



BOARD OF COUNTY COMMISSIONERS
ESCAMBIA COUNTY, FLORIDA
ENGINEERING AND CONSTRUCTION

PLANS PROPOSED FOR

FLORIDIAN DITCH
RESTORATION PHASE II
(SARASOTA PROJECT)

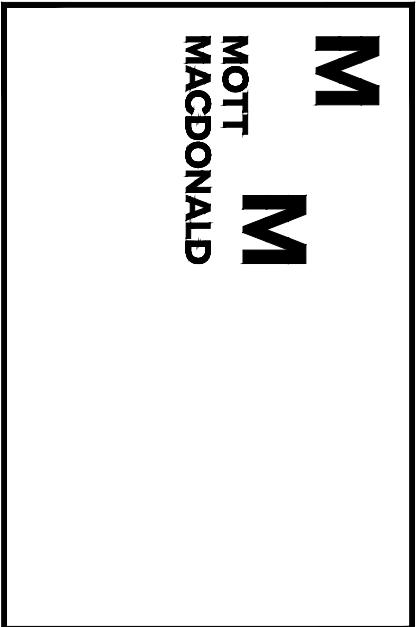
DRAINAGE IMPROVEMENTS

SUMMARY OF DRAINAGE STRUCTURES

EXISTING SITE, DEMOLITION & EROSION CONTROL PLAN

DRAINAGE STRUCTURE S-8 DETAILS

CONSULTANT PROJECT NO. _____



THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE LATEST ESCAMBIA COUNTY

ANY REFERENCE TO PDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION I, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICAPABLE TO ANY SPECIFICATION REFERED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL

100% REVIEW PLANS
NOT FOR CONSTRUCTION
NOVEMBER 2020

COMMISSIONERS

- DISTRICT ONE JEFF BERGOSH
- DISTRICT TWO DOUG UNDERHILL
- DISTRICT THREE LUMON MAY
- DISTRICT FOUR ROBERT BENDER (VICE CHAIRMAN)
- DISTRICT FIVE STEVEN BARRY (CHAIRMAN)



VICINITY MAP

SUMMARY OF QUANTITIES		
	Unit	Quantity
	LS	1
	LS	1
	LS	1
	LS	1
	LS	1
	LS	1
	LS	1
	LS	1
	LF	473
	LF	275
	LF	482
	LF	185
	LF	65
	LF	53
	EA	1
	EA	1
	EA	5
	EA	5
	EA	2
	EA	1
	TN	192
	SY	11
	SY	4500
	LS	1

PAY ITEM NOTES:

1. MAINTENANCE OF TRAFFIC PAY ITEM SHALL INCLUDE ALL ITEMS NECESSARY TO PROVIDE A SAFE WORK ZONE AND SHOULD INCLUDE ALL NECESSARY ITEMS REQUIRED FOR TRAFFIC CONTROL.THE MAINTENANCE OF TRAFFIC SHALL MAINTAIN ALL LANE ON BLUE ANGLE PARKWAY. THE CONTRACTOR SHALL PROVIDE THE COUNTY A TRAFFIC CONTROL PHASING PLAN FOR REVIEW AND APPROVAL PRIOR TO STARTING CONSTRUCTION. THIS PAY ITEM SHALL INCLUDE ALL ITEMS NECESSARY DEVELOP A TRAFFIC CONTROL PLAN AND PROVIDE A SAFE WORK ZONE FOR RESIDENTS AND THE PUBLIC.
2. EROSION CONTROL PAY ITEM SHALL INCLUDE ALL ITEMS NECESSARY TO PREVENT SITE SOILS FROM BEING DISCHARGED OFFSITE AND MAY INCLUDE, BUT NOT LIMITED TO SILT FENCE, FLOATING TURBIDITY BARRIER, MULCH, HAY, STRAW, SOIL TRACKING DEVICES, TEMPORARY SODDING, ETC.
3. ANY TESTING AND COORDINATION REQUIRED SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEM.
4. CLEARING AND GRUBBING PAY ITEM SHALL INCLUDE ALL ITEMS NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THIS MAY INCLUDE SUCH ITEMS AS REMOVAL ASPHALT PAVEMENT.REMOVAL OF CONCRETE, SAWCUTTING, TREE REMOVAL, TREE TRIMMING, FENCE REMOVAL, LANDSCAPE DEMOLITION, UTILITIES, FENCING, REMOVAL OF EXISTING DRAINAGE STRUCTURES, REMOVAL OF DRAINAGE PIPING, RIPRAP, BRICKS, DEBRIS, VEGETATION, AND OTHER MISCELLANEOUS ITEMS. ALL TREES WITHIN THE DRAINAGE EASEMENT SHALL BE REMOVED. TREES. TREES WITHIN IMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE INCLUDED IN THE CLEARING AND GRUBBING PAY ITEM.
5. FILTER FABRIC SHALL BE INCLUDED IN THE COST OF RIPRAP.
6. ANY PUMPING NECESSARY FOR CONSTRUCTION SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEM.
7. ANY EARTHWORK SHALL BE INCLUDED IN THE ASSOCIATED PAY ITEM OR CONSTRUCTION ACTIVITY.
8. ALL DISTURBED AREAS SHALL BE SODDED.
9. THE SOD SHALL MATCH THE EXISTING SOD TYPE.
10. DEWATERING PAY ITEM SHALL INCLUDE ALL PUMPING ACTIVITIES TO FACILITATE ALL ROADWAY AND DRAINAGE CONSTRUCTION ACTIVITIES.
11. FENCING PAY ITEMS INCLUDES ALL MATERIALS NEEDED TO INSTALL THE TYPE OF FENCE INCLUDING POST, GATES, CONCRETE FOUNDATION, ETC.
15. COST OF FOR ANY BEDDING MATERIAL, TEMPORARY SHEETING, TRENCH BOXES, AND OR ANY OTHER ITEMS NECESSARY TO INSTALL DRAINAGE SYSTEM SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEM.
16. YARD DRAIN PIPE PAY ITEMS SHALL INCLUDE ALL MATERIALS NECESSARY TO CONNECT THE EXISTING YARD PIPE TO THE DRAINAGE INLETS. THIS ITEM MAY INCLUDE BUT NOT LIMITED TO ELBOWS, ADAPTORS, PIPE WRAPPING, AND CONNECTORS.
17. BOX CULVERT CONNECTION PAY ITEM SHALL INCLUDE THE CONCRETE, REBAR, BEDDING MATERIAL, TEMPORARY SHEETING, TEMPORARY PIPING, PUMPING, AND ANY OTHER ITEMS NECESSARY TO CONNECT THE BOX CULVERT TO THE DRAINAGE INLET.
18. AS-BUILT PAY ITEM SHALL INCLUDE A PDF AND 3 HARD COPIES SIGNED AND SEALED BY A REGISTERED SURVEYOR.
19. DRAINAGE STRUCTURES GREATER THAN 5 FEET SHALL INCLUDE A LADDER. THE COST OF THE LATTER SHALL BE INCLUDED IN THE COST OF THE STRUCTURE.
20. DRAINAGE PIPE SHALL BE BACKFILL WITH MANUFACTURE RECOMMENDED MATERIAL. THE COST OF THE BACKFILL SHALL BE INCLUDED IN THE COST OF THE PIPE.
21. SHED LEVELING PAY ITEM SHALL INCLUDE ALL MATERIAL NECESSARY TO STRUCTURALLY STABILIZE AND LEVEL THE SHED AT 6450 SARASOTA STREET. THIS ITEM COULD INCLUDE BLOCK, FLOWABLE FILL, EARTHWORK, AND SOD.
22. U-TYPE CONCRETE ENERGY DISSIPATOR PAY ITEM SHALL INCLUDE THE FENCE AND SAND CEMENT RIPRAP IN THE COST OF THE STRUCTURE. SEE FDOT STANDARD PLANS 430-012 FOR FENCE AND SAND CEMENT RIPRAP.

Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

Client

Escambia County
Board of County Commissioners

Title

Floridian Ditch
Restoration Phase II
(Sarasota Project)

SUMMARY OF PAY ITEMS

THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number			B/O		Total	
502100479					12	
Designed	K. MORGAN		Eng check			
Drawn	C. RILEY		Coordination			
Dwg check			Approved			
Scale at ANSI D		Status	Rev		Security	
NTS		PRE	P1		STD	
Drawing Number						
C-003						

STRUCTURE TABLE						
STR. #	STATION	OFFSET / SIDE	NORTHING EASTING	DESCRIPTION	RIM EL.	CONNECTED PIPE
S-1	12+35.00	0.00	N: 547914.44 E: 1078540.41	FDOT 60" U-TYPE ENDWALL ENERGY DISSIPATOR	70.67	INV. (IN) = 65.13 60" HP STORM (P-1)
S-2	12+45.00	0.00	N: 547914.54 E: 1078550.40	FDOT TYPE D INLET W/ 5' X 7' J BOTTOM	73.10	INV. (OUT) = 65.20 60" HP STORM (P-1) INV. (IN) = 65.20 60" HP STORM (P-2)
S-3	13+15.00	0.00	N: 547910.45 E: 1078620.29	FDOT TYPE D INLET W/ 5' X 7' J BOTTOM W/ SINGLE SLOT	73.80	INV. (OUT) = 65.60 60" HP STORM (P-2) INV. (IN) = 65.60 60" HP STORM (P-3)
S-4	13+85.00	0.00	N: 547906.36 E: 1078690.16	FDOT TYPE D INLET W/ 5' X 7' J BOTTOM W/ SINGLE SLOT	74.50	INV. (OUT) = 66.00 60" HP STORM (P-3) INV. (IN) = 66.00 60" HP STORM (P-4)
S-5	14+55.00	0.00	N: 547902.27 E: 1078760.04	FDOT TYPE D INLET W/ 5' X 7' J BOTTOM W/ SINGLE SLOT	76.65	INV. (OUT) = 68.15 60" HP STORM (P-4) INV. (IN) = 68.15 60" HP STORM (P-5)
S-6	15+25.00	0.00	N: 547898.18 E: 1078829.92	FDOT TYPE D INLET W/ 5' X 7' J BOTTOM W/ SINGLE SLOT	78.80	INV. (OUT) = 70.30 60" HP STORM (P-5) INV. (IN) = 70.30 60" HP STORM (P-6)
S-7	16+00.00	0.00	N: 547893.80 E: 1078904.80	FDOT TYPE D INLET W/ 5' X 7' J BOTTOM W/ SINGLE SLOT	81.10	INV. (OUT) = 72.60 60" HP STORM (P-6) INV. (IN) = 72.60 60" HP STORM (P-7)
S-8	17+17.33	0.00	N: 547896.68 E: 1079022.09	FDOT TYPE E INLET W/ 5'X8' J BOTTOM	87.68	INV. (OUT) = 78.50 60" HP STORM (P-7)

PIPE TABLE			
NAME	SIZE / MATERIAL	LENGTH	SLOPE
P-1	60" HP STORM"	10.00'	0.69%
P-2	60" HP STORM"	70.00'	0.57%
P-3	60" HP STORM"	70.00'	0.57%
P-4	60" HP STORM"	70.00'	3.07%
P-5	60" HP STORM"	70.00'	3.07%
P-6	60" HP STORM"	75.00'	3.07%
P-7	60" HP STORM"	117.00'	5.02%

Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

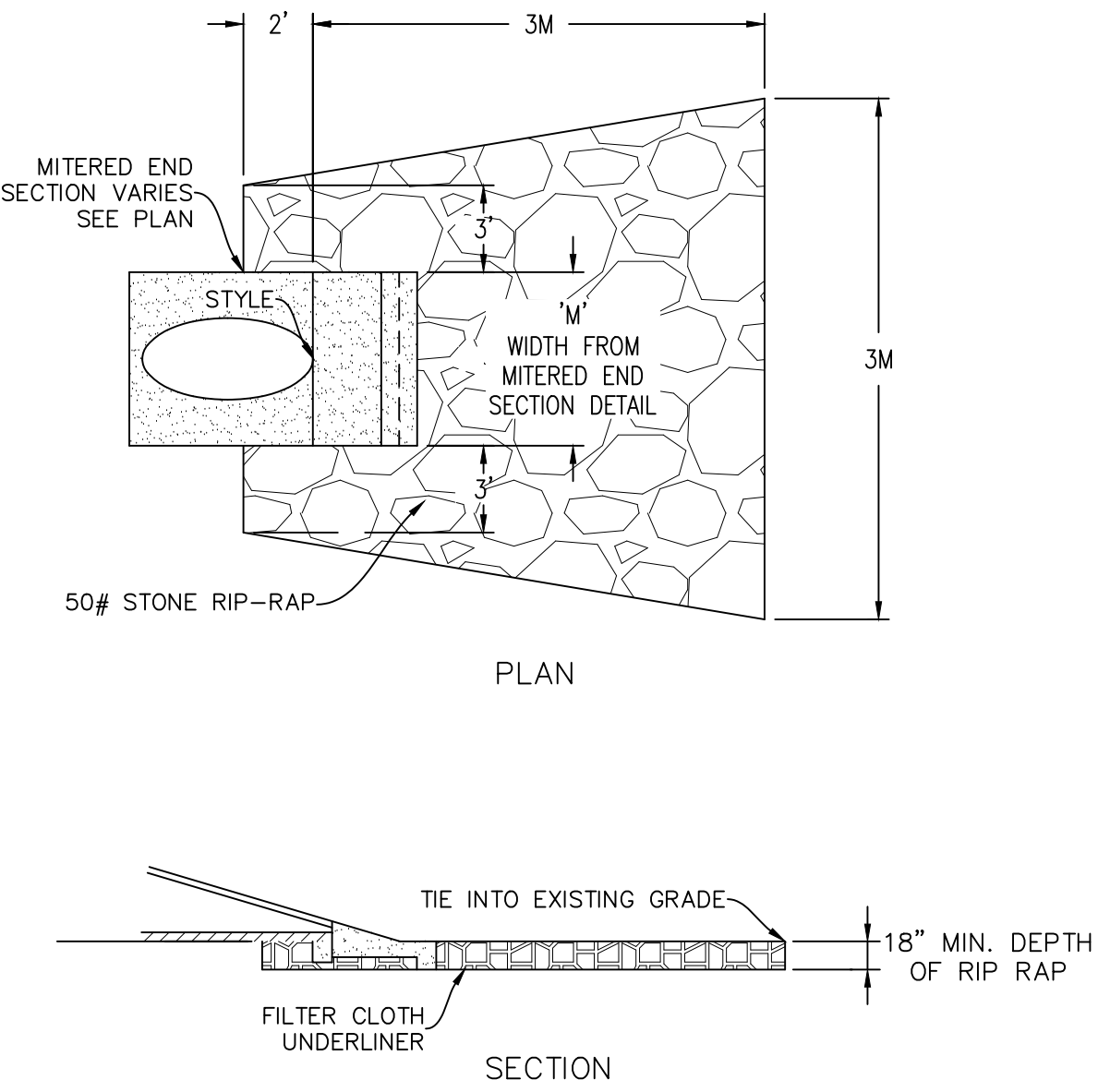
Client
Escambia County
Board of County Commissioners

Title
Floridian Ditch
Restoration Phase II
(Sarasota Project)

SUMMARY OF DRAINAGE STRUCTURES

THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number		B/O		Total	
502100479				12	
Designed	K. MORGAN	Eng check			
Drawn	C. RILEY	Coordination			
Dwg check		Approved			
Scale at ANSI D	Status	Rev	Security		
NTS	PRE	P1	STD		
Drawing Number					
C-004					



RIP-RAP DETAIL
N.T.S.

Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

Client

Escambia County
Board of County Commissioners

Title

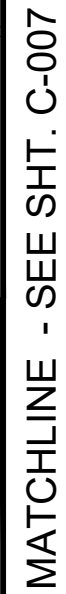
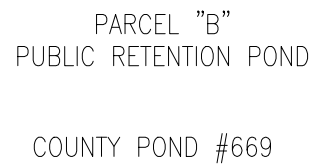
Floridian Ditch
Restoration Phase II
(Sarasota Project)

DETAILS

THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number			B/O		Total	
502100479					12	
Designed	K. MORGAN		Eng check			
Drawn	C. RILEY		Coordination			
Dwg check			Approved			
Scale at ANSI D	Status	Rev		Security		
NTS	PRE	P1		STD		
Drawing Number						
C-005						

TREE TABLE		
	SIZE & TYPE	DISPOSITION
	12" TREE	PROTECT
	12" TREE	PROTECT
	18" OAK	PROTECT
	14" OAK	PROTECT
	16" OAK	PROTECT
	16" OAK	PROTECT
	24" OAK	PROTECT
	24" OAK	PROTECT
	18" TREE	PROTECT
	32" OAK	PROTECT
	12" TREE	PROTECT
	32" OAK	PROTECT
	36" OAK	PROTECT
	14" PINE	PROTECT
	24' PINE	PROTECT
	8" TREE	PROTECT
	12" OAK	PROTECT
	8" OAK	PROTECT
	10" TREE	PROTECT
	8" TREE	PROTECT
	8" TREE	PROTECT
	6" OAK	PROTECT
	6" OAK	PROTECT
	10" OAK	PROTECT
	10" OAK	PROTECT
	24" OAK	PROTECT
	30" OAK	PROTECT
	30" OAK	PROTECT
	36" OAK	PROTECT



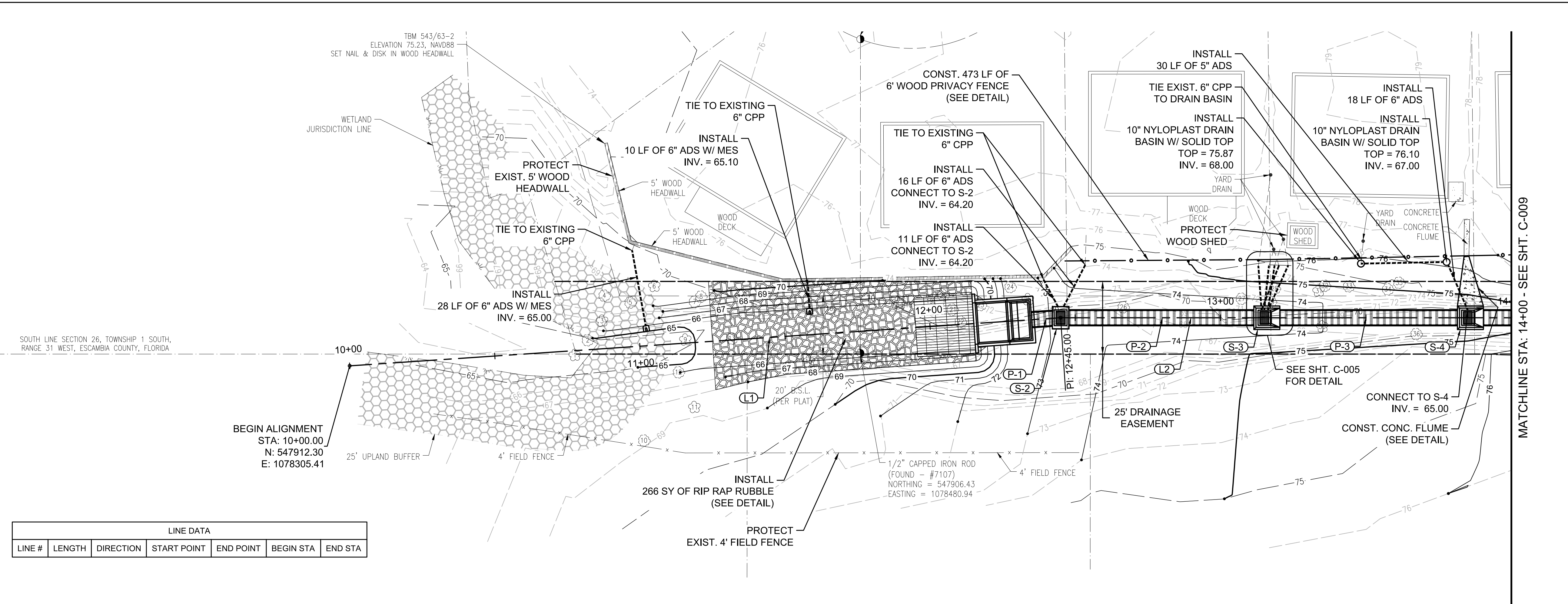
Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

Client
Escambia County
Board of County Commissioners

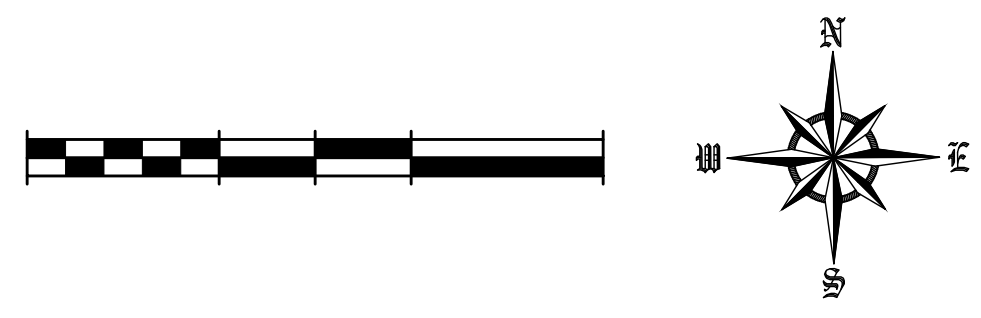
Title	Floridian Ditch Restoration Phase II (Sarasota Project) EXISTING SITE, DEMOLITION & EROSION CONTROL PLAN
-------	--

THIS DRAWING IS
NOT FOR
CONSTRUCTION

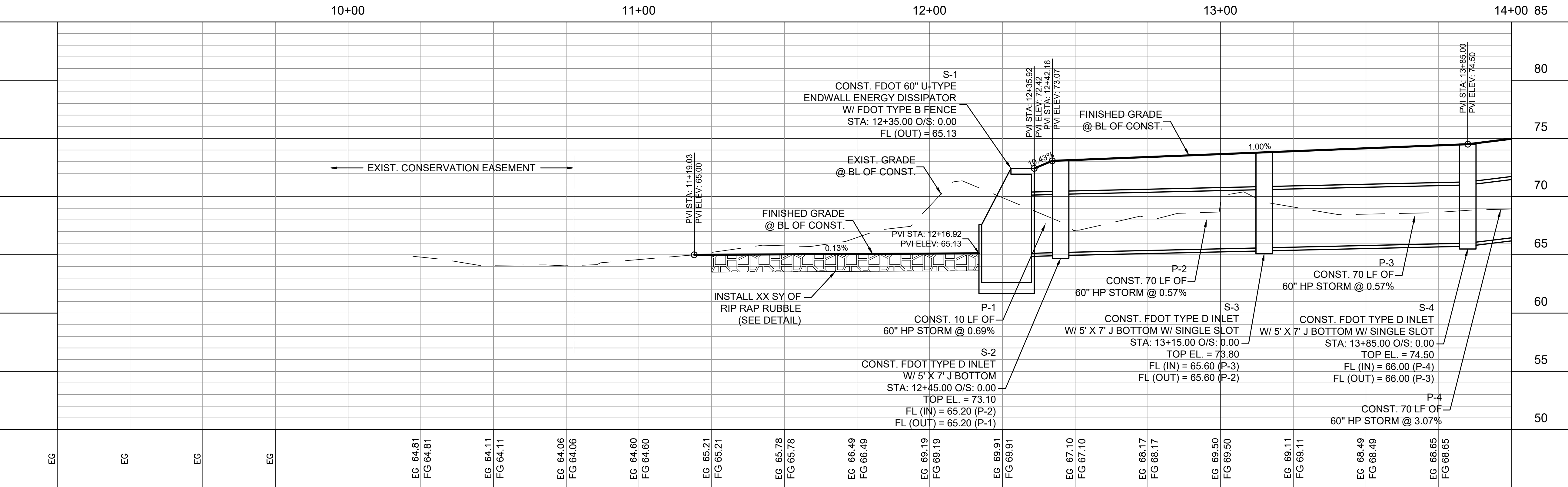
Project Number 502100479			B/O		Total 12	
Designed	K. MORGAN		Eng check			
Drawn	C. RILEY		Coordination			
Dwg check			Approved			
Scale at ANSI D 1:20		Status PRE	Rev P1		Security STD	
Drawing Number						



LINE DATA						
LINE #	LENGTH	DIRECTION	START POINT	END POINT	BEGIN STA	END STA



DRAINAGE EASEMENT



Rev	Date	Drawn	Description	Ch'k'd	App'd

M

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

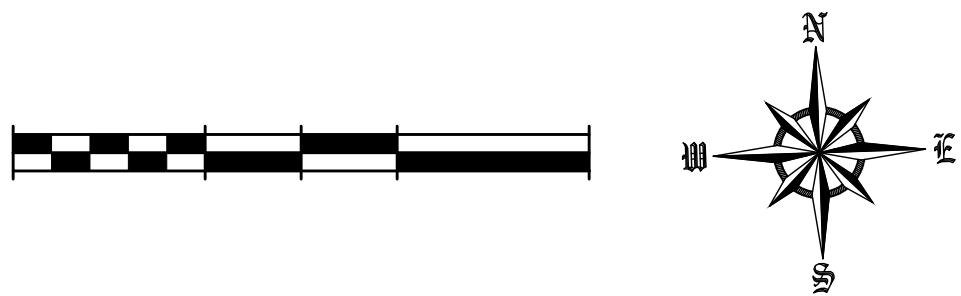
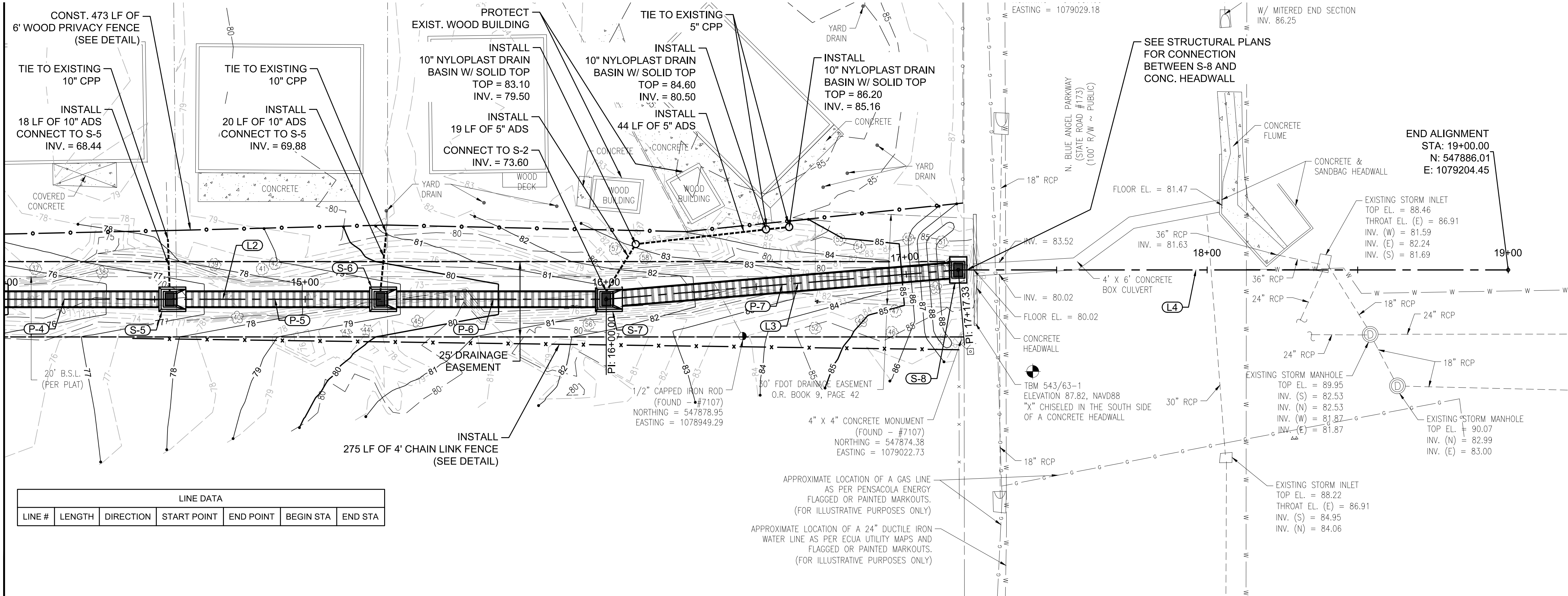
Client
Escambia County
Board of County Commissioners

Title
Floridian Ditch
Restoration Phase II
(Sarasota Project)
PLAN & PROFILE
STA: 9+00 - 14+00

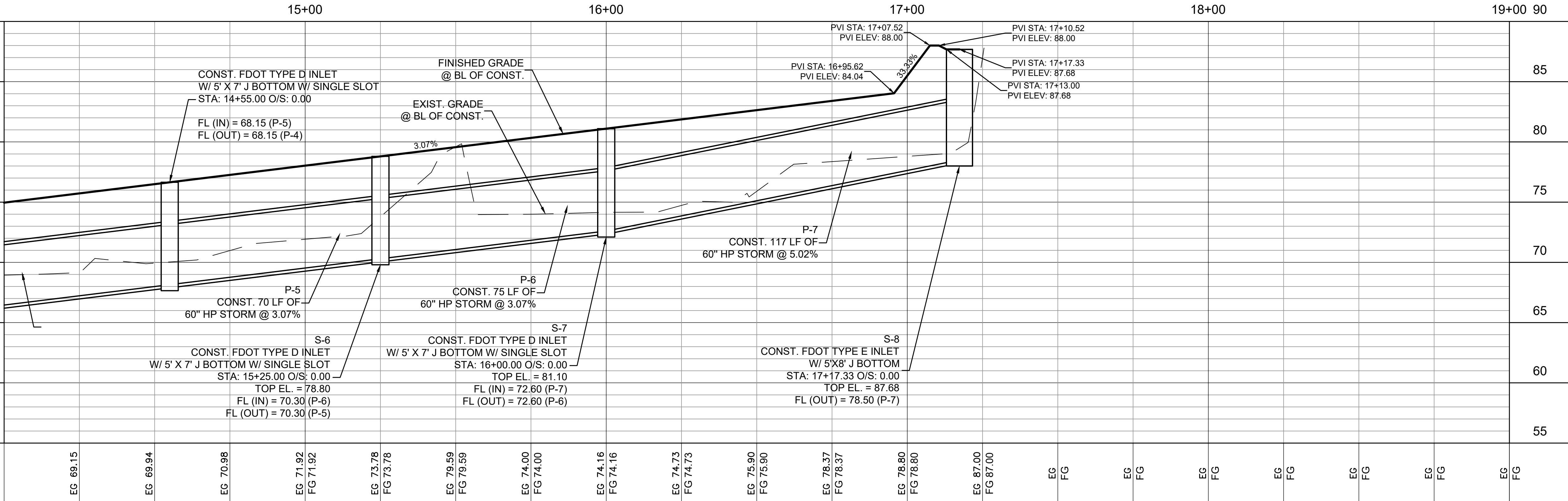
THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number	B/O	Total	
502100479		12	
Designed	K. MORGAN	Eng check	
Drawn	C. RILEY	Coordination	
Dwg check		Approved	
Scale at ANSI D	Status	Rev	Security
1:20	PRE	P1	STD
Drawing Number	C-008		

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.



