

THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

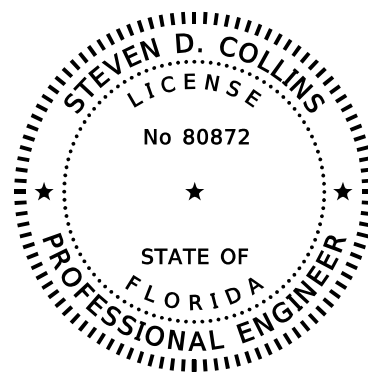
PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED SIGNED AND SEALED.
THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.

JMT-JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT,
SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION No.: 5917
JASON R. FLICK, P.E. NO. 74741

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEYSHEET
2	SIGNATURE SHEET
2A	SUMMARY OF PAY ITEMS
11 - 15	TYPICAL SECTIONS
35	GENERAL NOTES
36 - 65	ROADWAY PLAN & PROFILE
173 - 289	CROSS SECTIONS
292 - 402	TEMPORARY TRAFFIC CONTROL PLANS
403 - 417	UTILITY ADJUSTMENTS
418 - 419	SUMMARY OF VERIFIED UTILITIES
SQ-1 - SQ-27	SUMMARY OF QUANTITIES



THIS ITEM HAS BEEN DIGITALLY
SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE
NOT CONSIDERED SIGNED AND SEALED.
THE SIGNATURE MUST BE VERIFIED
ON ANY ELECTRONIC COPIES.

JMT-JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT,
SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION No.: 5917
STEVEN D. COLLINS, P.E., Ph.D. NO. 80872

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

DRAINAGE PLANS

SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
3 - 10	DRAINAGE MAP
16A - 34F	SUMMARY OF DRAINAGE STRUCTURES
66 - 148	DRAINAGE STRUCTURES
149 - 159	POND DETAIL
160 - 169	POND CROSS SECTIONS
170 - 172	DRAINAGE DETAIL
290 - 291	STORMWATER POLLUTION PREVENTION PLAN

10/10/2022 3:43:54 PM O:\2017\1710782_002_Orange_Blvd_(CR_431)\Orange_Blvd_CADD\roadway\SIGNRD01.dgn

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS

ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

SIGNATURE SHEET

SHEET NO.

2

SUMMARY OF PAY ITEMS

ITEM No.	DESCRIPTION	UNIT	QUANTITY
ROADWAY			
101 1	MOBILIZATION	LS	1
102 1	MAINTENANCE OF TRAFFIC	LS	1
110 1 1	CLEARING AND GRUBBING	AC	30.97
110 4 10	REMOVAL OF EXISTING CONCRETE	SY	4873
110 7 1	MAILBOX, F&I, SINGLE	EA	40
120 1	REGULAR EXCAVATION	CY	109130.1
120 6	EMBANKMENT	CY	26734.1
160 4	TYPE B STABILIZATION	SY	110771
285 701	OPTIONAL BASE GROUP 1	SY	17127
285 709	OPTIONAL BASE GROUP 9	SY	65481
285 710	OPTIONAL BASE GROUP 10	SY	14664
327 70 1	MILLING EXISTING ASPHALT PAVEMENT, 1" AVG. DEPTH	SY	494
327 70 6	MILLING EXISTING ASPHALT PAVEMENT, 1 1/2" AVG. DEPTH	SY	677
327 70 17	MILLING EXISTING ASPHALT PAVEMENT, 3 1/4" AVG. DEPTH	SY	718
334 1 12	SUPERPAVE ASPHALTIC CONC., TRAFFIC B	TN	11630.1
337 7 80	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC B, FC-9.5, PG 76-22	TN	4539.6
400 0 11	CONCRETE CLASS NS, GRAVITY WALL	CY	110.0
400 1 2	CONCRETE CLASS 1, ENDWALLS	CY	2.36
425 1331	INLETS, CURB, TYPE P-3, <10'	EA	98.00
425 1332	INLETS, CURB, TYPE P-3, >10'	EA	2.00
425 1431	INLETS, CURB, TYPE J-3, <10'	EA	25.0
425 1341	INLETS, CURB, TYPE P-4, <10'	EA	20.0
425 1441	INLETS, CURB, TYPE J-4, <10'	EA	5.0
425 1352	INLETS, CURB, TYPE P-5, <10'	EA	15.0
425 1451	INLETS, CURB, TYPE J-5, <10'	EA	1.0
425 1361	INLETS, CURB, TYPE P-6, <10'	EA	4.0
425 1521	INLETS, DT BOT, TYPE C, <10'	EA	36.0
425 1541	INLETS, DT BOT, TYPE D, <10'	EA	18.0
425 1581	INLETS, DT BOT, TYPE H, <10'	EA	1.0
425 2 41	MANHOLES, P-7, <10'	EA	37.0
425 2 71	MANHOLES, J-7, <10'	EA	30.0
425 10	YARD DRAIN	EA	88

SUMMARY OF PAY ITEMS

ITEM No.	DESCRIPTION	UNIT	QUANTITY
ROADWAY			
430175118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18"S/CD	LF	10541
430175124	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 24"S/CD	LF	12785
430175130	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 30"S/CD	LF	2737
430175136	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 36"S/CD	LF	1235
430175142	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 42"S/CD	LF	405
430175148	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 48"S/CD	LF	300
430175218	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 18"S/CD	LF	490
430175224	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 24"S/CD	LF	1192
430175230	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 30"S/CD	LF	1357
430175236	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 36"S/CD	LF	998
430175242	PIPE CULVERT, OPTIONAL MATERIAL, OTHER SHAPE - ELLIP/ARCH, 42"S/CD	LF	447
430200 25	FLARED END SECTION, CONCRETE, 18"	EA	3
430200 29	FLARED END SECTION, CONCRETE, 24"	EA	9
430200 33	FLARED END SECTION, CONCRETE, 30"	EA	1
430200 38	FLARED END SECTION, CONCRETE, 36"	EA	1
430200 41	FLARED END SECTION, CONCRETE, 48"	EA	1
430530100	STRAIGHT CONCRETE ENDWALLS, 30", SINGLE, 0 DEGREES, ROUND	EA	1
430982125	MITERED END SECTION, OPTIONAL ROUND, 18" CD	EA	1
430982129	MITERED END SECTION, OPTIONAL ROUND, 24" CD	EA	1
440 1 10	UNDERDRAIN, TYPE I	LF	80
520 1 7	CONCRETE CURB & GUTTER, TYPE E	LF	12903
520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	32505
520 70	CONCRETE TRAFFIC SEPARATOR, SPECIAL - VARIABLE WIDTH	SY	1030
522 1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" THICK	SY	7945
522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3766
527 2	DETECTABLE WARNINGS	SF	880
550 10230	FENCING, TYPE B, 6.1-7.0', STANDARD	LF	7842
550 60233	FENCE GATE, TYPE B, SLIDING/CANTILEVER 12.1-18' OPENING	EA	1
550 60235	FENCE GATE, TYPE B, SLIDING/CANTILEVER 20.1-24' OPENING	EA	7
570 1 2	PERFORMANCE TURF, SOD	SY	27670

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

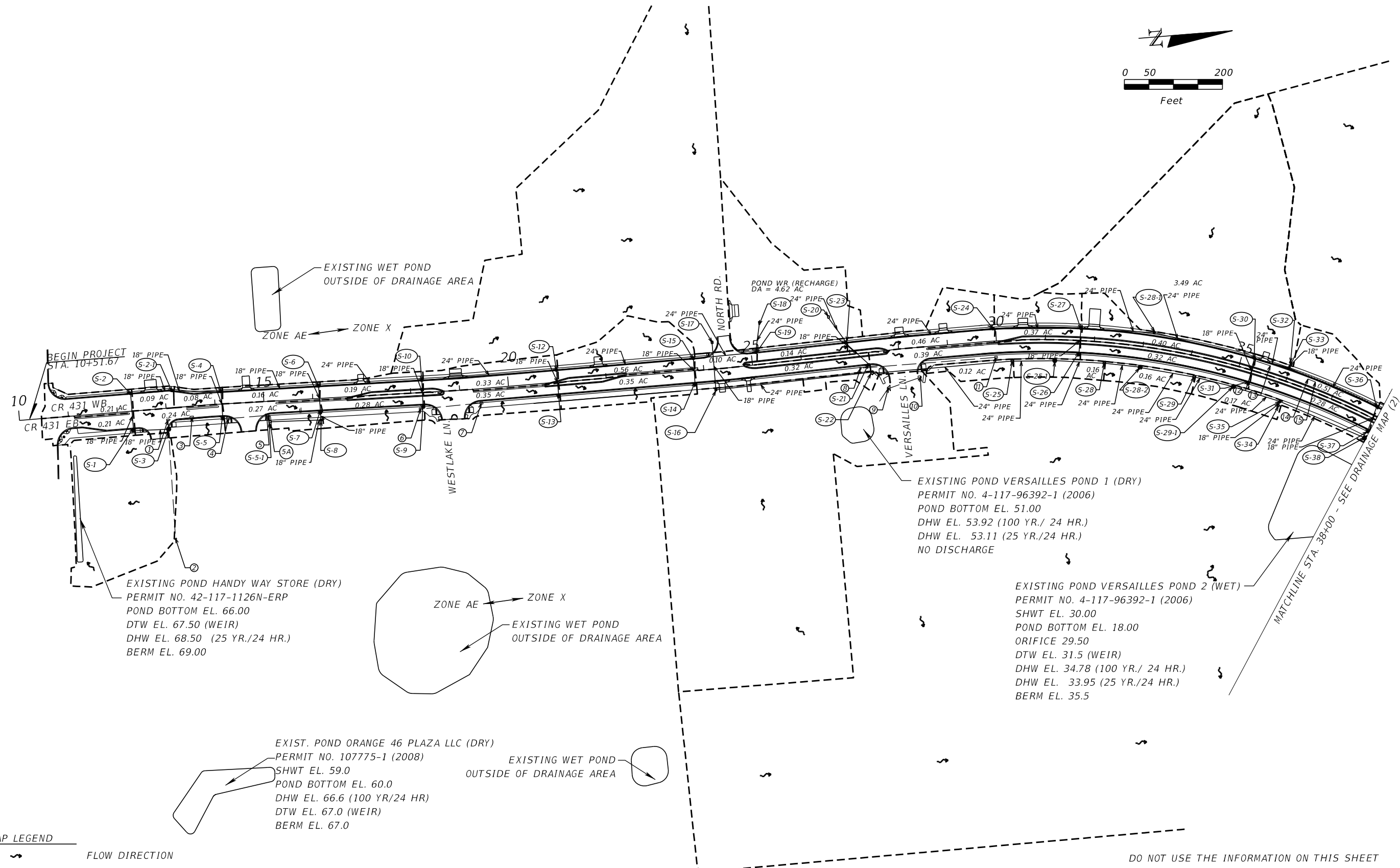
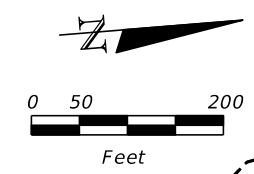
SEMINOLE COUNTY PUBLIC WORKS

ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

SUMMARY OF PAY ITEMS

SHEET NO.

2A



EXISTING WET POND
OUTSIDE OF DRAINAGE AREA

ZONE AE → ZONE X

EXISTING POND HANDY WAY STORE (DRY)
PERMIT NO. 42-117-1126N-ERP
POND BOTTOM EL. 66.00
DTW EL. 67.50 (WEIR)
DHW EL. 68.50 (25 YR./24 HR.)
BERM EL. 69.00

EXISTING WET POND
OUTSIDE OF DRAINAGE AREA

ZONE AE → ZONE X

EXISTING POND VERSAILLES POND 1 (DRY)
PERMIT NO. 4-117-96392-1 (2006)
POND BOTTOM EL. 51.00
DHW EL. 53.92 (100 YR./ 24 HR.)
DHW EL. 53.11 (25 YR./24 HR.)
NO DISCHARGE

EXISTING POND VERSAILLES POND 2 (WET)
PERMIT NO. 4-117-96392-1 (2006)
SHWT EL. 30.00
POND BOTTOM EL. 18.00
ORIFICE 29.50
DTW EL. 31.5 (WEIR)
DHW EL. 34.78 (100 YR./ 24 HR.)
DHW EL. 33.95 (25 YR./24 HR.)
BERM EL. 35.5

EXIST. POND ORANGE 46 PLAZA LLC (DRY)
PERMIT NO. 107775-1 (2008)
SHWT EL. 59.0
POND BOTTOM EL. 60.0
DHW EL. 66.6 (100 YR./24 HR.)
DTW EL. 67.0 (WEIR)
BERM EL. 67.0

EXISTING WET POND
OUTSIDE OF DRAINAGE AREA

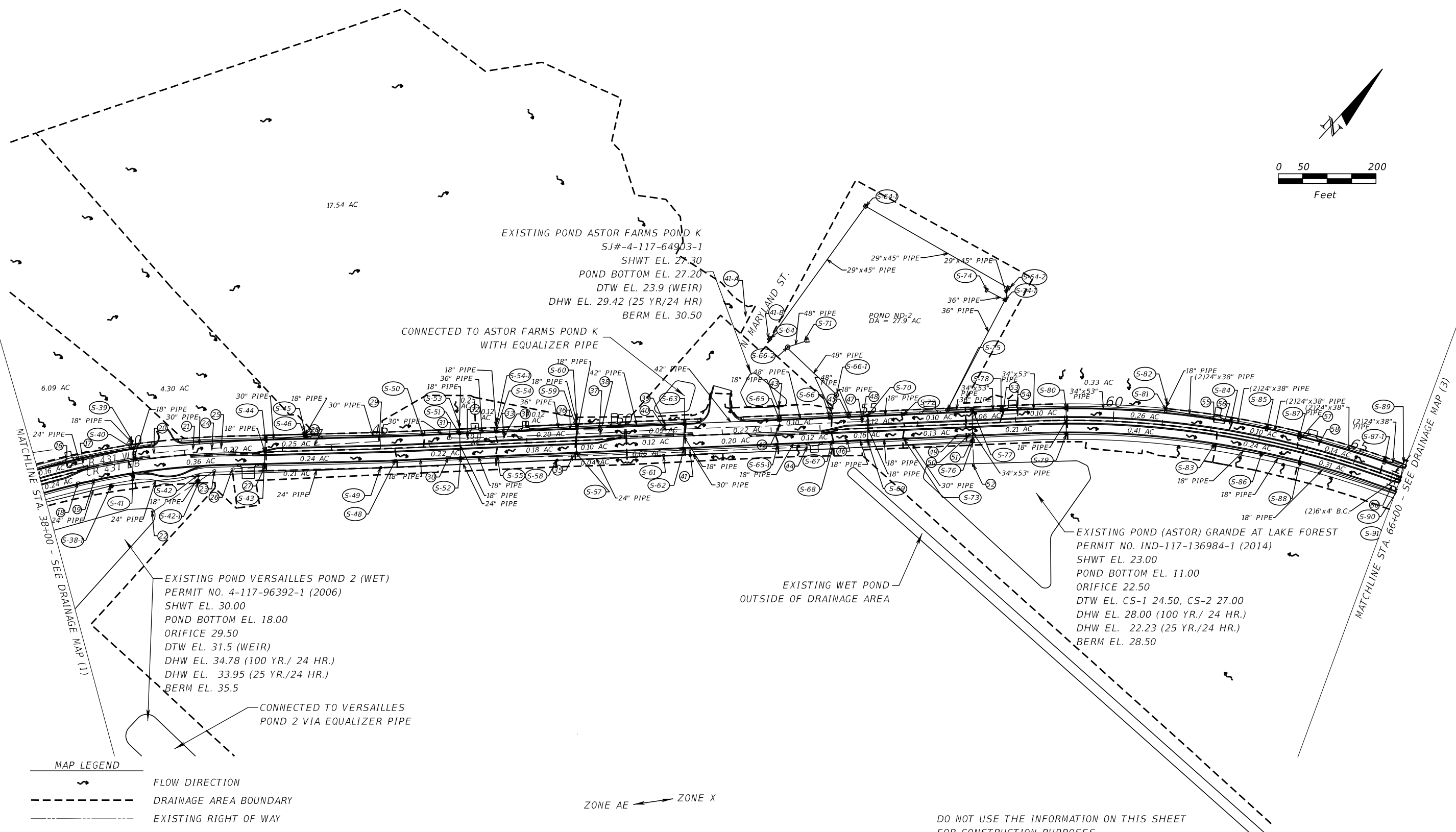
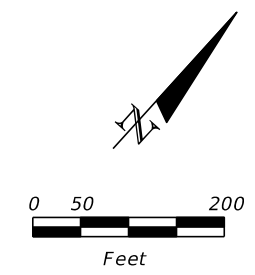
MAP LEGEND

	FLOW DIRECTION
	DRAINAGE AREA BOUNDARY
	EXISTING RIGHT OF WAY
	PROPOSED RIGHT OF WAY
	EXISTING WETLANDS

DO NOT USE THE INFORMATION ON THIS SHEET
FOR CONSTRUCTION PURPOSES.
This sheet is in the plans for documentation and
to assist construction personnel with drainage concerns.

10/10/2022 3:44:18 PM O:\2017\1710782_002_Orange_Bldg_Cr_431\Orange_Bldg_Cr_431\Drawings\DRMPRD02.dgn

<p>PRELIMINARY NOT FOR CONSTRUCTION</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	DESCRIPTION	DATE	DESCRIPTION					<p>STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917</p>	<p>SEMINOLE COUNTY PUBLIC WORKS</p> <table border="1"> <thead> <tr> <th>ROAD NO.</th> <th>COUNTY</th> <th>SEMINOLE COUNTY CIP</th> </tr> </thead> <tbody> <tr> <td>CR 431</td> <td>SEMINOLE</td> <td>01785303</td> </tr> </tbody> </table>			ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	CR 431	SEMINOLE	01785303	<p>DRAINAGE MAP</p>	<p>SHEET NO.</p>
		DATE	DESCRIPTION	DATE	DESCRIPTION																		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP																					
CR 431	SEMINOLE	01785303																					
			3																				



MAP LEGEND

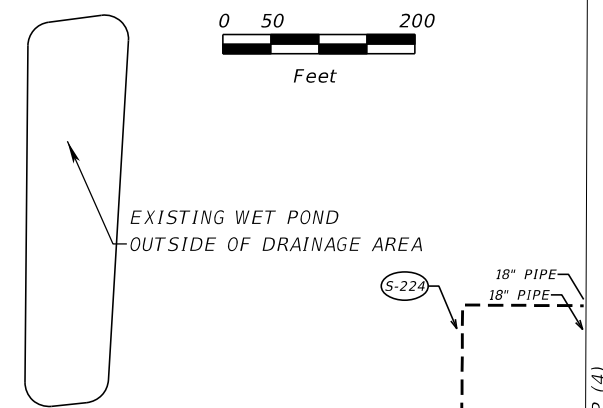
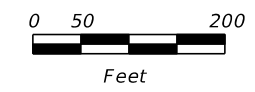
- FLOW DIRECTION
- DRAINAGE AREA BOUNDARY
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- EXISTING WETLANDS

ZONE AE ← ZONE X

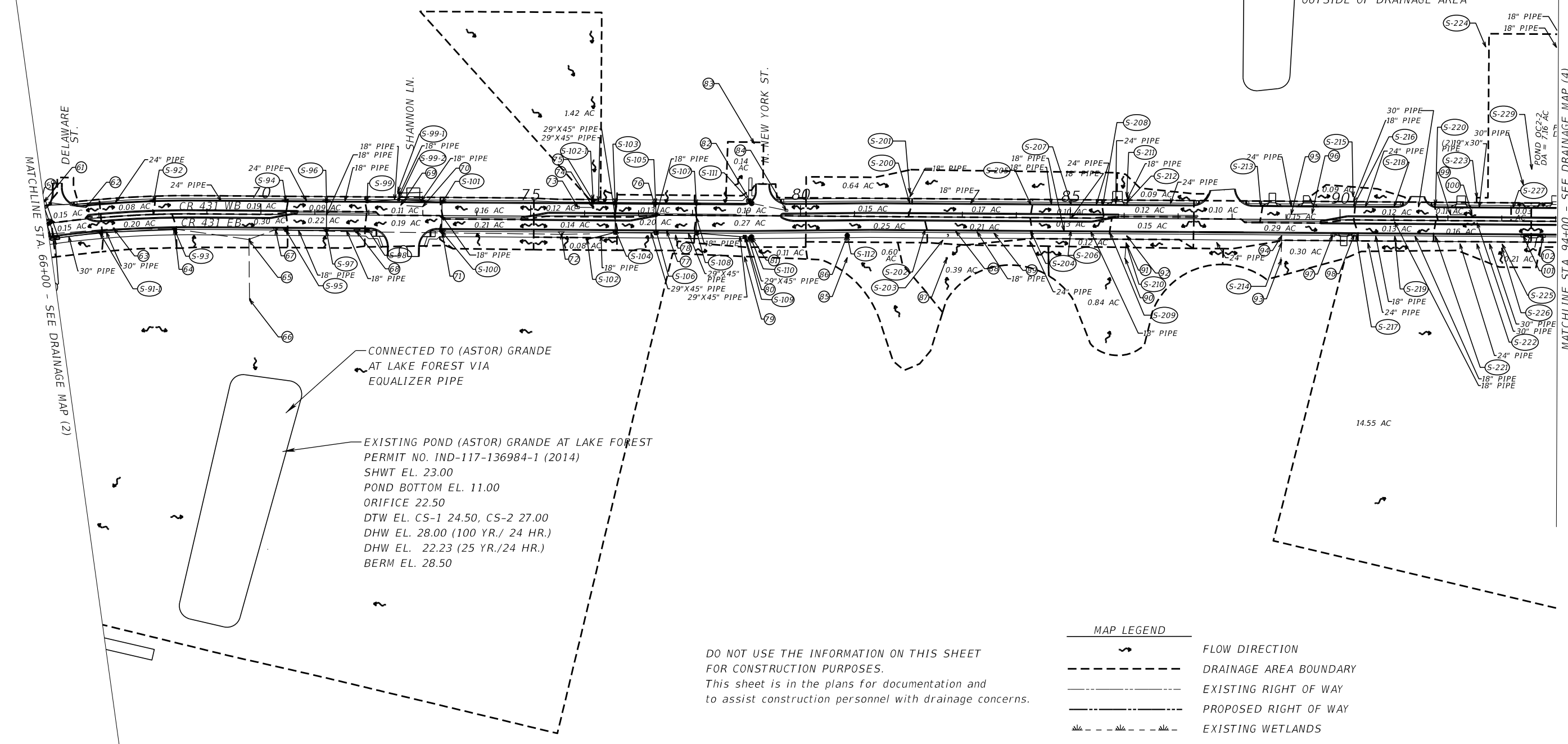
DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES.
This sheet is in the plans for documentation and to assist construction personnel with drainage concerns.

