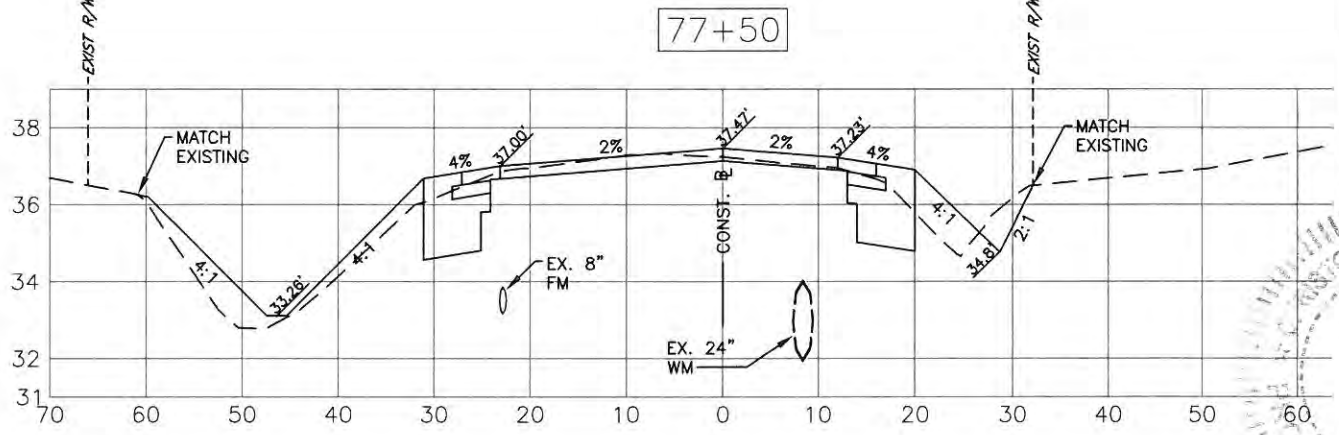
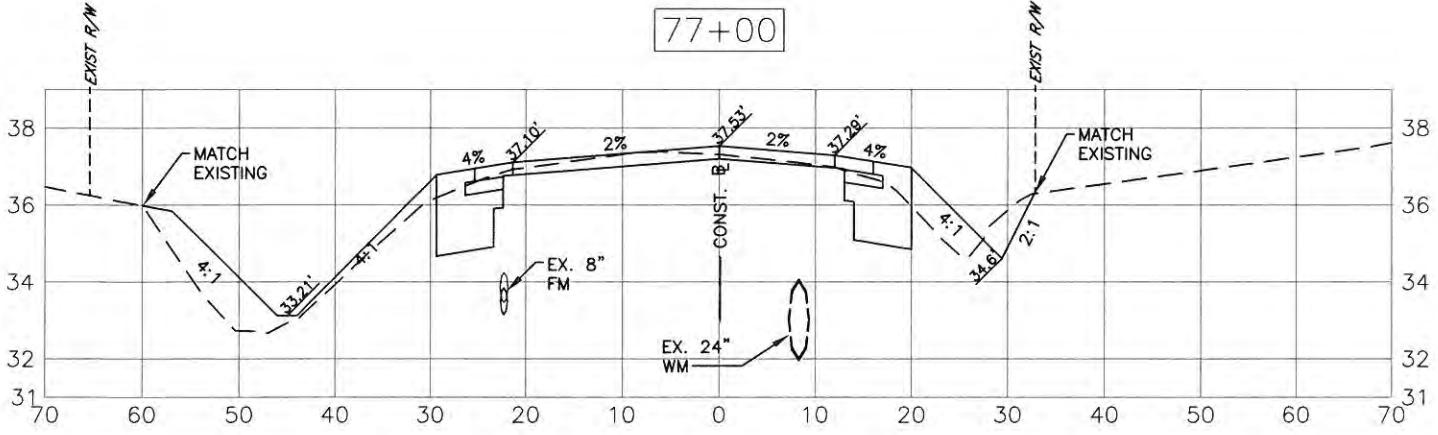
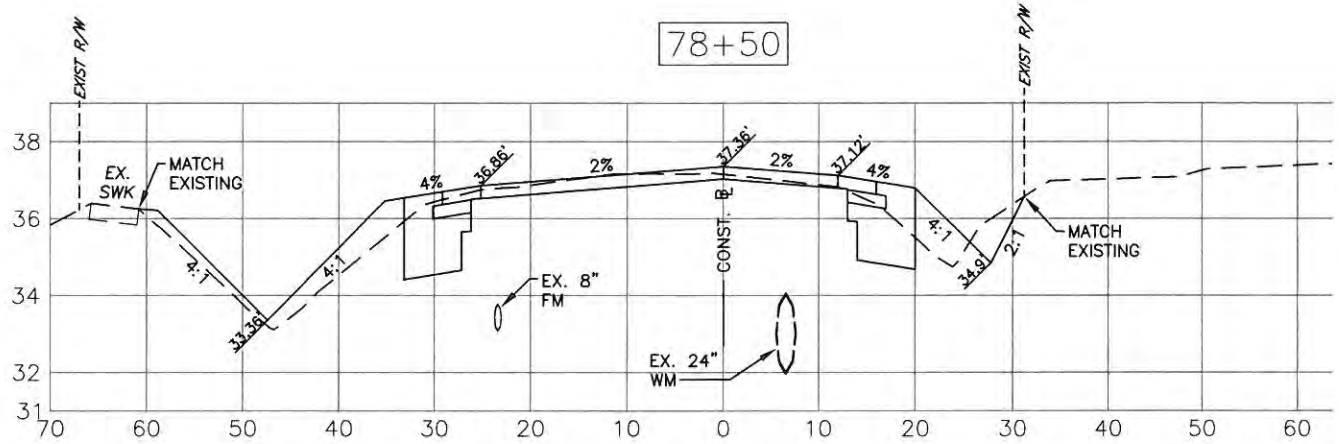
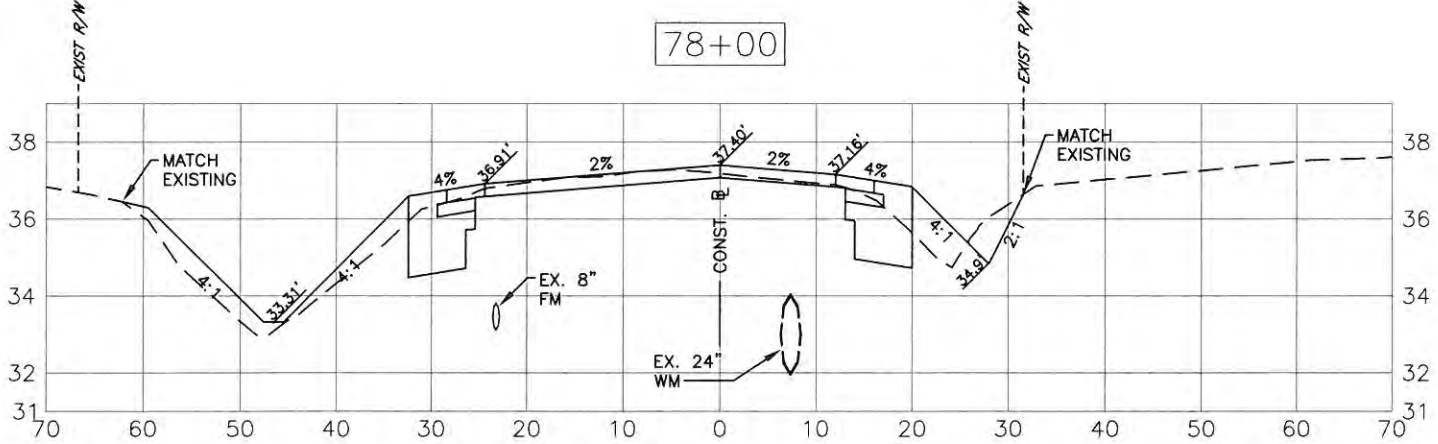
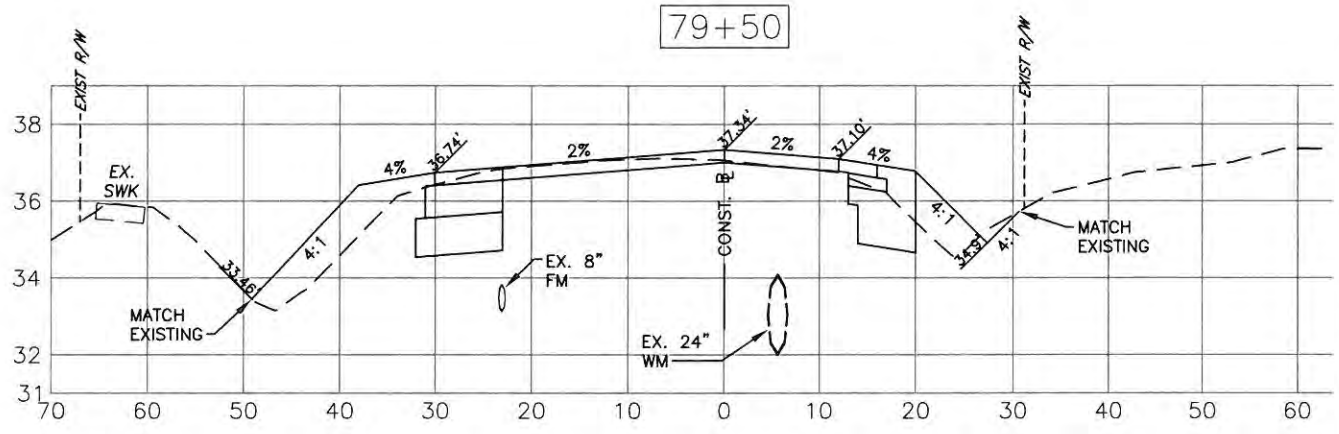
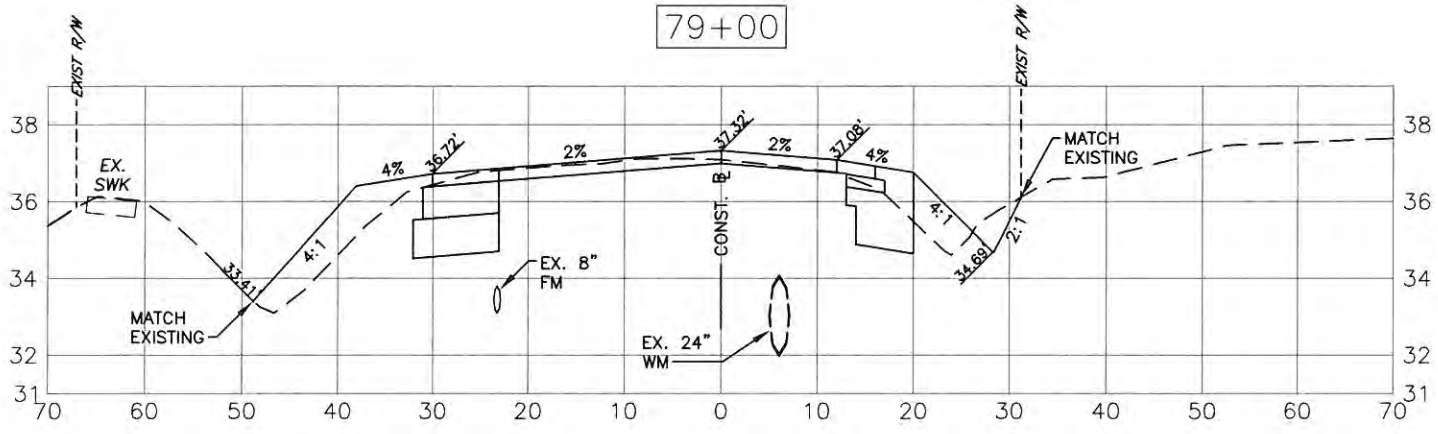




Manatee County
FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 77+00 TO STA 79+50**



NO.	REVISION DESCRIPTION	BY	DATE

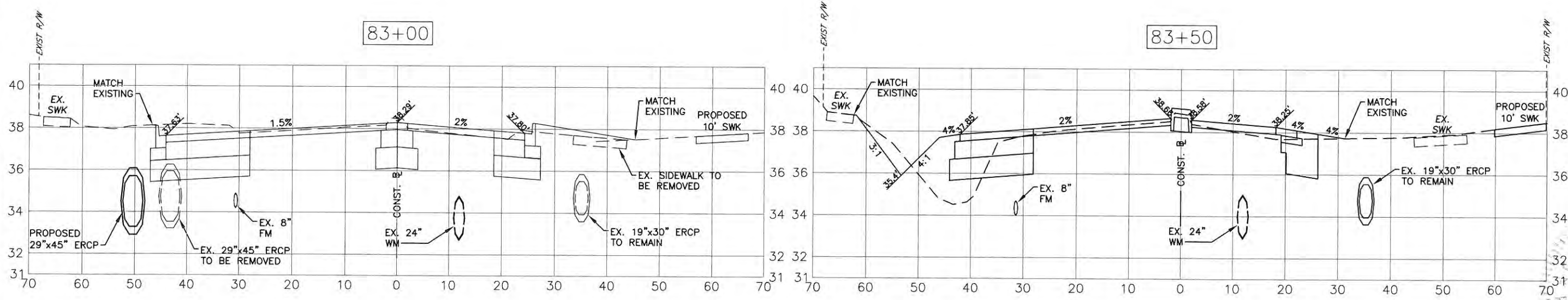
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	18S/18E
SCALE	1"=1.20' / 1:1.5
BY	DATE
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/20/14
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
Signature & Date	

S:\PMD_Engineering_Stations\Highway_Engineering\Roads\Fort Hamer_Road\DWG\FH_KSEC_2.DWG,SB_KSEC_10/24/2014 7:47 AM Thom Forester, 1:1, 11x17



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

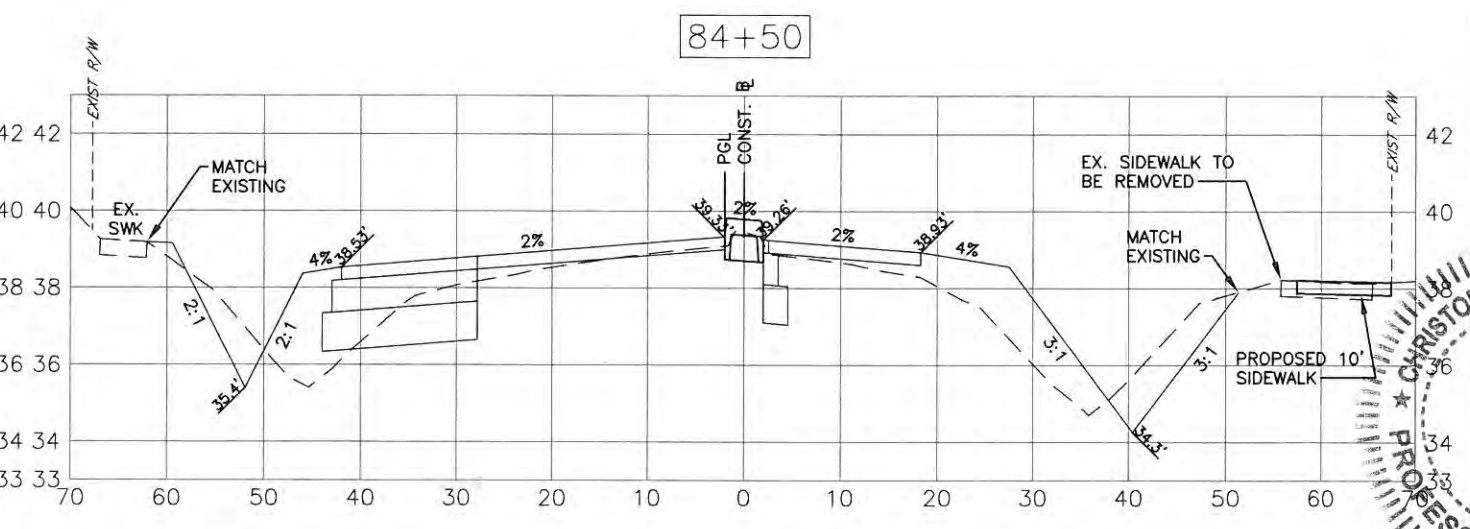
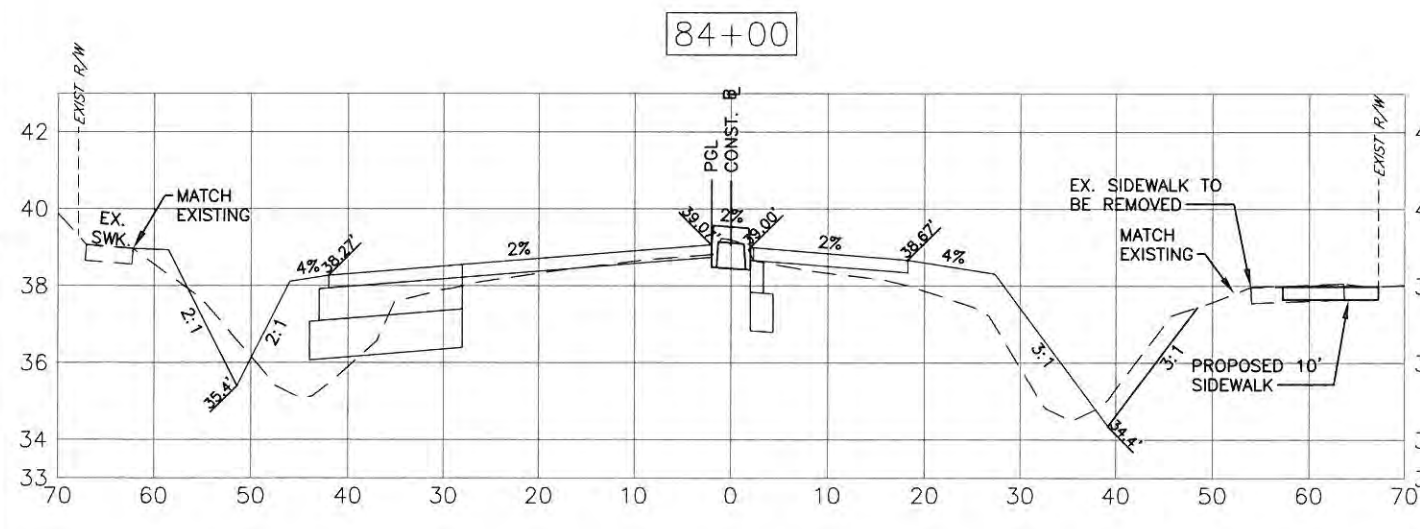
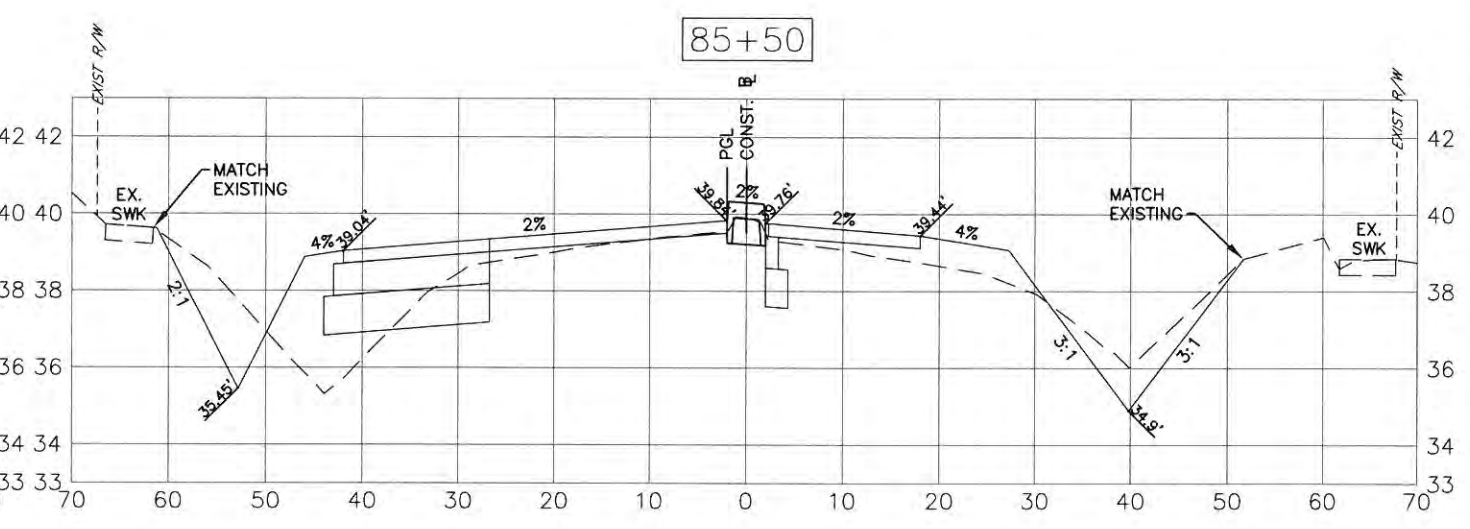
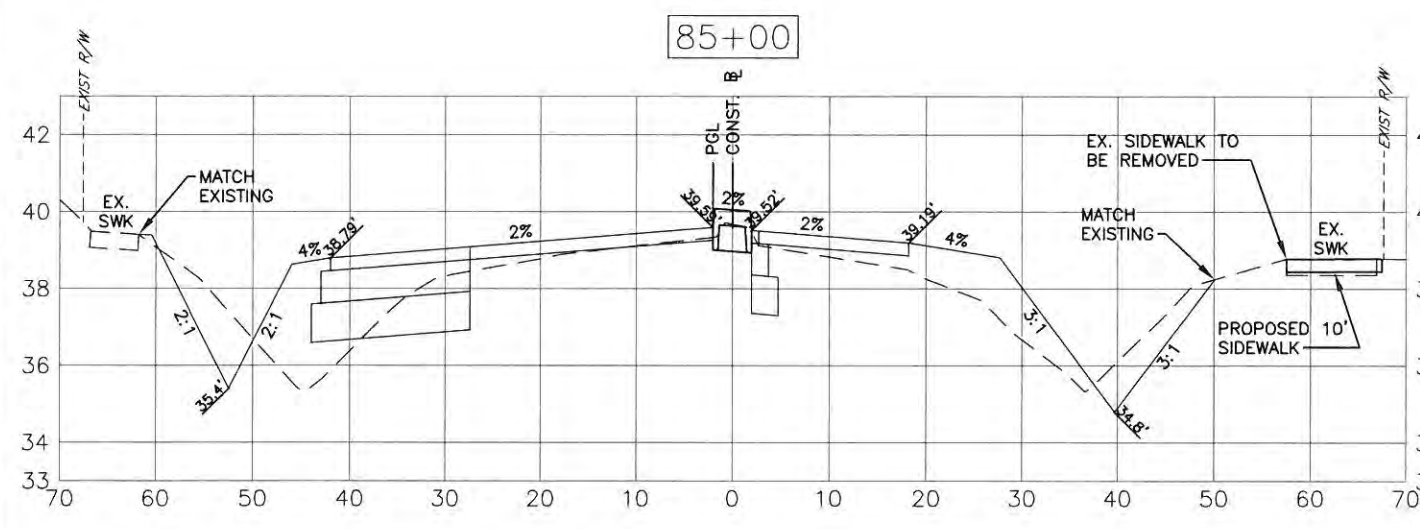
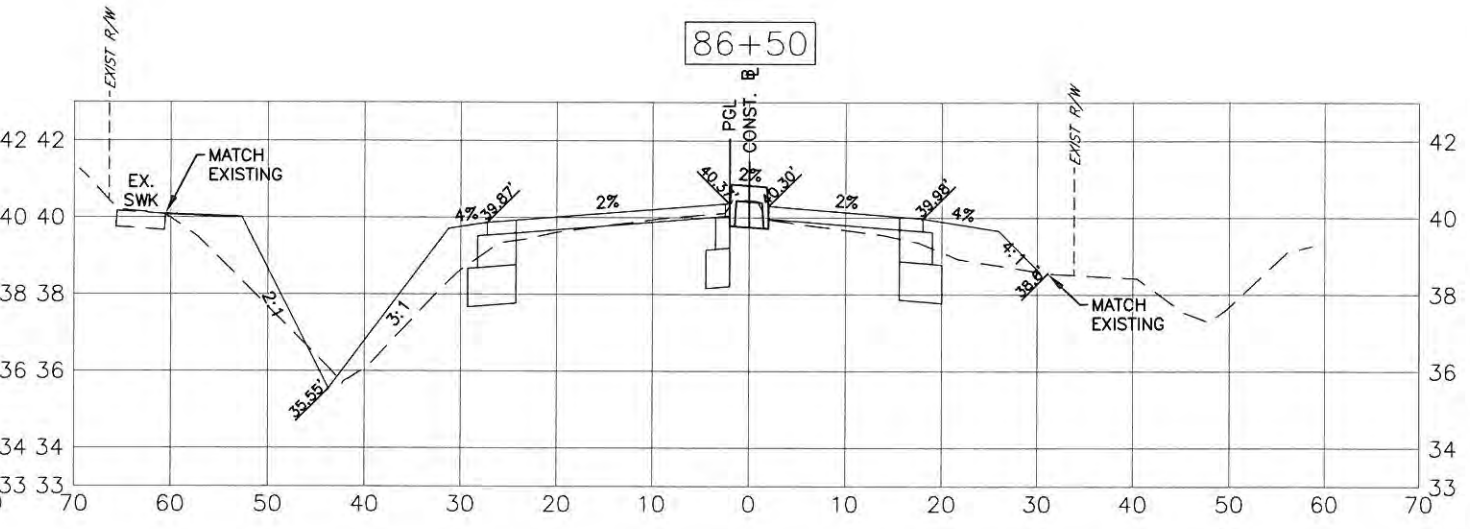
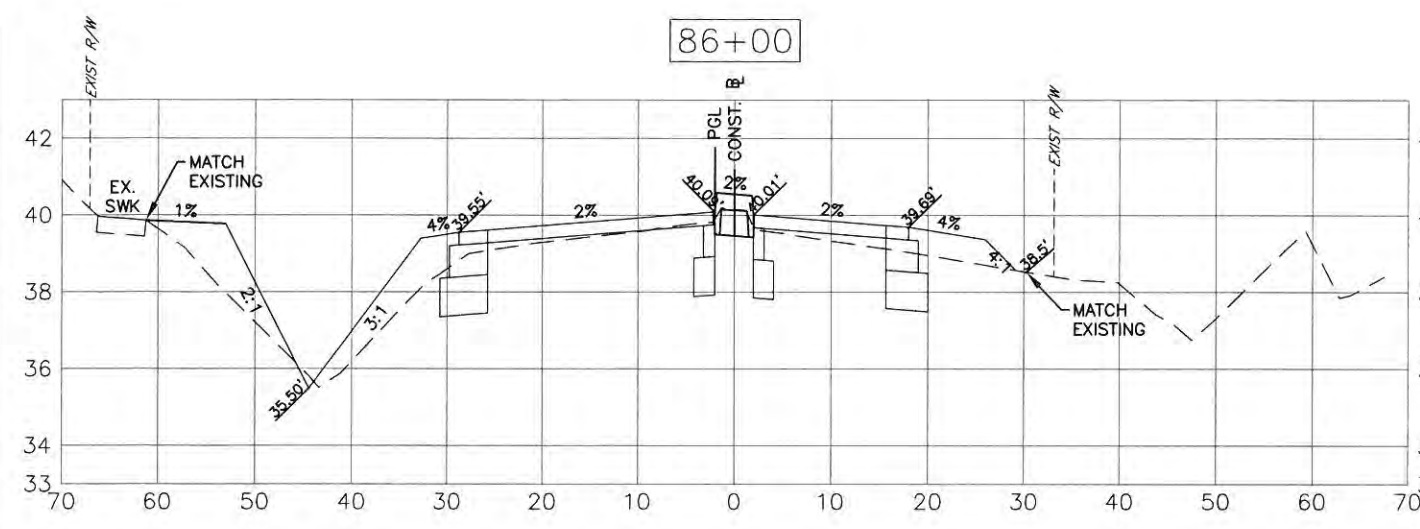
**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 83+00 TO STA 83+50**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
CHECKED	JP/GB 09/20/14
DRAWN	TMF 01/11/13
DESIGNED	AAM 01/11/13
SURVEYED	ZNS
BY	DATE
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
Signature & Date	

FORT HAMMER ROAD PHASE II US
301 TO FUTURE FORT HAMMER
BRIDGE
CROSS SECTIONS
STA 84+00 TO STA 86+50



s:\pwworking\storehighway\engineering\roads\fort_hammer\road\DWG\PHASE II CROSS SECTIONS STA 84+00 TO STA 86+50.dwg, 11/11/14

NO.	REVISION DESCRIPTION	DATE

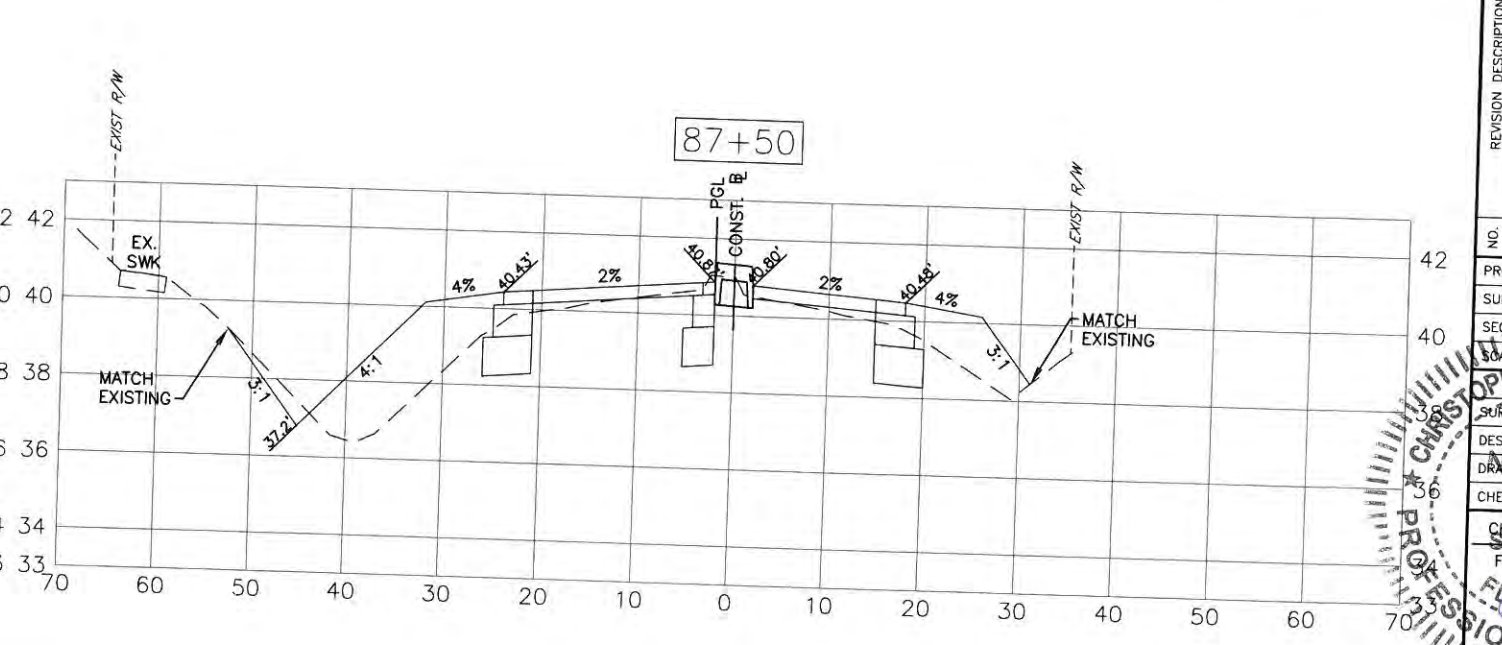
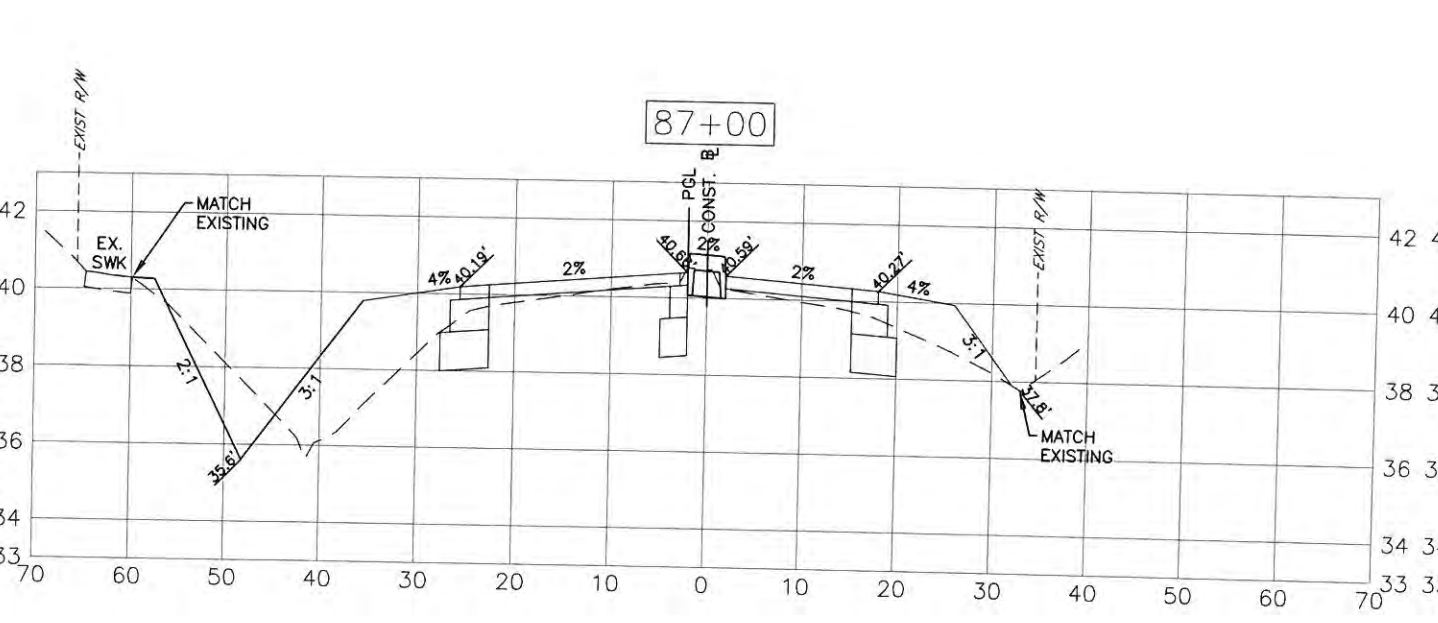
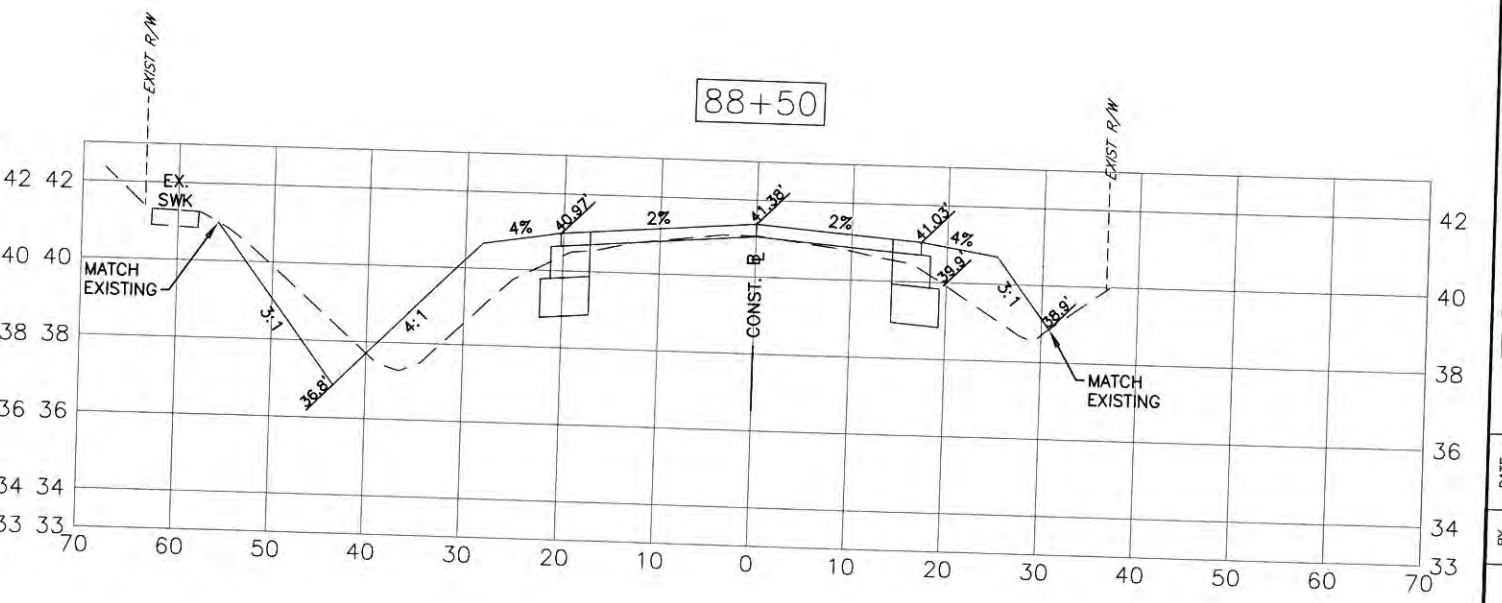
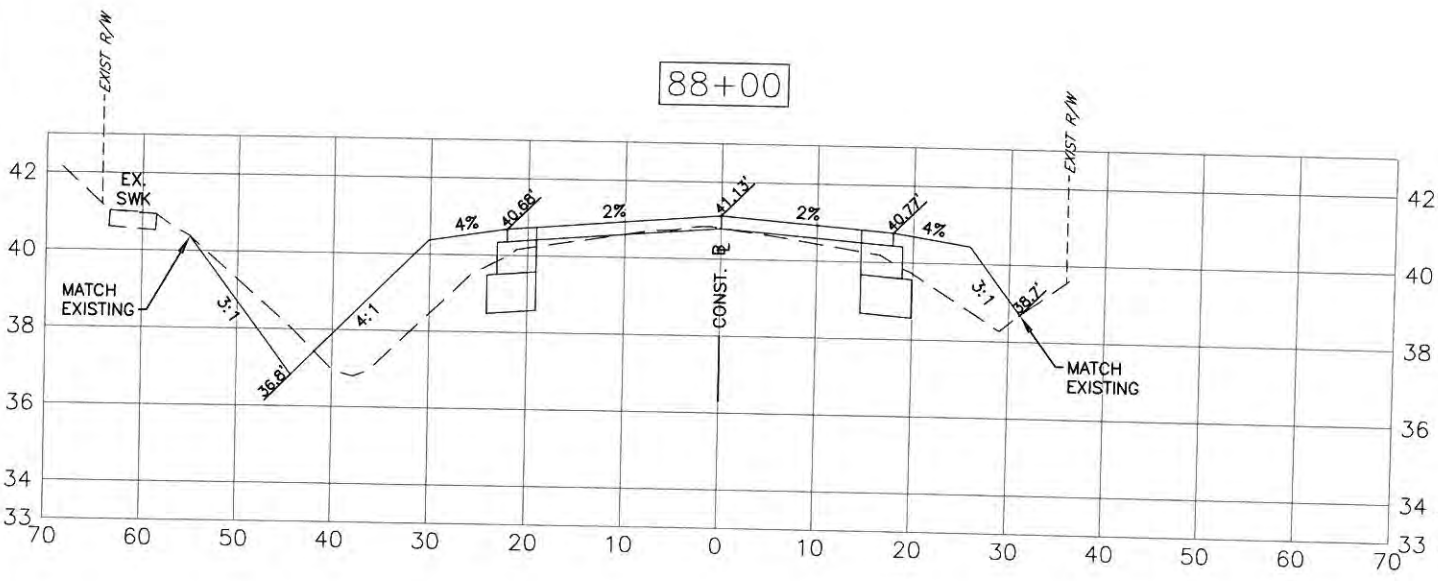
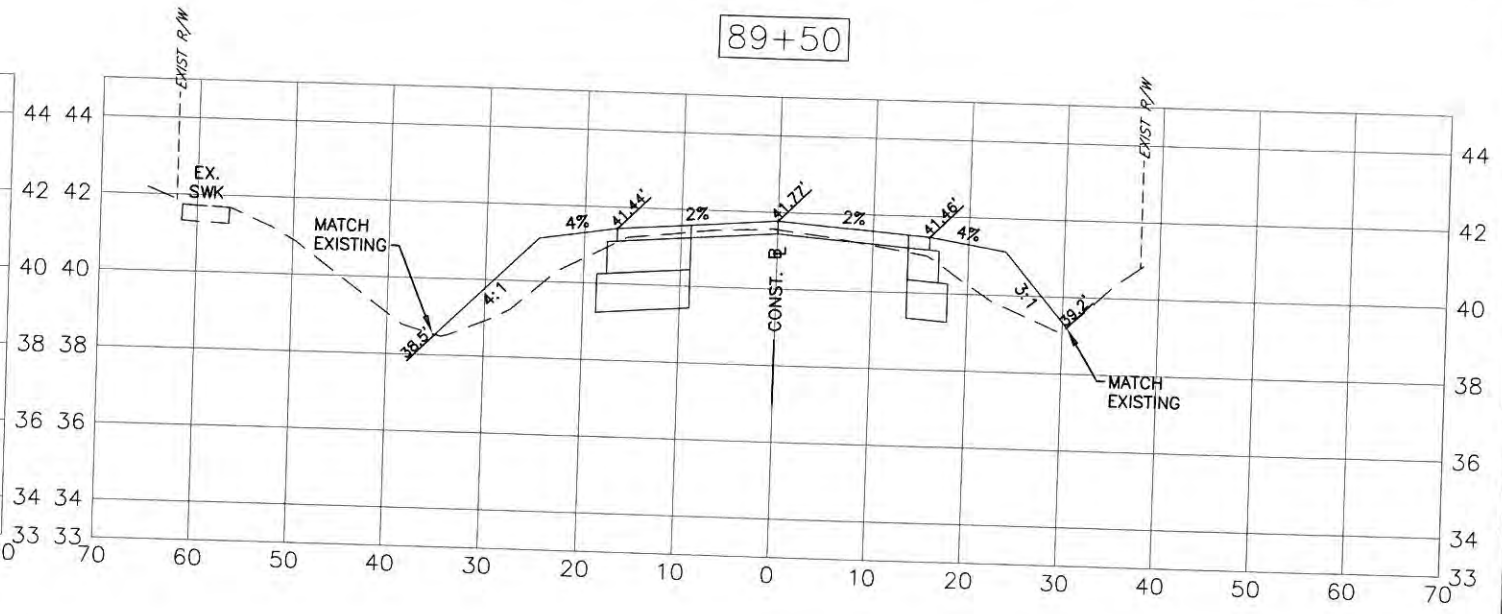
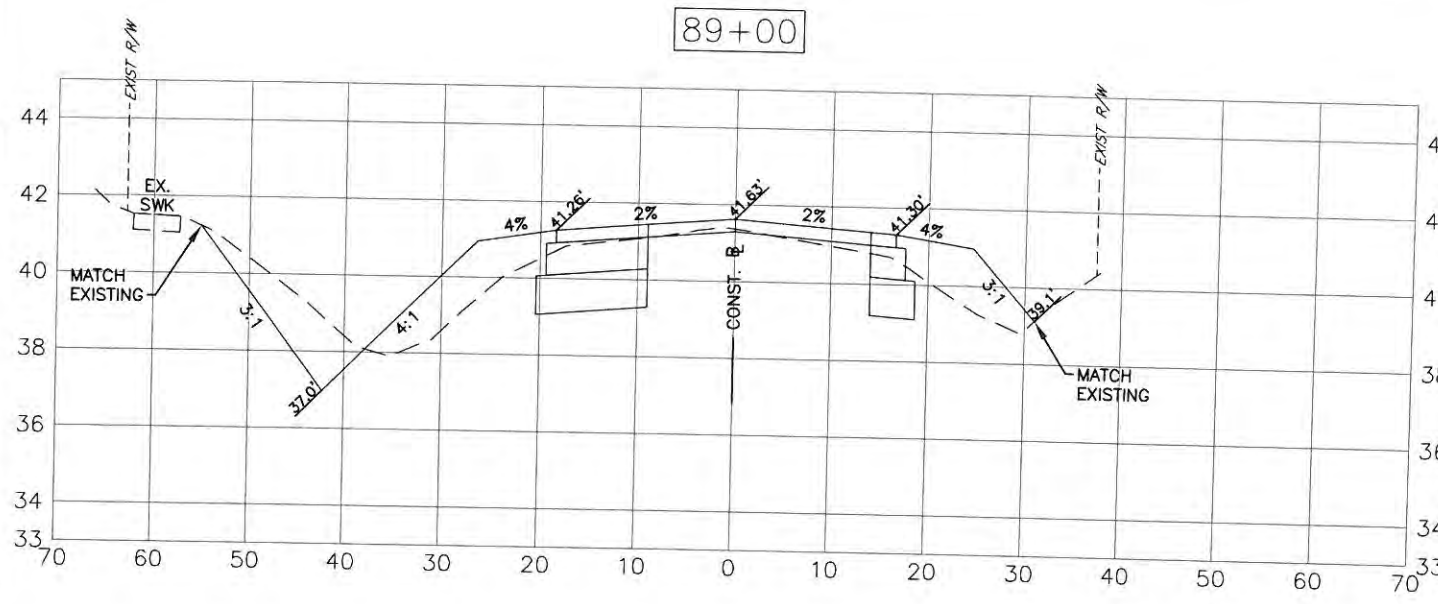
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
DESIGNED BY	ZNS
DESIGNED DATE	01/11/13
DRAWN BY	TMF
DRAWN DATE	01/11/13
CHECKED BY	JP/GR
CHECKED DATE	09/20/14
IN CHARGE	CHRISTOPHER Z. WIMBRY, P.E.
FLORIDA P.E. #	46777

STATE OF FLORIDA
PROFESSIONAL ENGINEER
Signature & Date



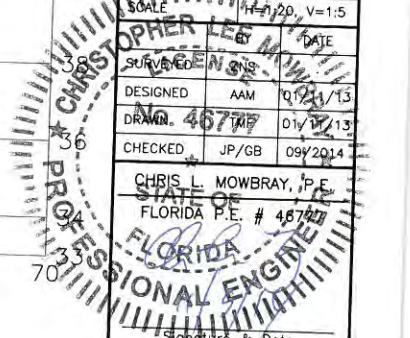
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**FORT HAMER ROAD PHASE II US
BRIDGE
301 TO FUTURE FORT HAMER
CROSS SECTIONS
STA 87+00 TO STA 89+50**