DRAINAGE EASEMENT



Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

Client

Escambia County
Board of County Commissioners

Title

Floridian Ditch
Restoration Phase II
(Sarasota Project)

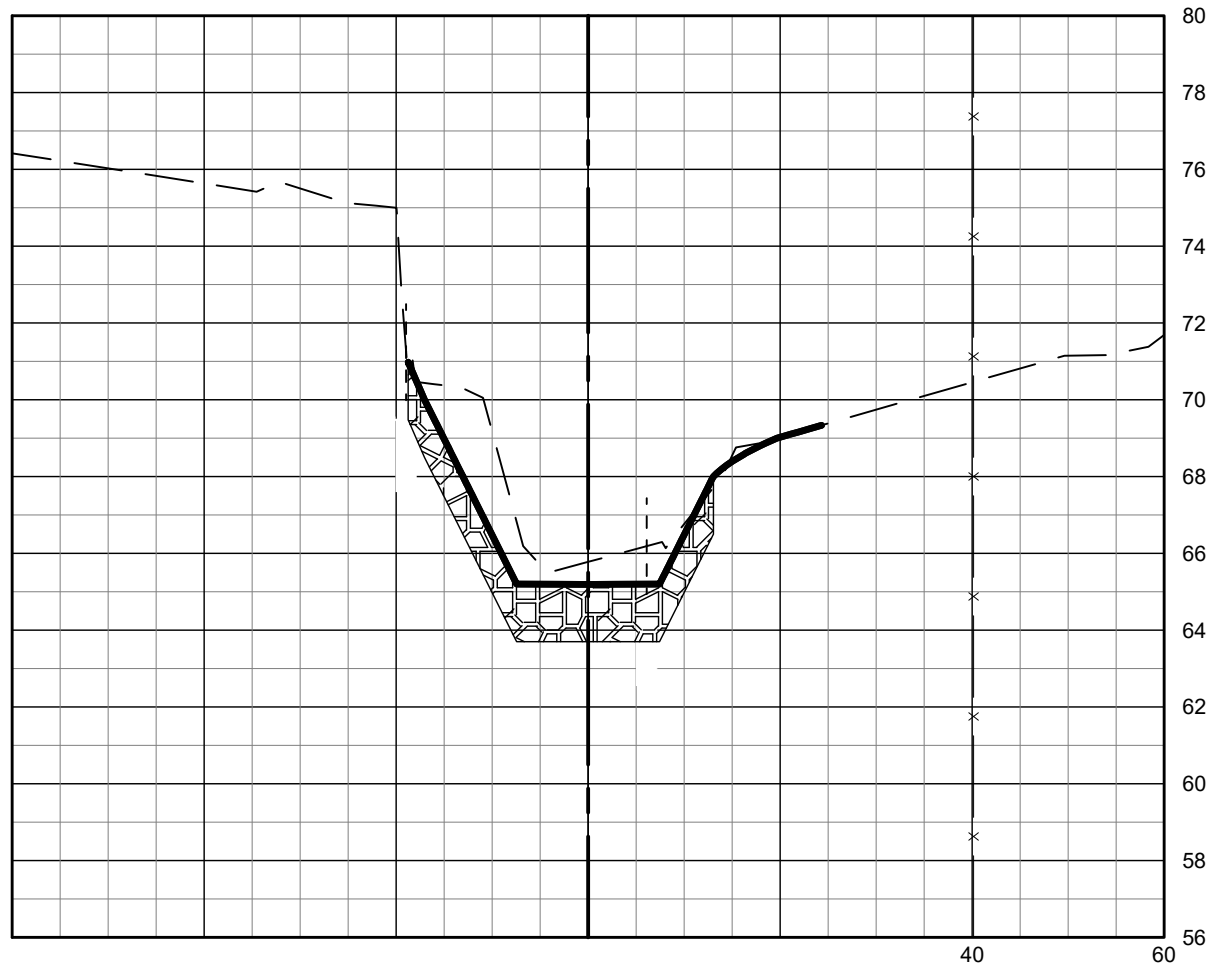
PLAN & PROFILE
STA: 14+00 - 19+00

THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number			B/O		Total	
502100479					12	
Designed	K. MORGAN		Eng check			
Drawn	C. RILEY		Coordination			
Dwg check			Approved			
Scale at ANSI D		Status	Rev	Security		
1:20		PRE	P1	STD		
Drawing Number						

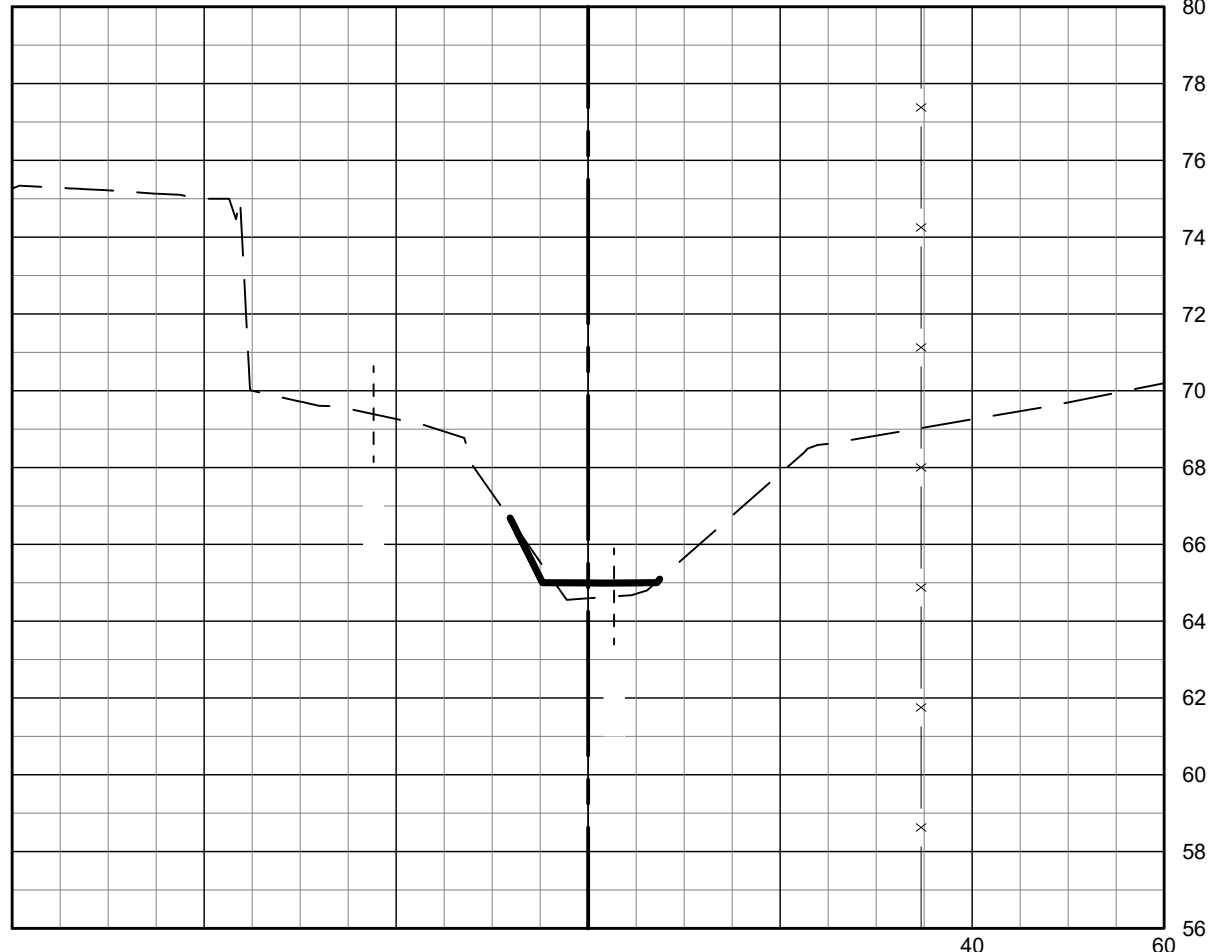
C-009

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.



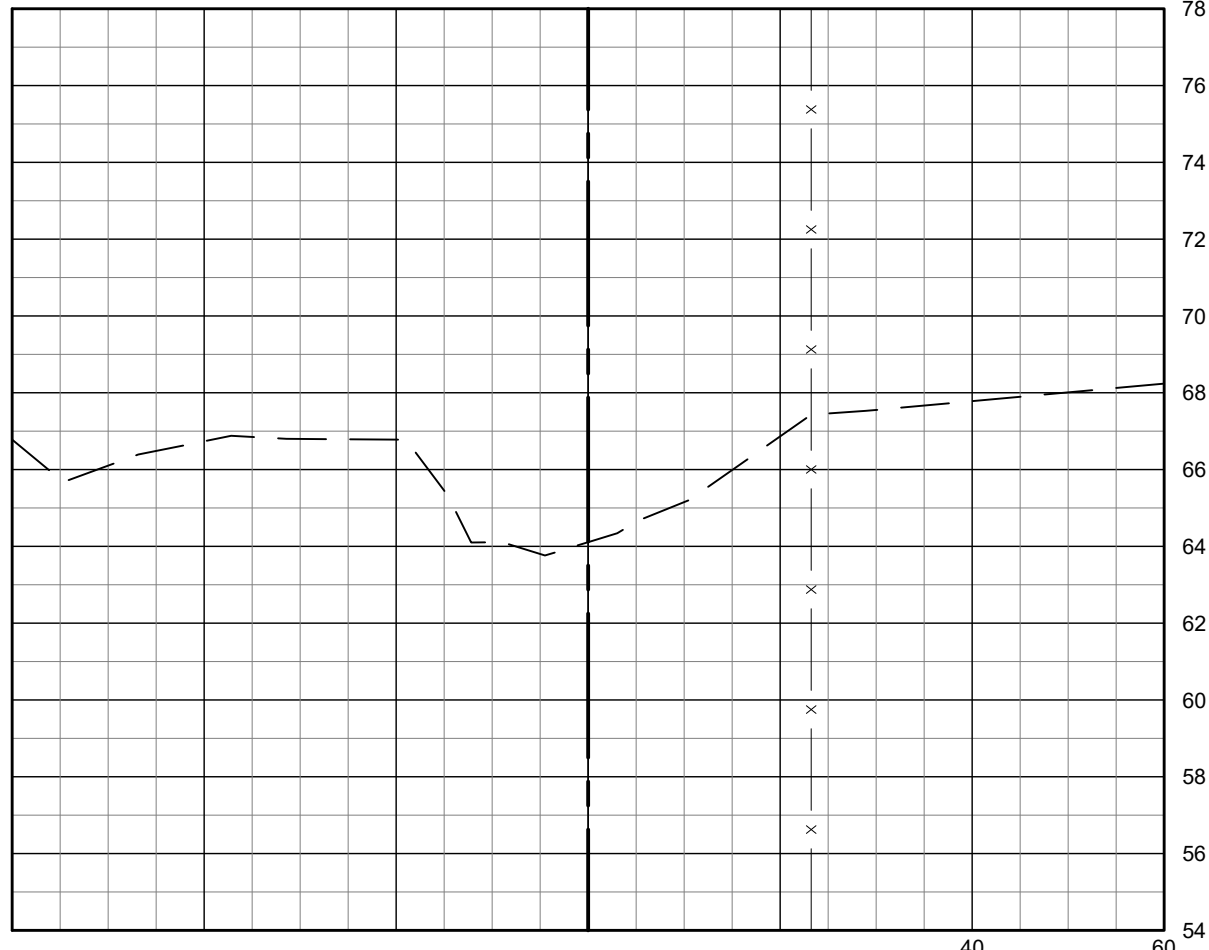
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



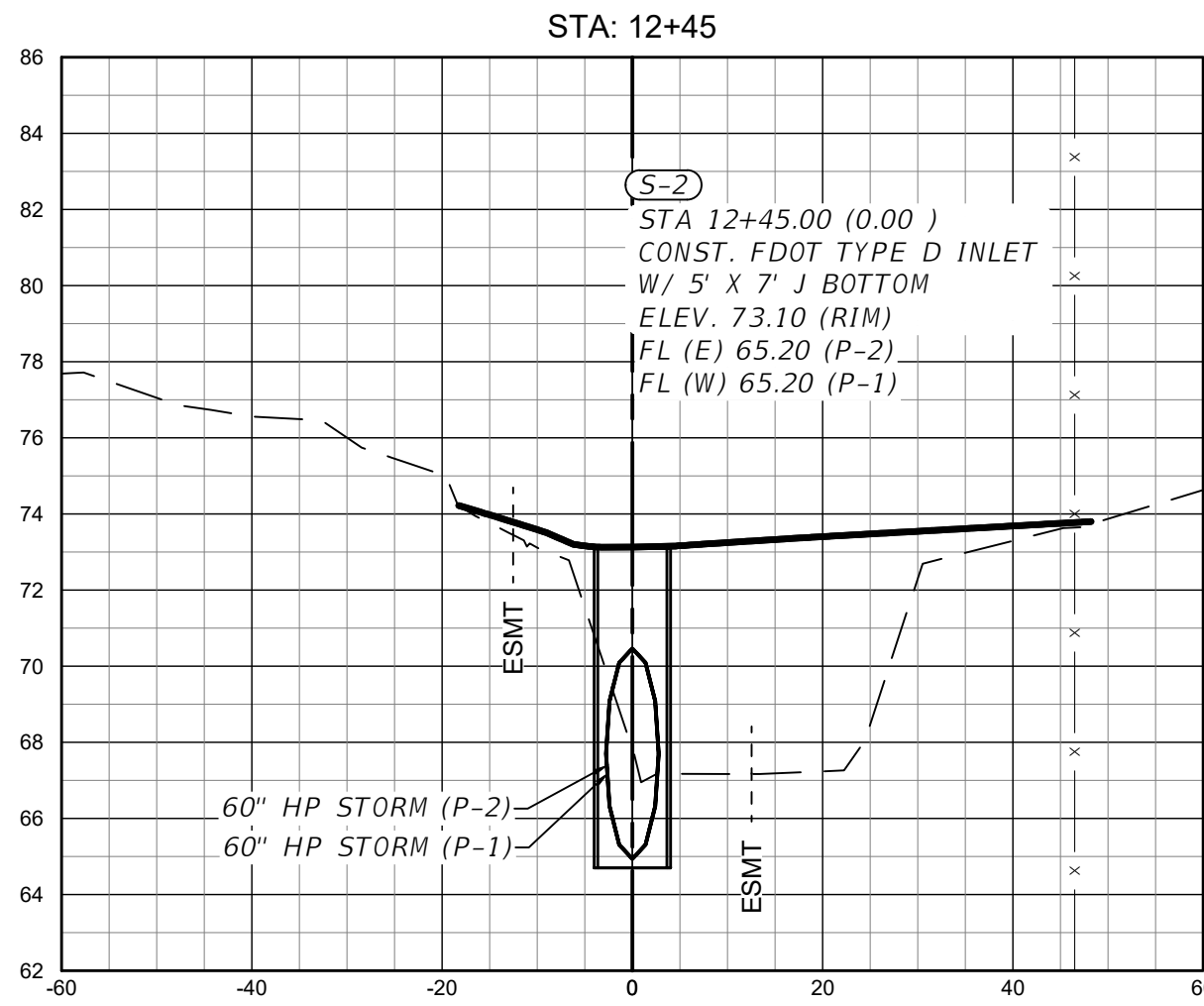
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



