



COMPONENTS OF CONTRACT PLANS SET

- ROADWAY PLANS
- SIGNING AND PAVEMENT MARKING PLANS
- SIGNALIZATION PLANS
- LIGHTING PLANS
- STRUCTURES PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

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6-13	TYPICAL SECTIONS
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74	CROSS SECTION PATTERN
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CONTRACT PLANS

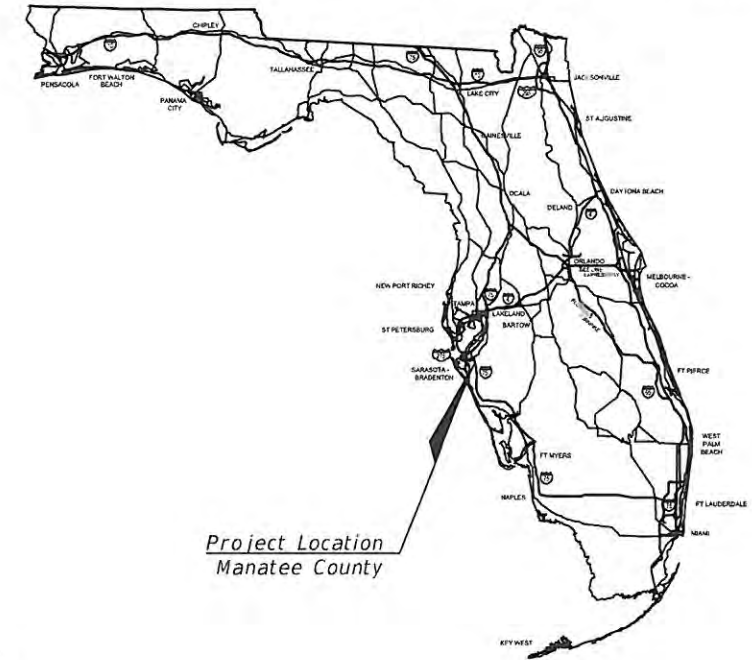
COUNTY PROJECT NUMBER 6035560

MANATEE COUNTY

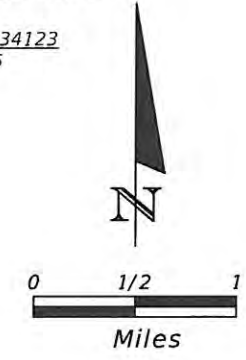
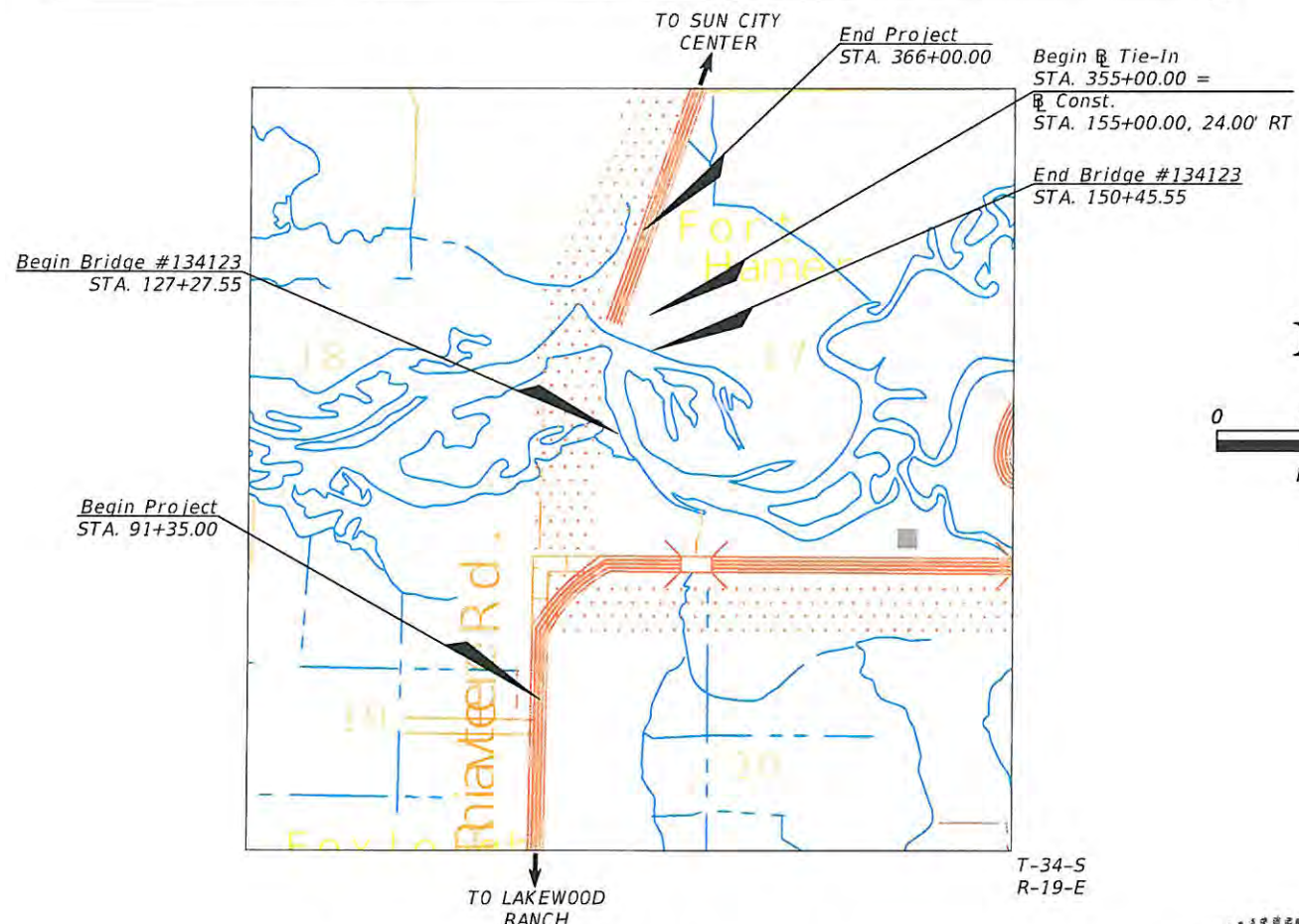
FORT HAMER BRIDGE

BRIDGE DESIGN OVER MANATEE RIVER FROM UPPER MANATEE RIVER ROAD TO NORTH OF FORT HAMER PARK

SEPTEMBER 2014



Project Location
Manatee County



ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO:

THE HEIMBURG GROUP, INC.
ATTN: LINDSEY SKOURELLOS, P.E.
5461 WEST WATERS AVENUE
SUITE 910
TAMPA, FLORIDA 33634
(813) 749-0823

PLANS PREPARED BY:



THE HEIMBURG GROUP, INC.

Certificate of Authorization No. 27842
Vendor Identification No. 22-3969341

5461 WEST WATERS AVENUE
SUITE 910
TAMPA, FLORIDA 33634
(813) 749-0823

NOTE: THIS PROJECT TO BE LET TO CONTRACT WITH COUNTY PROJECT NUMBER 6082660 & COUNTY PROJECT NUMBER 6054764

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

FINAL SUBMITTAL

ENGINEER OF RECORD: STEPHAN HEIMBURG, P.E.

P.E. NO.: 41934

PROJECT LENGTH IS BASED ON \mathcal{R} OF CONSTRUCTION

LENGTH OF PROJECT

	LINEAR FEET	MILES
ROADWAY	5272.2	0.999
BRIDGES	2318.0	0.439
NET LENGTH OF PROJECT	7590.2	1.438
EXCEPTIONS	0.0	0.000
GROSS LENGTH OF PROJECT	7590.2	1.438



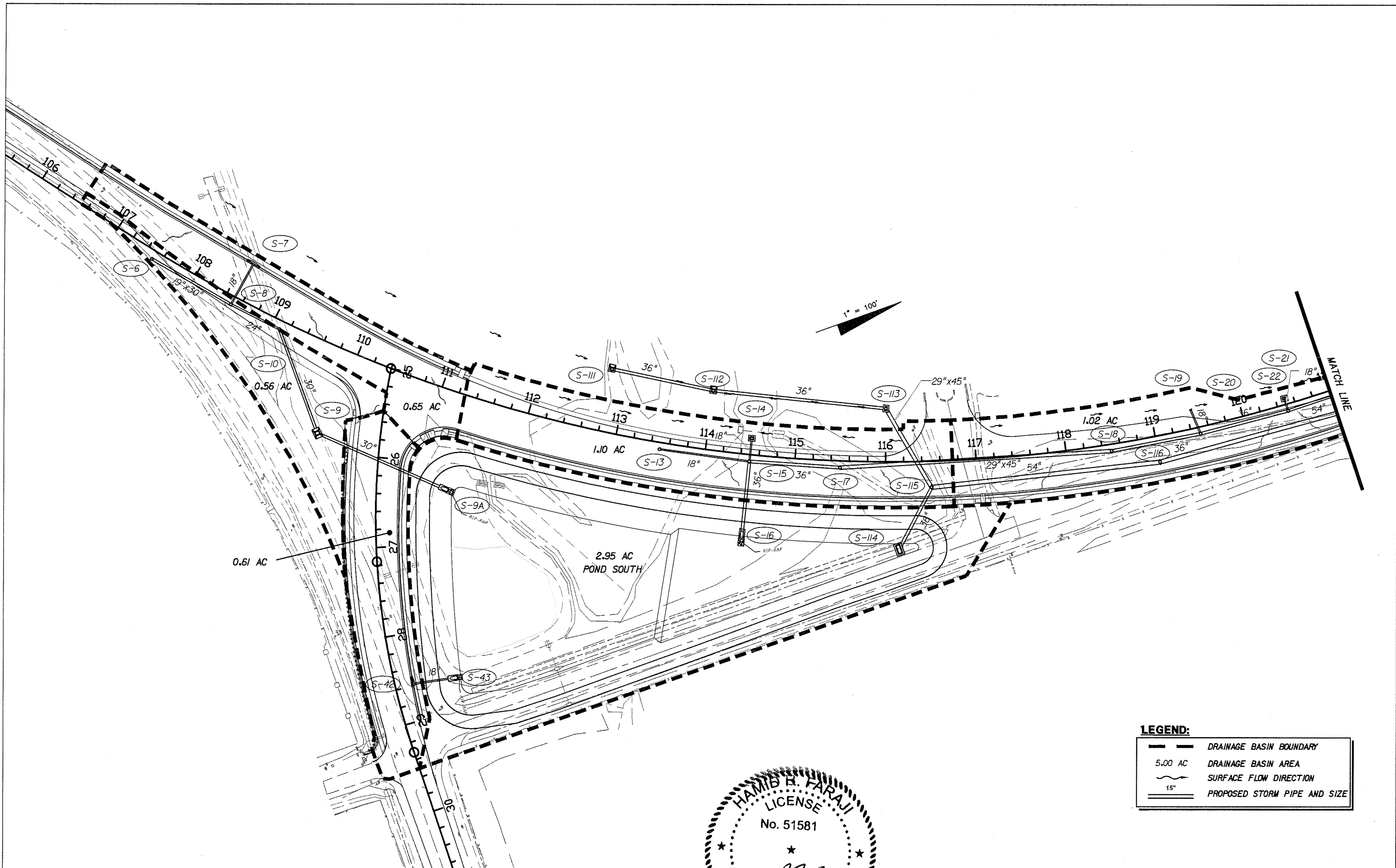
GOVERNING STANDARDS AND SPECIFICATIONS:
Florida Department of Transportation, 2014 Design Standards and revised Index Drawings as appended herein, and 2014 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents

For Design Standards click on the "Design Standards" link at the following web site:
<http://www.dot.state.fl.us/rddesign/>

For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:
<http://www.dot.state.fl.us/specificationsoffice/>

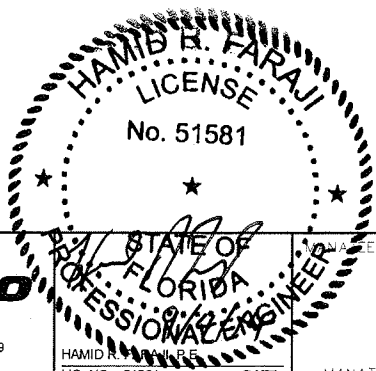
MANATEE COUNTY PROJECT MANAGER: KENT D. BONTRAGER, P.E.

FISCAL YEAR	SHEET NO.
14	1



LEGEND:

	DRAINAGE BASIN BOUNDARY
	5.00 AC DRAINAGE BASIN AREA
	SURFACE FLOW DIRECTION
	15" PROPOSED STORM PIPE AND SIZE

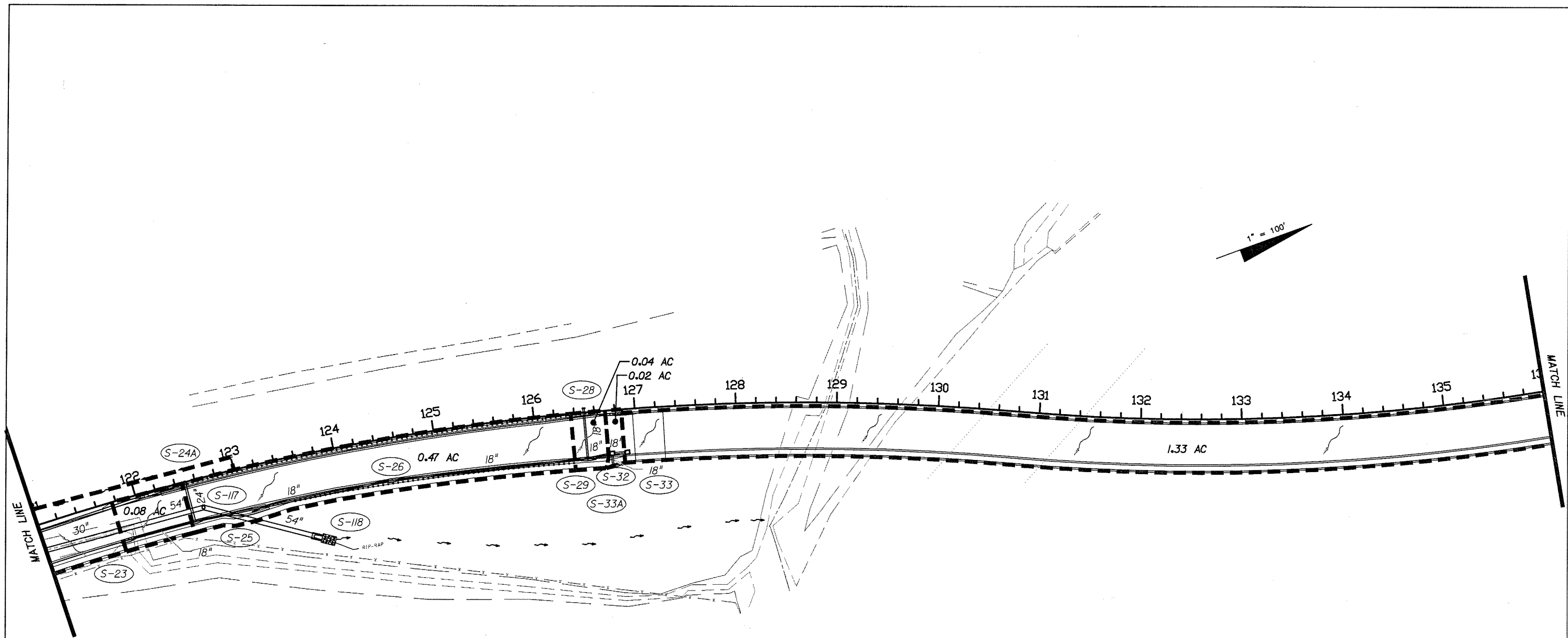


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

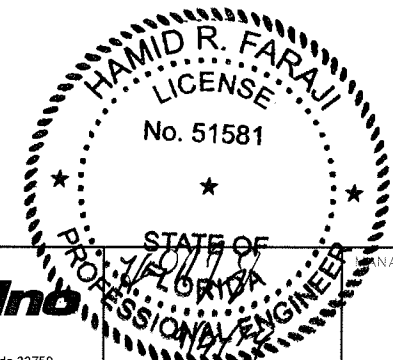
HAMID R. FARAJ
 LICENSE No. 51581
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT
 DATE

SHEET TITLE: DRAINAGE MAP (1)
 PROJECT NAME: FORT HAMER BRIDGE
 SHEET NO.: 2



LEGEND:

	DRAINAGE BASIN BOUNDARY
	DRAINAGE BASIN AREA
	SURFACE FLOW DIRECTION
	PROPOSED STORM PIPE AND SIZE



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

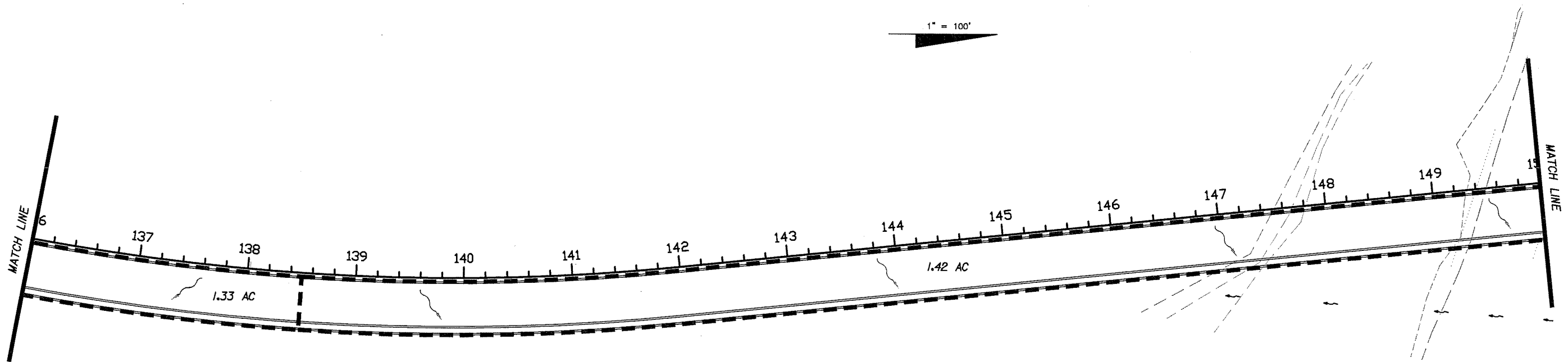
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

HAMID R. FARAJ, P.E.
 LIC. NO.: 51581 DATE

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

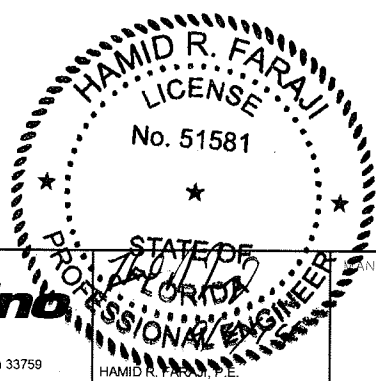
SHEET TITLE: DRAINAGE MAP (2)	SHEET NO. 3
PROJECT NAME: FORT HAMER BRIDGE	

1" = 100'



LEGEND:

	DRAINAGE BASIN BOUNDARY
	5.00 AC DRAINAGE BASIN AREA
	SURFACE FLOW DIRECTION
	15" PROPOSED STORM PIPE AND SIZE

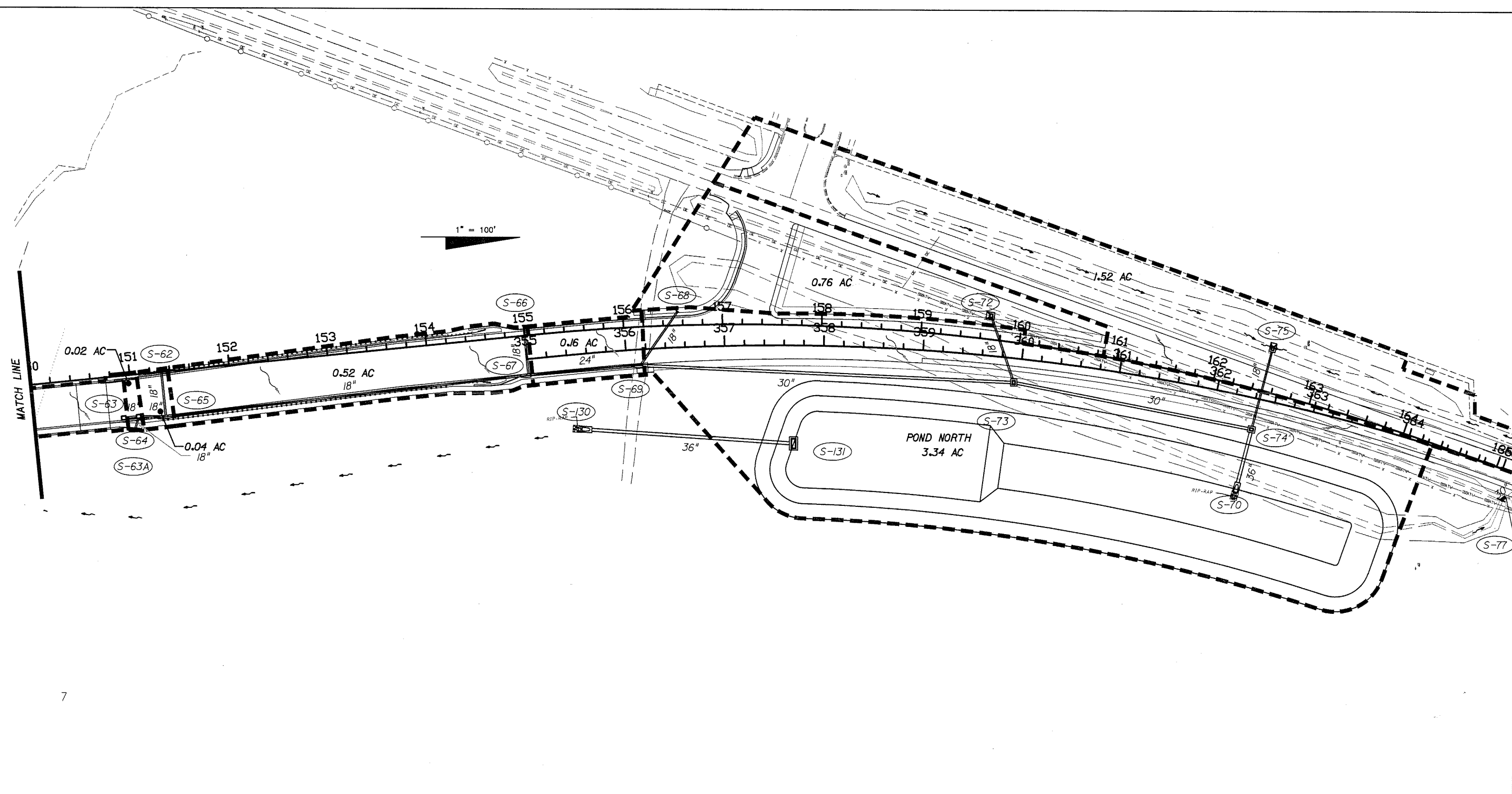


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 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: DRAINAGE MAP (3)		SHEET NO. 4
PROJECT NAME: FORT HAMER BRIDGE		

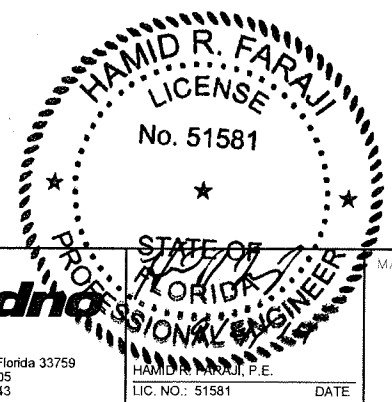
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



7

LEGEND:

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	DRAINAGE BASIN AREA
	SURFACE FLOW DIRECTION
	15" PROPOSED STORM PIPE AND SIZE



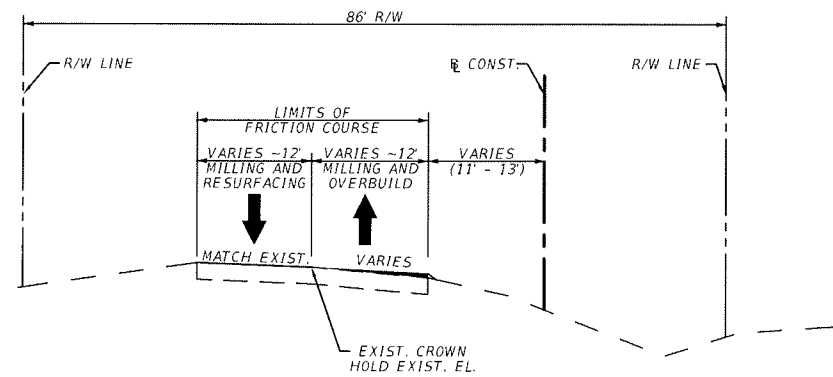
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

MANATEE COUNTY GOVERNMENT

 MANATEE COUNTY, FLORIDA

SHEET TITLE:	DRAINAGE MAP (4)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	5

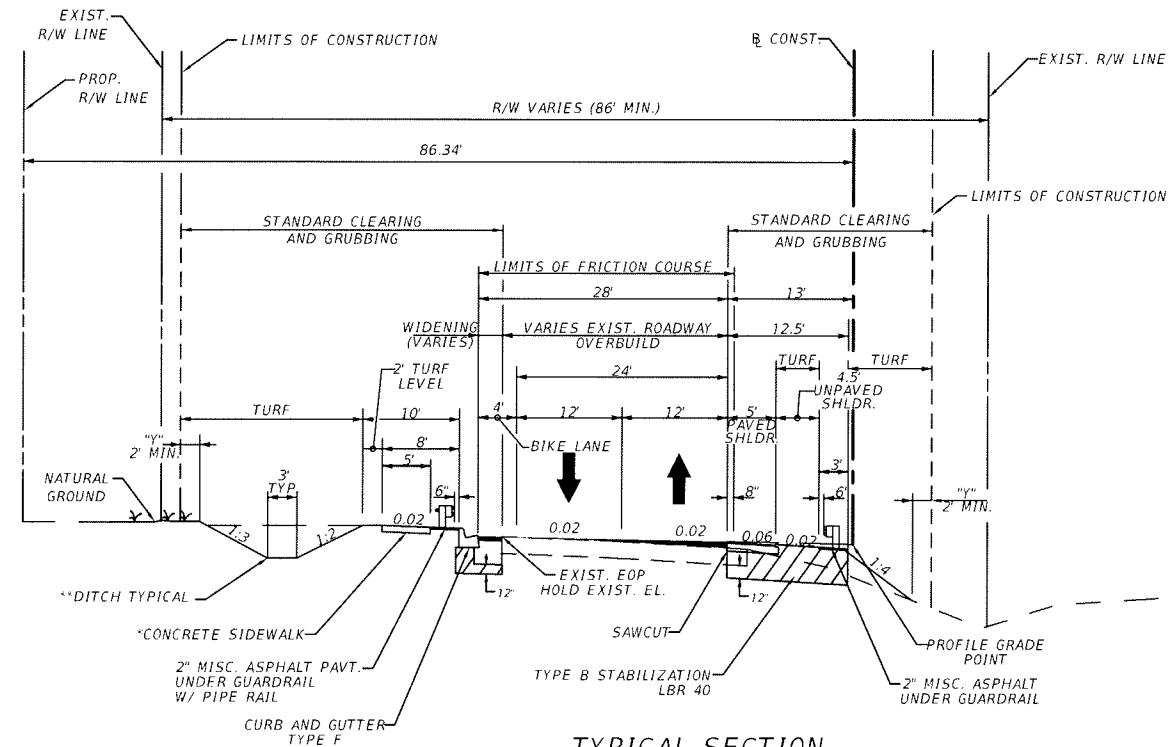
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



TYPICAL SECTION
FT. HAMER ROAD
STA. 91+35.00 TO STA. 92+35.00

VARIABLE MILLING
MILL EXISTING ASPHALT PAVEMENT FOR SLOPE (2" AVG. DEPTH)

RESURFACING / OVERBUILD
TYPE SP STRUCTURAL COURSE (DEPTH VARIES 1" MIN) (TRAFFIC C)
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)



TYPICAL SECTION
FT. HAMER ROAD
STA. 92+35.00 TO STA. 106+75.00

MILLING
MILL EXISTING ASPHALT PAVEMENT (2" DEPTH)

RESURFACING / OVERBUILD
TYPE SP STRUCTURAL COURSE (DEPTH VARIES 1" MIN) (TRAFFIC C)
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

WIDENING
OPTIONAL BASE GROUP 4 WITH
TYPE SP STRUCTURAL COURSE (4") (TRAFFIC C)
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

SHOULDER PAVEMENT
OPTIONAL BASE GROUP 2 WITH
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

*SIDEWALK BEGINS
STATION 95+12.79

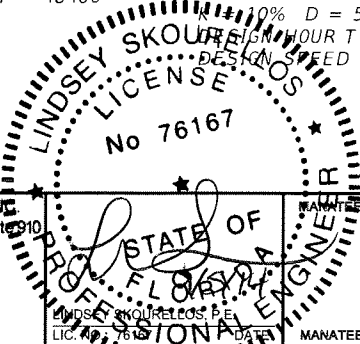
** DITCH TYPICAL
STA. 93+00 - STA. 102+00

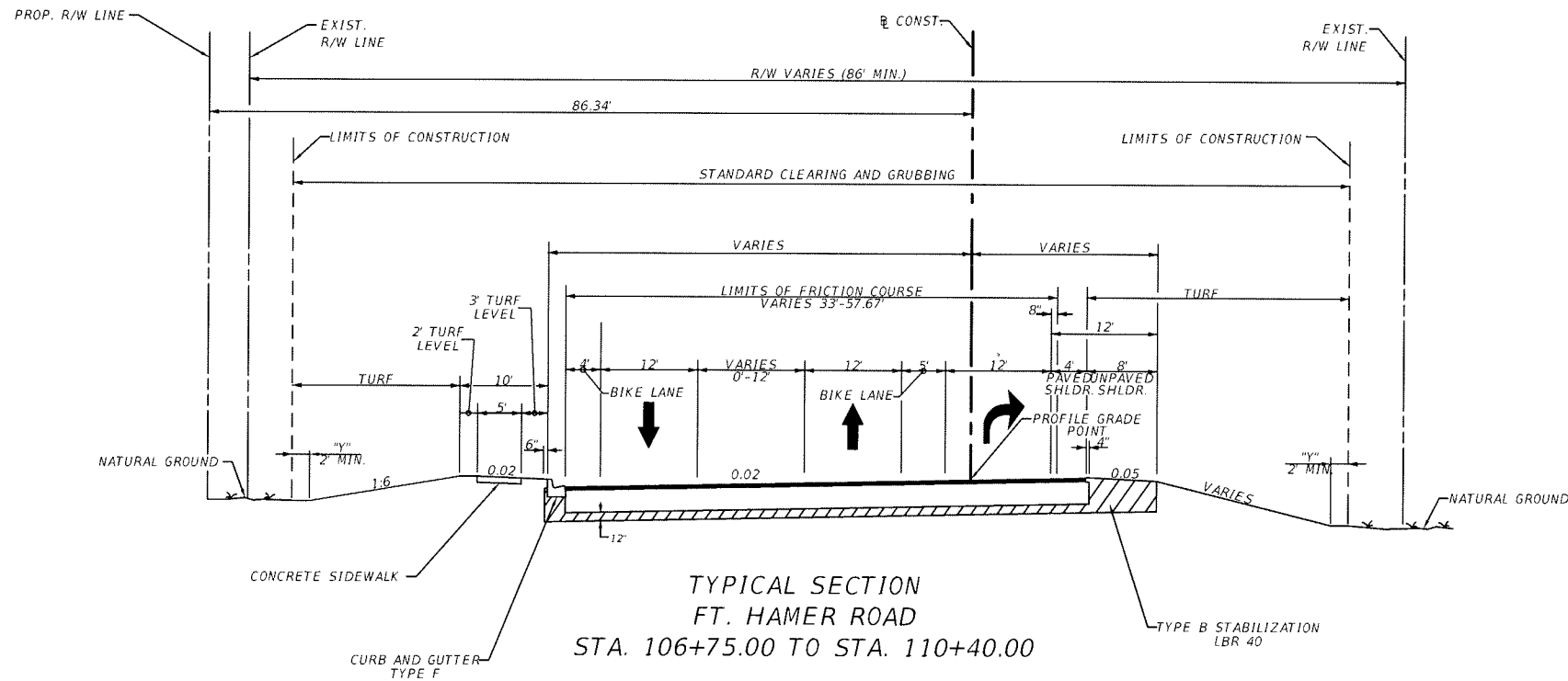
EXISTING UPPER MANATEE RIVER ROAD PROPOSED ROADWAY
TRAFFIC DATA TRAFFIC DATA

CURRENT YEAR = 2010 AADT = 5100
ESTIMATED OPENING YEAR = 2015 AADT = 15900
ESTIMATED DESIGN YEAR = 2035 AADT = 48400
K = 10% D = 59% T = 8% (24 HOUR)
DESIGN HOUR T = 4%
DESIGN SPEED = 45 MPH

CURRENT YEAR = 2014 AADT = 0
ESTIMATED OPENING YEAR = 2015 AADT = 17400
ESTIMATED DESIGN YEAR = 2035 AADT = 23600
K = 10% D = 59% T = 3% (24 HOUR)
DESIGN HOUR T = 4%
DESIGN SPEED = 45 MPH

"V": THE AREA DISTURBED BY CONSTRUCTION VARIES.

REVISIONS						 THE HEIMBURG GROUP, INC. 5461 W. Waters Avenue, Suite 310 TAMPA, FL 33634 (813) 749-0823 C.A. NO. 00027842		 MANATEE COUNTY GOVERNMENT MANATEE COUNTY, FLORIDA	SHEET TITLE:		SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				TYPICAL SECTION (1)		
								PROJECT NAME:		FORT HAMER BRIDGE	



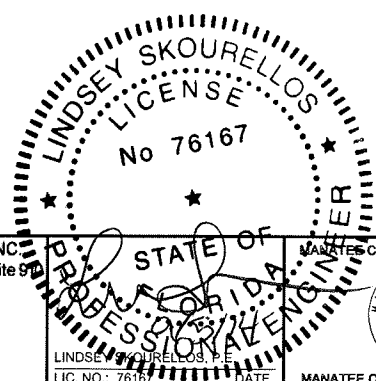
TYPICAL SECTION
 FT. HAMER ROAD
 STA. 106+75.00 TO STA. 110+40.00

NEW CONSTRUCTION

OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

* RIGHT TURN LANE BEGIN
 STATION 106+91.84

"V": THE AREA DISTURBED BY CONSTRUCTION VARIES.



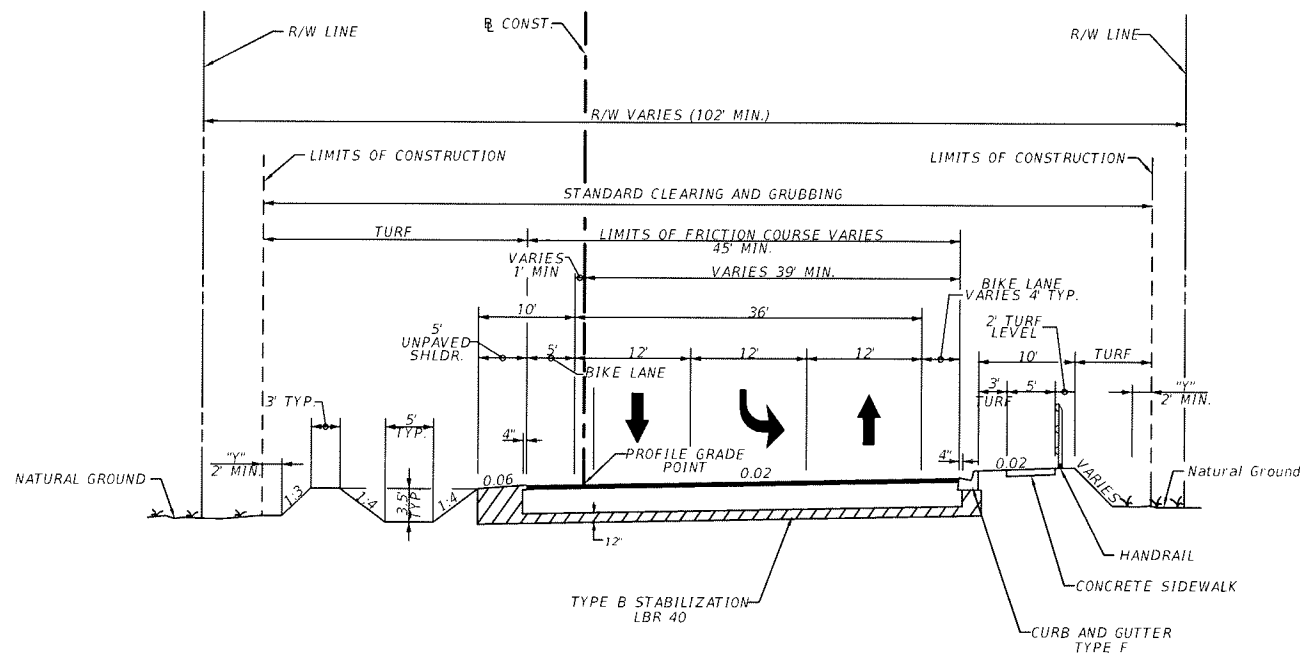
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 9
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

MANATEE COUNTY GOVERNMENT
 LINDSEY SKOURELLOS, P.E.
 LIC. NO.: 76167
 MANATEE COUNTY, FLORIDA

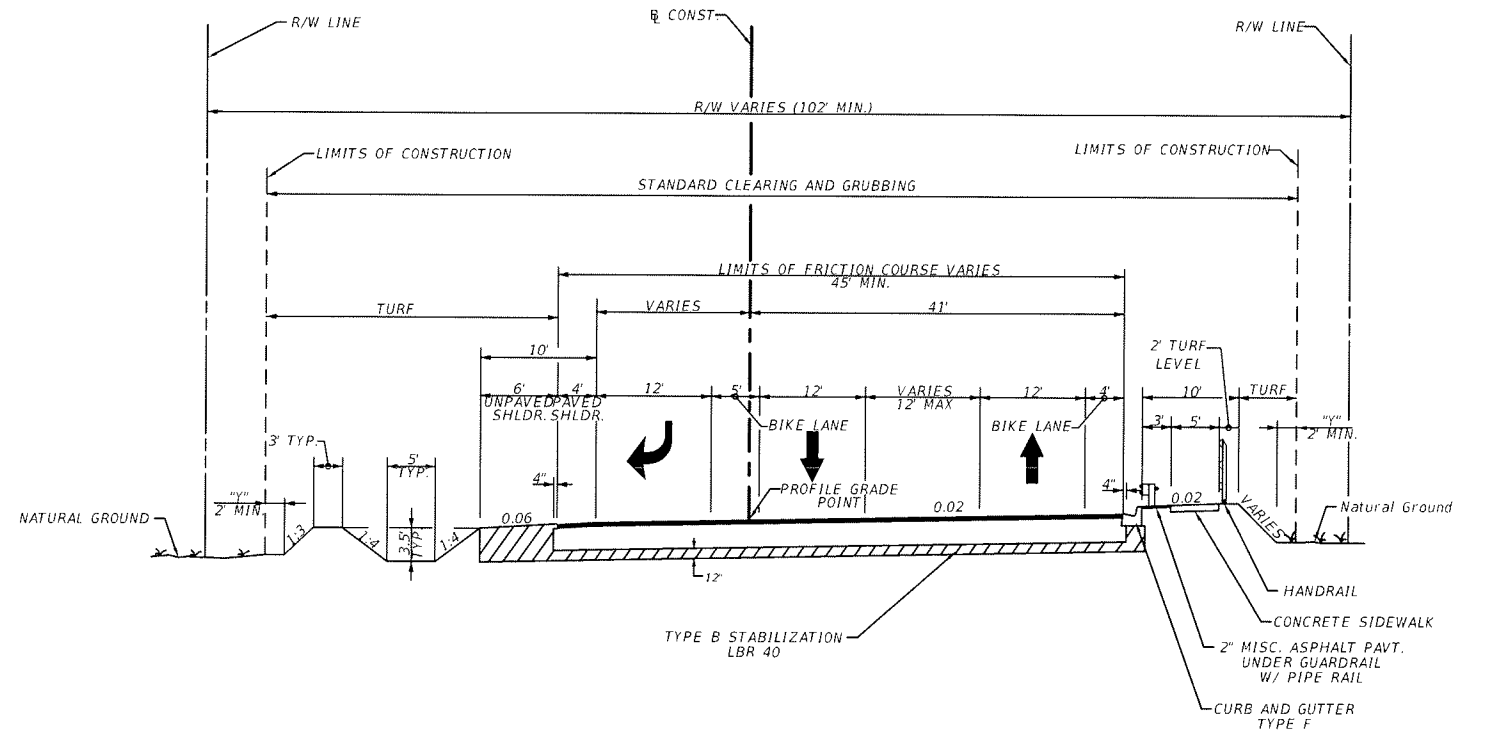
SHEET TITLE:	TYPICAL SECTION (2)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	7



TYPICAL SECTION
 FT. HAMER ROAD
 STA. 110+40.00 TO STA. 117+00.00

NEW CONSTRUCTION

OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)



TYPICAL SECTION
 FT. HAMER ROAD
 STA. 117+00.00 TO STA. 119+90.00

NEW CONSTRUCTION

OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

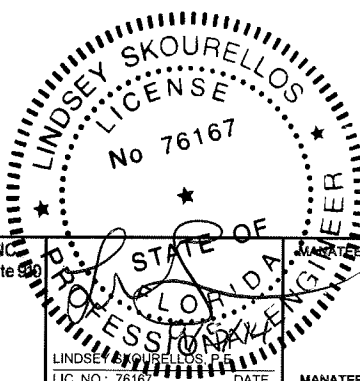
"V": THE AREA DISTURBED BY CONSTRUCTION VARIES.

NOTE: SEE GRADING PLANS
 FOR EDGE OF PAVEMENT
 ELEVATIONS.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

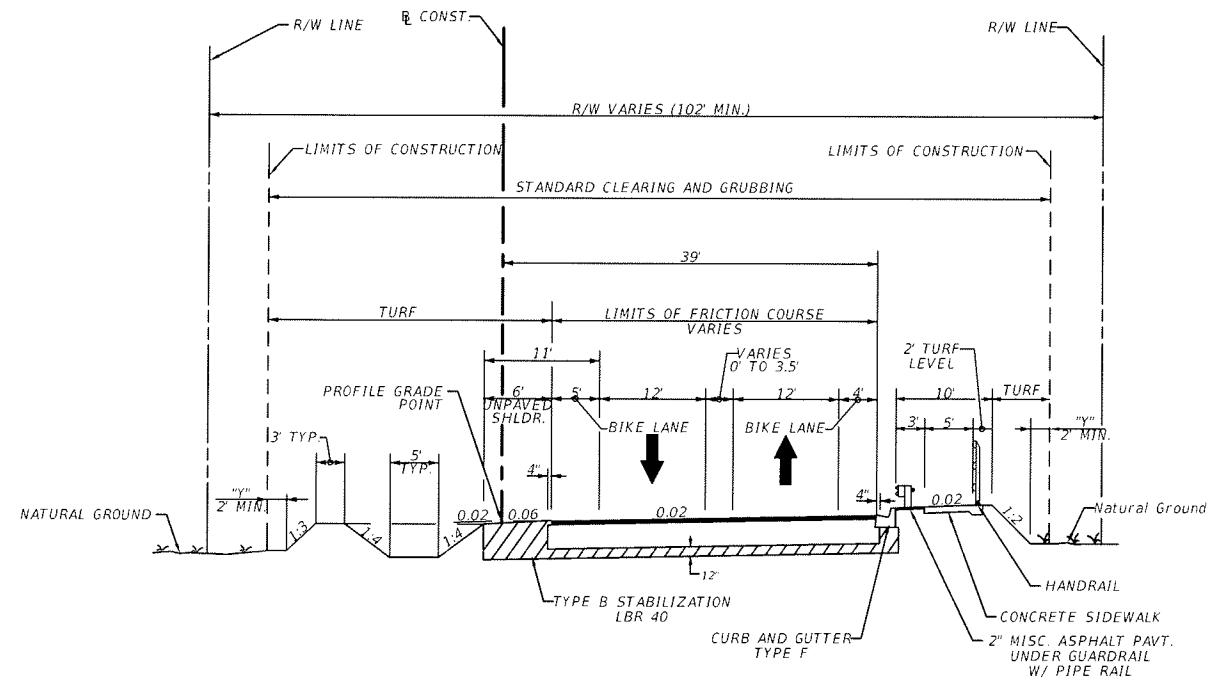


THE HEIMBURG GROUP, INC.
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 (813) 749-0823
 C.A. NO. 00027842



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 MANATEE COUNTY, FLORIDA

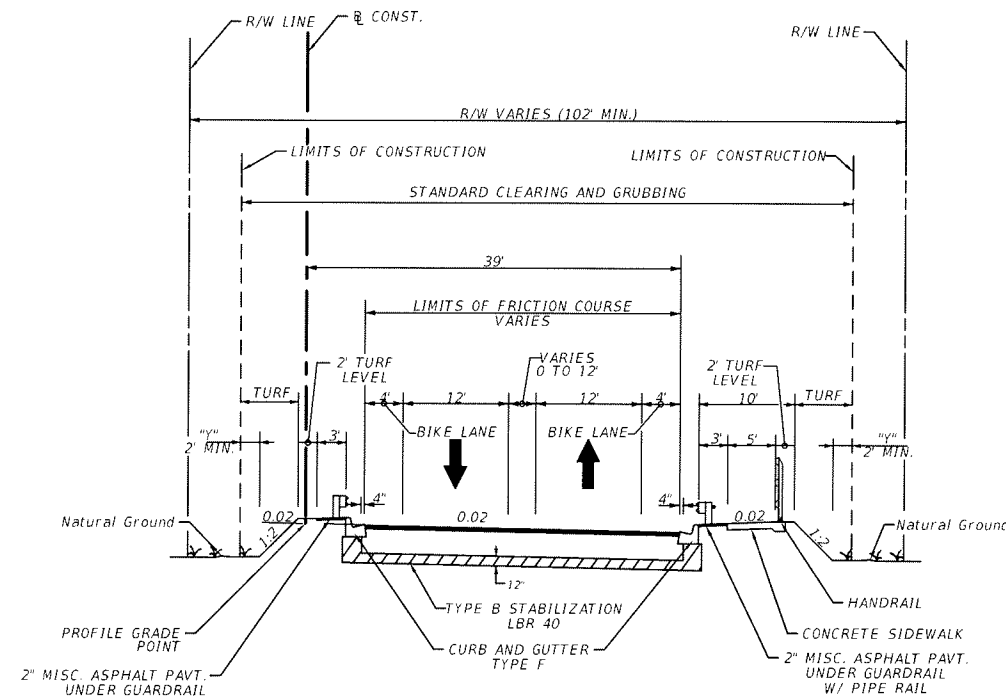
SHEET TITLE:	TYPICAL SECTION (3)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	8



TYPICAL SECTION
 FT. HAMER ROAD
 STA. 119+90.00 TO STA. 123+00.00

NEW CONSTRUCTION

OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

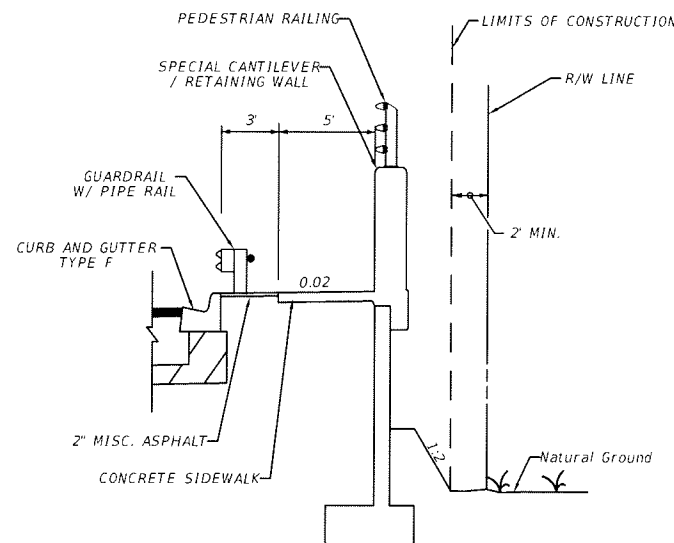


TYPICAL SECTION *
 FT. HAMER ROAD
 STA. 123+00.00 TO STA. 127+27.55
 STA. 150+45.55 TO STA. 156+22.65

NEW CONSTRUCTION

OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

* TRANSITION SIDEWALK CROSS-SLOPE AND ELEVATION
 BETWEEN ROADWAY. SEE PROFILE FOR TRANSITION LENGTH.



RETAINING WALL DETAIL
 STA. 119+25.00 TO STA. 122+75.00

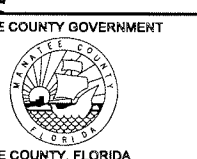
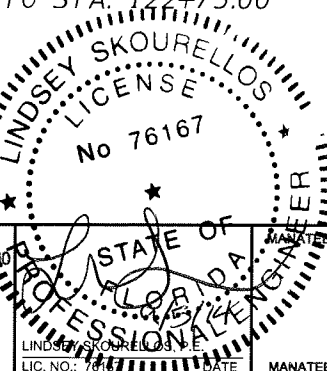
"Y": THE AREA DISTURBED BY CONSTRUCTION VARIES.

NOTE: SEE GRADING PLANS
 FOR EDGE OF PAVEMENT
 ELEVATIONS.

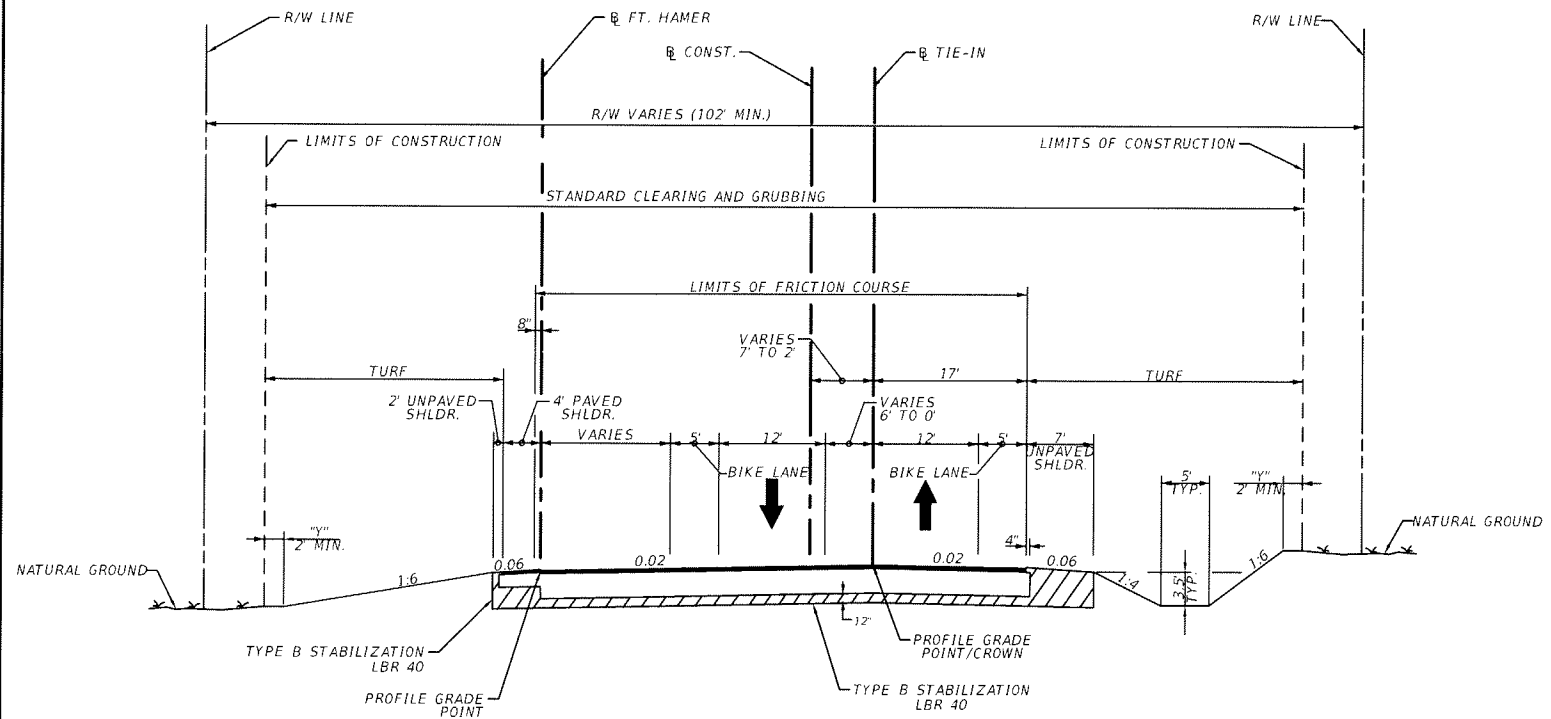
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 200
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



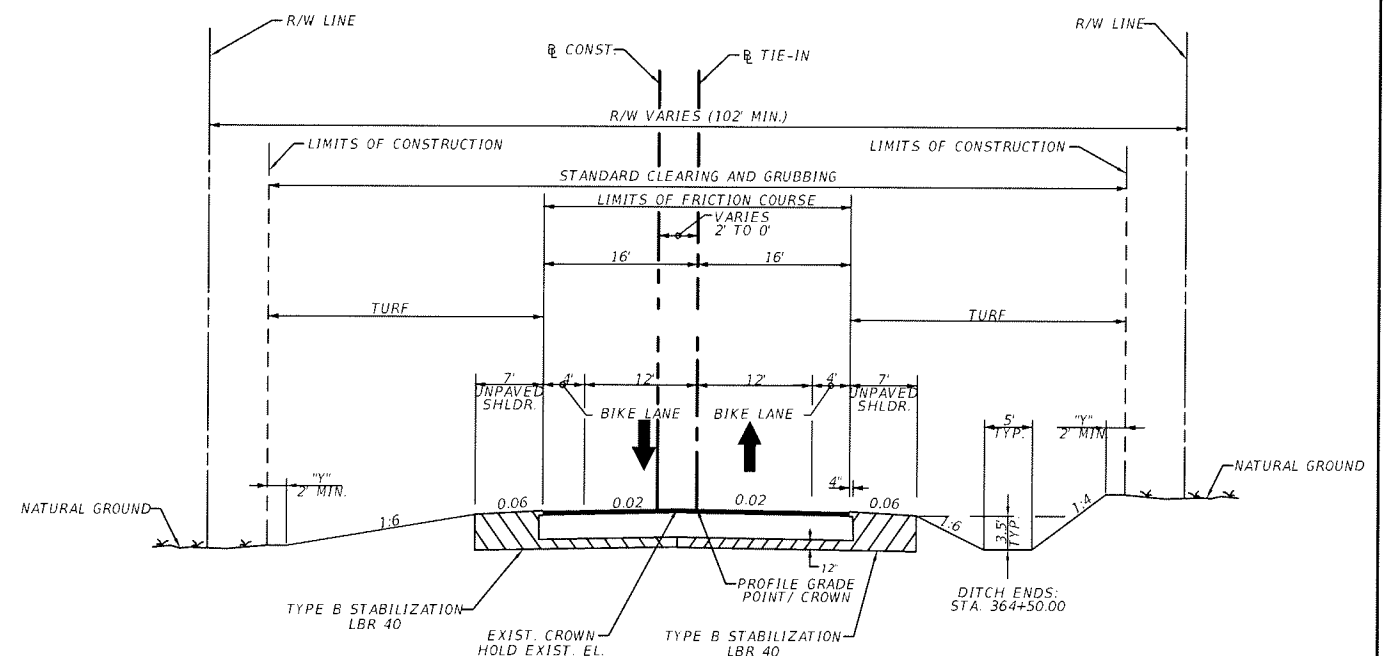
SHEET TITLE:	TYPICAL SECTION (4)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	9



TYPICAL SECTION
 TIE-IN
 STA. 361+06.41 TO STA. 363+79.46

FORT HAMER ROAD
 FT. HAMER
 STA. 61+10.48 TO STA. 63+85.36

- NEW CONSTRUCTION**
 OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)
- SHOULDER PAVEMENT**
 OPTIONAL BASE GROUP 2 WITH
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)



TYPICAL SECTION
 TIE-IN
 STA. 363+79.46 TO STA. 366+00.00

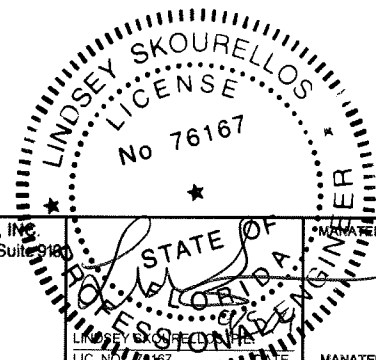
- NEW CONSTRUCTION**
 OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)
- SHOULDER PAVEMENT**
 OPTIONAL BASE GROUP 2 WITH
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

"Y": THE AREA DISTURBED BY CONSTRUCTION VARIES.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

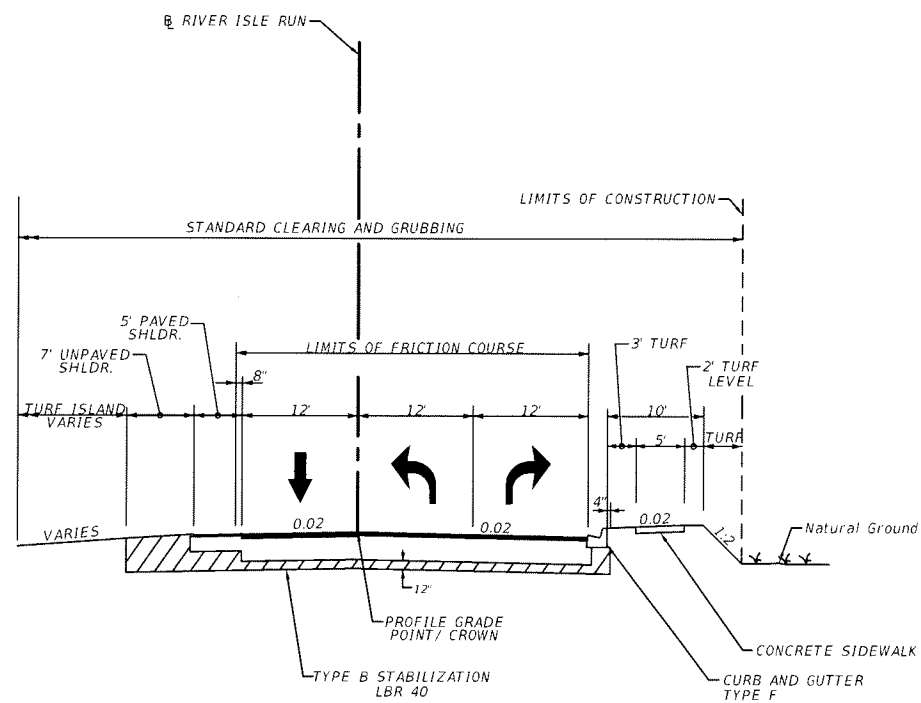


THE HEIMBURG GROUP, INC.
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 TAMPA, FL 33634
 (813) 749-0823
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MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

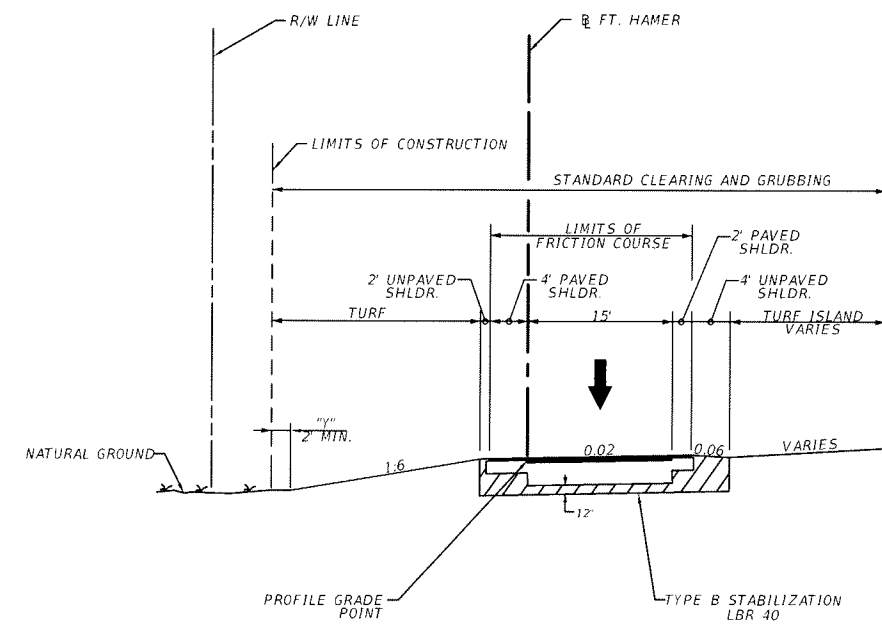
SHEET TITLE: TYPICAL SECTION (6)		SHEET NO. 11
PROJECT NAME: FORT HAMER BRIDGE		



TYPICAL SECTION
 RIVER ISLE RUN
 @ RIVER ISLE RUN
 STA. 11+04.40 TO STA. 12+10.72

NEW CONSTRUCTION
 OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

SHOULDER PAVEMENT
 OPTIONAL BASE GROUP 2 WITH
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)



TYPICAL SECTION
 FT. HAMER ROAD
 @ FT. HAMER
 STA. 58+00.00 TO STA. 59+25.00

NEW CONSTRUCTION
 OPTIONAL BASE GROUP 9
 TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

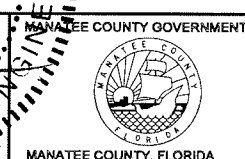
SHOULDER PAVEMENT
 OPTIONAL BASE GROUP 2 WITH
 AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

"V": THE AREA DISTURBED BY CONSTRUCTION VARIES.

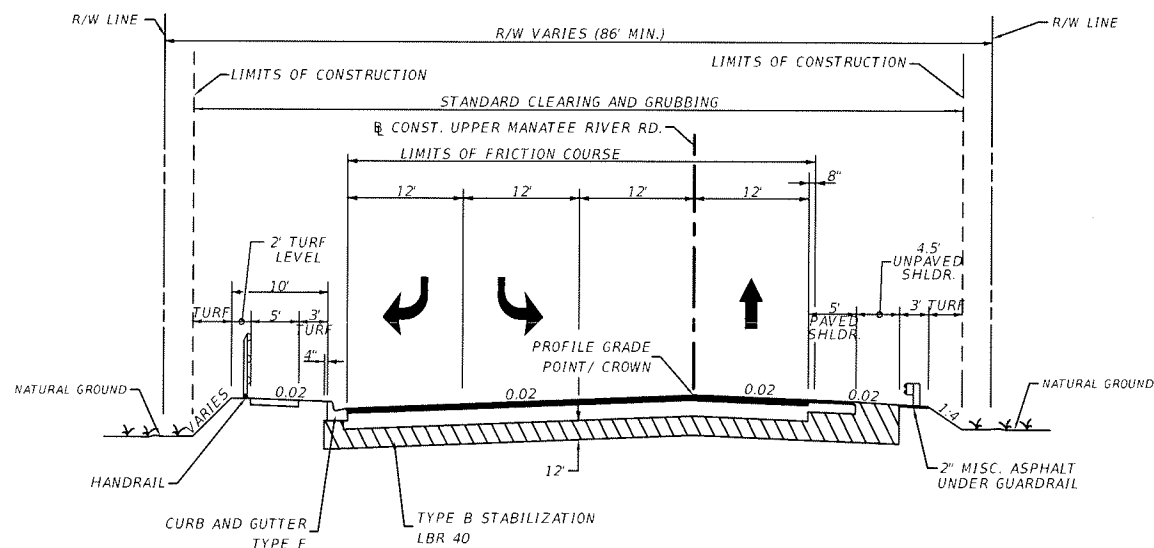
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 5461 W. Waters Avenue, Suite 910
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 (813) 749-0823
 C.A. NO. 00027842



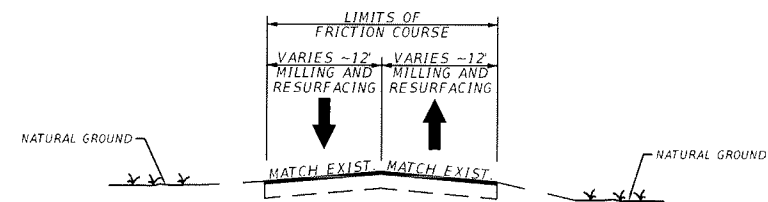
SHEET TITLE: TYPICAL SECTION (7)		SHEET NO. 12
PROJECT NAME: FORT HAMER BRIDGE		



TYPICAL SECTION
UPPER MANATEE RIVER ROAD
STA. 26+11.43 TO STA. 29+00.00

NEW CONSTRUCTION
OPTIONAL BASE GROUP 9
TYPE SP STRUCTURAL COURSE (2") (TRAFFIC C)
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

SHOULDER PAVEMENT
OPTIONAL BASE GROUP 2 WITH
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)



TYPICAL SECTION
GATES CREEK ROAD
(EAST OF 3RD AVE NE AND
WEST OF UPPER MANATEE RIVER ROAD)
&
3RD AVE NE
(NORTH OF GATES CREEK AND
SOUTH OF UPPER MANATEE RIVER ROAD)

MILLING
MILL EXISTING ASPHALT PAVEMENT (3" DEPTH)

RESURFACING
TYPE SP STRUCTURAL COURSE (DEPTH VARIES 2" MIN) (TRAFFIC C)
AND FC-9.5 FRICTION COURSE (1") (TRAFFIC C) (RUBBER)

TRAFFIC DATA

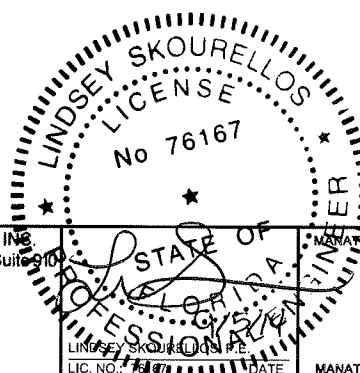
UPPER MANATEE RIVER ROAD
CURRENT YEAR = 2010 AADT = 5100
ESTIMATED OPENING YEAR = 2020 AADT = 5700
ESTIMATED DESIGN YEAR = 2035 AADT = 8300
K = 10% D = 61% T = 1% (24 HOUR)
DESIGN HOUR T = 1%
DESIGN SPEED = 35 MPH

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



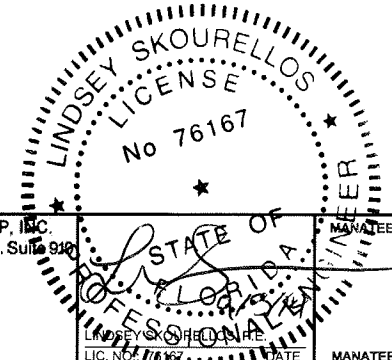
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



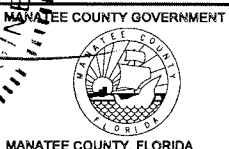
SHEET TITLE:	TYPICAL SECTION (8)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	13

SUMMARY OF GUARDRAIL

LOCATION		GUARDRAIL (LF)								END ANCHORAGE ASSEMBLIES (EA)						REMARKS	FIELD BOOK REFERENCE
STATION	ROADWAY SIDE	ROADWAY 536 1 1		ROADWAY DOUBLE FACE		MOD. THRIE BEAM DOUBLE FACE		PEDESTRIAN SAFETY TREATMENT 536 6		FLARED 536 85 22		PARALLEL 536 85 24		TYPE CRT 536 85 26			
		P	F	P	F	P	F	P	F	P	F	P	F	P	F		
FROM 91+95.74	LT	550.0								FROM 95+10.31			1				
TO 97+39.09									TO 97+02.50	1							
FROM 91+67.40	RT	292.5								FROM				1			
TO 94+38.27									TO					1			
FROM 94+58.35	RT	942.5								FROM				1			
TO 103+84.73									TO					1			
FROM 117+60.52	RT	926.1								FROM 119+25.00	1						BARRIER WALL CONNECTION
TO 126+82.36									TO 122+75.00								
FROM 121+87.21	LT	501.1								FROM	1						BARRIER WALL CONNECTION
TO 127+01.20									TO								
FROM 150+69.87	LT	538.6								FROM							BARRIER WALL CONNECTION
TO 156+25.00									TO	1							
FROM 151+91.28	RT	351.1								FROM 151+91.28							BARRIER WALL CONNECTION
TO 154+60.87									TO 154+60.87	1							
FROM 25+78.59	RT	365.0								FROM	1						
TO 29+17.86									TO					1			
TOTAL		4467.0							1505.5		6		1		5		



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE: <h3 style="text-align: center;">SUMMARY OF QUANTITIES (1)</h3>	SHEET NO. <h3 style="text-align: center;">14</h3>
PROJECT NAME: <h3 style="text-align: center;">FORT HAMER BRIDGE</h3>	

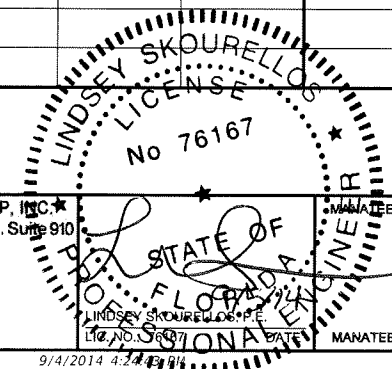
R E V I S I O N S					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

SUMMARY OF RAILING

LOCATION	SIDE	METAL TRAFFIC RAILING	PIPE HANDRAIL - GUIDERAIL	PED/BICYCLE RAILING	HANDRAIL	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.		0460 71 A LF	0515 1 A LF	0515 2ABB LF	0515 3 2 LF		
29+00.00 TO 119+25.00	RT				1171.1		
122+75.00 TO 126+84.73	RT				409.8		
150+86.30 TO 154+75.00	RT				388.7		
TOTAL					1969.6		

SUMMARY OF MISCELLANEOUS ASPHALT

LOCATION	SIDE	UNDER GUARDRAIL 0339 1			BICYCLE PATH			MEDIAN PAVEMENT			TEMPORARY SIDEWALK			OTHER			REMARKS
		THICK (IN)	SY		THICK (IN)	SY		THICK (IN)	SY		THICK (IN)	SY		THICK (IN)	SY		
			P	F		P	F		P	F		P	F		P	F	
91+95.74 TO 97+39.09	LT	2	187.8														
91+67.40 TO 94+38.27	RT	2	97.0														
94+58.35 TO 103+84.17	RT	2	315.3														
117+97.50 TO 126+62.37	RT	2	295.0														
122+25.00 TO 126+62.37	LT	2	152.5														
25+78.59 TO 29+17.86	RT	2	113.1														
150+69.87 TO 154+60.66	LT	2	136.9														
150+91.28 TO 154+60.87	RT	2	129.9														
TOTAL			1427.3														



R E V I S I O N S					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



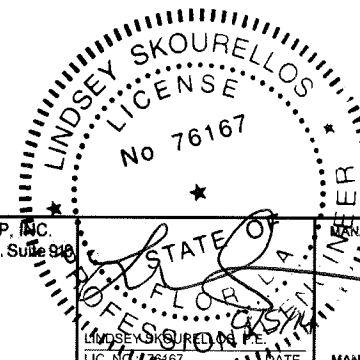
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 (813) 749-0823
 C.A. NO. 00027842

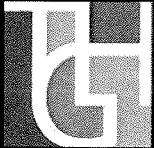
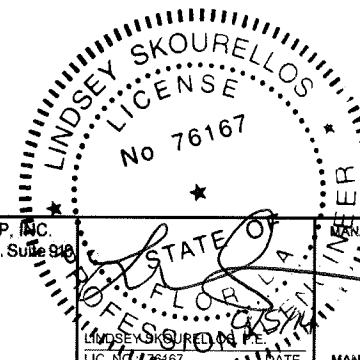
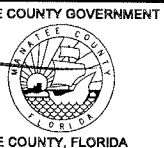
MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: SUMMARY OF QUANTITIES (2)	SHEET NO. 15
PROJECT NAME: FORT HAMER BRIDGE	

SUMMARY OF EARTHWORK						
DESCRIPTION	CY					
	EXCAVATION 120 1		EMBANKMENT 120 6		SUBSOIL EXCAVA. 120 4	
	P	F	P	F	P	F
CONST. SOUTH OF BRIDGE	2,356.0		44,164.0		4,994.0	
CONST. UPPER MANATEE RIVER ROAD	73.0		1,786.0			
CONST. NORTH OF BRIDGE	171.0		23,776.0			
TIE-IN	959.0		701.0			
FT. HAMER	1,228.0		0.0			
TOTAL	4,787		70,427		4,994	

SUMMARY OF PERFORMANCE TURF									
LOCATION	SIDE	LENGTH	WIDTH	PERFORMANCE TURF (SOD) SOUTH		PERFORMANCE TURF (SOD) NORTH		DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.				0570 1 2		0570 1 2			
				SY		SY			
				P	F	P	F		
90+35.00 TO 127+27.55	VAR.	3692.55	VAR.	27849					
150+45.55 TO 166+05.22	VAR.	1559.67	VAR.			9578			
110+77.00 TO 116+64.00	RT	587.00	VAR.	4022				POND SOUTH	
157+37.00 TO 164+29.00	RT	692.00	VAR.			3982		POND NORTH	
SUB TOTAL				31871		13560			
TOTAL				31871		13560			



REVISIONS						 THE HEIMBURG GROUP, INC. 5461 W. Waters Avenue, Suite 810 TAMPA, FL 33634 (813) 749-0823 C.A. NO. 00027842			SHEET TITLE:	SUMMARY OF QUANTITIES (3)	
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION				PROJECT NAME:	FORT HAMER BRIDGE	SHEET NO.:

FT. HAMER BRIDGE

FINANCIAL PROJECT NO. 6035560

ROADWAY QUANTITIES

PAY ITEM NUMBER	DESCRIPTION	UNIT	SOUTH	NORTH	TOTAL
0101 1	MOBILIZATION	LS			1
0102 1	MAINTENANCE OF TRAFFIC	LS			1
0102 60	WORK ZONE SIGN	ED	65520	10290	75810
0102 74 1	BARRICADE, TEMPORARY, TYPES I, II, DI, VP & DRUM	ED	51870	14490	66360
0102 74 2	BARRICADE, TEMPORARY, TYPE III, 6'	ED	5670	2520	8190
0102 77	HIGH INTENSITY FLASHING LIGHT, TEMPORARY, TYPE B	ED	5460	2100	7560
0102 78	REFLECTIVE PAVEMENT MARKER, TEMPORARY	EA	343	0	343
0102 99	PORTABLE CHANGEABLE MESSAGE SIGN, TEMPORARY	ED	420	0	420
0102 104	TEMPORARY SIGNALIZATION	ED	0	630	630
0102 107 1	TEMPORARY TRAFFIC DETECTION	ED	630	0	630
0102 911 2	PAVEMENT MARKING REMOVABLE, WHITE, SOLID	LF	13706	0	13706
0107 1	LITTER REMOVAL AND DISPOSAL	AC	57	20	77
0107 2	MOWING	AC	57	20	77
0110 1 1	CLEARING & GRUBBING	LS/AC	9.90 AC	4.41 AC	14.31 AC
0110 4	CONCRETE PAVEMENT REMOVAL	SY	739	0	739
110 7 1	MAILBOX, FURNISH & INSTALL SINGLE	EA	4	0	4
0160 4	TYPE B STABILIZATION	SY	13832	12061	25893
0285 702	OPTIONAL BASE, BASE GROUP 02	SY	800	373	1173
0285 704	OPTIONAL BASE, BASE GROUP 04	SY	640	0	640
0285 709	OPTIONAL BASE, BASE GROUP 09	SY	10482	10352	20834
0327 70 4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	SY	7802	0	7802
0327 70 5	MILLING EXIST ASPH PAVT, 2" AVG DEPTH	SY	5274	0	5274
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	1919	1139	3058
0337 7 42	ASPH CONC FRICTION COURSE, TRAFFIC C, FC-9.5, PG76-22, PMA	TN	945	590	1535
0515 2 211	PEDESTRIAN/BICYCLE RAILING, STEEL, 42" TYPE 1	LF	350	0	350
0520 1 10	CONCRETE CURB, TYPE F	LF	4409	1233	5642
0520 2 2	CONCRETE CURB, TYPE D	LF	32	35	67
0521 72 3	SHOULDER CONCRETE BARRIER WALL, RIGID-SHOULDER	LF	30	30	60
0522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4 INCH THICK	SY	1866	566	2394
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6 INCH THICK	SY	213	0	213
0536 73	GUARDRAIL REMOVAL	LF	337	0	337
0999 25	INITIAL CONTINGENCY AMOUNT, DO NOT BID	LS			1
1080 14	UTILITY FIXTURES, RELOCATE	EA	4	0	4
1644 816 08	FIRE HYDRANT, RELOCATE	EA	2	0	2



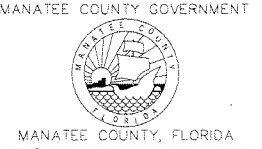
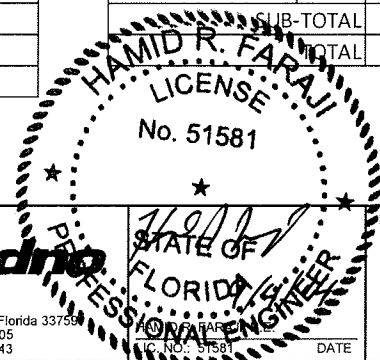
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

MANATEE COUNTY GOVERNMENT
STEPHAN HEIMBURG, P.E.
LIC. NO.: 41934 DATE
MANATEE COUNTY, FLORIDA

REVISIONS		SHEET TITLE: SUMMARY OF QUANTITIES (4)
DATE	BY	
PROJECT NAME: FORT HAMER BRIDGE		SHEET NO. 17

SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES													
LOCATION STA. TO STA.	SIDE	ARTIFICIAL COVERINGS		SEDIMENT BARRIER		FLOATING TURBIDITY BARRIER		STAKED TURBIDITY BARRIER		INLET PROTECTION SYSTEM		DESIGN NOTES	CONSTRUCTION REMARKS
		0104 1		0104 10 3		0104 11		0104 12		0104 18			
		SY		LF		LF		LF		EA			
		P	F	P	F	P	F	P	F	P	F		
29+70	RT			15									
91+20	RT			25									
94+00	RT			25									
94+80	LT			25									
96+80	LT			25									
96+90	RT			15									
97+10	LT			25									
97+30	RT			15									
98+25	LT			20									
101+90	RT			20									
101+00	LT			15									
103+60	RT			10									
102+00 TO 116+43	LT			1434									
105+00	LT			25									
107+50	RT									1			
108+50	LT									1			
108+50	RT									1			
109+10	RT									1			
109+93	RT									1			
110+20	LT			20									
111+64	RT									1			
112+13 TO 128+12	LT			1749									
112+50	LT			20									
112+80	LT									1			
113+50	RT									1			
114+00	LT									1			
114+50	LT									1			
114+50	RT									1			
115+50	RT									1			
116+00	LT									1			
116+15	RT									1			
116+20	RT					93							
116+50	RT									1			
117+08 TO 128+22	LT			1351									
118+50	RT									1			
119+00	RT									1			
119+45	LT									1			
119+50	RT									1			
120+50	LT									1			
120+50	RT									1			
121+80	RT									1			
122+50	RT									2			
122+62	RT									1			
123+00 TO 127+50		3600											
124+51	RT									1			
SUB-TOTAL		3600		4599		93		0		25			

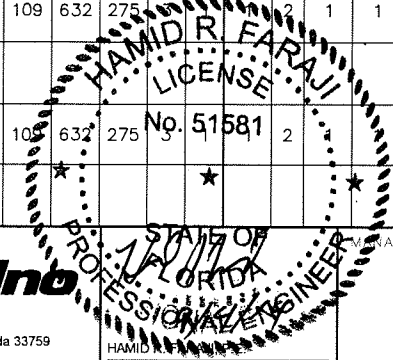
SUMMARY OF EROSION AND SEDIMENT CONTROL DEVICES CONTINUED													
LOCATION STA. TO STA.	SIDE	ARTIFICIAL COVERINGS		SEDIMENT BARRIER		FLOATING TURBIDITY BARRIER		STAKED TURBIDITY BARRIER		INLET PROTECTION SYSTEM		DESIGN NOTES	CONSTRUCTION REMARKS
		0104 1		0104 10 3		0104 11		0104 12		0104 18			
		SY		LF		LF		LF		EA			
		P	F	P	F	P	F	P	F	P	F		
125+00	RT			45									
126+50	RT									1			
126+75	RT									2			
126+90	RT									1			
127+00	LT			40									
127+00	RT			45									
128+22 TO 130+70	RT									251			
128+22 TO 130+45	LT									392			
128+28	RT									140			
129+28	RT									140			
130+28	RT								140				
131+72	RT								140				
133+16	RT								140				
134+47	RT								140				
135+78	RT								140				
137+09	RT								140				
138+40	RT								140				
139+74	RT								140				
141+08	RT								140				
142+42	RT								140				
143+76	RT								140				
145+10	RT								140				
146+44	RT								140				
147+78	RT								140				
148+97 TO 166+48	RT			1935									
149+12	RT								140				
149+37 TO 156+38	LT			824									
150+50 TO 155+00		3700											
150+90	RT									1			
151+00	RT									1			
151+05	RT									1			
151+32	RT									1			
155+00	RT									1			
156+15	RT									1			
158+00	RT							72					
159+69	LT									1			
160+00	RT									1			
160+00	LT			40									
162+50	LT									1			
162+50	RT									1			
165+00	LT			30									
165+05	RT									26			
165+70	LT									30			
SUB-TOTAL		3700		2959		1892		1259		14			
TOTAL		7300		7558		1985		1259		39			



SHEET TITLE:		SUMMARY OF QUANTITIES	
PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.			18

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN RCP				CURB INLETS		DITCH BOTTOM INLET				MITERED END SECTION ROUND SHAPE	PIPE PLUG		RIPRAP	REMARKS		
						ROUND SHAPE				P-5	P-6	C	D	D	H		BARRIER WALL INLET	EA			CY	TN
						18"	24"	30"	36"	<10	<10	<10	<10	<10	<10							
P	S-63	150+90.00	RT	INLET, PIPE	1	11									1							
F																						
P	S-63A	151+00.00	RT	INLET, PIPE	1	9				1												
F																						
P	S-64	151+05.00	RT	INLET, PIPE	1	23									1							
F																						
P	S-62	151+32.00	LT	PIPE PLUG, PIPE	1	43											1					
F																						
P	S-65	151+32.00	RT	INLET, PIPE	1	366				1												
F																						
P	S-66	155+00.00	LT	PIPE PLUG, PIPE	1	47											1					
F																						
P	S-67	155+00.00	RT	INLET, PIPE	1	109				1												
F																						
P	S-130	155+50.00	RT	MITERED END SECTION	1													1		7.00		
F																						
P	S-69	156+15.00	RT	INLET, PIPE	1			373		1												
F																						
P	S-68	156+55.00	LT	PIPE PLUG, PIPE	1	63												1				
F																						
P	S-131	157+75.17	RT	DITCH BOTTOM INLET, PIPE	1				212						1					OUTFALL STRUCTURE		
F																						
P	S-72	159+68.69	LT	DITCH BOTTOM INLET, PIPE	1	67						1								TRAVERSABLE SLOT		
F																						
P	S-73	160+00.00	RT	DITCH BOTTOM INLET, PIPE	1				241				1									
F																						
P	S-74	162+50.00	RT	DITCH BOTTOM INLET, PIPE	1				63				1									
F																						
P	S-75	162+50.00	LT	DITCH BOTTOM INLET, PIPE	1	81						1								TRAVERSABLE SLOT		
F																						
P	S-70	162+50.22	RT	MITERED END SECTION	1													1		6.22		
F																						
P	S-76	165+62.22	LT	STRAIGHT END WALL, PIPE	1			13												3.26		
F																						
P	S-77	165+15.97	RT	STRAIGHT END WALL, PIPE	1			5												3.26		
F																						
P																						
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SUBTOTALS					PLAN QUANTITY	710	109	632	275			2	1	1	2	1	1	3	6.52	13.22		
					FINAL QUANTITY																	
TOTALS					PLAN QUANTITY	710	109	632	275			2	1	1	2	1	1	3	6.52	13.22		
					FINAL QUANTITY																	



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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Certificate of Authorization No. 3843

John Hutchison 9/4/2014 4:11:14 PM

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE:	SUMMARY OF DRAINAGE STRUCTURES (NORTH)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	21

S-6
 STA 107+50.00 9.50' RT
 CONST MANHOLE TYPE P8
 FDOT INDEX 200, 201
 RIM EL 10.70
 INV (NE) 6.60 (19"x30" ERCP)

S-7
 STA 108+50.06 41.83' LT
 CONST CURB INLET TYPE 6
 FDOT INDEX 200, 211
 EOP EL 10.41
 INV (SE) 5.40 (18" RCP)

S-8
 STA 108+50.00 9.50' RT
 CONST MANHOLE TYPE P8
 FDOT INDEX 200, 201
 RIM EL 11.41
 INV (NW) 5.20 (18" RCP)
 INV (SW) 6.50 (19"x30" ERCP)
 INV (NE) 5.20 (24" RCP)

S-9
 STA 109+93.11 97.12' RT
 CONST DITCH BOTTOM INLET TYPE D
 W/ DOUBLE TRAVERSABLE SLOTS
 FDOT INDEX 232
 GRATE EL 8.00
 INV (W) 3.80 (30" RCP)
 INV (NE) 3.80 (30" RCP)

S-9A
 STA 111+40.31 107.00' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 272
 INV (SW) 3.50 (30" RCP)

S-10
 STA 109+09.88 9.50' RT
 CONST MANHOLE TYPE P8
 FDOT INDEX 200, 201
 RIM EL 11.60
 INV (SW) 4.00 (24" RCP)
 INV (E) 4.00 (30" RCP)

S-13
 STA 113+50.00 7.50' RT
 CONST MANHOLE TYPE P8
 FDOT INDEX 200, 201
 RIM EL 11.30
 INV (NE) 5.40 (18" RCP)

S-14
 STA 114+50.00 18.25' LT
 CONST DITCH BOTTOM INLET TYPE D
 W/ PAVEMENT
 FDOT INDEX 232
 GRATE EL 9.10
 INV (SE) 5.30 (18" RCP)

S-15
 STA 114+50.00 7.50' RT
 CONST MANHOLE TYPE J8 (5.0'x5.0')
 FDOT INDEX 200, 201
 RIM EL 11.37
 INV (SW) 5.20 (18" RCP)
 INV (SE) 3.70 (36" RCP)
 INV (NW) 5.20 (18" RCP)
 INV (NE) 3.70 (36" RCP)

S-16
 STA 114+50.00 93.00' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 272
 INV (NW) 3.50 (36" RCP)

S-17
 STA 115+50.00 7.50' RT
 CONST MANHOLE TYPE J8 (6.0'x4.0')
 FDOT INDEX 200, 201
 RIM EL 11.67
 INV (SW) 3.90 (36" RCP)
 INV (N) 3.90 (29"x45" ERCP)

S-18
 STA 118+50.00 7.50' RT
 CONST MANHOLE TYPE J8 (5' DIA)
 FDOT INDEX 200, 201
 RIM EL 11.97
 INV (S) 4.80 (29"x45" ERCP)
 INV (N) 4.80 (36" RCP)

S-19
 STA 119+44.79 21.40' LT
 CONST PIPE PLUG
 FDOT INDEX 280
 INV (E) 5.46 (18" RCP)

S-20
 STA 119+50.00 7.50' RT
 CONST MANHOLE TYPE J8 (5' DIA)
 FDOT INDEX 200, 201
 RIM EL 11.67
 INV (S) 5.00 (36" RCP)
 INV (W) 5.40 (18" RCP)
 INV (N) 5.00 (36" RCP)

S-21
 STA 120+50.00 6.85' LT
 CONST DITCH BOTTOM INLET TYPE D
 W/ PAVEMENT
 FDOT INDEX 232
 GRATE EL 9.90
 INV (E) 5.50 (18" RCP)

S-22
 STA 120+50.00 7.50' RT
 CONST MANHOLE TYPE J8 (5' DIA)
 FDOT INDEX 200, 201
 RIM EL 11.36
 INV (S) 5.40 (36" RCP)
 INV (W) 5.40 (18" RCP)
 INV (N) 5.40 (30" RCP)

S-23
 STA 121+79.99 40.25' RT
 CONST CURB INLET TYPE 5
 FDOT INDEX 200, 211
 EOP EL 11.46
 INV (N) 6.20 (18" RCP)

S-24A
 STA 122+50.00 0.82' RT
 CONST MANHOLE TYPE P8
 FDOT INDEX 200, 201
 RIM EL 12.16
 INV (S) 5.80 (30" RCP)
 INV (E) 5.80 (24" RCP)

S-25
 STA 122+50.00 40.25' RT
 CONST CURB INLET TYPE 5
 FDOT INDEX 200, 211
 EOP EL 11.90
 INV (S) 5.90 (18" RCP)
 INV (W) 5.90 (24" RCP)
 INV (N) 5.90 (18" RCP)

S-26
 STA 124+49.96 41.47' RT
 CONST CURB INLET TYPE 5
 FDOT INDEX 200, 211
 EOP EL 17.32
 INV (S) 11.60 (18" RCP)
 INV (N) 11.60 (18" RCP)

S-28
 STA 126+49.95 4.39' LT
 CONST PIPE PLUG
 FDOT INDEX 280
 INV (E) 21.30 (18" RCP)

S-29
 STA 126+49.92 45.87' RT
 CONST CURB INLET TYPE 6
 FDOT INDEX 200, 211
 EOP EL 25.70
 INV (S) 19.60 (18" RCP)
 INV (W) 21.00 (18" RCP)
 INV (N) 19.60 (18" RCP)

S-33A
 STA 126+74.62 54.99' RT
 CONST CURB INLET TYPE 5
 FDOT INDEX 200, 211
 EOP EL 26.32
 INV (W) 20.70 (18" RCP)

S-32
 STA 126+74.64 42.88' RT
 CONST BARRIER WALL INLET
 FDOT INDEX 218
 GRATE EL 26.52
 INV (S) 20.60 (18" RCP)
 INV (N) 20.60 (18" RCP)
 INV (E) 20.60 (18" RCP)