10/10/2022 3:44:21 PM G:\2017\1710782_002_Orange Blvd (CR 431)\Orange Blvd_CADD\Drainage\DRMP\RD03.dgn

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 4
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303	DRAINAGE MAP	



EXISTING WET POND
OUTSIDE OF DRAINAGE AREA



CONNECTED TO (ASTOR) GRANDE
AT LAKE FOREST VIA
EQUALIZER PIPE

EXISTING POND (ASTOR) GRANDE AT LAKE FOREST
PERMIT NO. IND-117-136984-1 (2014)
SHWT EL. 23.00
POND BOTTOM EL. 11.00
ORIFICE 22.50
DTW EL. CS-1 24.50, CS-2 27.00
DHW EL. 28.00 (100 YR./ 24 HR.)
DHW EL. 22.23 (25 YR./24 HR.)
BERM EL. 28.50

MAP LEGEND

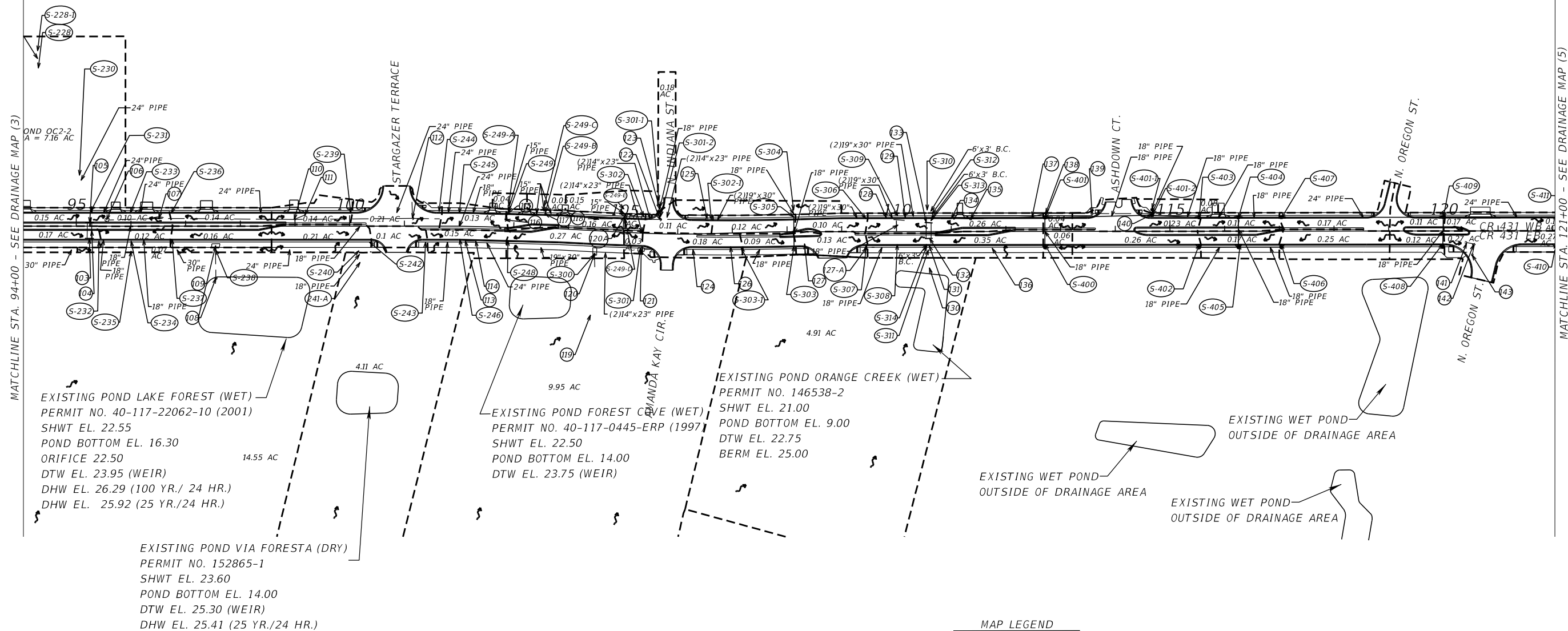
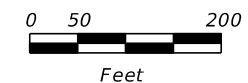
	FLOW DIRECTION
	DRAINAGE AREA BOUNDARY
	EXISTING RIGHT OF WAY
	PROPOSED RIGHT OF WAY
	EXISTING WETLANDS

DO NOT USE THE INFORMATION ON THIS SHEET
FOR CONSTRUCTION PURPOSES.
This sheet is in the plans for documentation and
to assist construction personnel with drainage concerns.

10/10/2022 3:44:25 PM G:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\drainage\DRMPRD04.dgn

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303	5	

DRAINAGE MAP



MAP LEGEND

	FLOW DIRECTION
	DRAINAGE AREA BOUNDARY
	EXISTING RIGHT OF WAY
	PROPOSED RIGHT OF WAY
	EXISTING WETLANDS

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES.
This sheet is in the plans for documentation and to assist construction personnel with drainage concerns.

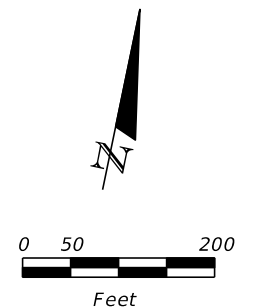
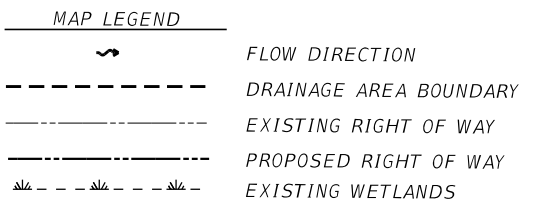
10/10/2022 3:44:28 PM C:\2017\1710782_002_Orange_Bldg_(CR_431)\Orange_Bldg_CADD\drainage\DRMPRD05.dgn

MATCHLINE STA. 94+00 - SEE DRAINAGE MAP (3)

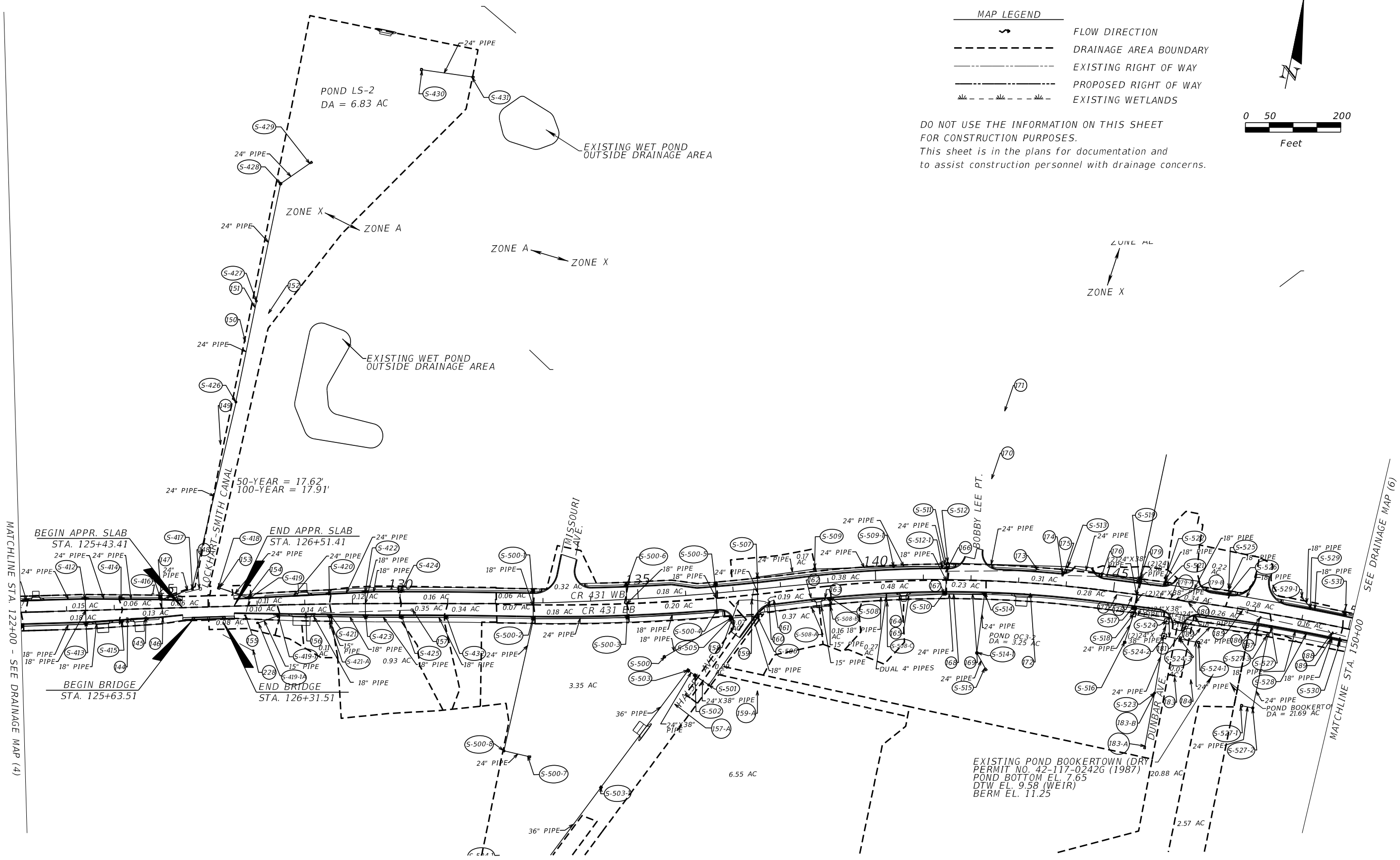
MATCHLINE STA. 121+00 - SEE DRAINAGE MAP (5)

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 6
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303	

DRAINAGE MAP



DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES.
This sheet is in the plans for documentation and to assist construction personnel with drainage concerns.

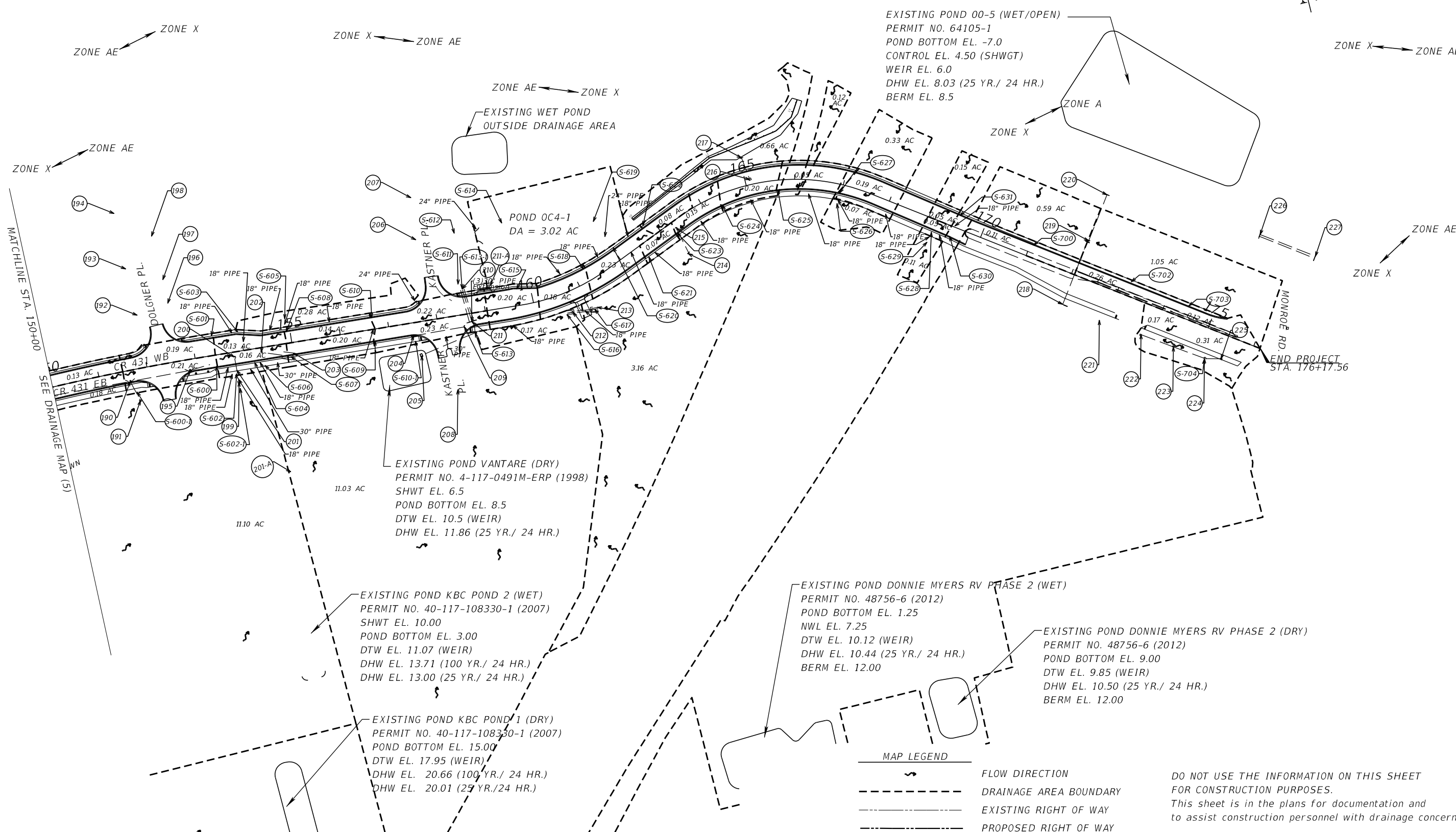
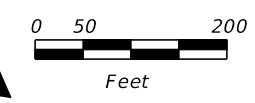


10/10/2022 3:44:34 PM G:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\DRMPRD06.dgn

REVISIONS				SEMINOLE COUNTY PUBLIC WORKS			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303	7

STEVEN D. COLLINS, P.E., Ph.D.
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

DRAINAGE MAP



10/10/2022 3:44:37 PM G:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\CADD\drainage\DRMPRD07.dgn

REVISIONS	
DATE	DESCRIPTION

STEVEN D. COLLINS, P.E., Ph.D.
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE MAP

SHEET NO.
8

PRELIMINARY NOT FOR CONSTRUCTION

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES.
 This sheet is in the plans for documentation and to assist construction personnel with drainage concerns.