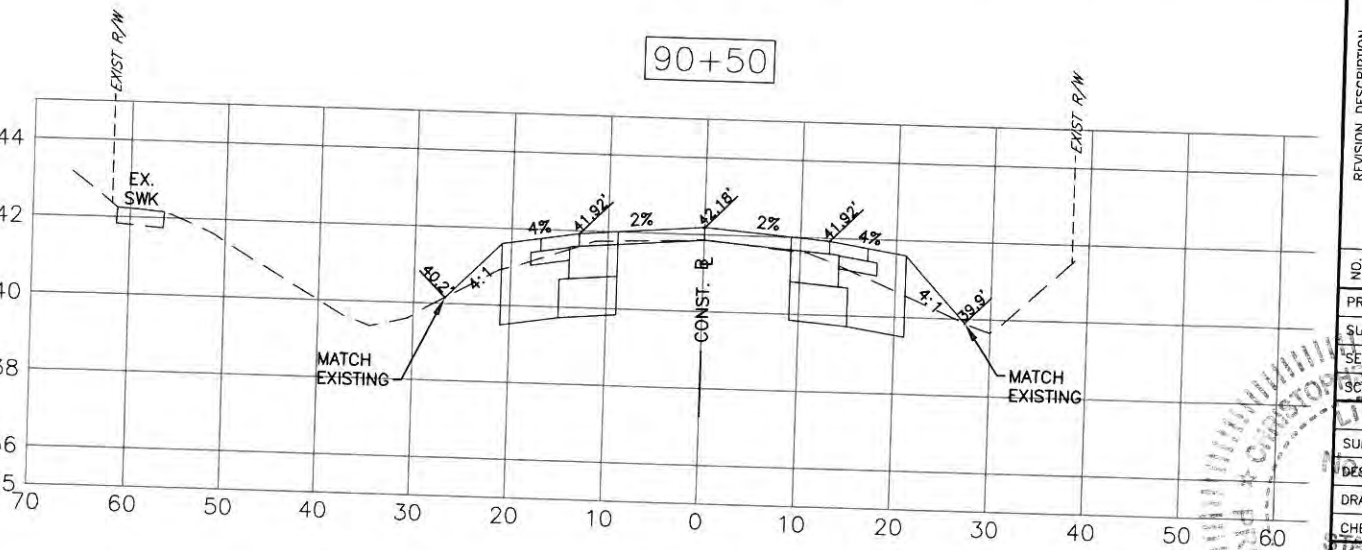
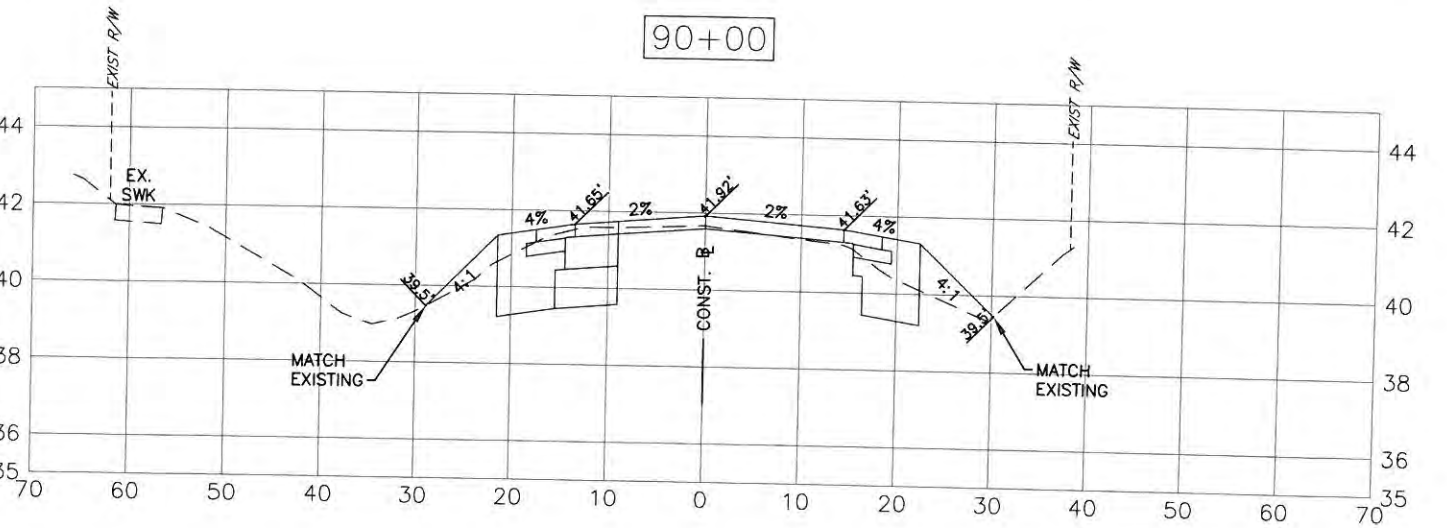
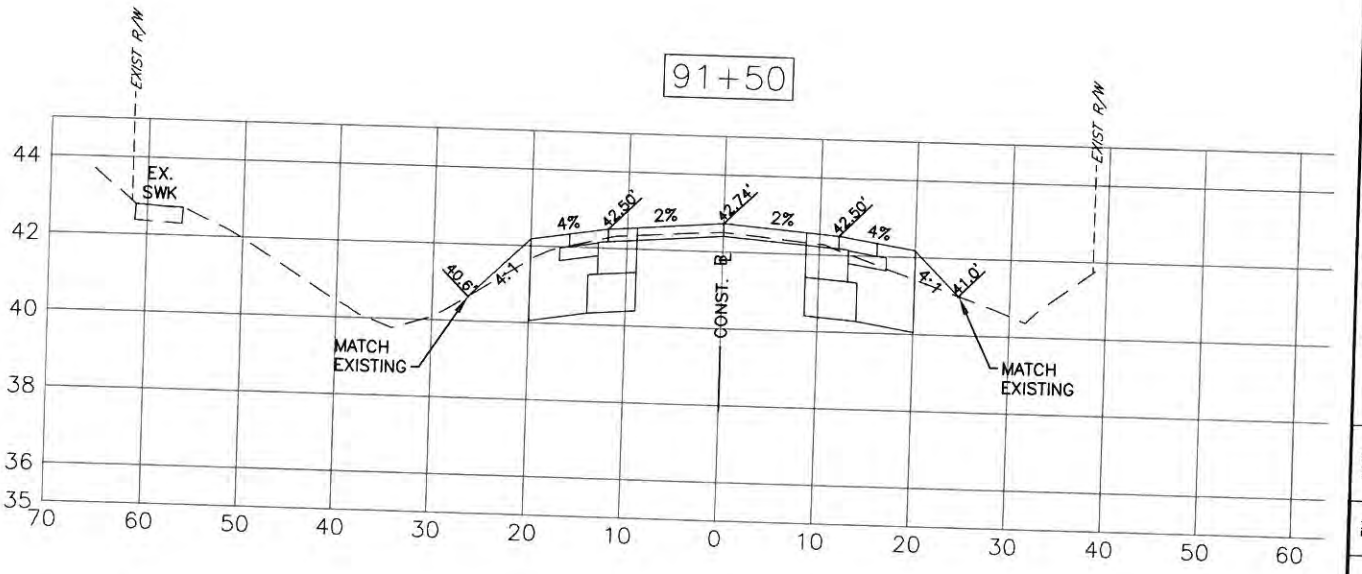
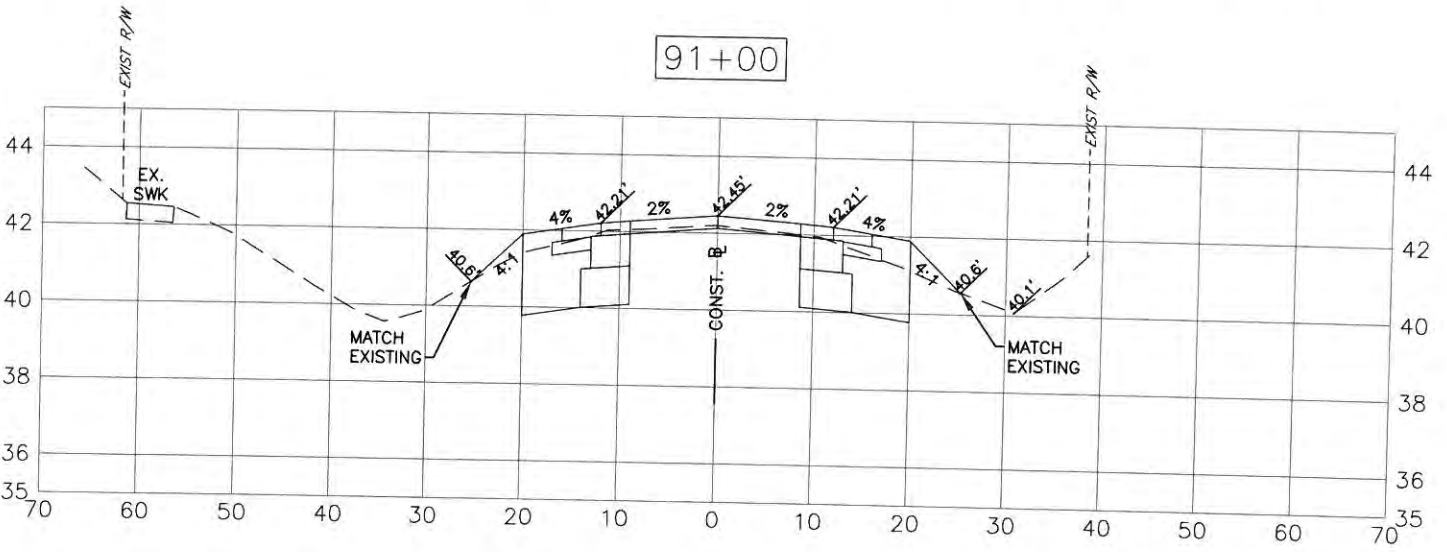
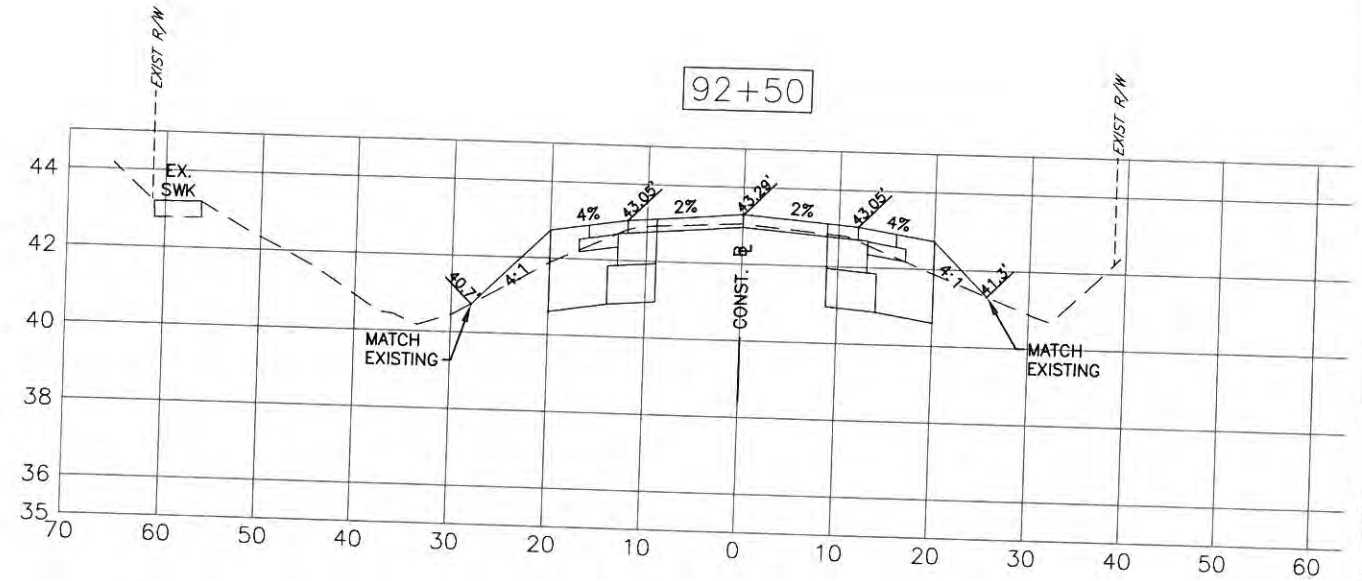
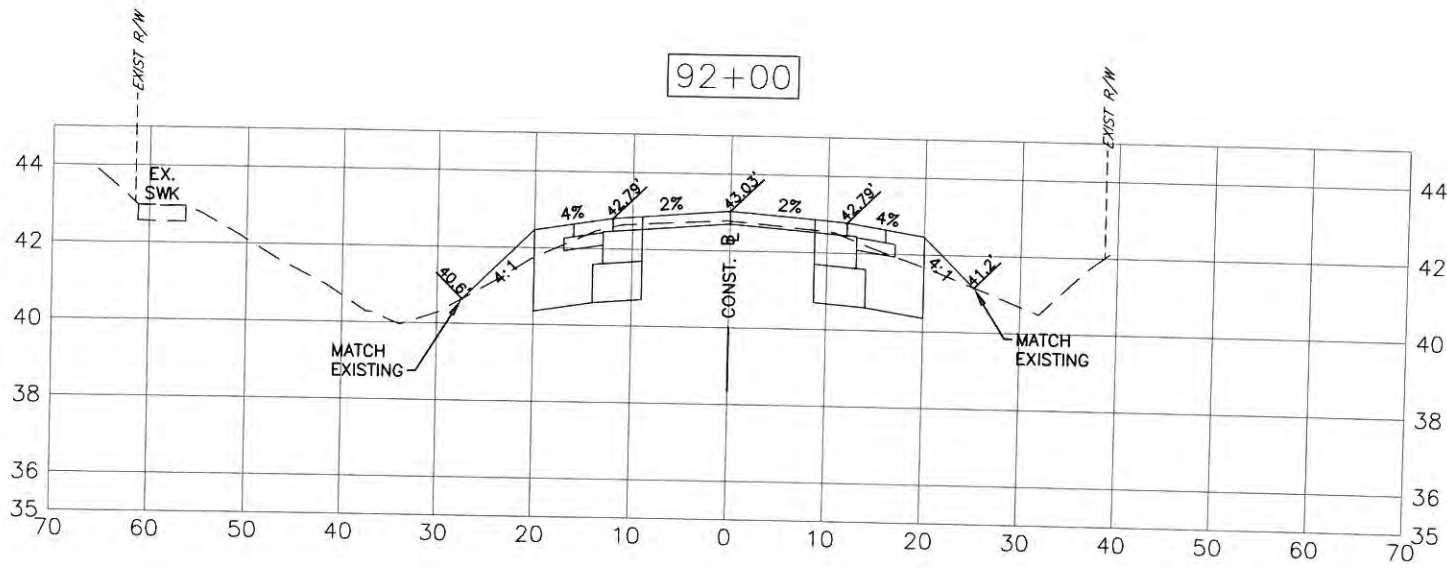
NO.	DATE	BY	REVISION DESCRIPTION

PROJECT # 323-6054764
 SURVEY # 5303
 SEC./TWN./RGE 7/35S/18E
 SCALE H=1/20, V=1:5
 SURVEYED IN 8/13
 DESIGNED AAM 01/21/13
 DRAWN 407/TJP 01/21/13
 CHECKED JP/GB 09/20/14
 CHRIS L. MOWBRAY, P.E.
 FLORIDA P.E. # 46720
 Signature & Date



I:\Work\engineering\share\highway\engineering\ROADS\Fort Hamer\89+00\89+00.dwg, XSEC, 11/9/2012 3:40 PM Thom Forrester, 11, 11x17

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 90+00 TO STA 92+50**

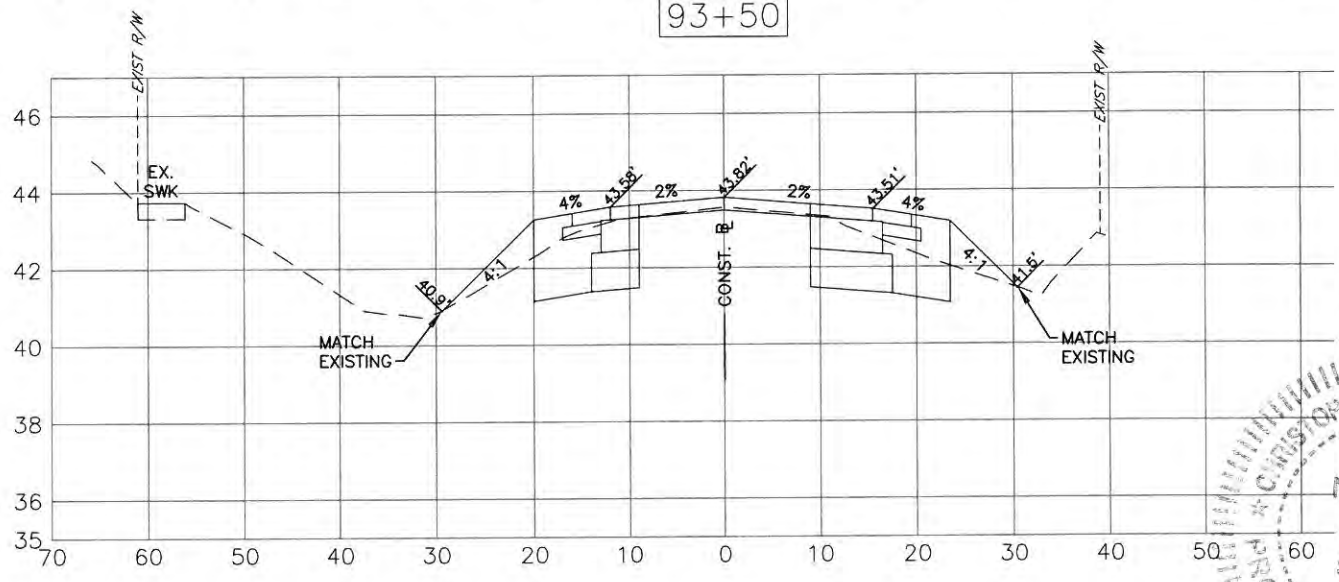
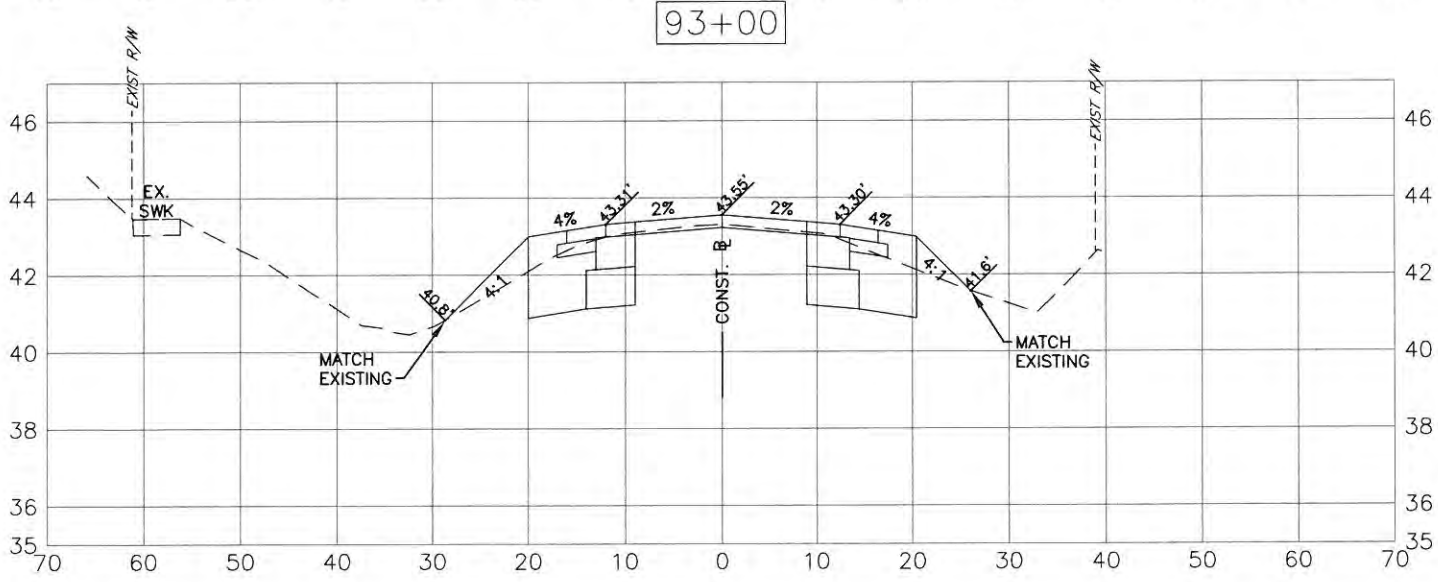
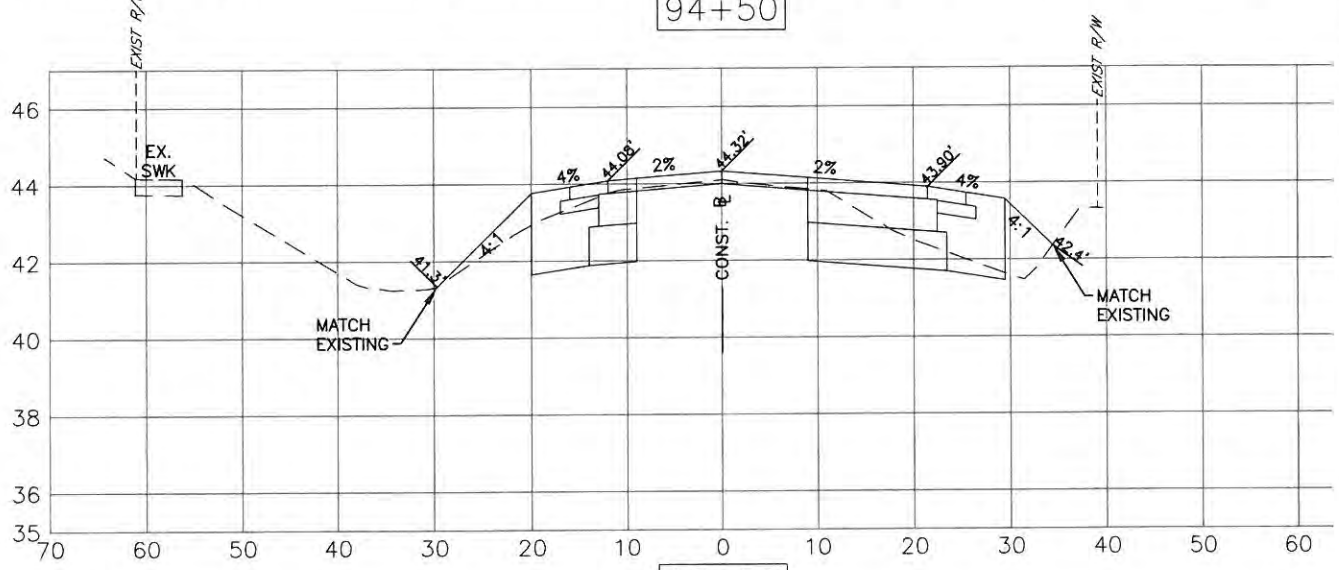
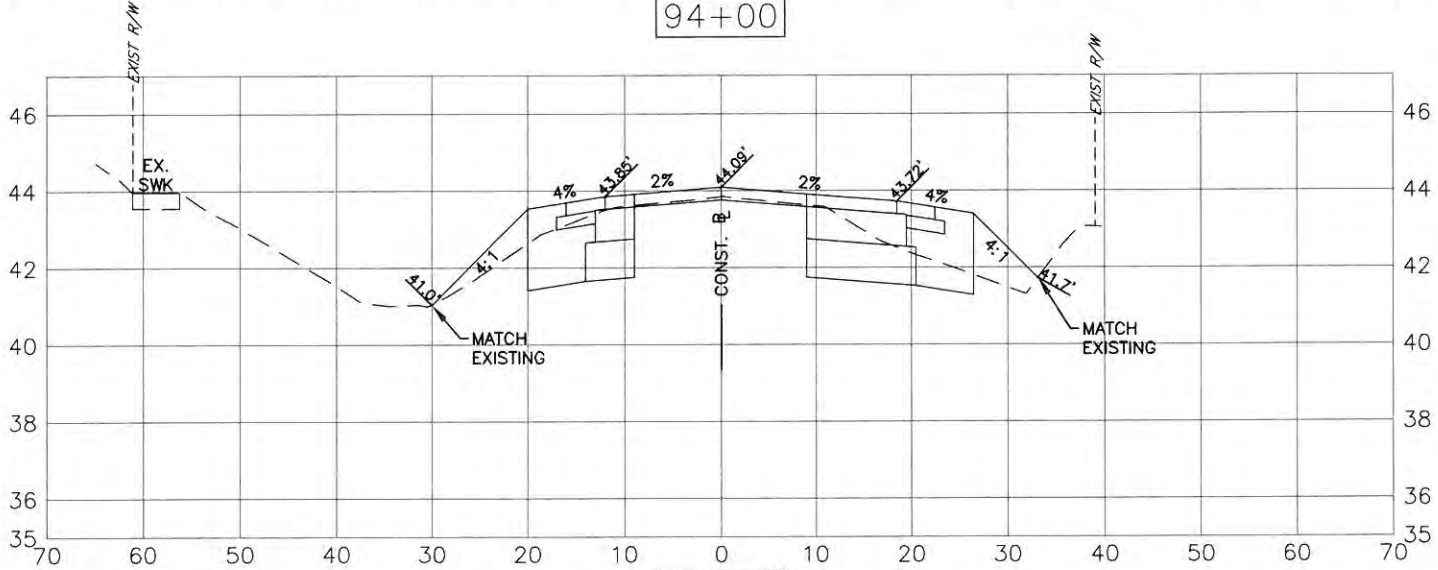
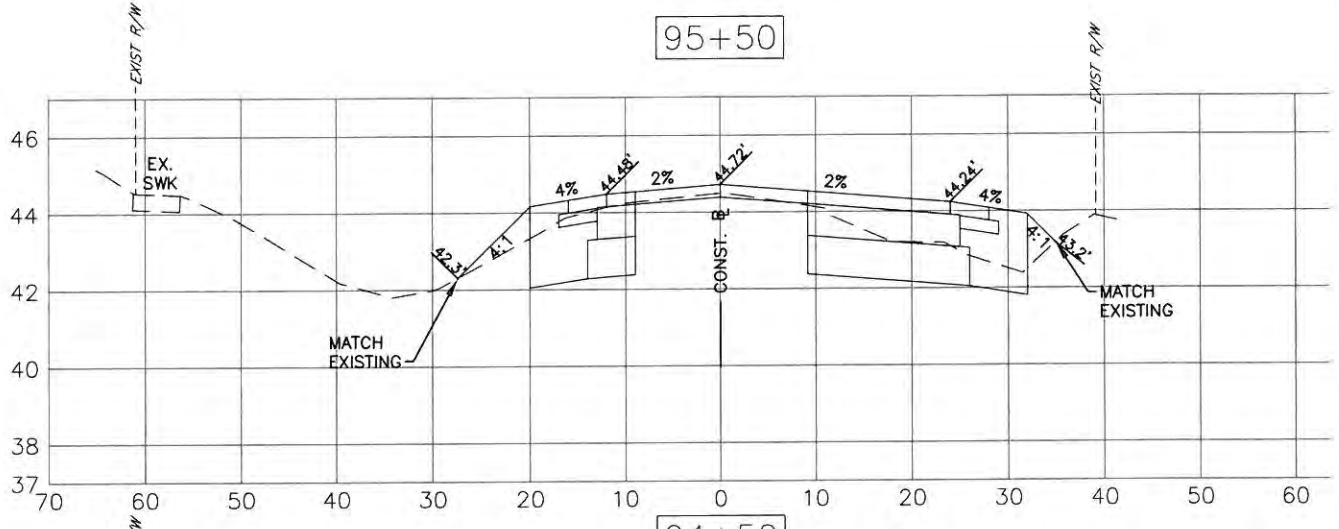
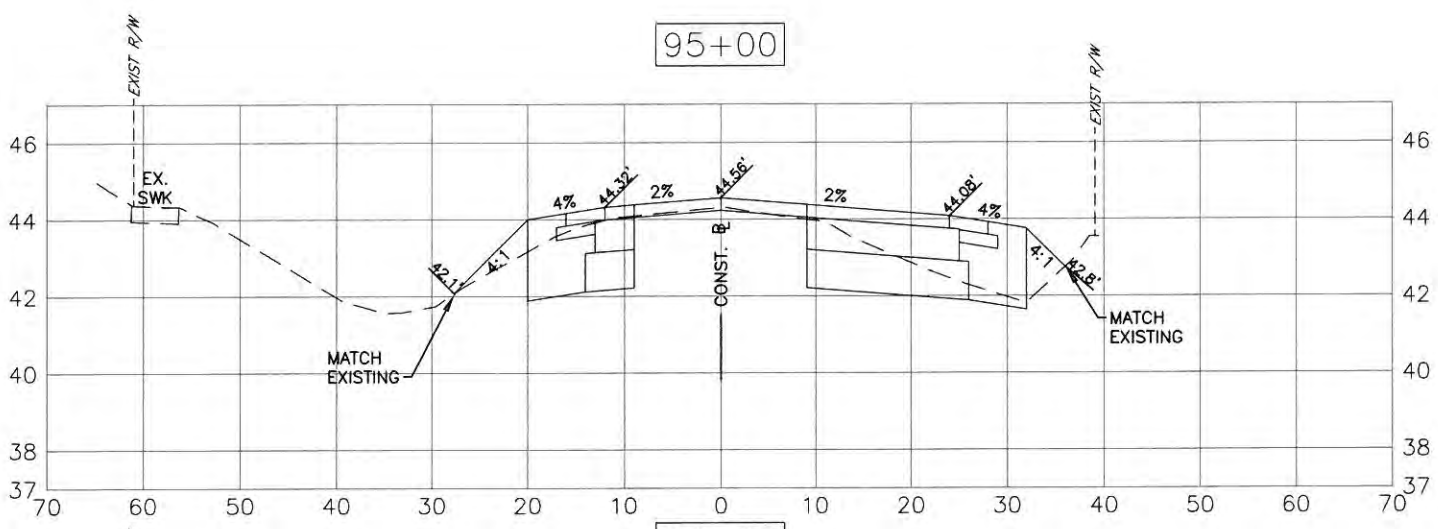


NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE.	7/35S/18E
SCALE	H=1/20, V=1/5
DESIGNED BY	DATE
SURVEYED	ZNS
DESIGNED	77AAM 01/11/13
DRAWN	TMF 03/11/13
CHECKED	JP/GB 09/20/14
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46727	
Signature & Date	

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**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 93+00 TO STA 95+50**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	1"=20', V=1:5
DESIGNED BY	ZNS
DESIGNED DATE	01/17/13
DRAWN	TMF
DRAWN DATE	01/17/13
CHECKED	JP/GB
CHECKED DATE	09/20/14

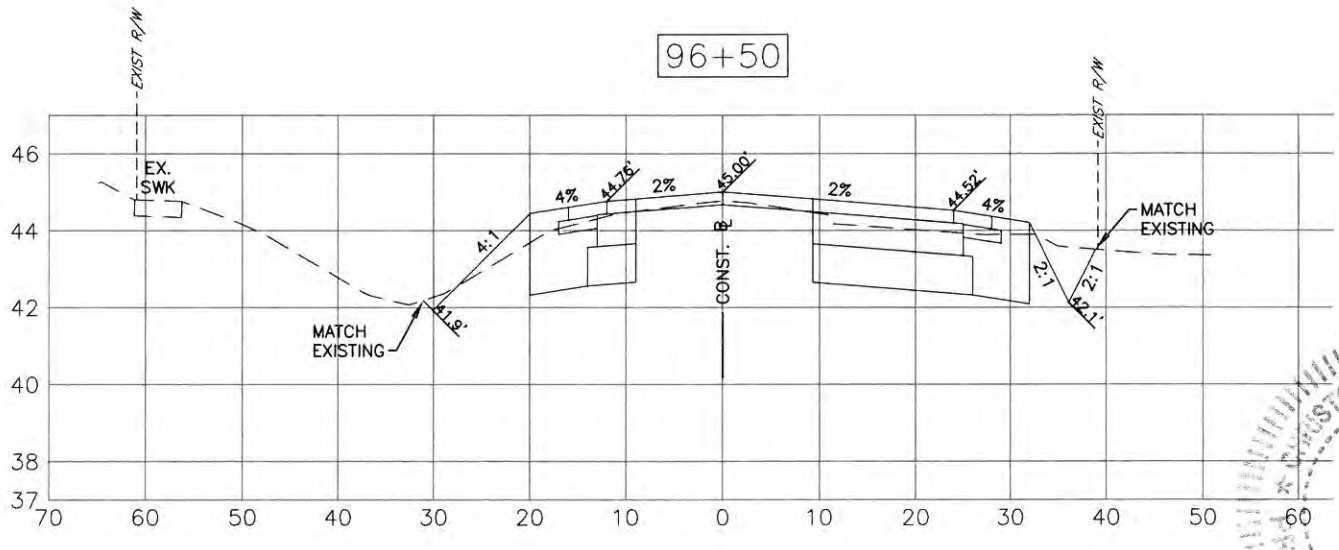
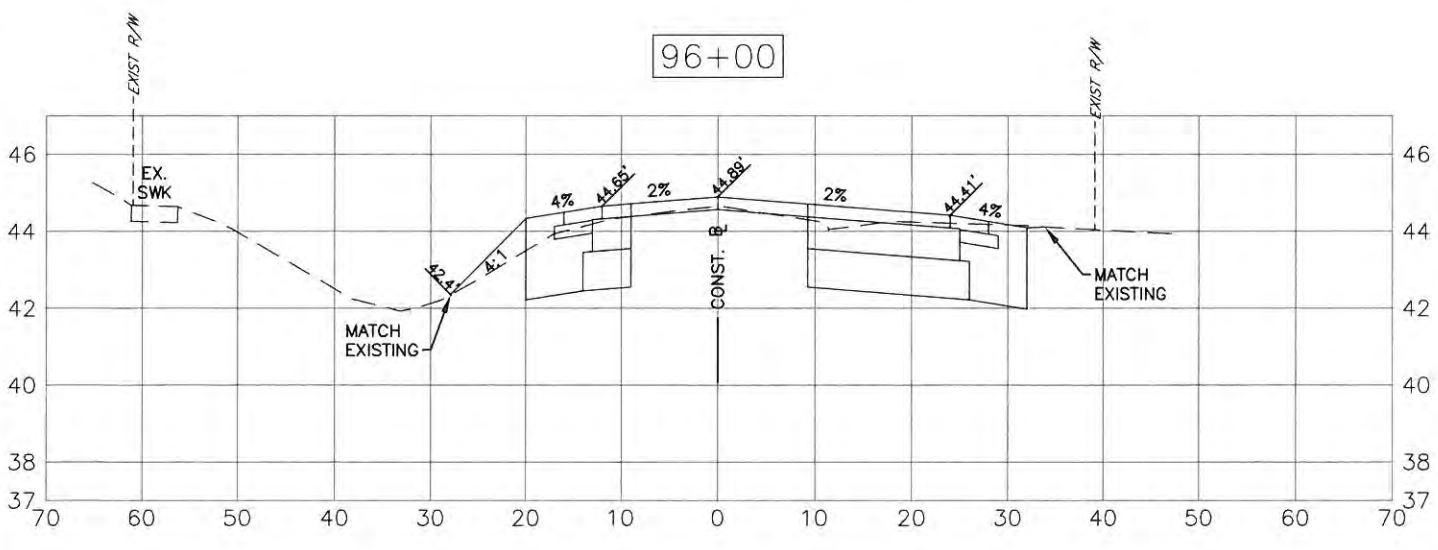
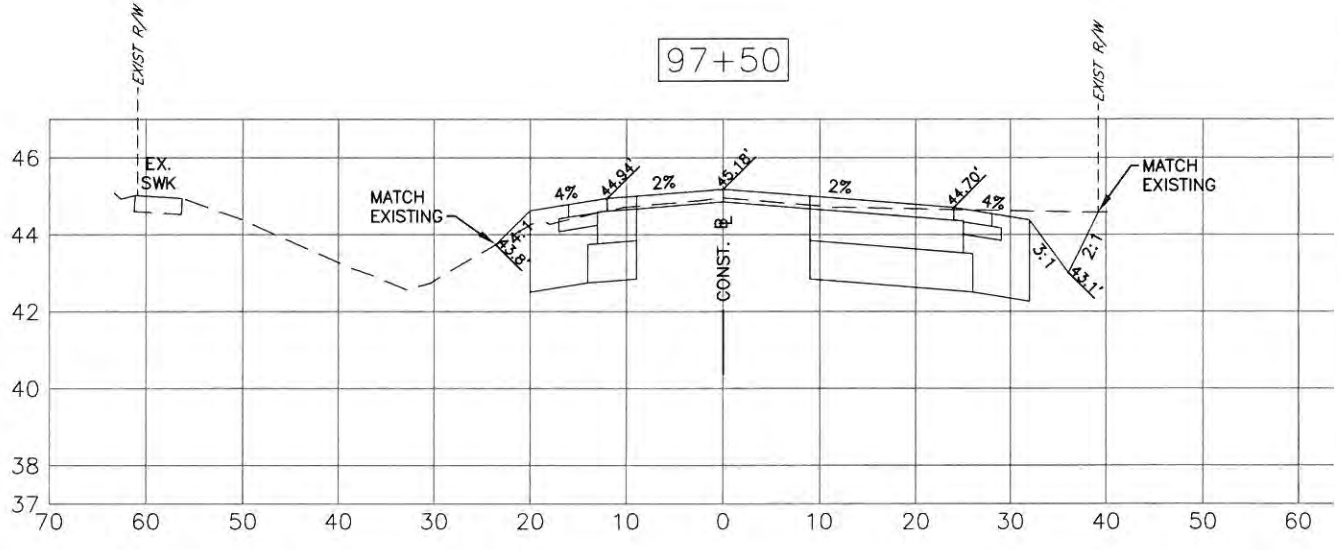
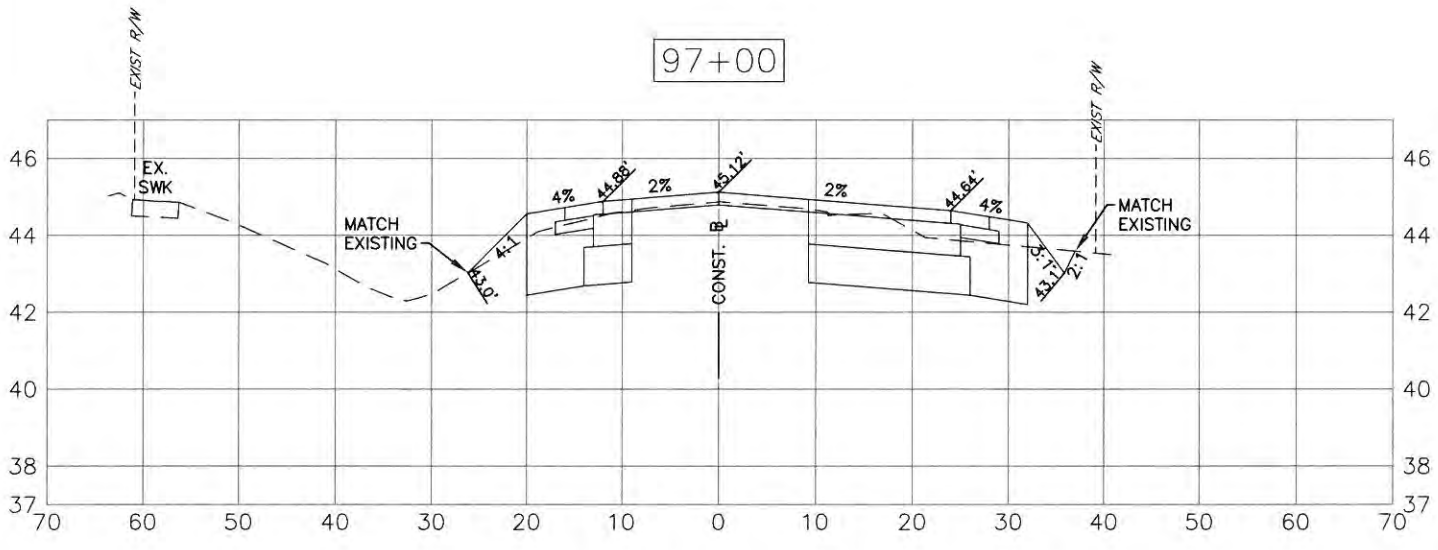
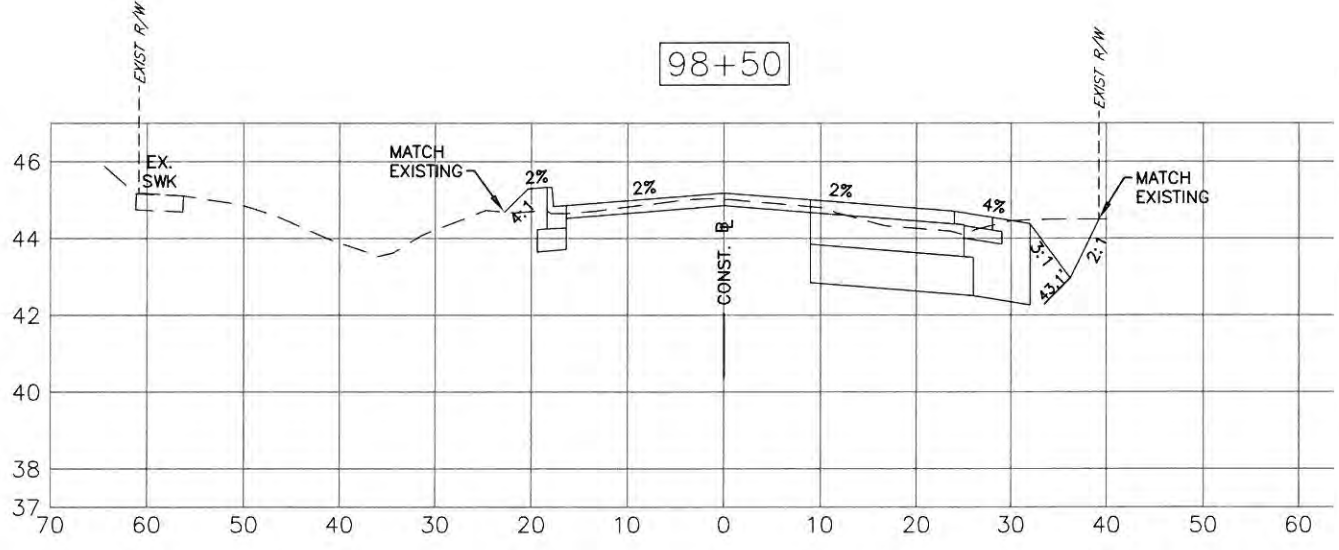
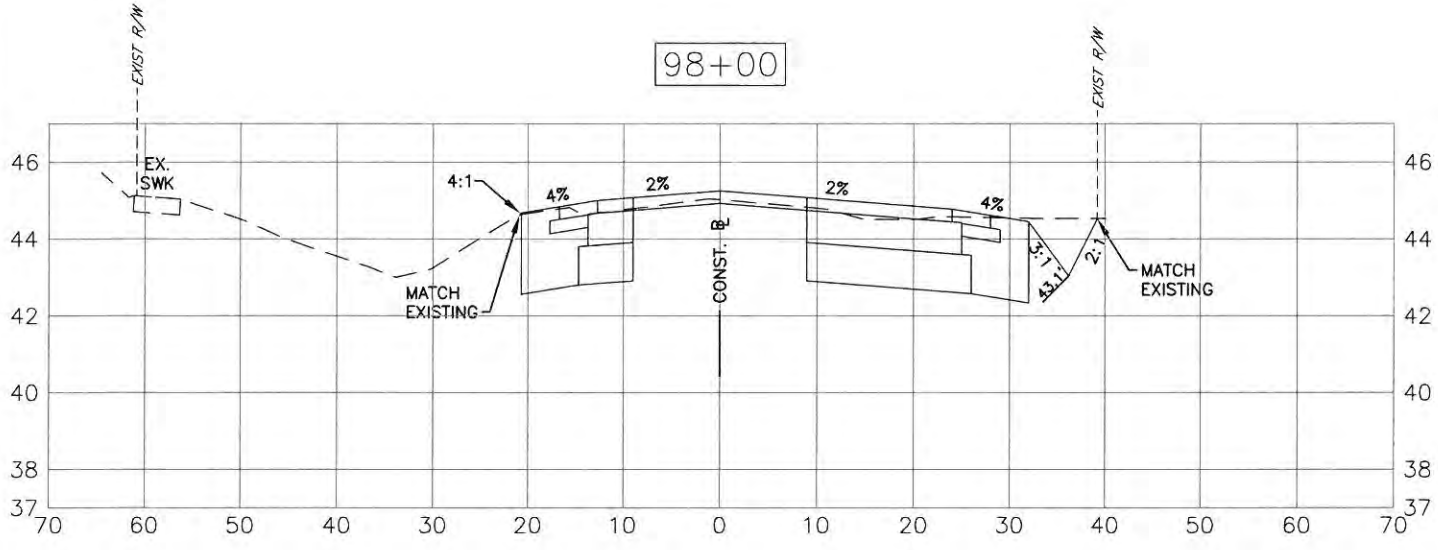
STATUS: **CHRIS MOWBRAY, P.E.**
 FLORIDA P.E. # 46777
 Signature & Date
SHEET 64

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PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 96+00 TO STA 98+50**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE.	7/35S/18E
SCALE	H=1:20, V=1:5
BY	DATE
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	JMF 01/11/13
CHECKED	JP/GB 09/20/14
CHRIS L. MOWBRAY, P.E.	FLORIDA P.E. # 46777
Signature & Date	

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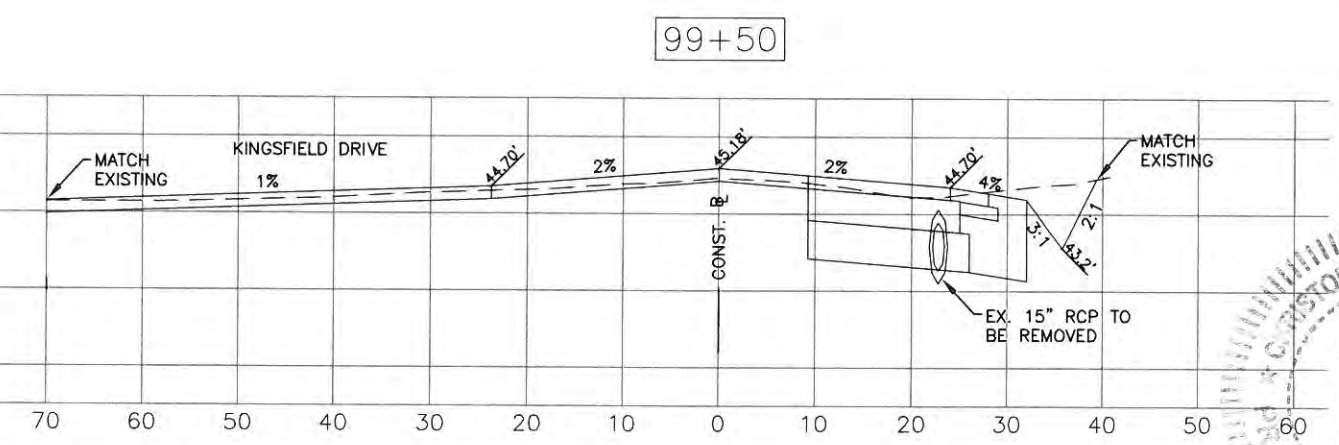
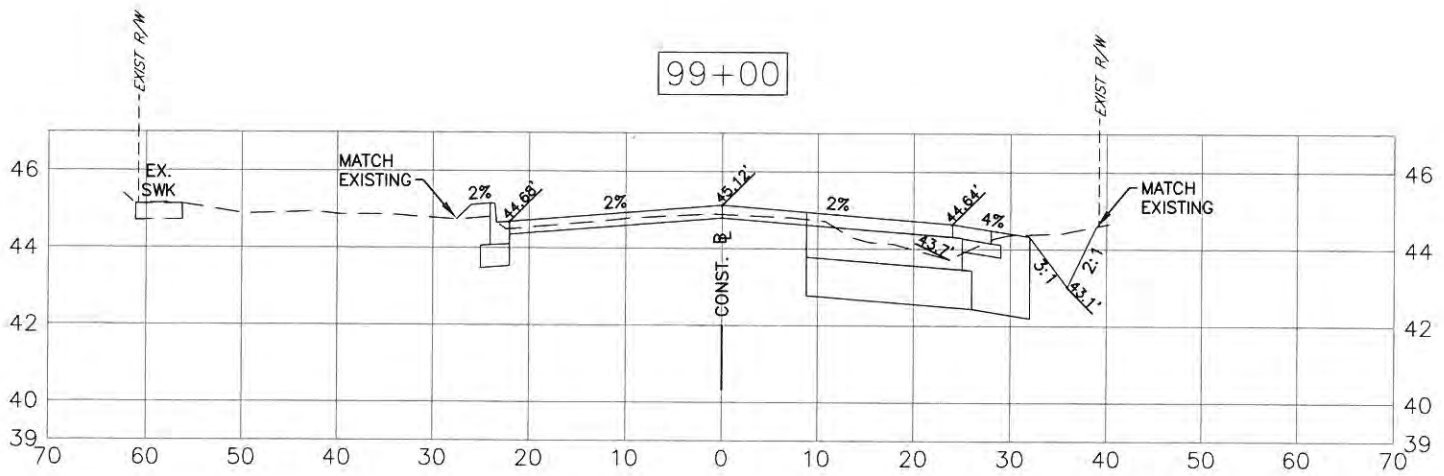
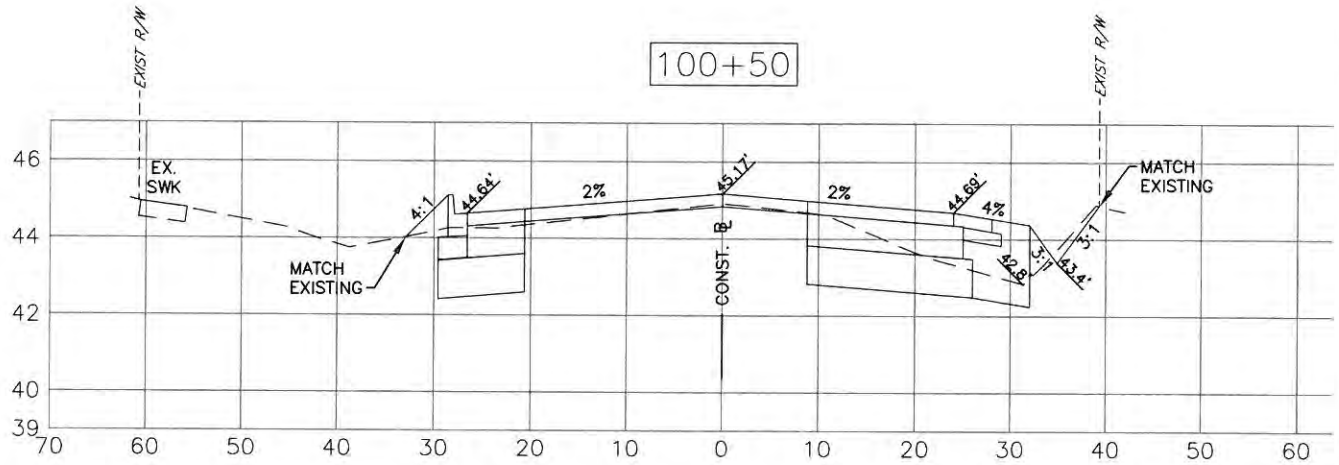
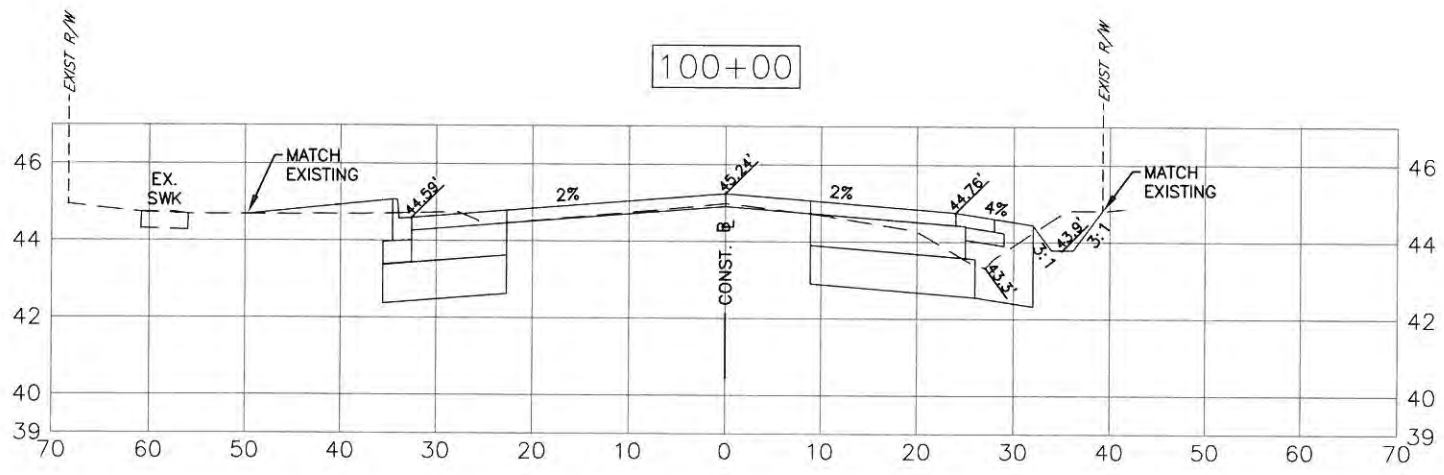
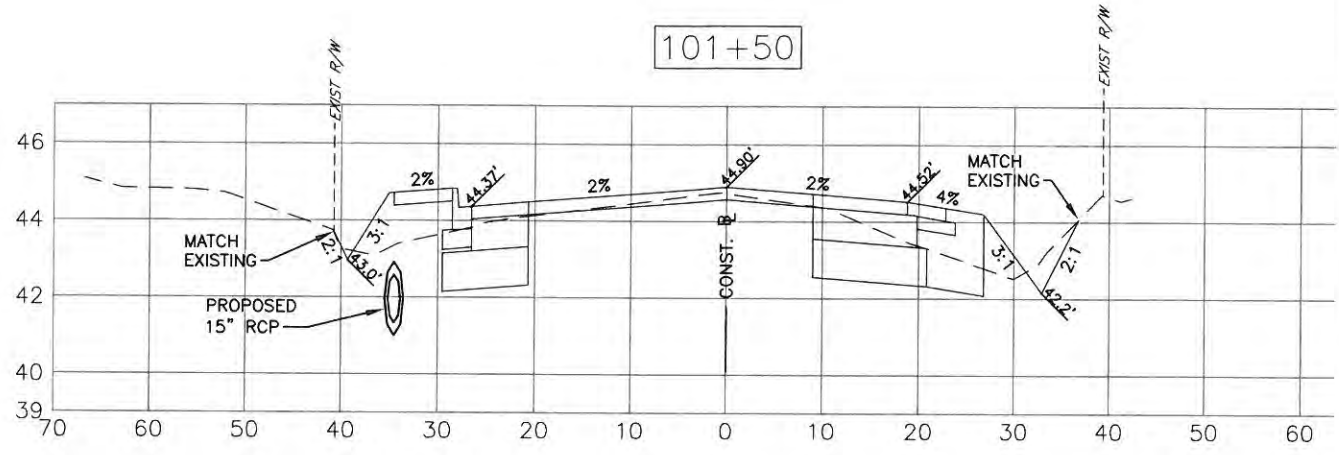
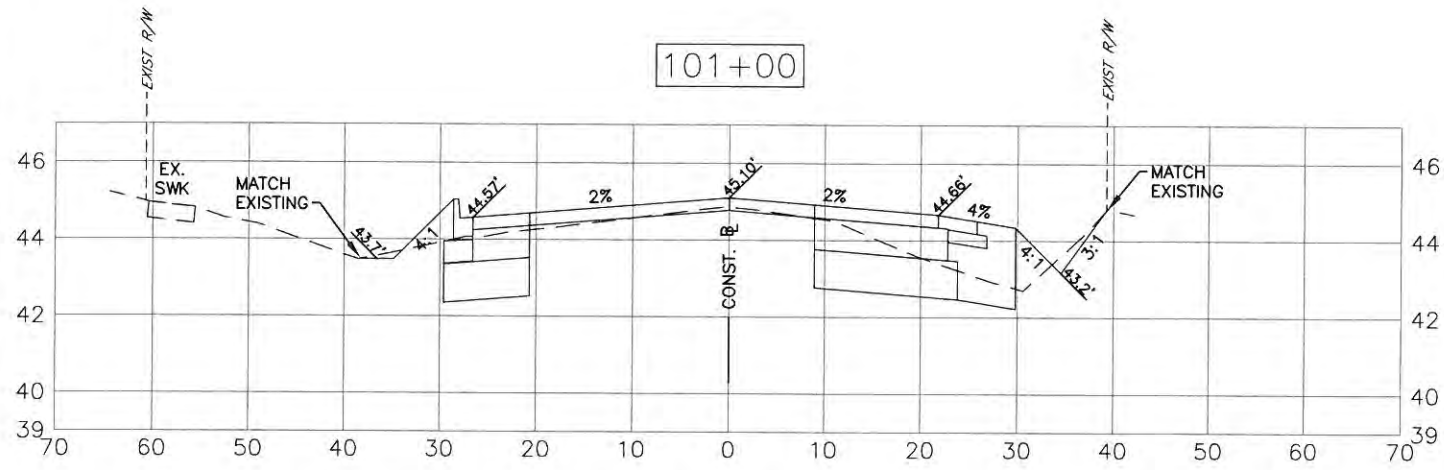
FORT HAMER ROAD PHASE II US

301 TO FUTURE FORT HAMER

BRIDGE

CROSS SECTIONS


STA 99+00 TO STA 101+50



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE.	17/35S/18E
SCALE	H=1/20, V=1/5
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/20/14
DESIGNED	ZNS 01/11/13
SURVEYED	ZNS
BY	DATE
CHRIS L. MOWBRAY, P.E.	

