIETY AND OF EQUAL SIZE OR GREATER.
- Q. THE CONTRACTOR SHALL HIRE A CERTIFIED ARBORIST TO OVERSEE THE PRUNING OF BRANCHES AND ROOT SYSTEMS WHILE WORKING AROUND TREES.
- R. THE MAINTENANCE OF TRAFFIC FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE APPLICABLE FDOT DESIGN MANUAL STANDARD PLAN (102-600 SERIES) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (U.S.DEPARTMENT OF TRANSPORTATION, FHWA). THESE SHALL BE FOLLOWED IN THE DESIGN, APPLICATION, INSTALLATION, MAINTENANCE AND

REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKERS FROM HAZARDS WITHIN THE PROJECT LIMITS.

- S. ANY WORK, STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON OR ABUTTING PRIVATE PROPERTY WITHOUT WRITTEN APPROVAL FROM THE PROPERTY OWNER AND SUBMITTED TO THE COUNTY.
- T. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE TAKEN BY CONTRACTOR DURING CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, JULY 2013 UPDATE.
- U. ALL EXISTING FEATURES TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS.

1. GENERAL

- A. MOBILIZATION: MOBILIZATION SHALL MEET THE REQUIREMENTS OF FDOT SECTION 101. THIS WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, OPERATIONS NECESSARY FOR THE MOVEMENT OF PERSONNEL, EQUIPMENT, SUPPLIES, AND INCIDENTALS TO THE PROJECT SITE, AND FOR THE ESTABLISHMENT OF TEMPORARY OFFICES, BUILDINGS, SAFETY EQUIPMENT AND FIRST AID SUPPLIES, SANITARY AND OTHER FACILITIES, AS REQUIRED BY STATE AND LOCAL LAWS AND REGULATIONS. THE COSTS OF BONDS AND ANY REQUIRED INSURANCE, AND ANY OTHER PRECONSTRUCTION EXPENSE NECESSARY FOR THE START OF WORK, EXCLUDING THE COST OF CONSTRUCTION MATERIALS, SHALL ALSO BE INCLUDED IN THIS SECTION. THIS SECTION ALSO INCLUDES ANY AND ALL WORK RELATED TO THE FINAL CLEANUP.
- B. CONSTRUCTION SURVEYING: THE OWNER SHALL PROVIDE HORIZONTAL CONTROL. THE OWNER SHALL ALSO PROVIDE BENCHMARKS ON THE PROPERTY. THIS CONTROL SHALL BE PROVIDED ONE TIME ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL OTHER CONSTRUCTION SURVEYING. THE CONTRACTOR IS RESPONSIBLE TO PROTECT THESE REFERENCE POINTS AND THE CONSTRUCTION STAKING THROUGHOUT THE JOB. THE CONTRACTOR SHALL BEAR THE COST OF ANY NECESSARY RESTAKING.
- C. SOIL TESTING: SOIL TESTING SHALL BE PERFORMED BY A CERTIFIED TESTING LABORATORY TO BE COMMISSIONED BY ST. LUCIE COUNTY.

2. EARTHWORK AND GRADING

MATERIALS AND CONSTRUCTION METHODS FOR EARTHWORK, EXCAVATION, EMBANKMENT AND GRADING SHALL MEET THE REQUIREMENTS OF FDOT SECTION 120, THE PROJECT SPECIFICATIONS AND SHALL BE PERFORMED TO ACQUIRE FINAL GRADES, ELEVATIONS AND TYPICAL SECTIONS AS SHOWN ON THE PLANS FOR THE PROPOSED WORK.

- A. CLEARING AND GRUBBING: CLEARING AND GRUBBING SHALL MEET THE REQUIREMENTS OF FDOT SECTION 110 AND SHALL BE PERFORMED WITHIN THE LIMITS OF THE PROJECT WORK. THIS WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF EXISTING TREES, BRUSH STUMPS, ROOTS AND OTHER OBJECTIONABLE MATERIAL TO A DEPTH OF 18 INCHES BELOW THE NATURAL GROUND OR DESIGN GRADE, WHICHEVER IS LOWER. THE AREAS TO BE CLEARED AND GRUBBED GENERALLY CONSIST OF RIGHTS-OF-WAY, UTILITY EASEMENTS, WATER MANAGEMENT TRACTS, AND PORTIONS OF THE LOTS AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL CONFIRM WITH THE OWNER THE REMOVAL OF ANY TREES ON THE LOTS FOR POSSIBLE PRESERVATION. ALL MATERIAL SHALL BE REMOVED FROM THE SITE OF THE PROJECT AND SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, REGIONAL, STATE AND FEDERAL LAWS, REGULATIONS AND ORDINANCES.
- B. ROUGH GRADE: THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO MEET THE REQUIREMENTS OF FDOT SECTIONS 110 AND 120 AND SHALL CONFORM TO THE LINES, GRADES, AND TYPICAL SECTIONS AS SHOWN ON THE PLANS.
- C. FINE GRADE: THE CONTRACTOR SHALL FINE GRADE THE PAVEMENT AREAS TO MEET THE REQUIREMENTS OF FDOT SECTIONS 110 AND 120 AND SHALL CONFORM TO THE LINES, GRADES AND TYPICAL SECTIONS AS SHOWN ON THE PLANS.
- D. SOD: SOD SHALL MEET THE REQUIREMENTS OF FDOT SECTION 570, AND 981 AND SHALL BE PLACED ADJACENT TO THE EDGE OF PAVEMENT FOR A MINIMUM WIDTH OF 24 INCHES.

3. DRAINAGE IMPROVEMENTS

MATERIALS, TRENCH EXCAVATION, PIPE LAYING AND BACKFILLING OPERATIONS FOR DRAINAGE IMPROVEMENTS SHALL MEET THE REQUIREMENTS OF FDOT SECTIONS 125 AND 430. PIPE SHALL BE LAID IN TRUE ALIGNMENT IN A PIPE TRENCH WITH AN ADEQUATE SUPPORTING VALUE AND "BEDDED" TO THE DETAIL SHOWN IN THE PLANS AND FDOT SECTION 430. ALL BACKFILL SHALL BE COMPACTED TO A MINIMUM DENSITY OF 100 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99, UNLESS OTHERWISE SHOWN ON THE PLANS.

THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO COMPLETE THE WORK FOR DRAINAGE IMPROVEMENTS AT THE LOCATIONS, SIZES, AND TYPES SHOWN ON THE PLANS FOR THE FOLLOWING ITEMS:

- A. REINFORCED CONCRETE PIPE: REINFORCED CONCRETE PIPES AND BOX CULVERT SHALL MEET THE REQUIREMENTS OF CLASS III OF ASTM C-76, WALL THICKNESS "B", LATEST REVISION, AS MODIFIED BY FDOT SECTION 941. GASKETS FOR PIPE JOINTS SHALL BE ROUND RUBBER GASKETS AND SHALL MEET THE REQUIREMENTS OF FDOT SECTION 942.
- B. MITERED END SECTION: SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 430-022,

4. PAVING IMPROVEMENTS

ALL PAVED AREAS SHALL MEET THE REQUIREMENTS OF AASHTO SPECIFICATIONS, FDOT AND ST. LUCIE COUNTY ENGINEERING DIVISION AND SHALL BE CONSTRUCTED TO THE TYPICAL SECTIONS AS SHOWN ON THE PLANS.

- A. ASPHALTIC CONCRETE: ASPHALTIC CONCRETE MATERIALS AND CONSTRUCTION METHODS SHALL MEET THE REQUIREMENTS OF FDOT SECTIONS 300, 320, 330 AND 334 AND SHALL BE TYPE SP. PRIME AND TACK COATS SHALL MEET THE REQUIREMENTS OF FDOT SECTIONS 300-1 THROUGH 300-7 AND SHALL HAVE AN APPLICATION RATE OF 0.10 GALLONS PER SQUARE YARD, UNLESS A VARIATION RATE IS APPROVED BY THE COUNTY ENGINEER. ASPHALT SHALL BE PLACED IN TWO (2) LIFTS WHERE REQUIRED.
- B. BASE: CEMENTED COQUINA (LBR 100) SHALL BE USED FOR THE ROADWAY SECTION AS SHOWN ON TYPICAL SECTION. BASE COURSE TO MEET REQUIREMENTS OUTLINED IN FDOT INDEX 911.
- C. SUBGRADE: THE SUBGRADE SHALL BE 12" INCHES THICK TYPE "B" STABILIZED WITH LBR=40 AND SHALL EXTEND 5' BEYOND THE EDGE OF THE BASE COURSE WITHIN THE LIMITS SHOWN ON THE PLANS. SUBGRADE SHALL BE COMPACTED TO 98 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- D. ALL MARKING SHALL BE THERMO PLASTIC. AND SHALL MEET THE REQUIREMENTS OF FDOT INDEX 711, 6" WIDE WHITE STRIPES SHALL BE USED FOR THE EDGE-OF-PAVEMENT.
- E. PORTLAND CEMENT CONCRETE: PORTLAND CEMENT CONCRETE MATERIALS AND CONSTRUCTION METHODS SHALL MEET THE REQUIREMENTS OF FDOT SECTIONS 347, 350 AND 355. CONCRETE SHALL BE 4,000 PSI.
- F. MILLING OF EXISTING ASPHALT PAVEMENT - REMOVE EXISTING ASPHALTIC CONCRETE PAVEMENT PER FDOT SECTION 327. MILLING SHALL BE INCLUDED IN THE COST OF THE ASPHALT PAVEMENT.