EXISTING DRAINAGE STRUCTURES

- ① STA. 13+01.72, 24.24' RT CATCH BASIN
TOP EL. = 67.03
BOTTOM EL. = 64.98
N. INV. EL. = 64.80
E. INV. EL. = 64.98
- ② STA. 12+97.22, 265.98' RT 24" STORM MANHOLE
TOP EL. = 69.20
W. INV. EL. = 65.70
- ③ STA. 13+51.92, 22.73' RT MES
INV. EL. = 64.78
- ④ STA. 14+25.52, 30.30' RT MITERED END SECTION
INV. EL. = 63.82 (19"x30" RCP)
- ⑤ STA. 15+04.20, 28.75' RT MITERED END SECTION
INV. EL. = 63.38 (19"x30" RCP)
- 5A STA. 15+10+55, 42.06' RT CONCRETE SPILLWAY
- ⑥ STA. 18+18.71, 32.66' RT MES
INV. EL. = 62.99
- ⑦ STA. 19+41.95, 29.96' RT MES
INV. EL. = 62.84
- ⑧ STA. 27+18.11, 30.65' RT CATCH BASIN
TOP EL. = 52.68
BOTTOM EL. = 48.38
N. INV. EL. = 48.14
- ⑨ STA. 27+70.09, 76.67' RT CONC CURB INLET WITH 24" MANHOLE
TOP EL. = 52.77
BOTTOM EL. = 48.69
N. INV. EL. = 48.71
SE. INV. EL. = 48.64
- ⑩ STA. 28+38.90, 60.32' RT CONC CURB INLET WITH 24" MANHOLE
TOP EL. = 52.72
BOTTOM EL. = 49.01
S. INV. EL. = 48.92
- ⑪ STA. 29+97.37, 33.47' RT MES
INV. EL. = 47.36
- ⑫ STA. 35+28.56, 20.46' LT
INV. EL. = 38.41
- ⑬ STA. 35+60.43, 19.87' LT
INV. EL. = 37.67
- ⑭ STA. 36+40.78, 19.93' LT
INV. EL. = 36.35
- ⑮ STA. 36+56.98, 19.77' LT
INV. EL. = 36.44
- ⑯ STA. 38+59.13, 15.31' LT
INV. EL. = 34.38
- ⑰ STA. 38+92.58, 15.26' LT
INV. EL. = 33.81
- ⑱ STA. 38+73.06, 22.62' RT MES
INV. EL. = 34.36
- ⑲ STA. 39+07.85, 24.11' RT MES
INV. EL. = 33.71
- ⑳ STA. 40+37.96, 10.09' LT
INV. EL. = 31.91
- ㉑ STA. 41+17.27, 10.31' LT
INV. EL. = 30.68
- ㉒ STA. 40+18.01, 108.70' RT DRAINAGE CONTROL STRUCTURE
TOP EL. = 32.91
N. INV. EL. = 29.88
- ㉓ STA. 41.58.80, 36.32' RT MES
INV. EL. = 29.92
- ㉔ STA. 41+55.78, 9.91' LT
INV. EL. = 29.76
- ㉕ STA. 41+74.80, 10.87' LT
INV. EL. = 29.19
- ㉖ STA. 41+96.36, 34.45' RT MES
INV. EL. = 29.38
- ㉗ STA. 42+613.49, 31.63' RT MES
INV. EL. = 29.10
- ㉘ STA. 43+65.20, 10.30' LT
INV. EL. = 28.38
- ㉙ STA. 44+97.73, 15.31' LT
INV. EL. = 25.91
- ㉚ STA. 46+38.00, 24.11' RT MES
INV. EL. = 25.52
- ㉛ STA. 46+42.80, 16.13' LT MES
INV. EL. = 25.68
- ㉜ STA. 46+78.70, 14.50' LT 24" STORM MANHOLE
TOP EL. = 29.12
BOTTOM EL. = 25.22
NE. INV. EL. = 25.47
SW. INV. EL. = 25.52
- ㉝ STA. 47+53.22, 21.11' LT CATCH BASIN
TOP EL. = 27.87
BOTTOM EL. = 25.50
SE. INV. EL. = 25.45
- ㉞ STA. 47+53.22, 14.19' LT 24" STORM MANHOLE
TOP EL. = 29.23
BOTTOM EL. = 25.33
NE. INV. EL. = 25.32
SW. INV. EL. = 25.38
NW. INV. EL. = 25.33
- ㉟ STA. 48+91.85, 31.56' RT CATCH BASIN
TOP EL. = 27.77
BOTTOM EL. = 25.11
NE. INV. EL. = 25.12
SW. INV. EL. = 25.12
- ㊱ STA. 48+89.74, 23.23' LT 18" HDPE PIPE
END INV. = 26.13
- ㊲ STA. 49+48.89, 19.64' LT CATCH BASIN
TOP EL. = 27.83
BOTTOM EL. = 25.03
SE. INV. EL. = 24.96
SW. INV. EL. = 25.15
- ㊳ STA. 49+50.15, 13.32' LT 24" STORM MANHOLE
TOP EL. = 29.12
BOTTOM EL. = 25.03
NE. INV. EL. = 25.02
SW. INV. EL. = 25.06
NW. INV. EL. = 25.04
- ㊴ STA. 50+84.04, 24.85' LT CATCH BASIN
TOP EL. = 27.37
BOTTOM EL. = 25.37
SE. INV. EL. = 25.01
- ㊵ STA. 50+84.04, 14.62' LT 24" STORM MANHOLE
TOP EL. = 28.98
BOTTOM EL. = 24.73
NE. INV. EL. = 24.73
SW. INV. EL. = 24.73
NW. INV. EL. = 24.85
- ㊶ STA. 51+32.66, 33.14' RT CATCH BASIN
TOP EL. = 27.43
BOTTOM EL. = 24.97
NE INV. EL. = 24.97
SW INV EL. = 24.97
- 41-A STA. 52+57.90, 239.26' LT MITERED END SECTION DUAL 18" RCP
N INV. EL. = 24.74
S INV EL. = 24.64
- 41-B STA. 53+2.82, 192.83' LT MITERED END SECTION DUAL 18" RCP
N INV. EL. = 25.18
S INV EL. = 25.19
- 42 STA. 53+17.45, 12.75' LT 24" STORM MANHOLE
TOP EL. = 28.58
BOTTOM EL. = 24.28
NE. INV. EL. = 24.28
SW. INV. EL. = 24.28
NW. INV. EL. = 24.98
- 43 STA. 53+17.45, 53.56' LT CATCH BASIN
TOP EL. = 8.36
SE. INV. EL. = 25.30
- 44 STA. 53+71.73, 33.18' RT CATCH BASIN
TOP EL. = 26.91
BOTTOM EL. = 24.59
NE INV. EL. = 24.59
SW INV EL. = 24.59
- 45 STA. 54+59.88, 22.97' LT MES
INV. EL. = 25.20
- 46 STA. 54+53.56, 21.70' RT CATCH BASIN
TOP EL. = 27.90
BOTTOM EL. = 24.45
NE INV. EL. = 24.45
SW INV EL. = 24.46
- 47 STA. 54+85.89, 18.29' LT CATCH BASIN
TOP EL. = 27.51
BOTTOM EL. = 24.46
SW. INV. EL. = 24.11
SE. INV. EL. = 24.29
- 48 STA. 54+85.89, 14.23' LT 24" STORM MANHOLE
TOP EL. = 28.16
BOTTOM EL. = 24.16
NE. INV. EL. = 24.11
SW. INV. EL. = 24.14
NW. INV. EL. = 24.30
- 49 STA. 56+79.95, 21.05' RT 18" RCP
- 50 STA. 57+06.16, 20.85' RT MITERED END SECTION
INV. EL. = 23.98
- 51 STA. 57+11.01, 29.24' RT 24" STORM MANHOLE
TOP EL. = 27.08
BOTTOM EL. = 23.39
SE. INV. EL. = 24.01
NW. 0.6'x1.0' OPENING = 25.51
- 52 STA. 57+11.01, 84.81' RT CATCH BASIN
TOP EL. = 25.85
NW INV. EL. = 23.98
- 53 STA. 57+75.02, 16.72' LT
INV. EL. = 24.12
- 54 STA. 58+04.55, 16.56' LT
INV. EL. = 24.25
- 55 STA. 62+04.01, 18.48' LT
INV. EL. = 23.31
- 56 STA. 62+24.72, 19.19' LT
INV. EL. = 23.46
- 57 STA. 63+80.87, 19.00' LT MES
INV. EL. = 22.99
- 58 STA. 64+21.62, 19.61' LT MES
INV. EL. = 22.66
- 59 STA. 65+86.11, 12.89' LT 9.20'x9.20' BOX CULVERT
INV. EL. = 16.63
- 60 STA. 65+89.39, 16.91' RT
INV. EL. = 19.52
- 61 STA. 56+02.85, 40.75' LT
INV. EL. = 21.35
- 62 STA. 66+77.20, 21.16' LT
INV. EL. = 21.75
- 63 STA. 67+25.45, 22.21' RT CATCH BASIN
TOP EL. = 25.77
BOTTOM EL. = 20.10
SW. INV. EL. = 20.07
NE. INV. EL. = 20.12
- 64 STA. 68+39.07, 27.81' RT CATCH BASIN
TOP EL. = 25.65
BOTTOM EL. = 20.48
W. INV. EL. = 20.47
E. INV. EL. = 20.49
- 65 STA. 69+78.21, 46.85' RT 24" STORM MANHOLE
TOP EL. = 27.35
BOTTOM EL. = 20.60
W. INV. EL. = 20.70
NE. INV. EL. = 20.50
S. INV. EL. = 20.52
- 66 STA. 69+78.21, 158.04' RT 24" STORM MANHOLE
TOP EL. = 26.95
N. INV. EL. = 21.58
- 67 STA. 70+27.38, 28.19' RT CURB INLET WITH 24" STORM MANHOLE
TOP EL. = 26.42
BOTTOM EL. = 20.59
SW. INV. EL. = 20.62
E. INV. EL. = 20.57
- 68 STA. 71+77.49, 30.61' RT CURB INLET WITH 24" STORM MANHOLE
TOP EL. = 26.42
BOTTOM EL. = 20.79
W. INV. EL. = 20.77
E. INV. EL. = 20.82
- 69 STA. 72+59.13, 18.61' LT
INV. EL. = 21.54
- 70 STA. 72+99.71, 16.23' LT
INV. EL. = 22.53
- 71 STA. 73+35.21, 29.25' RT CURB INLET WITH 24" STORM MANHOLE
TOP EL. = 26.44
W. INV. EL. = 21.00
E. INV. EL. = 21.12
- 72 STA. 75+56.71, 33.76' RT CURB INLET WITH 24" STORM MANHOLE
TOP EL. = 26.45
BOTTOM EL. = 21.62
W. INV. EL. = 21.60
E. INV. EL. = 21.64
- 73 STA. 75+85.94, 15.76' LT MES
INV. EL. = 23.52
- 74 STA. 76+15.98, 15.53' LT CATCH BASIN
TOP EL. = 26.04
BOTTOM EL. = 22.36
WATER EL. = 22.85
W. INV. EL. = 22.85
E. INV. EL. = 22.85
N. INV. EL. = 23.31
- 75 STA. 76+15.98, 25.80' LT MES
INV. EL. = 23.46
- 76 STA. 77+30.29, 17.62' LT CATCH BASIN
TOP EL. = 25.71
BOTTOM EL. = 22.00
WATER EL. = 22.49
E. INV. EL. = 22.49
W. INV. EL. = 22.52
- 77 STA. 77+51.72, 28.98' RT 24" STORM MANHOLE (UNDER CONSTRUCTION)
- 78 STA. 77+68.35, 35.42' RT 24" STORM MANHOLE
TOP EL. = 26.54
NW. INV. EL. = 22.52
E. INV. EL. = 22.34
- 79 STA. 78+96.82, 74.85' RT CONCRETE CATCH BASIN WITH METAL GRATE
TOP EL. = 24.92
BOTTOM EL. = 23.47
N. INV. EL. = 23.12
- 80 STA. 78+69.82, 39.48' RT 24" STORM MANHOLE
TOP EL. = 27.26
W. INV. EL. = 22.03
E. INV. EL. = 22.33
S. INV. EL. = 22.02
- 81 STA. 79+09.65, 39.79' RT 24" STORM MANHOLE
TOP EL. = 27.88
BOTTOM EL. = 20.36
WATER EL. = 22.10
E. INV. EL. = 21.67
W. INV. EL. = 22.06
N. INV IS OPEN
- 82 STA. 79+09.65, 22.93' LT 24" STORM MANHOLE
TOP EL. = 27.49
BOTTOM EL. = 20.91
WATER EL. = 21.97
N. INV. EL. = 21.92
W. INV. EL. = 21.93
S. INV IS OPEN
- 83 STA. 79+13.57, 133.67' LT CATCH BASIN
TOP EL. = 26.33
BOTTOM EL. = 20.34
N. INV. EL. = 21.07
S. INV. EL. = 21.09
- 84 STA. 79+73.28, 10.31' LT MITERED END SECTION
INV. EL. = 22.31
- 85 STA. 80+87.53, 75.61' RT 24"x24" METAL GRATE
TOP EL. = 24.58
N. INV. EL. = 22.80
- 86 STA. 80+87.53, 35.42' RT 24" STORM MANHOLE
TOP EL. = 26.80
E. INV. EL. = 22.22
S. INV. EL. = 22.60
W. INV. EL. = 22.22
- 87 STA. 82+71.74, 76.25' RT CATCH BASIN
TOP EL. = 24.99
BOTTOM EL. = 22.55
WATER EL. = 23.27
N. INV. EL. = 22.37
- 88 STA. 82+87.91, 26.19' RT 24" STORM MANHOLE
TOP EL. = 25.99
E. INV. EL. = 21.49
W. INV. EL. = 21.48
- 89 STA. 83+57.88, 29.25' RT MITERED END SECTION
INV. EL. = 21.25
- 90 STA. 86+01.78, 74.82' RT 15" DIAMETER INLET GRATE ON 20" DIAMETER CONCRETE STRUCTURE
TOP EL. = 24.33
BOTTOM EL. = 22.18
N. INV. EL. = 22.19
- 91 STA. 86+03.56, 45.44' RT 15" RCP
- 92 STA. 86+04.27, 32.27' RT
INV. EL. = 22.12
- 93 STA. 88+92.25, 42.79' RT 3.0'x 2.3' DITCH
BOTTOM INLET
TOP EL. = 23.03
BOTTOM EL. = 21.33
WATER EL. = 22.11
N. INV. EL. = 21.20
- 94 STA. 88+92.25, 30.61' RT
INV. EL. = 21.38
- 95 STA. 89+09.44, 9.52' LT
INV. EL. = 21.67
- 96 STA. 89+48.06, 11.09' LT
INV. EL. = 20.51
- 97 STA. 89+86.37, 28.40' RT MITERED END SECTION
INV. EL. = 21.45
- 98 STA. 90+26.59, 27.24' RT MITERED END SECTION
INV. EL. = 21.42
- 99 STA. 92+04.91, 27.24' LT
INV. EL. = 20.65
- 100 STA. 92+44.57, 11.43' LT
INV. EL. = 19.98
- 101 STA. 93+39.88, 27.61' RT MITERED END SECTION
INV. EL. = 20.84
- 102 STA. 93+76.30, 27.16' RT MITERED END SECTION
INV. EL. = 20.86
- 103 STA. 95+24.62, 22.01' RT TOP OF BOX CULVERT
EL. = 24.97
- 104 STA. 95+24.62, 9.83' RT 8' WIDE BOX CULVERT
- 105 STA. 95+24.62, 6.84' LT TOP OF BOX CULVERT
EL. = 24.98
- 106 STA. 95+55.37, 11.67' LT MITERED END SECTION
INV. EL. = 20.57
- 107 STA. 96+51.13, 14.23' LT CURB INLET
TOP EL. = 24.93
BOTTOM EL. = 21.13
E. INV. EL. = 20.63
W. INV. EL. = 20.68
- 108 STA. 97+55.18, 95.06' RT CATCH BASIN
TOP EL. = 24.71
N. INV. EL. = 21.66
- 109 STA. 97+55.18, 35.66' RT MITERED END SECTION
INV. EL. = 21.18
- 110 STA. 98+98.12, 12.47' LT 24" STORM MANHOLE
TOP EL. = 25.04
BOTTOM EL. = 20.94
NE. INV. EL. = 20.79
E. INV. EL. = 20.19
W. INV. EL. = 20.24
- 111 STA. 99+18.07, 20.37' LT 20" DIAMETER YARD DRAIN GRATE
TOP EL. = 22.90
SW. INV. EL. = 21.22
- 112 STA. 101+14.65, 14.20' LT 24" STORM MANHOLE
TOP EL. = 24.51
N. INV. EL. = 19.53
E. INV. EL. = 19.73
W. INV. EL. = 19.68
- 113 STA. 102+12.16, 26.65' RT
INV. EL. = 22.99
- 114 STA. 102+31.20, 26.25' RT
INV. EL. = 23.16
- 115 STA. 102+84.55, 21.85' LT 18" DIAMETER METAL GRATE
TOP EL. = 23.51
S. INV. EL. = 20.01
- 116 STA. 102+84.55, 13.63' LT 24" STORM MANHOLE
TOP EL. = 24.65
(FALLS IN TRAVEL LANE)
- 117 STA. 103+56.05, 26.74' LT 18" DIAMETER METAL GRATE (TOP BROKEN) (FULL OF DIRT)
TOP EL. = 23.68
- 118 STA. 104+54.53, 21.33' LT CURB INLET
TOP EL. = 24.62
E. INV. EL. = 20.54
W. INV. EL. = 20.37
- 119 STA. 104+48.26, 154.65' RT -
- 120 STA. 104+48.26, 43.37' RT MITERED END SECTION
INV. EL. = 21.05
- 120A STA. 105+01.69, 29.17' LT 18" DIAMETER METAL GRATE
TOP EL. = 24.07
W. INV. EL. = 21.25

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

STEVEN D. COLLINS, P.E., Ph.D.
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS

ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

EXISTING DRAINAGE STRUCTURES

SHEET NO.

9

EXISTING DRAINAGE STRUCTURES

- (121) STA. 105+34.73, 30.33' RT MITERED END SECTION INV. EL. = 21.14
- (122) STA. 105+66.76, 25.50' LT 24" STORM MANHOLE TOP EL. = 24.58 N. INV. EL. = 20.78 E. INV. EL. = 20.80 W. INV. EL. = 20.78
- (123) STA. 105+66.76, 44.76' LT MITERED END SECTION INV. EL. = 20.89
- (124) STA. 106+27.66, 28.58' RT 24" STORM MANHOLE TOP EL. = 25.32 E. INV. EL. = 21.04 W. INV. EL. = 21.09
- (125) STA. 106+54.45, 27.23' LT MITERED END SECTION INV. EL. = 20.90
- (126) STA. 106+95.92, 25.13' RT CATCH BASIN TOP EL. = 23.77 E. INV. EL. = 19.61 W. INV. EL. = 19.70
- (127) STA. 108+31.77, 22.14' RT 24" STORM MANHOLE TOP EL. = 24.99 E. INV. EL. = 19.35 W. INV. EL. = 19.34
- (127-A) STA. 109+43.89, 25.66' RT 24" STORM MANHOLE TOP EL. = 24.05 E. INV. EL. = 19.24 W. INV. EL. = 19.21
- (128) STA. 109+81.81, 24.79' LT MITERED END SECTION INV. EL. = 21.26
- (129) STA. 110+16.45, 25.22' LT MITERED END SECTION INV. EL. = 21.04
- (130) STA. 110+60.29, 66.47' RT CATCH BASIN (IN POND) INV. EL. = 19.51
- (131) STA. 110+60.29, 26.14' RT CATCH BASIN TOP EL. = 24.51 TOP OF WEIR EL. = 20.89 N. INV. EL. = 18.26 E. INV. EL. = 19.19 S. INV. EL. = 19.21 W. INV. EL. = 19.20
- (132) STA. 110+60.29, 12.26' RT 36" RCP (BOX CULVERT)
- (133) STA. 110+60.29, 15.44' LT CONCRETE HEADWALL TOP EL. = 24.07 S. INV. EL. = 19.25
- (134) STA. 111+00.94, 25.15' LT MITERED END SECTION INV. EL. = 20.07
- (135) STA. 111+35.72, 23.01' LT CATCH BASIN TOP EL. = 22.37 E. INV. EL. = 20.12 W. INV. EL. = 20.11
- (136) STA. 111+74.99, 30.58' RT CATCH BASIN TOP EL. = 22.80 W. INV. EL. = 19.98
- (137) STA. 112+47.93, 26.60' LT 24" STORM MANHOLE TOP EL. = 23.18 E. INV. EL. = 19.98 W. INV. EL. = 19.98
- (138) STA. 112+72.76, 33.02' LT CATCH BASIN TOP EL. = 22.46 E. INV. EL. = 20.20 W. INV. EL. = 20.20

- (139) STA. 113+57.49, 32.92' LT CATCH BASIN TOP EL. = 23.01 BOTTOM EL. = 19.96 E. INV. EL. = 20.48 W. INV. EL. = 20.31
- (140) STA. 114+68.06, 31.52' LT CATCH BASIN TOP EL. = 22.56 W. INV. EL. = 20.48
- (141) STA. 120+42.42, 22.75' RT MITERED END SECTION INV. EL. = 20.64
- (142) STA. 120+55.13, 25.06' RT CATCH BASIN TOP EL. = 22.94 W. INV. EL. = 21.02 S. INV. EL. = 21.02
- (143) STA. 120+55.13, 43.75' RT MITERED END SECTION INV. EL. = 20.64
- (144) STA. 124+27.20, 18.87' RT MITERED END SECTION INV. EL. = 20.95
- (145) STA. 124+65.64, 19.17' RT MITERED END SECTION INV. EL. = 20.67
- (146) STA. 125+01.03, 21.09' RT CATCH BASIN TOP EL. = 20.49 N. INV. EL. = 16.96
- (147) STA. 125+01.03, 19.95' LT CATCH BASIN TOP EL. = 21.47 NE. INV. EL. = 15.77 S. INV. EL. = 16.35
- (148) STA. 125+81.97, 38.56' LT MITERED END SECTION INV. EL. = 13.93
- (149) STA. 126+33.09, 338.59' LT CATCH BASIN TOP EL. = 19.08 BOTTOM EL. = 11.33
- (150) STA. 126+89.97, 554.14' LT CATCH BASIN TOP EL. = 18.94 INV. EL. = 16.31
- (151) STA. 127+11.49, 625.23' LT INV. EL. = 16.60
- (152) STA. 127+30.70, 611.04' LT ENDWALL INV. EL. = 15.49
- (153) STA. 126+19.71, 39.57' LT MITERED END SECTION INV. EL. = 13.53
- (154) STA. 126+82.73, 19.71' LT CATCH BASIN TOP EL. = 21.71 NW. INV. EL. = 14.87 S. INV. EL. = 16.41
- (155) STA. 126+74.59, 19.86' RT CATCH BASIN TOP EL. = 21.84 N. INV. EL. = 17.04
- (156) STA. 128+01.90, 19.52' RT CATCH BASIN TOP EL. = 22.68 E. INV. EL. = 20.75 W. INV. EL. = 20.83
- (157) STA. 130+24.13, 13.49' RT MITERED END SECTION INV. EL. = 20.88
- (157-A) STA. 135+59.00, 225.80' RT CATCH BASIN CENTER OF GRATE EL.=20.59 E. INV. EL.=17.21 N. INV. EL.=17.13
- (158) STA. 137+09.79, 19.35' RT INV. EL. = 16.12

- (159) STA. 137+36.93, 20.49' RT 24" STORM MANHOLE N. RIM EL. = 19.19 E. INV. EL. = 16.18 SW. INV. EL. = 16.18 N. INV. EL. = 16.24
- (159-A) STA. 137+31.79, 211.39' RT 24" STORM MANHOLE N. RIM EL.=21.14 E. INV. EL.=16.69 W. INV. EL.=16.64
- (160) STA. 137+71.92, 29.47' RT 24" STORM MANHOLE N. RIM EL. = 19.34 NE. INV. EL. = 15.80 SW. INV. EL. = 15.80 W. INV. EL. = 16.09
- (161) STA. 137+82.95, 26.37' RT INV. EL. = 15.52
- (162) STA. 138+61.88, 29.08' RT INV. EL. = 15.30
- (163) STA. 138+92.26, 31.18' RT INV. EL. = 14.93
- (164) STA. 140+48.95, 35.18' RT INV. EL. = 12.65
- (165) STA. 140+68.71, 34.46' RT INV. EL. = 12.57
- (166) STA. 141+47.88, 17.19' LT CURB GRATE INLET TOP EL. = 14.14 E. INV. EL. = 11.10
- (167) STA. 141+47.88, 28.17' RT INV. EL. = 11.75
- (168) STA. 141+64.18, 30.15' RT INV. EL. = 11.05
- (169) STA. 142+04.40, 29.02' RT INV. EL. = 10.70
- (170) STA. 142+34.06, 211.84' LT CATCH BASIN TOP EL. = 12.34 N. INV. EL. = 7.82
- (171) STA. 142+51.77, 357.17' LT TOP EL. = 10.05 INV. EL. = 6.77
- (172) STA. 143+26.47, 21.71' RT INV. EL. = 9.48
- (173) STA. 143+37.77, 27.23' LT MITERED END SECTION INV. EL. = 10.32
- (174) STA. 143+89.50, 27.84' LT CONCRETE SPILLWAY
- (175) STA. 143+89.50, 21.81' LT CURB GRATE INLET TOP EL. = 11.78 E. INV. EL. = 8.96 N. INV. EL. = 10.21
- (176) STA. 144+72.30, 27.71' LT 24" STORM MANHOLE N. RIM EL. = 11.75 E. INV. EL. = 7.51 W. INV. EL. = 7.51
- (177) STA. 145+07.94, 5.67' RT INV. EL. = 7.29
- (178) STA. 145+40.39, 6.33' RT INV. EL. = 6.94
- (179) STA. 145+52.72, 36.01' LT 24" STORM MANHOLE N. RIM EL. = 11.10 BOTTOM EL. = 5.89 N. INV. EL. = 6.17 (EAST PIPE) N. INV. EL. = 6.17 (WEST PIPE) SE. INV. EL. = 5.40 S. INV. EL. = 6.90 W. INV. EL. = 5.89
- (179-A) STA. 146+22.10, 2.53' LT 36" RCP INV. ELEV. = 5.53

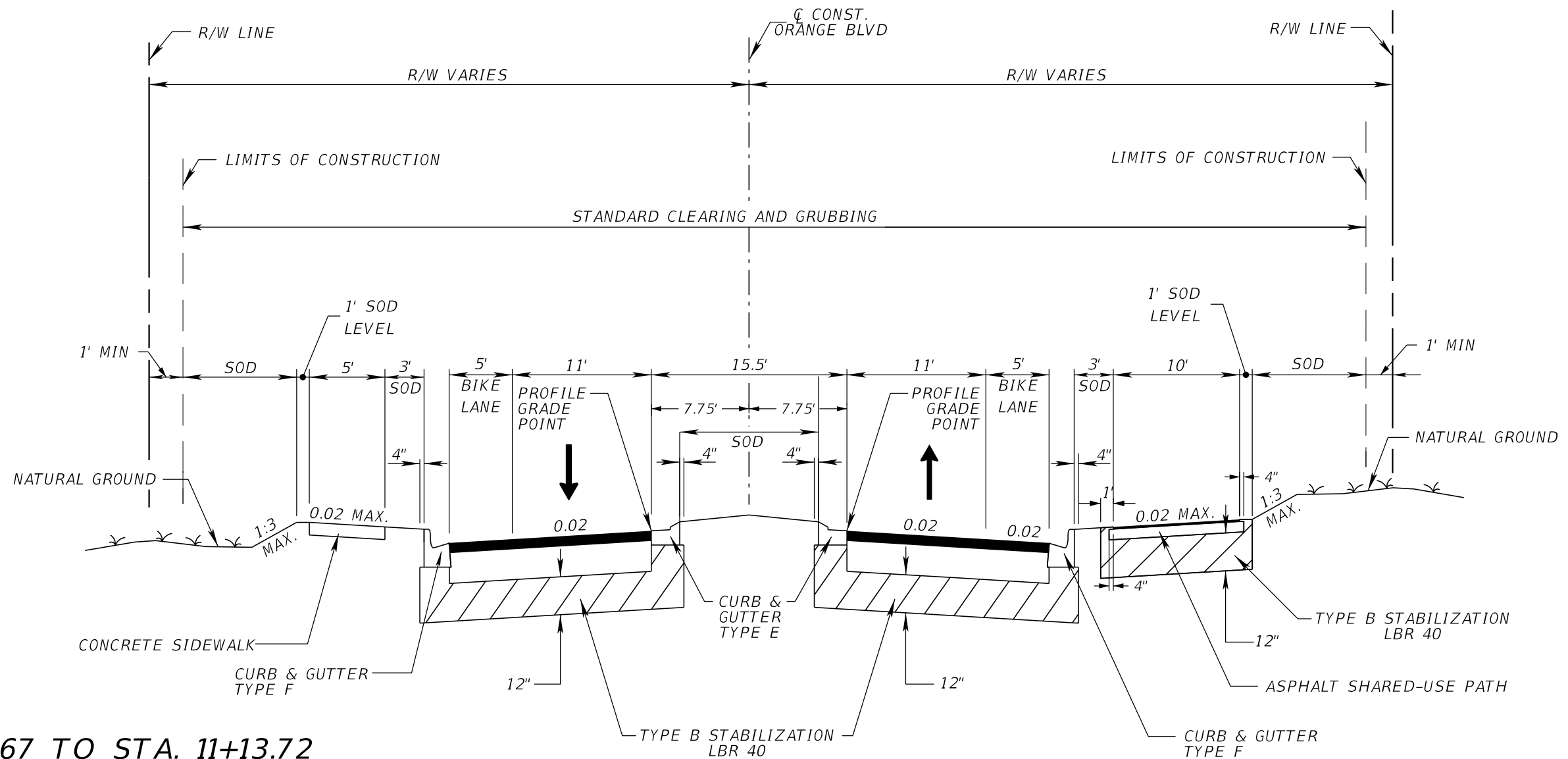
- (179-B) STA. 146+31.13, 0.47' RT 30" CMP INV. ELEV. = 6.01
- (180) STA. 146+59.77, 3.04' RT 24" STORM MANHOLE TOP EL. 9.96 E. INV. EL. = 6.72 (18" CMP) SE. INV. EL. = 6.61 (8" DIP) S. INV. EL. = 5.18 (24" CMP) W. INV. EL. = 5.78 (30" CMP)
- (181) STA. 146+59.77, 51.08' RT 24" STORM MANHOLE TOP EL. 10.68 N. INV. EL. = 6.85 (24" CMP) W. INV. EL. = 6.46 (TO POND) SE. INV. EL. = 7.06 (8" DIP)
- (182) STA. 146+90.10, 52.90' RT TOP OF GRATE EL. 9.45
- (183) STA. 146+50.65, 162.12' RT INV. EL. 7.45
- (183-A) STA. 146+07.59, 315.02' RT INV. EL. 10.46
- (183-B) STA. 146+13.53, 199.83' RT INV. EL. 9.01
- (184) STA. 146+86.11, 162.18' RT INV. EL. 7.33
- (185) STA. 147+72.55, 5.59' RT CONCRETE DITCH WITH MITERED PIPE INV. EL. = 6.00
- (186) STA. 148+12.92, 11.00' RT 24" STORM MANHOLE N. RIM EL. = 9.97 BOTTOM EL. = 5.95 E. INV. EL. = 5.95 S. INV. EL. = 5.95 W. INV. EL. = 5.95
- (187) STA. 148+12.92, 30.67' RT CATCH BASIN N. TOP EL. = 9.44 BOTTOM EL. = 6.49 N. INV. EL. = 6.49 S. INV. EL. = 6.54
- (188) STA. 149+67.93, 14.95' RT CURB INLET WITH 24" STORM MANHOLE N. RIM EL. = 9.68 BOTTOM EL. = 5.68 E. INV. EL. = 5.68 W. INV. EL. = 5.68 S. INV. EL. = 5.68
- (189) STA. 149+67.93, 28.22' RT CATCH BASIN N. TOP EL. = 9.14 BOTTOM EL. = 5.91 N. INV. EL. = 5.91
- (190) STA. 151+61.46, 22.71' RT CURB INLET WITH 24" STORM MANHOLE N. RIM EL. = 9.63 BOTTOM EL. = 5.61 E. INV. EL. = 5.61 W. INV. EL. = 5.61 S. INV. EL. = 5.61
- (191) STA. 151+74.21, 64.95' RT CATCH BASIN N. TOP EL. = 9.17 BOTTOM EL. = 5.80 N. INV. EL. = 5.80
- (192) STA. 152+00.12, 107.51' LT CATCH BASIN TOP EL. = 7.52 N. INV. EL. = -1.35
- (193) STA. 152+00.12, 205.68' LT CATCH BASIN TOP EL. = 6.98 S. INV. EL. = -1.59 N. INV. EL. = -1.57