FLORIDA P.E. # 46777

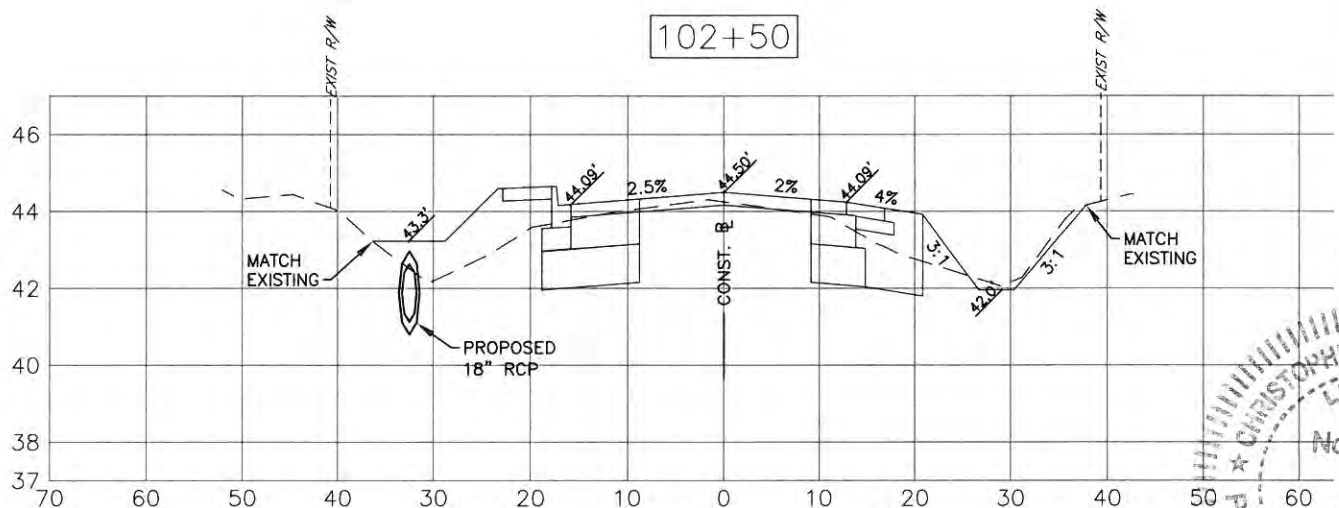
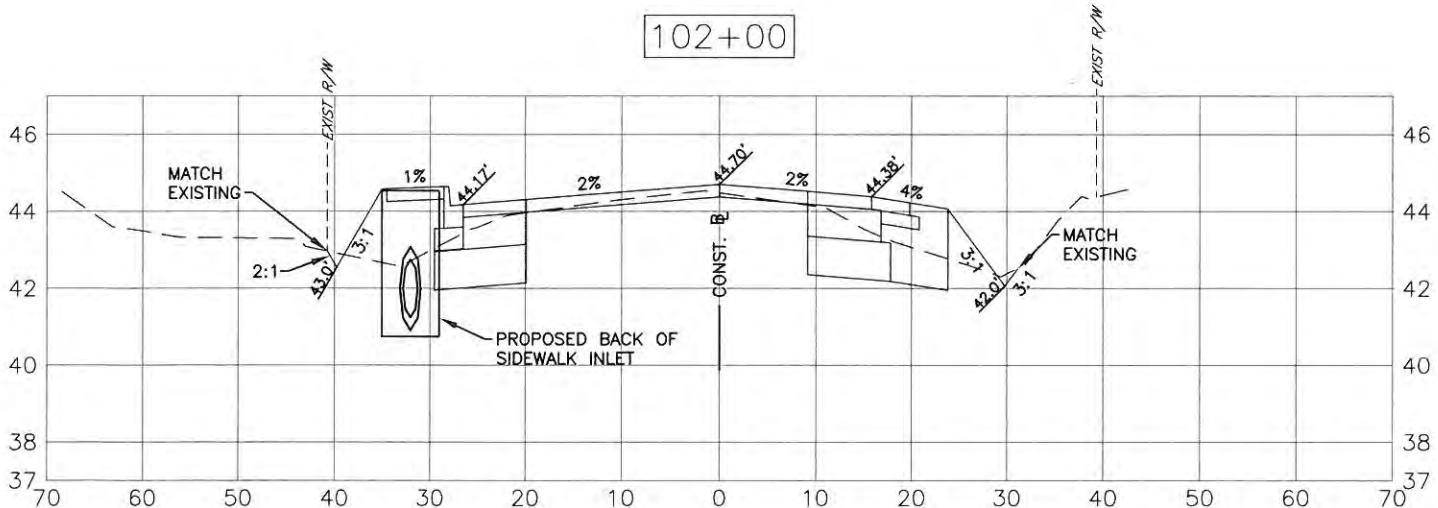
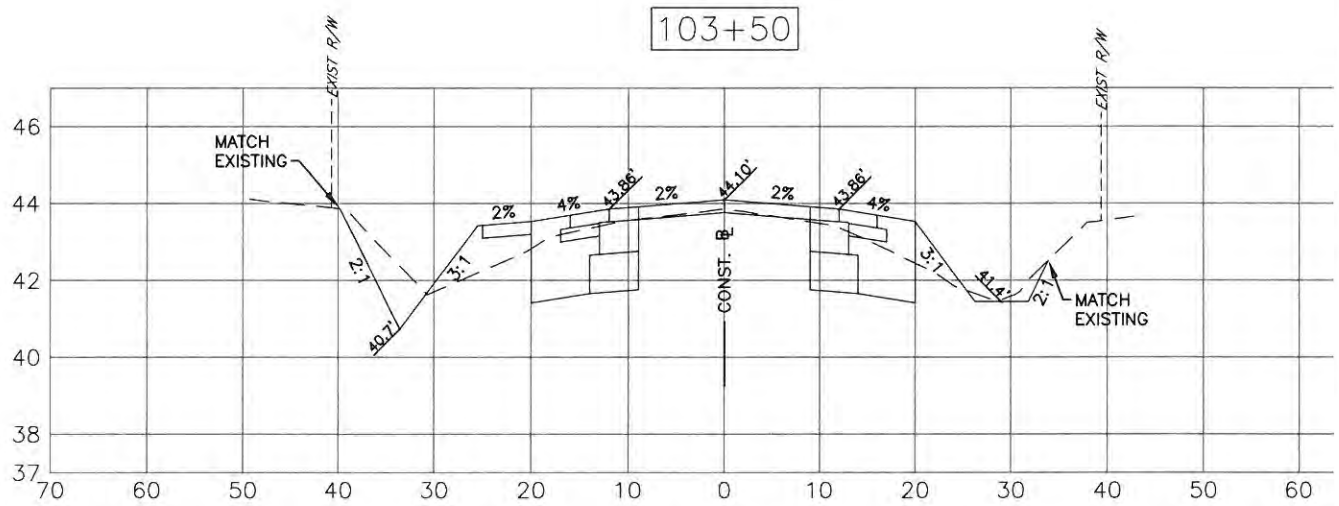
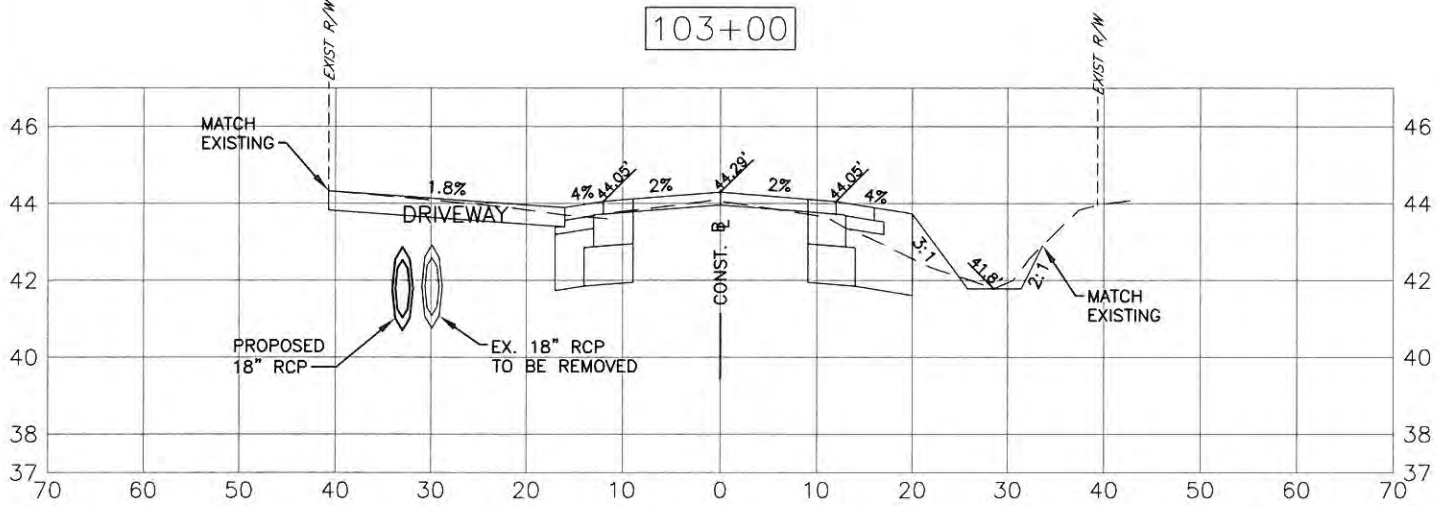
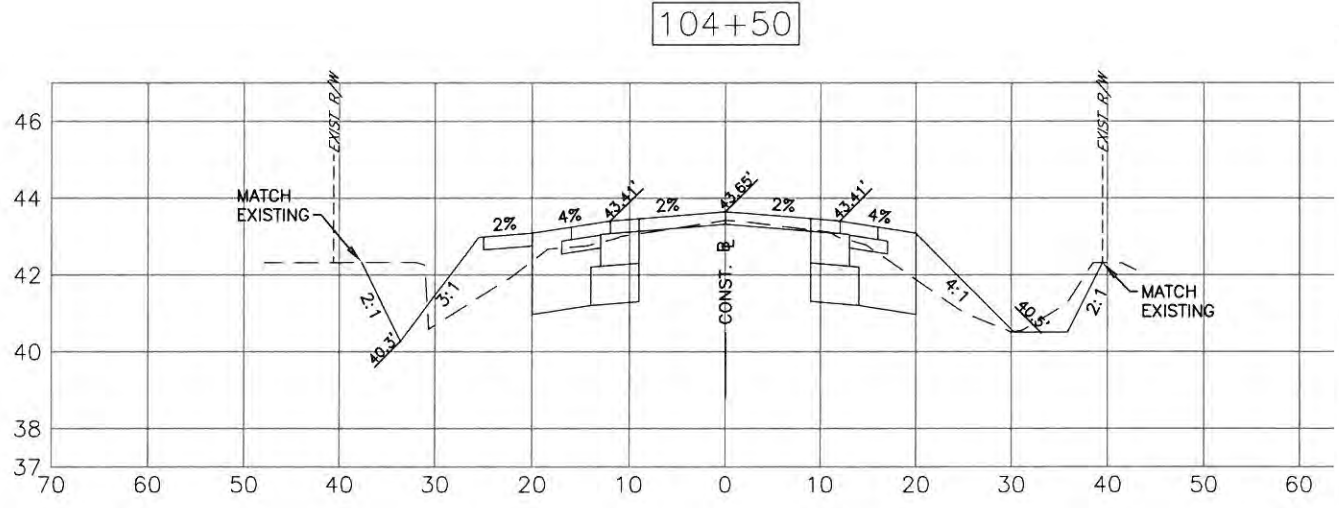
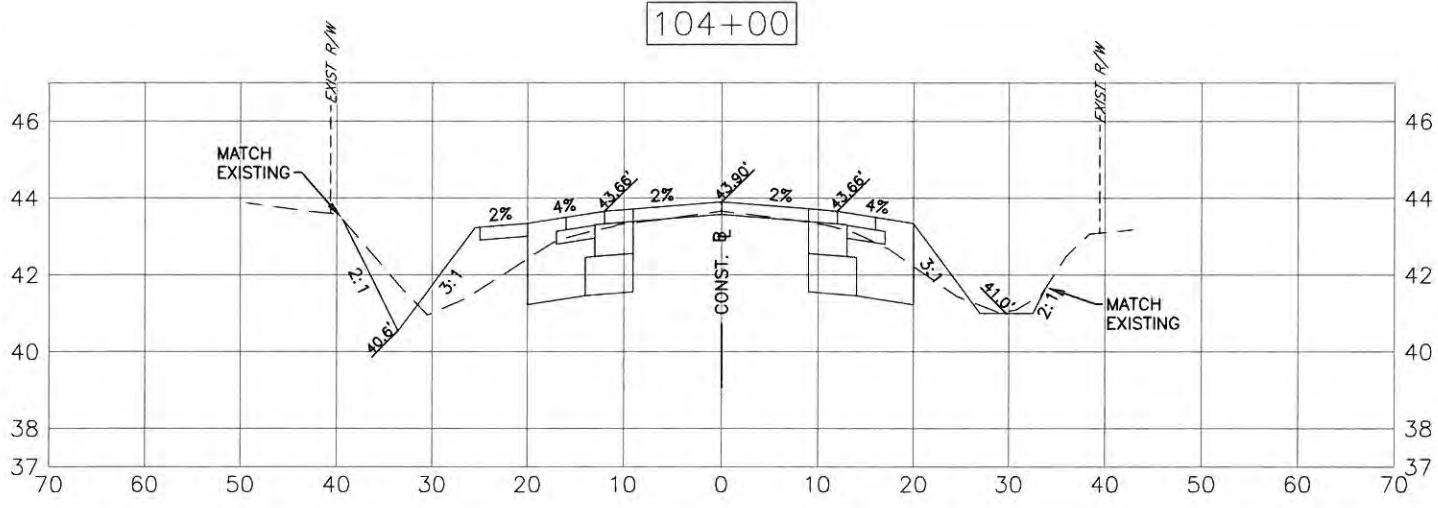


 11/5/14

 Signature & Date

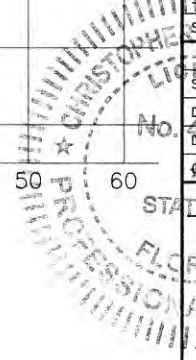
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**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 102+00 TO STA 104+50**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
SURVEYED	ZMS
DESIGNED	AAM 04/11/13
DRAWN	TWF 07/11/13
CHECKED	JP/GB 09/20/14



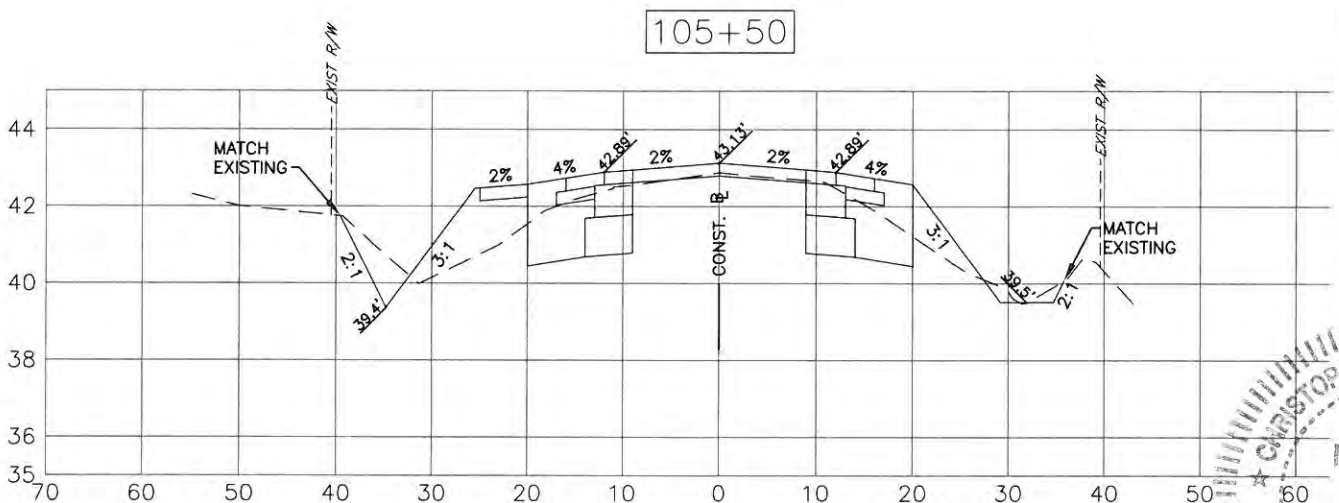
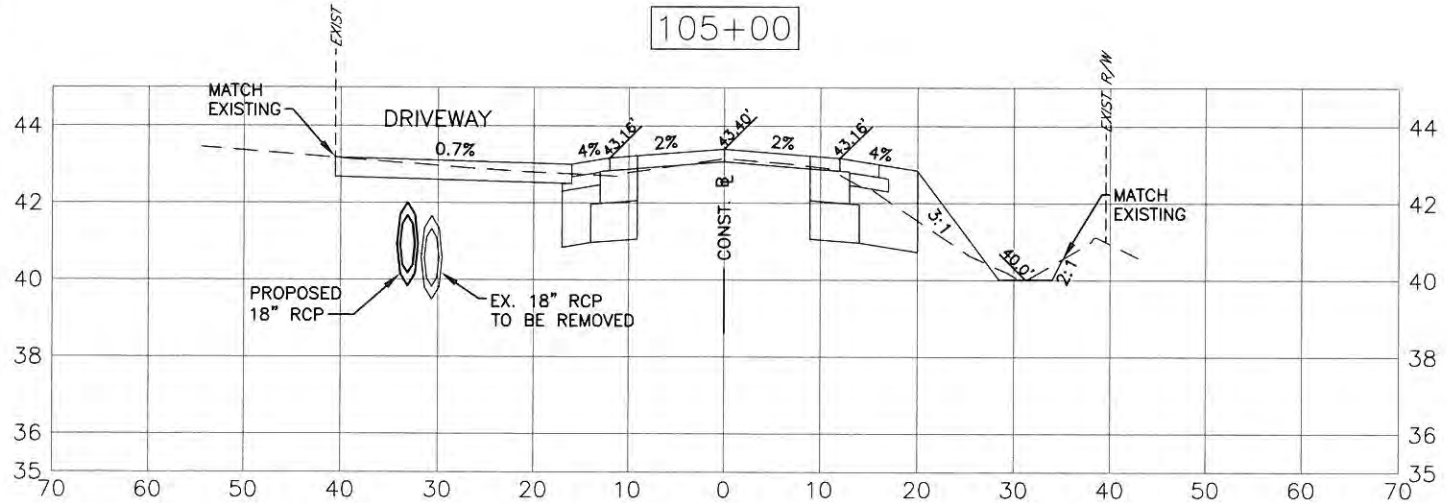
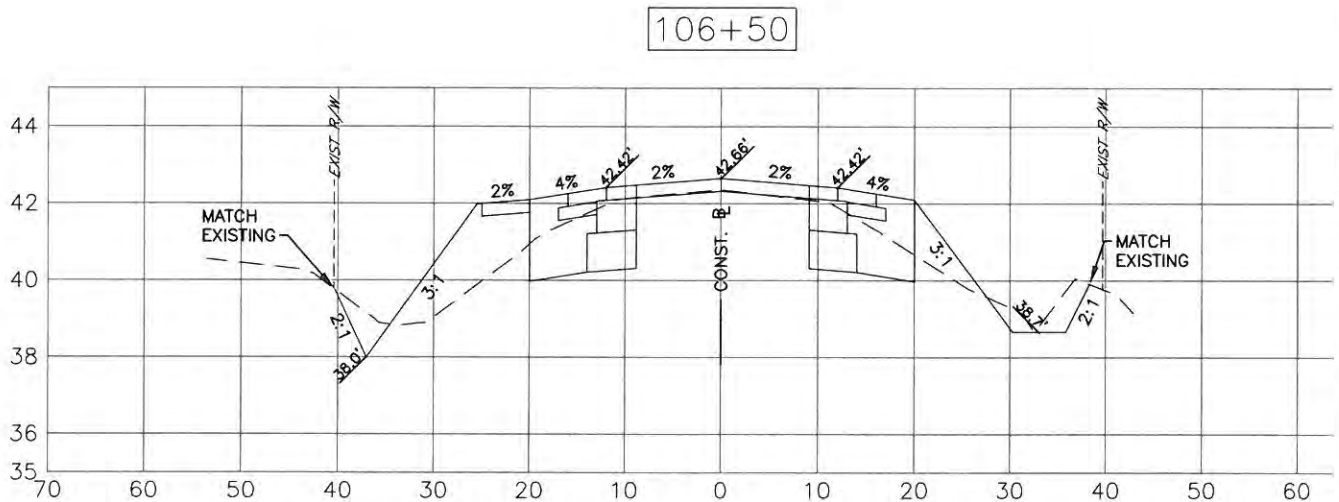
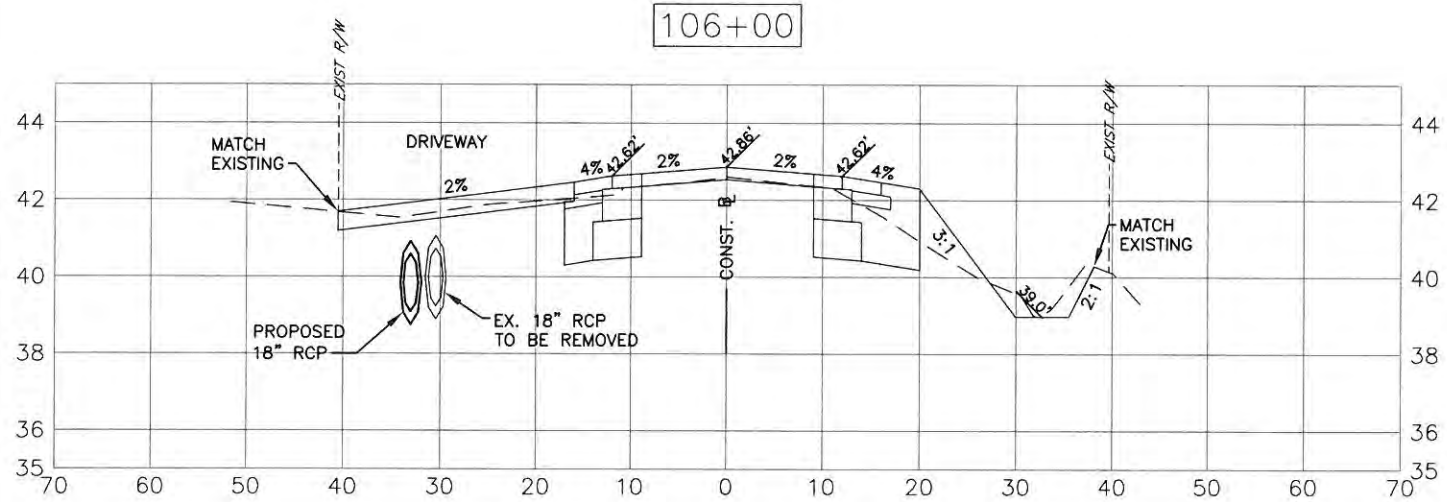
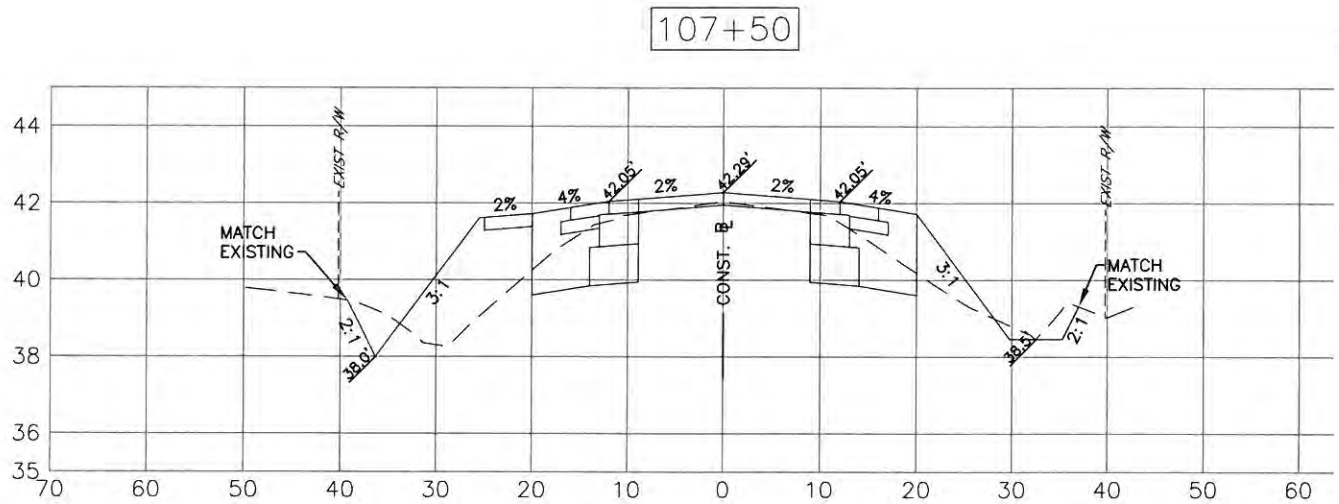
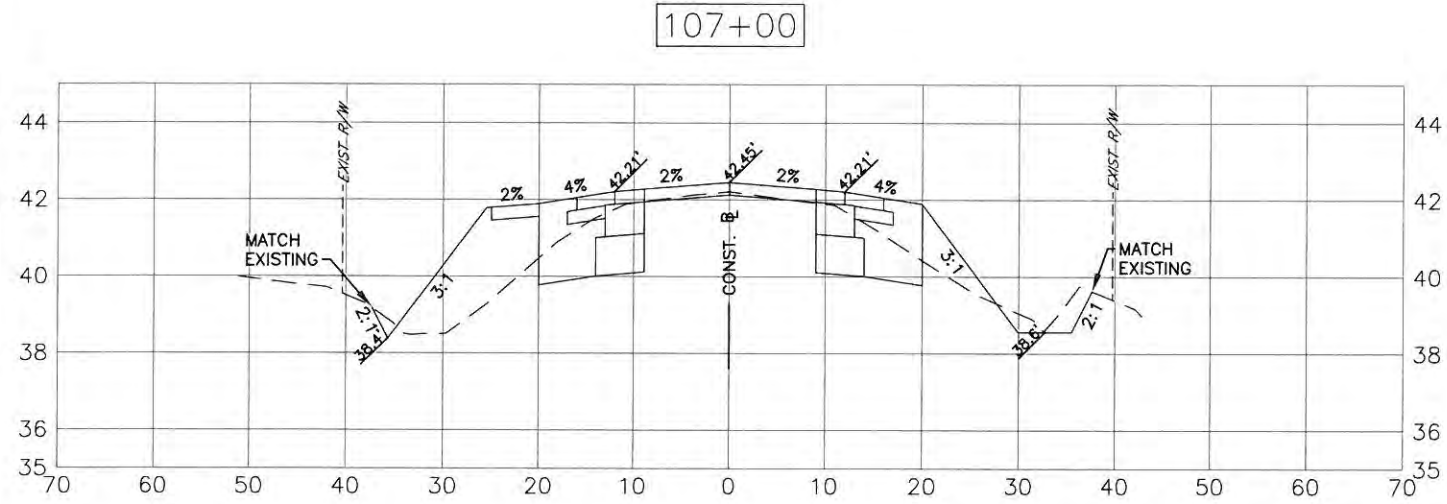
CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 76777
Signature & Date

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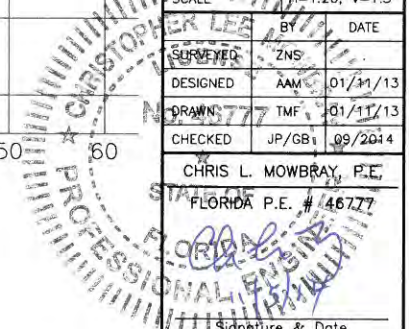
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 105+00 TO STA 107+50**



NO.	REVISION DESCRIPTION	BY	DATE

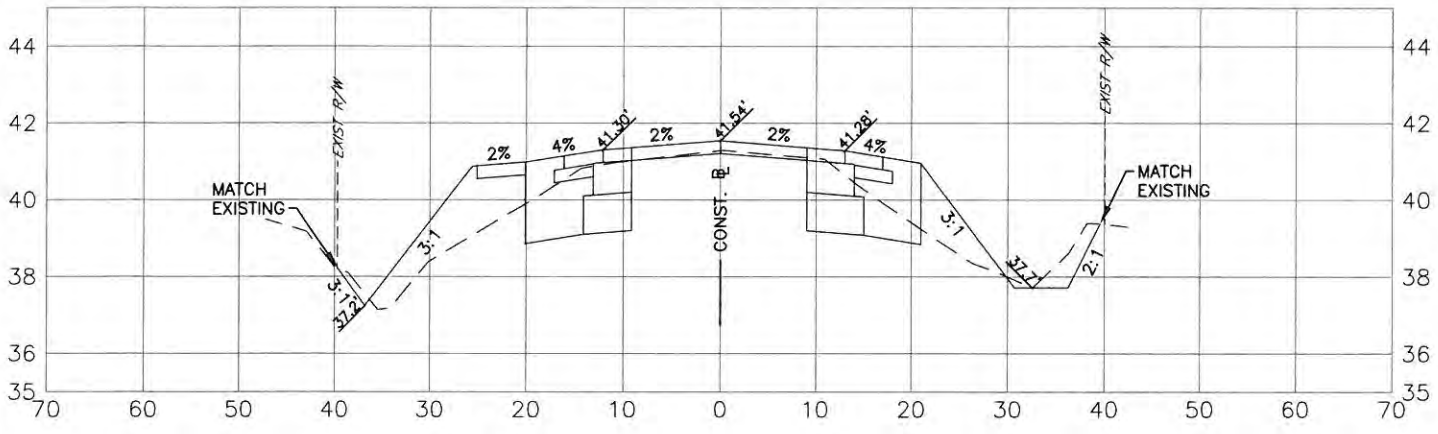
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SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
DESIGNED	AM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/20/14
BY	DATE
SURVEYED	ZNS
DESIGNED	AM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/20/14
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 146777	



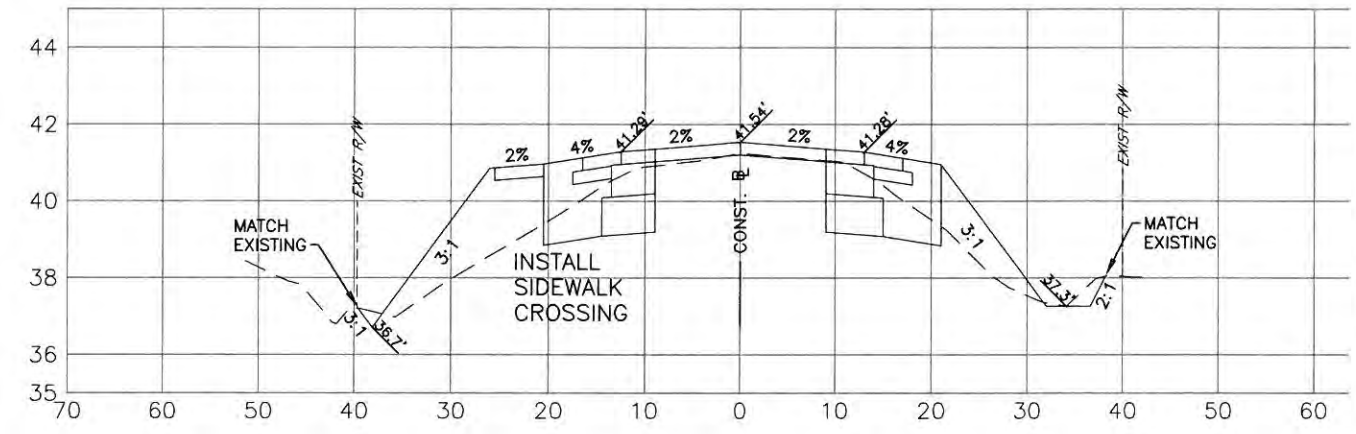
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**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 108+00 TO STA 110+50**

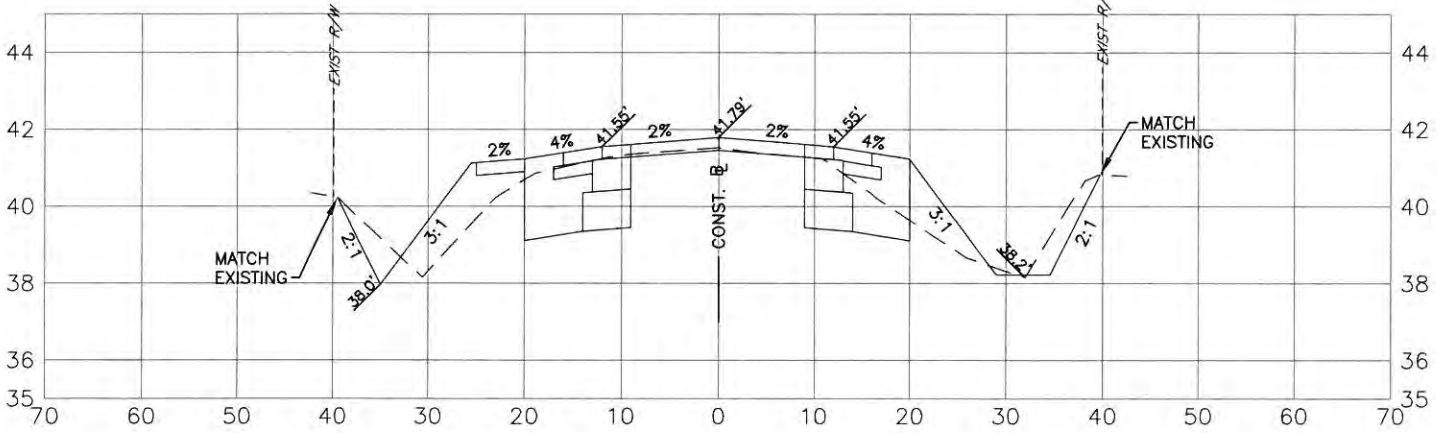
110+00



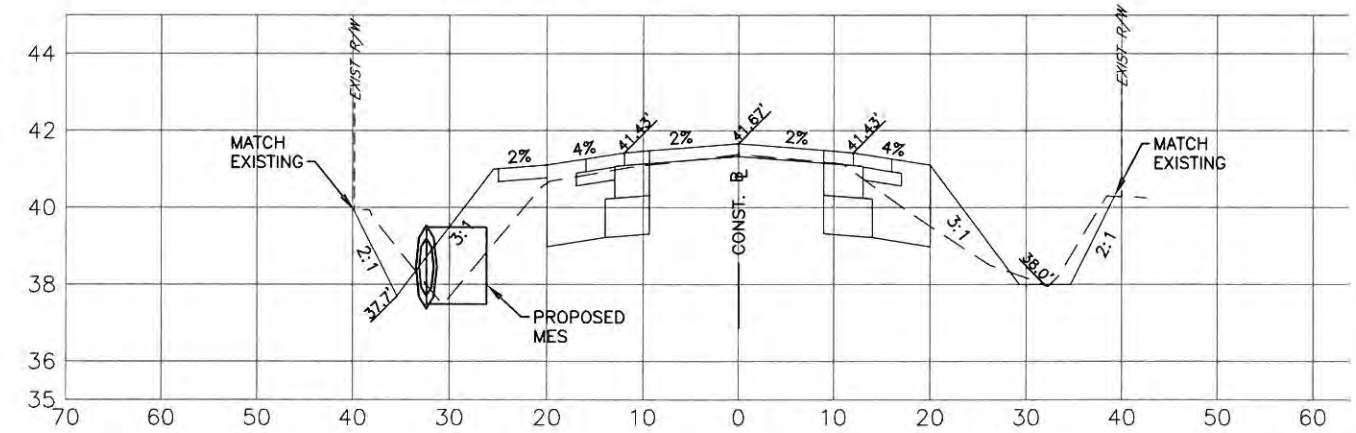
110+50



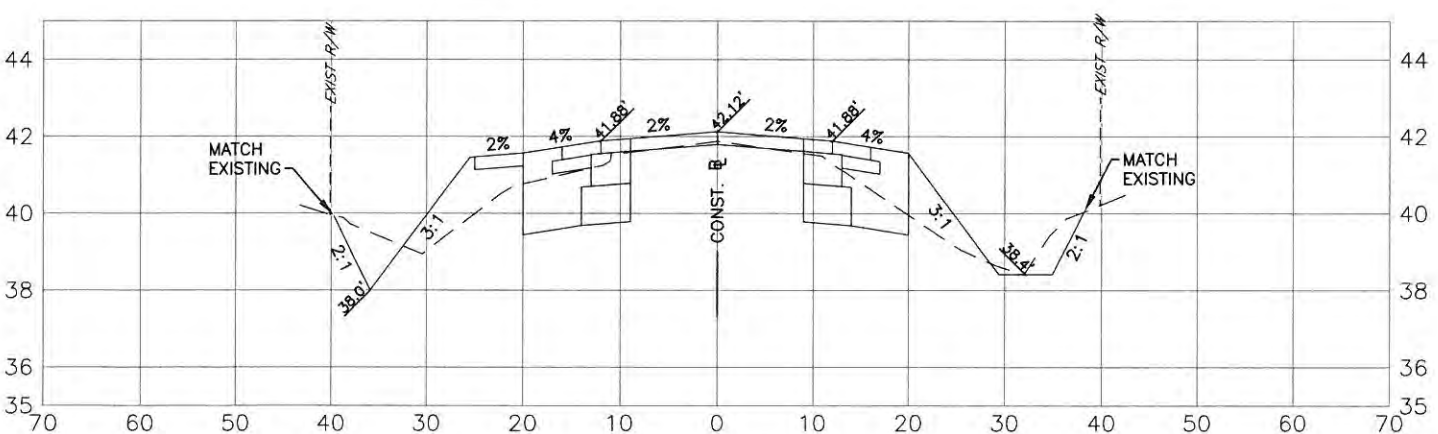
109+00



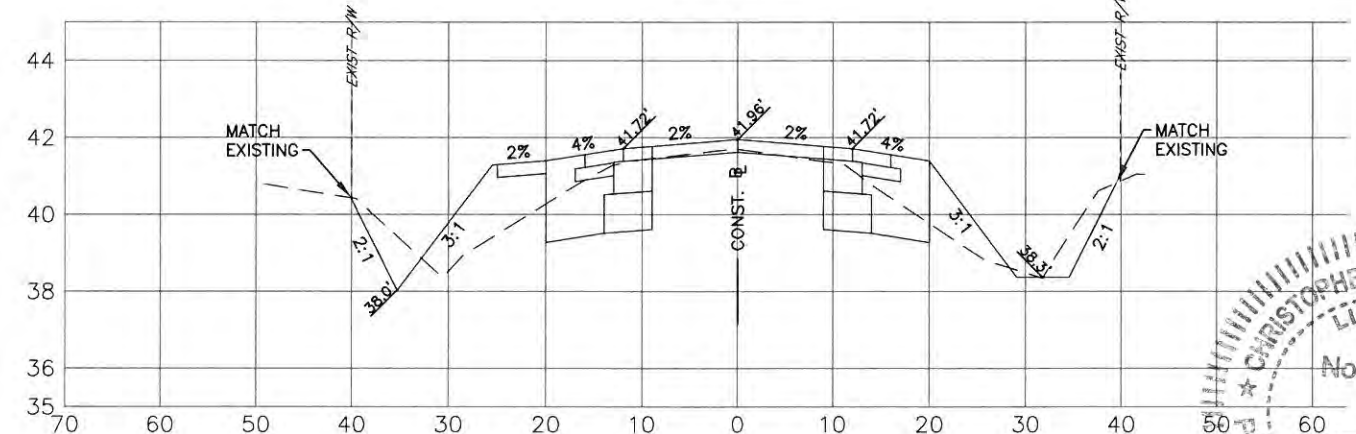
109+50



108+00

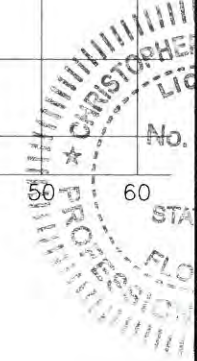


108+50



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
DESIGNED	AAM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JPYGB 09/2014



CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 46777
Signature & Date

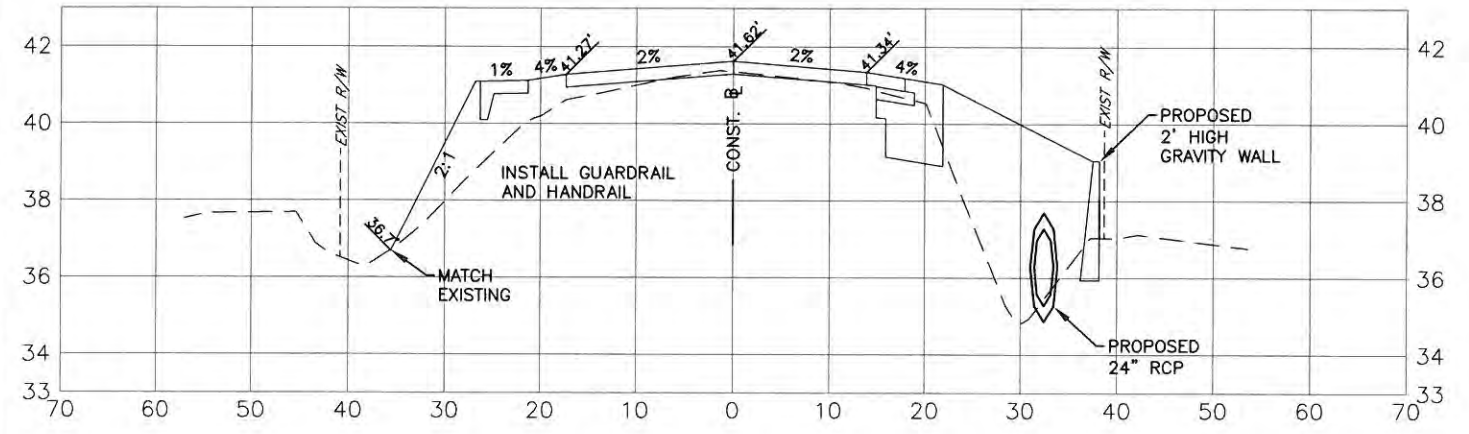
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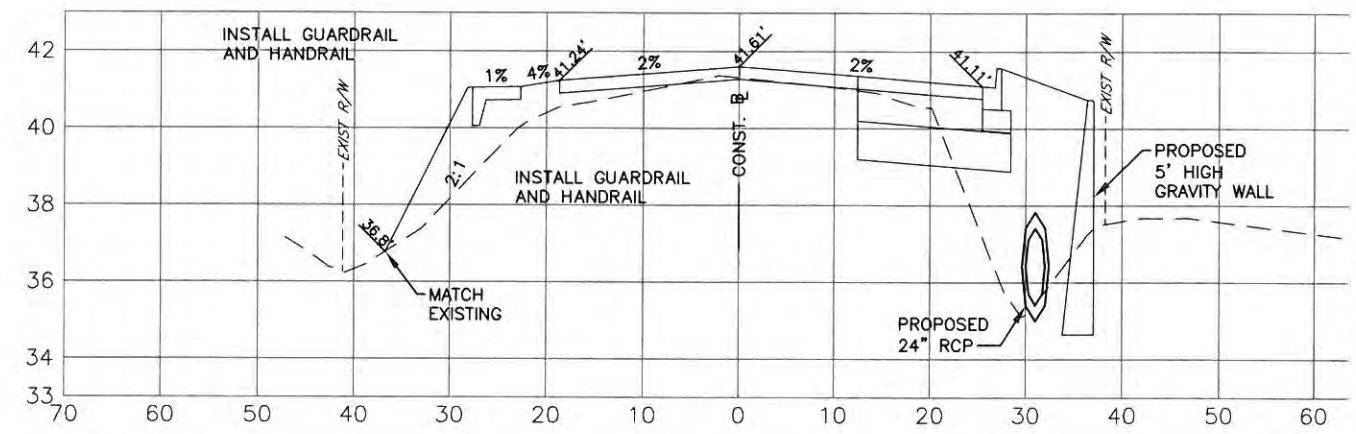
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 111+00 TO STA 112+50**

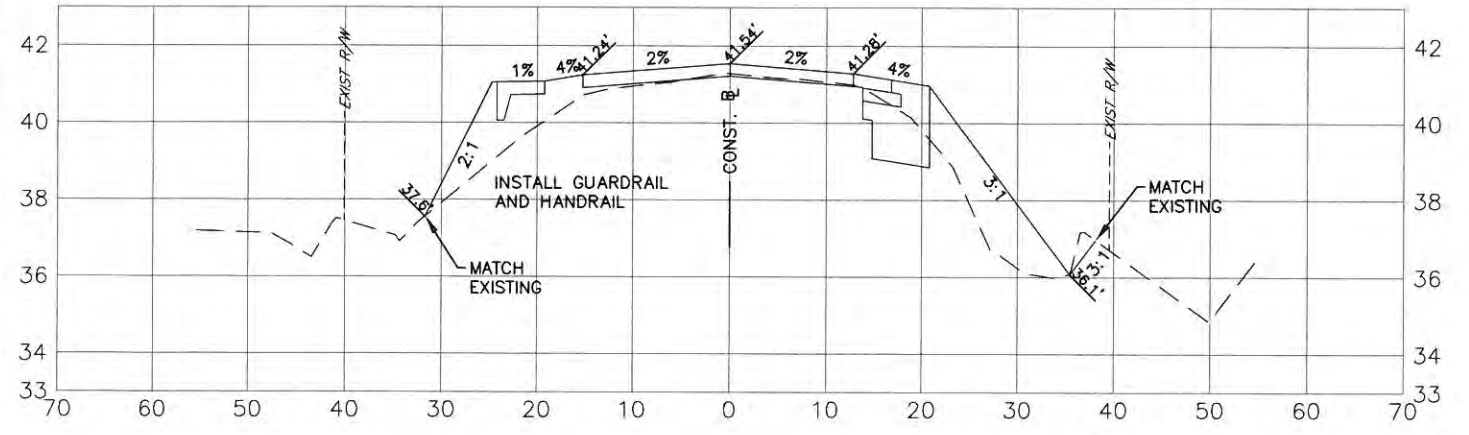
112+00



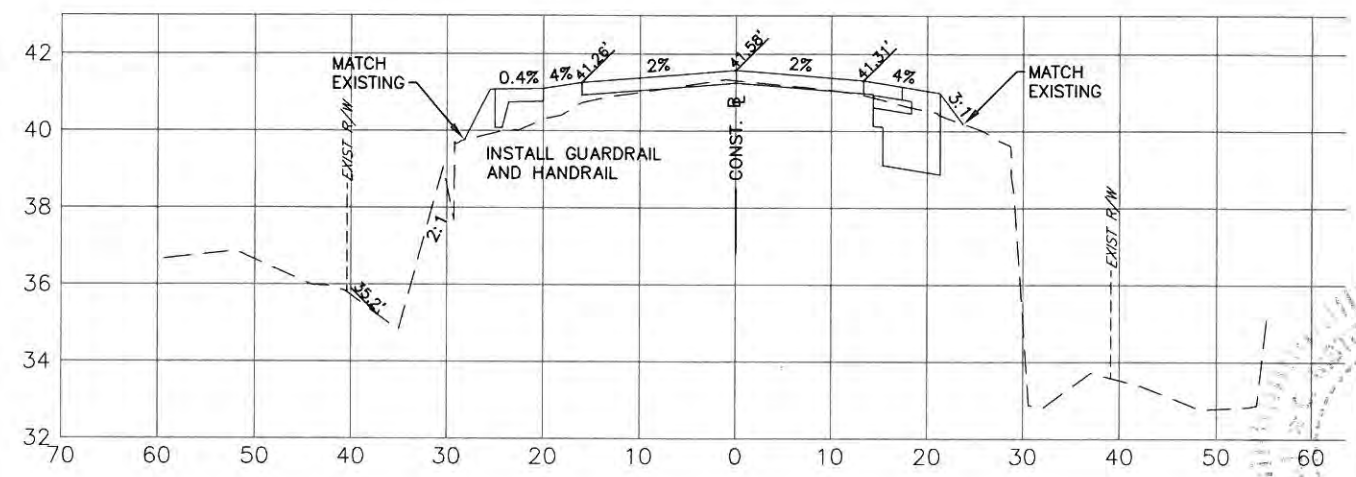
112+50



111+00



111+50



NO.	REVISION DESCRIPTION	BY	DATE

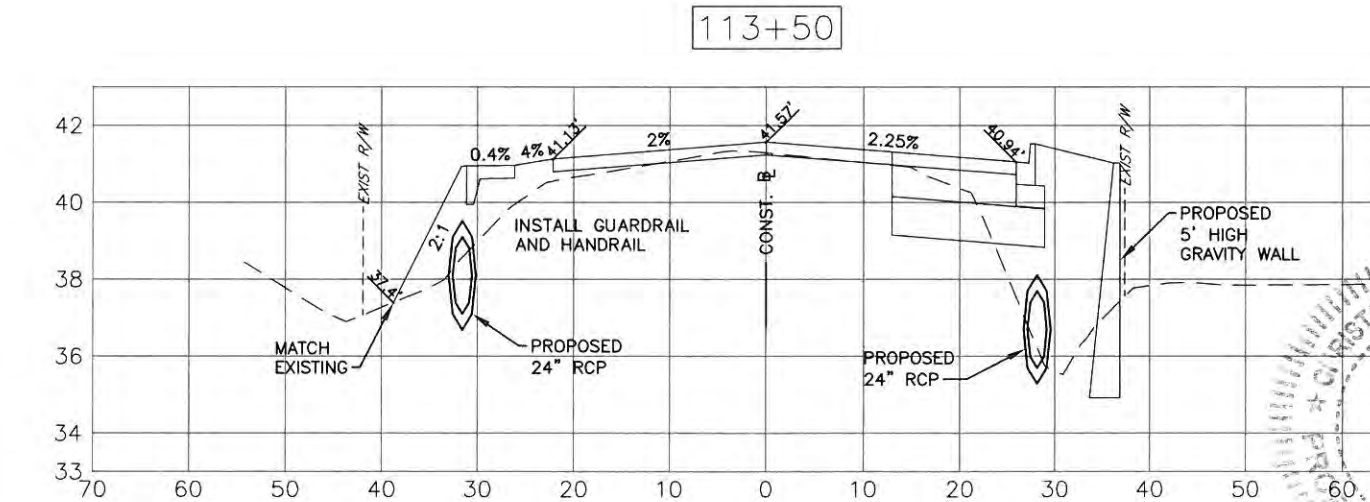
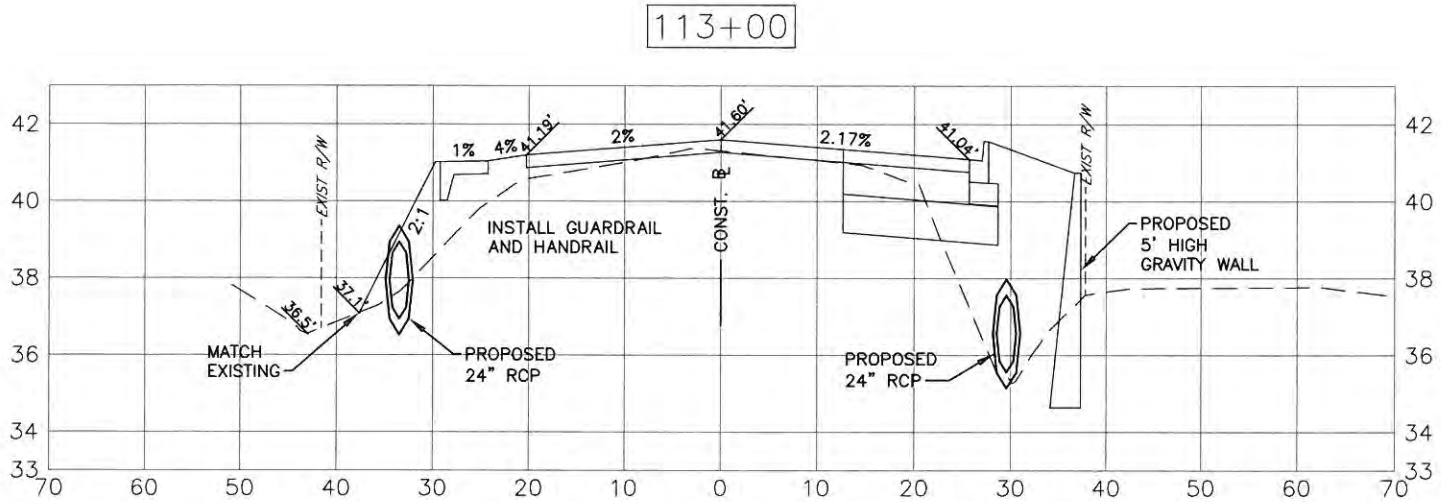
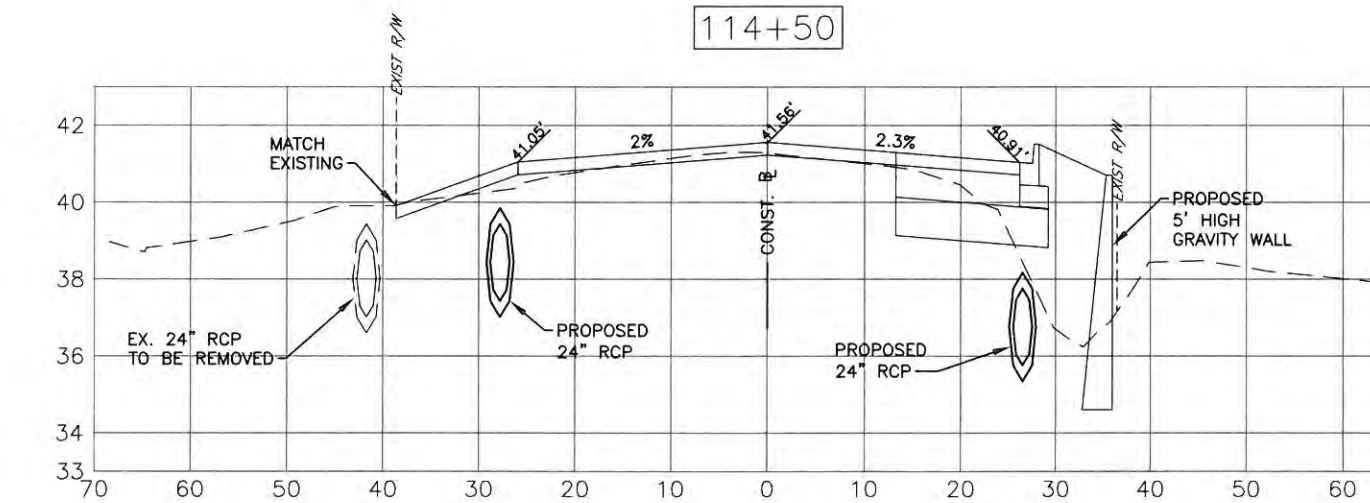
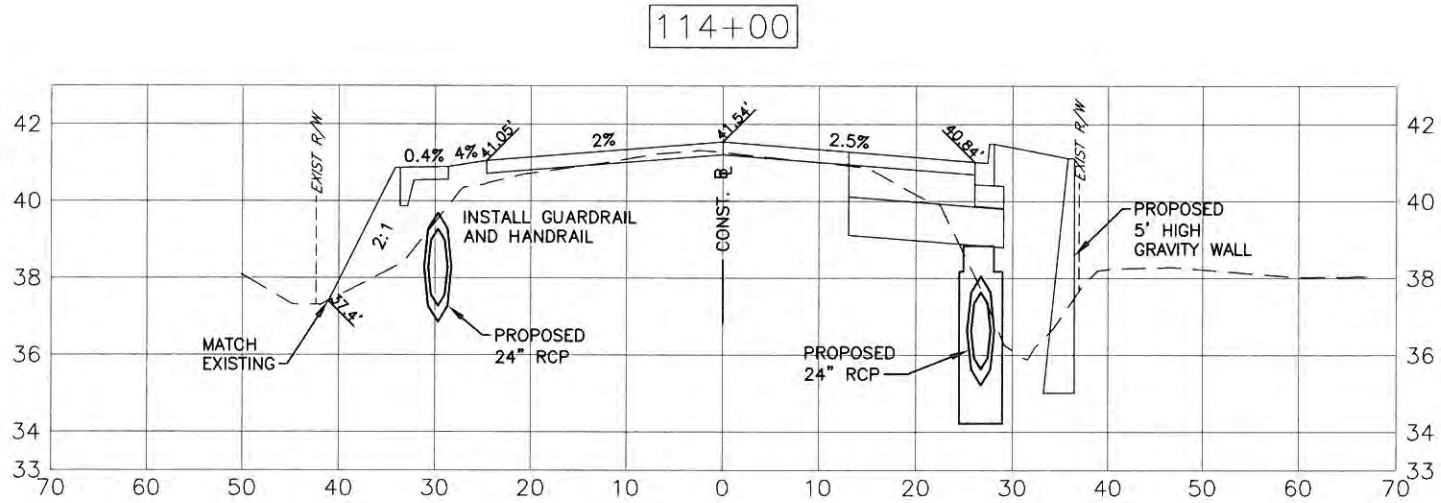
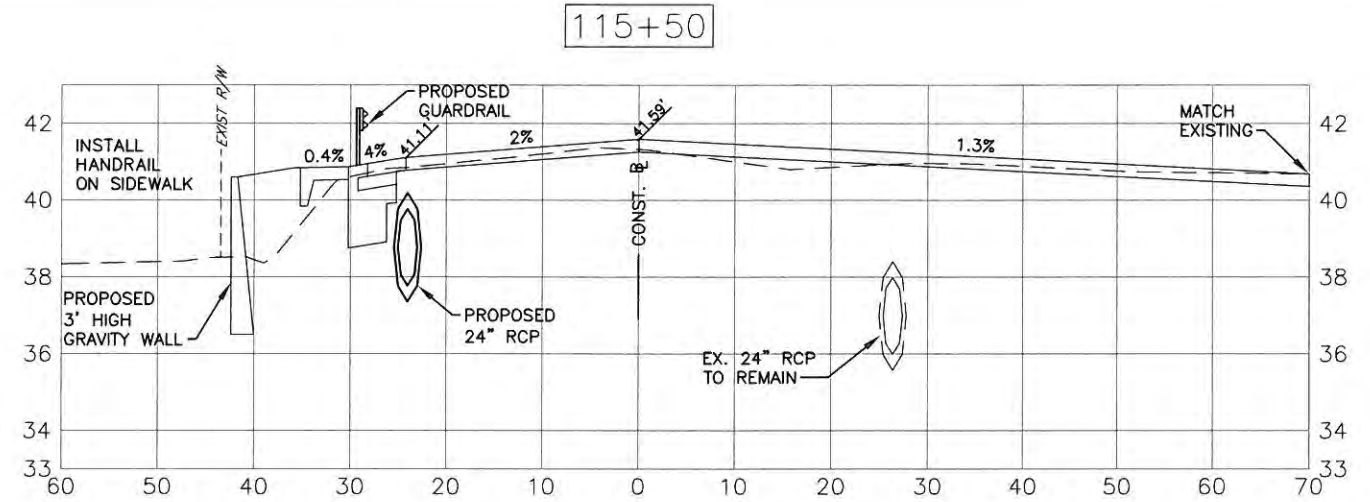
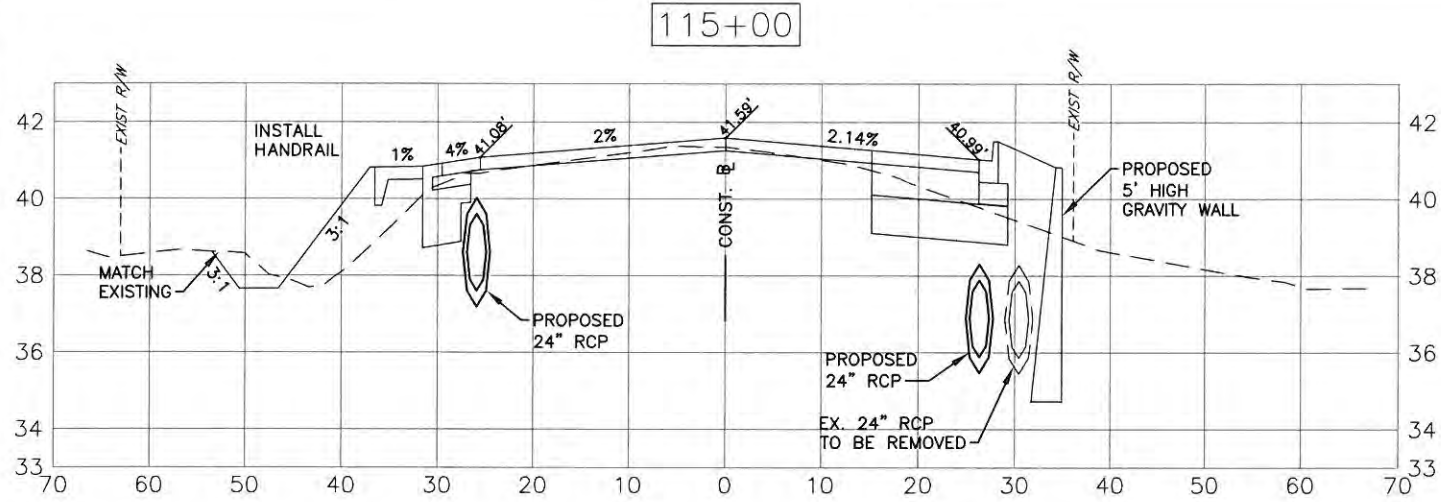
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	4" = 10', V=1:5
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	TMF 07/11/13
CHECKED	JP/GB 09/20/13
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
Signature & Date	