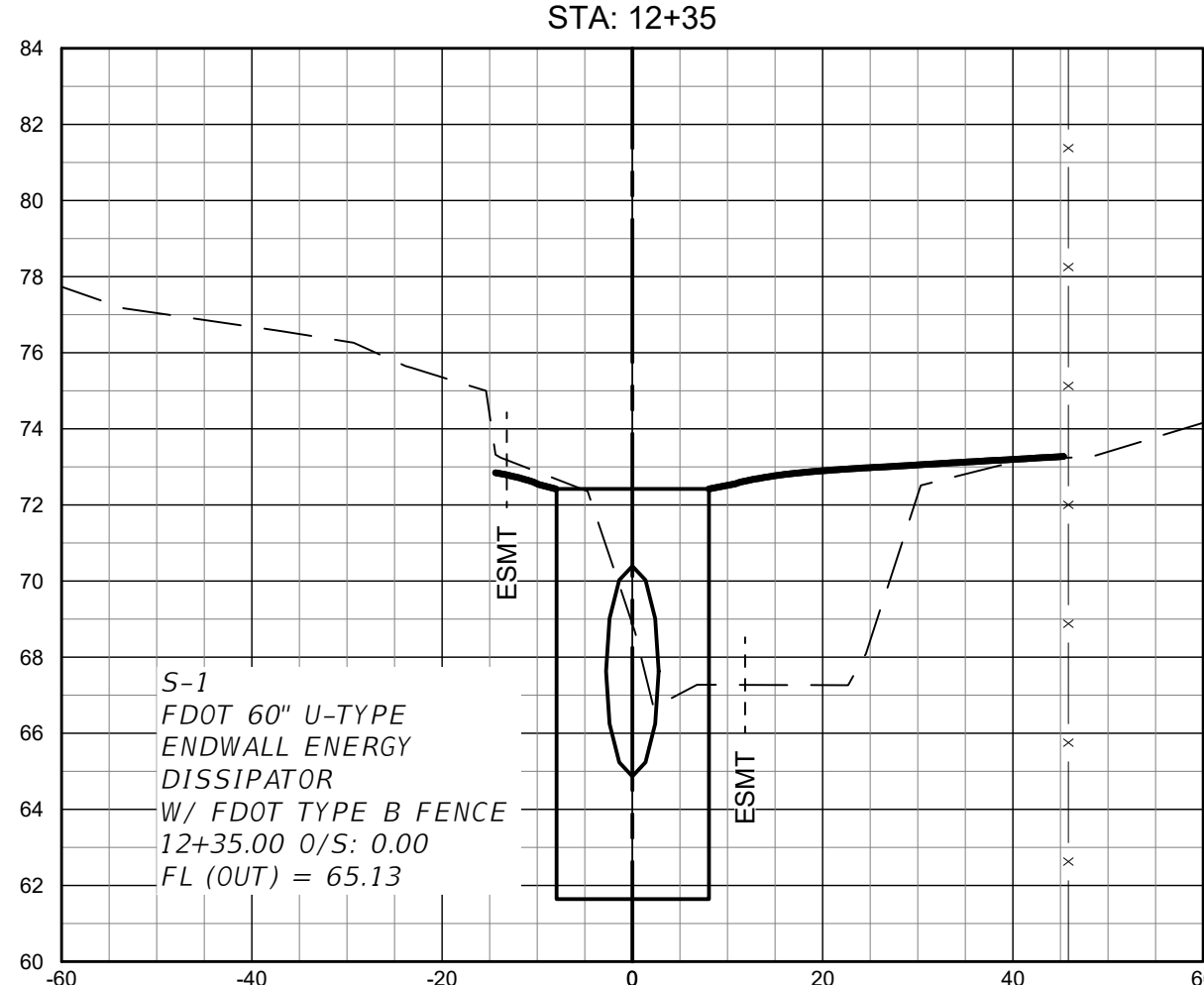
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



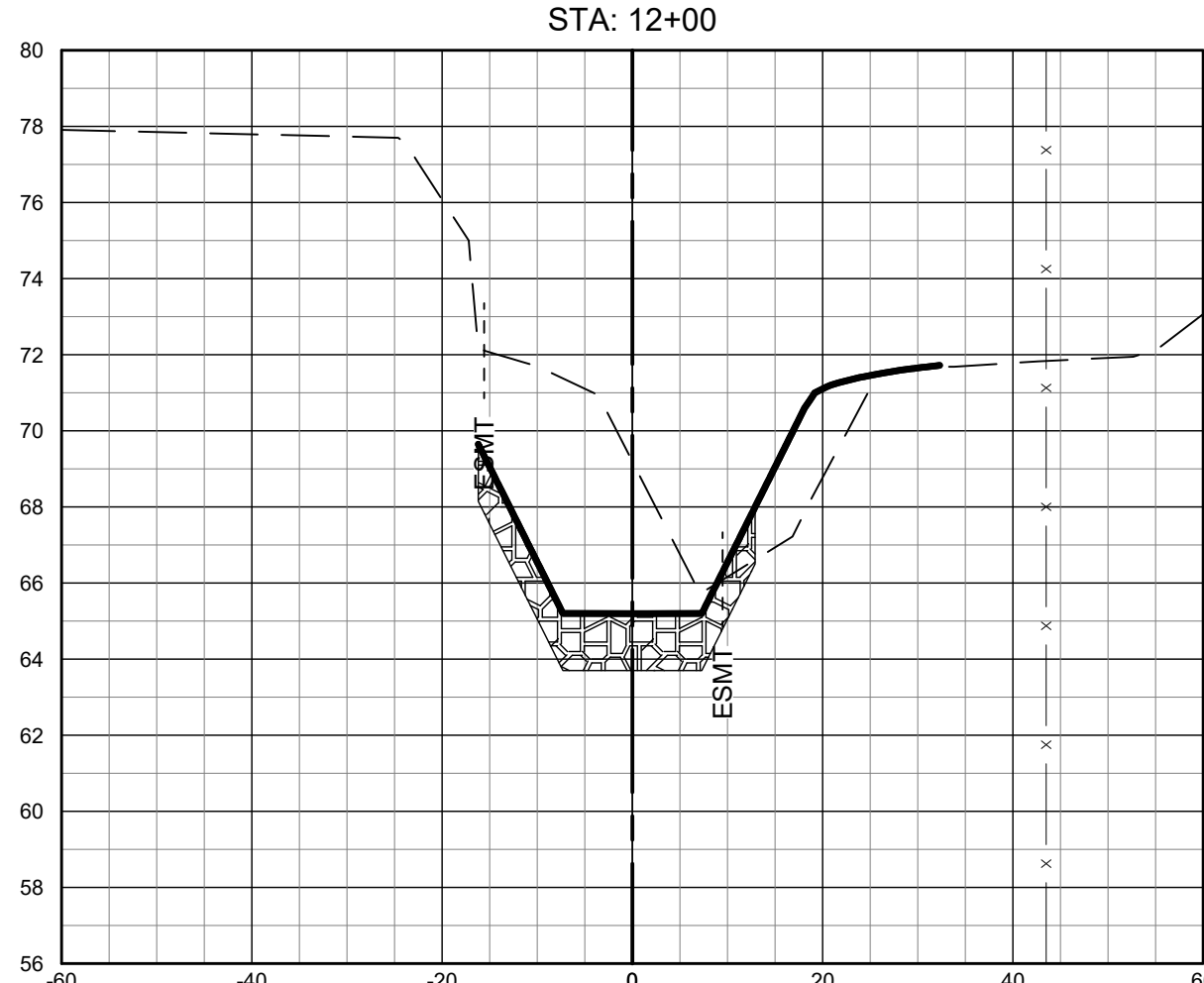
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



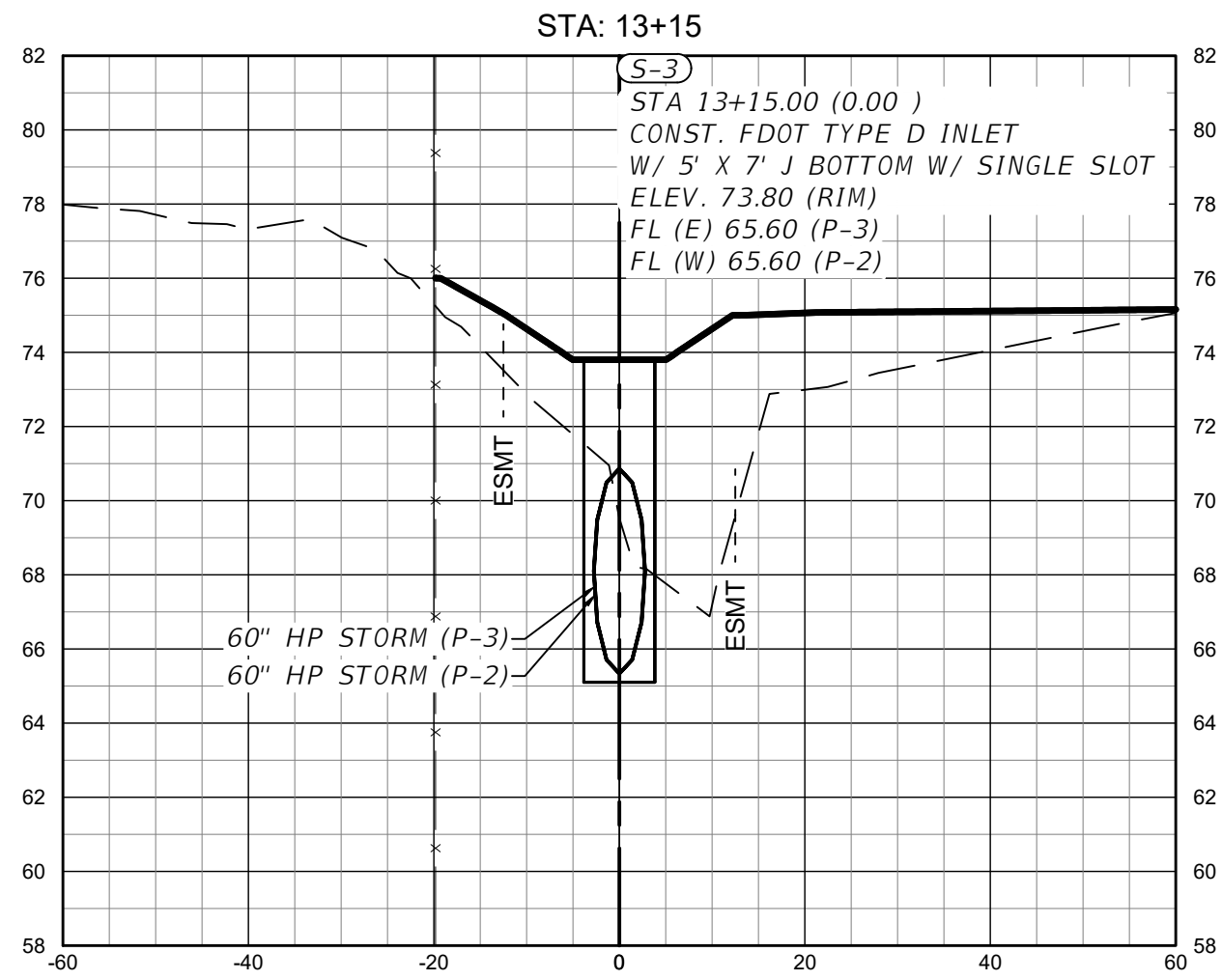
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



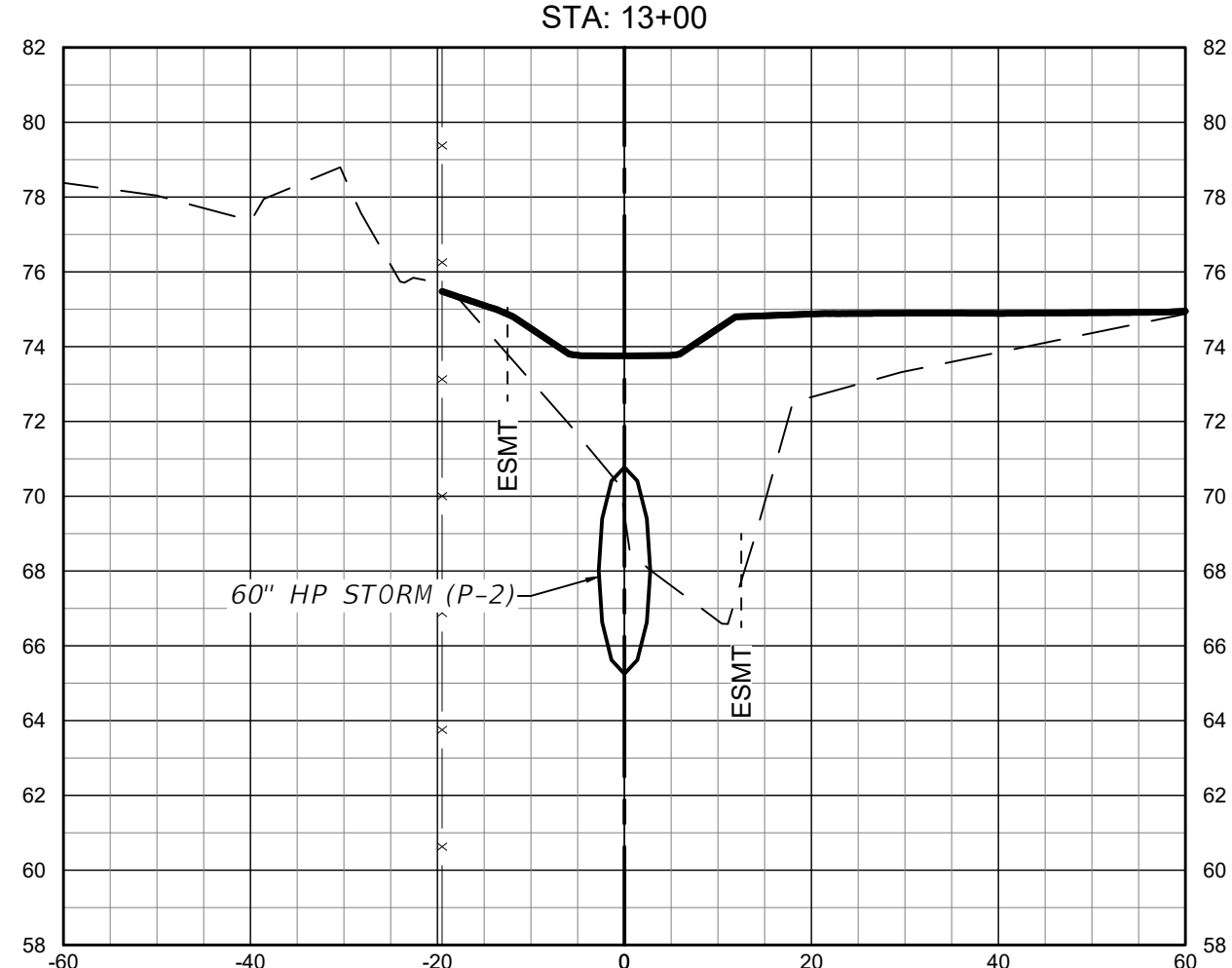
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



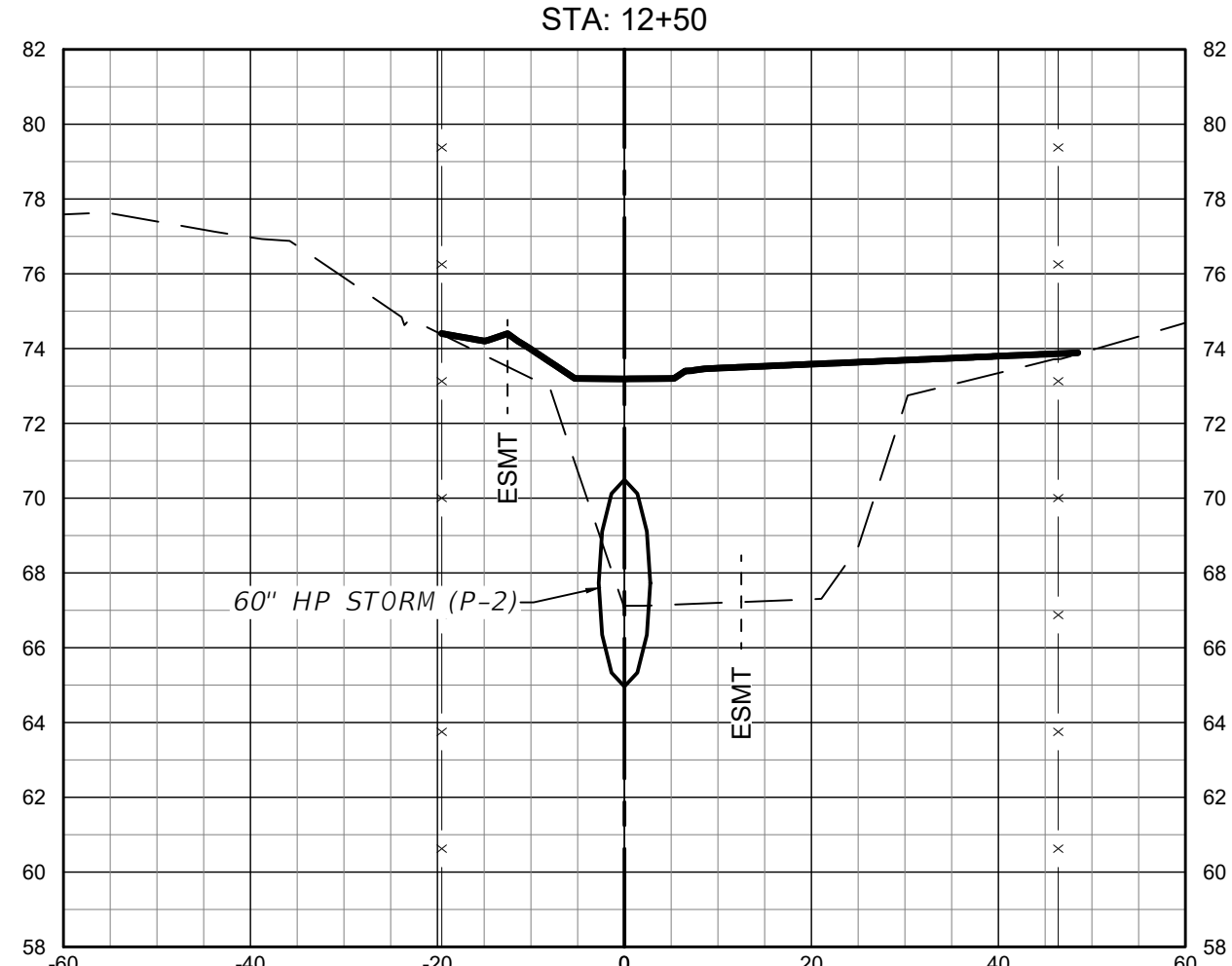
HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'