S-33
 STA 126+89.89 42.88' RT
 CONST BARRIER WALL INLET
 FDOT INDEX 218
 GRATE EL 27.08
 INV (S) 21.20 (18" RCP)

S-42
 STA 28+57.53 19.21' LT
 CONST CURB INLET TYPE 5
 FDOT INDEX 200, 211
 EOP EL 7.18
 INV (N) 3.10 (18" RCP)

S-43
 STA 28+62.35 68.69' LT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 272
 INV (S) 3.00 (18" RCP)

S-63A
 STA 151+00.00 55.34' RT
 CONST CURB INLET TYPE P5
 FDOT INDEX 200, 211
 EOP EL 30.49
 INV (W) 25.80 (18" RCP)

S-62
 STA 151+32.00 0.68' LT
 CONST PIPE PLUG
 FDOT INDEX 280
 INV (E) 24.60 (18" RCP)

S-63
 STA 150+90.00 42.88' RT
 CONST BARRIER WALL INLET
 FDOT INDEX 218
 GRATE EL 31.01
 INV (N) 25.80 (18" RCP)

S-64
 STA 151+05.00 42.88' RT
 CONST BARRIER WALL INLET
 FDOT INDEX 218
 GRATE EL 30.49
 INV (S) 25.70 (18" RCP)
 INV (N) 25.70 (18" RCP)
 INV (E) 25.70 (18" RCP)

S-65
 STA 151+32.00 45.67' RT
 CONST CURB INLET TYPE P6
 FDOT INDEX 200, 211
 EOP EL 29.64
 INV (S) 24.50 (18" RCP)
 INV (W) 24.50 (18" RCP)
 INV (N) 24.50 (18" RCP)

S-66
 STA 155+00.00 10.59' LT
 CONST PIPE PLUG
 FDOT INDEX 280
 INV (E) 7.70 (18" RCP)

S-67
 STA 155+00.00 40.25' RT
 CONST CURB INLET TYPE P5
 FDOT INDEX 200, 211
 EOP EL 14.56
 INV (S) 7.60 (18" RCP)
 INV (W) 7.60 (18" RCP)
 INV (N) 7.10 (24" RCP)

S-68
 STA 156+55.00 14.44' LT
 CONST PIPE PLUG
 FDOT INDEX 280
 INV (SE) 7.30 (18" RCP)

S-69
 STA 156+15.00 39.26' RT
 CONST CURB INLET TYPE P5
 FDOT INDEX 200, 211
 EOP EL 12.47
 INV (S) 6.60 (24" RCP)
 INV (NW) 7.10 (18" RCP)
 INV (N) 6.60 (30" RCP)

S-70
 STA 162+50.22 106.07' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (W) 4.00 (36" RCP)

S-72
 STA 159+68.69 23.85' LT
 CONST DITCH BOTTOM INLET TYPE D
 W/ TRAVERSABLE SLOT (S)
 FDOT INDEX 232
 GRATE EL 11.28
 INV (E) 5.80 (18" RCP)

S-73
 STA 160+00.00 40.50' RT
 CONST DITCH BOTTOM INLET TYPE D
 FDOT INDEX 232
 GRATE EL 11.19
 INV (S) 5.10 (30" RCP)
 INV (W) 5.60 (18" RCP)
 INV (N) 5.10 (30" RCP)

S-74
 STA 162+50.00 40.50' RT
 CONST DITCH BOTTOM INLET TYPE D
 (J BOTTOM 4.0'x4.0')
 FDOT INDEX 232
 GRATE EL 10.45
 INV (S) 4.20 (30" RCP)
 INV (W) 4.20 (18" RCP)
 INV (E) 4.20 (36" RCP)

S-75
 STA 162+50.00 44.50' LT
 CONST DITCH BOTTOM INLET TYPE C
 W/ TRAVERSABLE SLOT
 FDOT INDEX 232
 GRATE EL 9.50
 INV (E) 4.50 (18" RCP)

S-76
 STA 165+62.22 36.92' LT
 CONST STRAIGHT CONCRETE ENDWALL
 FDOT INDEX 250
 INV (SE) 6.11 (30")

S-77
 STA 165+15.97 30.39' RT
 CONST STRAIGHT CONCRETE ENDWALL
 FDOT INDEX 250
 INV (NW) 6.40 (30")

S-111
 STA 112+80.00 70.10' LT
 CONST DITCH BOTTOM INLET TYPE D
 W/ TRAVERSABLE SLOT
 FDOT INDEX 232
 GRATE EL 6.70
 INV (NE) 0.10 (36" RCP)

S-112
 STA 114+00.00 65.81' LT
 CONST DITCH BOTTOM INLET TYPE D
 W/ TRAVERSABLE SLOT
 FDOT INDEX 232
 GRATE EL 6.70
 INV (SW) 0.00 (36" RCP)
 INV (NE) 0.00 (36" RCP)

S-113
 STA 116+00.00 59.17' LT
 CONST DITCH BOTTOM INLET TYPE D
 W/ DITCH PAVEMENT
 FDOT INDEX 232
 GRATE EL 11.00
 INV (SW) -0.20 (36" RCP)
 INV (E) -0.20 (29"x45" ERCP)

S-114
 STA 116+14.62 97.01' RT
 CONST DITCH BOTTOM INLET TYPE H
 FDOT INDEX 232
 (SEE OUTFALL CONTROL
 STRUCTURE DETAIL)

S-115
 STA 116+50.00 29.00' RT
 CONST MANHOLE TYPE J8 (10' DIA)
 FDOT INDEX 200, 201
 RIM EL 12.40
 INV (W) -0.40 (29"x45" ERCP)
 INV (SE) -0.40 (36" RCP)
 INV (N) -0.40 (54" RCP)

S-116
 STA 119+00.00 29.00' RT
 CONST MANHOLE TYPE J8 (10' DIA)
 FDOT INDEX 200, 201
 RIM EL 12.25
 INV (S) -0.60 (54" RCP)
 INV (N) -0.60 (54" RCP)

S-117
 STA 122+61.98 29.00' RT
 CONST MANHOLE TYPE J8 (10' DIA)
 FDOT INDEX 200, 201
 RIM EL 4.77
 INV (S) -0.90 (54" RCP)
 INV (NE) -0.90 (54" RCP)

S-118
 STA 123+71.15 84.92' RT
 CONST MITERED END SECTION (2:1)
 FDOT INDEX 272
 INV (SW) -1.00 (54" RCP)

S-120
 STA 91+33.62 7.98' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (N) 6.10 (24" RCP)

S-121
 STA 91+80.47 8.74' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (S) 6.00 (24" RCP)

S-122
 STA 94+22.53 9.01' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (N) 5.90 (24" RCP)

S-123
 STA 94+69.69 9.12' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (S) 6.00 (24" RCP)

S-124
 STA 94+94.86 57.05' LT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (N) 5.70 (24" RCP)

S-125
 STA 95+39.32 59.86' LT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (S) 5.80 (24" RCP)

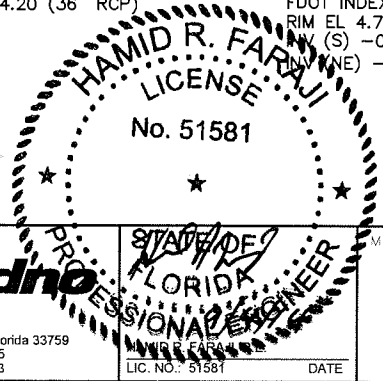
S-126
 STA 103+69.56 11.00' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (NE) 5.90 (24" RCP)

S-127
 STA 104+16.88 11.06' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (SW) 5.90 (24" RCP)

S-128
 STA 96+95.46 53.66' LT
 CONST STRAIGHT CONCRETE ENDWALL
 FDOT INDEX 250
 INV (E) 5.69 (24" RCP)

S-130
 STA 155+50.00 100.00' RT
 CONST MITERED END SECTION (4:1)
 FDOT INDEX 273
 INV (N) 4.50 (36" RCP)

S-131
 STA 157+75.17 120.42' RT
 CONST DITCH BOTTOM INLET TYPE H
 FDOT INDEX 232
 (SEE OUTFALL CONTROL STRUCTURE DETAIL)

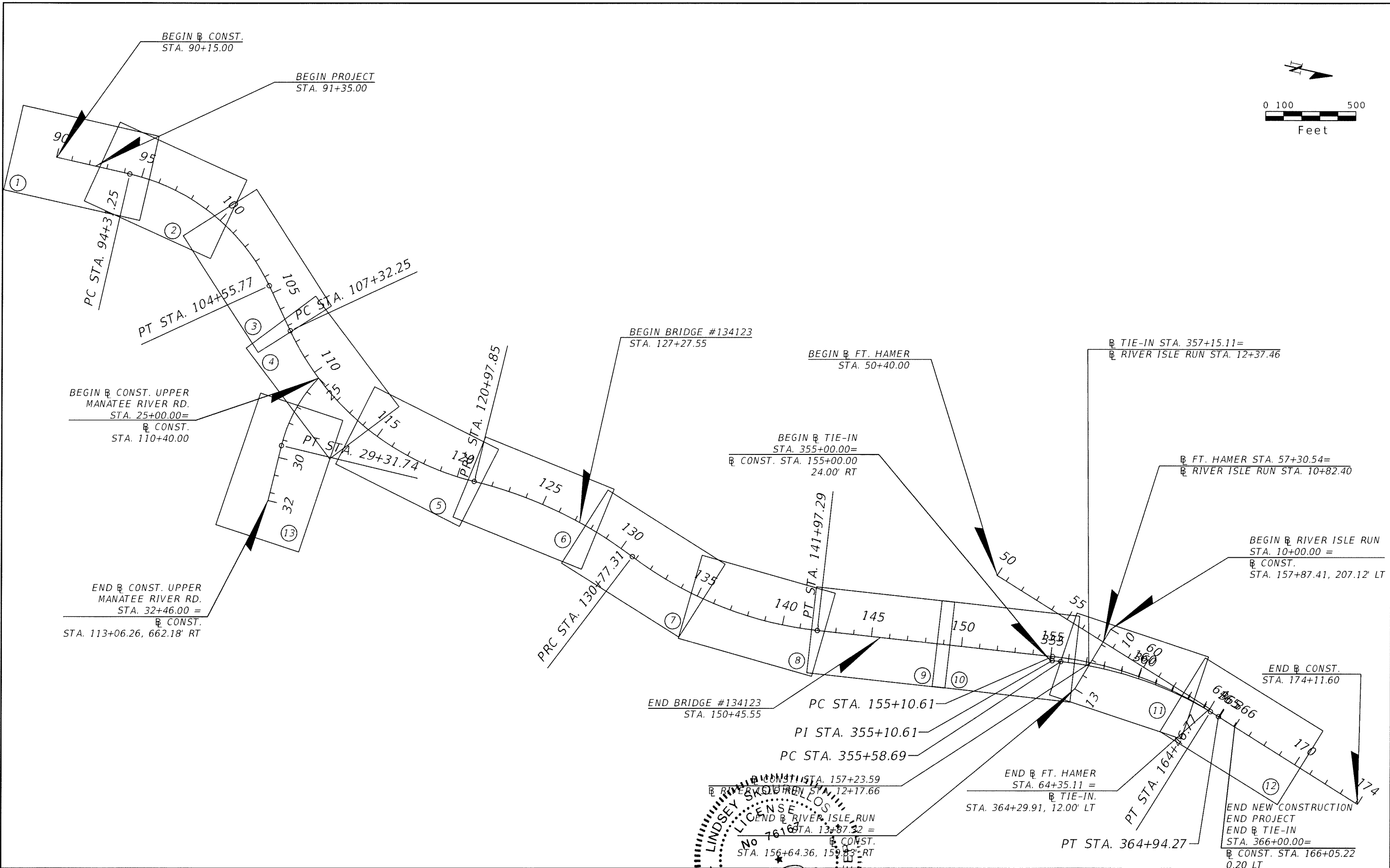
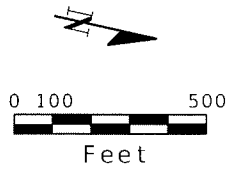


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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

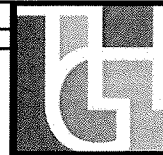
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: PROPOSED DRAINAGE STRUCTURE DATA
 PROJECT NAME: FORT HAMER BRIDGE
 SHEET NO.: 22



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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



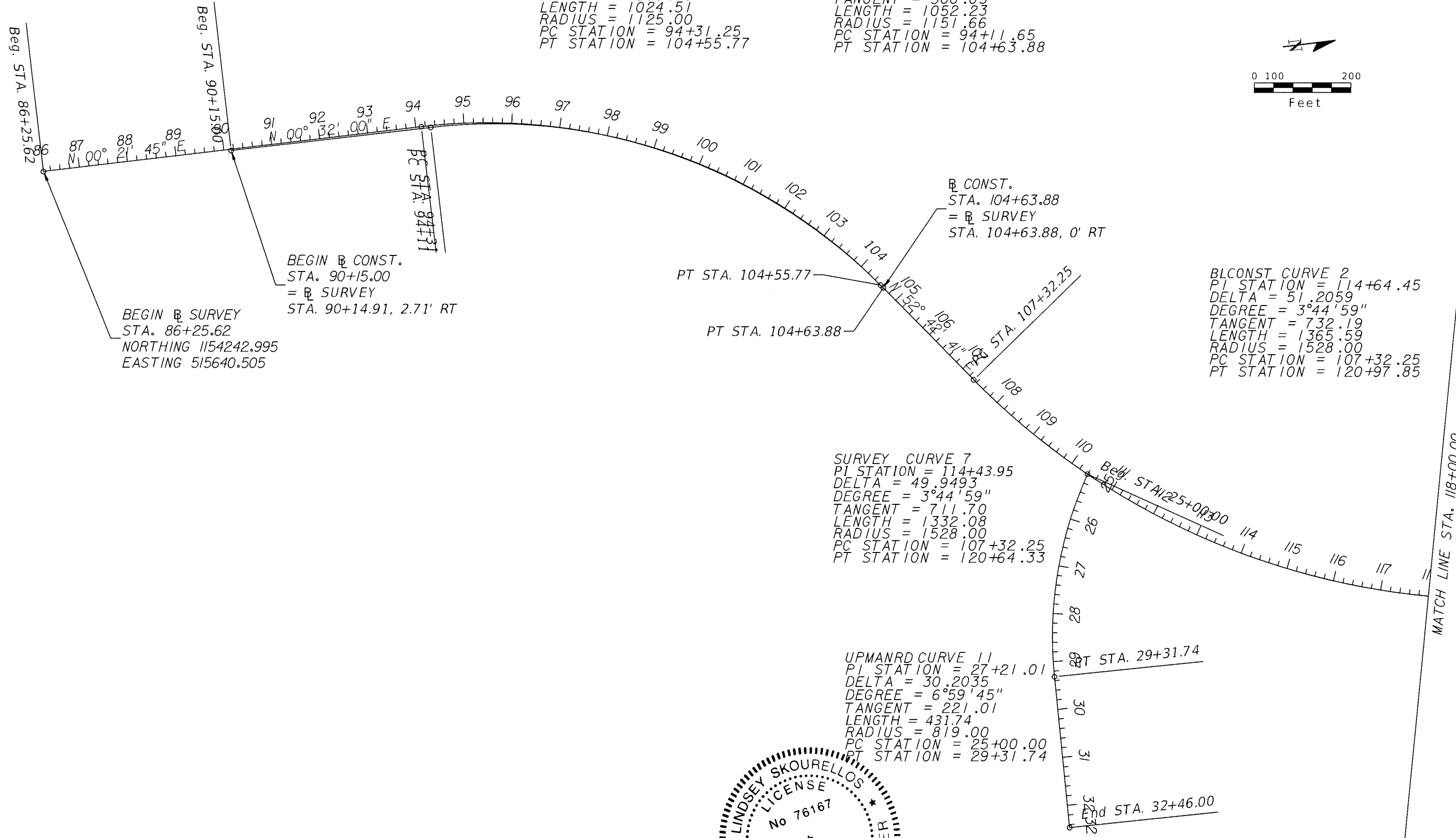
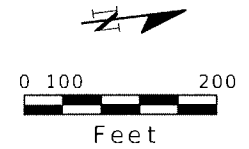
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

LINDSEY SKORPHEIM, P.E.
 LICENSE NO. 76169
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: PROJECT LAYOUT	SHEET NO. 23
PROJECT NAME: FORT HAMER BRIDGE	

BLCONST CURVE 1
 PI STATION = 99+82.12
 DELTA = 52.1780
 DEGREE = 5°05'35"
 TANGENT = 550.86
 LENGTH = 1024.51
 RADIUS = 1125.00
 PC STATION = 94+31.25
 PT STATION = 104+55.77

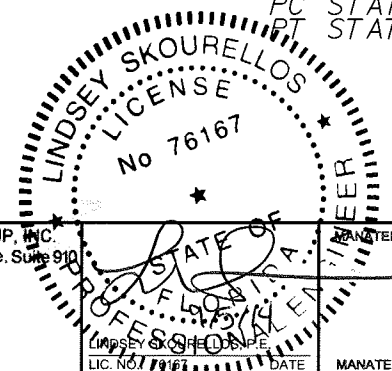
SURVEY CURVE 6
 PI STATION = 99+77.70
 DELTA = 52.3489
 DEGREE = 4°58'30"
 TANGENT = 566.05
 LENGTH = 1052.23
 RADIUS = 1151.66
 PC STATION = 94+11.65
 PT STATION = 104+63.88



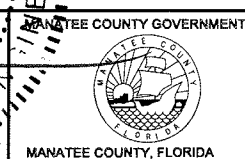
BLCONST CURVE 2
 PI STATION = 114+64.45
 DELTA = 51.2059
 DEGREE = 3°44'59"
 TANGENT = 732.19
 LENGTH = 1365.59
 RADIUS = 1528.00
 PC STATION = 107+32.25
 PT STATION = 120+97.85

SURVEY CURVE 7
 PI STATION = 114+43.95
 DELTA = 49.9493
 DEGREE = 3°44'59"
 TANGENT = 711.70
 LENGTH = 1332.08
 RADIUS = 1528.00
 PC STATION = 107+32.25
 PT STATION = 120+64.33

UPMANRD CURVE 11
 PI STATION = 27+21.01
 DELTA = 30.2035
 DEGREE = 6°59'45"
 TANGENT = 221.01
 LENGTH = 431.74
 RADIUS = 819.00
 PC STATION = 25+00.00
 PT STATION = 29+31.74

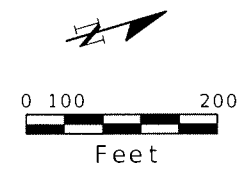


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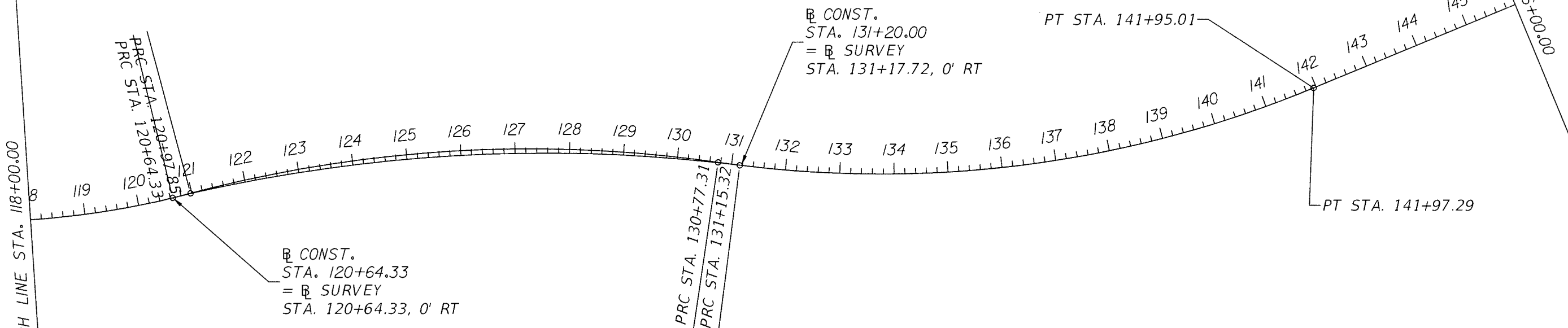
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PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.:			24

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



BLCONST CURVE 3
 PI STATION = 125+94.49
 DELTA = 23.3830
 DEGREE = 2°23'14"
 TANGENT = 496.65
 LENGTH = 979.47
 RADIUS = 2400.00
 PC STATION = 120+97.85
 PT STATION = 130+77.31

SURVEY CURVE 8
 PI STATION = 125+95.80
 DELTA = 21.0182
 DEGREE = 1°59'59"
 TANGENT = 531.47
 LENGTH = 1050.99
 RADIUS = 2865.00
 PC STATION = 120+64.33
 PT STATION = 131+15.32



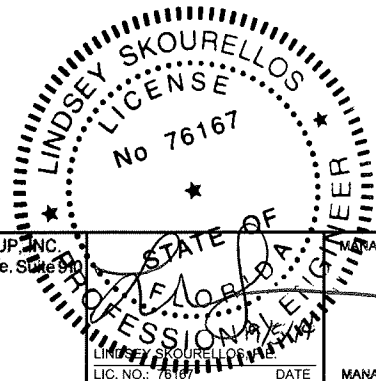
CONST.
 STA. 120+64.33
 = SURVEY
 STA. 120+64.33, 0' RT

CONST.
 STA. 131+20.00
 = SURVEY
 STA. 131+17.72, 0' RT

PRC STA. 130+77.31
 PRC STA. 131+15.32

BLCONST CURVE 4
 PI STATION = 136+51.19
 DELTA = 30.8066
 DEGREE = 2°45'02"
 TANGENT = 573.88
 LENGTH = 1119.98
 RADIUS = 2083.00
 PC STATION = 130+77.31
 PT STATION = 141+97.29

SURVEY CURVE 9
 PI STATION = 136+67.58
 DELTA = 29.6983
 DEGREE = 2°45'02"
 TANGENT = 552.26
 LENGTH = 1079.69
 RADIUS = 2083.00
 PC STATION = 131+15.32
 PT STATION = 141+95.01



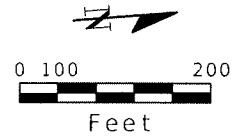
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THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 900
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

LINDSEY SKOURELLOS
 LICENSE No 76167
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 LIC. NO. 76167
 DATE
 MANATEE COUNTY, FLORIDA

SHEET TITLE: CURVE DATA SHEET (2)		SHEET NO. 25
PROJECT NAME: FORT HAMER BRIDGE		



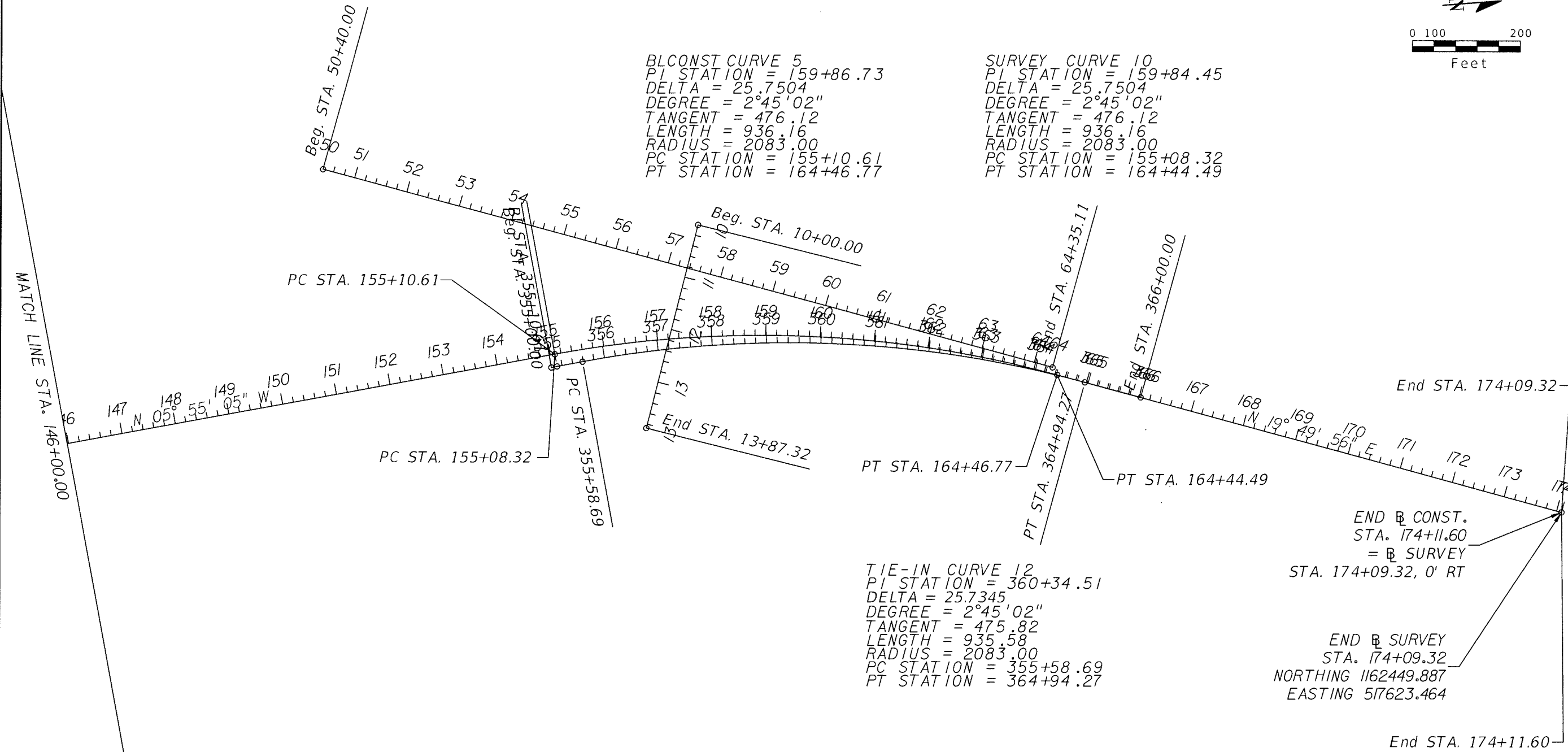
BLCONST CURVE 5
 PI STATION = 159+86.73
 DELTA = 25.7504
 DEGREE = 2°45'02"
 TANGENT = 476.12
 LENGTH = 936.16
 RADIUS = 2083.00
 PC STATION = 155+10.61
 PT STATION = 164+46.77

SURVEY CURVE 10
 PI STATION = 159+84.45
 DELTA = 25.7504
 DEGREE = 2°45'02"
 TANGENT = 476.12
 LENGTH = 936.16
 RADIUS = 2083.00
 PC STATION = 155+08.32
 PT STATION = 164+44.49

TIE-IN CURVE 12
 PI STATION = 360+34.51
 DELTA = 25.7345
 DEGREE = 2°45'02"
 TANGENT = 475.82
 LENGTH = 935.58
 RADIUS = 2083.00
 PC STATION = 355+58.69
 PT STATION = 364+94.27

END \square CONST.
 STA. 174+11.60
 = \square SURVEY
 STA. 174+09.32, 0' RT

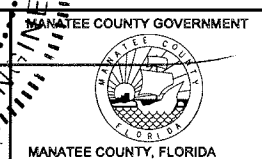
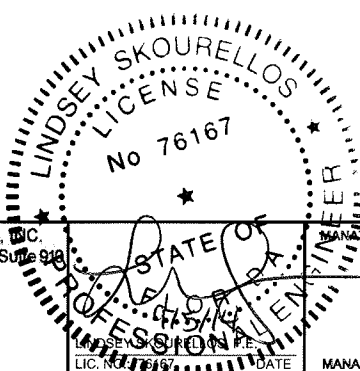
 END \square SURVEY
 STA. 174+09.32
 NORTHING 1162449.887
 EASTING 517623.464



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SHEET TITLE:	CURVE DATA SHEET (3)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	26

GENERAL NOTES

1. BM DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD - 29)
2. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED.
3. THE REMOVAL OF ANY DRAINAGE STRUCTURE OR PIPE WITHIN 5.0 FEET OF ANY UTILITY THAT IS IN SERVICE SHALL BE ACCOMPLISHED SO AS NOT TO DAMAGE THE UTILITY.
4. ANY PORTION OF THE EXISTING RIGHT OF WAY THAT IS DISTURBED OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE REDRESSED AND SODDED AT THE CONTRACTOR'S EXPENSE.
5. PRIOR TO CONSTRUCTION, A SITE PLAN WITH ANY AREAS OF THE RIGHT OF WAY INTENDED TO BE UTILIZED FOR STAGING CONSTRUCTION EQUIPMENT OR MATERIAL STORAGE SHALL BE SUBMITTED FOR THE APPROVAL OF THE ENGINEER. THE PLAN SHALL SHOW THE PROPOSED LOCATIONS FOR PARKING IDLE EQUIPMENT, DESIGNATED LOCATIONS FOR EMPLOYEE PARKING, AND WORK STAGING AREAS. THE SITE PLAN MUST BE UPDATED AND MAINTAINED VIA SUBMITTALS AND APPROVALS FOR THE DIFFERENT PHASES OF CONSTRUCTION THROUGHOUT THE LIFE OF THE PROJECT.
6. NO STOCKPILE OF MATERIAL IS PERMITTED WITHIN THE PROJECT LIMITS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. ALL BOTTOM PROFILE ELEVATIONS AND CROSS SECTIONS FOR TREATMENT/ATTENUATION SWALES SHALL BE CONSTRUCTED TO WITHIN ±0.1 FEET OF THE VALUES SHOWN ON THE PLANS.
8. EXISTING DRIVEWAYS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE REPLACED AT THE SAME LOCATION AND WIDTH, UNLESS OTHERWISE SHOWN IN THE PLANS. REFER TO MANATEE COUNTY STANDARD 101.0 FOR RURAL DRIVEWAY CONSTRUCTION.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING DRAINAGE INVERT ELEVATIONS THAT WILL REMAIN PART OF THE PROPOSED DRAINAGE SYSTEM. ANY DIFFERENCE FROM PLAN ELEVATION SHALL BE REPORTED TO THE ENGINEER.
10. EXISTING DRAINAGE STRUCTURES AND PIPES WITHIN CONSTRUCTION LIMITS SHALL BE REMOVED, UNLESS OTHERWISE NOTED.

PAY ITEM NOTES

- 101-1 INCLUDES COST FOR ALL APPLICATION FEES TO SECURE PERMITS FOR THE NATIONAL POLLUTANT DISCHARGE SYSTEM (NPDES) IN ACCORDANCE WITH FLORIDA STATUTE (F.S. 62-621). PLEASE CALL THE NPDES STORM WATER NOTICES CENTER AT (866) 336-6312 OR (850) 297-1232 FOR CURRENT FEE SCHEDULE.
- 102-1 INCLUDES APPROXIMATELY 538 SY OF TEMPORARY PAVEMENT. THE LUMP SUM PAY ITEM "MAINTENANCE OF TRAFFIC" ALSO INCLUDES THE COST TO COORDINATE TRAFFIC CONTROL CONSTRUCTION WITH ANY ADJACENT CONSTRUCTION CONTRACTS AND THE COST OF ANY MAINTENANCE OF TRAFFIC ITEM PAID FOR BY A SEPARATE PAY ITEM NUMBER.
- 110-1-1 SHALL INCLUDE THE COST FOR COMPLETE REMOVAL OF EXISTING BASE.
- 120-1 REMOVE CONSTRUCTION TRASH AND DEBRIS FROM WITHIN THE PROJECT LIMITS ON A DAILY BASIS. THE COST FOR THIS WORK IS TO BE INCLUDED UNDER THE PAY ITEM "EXCAVATION".
- 120-4 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE SUITABILITY OF EXCAVATED MATERIAL FOR USE ON THE PROJECT IN ACCORDANCE WITH THE APPLICABLE STANDARD SPECIFICATIONS AND ROADWAY AND TRAFFIC DESIGN STANDARDS. THE CONTRACTOR SHALL ALSO CONSIDER THE SEQUENCE OF WORK AND MOT PHASING IN THE DETERMINATION OF THE AVAILABILITY OF THIS MATERIAL. ANY EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH SECTION 120-5.
- 430-174-118 WHERE SHOWN, PIPE PLUG IS INCIDENTAL TO PIPE COST.
- 522-2 RURAL DRIVEWAYS SHALL BE CONSTRUCTED ACCORDING TO MANATEE COUNTY STANDARD 101.0.
- 1644-816-08 INCLUDE NEW 45 BEND OFFSET UNDER PROPOSED DITCH TO MAINTAIN 36" OF COVER UNDER DITCH LINE. ALL BENDS SHALL BE RESTRAINED JOINT PER COUNTY UTILITY SPECIFICATIONS.

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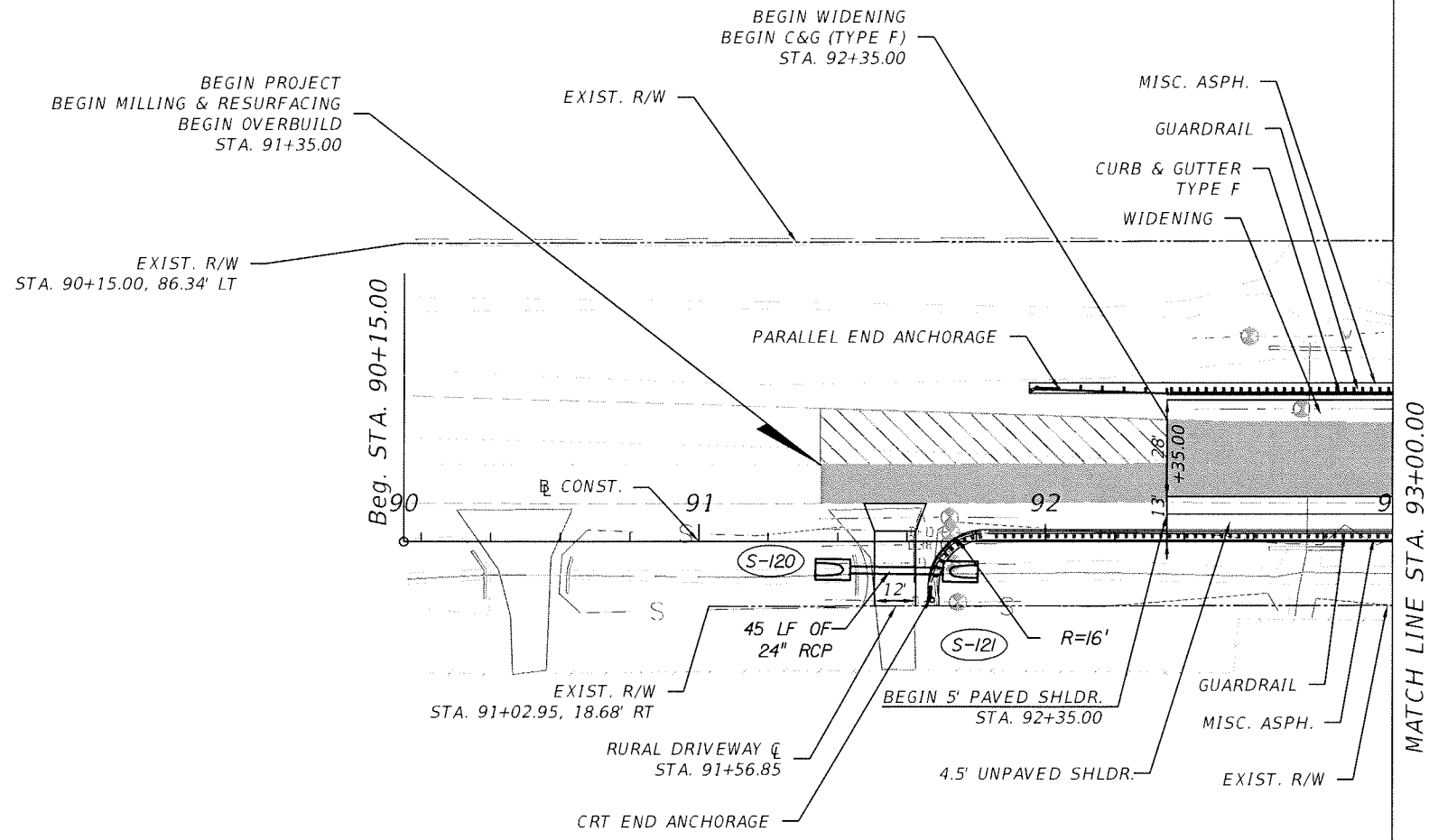
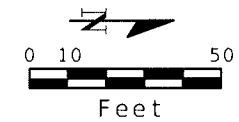
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 5461 W. Waters Avenue, Suite 200
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



DATE 11/3/2014 2:53:25 PM



SHEET TITLE:	GENERAL NOTES
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	27



MATCH LINE STA. 93+00.00

LEGEND

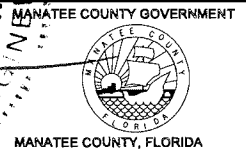
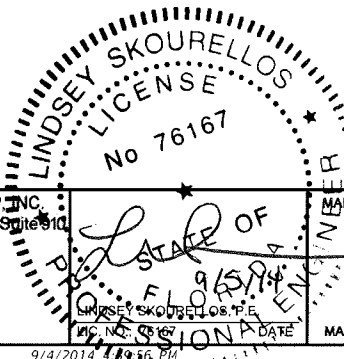
- MILL & OVERBUILD
- MILL & RESURFACE
- PAVEMENT REMOVAL

REVISIONS

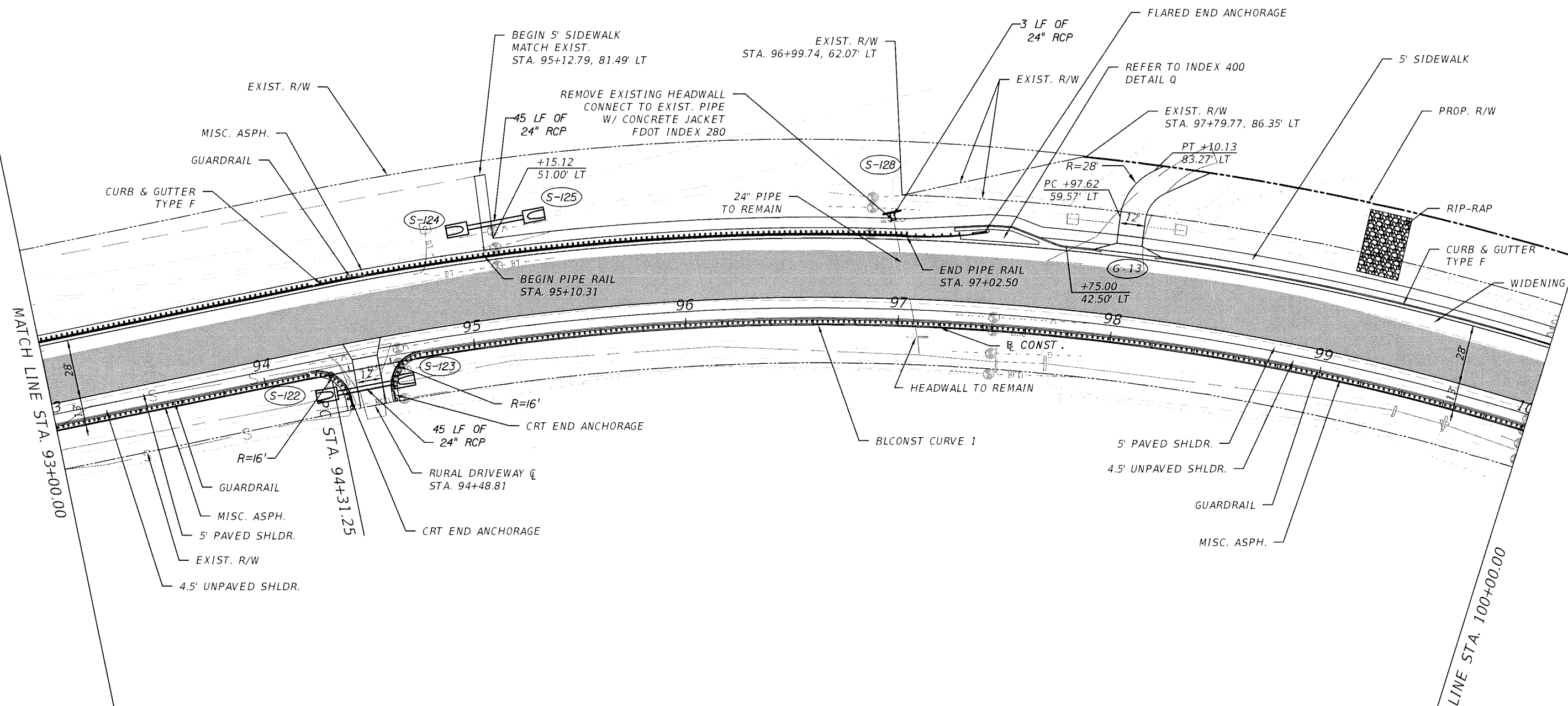
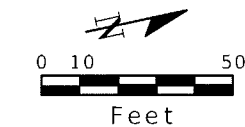
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 5461 W. Waters Avenue, Suite 110
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE: PLAN SHEET (1)	SHEET NO. 28
PROJECT NAME: FORT HAMER BRIDGE	

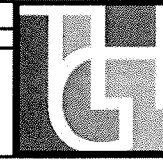


LEGEND

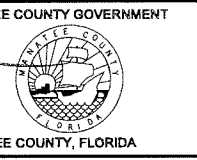
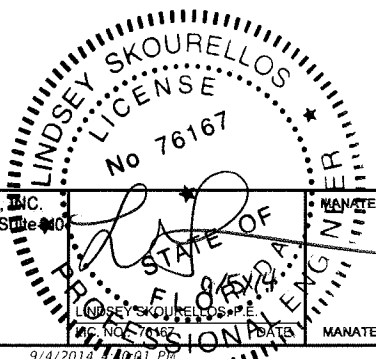
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

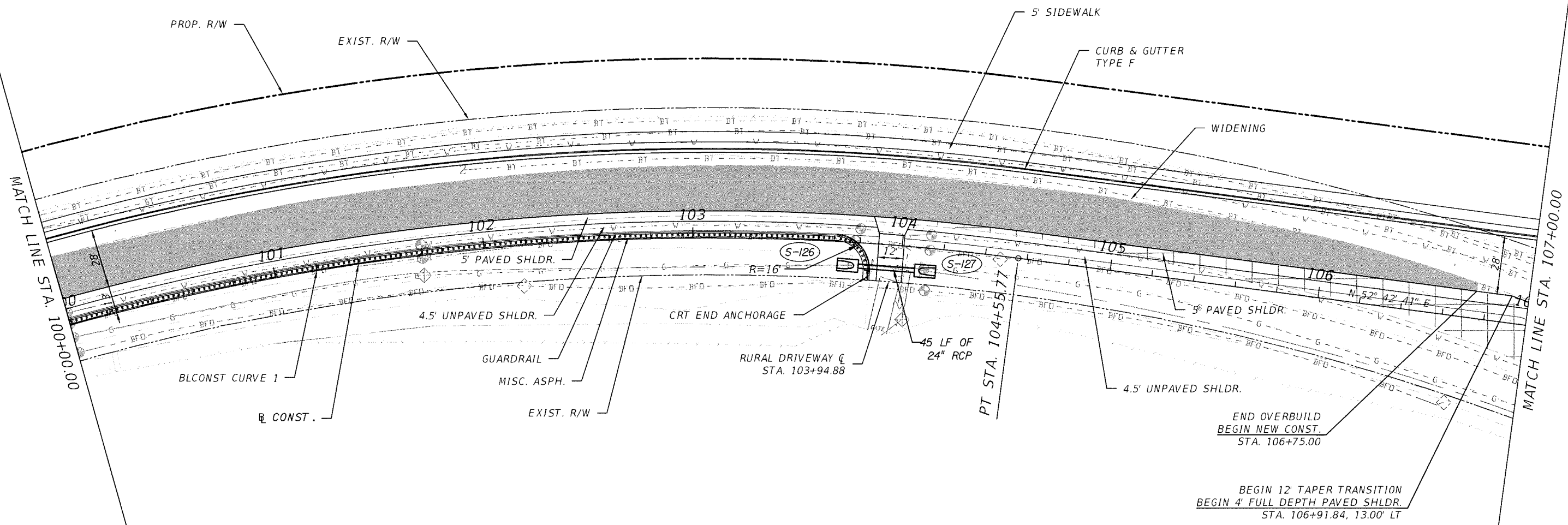
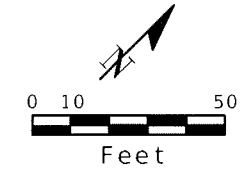
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 100
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



MANATEE COUNTY GOVERNMENT	SHEET TITLE: PLAN SHEET (2)
PROJECT NAME: FORT HAMER BRIDGE	SHEET NO. 29

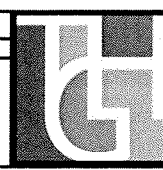


LEGEND

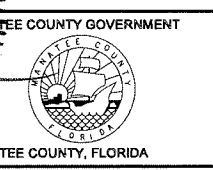
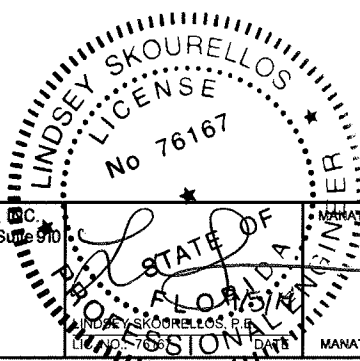
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	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

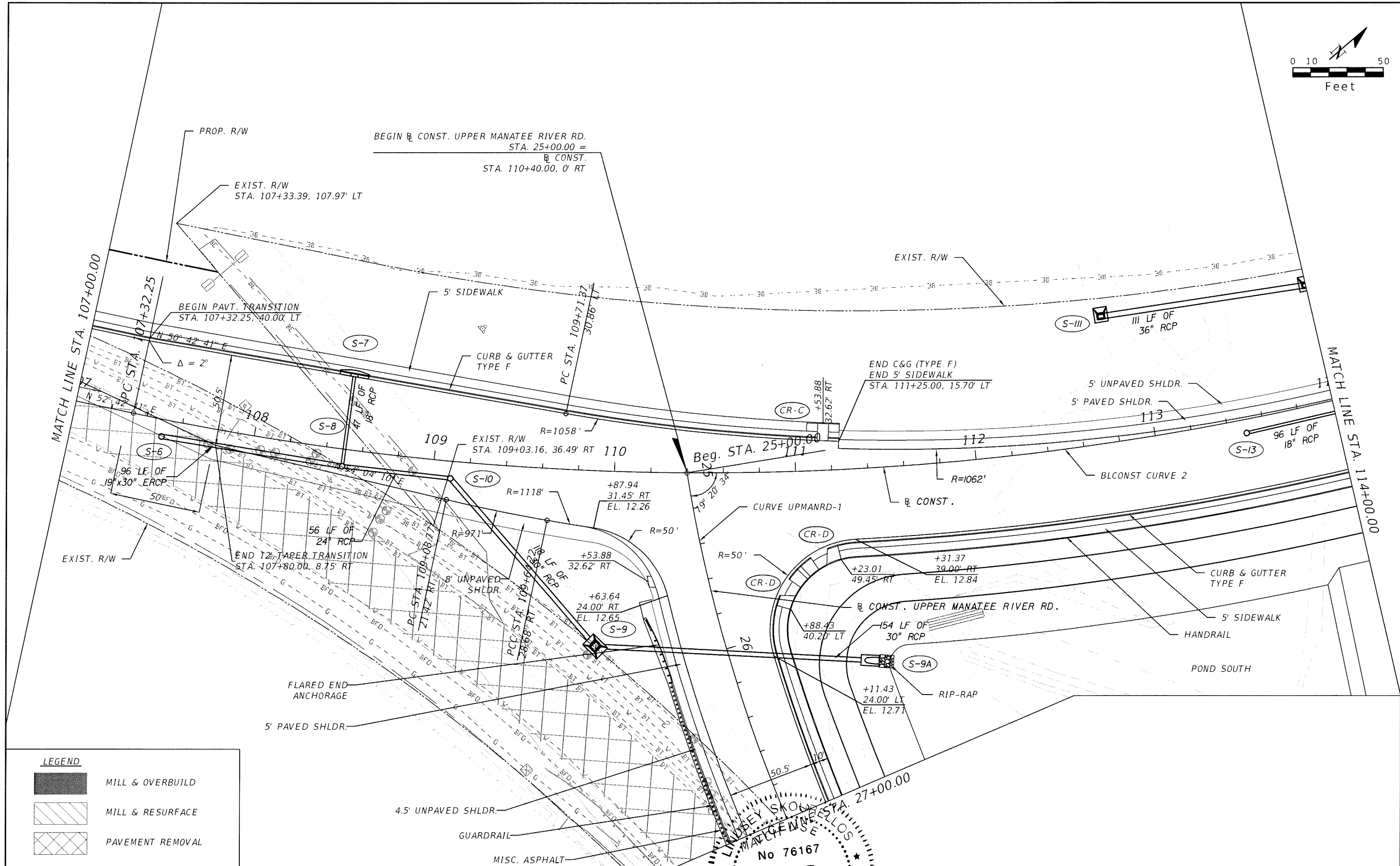
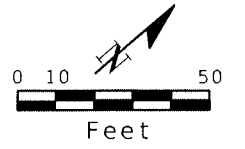
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 TAMPA, FL 33634
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 C.A. NO. 00027842



SHEET TITLE: PLAN SHEET (3)		SHEET NO. 30
PROJECT NAME: FORT HAMER BRIDGE		



LEGEND

	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

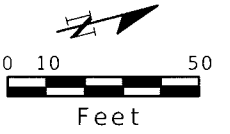
REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

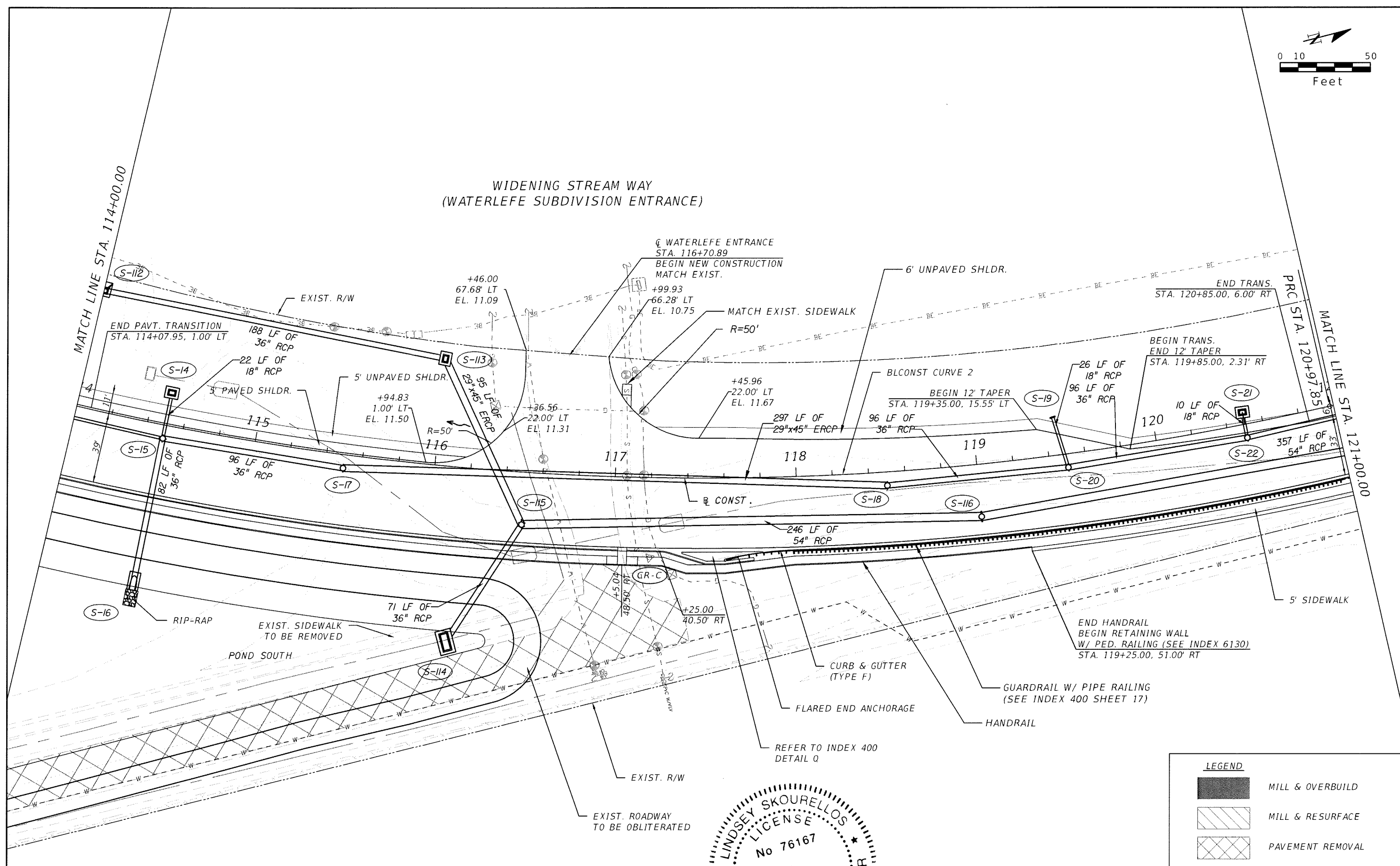
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE:	PLAN SHEET (4)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	31



WIDENING STREAM WAY
(WATERLEFE SUBDIVISION ENTRANCE)

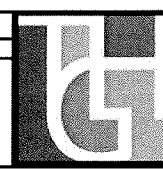


LEGEND

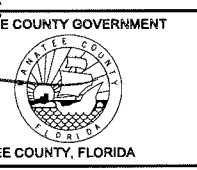
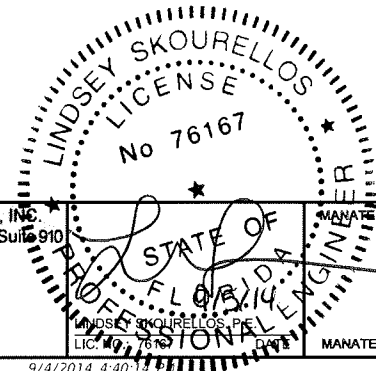
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

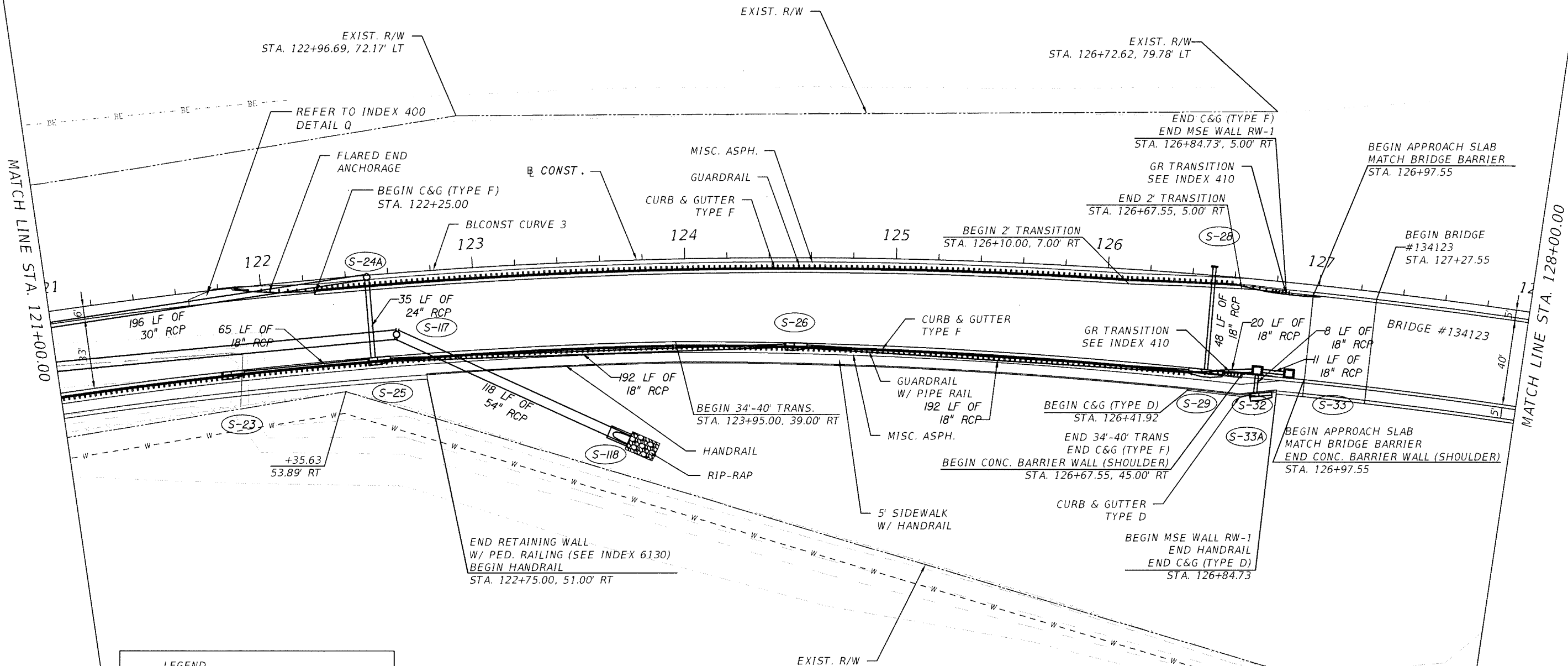
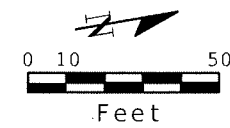
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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TAMPA, FL 33634
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C.A. NO. 00027842



SHEET TITLE: PLAN SHEET (5)		SHEET NO. 32
PROJECT NAME: FORT HAMER BRIDGE		



LEGEND

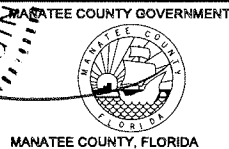
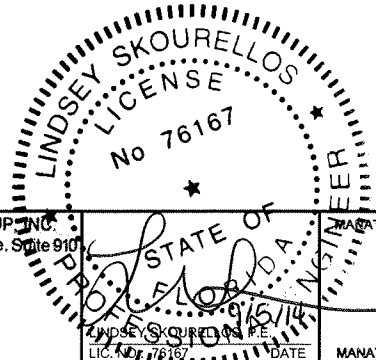
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 C.A. NO. 00027842

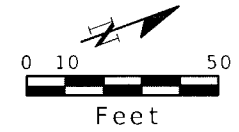


SHEET TITLE: PLAN SHEET (6)		SHEET NO. 33
PROJECT NAME: FORT HAMER BRIDGE		

Mitchell Johnson

9/4/2014 4:40:19 PM

J:\PROJECTS - CADD\09-2392BG\roadway\dwg\PLANRDF\thamer.dwg



MATCH LINE STA. 128+00.00

MATCH LINE STA. 135+00.00

RIVER 1B

HORIZONTAL CLEARANCE REQ.
FOR MAIN CHANNEL

BLCONST. CURVE 4

BLCONST. CURVE 3

R. CONST.

129

130

131

132

133


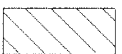

134

BRIDGE #134123

PRC STA. 130+77.31

40'

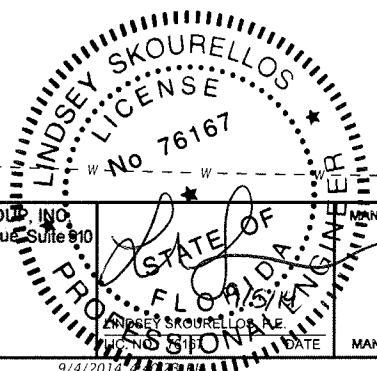
40'

LEGEND		
	MILL & OVERBUILD	
	MILL & RESURFACE	
	PAVEMENT REMOVAL	

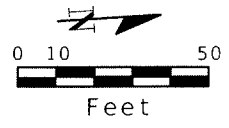
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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C.A. NO. 00027842



SHEET TITLE:	PLAN SHEET (7)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	34



RIVER 1B

MATCH LINE STA. 135+00.00

PT STA. 141+97.29
MATCH LINE STA. 142+00.00

136

137

138

139

140

141

CONST.
BLCONST CURVE 4

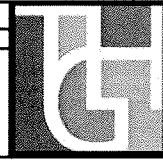
BRIDGE #134123

LEGEND

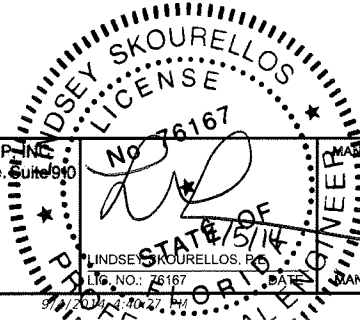
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 900
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

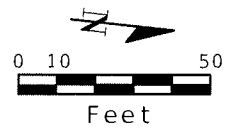


MAY 2014
LINDSEY SKOURELLOS, P.E.
LICENSE NO. 76167
MANATEE COUNTY, FLORIDA



SHEET TITLE:	PLAN SHEET (8)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	35

Mitchell Johnson

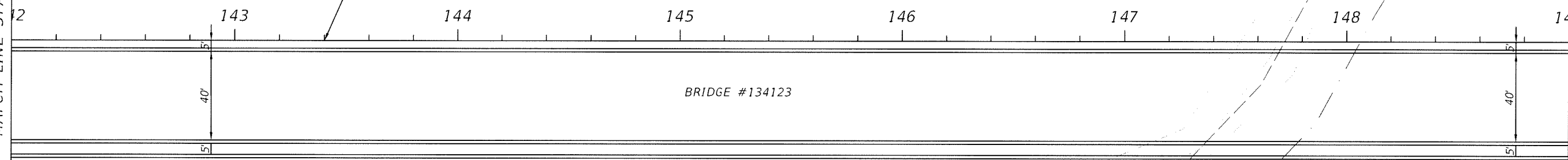


RIVER 1B

CONST.

MATCH LINE STA. 142+00.00

MATCH LINE STA. 149+00.00



LEGEND

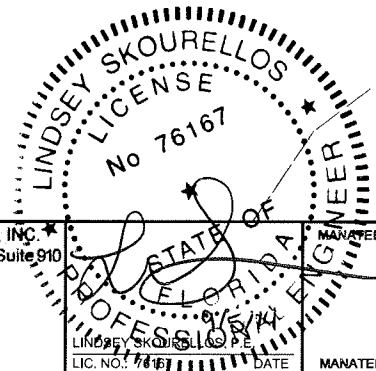
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:	PLAN SHEET (9)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	36



MATCH LINE STA. 149+00.00

MATCH LINE STA. 156+00.00

END APPROACH SLAB
MATCH BRIDGE BARRIER
STA. 150+75.55, 3.50' RT

BEGIN MSE WALL RW-2
BEGIN C&G (TYPE F)
STA. 150+88.30, 5.00' RT

END BRIDGE #134123
STA. 150+45.55

GR TRANSITION
SEE INDEX 410

BEGIN 10' PAVT. TRANSITION
STA. 151+05.55, 5.00' RT

END 10' PAVT. TRANSITION
STA. 153+70.00, 5.00' LT

B CONST.

PC STA. 155+10.61

BLCNST CURVE 5

TIE-IN CURVE 1

11 LF OF
18" RCP

23 LF OF
18" RCP

43 LF OF
18" RCP

END 6' PAVT. TRANSITION
STA. 153+70.00, 39.00' RT

REFER TO INDEX 400
DETAIL Q

47 LF OF
18" RCP

109 LF OF
24" RCP

BRIDGE #134123

S-63

S-63A

S-64

S-65

S-66

S-67

S-130

HORIZONTAL CLEARANCE
REQ. FOR ACCESS ROAD
& NATURE TRAIL

GR TRANSITION
SEE INDEX 410

END C&G (TYPE D)
STA. 151+30.65

9 LF OF
18" RCP

CURB & GUTTER (TYPE D)

END CONC. BARRIER WALL (SHOULDER)
BEGIN 6' PAVT. TRANSITION
STA. 151+05.63, 45.00' RT

END MSE WALL RW-2
BEGIN HANDRAIL
BEGIN C&G (TYPE D)
STA. 150+86.30

END APPROACH SLAB
BEGIN CONC. BARRIER WALL (SHOULDER)
MATCH BRIDGE BARRIER
STA. 150+75.55, 45.00' RT

FLARED END ANCHORAGE

GUARDRAIL
W/ PIPE RAIL

END HANDRAIL
STA. 154+75.00, 52.00' RT

BEGIN B TIE-IN
STA. 355+00.00=
B CONST.
STA. 155+00.00, 24.00' RT

Beg. STA. 355+00.00

PI STA. 355+10.61

RIP-RAP

CURB & GUTTER
(TYPE F)

LEGEND

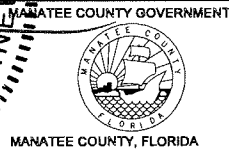
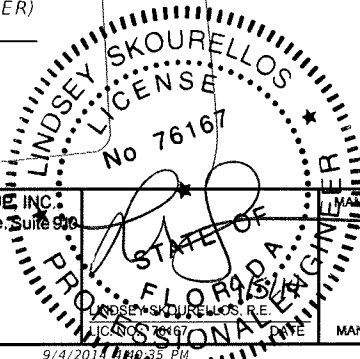
- MILL & OVERBUILD
- MILL & RESURFACE
- PAVEMENT REMOVAL

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 900
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

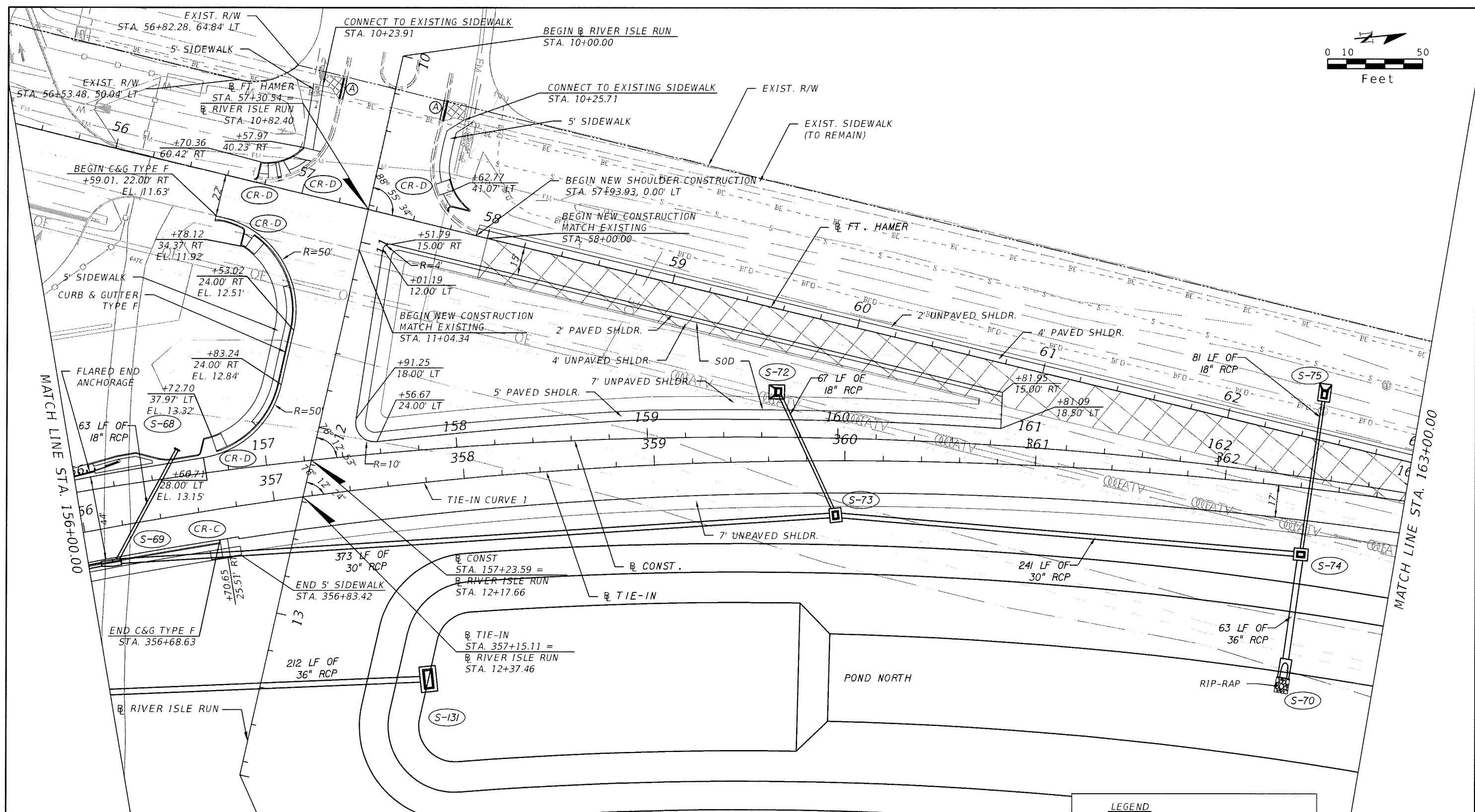
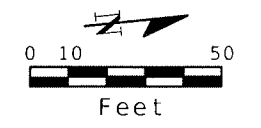


SHEET TITLE: PLAN SHEET (10)		SHEET NO. 37
PROJECT NAME: FORT HAMER BRIDGE		

Mitchell Johnson

9/4/2014 10:25 PM

J:\PROJECTS - CADD\09-2392BG\roadway\dwg\PLANRdfthamer.dwg

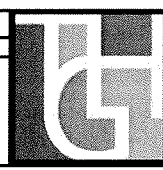


LEGEND

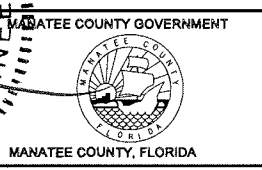
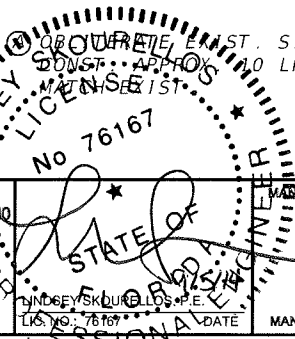
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

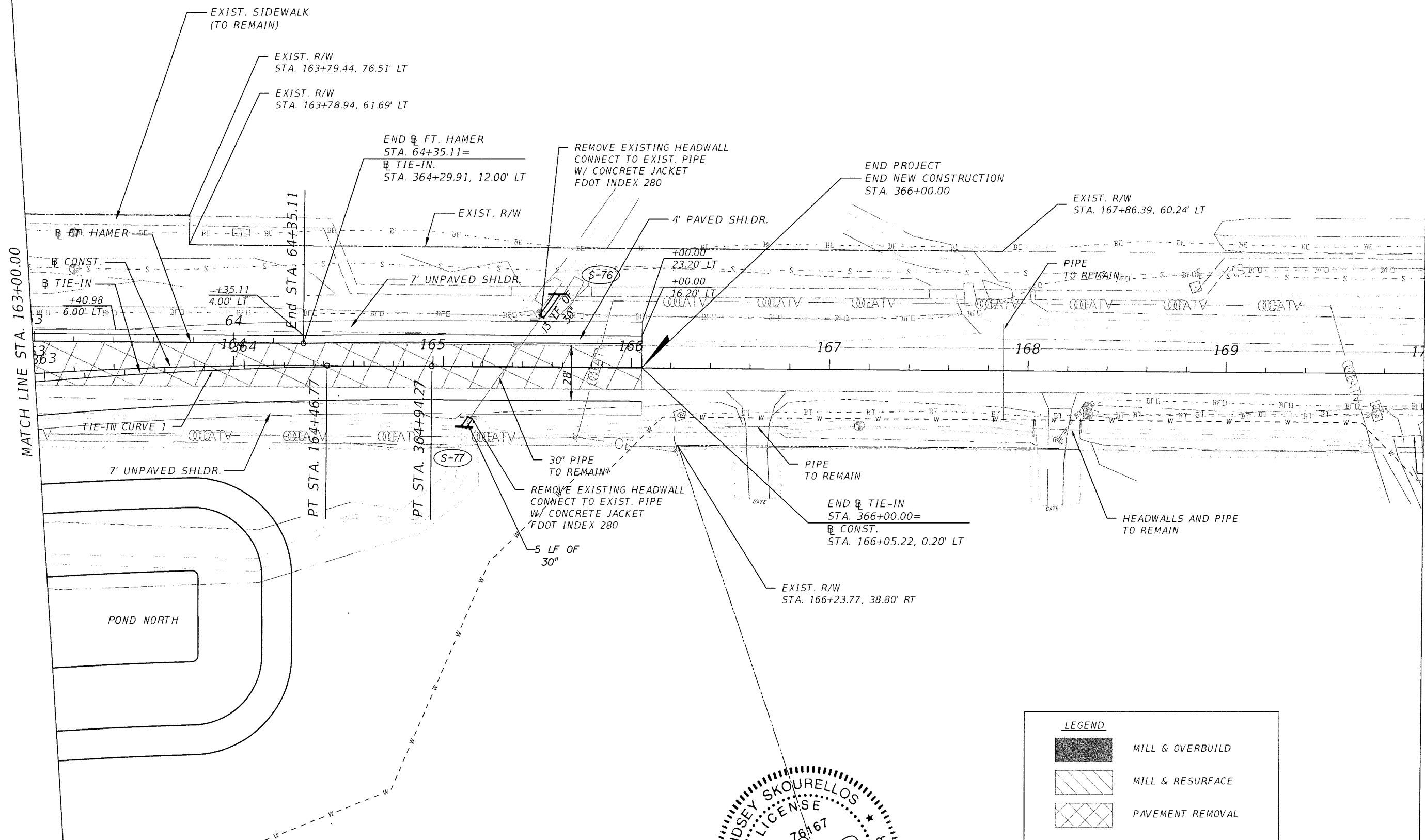
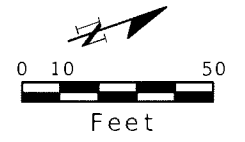
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE: PLAN SHEET (11)		SHEET NO. 38
PROJECT NAME: FORT HAMER BRIDGE		



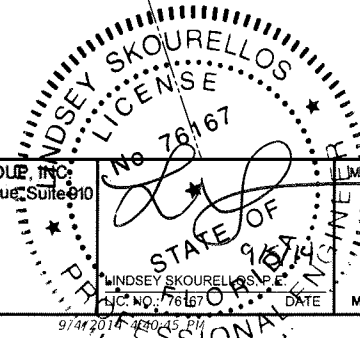
MATCH LINE STA. 163+00.00

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



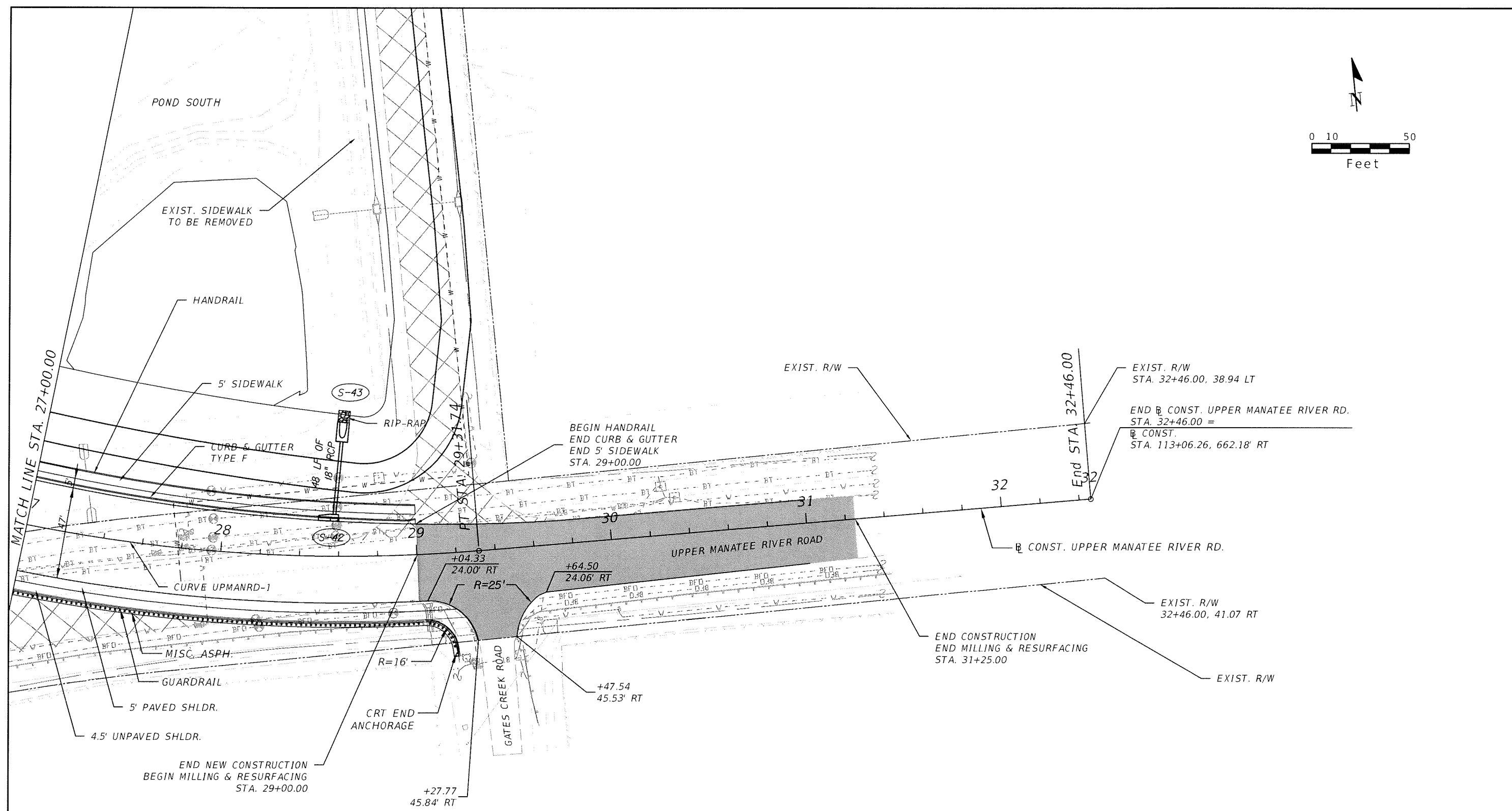
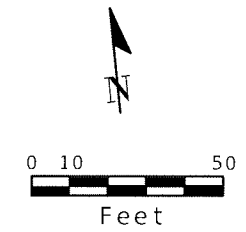
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 410
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



LEGEND	
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

SHEET TITLE: **PLAN SHEET (12)**
 PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO. **39**



LEGEND

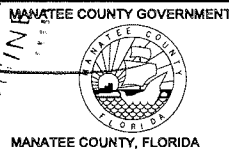
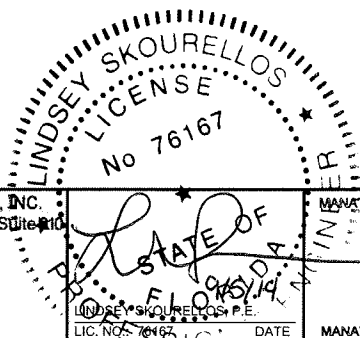
	MILL & OVERBUILD
	MILL & RESURFACE
	PAVEMENT REMOVAL

REVISIONS

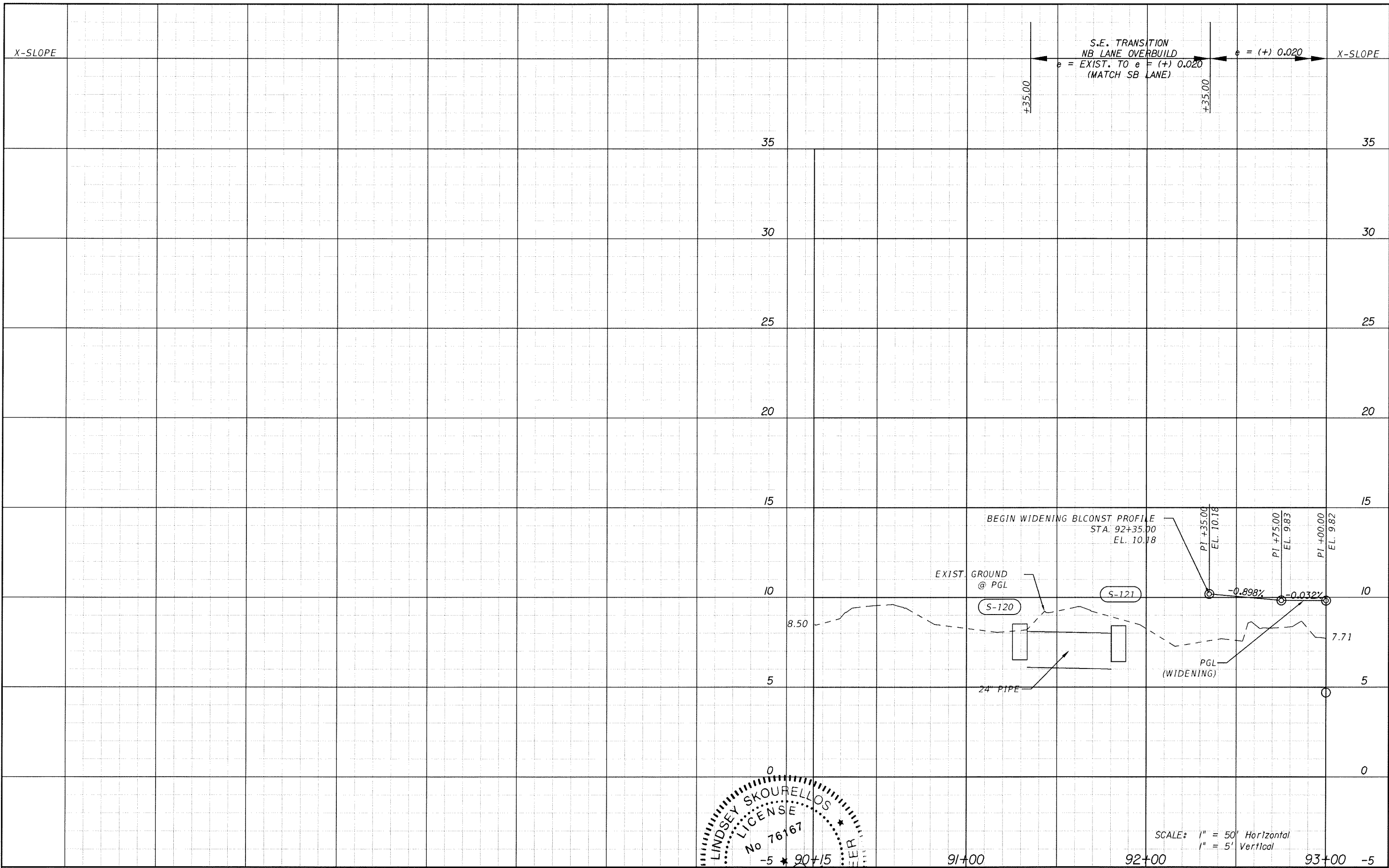
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



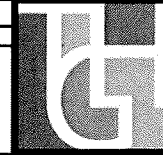
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 110
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



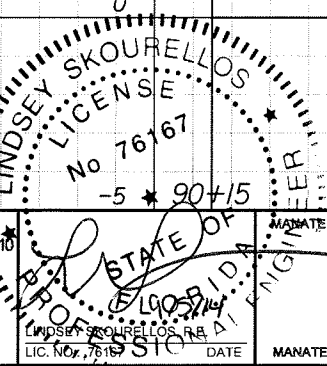
SHEET TITLE: PLAN SHEET (13)		SHEET NO. 40
PROJECT NAME: FORT HAMER BRIDGE		



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



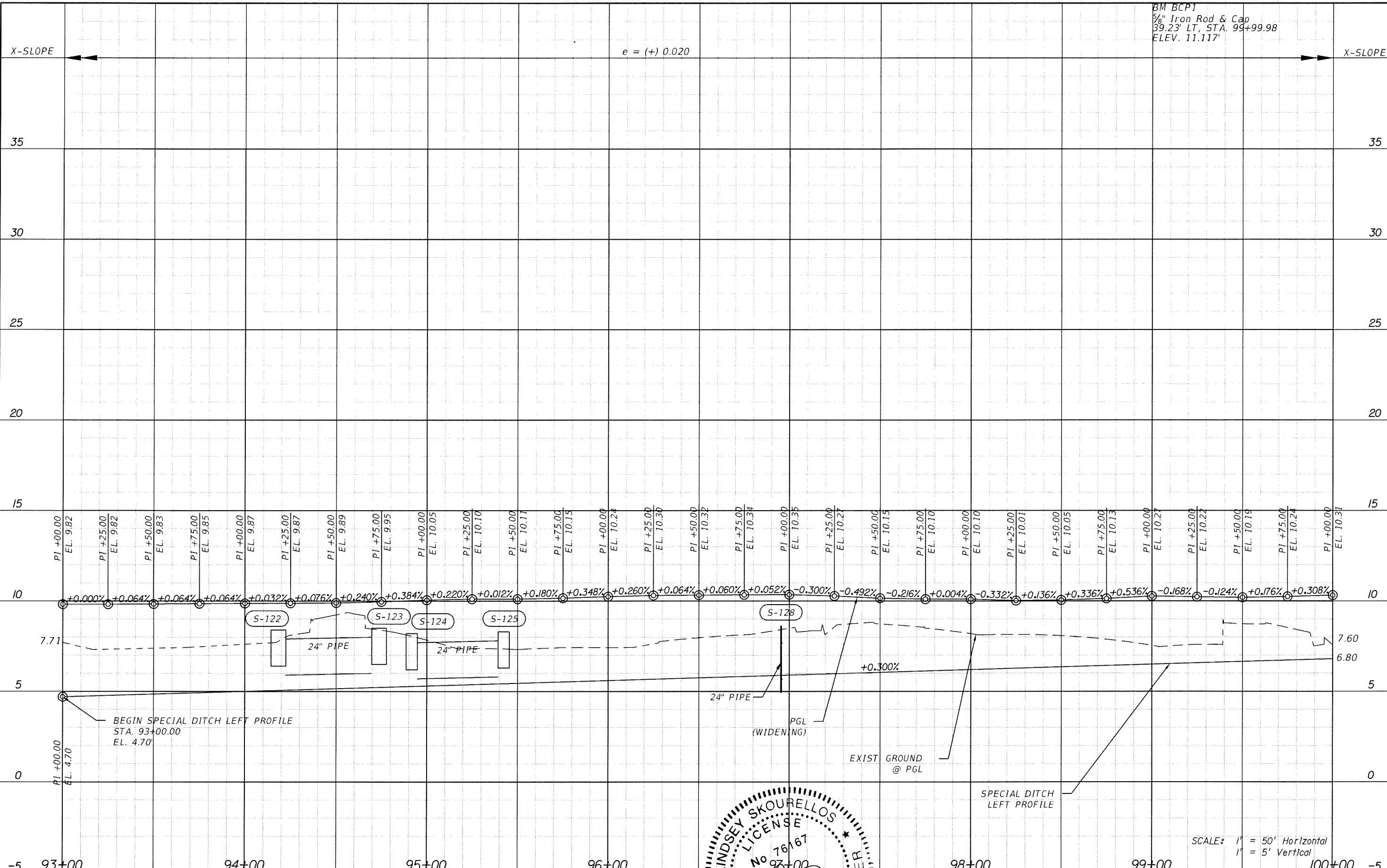
THE HEIMBURG GROUP, INC.
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 (813) 749-0823
 C.A. NO. 00027842



MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE:		PROFILE SHEET (1)
PROJECT NAME:		FORT HAMER BRIDGE
SHEET NO.:		41

BM BCP1
 3/8" Iron Rod & Cap
 39.23' LT, STA. 99+99.98
 ELEV. 11.117'



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

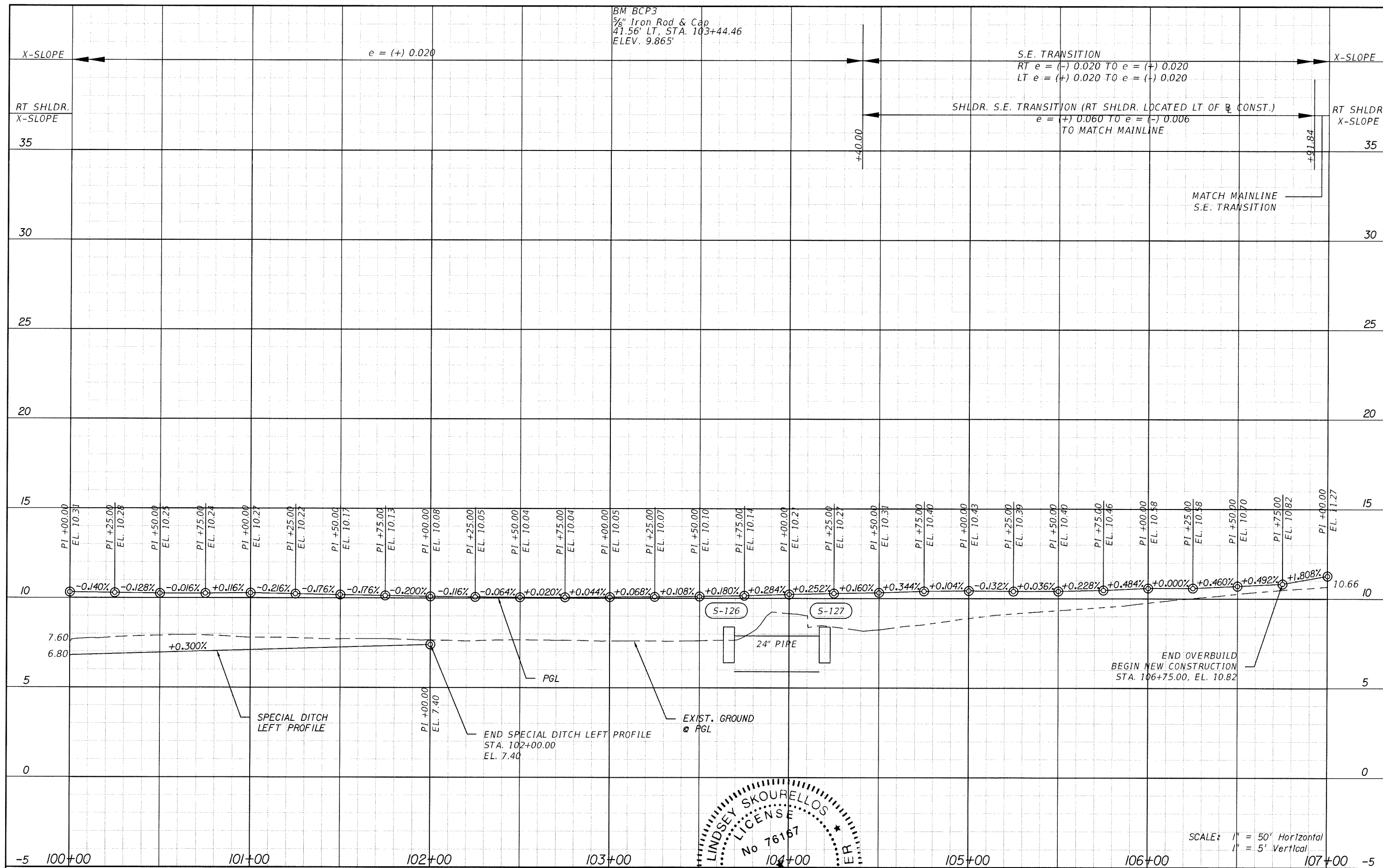
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