- (194) STA. 152+00.12, 320.33' LT CATCH BASIN TOP EL. = 6.96 S. INV. EL. = -1.69
- (195) STA. 152+85.38, 22.43' RT CURB INLET WITH 24" STORM MANHOLE N. RIM EL. = 9.83 BOTTOM EL. = 5.53 E. INV. EL. = 5.53 W. INV. EL. = 5.53
- (196) STA. 152+64.26, 119.12' LT CATCH BASIN TOP EL. = 7.79 N. INV. EL. = 1.98
- (197) STA. 152+64.26, 169.42' LT CATCH BASIN TOP EL. = 7.04 N. INV. EL. = 1.86 S. INV. EL. = 2.09
- (198) STA. 152+64.26, 259.33' LT CATCH BASIN TOP EL. = 6.91 S. INV. EL. = 1.84
- (199) STA. 153+80.92, 61.72' RT CATCH BASIN N. TOP EL. = 12.09 N. INV. EL. = 7.19
- (200) STA. 153+80.92, 11.22' RT 24" STORM MANHOLE N. RIM EL. = 9.47 (IN TRAVEL LANE)
- (201) STA. 153+80.92, 48.76' RT 18" PLASTIC
- (201-A) STA. 154+55.94, 261.51' RT STORM MANHOLE RIM EL. = 11.08 INV. EL. 7.24 EL. TO BE CONFIRMED
- (202) STA. 154+35.29, 9.77' RT 24" STORM MANHOLE N. RIM EL. = 9.37 (IN TRAVEL LANE)
- (203) STA. 154+96.85, 27.28' RT CONCRETE DITCH WITH MITERED PIPE INV. EL. = 5.22
- (204) STA. 157+47.88, 25.67' RT CONCRETE END WALL INV. EL. = 6.07
- (205) STA. 157+56.77, 66.77' RT CATCH BASIN ELEV. = 10.82 INV. ELEV. = 5.43
- (206) STA. 157+83.37, 166.61' LT CATCH BASIN TOP EL. = 7.10 N. INV. EL. = 4.81
- (207) STA. 157+83.37, 255.06' LT CATCH BASIN TOP EL. = 6.75 S. INV. EL. = 4.44
- (208) STA. 158+19.91, 149.55' RT CATCH BASIN TOP EL. = 11.26 SE. INV. EL. = 6.54 S. INV. EL. = 6.56 NW. INV. EL. = 6.63
- (209) STA. 158+54.26, 24.62' RT ENDWALL INV. ELEV. = 7.97 ELEV. = 4.94
- (210) STA. 158+60.80, 52.13' LT INV. ELEV. = 3.91
- (211) STA. 158+69.05, 16.21' RT INV. ELEV. = 4.80
- (211-A) STA. 159+00, 49.21' LT 12" CMP

- (212) STA. 160+63.41, 41.55' RT MES INV. ELEV. = 4.91
- (213) STA. 161+05.39, 56.86' RT MES INV. ELEV. = 4.57
- (214) STA. 163+20.43, 71.16' RT TOP ENDWALL ELEV. = 7.53 INV. ELEV. = 5.08
- (215) STA. 163+29.04, 15.03' RT TOP MANHOLE ELEV. = 11.64 INV. ELEV. = 6.60
- (216) STA. 165+09.73, 10.28' LT TOP MANHOLE ELEV. = 11.64 INV. ELEV. = 6.60
- (217) STA. 165+09.73, 57.33' LT TOP MANHOLE ELEV. = 9.80 INV. ELEV. = 7.37
- (218) STA. 172+06.25, 64.86' RT ENDWALL ELEV. = 10.11 INV. ELEV. = 4.86
- (219) STA. 172+06.25, 72.92' LT TOP CATCH BASIN ELEV. = 8.92 S.W. INV. ELEV. = 4.31
- (220) STA. 172+06.25, 176.20' LT TOP ENDWALL ELEV. = 7.05 INV. ELEV. = 2.02
- (221) STA. 172+87.87, 67.56' RT
- (222) STA. 173+77.71, 63.92' RT CATCH BASIN ELEV. = 9.70 INV. ELEV. = 5.18
- (223) STA. 174+48.27, 61.98' RT MANHOLE ELEV. = 10.16 S.E. INV. ELEV. = 5.04 N.W. INV. ELEV. = 5.20
- (224) STA. 174+48.27, 60.69' RT MANHOLE ELEV. = 10.54 N.W. INV. ELEV. = 4.76 S.E. INV. ELEV. = 5.38
- (225) STA. 175+47.72, 48.96' RT CATCH BASIN ELEV. = 9.84 INV. ELEV. = 5.33
- (226) STA. 175+27.81, 213.80' LT ENDWALL ELEV. = 6.90 INV. ELEV. = 2.95
- (227) STA. 176+17.56, 216.75' LT ENDWALL ELEV. = 6.50 INV. ELEV. = 2.64
- (228) STA. 126+88.82, 93.68' RT CATCH BASIN ACCESS BLOCKED BY PARKED VEHICLE

G:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\DRMPRD13.dgn 10/10/2022 3:45:07 PM

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			EXISTING DRAINAGE STRUCTURES	SHEET NO. 10
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
PRELIMINARY NOT FOR CONSTRUCTION					CR 431	SEMINOLE	01785303		



STA. 10+51.67 TO STA. 11+13.72

MILLING

MILL EXISTING ASPHALT PAVEMENT FOR DEPTH (1")

RESURFACING

FRICTION COURSE FC-9.5 (1") (PG 76-22)

WIDENING & PAVEMENT DESIGN

OPTIONAL BASE GROUP 10 (CRUSHED CONC.) WITH TYPE SP STRUCTURAL COURSE (TRAFFIC B) (3.5") AND FRICTION COURSE FC-9.5 (TRAFFIC B) (1") (PG 76-22)

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 8,300
 ESTIMATED OPENING YEAR = 2020 AADT = 9,047
 ESTIMATED DESIGN YEAR = 2038 AADT = 15,770
 K = 9% D = 53% T = 5% (24 HOUR)
 DESIGN SPEED = 35 MPH
 POSTED SPEED = 35 MPH

ORANGE BOULEVARD (CR 431)

TYPICAL SECTION 1

STA. 11+13.72 TO STA. 48+50.00
 STA. 53+50.00 TO STA. 68+50.00
 STA. 81+50.00 TO STA. 112+50.00
 STA. 117+50.00 TO STA. 120+48.15

PAVEMENT DESIGN

OPTIONAL BASE GROUP 09 (CRUSHED CONC.) WITH TYPE SP STRUCTURAL COURSE (TRAFFIC B) (2") AND FRICTION COURSE FC-9.5 (TRAFFIC B) (1") (PG 76-22)

STA. 48+50.00 TO STA. 53+50.00
 STA. 68+50.00 TO STA. 81+50.00
 STA. 112+50.00 TO STA. 117+50.00

PAVEMENT DESIGN

OPTIONAL BASE GROUP 10 (CRUSHED CONC.) WITH TYPE SP STRUCTURAL COURSE (TRAFFIC B) (3.5") AND FRICTION COURSE FC-9.5 (TRAFFIC B) (1") (PG 76-22)

SHARED USE PATH

PAVEMENT DESIGN

OPTIONAL BASE GROUP 1 WITH TYPE SP STRUCTURAL COURSE (TRAFFIC B) (1.5")

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS

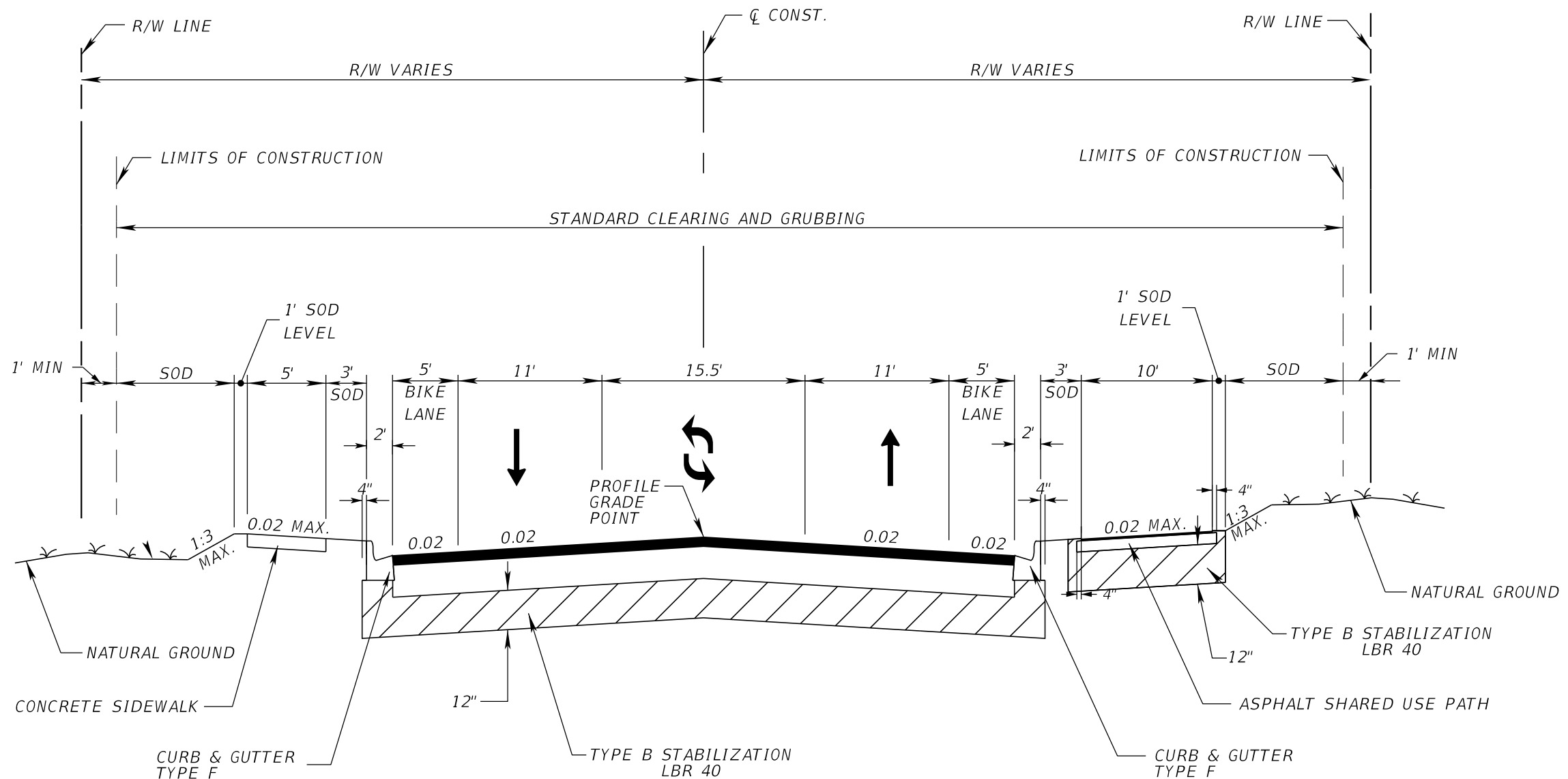
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

TYPICAL SECTIONS

SHEET NO.

11

10/10/2022 3:45:11 PM Q:\2017\1710782_002_Orange_Blvd_(CR_431)\Orange_Blvd_CADD\roadway\TYP SRD01.DGN



**ORANGE BOULEVARD (CR 431)
TYPICAL SECTION 2**

STA. 120+48.15 TO STA. 125+43.41
STA. 126+51.41 TO STA. 151+50.00
STA. 156+50.00 TO STA. 169+80.57

STA. 151+50.00 TO STA. 156+50.00

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 8,300
 ESTIMATED OPENING YEAR = 2020 AADT = 9,047
 ESTIMATED DESIGN YEAR = 2038 AADT = 15,770
 K = 9% D = 53% T = 5% (24 HOUR)
 DESIGN SPEED = 35 MPH
 POSTED SPEED = 35 MPH

PAVEMENT DESIGN

OPTIONAL BASE GROUP 09 (CRUSHED CONC.) WITH
 TYPE SP STRUCTURAL COURSE (TRAFFIC B) (2")
 AND FRICTION COURSE FC-9.5 (TRAFFIC B) (1") (PG 76-22)

PAVEMENT DESIGN

OPTIONAL BASE GROUP 10 (CRUSHED CONC.) WITH
 TYPE SP STRUCTURAL COURSE (TRAFFIC B) (3.5")
 AND FRICTION COURSE FC-9.5 (TRAFFIC B) (1") (PG 76-22)

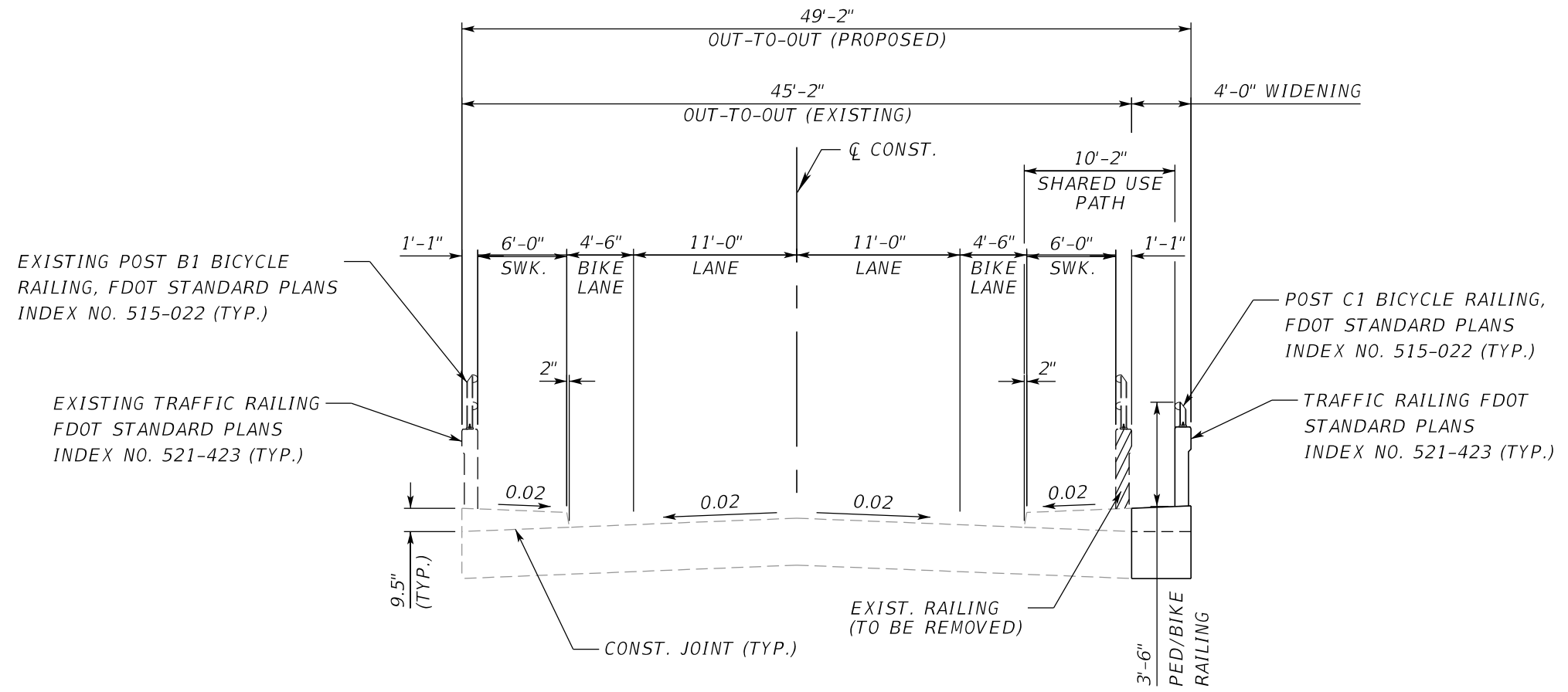
SHARED USE PATH

PAVEMENT DESIGN

OPTIONAL BASE GROUP 1 WITH
 TYPE SP STRUCTURAL COURSE (TRAFFIC B) (1.5")

10/10/2022 3:45:12 PM Q:\2017\1710782_002_Orange_Blvd_(CR_431)\Orange_Blvd_CADD\roadway\TYP SRD01.DGN

REVISIONS				JASON R. FLICK, P.E. P.E. LICENSE NUMBER 74741 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			TYPICAL SECTIONS 12
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303		



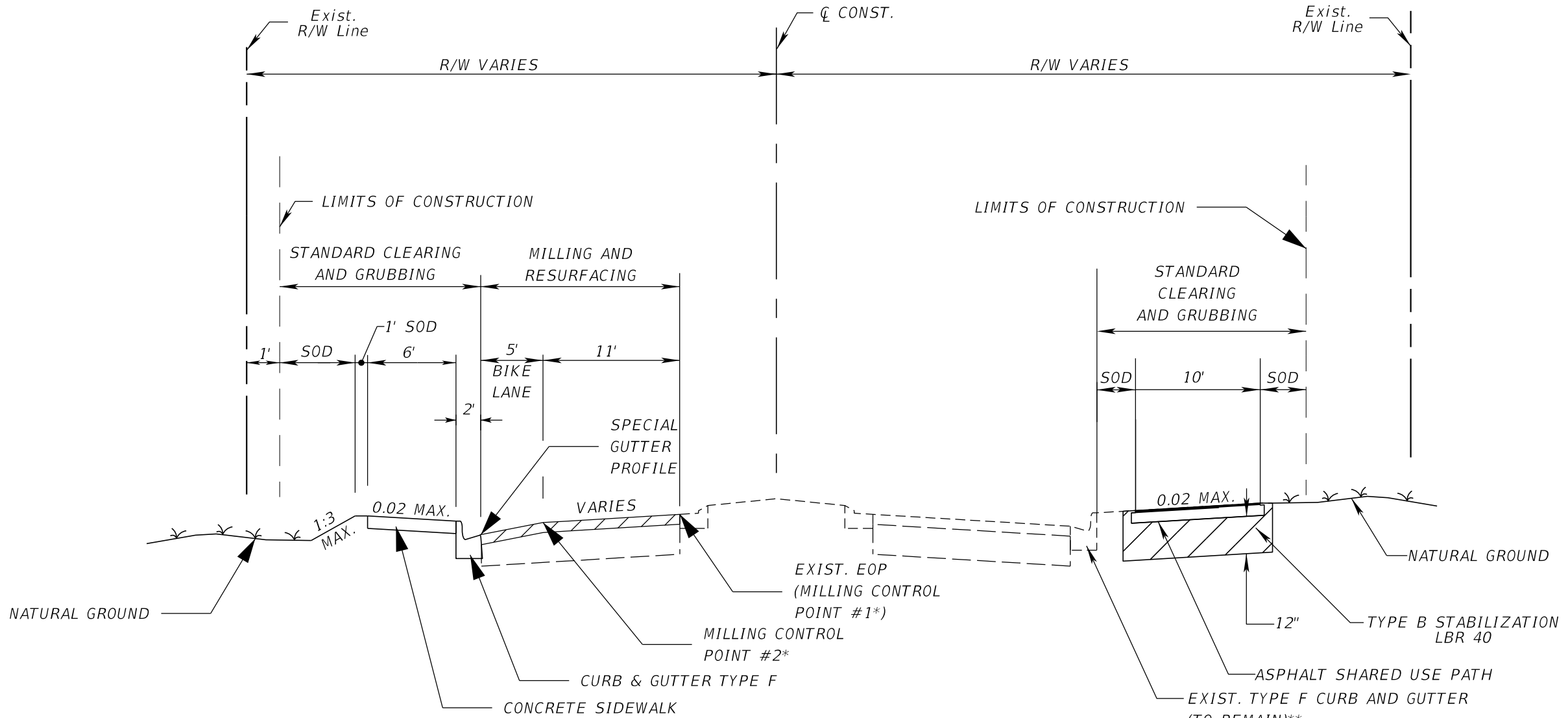
ORANGE BOULEVARD (CR 431)
TYPICAL SECTION 3
LOCKHART SMITH CANAL BRIDGE
STA. 125+43.41 TO STA. 126+51.41

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 8,300
 ESTIMATED OPENING YEAR = 2020 AADT = 9,047
 ESTIMATED DESIGN YEAR = 2038 AADT = 15,770
 K = 9% D = 53% T = 5% (24 HOUR)
 DESIGN SPEED = 35 MPH
 POSTED SPEED = 35 MPH

10/10/2022 3:45:12 PM Q:\2017\1710782_002_Orange_Blvd_(CR_431)\Orange_Blvd_CADD\roadway\TYP\SRD01.DGN

REVISIONS				JASON R. FLICK, P.E. P.E. LICENSE NUMBER 74741 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			TYPICAL SECTIONS 13
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303		



*NOTE: SEE TABLE ON TYPICAL SECTION DETAIL SHEET FOR ADDITIONAL MILLING CONTROL POINT INFORMATION

**NOTE: CONTRACTOR TO PROTECT EXISTING CURB AND GUTTER DURING CONSTRUCTION OF PATH. ANY DAMAGE TO ROADWAY AND/OR CURB PRIOR TO FINAL ACCEPTANCE OF THE PATH WILL BE RESTORED AT THE CONTRACTOR'S EXPENSE

ORANGE BOULEVARD (CR 431) TYPICAL SECTION 4

STA. 169+80.49 to STA. 176+61.89

TRAFFIC DATA

CURRENT YEAR = 2018 AADT = 8,300
 ESTIMATED OPENING YEAR = 2020 AADT = 9,047
 ESTIMATED DESIGN YEAR = 2038 AADT = 15,770
 K = 9% D = 53% T = 5% (24 HOUR)
 DESIGN SPEED = 35 MPH
 POSTED SPEED = 35 MPH

MILLING (L1 LANE)

MILL EXISTING FOR SLOPE (1.5" AVG. DEPTH)

RESURFACING (L1 LANE)

FRICITION COURSE FC-9.5 (TRAFFIC LEVEL B) (1") (PG 76-22)

MILLING (OL SHLDR.)