HORZ. SCALE: 1" = 20'

VERT. SCALE: 1" = 5'

Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

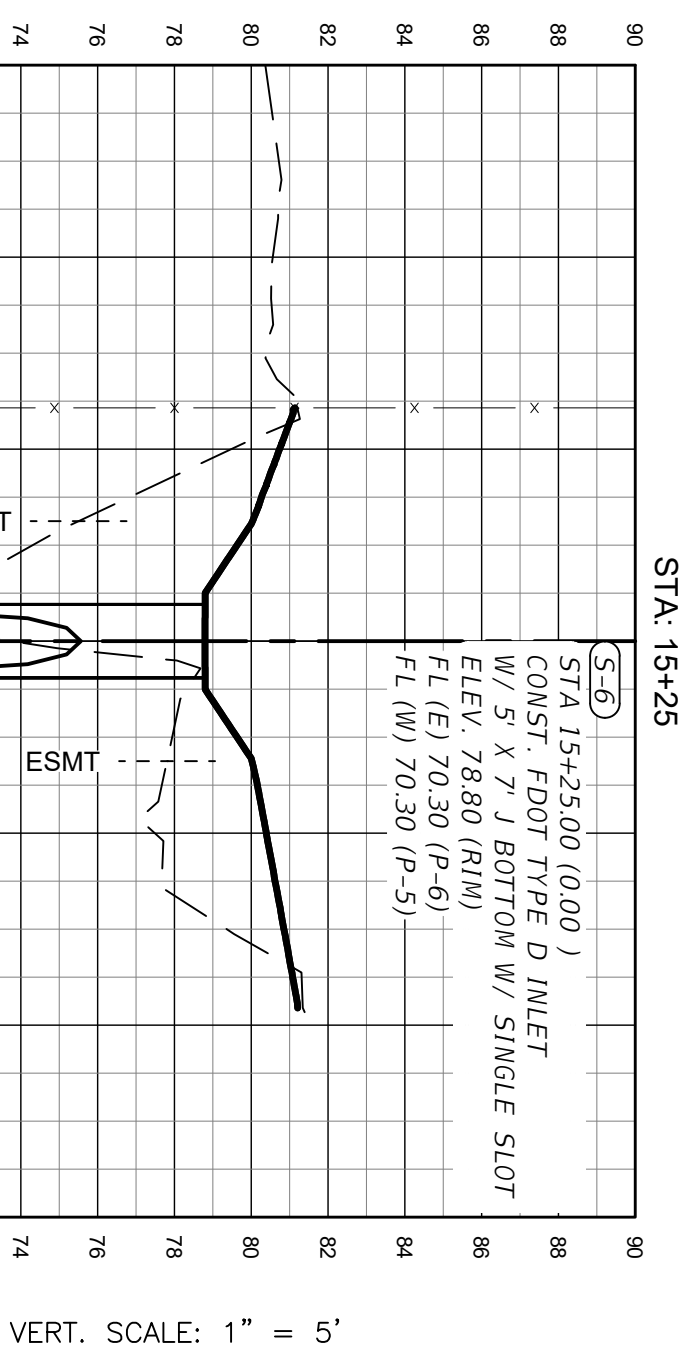
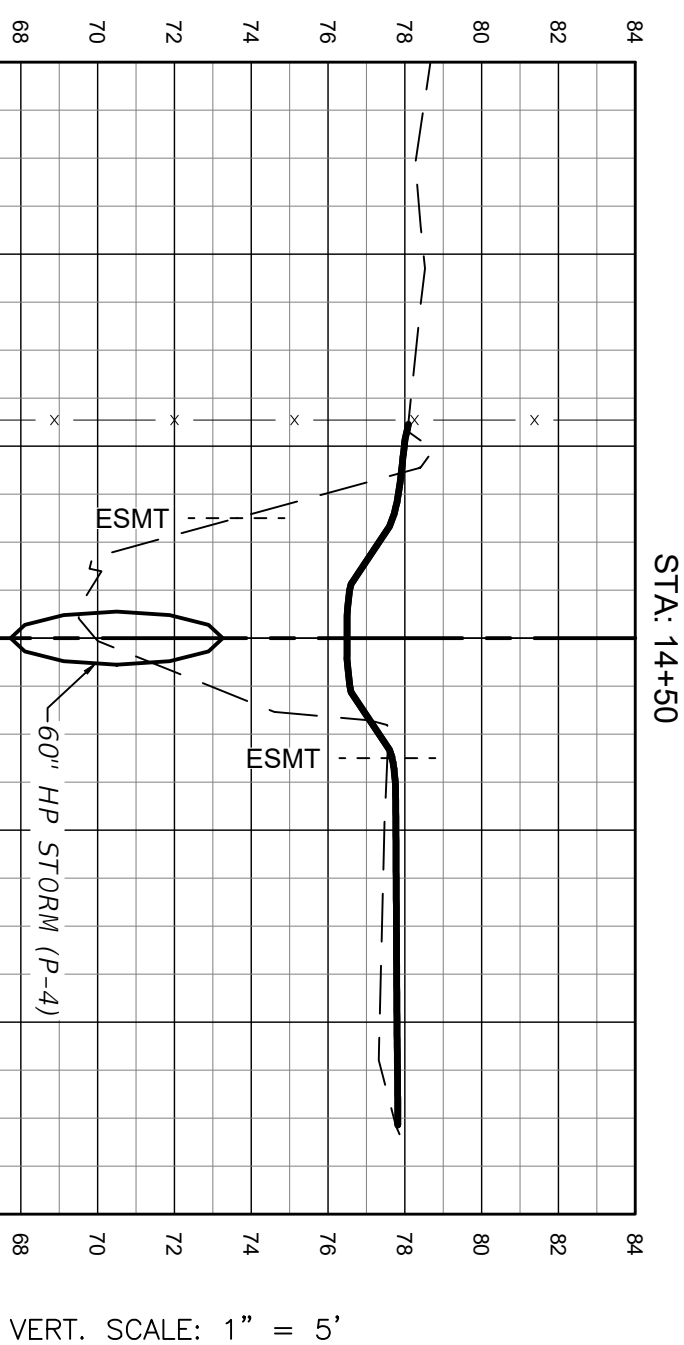
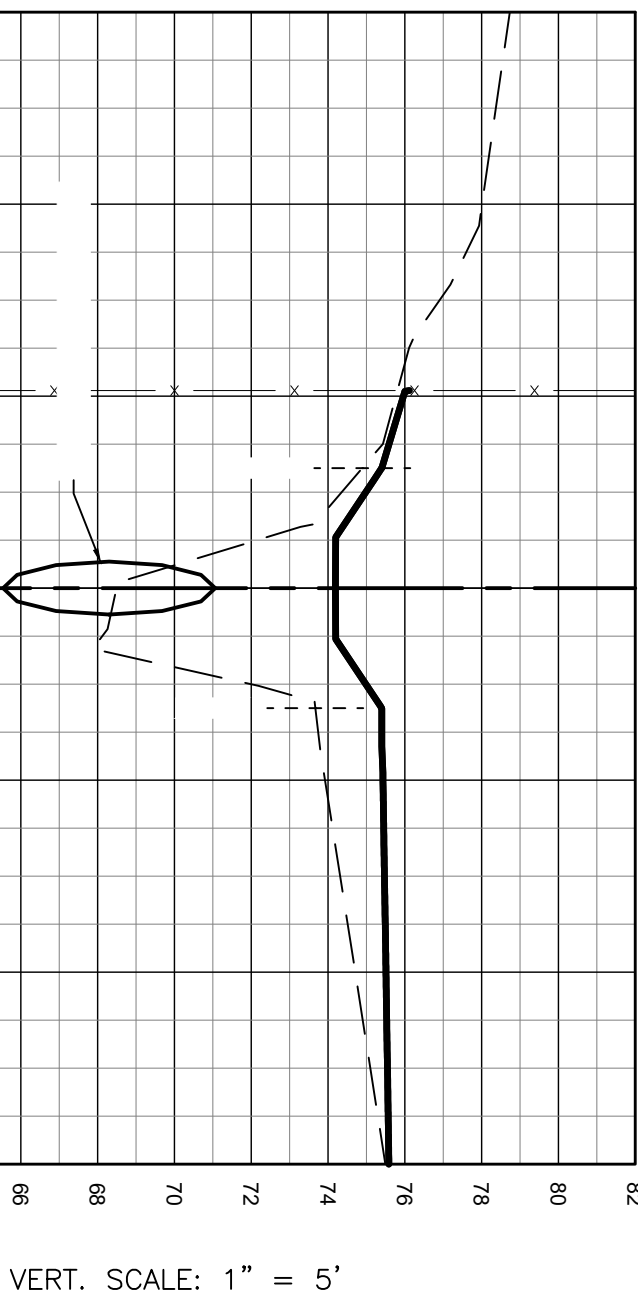
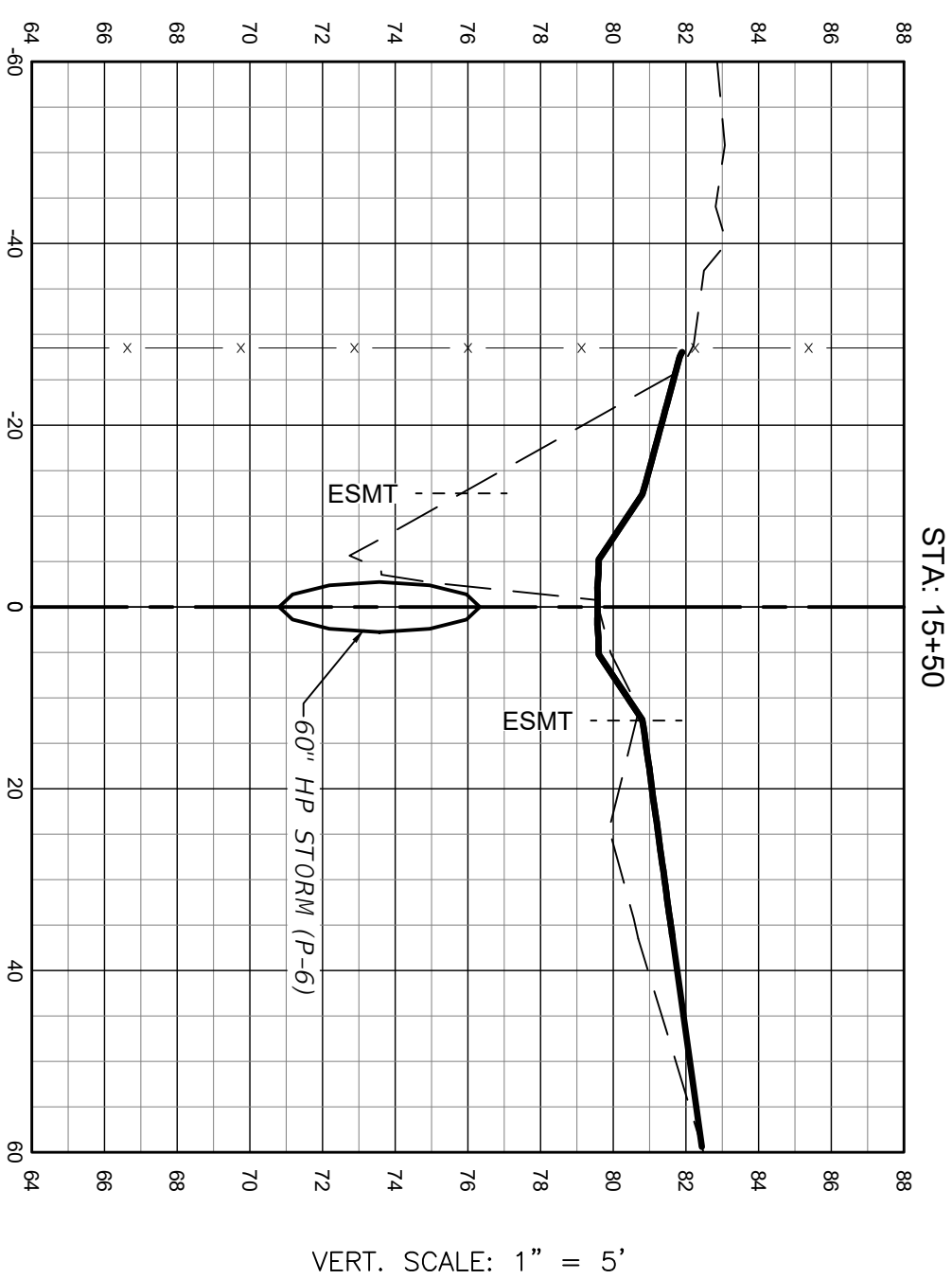