LINDSEY SKOURELLOS
 LICENSE No. 76167
 STATE OF FLORIDA
 ENGINEER
 LIC. NO.: 76167 DATE: 9/15/14

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: PROFILE SHEET (2)		SHEET NO. 42
PROJECT NAME: FORT HAMER BRIDGE		

SCALE: 1" = 50' Horizontal
 1" = 5' Vertical



BM BCP3
5/8" Iron Rod & Cap
41.56' LT, STA. 103+44.46
ELEV. 9.865'

S.E. TRANSITION
RT e = (-) 0.020 TO e = (+) 0.020
LT e = (+) 0.020 TO e = (-) 0.020

SHLDR. S.E. TRANSITION (RT SHLDR. LOCATED LT OF R CONST.)
e = (+) 0.060 TO e = (-) 0.006
TO MATCH MAINLINE

MATCH MAINLINE
S.E. TRANSITION

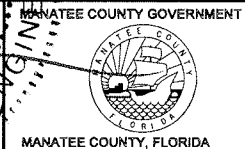
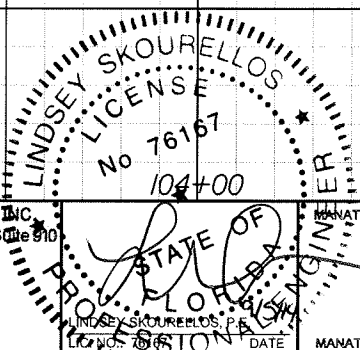
END OVERBUILD
BEGIN NEW CONSTRUCTION
STA. 106+75.00, EL. 10.82

SCALE: 1" = 50' Horizontal
1" = 5' Vertical

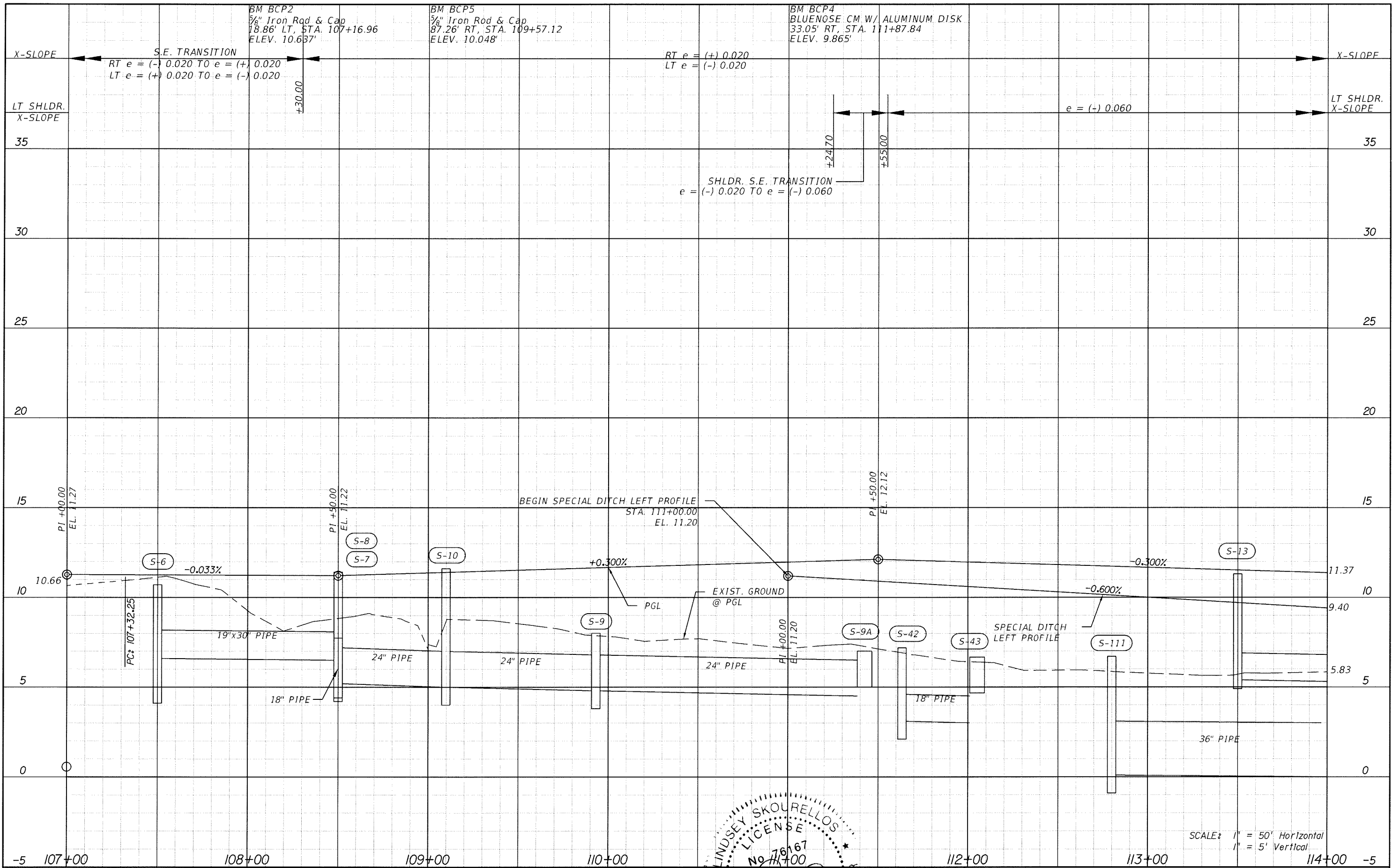
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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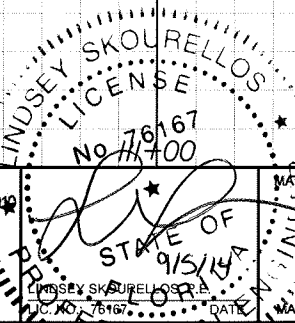
SHEET TITLE:		PROFILE SHEET (3)
PROJECT NAME:		FORT HAMER BRIDGE
SHEET NO.:		43



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

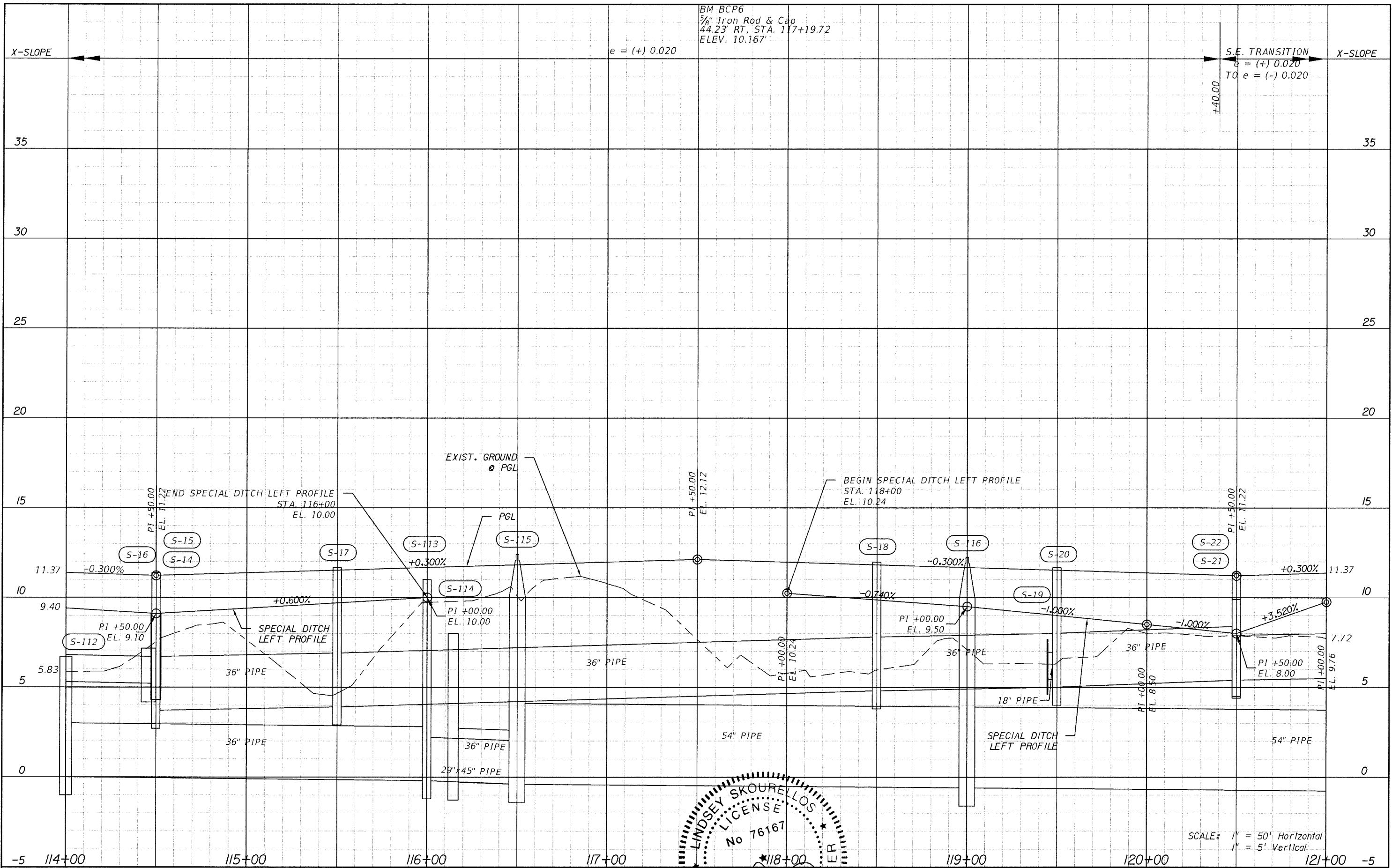


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 C.A. NO. 00027842



SHEET TITLE:		PROFILE SHEET (4)
PROJECT NAME:		FORT HAMER BRIDGE
SHEET NO.:		44

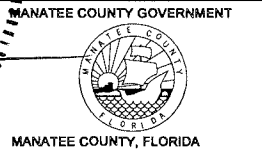
SCALE: 1" = 50' Horizontal
 1" = 5' Vertical



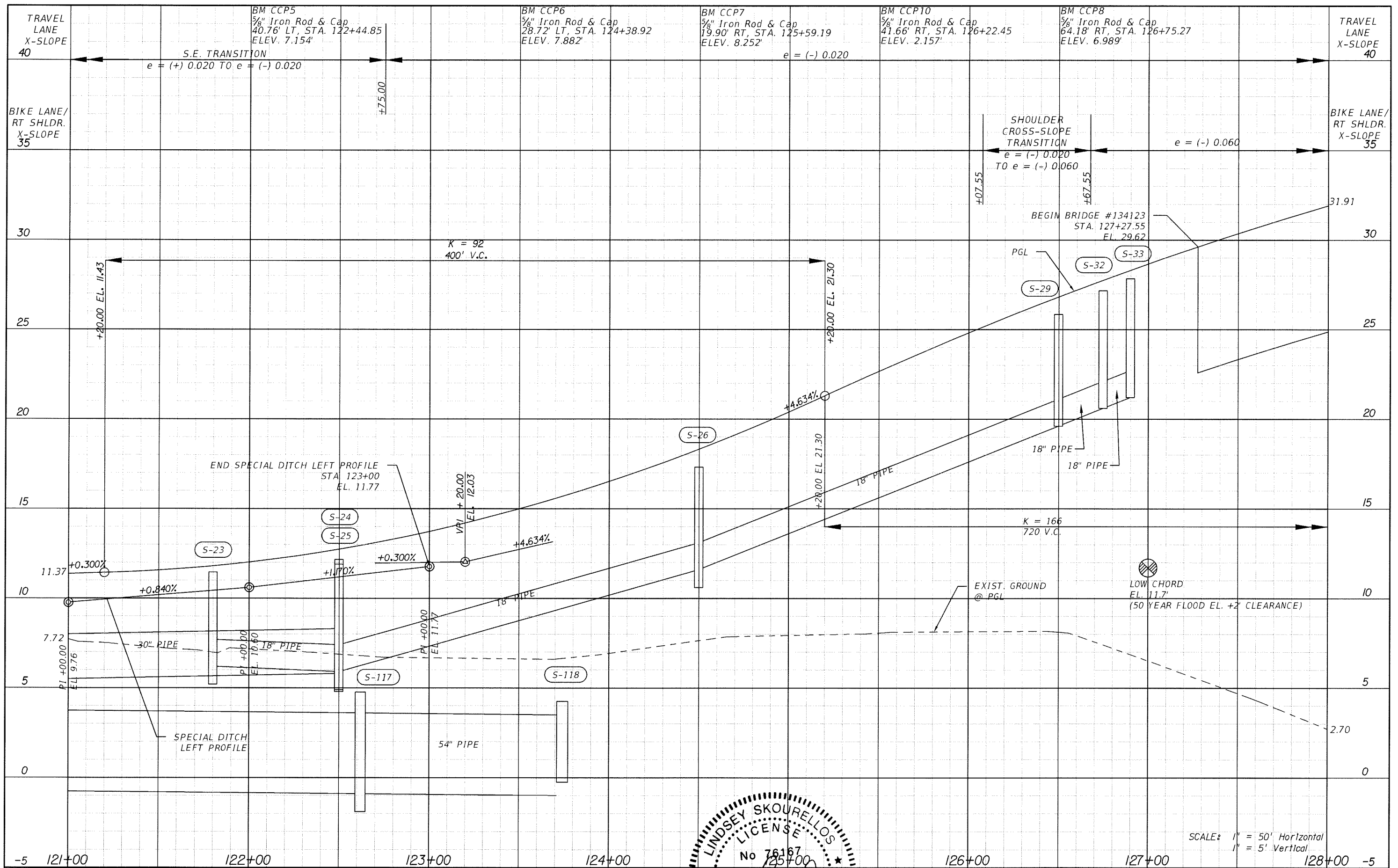
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION




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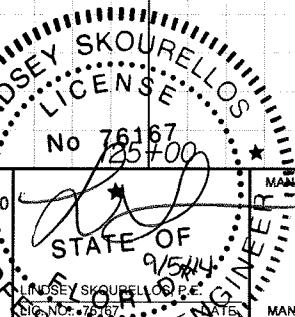



MANATEE COUNTY GOVERNMENT
 SHEET TITLE: **PROFILE SHEET (5)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **45**



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

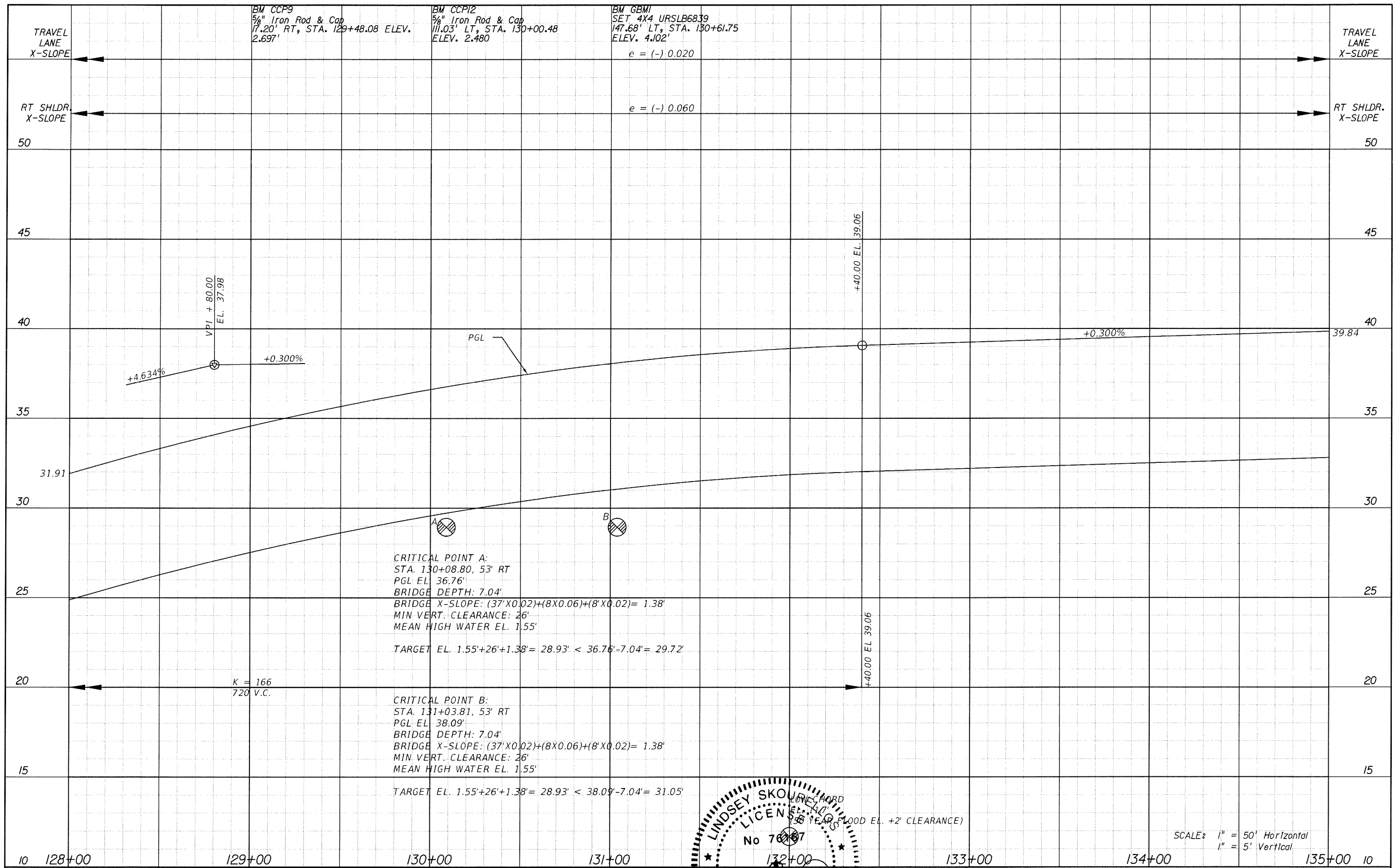

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 TAMPA, FL 33634
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 C.A. NO. 00027842


 LINDSEY SKOURELLOS
 LICENSE No. 76187
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

MANATEE COUNTY GOVERNMENT

 MANATEE COUNTY, FLORIDA

SHEET TITLE: **PROFILE SHEET (6)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **46**

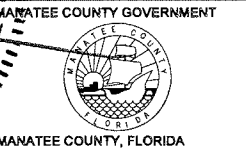
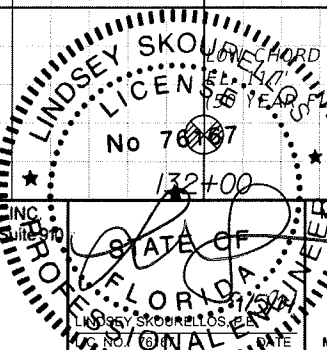
SCALE: 1" = 50' Horizontal
1" = 5' Vertical



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

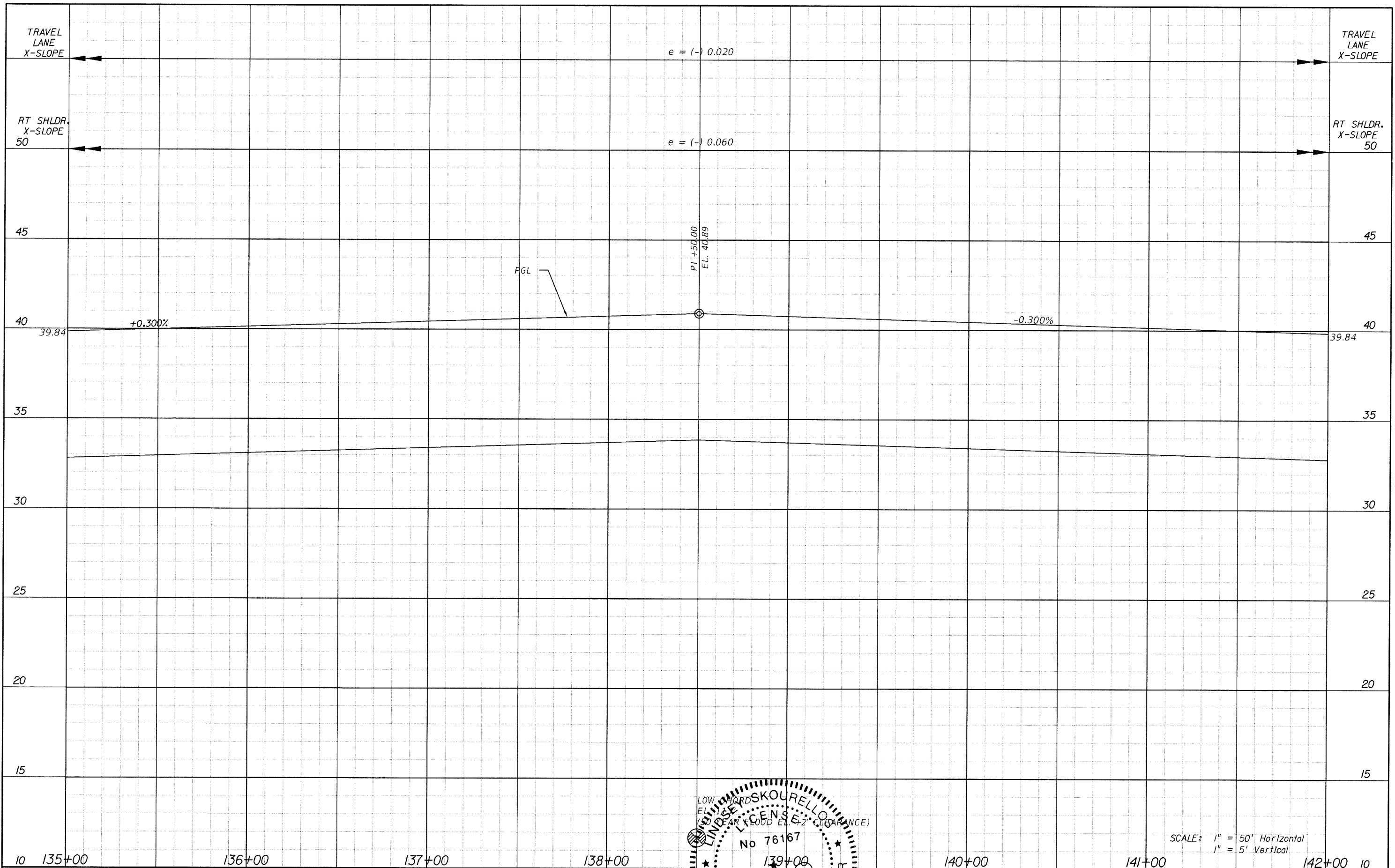


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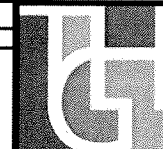
SHEET TITLE:	PROFILE SHEET (7)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	47

SCALE: 1" = 50' Horizontal
 1" = 5' Vertical

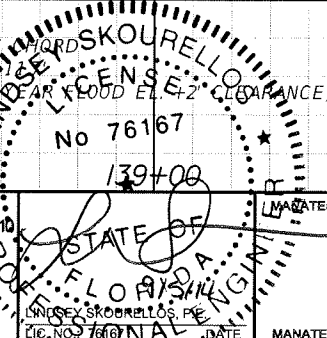


10 135+00 136+00 137+00 138+00 139+00 140+00 141+00 142+00 10

REVISIONS					
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SHEET TITLE: **PROFILE SHEET (8)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **48**

SCALE: 1" = 50' Horizontal
 1" = 5' Vertical

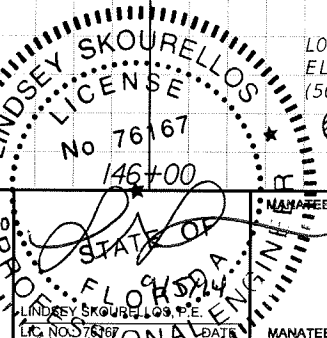


10 142+00 143+00 144+00 145+00 146+00 147+00 148+00 149+00 10

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LOW CHORD
 EL. 11.7'
 (50 YEAR FLOOD EL. +2' CLEARANCE)

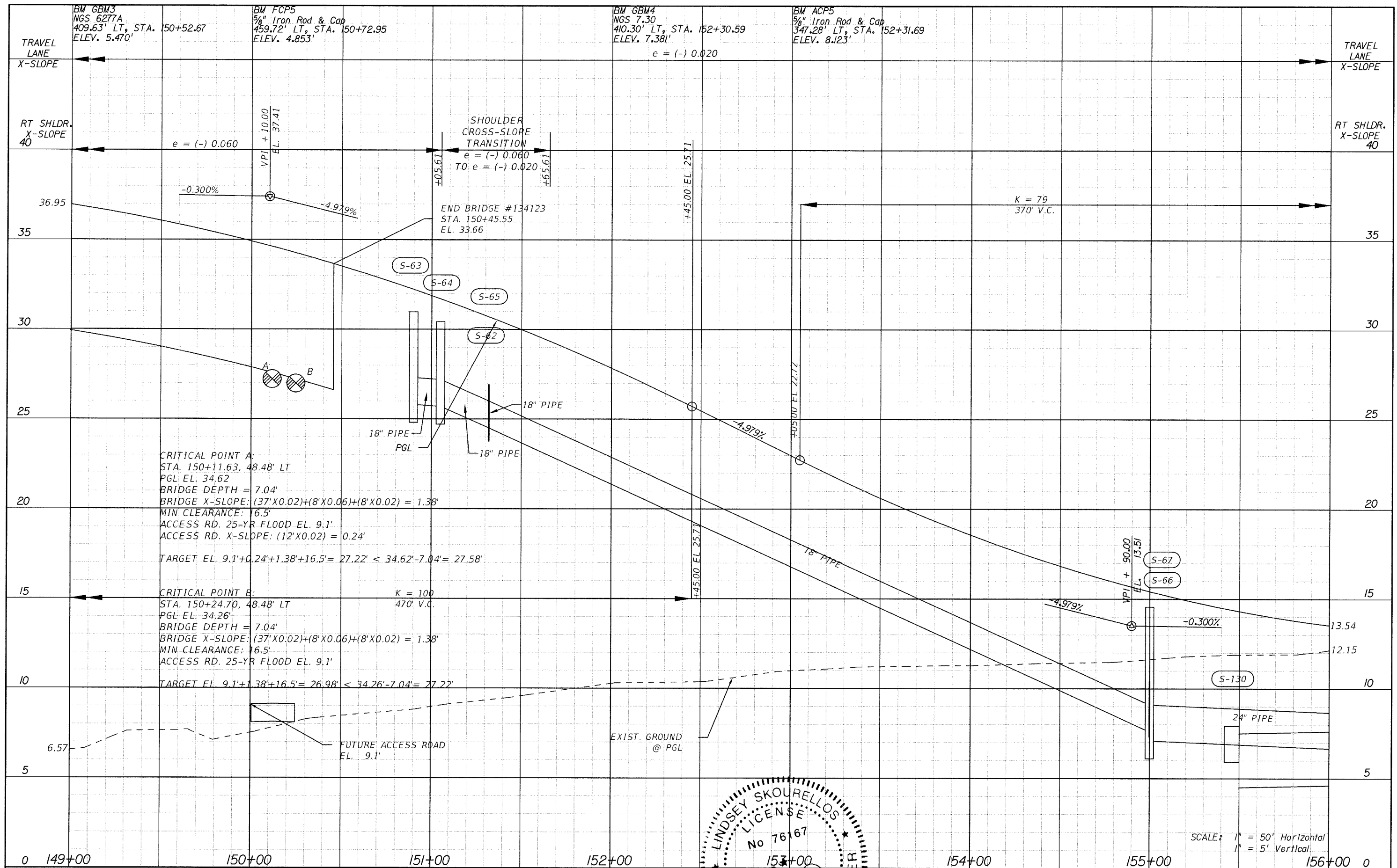


SHEET TITLE: **PROFILE SHEET (9)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **49**

SCALE: 1" = 50' Horizontal
 1" = 5' Vertical



CRITICAL POINT A:
 STA. 150+11.63, 48.48' LT
 PGL EL. 34.62
 BRIDGE DEPTH = 7.04'
 BRIDGE X-SLOPE: $(37' \times 0.02) + (8' \times 0.06) + (8' \times 0.02) = 1.38'$
 MIN. CLEARANCE: 16.5'
 ACCESS RD. 25-YR FLOOD EL. 9.1'
 ACCESS RD. X-SLOPE: $(12' \times 0.02) = 0.24'$
 TARGET EL. $9.1' + 0.24' + 1.38' + 16.5' = 27.22' < 34.62' - 7.04' = 27.58'$

CRITICAL POINT B:
 STA. 150+24.70, 48.48' LT
 PGL EL. 34.26'
 BRIDGE DEPTH = 7.04'
 BRIDGE X-SLOPE: $(37' \times 0.02) + (8' \times 0.06) + (8' \times 0.02) = 1.38'$
 MIN. CLEARANCE: 16.5'
 ACCESS RD. 25-YR FLOOD EL. 9.1'
 TARGET EL. $9.1' + 1.38' + 16.5' = 26.98' < 34.26' - 7.04' = 27.22'$

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LINDSEY SKOURELLOS
 LICENSE
 No 76167
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

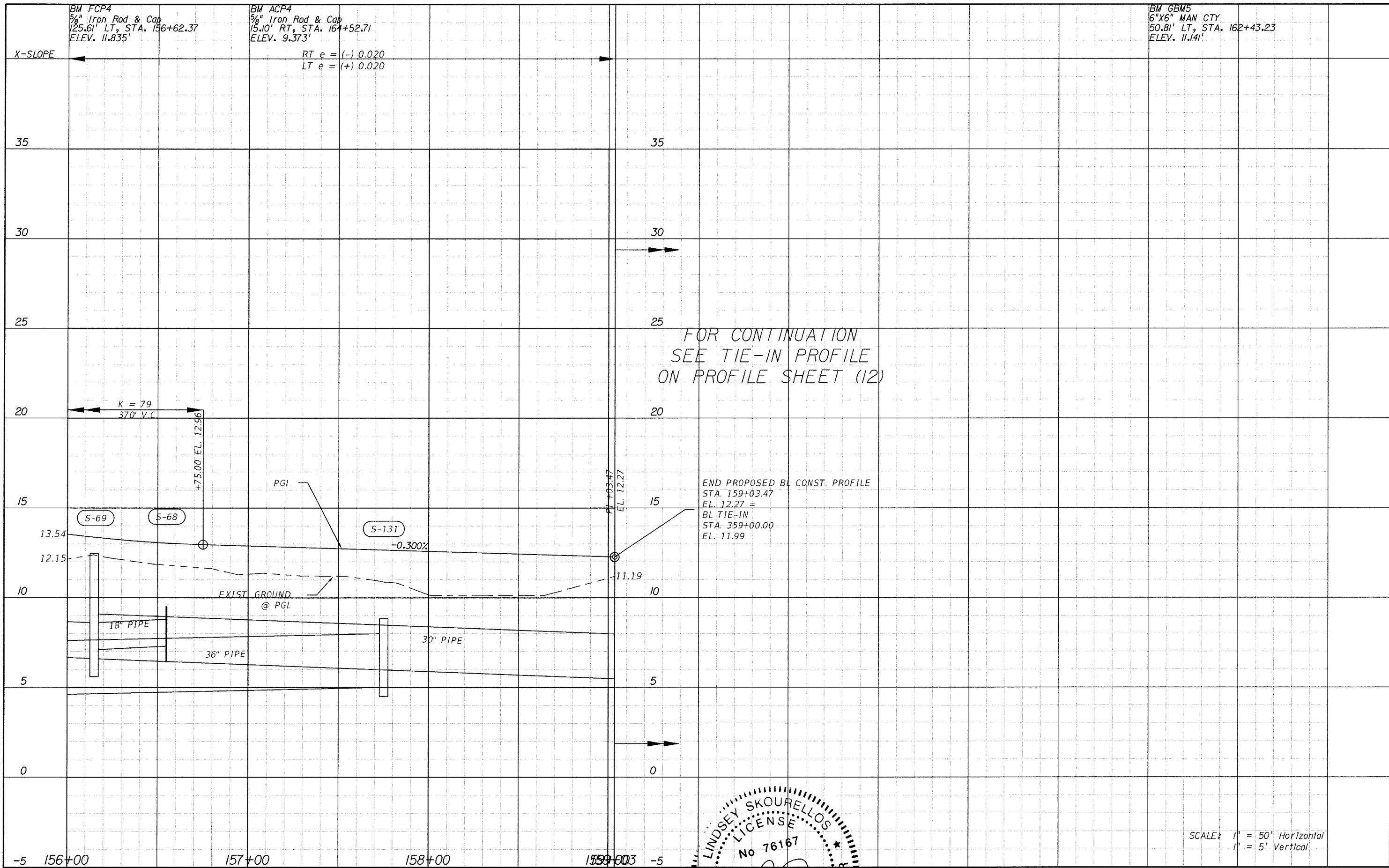
MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: PROFILE SHEET (10)

PROJECT NAME: FORT HAMER BRIDGE

SHEET NO.: 50

SCALE: 1" = 50' Horizontal
 1" = 5' Vertical



FOR CONTINUATION
SEE TIE-IN PROFILE
ON PROFILE SHEET (12)

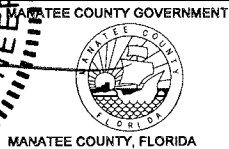
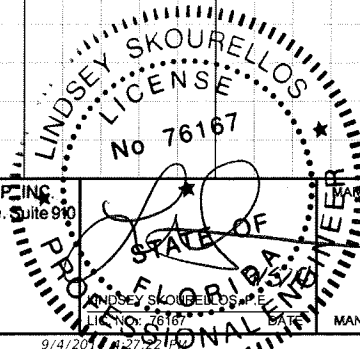
END PROPOSED BL CONST. PROFILE
STA. 159+03.47
EL. 12.27 =
BL TIE-IN
STA. 359+00.00
EL. 11.99

SCALE: 1" = 50' Horizontal
1" = 5' Vertical

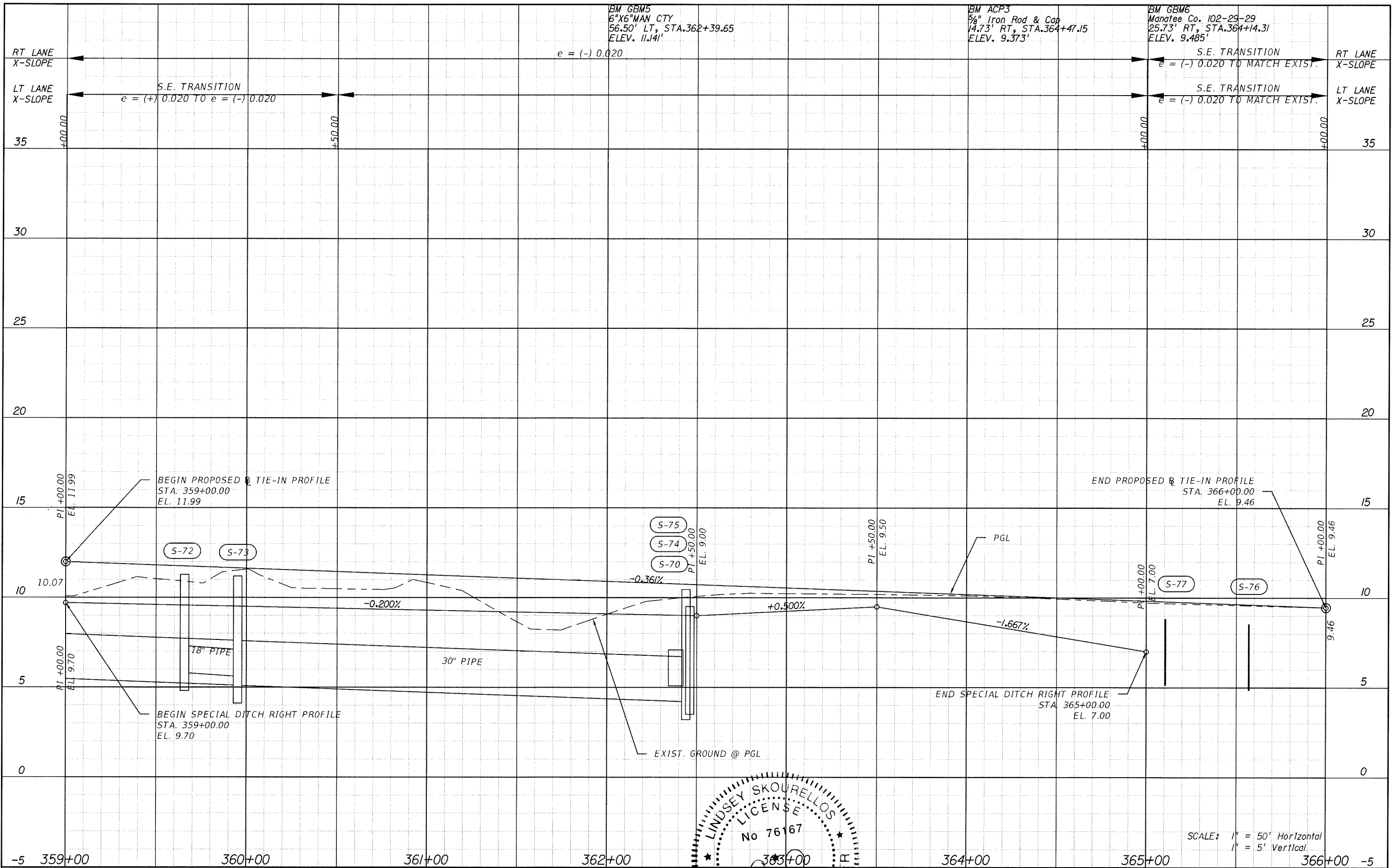
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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SHEET TITLE:	PROFILE SHEET (11)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	51



BM GBM5
6"X6" MAN CTY
56.50' LT, STA. 362+39.65
ELEV. 11.14'

BM ACP3
5/8" Iron Rod & Cap
14.73' RT, STA. 364+47.15
ELEV. 9.373'

BM GBM6
Manatee Co. 102-29-29
25.73' RT, STA. 364+14.31
ELEV. 9.485'

$e = (-) 0.020$

S.E. TRANSITION
 $e = (+) 0.020$ TO $e = (-) 0.020$

S.E. TRANSITION
 $e = (-) 0.020$ TO MATCH EXIST.

S.E. TRANSITION
 $e = (-) 0.020$ TO MATCH EXIST.

BEGIN PROPOSED TIE-IN PROFILE
STA. 359+00.00
EL. 11.99

END PROPOSED TIE-IN PROFILE
STA. 366+00.00
EL. 9.46

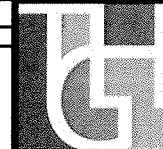
BEGIN SPECIAL DITCH RIGHT PROFILE
STA. 359+00.00
EL. 9.70

END SPECIAL DITCH RIGHT PROFILE
STA. 365+00.00
EL. 7.00

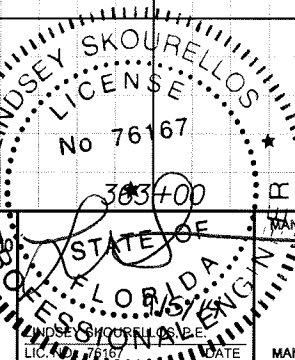
EXIST. GROUND @ PGL

SCALE: 1" = 50' Horizontal
1" = 5' Vertical

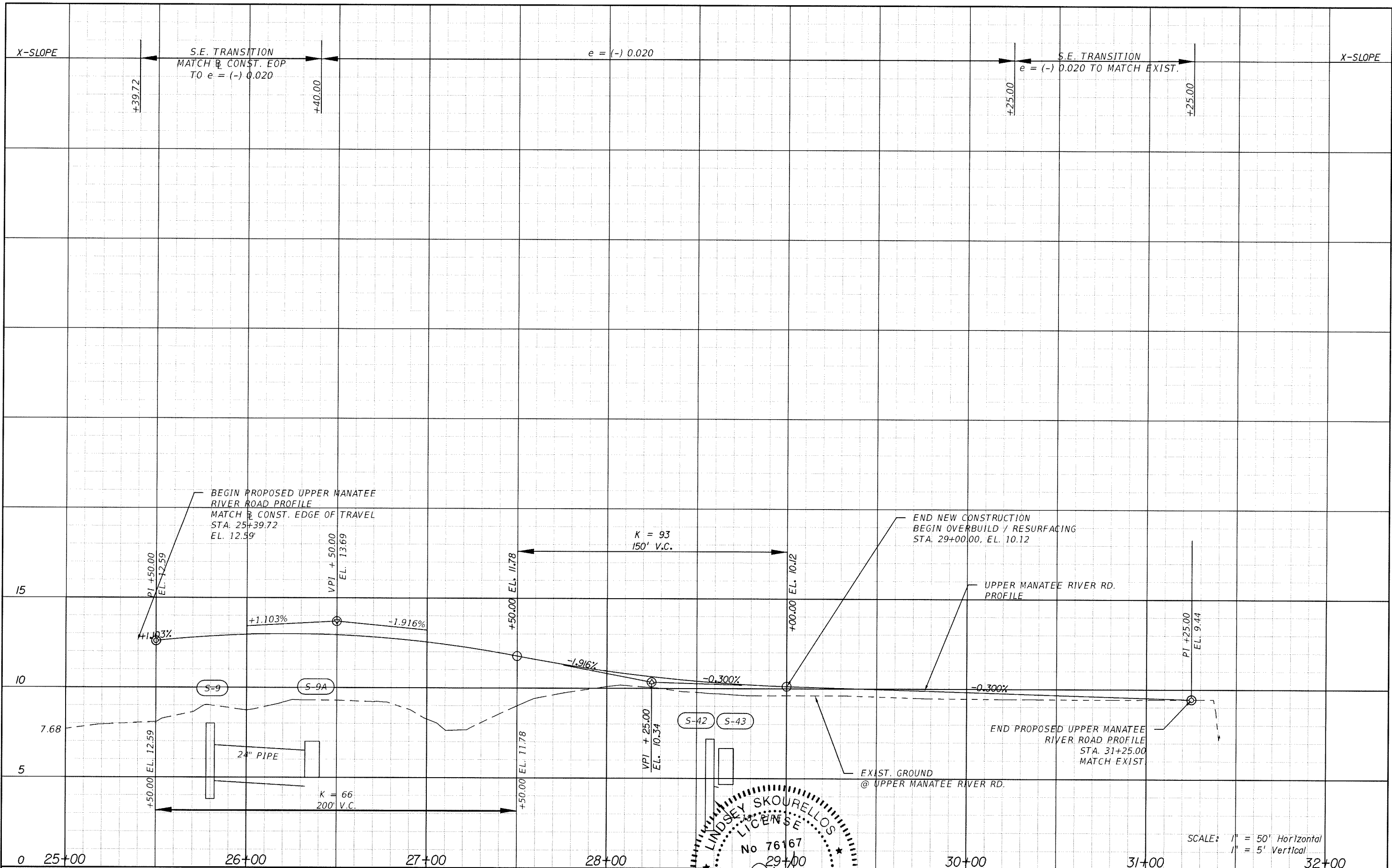
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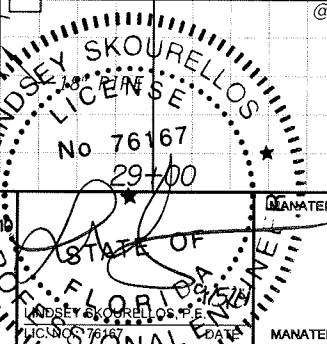


SHEET TITLE: PROFILE SHEET (12) TIE-IN		SHEET NO. 52
PROJECT NAME: FORT HAMER BRIDGE		



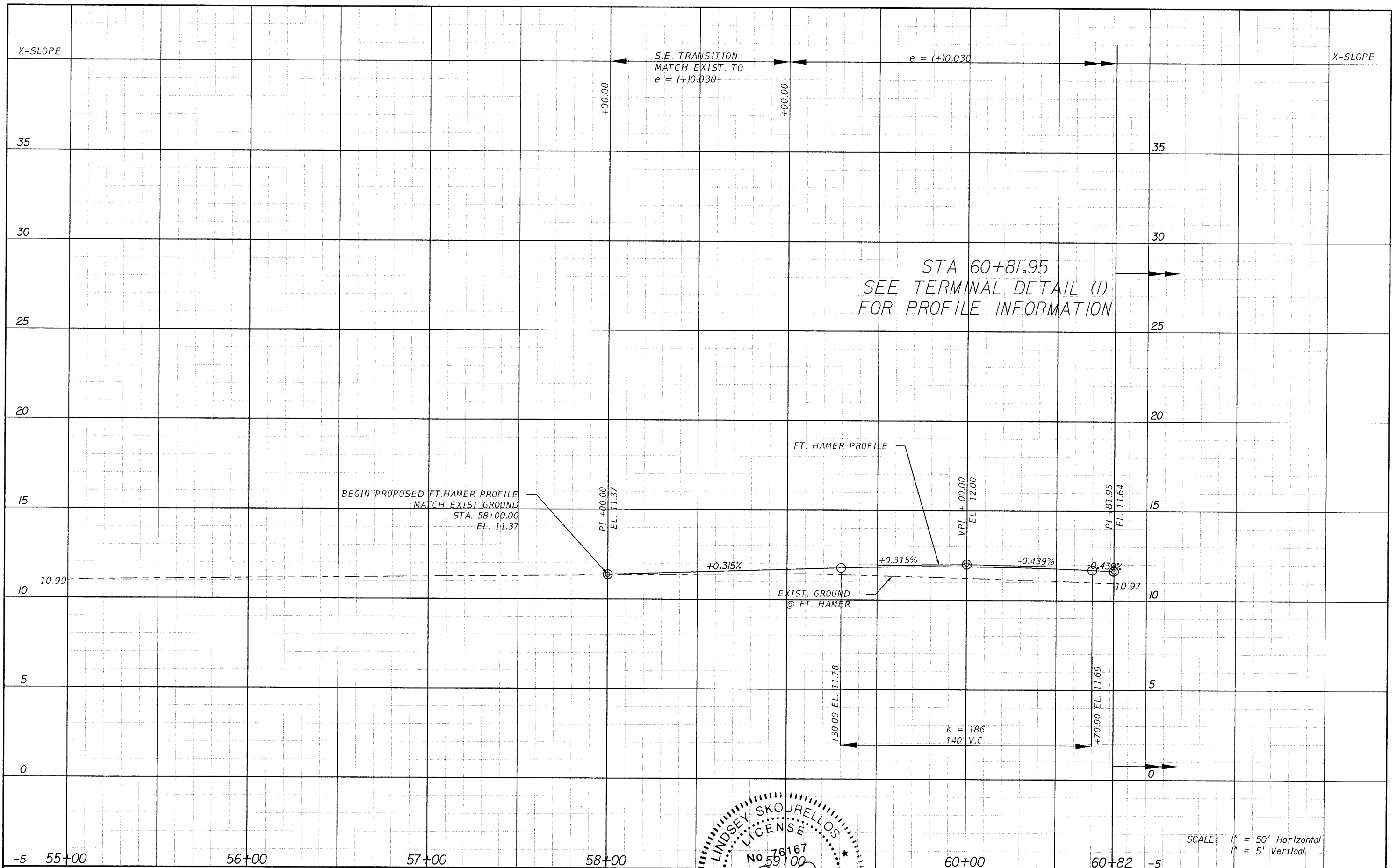
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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION


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 C.A. NO. 00027842


 LINDSEY SKOURELLOS
 LICENSE NO. 76167
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER


 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **PROFILE SHEET (13)
UPPER MANATEE RIVER ROAD**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SCALE: 1" = 50' Horizontal
 1" = 5' Vertical
 SHEET NO. **53**

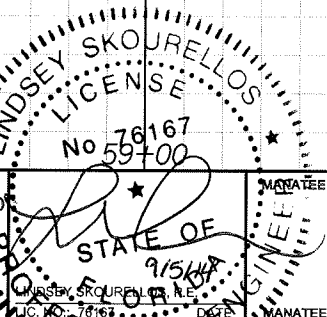


SCALE: 1" = 50' Horizontal
 1" = 5' Vertical

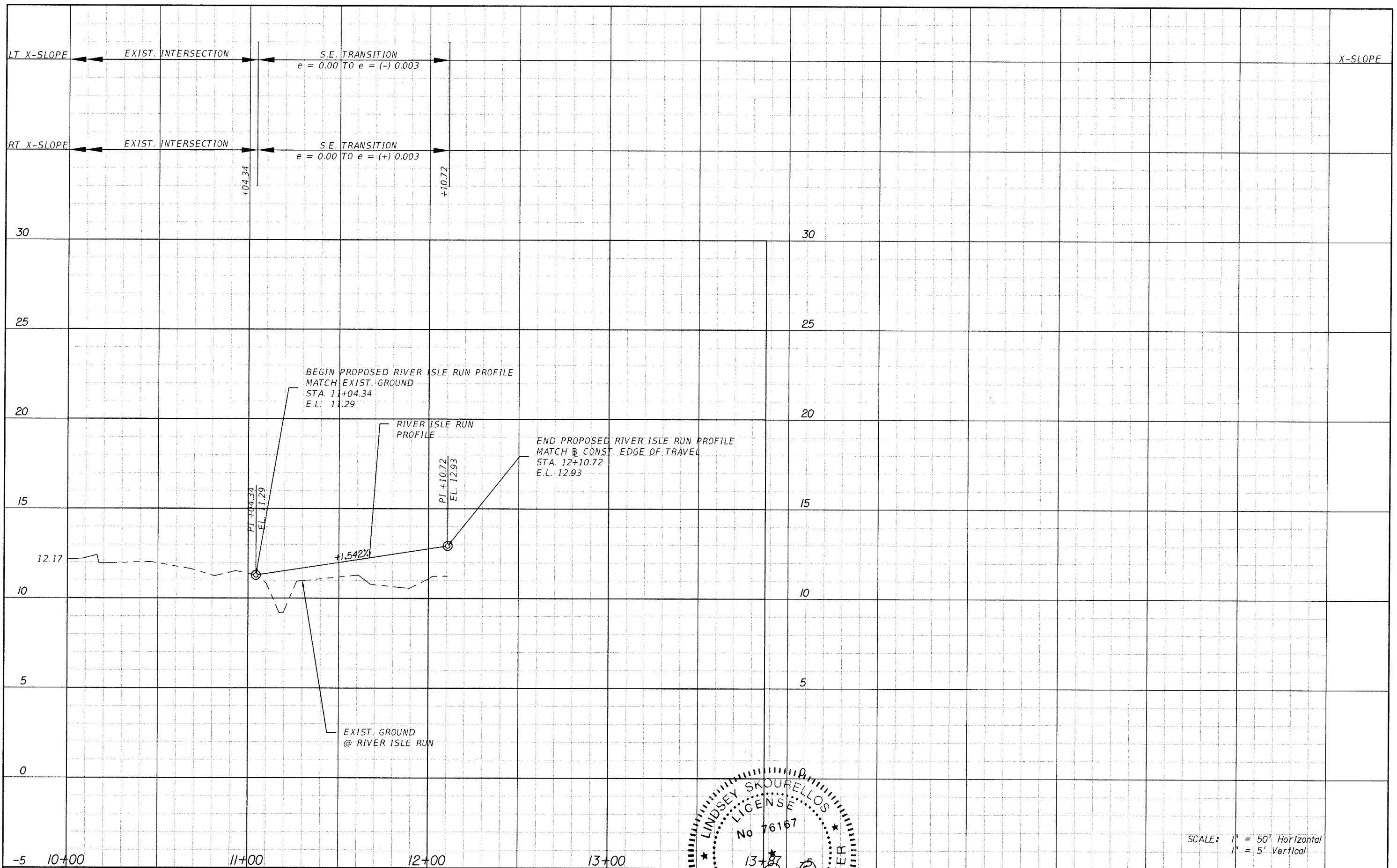
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION




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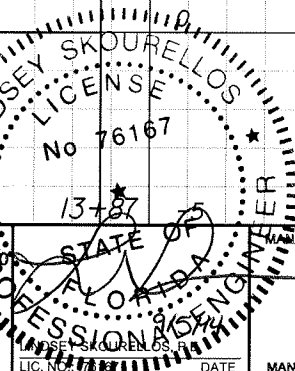
SHEET TITLE:	PROFILE SHEET (14) FT. HAMER ROAD
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	54



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



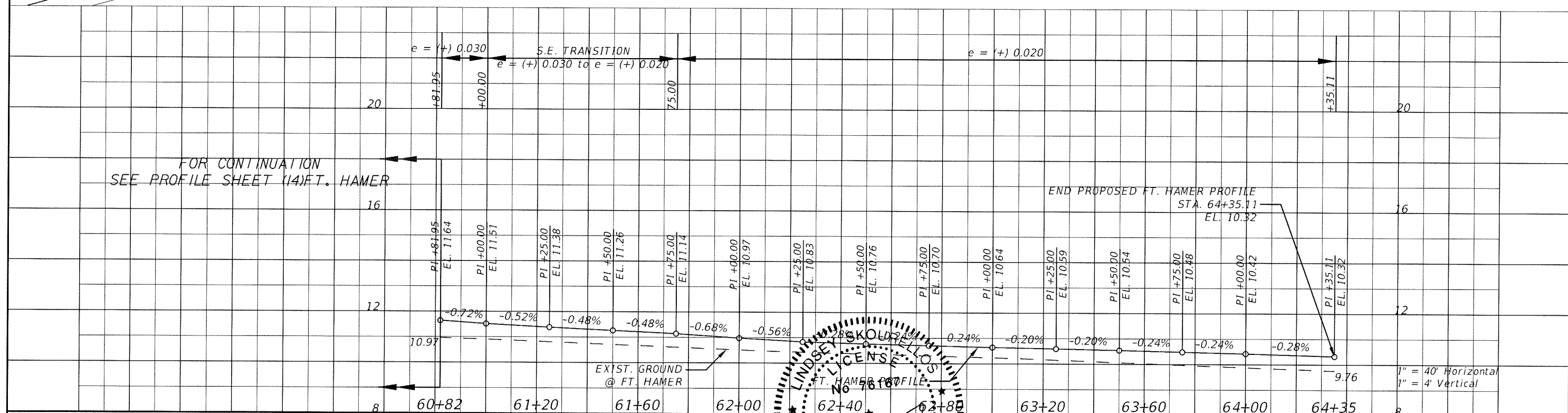
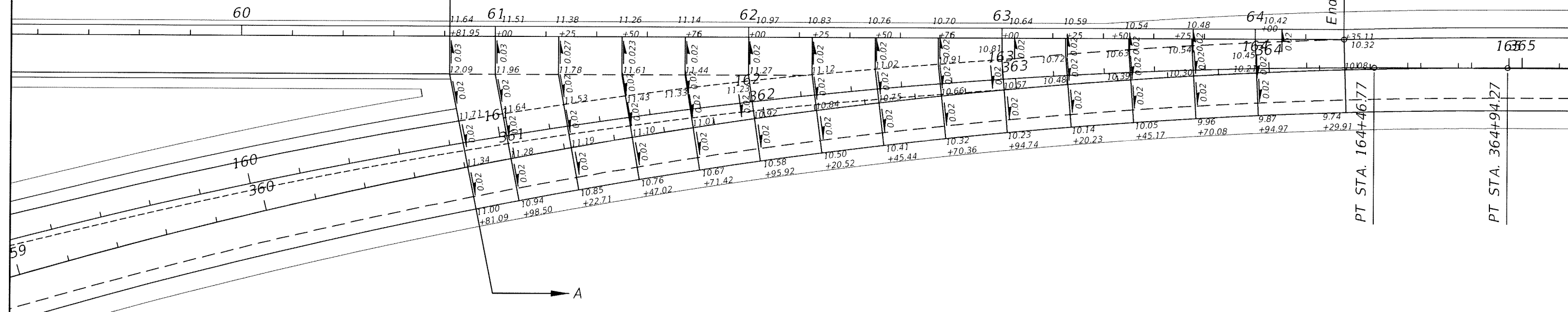
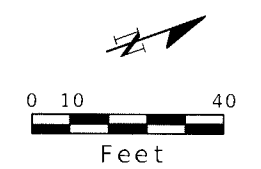
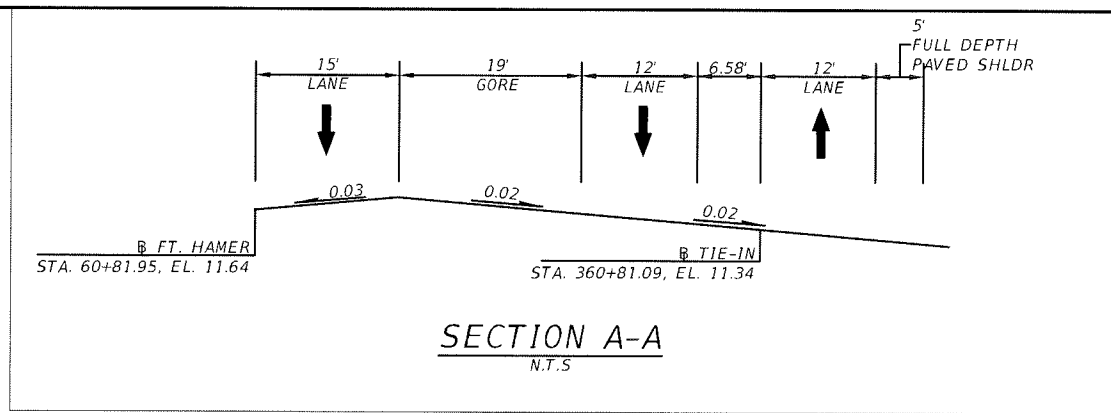
THE HEIMBURG GROUP, INC.
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LINDSEY SKOURELLOS
 LICENSE
 No 76167
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

DATE: 9/4/2014 4:27:37 PM
 MANATEE COUNTY, FLORIDA


SHEET TITLE: **PROFILE SHEET (15)
RIVER ISLE RUN**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **55**

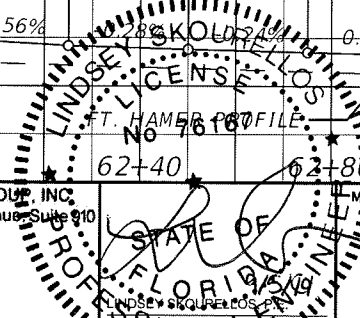



FOR CONTINUATION
SEE PROFILE SHEET (14) FT. HAMER

END PROPOSED FT. HAMER PROFILE
STA. 64+35.11
EL. 10.32

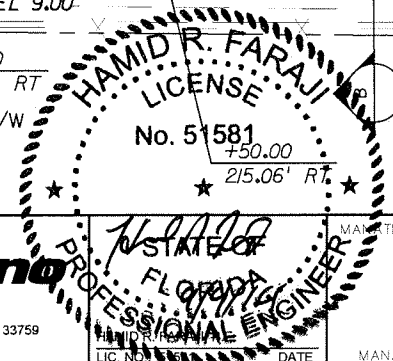
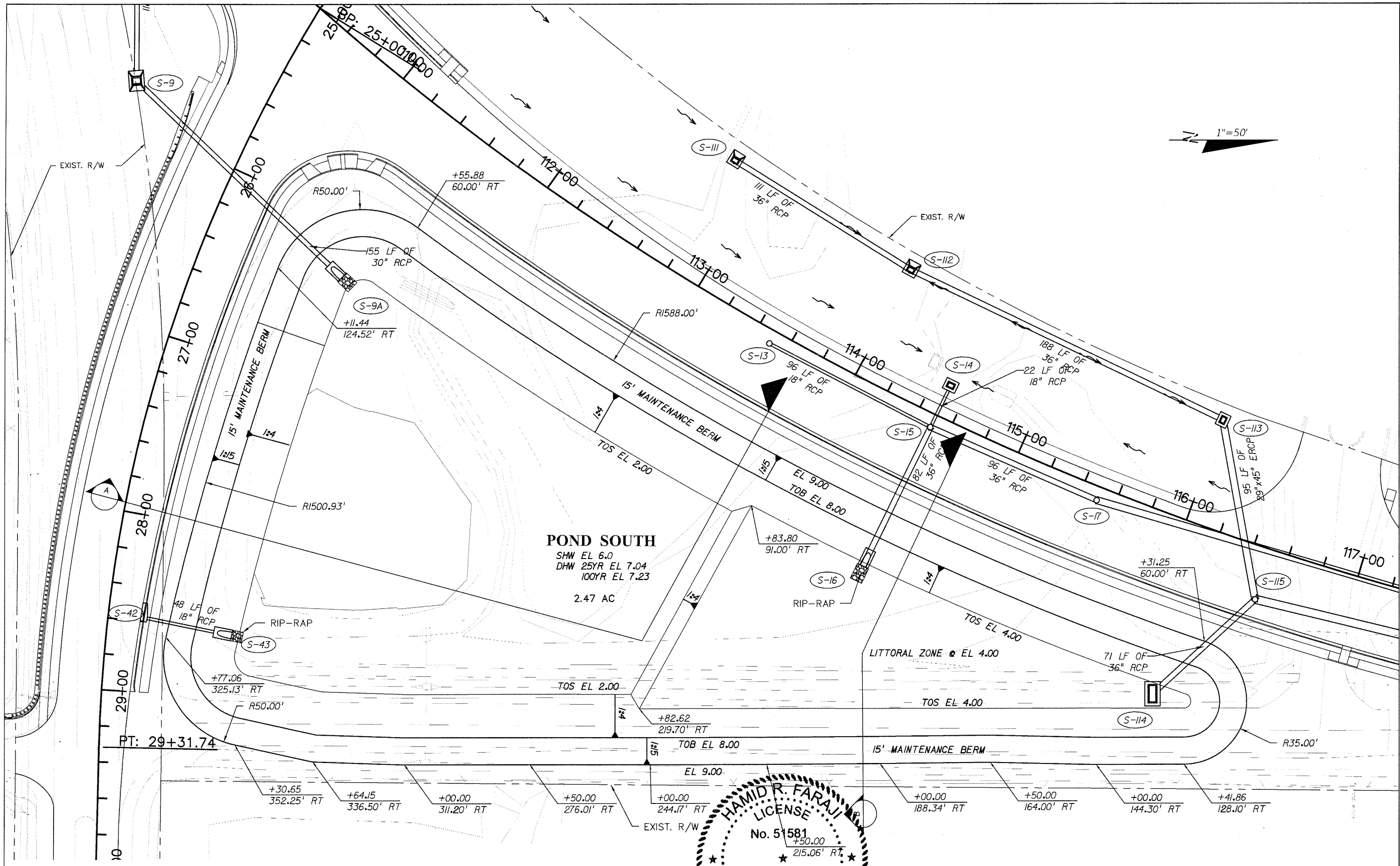
REVISIONS		REVISIONS			
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION


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 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 No. 76167


MANATEE COUNTY GOVERNMENT

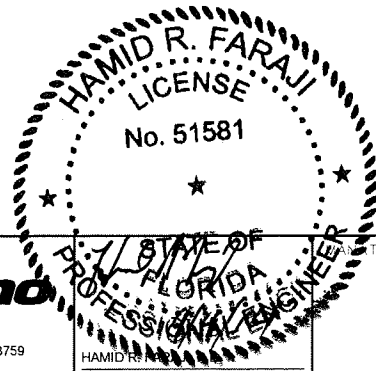
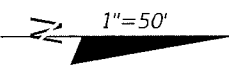
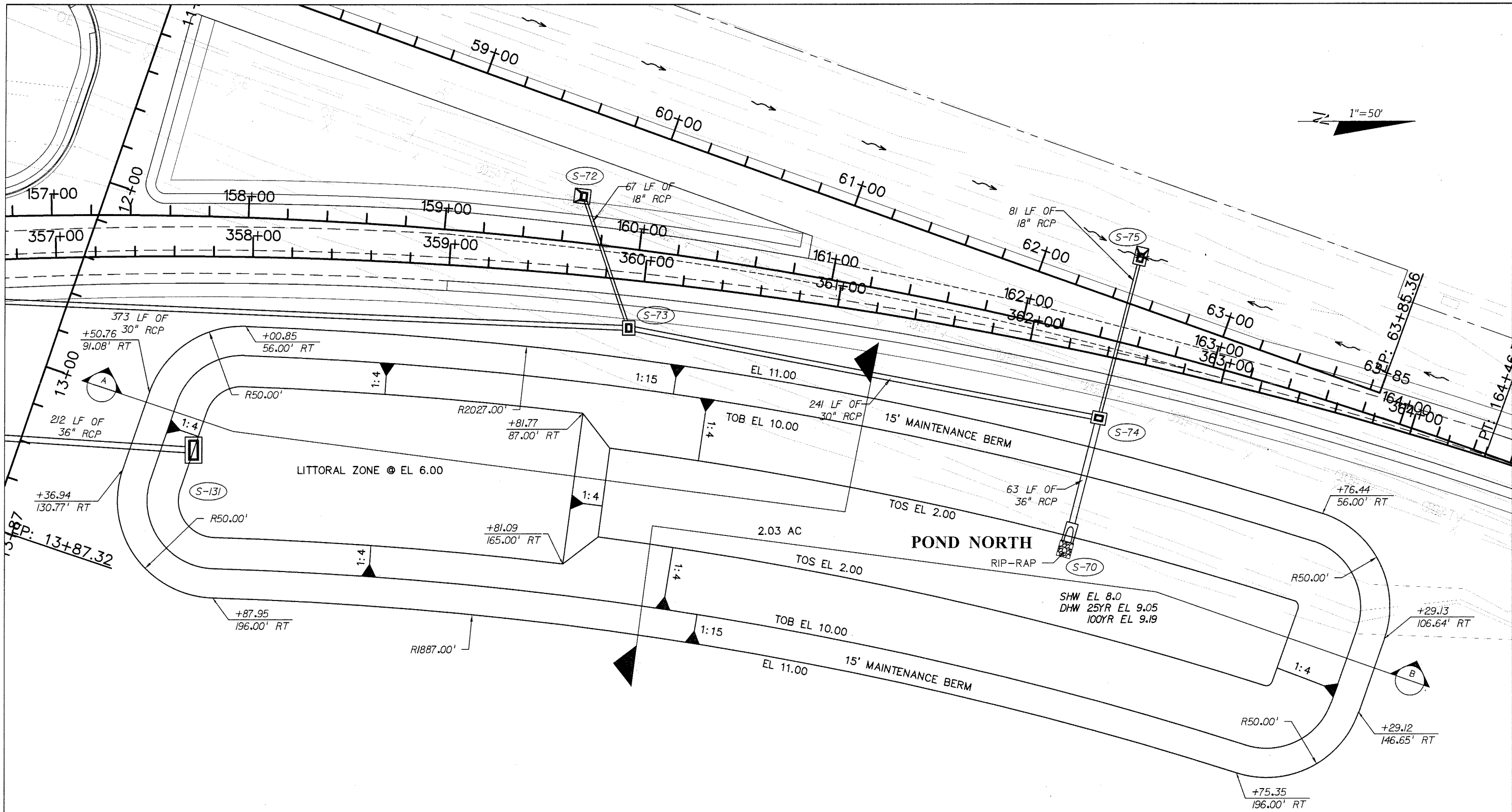
SHEET TITLE:		TERMINAL DETAIL (1)
PROJECT NAME:		
SHEET NO.:		56



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MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: POND SOUTH PLAN
 PROJECT NAME: FORT HAMER BRIDGE
 SHEET NO.: 57

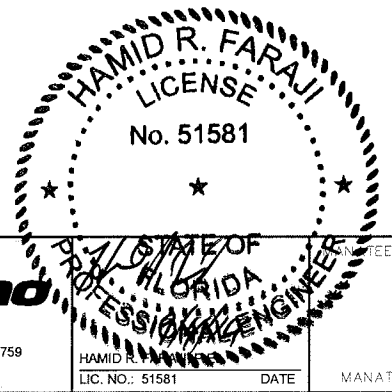
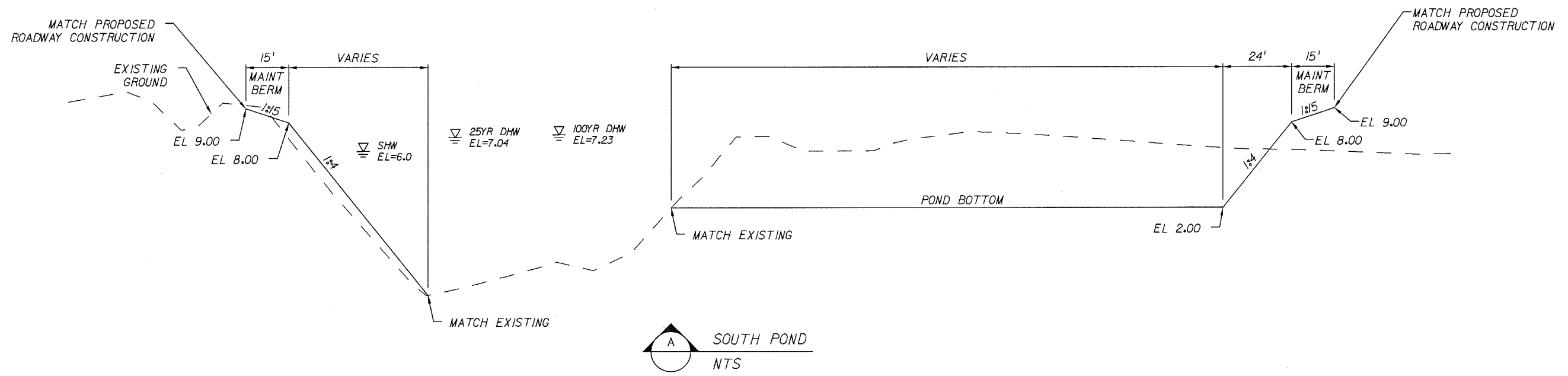
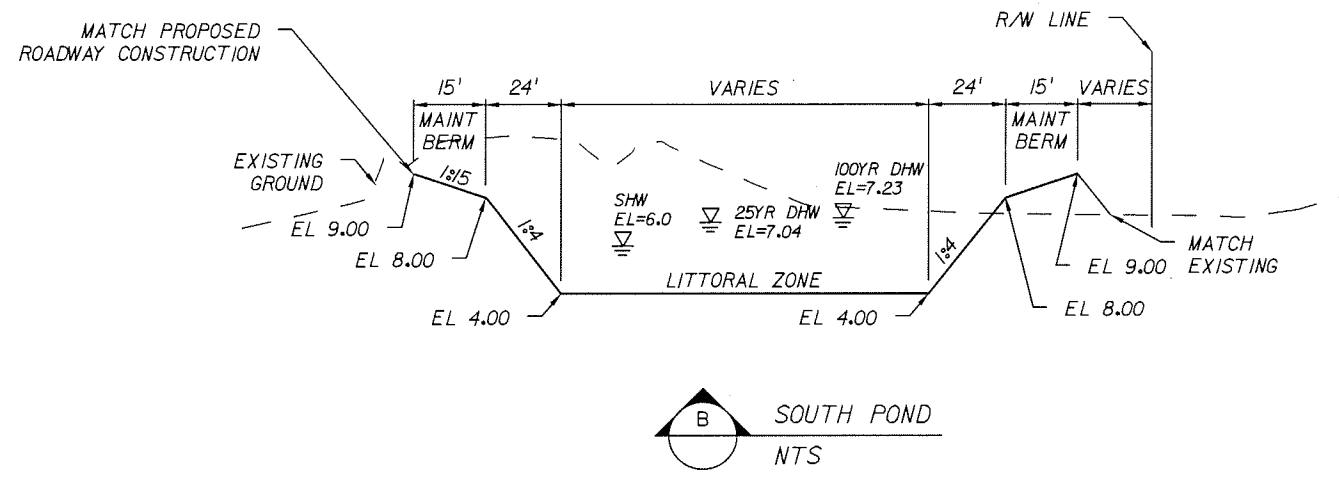


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SHEET TITLE: POND NORTH PLAN
 PROJECT NAME: FORT HAMER BRIDGE
 SHEET NO.: 58



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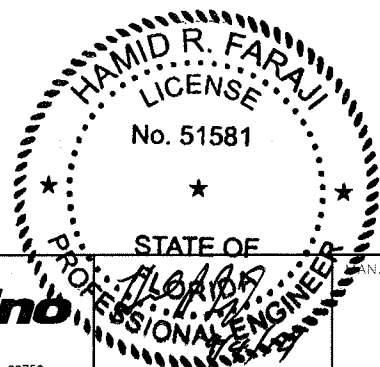
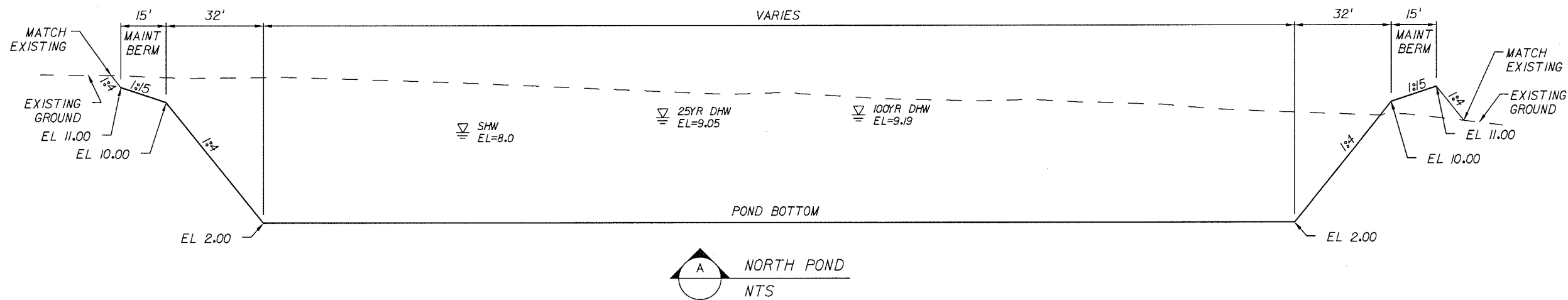
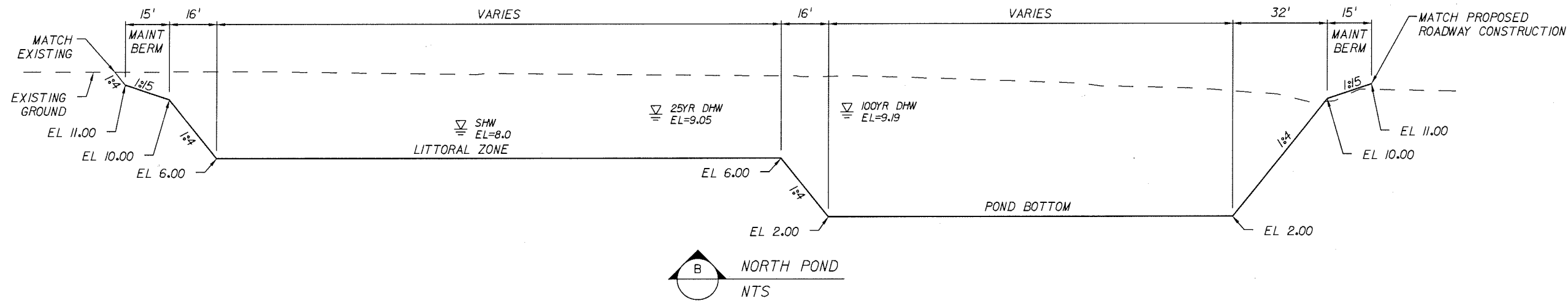
HAMID R. FARAJI
LIC. NO.: 51581
DATE

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: POND SOUTH TYPICALS

PROJECT NAME: FORT HAMER BRIDGE

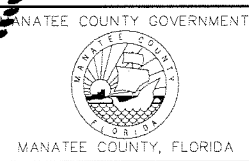
SHEET NO.: 59



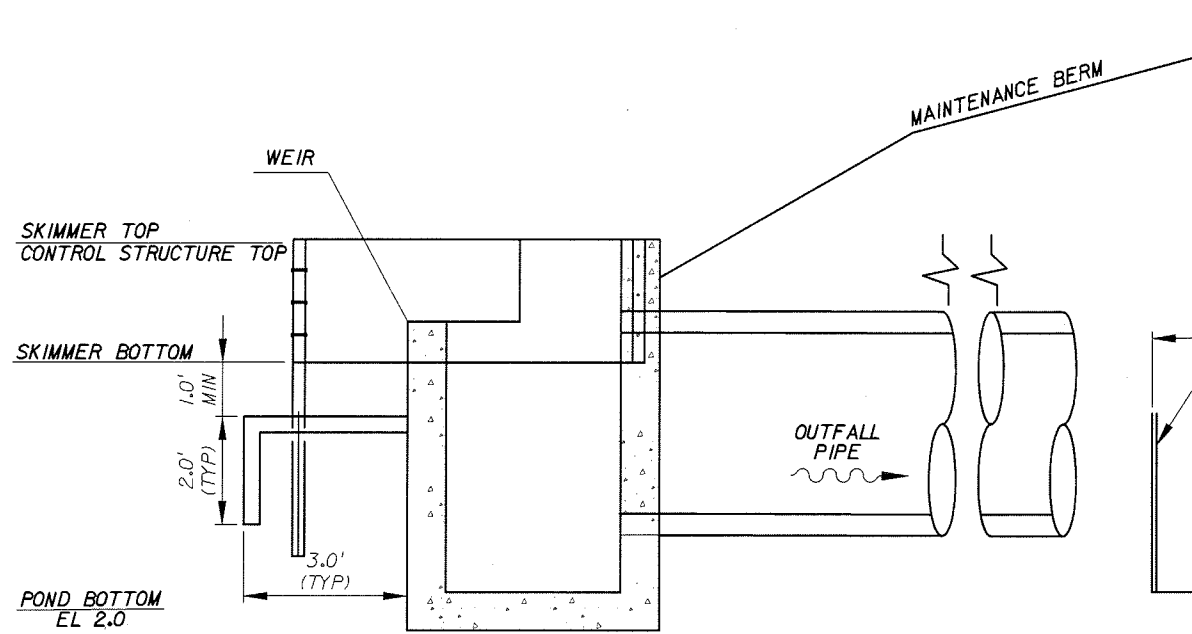
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



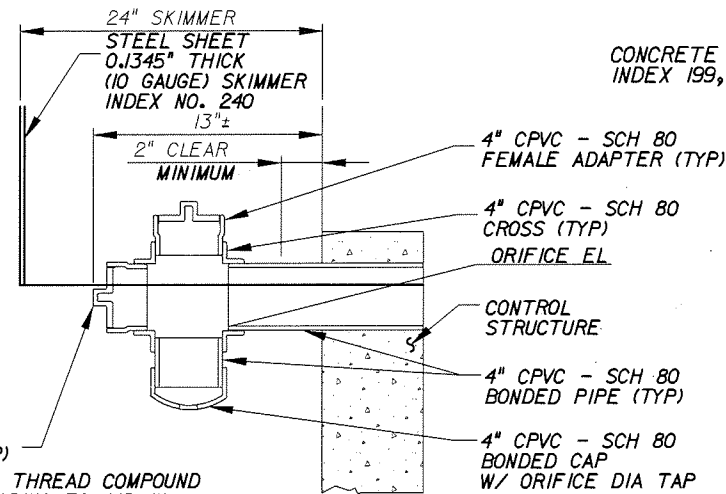
HAMID R. FARAJ, P.E.
LIC. NO.: 51581 DATE



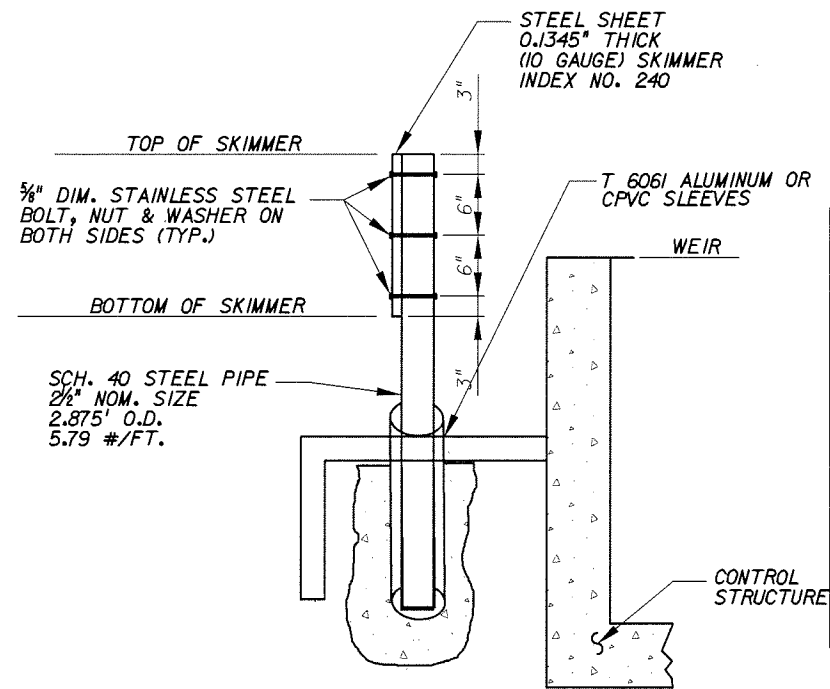
SHEET TITLE:	POND NORTH TYPICALS
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	60



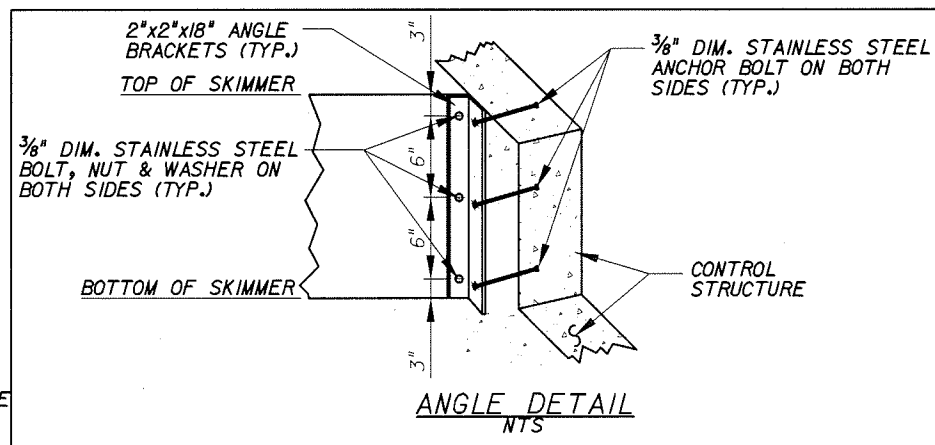
SECTION A-A
NTS



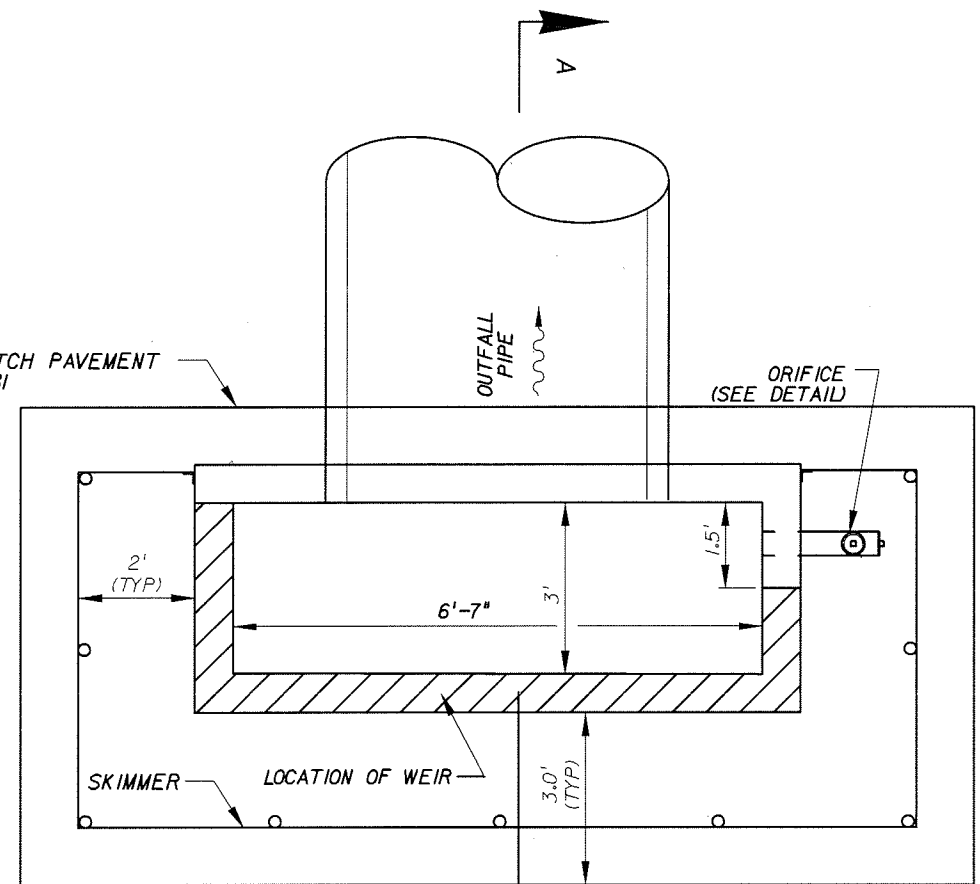
ORIFICE DETAIL
NTS



SKIMMER DETAIL
NTS

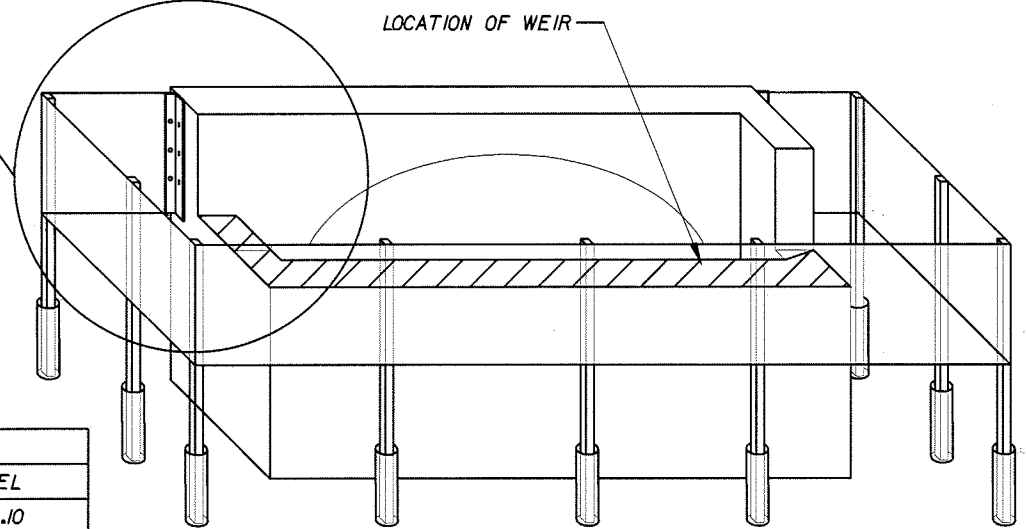


ANGLE DETAIL
NTS



PLAN
NTS

NOTE: 1) ALL COST FOR THE CONCRETE DITCH PAVEMENT, ORIFICE AND SKIMMER (INCLUDING HARDWARE AND INSTALLATION) IS TO BE INCLUDED IN THE COST OF THE CONTROL STRUCTURE.