MILL EXISTING FOR SLOPE (3.25" AVG. DEPTH)

RESURFACING (OL SHLDR.)

FRICITION COURSE FC-9.5 (1") (TRAFFIC B) (PG 76-22)

SHARED USE PATH

PAVEMENT DESIGN

OPTIONAL BASE GROUP 1 WITH
 TYPE SP STRUCTURAL COURSE (TRAFFIC B) (1.5")

10/10/2022 3:45:13 PM Q:\2017\1710782_002_Orange_Blvd_(CR_431)\Orange_Blvd_CADD\roadway\TYP\SRD01.DGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

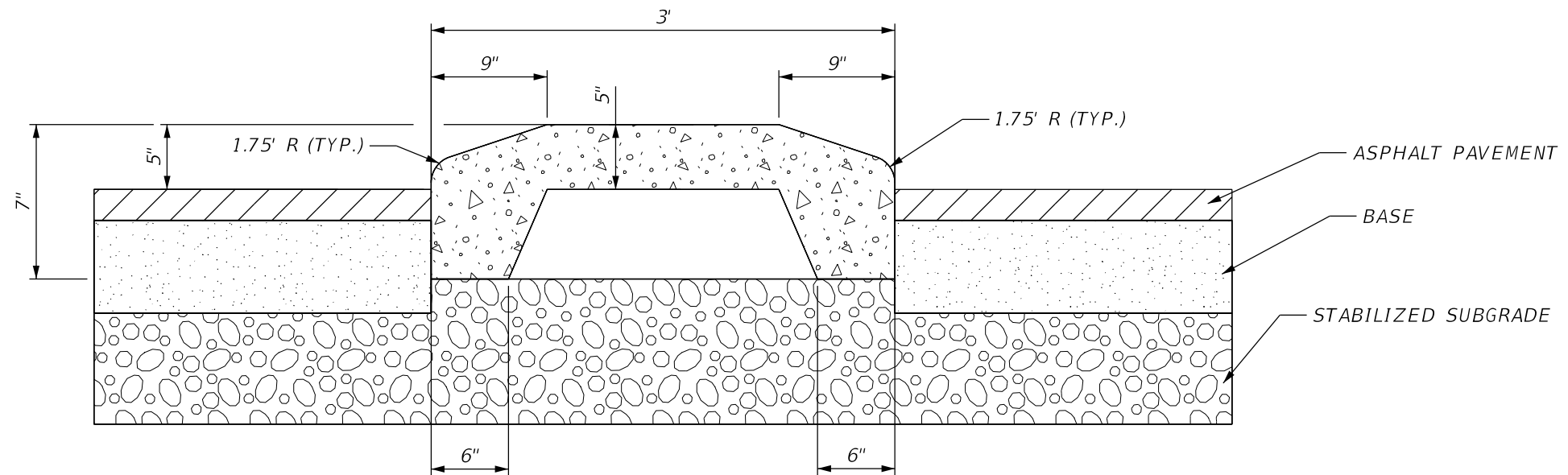
JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

TYPICAL SECTIONS

SHEET NO.
14

STATION	MILLING CONTROL POINT #1 (DEPTH)	WIDTH (FT)	SLOPE	MILLING CONTROL POINT #2 (DEPTH)	WIDTH (FT)	SLOPE
170+00	2.5"	11	2.00%	2.5"	5	2.00%
171+00	3"	11	3.30%	4.85"	5	3.30%
172+00	3"	11	2.40%	3"	5	8.00%
173+00	3"	11	2.00%	4.1"	5	8.00%
174+00	3"	11	2.00%	3.41"	5	2.00%
175+00	3"	11	2.00%	3.41"	5	3.10%



TYPICAL TRAFFIC SEPARATOR DETAIL
TYPE I, OPTION I

10/10/2022 3:45:12 PM 0:\2017\1710782_002_Orange_Blvd_(CR_431)\Orange_Blvd_CADD\roadway\TYP SRD01.DGN

REVISIONS				JASON R. FLICK, P.E. P.E. LICENSE NUMBER 74741 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			TYPICAL SECTION DETAILS	SHEET NO. 15
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:18 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL														
						ROUND					BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"	
F																				
P	S-17	24+21.58	LT.	Inlet, Pipe	1		94													
F																				
P	S-18	25+23.16	LT.	FES	1															
F																				
P	S-19	25+09.66	LT.	Inlet, Pipe	1			56												
F																				
P	S-20	26+64.85	LT.	Inlet, Pipe	1			60												
F																				
P	S-21	27+35.37	RT.	Inlet, Pipe	1		62													
F																				
P	S-22	27+40.61	RT.	Inlet, Pipe	1			282												
F																				
P	S-23	26+94.27	LT.	Inlet, Pipe	1			299												
F																				
P	S-24	29+95.21	LT.	Inlet, Pipe	1			176												
F																				
P	S-25	30+30.61	RT.	Inlet, Pipe	1			83												
F																				
P	S-26	31+69.93	RT.	Inlet, Pipe	1		51													
F																				
P	S-27	31+71.43	LT.	Inlet, Pipe	1			146												
F																				
P	S-28	32+24.05	RT.	Inlet, Pipe	1			70												
F																				
P	S-29	34+14.92	RT.	Inlet, Pipe	1			79												
F																				
P	S-30	35+25.26	LT.	Inlet, Pipe	1			70												
F																				
P	S-31	35+28.13	RT.	Inlet, Pipe	1		51													
F																				
P	S-32	35+96.65	LT.	Inlet, Pipe	1		9													
F																				
Sheet Summary					<u>P Total</u>	0	267	1321	0	0	0	0	0	0	0	0	0	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		17A
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:18 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL															
						ROUND						BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"		
P	S-33	35+97.03	LT.	Manhole, Pipe	1			193													
F																					
P	S-34	36+02.72	RT.	Inlet, Pipe	1		6														
F																					
P	S-35	36+02.94	RT.	Manhole, Pipe	1			184													
F																					
P	S-36	37+90.05	LT.	Inlet, Pipe	1			208													
F																					
P	S-37	37+95.68	RT.	Inlet, Pipe	1		51														
F																					
P	S-38	37+96.20	RT.	Manhole, Pipe	1			136													
F																					
P	S-39	39+97.79	LT.	Inlet, Pipe	1		13														
F																					
P	S-40	39+98.27	LT.	Inlet, Pipe	1			266													
F																					
P	S-41	39+87.80	RT.	Inlet, Pipe	1		53														
F																					
P	S-42	41+24.52	RT.	Manhole, Pipe	1			371													
F																					
P	S-43	42+62.02	RT.	Inlet, Pipe	1		47														
F																					
P	S-44	42+65.38	LT.	Inlet, Pipe	1			78													
F																					
P	S-45	43+47.84	LT.	Inlet, Pipe	1		6														
F																					
P	S-46	43+47.47	LT.	Manhole, Pipe	1			237													
F																					
P	S-48	45+30.23	RT.	Inlet, Pipe	1		130														
F																					
P	S-49	45+00.09	RT.	Inlet, Pipe	1			359													
F																					
P	S-50	45+88.25	LT.	Inlet, Pipe	1			71													
F																					
Sheet Summary					<u>P Total</u>	0	306	1451	652	0	0	0	0	0	0	0	0	0	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		18A

10/10/2022 3:45:18 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\S\IMBDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL													
						ROUND					BOX		ELLIPTICAL						
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"
F																			
P	S-51	46+63.33	LT.	Inlet, Pipe	1					71									
F																			
P	S-52	46+63.34	RT.	Inlet, Pipe	1		46												
F																			
P	S-53	46+63.45	LT.	Inlet, Pipe	1		15												
F																			
P	S-54	47+38.24	LT.	Inlet, Pipe	1					161									
F																			
P	S-55	47+38.51	RT.	Inlet, Pipe	1		72												
F																			
P	S-57	49+00.23	RT.	Inlet, Pipe	1		50												
F																			
P	S-58	48+60.00	RT.	Inlet, Pipe	1			216											
F																			
P	S-59	49+03.16	LT.	Manhole, Pipe	1					216									
F																			
P	S-60	49+04.04	LT.	Inlet, Pipe	1		11												
F																			
P	S-61	50+78.00	RT.	Inlet, Pipe	1				343										
F																			
P	S-62	51+18.42	RT.	Inlet, Pipe	1		46												
F																			
P	S-63	51+23.54	LT.	Inlet, Pipe	1					189									
F																			
P	S-64	53+04.71	LT.	Manhole, Pipe	1												329		
F																			
P	S-65	53+17.69	LT.	Inlet, Pipe	1					98									
F																			
P	S-66	54+22.06	LT.	Inlet, Pipe	1					41									
F																			
P	S-67	54+23.39	RT.	Inlet, Pipe	1		70												
F																			
Sheet Summary					<u>P Total</u>	0	310	216	343	232	405	139	0	0	0	0	0	329	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		19A

10/10/2022 3:45:19 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\S\IMBDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL														
						ROUND					BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"	
F																				
P	S-85	63+11.59	LT.	Inlet, Pipe	2															130
F																				
P	S-86	63+11.89	RT.	Inlet, Pipe	1		77													
F																				
P	S-87	63+79.25	LT.	Inlet, Pipe	2															356
F																				
P	S-88	63+94.01	RT.	Inlet, Pipe	1		206													
F																				
P	S-90	66+00.05	LT.	Culvert	2							140								
F																				
P	S-91	66+13.70	RT.	Inlet	1															
F																				
P	S-92	68+01.90	LT.	Inlet, Pipe	1			196												
F																				
P	S-93	68+39.87	RT.	Inlet, Pipe	1				135											
F																				
P	S-94	70+46.29	LT.	Inlet, Pipe	1			242												
F																				
P	S-95	70+46.40	RT.	Inlet, Pipe	1		72													
F																				
P	S-96	71+21.51	LT.	Inlet, Pipe	1			72												
F																				
P	S-97	71+21.54	RT.	Inlet, Pipe	1		51													
F																				
P	S-98	71+96.47	RT.	Inlet, Pipe	1		71													
F																				
P	S-99	71+96.57	LT.	Inlet, Pipe	1		72													
F																				
P	S-100	73+35.21	RT.	Inlet, Pipe	1		51													
F																				
P	S-101	73+35.64	LT.	Inlet, Pipe	1		77													
F																				
Sheet Summary					<u>P Total</u>	0	677	510	135	0	0	0	0	140	0	0	486	0	0	
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		21A
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:19 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL														
						ROUND					BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"	
F																				
P	S-205	84+26.95	LT.	Inlet, Pipe	1		72													
F																				
P	S-206	85+01.24	RT.	Inlet, Pipe	1		47													
F																				
P	S-207	85+02.08	LT.	Inlet, Pipe	1			56												
F																				
P	S-208	85+61.66	LT.	Inlet, Pipe	1			40												
F																				
P	S-209	85+76.38	RT.	Inlet, Pipe	1		72													
F																				
P	S-210	86+03.57	RT.	Inlet, Pipe	1			285												
F																				
P	S-211	86+04.55	LT.	Inlet, Pipe	1		10													
F																				
P	S-212	86+04.82	LT.	Manhole, Pipe	1			245												
F																				
P	S-213	88+53.40	LT.	Inlet, Pipe	1			168												
F																				
P	S-214	88+92.26	RT.	Manhole, Pipe	1			358												
F																				
P	S-215	90+23.95	LT.	Inlet, Pipe	1		15													
F																				
P	S-216	90+24.77	LT.	Inlet, Pipe	1			72												
F																				
P	S-217	90+30.35	RT.	Inlet, Pipe	1		68													
F																				
P	S-218	90+99.91	LT.	Inlet, Pipe	1			76												
F																				
P	S-219	91+01.89	RT.	Inlet, Pipe	1		51													
F																				
P	S-220	91+79.16	LT.	Inlet, Pipe	2									274						
F																				
Sheet Summary					<u>P Total</u>	0	335	1224	76	0	0	0	0	0	274	0	0	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		23A
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:20 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\S\IMBDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL													
						ROUND						BOX		ELLIPTICAL					
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"
P	S-238	97+54.77	RT.	Manhole, Pipe	1				150										
F																			
P	S-239	100+02.01	LT.	Inlet, Pipe	1			325											
F																			
P	S-240	100+17.06	RT.	Inlet, Pipe	1		4	258											
F																			
P	S-242	100+36.19	RT.	Inlet, Pipe	1		61												
F																			
P	S-243	101+38.79	RT.	Inlet, Pipe	1		59												
F																			
P	S-244	101+65.75	LT.	Inlet, Pipe	1			160											
F																			
P	S-245	101+99.91	LT.	Inlet, Pipe	1			31											
F																			
P	S-246	102+01.90	RT.	Inlet, Pipe	1			51											
F																			
P	S-248	102+89.98	RT.	Inlet, Pipe	1			85											
F																			
P	S-249	102+88.66	LT.	Inlet, Pipe	1		85												
F																			
P	S-249-A	102+88.66	LT.	Inlet, Pipe	1	12													
F																			
P	S-249-B	103+55.00	LT.	Manhole, Pipe	1	63													
F																			
P	S-249-C	103+55.00	LT.	Inlet, Pipe	1	12													
F																			
P	S-249-D	105+00.00	LT.	Manhole, Pipe	1	142													
F																			
P	S-249-E	105+00.00	LT.	Inlet, Pipe	1	12													
F																			
P	S-300	104+49.76	RT.	Manhole, Pipe	2								158	156					
F																			
P	S-301	105+32.50	RT.	Inlet, Pipe	2								94						
F																			
P	S-302	105+37.03	LT.	Inlet, Pipe	2								50						
F																			
P	S-303	108+12.07	RT.	Inlet, Pipe	1		48												
F																			
P	S-304	108+12.74	LT.	Inlet, Pipe	1		12												
F																			
Sheet Summary					P Total	241	269	910	150	0	0	0	0	0	302	156	0	0	0
					F Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		25A
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:20 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL													
						ROUND						BOX		ELLIPTICAL					
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"
P	S-305	108+13.04	LT.	Inlet, Pipe	2														
F																			
P	S-306	109+44.39	LT.	Inlet, Pipe	2											256			
F																			
P	S-307	109+45.10	RT.	Inlet, Pipe	1			52											
F																			
P	S-308	110+01.48	RT.	Inlet, Pipe	1			48											
F																			
P	S-309	110+02.08	LT.	Inlet, Pipe	2											106			
F																			
P	S-310	110+58.97	LT.	Culvert	1							6							
F																			
P	S-311	110+58.28	RT.	Manhole	1														
F																			
P	S-312	110+60.31	LT.	Manhole	1														
F																			
P	S-313	110+60.26	LT.	Culvert	1							7							
F																			
P	S-314	110+58.42	RT.	Culvert	1							3							
F																			
P	S-400	112+71.36	RT.	Inlet, Pipe	1			51											
F																			
P	S-401	112+71.31	LT.	Inlet, Pipe	1			193											
F																			
P	S-402	115+53.32	RT.	Inlet, Pipe	1			68											
F																			
P	S-403	115+53.39	LT.	Inlet, Pipe	1			68											
F																			
P	S-404	116+24.98	LT.	Inlet, Pipe	1			75											
F																			
P	S-405	116+25.03	RT.	Inlet, Pipe	1			51											
F																			
P	S-406	117+03.23	RT.	Inlet, Pipe	1			75											
F																			
Sheet Summary					<u>P Total</u>	0	681	0	0	0	0	0	16	0	0	470	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		26A

10/10/2022 3:45:21 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\S\IMBDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL																		
						ROUND						BOX		ELLIPTICAL										
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"					
F																								
P	S-407	117+03.46	LT.	Inlet, Pipe	1			293																
F																								
P	S-408	119+98.75	RT.	Inlet, Pipe	1		51																	
F																								
P	S-409	119+99.57	LT.	Inlet, Pipe	1			212																
F																								
P	S-410	122+05.58	RT.	Inlet, Pipe	1		131																	
F																								
P	S-411	122+15.06	LT.	Inlet, Pipe	1			121																
F																								
P	S-412	123+39.73	LT.	Inlet, Pipe	1			71																
F																								
P	S-413	123+39.76	RT.	Inlet, Pipe	1		51																	
F																								
P	S-414	124+14.57	LT.	Inlet, Pipe	1			81																
F																								
P	S-415	124+14.62	RT.	Inlet, Pipe	1		72																	
F																								
P	S-416	124+98.65	LT.	Inlet, Pipe	1			66																
F																								
P	S-417	125+65.18	LT.	Manhole, Pipe	1			399																
F																								
P	S-418	126+21.52	LT.	MES	1																			
F																								
P	S-419	126+83.40	LT.	Inlet, Pipe	1			61																
F																								
P	S-419-1A	127+00.00	RT.	Inlet, Pipe	1	42																		
F																								
P	S-420	128+51.95	LT.	Inlet, Pipe	1			165																
F																								
P	S-421	128+52.08	RT.	Inlet, Pipe	1		71																	
F																								
P	S-421-A	128+52.08	RT.	Inlet, Pipe	1	13																		
F																								
P	S-422	129+26.82	LT.	Inlet, Pipe	1			72																
F																								
Sheet Summary					<u>P Total</u>	55	376	1541	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		27A

10/10/2022 3:45:21 PM o:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL																			
						ROUND						BOX		ELLIPTICAL											
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"						
P	S-423	129+27.39	RT.	Inlet, Pipe	1		49																		
F																									
P	S-424	130+01.38	LT.	Inlet, Pipe	1		71																		
F																									
P	S-425	130+02.20	RT.	Inlet, Pipe	1		71																		
F																									
P	S-426	126+67.22	LT.	Manhole, Pipe	1			213																	
F																									
P	S-427	127+13.40	LT.	Manhole, Pipe	1			247																	
F																									
P	S-428	127+66.12	LT.	Manhole, Pipe	1			72																	
F																									
P	S-429	128+25.78	LT.	FES	1																				
F																									
P	S-430	130+40.96	LT.	Inlet, Pipe	1			104																	
F																									
P	S-431	131+39.16	LT.	FES	1																				
F																									
P	S-432	130+96.29	RT.	Inlet, Pipe	1		90																		
F																									
P	S-5-1	15+10.25	RT.	Inlet, Pipe	1		100																		
F																									
P	S-500	135+48.38	RT.	Inlet, Pipe	1		157																		
F																									
P	S-501	136+34.22	RT.	Pipe	1																		30		
F																									
P	S-502	136+08.30	RT.	Manhole, Pipe	1																		13		
F																									
P	S-503	135+94.81	RT.	Manhole, Pipe	1					301															
F																									
P	S-504	132+47.34	RT.	Manhole, Pipe	1					66															
F																									
P	S-505	136+94.73	RT.	Inlet, Pipe	1		54																		
Sheet Summary					P Total	0	592	636	0	367	0	0	0	0	0	0	0	0	0	0	0	43	0	0	
					F Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 28A
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:21 PM O:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL																	
						ROUND						BOX		ELLIPTICAL									
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"				
P	S-423	129+27.39	RT.	Inlet, Pipe	1		49																
F																							
P	S-424	130+01.38	LT.	Inlet, Pipe	1		71																
F																							
P	S-425	130+02.20	RT.	Inlet, Pipe	1		71																
F																							
P	S-426	126+67.22	LT.	Manhole, Pipe	1			213															
F																							
P	S-427	127+13.40	LT.	Manhole, Pipe	1			247															
F																							
P	S-428	127+66.12	LT.	Manhole, Pipe	1			72															
F																							
P	S-429	128+25.78	LT.	FES	1																		
F																							
P	S-430	130+40.96	LT.	Inlet, Pipe	1			104															
F																							
P	S-431	131+39.16	LT.	FES	1																		
F																							
P	S-432	130+96.29	RT.	Inlet, Pipe	1		90																
F																							
P	S-5-1	15+10.25	RT.	Inlet, Pipe	1		100																
F																							
P	S-500	135+48.38	RT.	Inlet, Pipe	1		157																
F																							
P	S-501	136+34.22	RT.	Pipe	1																30		
F																							
P	S-502	136+08.30	RT.	Manhole, Pipe	1																13		
F																							
P	S-503	135+94.81	RT.	Manhole, Pipe	1					301													
F																							
P	S-504	132+47.34	RT.	Manhole, Pipe	1					66													
F																							
P	S-505	136+94.73	RT.	Inlet, Pipe	1		54																
Sheet Summary					<u>P Total</u>	0	592	636	0	367	0	0	0	0	0	0	0	0	0	0	43	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		28A