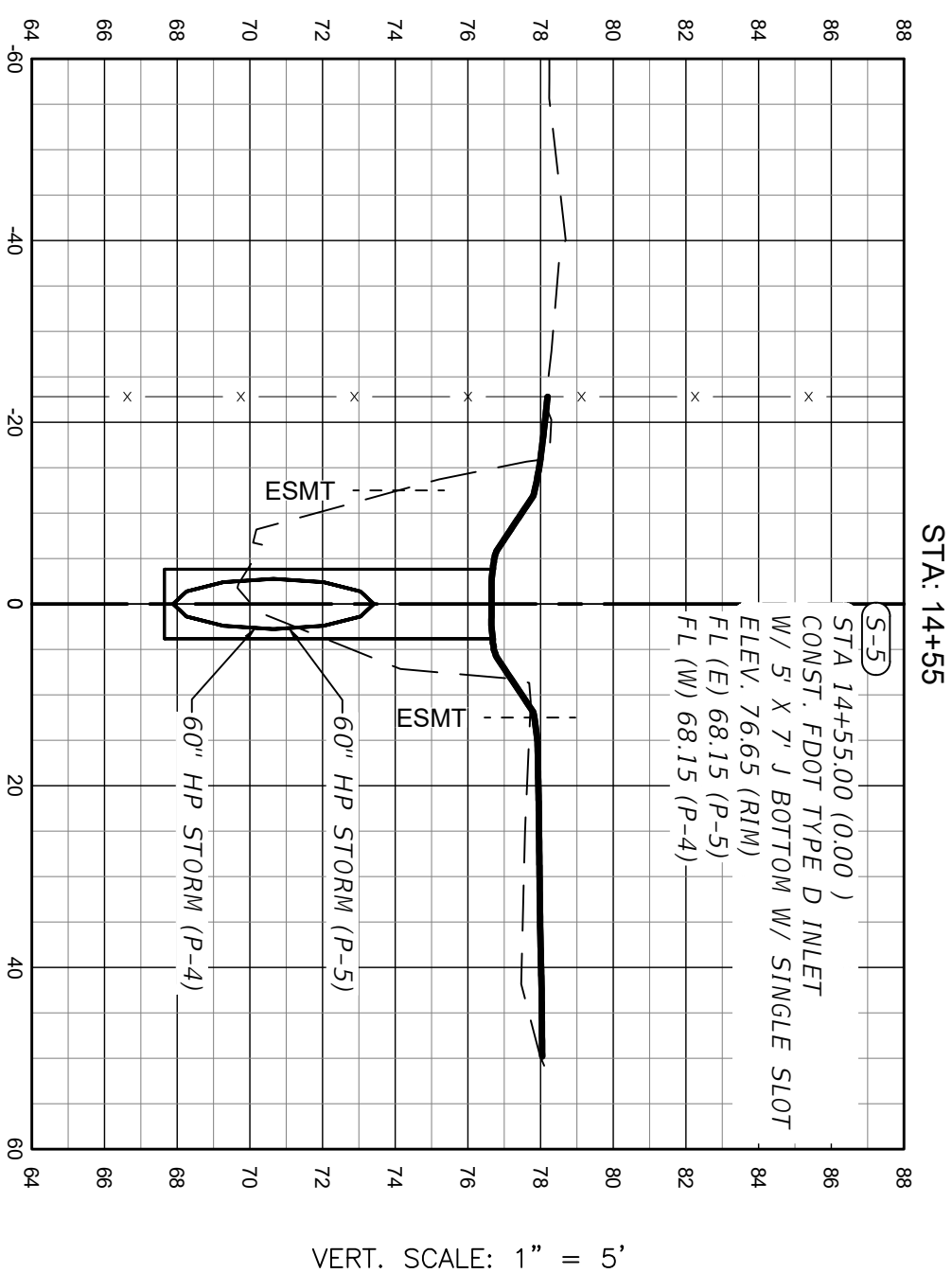
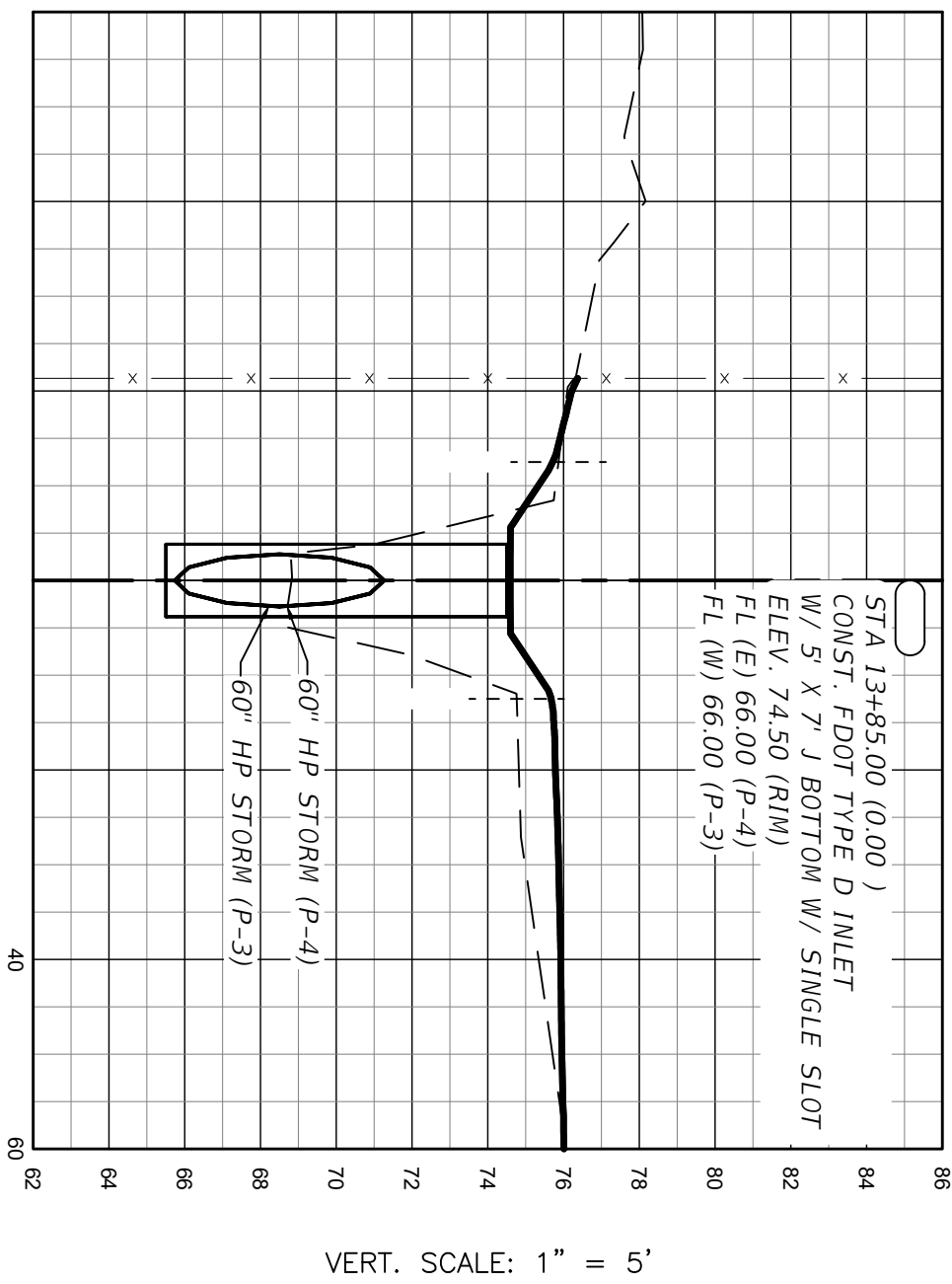
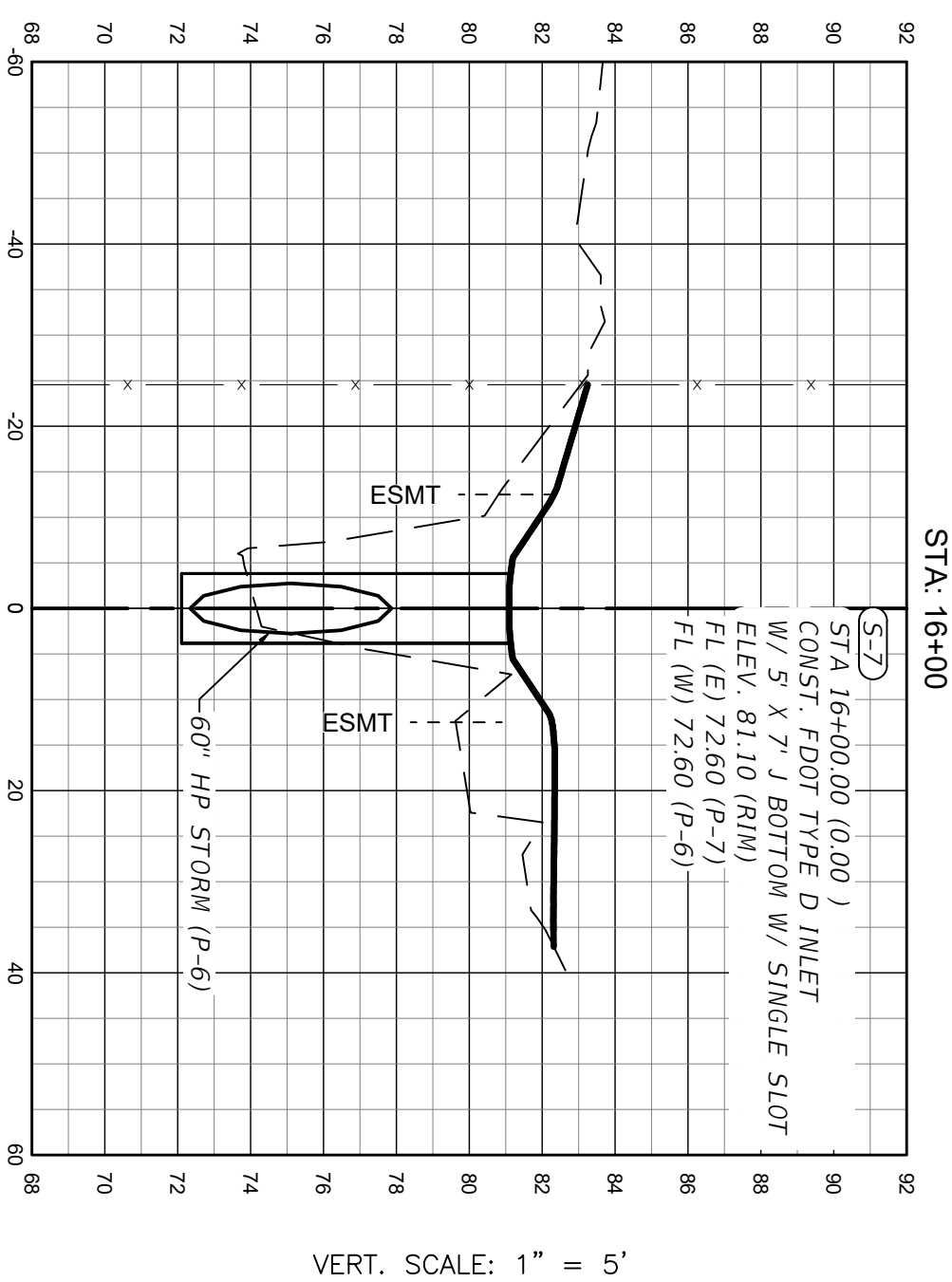
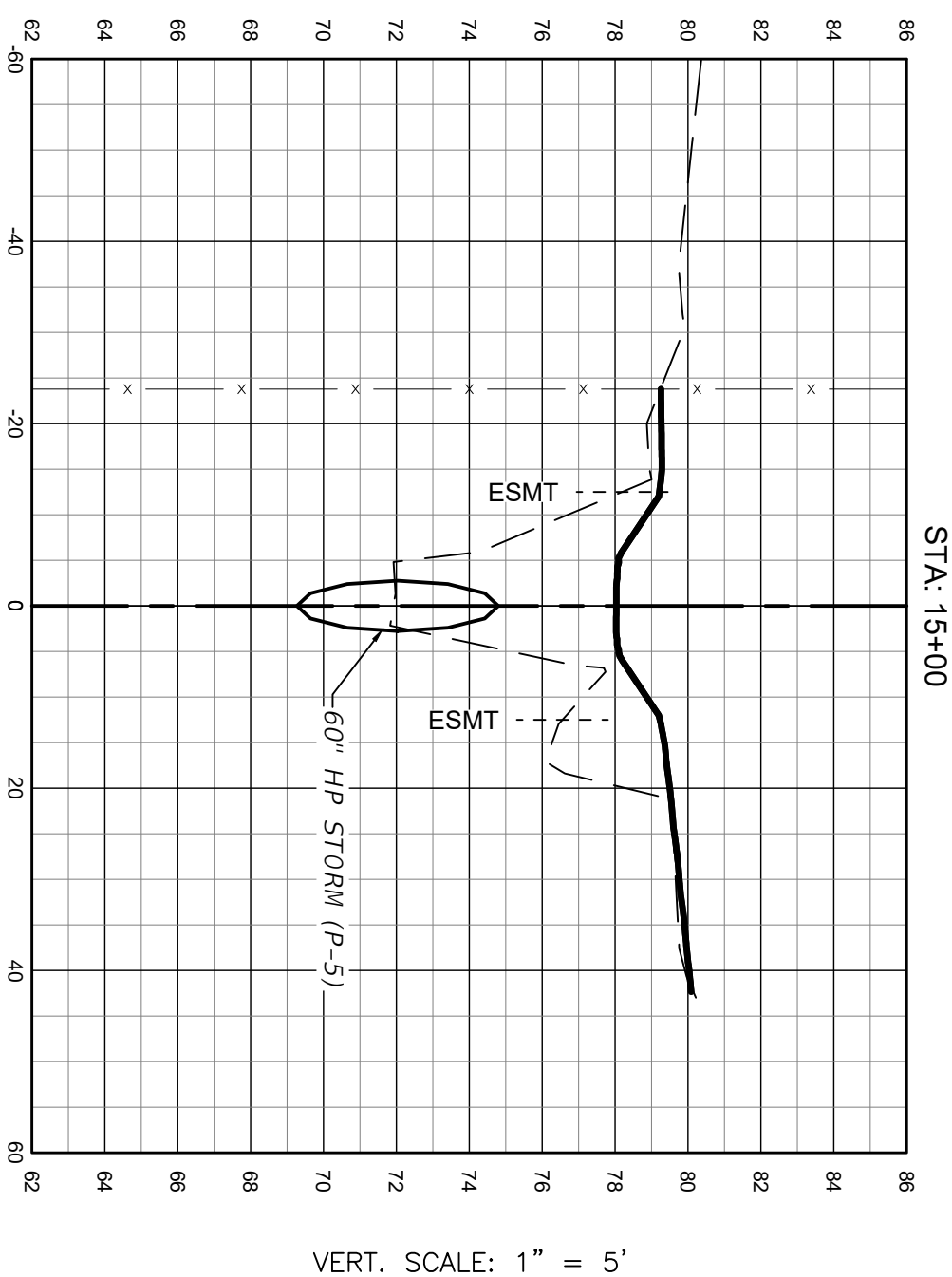
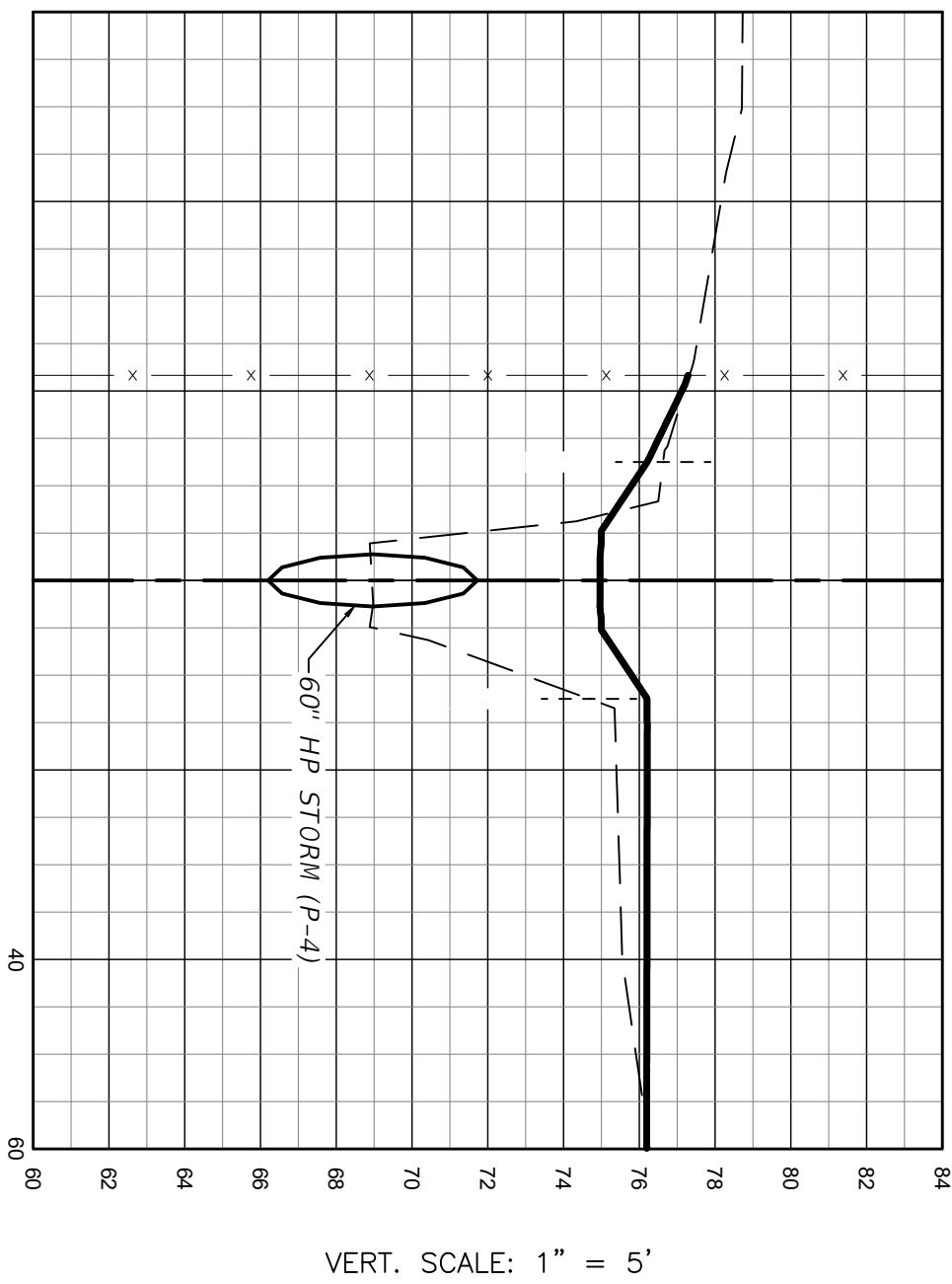
Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