5. THE WORK

EXISTING UTILITIES AND STRUCTURES:

EXISTING UTILITIES, STRUCTURES AND FACILITIES SHOWN ON THE DRAWINGS WERE LOCATED AS ACCURATELY AS POSSIBLE FROM THE RECORDS EXAMINED. NO GUARANTEE IS MADE THAT ALL EXISTING FACILITIES ARE SHOWN OR THAT THOSE SHOWN ARE ENTIRELY ACCURATE. THE CONTRACTOR SHALL ASSURE THEMSELVES OF THE ACTUAL LOCATION OF THE UTILITIES, STRUCTURES, OR FACILITIES PRIOR TO PERFORMANCE OF ANY WORK IN THE VICINITY. THE UTILITY COMPANIES OR UTILITY AGENCIES WILL CO-OPERATE WITH THE CONTRACTOR'S OPERATIONS. PRIOR TO START OF THE WORK, THE CONTRACTOR SHALL REQUEST EACH UTILITY AGENCY TO ADVISE HIM OF THE LOCATION OF THEIR FACILITIES IN THE VICINITY. THE OWNER WILL ASSUME NO LIABILITY FOR DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE CONTRACTOR'S OPERATION IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, OR TO THE TEMPORARY BRACING AND SHORING OF SAME. IN THE EVENT THAT IT IS NECESSARY TO SHORE, BRACE, OR SWING A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHOULD BE CONTACTED AND THEIR PERMISSION SECURED AS TO THE METHOD USED FOR ANY SUCH WORK.

RESTORATION OR DAMAGED STRUCTURES OR UTILITIES:

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, REBUILD OR RESTORE TO ITS FORMER CONDITION, ANY AND ALL PORTIONS OF EXISTING UTILITIES, STRUCTURES, EQUIPMENT, APPURTENANCES OR FACILITIES, OTHER THAN THOSE TO BE PAID FOR UNDER THIS CONTRACT, WHICH MAY BE DISTURBED OR DAMAGED DUE TO THIS CONSTRUCTION OPERATION, AT NO COST TO THE OWNER.


FINAL CLEANUP:

UPON COMPLETION OF THE WORK, BUT BEFORE FINAL PAYMENT WILL BE MADE, THE CONTRACTOR SHALL CLEAR AND REMOVE FROM THE PROJECT AREA, ALL FALSEWORK, EQUIPMENT, SURPLUS AND DISCARDED MATERIALS, RUBBISH AND TEMPORARY STRUCTURES WHICH RESULT FROM THE WORK UNDER THIS AGREEMENT, AND SHALL RESTORE IN AN ACCEPTABLE MANNER, ALL PROPERTY WHICH HAS BEEN DAMAGED DURING THE PROSECUTION OF THE WORK.

GUARANTEE:

ALL MATERIALS AND THE INSTALLATION THEREOF WHICH ARE FURNISHED AND INSTALLED BY THE CONTRACTOR, UNDER THE TERMS OF THE AGREEMENT, SHALL BE GUARANTEED BY THE CONTRACTOR AGAINST DEFECTIVE WORKMANSHIP, MECHANICAL AND PHYSICAL DEFECTS, LEAKAGE, BREAKAGE, AND OTHER DAMAGES AND FAILURE UNDER NORMAL OPERATION FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL PAYMENT, SAID DATE TO CONSTITUTE THE COMMENCEMENT OF THE ONE (1) YEAR WARRANTY PERIOD. ALL MATERIALS AND INSTALLATIONS PROVING TO BE DEFECTIVE WITHIN THE SPECIFIED PERIOD OF THE GUARANTY SHALL BE REPLACED, WITHOUT COST TO THE OWNER, BY THE MANUFACTURER OR THE CONTRACTOR. THE PERIOD OF GUARANTEE OF EACH SUCH REPLACEMENT SHALL BE FROM AND AFTER THE DATE OF INSTALLATION THEREOF.



SCALE VERIFICATION
0  1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

STEPHEN COOPER, P.E.
& ASSOCIATES, INC.
- CONSULTING ENGINEER -

CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7460 SOUTH FEDERAL HIGHWAY
FORT ST. LUCIE, FLORIDA 34952
Tel: 1-772-339-5383

FLORIDA CERTIFICATE OF AUTHORIZATION No. 00088868

SCPE

**GENERAL NOTES &
TECHNICAL
SPECIFICATIONS**

**JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT**

FLORIDA

ST. LUCIE COUNTY.

DATE: JANUARY 2022

DRAWN BY: DAD

DESIGNED BY: SC

CHECKED BY: SC

HORZ. SCALE: NA

VERT. SCALE: NA

DRAWING NO.

C2.0

JOB NO. 2021-115

Summary of Pay Items			
PAY ITEM NO.	DESCRIPTION	UNIT	PROJECT QUANTITY
101-1A	MOBILIZATION/DEMOBILIZATION	LS	1
102-1A	MAINTENANCE OF TRAFFIC	LS	1
104-2A	PREVENTION, CONTROL, & ABATEMENT OF EROSION & WATER POLLUTION	LS	1
110-1-1	CLEARING AND GRUBBING	LS	1
110-7-1	MAILBOX, F&I, SINGLE	EA	1
120-1A	EXCAVATION/EMBANKMENT	LS	1
199-1A	CONSTRUCTION LAYOUT/RECORD DRAWINGS	LS	1
285-718A	OPTIONAL BASE (CEMENTED COQUINA, LBR 100, 18")	SY	180
160-4	TYPE "B" STABILIZATION LBR 40 (12" MIN)	SY	7
334-1-13A	SUPERPAVE ASPHALTIC CONCRETE (1") (TRAFFIC C, SP-9.5)	TN	12
334-1-13B	SUPERPAVE ASPHALTIC CONCRETE (1.5") (TRAFFIC C, SP-12.5)	TN	9
400-2-1	CONCRETE CLASS II (CONCRETE COLLARS, 4000 PSI)	CY	13
400-80A	MAINTENANCE OF EXISTING DRAINAGE	LS	1
400-90A	CONSTRUCTION DEWATERING	LS	1
407-1-11A	PRECAST CONCRETE BOX CULVERT (10'(SPAN) X 6'(RISE))	LF	120
430-174-124	PIPE CULVERT, RCP, ROUND, 24", SD	LF	186
430-984-129	MITERED END SECTION, ROUND, 24", SD	EA	4
530-3-4	RIP RAP, RUBBLE, F&I, DITCH LINING	TN	419
530-74	BEDDING STONE	TN	77
536-73	GUARDRAIL REMOVAL	LF	250
570-1-2	PERFORMANCE TURF, SOD, MATCH EXISTING	SY	968
700-1-11	SINGLE POST SIGN (GROUND MOUNT)(F&I)(<12SF)	AS	4
706-1-3	RAISED PAVEMENT MARKER, TYPE B	EA	2
711-11-111A	THERMOPLASTIC, STANDARD, WHITE, SOLID, 6"	LF	176
711-11-231A	THERMOPLASTIC, STANDARD, YELLOW, SKIP, 6"	LF	30
1000-1A	UTILITY COORDINATION	LS	1

PAY ITEM FOOTNOTES

101-1A	COST TO INCLUDE, BUT NOT LIMITED TO, MOWING EXISTING SOD AND MAINTENANCE OF EXISTING RIGHT OF WAY WITHIN THE PROJECT LIMITS INCLUSIVE OF MOWING AND LITER REMOVAL FOR THE PROJECT DURATION.
102-1A	MAINTENANCE OF TRAFFIC COSTS SHALL INCLUDE BUT NOT LIMITED TO CONSTRUCTION SIGNS, TEMPORARY BARRICADES, VARIABLE MESSAGE SIGNS, TEMPORARY REFLECTIVE MARKERS, TEMPORARY PAVEMENT MARKINGS, INCIDENTAL TEMPORARY PAVEMENT, DUST CONTROL, ANY TEMPORARY DRAINAGE ELEMENTS BEYOND WHAT IS SPECIFIED IN THE CONTRACT DOCUMENTS, ALL ITEMS NECESSARY TO MEET THE MAINTENANCE OF TRAFFIC REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION AS PRESCRIBED IN SECTION 102-XXX OF THE FDOT STANDARD PLANS.
120-1A	ALL GRADING TO BE INCLUDED IN COST OF EXCAVATION AND EMBANKMENT.
285-718A	THE COST OF PRIME COAT SHALL BE INCLUDED IN THE PRICE OF BASE MATERIAL.
334-1-13A	THE COST OF THE TACK COAT SHALL BE INCLUDED IN THE PRICE OF ASPHALT.
570-1-2	COST OF PERFORMANCE TURF TO INCLUDE SOD, FERTILIZER, MOWING, WATERING, TOOL, EQUIPMENT, PEGGING, LABOR AND ALL INCIDENTAL ITEMS NECESSARY.