10/10/2022 3:45:22 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL															
						ROUND						BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"		
F																					
P	S-506	137+42.02	RT.	Inlet, Pipe	1			80													
F																					
P	S-507	137+54.56	LT.	Manhole, Pipe	1			117													
F																					
P	S-508	139+00.79	RT.	Inlet, Pipe	1		239														
F																					
P	S-508-A	138+60.00	RT.	Inlet, Pipe	1	39															
F																					
P	S-508-B	139+00.79	RT.	Inlet, Pipe	1	10															
F																					
P	S-509	138+74.62	LT.	Inlet, Pipe	1			164													
F																					
P	S-510	141+45.89	RT.	Inlet, Pipe	1			79													
F																					
P	S-508-C	140+21.38	RT.	MES, Pipe	1																
F																					
P	S-511	141+52.01	LT.	Inlet, Pipe	1		52														
F																					
P	S-512	141+51.78	LT.	Manhole, Pipe	1			247													
F																					
P	S-513	143+98.94	LT.	Manhole, Pipe	1			148													
F																					
P	S-514	142+29.75	RT.	Inlet, Pipe	1			119													
F																					
P	S-515	142+37.62	RT.	FES	1																
F																					
P	S-516	145+37.61	RT.	Inlet, Pipe	1			56													
F																					
P	S-517	145+48.14	RT.	Inlet, Pipe	2													110			
F																					
P	S-518	145+48.19	RT.	Manhole, Pipe	2													12			
F																					
P	S-519	145+51.68	LT.	Inlet, Pipe	2													6			
F																					
P	S-521	146+04.96	LT.	Manhole, Pipe	1		132														
F																					
P	S-522	146+04.88	LT.	Inlet, Pipe	1		11														
F																					
Sheet Summary					P Total	49	434	1010	0	0	0	0	0	0	0	0	0	128	0	0	
					F Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

DATE		DESCRIPTION		DATE		DESCRIPTION		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS ROAD NO. COUNTY SEMINOLE COUNTY CIP CR 431 SEMINOLE 01785303			SUMMARY OF DRAINAGE STRUCTURES			SHEET NO. 29A
PRELIMINARY NOT FOR CONSTRUCTION																	

10/10/2022 3:45:22 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL															
						ROUND						BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"		
P	S-523	146+13.53	RT.	Manhole, Pipe	1			115													
F																					
P	S-524	146+19.02	RT.	Manhole, Pipe	2												124				
F																					
P	S-525	147+39.08	LT.	Inlet, Pipe	1		11														
F																					
P	S-526	147+39.50	LT.	Inlet, Pipe	1		171														
F																					
P	S-527	148+37.56	RT.	Inlet, Pipe	1		282														
F																					
P	S-528	149+13.03	RT.	Inlet, Pipe	1		72														
F																					
P	S-529	149+12.92	LT.	Inlet, Pipe	1		24														
F																					
P	S-530	149+88.48	RT.	Inlet, Pipe	1		72														
F																					
P	S-531	149+87.40	LT.	Inlet, Pipe	1		72														
F																					
P	S-600	153+39.70	RT.	Inlet, Pipe	1		73														
F																					
P	S-601	153+40.85	LT.	Inlet, Pipe	1		53														
F																					
P	S-602	153+80.42	RT.	Manhole, Pipe	1			54													
F																					
P	S-603	153+96.35	LT.	Inlet, Pipe	1		91														
F																					
P	S-604	154+15.91	RT.	Inlet, Pipe	1		67														
F																					
P	S-605	154+91.44	LT.	Inlet, Pipe	1		16														
F																					
P	S-606	154+37.74	RT.	Manhole, Pipe	1			309													
F																					
P	S-607	154+90.92	RT.	Inlet, Pipe	1		72														
F																					
Sheet Summary					<u>P Total</u>	0	1076	115	363	0	0	0	0	0	0	0	0	124	0	0	
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		30A
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:22 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\S\IMBDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL														
						ROUND					BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"	
F																				
P	S-608	154+92.01	LT.	Inlet, Pipe	1		174													
F																				
P	S-609	156+68.61	RT.	Inlet, Pipe	1		55													
F																				
P	S-610	156+69.44	LT.	Inlet, Pipe	1			180												
F																				
P	S-611	158+50.72	LT.	FES	1															
F																				
P	S-612	158+61.81	LT.	FES	1															
F																				
P	S-613	158+72.92	RT.	Manhole, Culvert	3			51												
F																				
P	S-614	159+73.65	LT.	Inlet, Pipe	1			98												
F																				
P	S-615	159+71.77	LT.	Inlet, Pipe	1		137													
F																				
P	S-616	160+55.45	RT.	Inlet, Pipe	1		184													
F																				
P	S-617	161+06.61	RT.	FES, Pipe	1		53													
F																				
P	S-618	161+23.00	LT.	Inlet, Pipe	1		71													
F																				
P	S-619	161+98.51	LT.	FES	1															
F																				
P	S-620	162+01.66	LT.	Inlet, Pipe	1			62												
F																				
P	S-621	162+49.15	RT.	Inlet, Pipe	1		73													
F																				
P	S-622	162+76.71	LT.	Inlet, Pipe	1		72													
F																				
P	S-623	163+24.13	RT.	Inlet, Pipe	1		71													
F																				
Sheet Summary					<u>P Total</u>	0	890	340	51	0	0	0	0	0	0	0	0	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		31A

10/10/2022 3:45:23 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL															
						ROUND						BOX		ELLIPTICAL							
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"		
P	S-624	164+38.36	RT.	Inlet, Pipe	1		104														
F																					
P	S-625	165+63.26	RT.	Inlet, Pipe	1		112														
F																					
P	S-626	166+97.64	RT.	Inlet, Pipe	1		14														
F																					
P	S-627	166+98.08	RT.	Inlet, Pipe	1		121														
F																					
P	S-628	169+06.42	RT.	Manhole, Pipe	1		199														
F																					
P	S-629	169+06.60	RT.	Inlet, Pipe	1		20														
F																					
P	S-630	169+44.53	RT.	Inlet, Pipe	1		35														
F																					
P	S-631	169+47.15	LT.	Inlet, Pipe	1		55														
F																					
P	S-700	171+07.09	LT.	Inlet																	
F																					
P	S-702	173+20.32	LT.	Inlet																	
F																					
P	S-703	174+50.43	LT.	Inlet																	
F																					
P	S-704	175+19.88	RT.	Inlet																	
F																					
P	S-28-1	33+18.46	LT.	Manhole, Pipe	1			207													
F																					
P	S-38-1	39+40.27	RT.	Manhole, Pipe	1			175													
F																					
P	S-42-1	41+23.94	RT.	Manhole, Pipe	1		8														
F																					
P	S-54-1	47+38.68	LT.	Inlet, Pipe	1		14														
F																					
P	S-64-1	55+12.38	LT.	Manhole, Pipe	1															331	
Sheet Summary					<u>P Total</u>	0	682	382	0	0	0	0	0	0	0	0	0	0	0	331	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		32A

10/10/2022 3:45:29 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CURB INLETS											MANHOLE			DITCH BOTTOM I NLETS			CROSS DRAIN MITERED END SECTION		FLARED END SECTION						STRAIGHT CONC ENDWALL	SODDING				
						P-3		J-3		P-4		J-4		P-5		J-5		P-6		J-6		CLOSED FLUME	P-7	J-7	C	D	H	18"	24"	18"	24"	30"	36"	48"	30"	SY
						<10'	>10'	<10'	<10'	<10'	<10'	>10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	Type I - 1 barrel	<10'	<10'	<10'	<10'	<10'	18"	24"	18"	24"	30"	36"	48"	30"	SY	
P	S-33	35+97.03	LT.	Manhole, Pipe	1												1																			
F																																				
P	S-34	36+02.72	RT.	Inlet, Pipe	1														1																	
F																																				
P	S-35	36+02.94	RT.	Manhole, Pipe	1												1																			
F																																				
P	S-36	37+90.05	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-37	37+95.68	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-38	37+96.20	RT.	Manhole, Pipe	1												1																			
F																																				
P	S-39	39+97.79	LT.	Inlet, Pipe	1															1																
F																																				
P	S-40	39+98.27	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-41	39+87.80	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-42	41+24.52	RT.	Manhole, Pipe	1												1																			
F																																				
P	S-43	42+62.02	RT.	Inlet, Pipe	1					1																										
F																																				
P	S-44	42+65.38	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-45	43+47.84	LT.	Inlet, Pipe	1														1																	
F																																				
P	S-46	43+47.47	LT.	Manhole, Pipe	1												1																			
F																																				
P	S-48	45+30.23	RT.	Inlet, Pipe	1					1																										
F																																				
P	S-49	45+00.09	RT.	Inlet, Pipe	1																															
F																																				
P	S-50	45+88.25	LT.	Inlet, Pipe	1					1																										
F																																				
Sheet Summary					<u>P Total</u>	2	0	0	0	0	6	0	0	0	0	0	0	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		18B

10/10/2022 3:45:28 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CURB INLETS											MANHOLE			DITCH BOTTOM I NLETS			CROSS DRAIN MITERED END SECTION		FLARED END SECTION						STRAIGHT CONC ENDWALL	SODDING									
						P-3		J-3		P-4		J-4		P-5		J-5		P-6		J-6		CLOSED FLUME			P-7	J-7		C	D		H		18"	24"	18"	24"	30"	36"	48"	30"	SY
						<10'	>10'	<10'	<10'	<10'	<10'	>10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	Type I - 1 barrel	<10'	<10'	<10'	<10'	<10'	18"	24"	18"	24"	30"	36"	48"	30"	SY					
P	S-68	54+23.39	RT.	Manhole, Pipe	1													1																							
F																																									
P	S-69	54+96.65	RT.	Inlet, Pipe	1											1																									
F																																									
P	S-70	54+98.28	LT.	Inlet, Pipe	1											1																									
F																																									
P	S-71	53+79.02	LT.	FES	1																													1							
F																																									
P	S-72	55+72.06	LT.	Inlet, Pipe	1						1																														
F																																									
P	S-73	55+72.50	RT.	Inlet, Pipe	1						1																														
F																																									
P	S-74	57+52.64	LT.	Inlet, Pipe	1																																				
F																																									
P	S-75	56+62.13	LT.	Manhole, Pipe	1																																				
F																																									
P	S-76	57+10.78	RT.	Manhole, Pipe	1																																				
F																																									
P	S-77	57+12.12	LT.	Manhole, Pipe	1																																				
F																																									
P	S-78	57+71.65	LT.	Inlet, Pipe	1																																				
F																																									
P	S-79	59+03.59	RT.	Inlet, Pipe	1	1																																			
F																																									
P	S-80	59+03.78	LT.	Inlet, Pipe	1																																				
F																																									
P	S-81	61+04.74	LT.	Manhole, Pipe	2																																				
F																																									
P	S-82	61+05.51	LT.	Inlet, Pipe	1																																				
F																																									
P	S-83	62+12.13	RT.	Inlet, Pipe	1	1																																			
F																																									
P	S-84	62+37.65	LT.	Inlet, Pipe	2																																				
F																																									
Sheet Summary					<u>P Total</u>	2	0	0	0	0	2	0	3	2	0		0	1	4	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0						
					<u>F Total</u>	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES						SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				ROAD NO.	COUNTY	SEMINOLE COUNTY CIP							20B
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303										

10/10/2022 3:45:27 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CURB INLETS											MANHOLE			DITCH BOTTOM I NLETS			CROSS DRAIN MITERED END SECTION		FLARED END SECTION						STRAIGHT CONC ENDWALL	SODDING									
						P-3		J-3		P-4		J-4		P-5		J-5		P-6		J-6		CLOSED FLUME	P-7		J-7		C	D	H	18"		24"		30"		36"		48"		30"	SY
						<10'	>10'	<10'	<10'	<10'	<10'	>10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	Type I - 1 barrel	<10'	<10'	<10'	<10'	<10'	18"	24"	18"	24"	30"	36"	48"	30"	SY					
P	S-102	76+05.02	RT.	Inlet, Pipe	1																	1																			
F																																									
P	S-103	76+56.48	LT.	Inlet, Pipe	1																																				
F																																									
P	S-104	76+57.14	RT.	Inlet, Pipe	1																																				
F																																									
P	S-105	77+31.62	LT.	Inlet, Pipe	1																																				
F																																									
P	S-106	77+32.46	RT.	Inlet, Pipe	1																																				
F																																									
P	S-107	78+07.19	LT.	Inlet, Pipe	1																																				
F																																									
P	S-108	78+07.19	RT.	Inlet, Pipe	1																																				
F																																									
P	S-109	78+96.97	RT.	Manhole, Pipe	1																																				
F																																									
P	S-110	79+08.98	RT.	Manhole	1																																				
F																																									
P	S-111	79+09.86	LT.	Manhole	1																																				
F																																									
P	S-112	80+86.45	RT.	Manhole	1																																				
F																																									
P	S-2-1	13+14.60	LT.	Inlet, Pipe	1																																				
F																																									
P	S-200	82+02.49	LT.	Inlet, Pipe	1																																				
F																																									
P	S-201	82+02.46	LT.	Inlet, Pipe	1																																				
F																																									
P	S-202	82+31.19	RT.	Inlet, Pipe	1	1																																			
F																																									
P	S-203	82+64.29	RT.	Manhole, Pipe	1																																				
F																																									
P	S-204	84+26.27	RT.	Inlet, Pipe	1																																				
F																																									
Sheet Summary					<u>P Total</u>	1	0	2	0	1	4	0	1	1	0		0	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
					<u>F Total</u>	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			<p style="text-align: center;">SUMMARY OF DRAINAGE STRUCTURES</p>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		22B

10/10/2022 3:45:27 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CURB INLETS											MANHOLE		DITCH BOTTOM I NLETS			CROSS DRAIN MITERED END SECTION		FLARED END SECTION						STRAIGHT CONC ENDWALL	SODDING					
						P-3		J-3		P-4		J-4		P-5		J-5		P-6		J-6		CLOSED FLUME	P-7	J-7	C	D	H	18"	24"	18"	24"	30"	36"	48"	30"	SY
						<10'	>10'	<10'	<10'	<10'	<10'	>10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	Type I - 1 barrel	<10'	<10'	<10'	<10'	<10'	18"	24"	18"	24"	30"	36"	48"	30"	SY	
F																																				
P	S-205	84+26.95	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-206	85+01.24	RT.	Inlet, Pipe	1								1																							
F																																				
P	S-207	85+02.08	LT.	Inlet, Pipe	1								1																							
F																																				
P	S-208	85+61.66	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-209	85+76.38	RT.	Inlet, Pipe	1					1																										
F																																				
P	S-210	86+03.57	RT.	Inlet, Pipe	1															1																
F																																				
P	S-211	86+04.55	LT.	Inlet, Pipe	1														1																	
F																																				
P	S-212	86+04.82	LT.	Manhole, Pipe	1												1																			
F																																				
P	S-213	88+53.40	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-214	88+92.26	RT.	Manhole, Pipe	1												1																			
F																																				
P	S-215	90+23.95	LT.	Inlet, Pipe	1														1																	
F																																				
P	S-216	90+24.77	LT.	Inlet, Pipe	1					1																										
F																																				
P	S-217	90+30.35	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-218	90+99.91	LT.	Inlet, Pipe	1								1																							
F																																				
P	S-219	91+01.89	RT.	Inlet, Pipe	1					1																										
F																																				
P	S-220	91+79.16	LT.	Inlet, Pipe	2								1																							
F																																				
Sheet Summary					<u>P Total</u>	1	0	0	1	0	5	0	1	3	0		0	2	0	2	1	0	0	0	0	0	0	0	0	0	0					
					<u>F Total</u>	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES						SHEET NO. 23B
DATE	DESCRIPTION	DATE	DESCRIPTION				ROAD NO.	COUNTY	SEMINOLE COUNTY CIP							
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303										

10/10/2022 3:45:24 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CURB INLETS										MANHOLE		DITCH BOTTOM I NLETS			CROSS DRAIN MITERED END SECTION		FLARED END SECTION						STRAIGHT CONC ENDWALL	SODDING									
						P-3		J-3		P-4		J-4		P-5		J-5		P-6		J-6		CLOSED FLUME		P-7	J-7	C	D		H		18"	24"	18"	24"	30"	36"	48"	30"	SY
						<10'	>10'	<10'	<10'	<10'	<10'	>10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	Type I - 1 barrel	<10'	<10'	<10'	<10'	<10'	18"	24"	18"	24"	30"	36"	48"	30"	SY			
F																																							
P	S-608	154+92.01	LT.	Inlet, Pipe	1	1																																	
F																																							
P	S-609	156+68.61	RT.	Inlet, Pipe	1	1																																	
F																																							
P	S-610	156+69.44	LT.	Inlet, Pipe	1	1																																	
F																																							
P	S-611	158+50.72	LT.	FES	1																				1								14.00						
F																																							
P	S-612	158+61.81	LT.	FES	1																				1								14.00						
F																																							
P	S-613	158+72.92	RT.	Manhole, Culvert	3														1																				
F																																							
P	S-614	159+73.65	LT.	Inlet, Pipe	1																																		
F																																							
P	S-615	159+71.77	LT.	Inlet, Pipe	1	1																																	
F																																							
P	S-616	160+55.45	RT.	Inlet, Pipe	1																																		
F																																							
P	S-617	161+06.61	RT.	FES, Pipe	1																				1								11.00						
F																																							
P	S-618	161+23.00	LT.	Inlet, Pipe	1	1																																	
F																																							
P	S-619	161+98.51	LT.	FES	1																					1								14.00					
F																																							
P	S-620	162+01.66	LT.	Inlet, Pipe	1																																		
F																																							
P	S-621	162+49.15	RT.	Inlet, Pipe	1																																		
F																																							
P	S-622	162+76.71	LT.	Inlet, Pipe	1	1																																	
F																																							
P	S-623	163+24.13	RT.	Inlet, Pipe	1	1																																	
F																																							
Sheet Summary					<u>P Total</u>	7	0	0	2	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	3	0	0	0	0	0	0	53					
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

PRELIMINARY NOT FOR CONSTRUCTION		REVISIONS DATE DESCRIPTION DATE DESCRIPTION		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES						SHEET NO.
		ROAD NO.	COUNTY		SEMINOLE COUNTY CIP	CR 431	SEMINOLE							01785303

10/10/2022 3:45:24 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CURB INLETS										MANHOLE		DITCH BOTTOM I NLETS			CROSS DRAIN MITERED END SECTION		FLARED END SECTION						STRAIGHT CONC ENDWALL	SODDING						
						P-3		J-3		P-4		J-4		P-5		J-5		P-6		J-6		CLOSED FLUME		P-7	J-7	C	D	H							30"	SY
						<10'	>10'	<10'	<10'	<10'	<10'	>10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	<10'	Type I - 1 barrel	<10'	<10'	<10'	<10'	<10'	18"	24"	18"	24"	30"	36"	48"	30"	SY
P	S-624	164+38.36	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-625	165+63.26	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-626	166+97.64	RT.	Inlet, Pipe	1																															
F																																				
P	S-627	166+98.08	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-628	169+06.42	RT.	Manhole, Pipe	1																															
F																																				
P	S-629	169+06.60	RT.	Inlet, Pipe	1																															
F																																				
P	S-630	169+44.53	RT.	Inlet, Pipe	1	1																														
F																																				
P	S-631	169+47.15	LT.	Inlet, Pipe	1	1																														
F																																				
P	S-700	171+07.09	LT.	Inlet																																
F																																				
P	S-702	173+20.32	LT.	Inlet																																
F																																				
P	S-703	174+50.43	LT.	Inlet																																
F																																				
P	S-704	175+19.88	RT.	Inlet																																
F																																				
P	S-28-1	33+18.46	LT.	Manhole, Pipe	1																															
F																																				
P	S-38-1	39+40.27	RT.	Manhole, Pipe	1																															
F																																				
P	S-42-1	41+23.94	RT.	Manhole, Pipe	1																															
F																																				
P	S-54-1	47+38.68	LT.	Inlet, Pipe	1																															
F																																				
P	S-64-1	55+12.38	LT.	Manhole, Pipe	1																															
F																																				
Sheet Summary					<u>P Total</u>	5	0	0	0	0	0	0	0	0	0	0	0	3	4	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATE		DESCRIPTION		DATE		DESCRIPTION		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917		SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES						SHEET NO.		
		PRELIMINARY NOT FOR CONSTRUCTION								ROAD NO.	COUNTY								SEMINOLE COUNTY CIP		32B
										CR 431	SEMINOLE								01785303		