Client
**Escambia County
Board of County Commissioners**

Title
**Floridian Ditch
Restoration Phase II
(SARASOTA PROJECT)**
CROSS SECTIONS

THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number 502100479		B/O	Total 12	
Designed	K. MORGAN	Eng check		
Drawn	C. RILEY	Coordination		
Dwg check		Approved		
Scale at ANSI D 1:20	Status PRE	Rev P1	Security STD	
Drawing Number				

[illegible]

M **M**
MOTT
MACDONALD

Mott MacDonald Florida, LLC
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

Escambia County
Board of County Commissioners

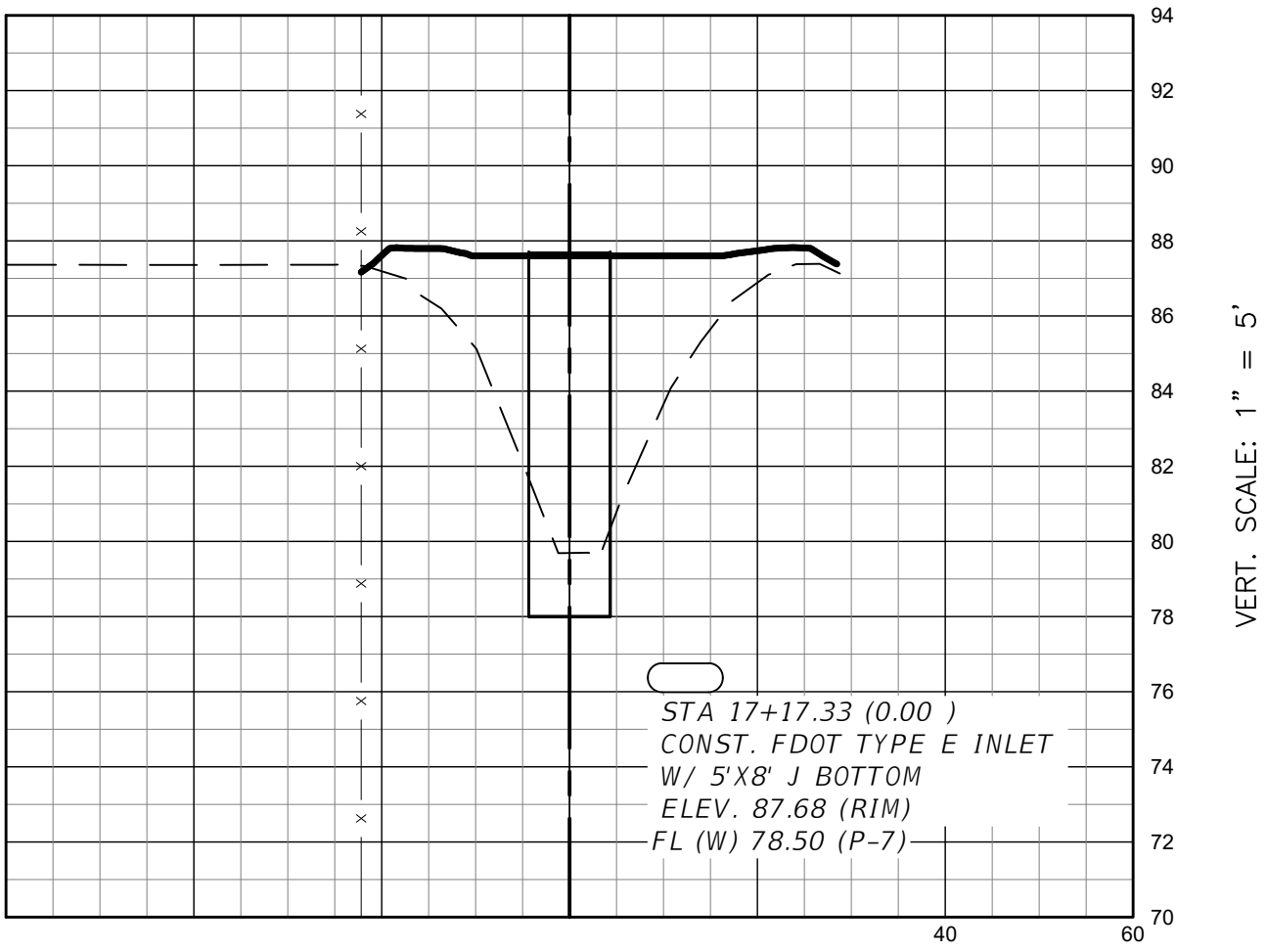
Client

Title

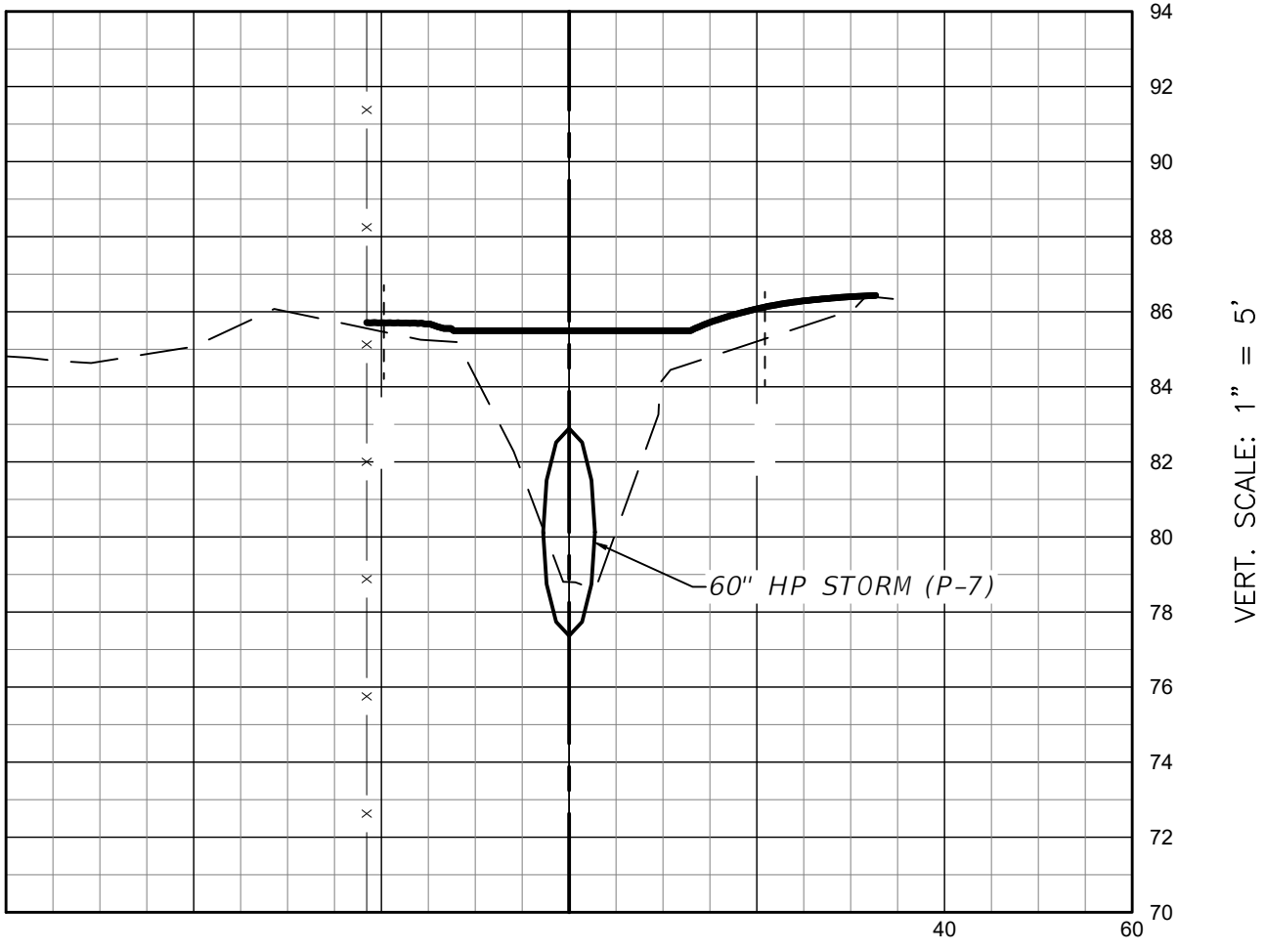
**Floridian Ditch
Restoration Phase II
(SARASOTA PROJECT)
CROSS SECTIONS**

THIS DRAWING IS
NOT FOR
CONSTRUCTION

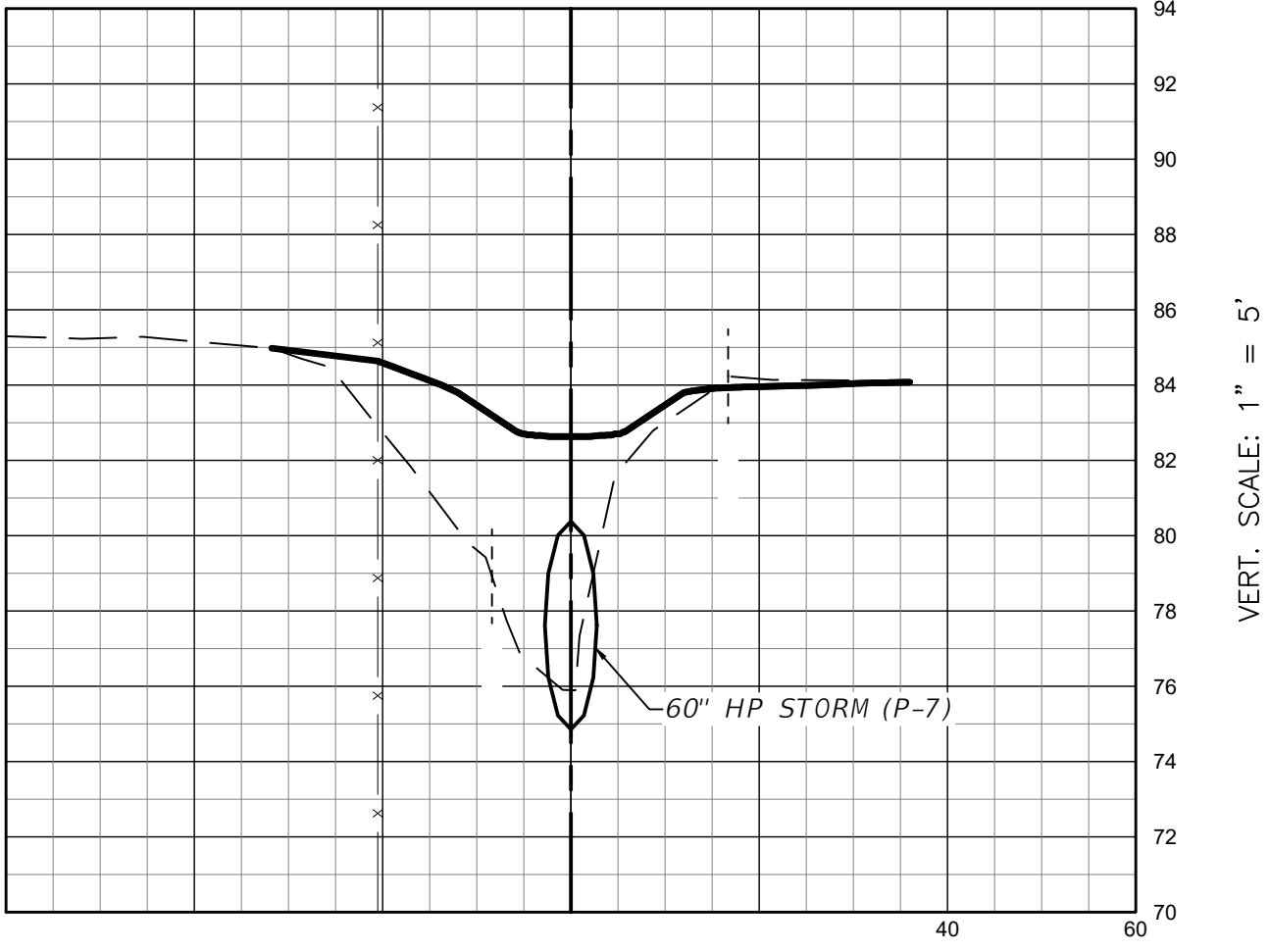
Project Number	502100479	B/O	Total	12
Designed	K. MORGAN	Eng check		
Drawn	C. RILEY	Coordination		
Dwg check		Approved		
Scale as ANSI D	Status	Rev	Security	
1:20	PRE	P1	STD	
Drawing Number				



HORZ. SCALE: 1" = 20'



HORZ. SCALE: 1" = 20'



HORZ. SCALE: 1" = 20'

Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

MOTT
MACDONALD

Mott MacDonald Florida, LLC.
220 West Garden Street
Suite 700
Pensacola, FL 32502
United States of America
T +1 (850) 484 6011
www.mottmac.com/americas

Architects Engineers Surveyors
AA - C0000035 EB - 0000155 LB - 0006783

Client
Escambia County
Board of County Commissioners

Title
Floridian Ditch
Restoration Phase II
(SARASOTA PROJECT)
CROSS SECTIONS

THIS DRAWING IS
NOT FOR
CONSTRUCTION

Project Number 502100479		B/O		Total 12	
Designed K. MORGAN		Eng check			
Drawn C. RILEY		Coordination			
Dwg check		Approved			
Scale at ANSI D 1:20	Status PRE	Rev P1	Security STD		

Drawing Number
C-012

GENERAL NOTES:

1. SHEETS S-001 TO S-003 PROVIDE DETAILS FOR CONNECTING PRECAST DRAINAGE STRUCTURE S-8 TO AN EXISTING 4X6 BOX CULVERT. THE DRAINAGE STRUCTURE ALSO CONNECTS TO A 60" DIAMETER PIPE. REFER TO THE CIVIL DRAWINGS FOR REQUIRED PIPE INVERT ELEVATION AND ADDITIONAL LAYOUT INFORMATION.

DESIGN SPECIFICATIONS:

1. FDOT STRUCTURES MANUAL DATED JANUARY 2020, VOLUME 1.
2. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE DESIGN SPECIFICATIONS (8TH EDITION) AND APPROVED INTERIMS AS SPECIFIED IN THE STRUCTURES DESIGN GUIDELINES.

GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS:

1. FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2021-2022 DESIGN STANDARDS AND JANUARY 2021 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS.
2. ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
3. ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATIONS REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

DESIGN METHOD: LOAD AND RESISTANCE FACTOR DESIGN METHOD (LRFD)

DESIGN LOADING:

1. LIVE LOADING = 230 PSF
2. DEAD LOADS: REINFORCED CONCRETE = 150 PCF, SOIL = 115 PCF, WATER = 62.4 PCF

BACKFILL SOIL:

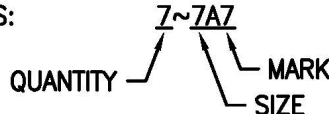
1. DESIGN PROPERTIES: DENSITY = 115 PCF, ANGLE OF INTERNAL FRICTION = 30 DEGREES
2. MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 125 FOR EXCAVATION AND BACKFILLING OF STRUCTURES AND PIPE FOR MATERIALS AND COMPACTION.

CONCRETE:

1. ALL CONCRETE SHALL CONFORM WITH SECTION 346 OF THE FDOT STANDARD SPECIFICATIONS.
2. CONCRETE SHALL BE FDOT CLASS IV WITH F'C = 5.5 KSI MINIMUM.
3. CONCRETE CLEAR COVER SHALL BE 2" MINIMUM.
4. CONCRETE COVER DOES NOT INCLUDE PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER." SEE FDOT SPECIFICATION SECTION 415 FOR ALLOWABLE REINFORCEMENT PLACEMENT TOLERANCES.