Stephen Cooper, P.E. #46557

811

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SCALE VERIFICATION

01

SOLID BAR IS EQUAL TO ONE
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DIMENSIONS ACCORDINGLY

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& ASSOCIATES, INC.
- CONSULTING ENGINEER -

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Tel: 772-336-2533
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008656

SCPE

SUMMARY OF
PAY ITEMS

JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT

FLORIDA
ST. LUCIE COUNTY.

DATE: JANUARY 2022

DRAWN BY: DAD

DESIGNED BY: SC

CHECKED BY: SC

HORZ. SCALE: NA

VERT. SCALE: NA

DRAWING NO.
C3.0

JOB NO. 2021-115

10

9

8

7

6

5

4

3

2

1

NA

REVISED PER COMMENTS

REV. SUMMARY ADDED FOOTNOTES

ADDED UPDATED SUMMARY

REVISED PER COMMENTS

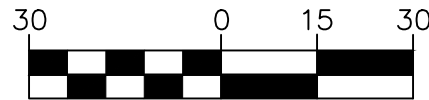
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REVISION

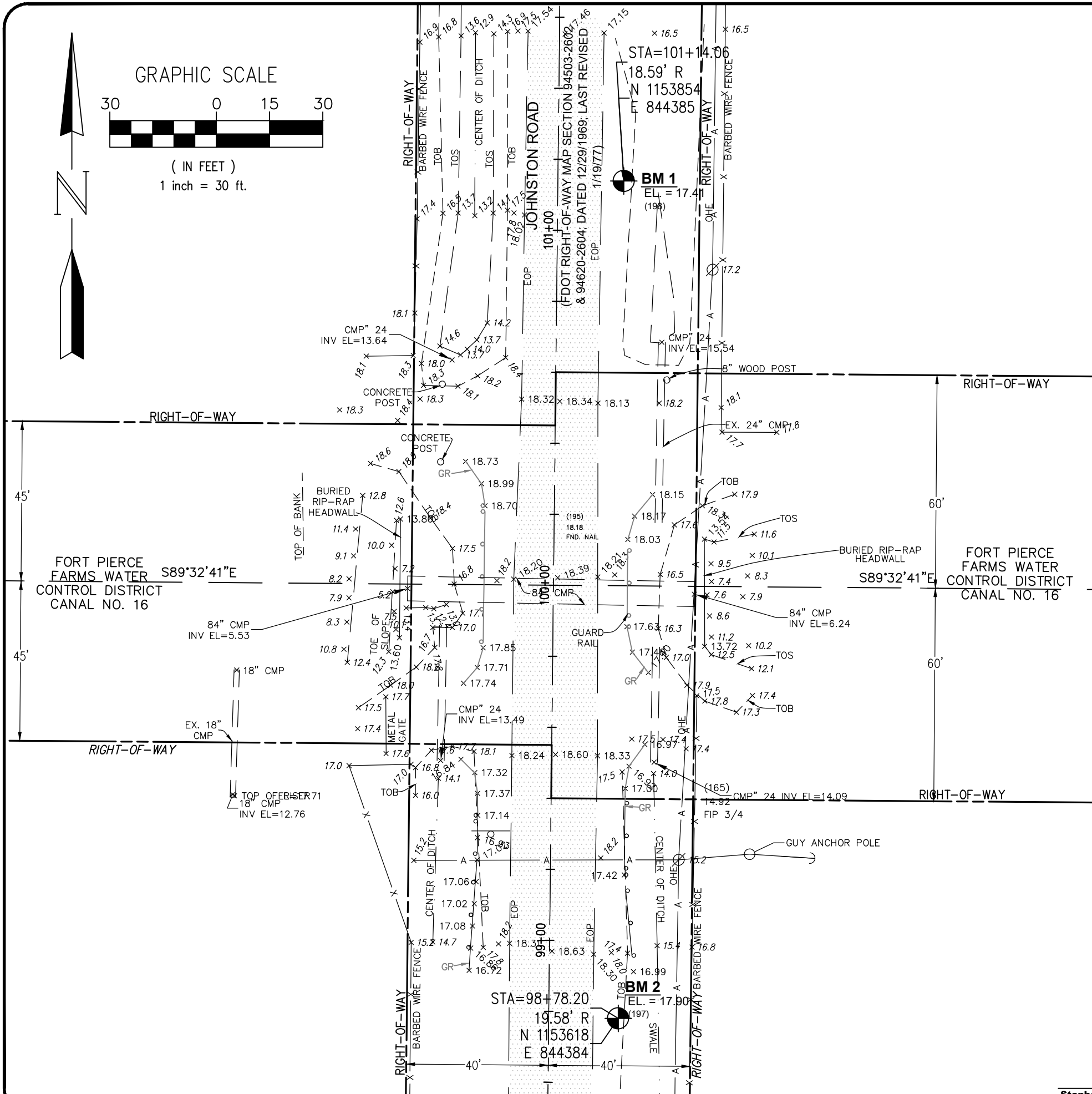
DATE



GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.



SURVEYOR'S NOTES

1. THE EXPECTED USE OF THIS SURVEY IS FOR DRAINAGE DESIGN PURPOSES.
2. ALL MEASUREMENTS SHOWN HEREON ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD AND ARE IN FEET.
3. ADDITIONS OR DELETIONS TO THE SURVEY MAP AND/OR REPORT BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES AND RENDERS THE SURVEY INVALID.
4. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE SURVEYOR HEREON.
5. UNLESS PRESENTED IN DIGITAL FORM WITH ELECTRONIC SEAL AND ELECTRONIC SIGNATURE THIS SURVEY MUST BEAR THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR OR MAPPER, OTHERWISE THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.
6. THIS SURVEY MEETS OR EXCEEDS APPLICABLE ACCURACY REQUIREMENTS AND IS PREPARED ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA ADMINISTRATIVE CHAPTER 5J-17 AS CODE, ADOPTED BY THE BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS.
7. THERE WAS NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES, EXCEPT AS SHOWN.
8. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHT-OF-WAY EASEMENTS, OWNERSHIP, OR OTHER INSTRUMENTS OF RECORD.
9. SYMBOLS SHOWN HEREON ARE NOT TO SCALE.
10. DATE OF LAST FIELD SURVEY: 12/20/2021
11. THIS SURVEY IS INTENDED TO BE DISPLAYED AT THE SCALE SHOWN ON THE SCALE BAR.
12. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), ADJUSTMENT OF 2011, FLORIDA STATE PLANE EAST ZONE AND THE CENTERLINE OF JOHNSTON RD AS SHOWN HEREON AS BEING SOUTH 00°37'38" WEST. ALL OTHER BEARINGS ARE RELATIVE THERETO. TRIMBLE "VRS" WAS USED AS HORIZONTAL CONTROL WITH GPS RTK WITH REDUNDANT MEASUREMENTS. HORIZONTAL ACCURACY IS 0.10 FOOT, PLUS OR MINUS.
13. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88), AS ESTABLISHED BY ST LUCIE COUNTY CONTROL POINT "HAL" HAVING A PUBLISHED ELEVATION OF 4.9832 METERS OR 16.35 FEET (NAVD88). ELEVATIONS DEPICTED ON THIS SURVEY WERE OBTAINED USING REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.2'.
14. THE HORIZONTAL ACCURACY OF THE RIGHT OF WAY LINES IS APPROXIMATELY 0.5 FEET.
15. IT IS NOT CLEAR WHICH RIGHT OF WAY HAS SENIOR RIGHTS AT THE INTERSECTION OF JOHNSTON ROAD AND CANAL 16 AS SHOWN ON THE AVAILABLE JOHNSTON ROAD FDOT MAP APPROVED 12/29/1969 AND THE FORT PIERCE FARMS WATER CONTROL DISTRICT DATED MAY, 1969 AND REVISED JUNE 1994. FURTHER DEED RESEARCH WOULD BE NECESSARY TO DETERMINE THE RIGHTS OF EACH RIGHT OF WAY.