S:\P\W\Engineering\Share\Highway_Engineering\ROADS\Fort Hamer_Road\DWG\FH_VSEC_3\DWG_70_XSEC_10724\2014_8:44 AM Thom_Forester_11.11.17



PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 113+00 TO STA 115+50**



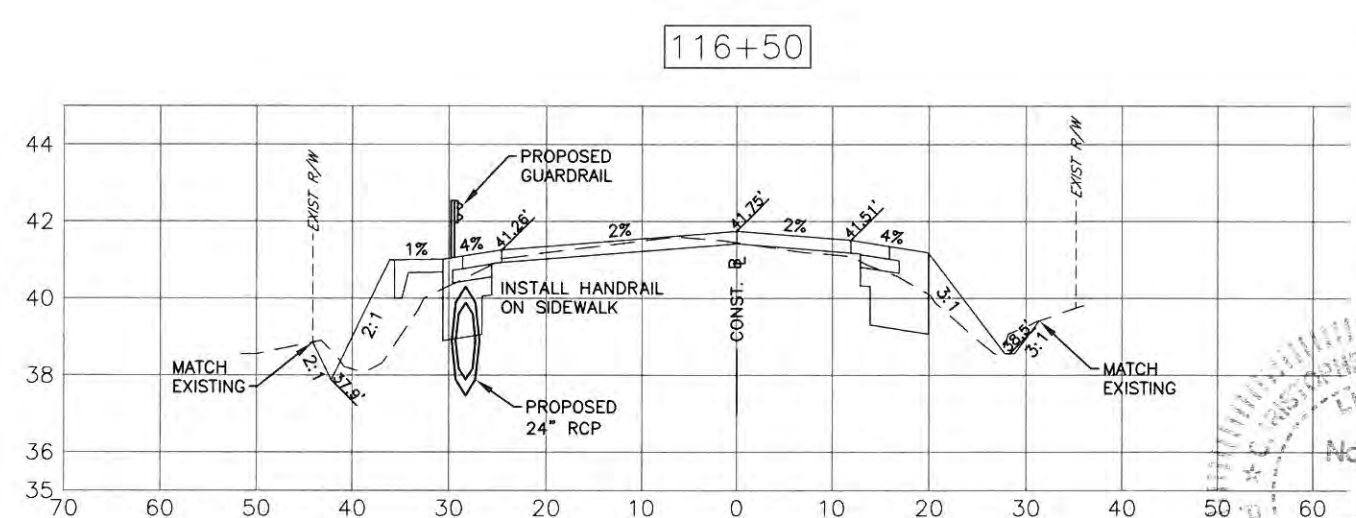
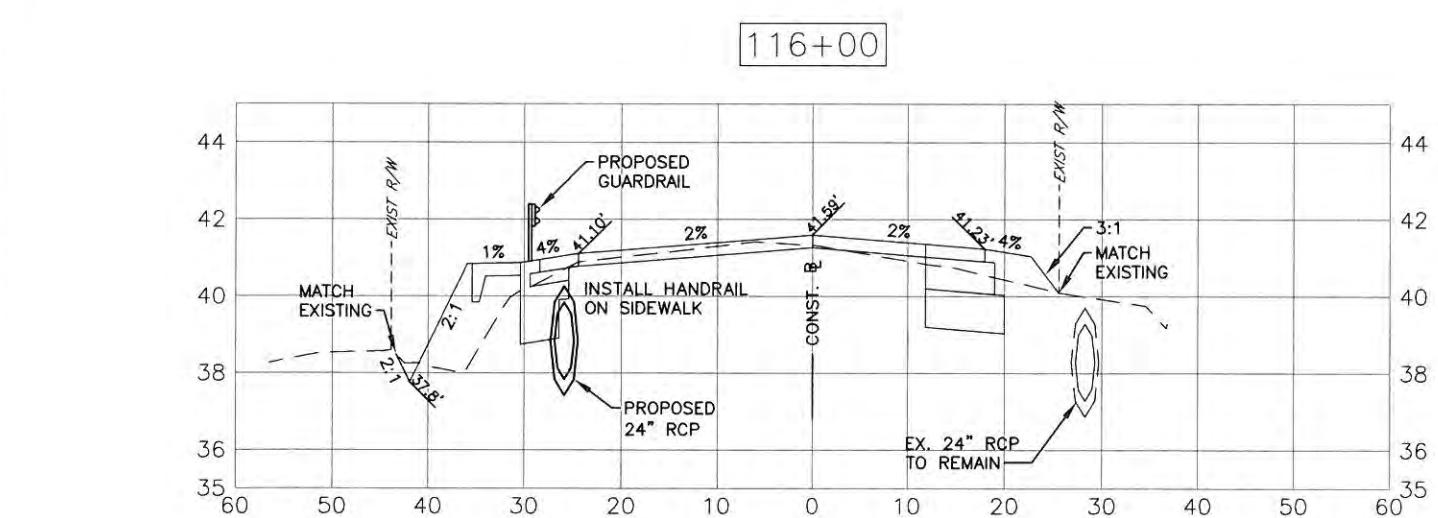
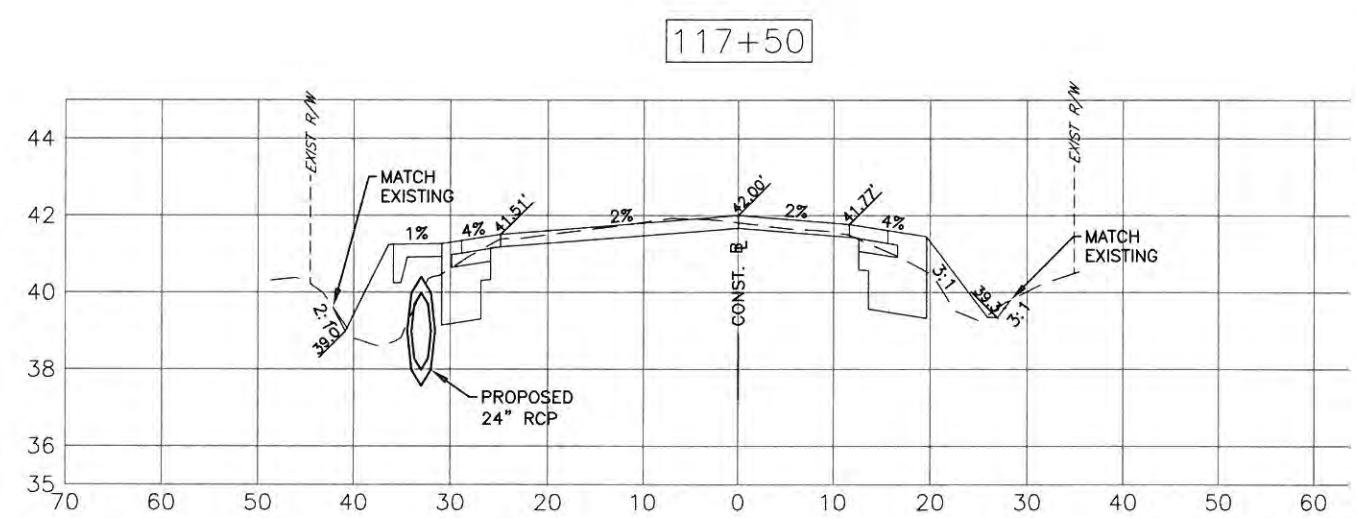
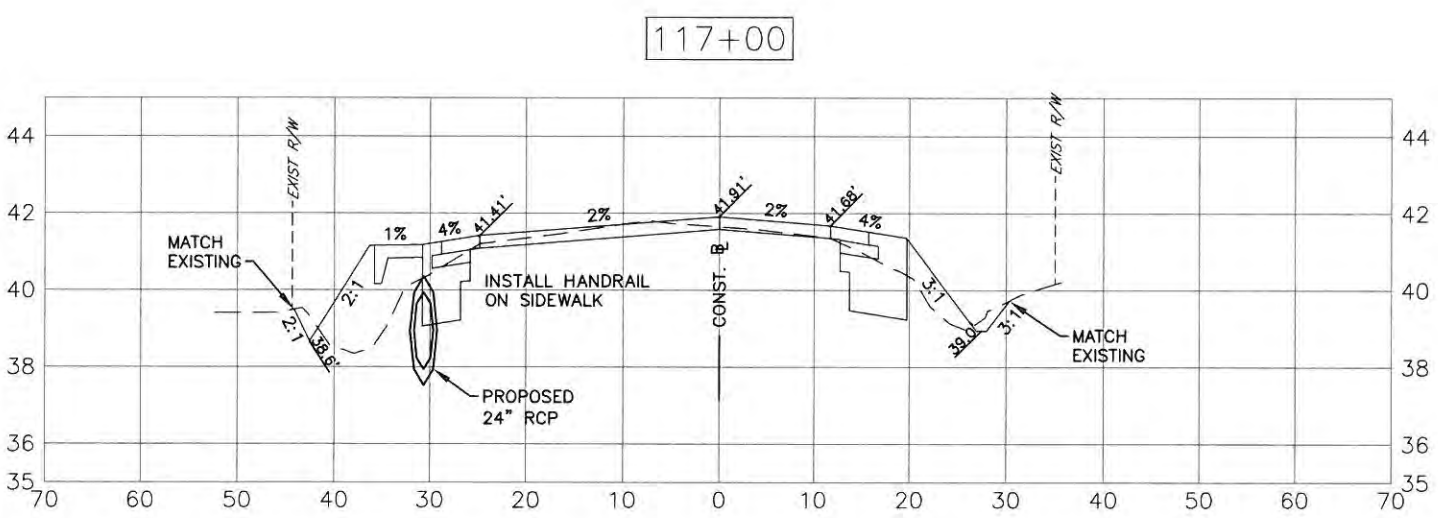
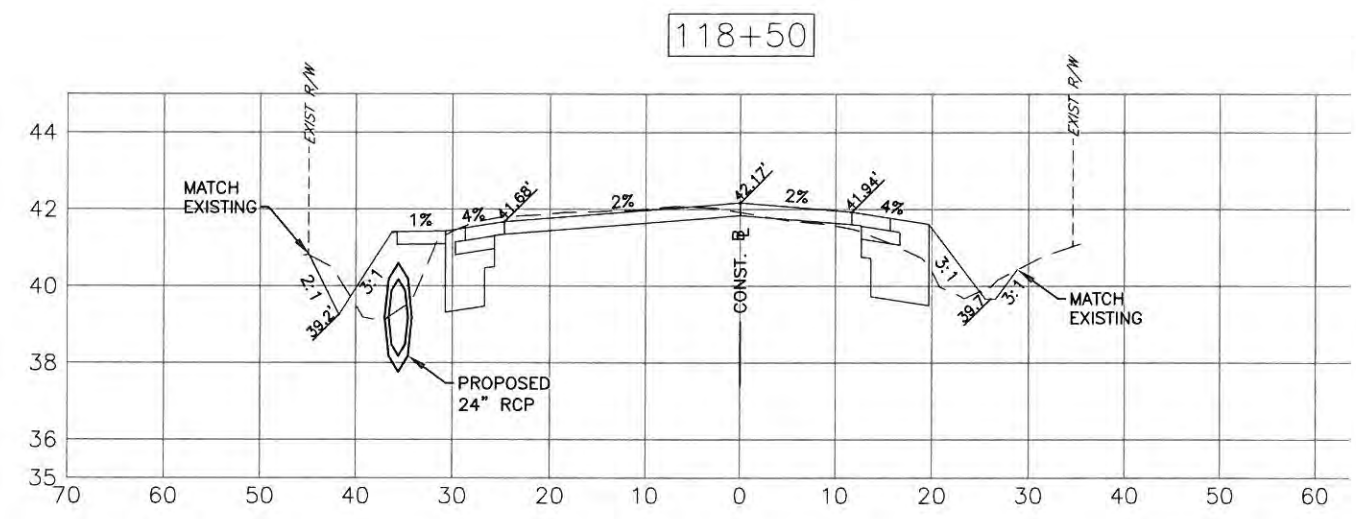
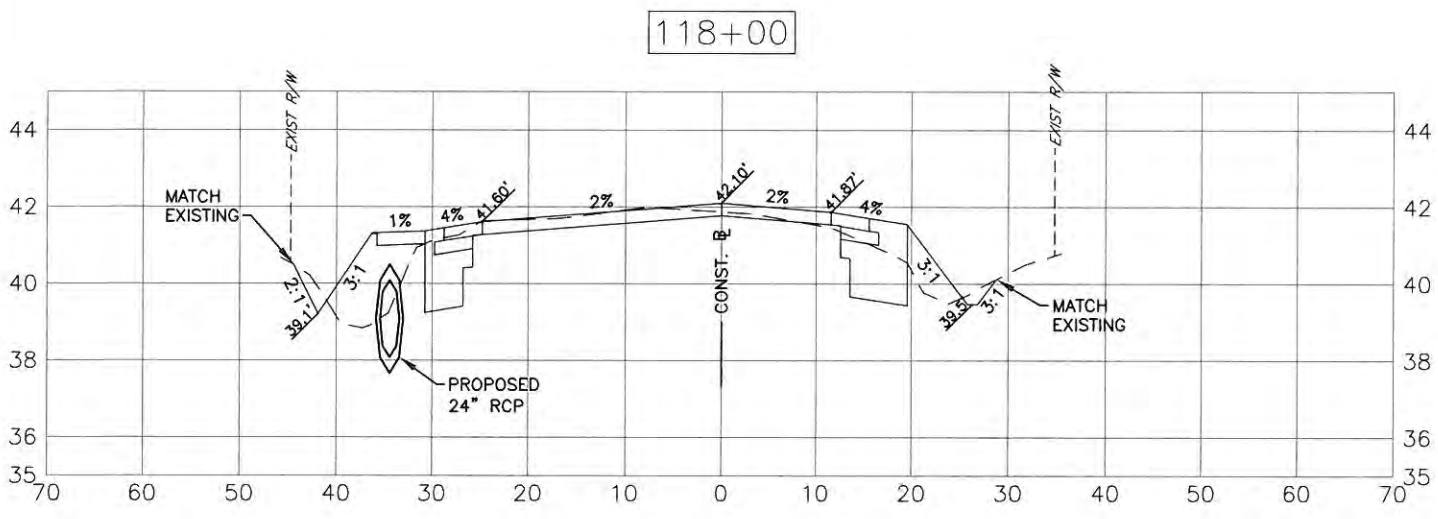
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC/TWN/RGE	7/35S/18E
SCALE	1" = 20', V=1:5
DRAWN	TMF 6/11/13
CHECKED	JP/GB 08/20/14
DESIGNED	AAM 01/11/13
SURVEYED	ZNS
BY	DATE
CHRIS L. MOWBRAY, P.E.	08/11/13
FLORIDA P.E. #	46777

Signature & Date

I:\P\WD_Engineering\Share\Highway_Engineering\ROADS\Conf_Homer_Road\DWG\NFI_XSEC_10/27/2014 8:44 AM Thom Forrester 1:1, 11x17

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 116+00 TO STA 118+50**



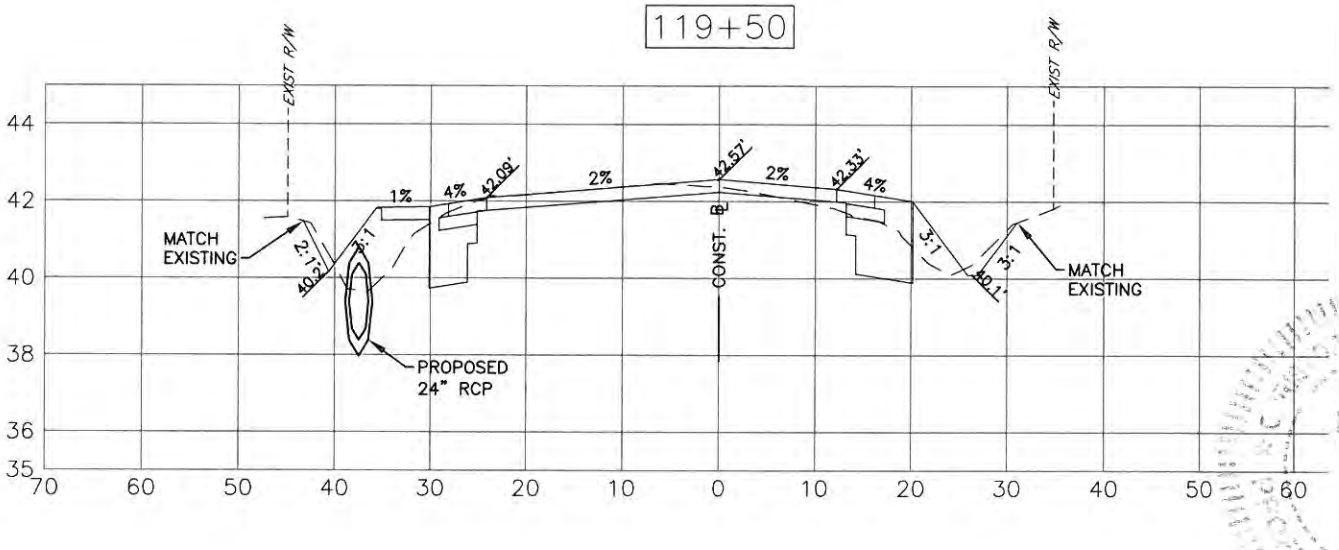
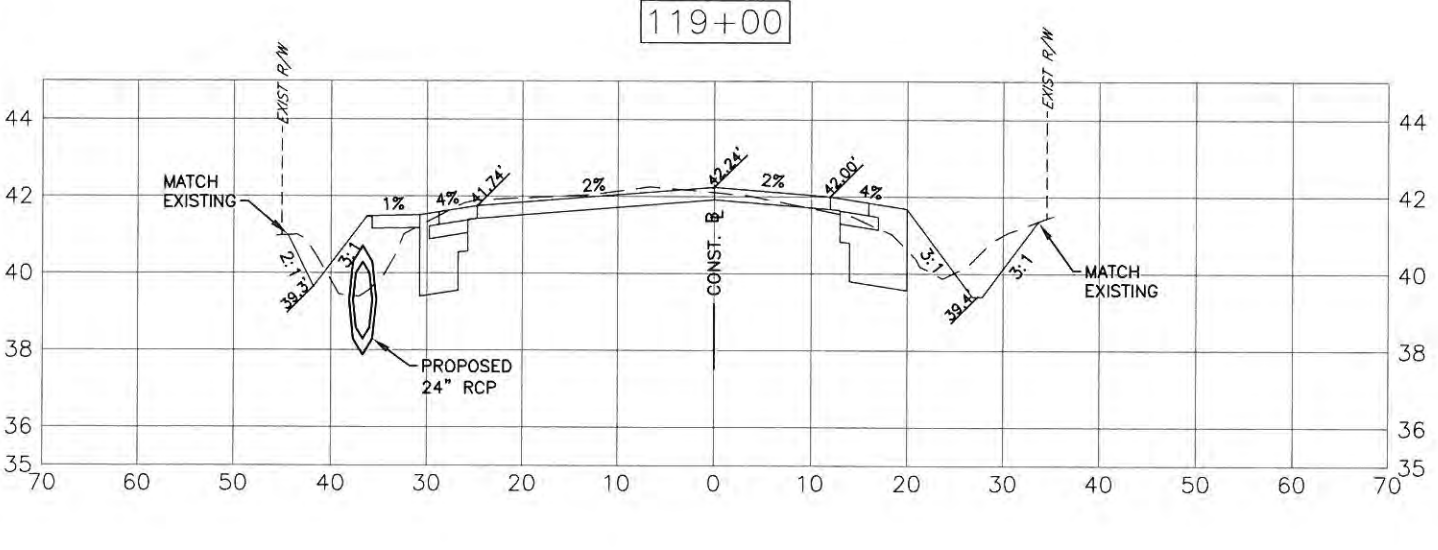
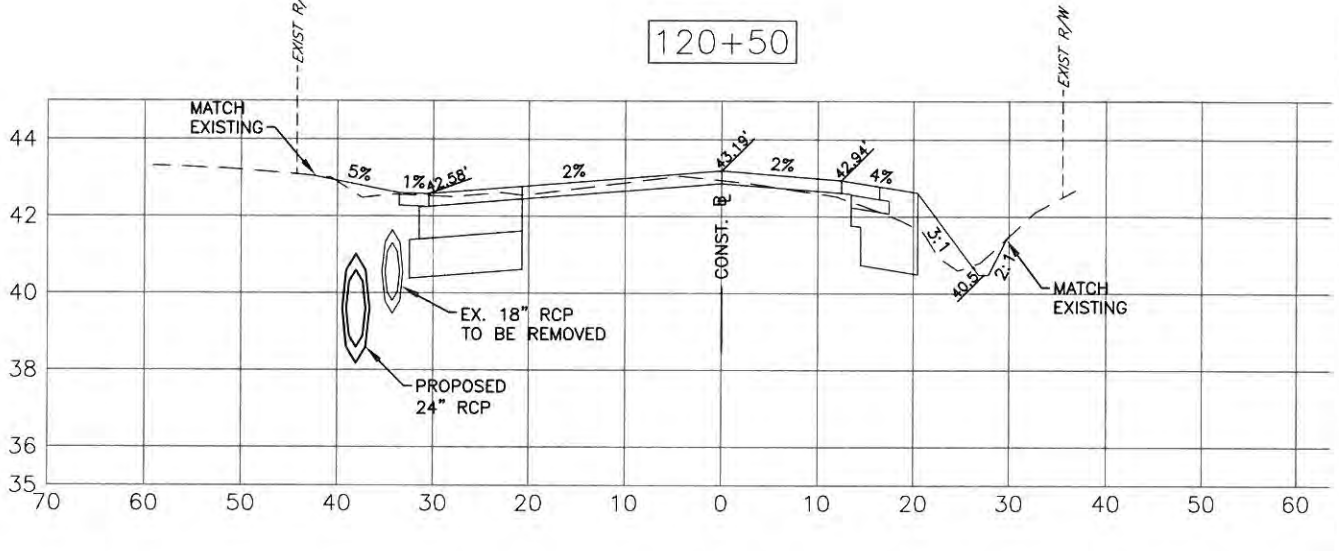
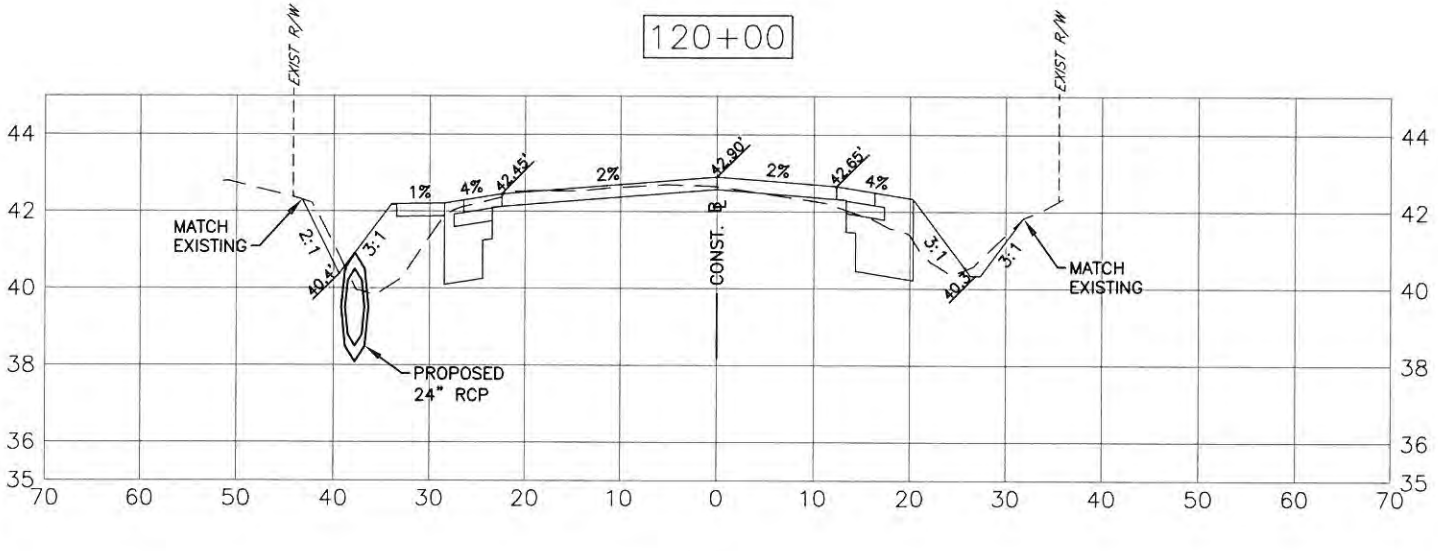
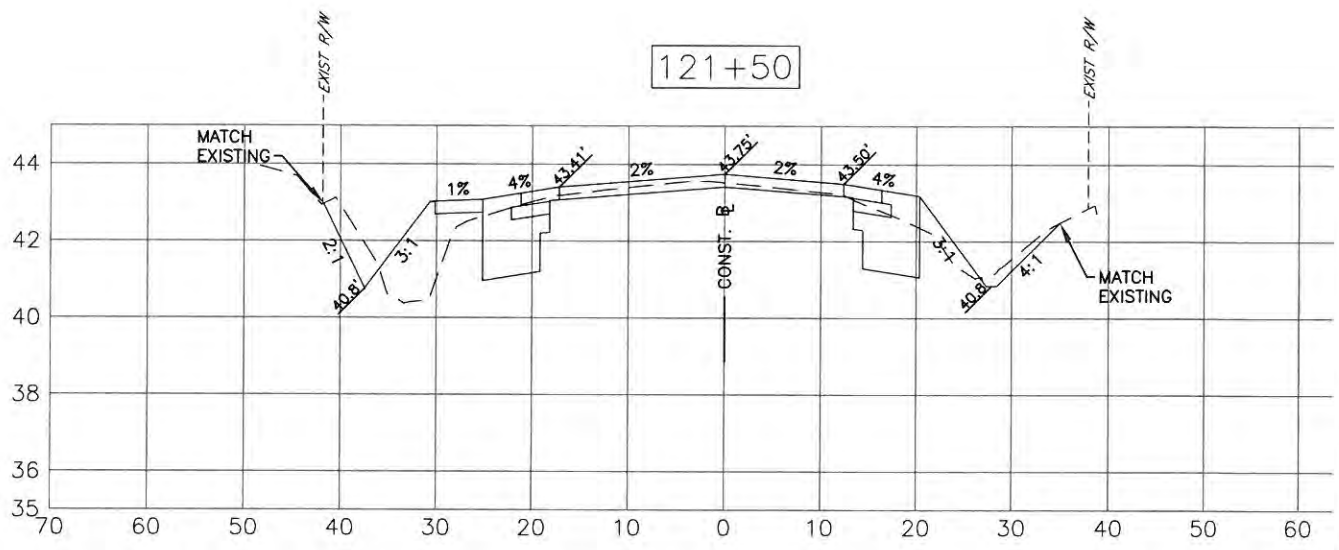
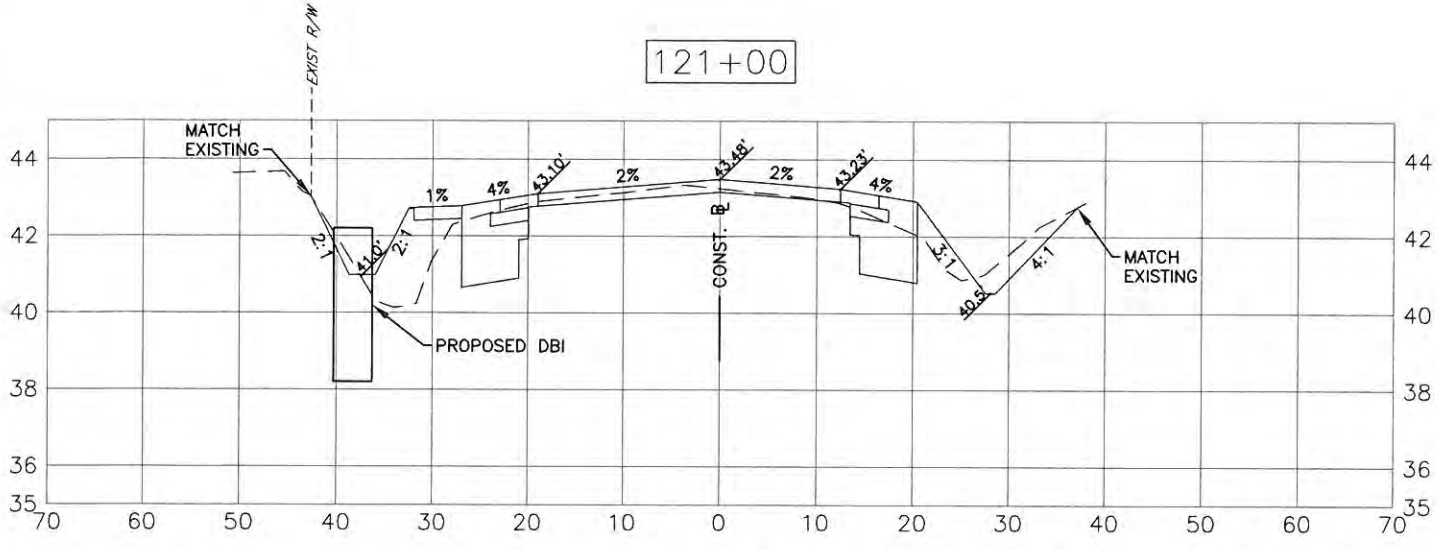
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
BY	
DATE	
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/2014

STATES
CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 46777
[Signature]
5/14
Signature & Date

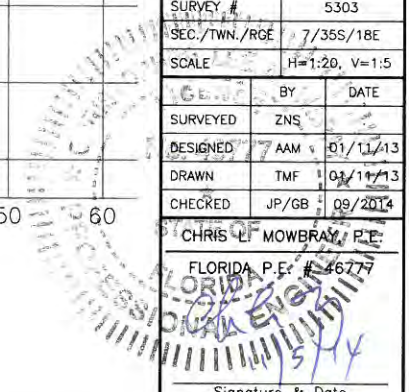
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FORT HAMMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
 CROSS SECTIONS
 STA 119+00 TO STA 121+50



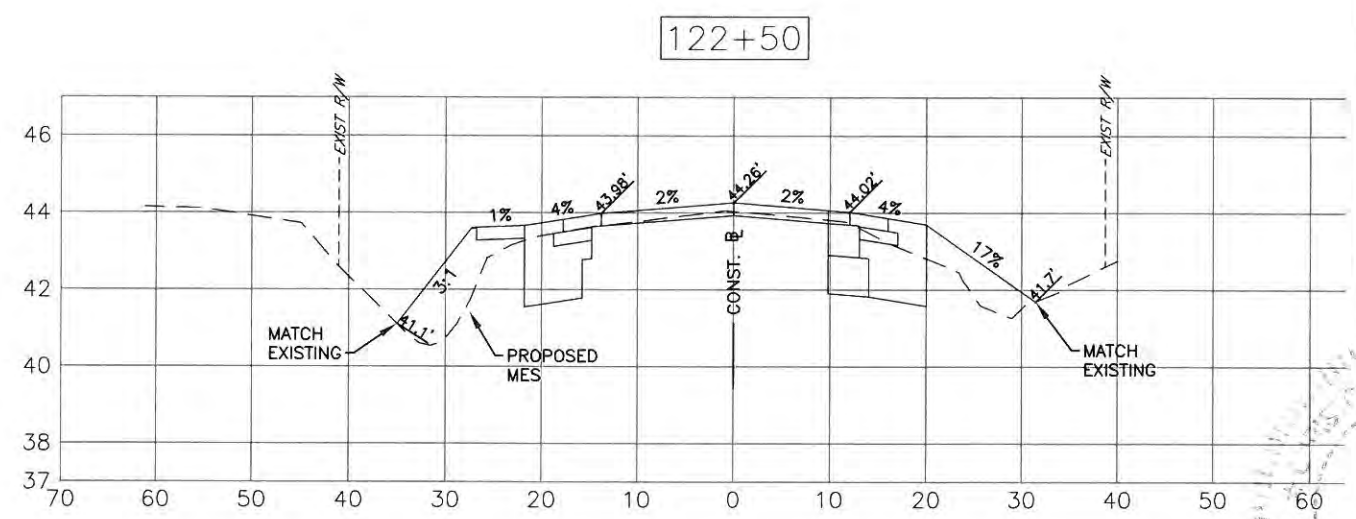
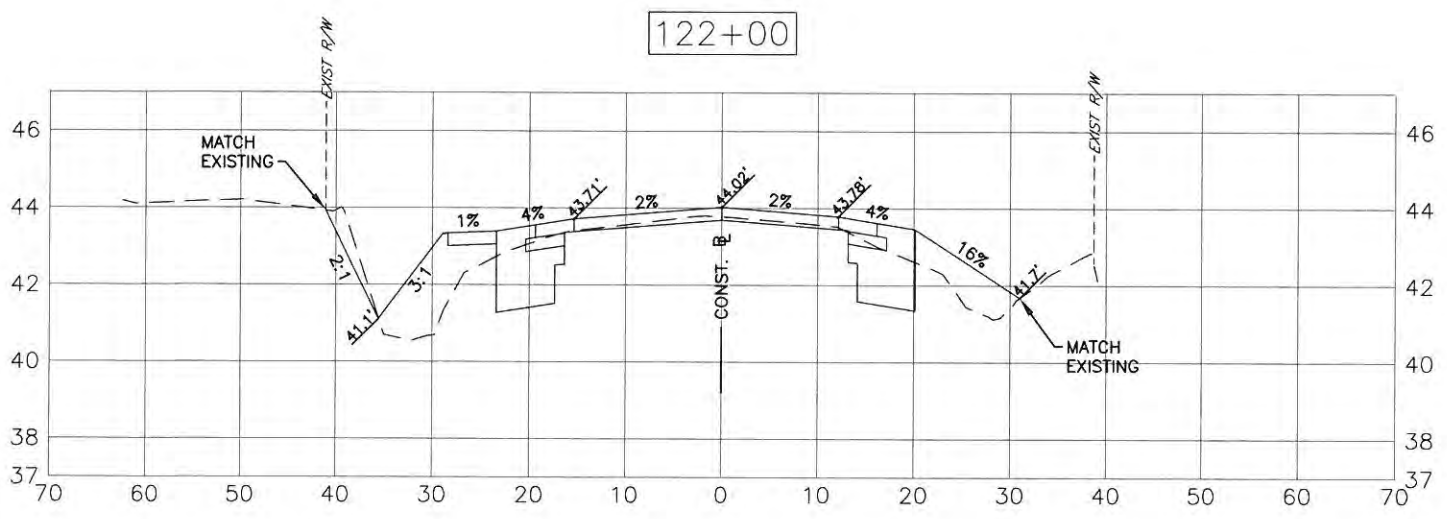
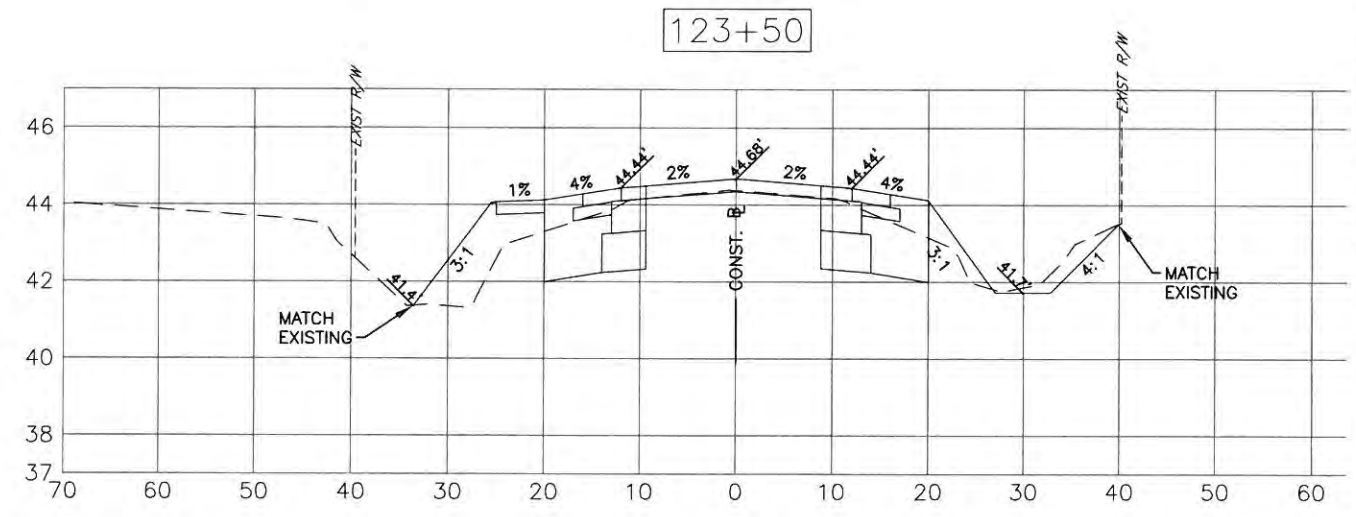
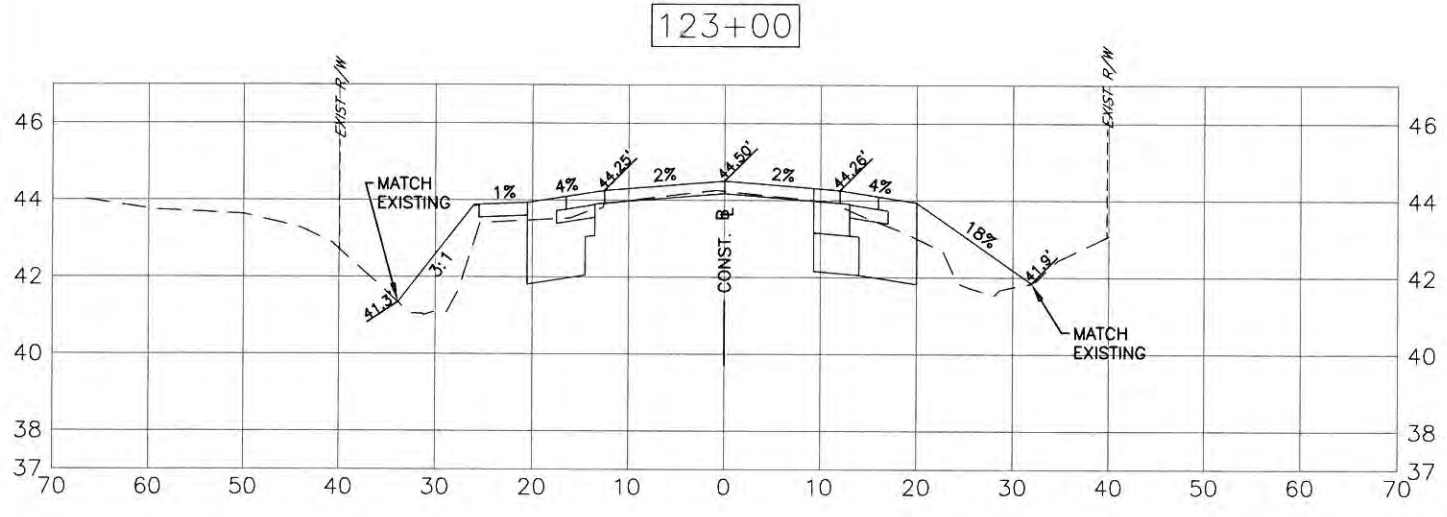
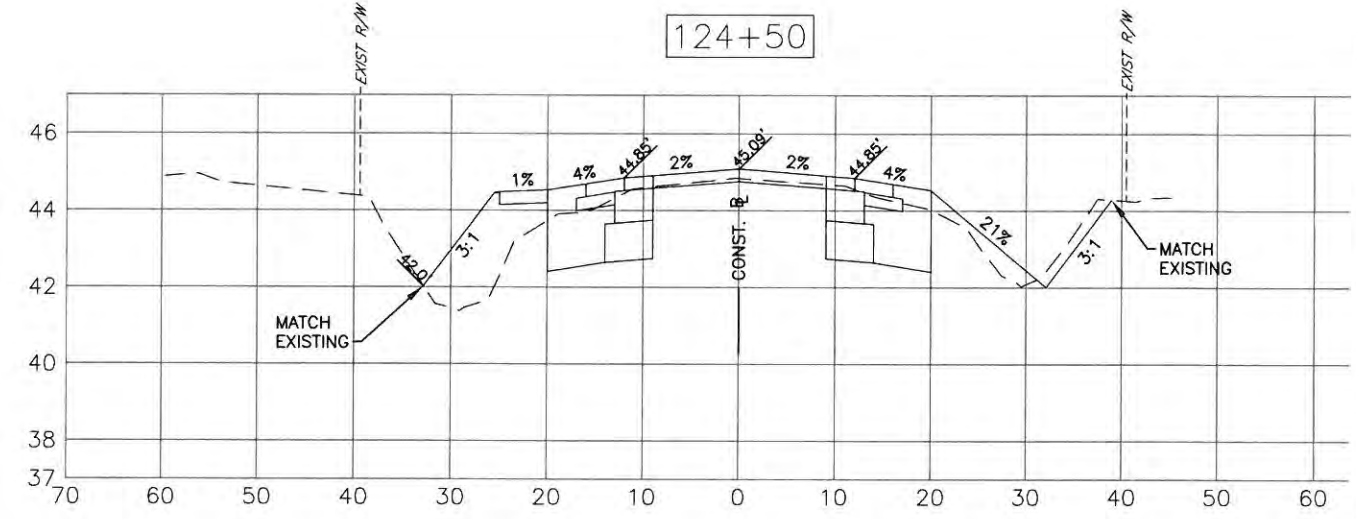
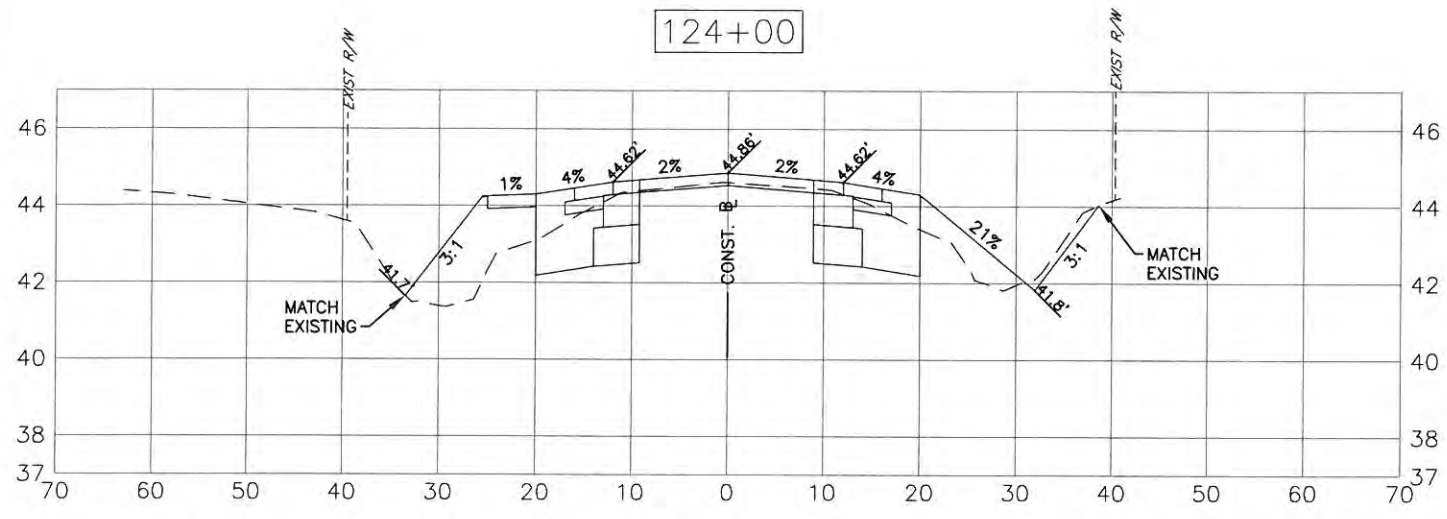
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # 323-6054764
 SURVEY # 5303
 SEC./TWN./RGE 7/35S/18E
 SCALE H=1:20, V=1:5
 DESIGNED AAM 01/11/13
 DRAWN TMF 01/11/13
 CHECKED JP/GB 09/2014
 CHRIS L. MOWBRAY, P.E.
 FLORIDA P.E. # 4667H



S:\P\W\Engineering\Share\Highway_Engineering\ROADS\Fort_Hamer_Road\WVA\FH_RSEC_3.DWG 10/23/2014 8:45 AM Thom Forester: 1:1, 11x17