ISOMETRIC
NTS

Pond	Structure		Orifice		Weir		Skimmer		Outfall Pipe
	Number	Type	Top EL	Diam (In)	EL	Width (In)	EL	Top EL	EL
South	S-114	H	7.50	1.77	6.00	133	6.32	7.50	2.10
North	S-131	H	9.50	1.59	8.00	133	8.37	9.50	5.00

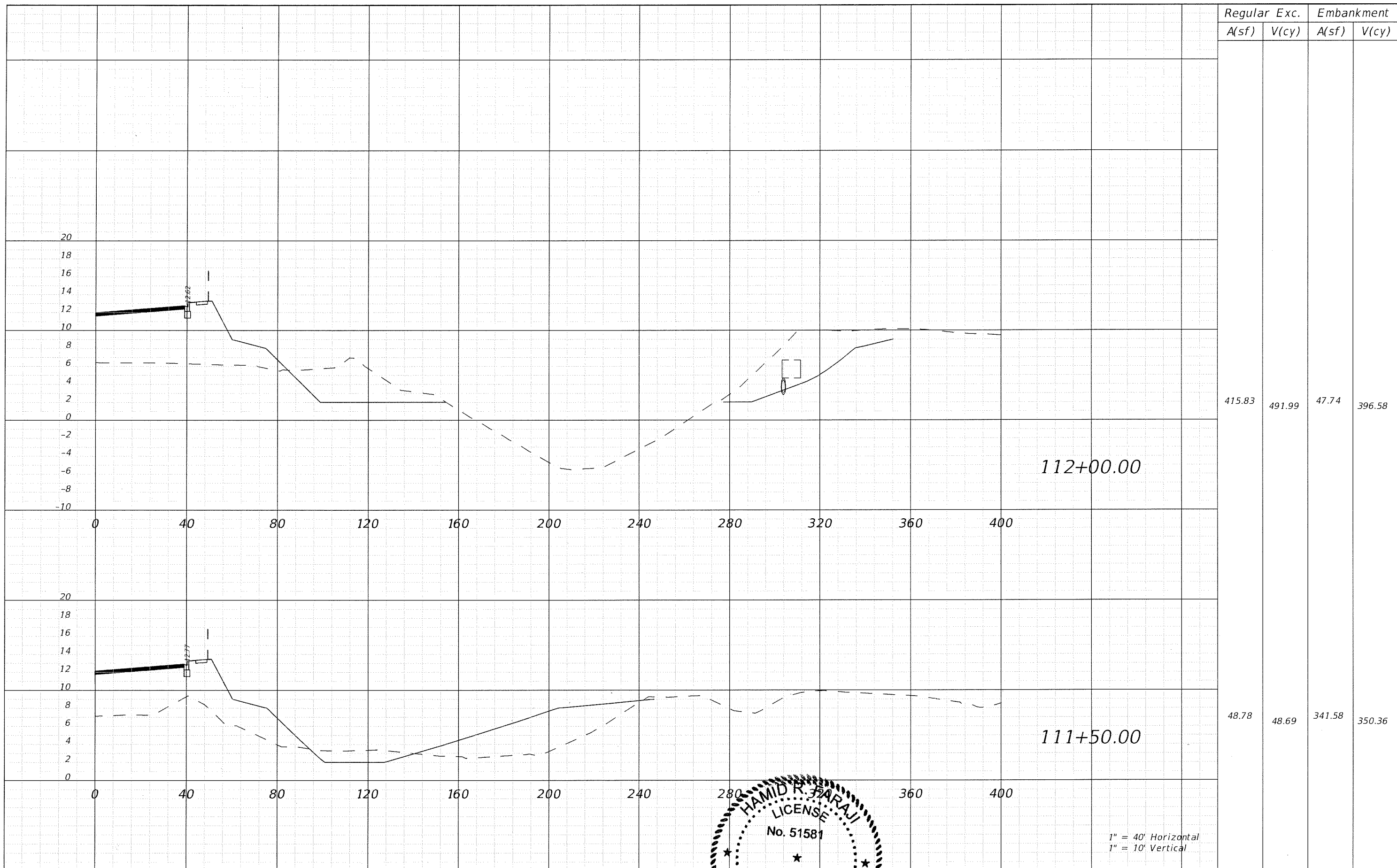
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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STATE OF FLORIDA
PROFESSIONAL ENGINEER
HAMILTON
LIC. NO.: 51581
DATE

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: **OUTFALL CONTROL STRUCTURE DETAILS**
PROJECT NAME: **FORT HAMER BRIDGE**
SHEET NO.: **61**



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

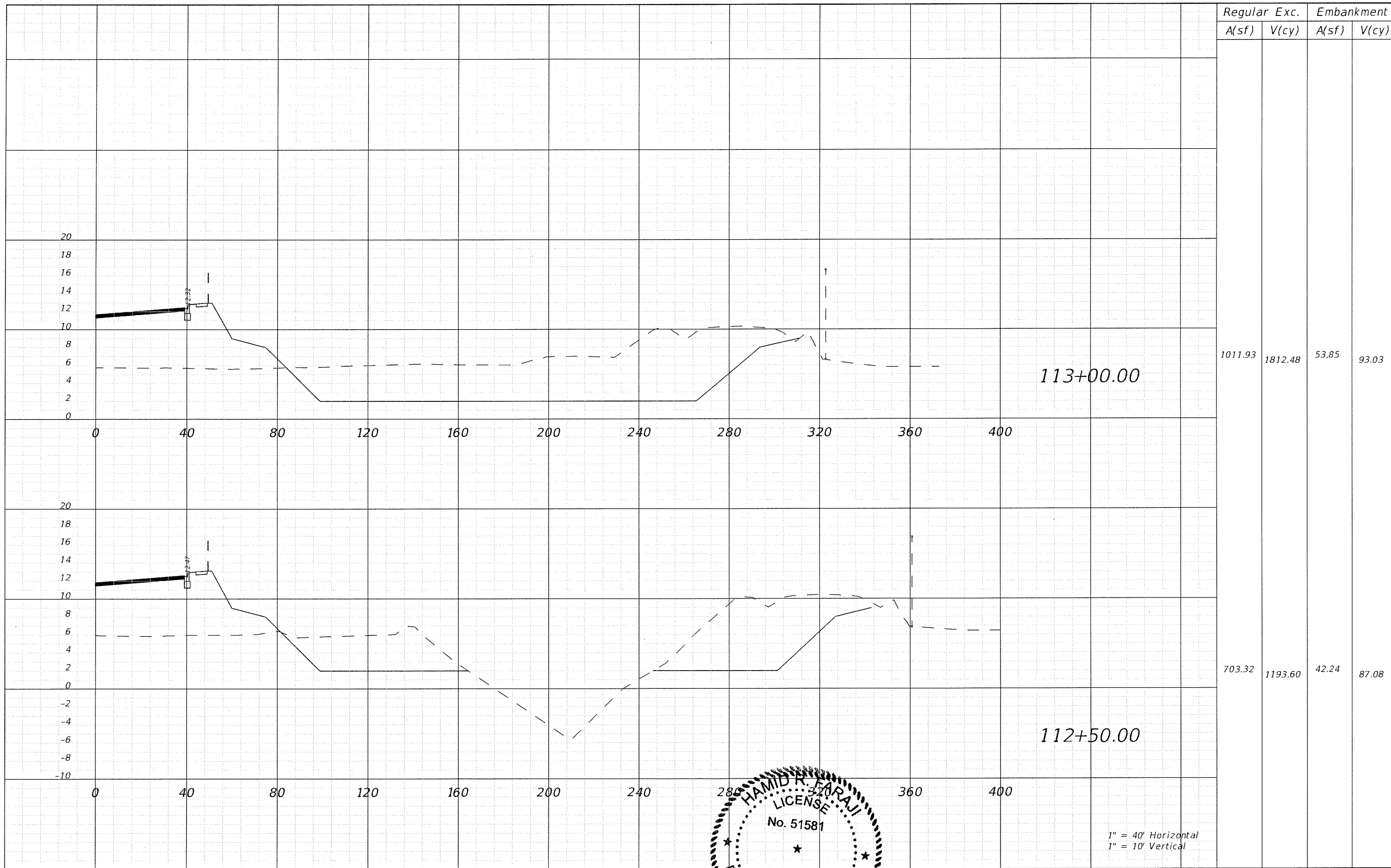
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HAMID R. FARAJI
 LICENSE No. 51581
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 MANATEE COUNTY, FLORIDA

MANATEE COUNTY GOVERNMENT
 COUNTY ENGINEER
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **POND SOUTH CROSS SECTION (1)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **62**

1" = 40' Horizontal
 1" = 10' Vertical



1" = 40' Horizontal
1" = 10' Vertical

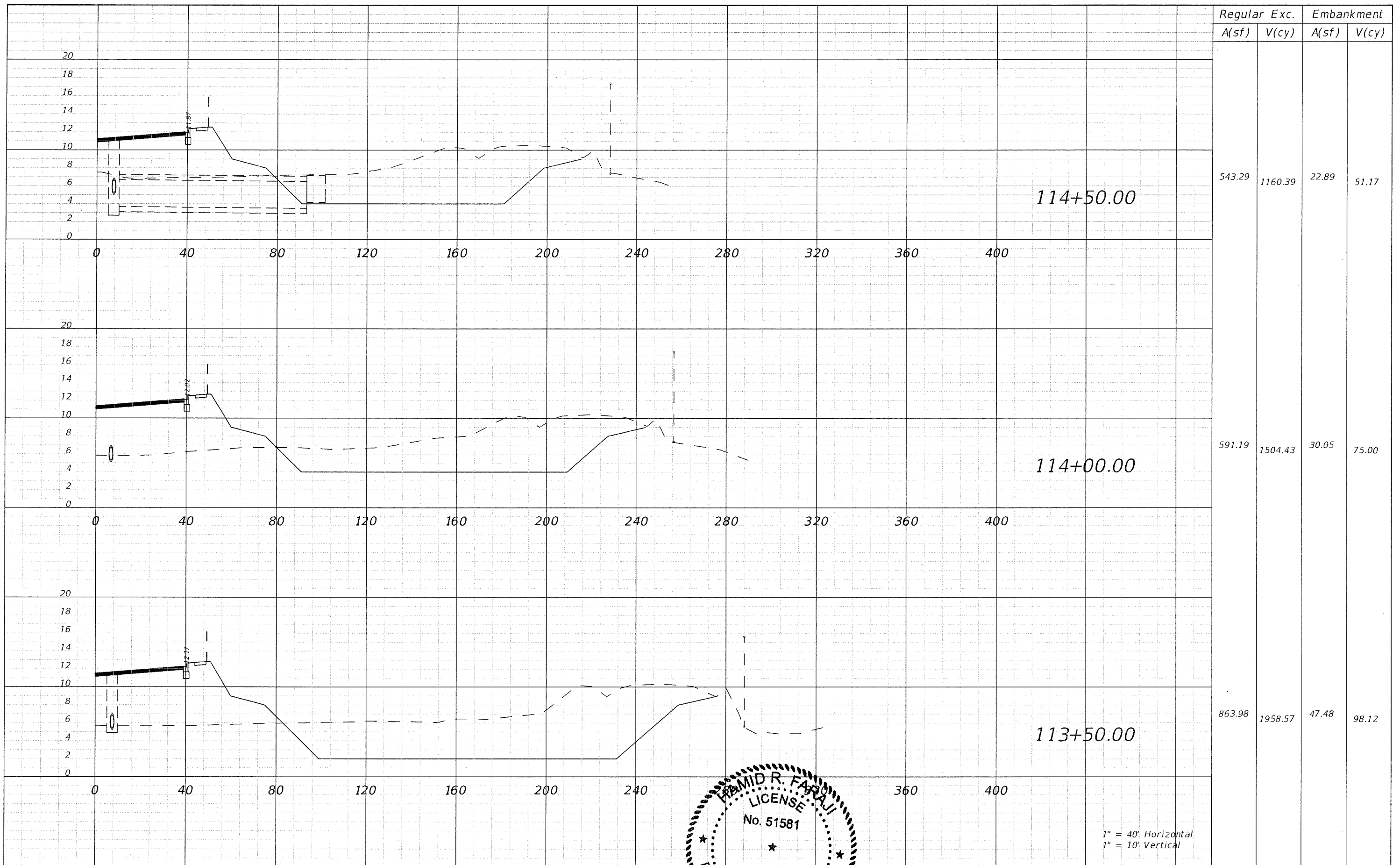
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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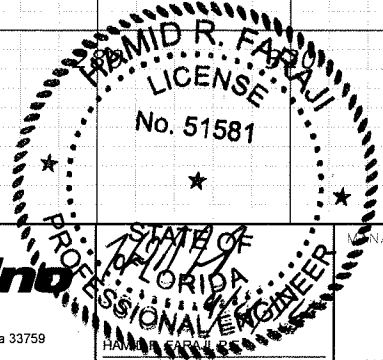
HAMID R. FARAJI
LICENSE
No. 51581
PROFESSIONAL ENGINEER
STATE OF FLORIDA

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

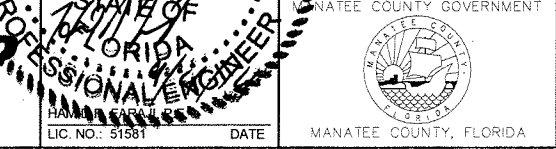
SHEET TITLE: **POND SOUTH CROSS SECTION (2)**
PROJECT NAME: **FORT HAMER BRIDGE**
SHEET NO.: **63**



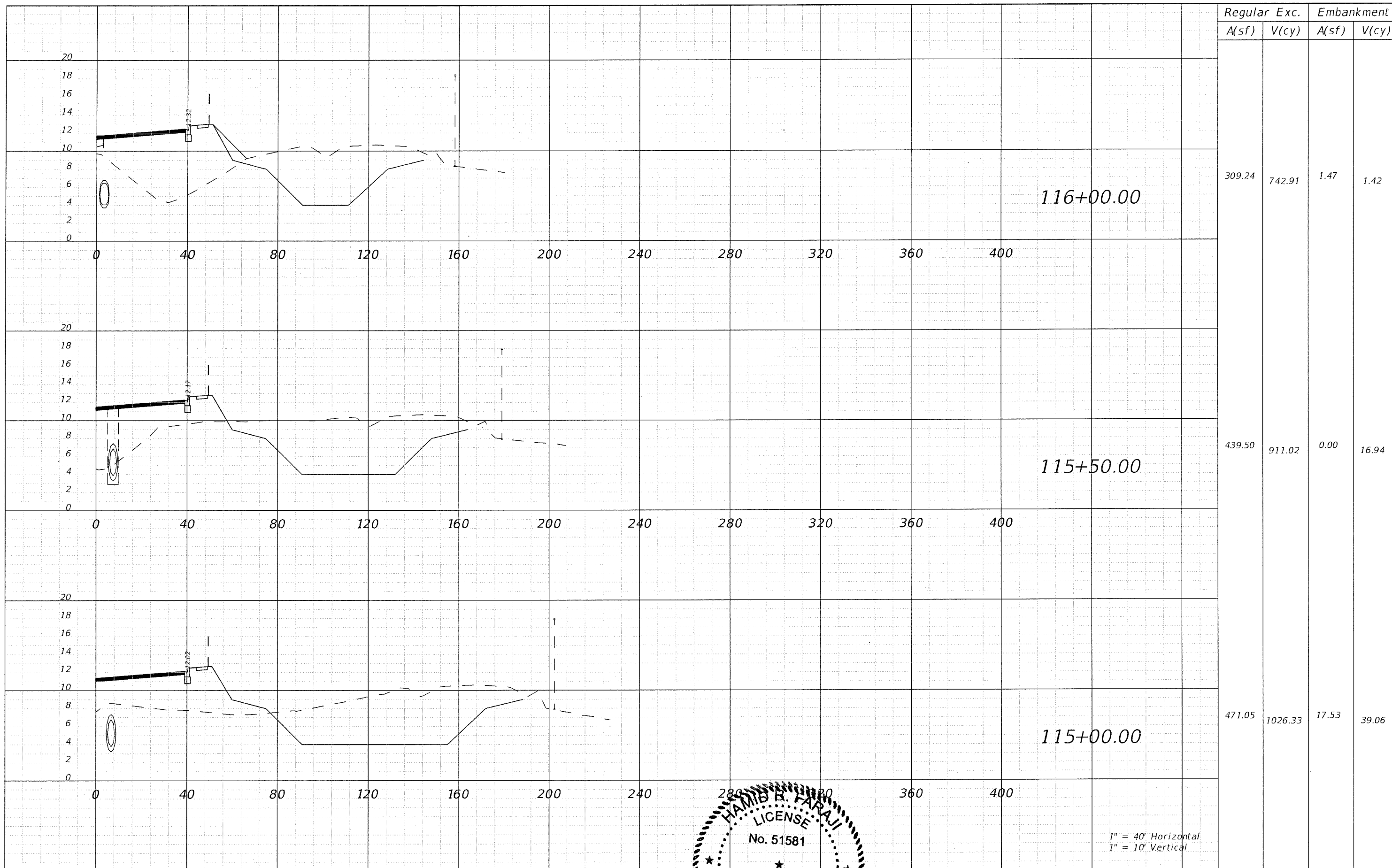
1" = 40' Horizontal
1" = 10' Vertical



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

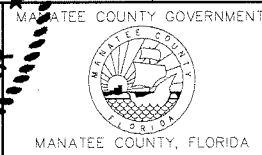
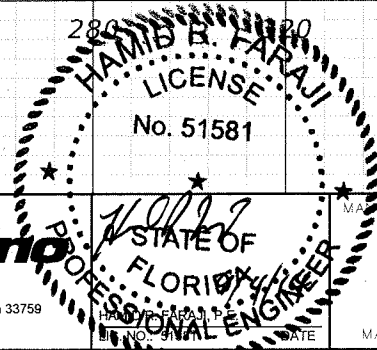


SHEET TITLE:	POND SOUTH CROSS SECTION (3)	
PROJECT NAME:	FORT HAMER BRIDGE	
SHEET NO.:	64	

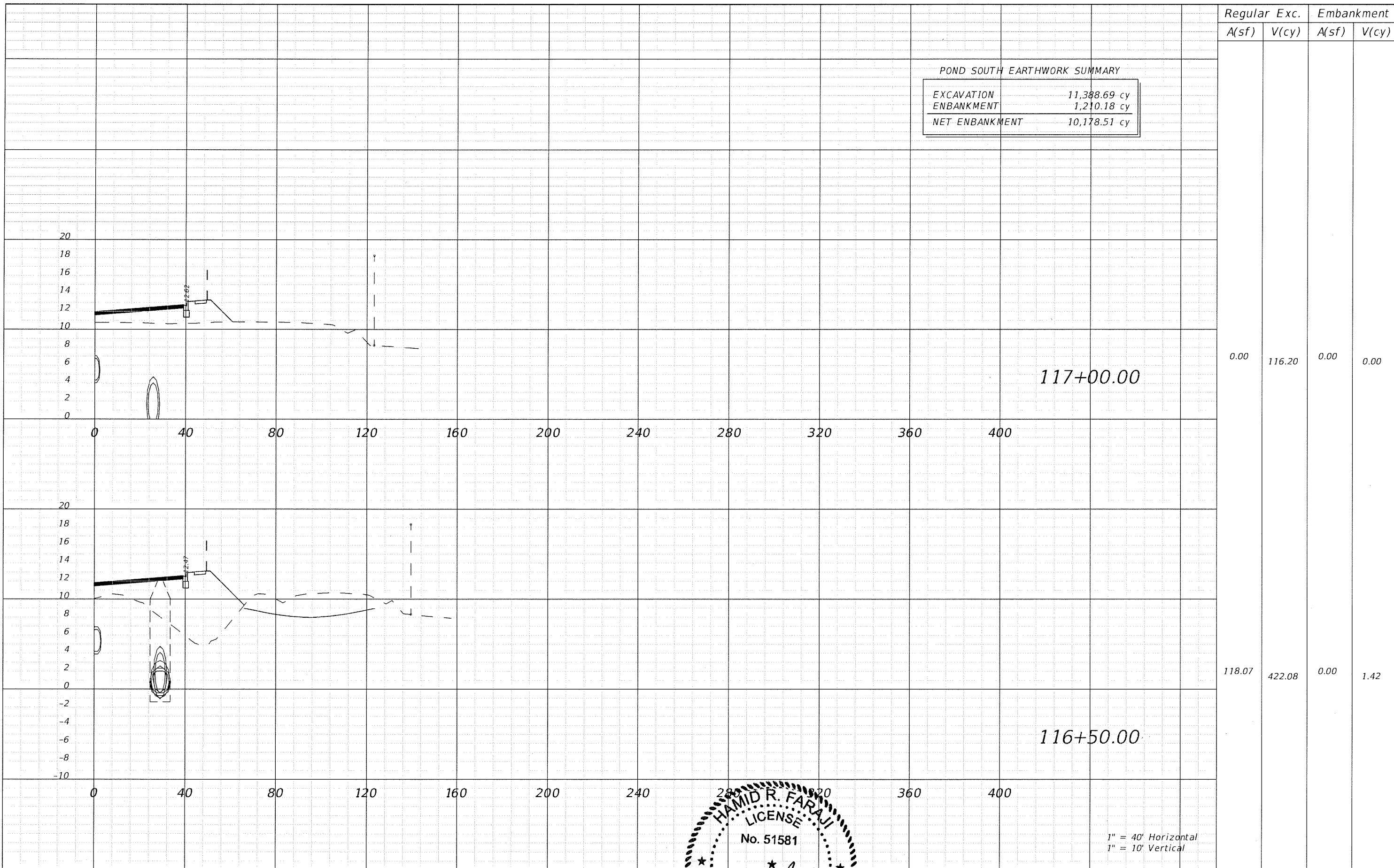


1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

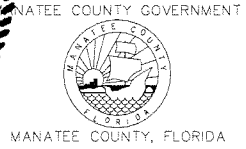
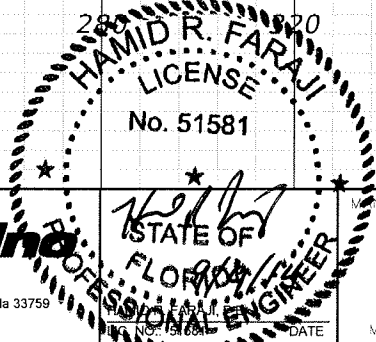


SHEET TITLE:	POND SOUTH CROSS SECTION (4)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	65



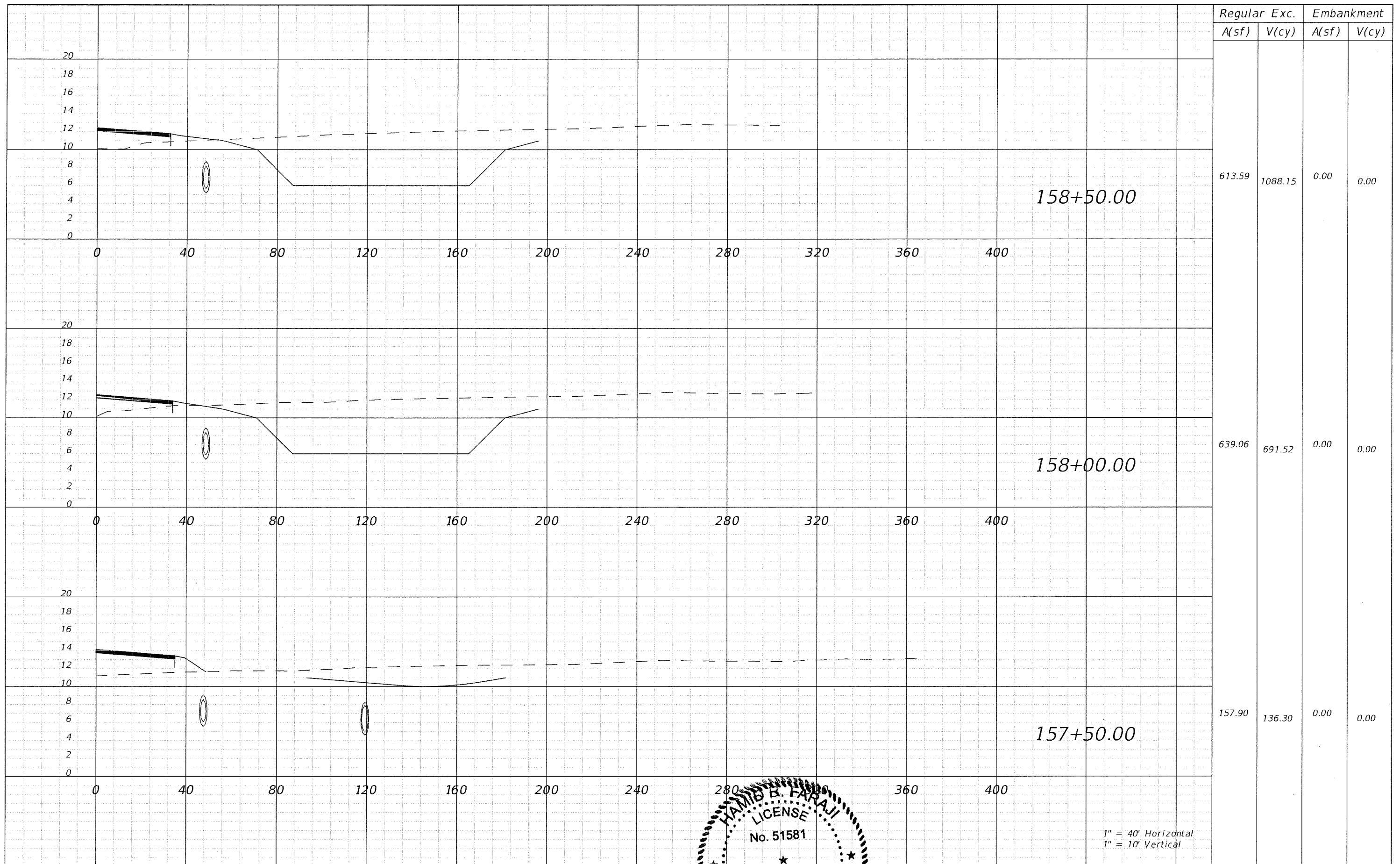
Station	Regular		Exc.		Embankment	
	A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
117+00.00	0.00	116.20	0.00	0.00	0.00	0.00
116+50.00	118.07	422.08	0.00	1.42	0.00	1.42

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



SHEET TITLE:	POND SOUTH CROSS SECTION (5)	
PROJECT NAME:	FORT HAMER BRIDGE	
SHEET NO.:	66	

1" = 40' Horizontal
1" = 10' Vertical



1" = 40' Horizontal
1" = 10' Vertical

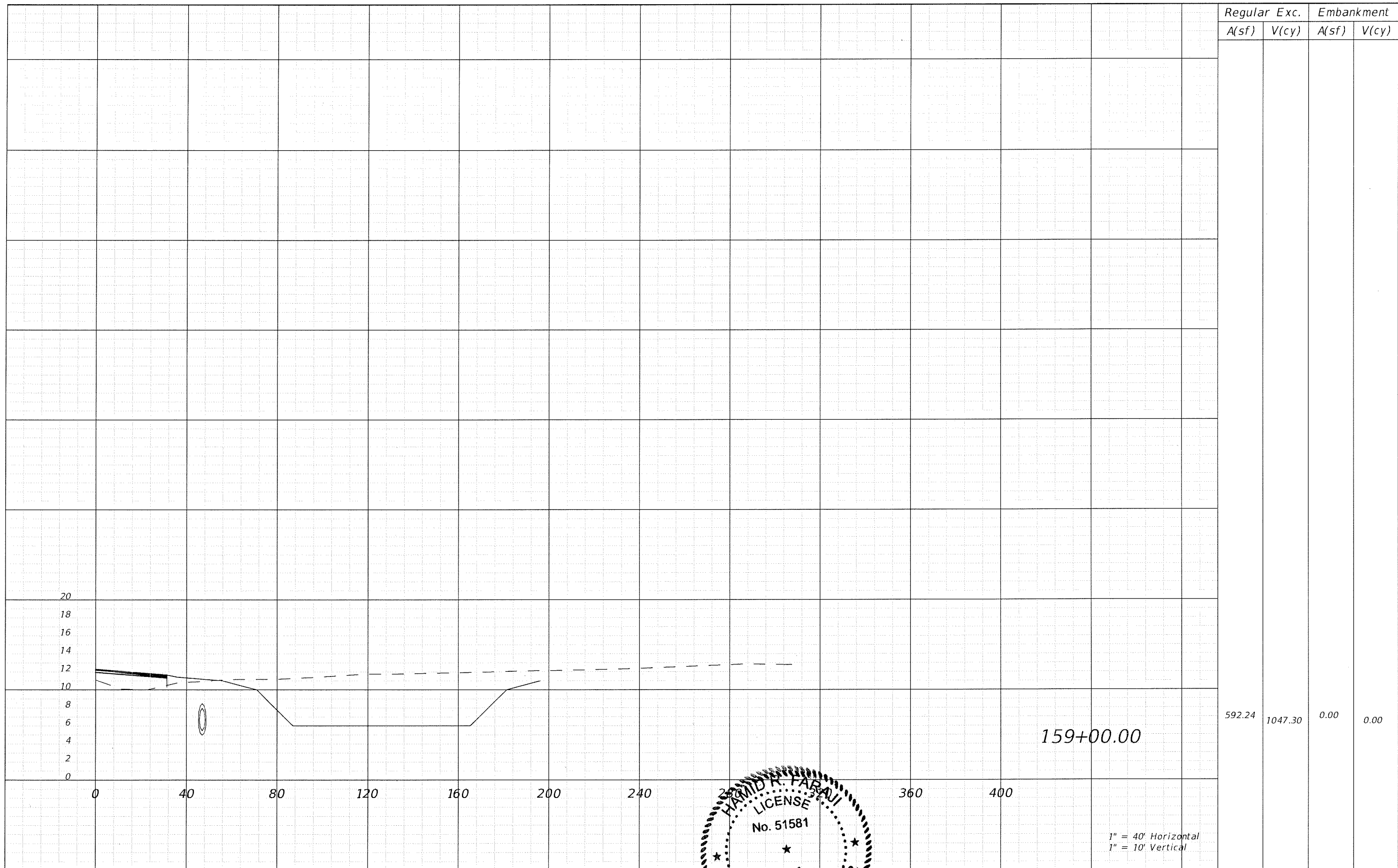
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Cardno TBE
380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardno.com - 727.531.3505
Certificate of Authorization No. 3843

HAMB B. FARAJI
LICENSE
No. 51581
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: **POND NORTH CROSS SECTION (1)**
PROJECT NAME: **FORT HAMER BRIDGE**
SHEET NO.: **67**



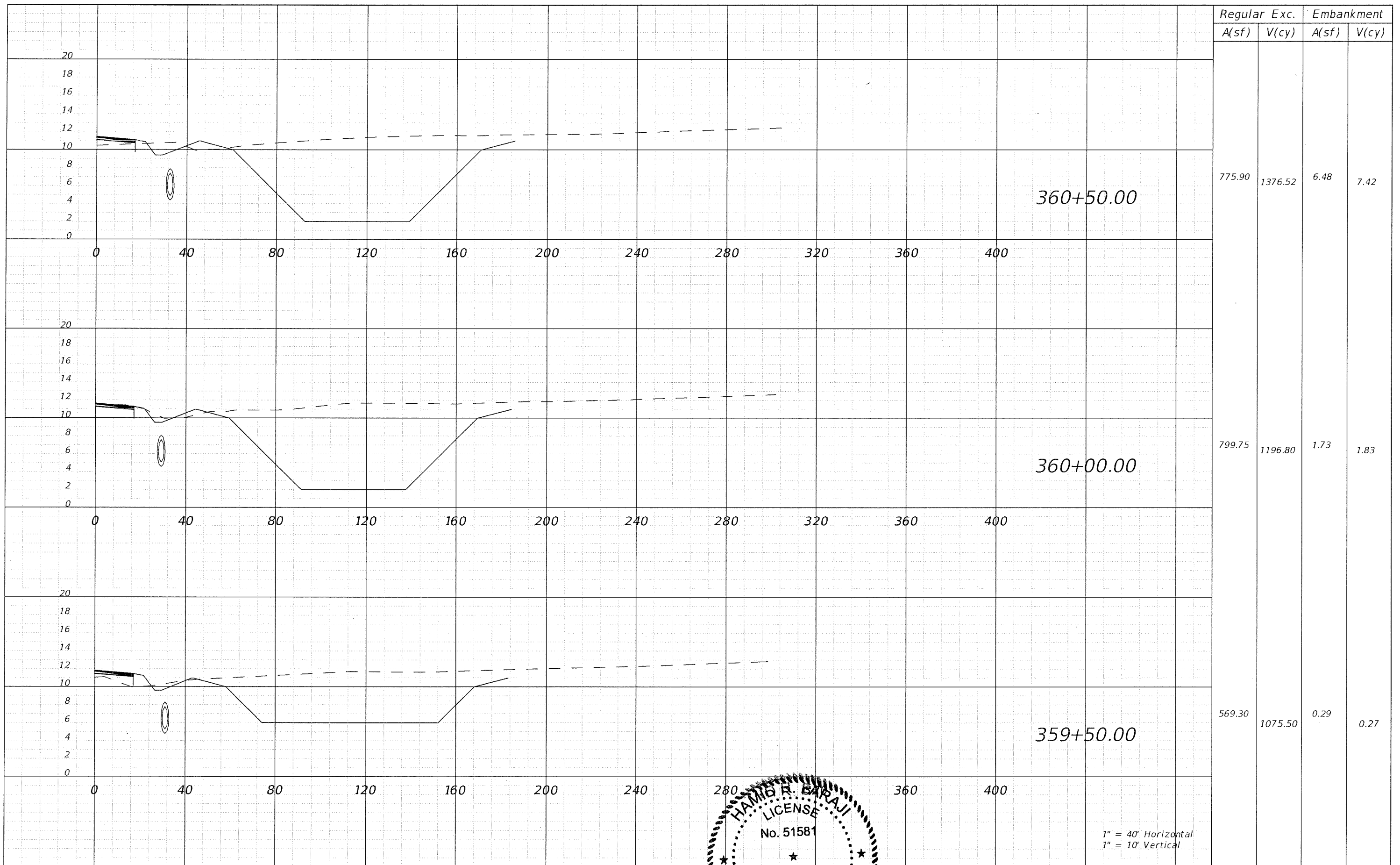
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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Certificate of Authorization No. 3843

HAMID K. FARAJI
LICENSE
No. 51581
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: POND NORTH CROSS SECTION (2)
PROJECT NAME: FORT HAMER BRIDGE
SHEET NO.: 68



1" = 40' Horizontal
1" = 10' Vertical

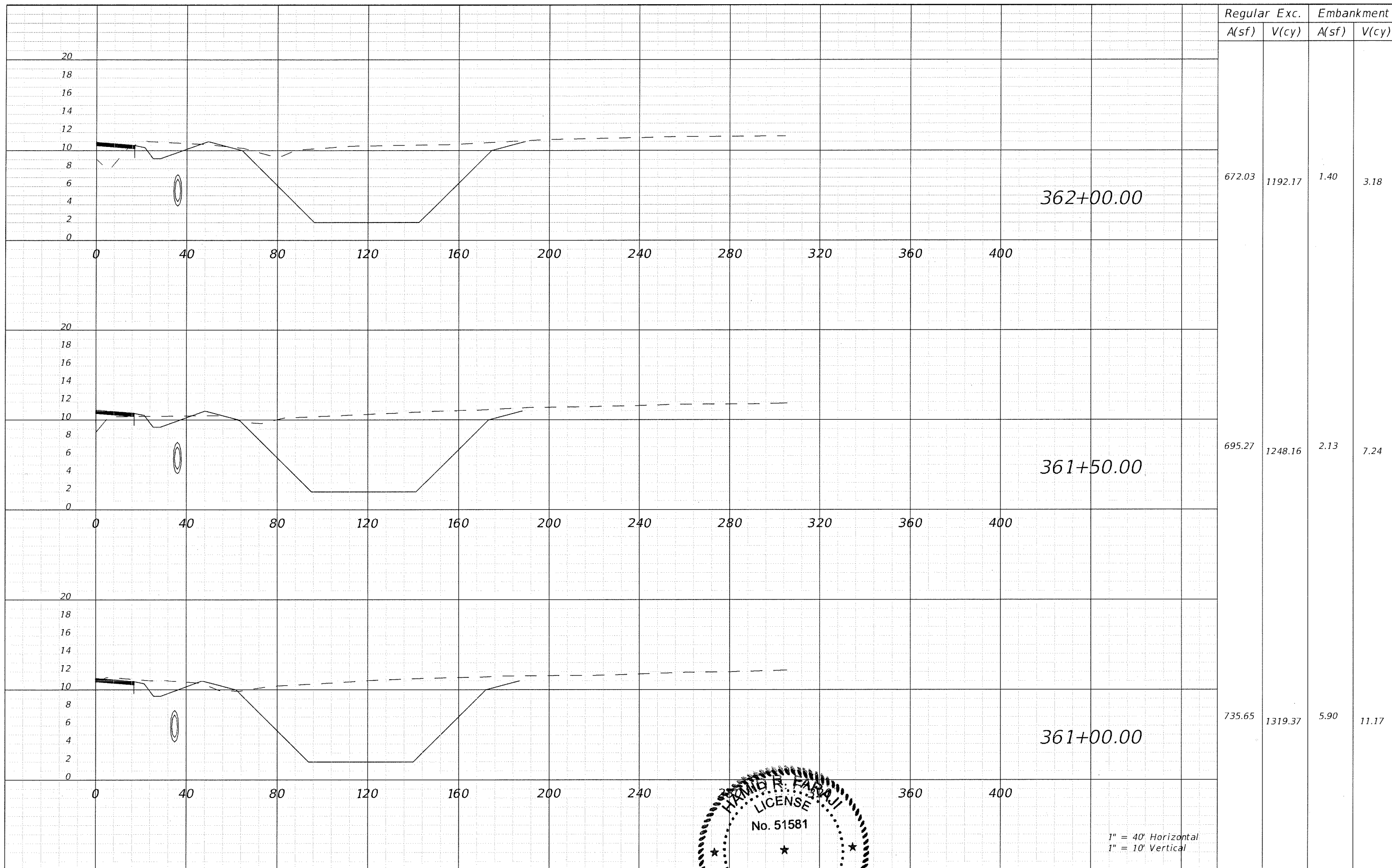
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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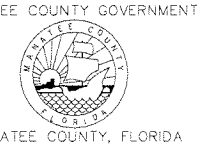
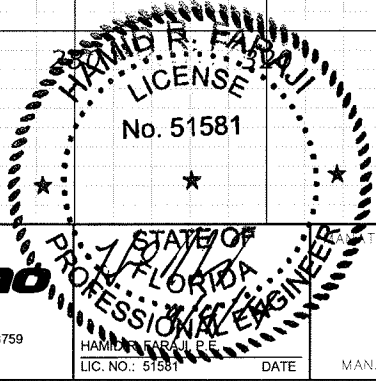
HAMID R. SARAJI
LICENSED PROFESSIONAL ENGINEER
No. 51581
STATE OF FLORIDA
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: **POND NORTH CROSS SECTION (3)**
PROJECT NAME: **FORT HAMER BRIDGE**
SHEET NO.: **69**

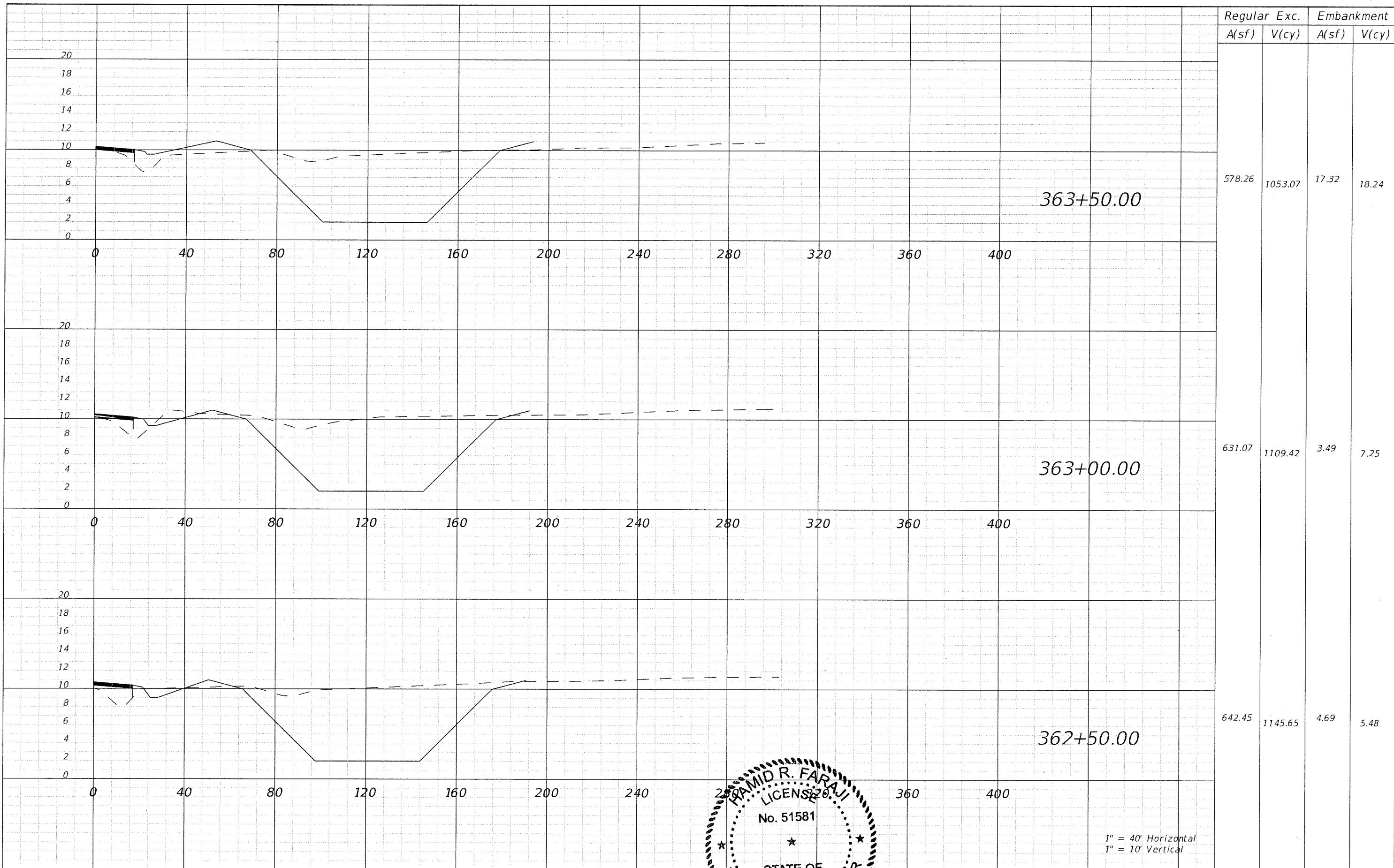


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1" = 10' Vertical

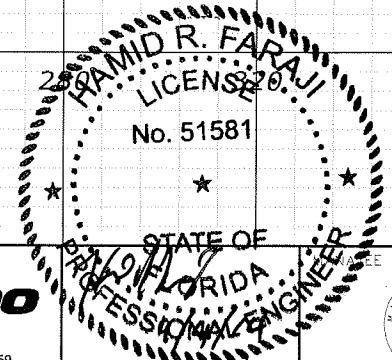


SHEET TITLE: POND NORTH CROSS SECTION (4)		SHEET NO. 70
PROJECT NAME: FORT HAMER BRIDGE		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



1" = 40' Horizontal
1" = 10' Vertical

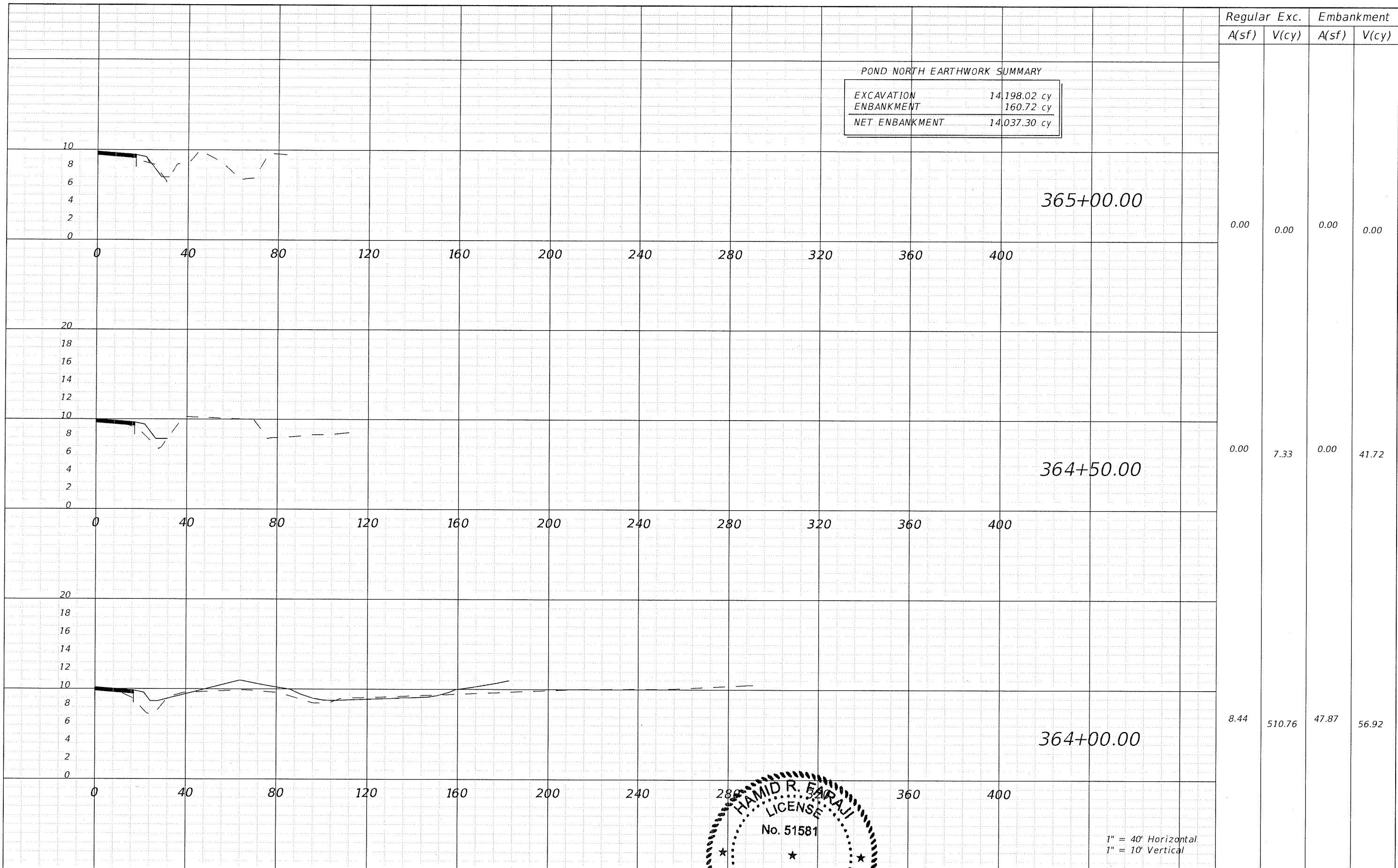


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



HAMID R. FARAJ, P.E.
LIC. NO.: 51581
DATE
MANATEE COUNTY, FLORIDA

SHEET TITLE:	POND NORTH CROSS SECTION (5)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	71



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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www.cardnotbe.com - 727.531.3505
Certificate of Authorization No. 3843

HAMID R. FARAJ
LICENSED PROFESSIONAL ENGINEER
No. 51581
DATE

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: POND NORTH CROSS SECTION (6)
PROJECT NAME: FORT HAMER BRIDGE
SHEET NO.: 72

MANATEE COUNTY, FLORIDA
BRIDGE DESIGN OVER MANATEE RIVER FROM UPPER MANATEE RIVER ROAD TO NORTH OF FT. HAMER PARK
PROJECT NO. 09-2392BG

DATE OF SURVEY: 01/11 - 03/11
 SURVEY MADE BY: URS CORPORATION / UNIVERSAL ENGINEERING SCIENCES, INC.
 SUBMITTED BY: MICHAEL R. SHARP, P. E.

ROAD: UPPER MANATEE COUNTY ROAD
 COUNTY: MANATEE

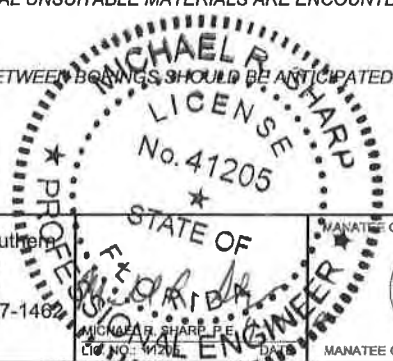
CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS

STRATUM NO.	NO. OF TESTS	ORGANIC CONTENT		NO. OF TESTS	SIEVE ANALYSIS % PASSING						ATTERBERG LIMITS (%)			DESCRIPTION	NO. OF TESTS	Corrosion Test Results			pH	
		% ORGANIC	MOISTURE CONTENT		#4 MESH	#8 MESH	#10 MESH	#40 MESH	#60 MESH	#200 MESH	LIQUID LIMIT	PLASTIC INDEX	AASHTO GROUP			RESISTIVITY ohm-cm	CHLORIDE ppm	SULFATES ppm		
1	--	--	--	4	96 - 81	93 - 60	92 - 57	83 - 27	56 - 17	3 - 1	--	--	--	A-3	GRAY TO BROWN SAND w/some SHELL & GRAVEL	1	680	123	600	7.8
2	--	--	--	6	100 - 99	99 - 97	98 - 96	82 - 78	59 - 55	7 - 2	--	--	--	A-3	GRAY TO REDDISH BROWN SAND w/tr SHELL & GRAVEL	2	1748 - 546	115 - 19	588 - 145	7.7 - 7.4
3	3	2.5 - 1.0	--	4	100	100	100	96	69	16 - 5	--	--	--	A-2-4	DARK BROWN SAND w/some SILT & w/tr ORGANICS	1	2500	133	560	5.4
4	2	21.0 - 11.0	43 - 39	2	--	--	--	--	--	36 - 33	2	41 - 40	13 - 10	A-8	DARK BROWN CLAYEY SAND w/ORGANICS (MUCK)					
5	--	--	--	3	100	100	100	94 - 93	69 - 66	37 - 21	3	39 - 29	19 - 9	A-2-6	GRAY TO BROWN CLAYEY SAND	1	3968	36	564	4.7
6	--	--	--	2	--	--	--	--	--	26 - 25	2	31 - 27	10 - 8	A-2-4	GRAY TO BROWN CLAYEY SAND					
7	--	--	--	1	--	--	--	--	--	73	1	53	26	A-7-6	GRAY TO BROWN SANDY CLAY					
8	--	--	--	4	100	100	100	96	75	10 - 5	--	--	--	A-3	DARK BROWN TO REDDISH BROWN SAND w/some SILT	2	1880 - 435	190 - 103	1940 - 1930	7.6 - 5.6
9	--	--	--	6	100 - 99	100 - 98	100 - 98	93 - 78	62 - 59	26 - 16	1	NP	NP	A-2-4	LIGHT GRAY TO REDDISH BROWN SILTY SAND	1	3378	35	384	6
10	--	--	--	7	99 - 85	97 - 80	96 - 79	73 - 61	54 - 47	13 - 11	--	--	--	A-2-4	LT. GRAY TO BROWN SAND w/some SILT & tr to some SHELL					
11	--	--	--	2	--	--	--	--	--	93 - 87	2	75 - 64	34 - 25	A-7-5	GRAY TO TAN SILTY CLAY					
12	1	3.0	--	1						34	1	38	17	A-2-6	GRAY CLAYEY SAND w/tr ORGANICS					

EMBANKMENT AND SUBGRADE MATERIAL

--- WATER TABLE ENCOUNTERED
 GNE --- GROUND WATER NOT ENCOUNTERED
 ▼

- THE MATERIAL FROM STRATA NUMBERS 1, 2, 3, 8, AND 10 APPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH INDEX 505.
- THE MATERIAL FROM STRATA NUMBERS 6 AND 9 APPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH INDEX 505. HOWEVER, THIS MATERIAL IS LIKELY TO RETAIN EXCESS MOISTURE AND MAY BE DIFFICULT TO DRY AND COMPACT. IT SHOULD BE USED IN THE EMBANKMENT ABOVE THE WATER LEVEL EXISTING AT THE TIME OF CONSTRUCTION.
- THE MATERIAL FROM STRATUM NUMBER 4 SHALL BE TREATED AS MUCK (A-8 MATERIAL) AND SHALL BE REMOVED WITHIN THE LIMITS OF THE HATCHED AREAS SHOWN ON THE ROADWAY CROSS SECTIONS.
- THE MATERIAL FROM STRATA NUMBERS 5 AND 12 IS PLASTIC MATERIAL AND SHALL BE REMOVED IN ACCORDANCE WITH INDEX 500. IT MAY BE PLACED ABOVE THE EXISTING WATER LEVEL (AT THE TIME OF CONSTRUCTION) TO WITHIN 4 FEET OF THE PROPOSED BASE. IT SHOULD BE PLACED UNIFORMLY IN THE LOWER PORTION OF THE EMBANKMENT FOR SOME DISTANCE ALONG THE PROJECT RATHER THAN FULL-DEPTH FOR SHORTER DISTANCES.
- THE MATERIAL FROM STRATA NUMBERS 7 AND 11 IS HIGH PLASTIC MATERIAL AND SHALL BE REMOVED IN ACCORDANCE WITH INDEX 500. IT MAY BE USED WITHIN THE PROJECT LIMITS AS INDICATED IN INDEX 505 ONLY WHEN EXCAVATED WITHIN THE PROJECT LIMITS AND IS NOT TO BE USED WHEN OBTAINED FROM OUTSIDE THE PROJECT LIMITS.
- IN ADDITION TO SOILS DATA ON THE ROADWAY CROSS SECTIONS, PLEASE REFER TO CORE BORING SHEETS FOR ADDITIONAL SOILS INFORMATION IN SIGNIFICANT FILL AREAS.
- OTHER ISOLATED AREAS OF ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL MAY EXIST BETWEEN BORING LOCATIONS. IF ADDITIONAL UNSUITABLE MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHOULD BE REMOVED AND REPLACED IN ACCORDANCE WITH INDEX 500.
- STRATA BOUNDARIES ARE APPROXIMATE AND REPRESENT SOIL STRATA AT EACH TEST HOLE LOCATION ONLY. SUBSURFACE VARIATIONS BETWEEN BORINGS SHOULD BE ANTICIPATED.



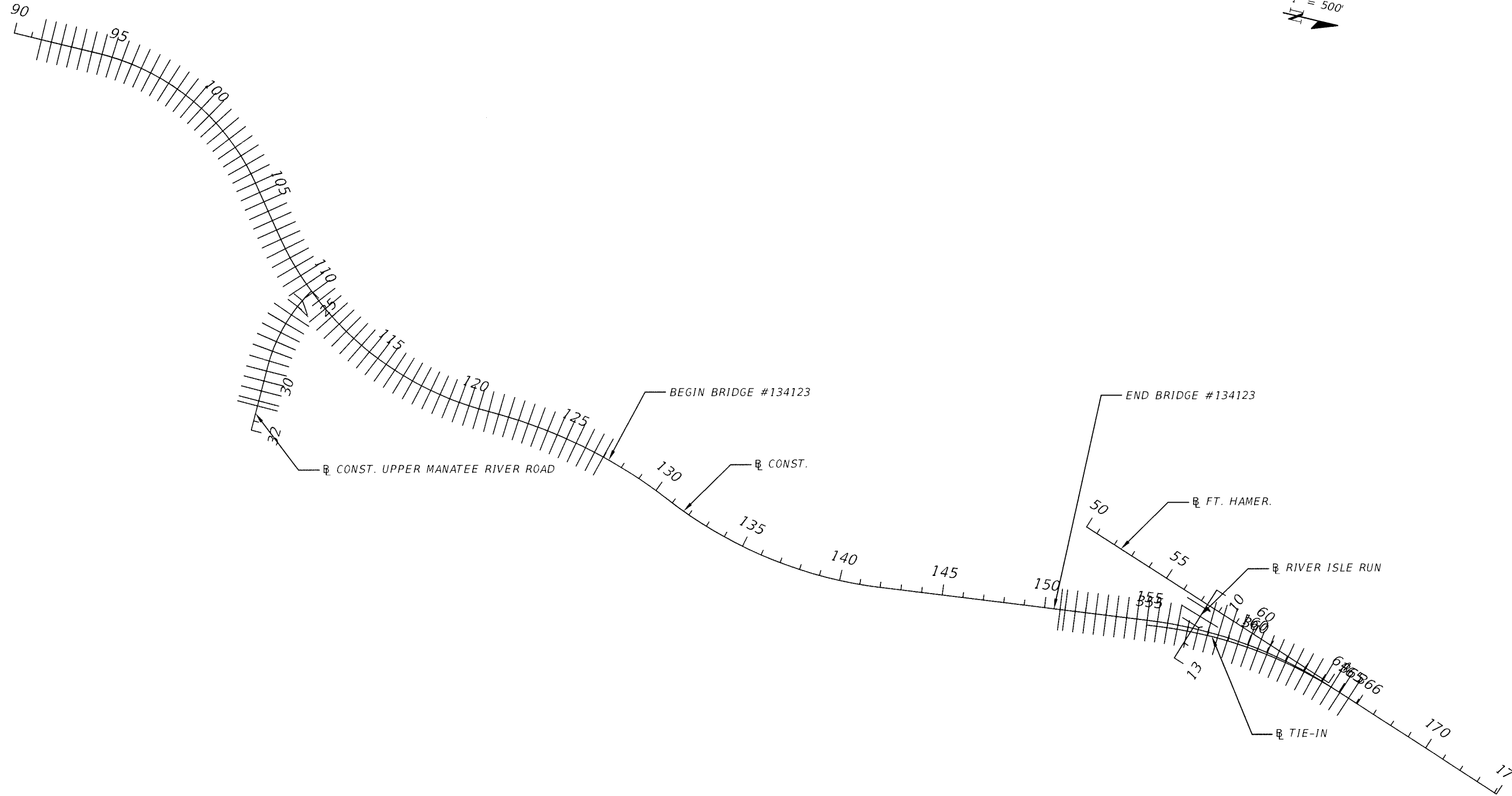
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

URS
 URS Corporation Southern
 7650 West Courtney
 Campbell Causeway
 Tampa, Florida 33607-1466
 C.A. No. 00000002

MANATEE COUNTY GOVERNMENT
 STATE OF FLORIDA
 MICHAEL R. SHARP, P.E.
 LICENSE NO. 41205
 PROFESSIONAL ENGINEER
 MANATEE COUNTY, FLORIDA

SHEET TITLE: SOIL SURVEY	SHEET NO. 73
PROJECT NAME: FORT HAMER BRIDGE	

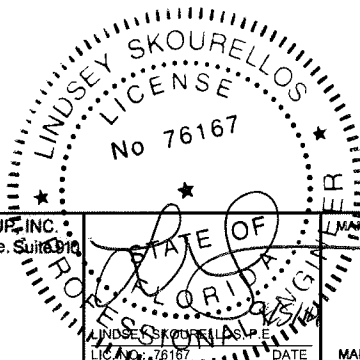
1" = 500'



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

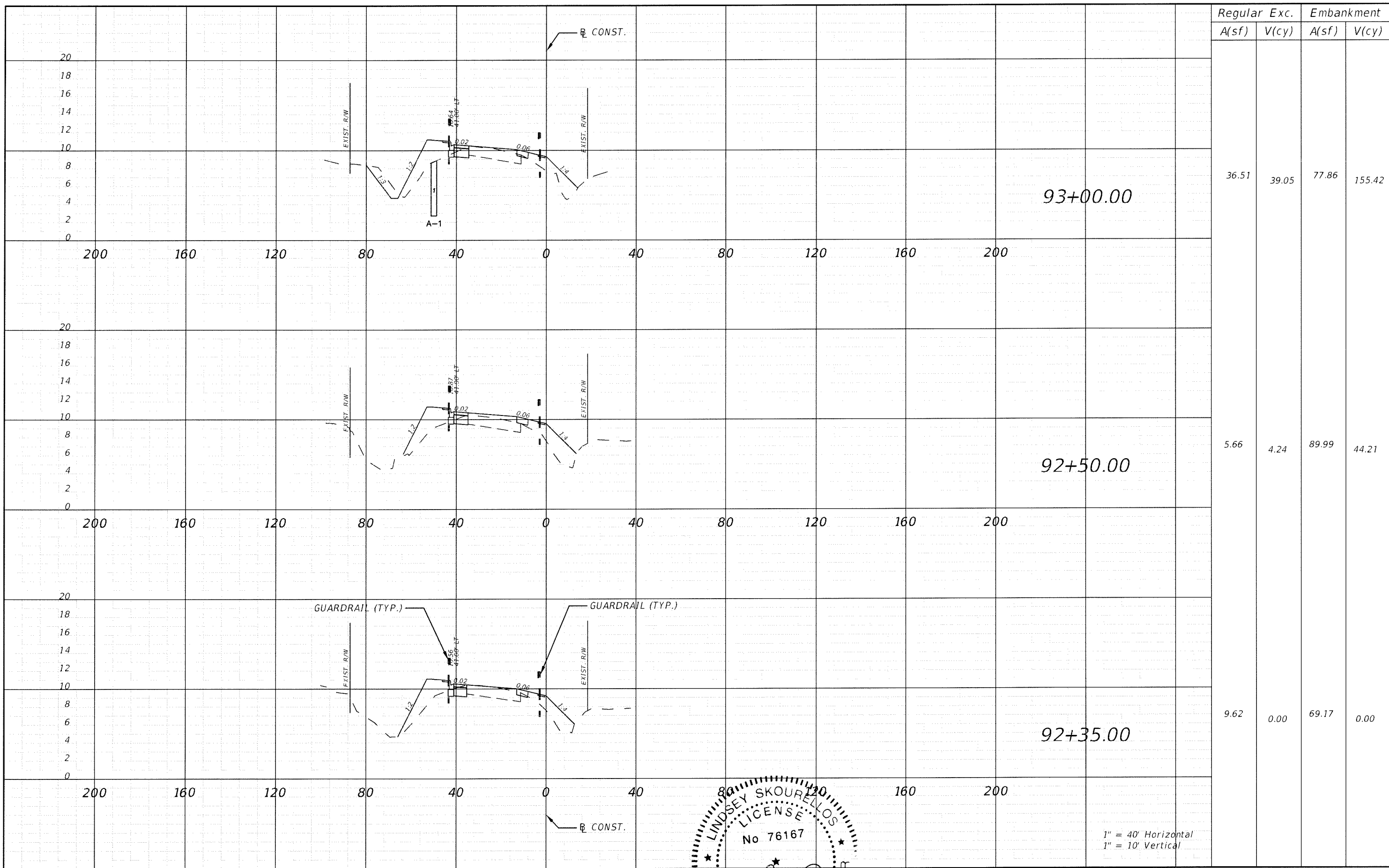


THE HEIMBURG GROUP, INC.
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 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

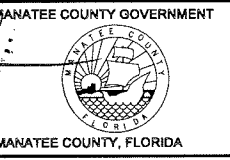
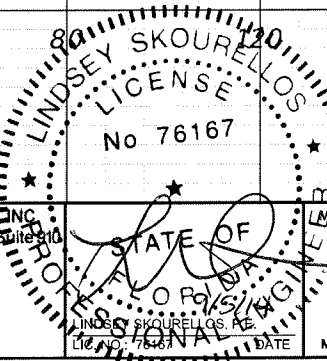
SHEET TITLE: CROSS SECTION PATTERN		SHEET NO. 74
PROJECT NAME: FORT HAMER BRIDGE		



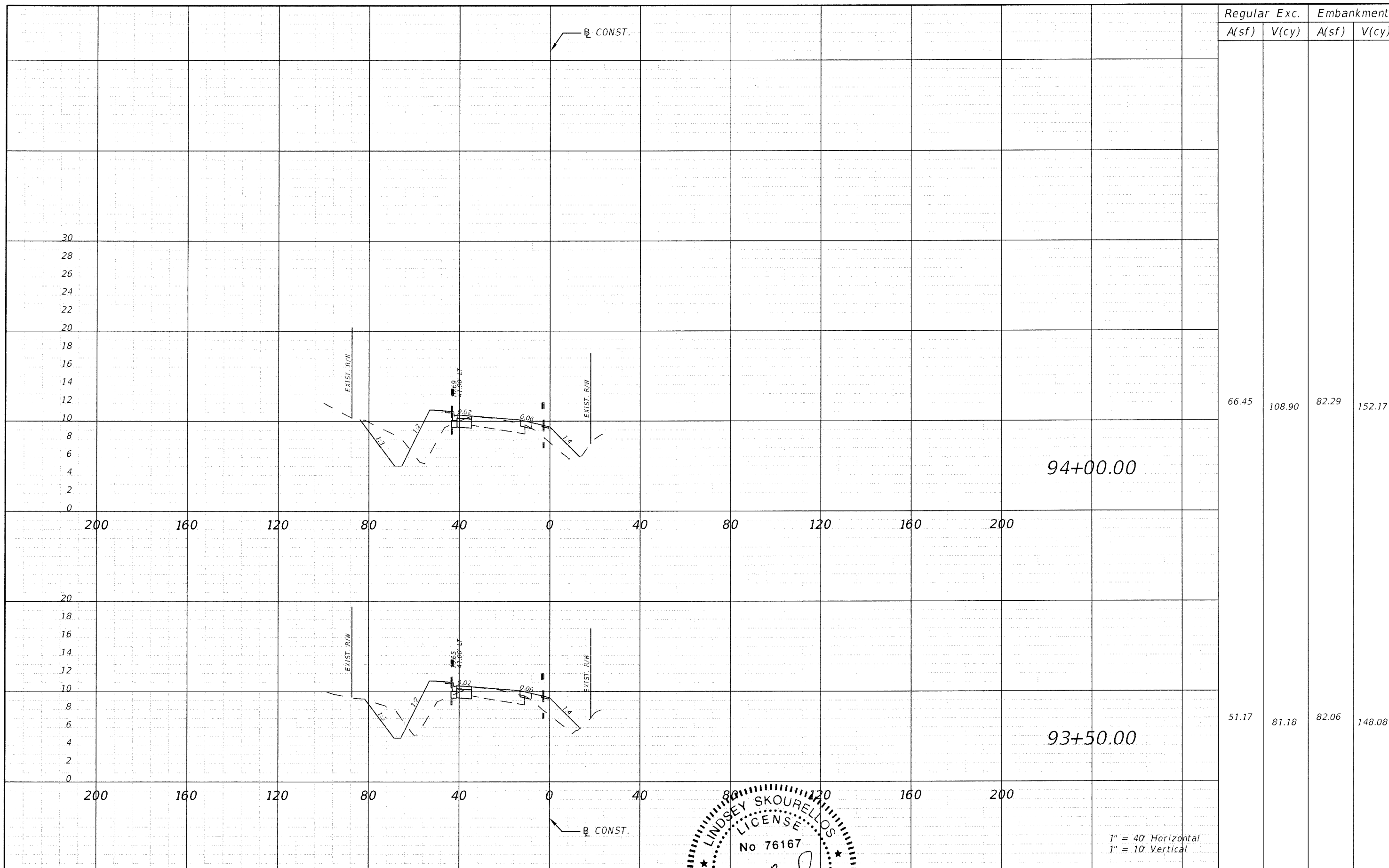
1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

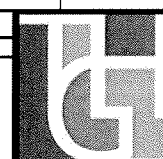
THE HEIMBURG GROUP, INC.
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 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



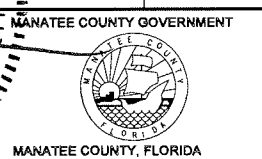
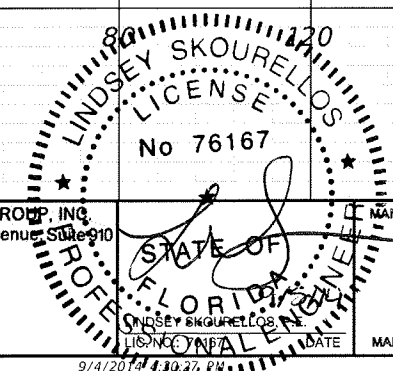
SHEET TITLE: CROSS SECTION (1)		SHEET NO. 75
PROJECT NAME: FORT HAMER BRIDGE		



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

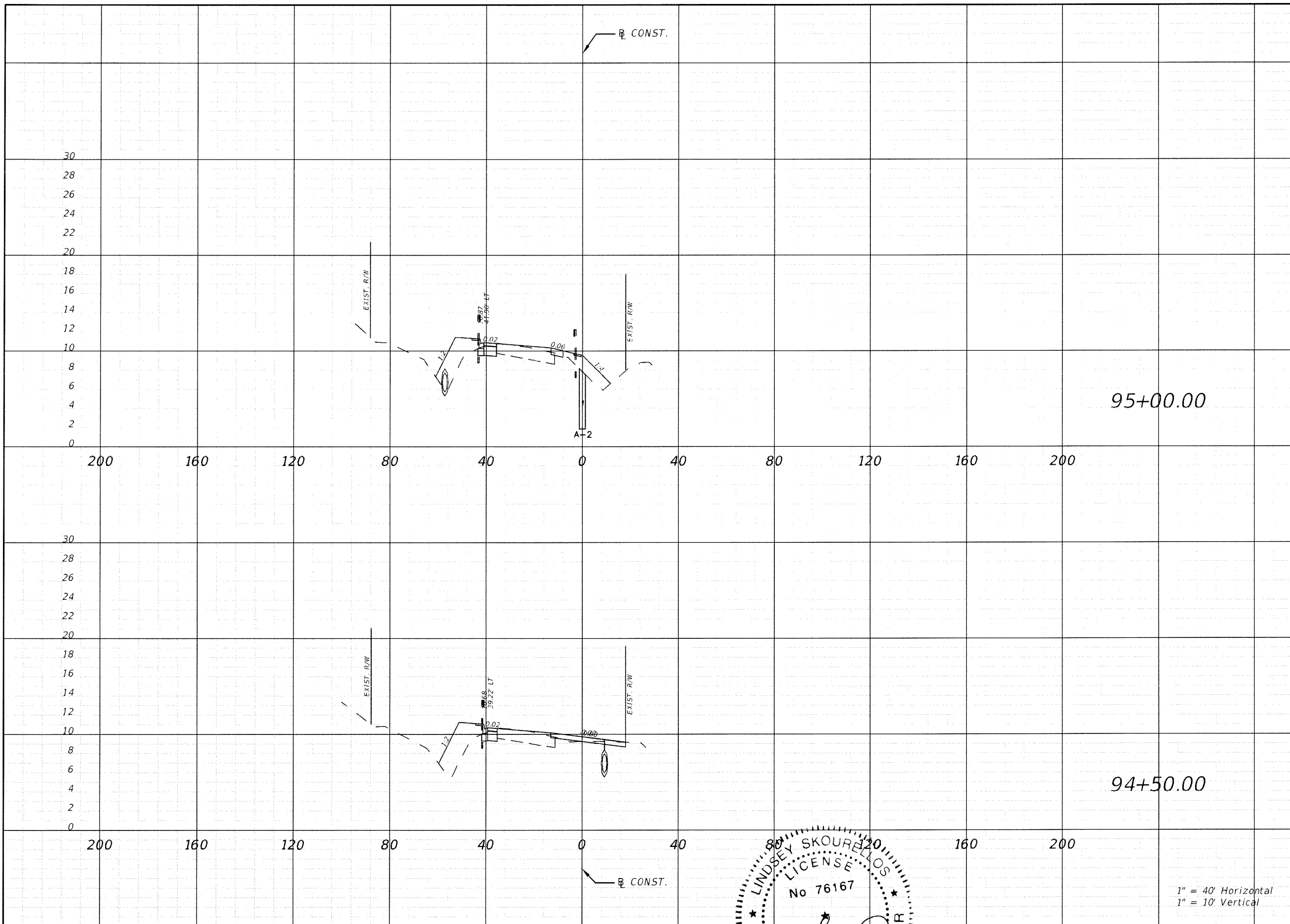


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 TAMPA, FL 33634
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 C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (2)		SHEET NO. 76
PROJECT NAME: FORT HAMER BRIDGE		

1" = 40' Horizontal
 1" = 10' Vertical



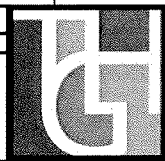
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
42.36	73.87	68.83	112.05		
35.75	94.63	48.13	120.76		

95+00.00

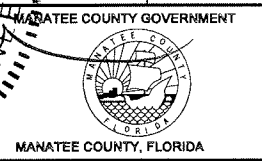
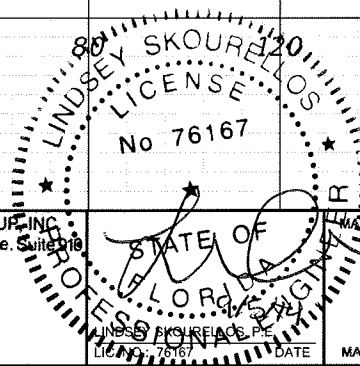
94+50.00

1" = 40' Horizontal
1" = 10' Vertical

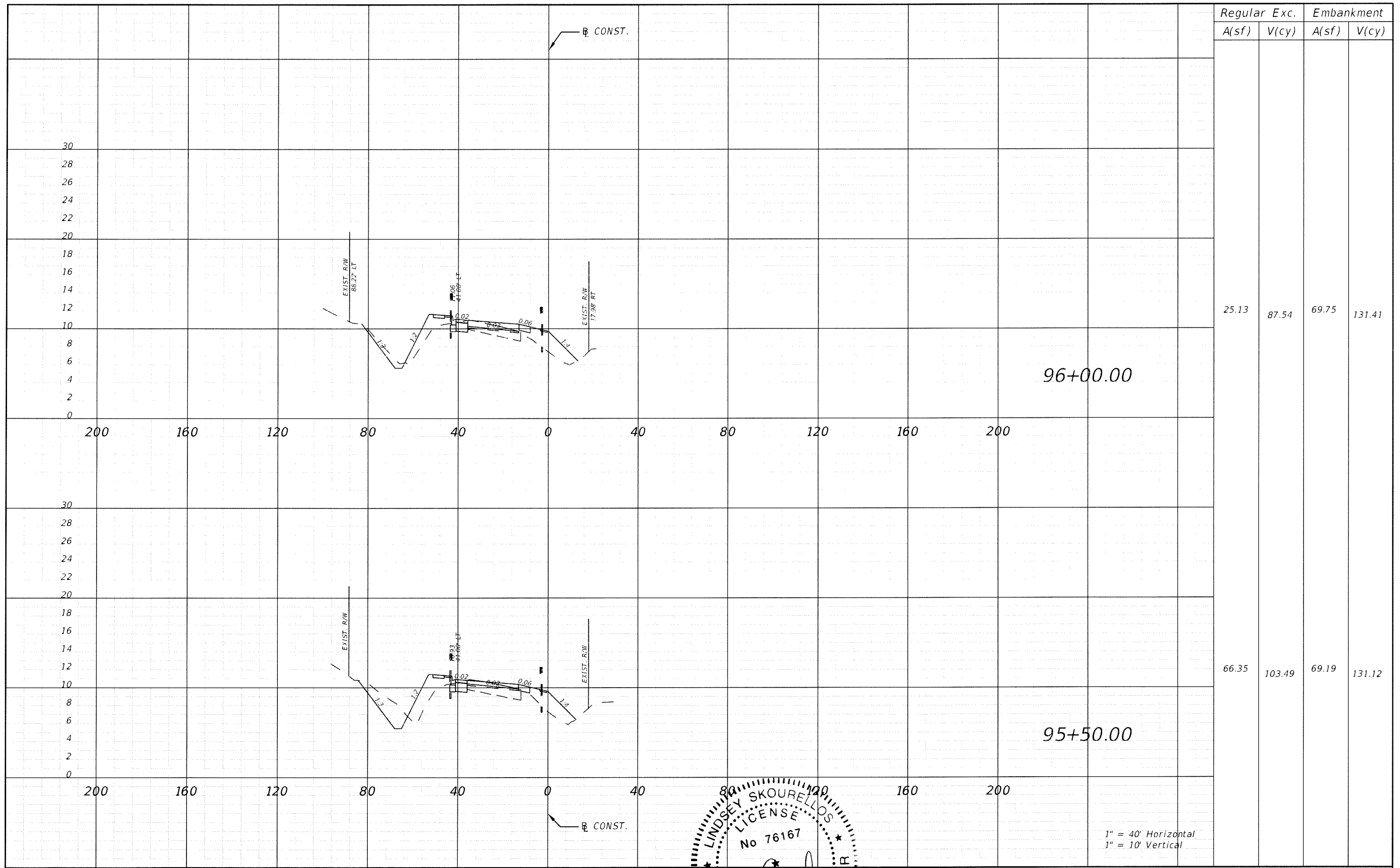
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (3)		SHEET NO. 77
PROJECT NAME: FORT HAMER BRIDGE		

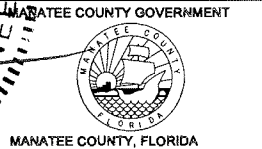
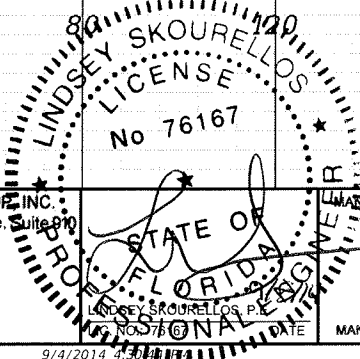


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
25.13	87.54	69.75	131.41		
66.35	103.49	69.19	131.12		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

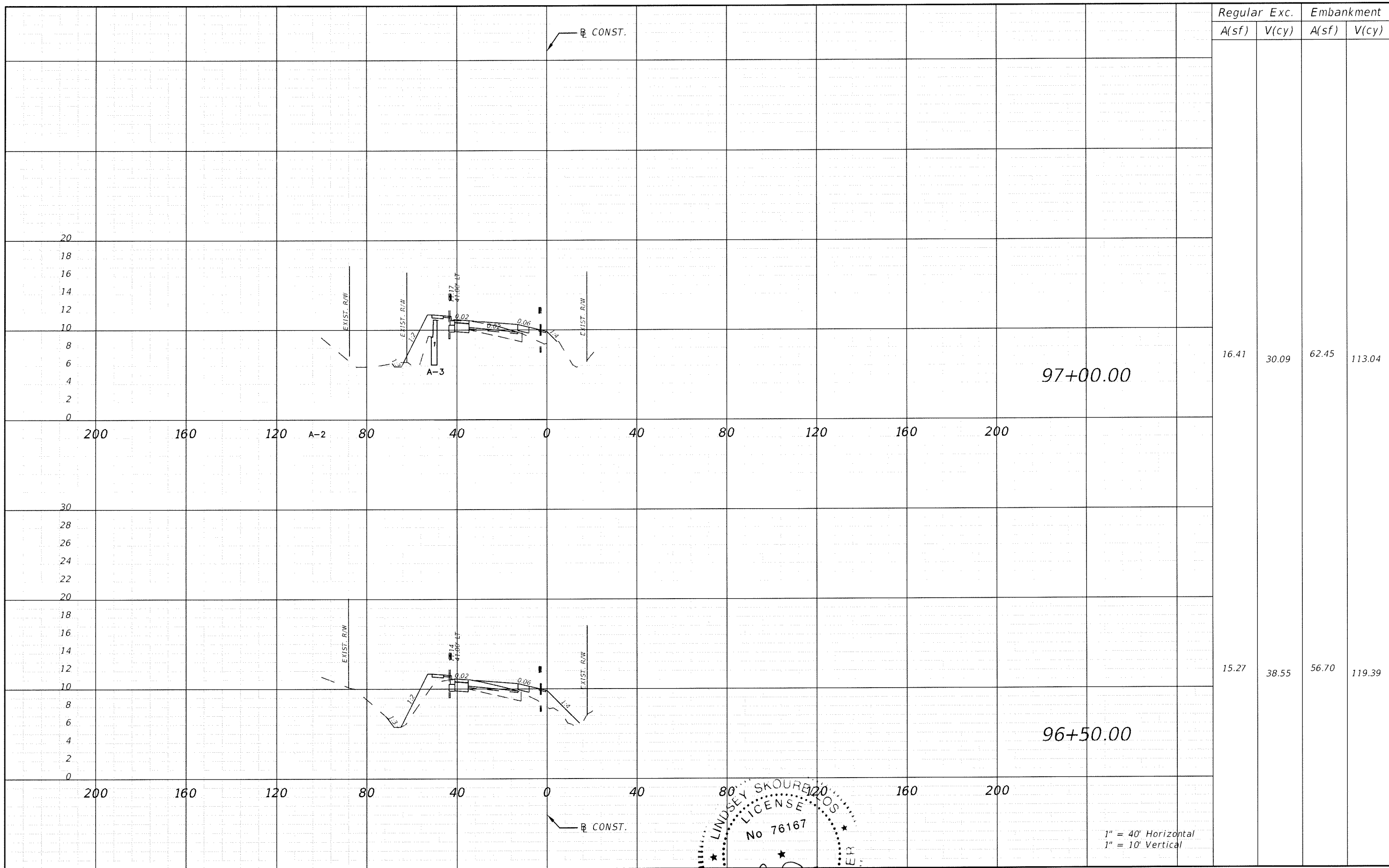


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 TAMPA, FL 33634
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 C.A. NO. 00027842

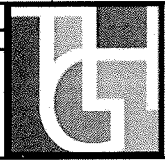


SHEET TITLE: CROSS SECTION (4)		SHEET NO. 78
PROJECT NAME: FORT HAMER BRIDGE		

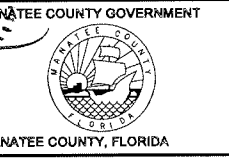
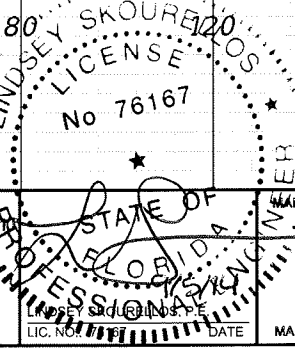
1" = 40' Horizontal
 1" = 10' Vertical



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

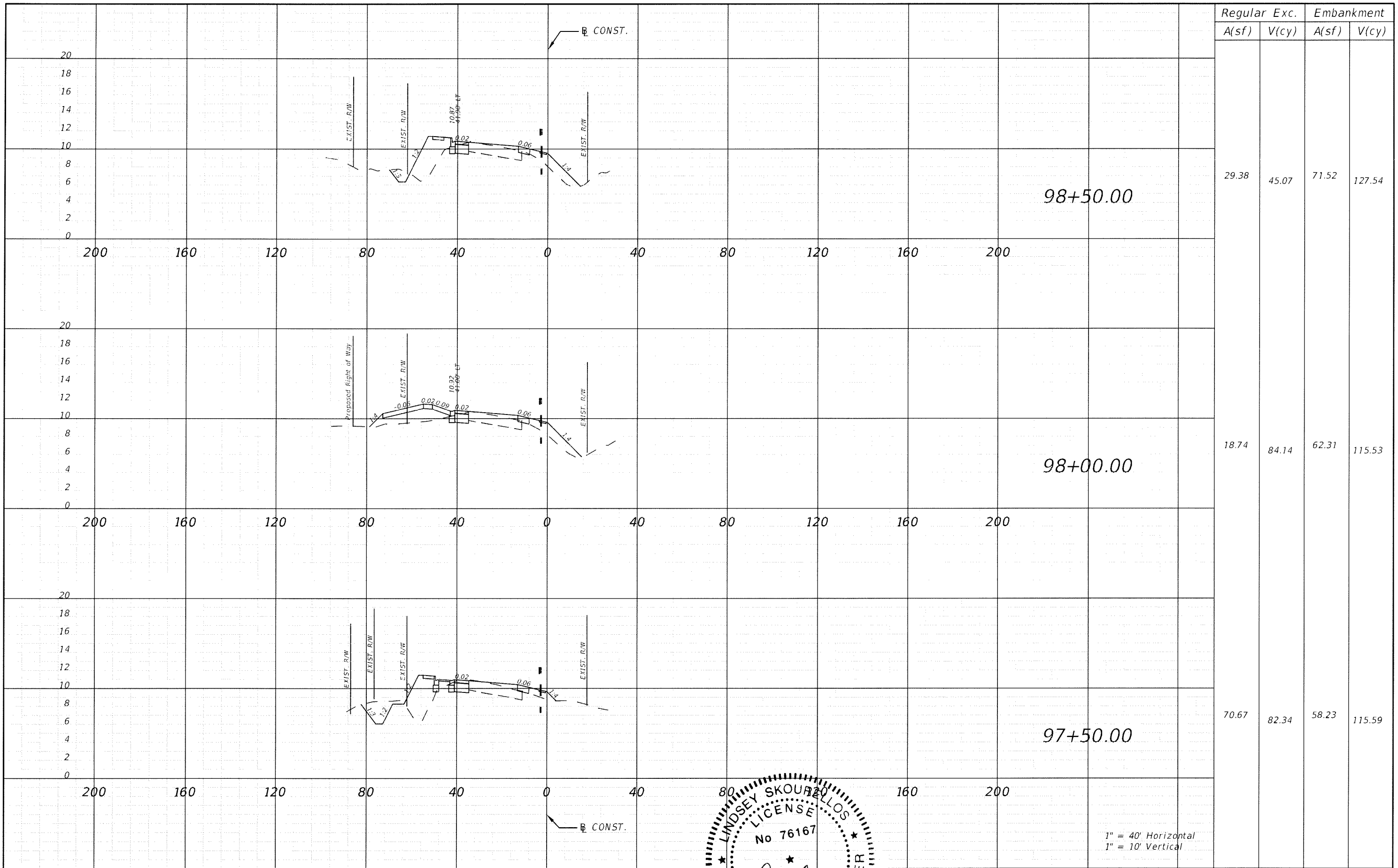


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 C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (5)		SHEET NO. 79
PROJECT NAME: FORT HAMER BRIDGE		

1" = 40' Horizontal
 1" = 10' Vertical



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
29.38	45.07	71.52	127.54		
18.74	84.14	62.31	115.53		
70.67	82.34	58.23	115.59		

1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 210
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

LINDSEY SKOURBLOS
 LICENSE
 No 76167

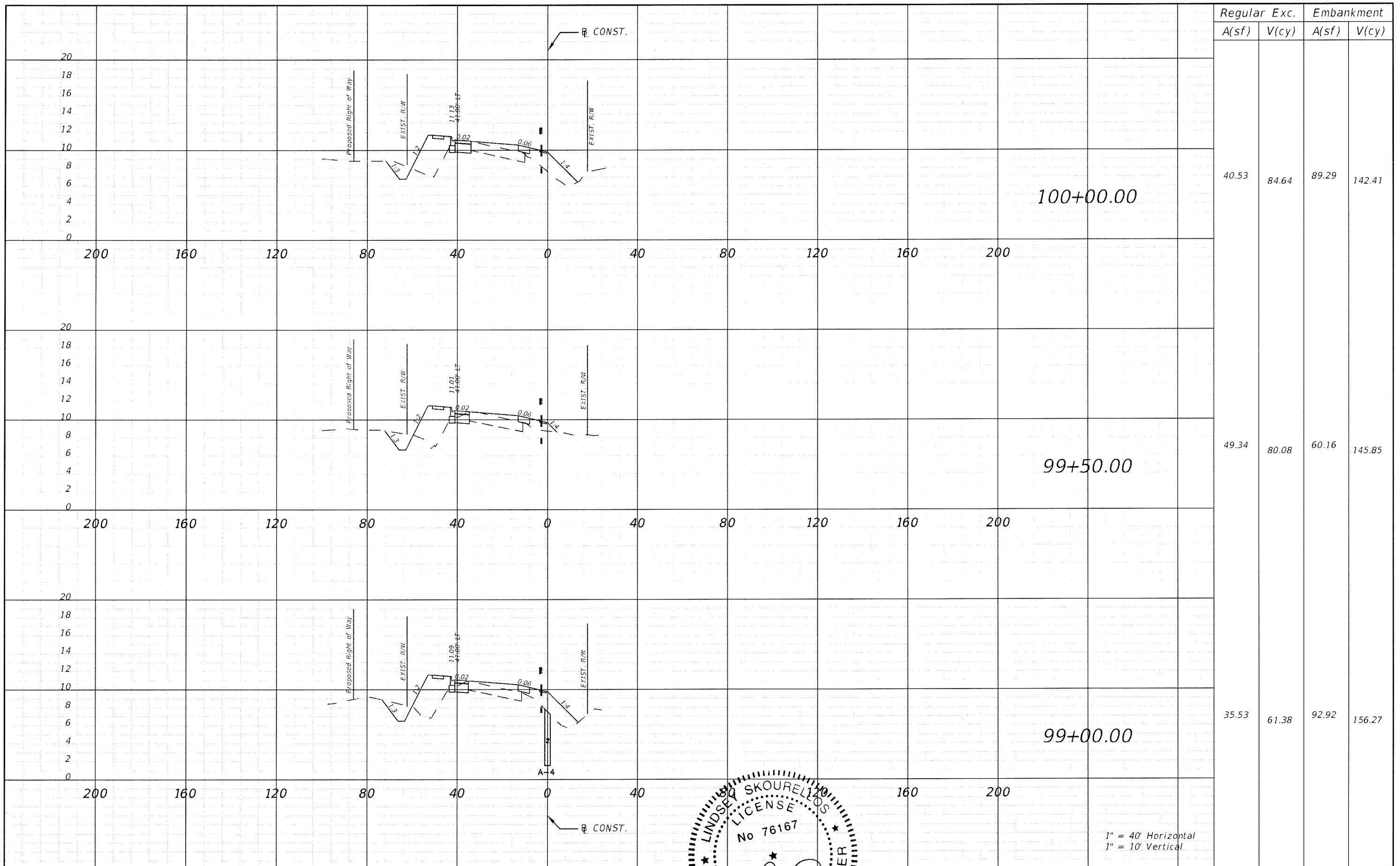
STATE OF FLORIDA
 PROFESSIONAL ENGINEER

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **CROSS SECTION (6)**

PROJECT NAME: **FORT HAMER BRIDGE**

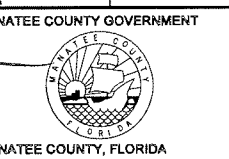
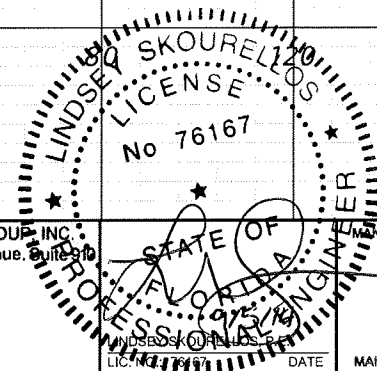
SHEET NO.: **80**



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

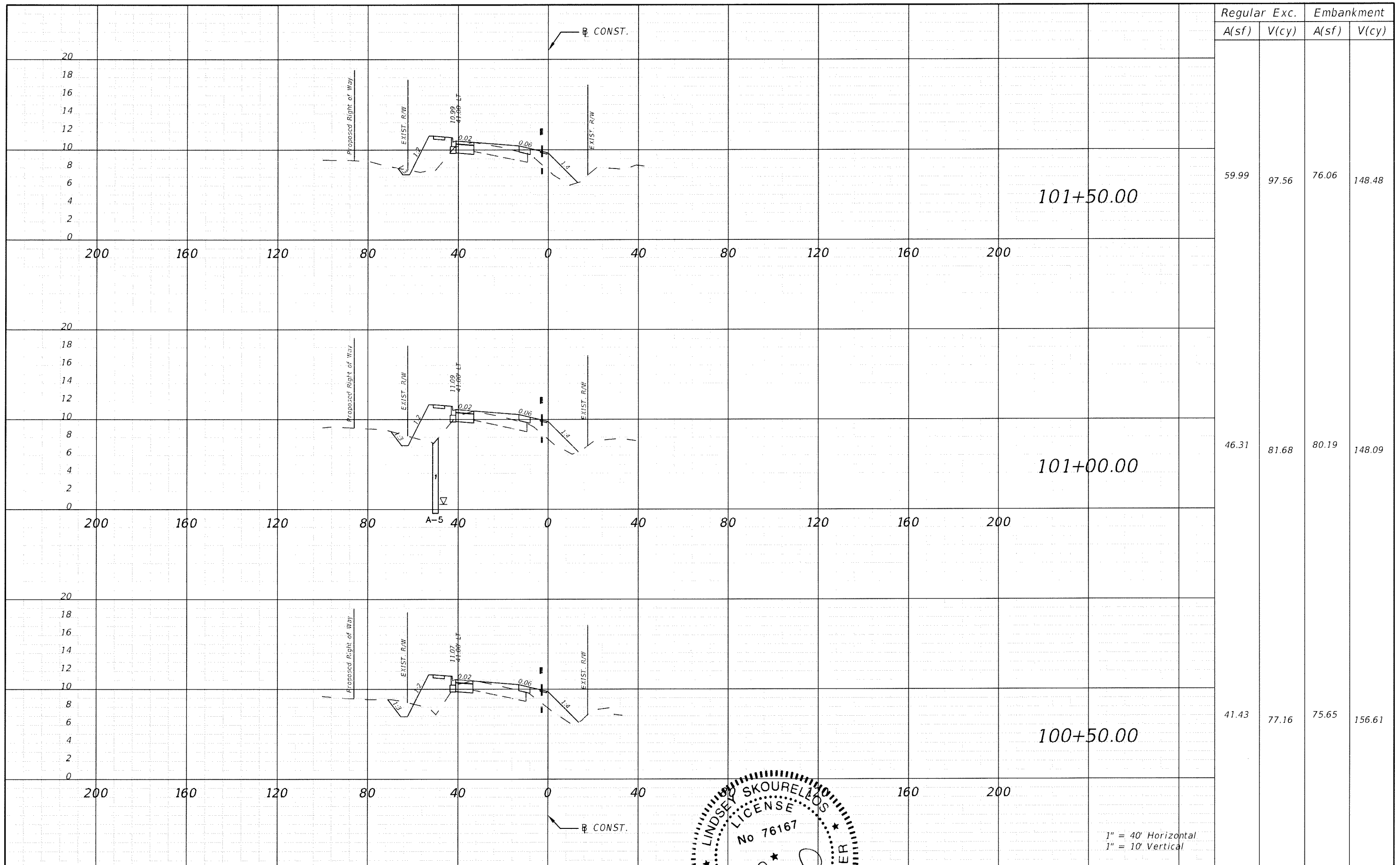


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 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842