LEGEND

Abbreviations

BM = BENCHMARK
DIA = DIAMETER
EL = ELEVATION
F.D.E.P. = FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MES = MITERED END SECTION
OSW = OTHER SURFACE WATERS
NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988
NGVD29 = NATIONAL GEODETIC VERTICAL DATUM OF 1929
X 14.2 = EXISTING ELEVATION
IP = IRON PIPE & CAP
IPC = IRON PIPE & CAP
IR = IRON ROD & CAP
IRC = IRON ROD & CAP
PK = TYPE OF NAIL
CM = CONCRETE MONUMENT
EOP = EDGE OF PAVEMENT
FND = FOUND
TOB = TOP OF BANK
TOS = TOE OF SLOPE
GR = GUARDRAIL
OHE = OVERHEAD ELECTRIC

Symbols

= CENTERLINE
= WOOD UTILITY POLE
= POLE ANCHOR
= SINGLE POLE SIGN (AS LABELED)
= BENCHMARK (AS LABELED)
= SET 5/8" IRON ROD & CAP
STAMPED "NORTHSTAR LB 7217"



SCALE VERIFICATION
0 1
SOLID BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING, ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

STEPHEN COOPER, P.E.
& ASSOCIATES, INC.
- CONSULTING ENGINEER -

CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7460 SOUTH FEDERAL HIGHWAY
FORT ST. LUCIE, FLORIDA 34952
Tel: 1-772-339-5393
FLORIDA CERTIFICATE OF AUTHORIZATION No. 0008886

SCPE

SURVEY OF
EXISTING CONDITIONS
VERTICAL & HORIZONTAL
CONTROL

**JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT**

FLORIDA
ST. LUCIE COUNTY

DATE: JANUARY 2022

DRAWN BY: DAD

DESIGNED BY: SC

CHECKED BY: SC

HORZ. SCALE: 1"=30'

VERT. SCALE: NA

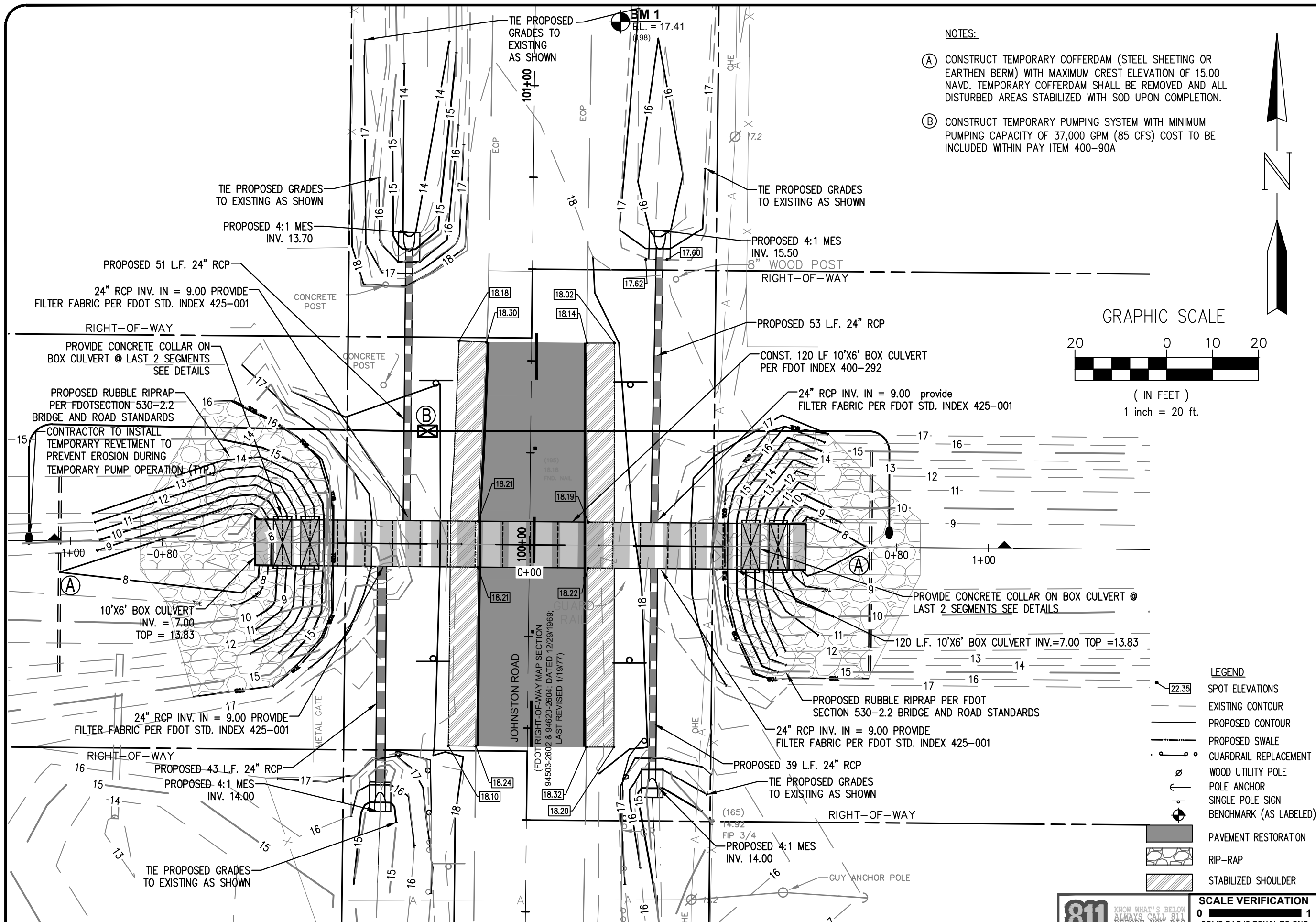
DRAWING NO.

C4.0

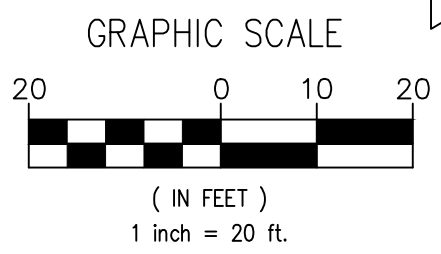
JOB NO. 2021-115

Stephen Cooper, P.E. #46557

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- NOTES:
- (A) CONSTRUCT TEMPORARY COFFERDAM (STEEL SHEETING OR EARTHEN BERM) WITH MAXIMUM CREST ELEVATION OF 15.00 NAVD. TEMPORARY COFFERDAM SHALL BE REMOVED AND ALL DISTURBED AREAS STABILIZED WITH SOD UPON COMPLETION.
 - (B) CONSTRUCT TEMPORARY PUMPING SYSTEM WITH MINIMUM PUMPING CAPACITY OF 37,000 GPM (85 CFS) COST TO BE INCLUDED WITHIN PAY ITEM 400-90A



- LEGEND
- SPOT ELEVATIONS
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SWALE
 - GUARDRAIL REPLACEMENT
 - WOOD UTILITY POLE
 - POLE ANCHOR
 - SINGLE POLE SIGN
 - BENCHMARK (AS LABELED)
 - PAVEMENT RESTORATION
 - RIP-RAP
 - STABILIZED SHOULDER

SCALE VERIFICATION

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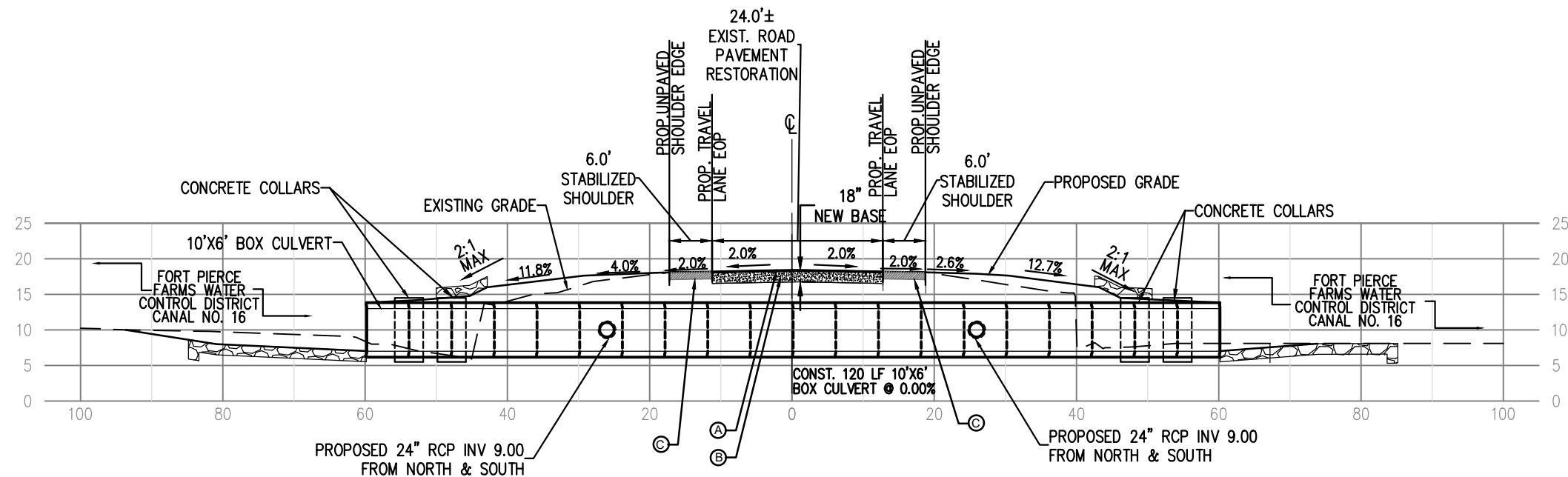
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7460 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
TEL: 772-339-5353
FLORIDA CERTIFICATE OF AUTHORIZATION No. 0008886

DRAINAGE MAP
PLAN

JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT

FLORIDA
ST. LUCIE COUNTY

DATE:	JANUARY 2022
DRAWN BY:	DAD
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=20'
VERT. SCALE:	1"=20'
DRAWING NO.	C5.0
JOB NO.	2021-115



JOHNSON ROAD PROPOSED 10'X6' BOX CULVERT

PAVEMENT RESTORATION (SEE DETAIL ON C7.0)