10/10/2022 3:45:30 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	43	53+18.11	LT.	Pipe	1			Existing Structure
F								
P	87	82+72.68	RT.	Pipe	1			Existing Pipe Extension
F								
P	S-1	12+30.05	RT.	Inlet, Pipe	1			
F								
P	S-2	12+30.28	LT.	Inlet, Pipe	1			
F								
P	S-3	13+02.65	RT.	Manhole, Pipe	1			
F								
P	S-4	14+14.03	LT.	Inlet, Pipe	1			
F								
P	S-5	14+14.28	RT.	Inlet, Pipe	1			
F								
P	S-6	16+13.26	LT.	Inlet, Pipe	1			
F								
P	S-7	16+14.26	RT.	Inlet, Pipe	1			
F								
P	S-8	16+14.21	RT.	Manhole, Pipe	1			
F								
P	S-9	18+23.91	RT.	Inlet, Pipe	1			
F								
P	S-10	18+24.08	LT.	Inlet, Pipe	1			
F								
P	S-12	21+00.32	LT.	Inlet, Pipe	1			
F								
P	S-13	21+00.59	RT.	Inlet, Pipe	1			
F								
P	S-14	23+79.84	RT.	Inlet, Pipe	1			
F								
P	S-15	23+80.77	LT.	Inlet, Pipe	1			
F								
P	S-16	24+21.17	RT.	Manhole, Pipe	1			
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		16C
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:30 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-17	24+21.58	LT.	Inlet, Pipe	1			
F								
P	S-18	25+23.16	LT.	FES	1	0.17		
F								
P	S-19	25+09.66	LT.	Inlet, Pipe	1			
F								
P	S-20	26+64.85	LT.	Inlet, Pipe	1			
F								
P	S-21	27+35.37	RT.	Inlet, Pipe	1			
F								
P	S-22	27+40.61	RT.	Inlet, Pipe	1			
F								
P	S-23	26+94.27	LT.	Inlet, Pipe	1			
F								
P	S-24	29+95.21	LT.	Inlet, Pipe	1			
F								
P	S-25	30+30.61	RT.	Inlet, Pipe	1			
F								
P	S-26	31+69.93	RT.	Inlet, Pipe	1			
F								
P	S-27	31+71.43	LT.	Inlet, Pipe	1			
F								
P	S-28	32+24.05	RT.	Inlet, Pipe	1			
F								
P	S-29	34+14.92	RT.	Inlet, Pipe	1			
F								
P	S-30	35+25.26	LT.	Inlet, Pipe	1			
F								
P	S-31	35+28.13	RT.	Inlet, Pipe	1			
F								
P	S-32	35+96.65	LT.	Inlet, Pipe	1			
F								
Sheet Summary				<u>P Total</u>		.17	0	
				<u>F Total</u>		0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		17C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:30 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-33	35+97.03	LT.	Manhole, Pipe	1			
F								
P	S-34	36+02.72	RT.	Inlet, Pipe	1			
F								
P	S-35	36+02.94	RT.	Manhole, Pipe	1			
F								
P	S-36	37+90.05	LT.	Inlet, Pipe	1			
F								
P	S-37	37+95.68	RT.	Inlet, Pipe	1			
F								
P	S-38	37+96.20	RT.	Manhole, Pipe	1			
F								
P	S-39	39+97.79	LT.	Inlet, Pipe	1			
F								
P	S-40	39+98.27	LT.	Inlet, Pipe	1			
F								
P	S-41	39+87.80	RT.	Inlet, Pipe	1			
F								
P	S-42	41+24.52	RT.	Manhole, Pipe	1			
F								
P	S-43	42+62.02	RT.	Inlet, Pipe	1			
F								
P	S-44	42+65.38	LT.	Inlet, Pipe	1			
F								
P	S-45	43+47.84	LT.	Inlet, Pipe	1			
F								
P	S-46	43+47.47	LT.	Manhole, Pipe	1			
F								
P	S-48	45+30.23	RT.	Inlet, Pipe	1			
F								
P	S-49	45+00.09	RT.	Inlet, Pipe	1		1	Type C Inlet (Modified)
F								
P	S-50	45+88.25	LT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	0	1	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		18C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:30 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-51	46+63.33	LT.	Inlet, Pipe	1			
F								
P	S-52	46+63.34	RT.	Inlet, Pipe	1			
F								
P	S-53	46+63.45	LT.	Inlet, Pipe	1			
F								
P	S-54	47+38.24	LT.	Inlet, Pipe	1			
F								
P	S-55	47+38.51	RT.	Inlet, Pipe	1			
F								
P	S-57	49+00.23	RT.	Inlet, Pipe	1			
F								
P	S-58	48+60.00	RT.	Inlet, Pipe	1		1	Type C Inlet (Modified)
F								
P	S-59	49+03.16	LT.	Manhole, Pipe	1			
F								
P	S-60	49+04.04	LT.	Inlet, Pipe	1			
F								
P	S-61	50+78.00	RT.	Inlet, Pipe	1		1	Type C Inlet (Modified)
F								
P	S-62	51+18.42	RT.	Inlet, Pipe	1			
F								
P	S-63	51+23.54	LT.	Inlet, Pipe	1			
F								
P	S-64	53+04.71	LT.	Manhole, Pipe	1			No precast cone riser required
F								
P	S-65	53+17.69	LT.	Inlet, Pipe	1			
F								
P	S-66	54+22.06	LT.	Inlet, Pipe	1			
F								
P	S-67	54+23.39	RT.	Inlet, Pipe	1			
F								
Sheet Summary				<u>P Total</u>	0		2	
				<u>F Total</u>	0		0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 19C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:31 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-68	54+23.39	RT.	Manhole, Pipe	1			
F								
P	S-69	54+96.65	RT.	Inlet, Pipe	1			
F								
P	S-70	54+98.28	LT.	Inlet, Pipe	1			
F								
P	S-71	53+79.02	LT.	FES	1			
F								
P	S-72	55+72.06	LT.	Inlet, Pipe	1			
F								
P	S-73	55+72.50	RT.	Inlet, Pipe	1			
F								
P	S-74	57+52.64	LT.	Inlet, Pipe	1			
F								
P	S-75	56+62.13	LT.	Manhole, Pipe	1			
F								
P	S-76	57+10.78	RT.	Manhole, Pipe	1			
F								
P	S-77	57+12.12	LT.	Manhole, Pipe	1			
F								
P	S-78	57+71.65	LT.	Inlet, Pipe	1			
F								
P	S-79	59+03.59	RT.	Inlet, Pipe	1			
F								
P	S-80	59+03.78	LT.	Inlet, Pipe	1			
F								
P	S-81	61+04.74	LT.	Manhole, Pipe	2			
F								
P	S-82	61+05.51	LT.	Inlet, Pipe	1			
F								
P	S-83	62+12.13	RT.	Inlet, Pipe	1			
F								
P	S-84	62+37.65	LT.	Inlet, Pipe	2			
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 20C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:31 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-85	63+11.59	LT.	Inlet, Pipe	2			
F								
P	S-86	63+11.89	RT.	Inlet, Pipe	1			
F								
P	S-87	63+79.25	LT.	Inlet, Pipe	2			
F								
P	S-88	63+94.01	RT.	Inlet, Pipe	1			
F								
P	S-90	66+00.05	LT.	Culvert	2			
F								
P	S-91	66+13.70	RT.	Inlet	1			
F								
P	S-92	68+01.90	LT.	Inlet, Pipe	1			
F								
P	S-93	68+39.87	RT.	Inlet, Pipe	1			
F								
P	S-94	70+46.29	LT.	Inlet, Pipe	1			
F								
P	S-95	70+46.40	RT.	Inlet, Pipe	1			
F								
P	S-96	71+21.51	LT.	Inlet, Pipe	1			Structure includes price of miscellaneous drainage connection
F								
P	S-97	71+21.54	RT.	Inlet, Pipe	1			
F								
P	S-98	71+96.47	RT.	Inlet, Pipe	1			
F								
P	S-99	71+96.57	LT.	Inlet, Pipe	1			
F								
P	S-100	73+35.21	RT.	Inlet, Pipe	1			
F								
P	S-101	73+35.64	LT.	Inlet, Pipe	1			
F								
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		21C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:31 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-102	76+05.02	RT.	Inlet, Pipe	1			
F								
P	S-103	76+56.48	LT.	Inlet, Pipe	1			
F								
P	S-104	76+57.14	RT.	Inlet, Pipe	1			
F								
P	S-105	77+31.62	LT.	Inlet, Pipe	1			
F								
P	S-106	77+32.46	RT.	Inlet, Pipe	1			
F								
P	S-107	78+07.19	LT.	Inlet, Pipe	1			
F								
P	S-108	78+07.19	RT.	Inlet, Pipe	1			
F								
P	S-109	78+96.97	RT.	Manhole, Pipe	1			
F								
P	S-110	79+08.98	RT.	Manhole	1			Manhole top to adjust rim
F								elevation of existing manhole.
P	S-111	79+09.86	LT.	Manhole	1			Manhole top to adjust rim
F								elevation of existing manhole.
P	S-112	80+86.45	RT.	Manhole	1			Manhole top to adjust rim
F								elevation of existing manhole.
P	S-2-1	13+14.60	LT.	Inlet, Pipe	1			
F								
P	S-200	82+02.49	LT.	Inlet, Pipe	1			
F								
P	S-201	82+02.46	LT.	Inlet, Pipe	1			
F								
P	S-202	82+31.19	RT.	Inlet, Pipe	1			
F								
P	S-203	82+64.29	RT.	Manhole, Pipe	1			
F								
P	S-204	84+26.27	RT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 22C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:32 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-205	84+26.95	LT.	Inlet, Pipe	1			
F								
P	S-206	85+01.24	RT.	Inlet, Pipe	1			
F								
P	S-207	85+02.08	LT.	Inlet, Pipe	1			
F								
P	S-208	85+61.66	LT.	Inlet, Pipe	1			
F								
P	S-209	85+76.38	RT.	Inlet, Pipe	1			
F								
P	S-210	86+03.57	RT.	Inlet, Pipe	1			
F								
P	S-211	86+04.55	LT.	Inlet, Pipe	1			
F								
P	S-212	86+04.82	LT.	Manhole, Pipe	1			
F								
P	S-213	88+53.40	LT.	Inlet, Pipe	1			
F								
P	S-214	88+92.26	RT.	Manhole, Pipe	1			
F								
P	S-215	90+23.95	LT.	Inlet, Pipe	1			
F								
P	S-216	90+24.77	LT.	Inlet, Pipe	1			
F								
P	S-217	90+30.35	RT.	Inlet, Pipe	1			
F								
P	S-218	90+99.91	LT.	Inlet, Pipe	1			
F								
P	S-219	91+01.89	RT.	Inlet, Pipe	1			
F								
P	S-220	91+79.16	LT.	Inlet, Pipe	2			
F								
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 23C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:32 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-221	91+76.92	RT.	Inlet, Pipe	1			
F								
P	S-222	92+54.01	RT.	Manhole, Pipe	1			
F								
P	S-223	92+54.35	LT.	SCEW	1	3.26		
F								
P	S-224	92+64.15	LT.	FES	1	0.11		
F								
P	S-225	93+00.80	RT.	Manhole, Pipe	1			
F								
P	S-226	93+01.09	RT.	Inlet, Pipe	1			
F								
P	S-227	93+20.04	LT.	Inlet, Pipe	1			
F								
P	S-228	94+29.36	LT.	Inlet, Pipe	1			
F								
P	S-229	93+53.84	LT.	FES	1	0.24		
F								
P	S-230	95+05.37	LT.	FES	1	0.17		
F								
P	S-231	95+41.29	LT.	Inlet, Pipe	1			
F								
P	S-232	95+41.70	RT.	Inlet, Pipe	1			
F								
P	S-233	95+98.65	LT.	Inlet, Pipe	1			
F								
P	S-234	96+00.32	RT.	Inlet, Pipe	1			
F								
P	S-235	96+00.31	RT.	Inlet, Pipe	1			
F								
P	S-236	96+73.62	LT.	Inlet, Pipe	1			
F								
P	S-237	96+75.17	RT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	3.78	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		24C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:32 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-238	97+54.77	RT.	Manhole, Pipe	1			
F								
P	S-239	100+02.01	LT.	Inlet, Pipe	1			
F								
P	S-240	100+17.06	RT.	Inlet, Pipe	1			4' stub pipe&plug for tie in from future development by others
F								
P	S-242	100+36.19	RT.	Inlet, Pipe	1			
F								
P	S-243	101+38.79	RT.	Inlet, Pipe	1			
F								
P	S-244	101+65.75	LT.	Inlet, Pipe	1			
F								
P	S-245	101+99.91	LT.	Inlet, Pipe	1			
F								
P	S-246	102+01.90	RT.	Inlet, Pipe	1			
F								
P	S-248	102+89.98	RT.	Inlet, Pipe	1			
F								
P	S-249	102+88.66	LT.	Inlet, Pipe	1			
F								
P	S-249-A	102+88.66	LT.	Inlet, Pipe	1		1	Yard Drain
F								
P	S-249-B	103+55.00	LT.	Manhole, Pipe	1			
F								
P	S-249-C	103+55.00	LT.	Inlet, Pipe	1		1	Yard Drain
F								
P	S-249-D	105+00.00	LT.	Manhole, Pipe	1			
F								
P	S-249-E	105+00.00	LT.	Inlet, Pipe	1		1	Yard Drain
F								
P	S-300	104+49.76	RT.	Manhole, Pipe	2			No precast cone riser required
F								
P	S-301	105+32.50	RT.	Inlet, Pipe	2			
F								
P	S-302	105+37.03	LT.	Inlet, Pipe	2			
F								
P	S-303	108+12.07	RT.	Inlet, Pipe	1			
F								
P	S-304	108+12.74	LT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	0	3	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		25C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:33 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-305	108+13.04	LT.	Inlet, Pipe	2			
F								
P	S-306	109+44.39	LT.	Inlet, Pipe	2			
F								
P	S-307	109+45.10	RT.	Inlet, Pipe	1			
F								
P	S-308	110+01.48	RT.	Inlet, Pipe	1			
F								
P	S-309	110+02.08	LT.	Inlet, Pipe	2			
F								
P	S-310	110+58.97	LT.	Culvert	1			
F								
P	S-311	110+58.28	RT.	Manhole	1			
F								
P	S-312	110+60.31	LT.	Manhole	1			
F								
P	S-313	110+60.26	LT.	Culvert	1			
F								
P	S-314	110+58.42	RT.	Culvert	1			
F								
P	S-400	112+71.36	RT.	Inlet, Pipe	1			
F								
P	S-401	112+71.31	LT.	Inlet, Pipe	1			
F								
P	S-402	115+53.32	RT.	Inlet, Pipe	1			
F								
P	S-403	115+53.39	LT.	Inlet, Pipe	1			
F								
P	S-404	116+24.98	LT.	Inlet, Pipe	1			
F								
P	S-405	116+25.03	RT.	Inlet, Pipe	1			
F								
P	S-406	117+03.23	RT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		26C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:33 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE CY		
F								
P	S-407	117+03.46	LT.	Inlet, Pipe	1			
F								
P	S-408	119+98.75	RT.	Inlet, Pipe	1			
F								
P	S-409	119+99.57	LT.	Inlet, Pipe	1			
F								
P	S-410	122+05.58	RT.	Inlet, Pipe	1			
F								
P	S-411	122+15.06	LT.	Inlet, Pipe	1			
F								
P	S-412	123+39.73	LT.	Inlet, Pipe	1			
F								
P	S-413	123+39.76	RT.	Inlet, Pipe	1			
F								
P	S-414	124+14.57	LT.	Inlet, Pipe	1			
F								
P	S-415	124+14.62	RT.	Inlet, Pipe	1			
F								
P	S-416	124+98.65	LT.	Inlet, Pipe	1			
F								
P	S-417	125+65.18	LT.	Manhole, Pipe	1			
F								
P	S-418	126+21.52	LT.	MES	1	0.54		1:2
F								
P	S-419	126+83.40	LT.	Inlet, Pipe	1			
F								
P	S-419-1A	127+00.00	RT.	Inlet, Pipe	1			
F								
P	S-420	128+51.95	LT.	Inlet, Pipe	1			
F								
P	S-421	128+52.08	RT.	Inlet, Pipe	1			
F								
P	S-421-A	128+52.08	RT.	Inlet, Pipe	1		1	
F								
P	S-422	129+26.82	LT.	Inlet, Pipe	1			
F								
Sheet Summary					<u>P Total</u>	.54	1	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		27C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:33 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-423	129+27.39	RT.	Inlet, Pipe	1			
F								
P	S-424	130+01.38	LT.	Inlet, Pipe	1			
F								
P	S-425	130+02.20	RT.	Inlet, Pipe	1			
F								
P	S-426	126+67.22	LT.	Manhole, Pipe	1			
F								
P	S-427	127+13.40	LT.	Manhole, Pipe	1			
F								
P	S-428	127+66.12	LT.	Manhole, Pipe	1			
F								
P	S-429	128+25.78	LT.	FES	1	0.17		
F								
P	S-430	130+40.96	LT.	Inlet, Pipe	1			
F								
P	S-431	131+39.16	LT.	FES	1	0.17		
F								
P	S-432	130+96.29	RT.	Inlet, Pipe	1			
F								
P	S-5-1	15+10.25	RT.	Inlet, Pipe	1			
F								
P	S-500	135+48.38	RT.	Inlet, Pipe	1			
F								
P	S-501	136+34.22	RT.	Pipe	1			Existing Structure
F								
P	S-502	136+08.30	RT.	Manhole, Pipe	1			
F								
P	S-503	135+94.81	RT.	Manhole, Pipe	1			
F								
P	S-504	132+47.34	RT.	Manhole, Pipe	1			
F								
P	S-505	136+94.73	RT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	.34	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 28C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303	SUMMARY OF DRAINAGE STRUCTURES	

10/10/2022 3:45:33 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS 1 CONC	BACK OF SIDEWALK DRAINAGE	REMARKS
						RETE		
						CY		
F								
P	S-506	137+42.02	RT.	Inlet, Pipe	1			
F								
P	S-507	137+54.56	LT.	Manhole, Pipe	1			
F								
P	S-508	139+00.79	RT.	Inlet, Pipe	1			
F								
P	S-508-A	138+60.00	RT.	Inlet, Pipe	1		1	Yard Drain
F								
P	S-508-B	139+00.79	RT.	Inlet, Pipe	1		1	Yard Drain
F								
P	S-509	138+74.62	LT.	Inlet, Pipe	1			
F								
P	S-510	141+45.89	RT.	Inlet, Pipe	1			
F								
P	S-508-C	140+21.38	RT.	MES, Pipe	1		1	Shallow Ditches
F								17' of Dual 4" Pipes
P	S-511	141+52.01	LT.	Inlet, Pipe	1			
F								
P	S-512	141+51.78	LT.	Manhole, Pipe	1			
F								
P	S-513	143+98.94	LT.	Manhole, Pipe	1			
F								
P	S-514	142+29.75	RT.	Inlet, Pipe	1			
F								
P	S-515	142+37.62	RT.	FES	1	0.17		
F								
P	S-516	145+37.61	RT.	Inlet, Pipe	1			
F								
P	S-517	145+48.14	RT.	Inlet, Pipe	2			
F								
P	S-518	145+48.19	RT.	Manhole, Pipe	2			
F								
P	S-519	145+51.68	LT.	Inlet, Pipe	2			
F								
P	S-521	146+04.96	LT.	Manhole, Pipe	1			
F								
P	S-522	146+04.88	LT.	Inlet, Pipe	1			
F								
Sheet Summary				P Total		.17	3	
				F Total		0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		29C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:34 PM 0:\2017\1710762_002_Orange_Bldg_Cr_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-523	146+13.53	RT.	Manhole, Pipe	1			
F								
P	S-524	146+19.02	RT.	Manhole, Pipe	2			6" precast cone riser required
F								
P	S-525	147+39.08	LT.	Inlet, Pipe	1			
F								
P	S-526	147+39.50	LT.	Inlet, Pipe	1			
F								
P	S-527	148+37.56	RT.	Inlet, Pipe	1			
F								
P	S-528	149+13.03	RT.	Inlet, Pipe	1			
F								
P	S-529	149+12.92	LT.	Inlet, Pipe	1			
F								
P	S-530	149+88.48	RT.	Inlet, Pipe	1			
F								
P	S-531	149+87.40	LT.	Inlet, Pipe	1			
F								
P	S-600	153+39.70	RT.	Inlet, Pipe	1			
F								
P	S-601	153+40.85	LT.	Inlet, Pipe	1			
F								
P	S-602	153+80.42	RT.	Manhole, Pipe	1			
F								
P	S-603	153+96.35	LT.	Inlet, Pipe	1			
F								
P	S-604	154+15.91	RT.	Inlet, Pipe	1			
F								
P	S-605	154+91.44	LT.	Inlet, Pipe	1			
F								
P	S-606	154+37.74	RT.	Manhole, Pipe	1			8" top slab required.
F								No precast cone riser required
P	S-607	154+90.92	RT.	Inlet, Pipe	1			
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 30C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:34 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\drainage\CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-608	154+92.01	LT.	Inlet, Pipe	1			
F								
P	S-609	156+68.61	RT.	Inlet, Pipe	1			
F								
P	S-610	156+69.44	LT.	Inlet, Pipe	1			
F								
P	S-611	158+50.72	LT.	FES	1	0.17		
F								
P	S-612	158+61.81	LT.	FES	1	0.17		
F								
P	S-613	158+72.92	RT.	Manhole, Culvert	3			Existing Pipe Extension 3 concrete jackets required
F								
P	S-614	159+73.65	LT.	Inlet, Pipe	1			
F								
P	S-615	159+71.77	LT.	Inlet, Pipe	1			
F								
P	S-616	160+55.45	RT.	Inlet, Pipe	1			
F								
P	S-617	161+06.61	RT.	FES, Pipe	1	0.11		
F								
P	S-618	161+23.00	LT.	Inlet, Pipe	1			
F								
P	S-619	161+98.51	LT.	FES	1	0.17		
F								
P	S-620	162+01.66	LT.	Inlet, Pipe	1			
F								
P	S-621	162+49.15	RT.	Inlet, Pipe	1			
F								
P	S-622	162+76.71	LT.	Inlet, Pipe	1			
F								
P	S-623	163+24.13	RT.	Inlet, Pipe	1			
F								
				<i>P Total</i>		.62	0	
<i>Sheet Summary</i>				<i>F Total</i>		0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 31C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303		

SUMMARY OF DRAINAGE STRUCTURES

10/10/2022 3:45:34 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMBRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-624	164+38.36	RT.	Inlet, Pipe	1			
F								
P	S-625	165+63.26	RT.	Inlet, Pipe	1			
F								
P	S-626	166+97.64	RT.	Inlet, Pipe	1			
F								
P	S-627	166+98.08	RT.	Inlet, Pipe	1			
F								
P	S-628	169+06.42	RT.	Manhole, Pipe	1			
F								
P	S-629	169+06.60	RT.	Inlet, Pipe	1			
F								
P	S-630	169+44.53	RT.	Inlet, Pipe	1			
F								
P	S-631	169+47.15	LT.	Inlet, Pipe	1			
F								
P	S-700	171+07.09	LT.	Inlet				
F								
P	S-702	173+20.32	LT.	Inlet				
F								
P	S-703	174+50.43	LT.	Inlet				
F								
P	S-704	175+19.88	RT.	Inlet				Existing Pipe
F								
P	S-28-1	33+18.46	LT.	Manhole, Pipe	1			
F								
P	S-38-1	39+40.27	RT.	Manhole, Pipe	1			
F								
P	S-42-1	41+23.94	RT.	Manhole, Pipe	1			
F								
P	S-54-1	47+38.68	LT.	Inlet, Pipe	1			
F								
P	S-64-1	55+12.38	LT.	Manhole, Pipe	1			
Sheet Summary					<u>P Total</u>	0	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303	32C

SUMMARY OF DRAINAGE STRUCTURES

10/10/2022 3:45:35 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-64-2	57+97.08	LT.	Manhole, Pipe	1			
F								
P	S-65-1	53+10.85	RT.	Inlet, Pipe	1			
F								
P	S-66-1	54+36.44	LT.	Manhole, Pipe	1			
F								
P	S-66-2	53+41.11	LT.	Manhole, Pipe	1			
F								
P	S-74-1	57+89.23	LT.	Manhole, Pipe	1			
F								
P	S-87-1	65+58.60	LT.	Inlet, Pipe	2			
F								
P	S-91-1	66+99.77	RT.	Manhole, Pipe	1			
F								
P	S-99-1	72+55.30	LT.	Inlet, Pipe	1			Structure includes price of miscellaneous drainage connection
F								
P	S-99-2	72+55.29	LT.	Manhole, Pipe	1			
F								
P	S-102-1	76+15.48	LT.	Manhole, Pipe	1			
F								
P	S-228-1	94+29.30	LT.	Manhole, Pipe	1			
F								
P	S-301-1	105+66.49	LT.	MES, Pipe	1	0.44		1:4
F								
P	S-301-2	105+66.99	LT.	Manhole, Pipe	2			
F								
P	S-302-1	106+61.36	LT.	Inlet, Pipe	2			
F								
P	S-303-1	107+15.54	RT.	Inlet, Pipe	1			
F								
P	S-401-1	114+67.31	LT.	Inlet, Pipe	1			
F								
Sheet Summary				<u>P Total</u>		.44	0	
				<u>F Total</u>		0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO. 33C
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			