SHEET TITLE: CROSS SECTION (7)		SHEET NO. 81
PROJECT NAME: FORT HAMER BRIDGE		

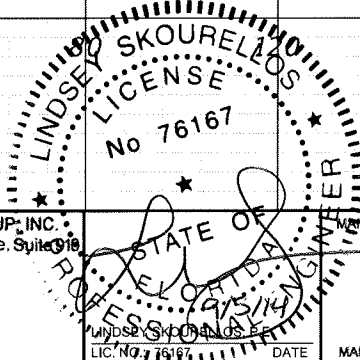
1" = 40' Horizontal
 1" = 10' Vertical




Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
59.99	97.56	76.06	148.48		
46.31	81.68	80.19	148.09		
41.43	77.16	75.65	156.61		

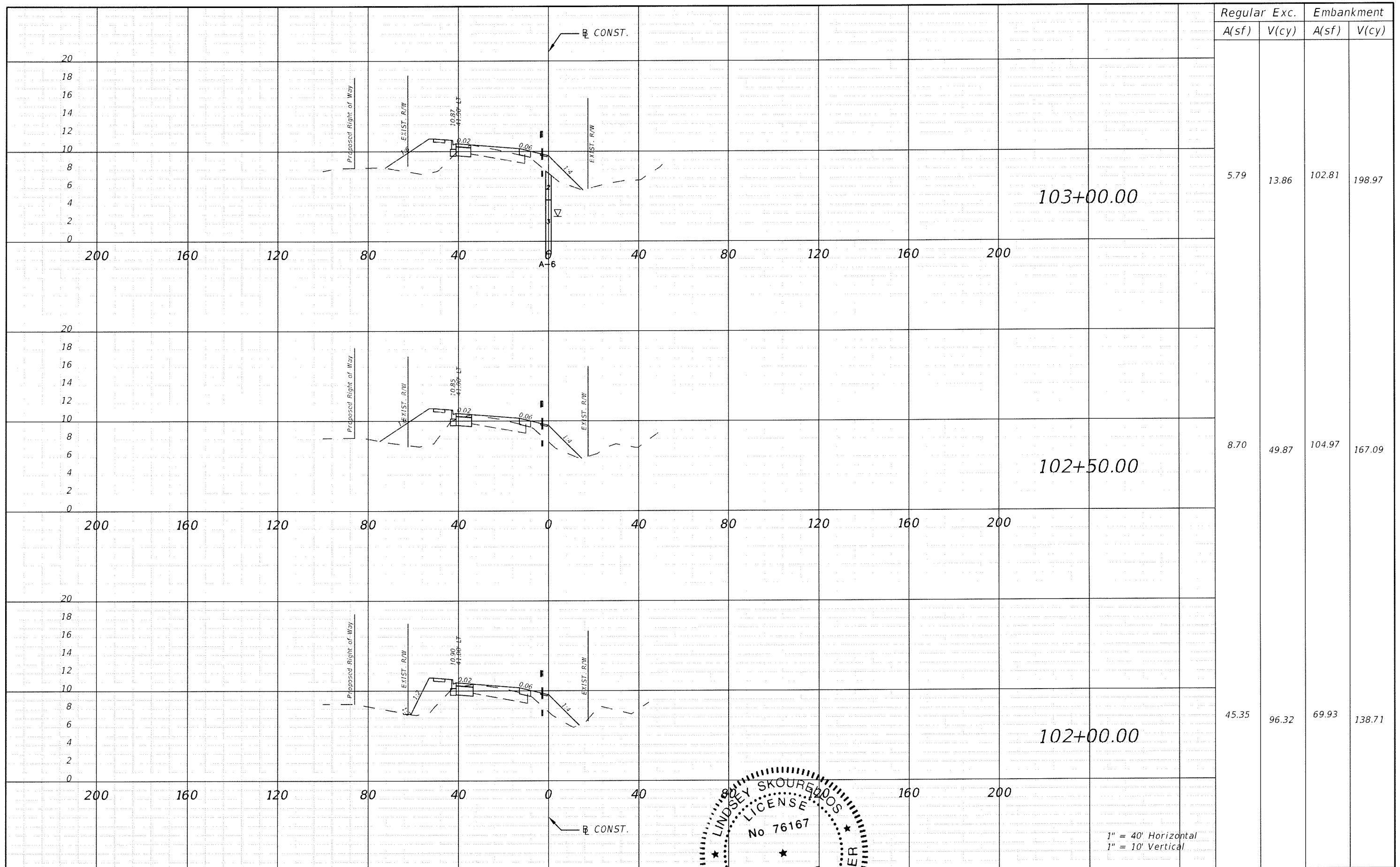
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION


THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 310
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842


LINDSEY SKOURELLOS
 LICENSE
 No 76167
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA


MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: CROSS SECTION (8)		SHEET NO. 82
PROJECT NAME: FORT HAMER BRIDGE		



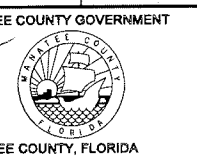
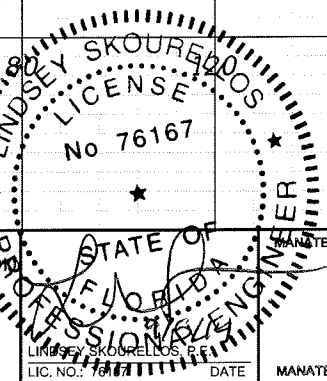
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
5.79	13.86	102.81	198.97		
8.70	49.87	104.97	167.09		
45.35	96.32	69.93	138.71		

1" = 40' Horizontal
1" = 10' Vertical

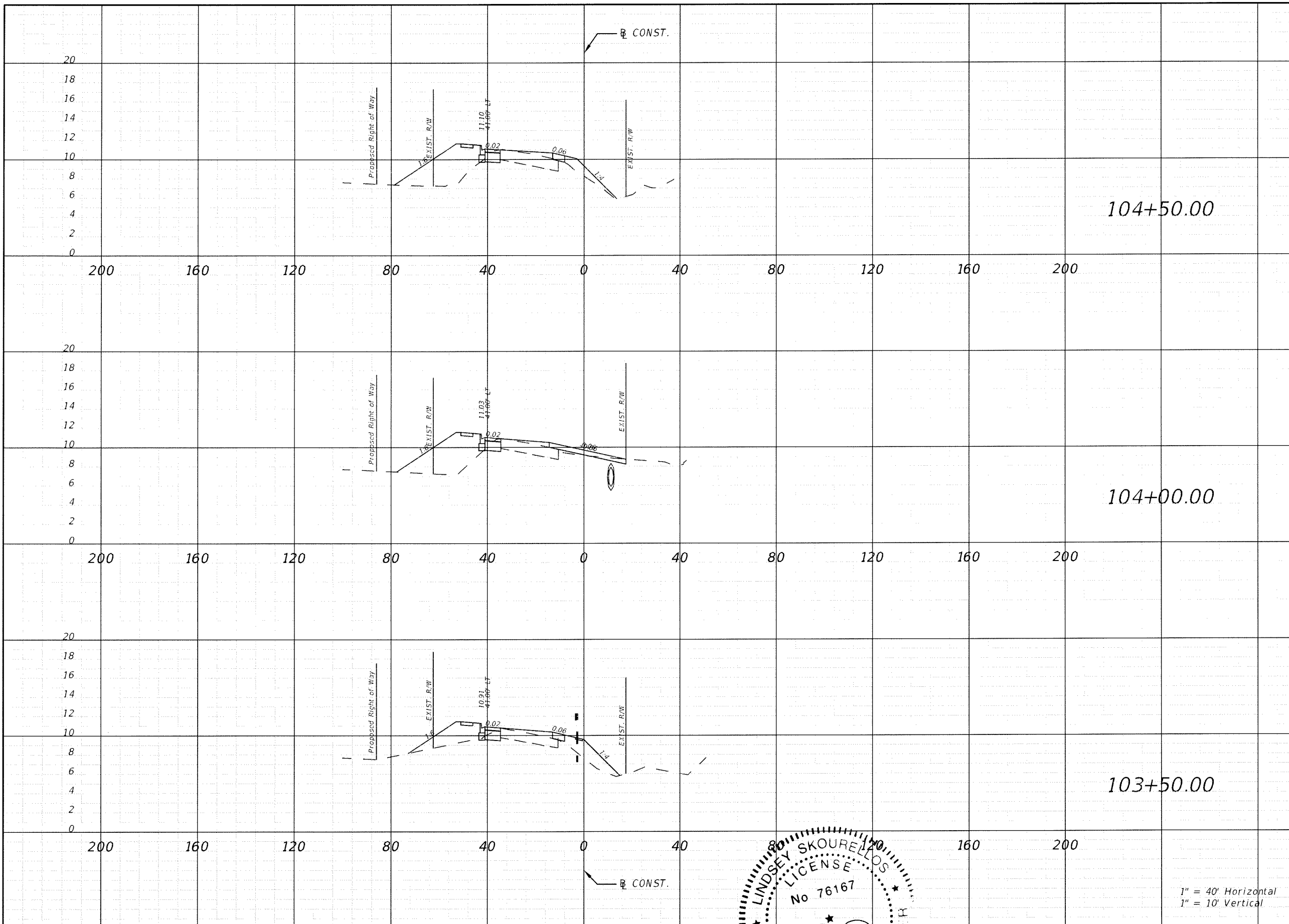
REVISIONS		DESCRIPTION	
DATE	BY	DATE	BY



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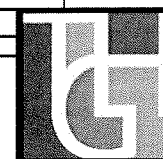
SHEET TITLE: CROSS SECTION (9)		SHEET NO. 83
PROJECT NAME: FORT HAMER BRIDGE		



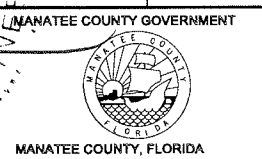
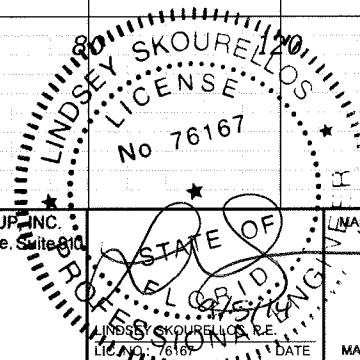
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
6.85	15.70	103.09	187.73		
9.75	14.95	90.98	161.00		
6.05	11.33	76.59	171.03		

1" = 40' Horizontal
1" = 10' Vertical

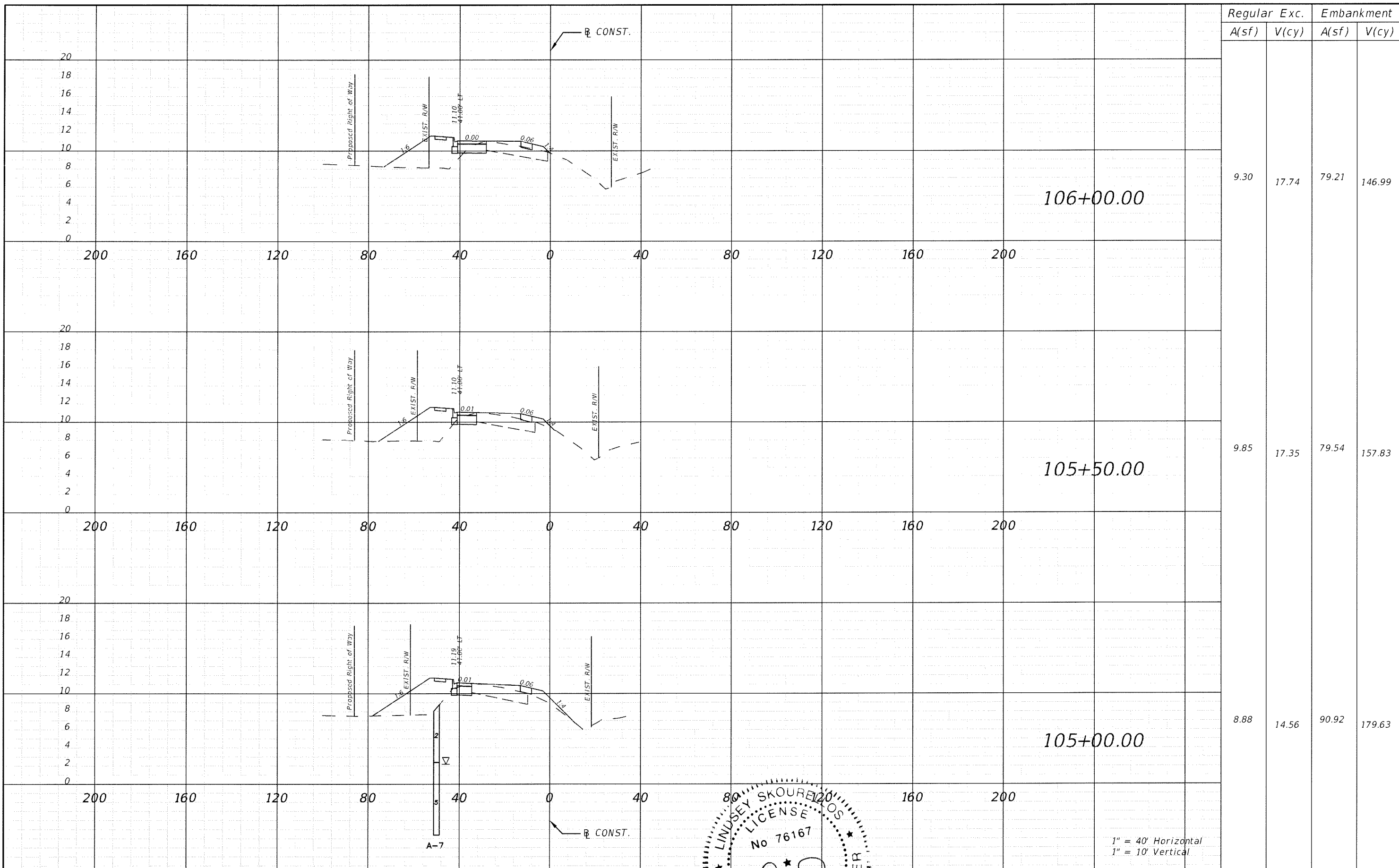
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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TAMPA, FL 33634
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C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (10)		SHEET NO. 84
PROJECT NAME: FORT HAMER BRIDGE		



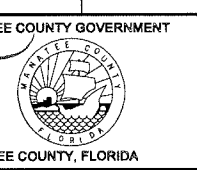
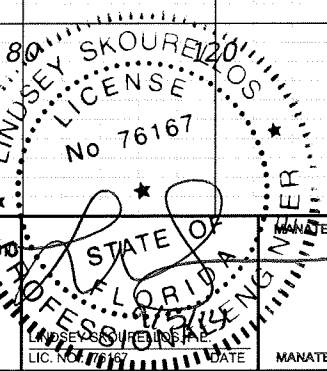
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
9.30	17.74	79.21	146.99		
9.85	17.35	79.54	157.83		
8.88	14.56	90.92	179.63		

1" = 40' Horizontal
1" = 10' Vertical

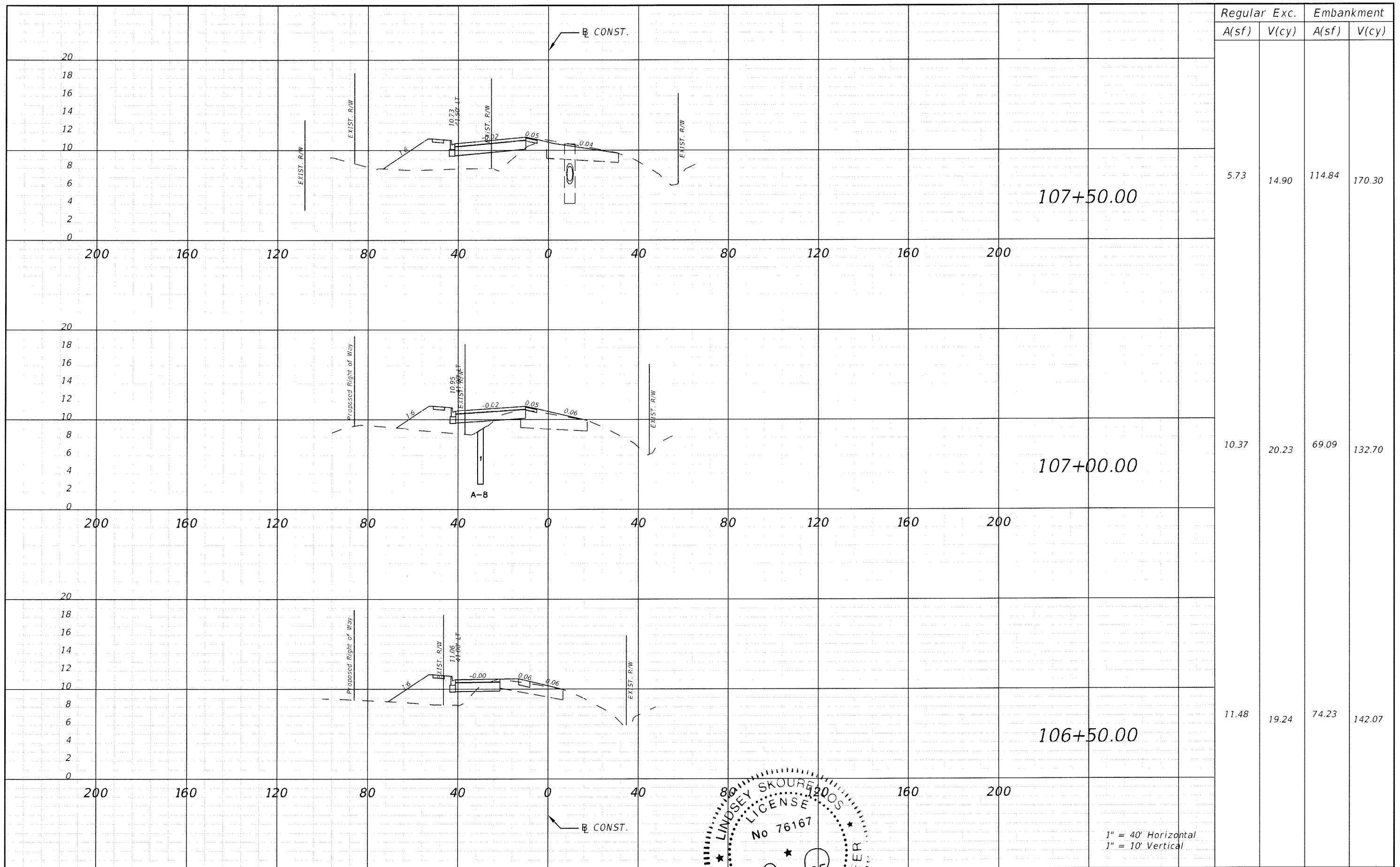
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (11)		SHEET NO. 85
PROJECT NAME: FORT HAMER BRIDGE		



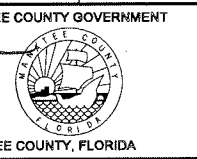
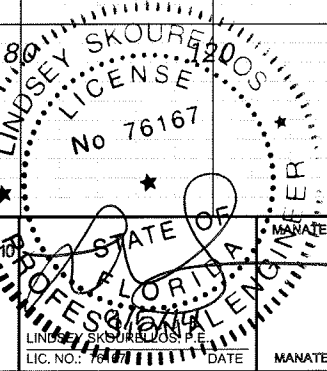
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
5.73	14.90	114.84	170.30		
10.37	20.23	69.09	132.70		
11.48	19.24	74.23	142.07		

1" = 40' Horizontal
1" = 10' Vertical

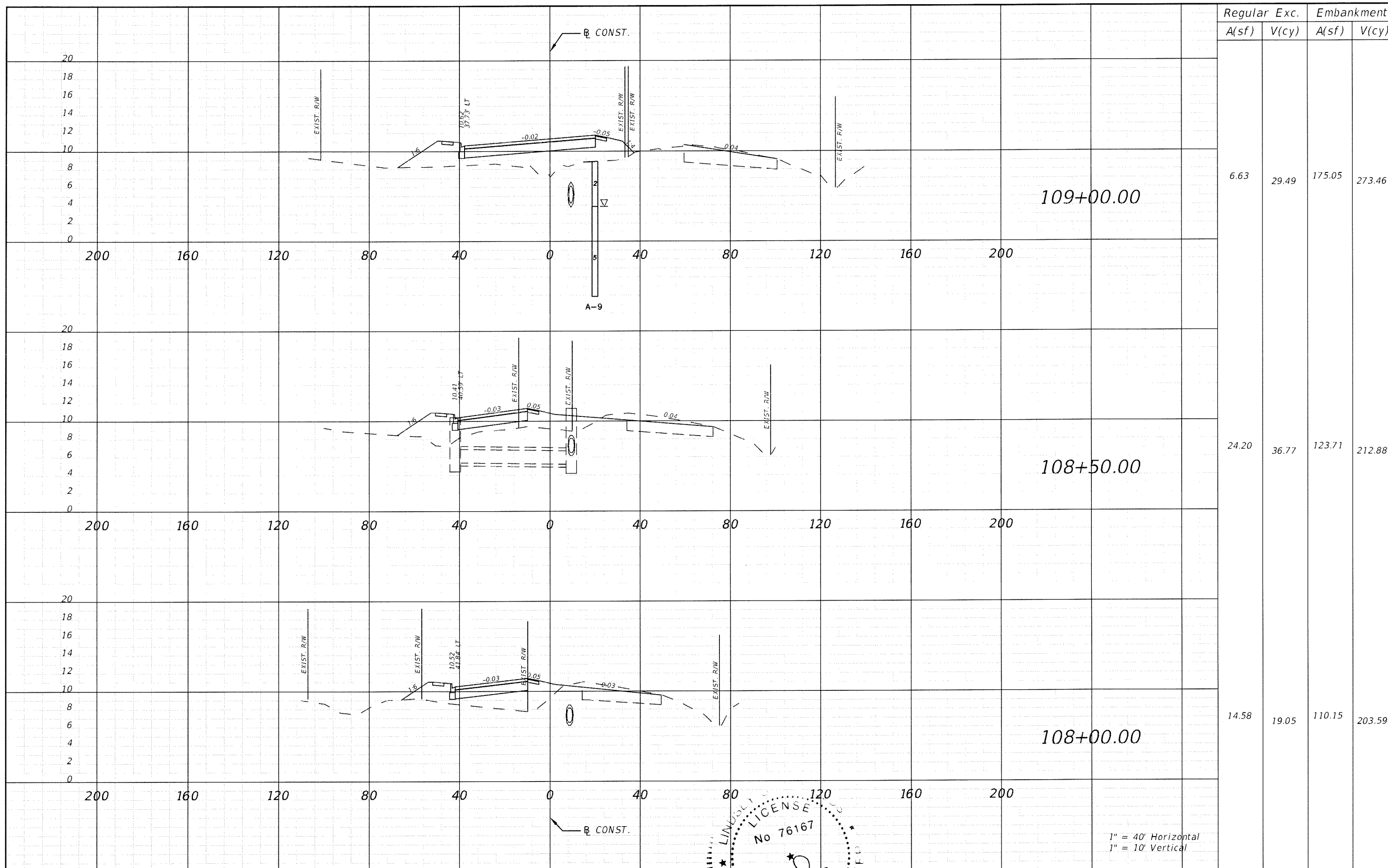
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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5461 W. Waters Avenue, Suite 510
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



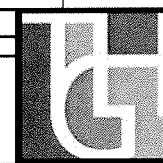
SHEET TITLE: CROSS SECTION (12)		SHEET NO. 86
PROJECT NAME: FORT HAMER BRIDGE		



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
6.63	29.49	175.05	273.46		
24.20	36.77	123.71	212.88		
14.58	19.05	110.15	203.59		

1" = 40' Horizontal
1" = 10' Vertical

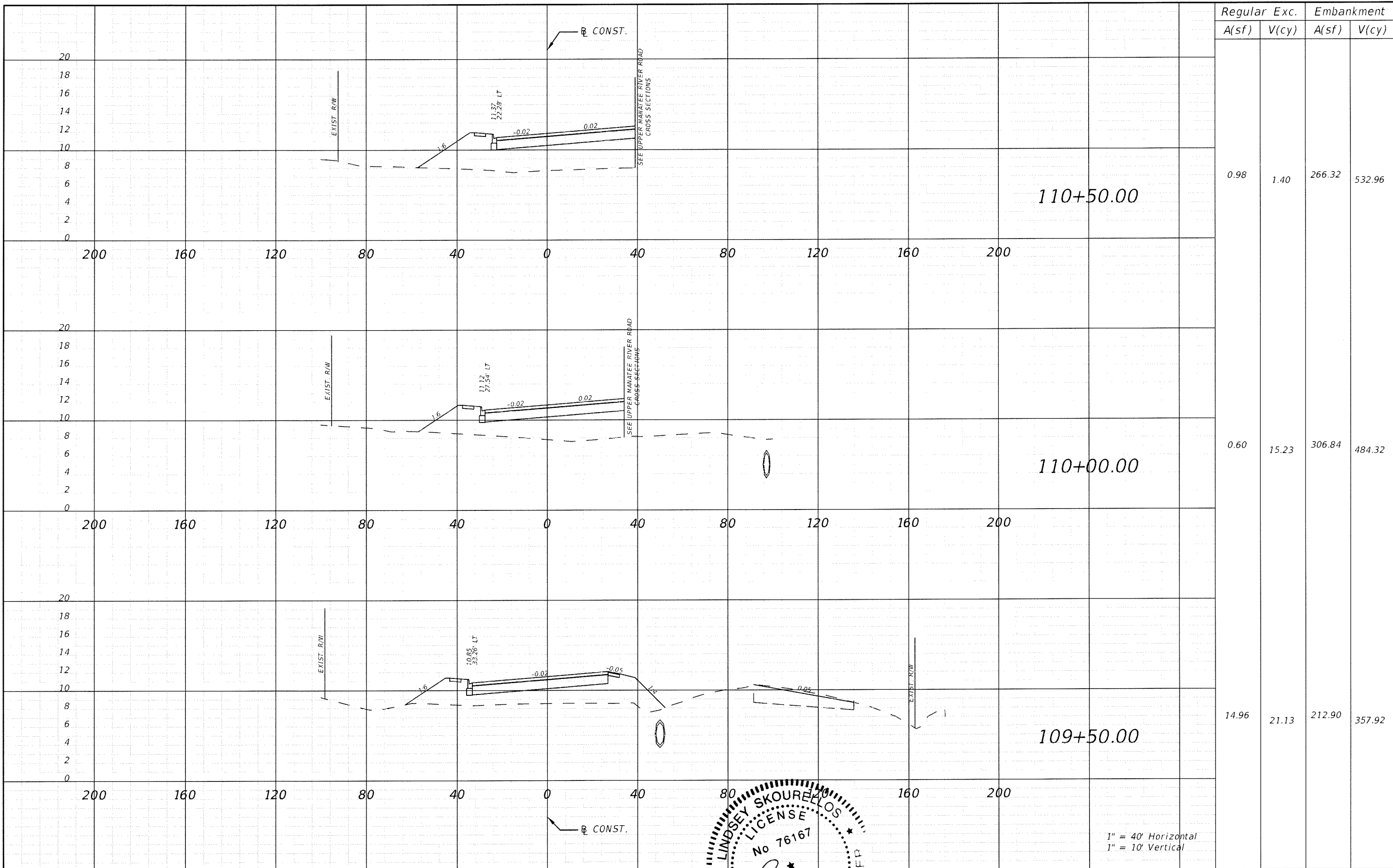
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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5461 W. Waters Avenue, Suite 6100
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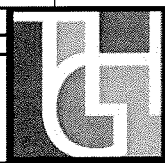
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA
LINDSEY B. JOHNSON
LICENSE No 76167
DATE

SHEET TITLE: CROSS SECTION (13)		SHEET NO. 87
PROJECT NAME: FORT HAMER BRIDGE		

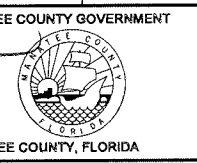
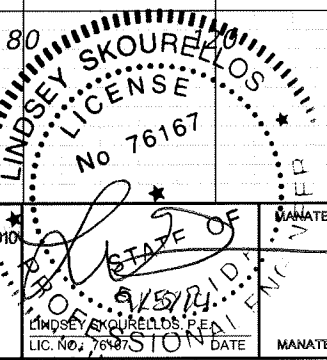


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.98	1.40	266.32	532.96		
0.60	15.23	306.84	484.32		
14.96	21.13	212.90	357.92		

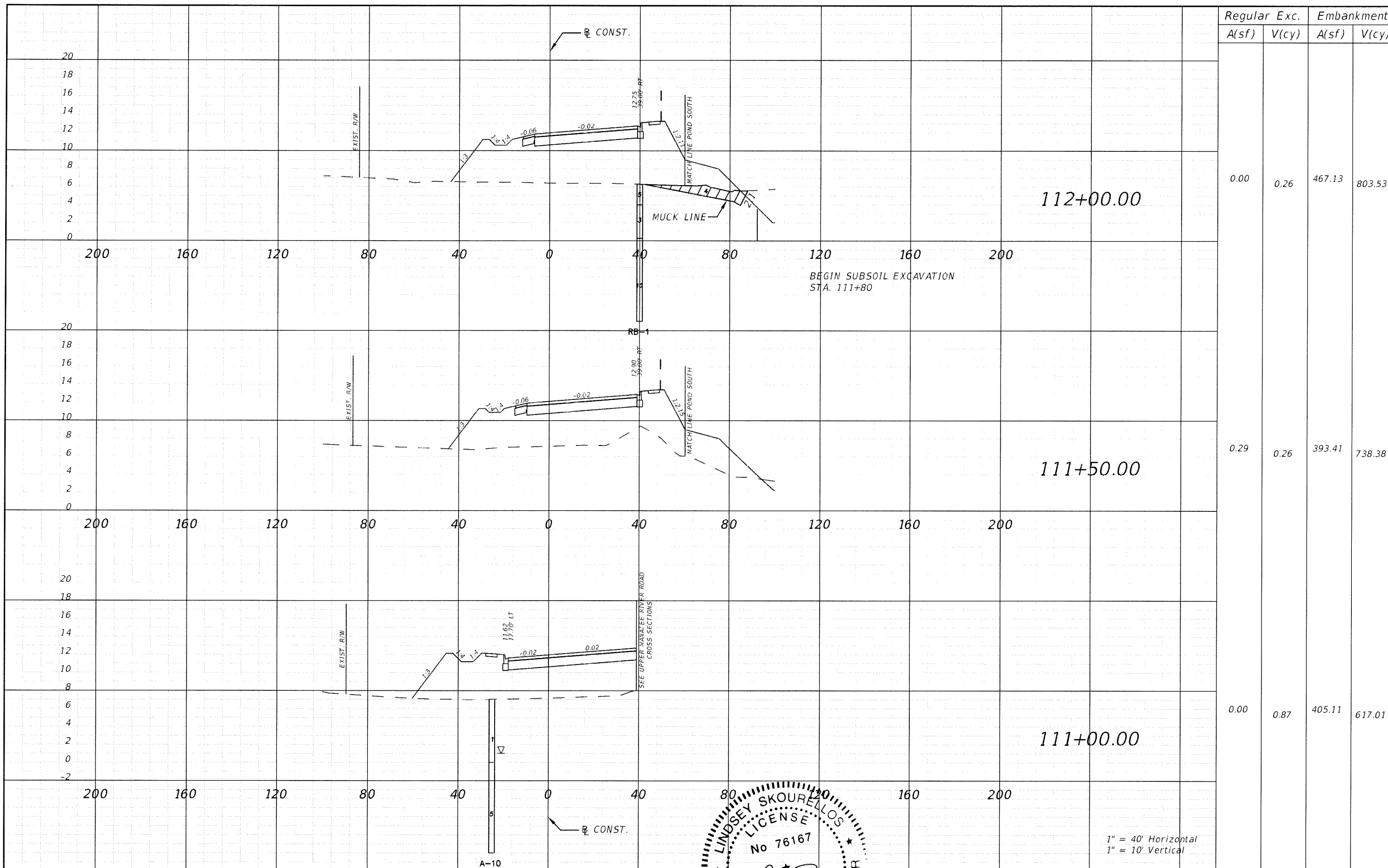
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 TAMPA, FL 33634
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 C.A. NO. 00027842

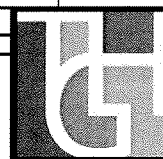


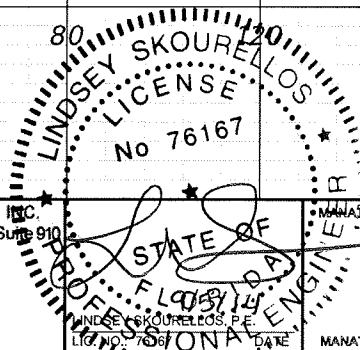
SHEET TITLE:		CROSS SECTION (14)	
PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.:			88

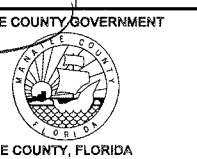


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.26	467.13	803.53		
0.29	0.26	393.41	738.38		
0.00	0.87	405.11	617.01		

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

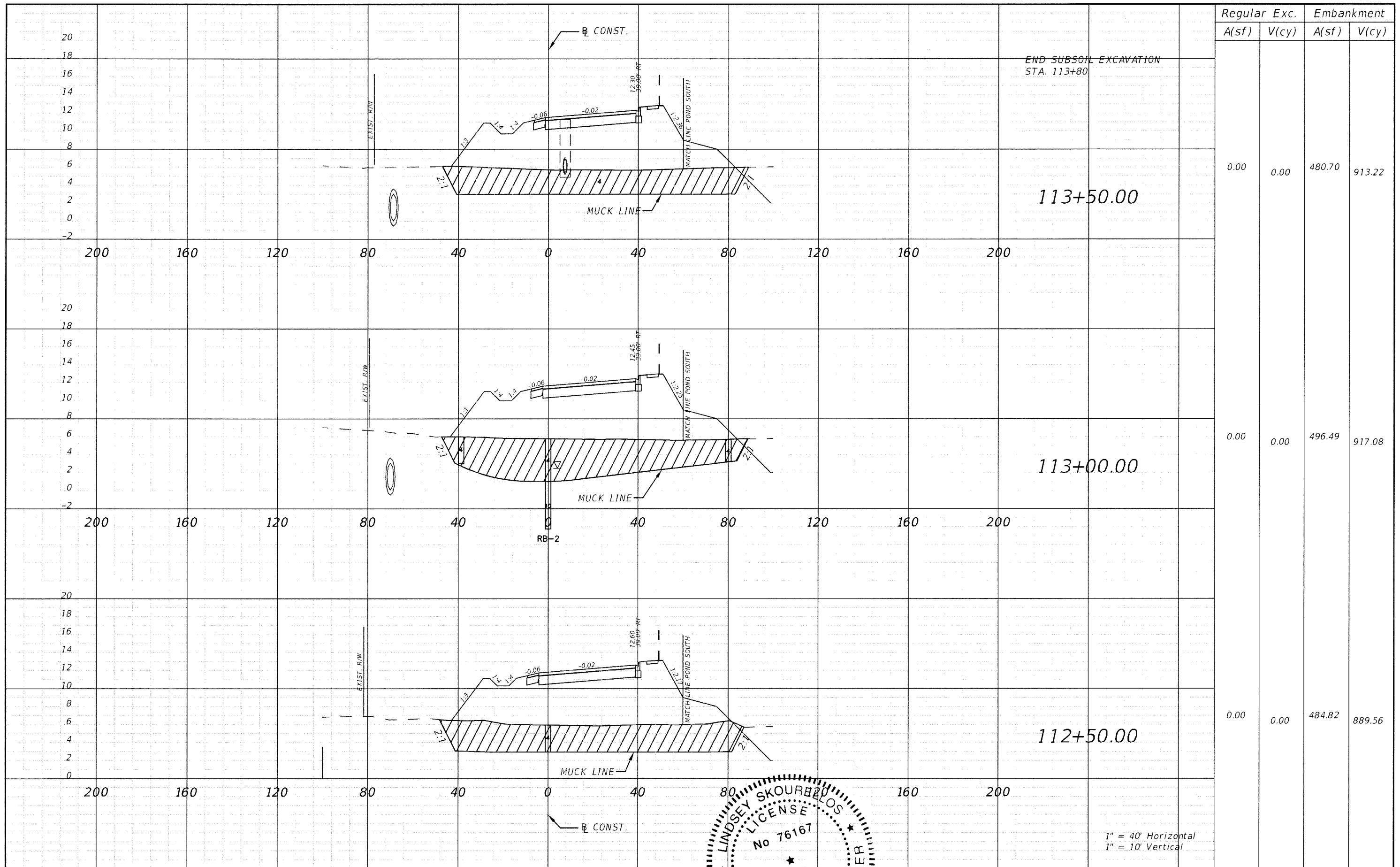

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 TAMPA, FL 33634
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 C.A. NO. 00027842


LINDSEY SKOURELLOS
 LICENSE No 76167
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER


MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE:		CROSS SECTION (15)	
PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.:		89	

1" = 40' Horizontal
1" = 10' Vertical



Regular	Exc.	Embankment
A(sf)	V(cy)	A(sf) V(cy)

END SUBSOIL EXCAVATION
STA. 113+80

113+50.00

0.00	0.00	480.70	913.22
------	------	--------	--------

113+00.00

0.00	0.00	496.49	917.08
------	------	--------	--------

112+50.00

0.00	0.00	484.82	889.56
------	------	--------	--------

1" = 40' Horizontal
1" = 10' Vertical

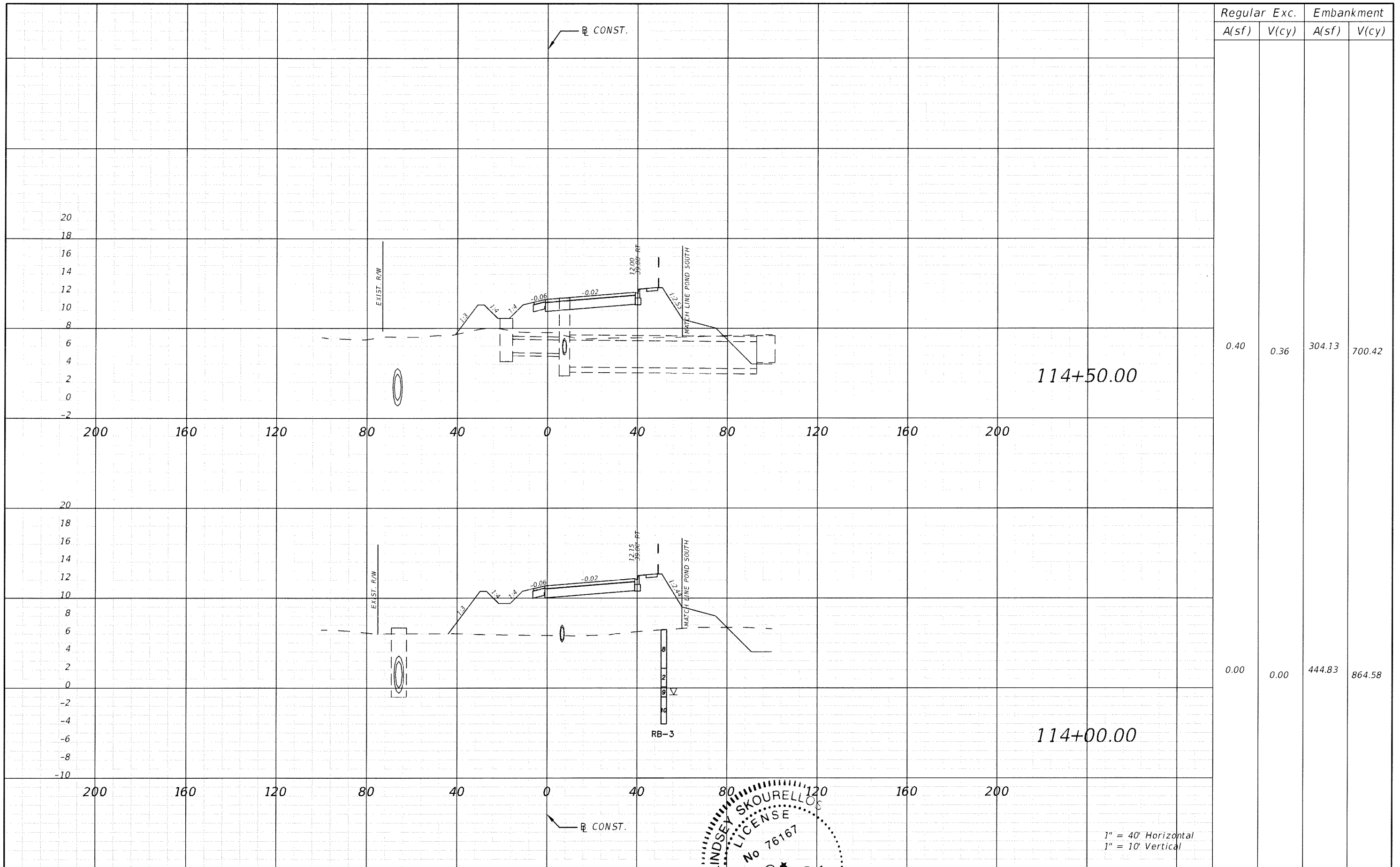
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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5461 W. Waters Avenue, Suite 210
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

LINDSEY SKOURBLOS
LICENSE
No 76167
PROFESSIONAL ENGINEER
STATE OF FLORIDA

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE:	CROSS SECTION (16)	
PROJECT NAME:	FORT HAMER BRIDGE	
SHEET NO.:	90	



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.40	0.36	304.13	700.42		
0.00	0.00	444.83	864.58		

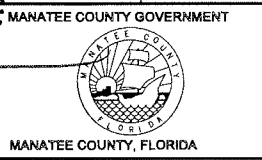
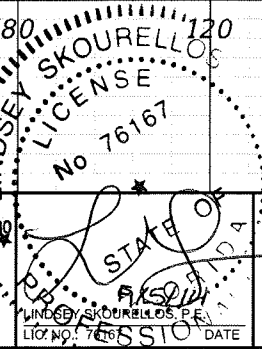
114+50.00

114+00.00

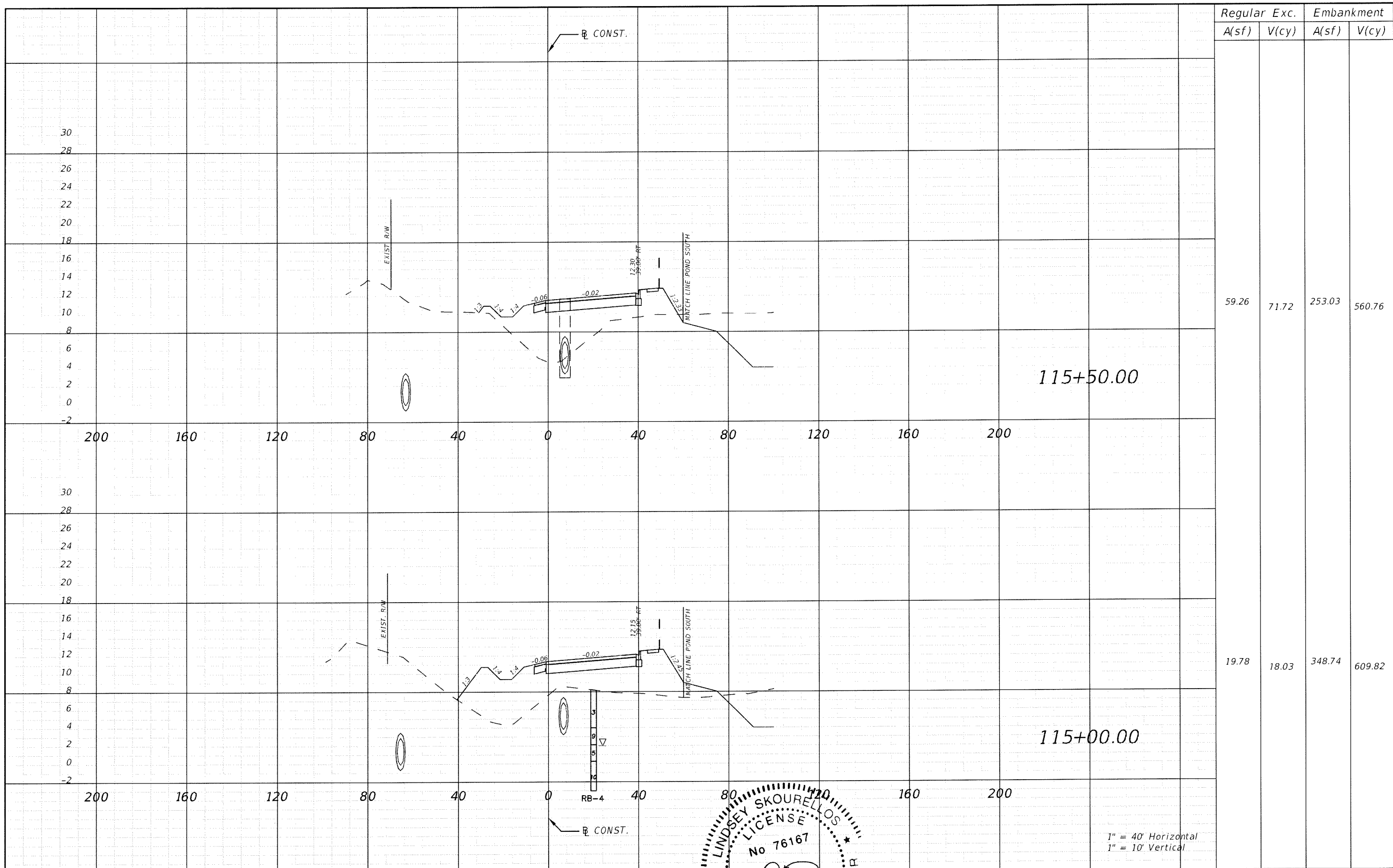
1" = 40' Horizontal
1" = 10' Vertical

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:	CROSS SECTION (17)	
PROJECT NAME:	FORT HAMER BRIDGE	
SHEET NO.:	91	



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
59.26	71.72	253.03	560.76		
19.78	18.03	348.74	609.82		

115+50.00

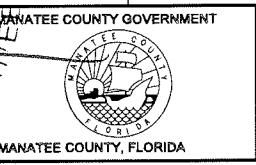
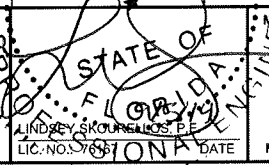
115+00.00

1" = 40' Horizontal
1" = 10' Vertical

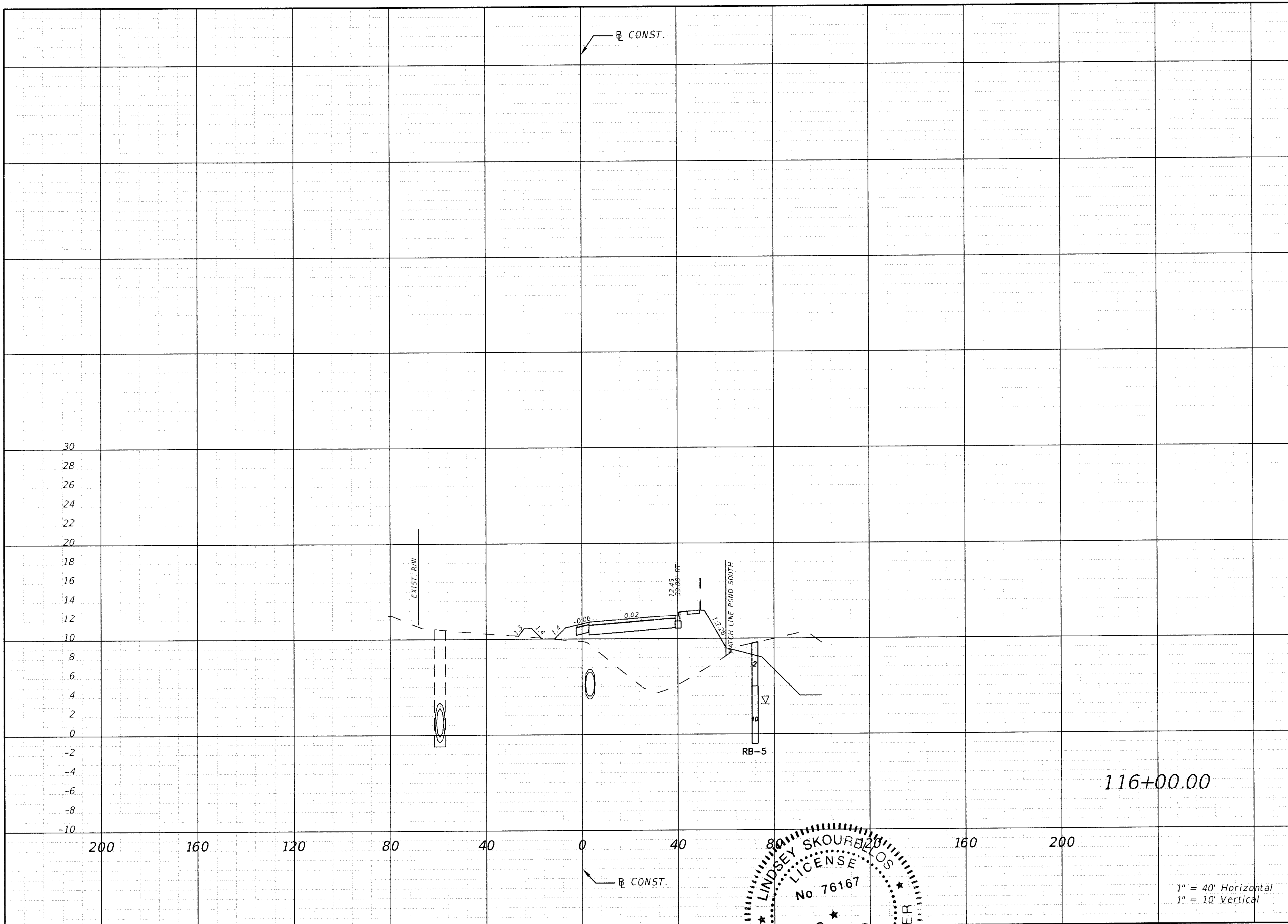
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



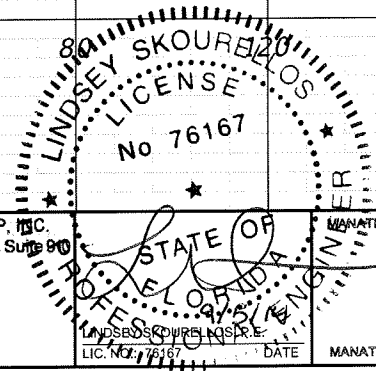
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



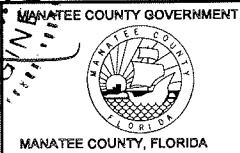
SHEET TITLE: CROSS SECTION (18)		SHEET NO. 92
PROJECT NAME: FORT HAMER BRIDGE		



Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)
28.30	79.61	293.88	513.70

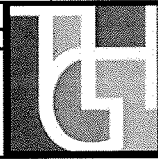


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 TAMPA, FL 33634
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 C.A. NO. 00027842



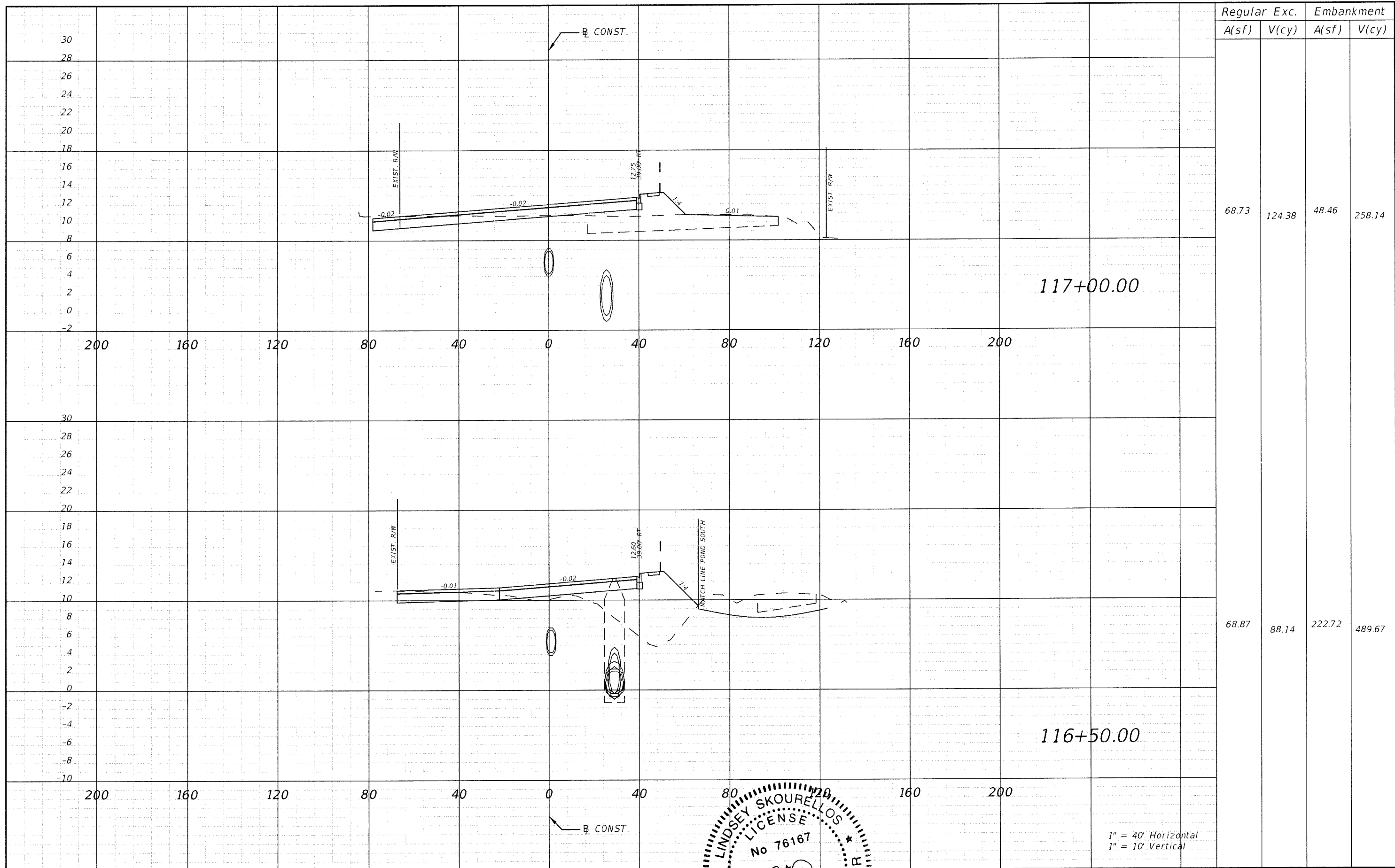
SHEET TITLE: **CROSS SECTION (19)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO. **93**

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



Mitchell Johnson

9/4/2014 4:32:54 PM



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
68.73	124.38	48.46	258.14		
68.87	88.14	222.72	489.67		

117+00.00

116+50.00

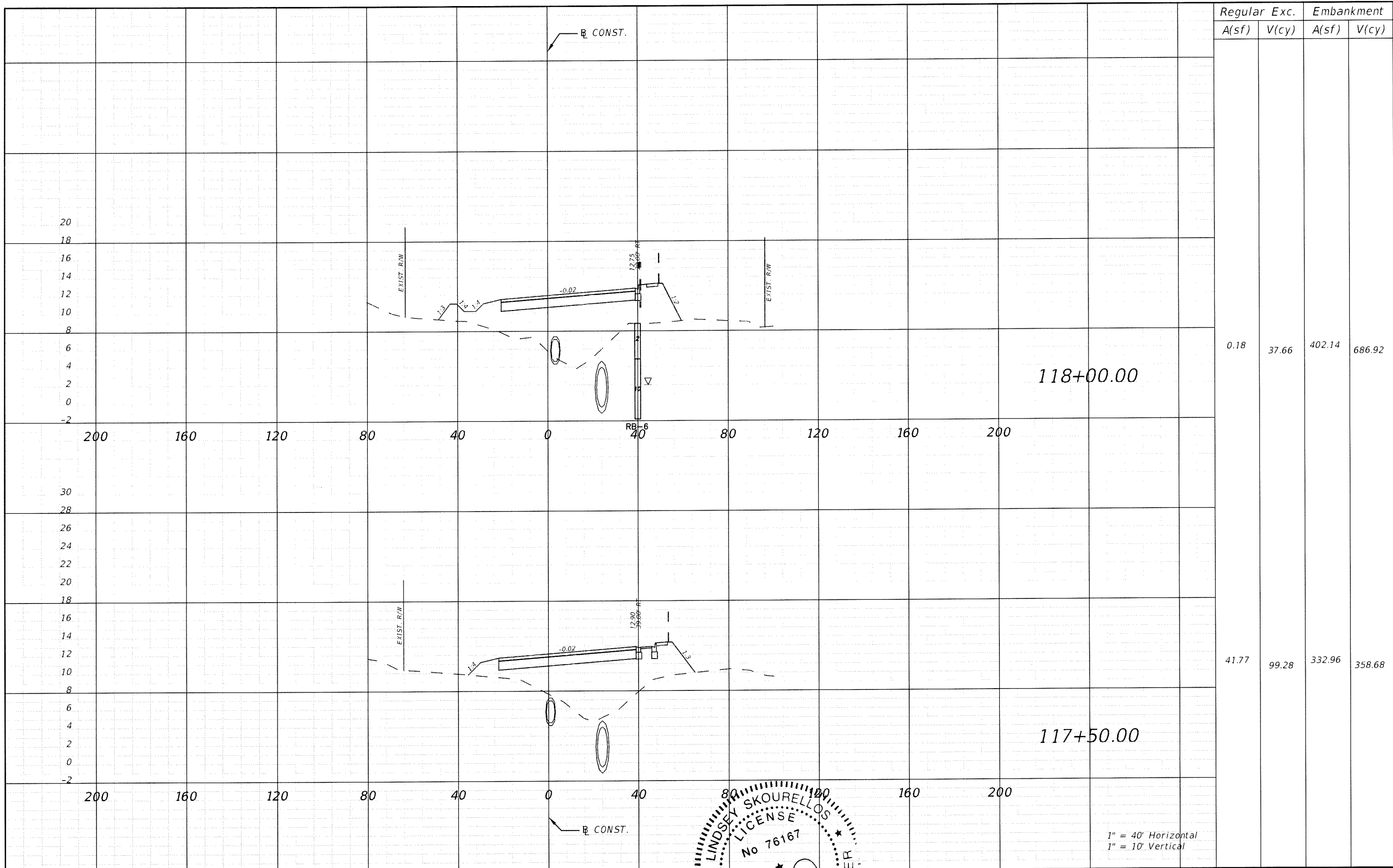
1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
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 C.A. NO. 00027842

LINDSEY SKOURELLOS
 LICENSE No 76167
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **CROSS SECTION (20)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **94**



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.18	37.66	402.14	686.92		
41.77	99.28	332.96	358.68		

1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

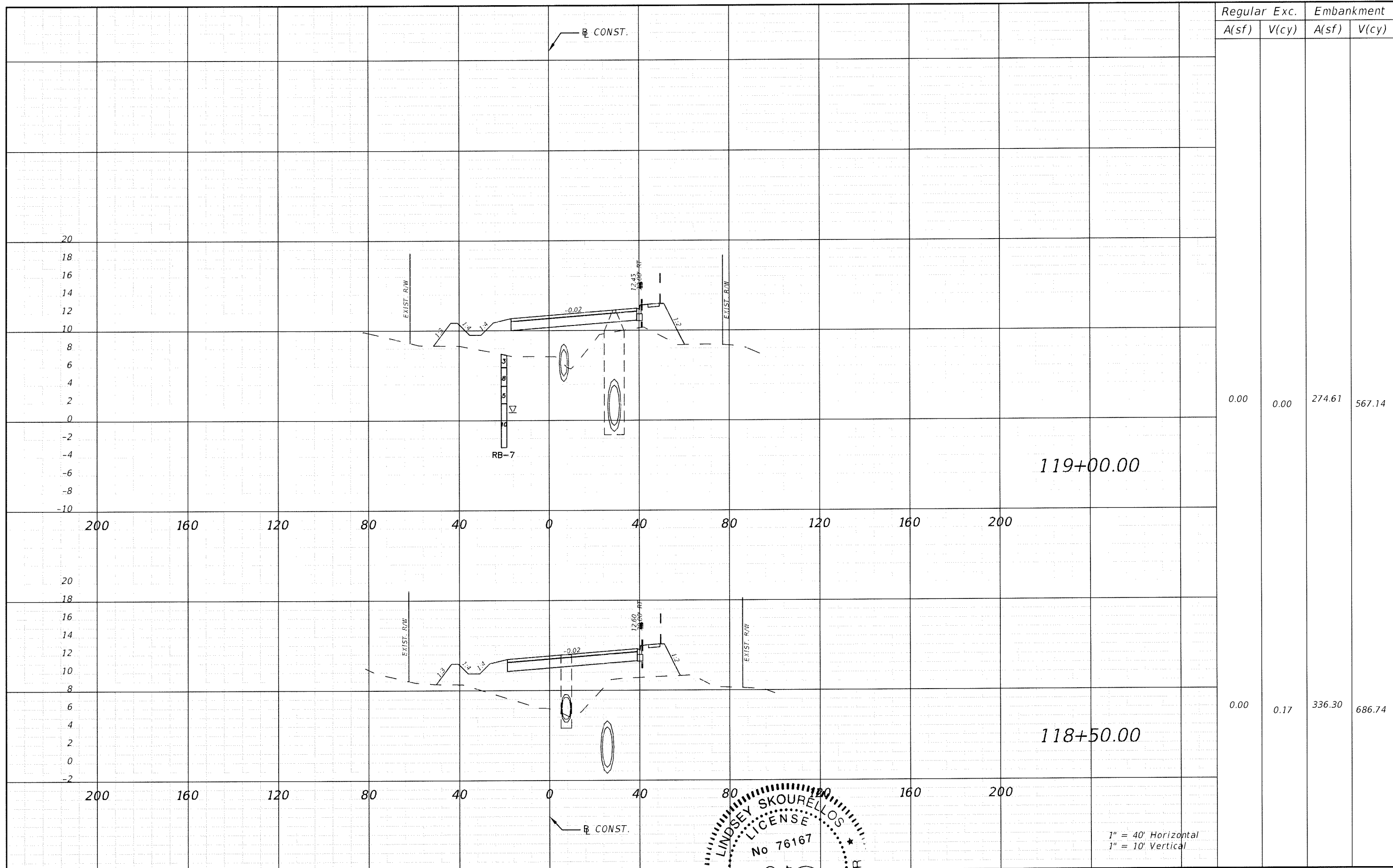
THE HEIMBURG GROUP, INC.
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 (813) 749-0823
 C.A. NO. 00027842

LINDSEY SKOURELLOS
 LICENSE
 No 76167

STATE OF FLORIDA
 PROFESSIONAL ENGINEER

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

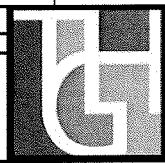
SHEET TITLE: CROSS SECTION (21)		SHEET NO. 95
PROJECT NAME: FORT HAMER BRIDGE		



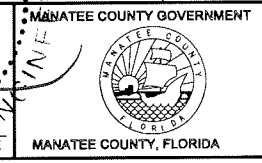
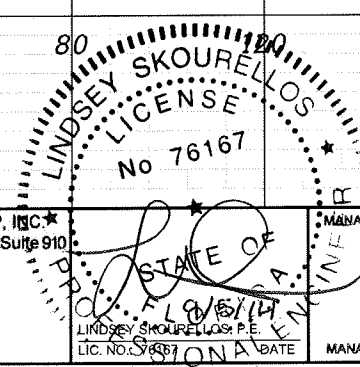
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	274.61	567.14		
0.00	0.17	336.30	686.74		

1" = 40' Horizontal
1" = 10' Vertical

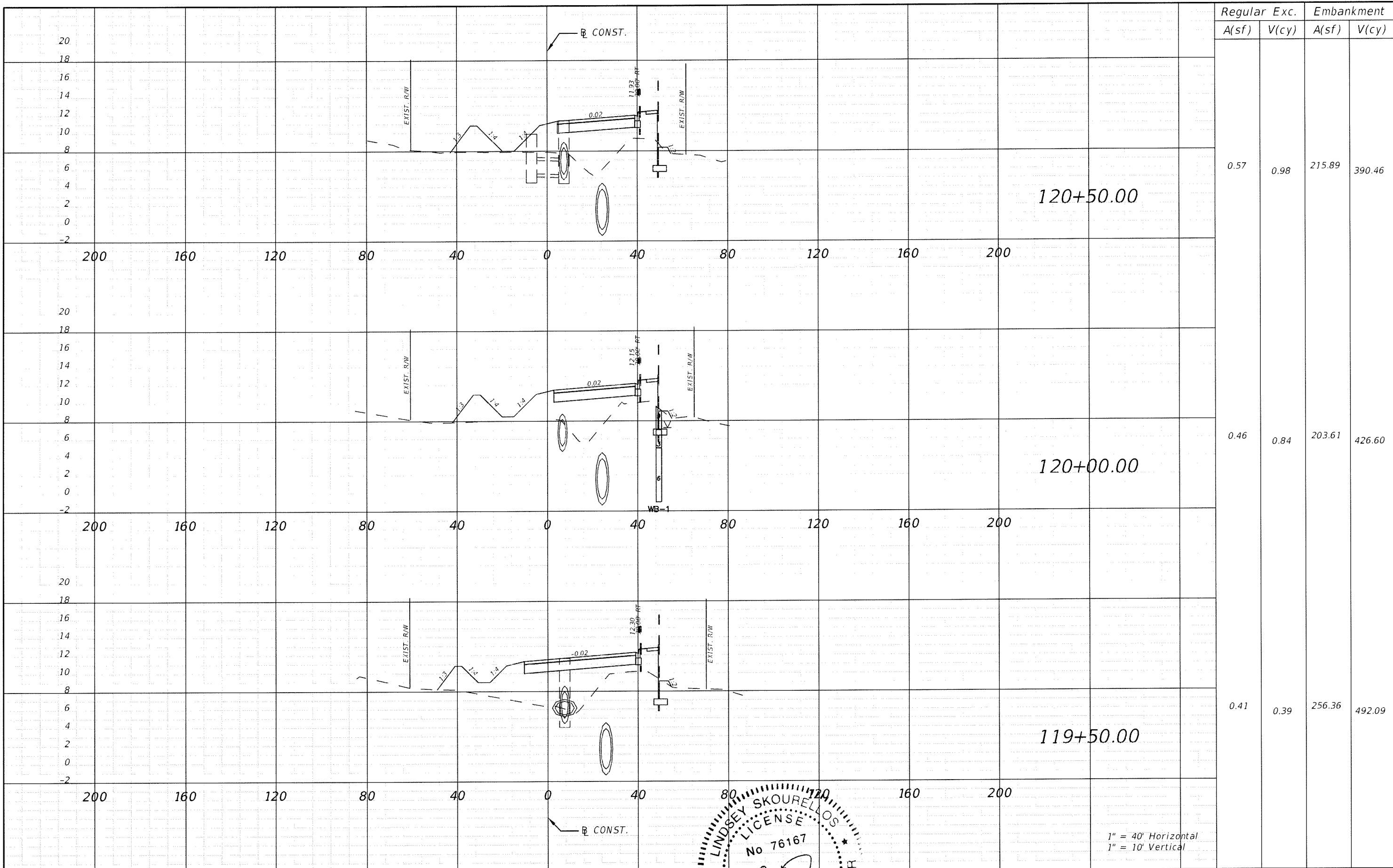
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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SHEET TITLE: CROSS SECTION (22)		SHEET NO. 96
PROJECT NAME: FORT HAMER BRIDGE		



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.57	0.98	215.89	390.46		
0.46	0.84	203.61	426.60		
0.41	0.39	256.36	492.09		

1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
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THE HEIMBURG GROUP, INC.
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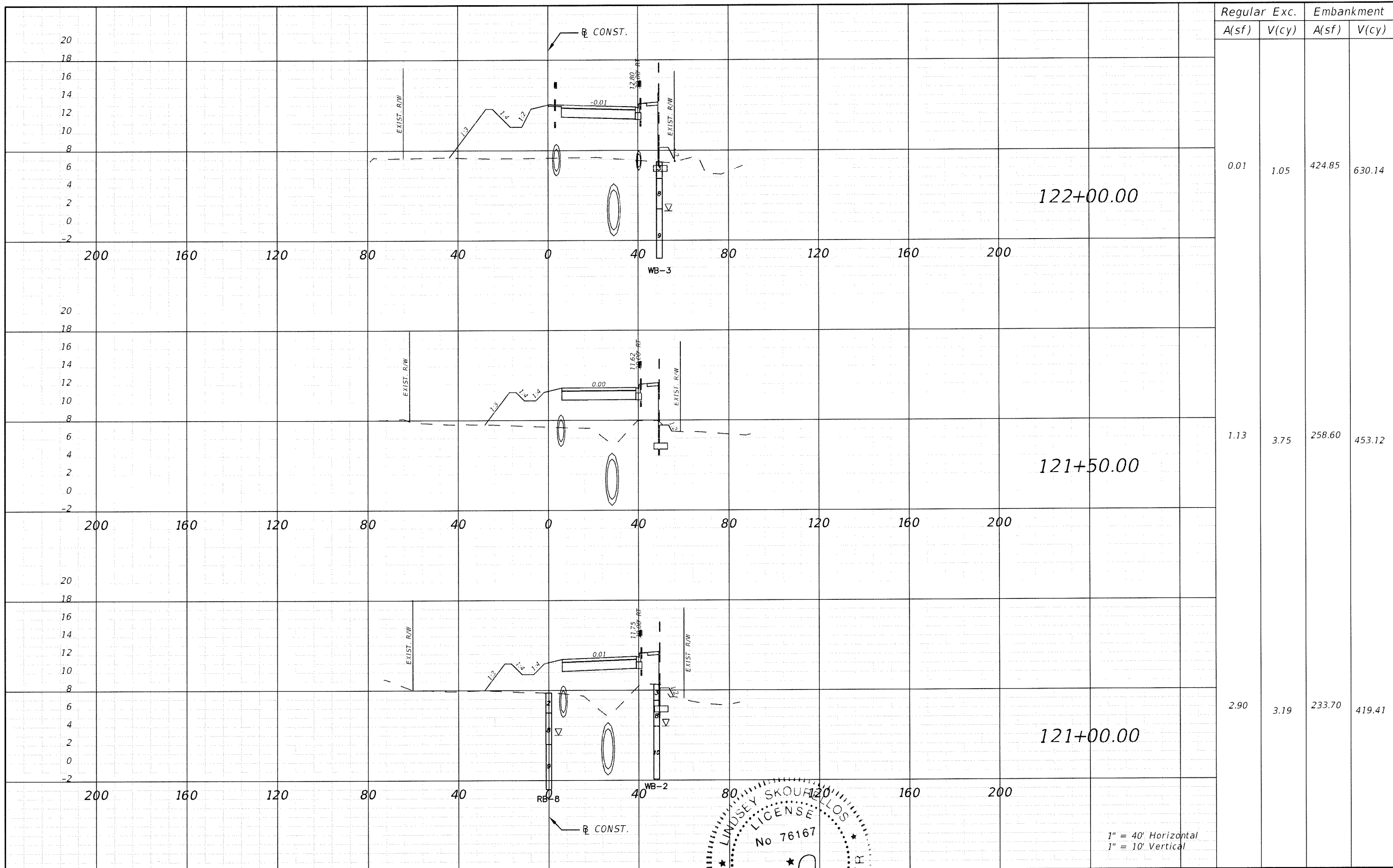
LINDSEY SKOURELLOS
 LICENSE
 No 76167
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

MANATEE COUNTY GOVERNMENT

SHEET TITLE: **CROSS SECTION (23)**

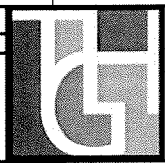
PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **97**

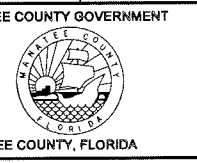
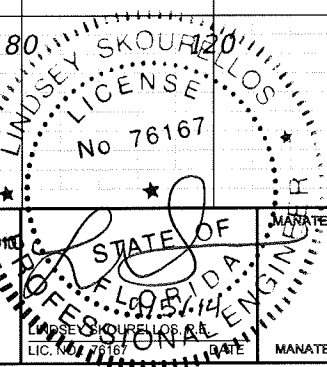


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.01	1.05	424.85	630.14		
1.13	3.75	258.60	453.12		
2.90	3.19	233.70	419.41		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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SHEET TITLE: CROSS SECTION (24)		SHEET NO. 98
PROJECT NAME: FORT HAMER BRIDGE		

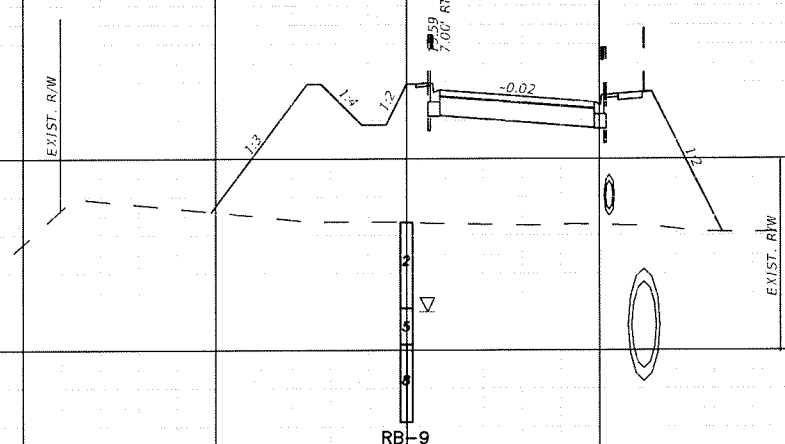
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)

20
18
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10

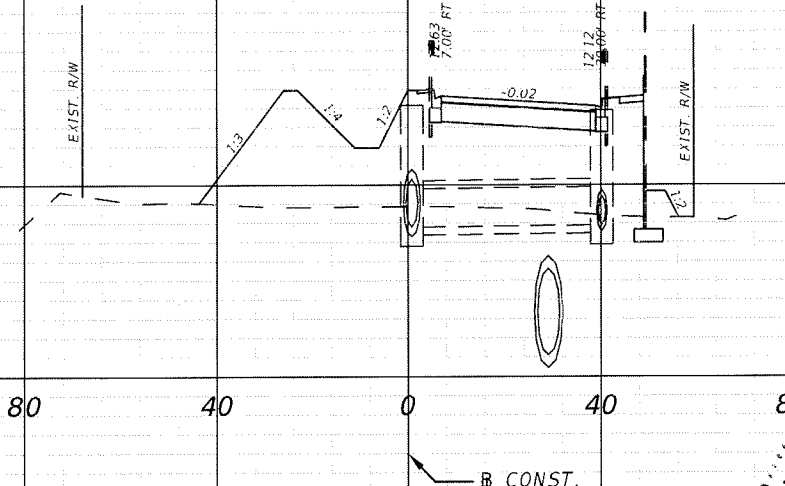
200 160 120 80 40 0 40 80 120 160 200

20
18
16
14
12
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8
6
4
2
0
-2

200 160 120 80 40 0 40 80 120 160 200



123+00.00



122+50.00

1" = 40' Horizontal
1" = 10' Vertical

0.00 0.02 543.80 880.14

0.02 0.02 410.91 771.46

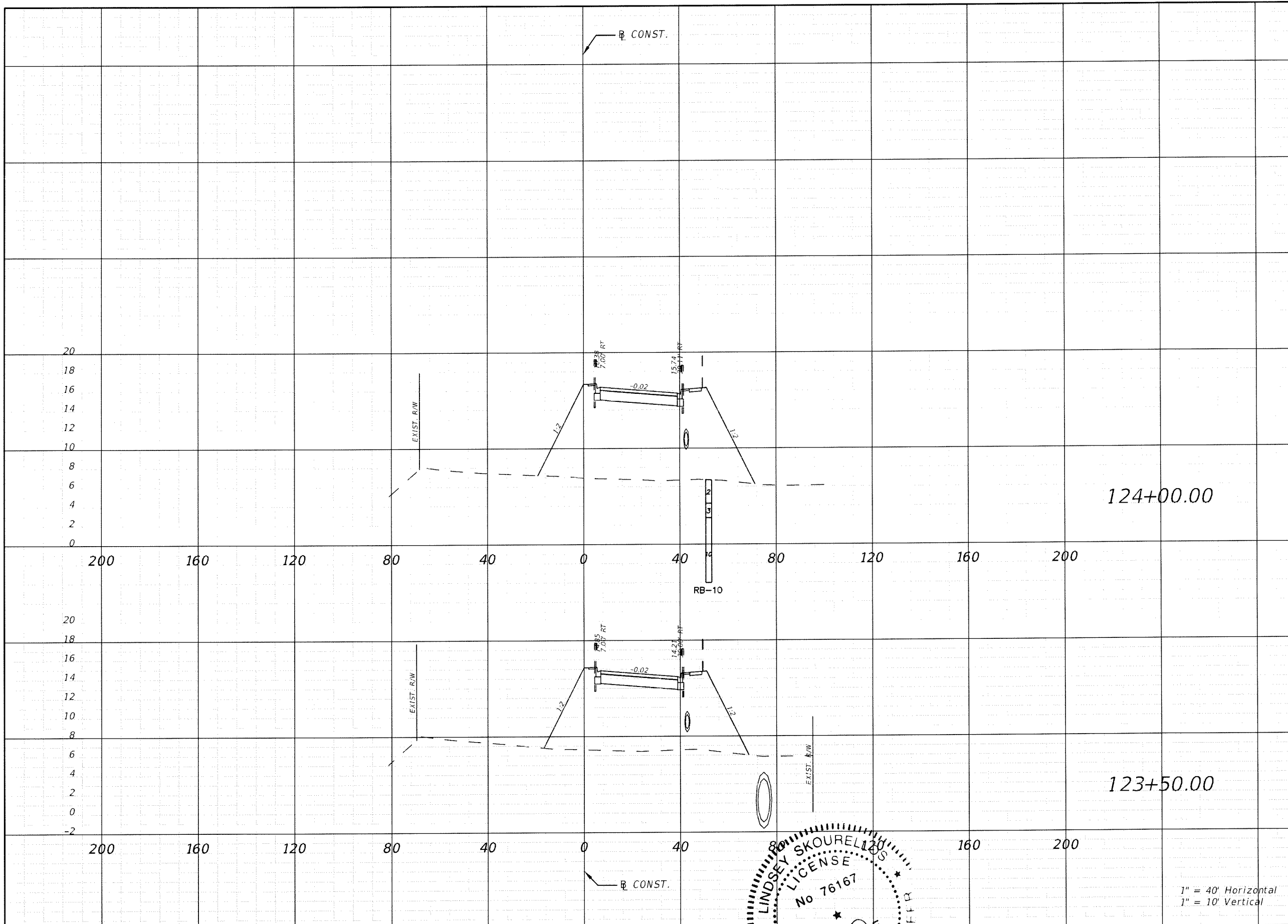
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 200
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

LINDSEY SKOUFELLOS
LICENSE
No 76167

MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE:	CROSS SECTION (25)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	99



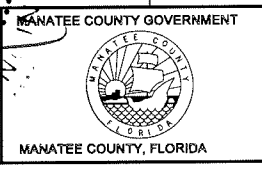
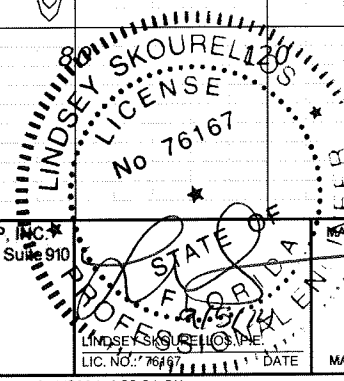
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	618.01	1029.40		
0.00	0.00	505.69	964.07		

1" = 40' Horizontal
1" = 10' Vertical

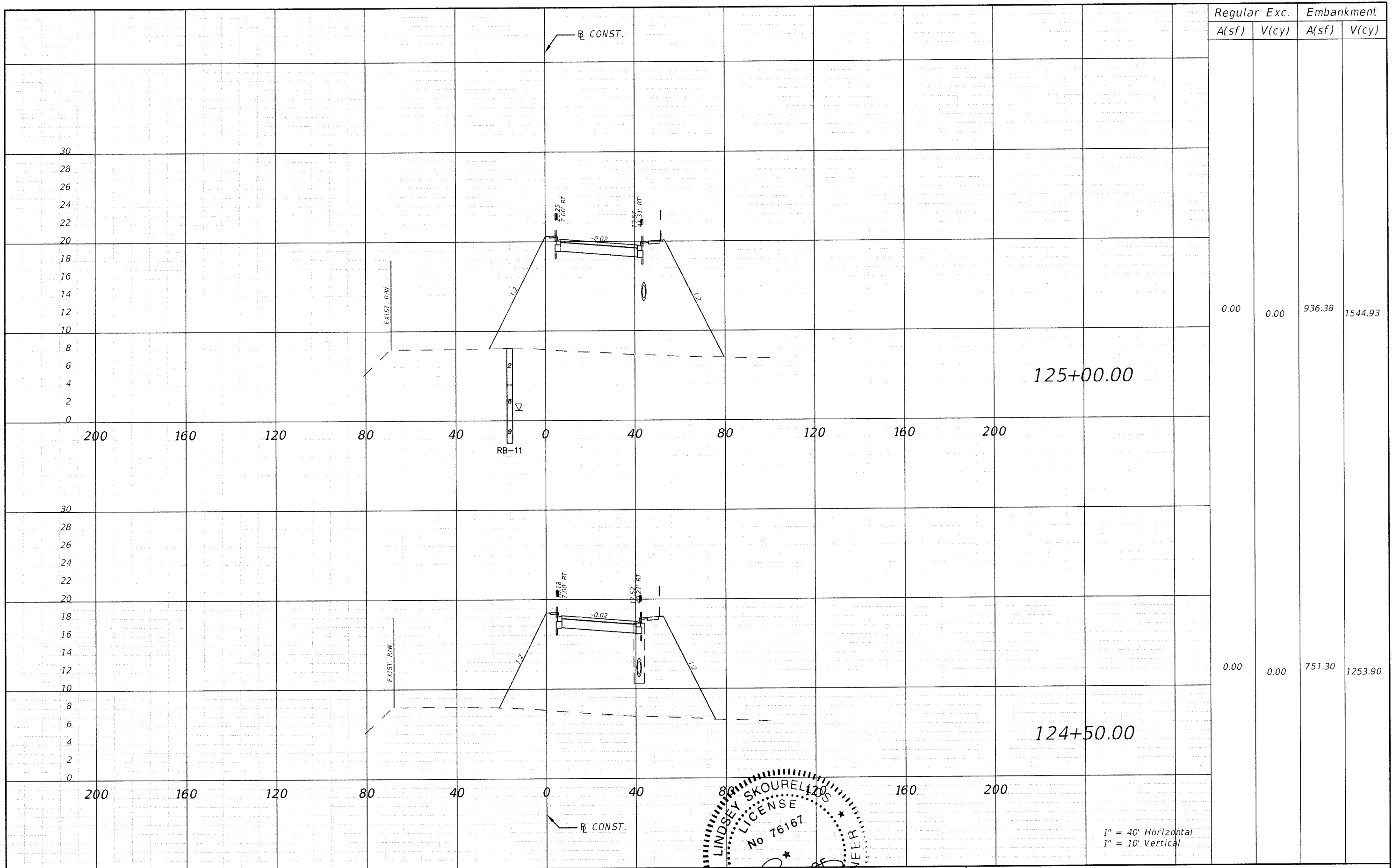
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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TAMPA, FL 33634
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C.A. NO. 00027842

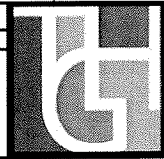


SHEET TITLE: CROSS SECTION (26)		SHEET NO. 100
PROJECT NAME: FORT HAMER BRIDGE		

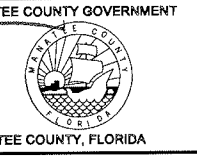
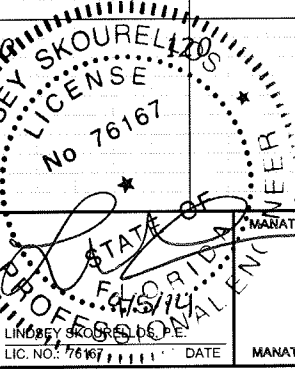


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	936.38	1544.93		
0.00	0.00	751.30	1253.90		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



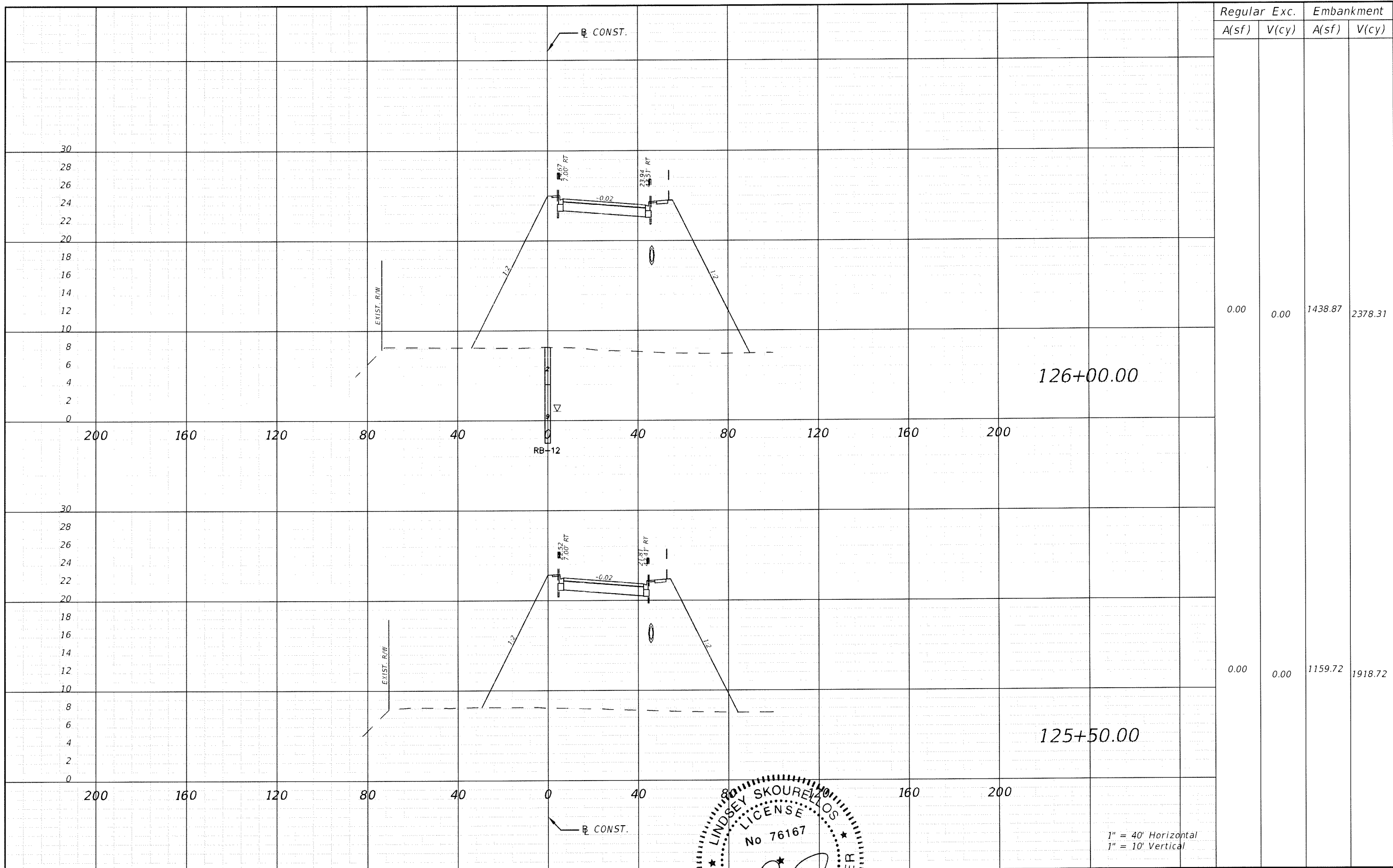
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 210
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:		CROSS SECTION (27)	
PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.:		101	