- (A) TYPE SP-9.5 (TRAFFIC LEVEL C) (1") ASPHALT OVERLAY
TYPE SP-12.5 ASPHALT (TRAFFIC LEVEL C) (1.5")
- (B) CEMENTED COQUINA (LBR 100) (18")
- (C) TYPE "B" STABILIZATION LBR 40 (12" MINIMUM)



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SCPE

**BOX CULVERT
SECTION**

**JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT**

FLORIDA
ST. LUCIE COUNTY

DATE: JANUARY 2022

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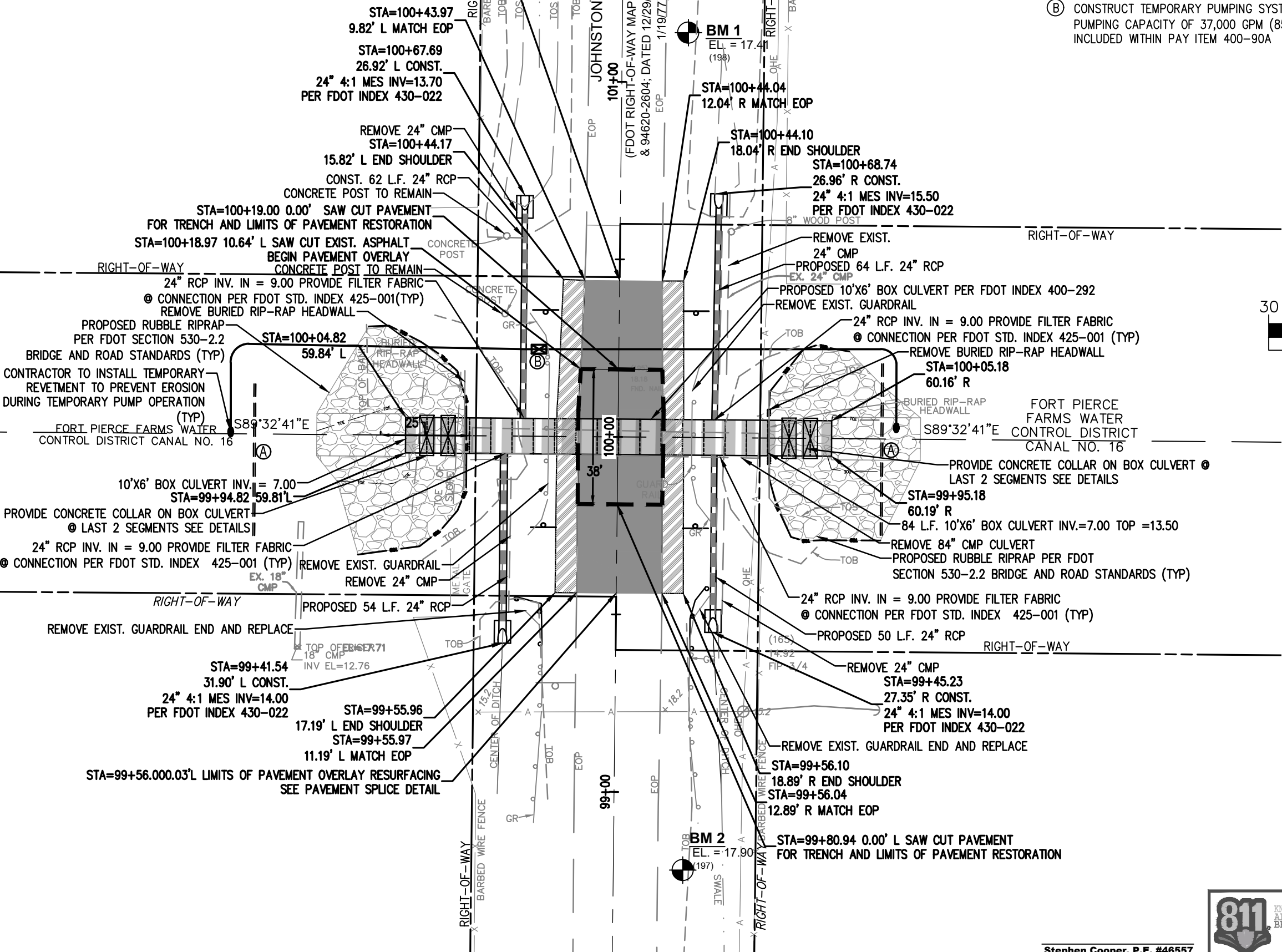
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C5.1

JOB NO. 2021-115

NO.	REVISION	DATE
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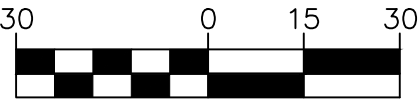
STA=100+44.00 0.00' LIMITS OF PAVEMENT OVERLAY RESURFACING
SEE PAVEMENT SPLICE DETAIL



NOTES:

- (A) CONSTRUCT TEMPORARY COFFERDAM (STEEL SHEETING OR EARTHEN BERM) WITH MAXIMUM CREST ELEVATION OF 15.00 NAVD. TEMPORARY COFFERDAM SHALL BE REMOVED AND ALL DISTURBED AREAS STABILIZED WITH SOD UPON COMPLETION.
- (B) CONSTRUCT TEMPORARY PUMPING SYSTEM WITH MINIMUM PUMPING CAPACITY OF 37,000 GPM (85 CFS) COST TO BE INCLUDED WITHIN PAY ITEM 400-90A

GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

LEGEND

- LIMITS OF PAVEMENT REMOVAL FOR TRENCH
- PROPOSED 24" RCP W/ MITERED END
- PROPOSED BOX CULVERT W/ CONC. COLLARS
- PROPOSED SWALE
- GUARDRAIL REPLACEMENT
- WOOD UTILITY POLE
- POLE ANCHOR
- SINGLE POLE SIGN
- BENCHMARK (AS LABELED)
- PAVEMENT RESTORATION
- RIP-RAP
- STABILIZED SHOULDER



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FORT ST. LUCIE, FLORIDA 34952
TEL: 888-339-5353
FLORIDA CERTIFICATE OF AUTHORIZATION No. 0008886

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BOX CULVERT
PLAN

JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT

FLORIDA
ST. LUCIE COUNTY

DATE:	JANUARY 2022
DRAWN BY:	DAD
DESIGNED BY:	SC
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HORZ. SCALE:	1"=30'
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DRAWING NO.	C6.0
JOB NO.	2021-115

SCALE VERIFICATION
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DIMENSIONS ACCORDINGLY



Stephen Cooper, P.E. #46557

NOTES:

1. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR THE SITE DEVELOPMENT.
2. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX LOCATION SHOWN ON THIS SHEET.
3. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
4. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT.

SOIL EROSION NOTES:

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A SPECIFIC SOIL EROSION PLAN. IN GENERAL, THE SOIL EROSION PLAN SHALL REQUIRE THAT ALL ON-SITE SOILS WILL REMAIN ON-SITE AND WILL NOT ERODE INTO THE ADJACENT ROADSIDE SWALES, ADJACENT PROPERTIES, OR RETENTION DITCHES. ALL EXISTING SWALES SHALL REMAIN SODDED DURING CONSTRUCTION. THE CONTRACTOR SHALL SCARIFY ONLY AS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL SCARIFY AREAS TO PLACE VARIOUS PIPE WORK. AFTER PLACEMENT OF THE PIPE, THESE TRENCHES SHALL BE BACKFILLED AND COMPACTED 98% DENSITY. PRIOR TO DISCHARGE FROM THE SITE, SILTATION BARRIERS SHALL BE UTILIZED AS PER THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL TO AVOID FILLING THESE AREAS. UPON COMPLETION OF THE SITE WORK, ALL AREAS SHALL BE SODDED WITHIN SEVEN DAYS TO AVOID EROSION. CONTRACTOR IS REQUIRED TO COMPLY WITH ALL STATE WATER QUALITY CRITERIA, SPECIFICALLY, NO OFF-SITE DISCHARGES WILL BE ALLOWED WHICH EXCEED THE STATE TURBIDITY CRITERIA.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, PREPARED FOR FLORIDA DEPARTMENT OF TRANSPORTATION AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, JULY 2013.