REINFORCING STEEL:

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 AND SHALL BE UNCOATED (BLACK) UNLESS OTHERWISE SHOWN IN THE PLANS.
2. ALL DIMENSIONS PERTAINING TO LOCATIONS OF REINFORCING ARE TO THE CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO THE FACE OF CONCRETE.
3. TYPICAL REINFORCING BARS ARE DESIGNATED AS:



PRECAST DRAINAGE STRUCTURE:

1. MEET THE REQUIREMENTS OF THE FDOT STANDARD SPECIFICATIONS FOR PRECAST DRAINAGE STRUCTURES.
2. MEET THE REQUIREMENTS OF FDOT STANDARD PLANS INDEX 425-001, 425-010, AND 425-052 AS MODIFIED BY THESE PLANS.
3. THE PRECAST DRAINAGE STRUCTURE SHALL BE A TYPE J WITH DIMENSIONS AS SHOWN IN THE PLANS.
4. INSTALL THREADED DOWEL BAR SPLICES IN THE PRECAST BOTTOM AND TOP SLAB AS SHOWN IN THE PLANS. USE A BAR SPLICE SYSTEM SUCH AS DAYTON SUPERIOR DBDI SPLICE SYSTEM OR OTHER APPROVED SYSTEM CAPABLE OF DEVELOPING THE STRENGTH OF THE REINFORCING BAR. SUPPLY THREADED BARS SHOWN AS TYPE E BARS IN THE PLANS WHICH MATCH THE SYSTEM USED IN THE PRECAST.
5. COST OF THREADED BARS AND INSERTS SHALL BE INCLUDED IN THE COST OF THE PRECAST CONCRETE STRUCTURES.

BEDDING STONE AND FILTER FABRIC:

1. MEET THE REQUIREMENTS OF THE FDOT STANDARD SPECIFICATIONS FOR MATERIAL AND INSTALLATION.
2. BEDDING STONE SHALL BE WRAPPED WITH TYPE D-4 FILTER FABRIC WITH MINIMUM 24" OVERLAP.
3. COST OF THE FILTER FABRIC IS INCIDENTAL TO THE COST OF THE BEDDING STONE.

EXISTING CULVERT DEMOLITION AND PREPARATION:

1. CUT ALONG THE SURFACE OF THE EXISTING HEADWALL TO REMOVE THE 6" CHAMFER. REMOVE EXISTING CONCRETE WHILE AVOIDING DAMAGE TO THE EXISTING REINFORCEMENT. EXISTING CONCRETE SURFACES TO RECEIVE ADDITIONAL CONCRETE SHALL BE CLEANED AND ROUGHENED IN ACCORDANCE WITH THE FDOT SPECIFICATIONS.
2. CUT AND REMOVE THE EXISTING HEADWALL ABOVE THE BOX CULVERT DOWN TO THE TOP OF THE EXISTING BOX CULVERT. (APPROXIMATELY 1'-0"). CUT EXPOSED REINFORCEMENT DOWN 1" BELOW THE CONCRETE SURFACE AND COAT WITH AN EPOXY GROUT.
3. COST FOR REMOVAL AND DISPOSAL OF MATERIAL FROM EXISTING HEADWALL AND COST OF CLEANING, STRAIGHTENING AND DOWELING REINFORCEMENT STEEL SHALL BE INCLUDED IN THE COST FOR CONCRETE AND STEEL FOR THE CONNECTING STRUCTURE.

EPOXY GROUTING:

1. USE AN ADHESIVE BONDING MATERIAL SYSTEM IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 416 AND 937.
2. EPOXY GROUTING OPERATIONS SHALL BE OBSERVED BY A COUNTY INSPECTOR.
3. COST FOR EPOXY GROUTING IS INCIDENTAL TO THE REINFORCEMENT COST.

EARTHWORK:

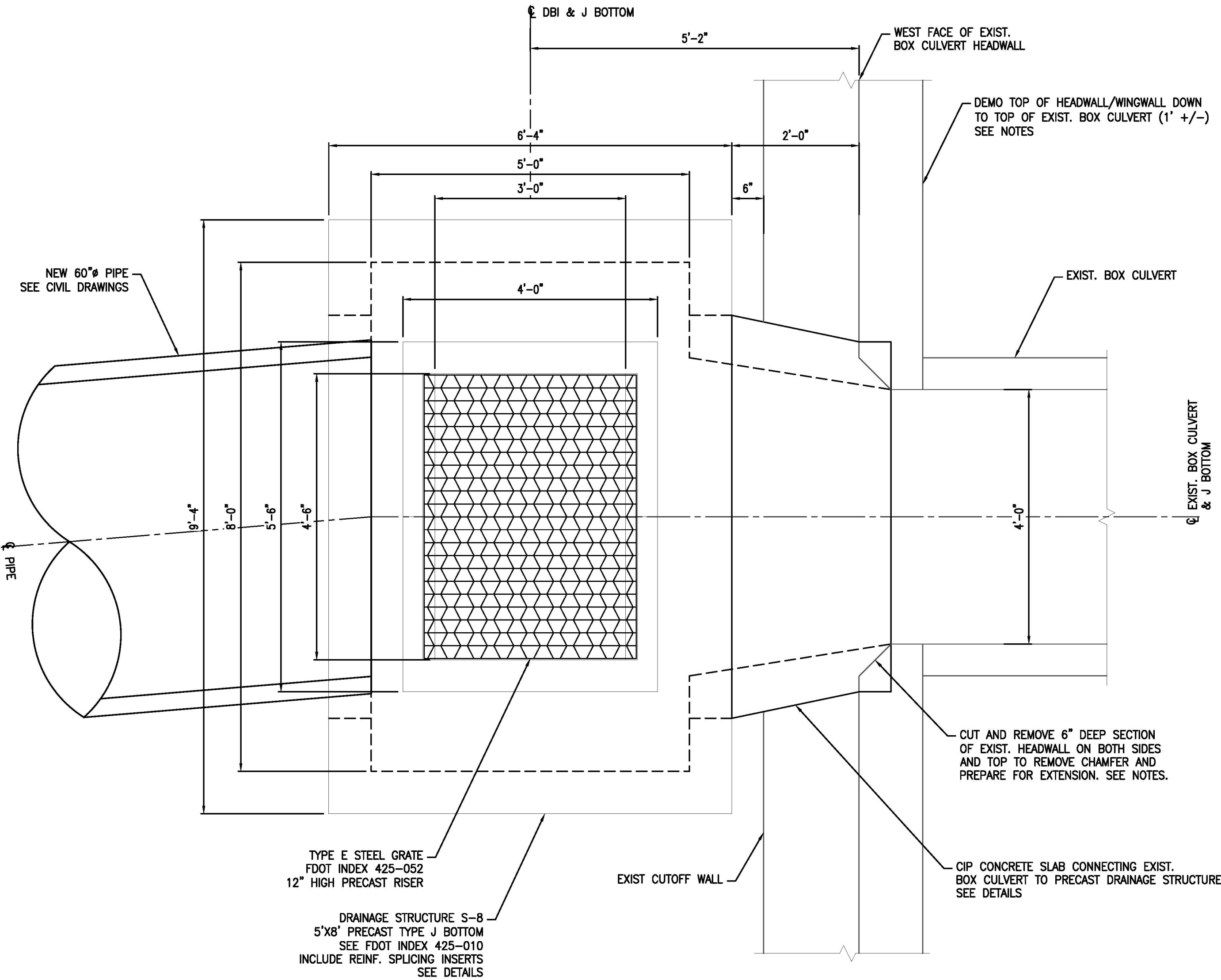
1. EXCAVATE BELOW THE DRAINAGE STRUCTURE TO REMOVE ALL LOOSE AND ORGANIC MATERIALS AND BACKFILL IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 125.
2. DO NOT DISTURB SOIL BENEATH THE EXISTING BOX CULVERT CUTOFF WALL. DRIVE TEMPORARY PIPE OR FLAT PLATE ADJACENT TO THE CUTOFF WALL PRIOR TO EXCAVATING BELOW THE BOTTOM OF THE CUTOFF WALL AS REQUIRED TO PREVENT SOIL SLUGHING OR UNDERMINING. REMOVE THE TEMPORARY SOIL SUPPORTS AFTER PLACING THE PRECAST BOTTOM. COST OF PLACING TEMPORARY SOIL SUPPORTS, EXCAVATION, AND DEWATERING REQUIRED TO PLACE THE PRECAST BOTTOM IS INCLUDED IN THE COST OF THE PRECAST BOTTOM.
3. COST OF REMOVAL OF EXISTING RIPRAP SHALL BE INCLUDED IN THE COST FOR CLEARING AND GRUBBING.

CONSTRUCTION SEQUENCE:

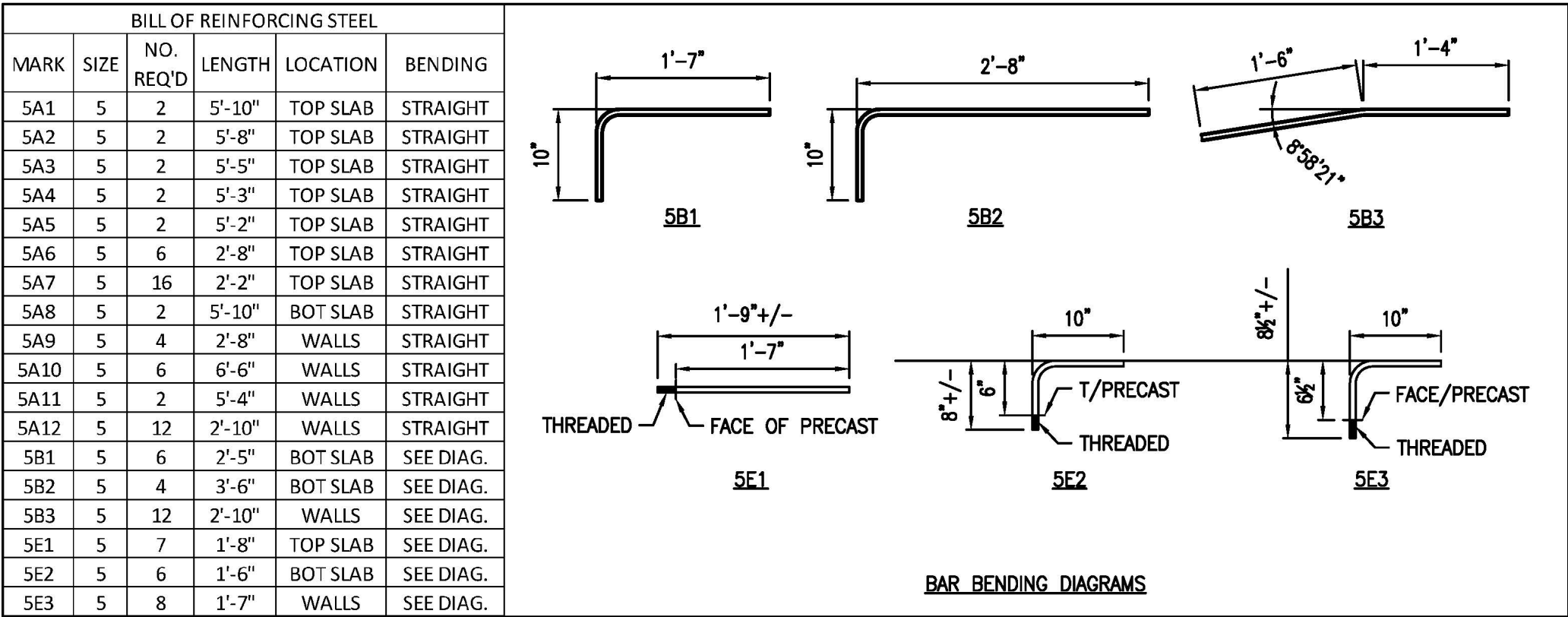
1. MEANS AND METHODS OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR AND THESE NOTES ARE NOT INTENDED TO PROVIDE COMPLETE DIRECTIONS FOR HOW THE WORK IS TO BE PERFORMED.
2. INSTALL DEWATERING EQUIPMENT AS REQUIRED TO DIVERT FLOW THROUGH THE BOX CULVERT.
3. PERFORM CLEARING AND GRUBBING OPERATIONS AND EXCAVATE TO REMOVE ALL DELETERIOUS MATERIAL BELOW THE BEDDING STONE FOOTPRINT.
4. PERFORM DEMOLITION OPERATIONS TO REMOVE THE TOP PORTION OF THE EXISTING BOX CULVERT HEADWALL DOWN TO THE TOP OF THE CULVERT AND TO REMOVE THE 6" CHAMFER TO MATCH THE WALL AND SLAB DIMENSION OF THE NEW CIP CONCRETE SECTIONS. DEWATER AS REQUIRED TO ALLOW SOIL COMPACTION.
5. PLACE FILL AND COMPACT SOIL AS REQUIRED BY THE SPECIFICATIONS TO THE BOTTOM OF BEDDING STONE ELEVATION.
6. PLACE FILTER FABRIC AND BEDDING STONE. VIBRATE THE BEDDING STONE TO PROVIDE AN UNYIELDING SURFACE LEVEL WITH THE BOTTOM OF THE PRECAST BOTTOM ELEVATION. WRAP THE BEDDING STONE WITH FILTER FABRIC.
7. EPOXY GROUT REINFORCEMENT INTO THE EXISTING BOX CULVERT.
8. INSTALL SPLICED REINFORCEMENT INTO THE PRECAST BOTTOM SECTION AND PLACE BOTTOM SECTION. PLACE BEDDING STONE BETWEEN THE PRECAST AND EXISTING CUTOFF WALL.
9. FORM BOTTOM SLAB, PLACE REINFORCEMENT AND CAST THE CONCRETE.
10. FORM WALLS, PLACE REINFORCEMENT AND CAST THE CONCRETE.
11. INSTALL SPLICED REINFORCEMENT INTO THE PRECAST TOP SLAB AND PLACE PRECAST TOP SLAB.
12. FORM THE TOP SLAB, PLACE REINFORCEMENT AND CAST THE CONCRETE.
13. PLACE THE BITUMINOUS COATING AND FILTER FABRIC OVER THE TOP SLAB.
14. PERFORM PIPE PLACEMENT OPERATIONS.

QUANTITIES:

1. CONCRETE = 2 CY
2. REINFORCING STEEL = 286 LB
3. THREADED REINFORCING STEEL = 35 LB (DOES NOT INCLUDE SPLICED REINFORCEMENT PLACED IN PRECAST)
4. BEDDING STONE = 6 TONS
5. FILTER FABRIC FOR FOUNDATION = 21 SY (INCIDENTAL TO THE COST OF THE BEDDING STONE)
6. FILTER FABRIC FOR TOP SLAB = 6 SY (INCIDENTAL TO PRECAST COST, DOES NOT INCLUDE FILTER FABRIC WRAP AROUND PIPE)
7. REFER TO CIVIL DRAWINGS FOR PRECAST, PIPE, AND EARTHWORK QUANTITIES.



DRAINAGE STRUCTURE S-8 PLAN



BAR BENDING DIAGRAMS

Rev	Date	Drawn	Description	Ch'k'd	App'd
-----	------	-------	-------------	--------	-------

M

M

MOTT
MACDONALD

MOTT
MACDONALD

FLORIDA LLC

220 West Garden Street
Suite 700,
Pensacola, Florida 32502
Telephone: (850) 484-8011

Architects AA - C000035
Engineers EB - 0000155
Surveyors LB - 0008783

MOTT MACDONALD
FLORIDA LLC

Client

Escambia County
Board of Commisinoers

Title

Florida Ditch
Restoration Phase II
(Sarasota Project)
DRAINAGE STRUCTURE DETAILS
1 OF 3

Bart F. Hendricks P.E.
FL PE #51391

Project Number		B/O		Total	
502100479					
Designed	BFH		Eng check		
Drawn	BFH		Coordination		
Dwg check			Approved		
Scale at ANSI D		Status		Rev	
As Shown		PRE		STD	
Drawing Number				S-001	



1. REFER TO THE CIVIL DRAWINGS FOR REQUIRED PIPE INVERT ELEVATION.
2. SEE S-003 FOR SECTION C-C.
3. REFER TO S-001 FOR BILL OF REINFORCEMENT.

	MOTT MACDONALD FLORIDA LLC 220 West Garden Street Suite 700, Pensacola, Florida 32502 Telephone: (850) 484-0111 Architects AA - C0000035 Engineers EB - 0000155 Surveyors LB - 0006783
---	---

Title	Florida Ditch Restoration Phase II (Sarasota Project) DRAINAGE STRUCTURE DETAILS 2 OF 3
-------	---

Project Number 502100479			B/O		Total	
Designed		BFH		Eng check		
Drawn		BFH		Coordination		
Dwg check				Approved		
Scale at ANSI D		Status		Rev		Security
As Shown		PRE				STD
Drawing Number						