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9/4/2014 4:34:03 PM

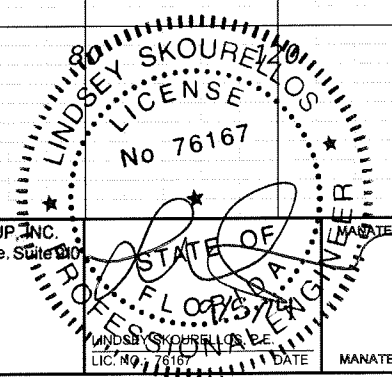


1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
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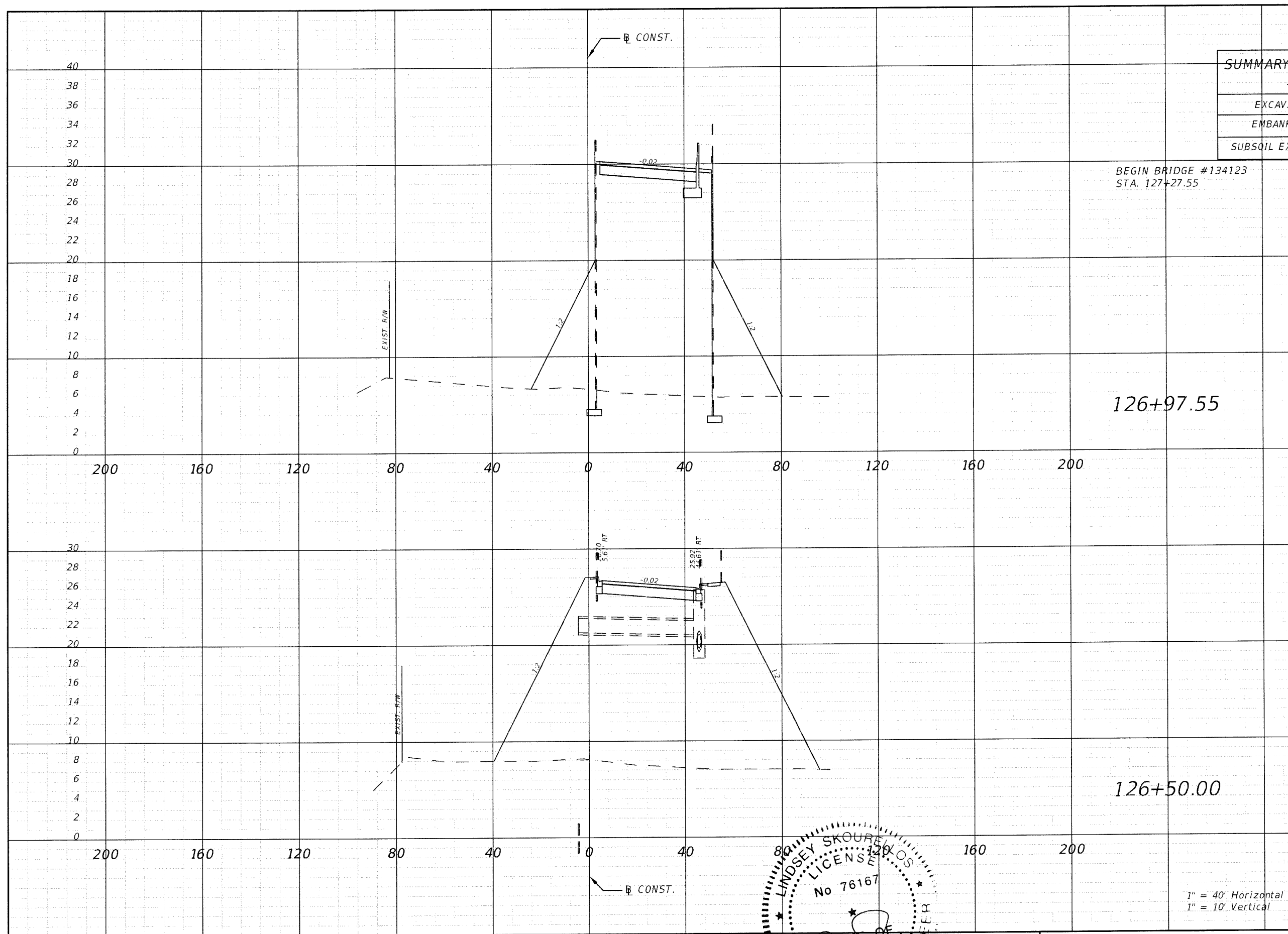
LINDSEY SKOURELLOS, P.E.
LIC. NO. 76167



SHEET TITLE: CROSS SECTION (28)		SHEET NO. 102
PROJECT NAME: FORT HAMER BRIDGE		

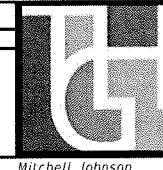
Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)

SUMMARY OF EARTHWORK & CONST. SOUTH OF BRIDGE			
EXCAVATION		2,356.23 CY	
EMBANKMENT		44,163.92 CY	
SUBSOIL EXCAVATION		4,993.57 CY	

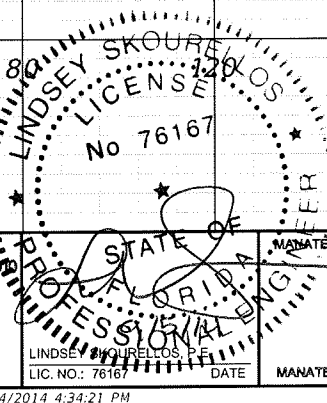


0.00	0.00	1947.54	2085.28
0.00	0.00	1485.46	2836.82
0.00	0.00	1774.28	2940.26

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



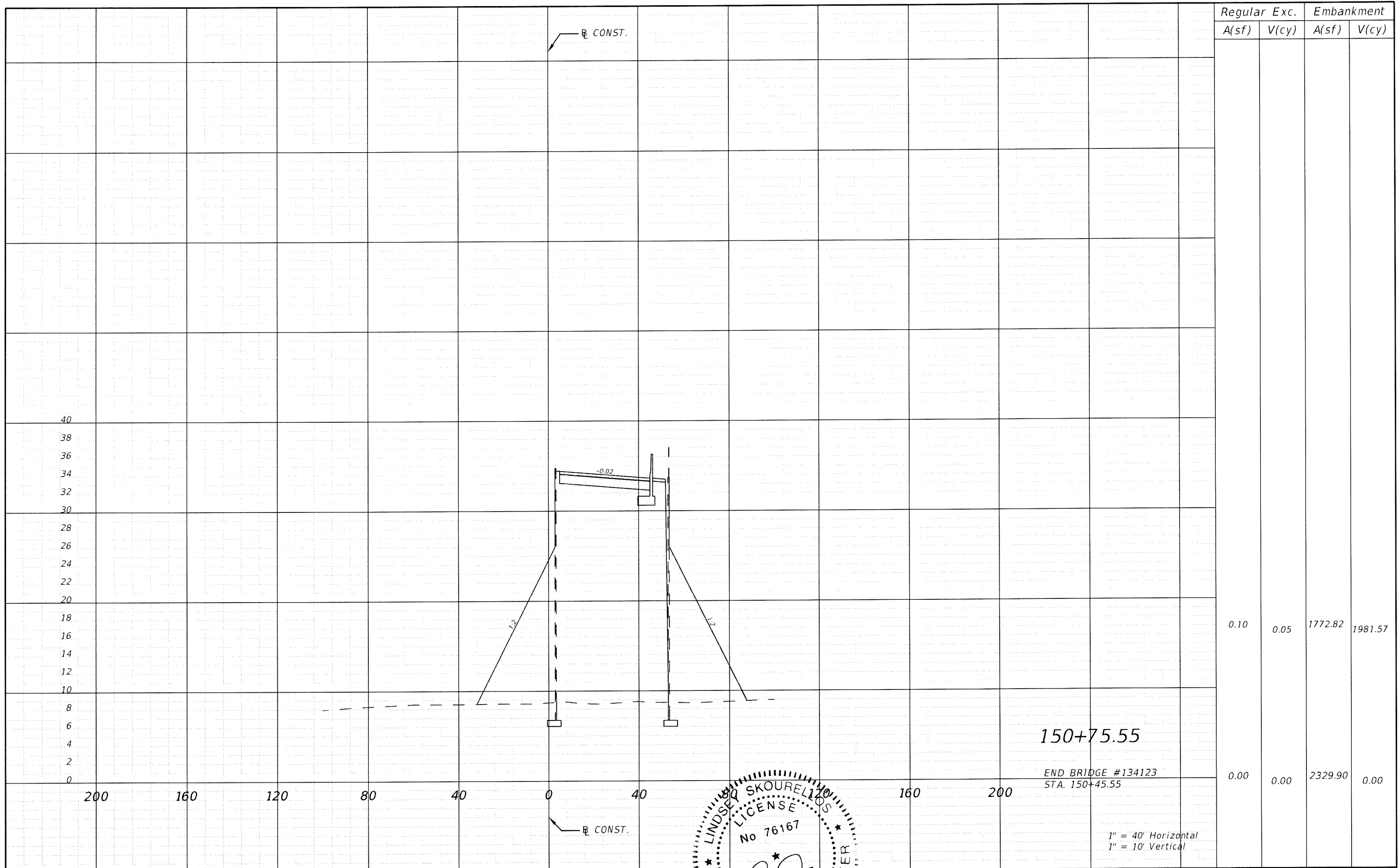
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 200
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE:	CROSS SECTION (29)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	103

1" = 40' Horizontal
 1" = 10' Vertical

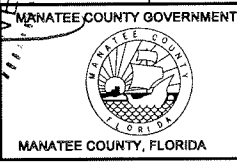
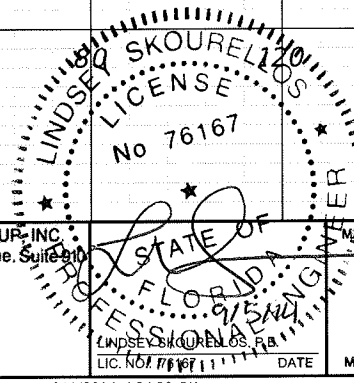


Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)
0.10	0.05	1772.82	1981.57
0.00	0.00	2329.90	0.00

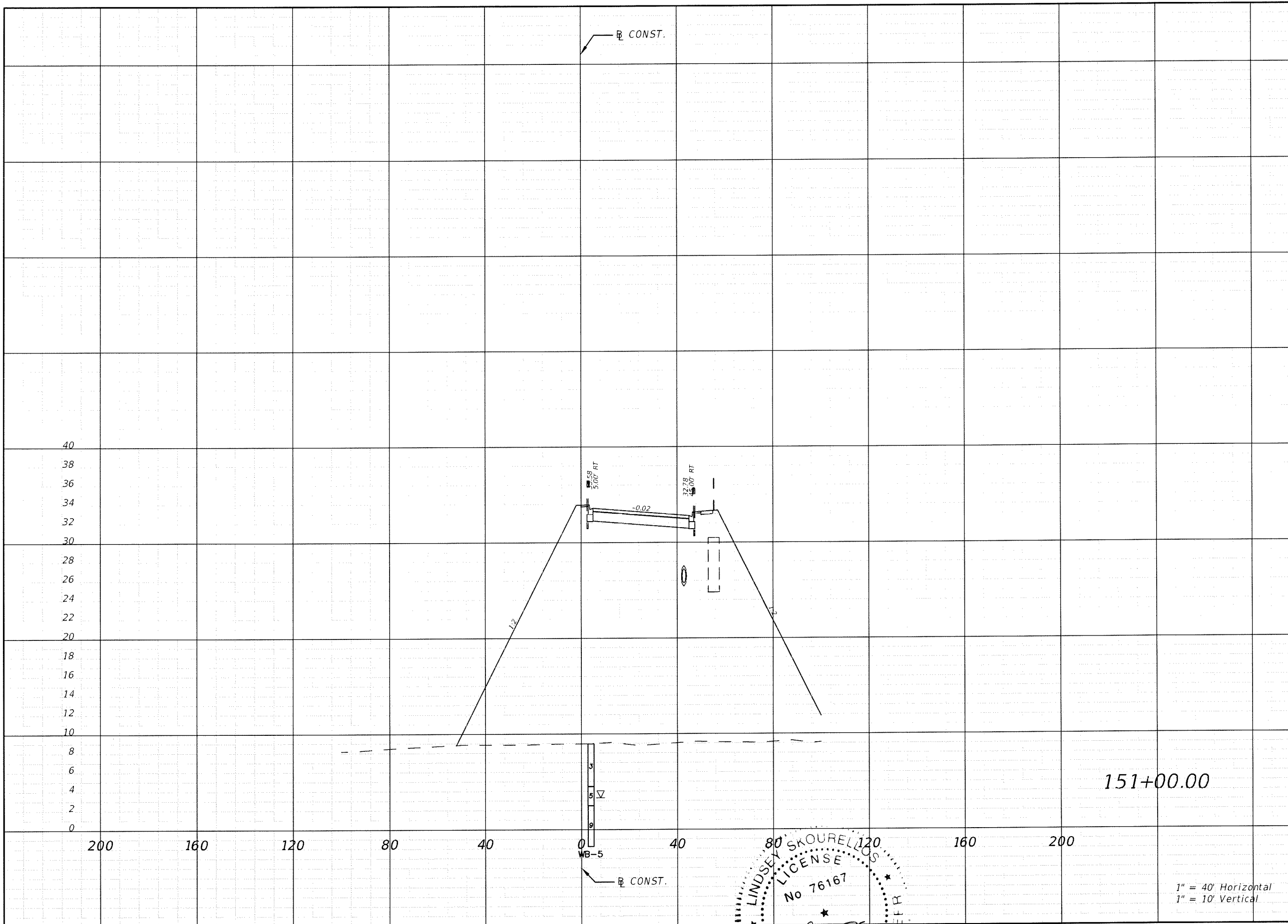
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 5461 W. Waters Avenue, Suite 210
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

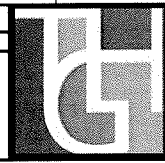


SHEET TITLE:	CROSS SECTION (30)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	104

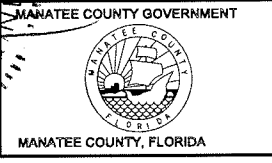


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.04	2572.22	1967.34		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

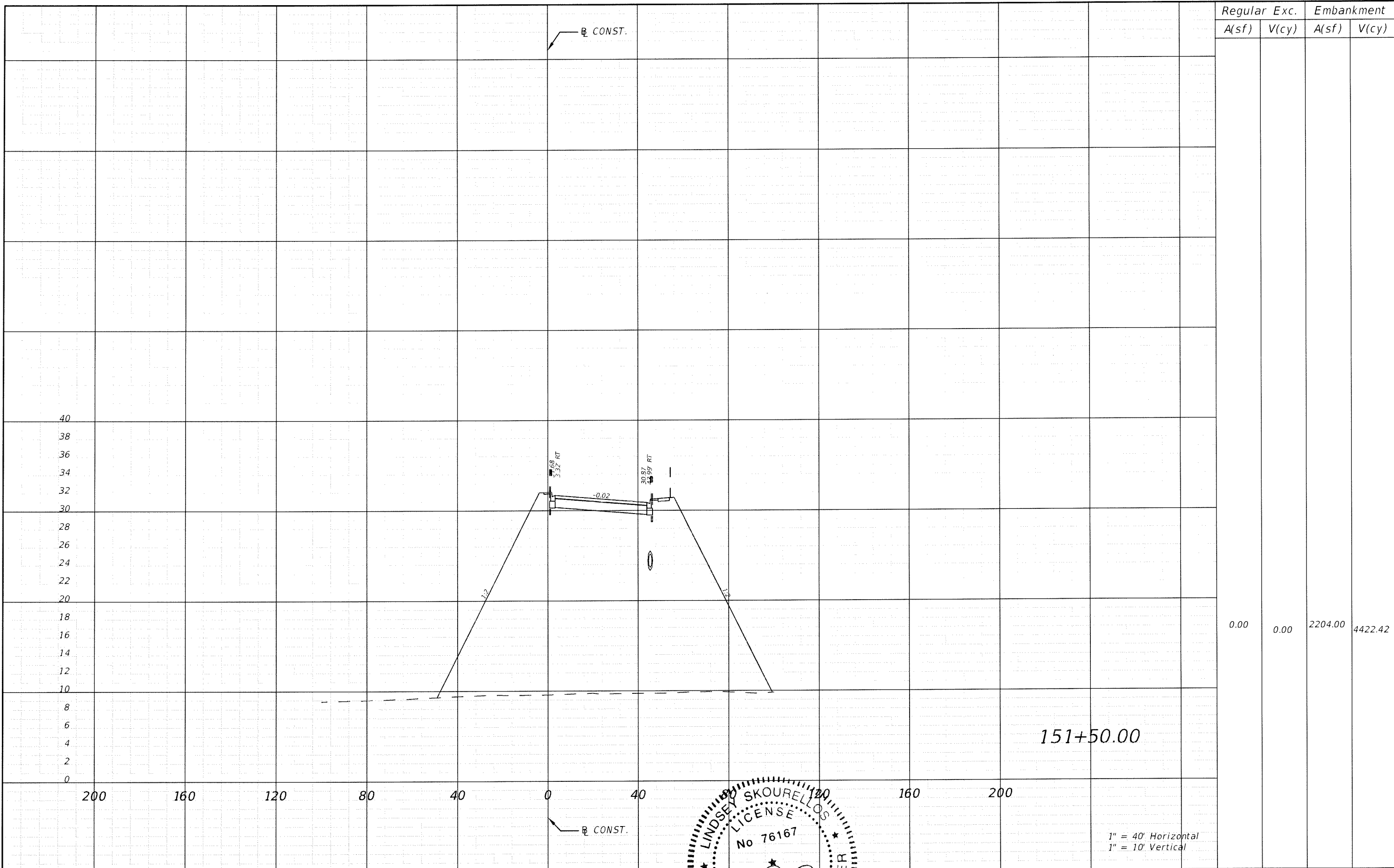


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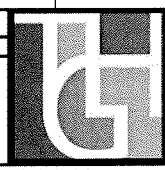
SHEET TITLE: CROSS SECTION (31)	SHEET NO. 105
PROJECT NAME: FORT HAMER BRIDGE	

1" = 40' Horizontal
 1" = 10' Vertical

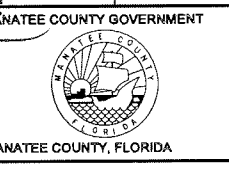
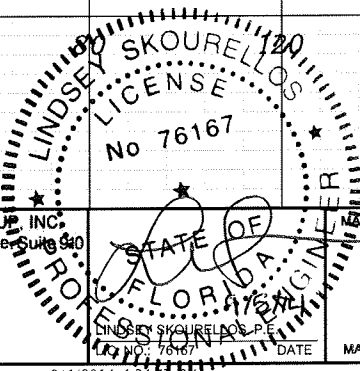


Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	2204.00	4422.42

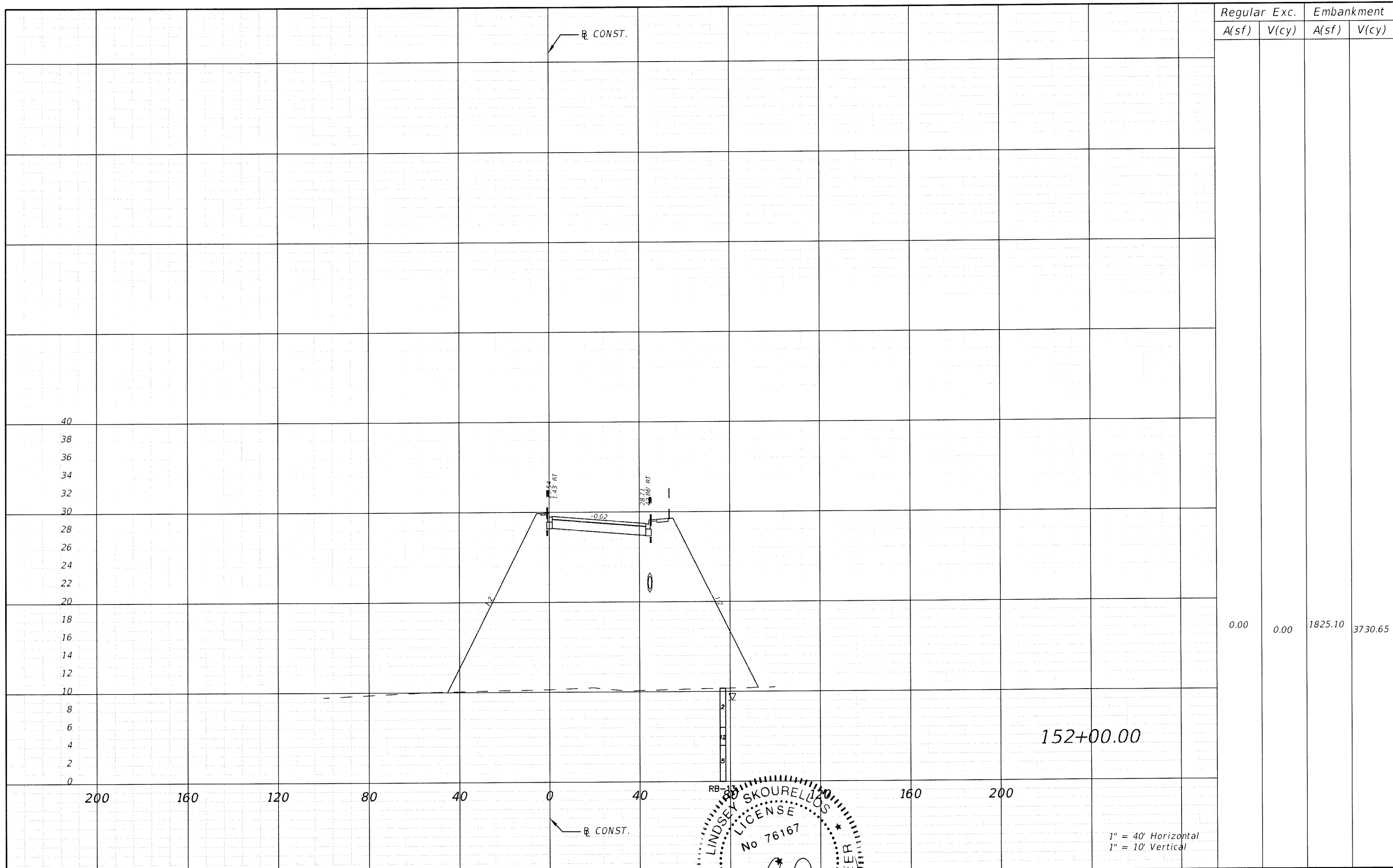
REVISIONS			
DATE	BY	DESCRIPTION	



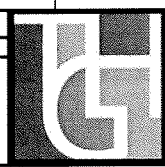
THE HEIMBURG GROUP, INC.
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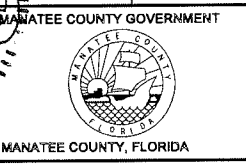
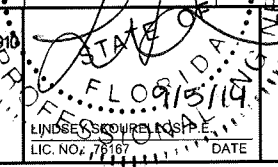
SHEET TITLE:		CROSS SECTION (32)
PROJECT NAME:		FORT HAMER BRIDGE
DATE:		9/4/2014 4:34:47 PM
SHEET NO.:		106



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

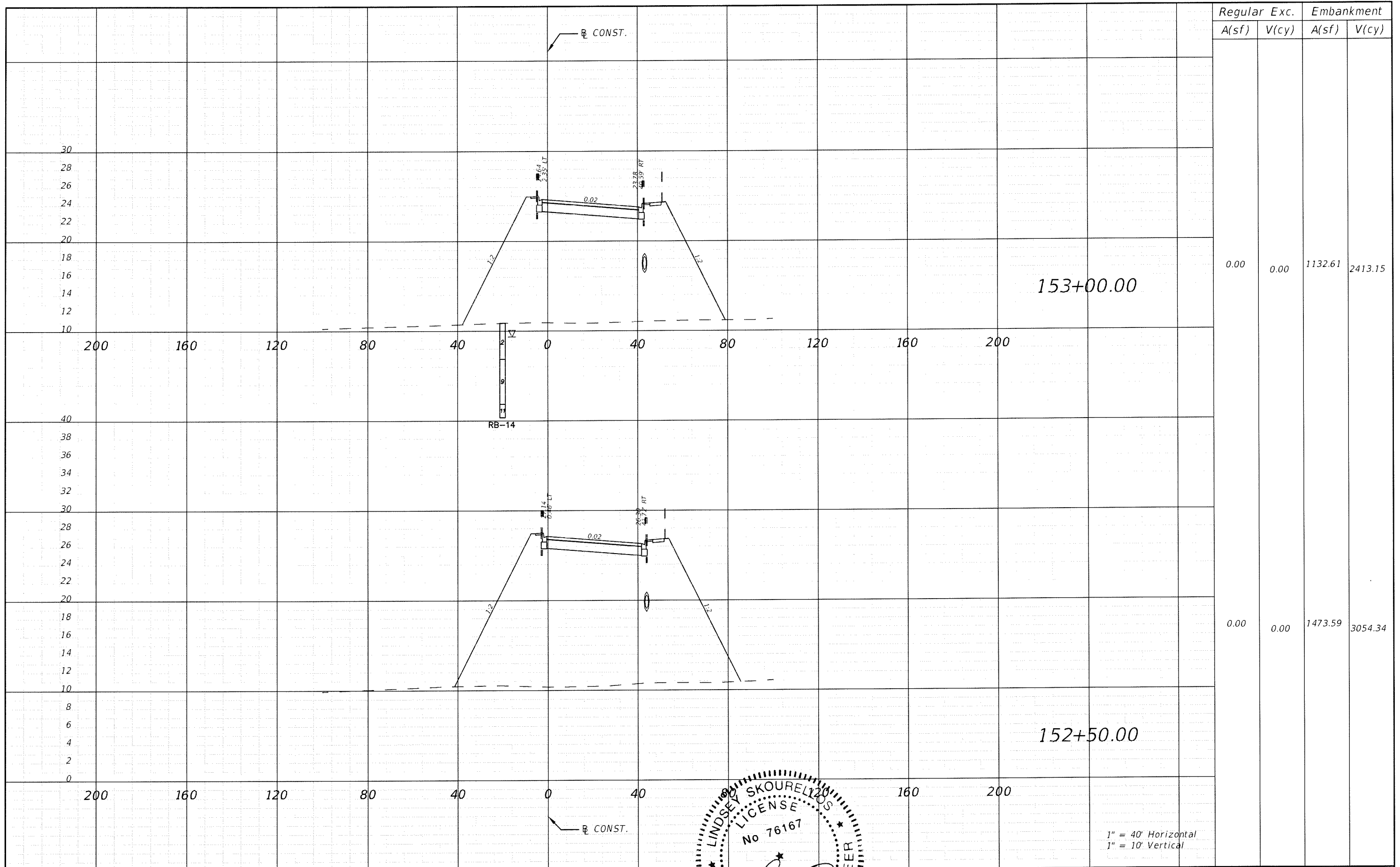


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 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

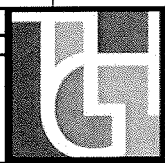


SHEET TITLE:		CROSS SECTION (33)	
PROJECT NAME:		FORT HAMER BRIDGE	
			SHEET NO.
			107

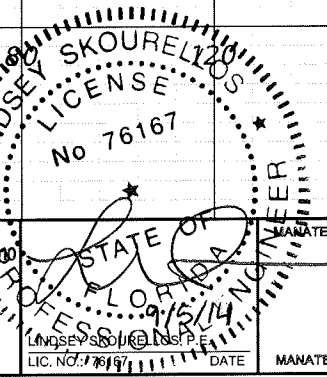
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1" = 10' Vertical



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

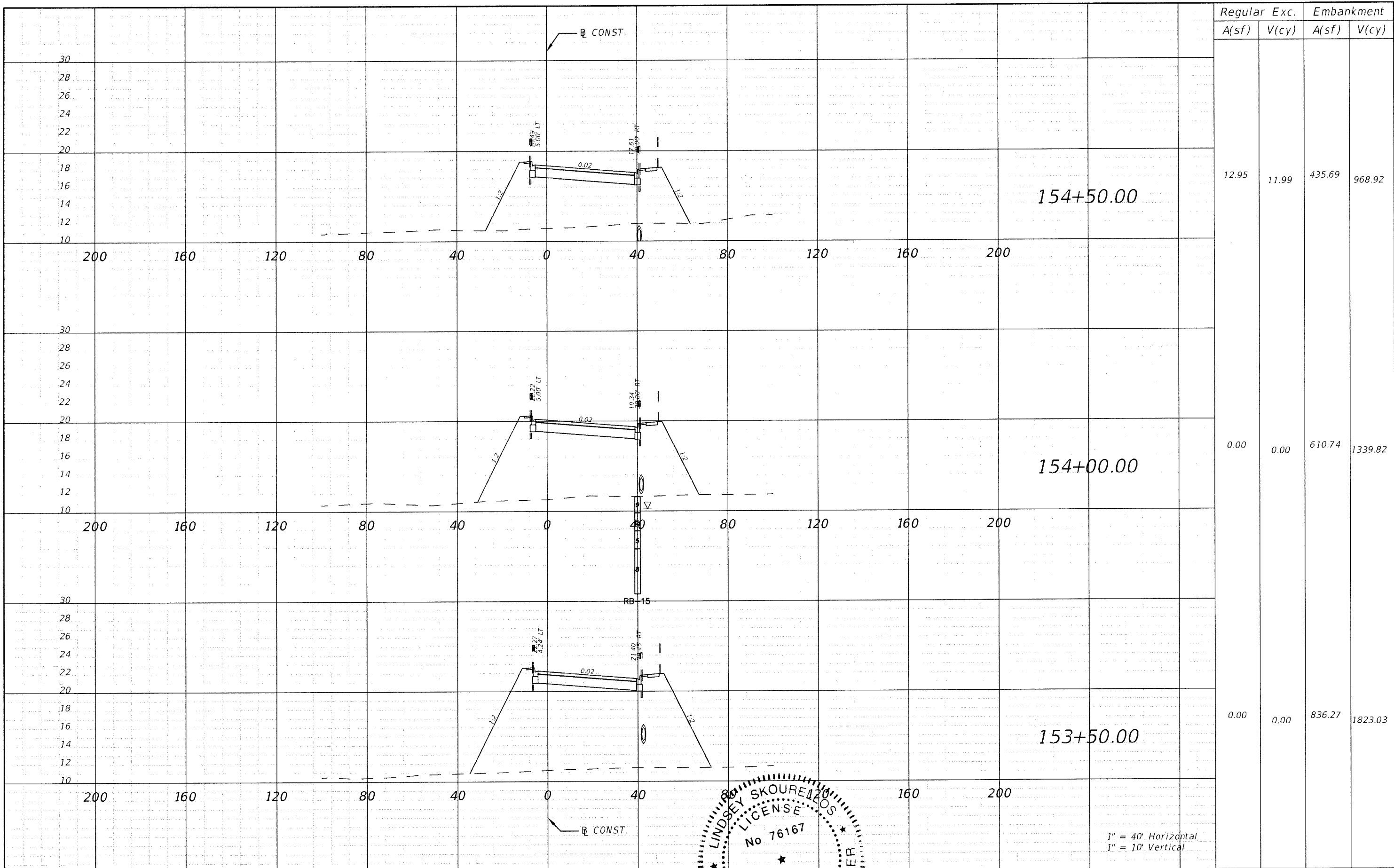


THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 400
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



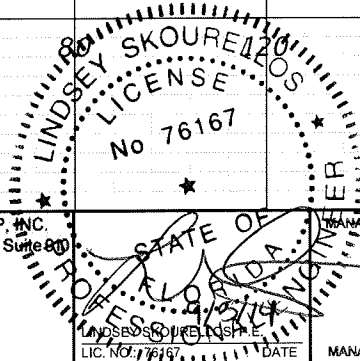
MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: CROSS SECTION (34)		SHEET NO. 108
PROJECT NAME: FORT HAMER BRIDGE		

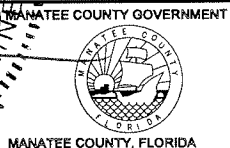


Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)
12.95	11.99	435.69	968.92
0.00	0.00	610.74	1339.82
0.00	0.00	836.27	1823.03

1" = 40' Horizontal
1" = 10' Vertical



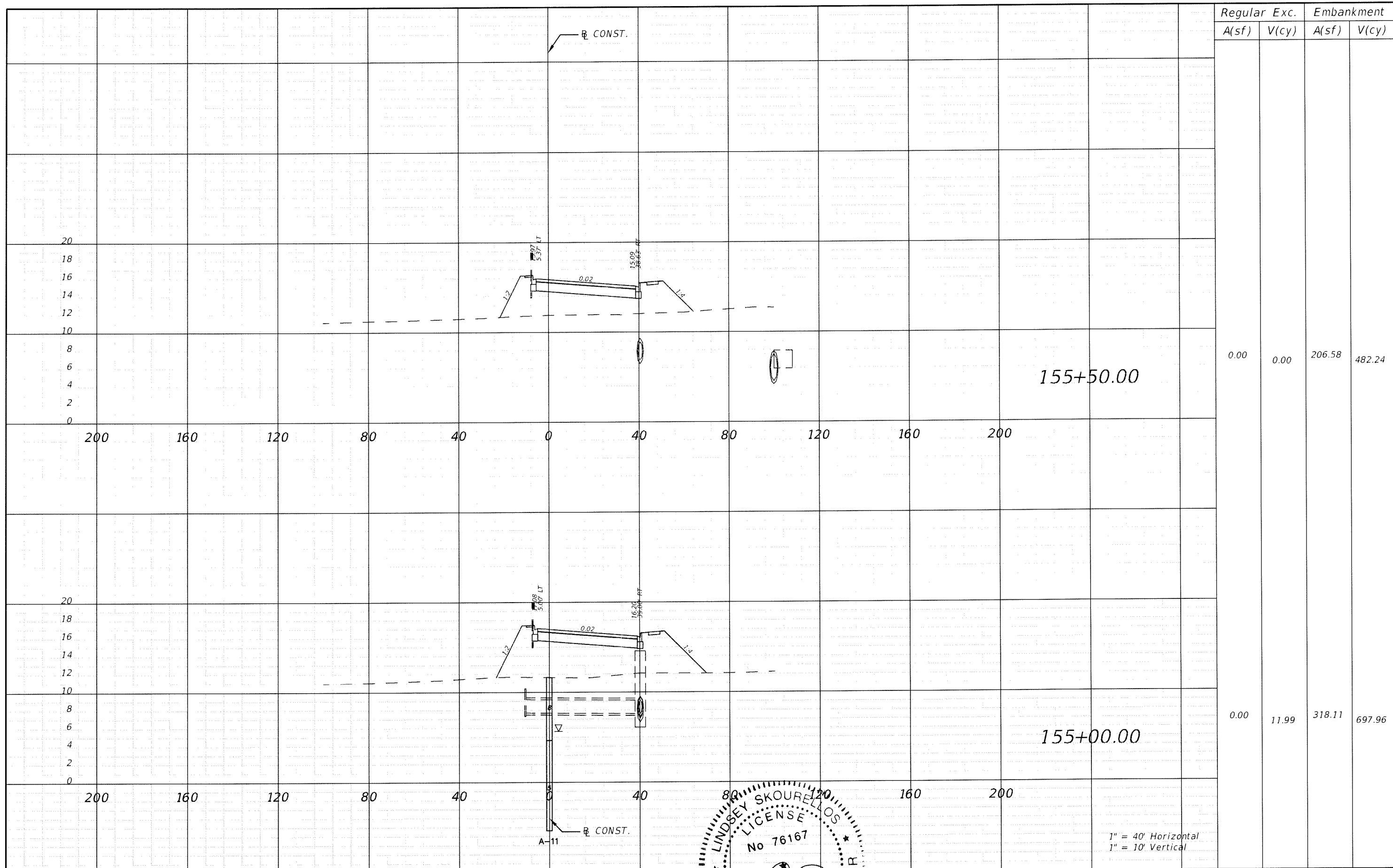
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 800
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE:		CROSS SECTION (35)
PROJECT NAME:		FORT HAMER BRIDGE
DATE:		9/4/2014 4:35:13 PM
SHEET NO.:		109

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION





1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

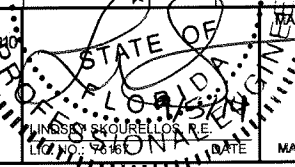
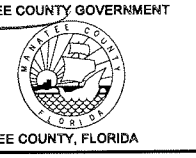
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 210
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



LINDSEY SKOURELLOS
 LICENSE
 No 76167

STATE OF FLORIDA
 PROFESSIONAL ENGINEER

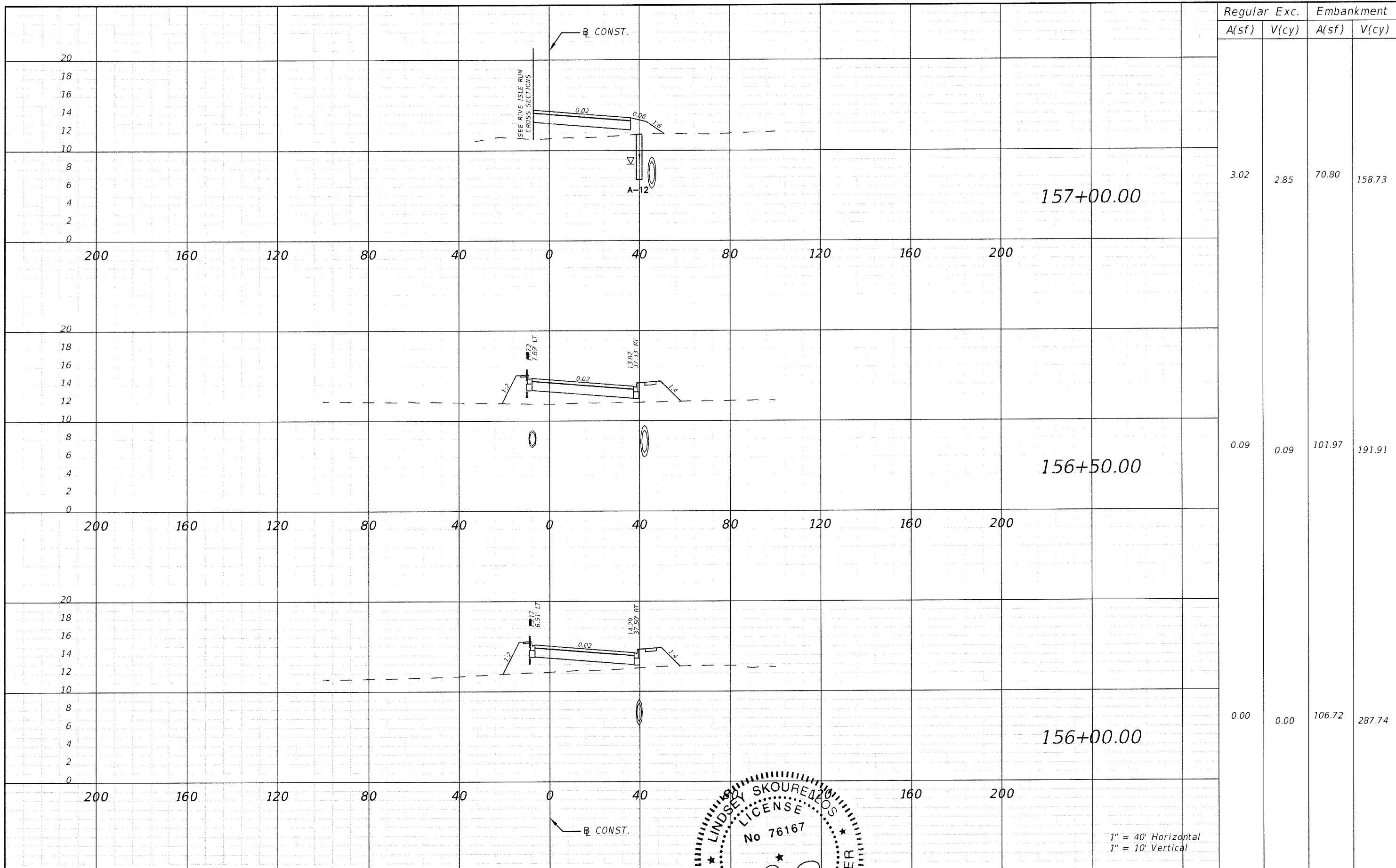
MANATEE COUNTY GOVERNMENT

SHEET TITLE: **CROSS SECTION (36)**

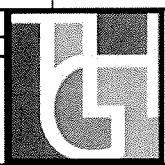
PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **110**

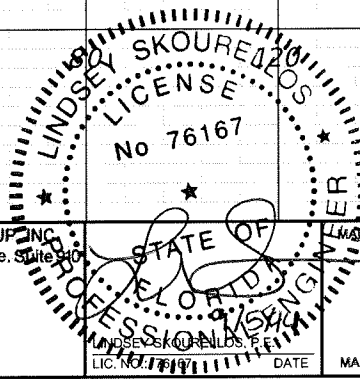


1" = 40' Horizontal
1" = 10' Vertical

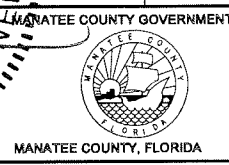
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



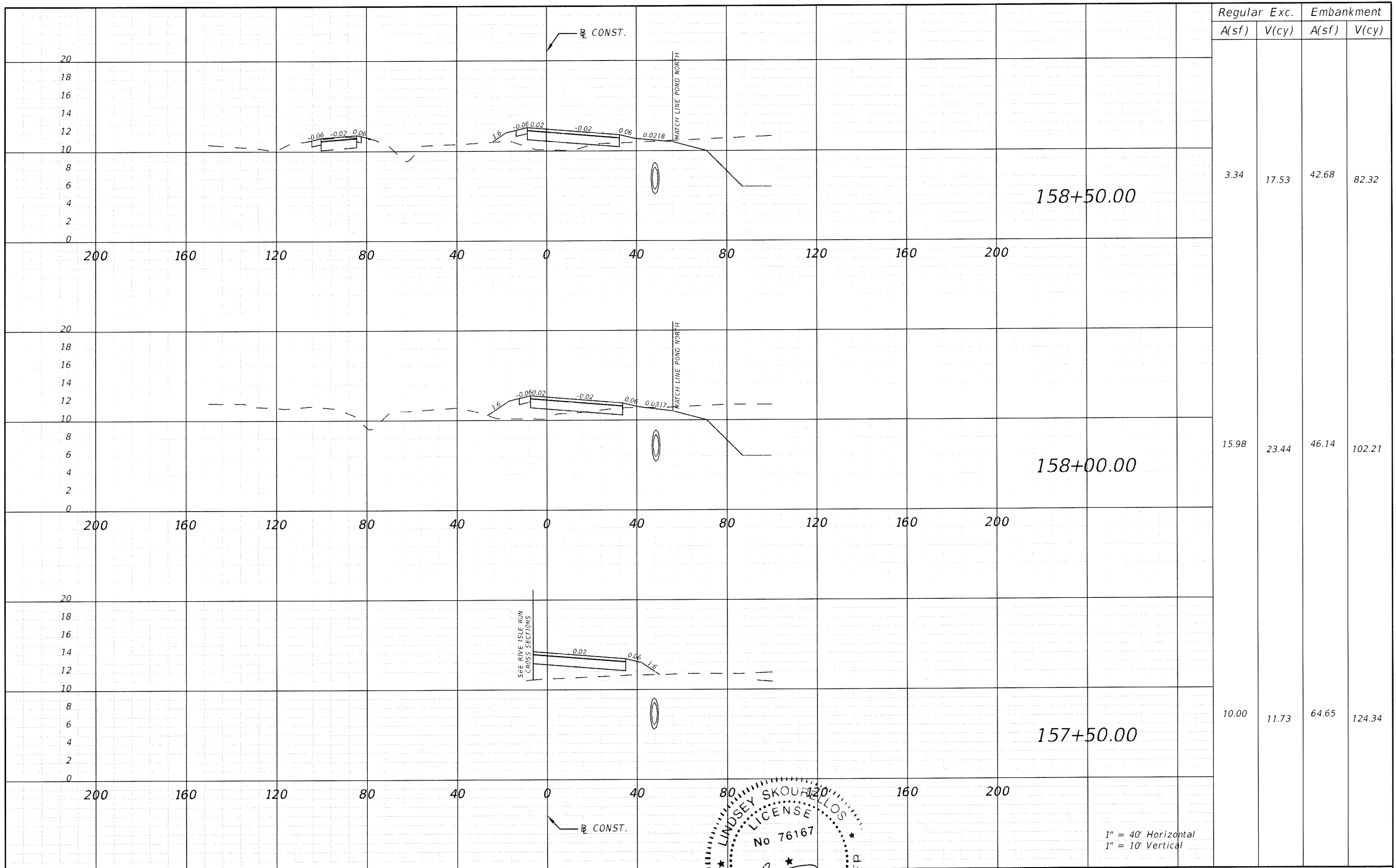
THE HEIMBURG GROUP, INC.
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TAMPA, FL 33634
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9/4/2014 4:35:30 PM




SHEET TITLE: CROSS SECTION (37)		SHEET NO. 111
PROJECT NAME: FORT HAMER BRIDGE		

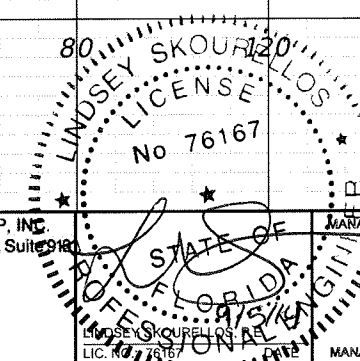



1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
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(813) 749-0823
C.A. NO. 00027842

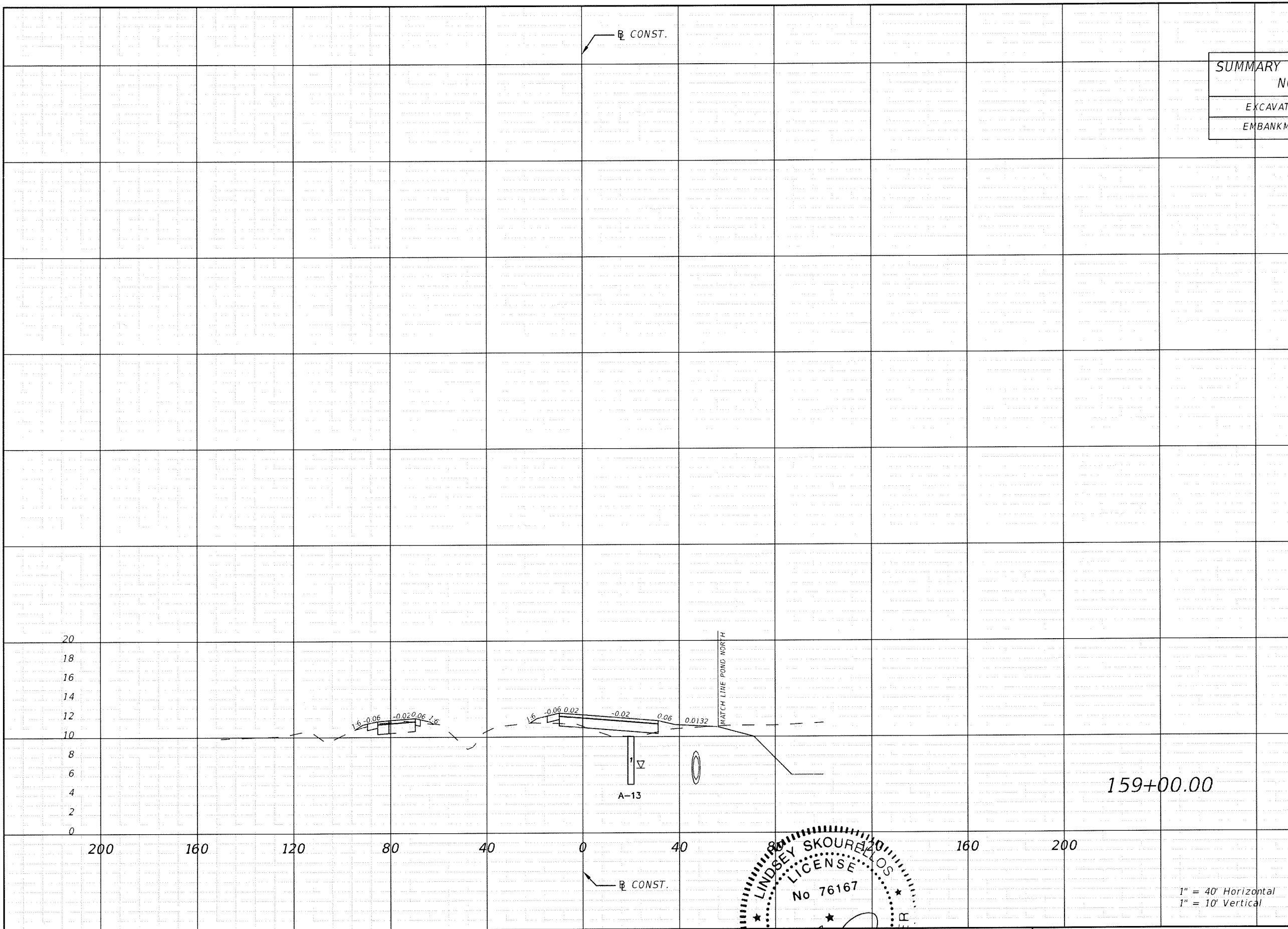




SHEET TITLE: CROSS SECTION (38)		SHEET NO. 112
PROJECT NAME: FORT HAMER BRIDGE		

Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)

SUMMARY OF EARTHWORK & CONST. NORTH OF BRIDGE			
EXCAVATION		171.21 CY	
EMBANKMENT		23,776.49 CY	

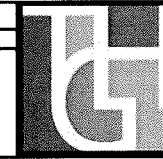


13.52	15.91	59.49	95.10
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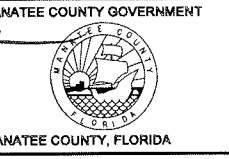
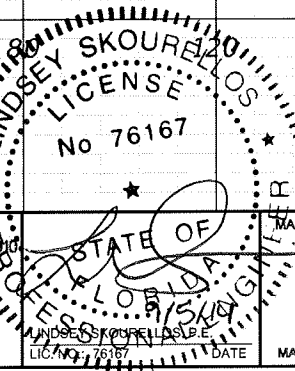
159+00.00

1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



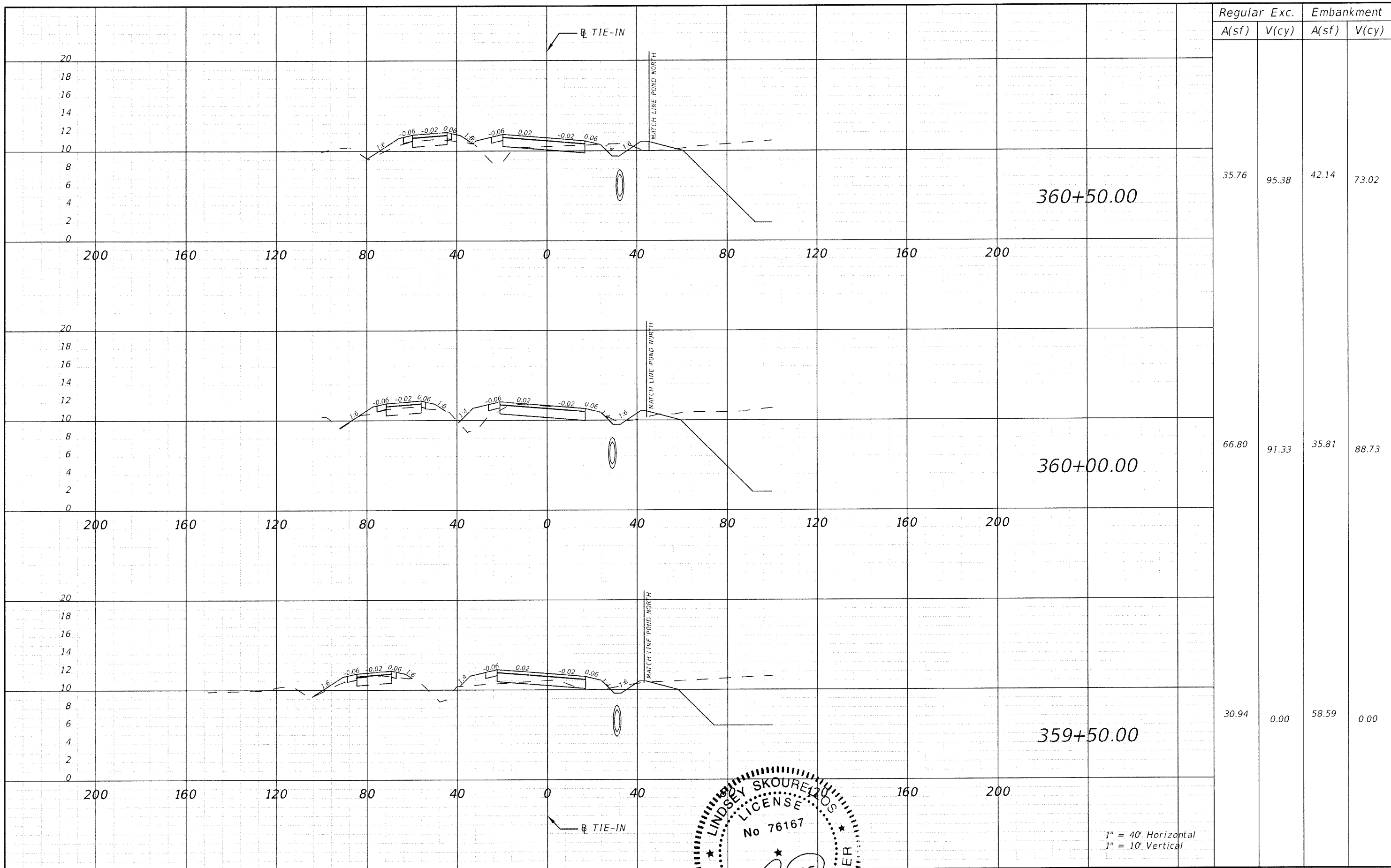
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 900
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE:		CROSS SECTION (39)
PROJECT NAME:		FORT HAMER BRIDGE
SHEET NO.:		113

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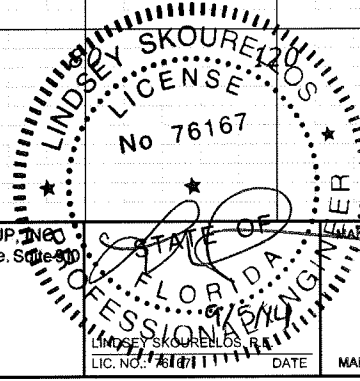
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
35.76	95.38	42.14	73.02		
66.80	91.33	35.81	88.73		
30.94	0.00	58.59	0.00		

1" = 40' Horizontal
1" = 10' Vertical

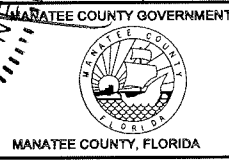
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



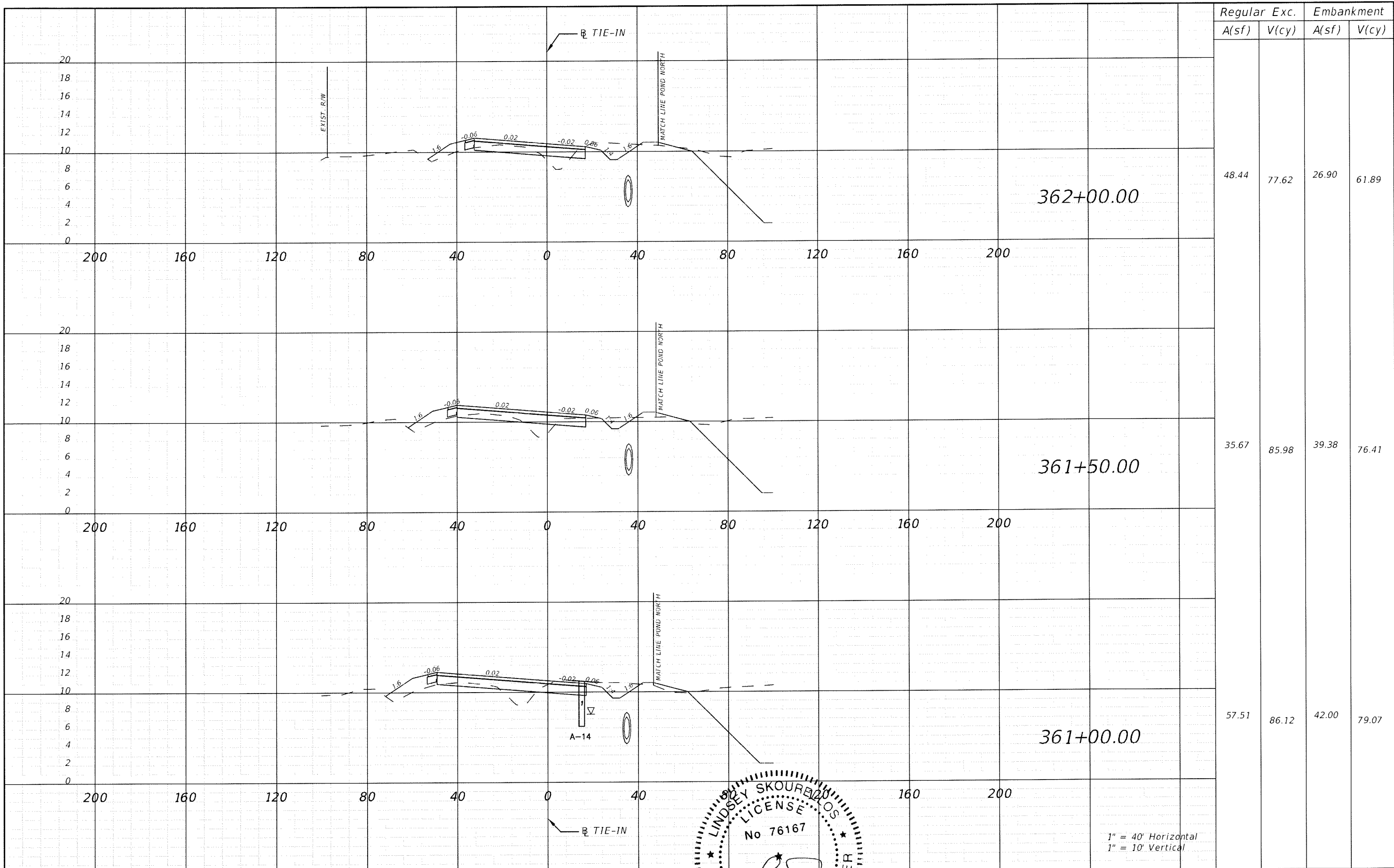
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 300
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



DATE 9/4/2014 4:35:57 PM



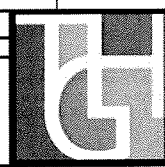
SHEET TITLE: CROSS SECTION (40)		SHEET NO. 114
PROJECT NAME: FORT HAMER BRIDGE		



Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
48.44	77.62	26.90	61.89		
35.67	85.98	39.38	76.41		
57.51	86.12	42.00	79.07		

1" = 40' Horizontal
1" = 10' Vertical

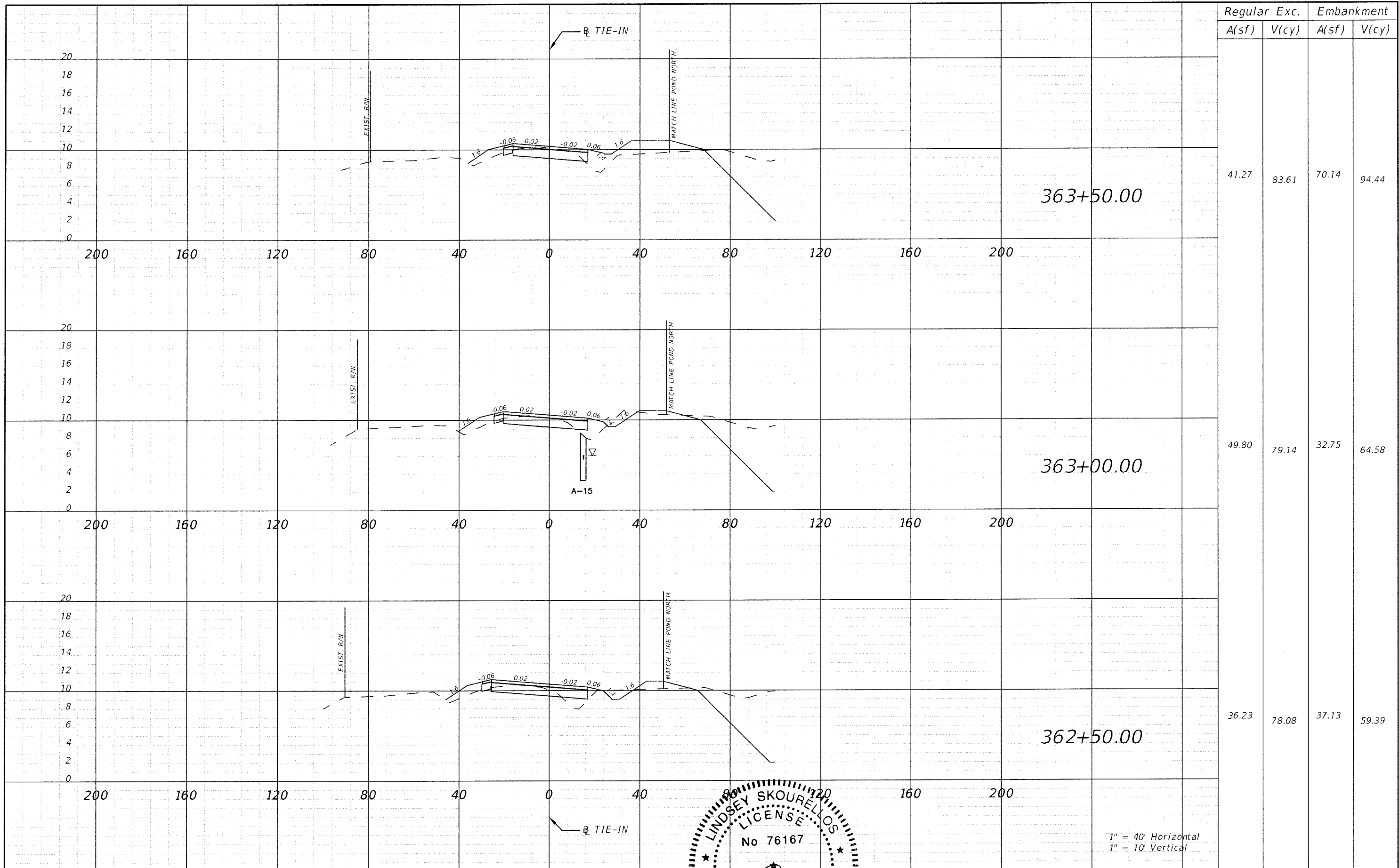
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

STATE OF FLORIDA
LINDSEY SKOURBLOS
LICENSE No 76167
PROFESSIONAL ENGINEER
DATE 9/4/2014 4:36:05 PM
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

SHEET TITLE: CROSS SECTION (41)		SHEET NO. 115
PROJECT NAME: FORT HAMER BRIDGE		

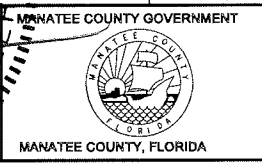
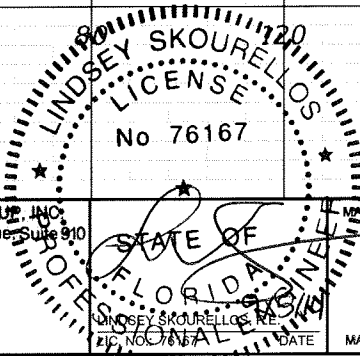


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
41.27	83.61	70.14	94.44		
49.80	79.14	32.75	64.58		
36.23	78.08	37.13	59.39		

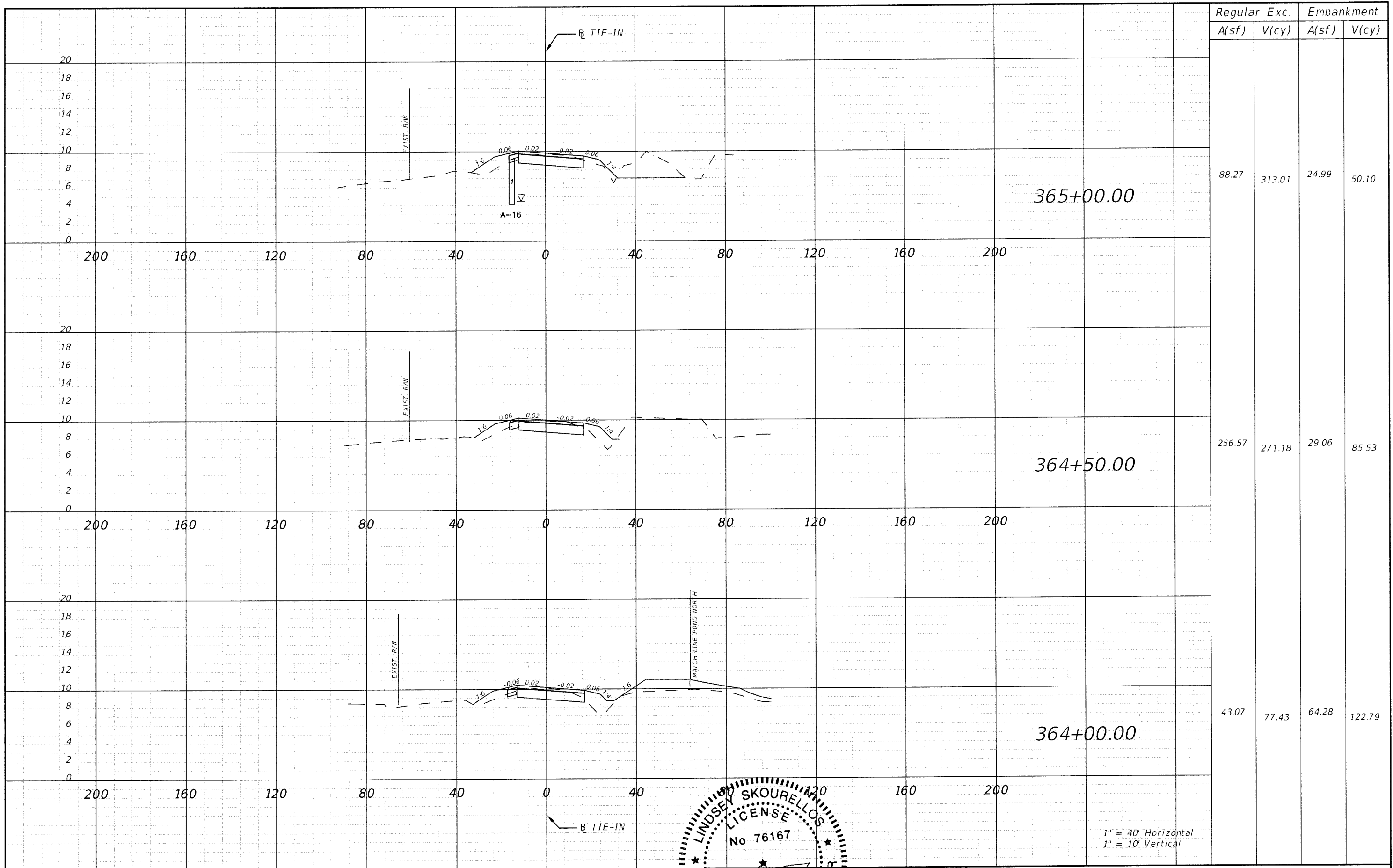
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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 (813) 749-0823
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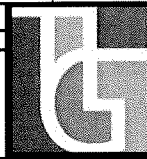
SHEET TITLE:	CROSS SECTION (42)	
PROJECT NAME:	FORT HAMER BRIDGE	
SHEET NO.:	116	



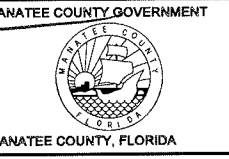
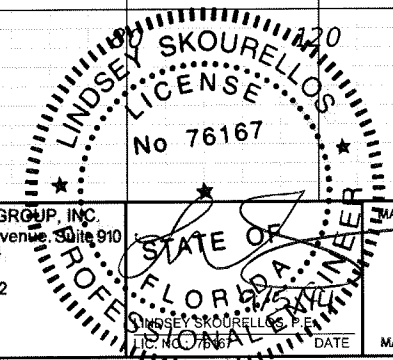
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
88.27	313.01	24.99	50.10		
256.57	271.18	29.06	85.53		
43.07	77.43	64.28	122.79		

1" = 40' Horizontal
1" = 10' Vertical

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



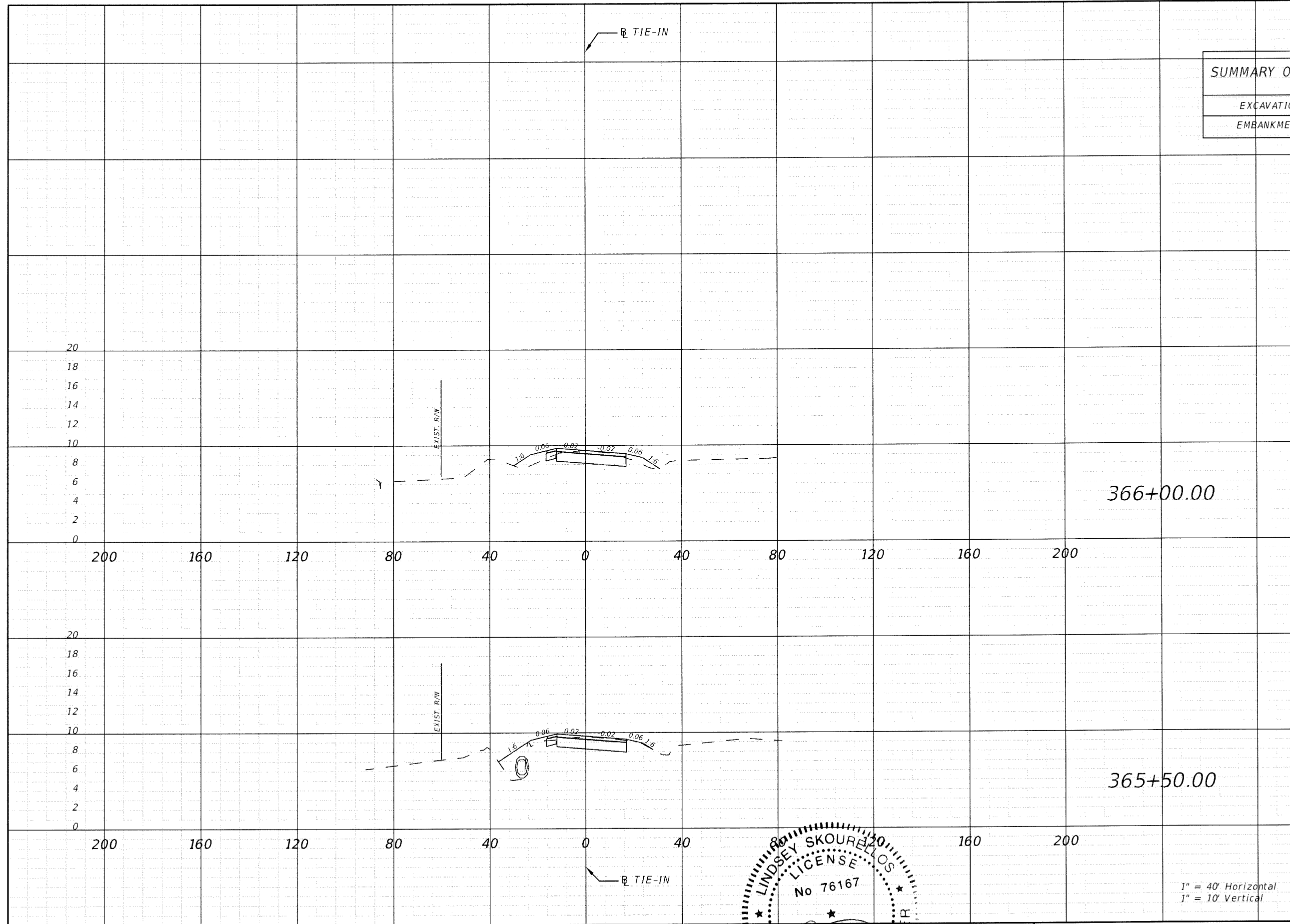
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (43)		SHEET NO. 117
PROJECT NAME: FORT HAMER BRIDGE		

Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)

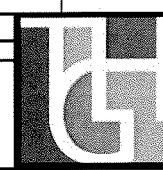
SUMMARY OF EARTHWORK @ TIE-IN			
EXCAVATION		959.23 CY	
EMBANKMENT		701.23 CY	



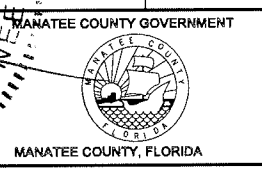
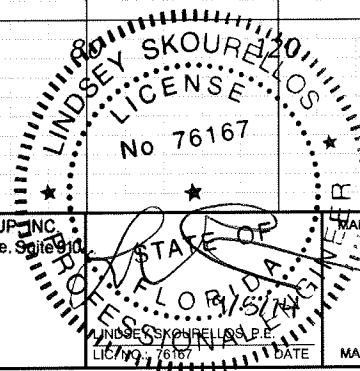
35.54	108.91	18.59	45.97
82.09	157.74	31.06	51.90

1" = 40' Horizontal
1" = 10' Vertical

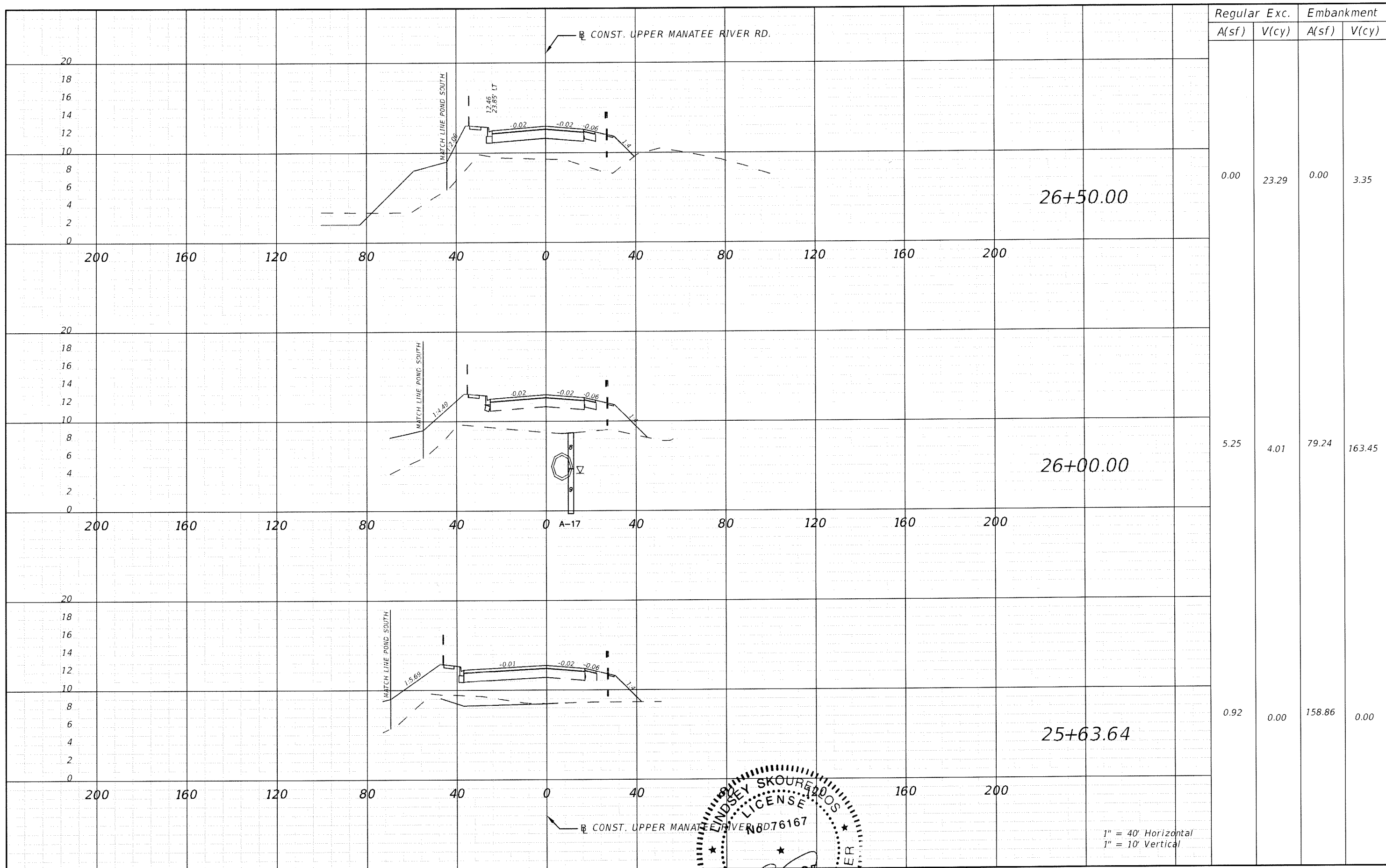
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 100
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



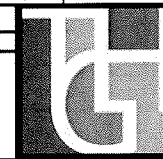
SHEET TITLE: CROSS SECTION (44)		SHEET NO. 118
PROJECT NAME: FORT HAMER BRIDGE		



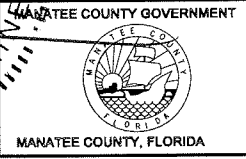
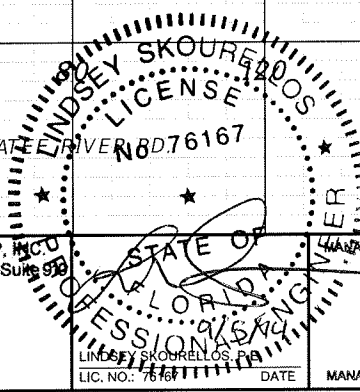
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	23.29	0.00	3.35		
5.25	4.01	79.24	163.45		
0.92	0.00	158.86	0.00		

1" = 40' Horizontal
1" = 10' Vertical

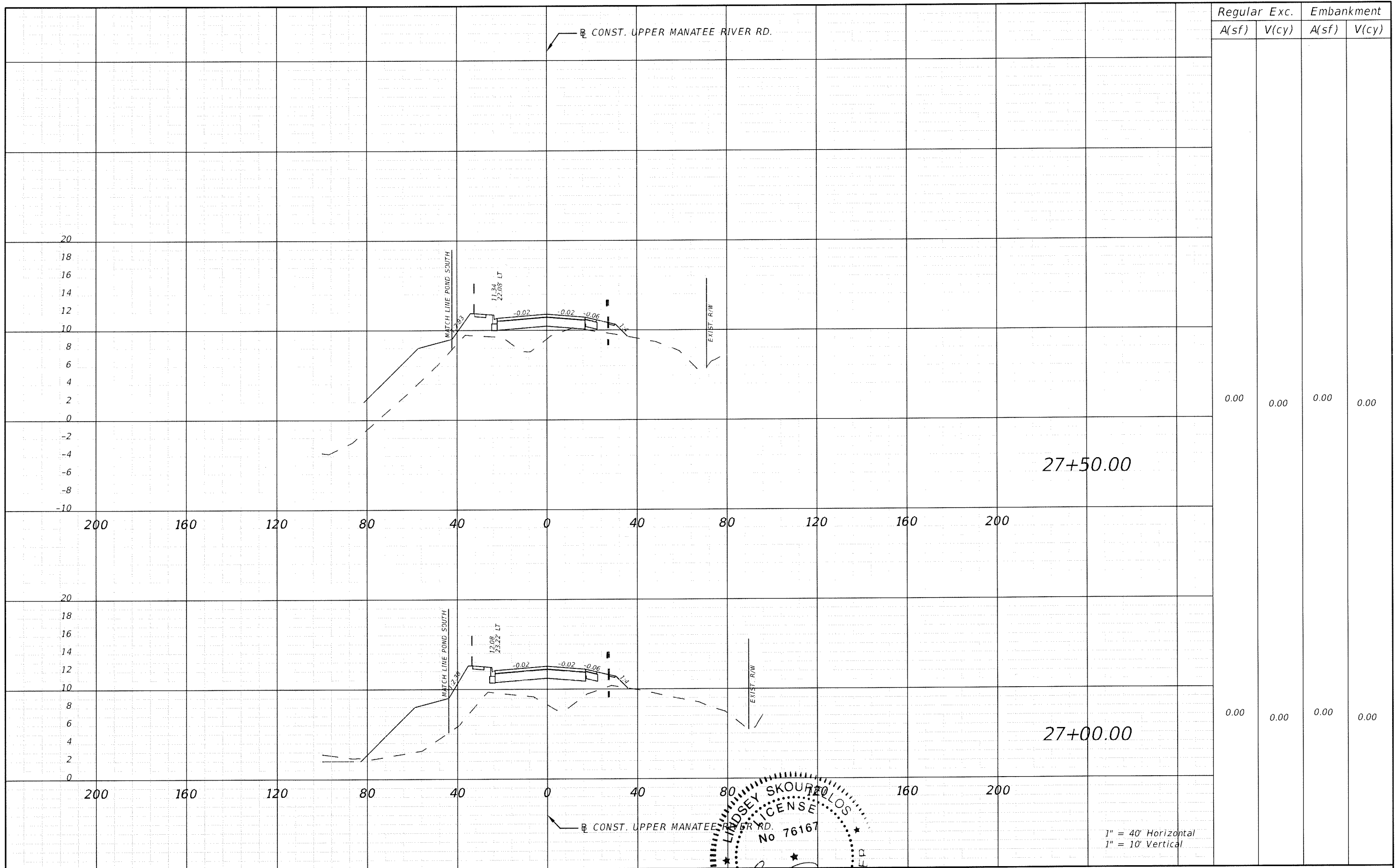
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 500
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE: CROSS SECTION (45)		SHEET NO. 119
PROJECT NAME: FORT HAMER BRIDGE		



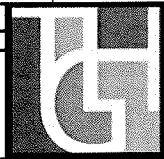
Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00

27+50.00

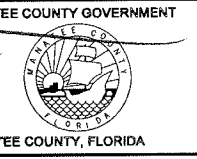
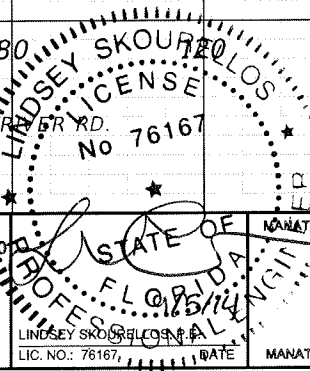
27+00.00

1" = 40' Horizontal
1" = 10' Vertical

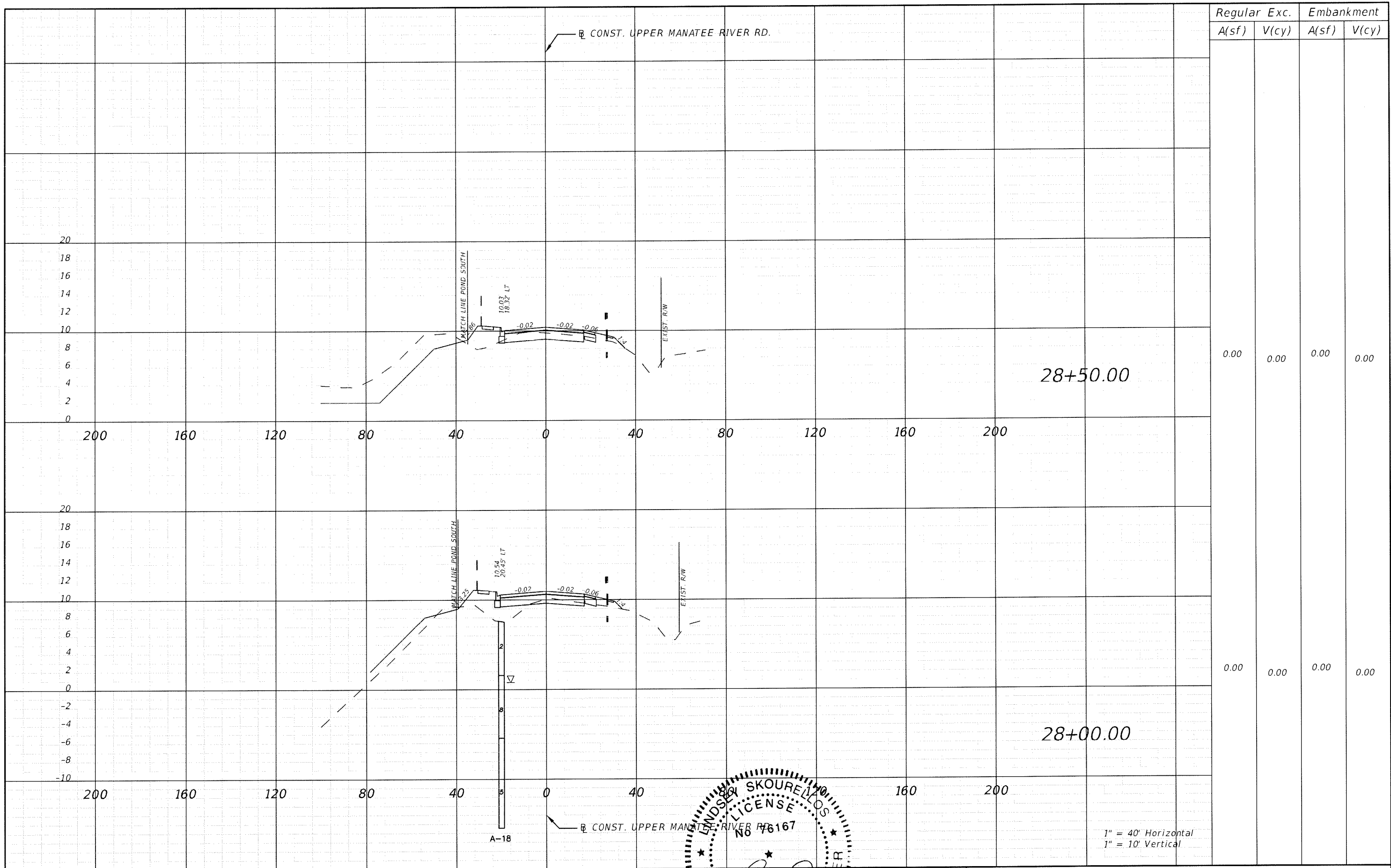
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 200
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

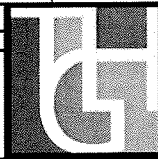


SHEET TITLE: CROSS SECTION (46)		SHEET NO. 120
PROJECT NAME: FORT HAMER BRIDGE		

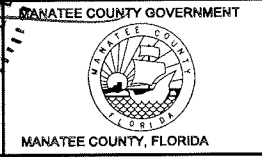
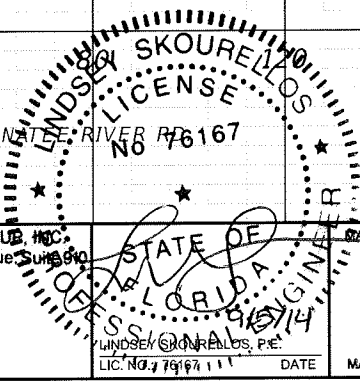


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



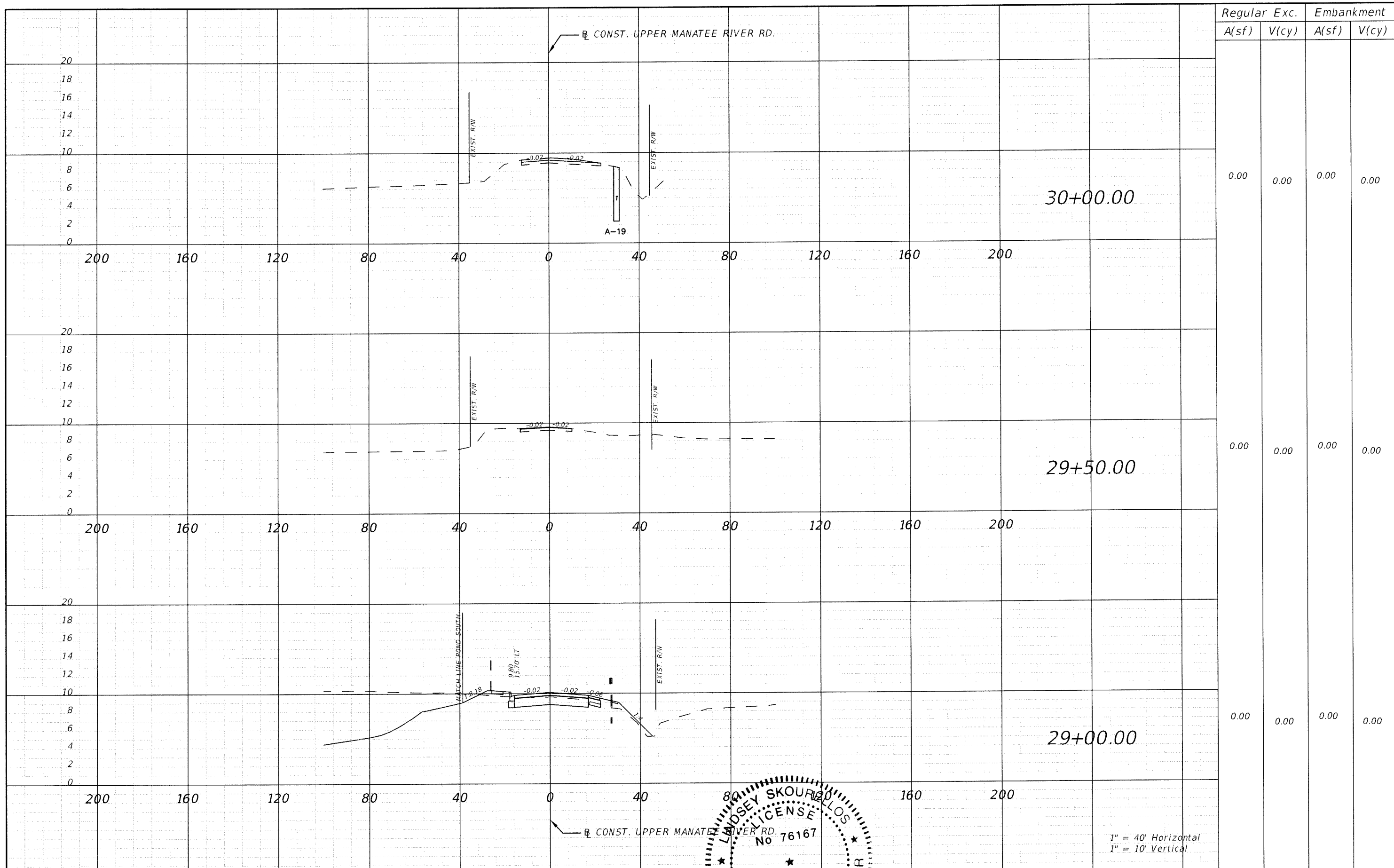
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 610
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:		CROSS SECTION (47)	
PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.			121

Mitchell Johnson

9/4/2014 4:36:58 PM



Regular Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 900
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