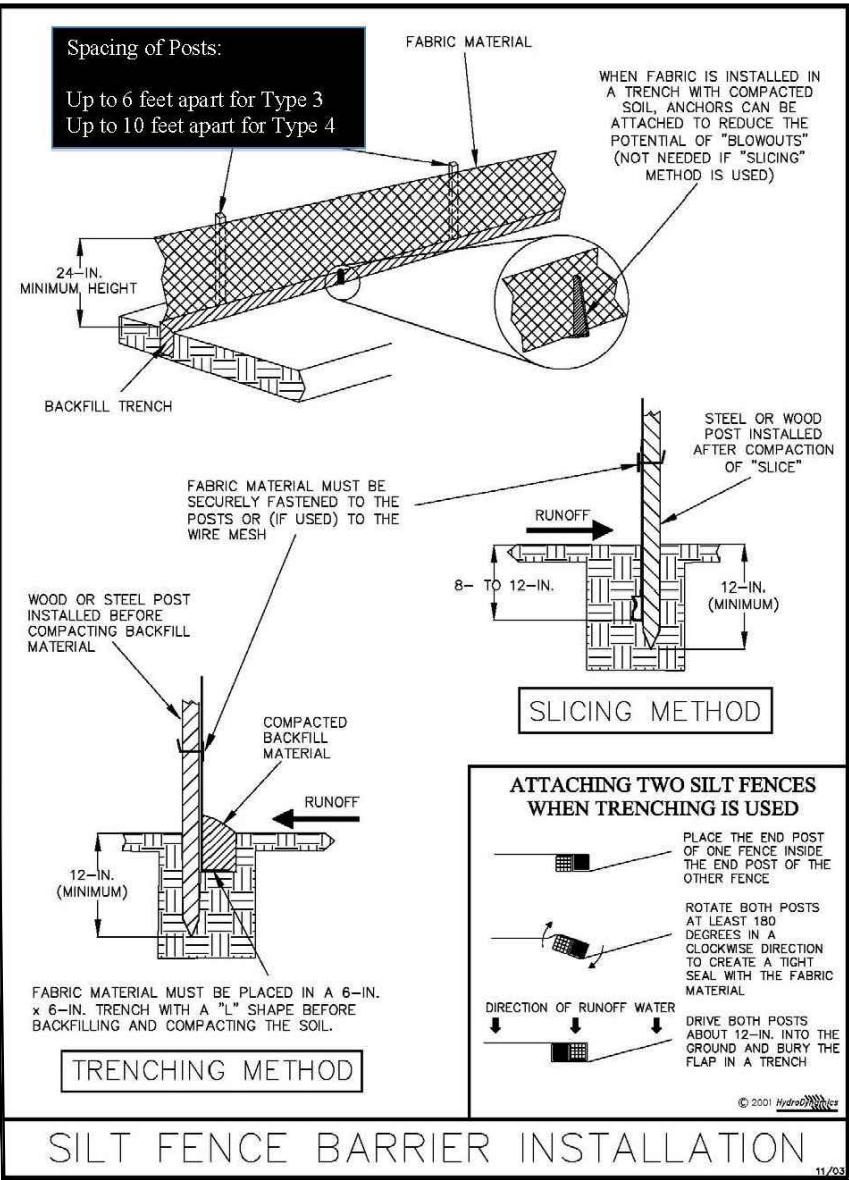
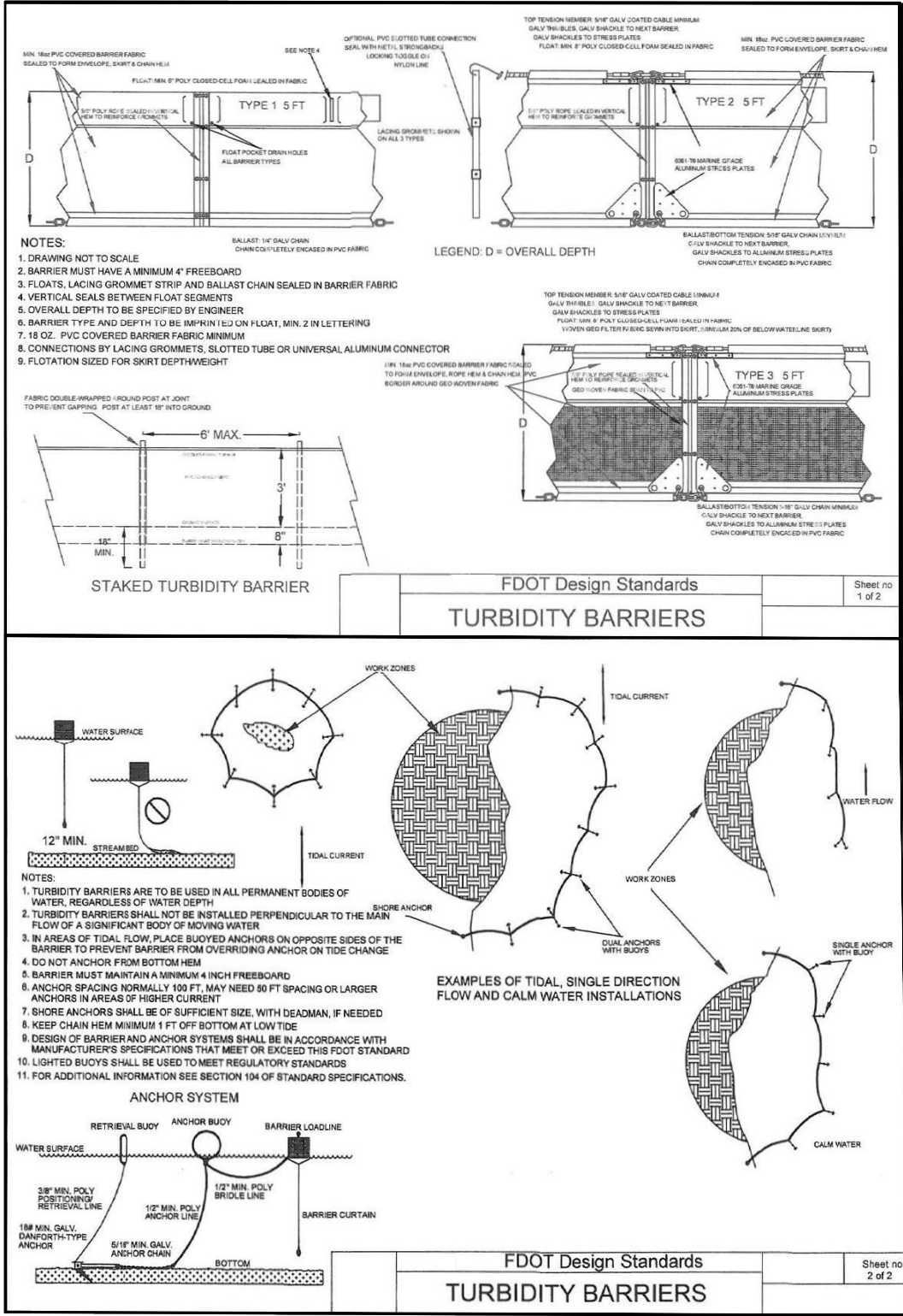
ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEMS SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.

CLEARING AND GRUBBING:

CONTRACTOR IS CAUTIONED TO REVIEW ALL PERMITS AND CONSTRUCTION DOCUMENTS PRIOR TO THE CLEARING/GRUBBING PHASE.

THE CONTRACTOR WILL NOT REMOVE ANY TREES WITHOUT CONFIRMATION FROM ENGINEER OR OWNER.

CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING PERIMETER EROSION AND SEDIMENT CONTROL UNTIL THE PROJECT IS COMPLETE.



NOTES:

ALL EROSION AND SEDIMENT CONTROL DETAILS SHOWN ARE FROM THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, PREPARED FOR FLORIDA DEPARTMENT OF TRANSPORTATION AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, JULY 2013.

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PORT ST. LUCIE, FLORIDA 34952											
161-177-2336/2533											
FLORIDA CERTIFICATE OF AUTHORIZATION No. 0000856											
JOHNSTON ROAD AT FPFWCD CANAL 16											
CULVERT REPLACEMENT											
ST. LUCIE COUNTY, FLORIDA											
DATE: JANUARY 2022											
DRAWN BY: DAD											
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HORZ. SCALE: 1"=30'											
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JOB NO. 2021-115											