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 122+00 TO STA 124+50**



NO.	REVISION DESCRIPTION	BY	DATE

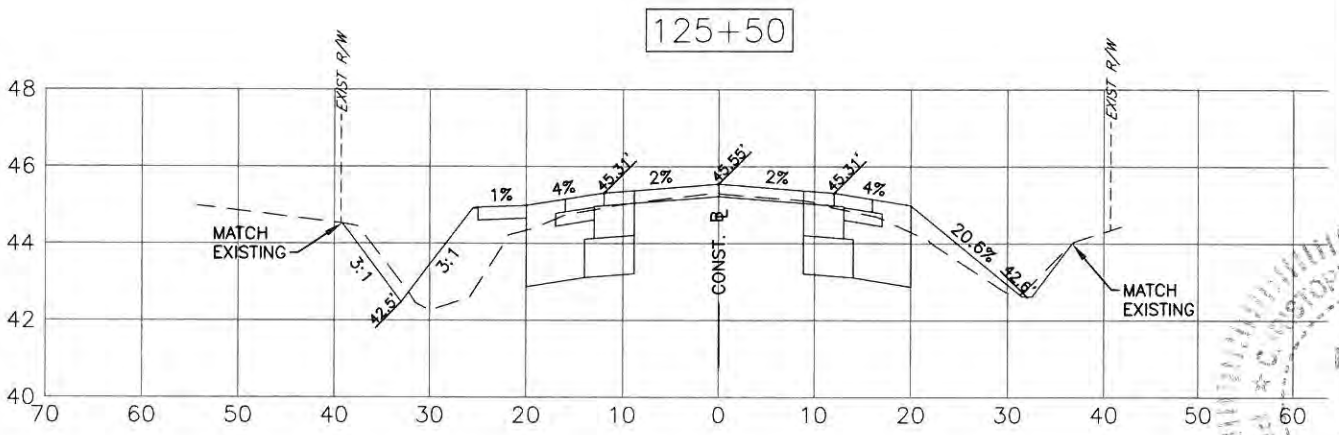
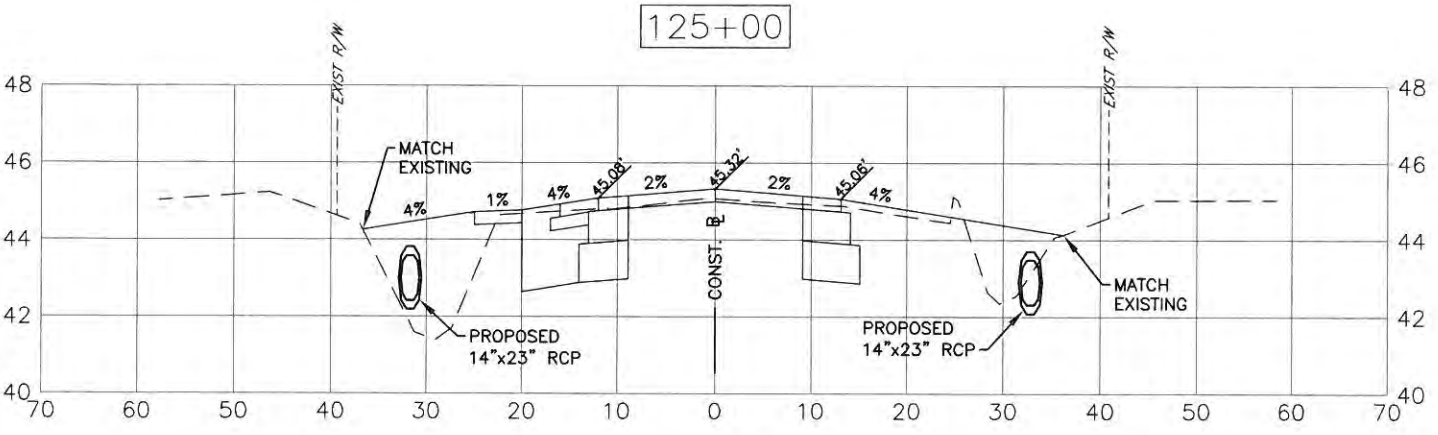
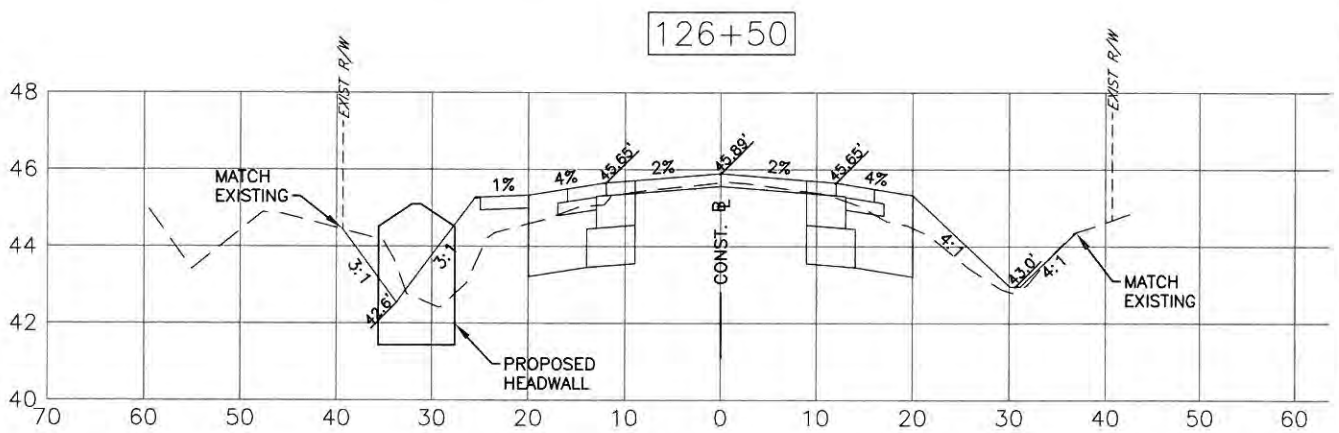
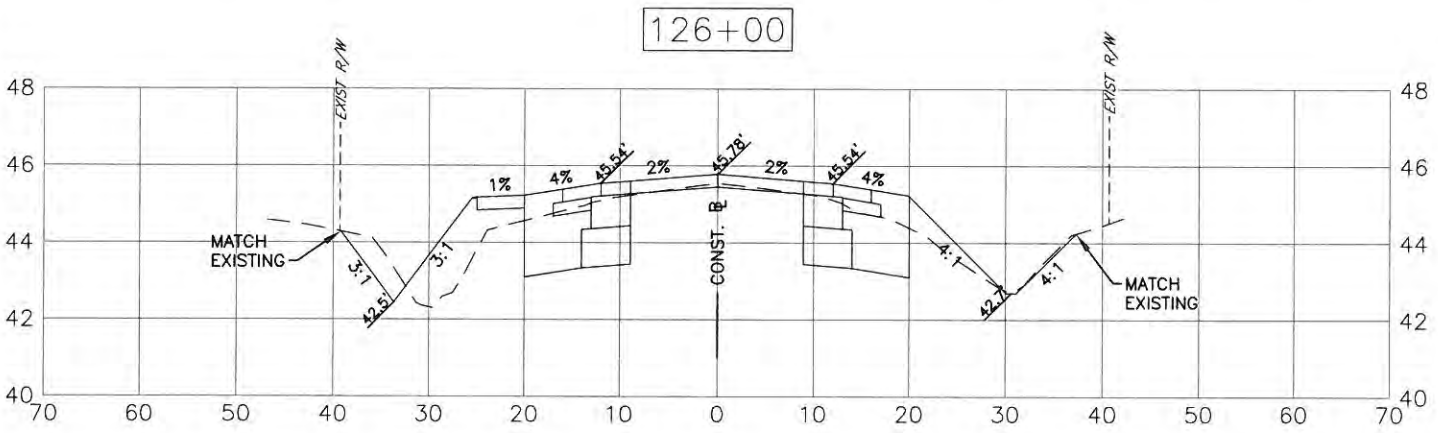
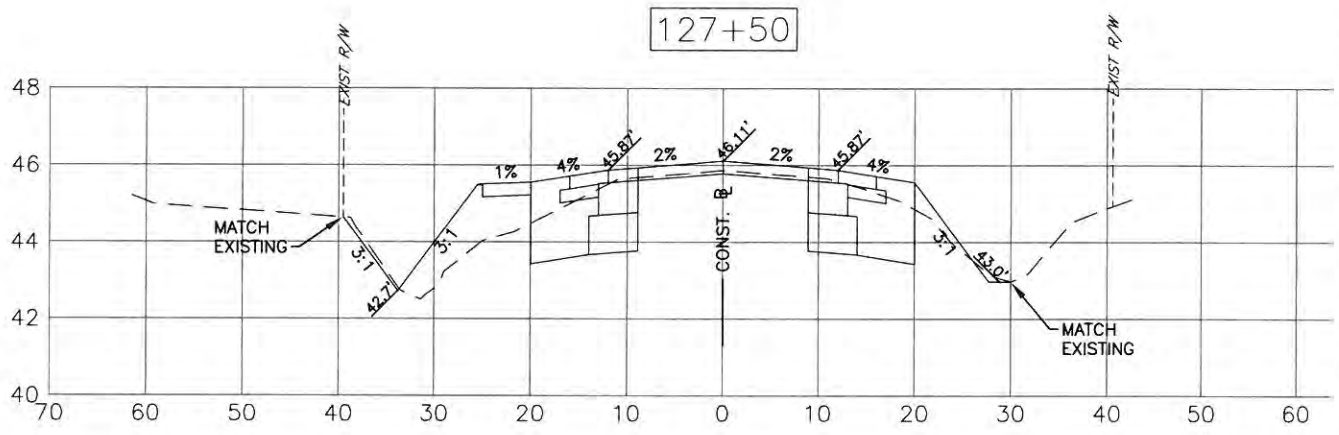
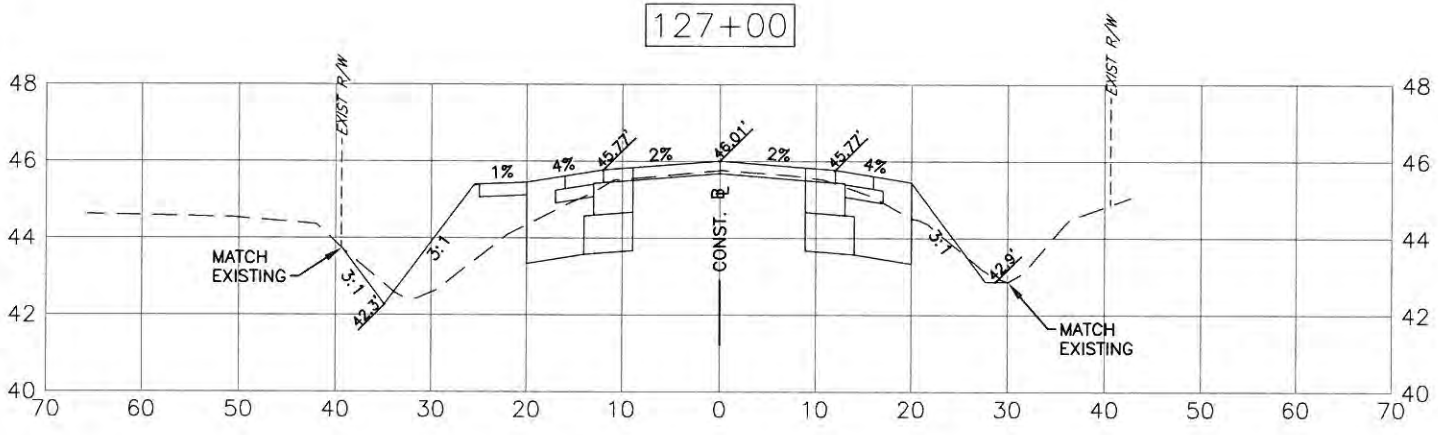
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
DESIGNED BY	AAM 01/11/13
DRAWN BY	JMF 01/11/13
CHECKED BY	JP/GB 09/2013

CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 48777

Chris Mowbray
Signature & Date

I:\P\W\Engineering\Share\Highway Engineering\PROJUS\Fort Hamer Road\DWG\Fin SECT 10/24/2014 8:45 AM Thom Corrales. 1:1 11x17

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 125+00 TO STA 127+50**



NO.	REVISION DESCRIPTION	BY	DATE

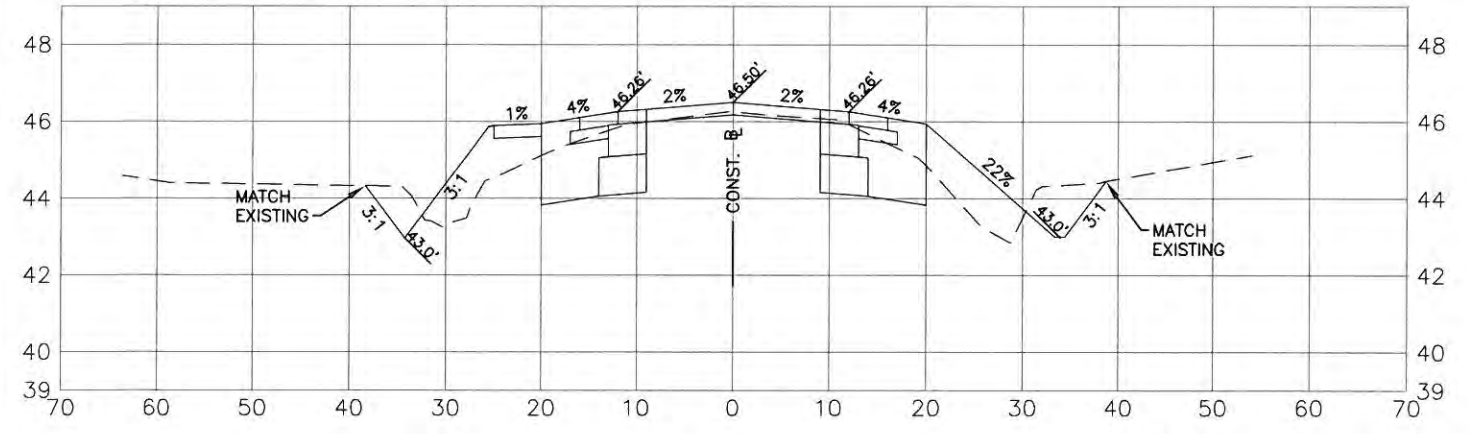
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1/20, V=1/5
DESIGNED BY	AAM 01/11/13
DRAWN BY	TMF 01/11/13
CHECKED BY	JP/GB 09/20/14

CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 46777
Signature & Date

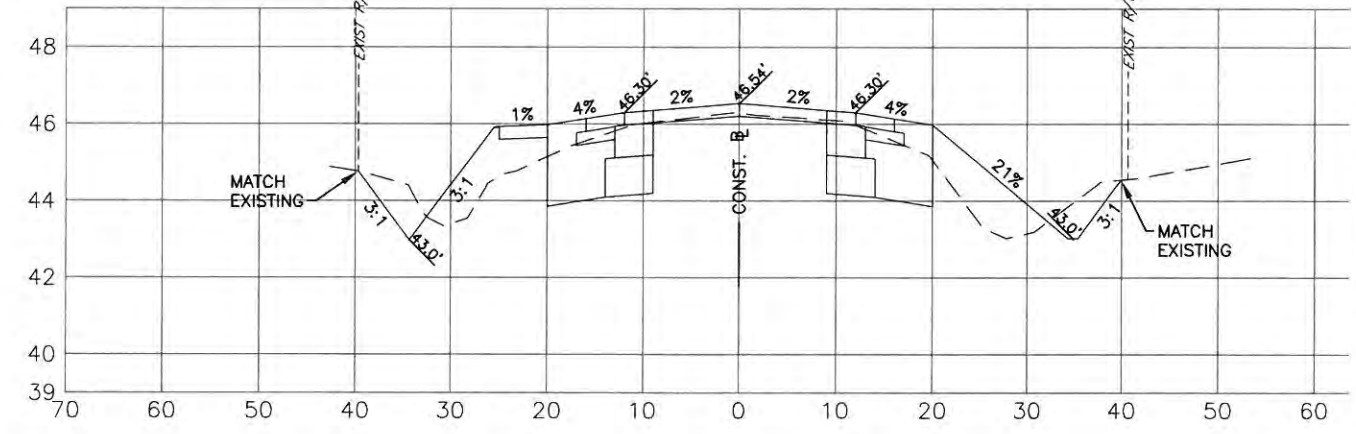
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**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 128+00 TO STA 130+50**

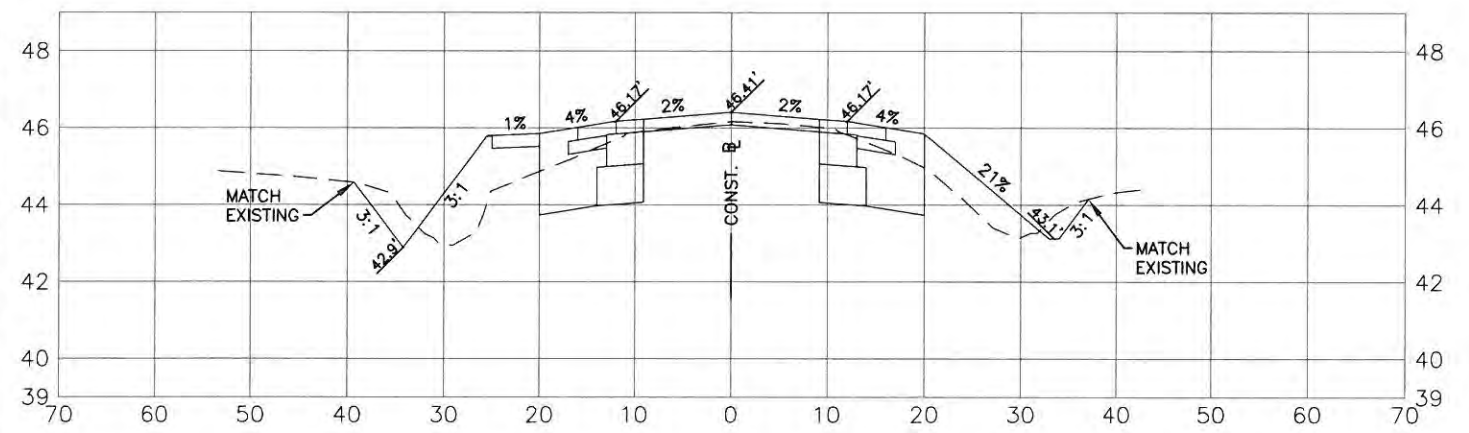
130+00



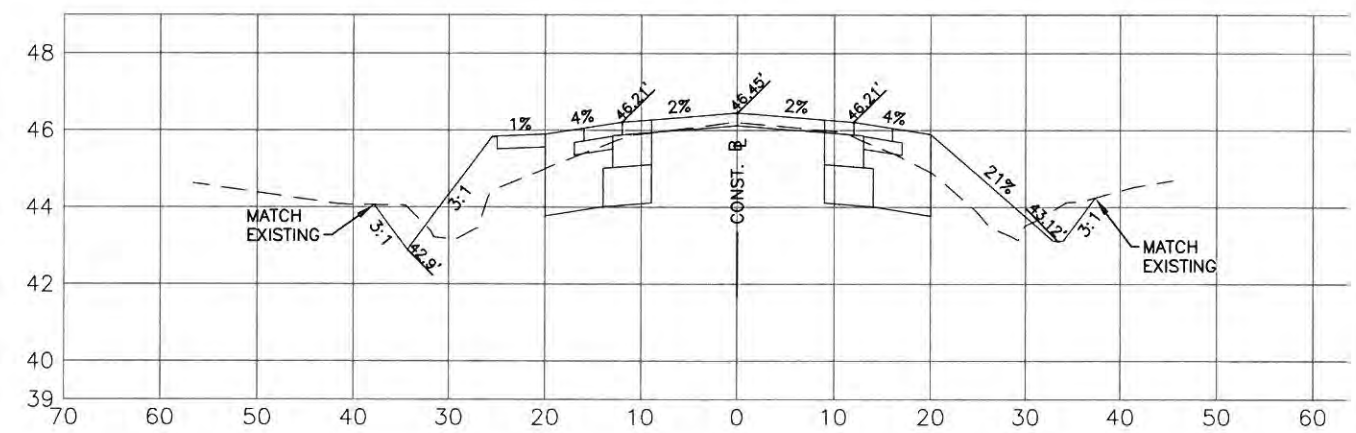
130+50



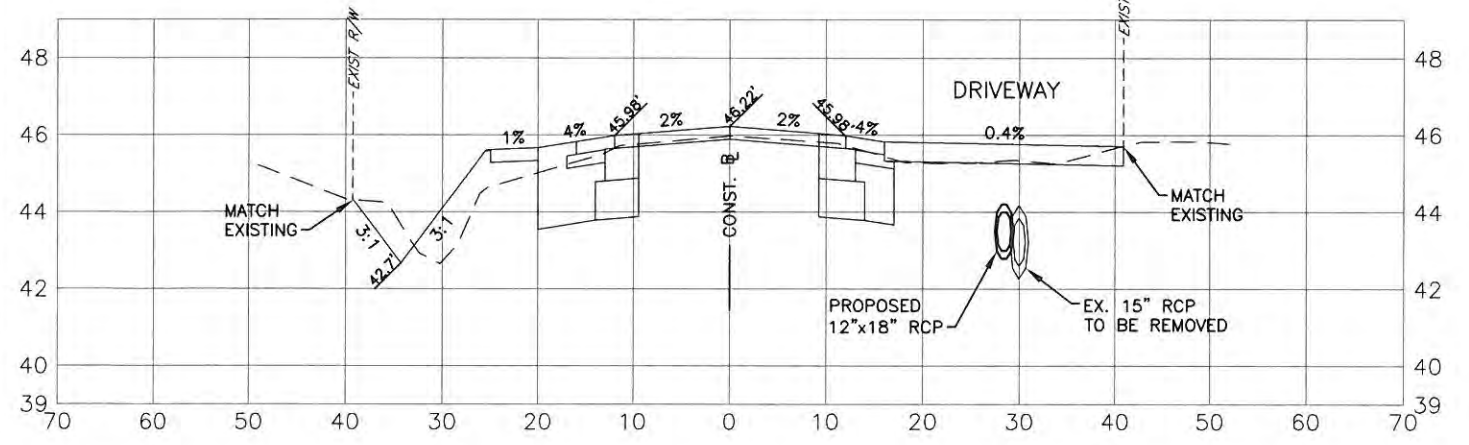
129+00



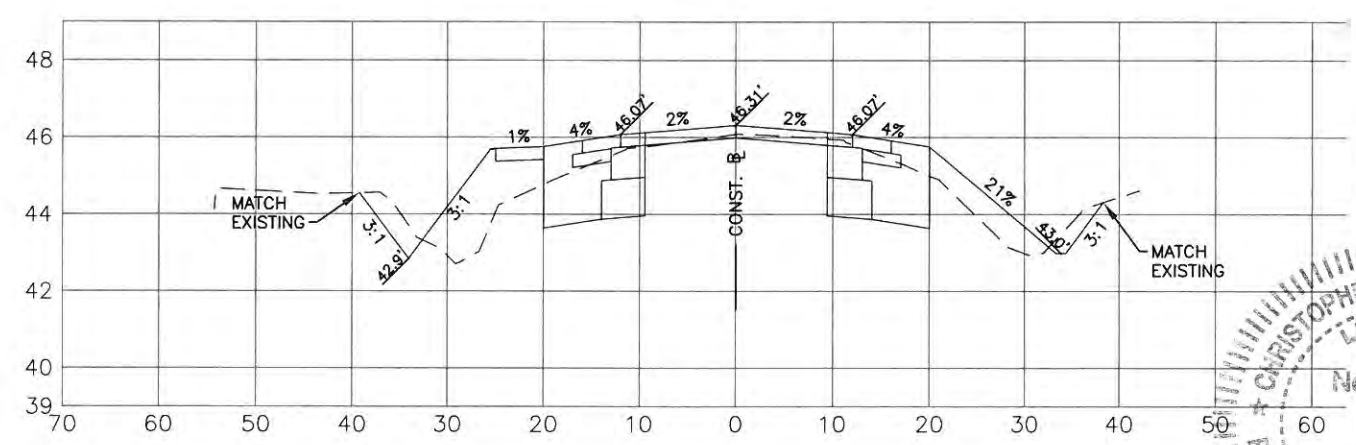
129+50



128+00

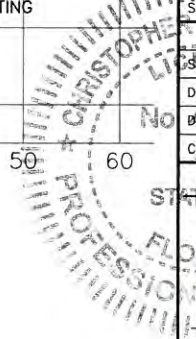


128+50



NO.	REVISION DESCRIPTION	BY	DATE

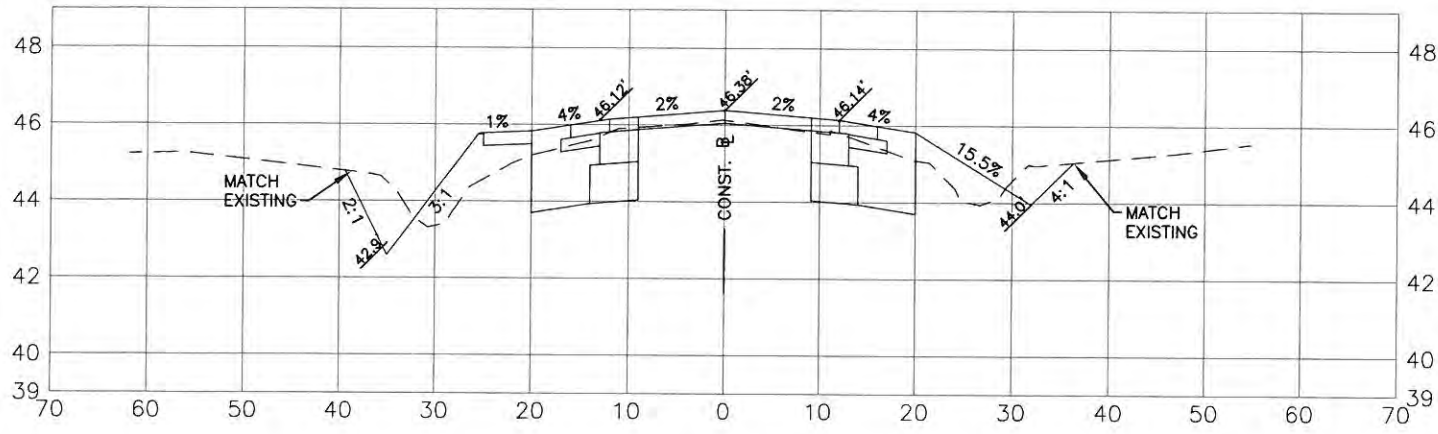
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SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
DESIGNED	WAM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/2014
BY	DATE
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	



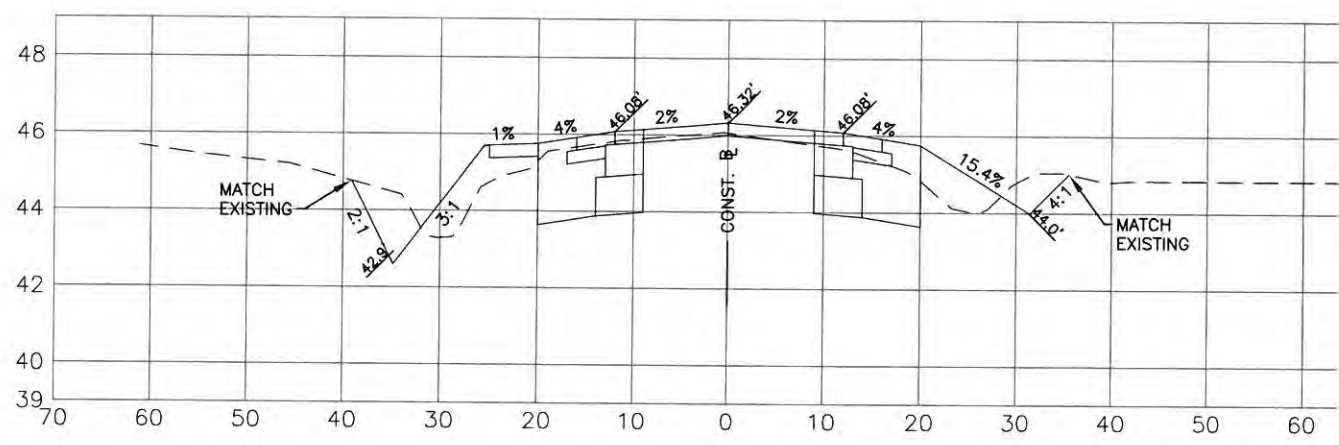
I:\VMS_Engineering\Shore Highway_Engineering\ROADS\Fort Hamer_Road\DWG\PH_Hamer_Road\128+00.dwg 10/24/2014 8:45 AM Thom Forrester, I.T. 11x17

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 131+00 TO STA 133+50**

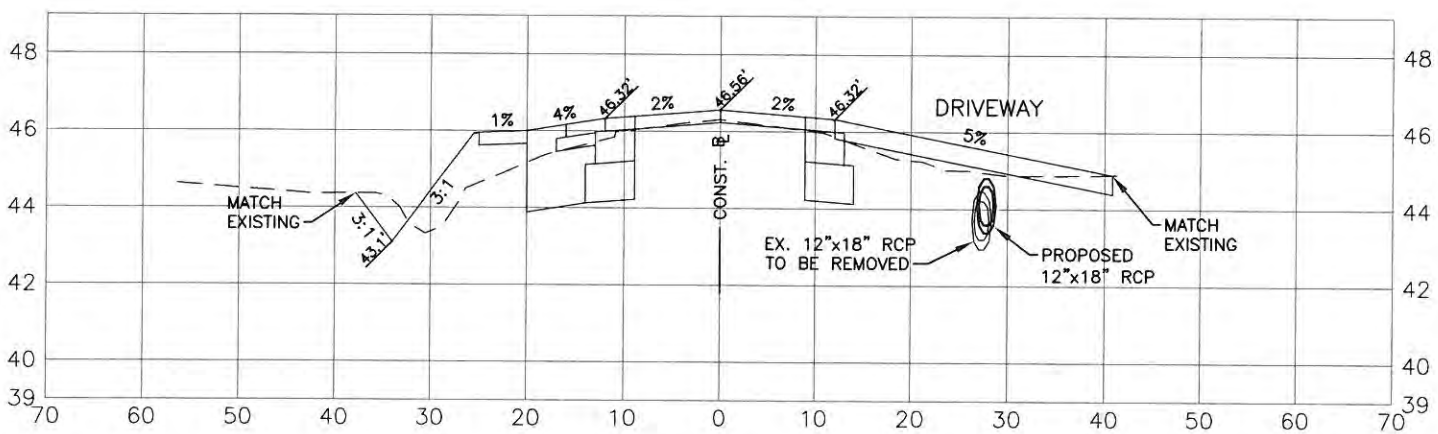
133+00



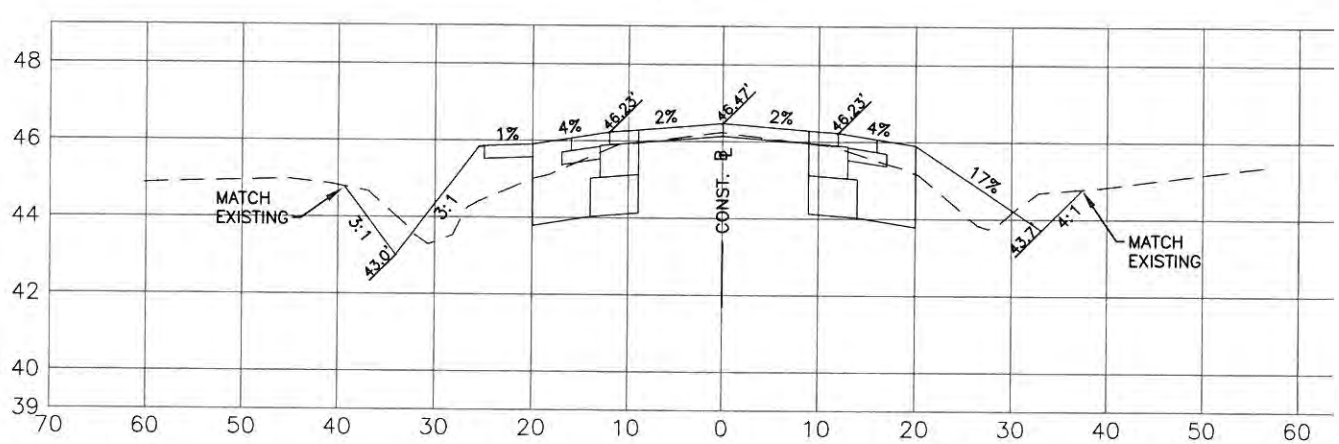
133+50



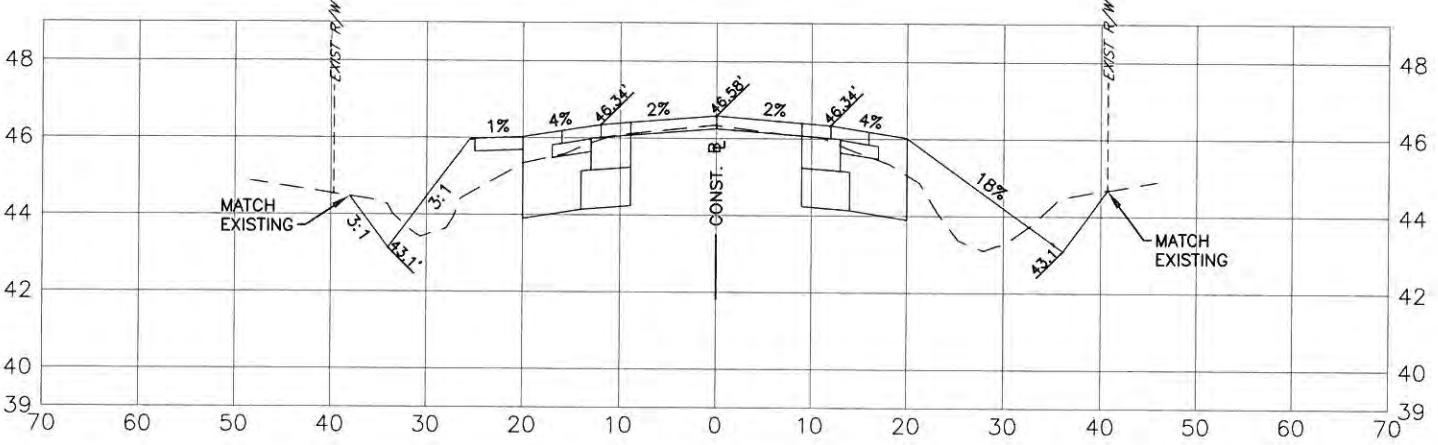
132+00



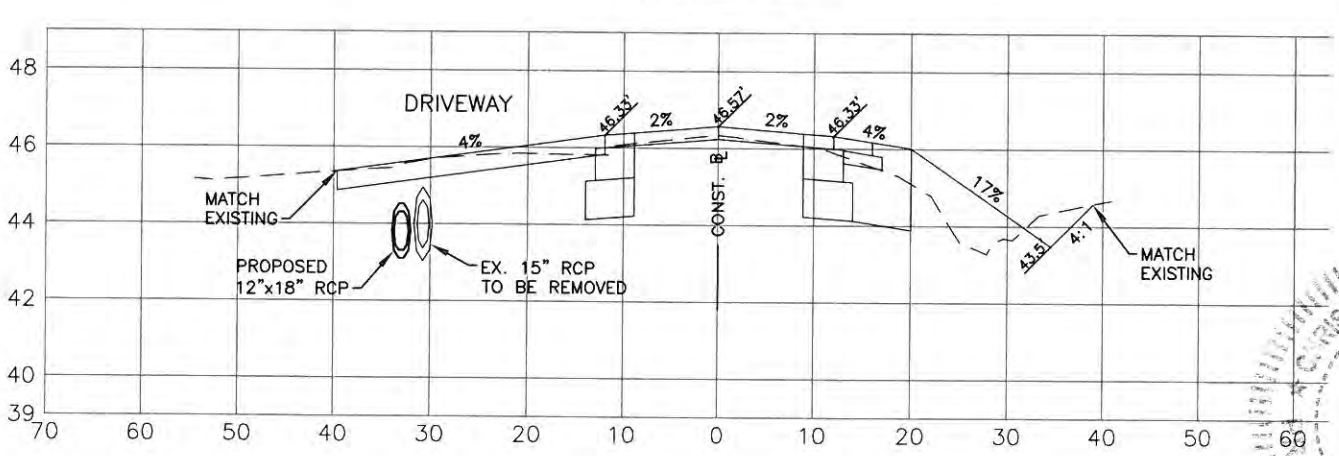
132+50



131+00



131+50



NO.	REVISION DESCRIPTION	BY	DATE

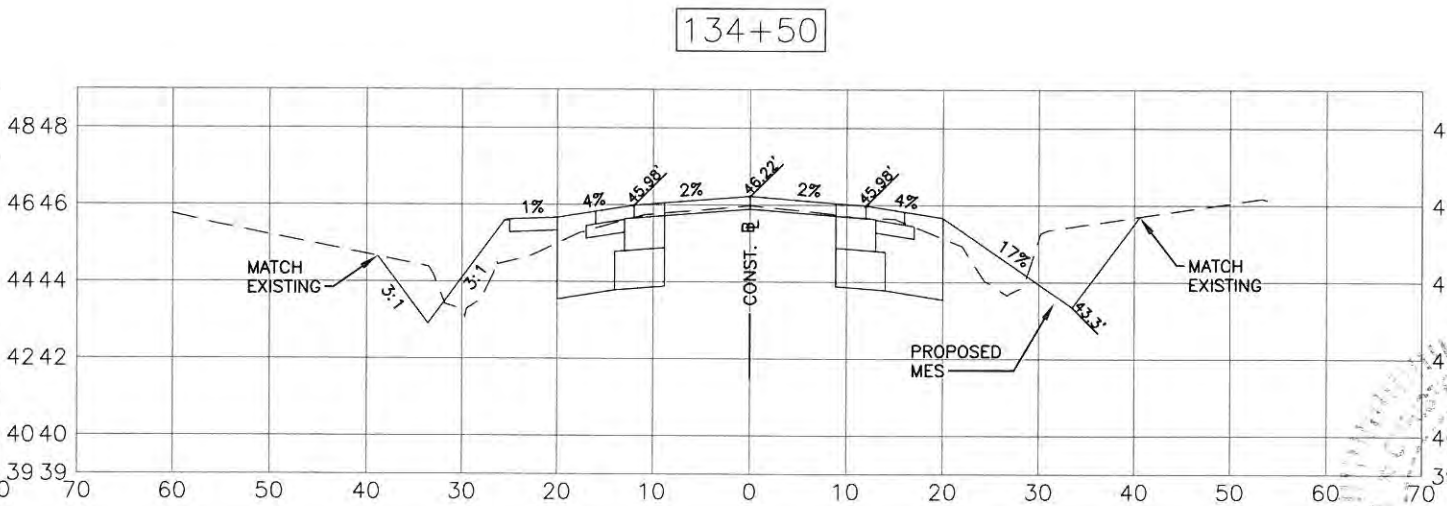
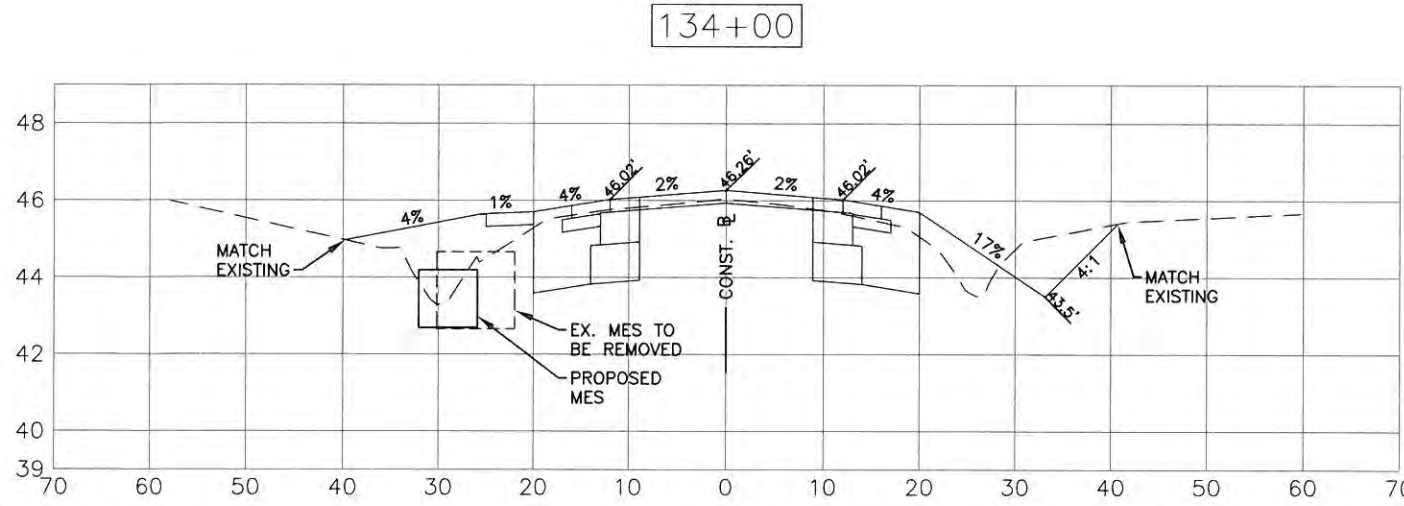
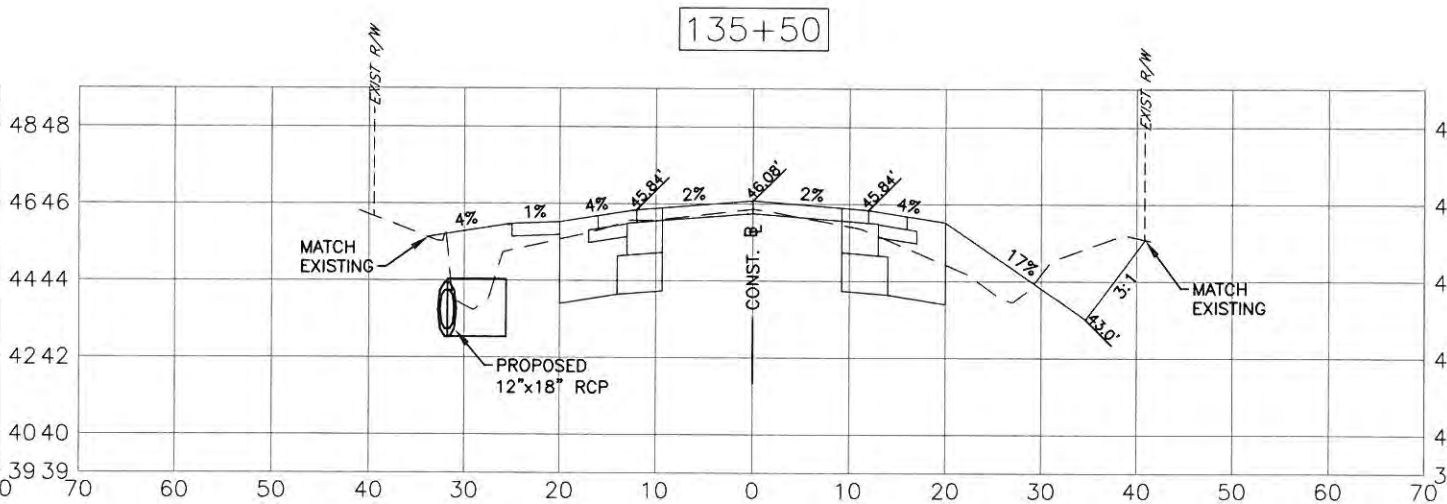
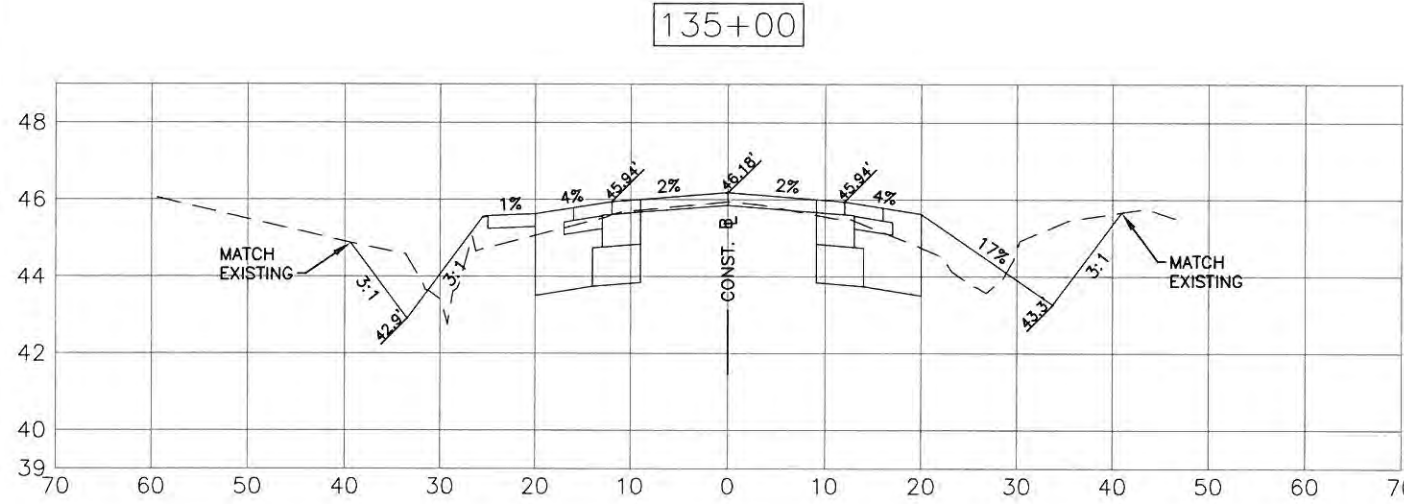
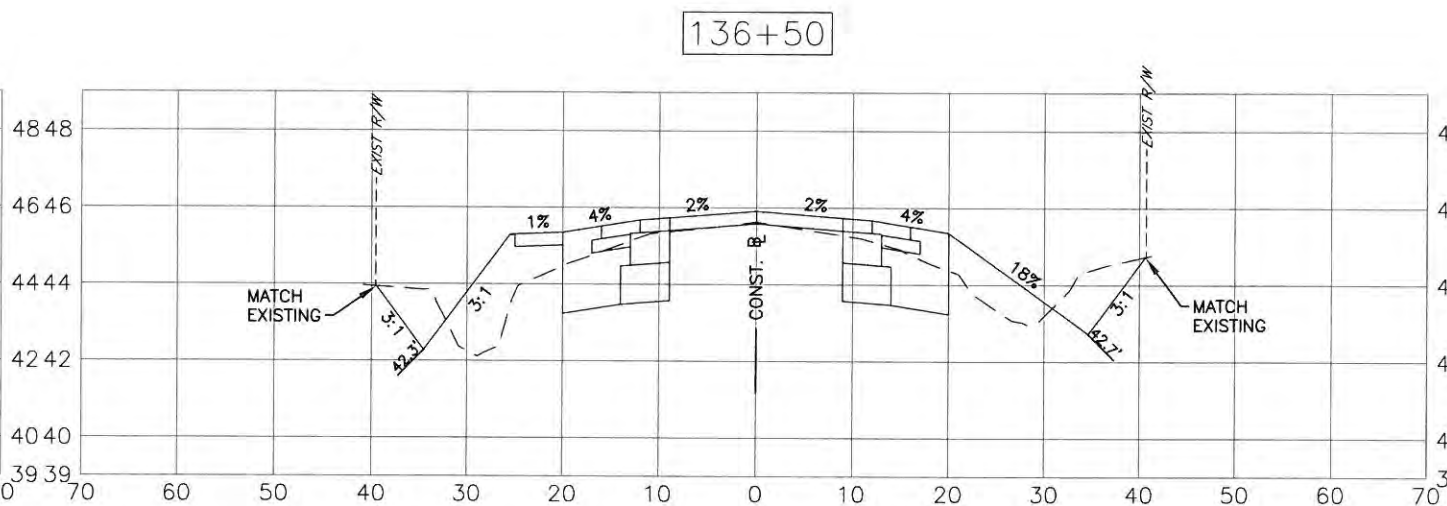
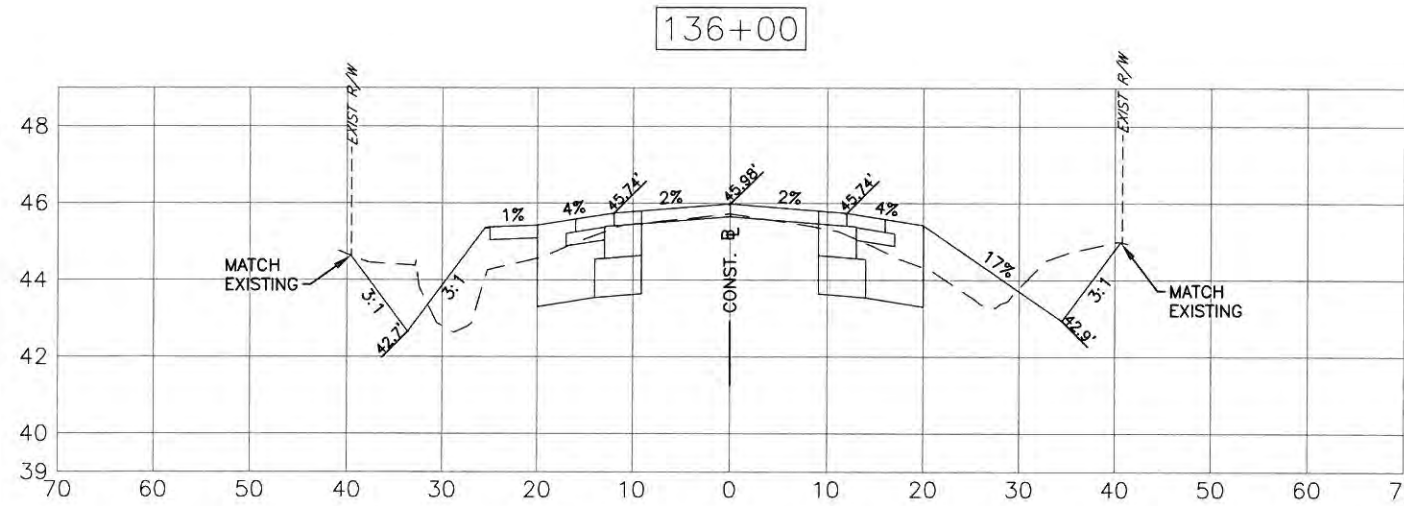
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN/RGE	7/35S/18E
SCALE	1"=1.25'
DATE	
BY	
SURVEYED	ZNS
DESIGNED	AAM 01/19/13
DRAWN	TMF 01/14/13
CHECKED	JP/GB 09/20/14

CHRISTIE MOWBRAY, P.E.
FLORIDA P.E. # 46771

Signature & Date

I:\PMD_Engineering\Share\Highway_Engineering\ROADS\Fort Hamer_Road\DWG\FH_XSEC_10/24/2014 8:46 AM Thom Forester, 1.1, 11-17

**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 134+00 TO STA 136+50**



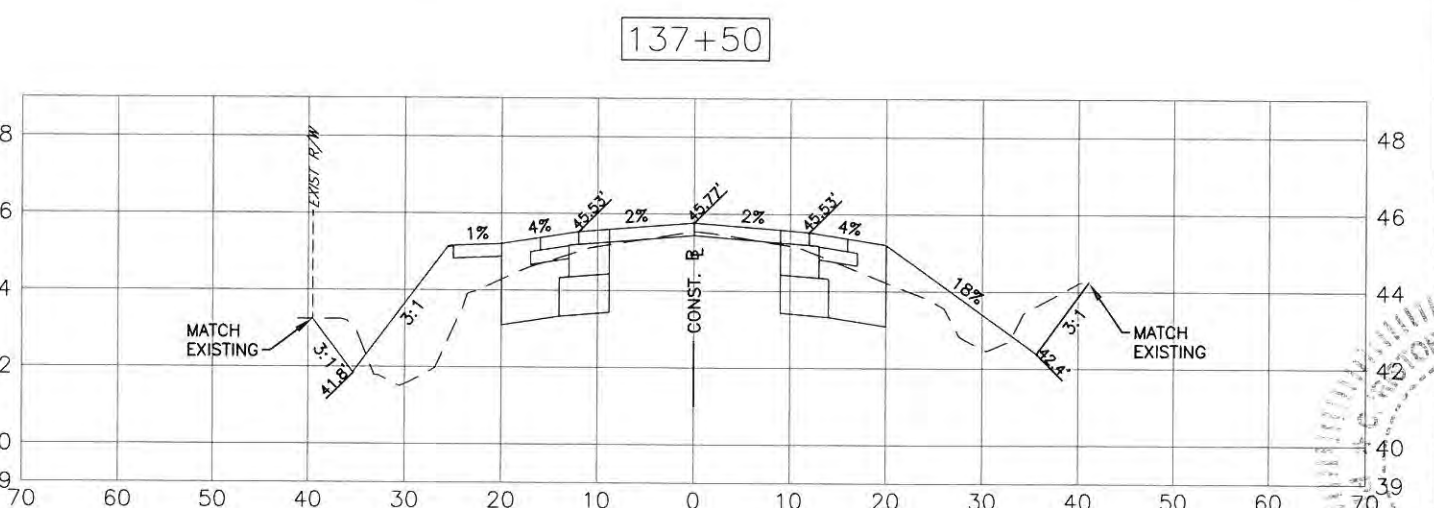
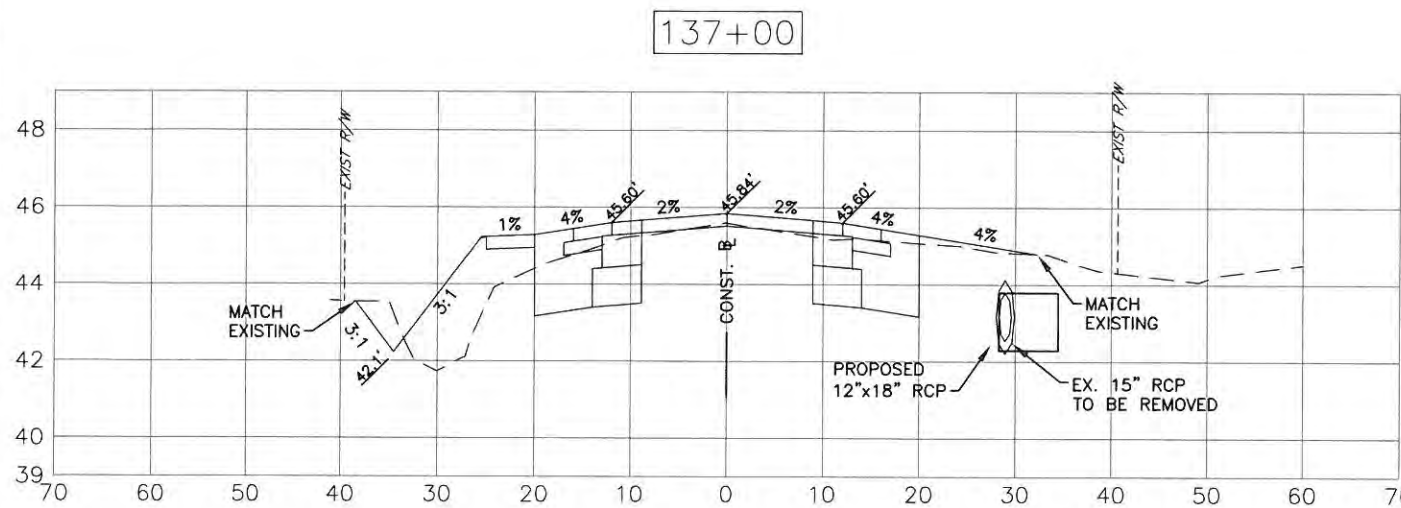
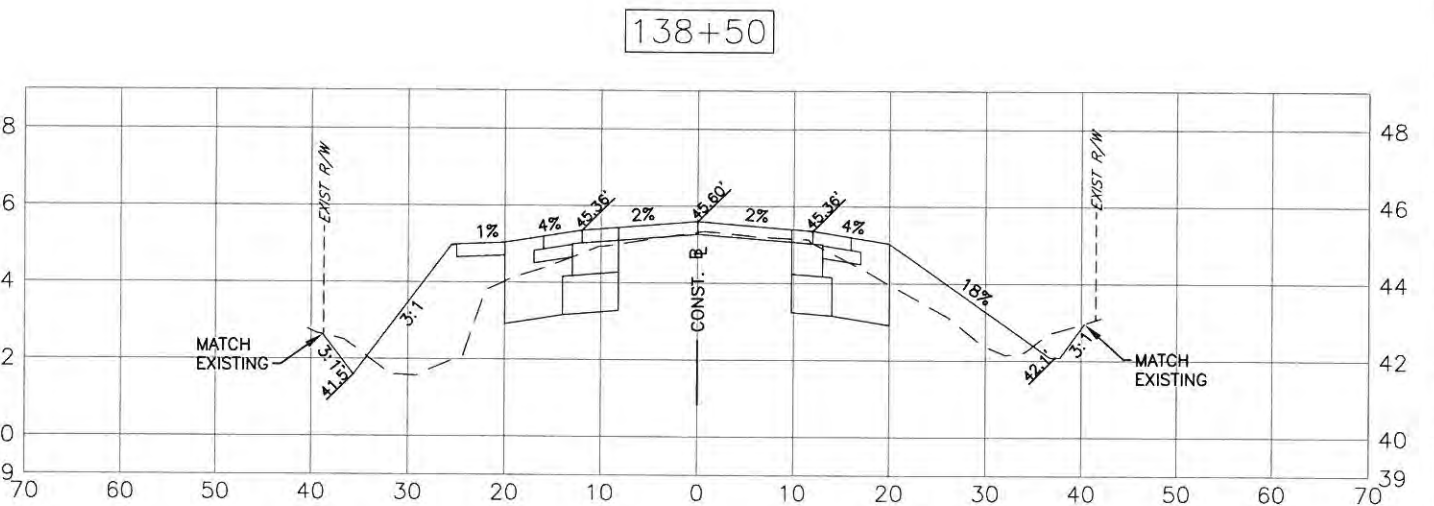
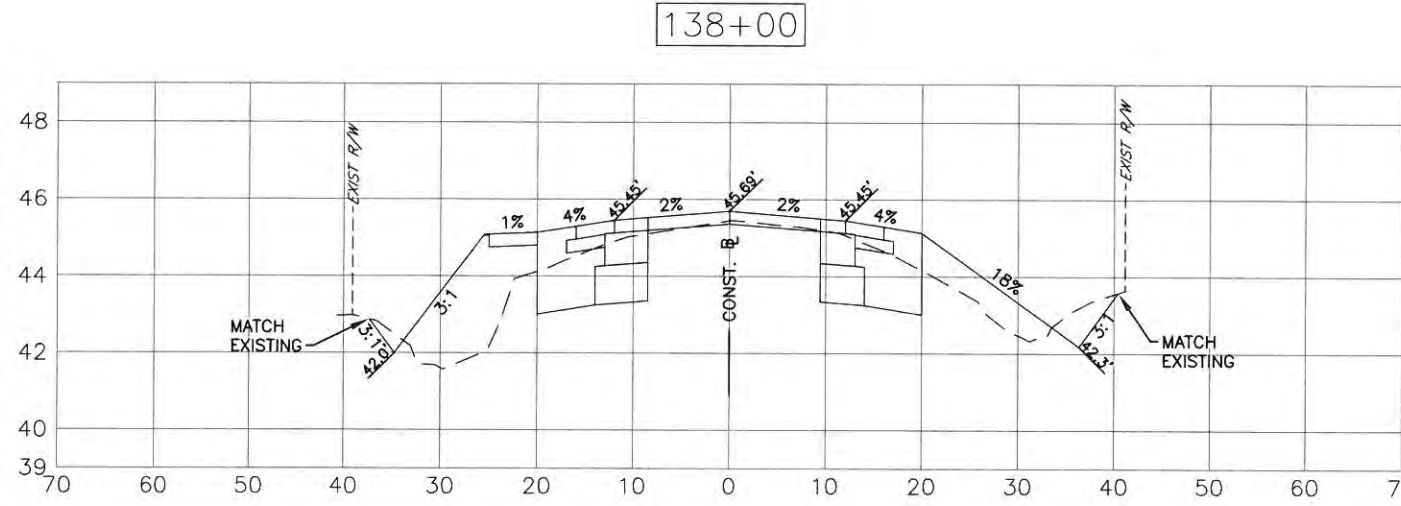
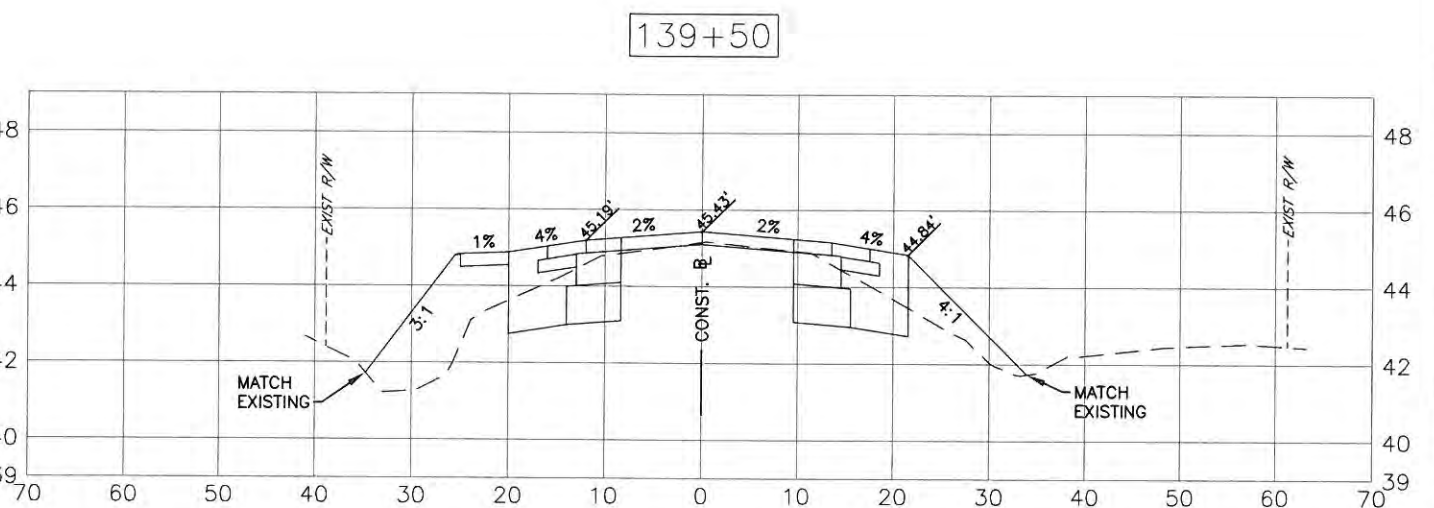
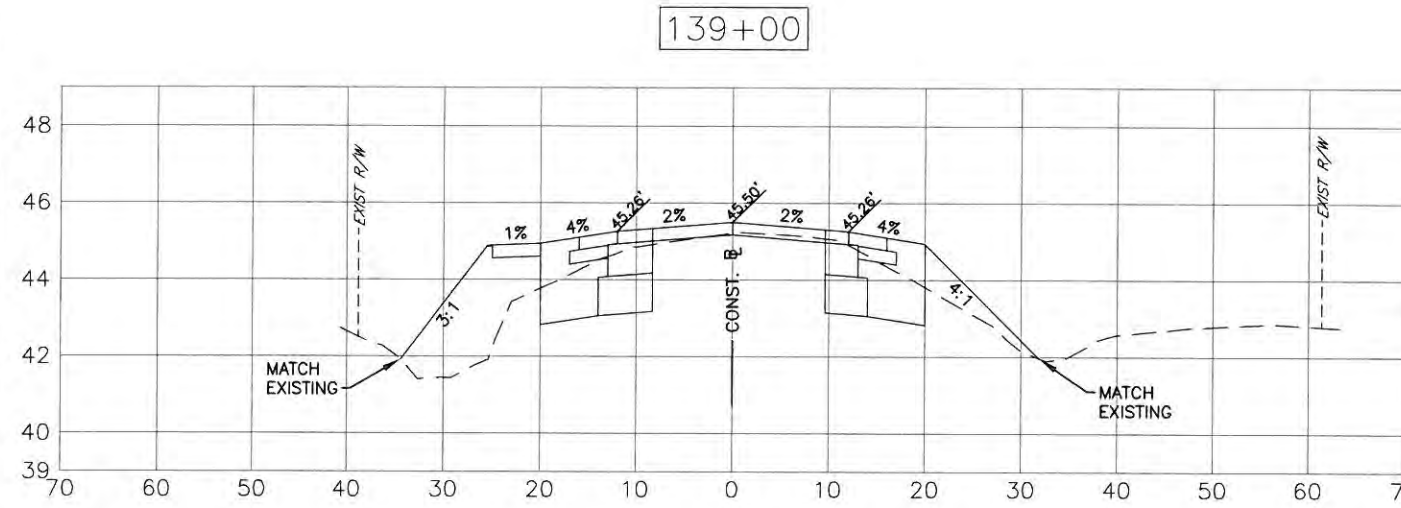
NO.	REVISION DESCRIPTION	DATE	BY