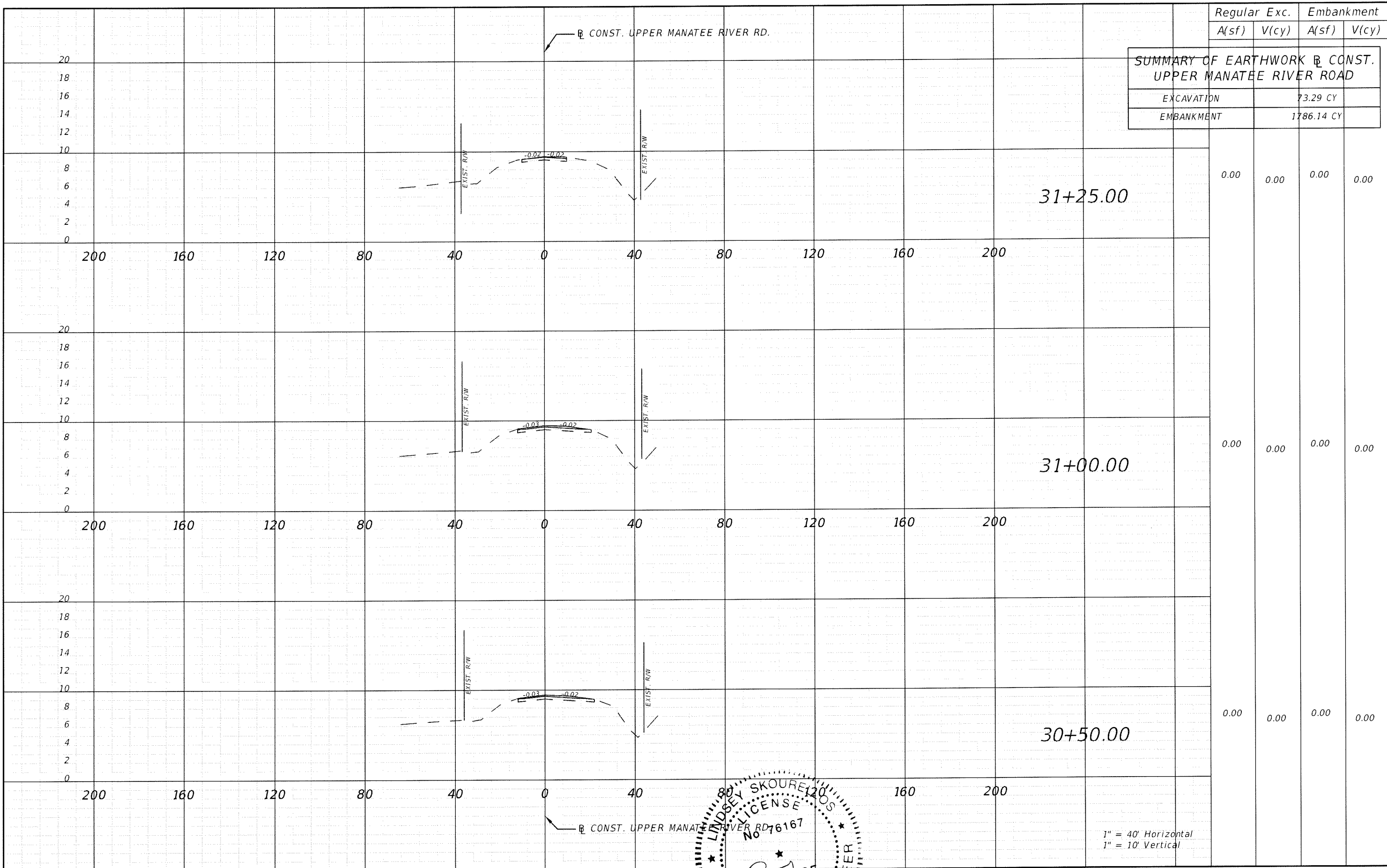
LADSEY SKOURIDIS
 LICENSE No 76167
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 LIC. NO. 76167

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

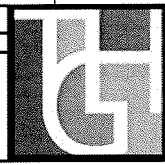
SHEET TITLE: CROSS SECTION (48)		SHEET NO. 122
PROJECT NAME: FORT HAMER BRIDGE		

Mitchell Johnson

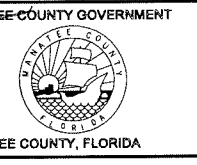
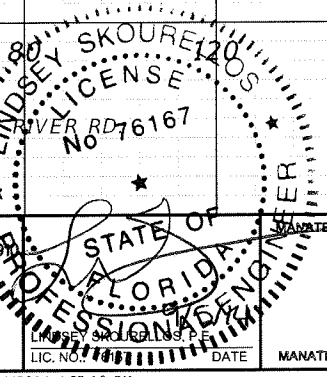
9/4/2014 4:37:07 PM



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

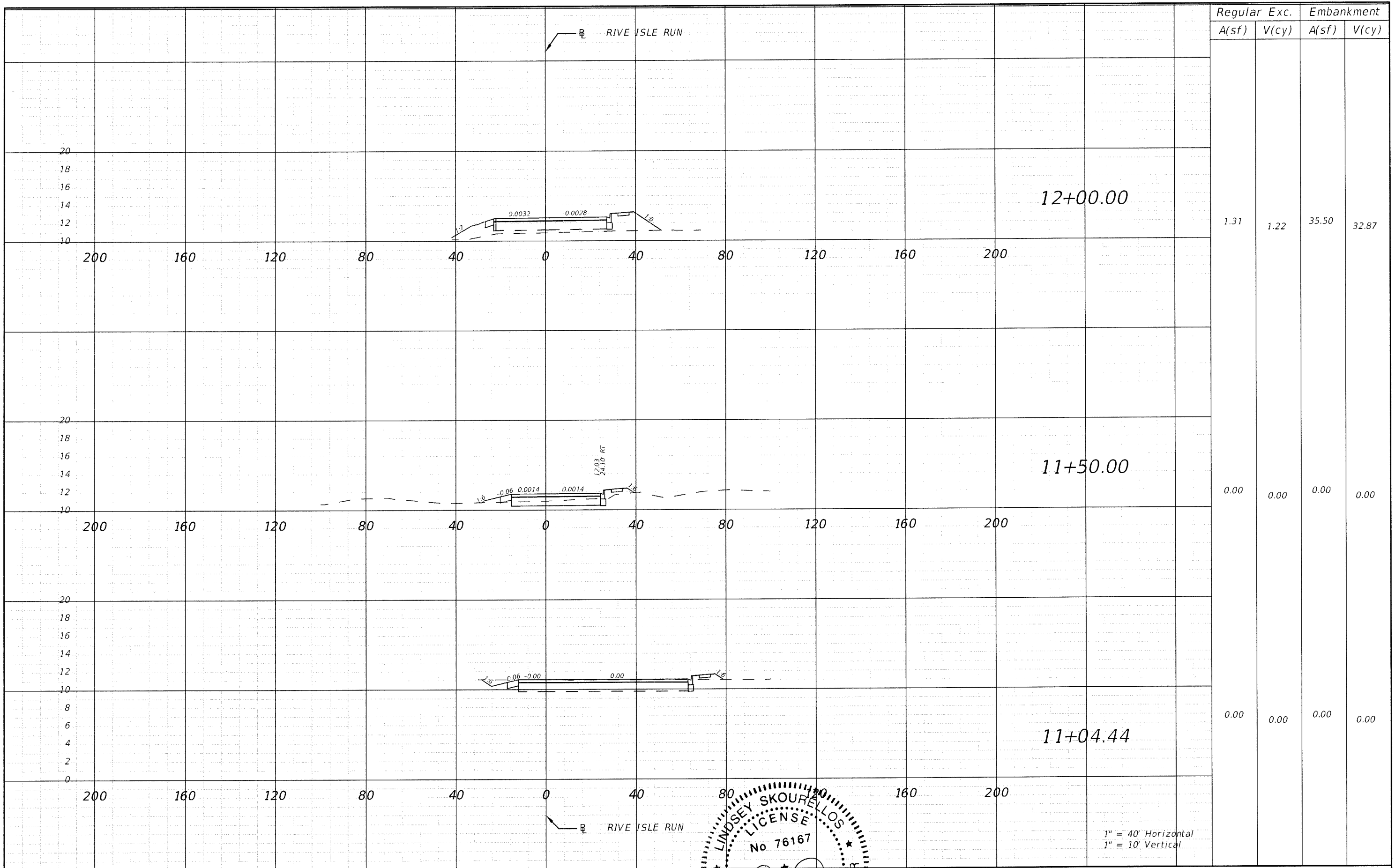


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 5461 W. Waters Avenue, Suite 900
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



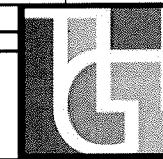
SHEET TITLE: CROSS SECTION (49)		SHEET NO. 123
PROJECT NAME: FORT HAMER BRIDGE		

1" = 40' Horizontal
 1" = 10' Vertical

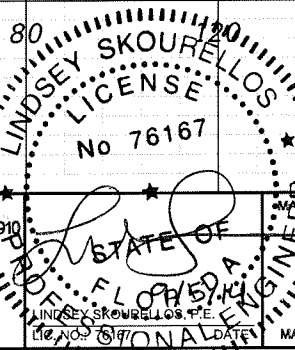


Regular		Exc.		Embankment	
A(sf)	V(cy)	A(sf)	V(cy)	A(sf)	V(cy)
1.31	1.22	35.50	32.87		
0.00	0.00	0.00	0.00		
0.00	0.00	0.00	0.00		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

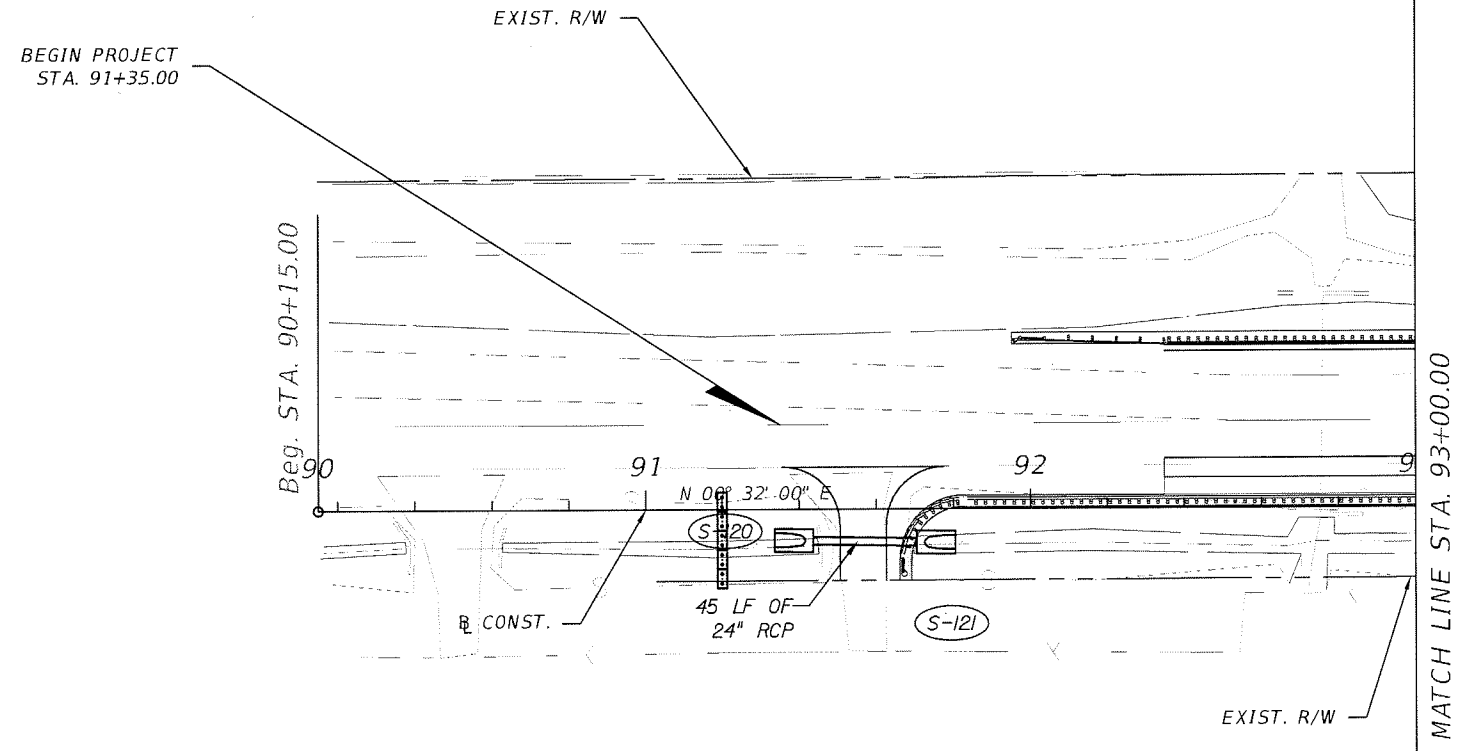
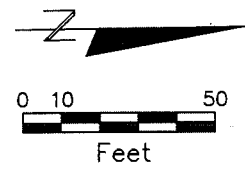


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 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

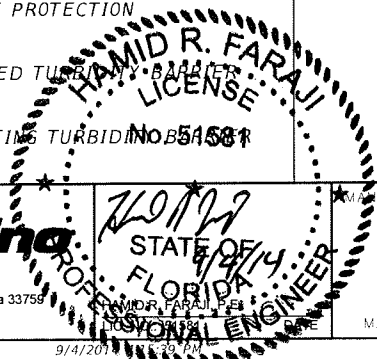


SHEET TITLE:	CROSS SECTION (50)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	124

1" = 40' Horizontal
 1" = 10' Vertical



	SEDIMENT BARRIER
	INLET PROTECTION
	STAKED TURBIDITY BARRIER
	FLOATING TURBIDITY BARRIER



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
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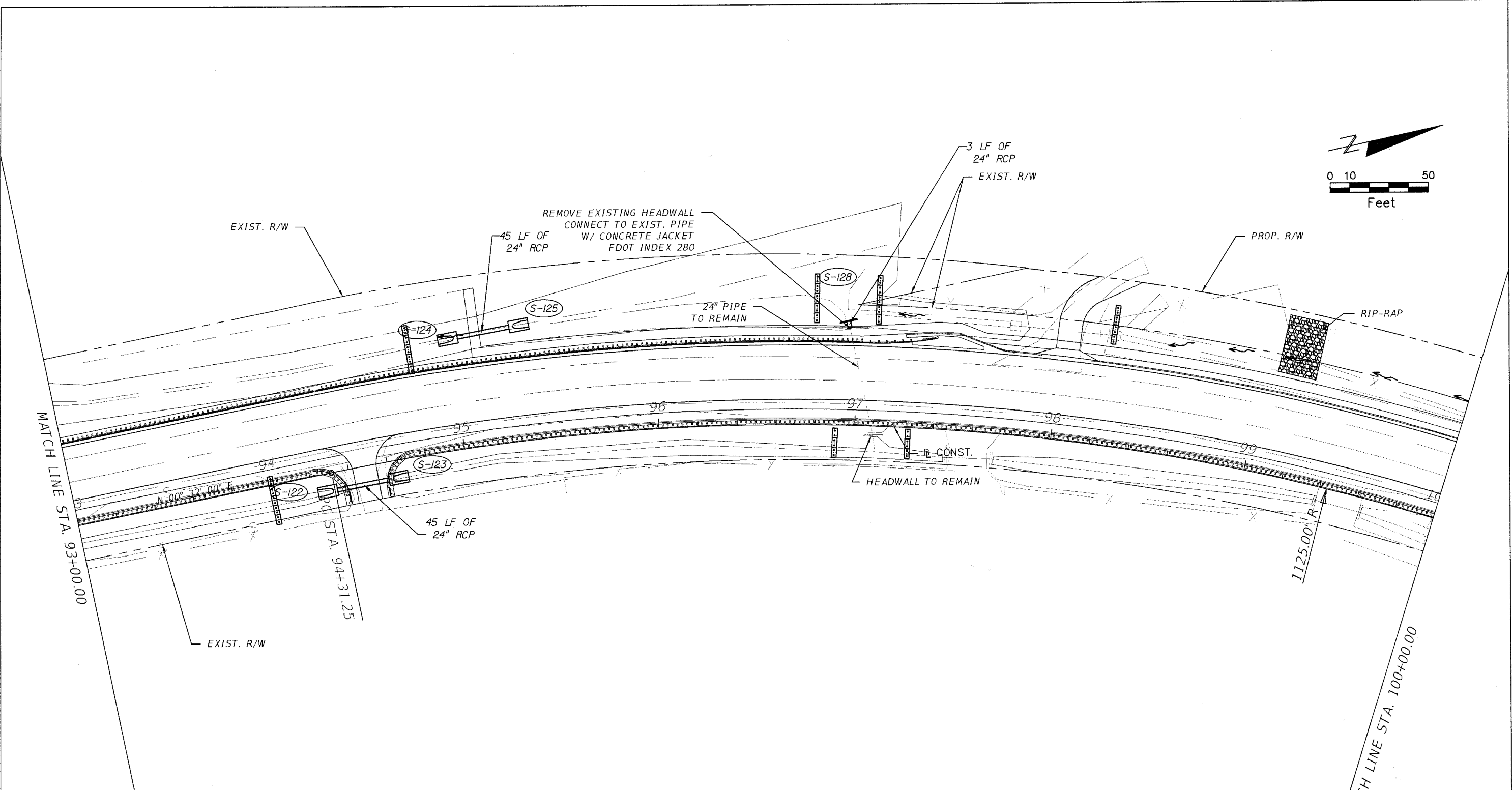
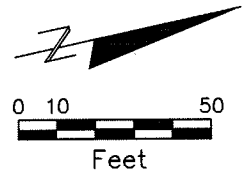
MANATEE COUNTY GOVERNMENT

MANATEE COUNTY, FLORIDA

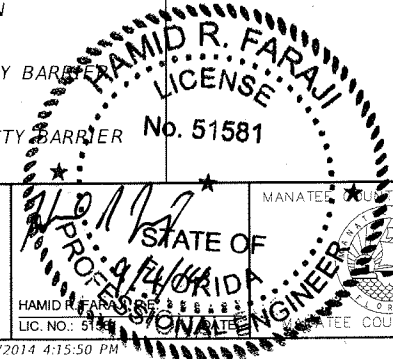
SHEET TITLE: **EROSION CONTROL SHEET (I)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO. **125**



- SEDIMENT BARRIER
- INLET PROTECTION
- STAKED TURBIDITY BARRIER
- FLOATING TURBIDITY BARRIER



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

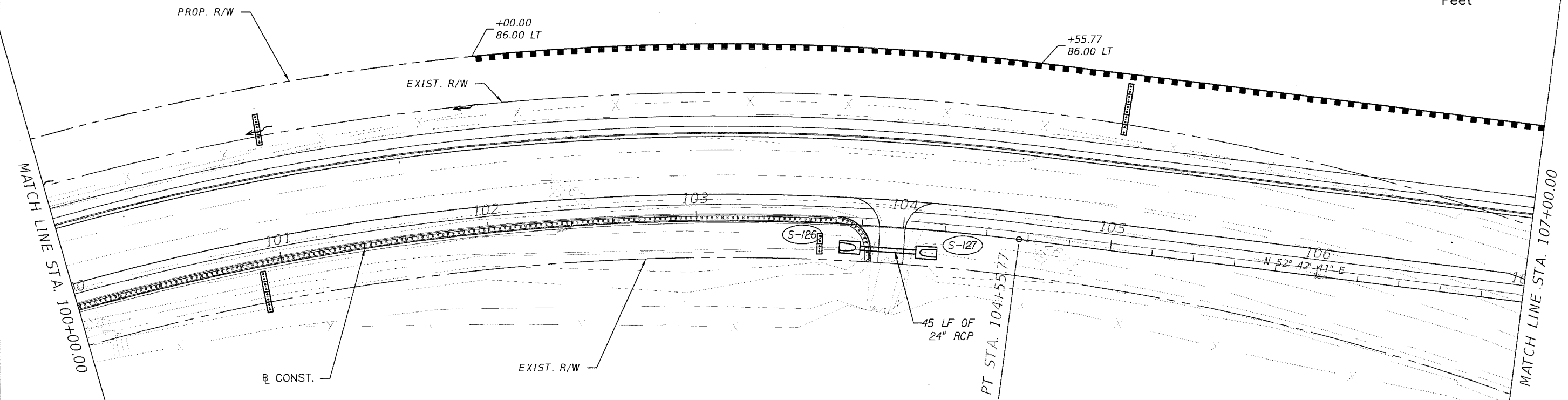
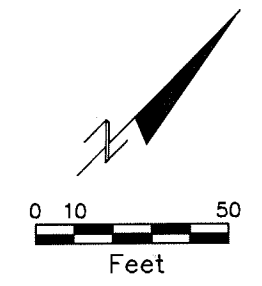
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

MANATEE COUNTY GOVERNMENT
 STATE OF FLORIDA
 HAMID R. FARAJ
 LICENSE No. 51581
 PROFESSIONAL ENGINEER
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **EROSION CONTROL SHEET (2)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO. **126**



	SEDIMENT BARRIER
	INLET PROTECTION
	STAKED TURBIDITY BARRIER
	FLOATING TURBIDITY BARRIER

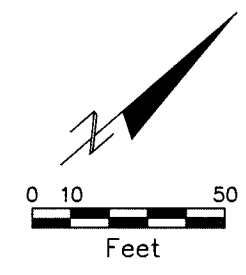
HAMID R. FARAJI
 LICENSE No. 51581
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

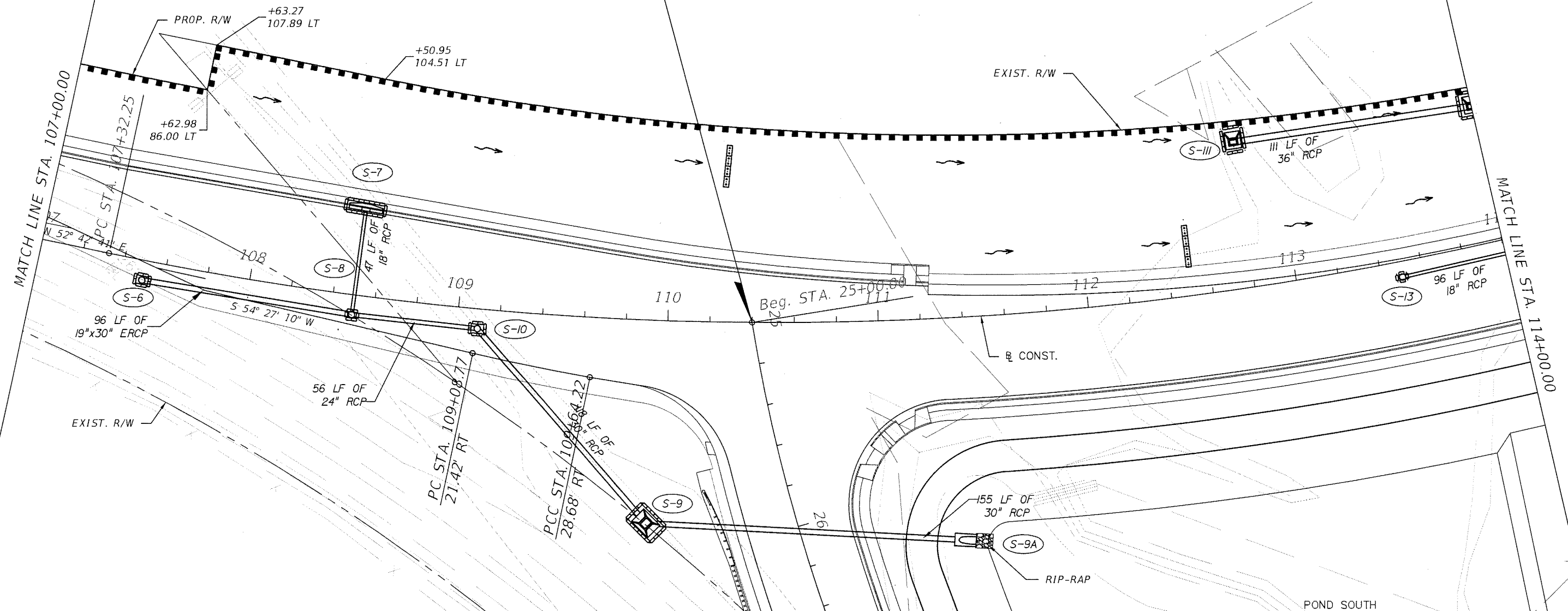
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

HAMID R. FARAJI
 LIC. NO.: 51581
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **EROSION CONTROL SHEET (3)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **127**



BEGIN \square CONST. UPPER MANATEE RIVER RD.
 STA. 25+00.00 =
 \square CONST.
 STA. 110+40.00, 0' RT



	SEDIMENT BARRIER
	INLET PROTECTION
	STAKED TURBIDITY BARRIER
	FLOATING TURBIDITY BARRIER

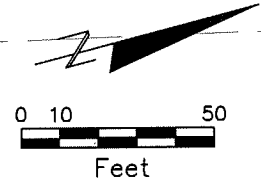
REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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MANATEE COUNTY GOVERNMENT
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 HAMID R. FARAJI
 LICENSE No. 51587
 MANATEE COUNTY, FLORIDA

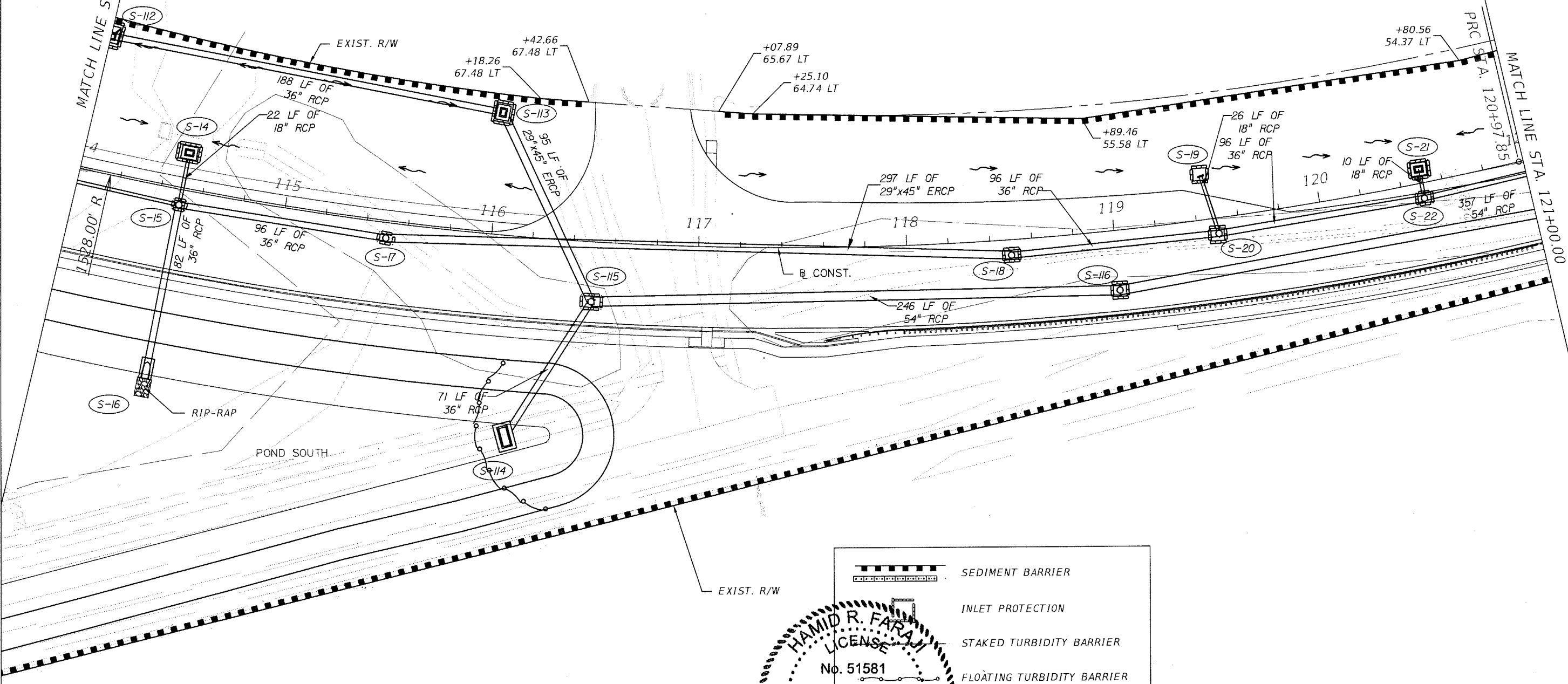
SHEET TITLE: EROSION CONTROL SHEET (4)	SHEET NO. 128
PROJECT NAME: FORT HAMER BRIDGE	



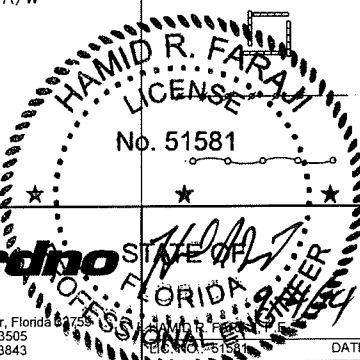
MATCH LINE STA. 114+00.00

PRC STA. 120+97.85

MATCH LINE STA. 121+00.00



	SEDIMENT BARRIER
	INLET PROTECTION
	STAKED TURBIDITY BARRIER
	FLOATING TURBIDITY BARRIER



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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 Certificate of Authorization No. 3843

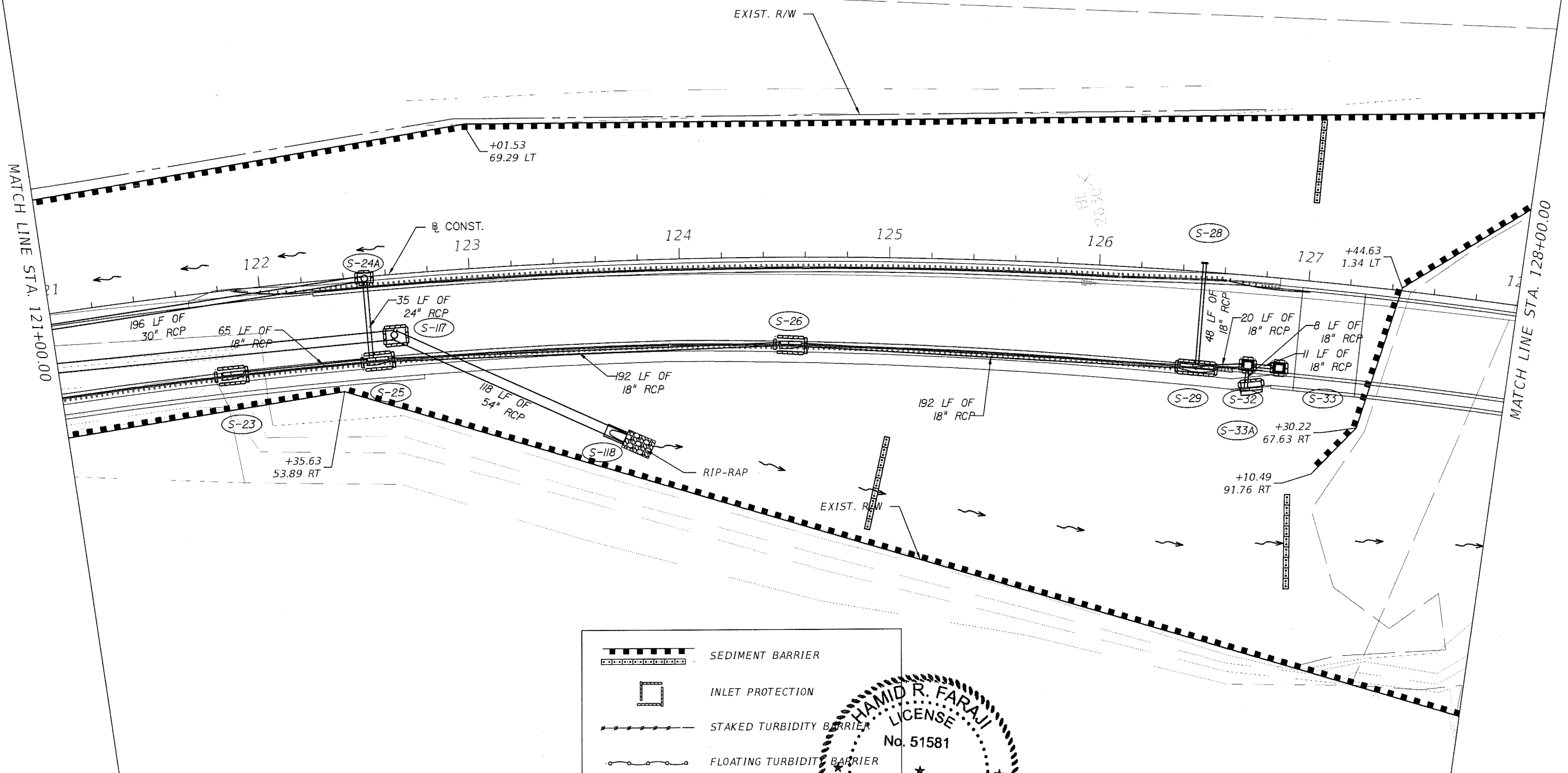
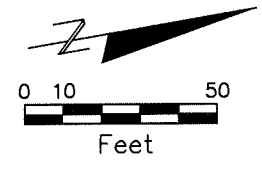
MANATEE COUNTY GOVERNMENT

MANATEE COUNTY, FLORIDA

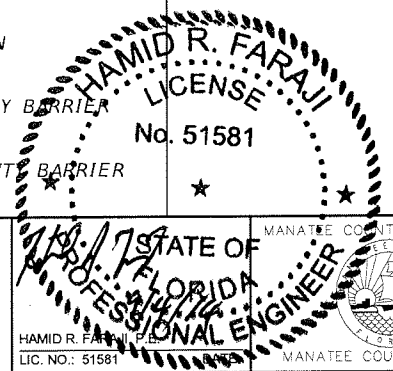
SHEET TITLE: **EROSION CONTROL SHEET (5)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO. **129**



- SEDIMENT BARRIER
- INLET PROTECTION
- STAKED TURBIDITY BARRIER
- FLOATING TURBIDITY BARRIER



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

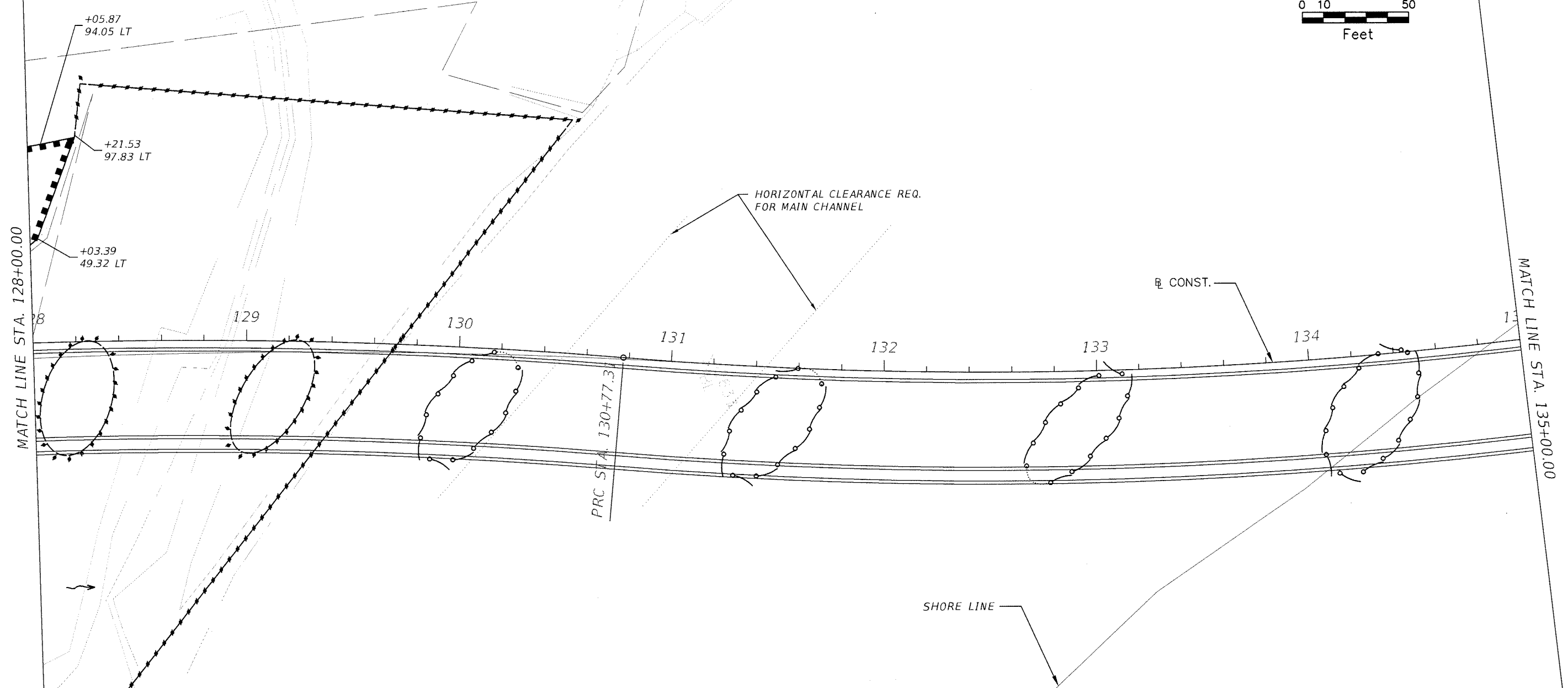
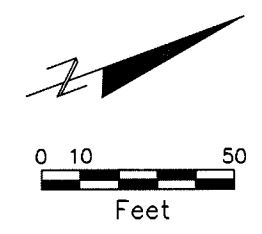
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT
 HAMID R. FARAJ
 LICENSE No. 51581
 PROFESSIONAL ENGINEER
 MANATEE COUNTY, FLORIDA

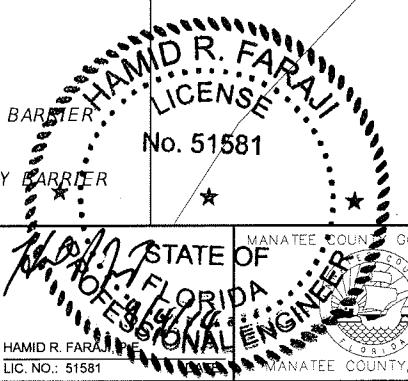
SHEET TITLE: **EROSION CONTROL SHEET (6)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **130**



- SEDIMENT BARRIER
- INLET PROTECTION
- STAKED TURBIDITY BARRIER
- FLOATING TURBIDITY BARRIER

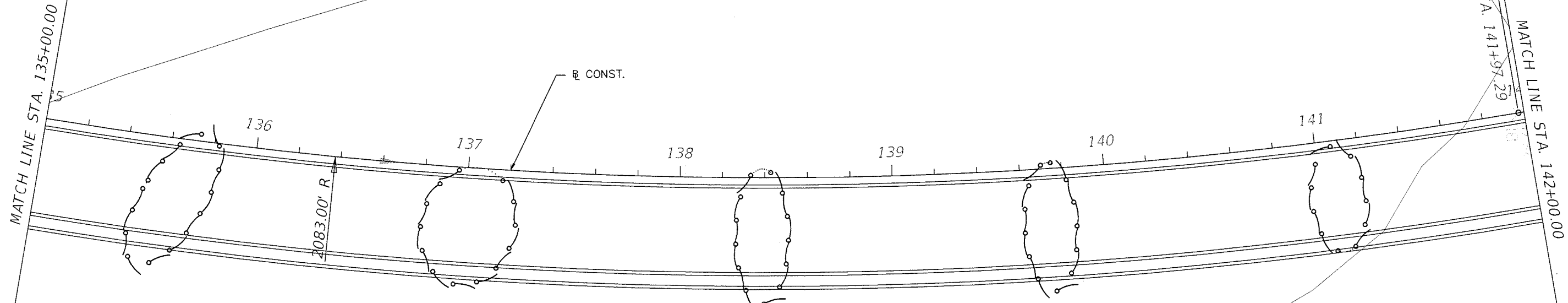
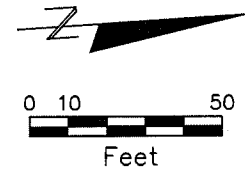




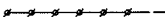
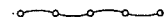
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

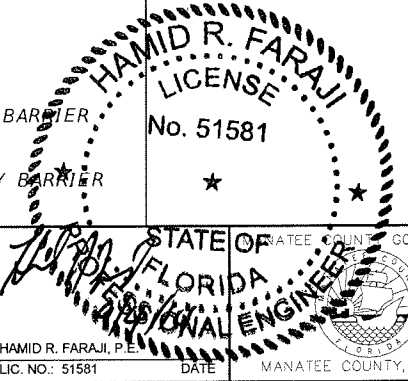
Cardno TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT
 HAMID R. FARAJ
 LICENSE No. 51581
 PROFESSIONAL ENGINEER
 MANATEE COUNTY, FLORIDA

SHEET TITLE: EROSION CONTROL SHEET (7)		SHEET NO. 131
PROJECT NAME: FORT HAMER BRIDGE		



-  SEDIMENT BARRIER
-  INLET PROTECTION
-  STAKED TURBIDITY BARRIER
-  FLOATING TURBIDITY BARRIER



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Cardno
TBE

380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
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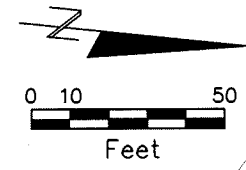
HAMID R. FARAJI, P.E.
LIC. NO.: 51581

STATE OF FLORIDA
MANATEE COUNTY GOVERNMENT
PROFESSIONAL ENGINEER

SHEET TITLE: **EROSION CONTROL SHEET (8)**

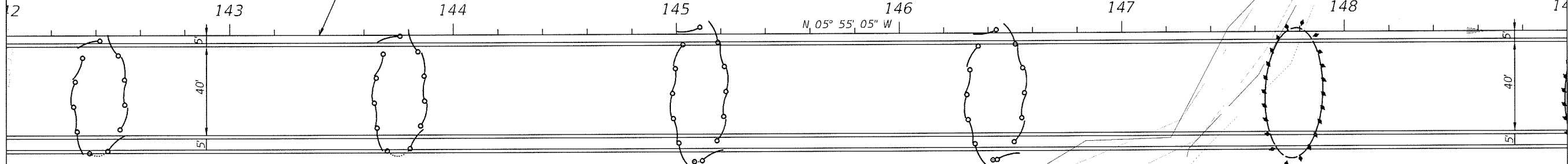
PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **132**



MATCH LINE STA. 142+00.00

MATCH LINE STA. 149+00.00



+96.72
130.79 RT

	SEDIMENT BARRIER
	INLET PROTECTION
	STAKED TURBIDITY BARRIER
	FLOATING TURBIDITY BARRIER

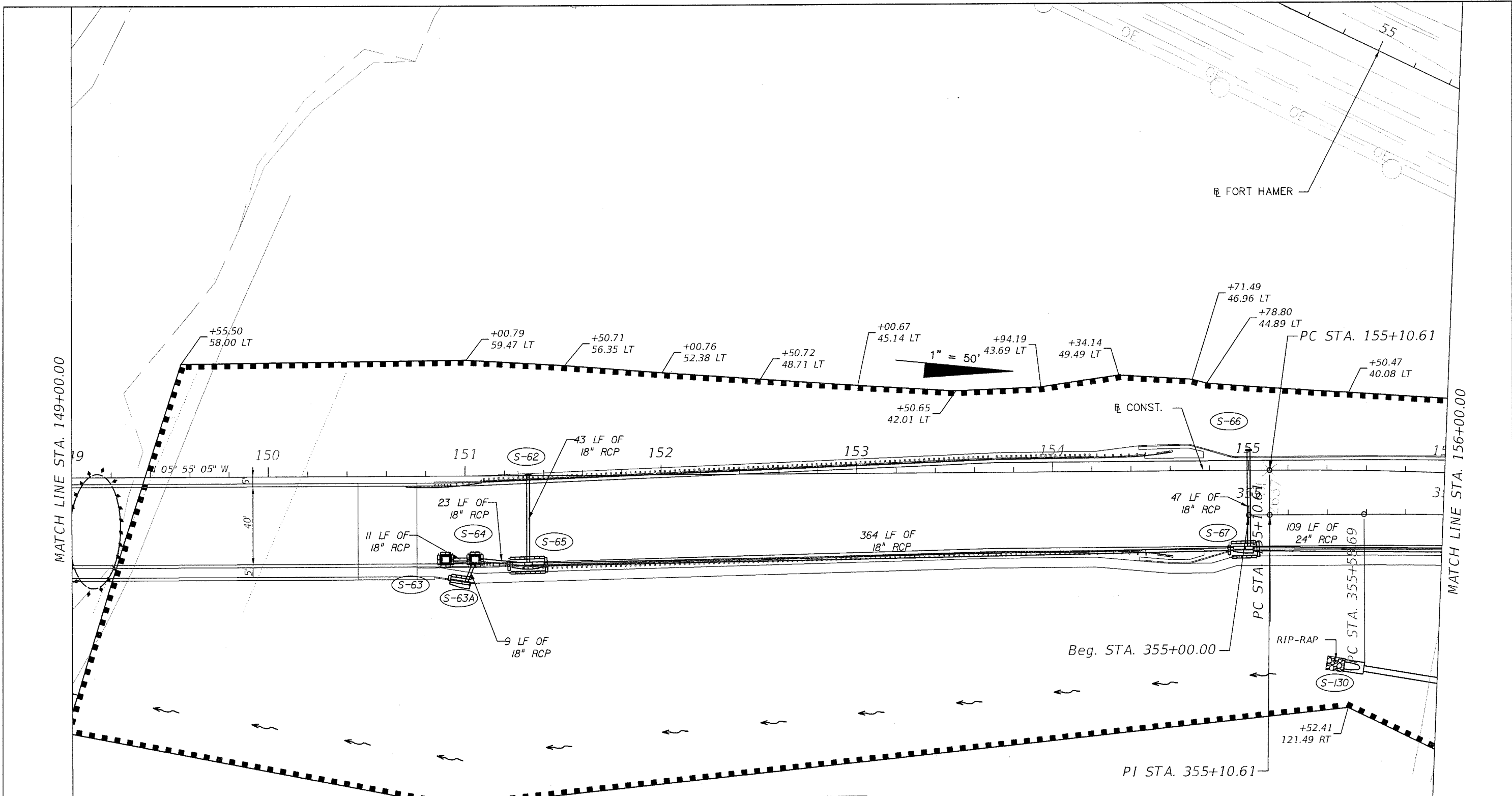
HAMID R. FARAJ
 LICENSE
 No. 51581
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 MANATEE COUNTY, FLORIDA

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Cardno
TBE
 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
 www.cardnotbe.com - 727.531.3505
 Certificate of Authorization No. 3843

STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT
 HAMID R. FARAJ
 LICENSE NO. 51581
 DATE
 MANATEE COUNTY, FLORIDA

SHEET TITLE: EROSION CONTROL SHEET (9)	SHEET NO. 133
PROJECT NAME: FORT HAMER BRIDGE	



SEDIMENT BARRIER
 INLET PROTECTION
 STAKED TURBIDITY BARRIER
 FLOATING TURBIDITY BARRIER

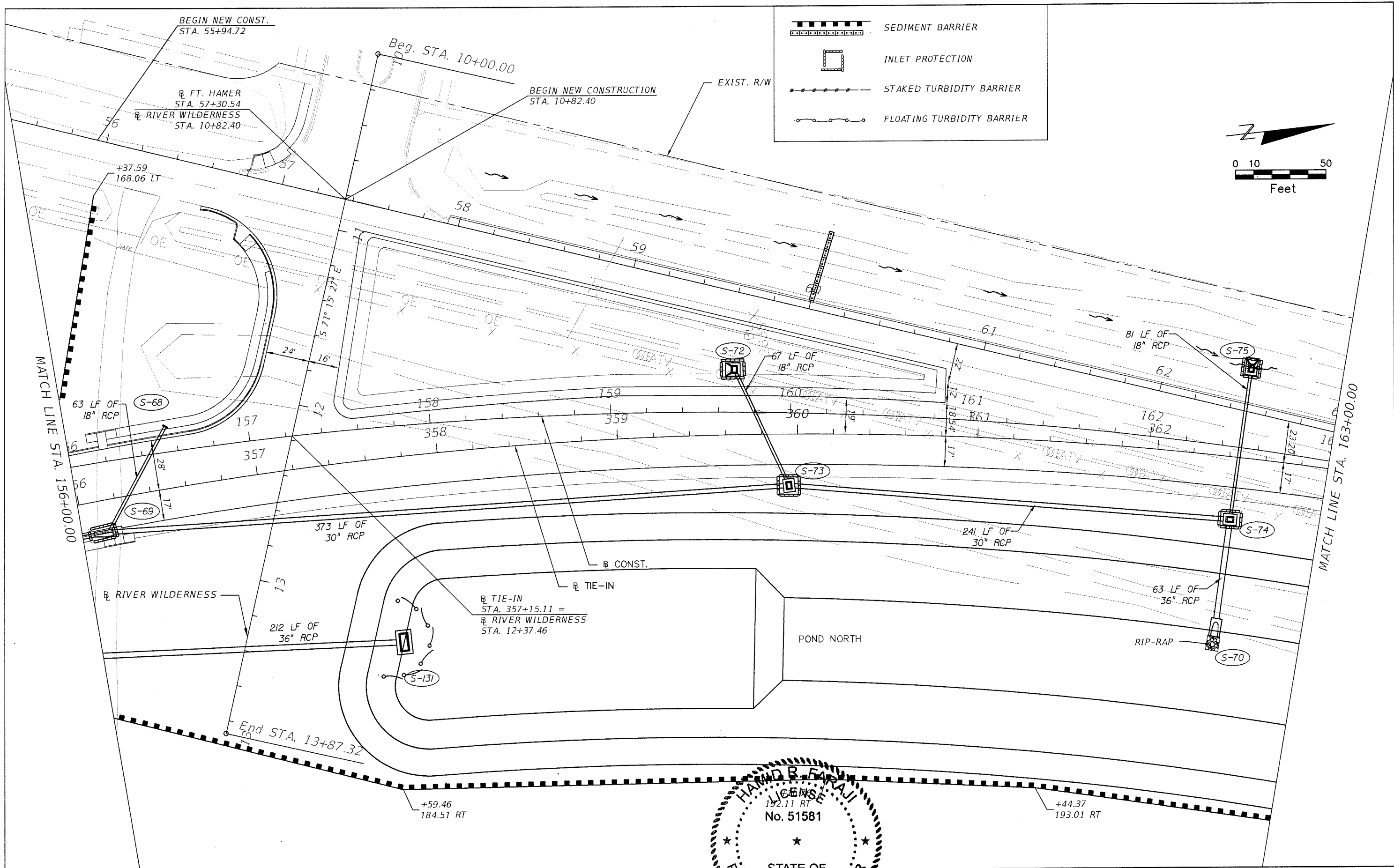
HAMID R. FARAJI
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HAMID R. FARAJI, P.E.
 LIC. NO.: 51581 DATE
 MANATEE COUNTY, FLORIDA

SHEET TITLE: EROSION CONTROL SHEET (10)
 PROJECT NAME: FORT HAMER BRIDGE
 SHEET NO.: 134



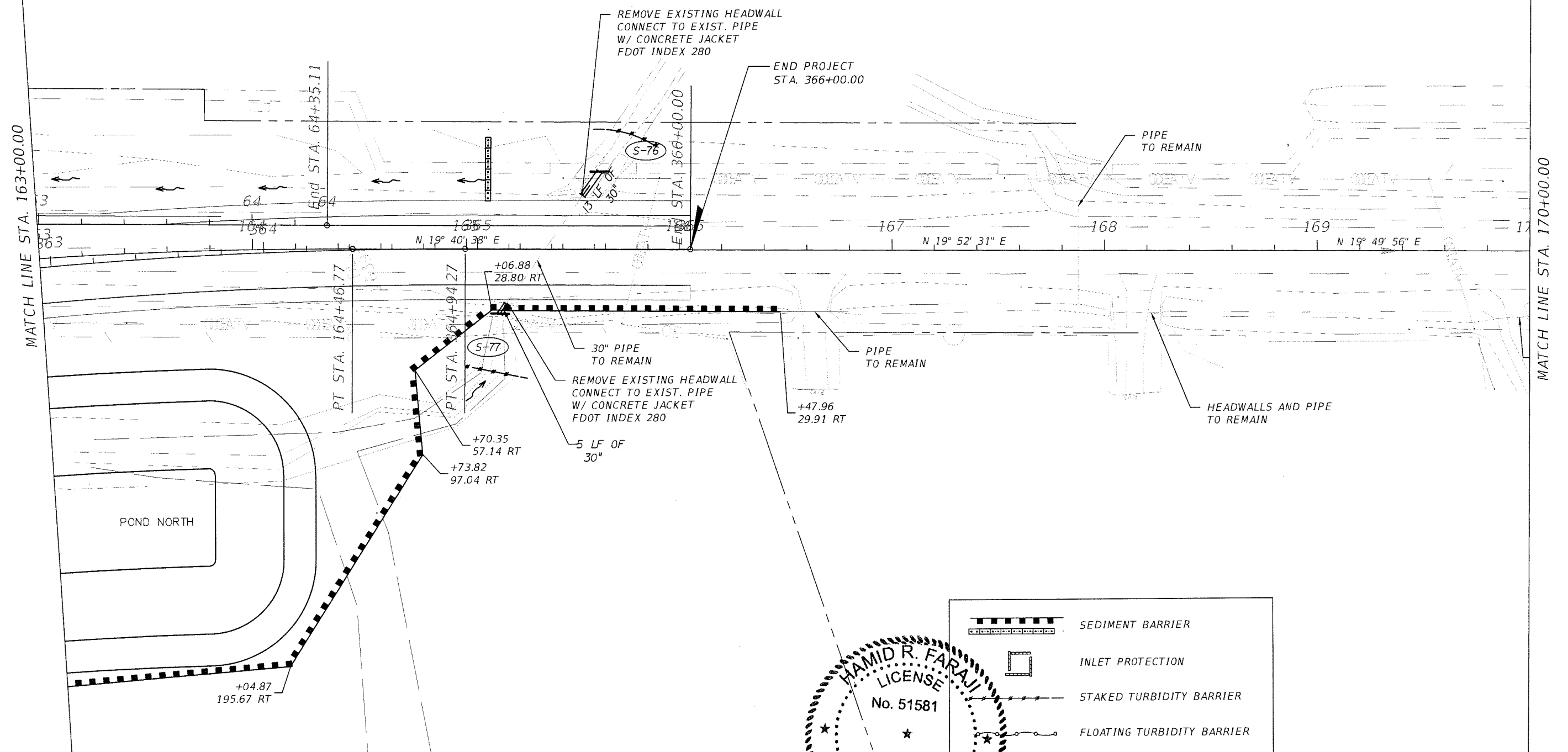
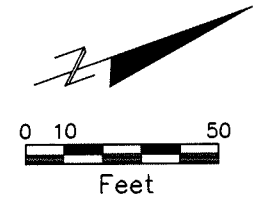
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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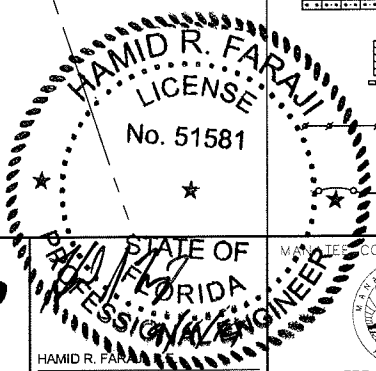
HAMID R. FARAJI
 LICENSED PROFESSIONAL ENGINEER
 No. 51581
 STATE OF FLORIDA
 LIC. NO.: 51581 DATE

MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: **EROSION CONTROL SHEET (II)**
 PROJECT NAME: **FORT HAMER BRIDGE**
 SHEET NO.: **135**



	SEDIMENT BARRIER
	INLET PROTECTION
	STAKED TURBIDITY BARRIER
	FLOATING TURBIDITY BARRIER



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MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

HAMID R. FARAJ
LIC. NO.: 51581 DATE

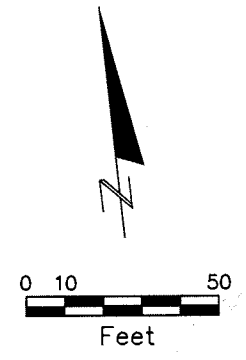
SHEET TITLE: **EROSION CONTROL SHEET (I2)**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO. **136**

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

POND SOUTH



RIP-RAP

S-43

RIP-RAP

S-42

48 LF OF 18" RCP

PT STA. 29+31.74

+12.68
391.57 RT

EXIST. R/W

End STA 32+46.00

S 88° 39' 02" E

UPPER MANATEE RIVER RD.

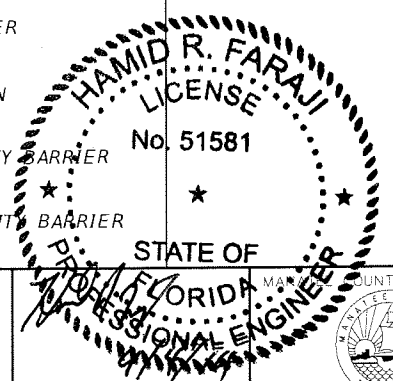
EXIST. R/W

SEDIMENT BARRIER

INLET PROTECTION

STAKED TURBIDITY BARRIER

FLOATING TURBIDITY BARRIER



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HAMID R. FARAJI, P.E.
 LIC. NO.: 51581 DATE MANATEE COUNTY, FLORIDA

SHEET TITLE: EROSION CONTROL SHEET (13)		SHEET NO. 137
PROJECT NAME: FORT HAMER BRIDGE		

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

TRAFFIC CONTROL GENERAL NOTES

1. THE PROPOSED TRAFFIC CONTROL SHALL CONFORM TO THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY, TRAFFIC DESIGN STANDARDS, 600 SERIES, AND MUTCD.

2. THE REGULATORY SPEED DURING ALL MAINTENANCE OF TRAFFIC PHASES SHALL REMAIN THE SAME UNLESS OTHERWISE NOTED IN THE TRAFFIC CONTROL PLANS. ALL REGULATORY SIGNS WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

EXISTING REGULATORY POSTED SPEEDS ARE AS FOLLOWS:
UPPER MANATEE RIVER ROAD - 45 MPH
FT. HAMER ROAD - 45 MPH

3. TEMPORARY TRAVEL LANES SHALL BE NO LESS THAN 12 FEET IN WIDTH UNLESS NOTED OTHERWISE.

4. CONFLICTING EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY WATER BLASTING ONLY. ALL EXISTING PAVEMENT MARKINGS OUTSIDE OF THE CONSTRUCTION LIMITS THAT ARE REMOVED FOR TRAFFIC CONTROL PURPOSES SHALL BE REPLACED UPON COMPLETION OF THE PROJECT.

5. TEMPORARY REFLECTORIZED RAISED PAVEMENT MARKERS SHALL BE INSTALLED THROUGHOUT ALL TRAFFIC CONTROL PHASES AND SPACED AS SPECIFIED IN STANDARD INDEX NO. 600. CONTRACTOR SHALL USE TEMPORARY RPM'S IN ALL TRANSITION AREAS, IN ACCORDANCE WITH INDEX 600.

6. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT ALL PHASES OF CONSTRUCTION.

7. PEAK TRAFFIC HOURS HAVE BEEN ESTABLISHED AS SHOWN BELOW. THE CONTRACTOR SHALL SUBMIT REQUESTS FOR LANE CLOSURES TWO WEEKS IN ADVANCE FOR MANATEE COUNTY'S NOTIFICATION TO THE PUBLIC. THE LANE CLOSURE RESTRICTIONS ARE AS FOLLOWS:

UPPER MANATEE RIVER RD:
LANE CLOSURES WILL NOT BE ALLOWED BETWEEN THE HOURS OF 6:30AM TO 8:00PM.

FORT HAMER RD:
LANE CLOSURES WILL NOT BE ALLOWED BETWEEN THE HOURS OF 7:00AM TO 9:00AM AND 4:00PM TO 6:00PM.

LANE CLOSURES OR DETOURS SHALL NOT BE PERFORMED DURING HOLIDAY PERIODS AS IDENTIFIED IN SPECIFICATION 8-6.4.; THE WEEKEND AFTER A FRIDAY HOLIDAY; WEDNESDAY NIGHT PRIOR TO AND SUNDAY NIGHT AFTER THANKSGIVING DAY. IN ADDITION TO ALL PREVIOUSLY STATED LIMITATIONS ON LANE CLOSURES AND DETOURS, WITH A MINIMUM OF 14 DAYS NOTICE, MANATEE COUNTY MAY PROHIBIT ANY LANE CLOSURES AND/OR DETOURS FOR AN ADDITIONAL 10 DAYS AT NO ADDITIONAL COMPENSATION (TIME OR MONEY) TO THE CONTRACTOR.

8. THE CONTRACTOR SHALL USE INDEX NUMBER 619 WHENEVER CONSTRUCTION EQUIPMENT IS RELOCATED OR DRIVEN ON EXISTING FIELD CONDITIONS.

9. LOCATIONS FOR ADVANCE WARNING AND END CONSTRUCTION SIGNS, AS DEPICTED ON THE TRAFFIC CONTROL PLANS, ARE APPROXIMATE AND THE CONTRACTOR SHALL POSITION SIGNS APPROPRIATELY CONSIDERING THE EXISTING FIELD CONDITIONS.

10. DURING PERIODS OF LANE CLOSURES, THE CONTRACTOR SHALL PROVIDE A DEDICATED CREW FOR THE INSTALLATION, MAINTENANCE AND REMOVAL OF THE TRAFFIC CONTROL DEVICES (I.E. BARRICADES, SIGNS, ARROW BOARDS, ETC.). THIS CREW SHALL CONSIST OF AT LEAST 3 MEMBERS OF THE CONTRACTOR'S WORK FORCE WHOSE SOLE RESPONSIBILITIES WILL BE THE MAINTENANCE OF TRAFFIC CONTROL. THE CONTRACTOR SHALL FURNISH A WORK VEHICLE TO AID IN MAINTAINING THE CONTROL DEVICES.

11. A) A DISCUSSION OF LANE CLOSURE OPERATIONS WILL BE MADE PART OF ALL PRE-CONSTRUCTION CONFERENCES. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A WRITTEN PLAN WHICH DETAILS EACH ACTIVITY INVOLVED IN THE LANE CLOSURE. THE PLANS SHALL INCLUDE BACK-UP PLANS FOR ACTIVITIES CRITICAL TO RE-OPENING THE LANES TO TRAFFIC. THE BACK-UP PLAN SHALL INCLUDE BACK-UP FOR ALL SUBCONTRACTOR OPERATIONS AS WELL AS THE PRIME CONTRACTOR'S.

B) NO LANE CLOSURE WILL BE ALLOWED WITHOUT A PLAN TO ACHIEVE REOPENING. AN EXAMPLE OF AN ACCEPTABLE BACK-UP PLAN WOULD INCLUDE THE CONTRACTOR CHOOSING TO HAVE TEMPORARY TAPE ON HAND.

12. THE CONTRACTOR SHALL PROVIDE A TWO-WEEK ADVANCED NOTIFICATION TO ALL OF THE FOLLOWING AGENCIES PRIOR TO THE IMPLEMENTATION OF A DETOUR OF TRAFFIC:

* MANATEE COUNTY PUBLIC INFORMATION OFFICE

13. THE CONTRACTOR SHALL, AT THE DISCRETION OF THE ENGINEER, OPEN ANY TEMPORARY LANE CLOSURE CAUSING EXTENDED TRAFFIC CONGESTION (5 MINUTE DELAY) UNTIL TRAFFIC HAS RETURNED TO AN ACCEPTABLE FLOW AS DETERMINED BY THE ENGINEER.

14. THE CONTRACTOR SHALL PROVIDE A REDIRECTIVE CRASH CUSHION ATTENUATOR AT THE LEADING EDGE (TOWARDS ONCOMING TRAFFIC) OF ALL TEMPORARY CONCRETE BARRIER WALL. THIS INCLUDES OPERATIONS INVOLVING THE INSTALLATION, RELOCATION, OR REMOVAL OF TEMPORARY CONCRETE BARRIER WALL.

15. FOR TEMPORARY CONSTRUCTION SIGNS LOCATED IN PAVED AREAS, THE CONTRACTOR SHALL PROVIDE TEMPORARY SIGN SUPPORT WHICH DOES NOT PENETRATE THE PAVEMENT.

16. IN INSTANCES WHERE A MOVING OPERATION WILL BE REQUIRED, TRUCK MOUNTED ATTENUATORS SHALL BE PAID FOR UNDER BID ITEM NO. 102-1, LUMP SUM, MAINTENANCE OF TRAFFIC.

17. THROUGHOUT THE MILLING OPERATIONS, THE CONTRACTOR SHALL HAVE A SELF-CONTAINED VACUUM TYPE MOBILE BROOM ON THE JOB FOR CLEAN UP OF MILLED DUST MATERIAL. THE CONTRACTOR SHALL ONLY MILL THE AMOUNT OF PAVEMENT THAT CAN BE RESTORED IN ONE WORK PERIOD.

18. LOCATIONS OF WORK ZONE ACCESS TO BE DETERMINED BY CONTRACTOR AND APPROVED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TO THE ENGINEER THE PROPOSED METHOD OF ENTERING AND LEAVING THE WORK ZONE DURING EACH PHASE OF CONSTRUCTION. (SOIL TRACKING DEVICES WILL BE REQUIRED.)

19. THE CONTRACTOR SHALL PROVIDE ADEQUATE LIGHTING FOR CONSTRUCTION OPERATIONS DURING NIGHTTIME HOURS AS DETERMINED BY THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR NIGHTTIME WORK.

20. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING SYSTEM IN ALL AREAS CURRENTLY LIGHTED UNTIL THE PROPOSED LIGHTING SYSTEM IS IN SERVICE. THIS INCLUDES EXISTING AND PROPOSED ROADWAY SIGN LIGHTING. EXISTING LIGHTING POWER SOURCES SHALL BE VERIFIED PRIOR TO COMMENCING DEMOLITION/REMOVAL WORK.

21. THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL CONSTRUCTION PHASING WITH ANY ADJACENT CONSTRUCTION CONTRACTORS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS COORDINATION.

22. LONGITUDINAL DIMENSIONS SHOWN IN THE CONSTRUCTION TRAFFIC CONTROL PLANS SHALL BE ADJUSTED TO ACCOMMODATE FIELD CONDITIONS AS DETERMINED NECESSARY BY THE ENGINEER.

23. WHEN PAVING OPERATIONS RESULT IN A PAVEMENT GRADE DIFFERENCE OF 0.75 INCHES OR MORE IN THE DIRECTION OF TRAVEL ON AN OPEN TRAVEL LANE, A WEDGE OF ASPHALT SHALL BE CONSTRUCTED TO PROVIDE A VERTICAL TAPER IN THE DIRECTION OF TRAVEL AT A RATE OF 1:50 OR FLATTER. THIS WEDGE SHALL BE REMOVED PRIOR TO CONSTRUCTING THE NEXT LIFT OF ASPHALT. THIS SHALL BE PAID FOR UNDER BID ITEM NO. 102-1, LUMP SUM, MAINTENANCE OF TRAFFIC.

24. ARROWS SHOWN ON THE TRAFFIC CONTROL PLANS INDICATE DIRECTION OF TRAFFIC. THEY DO NOT REPRESENT MARKINGS UNLESS SPECIFICALLY NOTED AS SUCH.

25. A LANE CLOSURE SHALL BE REQUIRED WHENEVER A BOOM ARM OR BUCKET CROSSES A TRAVEL LANE.

26. SIGN STRUCTURES SHALL BE INSTALLED DURING THE APPROPRIATE MAINTENANCE OF TRAFFIC/CONSTRUCTION PHASE.

27. THE CONTRACTOR SHALL BE RESPONSIBLE TO DESIGN, BUILD, MAINTAIN AND REMOVE WHEN NO LONGER NEEDED ALL TEMPORARY PAVEMENT, EMBANKMENT AND DRAINAGE STRUCTURES FOR THE MAINTENANCE OF TRAFFIC.

28. WHERE FINAL PAVEMENT MARKINGS ARE CALLED OUT IN THE TRAFFIC CONTROL PLANS, REFER TO THE SIGNING AND PAVEMENT MARKING PLANS FOR TYPE AND LOCATION. THE CONTRACTOR SHALL NOT EXCAVATE ANY AREAS THAT CANNOT BE SAFELY REOPENED TO TRAFFIC WITHIN THE SAME WORK PERIOD.

30. THE LOCATION OF PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE DETERMINED BY THE ENGINEER.

31. CONSTRUCTION OF FINAL SURFACE'S FRICTION COURSE SHALL BE PERFORMED AT THE END OF CONSTRUCTION ALONG WITH THE FINAL PERMANENT STRIPING.

32. THE CONTRACTOR SHALL MAINTAIN STREET NAME SIGNS VISIBLE DURING CONSTRUCTION OPERATIONS IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

33. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TWO PORTABLE 4 'X' 8' CHANGEABLE MESSAGE SIGNS (PCMS) FOR A PERIOD OF TWO WEEKS. THE PCMS WILL BE LOCATED AT AN APPROPRIATE DISTANCE IN ADVANCE OF THE NORTH AND SOUTH APPROACHES TO THE NEW SIGNALIZED INTERSECTION AS SPECIFIED BY THE MAINTAINING AGENCY'S ENGINEER. THE PCMS WILL BE PROVIDED (1) WEEK PRIOR TO THE SCHEDULED ACTIVATION TO FULL COLOR OPERATION AND SHALL REMAIN IN PLACE FOR (1) WEEK FOLLOWING ACTIVATION. COST OF FURNISHING PCMS TO BE INCLUDED UNDER PAY ITEM NO. 102-99-PORTABLE CHANGEABLE MESSAGE SIGN - TEMPORARY. PRIOR TO ACTIVATION, THE VMS SIGN SHALL BE:

(PANEL ONE - LINE 1) "TRAFFIC"
(PANEL ONE - LINE 2) "SIGNAL"
(PANEL ONE - LINE 3) "WILL BE"
(PANEL TWO - LINE 1) "ACTIVATED"
(PANEL TWO - LINE 2) "ON DAY"
(PANEL TWO - LINE 3) "MONTH XX"

SUBSTITUTION FOR THE WORD "DAY" SHALL BE AS FOLLOWS:
SUNDAY AS "SUN"; MONDAY AS "MON"; TUESDAY AS "TUES"; WEDNESDAY AS "WED"; THURSDAY AS "THUR"; FRIDAY AS "FRI"; SATURDAY AS "SAT".

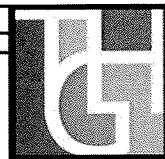
SUBSTITUTION FOR THE WORD "MONTH" SHALL BE AS FOLLOWS:
JANUARY AS "JAN"; FEBRUARY AS "FEB"; MARCH AS "MAR"; APRIL AS "APR"; MAY AS "MAY"; JUNE AS "JUN"; JULY AS "JUL"; AUGUST AS "AUG"; SEPTEMBER AS "SEP"; OCTOBER AS "OCT"; NOVEMBER AS "NOV"; DECEMBER AS "DEC"

SUBSTITUTION FOR THE WORD "XX" SHALL BE AS FOLLOWS:
THE NUMERICAL DAY OF THE MONTH, FROM ONE (1) TO THIRTY-ONE (31). DATES LESS THAN TEN (10) SHALL BE PRECEDED BY A ZERO (0); EXAMPLE: "JAN 03" FOR JANUARY 3RD.

AFTER THE TURN-ON, THE VMS SHALL BE CHANGED TO (PANEL ONE - LINE 1) "TRAFFIC"
(PANEL ONE - LINE 2) "SIGNAL"
(PANEL TWO - LINE 1) "NOW"
(PANEL TWO - LINE 2) "ACTIVE"
PANEL TWO, LINE 1 AND LINE 2, SHALL FLASH THREE (3) TIMES BEFORE REVERTING TO PANEL ONE

34. CONSTRUCTION OF FINAL SURFACE'S FRICTION COURSE SHALL BE PERFORMED AT THE END OF CONSTRUCTION ALONG WITH THE FINAL PERMANENT STRIPING. PRIOR TO PLACEMENT OF PERMANENT THERMOPLASTIC MARKINGS, CONTRACTOR SHALL ALLOW FOR A MINIMUM 30-DAY CURE PERIOD.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

STATE OF FLORIDA
MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA
Professional Engineer Seal: LINDSEY B. BROWN, P.E., LIC. NO. 78187, DATE 9/5/14

SHEET TITLE:	TRAFFIC CONTROL PLAN GENERAL NOTES
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	138

PHASE 1

1. CONSTRUCT BRIDGE.
2. UTILIZE INDEX 602 TO CONSTRUCT PROPOSED ROADWAY AND DRAINAGE BETWEEN EXISTING UPPER MANATEE RIVER ROAD AND MANATEE RIVER.
3. CLOSE WATERLEFE SUBDIVISION NORTH ENTRANCE FOR NO MORE THAN A TOTAL OF 14 DAYS FOR THE DURATION OF THE CONTRACT. REMOVE EXISTING WATERLEFE SUBDIVISION NORTH ENTRANCE PAVEMENT AT PROPOSED INTERSECTION AND CONSTRUCT PROPOSED DRAINAGE. CONSTRUCT TEMPORARY PAVEMENT AND REOPEN WATERLEFE SUBDIVISION NORTH ENTRANCE.
4. RECONSTRUCT DRIVEWAYS ALONG EXISTING WESTBOUND/SOUTHBOUND UPPER MANATEE RIVER ROAD.
5. CONSTRUCT PROPOSED MAST ARMS AND SIGNALS.
6. UTILIZE INDEX 602 TO CONSTRUCT PROPOSED ROADWAY AND DRAINAGE BETWEEN MANATEE RIVER AND EXISTING FORT HAMER ROAD. MAINTAIN EXISTING RIVER ISLE RUN ENTRANCE.
7. CONSTRUCT POND NORTH.
8. UTILIZE INDEX 600 TO MILL AND RESURFACE 3RD AVE AND GATES CREEK ROAD.

PHASE 2

1. DETOUR EASTBOUND/NORTHBOUND UPPER MANATEE RIVER ROAD ONTO 3RD AVE AND GATES CREEK ROAD.
2. RESTRIPE AND SHIFT WESTBOUND/SOUTHBOUND UPPER MANATEE RIVER ROAD ONTO EXISTING NORTHBOUND LANE.
3. CONSTRUCT WIDENING, OVERBUILD, AND DRAINAGE ALONG EXISTING WESTBOUND/SOUTHBOUND UPPER MANATEE RIVER ROAD. MAINTAIN EXISTING WATERLEFE SUBDIVISION ENTRANCE.
4. CONSTRUCT PROPOSED UPPER MANATEE RIVER ROAD AND DRAINAGE SOUTH OF PROPOSED T-INTERSECTION.

PHASE 3

1. MAINTAIN EASTBOUND/NORTHBOUND UPPER MANATEE RIVER ROAD DETOUR.
 2. RESTRIPE AND SHIFT WESTBOUND/SOUTHBOUND UPPER MANATEE RIVER ROAD TRAFFIC ONTO PROPOSED SOUTHBOUND UPPER MANATEE RIVER ROAD LANE. MAINTAIN EXISTING WATERLEFE SUBDIVISION ENTRANCE.
 3. CONSTRUCT OVERBUILD, OUTSIDE SHOULDER, AND DRAINAGE ALONG EXISTING EASTBOUND/NORTHBOUND UPPER MANATEE RIVER ROAD.
 4. RECONSTRUCT DRIVEWAYS ALONG EXISTING EASTBOUND/NORTHBOUND UPPER MANATEE RIVER ROAD.
- THE CONTRACTOR SHALL EXPEDITE STEPS 5-7 FOR THE RECONSTRUCTION OF THE WATERLEFE SUBDIVISION NORTH ENTRANCE.
5. CLOSE WATERLEFE SUBDIVISION NORTH ENTRANCE FOR NO MORE THAN A TOTAL OF 14 DAYS FOR THE DURATION OF THE CONTRACT. REMOVE WATERLEFE SUBDIVISION NORTH ENTRANCE TEMPORARY PAVEMENT. CONSTRUCT PROPOSED FORT HAMER ROAD AND WATERLEFE SUBDIVISION NORTH ENTRANCE INTERSECTION.
 6. ROUTE WESTBOUND/SOUTHBOUND TRAFFIC ONTO PROPOSED UPPER MANATEE RIVER ROAD. UTILIZE INDEX 602 TO CONSTRUCT OVERBUILD ON PROPOSED EASTBOUND UPPER MANATEE RIVER ROAD.
 7. OPEN WATERLEFE SUBDIVISION NORTH ENTRANCE. IMPLEMENT TEMPORARY TRAFFIC SIGNAL TIMING.
 8. REMOVE REMAINING EXISTING PAVEMENT AT WATERLEFE SUBDIVISION NORTH ENTRANCE.

NOTE:

PHASES 2-5 MAY BE CONSTRUCTED CONCURRENTLY.

9. CONSTRUCT POND SOUTH.
10. REMOVE EXISTING UPPER MANATEE RIVER ROAD PAVEMENT.
11. CONSTRUCT FRICTION COURSE AND PERMANENT STRIPING SOUTH OF THE BRIDGE. ROUTE EASTBOUND/NORTHBOUND AND WESTBOUND/SOUTHBOUND TRAFFIC ONTO PROPOSED ROADWAY SOUTH OF THE PROPOSED INTERSECTION. IMPLEMENT PROPOSED TRAFFIC SIGNAL TIMING.

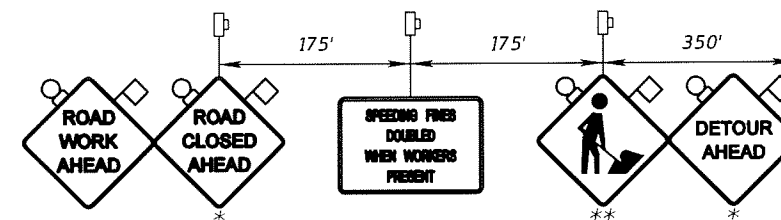
PHASE 4

1. UTILIZE INDICES 603 AND 606 TO FACILITATE ONE LANE TWO WAY TRAFFIC ON EXISTING SOUTHBOUND FORT HAMER ROAD. MAINTAIN EXISTING RIVER ISLE RUN ENTRANCE. MAINTAIN ACCESS TO FORT HAMER PARK.
2. REMOVE EXISTING NORTHBOUND FORT HAMER PAVEMENT WITHIN PROJECT LIMITS.
3. CONSTRUCT NEW PAVEMENT AND PROPOSED DRAINAGE.
4. CONSTRUCT PROPOSED ISLAND.

PHASE 5

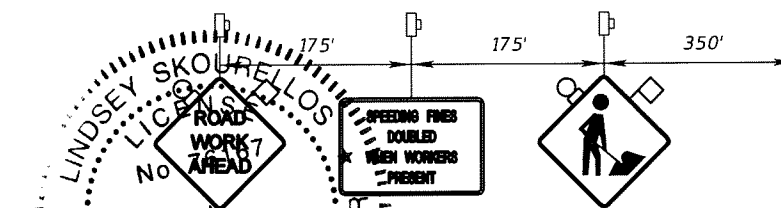
1. UTILIZE INDICES 603 AND 606 TO FACILITATE ONE LANE TWO WAY TRAFFIC ON PROPOSED NORTHBOUND FORT HAMER ROAD. MAINTAIN EXISTING RIVER ISLE RUN ENTRANCE. MAINTAIN ACCESS TO FORT HAMER PARK.
2. REMOVE EXISTING SOUTHBOUND FORT HAMER PAVEMENT WITHIN PROJECT LIMITS.
3. CONSTRUCT NEW PAVEMENT AND PROPOSED DRAINAGE.
4. DURING OFF-PEAK HOURS CONSTRUCT FRICTION COURSE AND PERMANENT STRIPING NORTH OF THE BRIDGE.
5. OPEN PROPOSED FORT HAMER ROAD TO TRAFFIC.
6. CONSTRUCT PERMANENT STRIPING ON BRIDGE.
7. OPEN BRIDGE TO TRAFFIC.