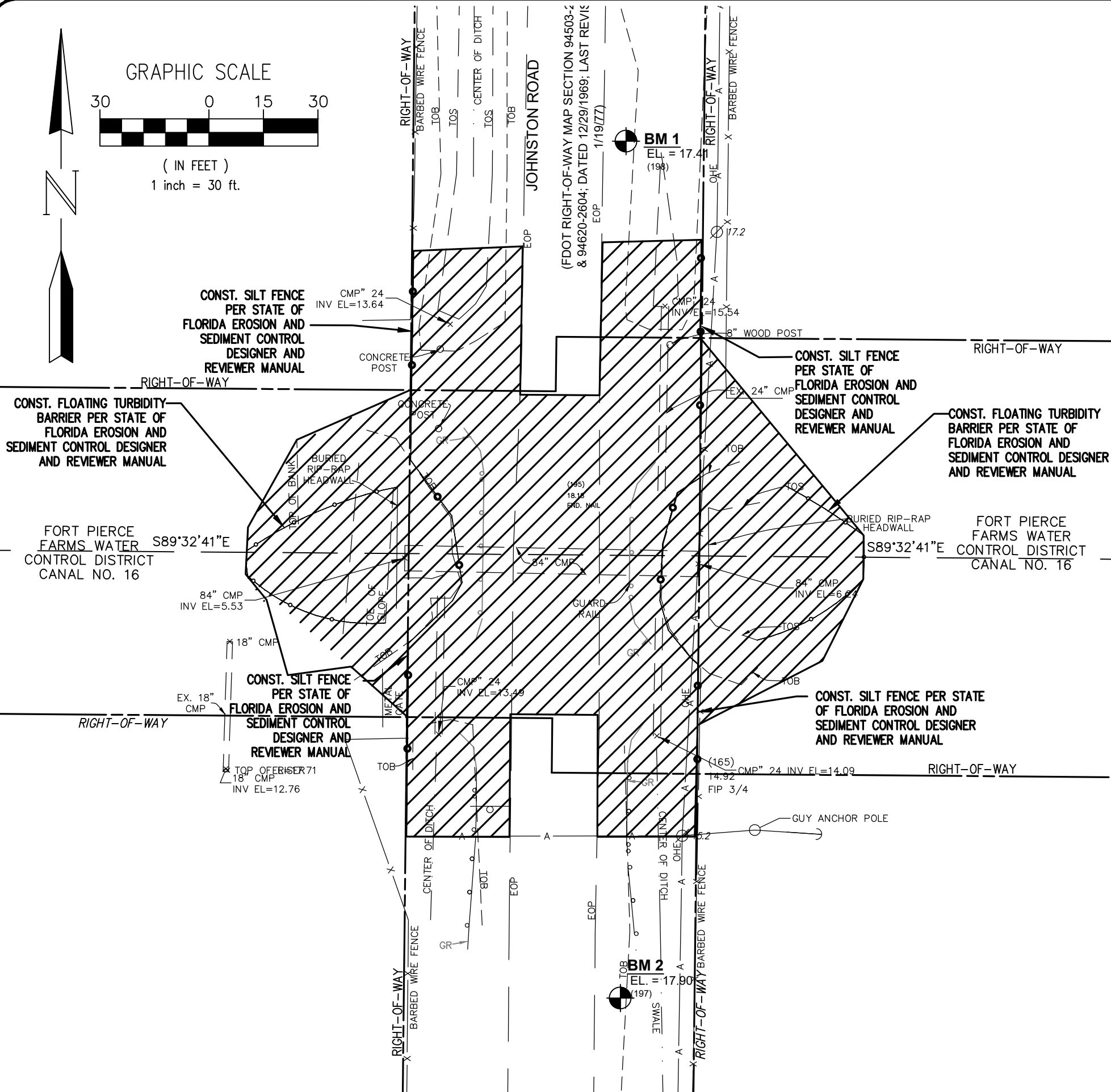
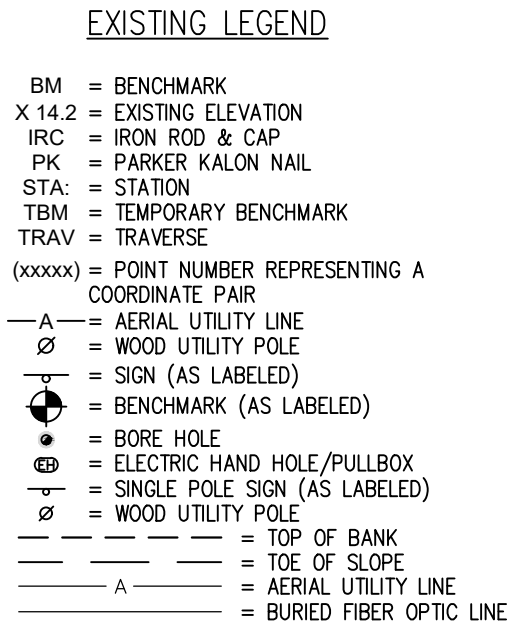
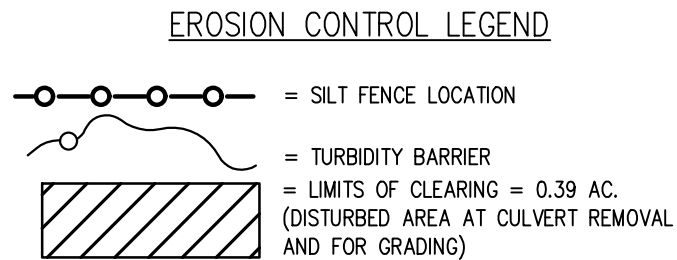
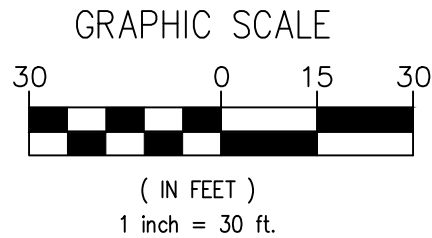


SCALE VERIFICATION

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PORT ST. LUCIE, FLORIDA 34952
Tel: 772-336-5533

FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008656

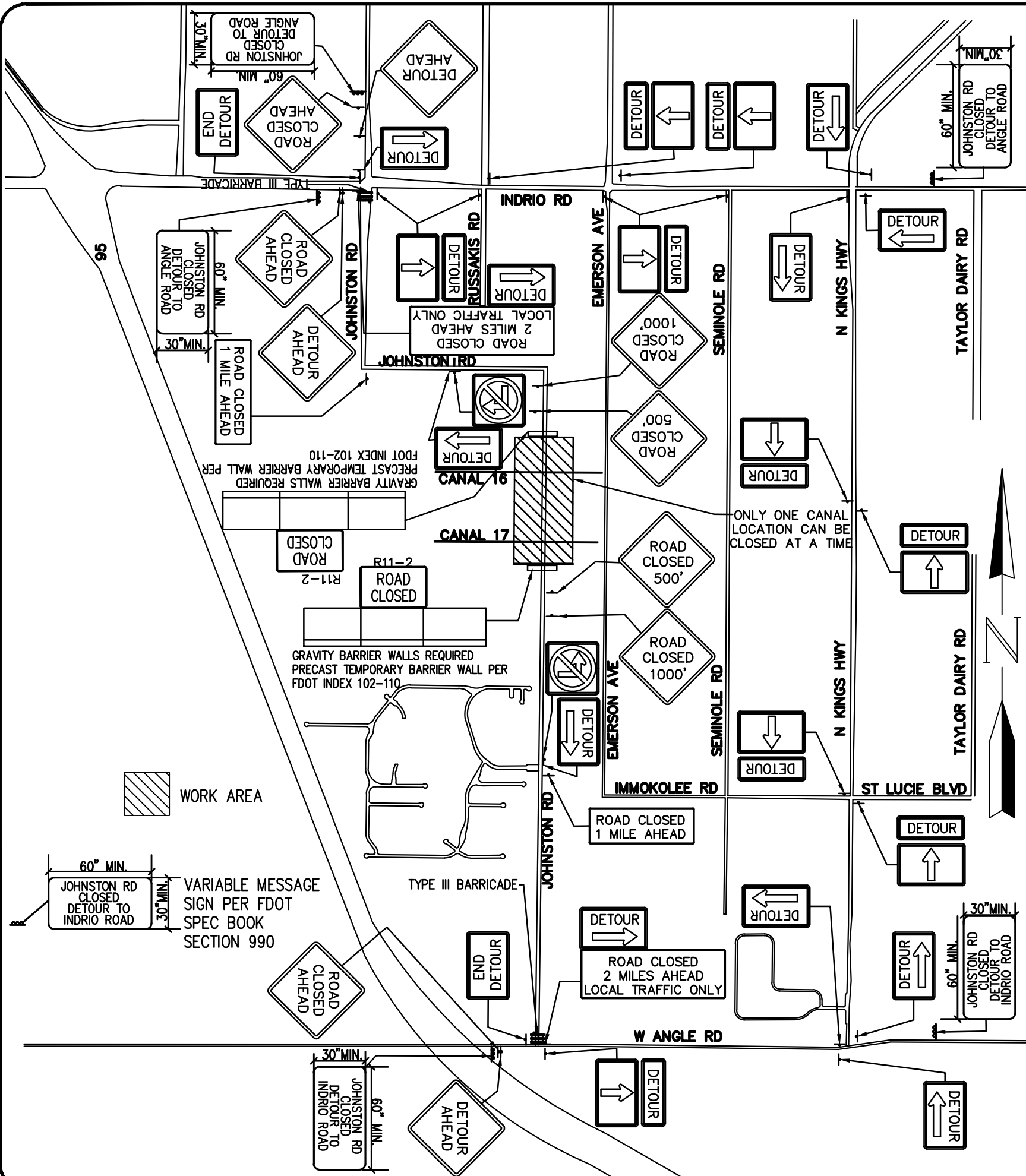
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EROSION CONTROL
PLAN