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
SURVEYED	ZNS
DESIGNED	AAM 03/11/13
DRAWN	TNF 04/11/13
CHECKED	JP/GB 09/2014

CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 46777

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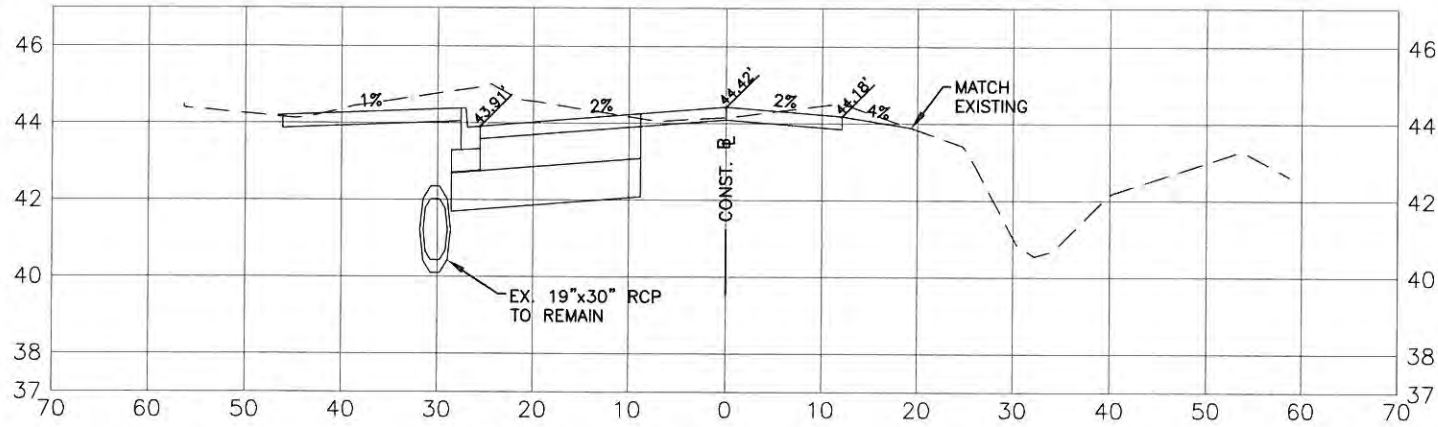
FORT HAMER ROAD PHASE II US
BRIDGE
301 TO FUTURE FORT HAMER
CROSS SECTIONS
STA 137+00 TO STA 139+50



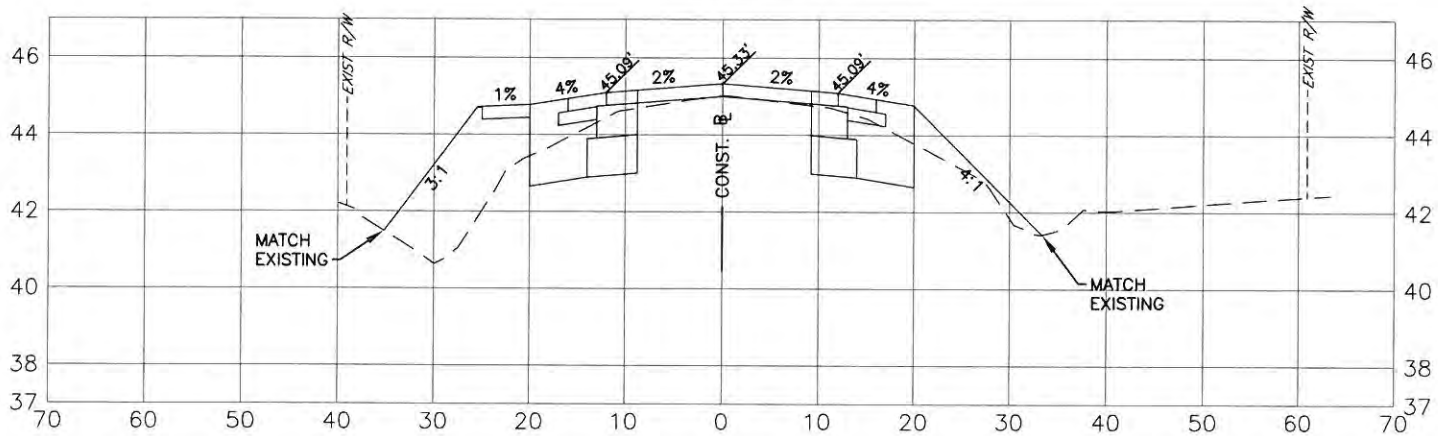
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1/20, V=1/5
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/20/14
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46774	
Signature & Date	

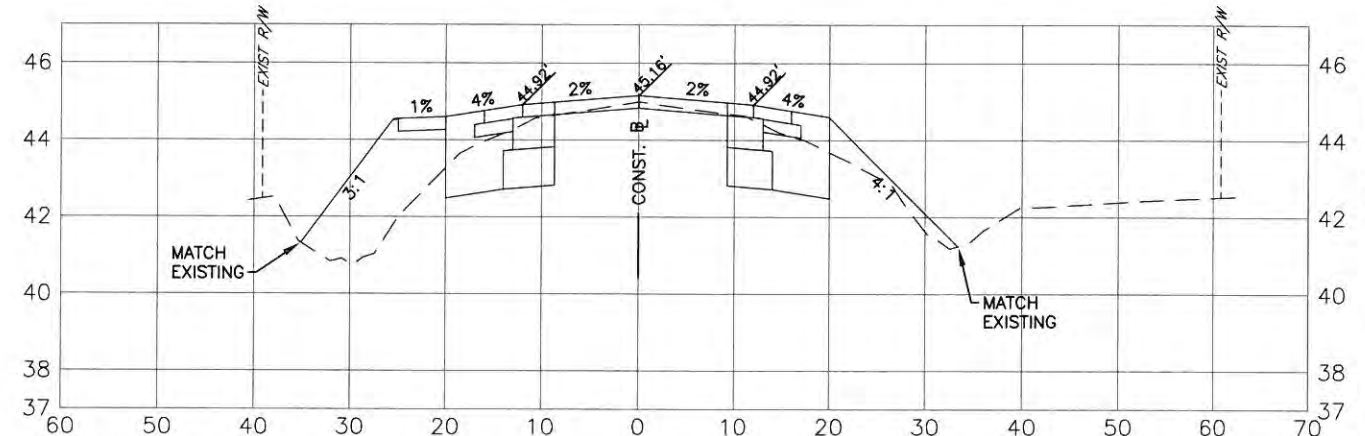
142+00



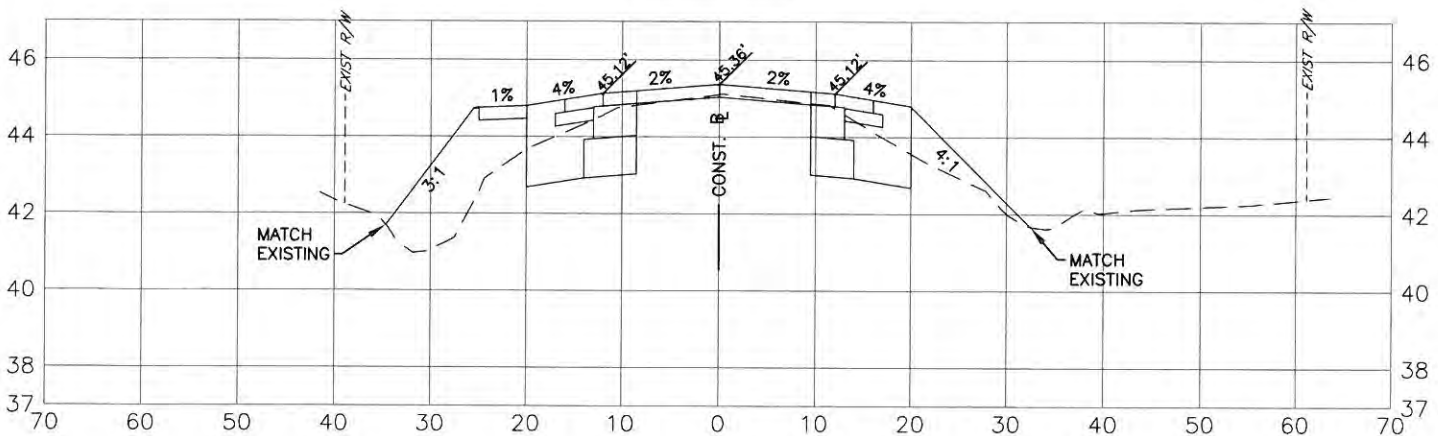
141+00



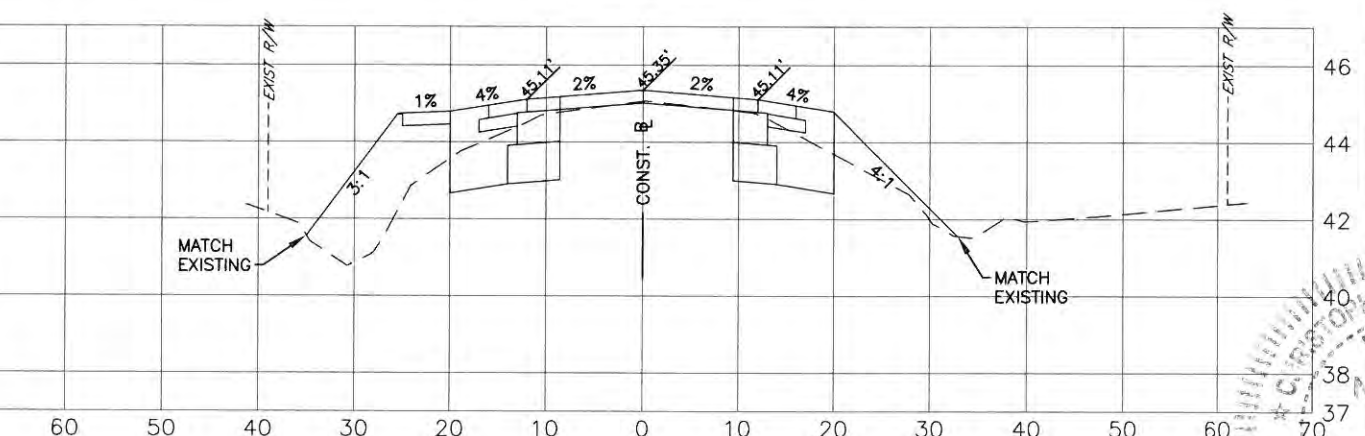
141+50



140+00



140+50



**FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CROSS SECTIONS
STA 140+00 TO STA 142+00**

NO.	REVISION DESCRIPTION	DATE	BY

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	H=1:20, V=1:5
SURVEYED	ZNS
DESIGNED	AAM 01/14/13
DRAWN	TMF 01/17/13
CHECKED	JP/GB 09/2014

CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 46777

FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CUT AND FILL TABLE

STATION	AREA CUT (SF)	AREA FILL (SF)	DIST. (ft)	VOLUME CUT (CF)	VOLUME FILL (CF)
09+50	0.0	0.0			
10+00	84.5	2.3	50	2113	56
10+50	80.6	4.5	50	4128	169
11+00	72.0	11.6	50	3815	402
11+50	35.1	23.0	50	2677	865
12+00	32.4	37.8	50	1686	1519
12+50	28.8	47.6	50	1529	2133
13+00	56.9	40.0	50	2143	2189
13+50	61.3	39.3	50	2954	1981
14+00	70.6	33.5	50	3296	1819
14+50	69.9	40.8	50	3512	1857
15+00	76.3	34.6	50	3655	1883
15+50	76.4	37.5	50	3817	1801
16+00	73.2	42.0	50	3739	1988
16+50	74.3	41.3	50	3687	2082
17+00	73.5	38.3	50	3695	1989
17+50	69.0	38.8	50	3563	1927
18+00	68.3	38.8	50	3432	1939
18+50	71.8	39.3	50	3501	1952
19+00	70.8	46.5	50	3563	2144
19+50	70.1	44.1	50	3521	2265
20+00	74.9	42.0	50	3624	2152
20+50	80.5	37.8	50	3885	1994
21+00	59.0	34.6	50	3489	1810
21+50	90.6	37.5	50	3740	1802
22+00	64.0	46.5	50	3864	2100
22+50	68.7	44.1	50	3318	2265
23+00	67.8	42.8	50	3412	2171
23+50	64.2	42.1	50	3298	2120
24+00	53.1	33.7	50	2932	1894
24+50	67.0	28.3	50	3003	1550
25+00	64.4	26.3	50	3287	1363
25+50	59.5	29.3	50	3099	1388
26+00	81.8	35.1	50	3534	1610
26+50	70.8	43.3	50	3814	1960
27+00	83.4	18.5	50	3853	1545
27+50	78.0	38.3	50	4033	1420
28+00	94.3	37.0	50	4305	1882
28+50	92.8	29.9	50	4677	1671
29+00	139.5	27.4	50	5808	1432
29+50	113.8	21.3	50	6331	1216
30+00	107.1	17.6	50	5520	972
30+50	103.5	15.8	50	5263	834

30+00	107.1	17.6	50	5520	972
30+50	103.5	15.8	50	5263	834
31+00	100.0	15.3	50	5087	776
31+50	34.2	8.0	50	3356	582
32+00	41.5	31.3	50	1893	982
32+50	70.1	34.6	50	2789	1646
33+00	58.1	38.5	50	3203	1827
33+50	66.1	30.3	50	3104	1721
34+00	60.4	27.8	50	3163	1452
34+50	57.4	5.5	50	2946	831
35+00	17.1	10.5	50	1862	400
35+50	24.5	15.3	50	1039	644
36+00	31.4	6.8	50	1397	552
36+50	30.8	11.1	50	1556	449
37+00	28.9	13.3	50	1493	609
37+50	32.1	13.3	50	1524	663
38+00	26.5	1.3	50	1464	363
38+50	32.3	0.6	50	1471	45
39+00	35.6	0.0	50	1698	15
39+50	40.8	0.3	50	1910	7
40+00	36.6	6.3	50	1934	163
40+50	37.0	8.2	50	1839	361
41+00	42.1	7.5	50	1977	392
41+50	47.5	9.5	50	2240	425
42+00	32.8	0.1	50	2007	240
42+50	45.8	8.0	50	1963	202
43+00	43.8	6.0	50	2239	350
43+50	44.0	4.3	50	2195	256
44+00	41.8	6.6	50	2146	270
44+50	42.6	4.8	50	2111	285
45+00	51.9	0.8	50	2363	140
45+50	40.1	6.0	50	2299	169
46+00	39.4	5.8	50	1988	295
46+50	40.6	11.0	50	2001	420
47+00	38.8	3.0	50	1984	350
47+50	40.0	0.3	50	1969	81
48+00	41.0	0.5	50	2025	19
48+50	43.0	1.6	50	2100	53
49+00	43.4	6.8	50	2159	210
49+50	72.9	3.8	50	2908	263
50+00	88.3	4.1	50	4030	196
50+50	92.7	2.8	50	4524	171
51+00	85.6	0.5	50	4458	81
51+50	81.5	4.3	50	4178	120

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054784
SURVEY #	5303
SEC./TWN./RGE	17/35S/18E
SCALE	1"=40' HFS
SURVEYED	ZNS
DESIGNED	AM 01/11/13
DRAWN	TMF 01/11/13
CHECKED	JP/GB 09/2014
CHRIS L. MOWBRAY, P.E. FLORIDA P.E. # 46777	
Signature & Date	

FORT HAMER ROAD PHASE II US
301 TO FUTURE FORT HAMER
BRIDGE
CUT AND FILL TABLE

52+00	139.6	0.8	50	5527	126
52+50	74.0	0.7	50	5339	36
53+00	53.5	1.3	50	3188	48
53+50	81.5	2.1	50	3375	84
54+00	66.5	13.8	50	3701	396
54+50	71.8	12.8	50	3457	663
55+00	71.4	12.6	50	3580	633
55+50	72.5	12.8	50	3599	633
56+00	64.1	12.3	50	3416	628
56+50	63.0	15.0	50	3179	684
57+00	51.4	15.9	50	2861	772
57+50	53.5	10.9	50	2623	669
58+00	38.5	35.3	50	2301	1155
58+50	54.8	6.4	50	2334	1042
59+00	66.8	4.5	50	3040	272
59+50	106.0	4.4	50	4318	222
60+00	110.8	3.3	50	5420	190
60+50	83.5	11.6	50	4858	371
61+00	77.4	17.5	50	4022	727
61+50	69.8	19.5	50	3678	924
62+00	66.2	22.8	50	3398	1056
62+50	65.4	48.1	50	3289	1771
63+00	84.1	82.8	50	3737	3271
63+50	57.8	21.3	50	3546	2600
64+00	16.6	10.3	50	1860	788
64+50	41.7	1.0	50	1459	281
65+00	30.8	9.0	50	1815	250
65+50	6.2	21.0	50	926	751
66+00	4.6	21.1	50	270	1053
66+50	4.5	20.1	50	228	1031
67+00	3.1	21.3	50	191	1036
67+50	2.7	20.3	50	144	1041
68+00	10.6	19.3	50	331	989
68+50	25.0	20.1	50	889	984
69+00	16.0	22.5	50	1025	1066
69+50	8.6	25.8	50	616	1207
70+00	6.2	28.3	50	371	1350
70+50	8.1	29.8	50	359	1450
71+00	9.6	31.6	50	443	1533
71+50	7.8	35.5	50	435	1677
72+00	6.2	38.3	50	350	1845
72+50	4.8	42.3	50	275	2014
73+00	7.6	40.9	50	310	2079

74+00	5.1	45.6	50	316	2089
74+50	16.2	35.5	50	531	2026
75+00	3.5	42.8	50	492	1956
75+50	23.7	29.0	50	680	1794
76+00	23.5	25.8	50	1179	1369
76+50	28.5	26.3	50	1298	1300
77+00	28.9	26.5	50	1434	1320
77+50	29.8	22.0	50	1467	1214
78+00	30.0	15.0	50	1496	926
78+50	32.6	15.8	50	1566	772
79+00	34.0	24.8	50	1665	1016
79+50	31.1	24.9	50	1627	1244
80+00	77.6	22.6	50	2718	1188
80+50	63.9	31.3	50	3537	1346
81+00	81.1	27.3	50	3625	1464
81+50	82.5	5.8	50	4091	827
82+00	26.2	25.0	50	2718	769
82+50	26.3	25.0	50	1311	1250
83+00	110.0	44.3	50	3406	1731
83+50	110.0	45.0	50	5500	2231
84+00	110.0	44.3	50	5500	2233
84+50	110.0	45.3	50	5500	2239
85+00	101.3	43.0	50	5281	2206
85+50	132.8	36.5	50	5850	1988
86+00	91.3	30.3	50	5600	1669
86+50	87.8	34.0	50	4475	1606
87+00	82.8	41.0	50	4263	1875
87+50	82.8	41.3	50	4138	2056
88+00	23.0	41.0	50	2644	2056
88+50	28.0	38.3	50	1275	1983
89+00	32.3	35.3	50	1506	1839
89+50	18.3	28.0	50	1263	1581
90+00	36.8	8.3	50	1376	907
90+50	36.6	4.5	50	1833	320
91+00	39.5	3.3	50	1901	194
91+50	40.8	3.5	50	2006	168
92+00	39.1	4.9	50	1997	208
92+50	38.3	5.8	50	1935	267
93+00	38.1	6.5	50	1910	308
93+50	39.1	8.8	50	1930	381
94+00	39.0	11.6	50	1952	509
94+50	39.0	9.6	50	1950	530
95+00	39.8	6.8	50	1969	411
95+50	44.3	5.0	50	2100	295

NO.					
REVISION DESCRIPTION					
BY	DATE				
PROJECT # 323-6054764					
SURVEY # 5303					
SEC. TWP. / RGE 7/35S/18E					
SCALE 1"=40'					
SURVEYED	ZNS	BY	DATE		
DESIGNED	AAM		01/11/13		
DRAWN	TMF		01/11/13		
CHECKED	JP/GB		09/20/14		
CHRIS L. MOWBRAY, P.E.					
FLORIDA P.E. # 46777					
Signature & Date					
SHEET 82					

S:\P\W\Engineering\Shore\Highway\Engineering\ROADS\Fort_Hamer_Road\DWG\0314.XSEC.10/24/2014 8:47 AM from Forester, E.L. 1x17



**FORT HAMER ROAD PHASE II US
 301 TO FUTURE FORT HAMER
 BRIDGE
 CUT AND FILL TABLE**

96+00	61.8	3.3	50	2650	208
96+50	57.9	3.0	50	2990	158
97+00	58.3	2.5	50	2903	138
97+50	75.1	3.3	50	3334	144
98+00	74.8	0.0	50	3746	81
98+50	53.3	2.0	50	3200	50
99+00	46.5	0.0	50	2494	50
99+50	60.4	0.0	50	2671	0
100+00	66.8	2.5	50	3178	63
100+50	45.1	9.5	50	2795	301
101+00	40.0	10.9	50	2126	510
101+50	44.8	12.0	50	2119	571
102+00	39.5	16.5	50	2108	713
102+50	37.2	19.0	50	1918	888
103+00	44.6	3.3	50	2045	556
103+50	44.4	10.3	50	2225	338
104+00	40.5	15.5	50	2123	644
104+50	47.8	18.0	50	2207	838
105+00	43.0	5.0	50	2269	575
105+50	40.4	18.4	50	2084	584
106+00	39.5	5.3	50	1997	590
106+50	37.3	24.6	50	1919	747
107+00	35.9	29.8	50	1828	1359
107+50	35.9	30.3	50	1794	1500
108+00	39.8	18.8	50	1891	1225
108+50	42.1	22.8	50	2046	1038
109+00	44.5	19.3	50	2165	1050
109+50	41.8	24.0	50	2156	1082
110+00	36.5	24.9	50	1956	1224
110+50	31.0	33.5	50	1688	1461
111+00	10.8	37.8	50	1044	1784
111+50	12.0	15.3	50	569	1327
112+00	10.3	56.3	50	556	1788
112+50	15.8	64.0	50	652	3006
113+00	15.8	71.5	50	792	3388
113+50	16.5	63.5	50	809	3376
114+00	16.3	56.8	50	821	3007
114+50	19.3	32.3	50	889	2225
115+00	29.3	29.4	50	1214	1541
115+50	19.5	2.6	50	1220	799
116+00	34.6	15.5	50	1351	453
116+50	24.0	18.0	50	1464	839
117+00	25.8	19.0	50	1244	926
117+50	29.0	17.2	50	1369	905
118+00	31.8	16.3	50	1521	838
118+50	33.8	15.3	50	1639	791
119+00	37.5	13.8	50	1781	726
119+50	29.8	15.2	50	1681	725

120+00	28.3	17.0	50	1450	805	
120+50	26.5	4.8	50	1369	543	
121+00	29.8	17.3	50	1407	551	
121+50	31.3	15.6	50	1525	821	
122+00	25.1	23.8	50	1409	984	
122+50	29.8	22.8	50	1373	1164	
123+00	27.9	20.5	50	1442	1081	
123+50	37.4	17.6	50	1631	951	
124+00	37.6	25.7	50	1875	1081	
124+50	41.1	22.6	50	1967	1206	
125+00	52.8	16.5	50	2345	977	
125+50	42.8	19.1	50	2388	890	
126+00	40.3	16.8	50	2076	896	
126+50	40.5	19.1	50	2020	896	
127+00	38.9	22.1	50	1984	1031	
127+50	39.6	19.1	50	1962	1030	
128+00	32.0	11.0	50	1790	751	
128+50	41.5	24.7	50	1838	892	
129+00	41.0	24.5	50	2064	1228	
129+50	41.6	22.7	50	2065	1178	
130+00	46.8	24.3	50	2210	1173	
130+50	46.5	25.3	50	2333	1238	
131+00	44.3	25.8	50	2269	1277	
131+50	45.8	12.1	50	2250	948	
132+00	37.0	13.8	50	2069	646	
132+50	44.0	19.6	50	2025	833	
133+00	46.8	15.9	50	2271	886	
133+50	47.8	16.1	50	2367	799	
134+00	57.6	15.4	50	2635	787	
134+50	59.6	14.8	50	2928	755	
135+00	56.4	13.5	50	2898	708	
135+50	54.5	14.1	50	2773	691	
136+00	50.0	20.5	50	2614	867	
136+50	46.8	26.8	50	2421	1182	
137+00	41.9	21.4	50	2219	1205	
137+50	42.8	31.7	50	2118	1329	
138+00	39.8	34.3	50	2065	1650	
138+50	37.4	36.3	50	1929	1763	
139+00	37.8	50.5	50	1878	2169	
139+50	37.9	39.9	50	1892	2261	
140+00	41.5	40.8	50	1986	2017	
140+50	47.0	42.5	50	2214	2081	
141+00	50.8	44.0	50	2447	2163	
141+50	51.3	45.3	50	2554	2232	
142+00	111.0	3.3	50	4059	1213	
142+50	0.0	0.0	50	2775	1131	
				SUBTOTAL VOLUMES (CF)	653,384	288,297
				SUBTOTAL VOLUMES (CY)	24,199.41	10,677.67

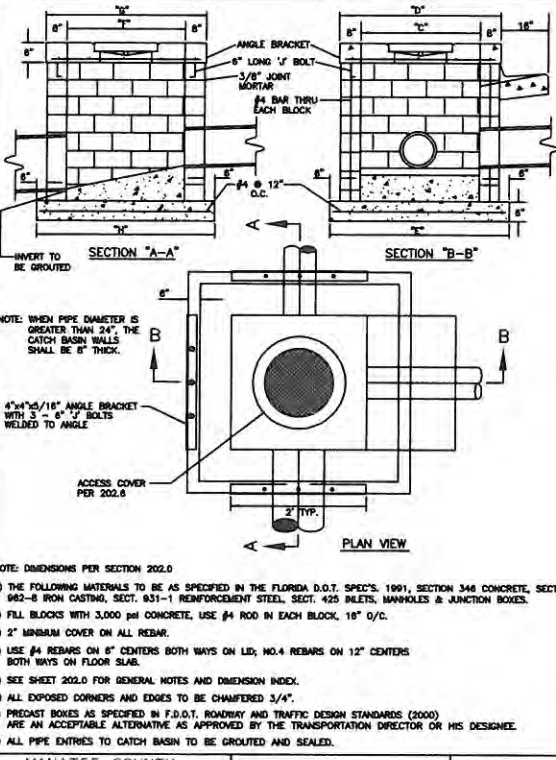
NO.					
REVISION DESCRIPTION					
BY					
DATE					
PROJECT #	323-6054764				
SURVEY #	5303				
SEG./TWN./R&E	7/35S/18E				
SCALE	AS SHOWN				
DESIGNED BY					
DATE					
SURVEYED	ZNS				
DESIGNED	AAM	07/11/13			
DRAWN	TMF	07/11/13			
CHECKED	JP/GB	09/20/14			
CHRIS C. MOWBRAY, P.E.					
FLORIDA P.E. # 46777					
Signature & Date					
SHEET 83					

S:\P\10_Engineering\Shore\Highway_Engineering\ROADS\Fort Hamer Road\DWG\14_VH_XSEC_10/24/2014_8:47 AM Thom Forrester_11.11x17

**FORT HAMER ROAD PHASE II-US
301 TO FUTURE FORT HAMER
BRIDGE
GENERAL DETAILS**

- GENERAL NOTES**
1. ALL REFERENCED STANDARDS SHALL BE LATEST REVISION.
 2. CONCRETE SHALL BE CLASS "1" AS SPECIFIED IN SECTION 345 OF F.D.O.T. SPECIFICATIONS.
 3. SEE SECTION 425-2.3 "MORTAR" OF FLORIDA D.O.T. SPECIFICATIONS.
 4. IRON CASTING SHALL BE AS SPECIFIED IN SECTION 952-8 OF F.D.O.T. SPECIFICATIONS. SEE SECTION 425-5.
 5. ALL REINFORCEMENT STEEL SHALL BE AS SPECIFIED IN SECTIONS 415 & 831.1 OF F.D.O.T. SPECIFICATIONS.
 6. SEE FLORIDA D.O.T. SPECIFICATIONS FOR GRATINGS.
 7. SEE FLORIDA D.O.T. SPECIFICATIONS FOR SECTION 125 "EXCAVATION FOR STRUCTURES."
 8. PRECAST TOP AND BOTTOM TO BE F.D.O.T. STANDARDS WITH MINIMUM TRAFFIC BEARING 6" THICKNESS.
 9. ALL STORMWATER PIPE SHALL BE INSTALLED BEHIND THE CURB OR EDGE OF PAVEMENT AND WITHIN THE RIGHT OF WAY AND WITHIN THE DRAINAGE EASEMENTS.
 10. THE FOLLOWING IS THE DRAINAGE STRUCTURE WALL MINIMUM THICKNESS:

PRECAST	BLOCK
NON-TRAFFIC 6"	8" EITHER WAY
- NOTE: FOR DRAINAGE STRUCTURES WITH PIPE DIAMETERS UP TO AND INCLUDING 24", 6" PRECAST WALLS ARE ACCEPTABLE FOR TRAFFIC BEARING.



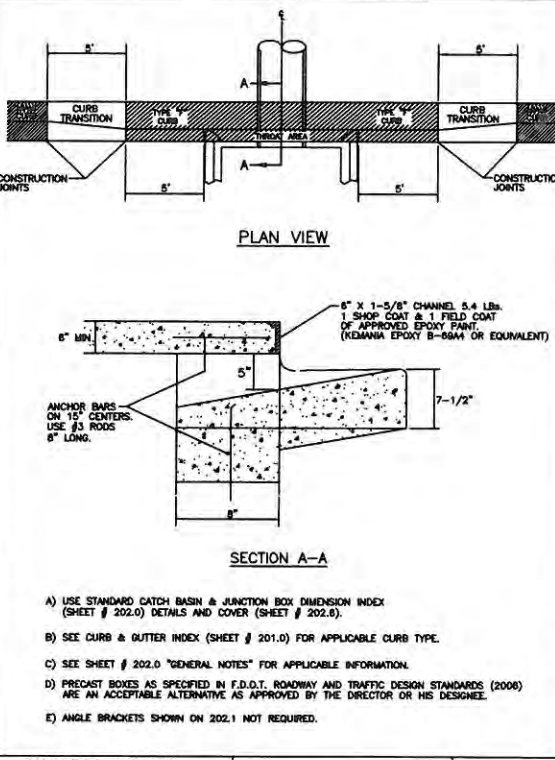
PIPE SIZE	TYPE	DIMENSION INDEX					
		"C"	"D"	"E"	"F"	"G"	"H"
15"	RCP	2'8"	4'	5'	4'	5'4"	6'4"
12"x18"	RCP	-	-	-	-	-	-
18"	RCP	-	-	-	-	-	-
14"x23"	RCP	-	-	-	-	-	-
24"	RCP	3'4"	4'8"	5'8"	-	-	-
19"x30"	RCP	4'	5'4"	6'4"	-	-	-
30"	RCP	-	-	-	-	-	-
24"x38"	RCP	5'	6'4"	7'4"	-	-	-
36"	RCP	5'	6'4"	-	-	-	-
66"	RCP	8'5"	9'9"	10'9"	4'8"	8'0"	7'0"

NOTE: DIMENSIONS PER SECTION 202.0

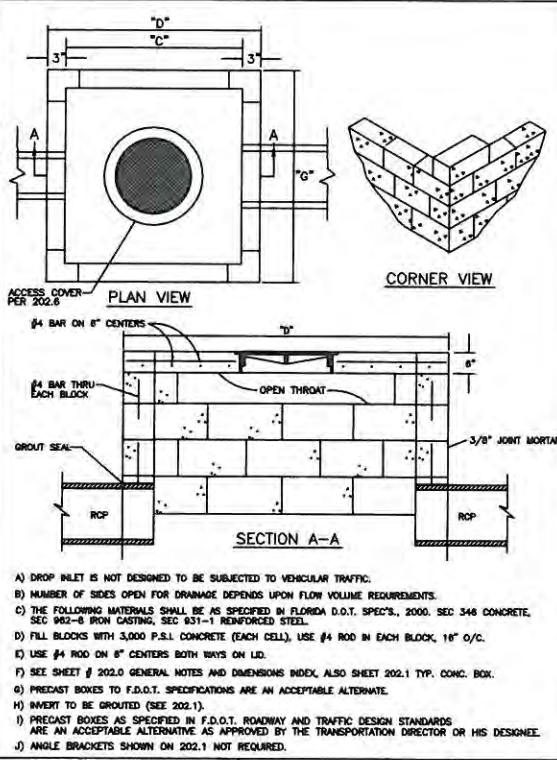
- A) THE FOLLOWING MATERIALS TO BE AS SPECIFIED IN THE FLORIDA D.O.T. SPEC'S, 1991, SECTION 346 CONCRETE, SECT. 952-8 IRON CASTING, SECT. 831-1 REINFORCEMENT STEEL, SECT. 425 BULETS, MANHOLES & JUNCTION BOXES.
- B) FILL BLOCKS WITH 3,000 PSI CONCRETE, USE #4 ROD IN EACH BLOCK, 18" O/C.
- C) 2" MINIMUM COVER ON ALL REBAR.
- D) USE #4 REBARS ON 8" CENTERS BOTH WAYS ON LID, NO.4 REBARS ON 12" CENTERS BOTH WAYS ON FLOOR SLAB.
- E) SEE SHEET 202.0 FOR GENERAL NOTES AND DIMENSION INDEX.
- F) ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
- G) PRECAST BOXES AS SPECIFIED IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS (2006) ARE AN ACCEPTABLE ALTERNATIVE AS APPROVED BY THE TRANSPORTATION DIRECTOR OR HIS DESIGNEE.
- H) ALL PIPE ENTRIES TO CATCH BASIN TO BE GROUTED AND SEALED.

MANATEE COUNTY FLORIDA	DRAINAGE CONTROL SHEET	202.0
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	

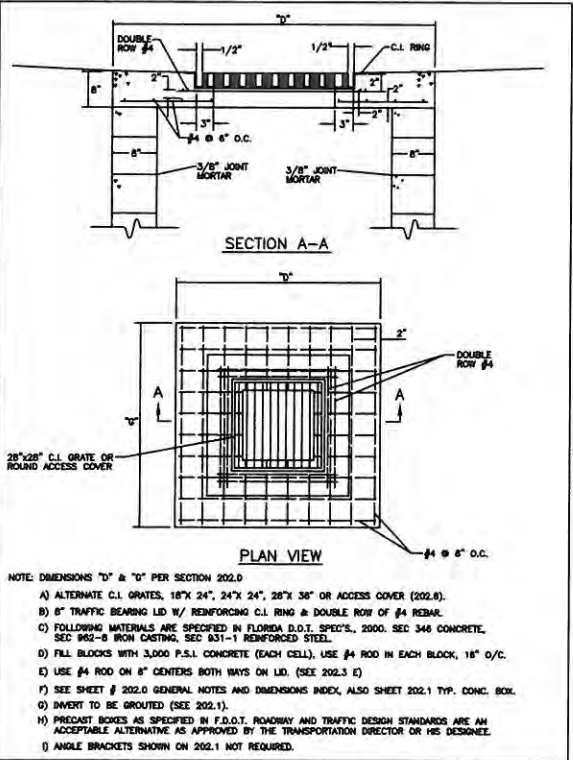
MANATEE COUNTY FLORIDA	TYPICAL CONC. BLOCK BOX	202.1
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	



MANATEE COUNTY FLORIDA	CURB INLET	202.2
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	

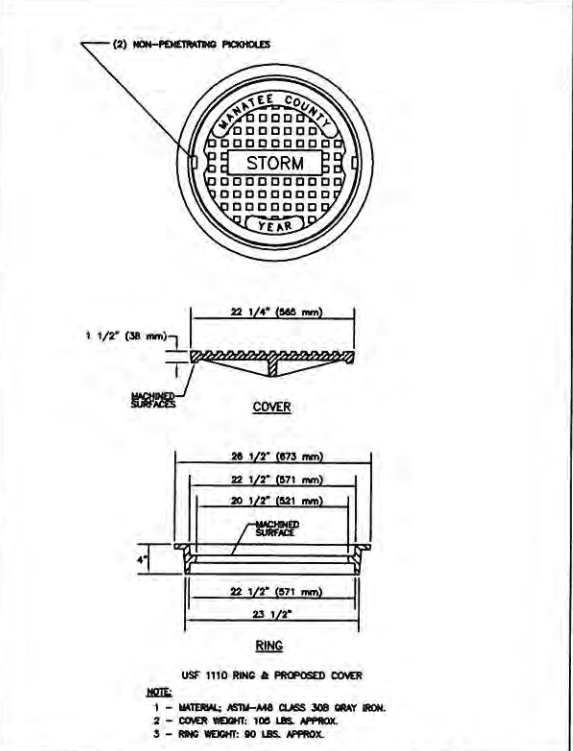


MANATEE COUNTY FLORIDA	THROAT DETAIL FOR DROP INLET	202.3
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	



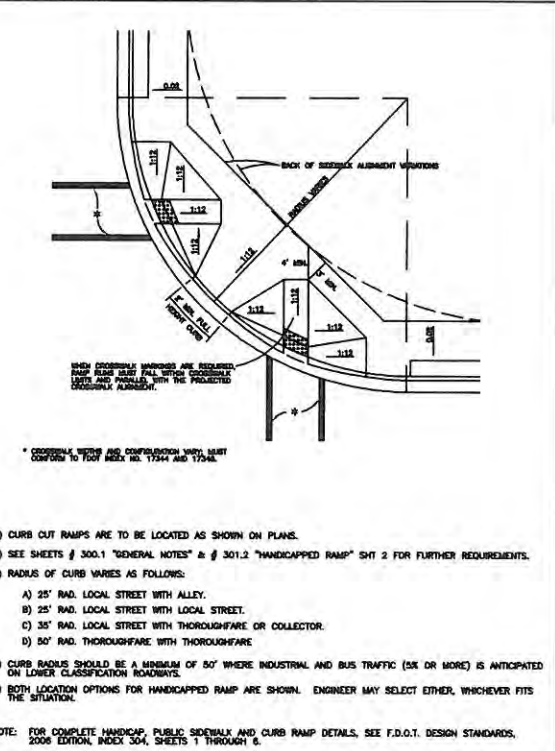
MANATEE COUNTY FLORIDA	TRAFFIC BEARING BOX LID	202.5
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	

REFER TO MANATEE COUNTY STANDARDS 2007

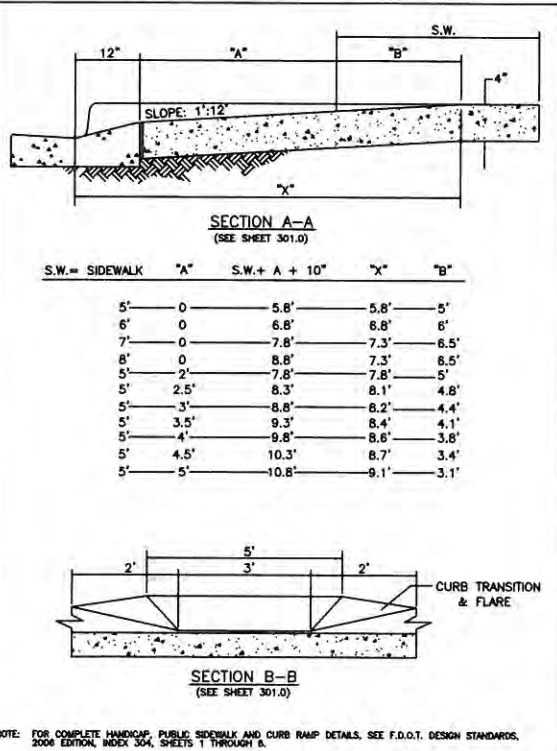


- GENERAL NOTES**
1. SIDEWALK SHALL BE CONSTRUCTED A MINIMUM OF 4" THICK, USING 3000 PSI CONCRETE, WHERE SIDEWALK BISECTS A DRIVEWAY, THE MINIMUM SHALL BE 6" OF CLASS 1 CONCRETE REINFORCED WITH 6"x6" #10 WIRE MESH.
* SEE SHEETS #101.2 & 101.3.
 2. ALL SIDEWALKS SHALL BE CONSTRUCTED TO THE SPECIFICATIONS OF THE MANATEE COUNTY LAND DEVELOPMENT CODE, SECTION 722. A MINIMUM (5) FOOT WIDE SIDEWALK SHALL BE INSTALLED ALONG THE NORTH AND WEST SIDES OF ALL NEW LOCAL STREETS WHICH ARE CONSTRUCTION IN CONJUNCTION WITH A NEW RESIDENTIAL DEVELOPMENT. A SIDEWALK A MINIMUM OF (5) FEET IN WIDTH SHALL BE INSTALLED ON BOTH SIDES OF ALL THOROUGHFARES. REFER TO F.D.O.T. ROADWAY AND TRAFFIC STANDARDS, LATEST REVISION FOR CURB CUT RAMP SPECIFICATIONS.
 3. THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL NOT BE MORE THAN 1/4" UNDER A TEN FOOT STRAIGHTEDGE, NOR MORE THAN 1/8" ON A FIVE-FOOT TRAVERSE SECTION. THE EDGE OF THE SIDEWALK SHALL BE CAREFULLY FINISHED WITH AN EDGING TOOL HAVING A RADIUS OF 1/2".
 4. EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE SIDEWALKS AND THE CURB OR DRIVEWAY OR AT FIXED OBJECTS AND SIDEWALK INTERSECTIONS SHALL BE 1/2" MATERIAL SHALL MEET THE REQUIREMENTS OF ASTM D1153 OR ASTM D1213. FOR LONG JOINTS, AN EXPANSION JOINT SHALL BE PLACED AT INTERVALS NOT TO EXCEED 120".
 5. CONTRACTION JOINTS:
OPEN TYPE JOINTS
OPEN TYPE CONTRACTION JOINTS SHALL BE FORMED BY STAKING A METAL BULKHEAD IN PLACE AND DEPOSITING THE CONCRETE ON BOTH SIDES. AFTER THE CONCRETE HAS SET SUFFICIENTLY TO PRESERVE THE WIDTH AND THE SHAPE OF THE JOINT, THE BULKHEAD SHALL BE REMOVED. AFTER THE SIDEWALK HAS BEEN FINISHED OVER THE JOINT, THE SLOT SHALL BE FINISHED WITH A TOOL HAVING A 1/2" RADIUS.
SAWED JOINTS
A SLOT APPROXIMATELY 3/16" WIDE AND NOT LESS THAN 4" DEEP AT 10' CENTERS SHALL BE CUT WITH A CONCRETE SAW AFTER THE CONCRETE HAS SET.
 6. SIDEWALKS ALONG OTHER STREETS SHALL BE CONSTRUCTED AND DEDICATED AS REQUIRED BY THE APPROVING AUTHORITY WHEN NECESSARY TO CONTINUE AN EXISTING OR PROPOSED SIDEWALK.
 7. HANDICAP RAMP SHALL MEET FLORIDA ACCESSIBILITIES STANDARDS, AND SECTIONS 301.0, 301.1 AND 301.2.
 8. ALL SIDEWALKS ON R/W WITHIN 10' OF AN EXISTING OR PROPOSED TREE THAT WILL EXCEED 5" IN DIAMETER AT MATURITY SHALL BE 5" THICK AND CONTAIN 2-#3 REBAR CENTERED VERTICALLY AND SPACED 3' ON CENTER. PALMS ARE NOT CONSIDERED TREES.
- NOTE: FOR COMPLETE SIDEWALK DETAILS, SEE F.D.O.T. DESIGN STANDARDS, 2006 EDITION, INDEX 304, SHEETS 1 THROUGH 6 AND INDEX 310, SHEETS 1 & 2.