ADVANCED WARNING SIGN SCHEME #1

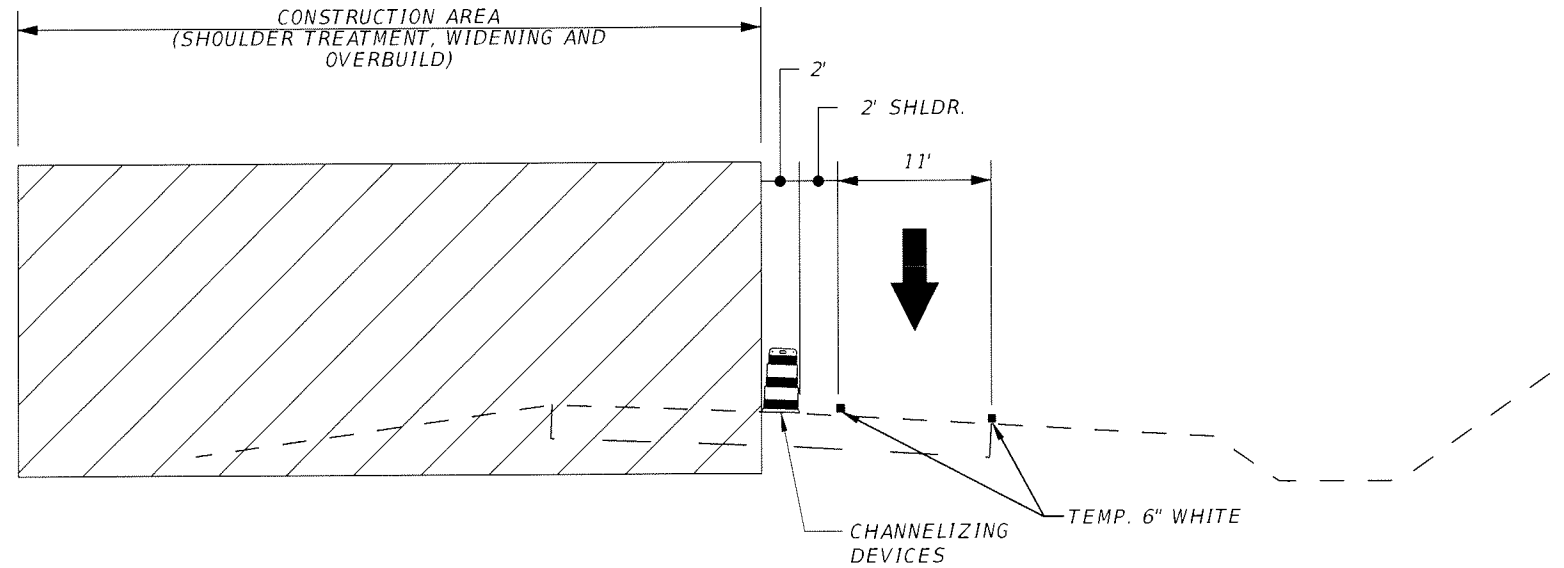


* TO BE COVERED WHEN DETOUR NOT IN USE.
 ** TO BE COVERED WHEN WORKERS NOT PRESENT

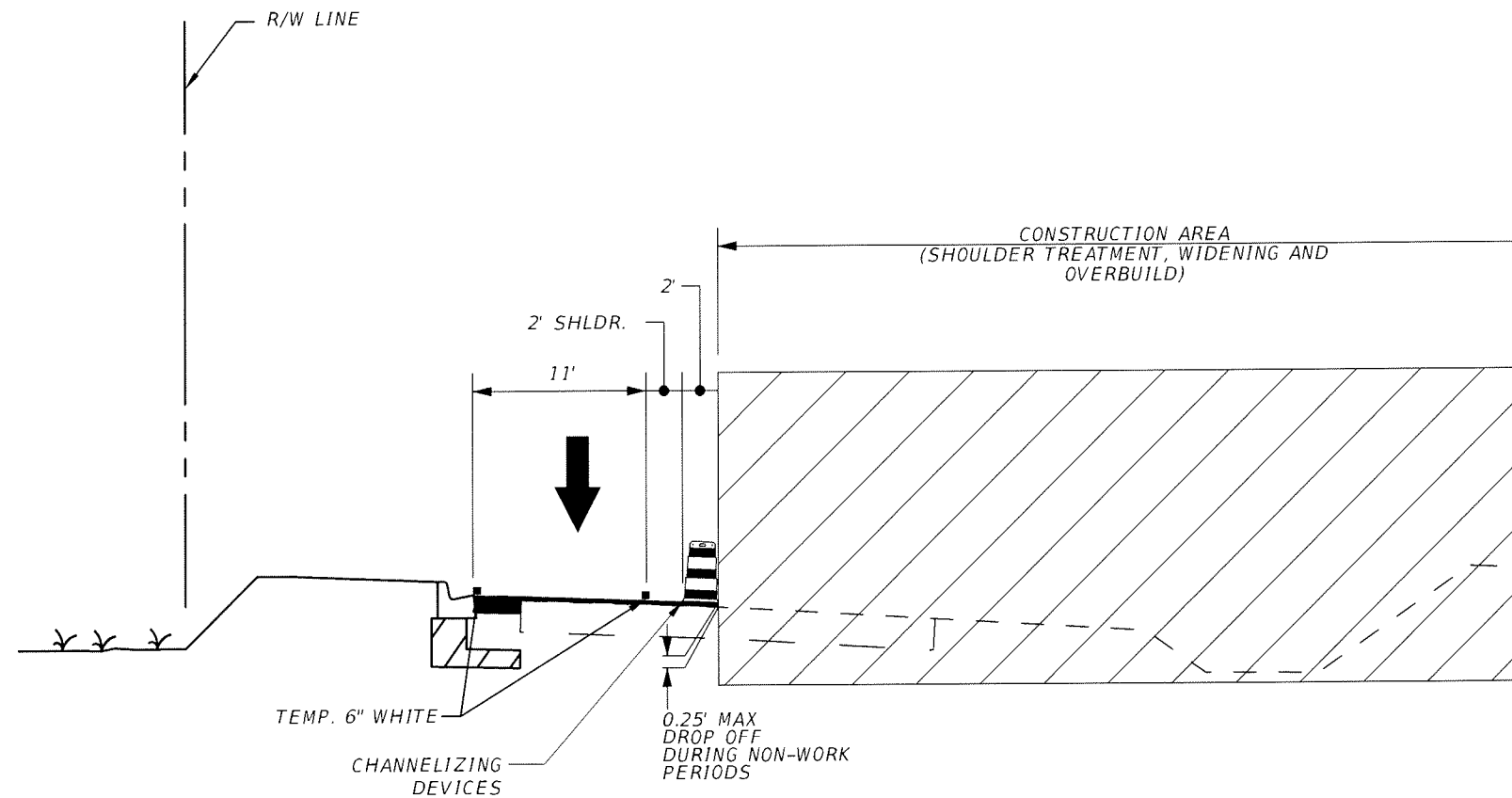
ADVANCED WARNING SIGN SCHEME #2



REVISIONS						 THE HEIMBURG GROUP, INC. 5461 W. Waters Avenue, Suite 910 TAMPA, FL 33634 (813) 749-0823 C.A. NO. 00027842	MANATEE COUNTY GOVERNMENT  MANATEE COUNTY, FLORIDA	SHEET TITLE:	
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			TRAFFIC CONTROL PLAN PHASING NOTES	
								PROJECT NAME:	FORT HAMER BRIDGE
								SHEET NO.:	139



UPPER MANATEE RIVER ROAD
MOT TYPICAL
PHASE 2

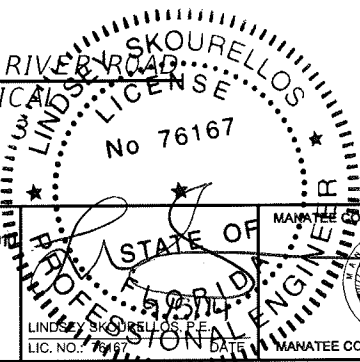


UPPER MANATEE RIVER ROAD
MOT TYPICAL
PHASE 2

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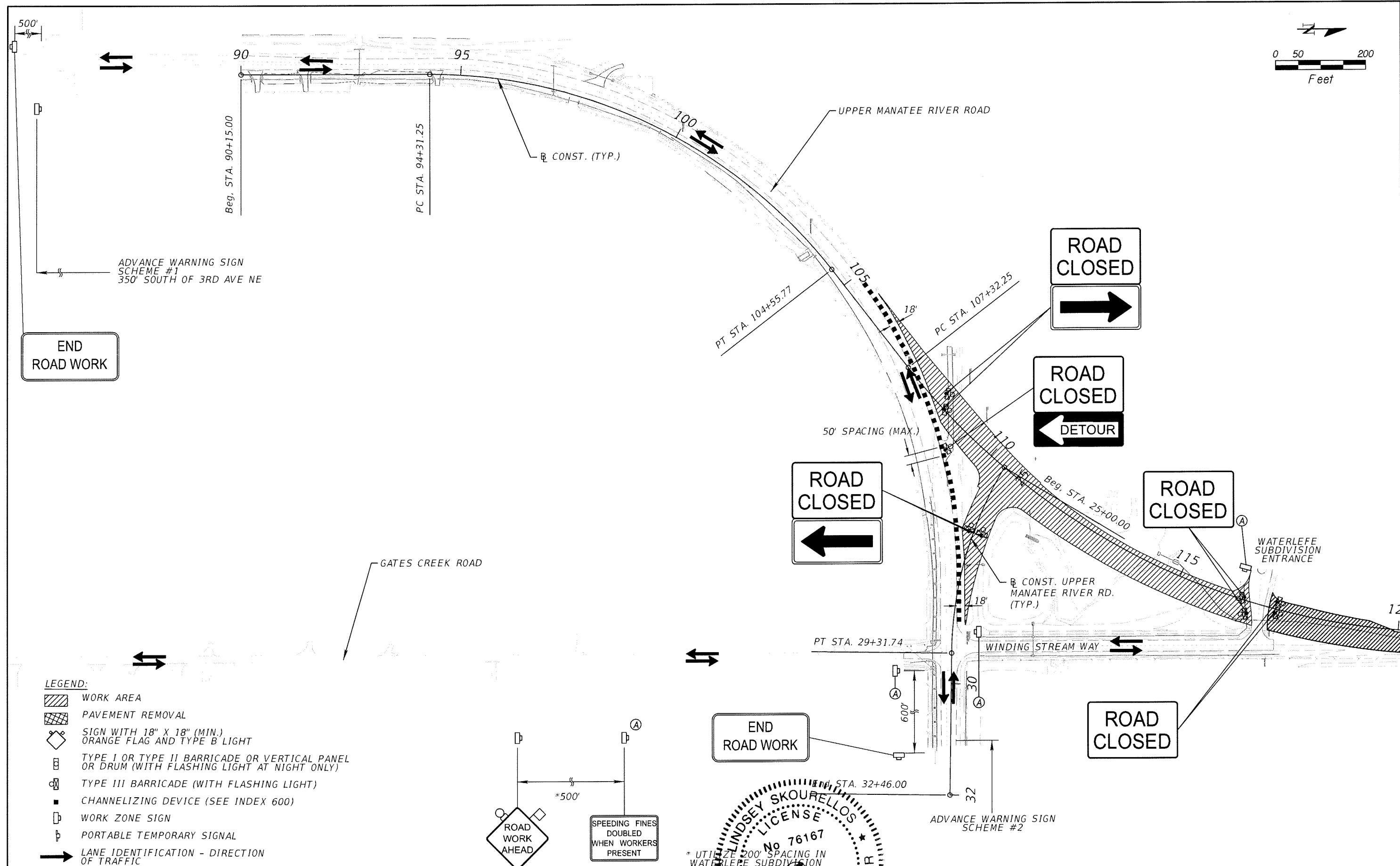
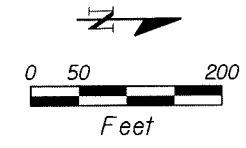


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MANATEE COUNTY GOVERNMENT
MANATEE COUNTY, FLORIDA

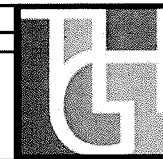
SHEET TITLE: TRAFFIC CONTROL PLAN TYPICAL SECTIONS, UPPER MANATEE RIVER ROAD		SHEET NO. 140
PROJECT NAME: FORT HAMER BRIDGE		



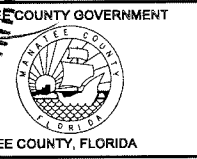
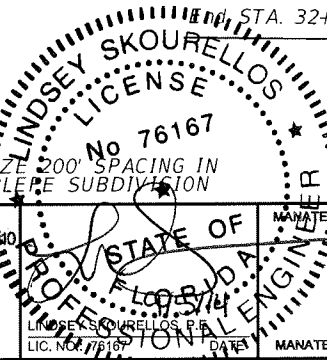
- LEGEND:**
- WORK AREA
 - PAVEMENT REMOVAL
 - SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
 - TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
 - TYPE III BARRICADE (WITH FLASHING LIGHT)
 - CHANNELIZING DEVICE (SEE INDEX 600)
 - WORK ZONE SIGN
 - PORTABLE TEMPORARY SIGNAL
 - LANE IDENTIFICATION - DIRECTION OF TRAFFIC

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

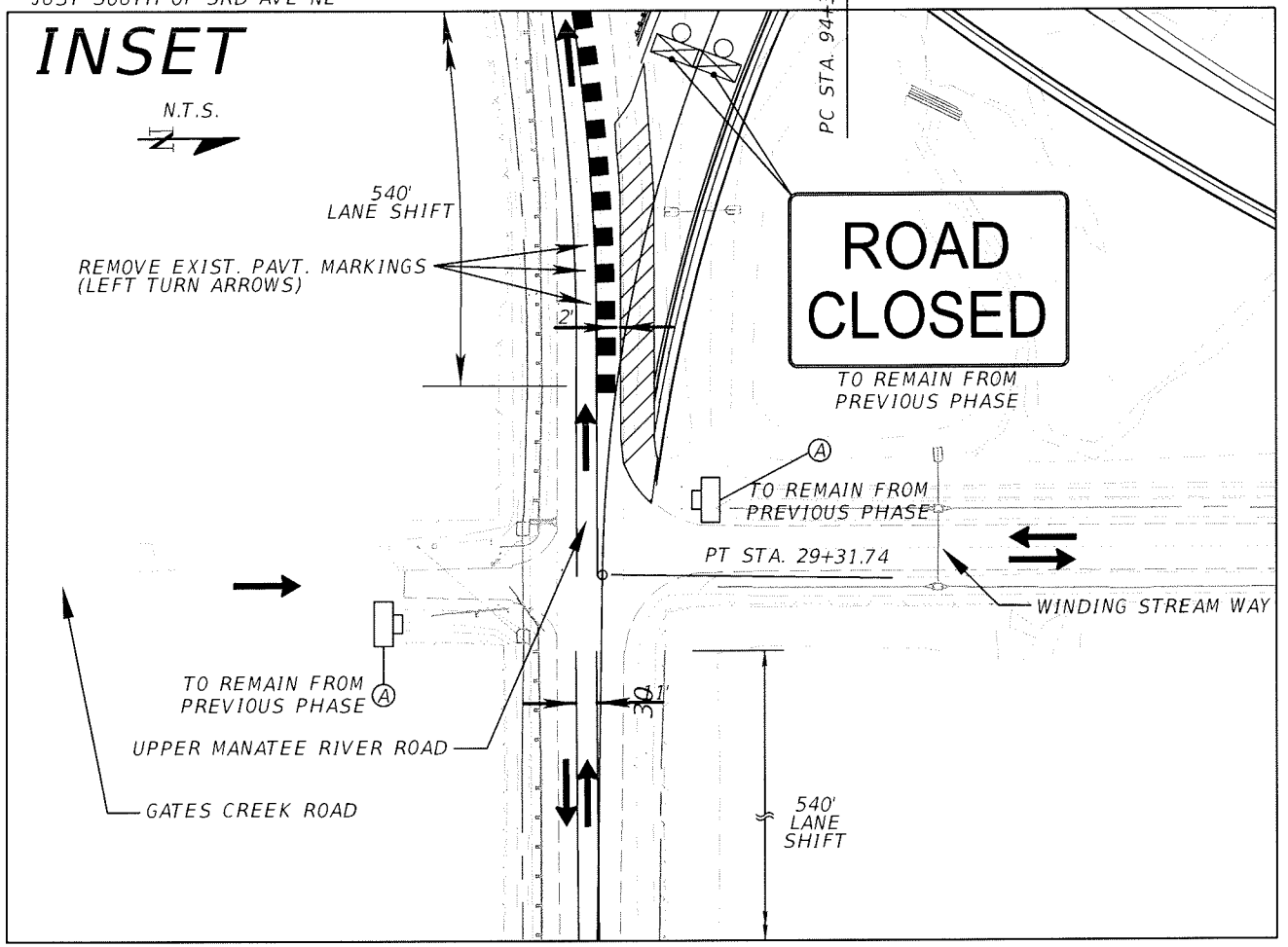
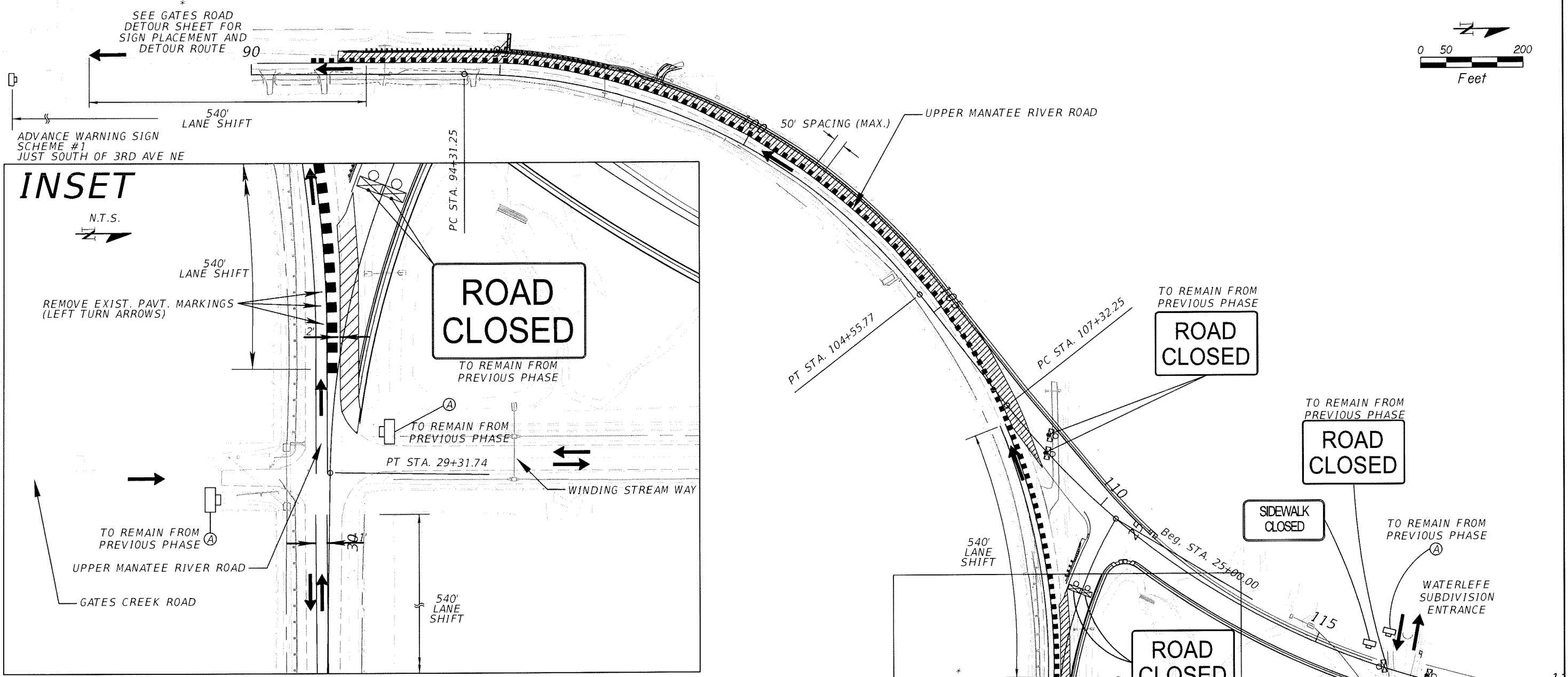
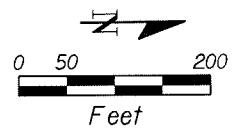


THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 310
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



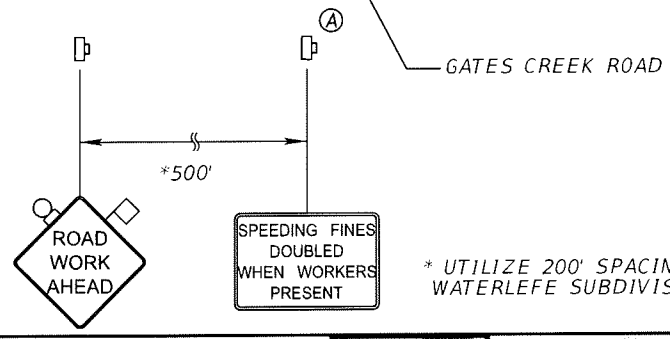
SHEET TITLE: TRAFFIC CONTROL PLAN PHASE 1 UPPER MANATEE RIVER ROAD		SHEET NO. 141
PROJECT NAME: FORT HAMER BRIDGE		

* UTILIZE 200' SPACING IN WATERLEFE SUBDIVISION

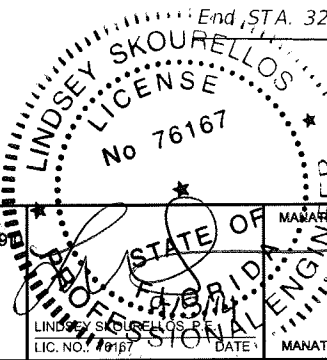


LEGEND:

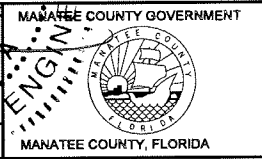
- WORK AREA
- SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
- TYPE I OR TYPE II BARRICADE OR VERTICLE PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
- TYPE III BARRICADE (WITH FLASHING LIGHT)
- CHANNELIZING DEVICE (SEE INDEX 600)
- WORK ZONE SIGN
- PORTABLE TEMPORARY SIGNAL
- LANE IDENTIFICATION - DIRECTION OF TRAFFIC



* UTILIZE 200' SPACING IN WATERLEFE SUBDIVISION



THE HEIMBURG GROUP, INC.
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TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



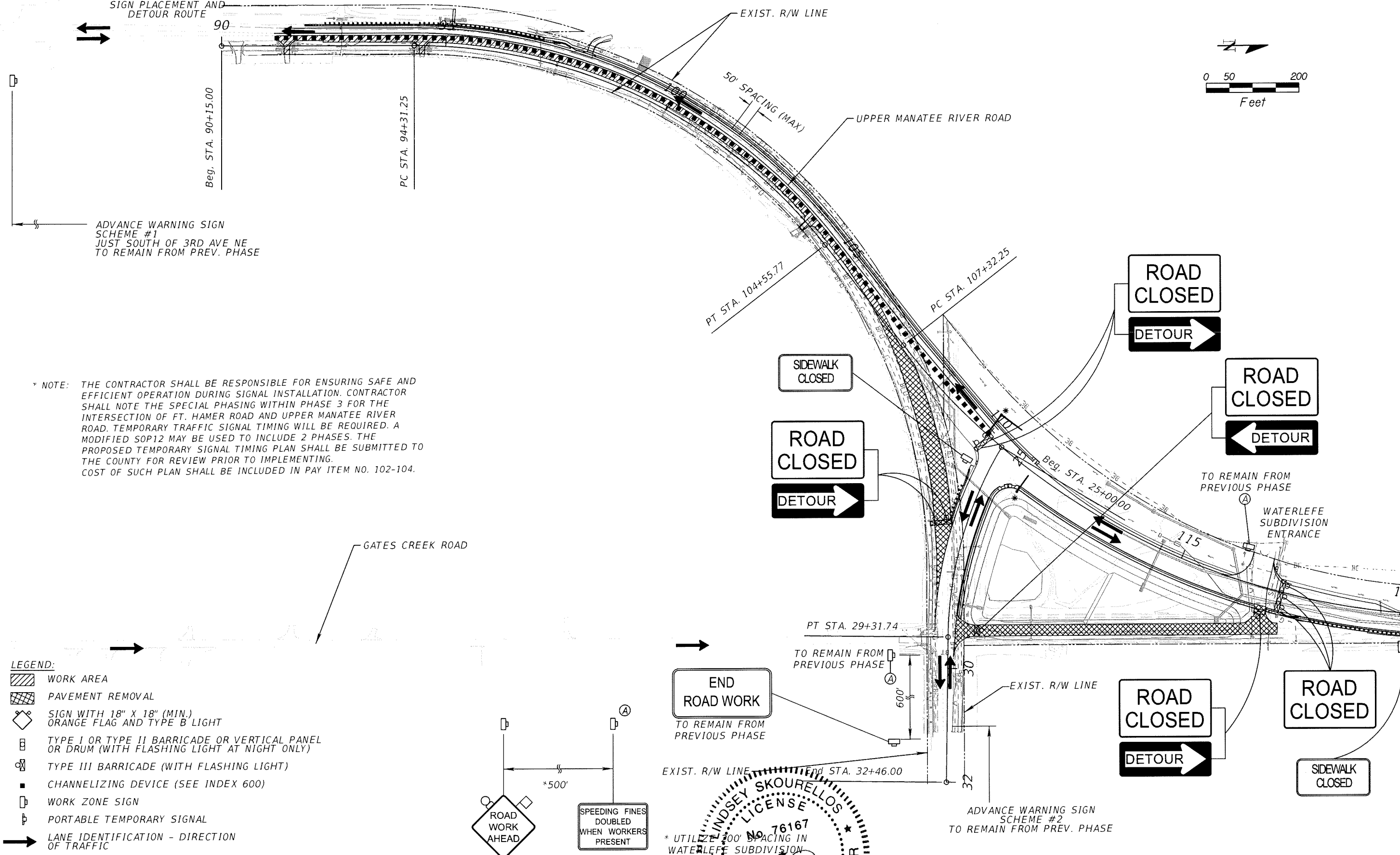
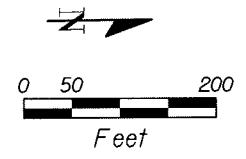
SHEET TITLE:		TRAFFIC CONTROL PLAN PHASE 2 UPPER MANATEE RIVER ROAD	
PROJECT NAME:		FORT HAMER BRIDGE	
SHEET NO.			142

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Mitchell Johnson

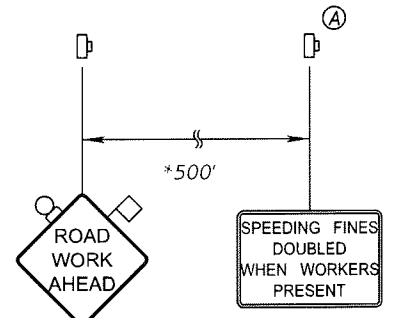
9/4/2014 4:29:06 PM

SEE GATES CREEK ROAD
DETOUR SHEET FOR
SIGN PLACEMENT AND
DETOUR ROUTE



* NOTE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFE AND EFFICIENT OPERATION DURING SIGNAL INSTALLATION. CONTRACTOR SHALL NOTE THE SPECIAL PHASING WITHIN PHASE 3 FOR THE INTERSECTION OF FT. HAMER ROAD AND UPPER MANATEE RIVER ROAD. TEMPORARY TRAFFIC SIGNAL TIMING WILL BE REQUIRED. A MODIFIED SOP12 MAY BE USED TO INCLUDE 2 PHASES. THE PROPOSED TEMPORARY SIGNAL TIMING PLAN SHALL BE SUBMITTED TO THE COUNTY FOR REVIEW PRIOR TO IMPLEMENTING. COST OF SUCH PLAN SHALL BE INCLUDED IN PAY ITEM NO. 102-104.

- LEGEND:**
- WORK AREA
 - PAVEMENT REMOVAL
 - SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
 - TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
 - TYPE III BARRICADE (WITH FLASHING LIGHT)
 - CHANNELIZING DEVICE (SEE INDEX 600)
 - WORK ZONE SIGN
 - PORTABLE TEMPORARY SIGNAL
 - LANE IDENTIFICATION - DIRECTION OF TRAFFIC



INDSEY SKOURELLOS
LICENSE
No. 76167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
MANATEE COUNTY, FLORIDA

* UTILIZE 300' SPACING IN WATERLEFE SUBDIVISION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

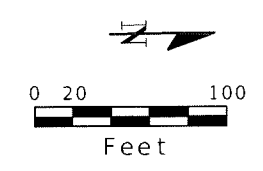
THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 940
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842

MANATEE COUNTY GOVERNMENT

SHEET TITLE: **TRAFFIC CONTROL PLAN
PHASE 3 UPPER MANATEE RIVER ROAD**

PROJECT NAME: **FORT HAMER BRIDGE**

SHEET NO.: **143**



ROAD CLOSED
DETOUR →

ROAD CLOSED
DETOUR →

ONE WAY ←

ROAD CLOSED



SIDEWALK CLOSED AHEAD
←
CROSS HERE

FOR ADDITIONAL PHASING
IN THIS AREA,
SEE PHASE 1, NOTE 3
OF TRAFFIC CONTROL PLAN
PHASING NOTES

WATERLEFE
SUBDIVISION
ENTRANCE

SIDEWALK CLOSED

R = 25'

50' SPACING
(MAX)

10' MIN.

PT STA. 29+31.74

GATES CREEK ROAD

SEE PHASE 3 TCP
FOR ADVANCED
SIGNING

UPPER MANATEE RIVER ROAD

End STA. 32+46.00

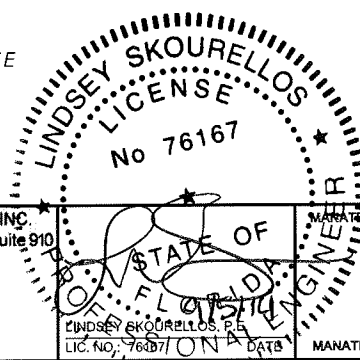
ROAD CLOSED
←
DETOUR

ROAD CLOSED

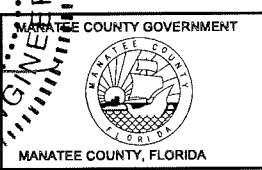
LEGEND:

- WORK AREA
- PAVEMENT REMOVAL
- SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
- TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
- TYPE III BARRICADE (WITH FLASHING LIGHT)
- CHANNELIZING DEVICE (SEE INDEX 600)
- WORK ZONE SIGN
- PORTABLE TEMPORARY SIGNAL
- LANE IDENTIFICATION - DIRECTION OF TRAFFIC

ADVANCE WARNING SIGN
SCHEME #2
TO REMAIN FROM PREV. PHASE



THE HEIMBURG GROUP, INC.
5461 W. Waters Avenue, Suite 910
TAMPA, FL 33634
(813) 749-0823
C.A. NO. 00027842



SHEET TITLE: TRAFFIC CONTROL PLAN
PHASE 3 WATERLEFE SUBDIVISION RECONSTRUCTION

PROJECT NAME: FORT HAMER BRIDGE

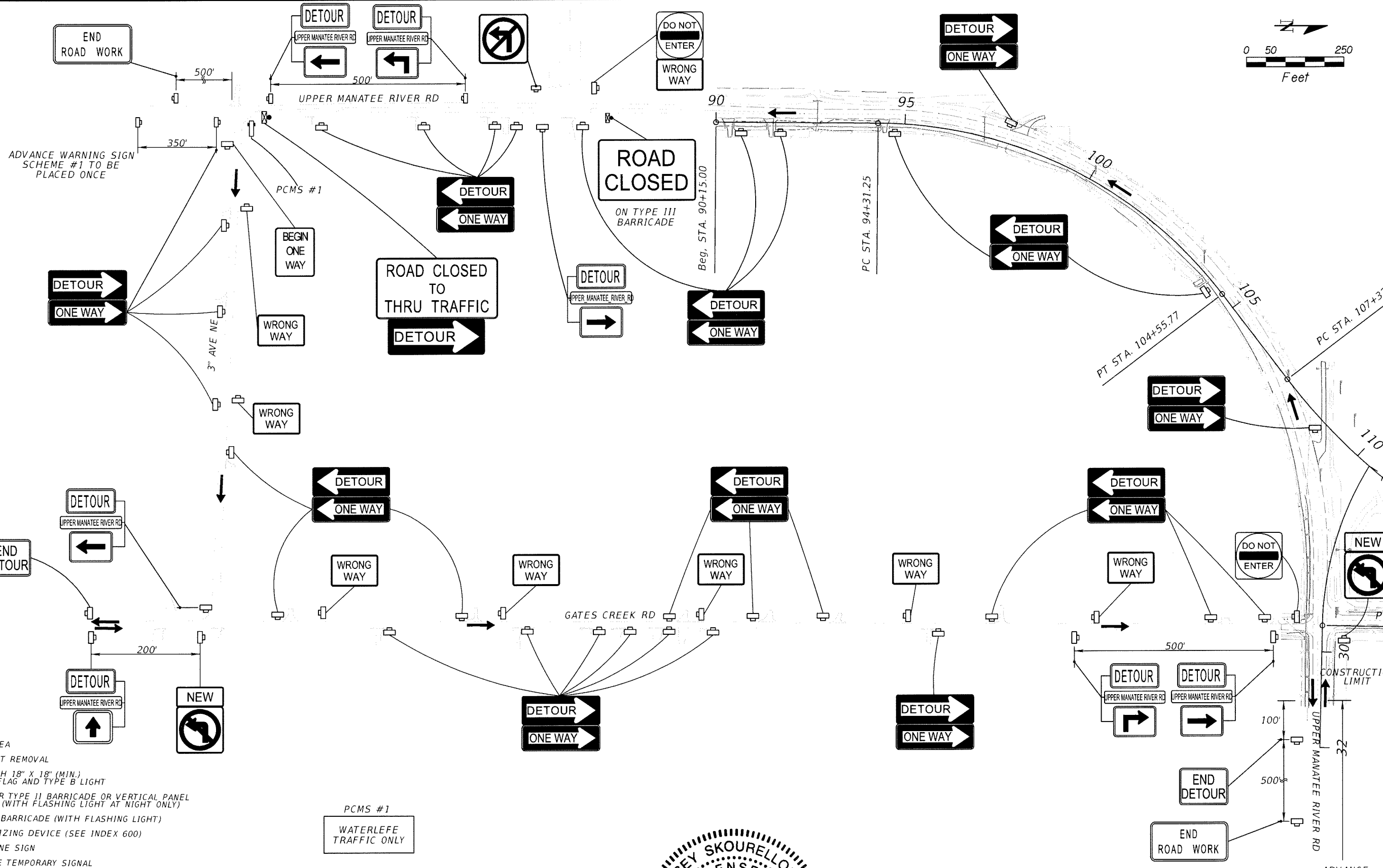
SHEET NO. 144

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Mitchell Johnson

9/4/2014 4:30:07 PM

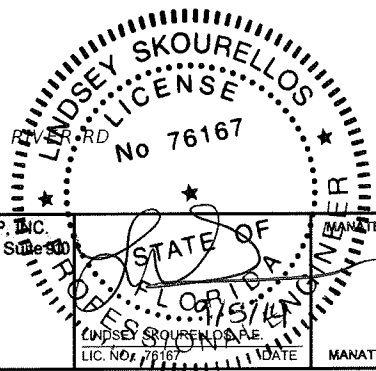
J:\PROJECTS - CADD\09-2392BG\roadway\dwg\TCPLRD03_WaterIefClosure.dwg



- LEGEND:**
- WORK AREA
 - PAVEMENT REMOVAL
 - SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
 - TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
 - TYPE III BARRICADE (WITH FLASHING LIGHT)
 - CHANNELIZING DEVICE (SEE INDEX 600)
 - WORK ZONE SIGN
 - PORTABLE TEMPORARY SIGNAL
 - PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGN
 - LANE IDENTIFICATION - DIRECTION OF TRAFFIC

NOTE: DETOUR TO BE USED DURING PH. 2 AND 3 WHEN NB/EB UPPER MANATEE RIVER RD TRAFFIC IS DETOURED THROUGH 3RD AVE NE AND GATES CREEK RD.

ADVANCE WARNING SIGN SCHEME #2 TO REMAIN FROM PREV. PHASE



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 300
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

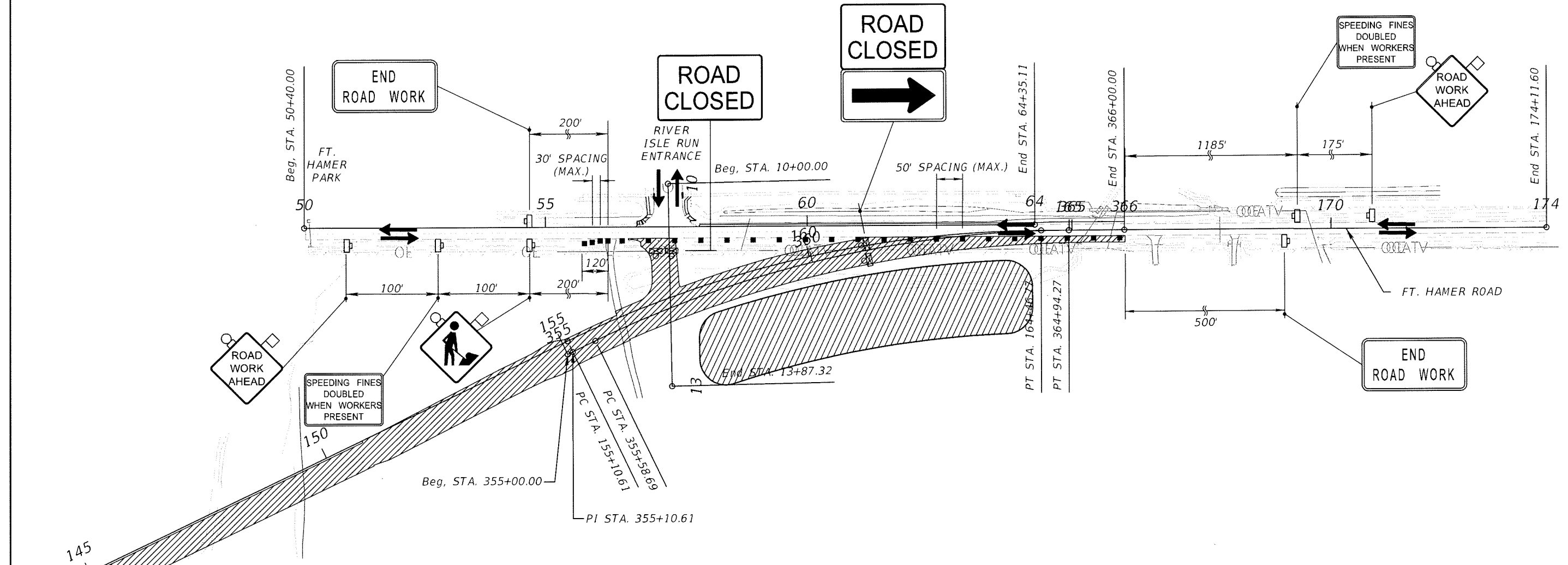
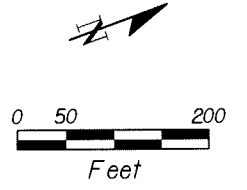
MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

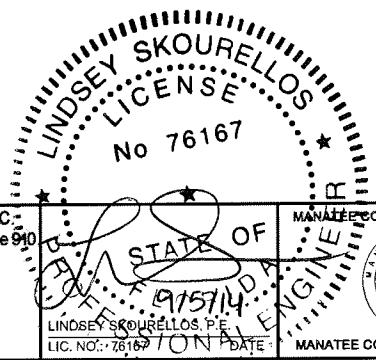
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GATES CREEK ROAD DETOUR SHEET**

PROJECT NAME: **FORT HAMER BRIDGE**

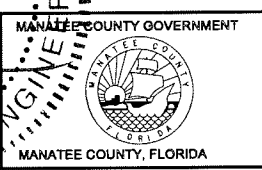
SHEET NO.: **145**



- LEGEND:**
- WORK AREA
 - PAVEMENT REMOVAL
 - SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
 - TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
 - TYPE III BARRICADE (WITH FLASHING LIGHT)
 - CHANNELIZING DEVICE (SEE INDEX 600)
 - WORK ZONE SIGN
 - PORTABLE TEMPORARY SIGNAL
 - LANE IDENTIFICATION - DIRECTION OF TRAFFIC

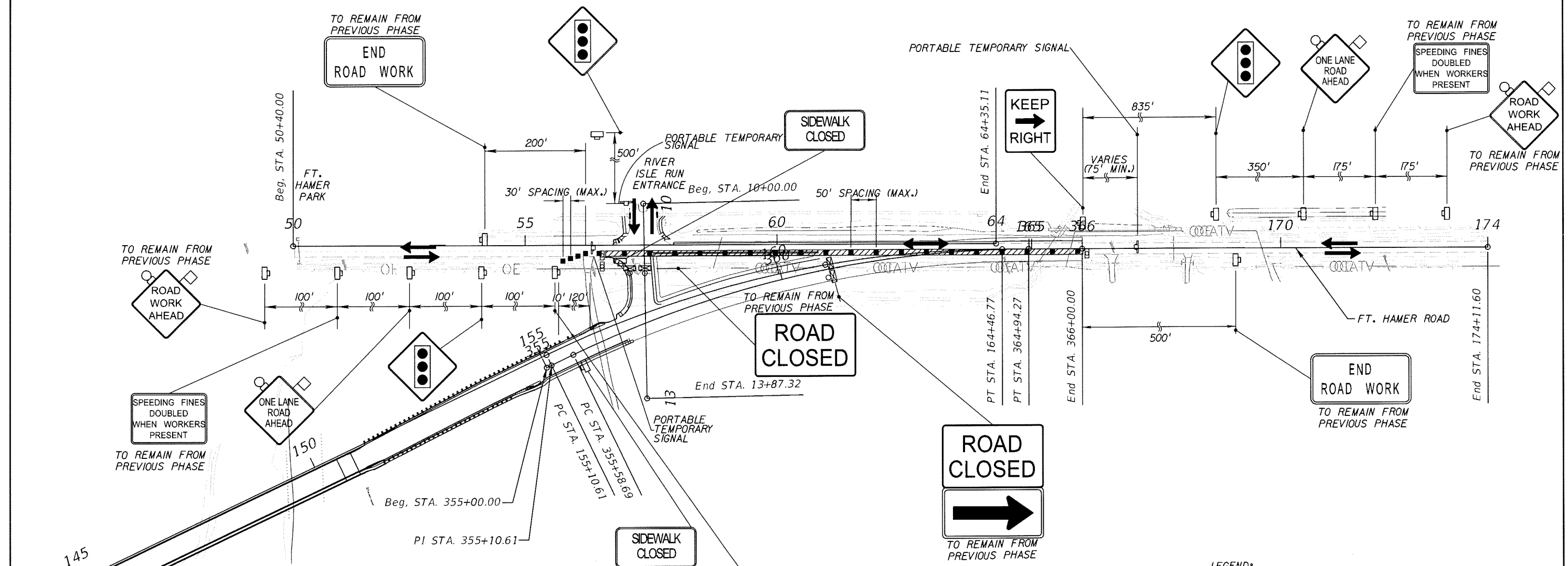
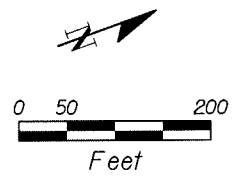


THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:		TRAFFIC CONTROL PLAN PHASE 1 FT. HAMER ROAD
PROJECT NAME:		FORT HAMER BRIDGE
SHEET NO.:		146

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

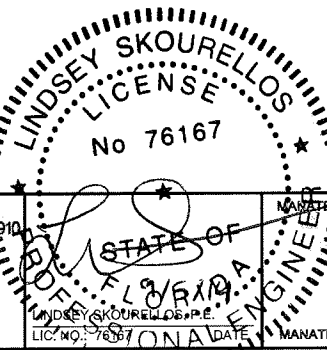


- LEGEND:**
- WORK AREA
 - PAVEMENT REMOVAL
 - SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
 - TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
 - TYPE III BARRICADE (WITH FLASHING LIGHT)
 - CHANNELIZING DEVICE (SEE INDEX 600)
 - WORK ZONE SIGN
 - PORTABLE TEMPORARY SIGNAL
 - LANE IDENTIFICATION - DIRECTION OF TRAFFIC

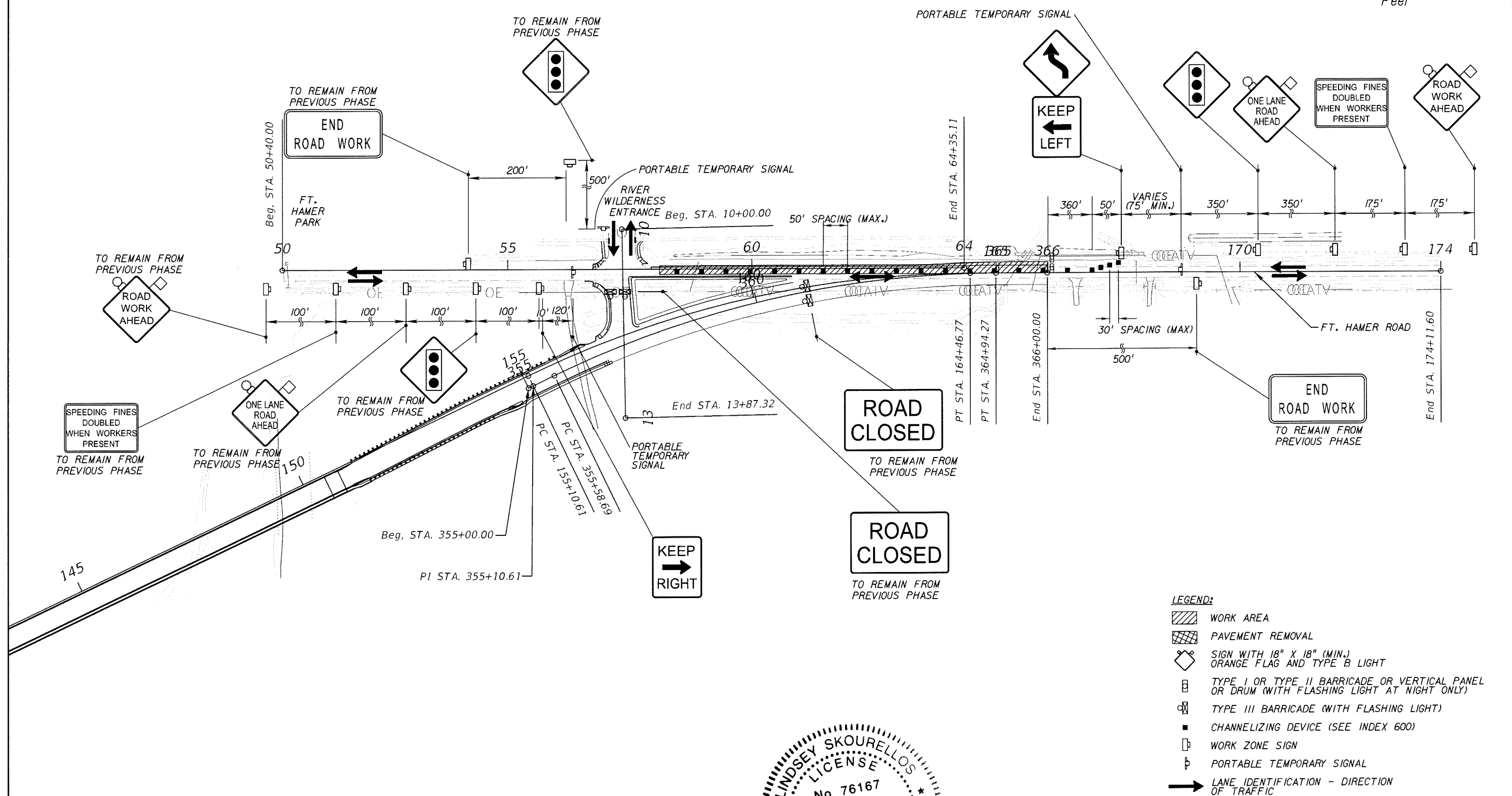
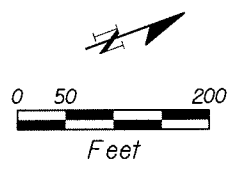
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE: TRAFFIC CONTROL PLAN PHASE 4 WORKING HOURS FORT HAMER ROAD		SHEET NO. 147
PROJECT NAME: FORT HAMER BRIDGE		



- LEGEND:**
- WORK AREA
 - PAVEMENT REMOVAL
 - SIGN WITH 18" X 18" (MIN.) ORANGE FLAG AND TYPE B LIGHT
 - TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH FLASHING LIGHT AT NIGHT ONLY)
 - TYPE III BARRICADE (WITH FLASHING LIGHT)
 - CHANNELIZING DEVICE (SEE INDEX 600)
 - WORK ZONE SIGN
 - PORTABLE TEMPORARY SIGNAL
 - LANE IDENTIFICATION - DIRECTION OF TRAFFIC

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 910
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

SHEET TITLE: TRAFFIC CONTROL PLAN PHASE 5 WORKING HOURS FT. HAMER ROAD	SHEET NO. 148
PROJECT NAME: FORT HAMER BRIDGE	

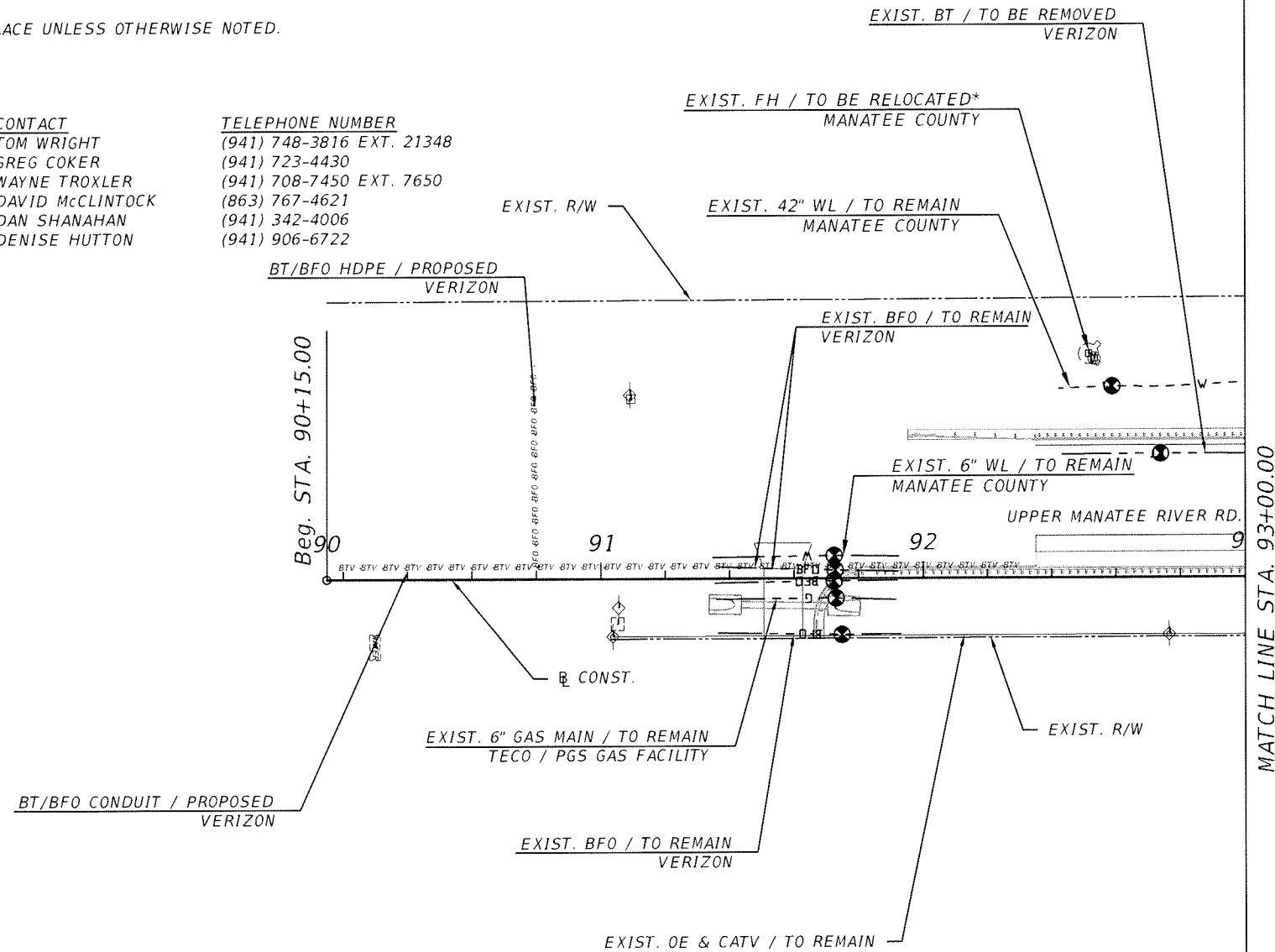
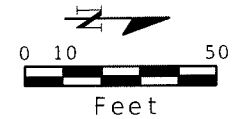
GENERAL NOTES:

1. THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
2. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
3. UTILITY/AGENCY OWNERS:

COMPANIES
 BRIGHTHOUSE
 FLORIDA POWER & LIGHT
 MANATEE COUNTY PUBLIC WORKS
 PEACE RIVER ELECTRIC COOPERATIVE
 TECO PEOPLES GAS
 VERIZON FLORIDA, INC

CONTACT
 TOM WRIGHT
 GREG COKER
 WAYNE TROXLER
 DAVID McCLINTOCK
 DAN SHANAHAN
 DENISE HUTTON

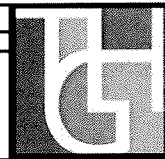
TELEPHONE NUMBER
 (941) 748-3816 EXT. 21348
 (941) 723-4430
 (941) 708-7450 EXT. 7650
 (863) 767-4621
 (941) 342-4006
 (941) 906-6722



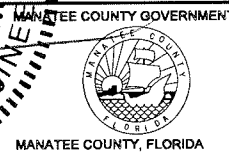
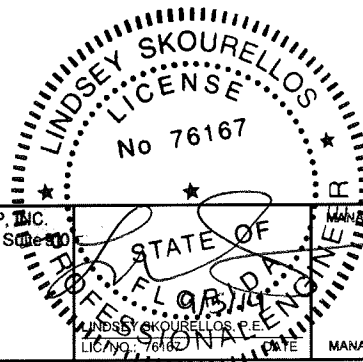
* RELOCATE EXISTING FH ASSEMBLY TO RIGHT OF WAY LINE.
 INCLUDE NEW 45 BEND OFFSET UNDER PROPOSED DITCH
 TO MAINTAIN 36" OF COVER UNDER DITCH LINE.
 ALL BENDS SHALL BE RESTRAINED JOINT PER COUNTY
 UTILITY SPECIFICATIONS.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 200
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:

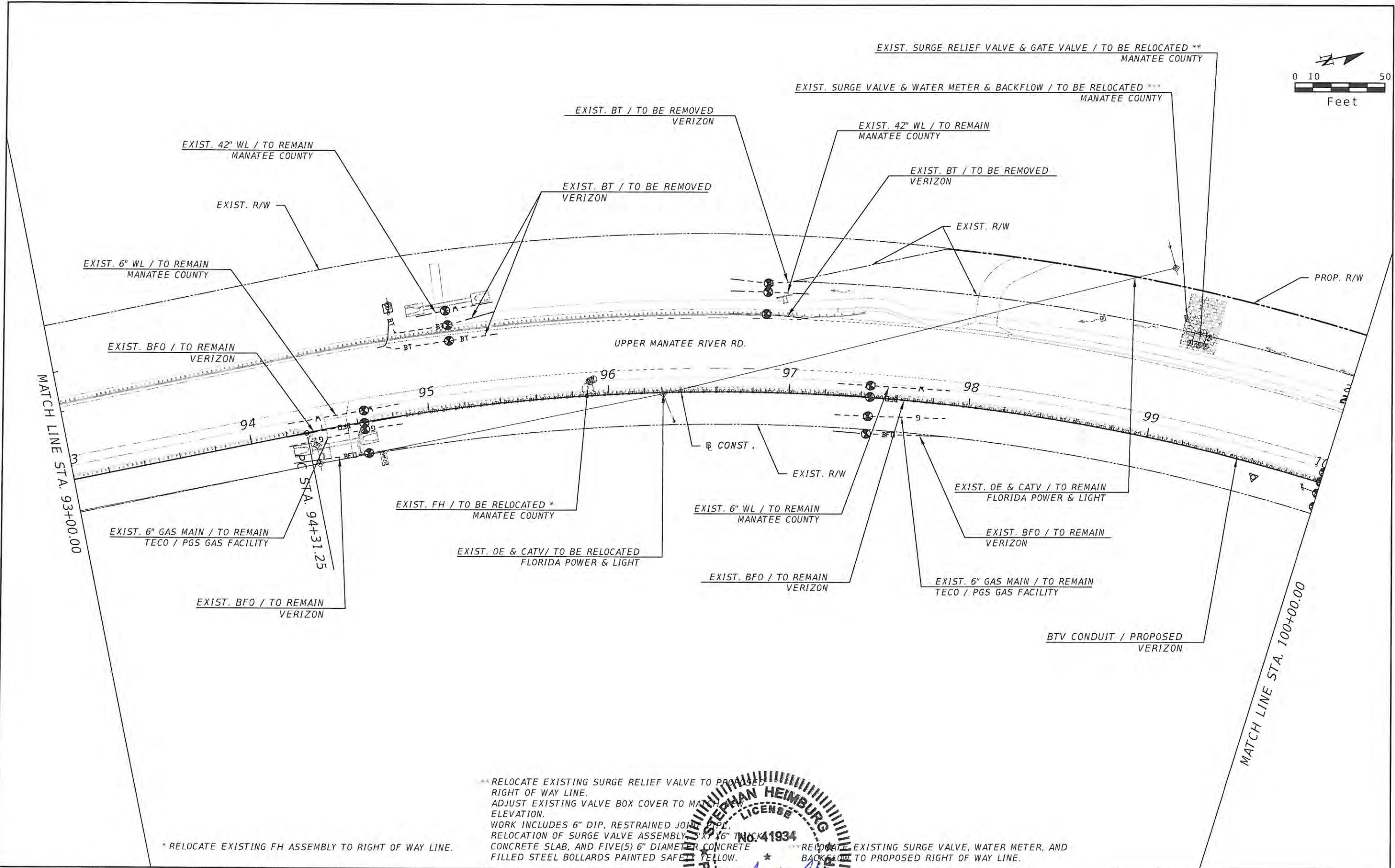
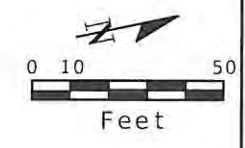
UTILITY ADJUSTMENT (1)

PROJECT NAME:

FORT HAMER BRIDGE

SHEET NO.

149



* RELOCATE EXISTING FH ASSEMBLY TO RIGHT OF WAY LINE.

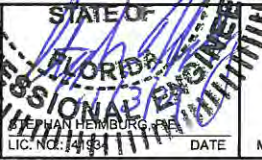
** RELOCATE EXISTING SURGE RELIEF VALVE TO PROPOSED RIGHT OF WAY LINE. ADJUST EXISTING VALVE BOX COVER TO MATCH PROPOSED ELEVATION. WORK INCLUDES 6" DIP, RESTRAINED JOINTS, RELOCATION OF SURGE VALVE ASSEMBLY TO PROPOSED CONCRETE SLAB, AND FIVE(5) 6" DIAMETER CONCRETE FILLED STEEL BOLLARDS PAINTED SAFETY YELLOW.

*** RELOCATE EXISTING SURGE VALVE, WATER METER, AND BACKFLOW TO PROPOSED RIGHT OF WAY LINE.

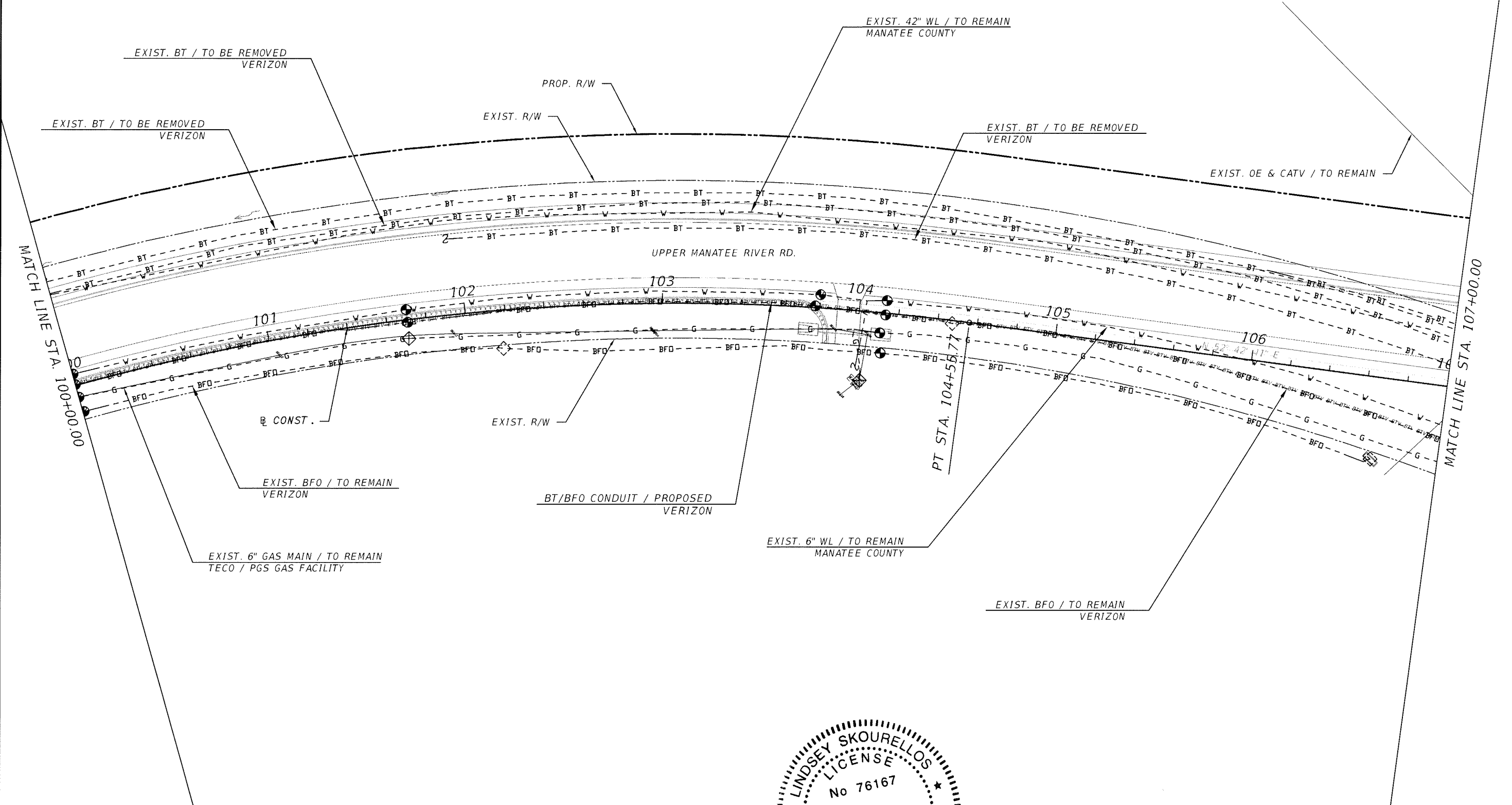
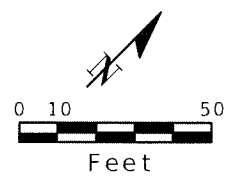
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



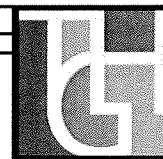
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 100
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



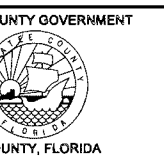
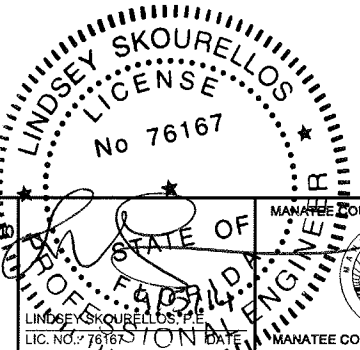
SHEET TITLE:	UTILITY ADJUSTMENT (2)	
PROJECT NAME:	FORT HAMER BRIDGE	
SHEET NO.:	150	



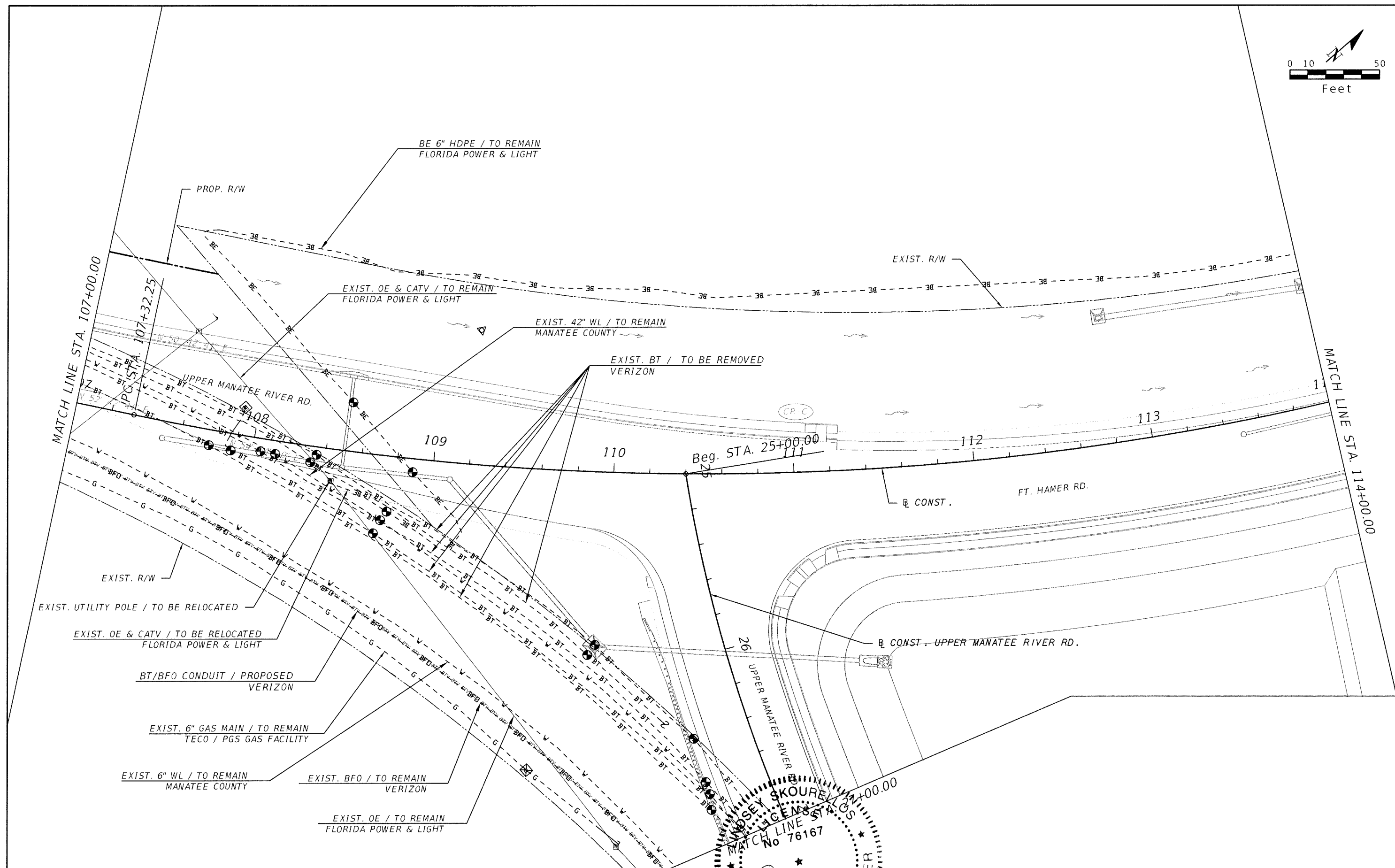
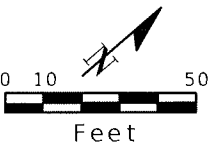
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



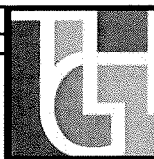
THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 900
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842



SHEET TITLE:	UTILITY ADJUSTMENT (3)
PROJECT NAME:	FORT HAMER BRIDGE
SHEET NO.:	151



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

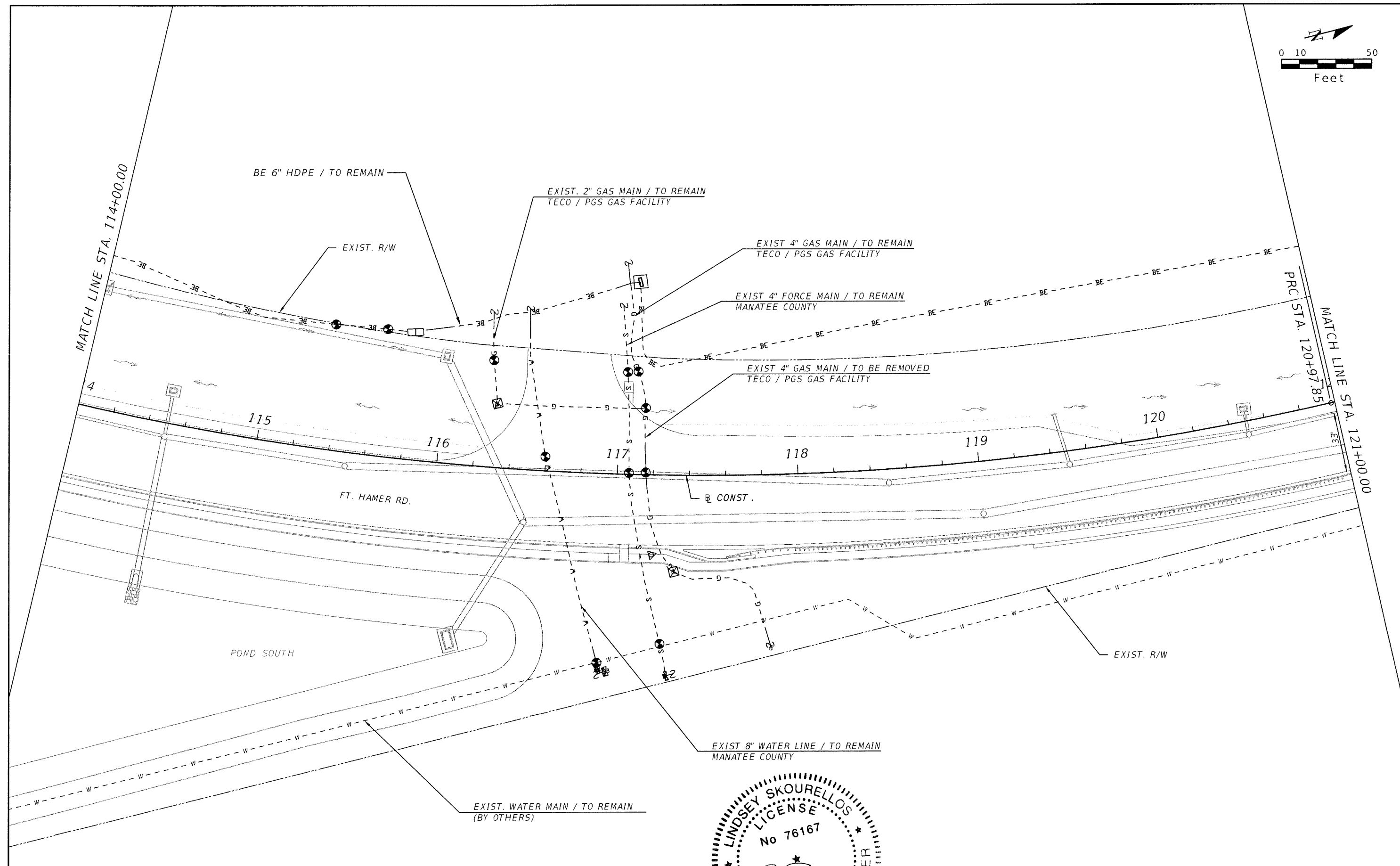
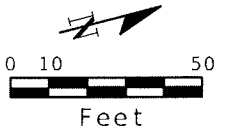


THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 500
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027842

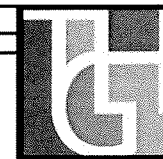
Professional Engineer
 LINCOLN S. SKOURE
 No 76167
 STATE OF FLORIDA
 MANATEE COUNTY GOVERNMENT
 MANATEE COUNTY, FLORIDA

SHEET TITLE: UTILITY ADJUSTMENT (4)
 PROJECT NAME: FORT HAMER BRIDGE

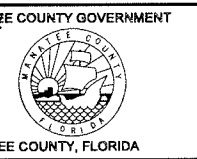
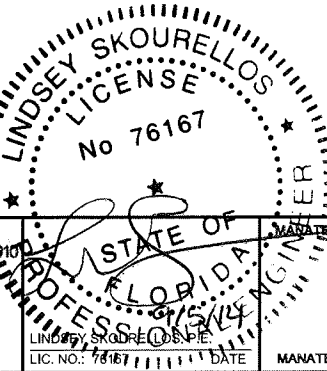
SHEET NO. 152



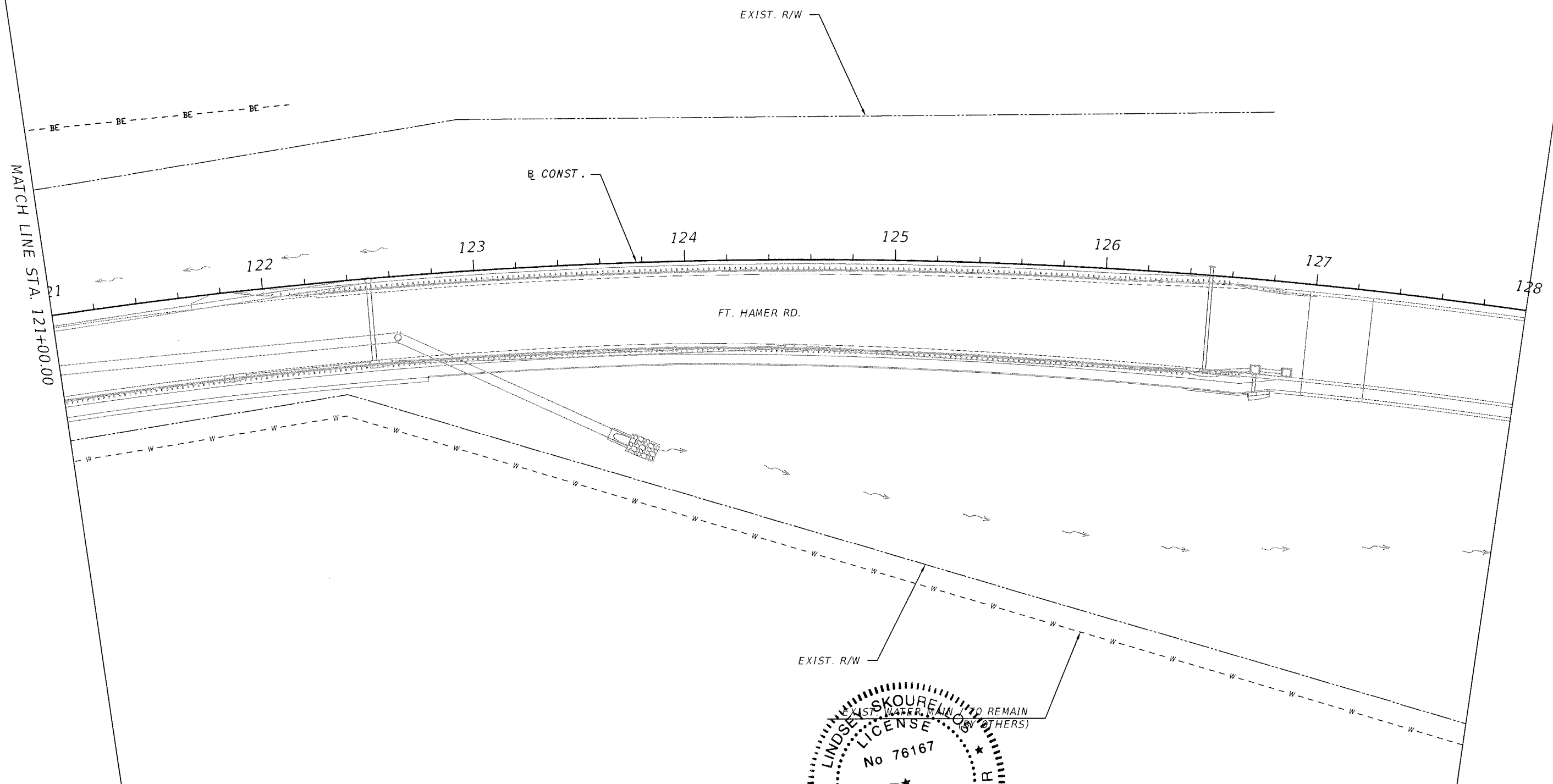
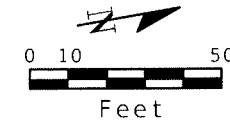
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



THE HEIMBURG GROUP, INC.
 5461 W. Waters Avenue, Suite 210
 TAMPA, FL 33634
 (813) 749-0823
 C.A. NO. 00027642



PROJECT NAME:	FORT HAMER BRIDGE	
SHEET TITLE:	UTILITY ADJUSTMENT (5)	
SHEET NO.:	153	

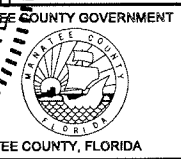
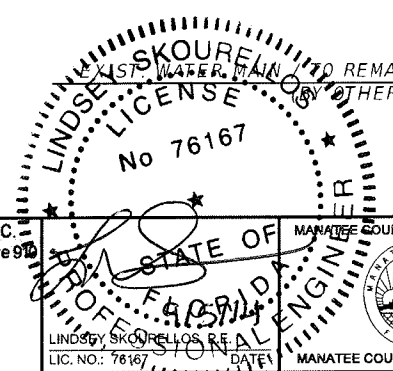


MATCH LINE STA. 121+00.00

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



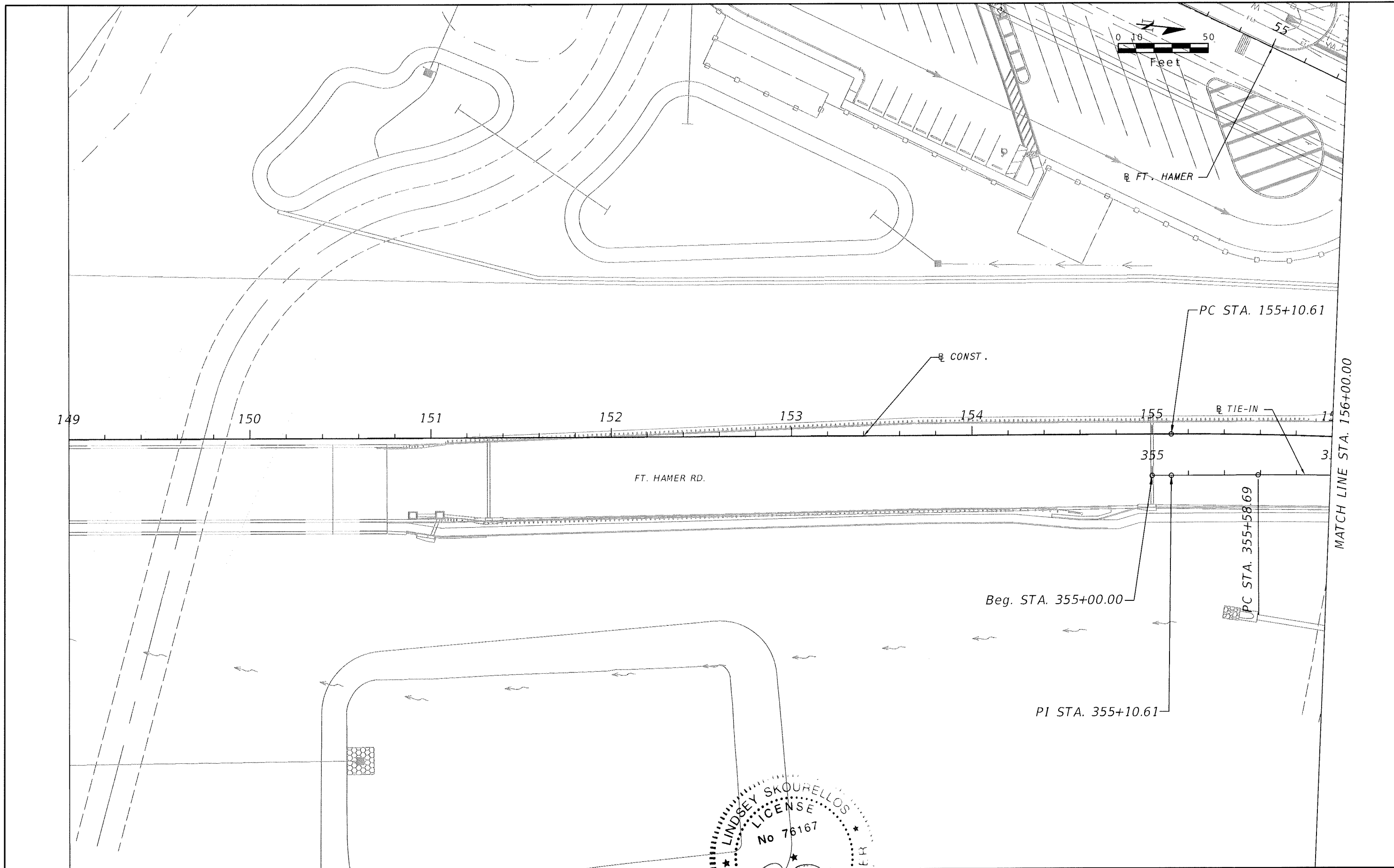
THE HEIMBURG GROUP, INC.
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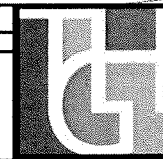
SHEET TITLE: **UTILITY ADJUSTMENT (6)**

PROJECT NAME: **FORT HAMER BRIDGE**

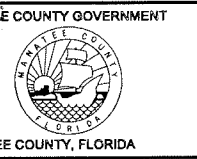
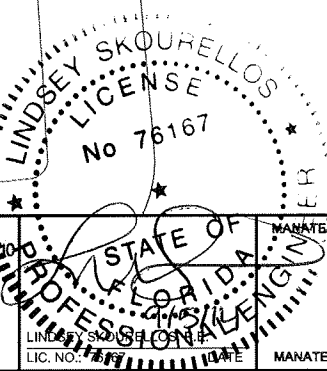
SHEET NO. **154**



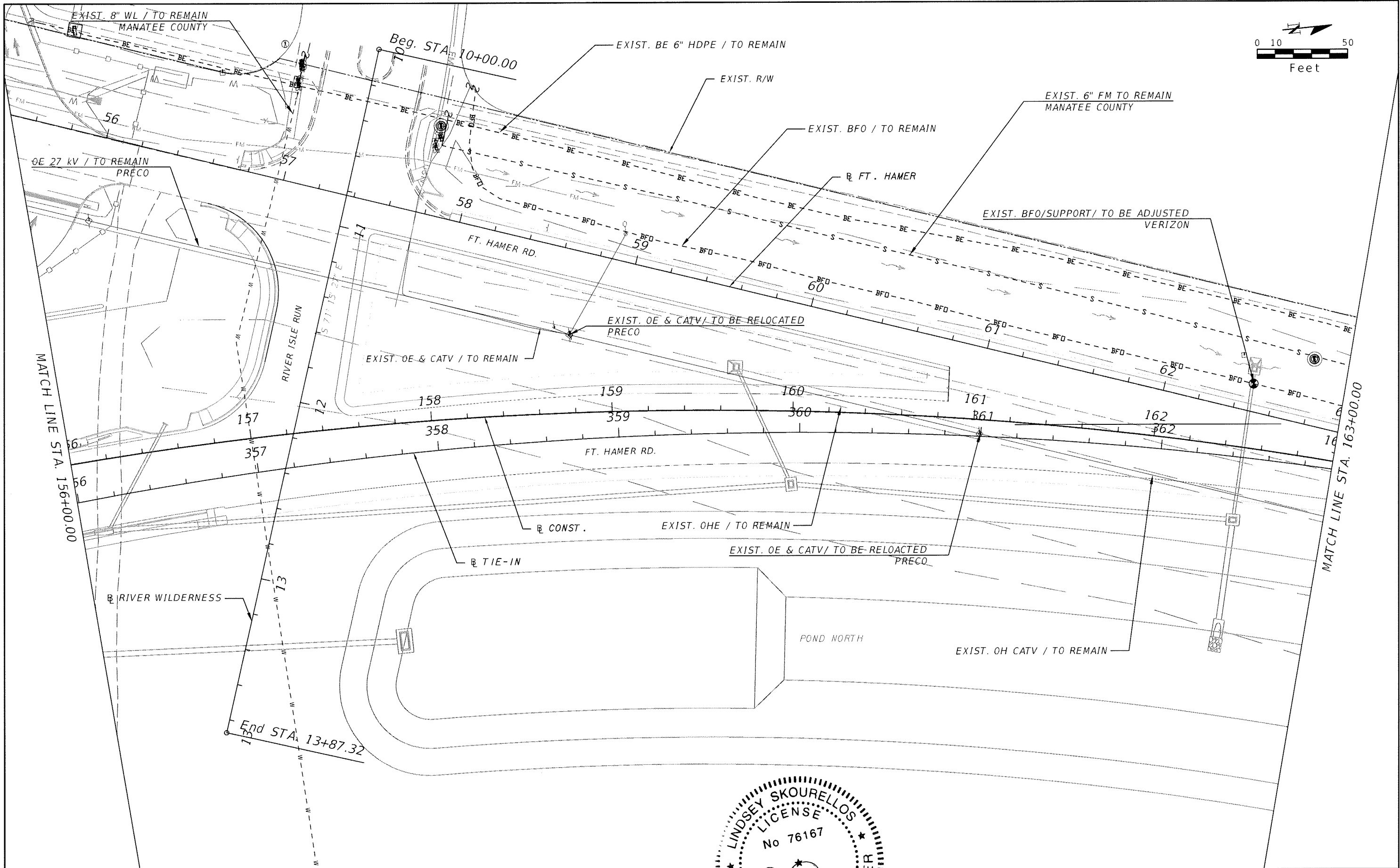
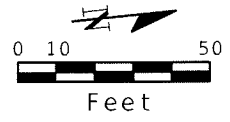
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



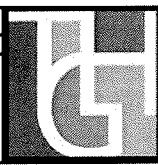
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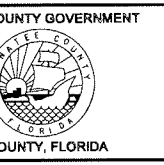
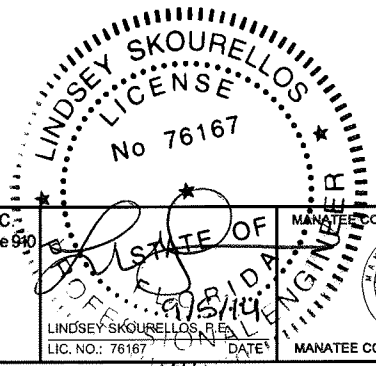
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PROJECT NAME:		FORT HAMER BRIDGE
SHEET NO.:		155



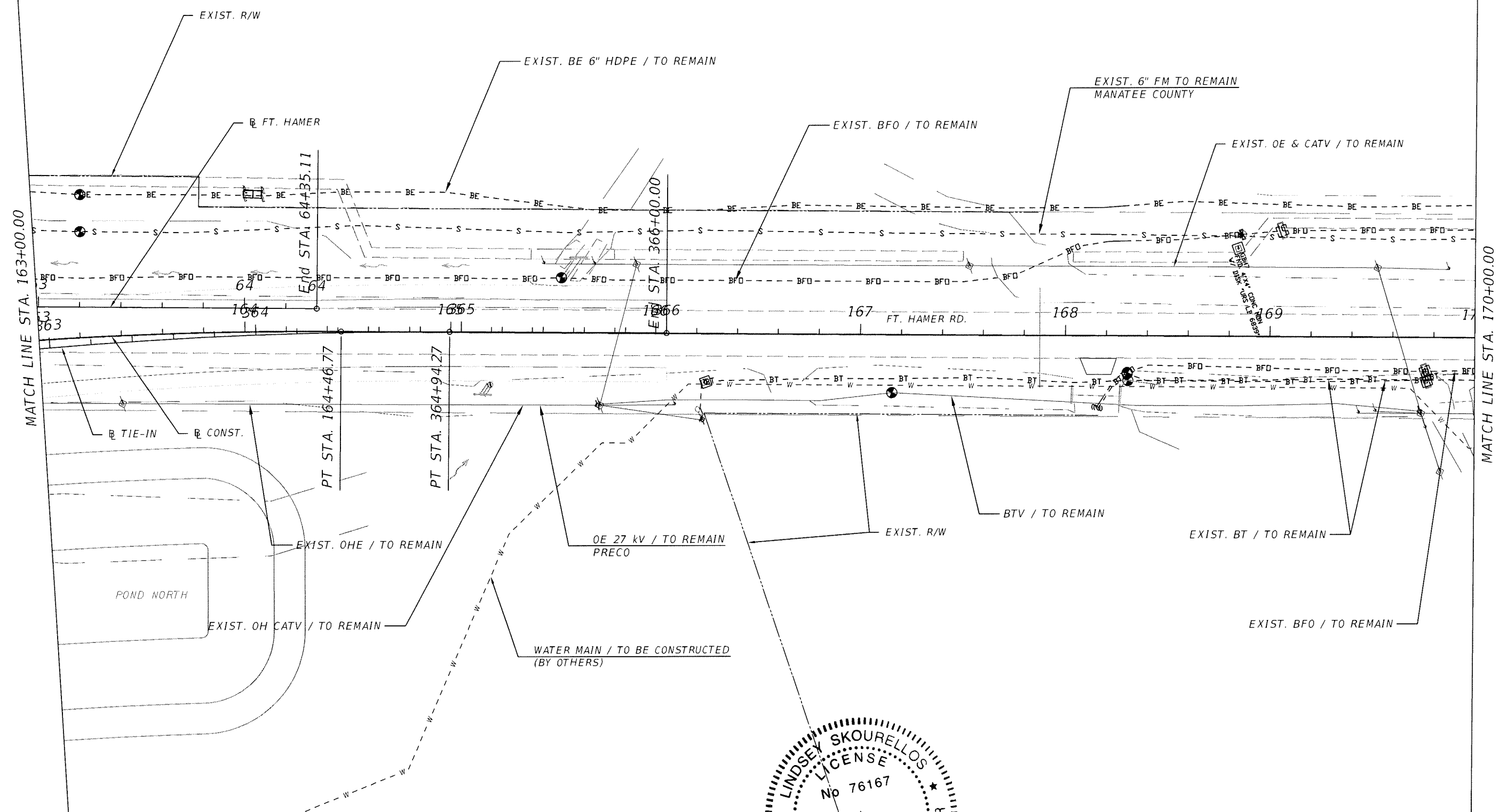
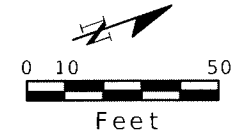
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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PROJECT NAME:	FORT HAMER BRIDGE		SHEET NO.:	156
SHEET TITLE:	UTILITY ADJUSTMENT (8)			

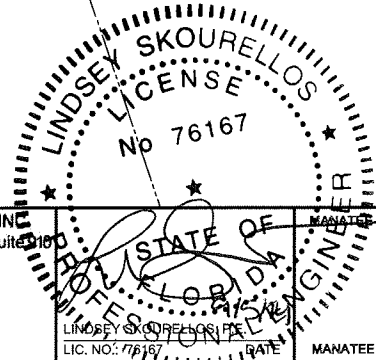


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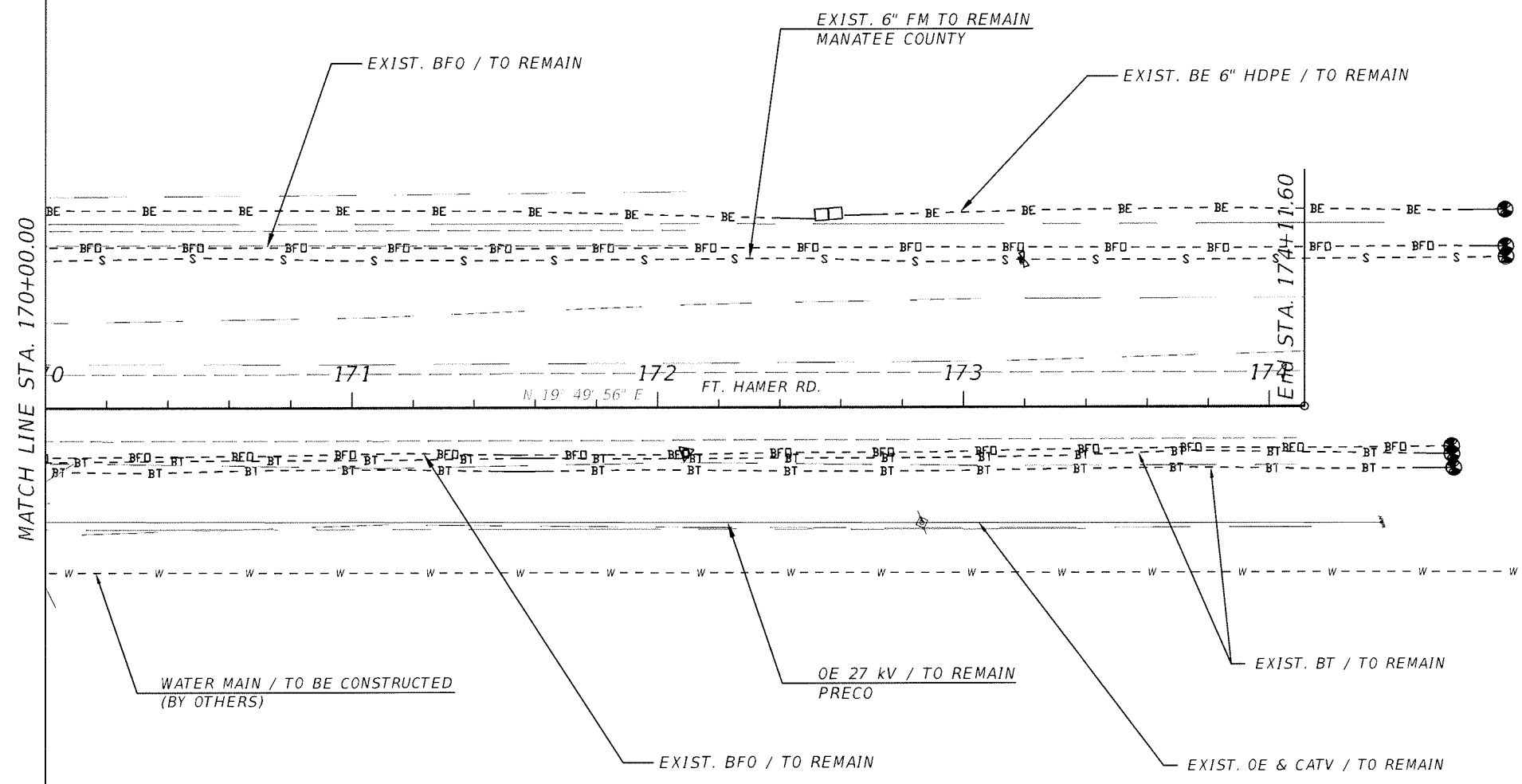
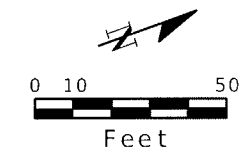
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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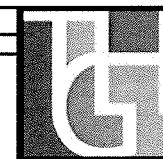
SHEET TITLE: UTILITY ADJUSTMENT (9)		SHEET NO. 157
PROJECT NAME: FORT HAMER BRIDGE		



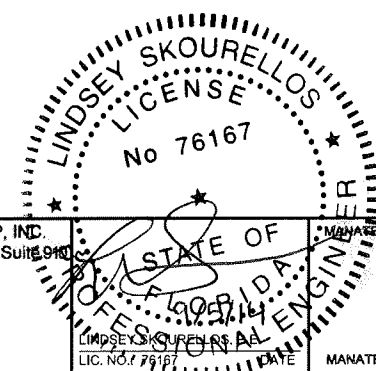
MATCH LINE STA. 170+00.00

STA. 174+11.60

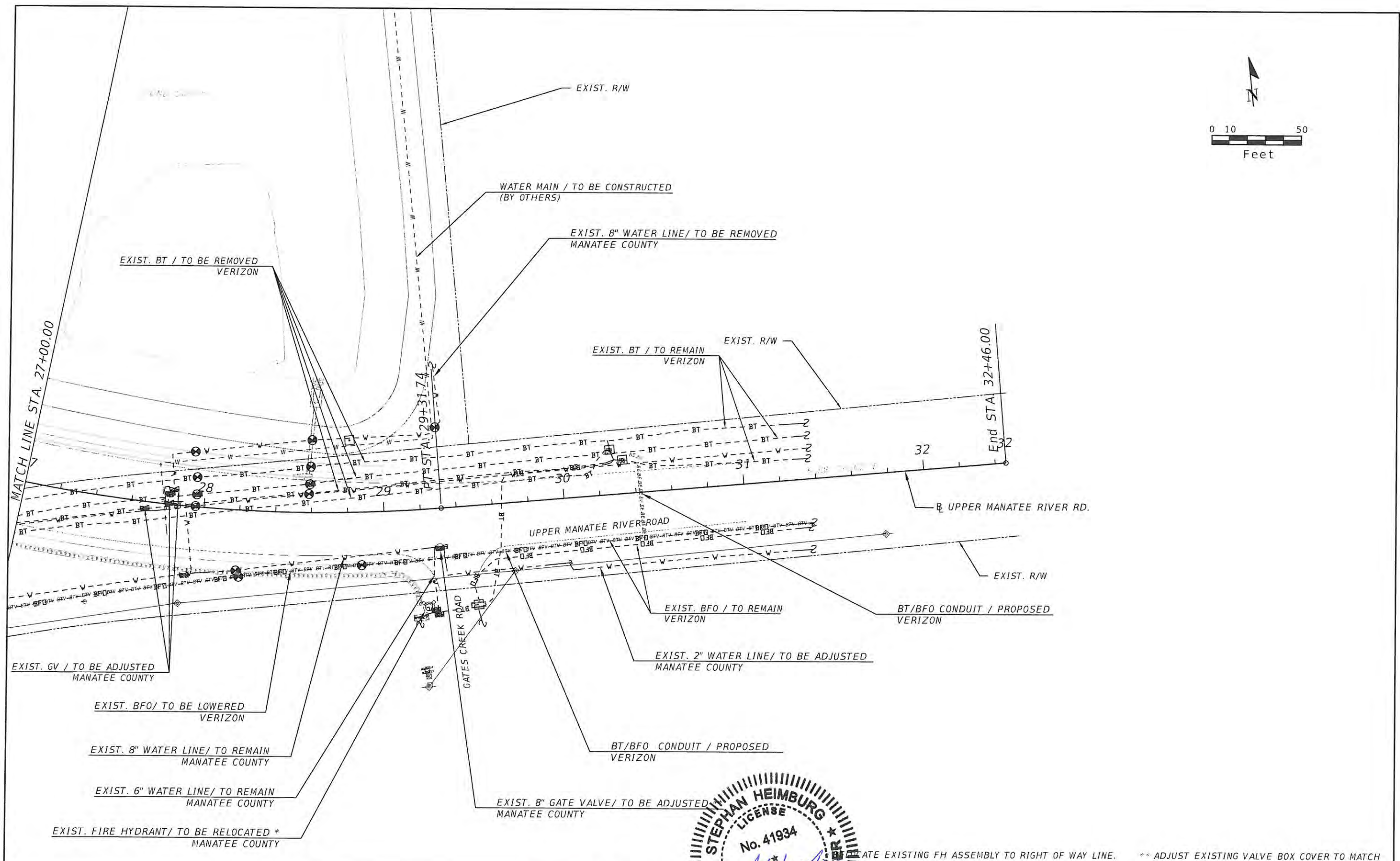
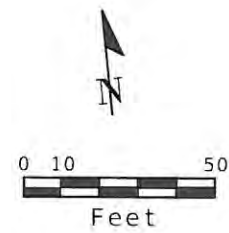
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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SHEET TITLE: UTILITY ADJUSTMENT (10)		SHEET NO. 158
PROJECT NAME: FORT HAMER BRIDGE		



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



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DATE 11/17/2014 2:54:01 PM



SHEET TITLE: UPPER MANATEE RIVER ROAD UTILITY ADJUSTMENT (11)		SHEET NO. 159
PROJECT NAME: FORT HAMER BRIDGE		

ADJUST EXISTING FH ASSEMBLY TO RIGHT OF WAY LINE. ** ADJUST EXISTING VALVE BOX COVER TO MATCH NEW PAVEMENT GRADE.