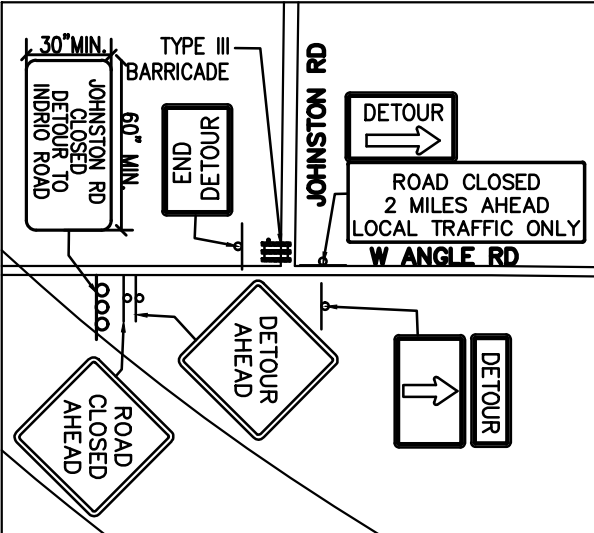
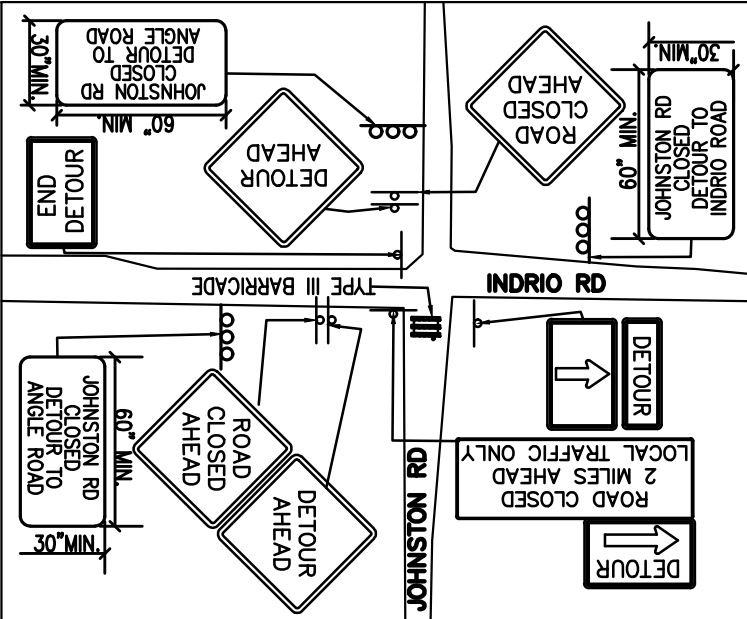
JOHNSTON ROAD AT
FPFCD CANAL 16
CULVERT
REPLACEMENT

FLORIDA
ST. LUCIE COUNTY

DATE:	JANUARY 2022
DRAWN BY:	DAD
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=30'
VERT. SCALE:	NA
DRAWING NO.	C8.1
JOB NO.	2021-115



- MINIMUM MOT REQUIREMENTS:**
- TYPE 3 BARRICADES
 - DETOUR ARROWS – RIGHT
 - DETOUR ARROWS – LEFT
 - END DETOUR SIGNS
 - ROAD CLOSED (ON TYPE 3 BARRICADES AT CLOSURE)
 - DETOUR AHEAD
 - ROAD CLOSED AHEAD
 - LEFT TURN PROHIBITION (R3-2)
 - RIGHT TURN PROHIBITION (R3-1)
 - CONCRETE BARRIER WALL SEGMENTS AT BOTH PROJECT SITES CANAL 16&17
 - VARIABLE MESSAGE OR POST MOUNTED STATIC INFORMATION SIGNAGE
- NOTE:**
1. ALL SIGNS SHALL BE POST MOUNTED EXCEPT THOSE ATTACHED TO TYPE III BARRICADES. SAND BAGS SHALL BE PROVIDED TO SECURE TYPE III BARRICADES.
 2. MOT PLAN IS A MINIMUM REQUIREMENT FOR ROADWAY CLOSURE. CONTRACTOR MAY SUBMIT ALTERNATE MOT PLAN IF DESIRED FOR APPROVAL BY ST. LUCIE COUNTY ENGINEER.
 3. CONTRACTOR SHALL SUBMIT MOT PLAN NECESSARY FOR CONSTRUCTION OPERATION FOR APPROVAL BY ST. LUCIE COUNTY ENGINEER.
 4. SIGNAGE SHALL BE SPACED SUCH THAT ONE SIGN IS VISIBLE FROM ANOTHER ALONG THE ENTIRE DETOUR ROUTE.
 5. VARIABLE MESSAGE SIGN MUST BE IN PLACE FOR 2 WEEKS IN ADVANCE OF ROADWAY CLOSURE.



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- CONSULTING ENGINEER -

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MAINTENANCE OF TRAFFIC PLAN

JOHNSTON ROAD AT FPFWCD CANAL 16 CULVERT REPLACEMENT

FLORIDA

ST. LUCIE COUNTY.

DATE: JANUARY 2022

DRAWN BY: DAD

DESIGNED BY: SC

CHECKED BY: SC

HORZ. SCALE: 1"=2500'

VERT. SCALE: NA

DRAWING NO. C9.0

JOB NO. 2021-115

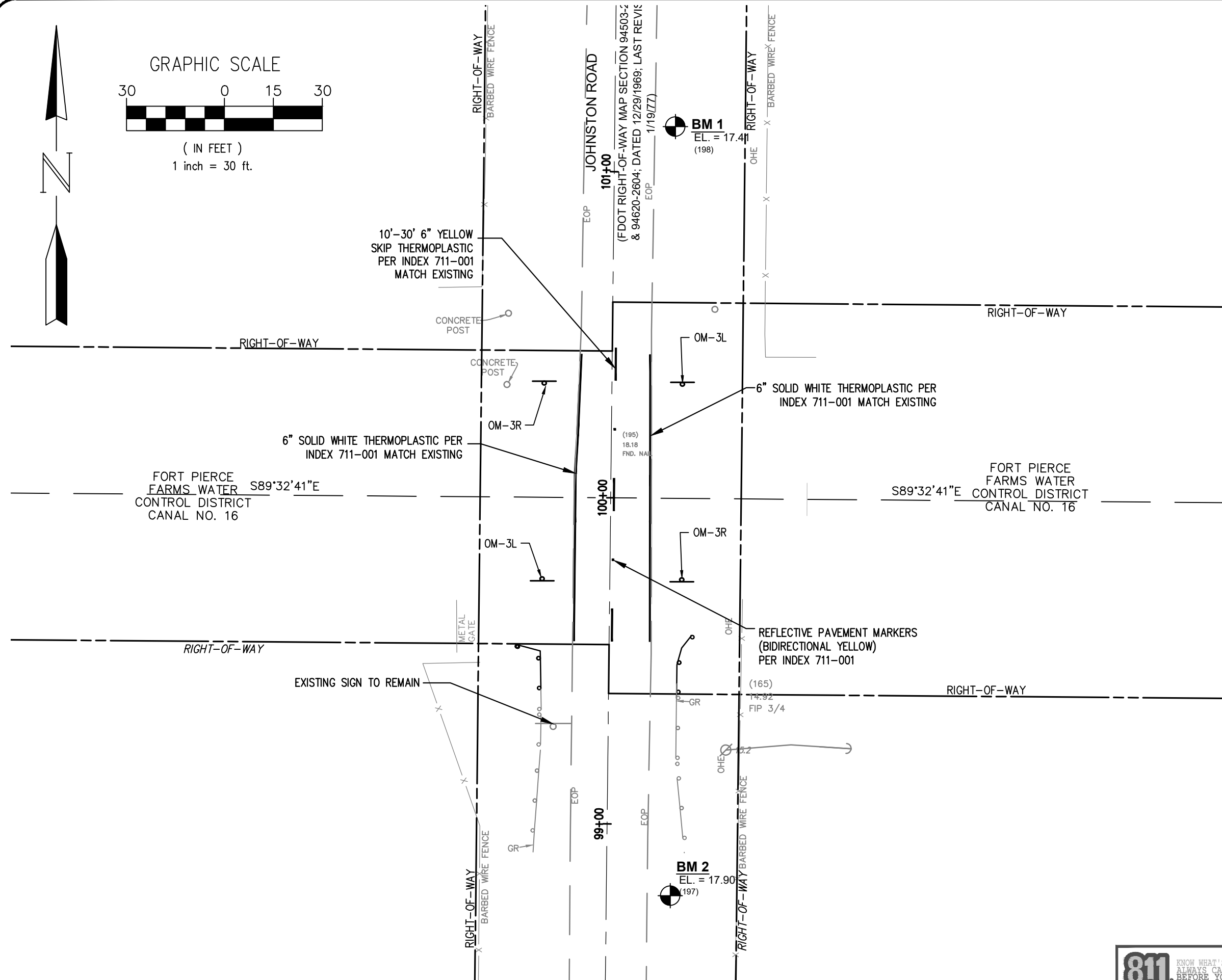
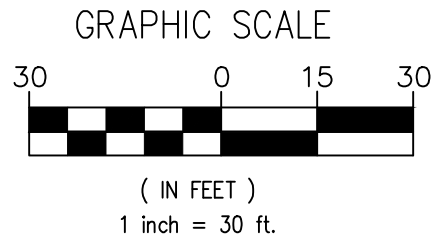
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CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING

7460 SOUTH FEDERAL HIGHWAY
FORT ST. LUCIE, FLORIDA 34952

18 1-772-339-5383

FLORIDA CERTIFICATE OF AUTHORIZATION No. 0008886



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7460 SOUTH FEDERAL HIGHWAY
FORT ST. LUCIE, FLORIDA 34952
Tel: 888-339-5363
FLORIDA CERTIFICATE OF AUTHORIZATION No. 0008886

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**SIGNING & PAVEMENT
MARKING PLAN**

**JOHNSTON ROAD AT
FPFWCD CANAL 16
CULVERT
REPLACEMENT**

ST. LUCIE COUNTY, FLORIDA

DATE: JANUARY 2022
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VERT. SCALE: NA
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C10.0
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