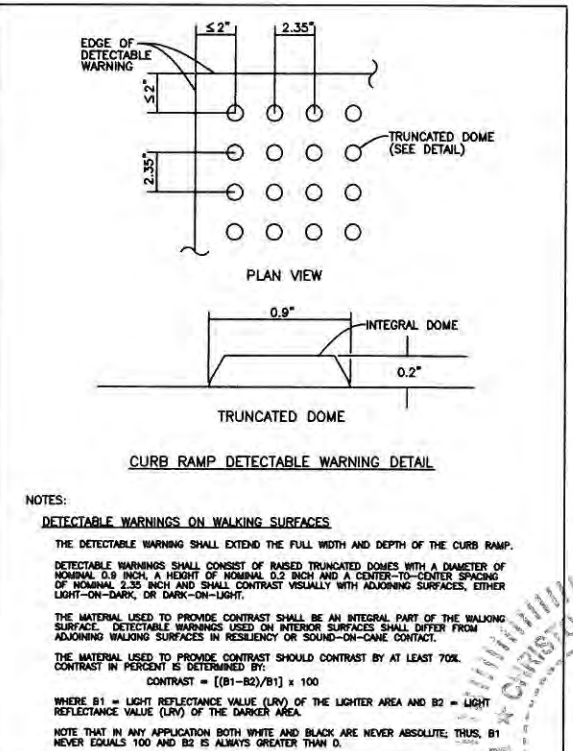
MANATEE COUNTY FLORIDA	ACCESS COVER FOR STORMWATER JUNCTION BOX (PUBLIC)	203.1
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	



MANATEE COUNTY FLORIDA	SIDEWALKS GENERAL NOTES	301.0
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	



MANATEE COUNTY FLORIDA	HANDICAPPED RAMP SHEET 1	302.1
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	



MANATEE COUNTY FLORIDA	HANDICAPPED RAMP SHEET 2	302.2
REV. BY DATE	6/12/07 DATE OF B.O.C.C. APPROVAL	

NO.	REVISION DESCRIPTION	DATE
PROJECT #	323-6054764	
SURVEY #	5303	
SEC./TWN./RGE	7/35S/18E	
SCALE	N.T.S.	
DESIGNED	ZNS	DATE
DRAWN	TMF	01/11/13
CHECKED	JP/GB	09/20/14
CHRIS L. MOWBRAY, P.E.		
FLORIDA P.E. # 14777		
Signature & Date		

**FORT HAMER ROAD PHASE II-US
301 TO FUTURE FORT HAMER
BRIDGE
GENERAL DETAILS**

URBAN DRIVES

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
101.1

CURB CUT & TRANSITION W/ T-FLARE FOR RESIDENTIAL DRIVES

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
101.2

COMMERCIAL & INDUSTRIAL DRIVE

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
101.3

TYPICAL DRIVEWAY

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
102.0

ELIPTICAL PIPE

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
102.1

REFER TO MANATEE COUNTY STANDARDS 2007

MITERED END SECTION FOR ROUND, SINGLE & MULTIPLE PIPES

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
102.2

DRIVEWAY AND ROAD PIPE MITERED END SECTION

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
103.0

FILTER FABRIC JACKET

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
104.0

TYPE "A" MIAMI CURB & GUTTER

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

MANATEE COUNTY
201.1

TYPE "F" BARRIER CURB & GUTTER

REV.	DATE	DESCRIPTION
1	6/12/07	DATE OF B.O.C.C. APPROVAL

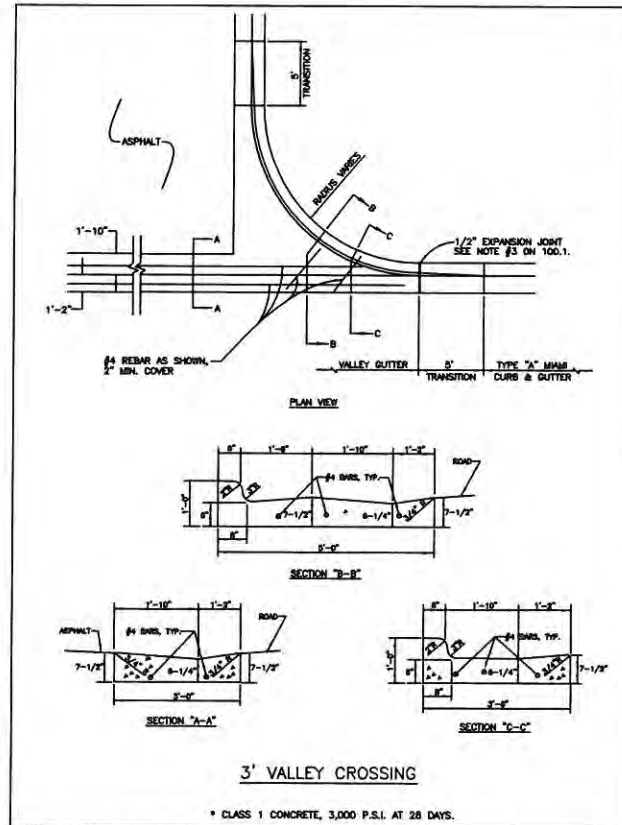
MANATEE COUNTY
201.2

NO.	REVISION DESCRIPTION	BY	DATE

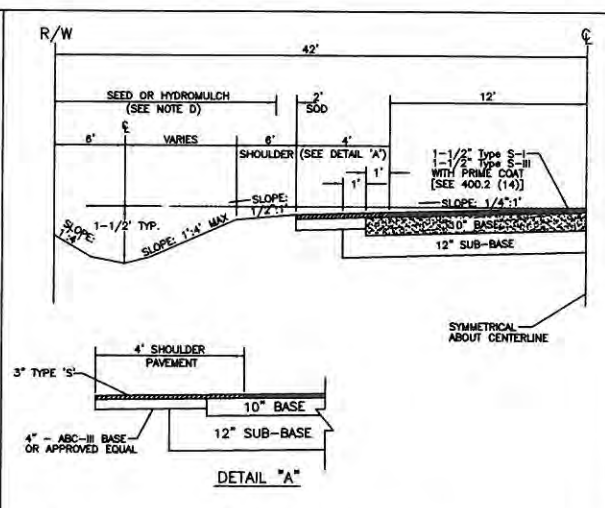
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	N.T.S.
SURVEYED	ZNS
DESIGNED	AM
DRAWN	TMF
CHECKED	JP/CB

CHRIS L. MOWERAY, P.E.
FLORIDA P.E. # 46777
PROFESSIONAL ENGINEER
Signature & Date
SHEET 85

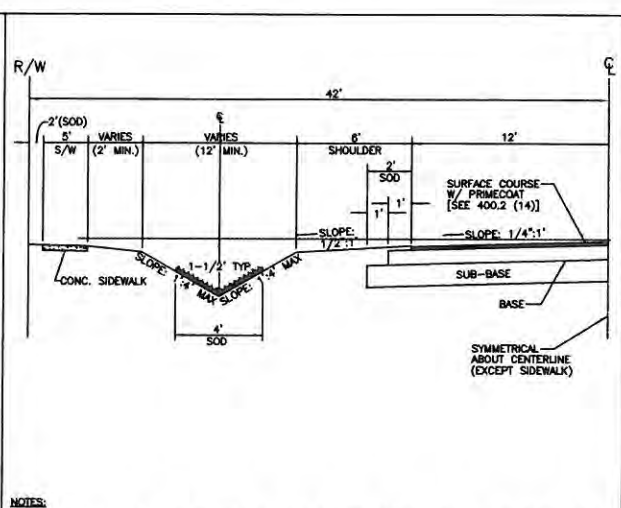
**FORT HAMER ROAD PHASE II-US
301 TO FUTURE FORT HAMER
BRIDGE
GENERAL DETAILS**



- GENERAL NOTES**
- All county road construction shall conform to these Manatee County Department Of Transportation Standards.
 - Asphaltic Concrete Type S: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 331
Asphaltic Concrete Type III: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 333.
(A) Superpave mixes equivalent to F.D.O.T. Type S mixes are an accepted alternative upon directors approval.
(B) Surface material will be consistent with existing surface, or better.
 - Limerock Base Course: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 200.
 - Crushed concrete base course is acceptable unless otherwise noted.
 - Stabilized Sub-Grade: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Sections 180, and 914.
 - Drainage: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 941.
Soft, yielding or super-saturated material that will not readily compact shall be considered unacceptable for backfill. This is at the discretion of the field engineer. This type of existing material must be excavated from the road footprint to a depth as set by an approved testing lab.
 - Soil Cement: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 270, excluding Sub-Section 270-4.3.1 ("Mix in place").
 - Concrete Gutters: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 520.
 - Topsoil: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 987.
Sodding: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 575.
Grassing: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 570.
(A) Entire R/W between road and property line, including median, shall be fertilized (1000 lbs. of slow-release 8-12-6 per acre), and seeded (30 lbs. Bahia and 30 lbs. of Rye per acre) and mulched, or sodded, as directed by the engineer.
(B) Hydromulch: Shall be per Florida Department Of Transportation Specifications Section 571.
 - Visibility Triangles: Shall be in accordance with the Manatee County Land Development Code 1994; Section 713, latest revision, and Section 600.7-600.9.
 - Handicap Ramps shall meet Florida Accessibility Standards, and Section 302 series.
 - Prime coat shall be applied @ a rate of 0.2 gal/sy. Tack coat of 0.08 gal/sy rate to be applied for overlay of existing roads.



- NOTES:**
- Asphaltic concrete surface course shall be 3" minimum thickness (Type S). Two lifts of asphalt shall be required practice. The first lift shall be 2" of S-I, the second lift shall be 1" of S-III.
 - 10" base course 800 lbs. per sq. yd. limerock compacted to 98% proctor mod. density or 10" soil cement.*
 - 12" stabilized sub-base shall consist of 6" stabilized sub-base minimum LBR 40, 98% T180 AASHTO.
 - Shoulder, slopes and ditch bottom to have a minimum of 2" topsoil, bottom 4" of area and first 2' of shoulder to be sodded, and the balance to be seeded and mulched per section 400.1 (B).
 - Underdrain may be required if deemed necessary.
 - The slope of contiguous property may not exceed 1' to 4'.
 - No portion of a drainage pipe shall be allowed in the sub-base.
 - Laboratory tests are required to substantiate structural section design. Specifications shown on this sheet are minimum requirements.
* Or approved equal, meeting same structural number.



- NOTES:**
- Asphaltic concrete surface course shall be 1-3/4" minimum thickness (Type S). Two lifts of asphalt shall be considered acceptable, however a performance bond shall be required if second lift is delayed. The first lift shall be 1" of S-I, the second lift shall be 3/4" of S-III.
 - Base Course shall consist of 4-1/2" compacted sand asphalt (1200 lbs. stabilized), 6" base course 800 lbs. per square yard limerock compacted to 98% AASHTO T-180 density, or 8" soil cement* (8" Calosahatchee Shell LBR 100).
 - 6" stabilized sub-base shall consist of 6" stabilized sub-base minimum LBR 40, 98% T180 AASHTO.
 - Shoulder, slopes and ditch bottom to have a minimum of 2" topsoil, bottom 4" of area to be sodded, and the balance is to be seeded and mulched per section 400.1 (B).
 - The slope of contiguous property may not exceed 1' to 4'.
 - 12" cover on storm sewers, no portion of pipe to be into sub-base.
 - Laboratory tests are required to substantiate structural section design. Specifications shown on this sheet are minimum requirements.
* Or approved equal, meeting same structural number.

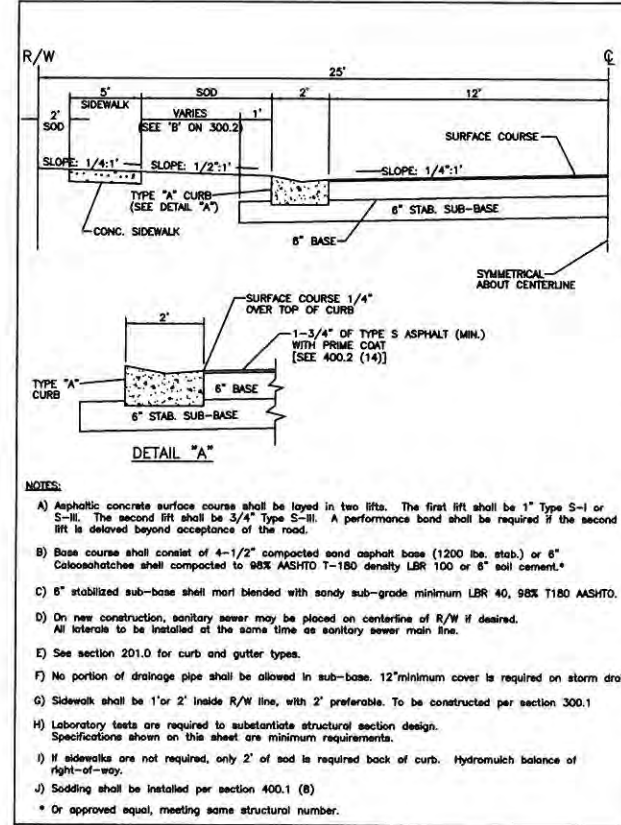
MANATEE COUNTY FLORIDA		VALLEY CROSSING	201.6
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

MANATEE COUNTY FLORIDA		GENERAL NOTES	400.1
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

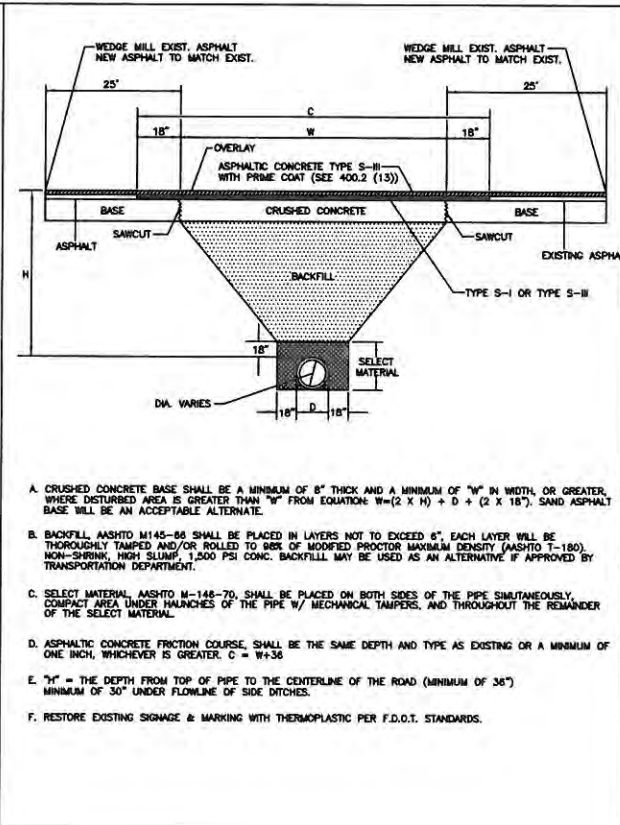
MANATEE COUNTY FLORIDA		RURAL INDUSTRIAL	401.5
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

MANATEE COUNTY FLORIDA		LOCAL RURAL RESIDENTIAL	401.7
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

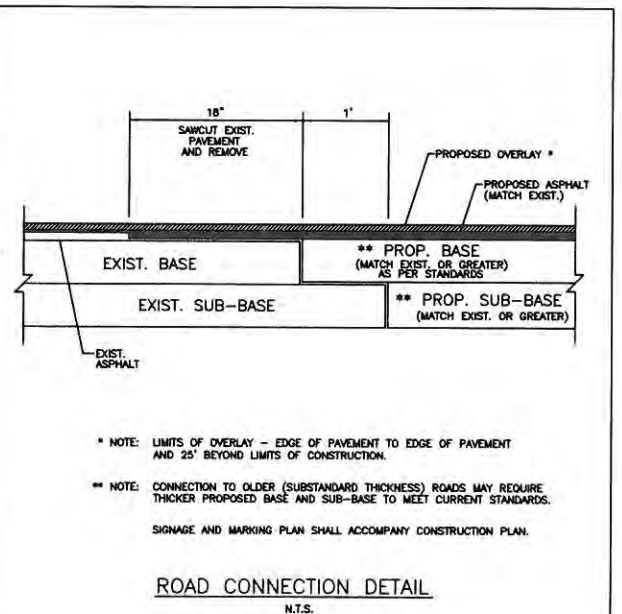
REFER TO MANATEE COUNTY STANDARDS 2007



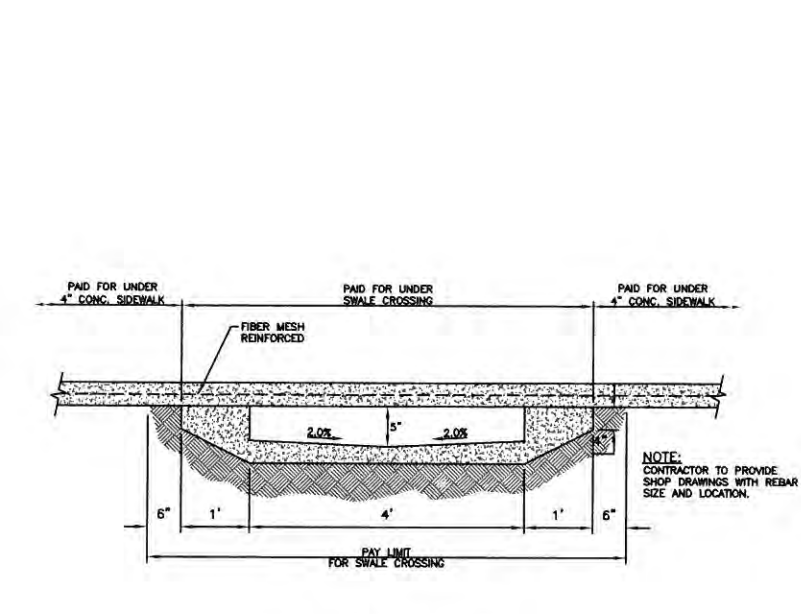
MANATEE COUNTY FLORIDA		LOCAL URBAN RESIDENTIAL	401.8
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



MANATEE COUNTY FLORIDA		UTILITY ROAD CUT REPLACEMENT	403.2
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



MANATEE COUNTY FLORIDA		ROAD CONNECTION DETAIL	403.3
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

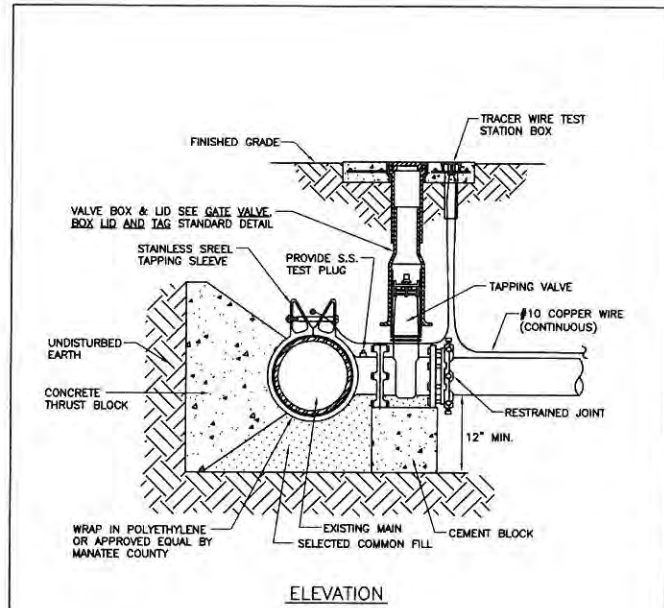


MANATEE COUNTY FLORIDA		LOCAL RURAL RESIDENTIAL	401.7
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

NO.	DATE	BY	REVISION DESCRIPTION
PROJECT #	323-6054764		
SURVEY #	5303		
SEC./TWN./RGE	7/35S/18E		
SCALE	N.T.S.		
SURVEYED BY	ZNS	DATE	
DESIGNED BY	AAM	DATE	05/11/13
DRAWN BY	TMF	DATE	01/11/13
CHECKED BY	JP/OB	DATE	09/20/14
CHRIS L. MOWBRAY, P.E.			
FLORIDA P.E. # 46777			
Signature & Date			
SHEET 86			

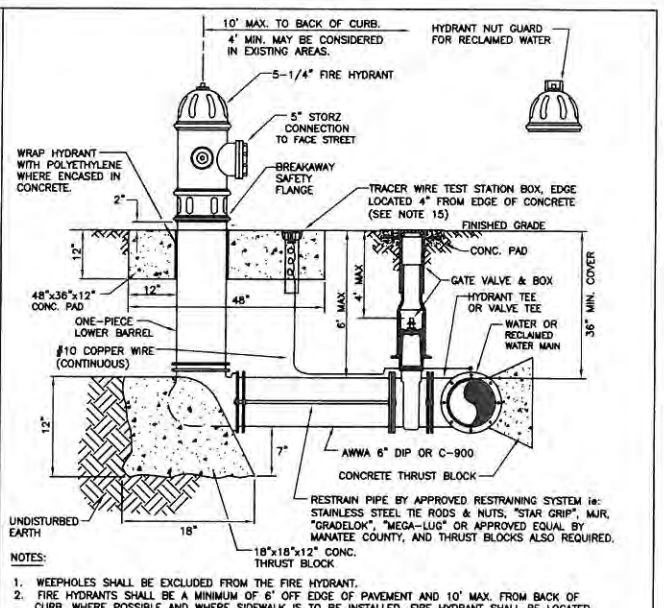
**FORT HAMER ROAD PHASE II-US
301 TO FUTURE FORT HAMER
BRIDGE
GENERAL DETAILS**

REFER TO MANATEE COUNTY STANDARDS 2007



- NOTES:**
- PRIOR TO TAPPING, CONTRACTOR TO DEMONSTRATE 60 MINUTE HYDROSTATIC TEST OF THE TAPPING SLEEVE AND VALVE WITH NO LOSS OF 180 PSI PRESSURE FOR WATER AND RECLAIMED WATER OR 150 PSI FOR FORCE MAIN.
 - ALL FITTINGS TO BE WRAPPED WITH 20 MIL VISQUEEN AT THRUST BLOCK.
 - ALL TAPS ON CONCRETE WATER MAINS AND LARGER THAN 12" ARE TO BE MADE BY A MANATEE COUNTY APPROVED TAPPING COMPANY. ALL MATERIALS TO BE SUPPLIED BY THE CONTRACTOR.
 - ALL TAPS MUST BE OF A SMALLER SIZE THAN THE MAIN BEING TAPPED & PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) TAP PIPE DIAMETERS (WHICHEVER IS GREATER) FROM A JOINT OR FITTING.
 - CONTRACTOR TO SUPPLY A DRY HOLE FOR TAPPING CREW TO WORK IN AND A BACK-HOE TO LOWER TAPPING MACHINE INTO THE HOLE.
 - WHERE THRUST BLOCK NOT USED, RESTRAINED JOINTS MUST THEN EXTEND FROM TEE FULL LENGTH SPECIFIED FOR TEES.
 - TRACER WIRE TEST STATION BOX IS REQUIRED AT CONNECTIONS TO EXISTING MAINS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TAPPING SLEEVE AND VALVE	UW-4
REV. BY CLB/KE	DATE 11/10	MAY 10, 2011 DATE OF APPROVAL	PAGE 122



- NOTES:**
- WEEPHOLES SHALL BE EXCLUDED FROM THE FIRE HYDRANT.
 - FIRE HYDRANTS SHALL BE A MINIMUM OF 6' OFF EDGE OF PAVEMENT AND 10' MAX. FROM BACK OF CURB. WHERE POSSIBLE AND WHERE SIDEWALK IS TO BE INSTALLED, FIRE HYDRANT SHALL BE LOCATED BETWEEN SIDEWALK AND RIGHT-OF-WAY.
 - HYDRANTS SHALL BE FUSION BONDED EPOXY COATED SAFETY YELLOW FOR WATER AND PURPLE (PANTONE 522C) FOR RECLAIMED WATER. HYDRANT SHALL BE DUCTILE IRON CONSTRUCTION.
 - FIRE HYDRANTS SHALL BE PLACED SO THAT STORM WATER FLOWS AWAY FROM THE HYDRANT.
 - FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINES" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR ALL WATER LINES.
 - FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOK" OFFSET FITTING.
 - RAISED REFLECTIVE PAVEMENT MARKER (BLUE) FOR POTABLE WATER (PURPLE) FOR RECLAIMED WATER. SHALL BE INSTALLED AT CENTERLINE OF PAVEMENT ADJACENT TO EACH HYDRANT.
 - PRECAST CONCRETE THRUST BLOCKS & PADS SHALL NOT BE USED.
 - ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2" CHAMFER.
 - FIRE HYDRANT VALVE SHALL BE FASTENED DIRECTLY TO TEE.
 - IN-LINE VALVES SHOULD BE LOCATED AT HYDRANT TEES.
 - HYDRANTS SHALL BE LOCATED ON SAME SIDE OF ROAD AS WATER MAIN UNLESS OTHERWISE APPROVED.
 - THERE MUST BE A CLEARANCE OF 7 1/2 FEET FROM FRONT AND BOTH SIDES, AND FOUR FEET TO THE REAR OF THE HYDRANT, TO ABOVE GRADE OBSTRUCTIONS INCLUDING POSTS, FENCES, TREES, ETC. PER THE FLORIDA FIRE PREVENTION CODE.
 - SEE STANDARD DETAIL GATE VALVE, BOX, LID AND TAG.
 - SHOULD THE FIRE HYDRANT'S CONCRETE PAD OVERLAP THE SIDEWALK, THE TRACER WIRE TEST STATION BOX SHALL NOT BE LOCATED WITHIN THE SIDEWALK.

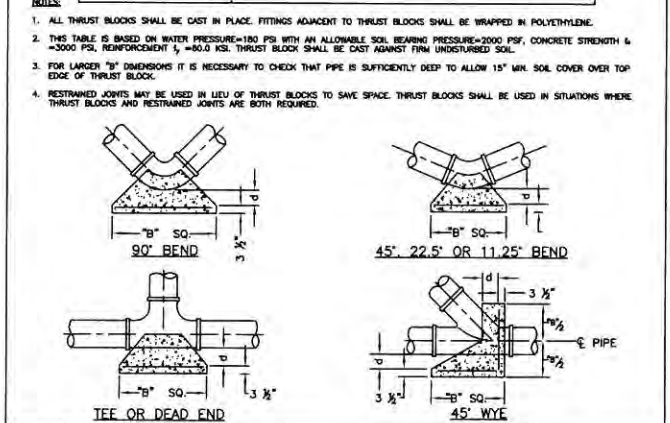
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		FIRE HYDRANT ASSEMBLY	UW-5
REV. BY CLB/KE	DATE 11/10	MAY 10, 2011 DATE OF APPROVAL	PAGE 123

THRUST BLOCK DIMENSIONS B ft. x d inches

PIPE SIZE (IN.)	90° BEND		45° BEND		22.5° BEND		11.25° BEND		DEAD END & TEE		45° WYE	
	B	d	B	d	B	d	B	d	B	d	B	d
4	1.5	3 1/2	1.1	3 1/2	0.8	3 1/2	0.6	3 1/2	1.3	3 1/2	1.1	3 1/2
6	2.2	5 1/2	1.6	3 3/4	1.2	3 3/4	0.8	3 3/4	1.9	4 1/2	1.6	3 3/4
8	2.9	7	2.1	5	1.5	3 1/2	1.1	3 1/2	2.4	5 3/4	2.0	4 1/2
10	3.5	8 1/2	2.6	6 1/4	1.9	4 1/2	1.3	3 3/4	3.0	7 1/2	2.5	6
12	4.2	10	3.1	7 1/2	2.2	5 1/2	1.6	3 3/4	3.5	8 1/2	3.0	7 1/2
14	4.9	11 3/4	3.6	8 3/4	2.6	6 1/4	1.8	4 1/2	4.1	9 3/4	3.4	8 1/2
18	5.5	13 1/4	4.1	9 3/4	2.9	7	2.1	5	4.7	11 1/4	3.9	9 1/2
18	6.2	15	4.6	11	3.3	8	2.3	5 1/2	5.2	12 1/2	4.4	10 1/2
20	6.9	16 1/2	5.0	12	3.6	8 3/4	2.6	6 1/4	5.8	14	4.9	11 1/2
24	8.2	19 1/4	6.0	14 1/4	4.3	10 1/4	3.1	7 3/4	6.9	16 1/2	5.8	14
30	10.1	24 1/4	7.5	18	5.3	12 3/4	3.8	9	8.5	20 1/2	7.2	17 1/2
36	12.1	29	8.9	21 1/4	6.4	15 1/4	4.5	10 3/4	10.2	24 1/2	8.6	20 1/2

REINFORCEMENT MAT SCHEDULE

FOR DIM. "B" BETWEEN 5.75' & 12.5' USE #4 @ 8" EACH WAY
FOR DIM. "B" LESS THAN 5.75' USE #3 @ 8" EACH WAY



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		CONCRETE THRUST BLOCKS	UG-7
REV. BY CLB/BR	DATE 11/10	MAY 10, 2011 DATE OF APPROVAL	PAGE 107

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED)

MAIN PIPE SIZE	HORIZ. BENDS	TEES				REDUCERS				PLUGS & VALVES
		90°	45°	22.5°	SIZE LENGTH	SIZE LENGTH	SIZE LENGTH	SIZE LENGTH		
36	142	59	28	136	136	136	136	136	136	453
30	124	51	25	124	124	124	124	124	124	391
24	106	44	21	106	106	106	106	106	106	327
20	92	38	18	92	92	92	92	92	92	280
16	77	32	15	77	77	77	77	77	77	231
12	61	25	12	61	61	61	61	61	61	181
10	52	22	10	52	52	52	52	52	52	153
8	44	18	9	44	44	44	44	44	44	128
6	34	14	7	34	34	34	34	34	34	98
4	24	10	5	24	24	24	24	24	24	69

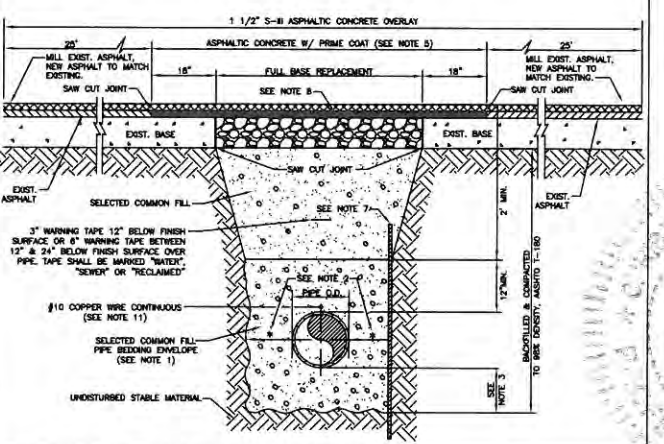
REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (NON-WRAPPED)

MAIN PIPE SIZE	HORIZ. BENDS	TEES				REDUCERS				PLUGS & VALVES
		90°	45°	22.5°	SIZE LENGTH	SIZE LENGTH	SIZE LENGTH	SIZE LENGTH		
36	100	42	20	100	100	100	100	100	100	188
30	86	37	18	86	86	86	86	86	86	162
24	75	31	15	75	75	75	75	75	75	135
20	65	27	13	65	65	65	65	65	65	116
16	54	22	11	54	54	54	54	54	54	96
12	43	18	8	43	43	43	43	43	43	75
10	37	15	7	37	37	37	37	37	37	63
8	30	13	6	30	30	30	30	30	30	53
6	24	10	5	24	24	24	24	24	24	41
4	17	7	3	17	17	17	17	17	17	29

NOTE:
SEE RESTRAINED LENGTHS FOR PVC PIPE DETAIL FOR NOTES 1 THROUGH 8 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

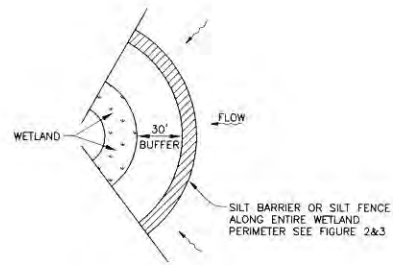
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		RESTRAINED LENGTHS FOR DIP	UG-9
REV. BY WRT/KE	DATE 03/11	MAY 10, 2011 DATE OF APPROVAL	PAGE 109

- NOTES:**
- USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
 - PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE ENDBEAMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.
 - TYPICALLY 4" TO 6".
 - PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - ASPHALTIC CONCRETE STRUCTURE COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF 1 1/4 INCH, WHICHEVER IS GREATER.
 - MILL 25' BACK FROM TRENCH SAW CUT. ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE. BUTT JOINT TO EXIST ASPHALT. FINAL OVERLAY LIMITS ARE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT. FINAL OVERLAY TO MATCH EXISTING WITH NO DISCERNABLE "BUMP" AT JOINT. MILLING LIMITS THAT IMPACT INTERSECTION SHALL BE ADDRESSED ON A CASE BY CASE BASIS AND APPROVED BY MANATEE COUNTY.
 - SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISHED GRADE OR 12" BELOW SUBGRADE.
 - BASE SHALL BE 8" MINIMUM THICKNESS CRUSHED CONCRETE.
 - TEMPORARY PATCHES WILL BE INSTALLED TO PROVIDE A SMOOTH ALL WEATHER SURFACE AT ALL TIMES. PERMANENT REPLACEMENT TO BE MADE AS SOON AS POSSIBLE.
 - RESTORE SIGNAGE & MARKING WITH THERMOPLASTIC PER FDOT STANDARDS, LATEST EDITION.
 - TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.
 - NOTES 5, THRU 10, ARE MINIMUM REQUIREMENTS FOR A TRENCH IN A ROAD. REFER TO LATEST EDITION OF MANATEE COUNTY HIGHWAY AND TRAFFIC STANDARDS FOR ADDITIONAL REQUIREMENTS.

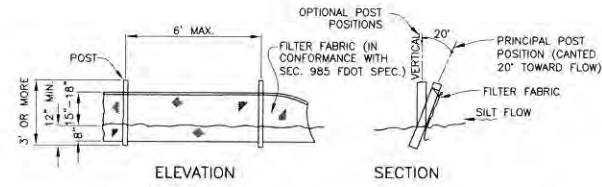


MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING	UG-12
REV. BY WRT/KE	DATE 03/11	MAY 10, 2011 DATE OF APPROVAL	PAGE 112

DATE	
BY	
REVISION DESCRIPTION	
NO.	
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	N.T.S.
SURVEYED BY	ZNS
DESIGNED BY	AAM 01/11/13
DRAWN BY	TMF 04/11/13
CHECKED BY	JP/GB 09/2014
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 48777	
Signature & Date	
SHEET	87

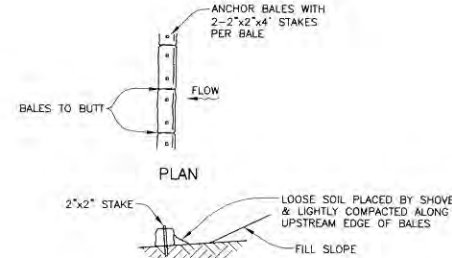


WETLAND BUFFER
FIGURE 1

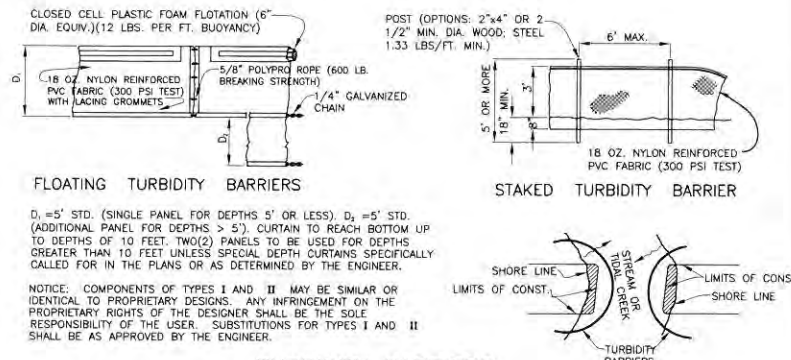


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

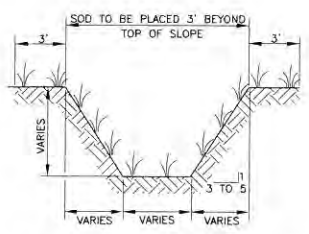
TYPICAL SILT FENCE
FIGURE 2



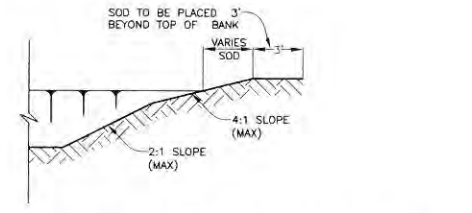
TYPICAL BALE SILT BARRIER
FIGURE 3



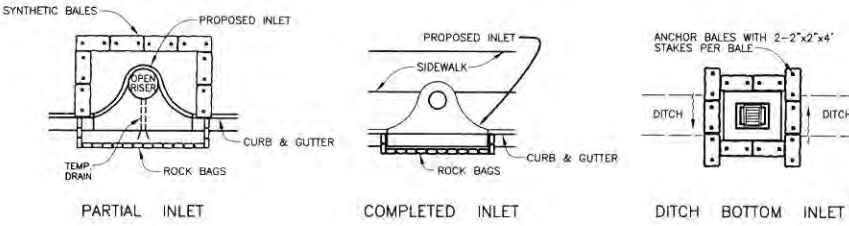
FLOATING TURBIDITY BARRIERS
STAKED TURBIDITY BARRIER
TURBIDITY BARRIERS
FIGURE 4



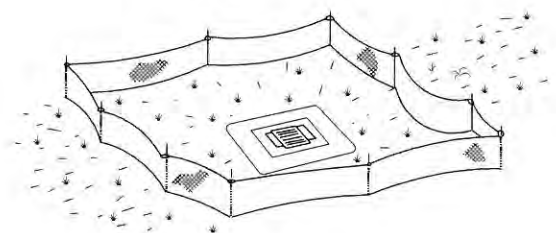
TYPICAL SWALE SECTION
FIGURE 5



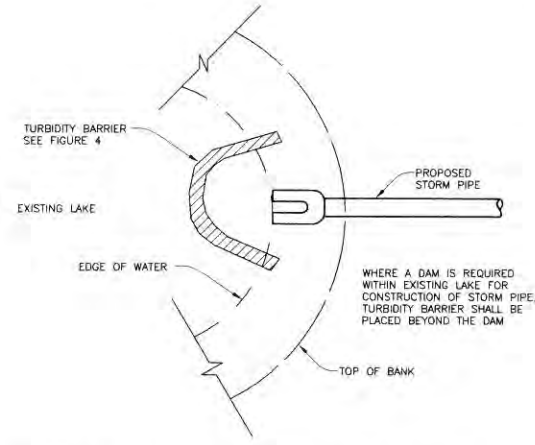
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



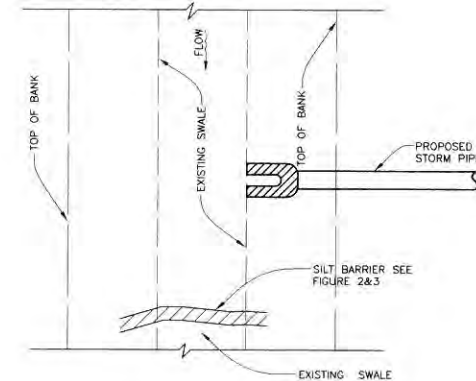
**SYNTHETIC BALE PROTECTION AROUND
INLETS OR SIMILAR STRUCTURES**
FIGURE 7



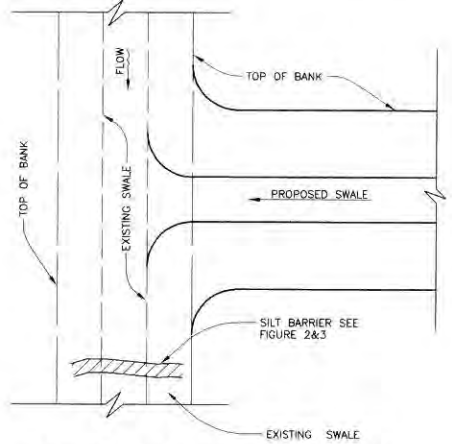
**TYPE III SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS**
**STAKED SILT BARRIER OR SILT FENCE
PROTECTION AROUND DITCH BOTTOM INLETS**
FIGURE 8



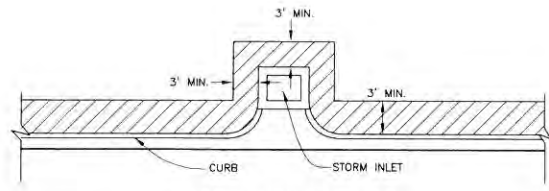
**TURBIDITY BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING LAKE**
FIGURE 9



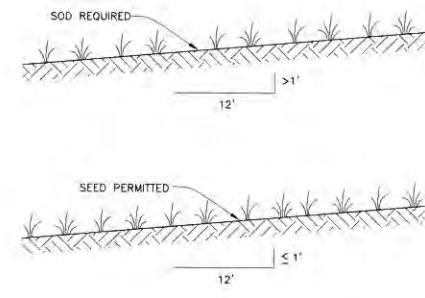
**SILT BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING SWALE**
FIGURE 10



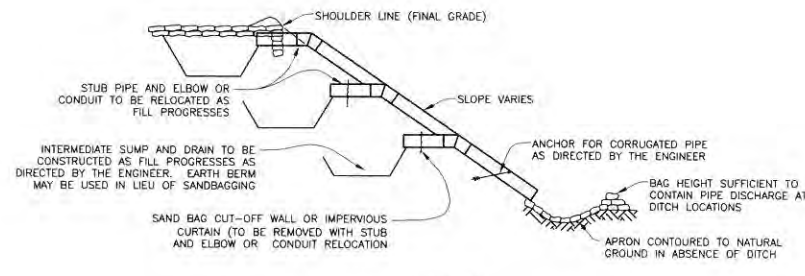
**SILT BARRIER AT CONNECTION
OF SWALE TO EXISTING SWALE**
FIGURE 11



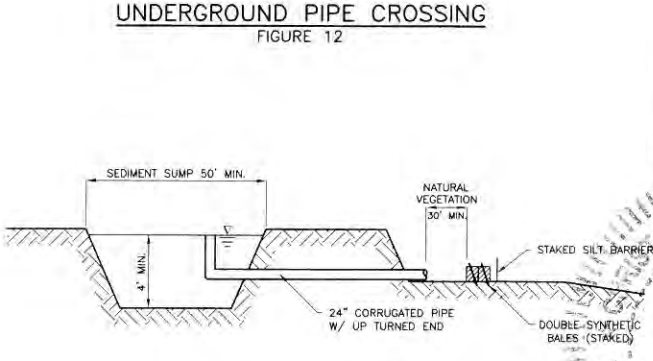
**SOD ALONG CURB
AND AROUND INLET**
FIGURE 14



GRASS SLOPES
FIGURE 13



**SECTION AA
TEMPORARY SLOPE DRAIN**
FIGURE 15

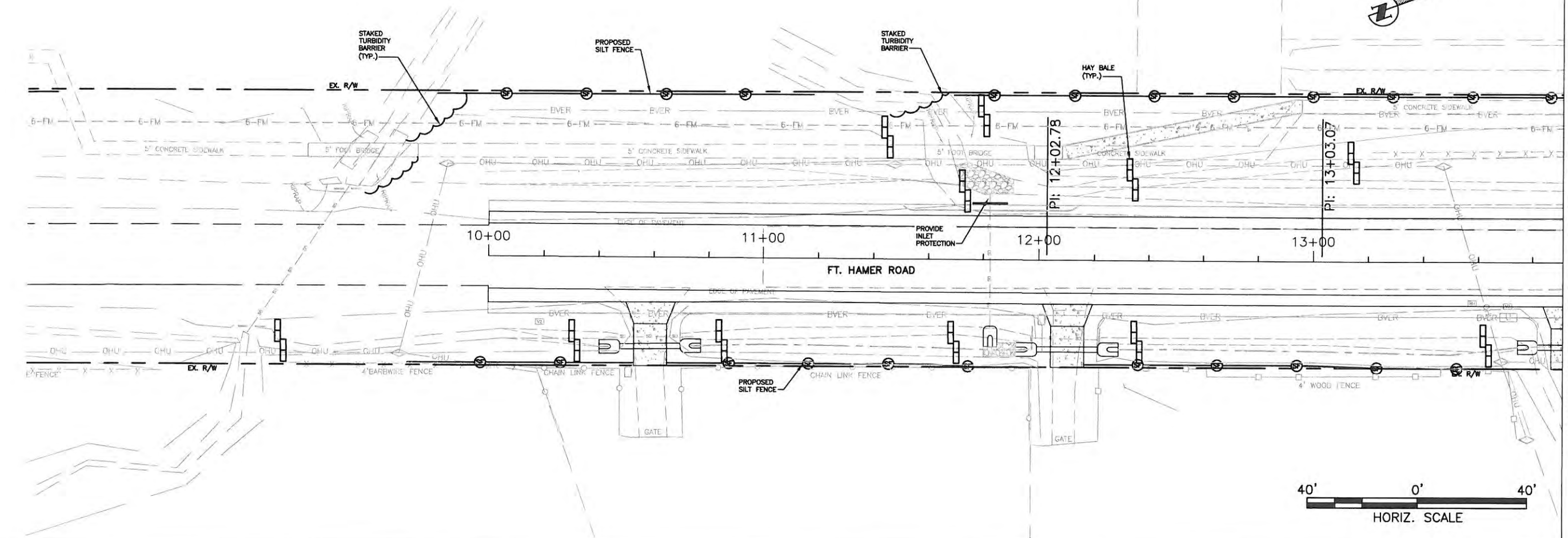


SEDIMENT SUMP SECTION
FIGURE 16

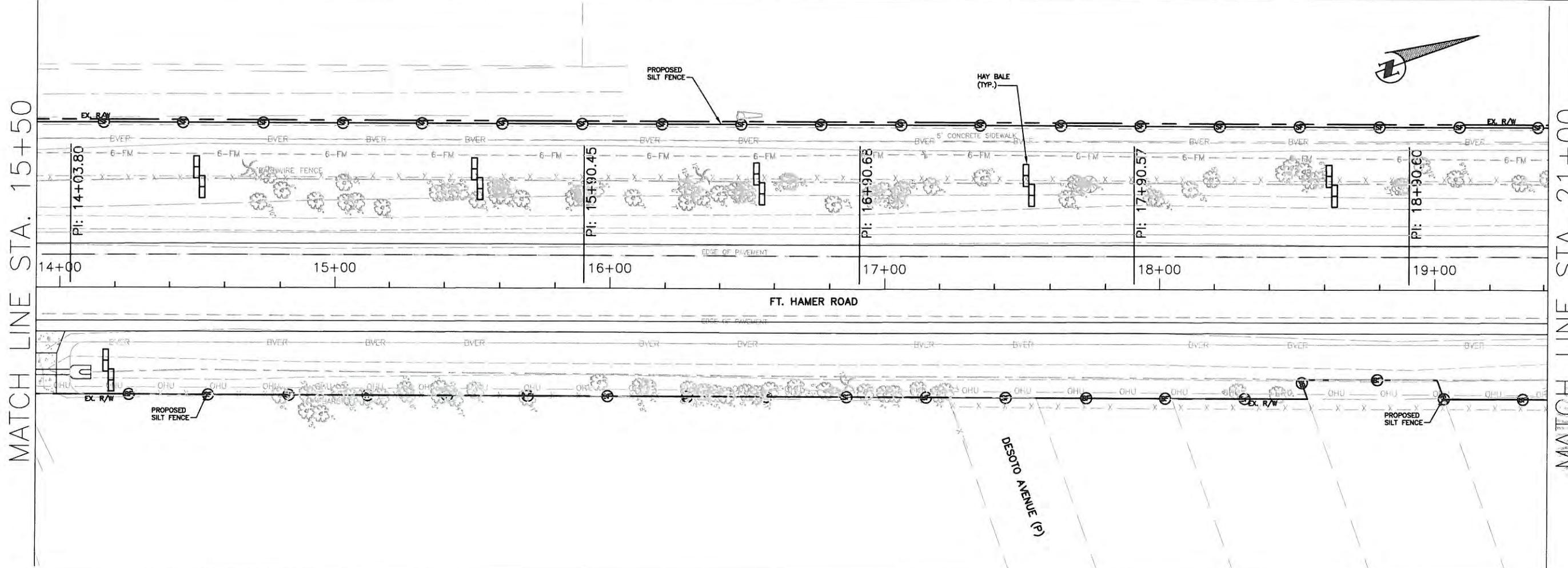
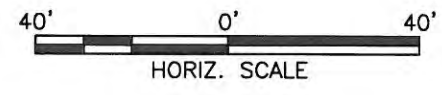
NOTE:
REFERENCE THE FDOT DESIGN STANDARDS
LATEST EDITION FOR ALL TEMPORARY
EROSION CONTROL MEASURES.

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	323-6054764		
SURVEY #			
SEC./TWN./RGE	7/35S/18E		
SCALE	AS SHOWN		
DESIGNED	AAM		
DRAWN	JP/GB		
CHECKED	JP/GB		09/2014
<p>CHRIS L. MOWBRAY, P.E. FLORIDA P.E. # 46777</p>			
<p>Signature & Date</p>			
<p>SHEET 88</p>			

FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
BEST MANAGEMENT PRACTICES PLAN



MATCH LINE STA. 15+50



MATCH LINE STA. 21+00

MATCH LINE STA. 15+50

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/355/18E
SCALE	AS NOTED
DESIGNED BY	ZNS
DESIGNED DATE	01/11/13
DRAWN BY	KR
DRAWN DATE	01/11/13
CHECKED BY	JP/GB
CHECKED DATE	09/20/14
DESIGNED BY	CHRIS L. MOWBRAY, P.E.
DESIGNED DATE	01/11/13
FLORIDA P.E. #	48777
Signature & Date	<i>[Signature]</i> 5/14

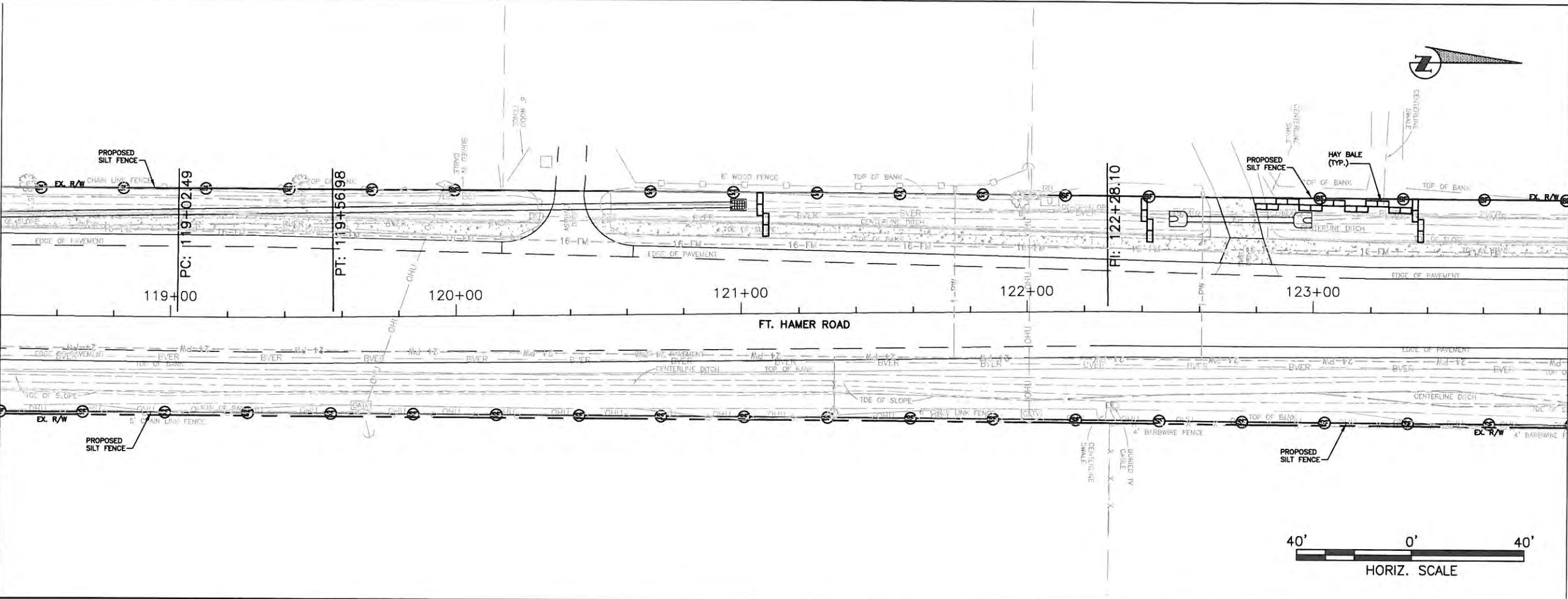
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PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

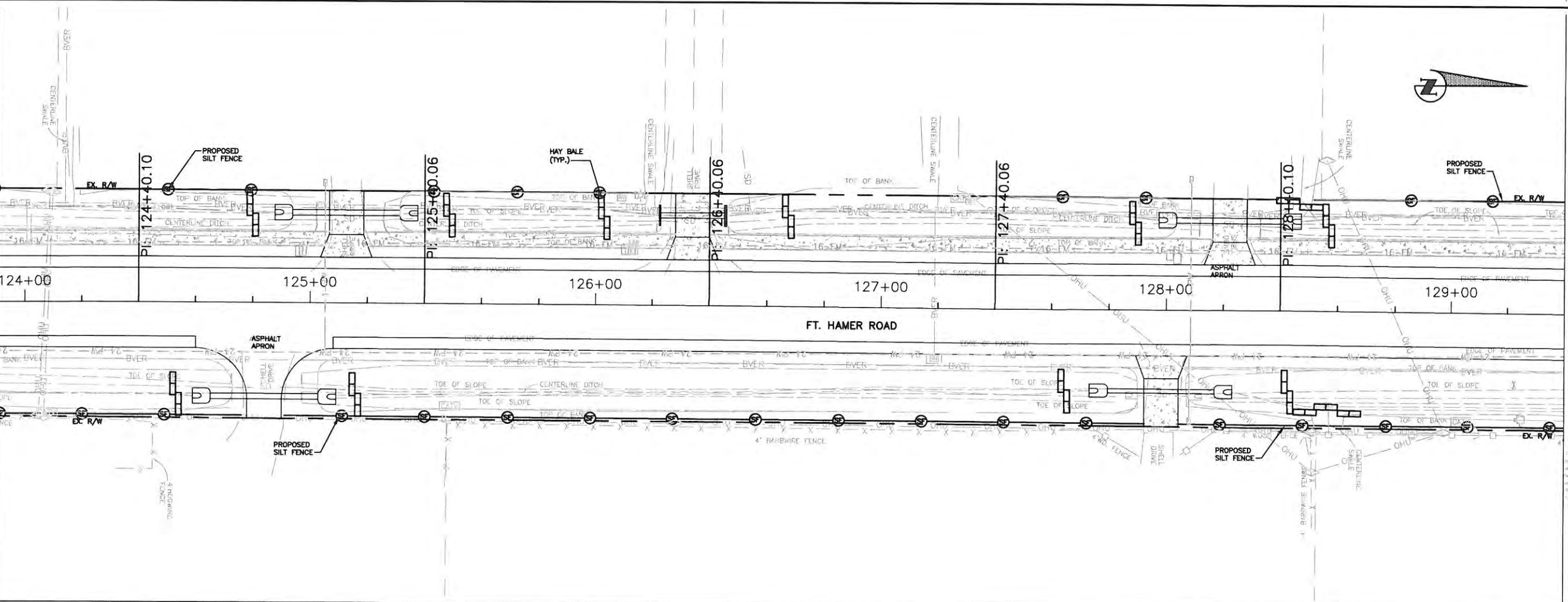
**FORT HAMER ROAD PHASE II
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BRIDGE
BEST MANAGEMENT PRACTICES PLAN**

MATCH LINE STA. 120+00



MATCH LINE STA. 125+50

MATCH LINE STA. 125+50



MATCH LINE STA. 131+00

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
SURVEYED BY	ZNS
DESIGNED	AAM 01/11/13
DRAWN	JP/GB 01/11/13
CHECKED	JP/GB 09/20/14

CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. # 46777

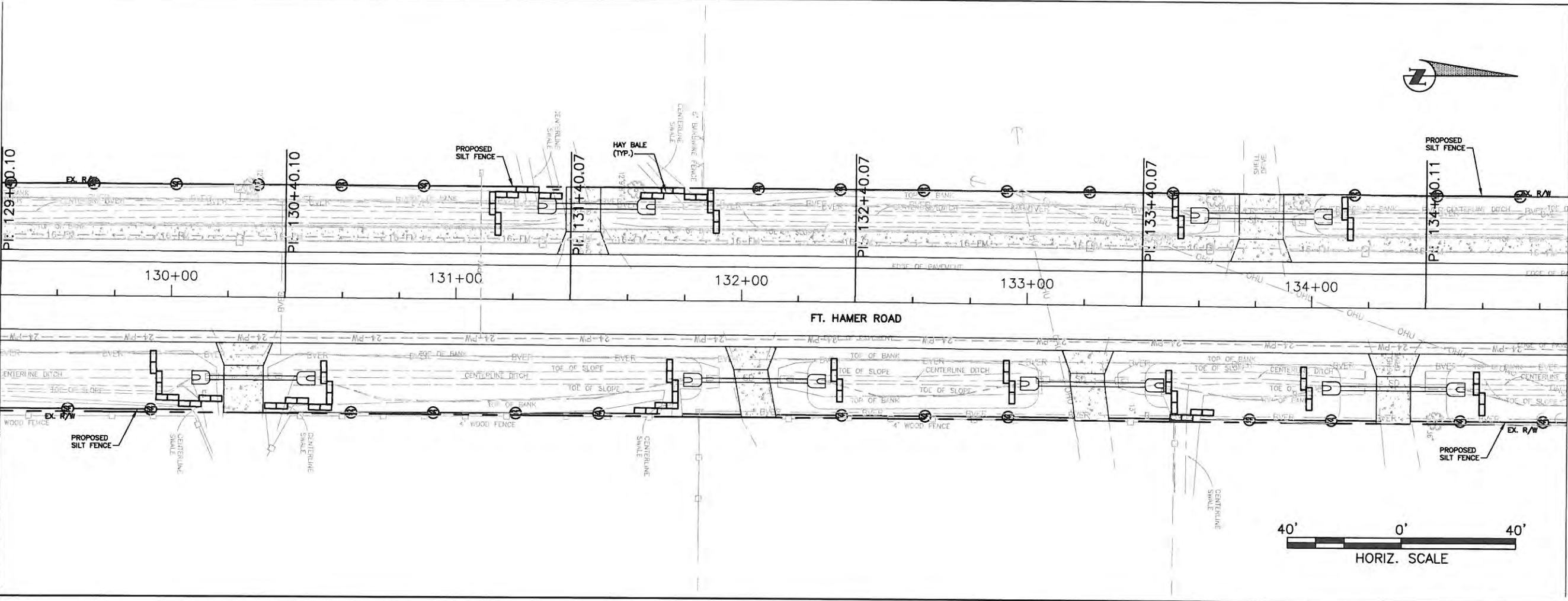
Signature & Date

SHEET BMP11

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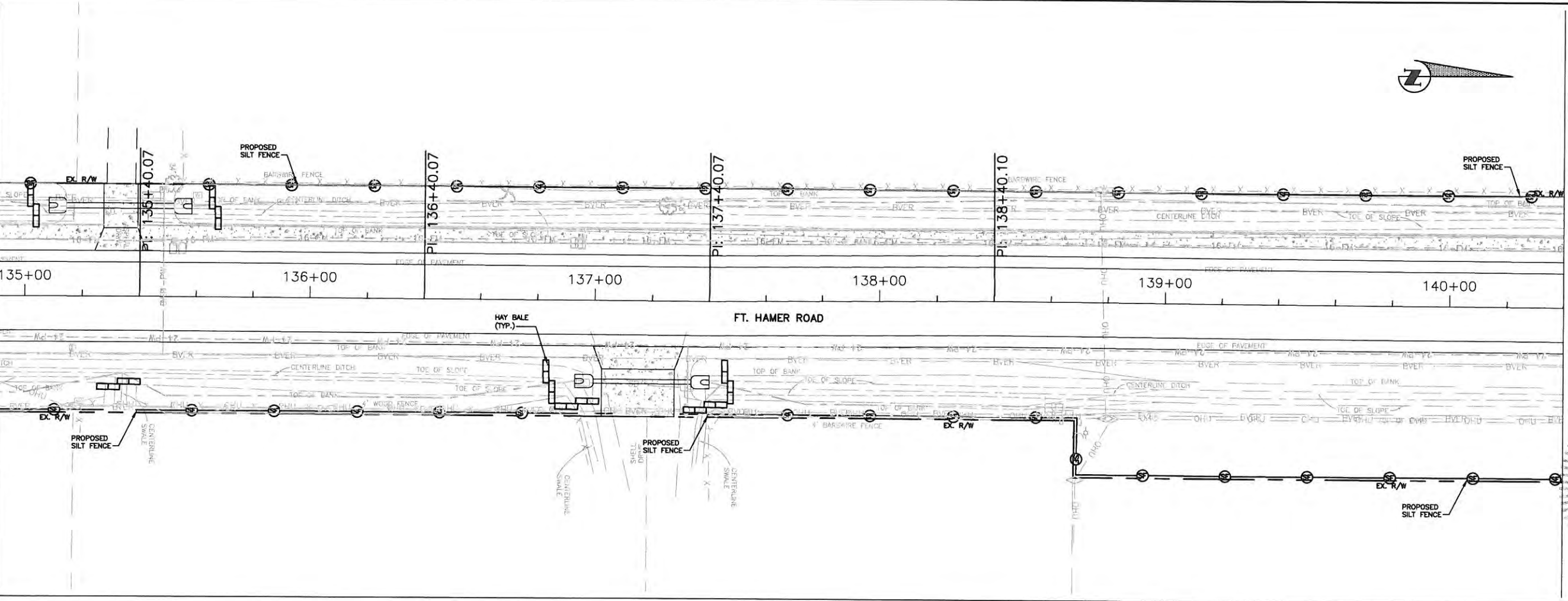
**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
BEST MANAGEMENT PRACTICES PLAN**

MATCH LINE STA. 131+00



MATCH LINE STA. 136+50

MATCH LINE STA. 136+50



MATCH LINE STA. 142+00

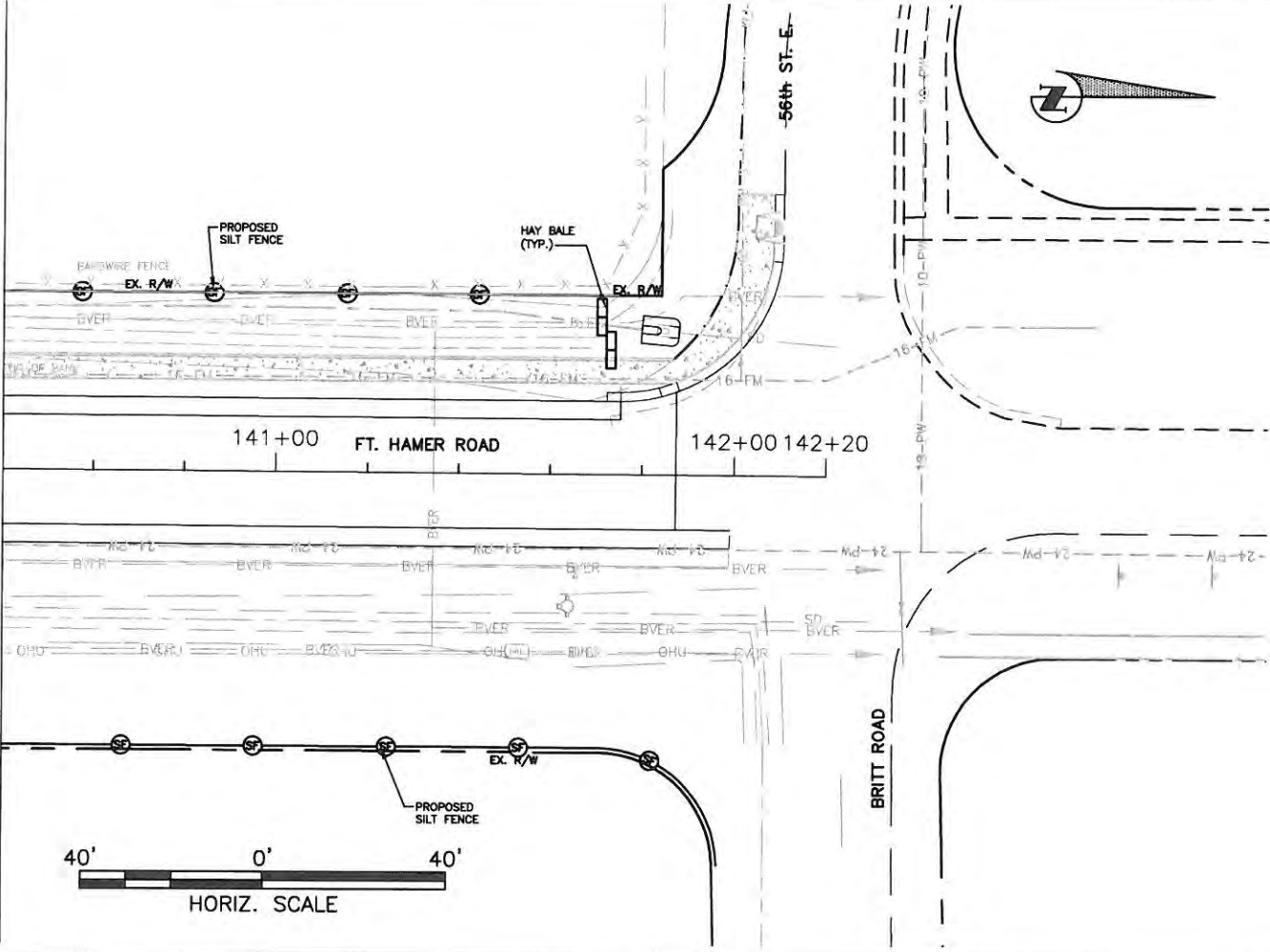
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
SURVEYED BY	ZNS
DESIGNED BY	AAM 01/11/13
DRAWN BY	KR 01/11/13
CHECKED BY	JUP/GB 09/20/14
DESIGNED BY	CHRIS L. MOWBRAY, P.E.
FLORIDA P.E. #	16777
PROFESSIONAL ENGINEER	
SIGNATURE & DATE	

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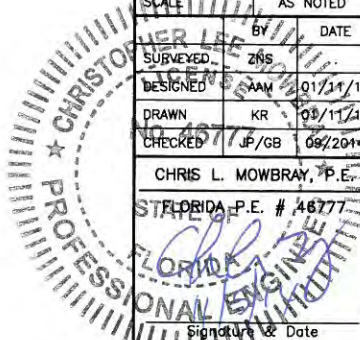
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MATCH LINE STA. 142+00



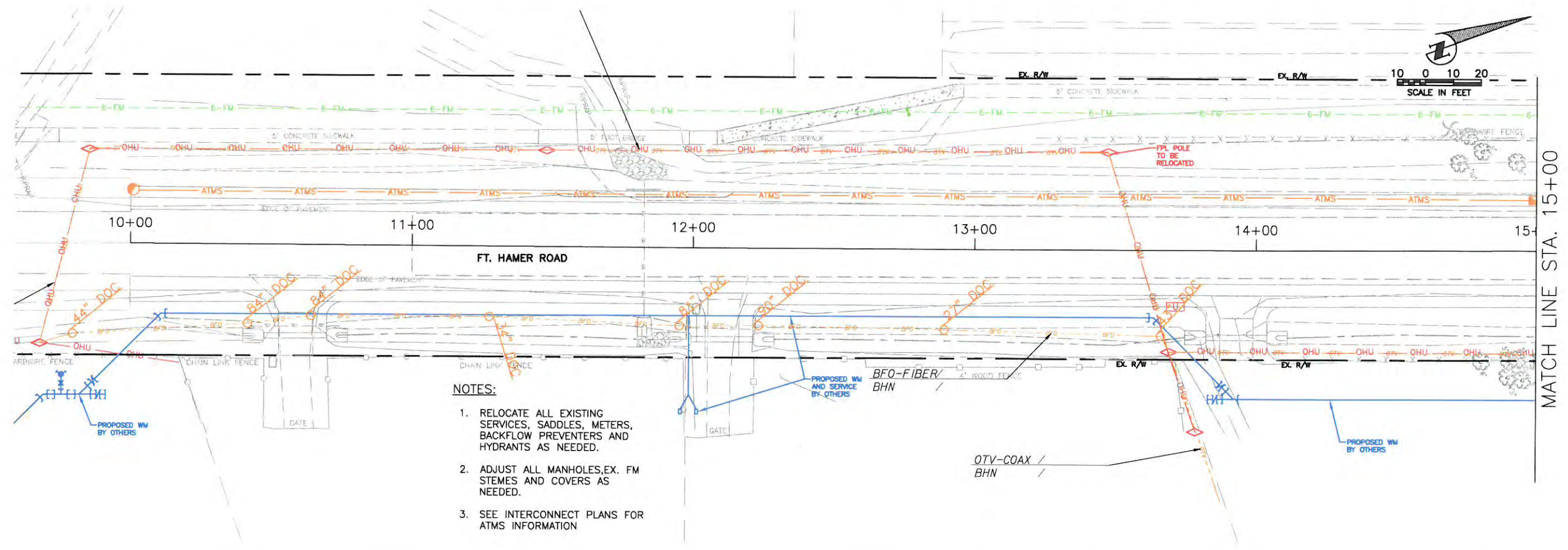
FORT HAMER ROAD PHASE II US 301 TO FUTURE FORT HAMER BRIDGE BEST MANAGEMENT PRACTICES PLAN

NO.	REVISION DESCRIPTION	BY	DATE

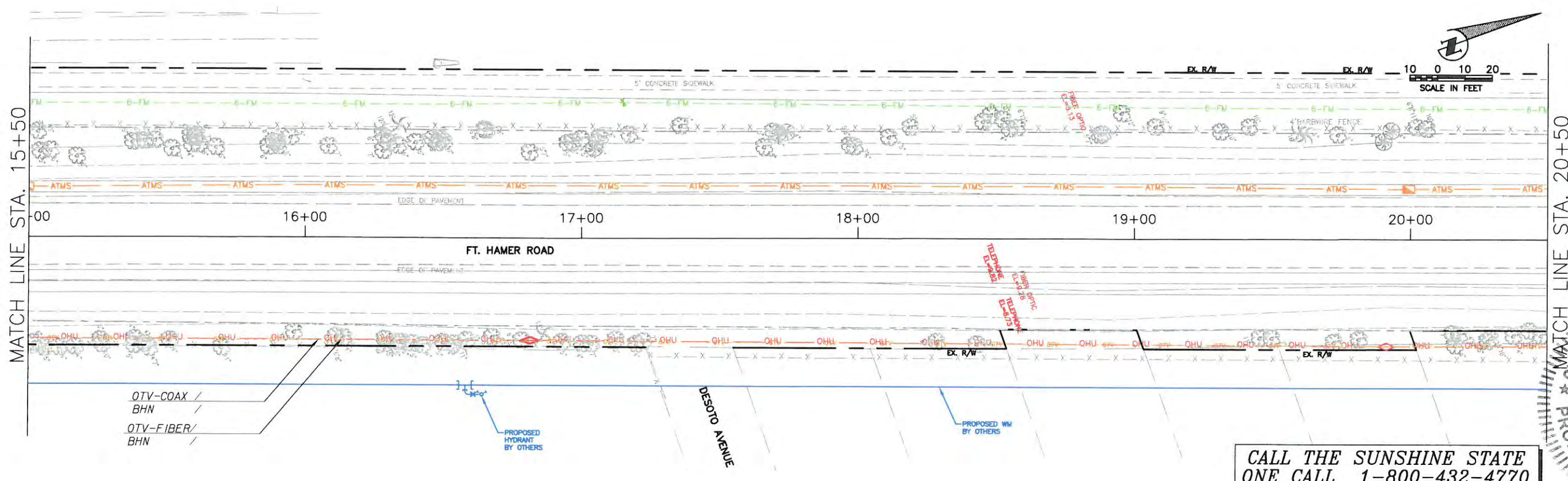
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
BY	DATE
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	KR 08/11/13
CHECKED	JF/GB 08/20/14
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
	
Signature & Date	

SHEET BMP13

**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
UTILITY ADJUSTMENT SHEET**



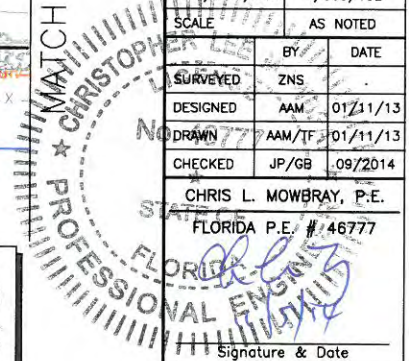
- NOTES:**
1. RELOCATE ALL EXISTING SERVICES, SADDLES, METERS, BACKFLOW PREVENTERS AND HYDRANTS AS NEEDED.
 2. ADJUST ALL MANHOLES, EX. FM STEMES AND COVERS AS NEEDED.
 3. SEE INTERCONNECT PLANS FOR ATMS INFORMATION



NO.	REVISION DESCRIPTION	BY	DATE

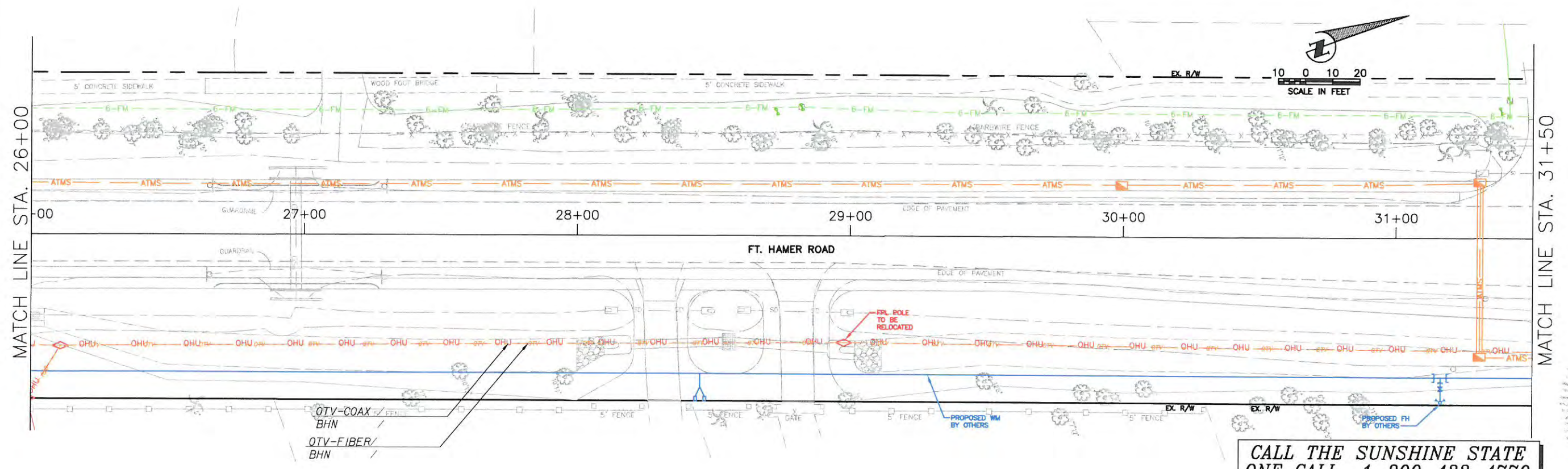
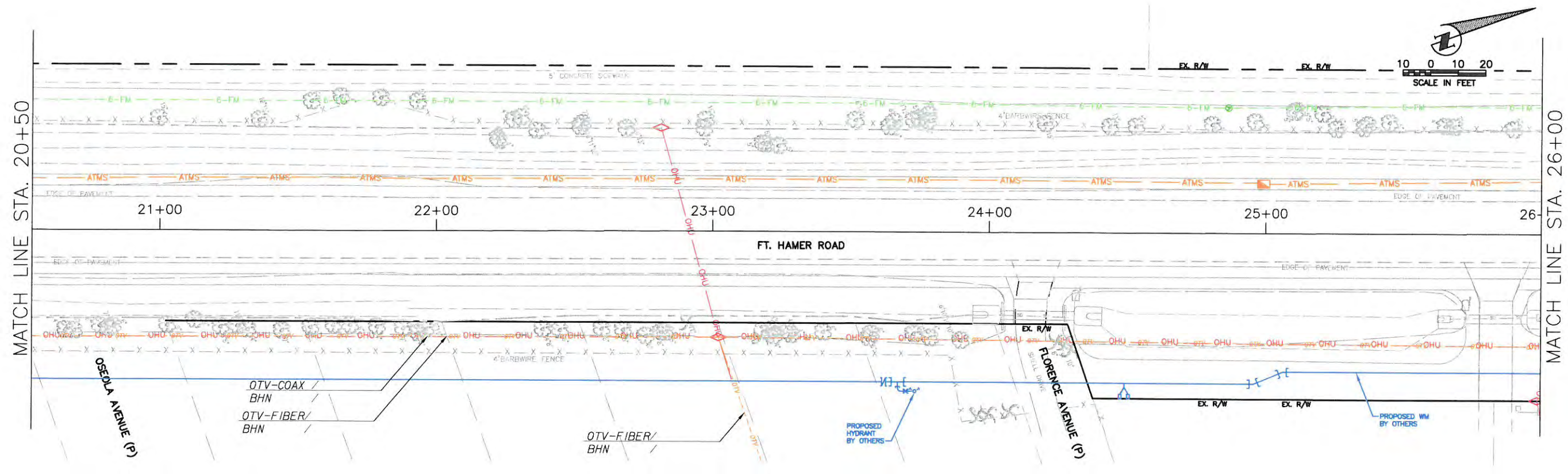
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	AAM/TF 01/11/13
CHECKED	JP/GB 09/2014
CHRIS L. MOWBRAY, P.E.	FLORIDA P.E. # 46777
Signature & Date	
SHEET UAS1	

**CALL THE SUNSHINE STATE
ONE CALL 1-800-432-4770**
48 HOURS BEFORE DIGGING FOR THE
LOCATION OF UNDERGROUND UTILITIES



s:\pww\engineering\roads\fort_hamer_road\UAS\UAS.dwg UAS 10/22/2014 10:14 AM from Forester, J. 11/17

**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
UTILITY ADJUSTMENT SHEET**



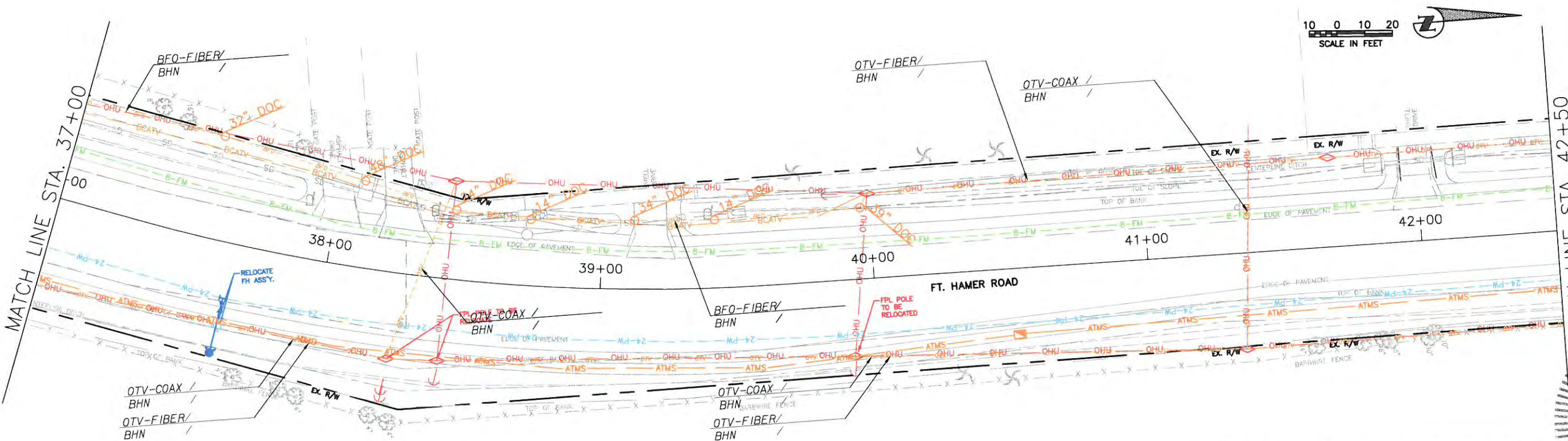
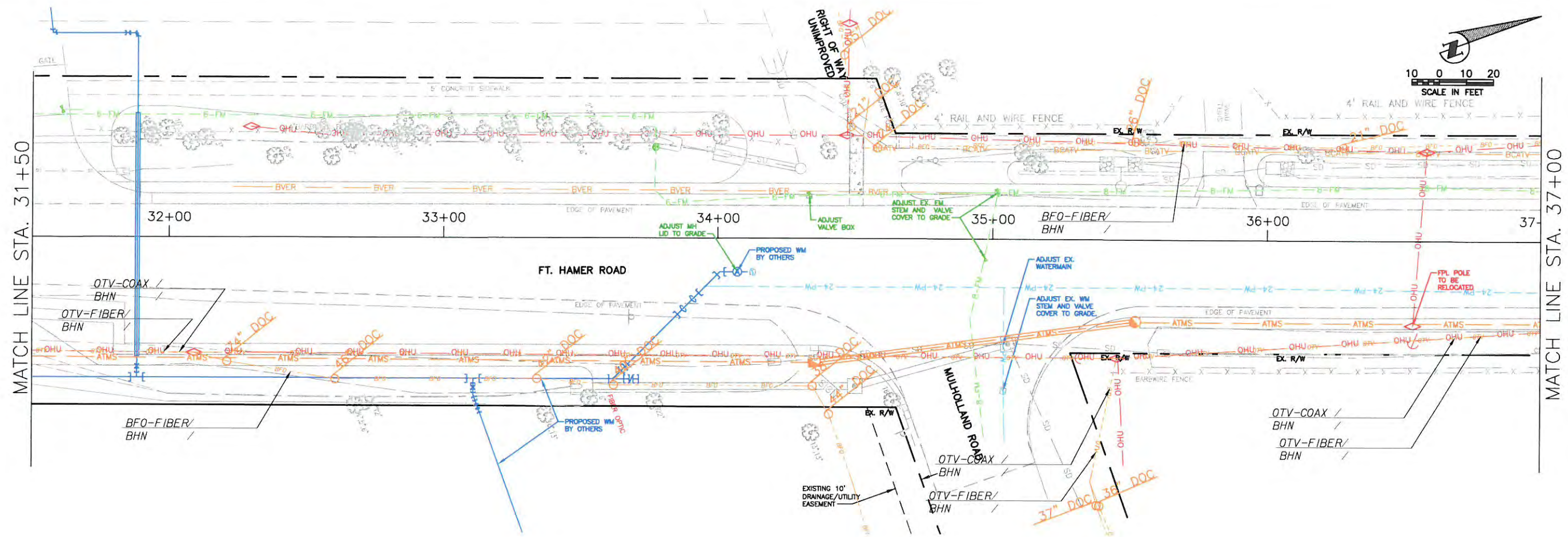
**CALL THE SUNSHINE STATE
ONE CALL 1-800-432-4770
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NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
DESIGNED BY	RAM 01/11/13
SURVEYED BY	ZNS
DRAWN BY	AM/TF 01/31/13
CHECKED BY	JP/GB 09/20/14
DESIGNED BY	CHRIS L. MOWBRAY, P.E.
FLORIDA REG. #	46777
SIGNATURE & DATE	

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 LOCATION OF UNDERGROUND UTILITIES**

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
DESIGNED BY	DATE
SURVEYED	ZNS
DESIGNED	SAM 01/11/13
DRAWN	AAM/TF 01/11/13
CHECKED	AP/GB 05/2014
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
SIGNATURE & DATE	

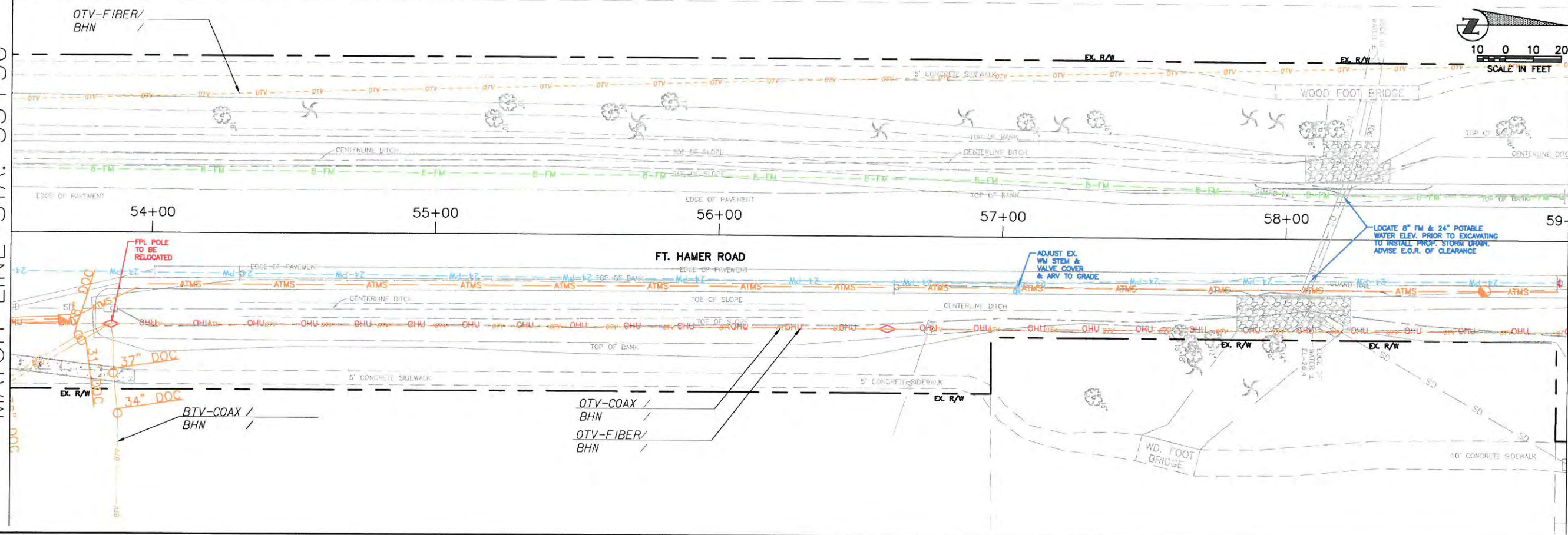
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**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
UTILITY ADJUSTMENT SHEET**

MATCH LINE STA. 53+50

MATCH LINE STA. 59+00



MATCH LINE STA. 59+00

MATCH LINE STA. 64+50



**CALL THE SUNSHINE STATE
ONE CALL 1-800-432-4770
48 HOURS BEFORE DIGGING FOR THE
LOCATION OF UNDERGROUND UTILITIES**

NO.	REVISION DESCRIPTION	BY	DATE

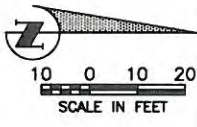
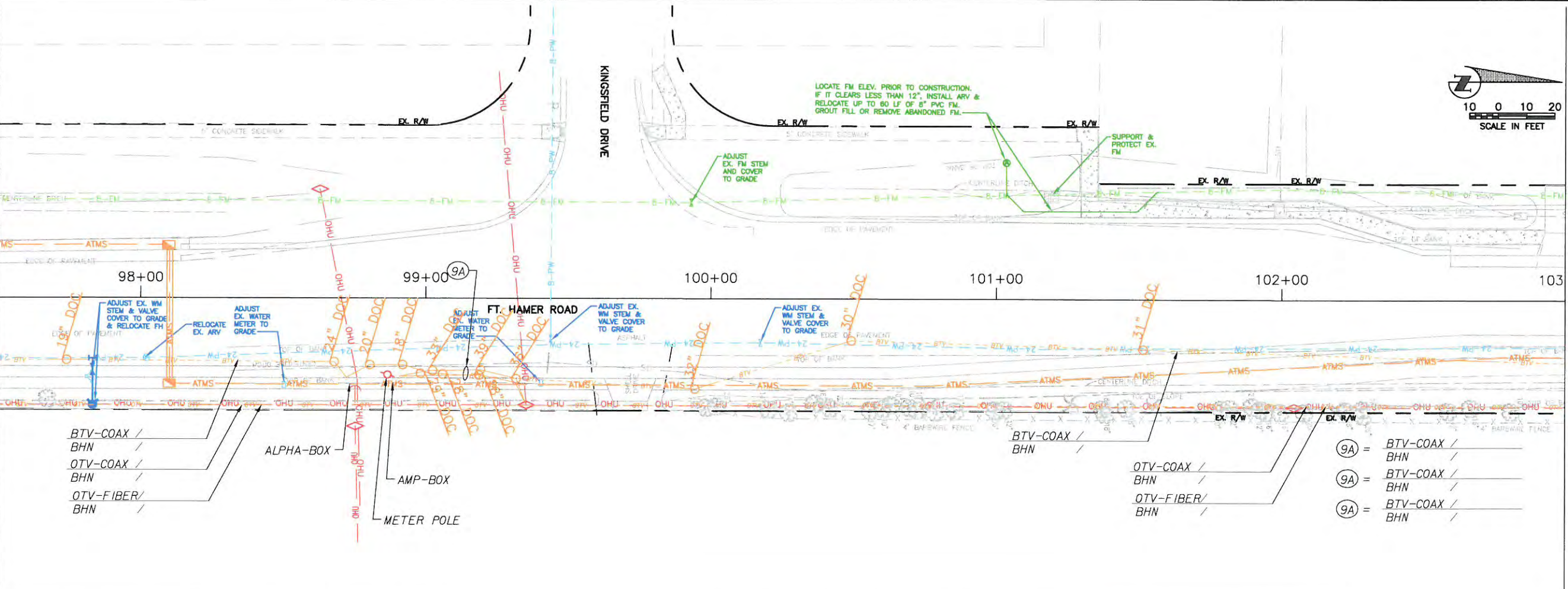
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
DATE	07/11/23
DESIGNED BY	AAM/TF
DRAWN BY	AAM/TF
CHECKED BY	08/28/24
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
STATE OF FLORIDA	
Professional Engineer	
Signature & Date	
SHEET UAS5	

C:\pwworking\manatee\highway\engineering\ROADS\fort hamer_road\UAS5.UAS.dwg, UAS 5, 10/22/2014, 10:14 AM, Thom Forrester, L1, T1x17

**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
UTILITY ADJUSTMENT SHEET**

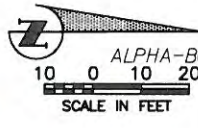
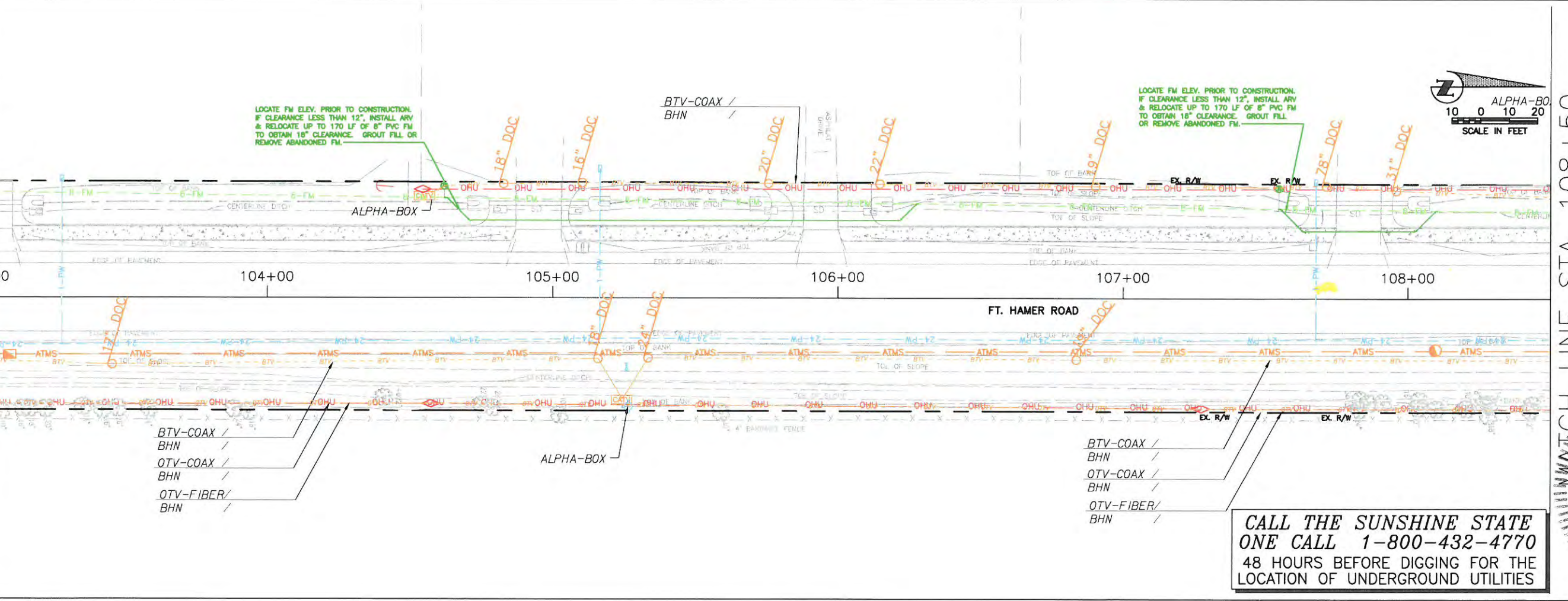
MATCH LINE STA. 97+50

MATCH LINE STA. 103+00



MATCH LINE STA. 103+00

MATCH LINE STA. 108+50

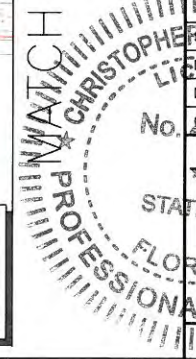


NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # 323-6054764
SURVEY # 5303
SEC./TWN./RGE 7/35S/18E
SCALE AS NOTED

NO.	BY	DATE
SUPPLIED	JNS	01/11/13
DESIGNED	AM	01/11/13
DRAWN	AM/TF	01/11/13
CHECKED	Jp/GB	09/20/14
CHRIS L. MOWERAY, P.E.		
FLORIDA P.E. # 48277		
STATE OF FLORIDA		
PROFESSIONAL ENGINEER		
Signature & Date		

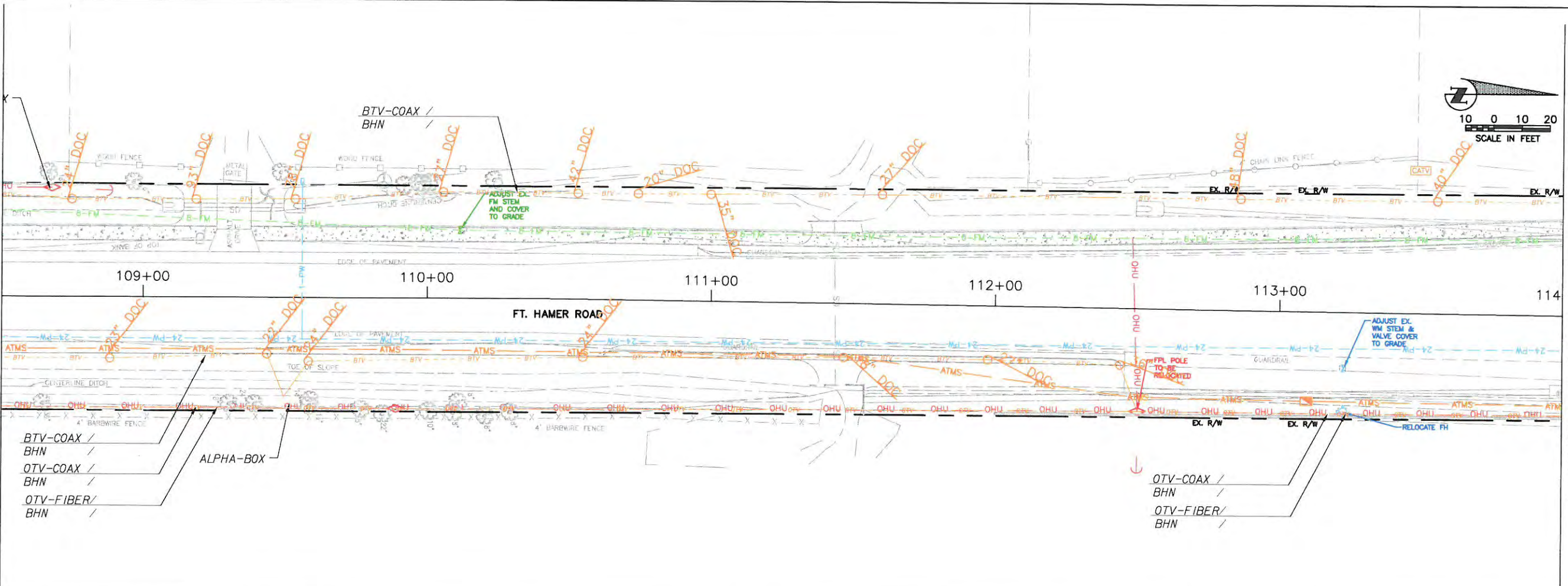
**CALL THE SUNSHINE STATE
ONE CALL 1-800-432-4770
48 HOURS BEFORE DIGGING FOR THE
LOCATION OF UNDERGROUND UTILITIES**



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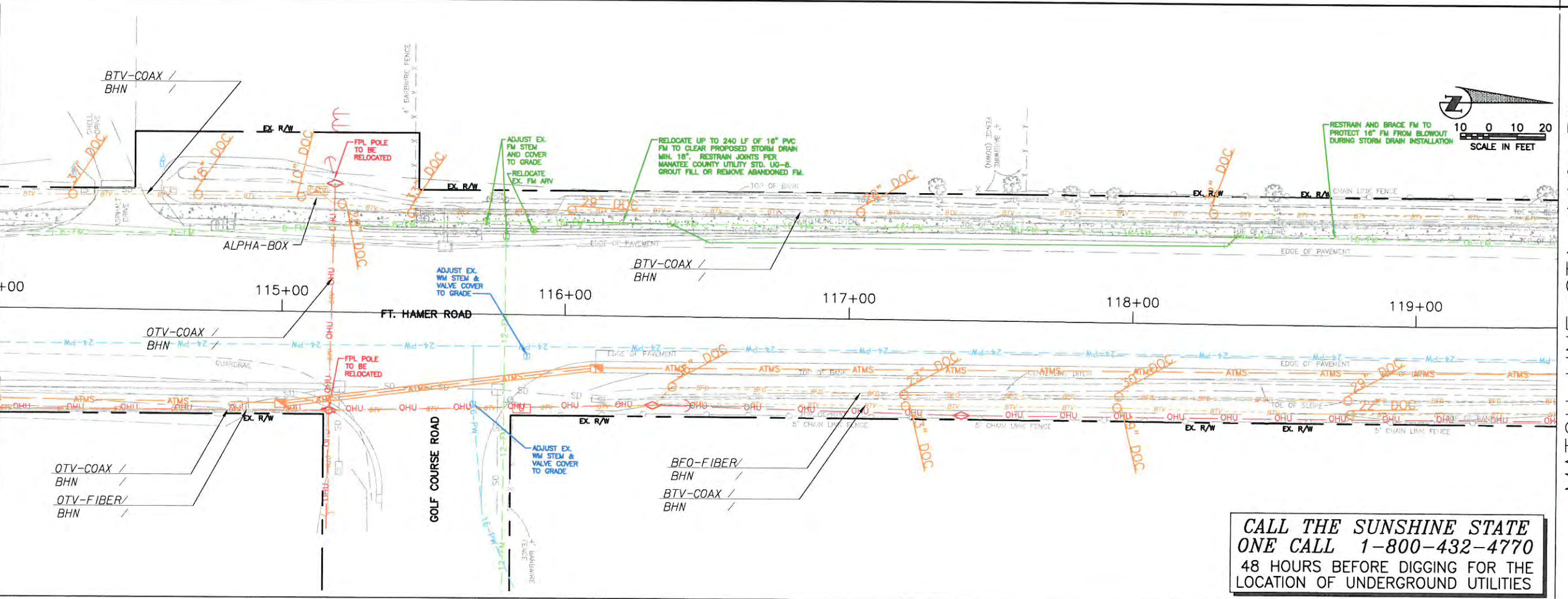
**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
UTILITY ADJUSTMENT SHEET**

MATCH LINE STA. 108+50



MATCH LINE STA. 114+00

MATCH LINE STA. 114+00



MATCH LINE STA. 119+50

NO.	REVISION DESCRIPTION	BY	DATE

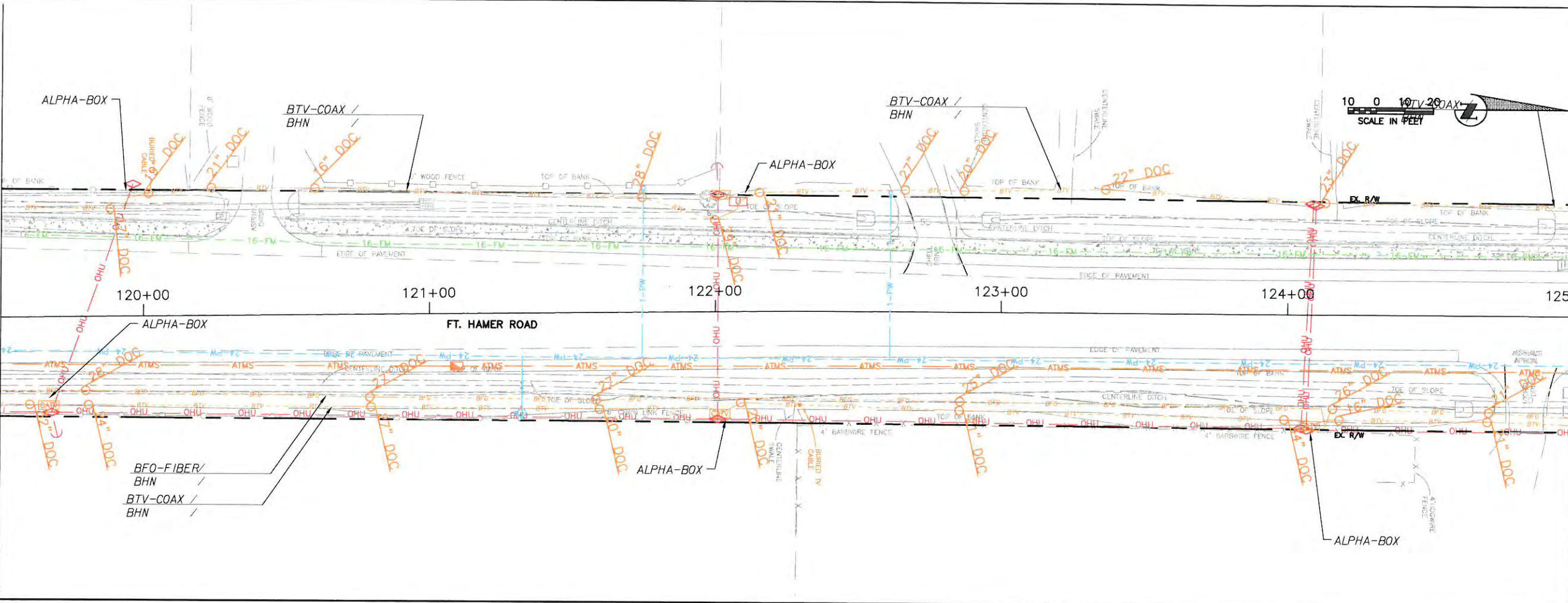
PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
DATE	
SURVEYED	ZNS
DESIGNED	ADD 01/13/13
DRAWN	MAN/TF 01/13/13
CHECKED	JP/GB 09/20/14
CHRIS L. WOVBRAY, P.E.	
FLORIDA P.E. # 46777	
STATE OF FLORIDA	
OWNER'S REPRESENTATIVE	
SHEET WAS10	

**CALL THE SUNSHINE STATE
ONE CALL 1-800-432-4770
48 HOURS BEFORE DIGGING FOR THE
LOCATION OF UNDERGROUND UTILITIES**

s:\pww\engineering\above\highway engineering\ROADS\Fort Hamer_road\DWG\PHAS II\AS 108-119.dwg 10/22/2014 10:15 AM Thom Forester, 1:1, 11x17

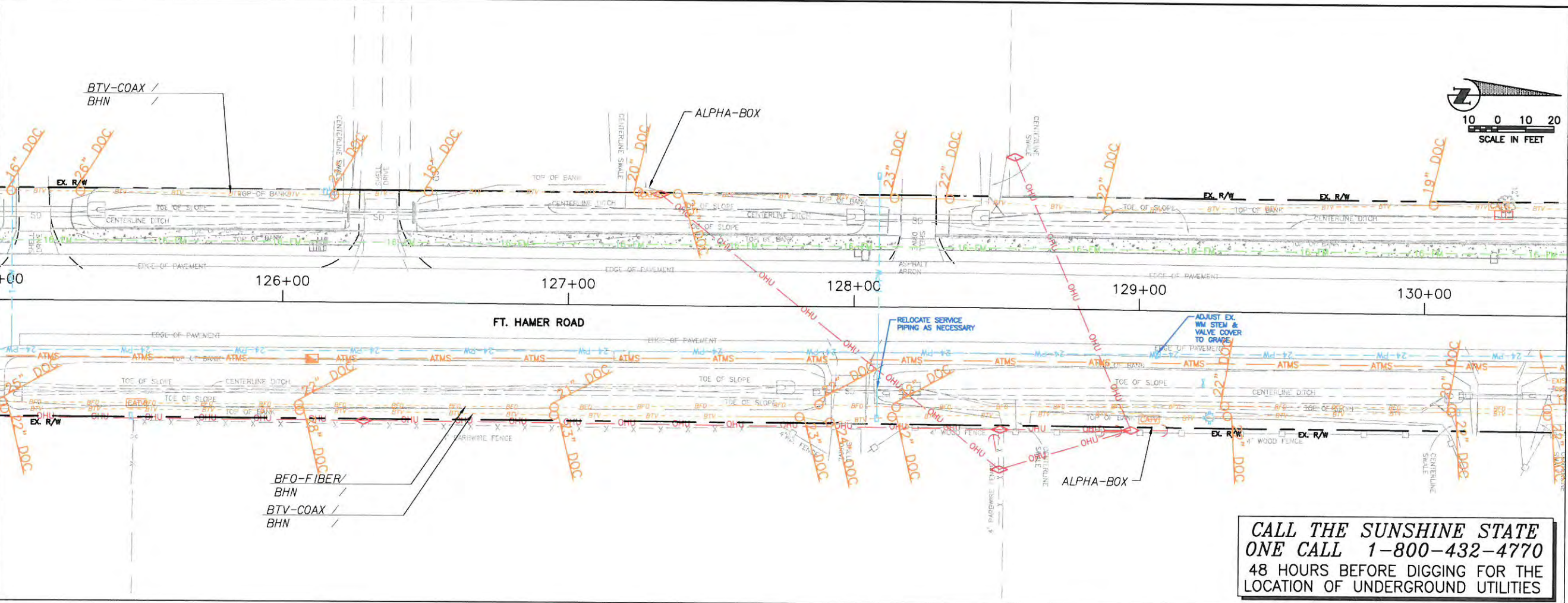
**FORT HAMER ROAD PHASE II
US 301 TO FUTURE FORT HAMER
BRIDGE
UTILITY ADJUSTMENT SHEET**

MATCH LINE STA. 119+50



MATCH LINE STA. 125+00

MATCH LINE STA. 125+00



MATCH LINE STA. 130+50

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED

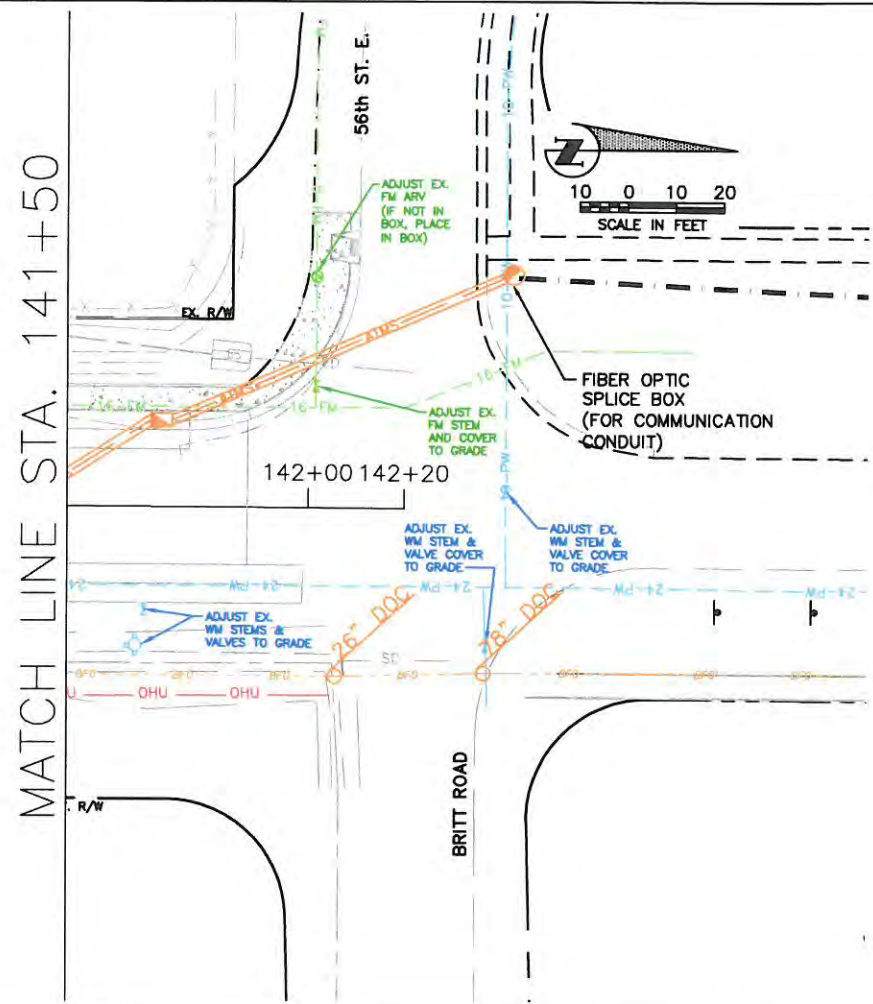
SURVEYED	BY	DATE
DESIGNED	AM	04/11/13
DRAWN	AM/TF	01/17/13
CHECKED	JP/GB	05/20/14

CHRIS 46777 MOWBRAY, P.E.
FLORIDA P.E. # 46777
STATE OF FLORIDA
Signature: _____ Date: _____
SHEET US11

**CALL THE SUNSHINE STATE
ONE CALL 1-800-432-4770
48 HOURS BEFORE DIGGING FOR THE
LOCATION OF UNDERGROUND UTILITIES**

c:\pwworking\abc\highway engineering\BOARDS\fort hamer road\US301 US Eng\US 11 - 10/22/2014 10:15 AM Thom Forrester, 1:1, 11x17

**FORT HAMER ROAD PHASE II
 US 301 TO FUTURE FORT HAMER
 BRIDGE
 UTILITY ADJUSTMENT SHEET**



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NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	323-6054764
SURVEY #	5303
SEC./TWN./RGE	7/35S/18E
SCALE	AS NOTED
SURVEYED	ZNS
DESIGNED	AAM 01/11/13
DRAWN	AAM/TF 01/11/13
CHECKED	JP/GB 09/2014
CHRIS L. MOWBRAY, P.E.	
FLORIDA P.E. # 46777	
 11/5/14 Signature & Date	
SHEET UAS13	

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