10/10/2022 3:45:35 PM 0:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-401-2	114+67.50	LT.	Manhole, Pipe	1			
F								
P	S-419-1	127+43.68	RT.	Inlet, Pipe	1			
F								
P	S-500-1	132+78.01	LT.	Inlet, Pipe	1			
F								
P	S-500-2	132+79.95	RT.	Inlet, Pipe	1			
F								
P	S-500-3	134+75.85	RT.	Inlet, Pipe	1			
F								
P	S-500-4	136+63.52	RT.	Inlet, Pipe	1			
F								
P	S-500-5	136+64.18	LT.	Inlet, Pipe	1			
F								
P	S-500-6	134+75.90	LT.	Inlet, Pipe	1			
F								
P	S-500-7	132+74.70	RT.	FES	1	0.17		
F								
P	S-500-8	132+23.78	RT.	Manhole, Pipe	1			
F								
P	S-503-1	134+13.36	RT.	Manhole, Pipe	1			
F								
P	S-504-1	132+34.79	RT.	FES	1	0.29		
F								
P	S-509-1	140+39.34	LT.	Manhole, Pipe	1			
F								
P	S-514-1	142+16.95	RT.	Manhole, Pipe	1			
F								
P	S-524-1	146+92.34	RT.	Inlet, Pipe	1			
F								
P	S-524-2	146+17.66	RT.	Manhole, Pipe	2			No precast cone riser required
F								
P	S-524-3	146+52.41	RT.	Inlet, Pipe	2			3" precast riser required
Sheet Summary					<u>P Total</u>	.46	0	
					<u>F Total</u>	0	0	

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		34C
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:35 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	STORM DRAIN OPTIONAL MATERIAL													
						ROUND					BOX		ELLIPTICAL						
						15"	18"	24"	30"	36"	42"	48"	6x3	6x4	14" x 23"	19" x 30"	24" x 38"	29" x 45"	34" x 53"
F																			
P	S-512-1	141+36.96	LT.	Manhole, Pipe	1			10											
F																			
P	S-527-1	148+05.47	RT.	Inlet, Pipe	1			21											
F																			
P	S-527-2	148+30.70	RT.	Manhole, Pipe	1			152											
F																			
P	S-527-3	148+35.68	RT.	Inlet, Pipe	1			208											
F																			
P	S-529-1	148+91.76	LT.	FES	1														
F																			
P	S-600-1	151+68.29	RT.	Inlet, Pipe	1		207												
F																			
P	S-602-1	153+81.20	RT.	Pipe	1		26												
F																			
P	S-610-1	157+50.21	RT.	Manhole, Pipe	1				115										
F																			
P	S-613-1	158+61.24	LT.	SCEW	3														
F																			
P	S-25-1	31+20.00	RT.	Manhole, Pipe	1			97											
F																			
P	S-28-2	33+00.00	RT.	Manhole, Pipe	1			108											
F																			
P	S-29-1	35+00.00	RT.	Manhole, Pipe	1			96											
F																			
Sheet Summary					<u>P Total</u>	0	233	690	115	0	0	0	0	0	0	0	0	0	0
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Summary					<u>P Total</u>	355	10277	12786	2738	1235	405	304	16	140	482	1194	1357	998	444
					<u>F Total</u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		34D
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

10/10/2022 3:45:36 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\SUMDRD01.dgn

QUANTITY	STR. NO.	STATION	SIDE	DESCRIPTION	BARRELS	CLASS I CONC	BACK OF SIDEWALK DRAINAGE YARD DRAIN	REMARKS
						RETE		
						CY		
P	S-512-1	141+36.96	LT.	Manhole, Pipe	1			
F								
P	S-527-1	148+05.47	RT.	Inlet, Pipe	1			
F								
P	S-527-2	148+30.70	RT.	Manhole, Pipe	1			
F								
P	S-527-3	148+35.68	RT.	Inlet, Pipe	1			
F								
P	S-529-1	148+91.76	LT.	FES	1	0.11		
F								
P	S-600-1	151+68.29	RT.	Inlet, Pipe	1			
F								
P	S-602-1	153+81.20	RT.	Pipe	1			Existing Structure To Be Relocated
F								
P	S-610-1	157+50.21	RT.	Manhole, Pipe	1			
F								
P	S-613-1	158+61.24	LT.	SCEW	3	4.98		Add Headwall to Existing (3) 30" Culvert
F								
P	S-25-1	31+20.00	RT.	Manhole, Pipe	1			
F								
P	S-28-2	33+00.00	RT.	Manhole, Pipe	1			
F								
P	S-29-1	35+00.00	RT.	Manhole, Pipe	1			
F								
Sheet Summary				<u>P Total</u>	5.09	0		
				<u>F Total</u>	0	0		
Final Summary				<u>P Total</u>	11.61	10		
				<u>F Total</u>	0	0		

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SUMMARY OF DRAINAGE STRUCTURES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		34F

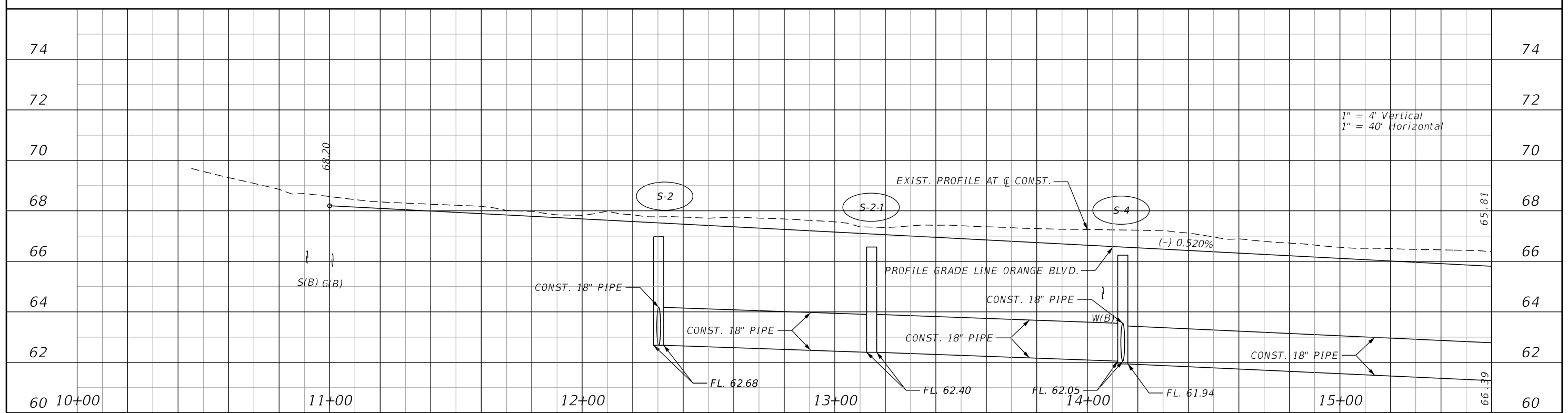
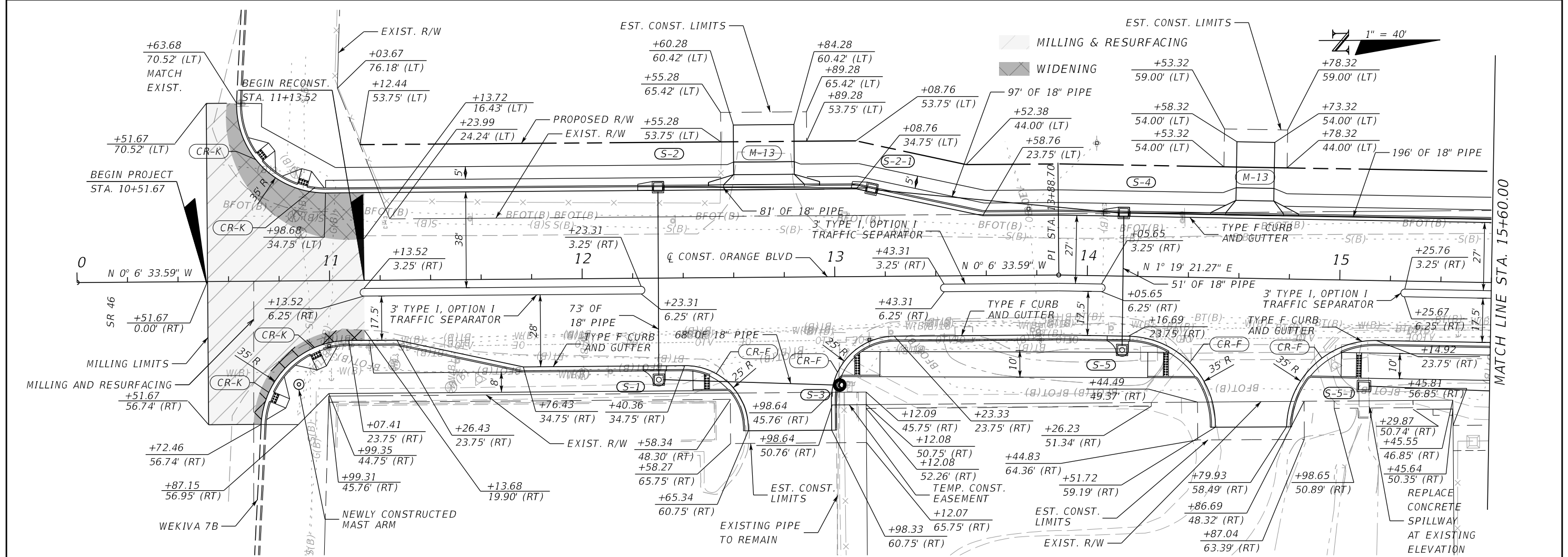
GENERAL NOTES

- BENCHMARK ELEVATIONS SHOWN ON THE PLANS ARE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
 - ALL SURVEY INFORMATION WAS OBTAINED FROM A LICENSED FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AND UTILIZED AS SUPPOTING DATA IN THE PRODUCTION OF DESIGN PLANS AND FOR CONSTRUCTION ON SUBJECT PROJECT. THE PROFESSIONAL SURVEYOR AND MAPPER OF RECORD IS:
TOM STEVENSON
P.L.S. NO.: 4460
JONES, WOOD & GENTRY, INC.
9645 EAST COLONIAL DRIVE, SUITE 114
ORLANDO, FL 32817
 - THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh, AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.
 - UTILITY AGENCY OWNERS:
- | COMPANY | CONTACT | TELEPHONE NUMBERS |
|--------------------------|------------------|-------------------|
| AT-T | STEFAN ERIKSSON | (407) 578-8000 |
| CHARTER COMMUNICATIONS | MARVIN USRY, JR. | (407) 532-8509 |
| CITY OF SANFORD | RICHARD BLAKE | (407) 688-5101 |
| CROWN CASTLE FIBER | DANNY HASKETT | (786) 610-7073 |
| FP&L (D) | JOEL BRAY | (386) 586-6403 |
| FP&L (T) | RALPH DIAZ | (561) 904-3617 |
| FLORIDA PUBLIC UTILITIES | DAVID JOHNSON | (386) 668-9364 |
| COMCAST | WADE MATHEWS | (352) 516-3824 |
| MCI | DEAN BOYERS | (469) 886-4238 |
| AT&T DISTRIBUTION | DINO FARRUGGIO | (561) 997-0240 |
| SEMINOLE COUNTY | PAUL ZIMMERMAN | (407) 665-2040 |
- SPECIAL EVENT DAYS FOR THIS PROJECT INCLUDE:
TBD
 - EXISTING STORMWATER PIPES AND STRUCTURES TO BE REMOVED UNLESS OTHERWISE DIRECTED.
 - WHERE THE RECONSTRUCTION OF SIDE STREETS ENDS, A SAW CUT LINE IN THE PAVEMENT IS TO BE PROVIDED.
 - 6" SIDEWALK ARE USED AT ALL CURB RAMP RETURN LOCATIONS PER FDOT STANDARD 522-001

SURVEY CONTROL POINTS			
POINT NAME	DESCRIPTION	STATION/OFFSET	ELEVATION
AA28	5/8" I.B.C. STAMPED "JWG TRAV"	STA 11+58.93 39.52' RT	67.48
AA18	5/8" I.B.C. STAMPED "JWG TRAV"	STA 14+98.63 33.94' RT	66.45
AA17	5/8" I.B.C. STAMPED "JWG TRAV"	STA 19+66.01 7.33' RT	64.05
EA2	5/8" I.B.C. STAMPED "JWG TRAV"	STA 22+29.78 37.33' RT	66.68
AA16	5/8" I.B.C. STAMPED "JWG TRAV"	STA 26+61.12 20.96' RT	54.06
AA15	5/8" I.B.C. STAMPED "JWG TRAV"	STA 31+18.99 24.90' RT	46.65
AA14	5/8" I.B.C. STAMPED "JWG TRAV"	STA 35+90.83 28.84' RT	38.5
AA13	5/8" I.B.C. STAMPED "JWG TRAV"	STA 39+74.50 47.12' RT	37.22
AA12	5/8" I.B.C. STAMPED "JWG TRAV"	STA 44+33.59 13.94' LT	29.68
AA11	5/8" I.B.C. STAMPED "JWG TRAV"	STA 48+61.41 27.01' RT	28.8
SA1	5/8" I.B.C. STAMPED "JWG TRAV"	STA 53+39.78 34.82' LT	28.44
AA10	5/8" I.B.C. STAMPED "JWG TRAV"	STA 56+91.22 19.96' RT	27.72
LLPOL2	5/8" I.B.C. STAMPED "JWG TRAV"	STA 60+20.85 47.59' RT	27.73
AA9	5/8" I.B.C. STAMPED "JWG TRAV"	STA 63+09.92 29.98' RT	25.01
AA8	5/8" I.B.C. STAMPED "JWG TRAV"	STA 68+26.43 35.27' RT	26.58
TP9	X-CUT	STA 73+92.10 40.73' RT	27.58
AA7	5/8" I.B.C. STAMPED "JWG TRAV"	STA 77+24.05 24.95' RT	27.94
TA1	5/8" I.B.C. STAMPED "JWG TRAV"	STA 79+63.86 14.85' LT	26.16
UA3	5/8" I.B.C. STAMPED "JWG TRAV"	STA 83+21.46 69.65' RT	25.06
V5	5/8" I.B.C. STAMPED "JWG TRAV"	STA 87+15.74 7.52' LT	25.47
AA6	5/8" I.B.C. STAMPED "JWG TRAV"	STA 90+18.07 26.14' RT	24.96
SSA1	5/8" I.B.C. STAMPED "JWG TRAV"	STA 94+69.30 151.94' LT	22.31
BM9	4" X 4" C.M. WITH DISC STAMPED "JWG BENCHMARK"	STA 107+98.00 47.74' RT	25.4
AA5	NAIL AND DISC STAMPED "JWG TRAV"	STA 100+83.38 26.63' LT	24.32
AA4	5/8" I.B.C. STAMPED "JWG TRAV"	STA 106+18.06 38.14' LT	24.54
AA3	5/8" I.B.C. STAMPED "JWG TRAV"	STA 109+20.77 21.50' RT	23.81
HAA6	5/8" I.B.C. STAMPED "JWG TRAV"	STA 111+90.46 35.19' RT	24.9
AA2	5/8" I.B.C. STAMPED "JWG TRAV"	STA 115+25.59 25.56' LT	23.72
AA1	NAIL AND DISC STAMPED "LB 024 REF PT" IN WALK	STA 120+33.32 49.79' RT	24.28
PAA1	5/8" I.B.C. STAMPED "JWG TRAV" 0.1' BELOW GRADE	STA 123+47.27 22.84' LT	22.46
PAA2	5/8" I.B.C. STAMPED "JWG TRAV"	STA 126+59.95 20.43' LT	22.77
AA19	5/8" I.B.C. STAMPED "JWG TRAV"	STA 132+48.85 35.43' LT	22.48
AA20	5/8" I.B.C. STAMPED "JWG TRAV"	STA 137+99.16 27.06' LT	18.69
LAA2	5/8" I.B.C. STAMPED "JWG TRAV"	STA 142+90.30 21.92' RT	13.16
AA21	5/8" I.B.C. STAMPED "JWG TRAV"	STA 145+82.18 58.38' LT	10.79
QAA4	5/8" I.B.C. STAMPED "JWG TRAV"	STA 148+22.69 7.49' RT	9.86
QAA5	5/8" I.B.C. STAMPED "JWG TRAV"	STA 151+81.72 43.26' RT	9.89
AA22	5/8" I.B.C. STAMPED "JWG TRAV"	STA 154+32.60 30.53' LT	8.71
IIAA4	5/8" I.B.C. STAMPED "JWG TRAV"	STA 157+73.93 32.61' RT	11.07
AA23	5/8" I.B.C. STAMPED "JWG TRAV"	STA 162+07.25 26.13' RT	11.53
AA24	5/8" I.B.C. STAMPED "JWG TRAV"	STA 165+90.96 71.35' LT	11.17
HAA1	5/8" I.B.C. STAMPED "JWG TRAV"	STA 168+90.35 33.45' LT	11.73
HAA2	5/8" I.B.C. STAMPED "JWG TRAV"	STA 172+02.47 37.52' LT	10.66

0:\2017\1710782_002_Orange_Bldv_(CR_431)\Orange_Bldv_CADD\roadway\GNNTRD01.dgn 10/10/2022 3:45:39 PM kyang

REVISIONS				JASON R. FLICK, P.E. P.E. LICENSE NUMBER 74741 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			GENERAL NOTES/ SURVEY CONTROL	SHEET NO. 35
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		



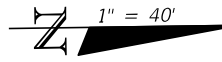
REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

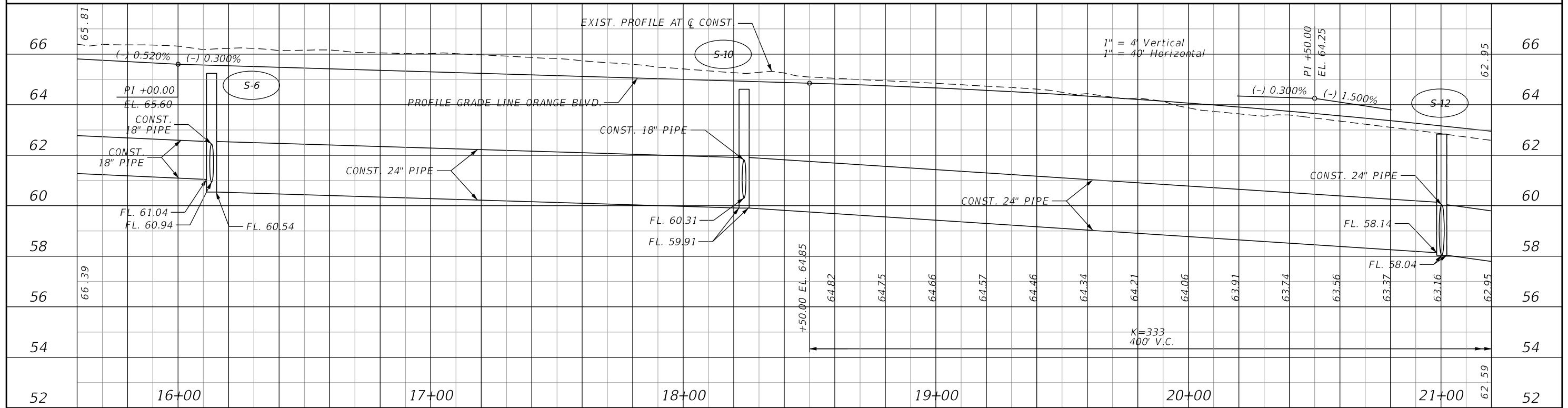
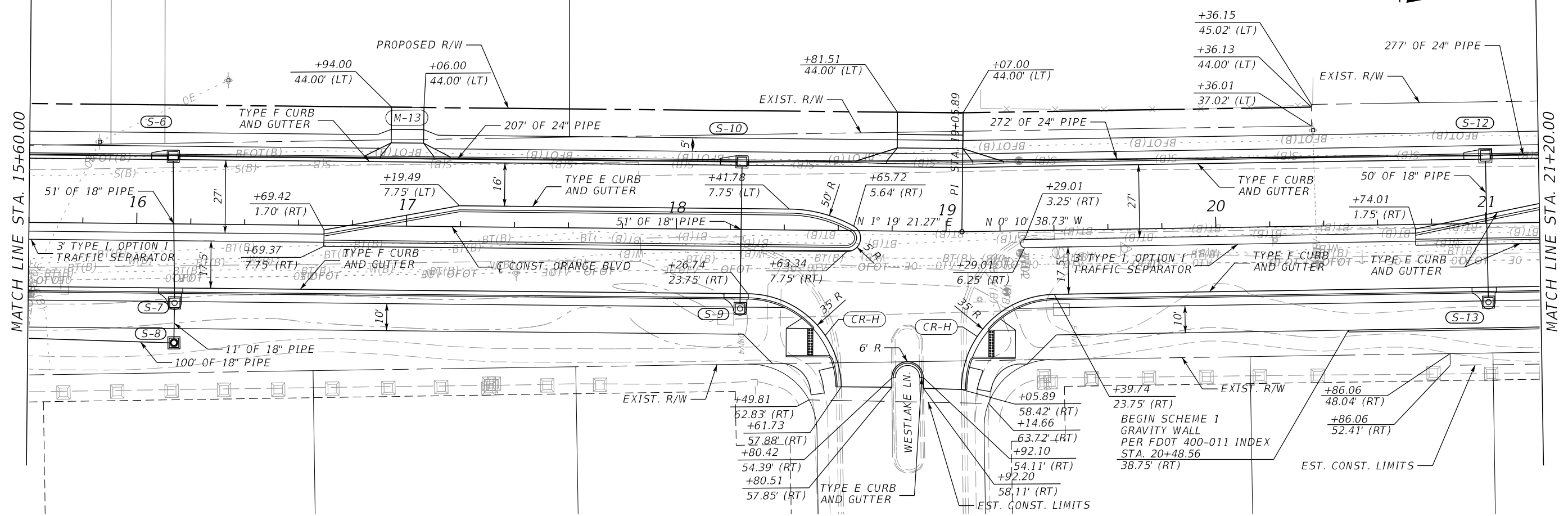
ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	36

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



MATCH LINE STA. 15+60.00

MATCH LINE STA. 21+20.00



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

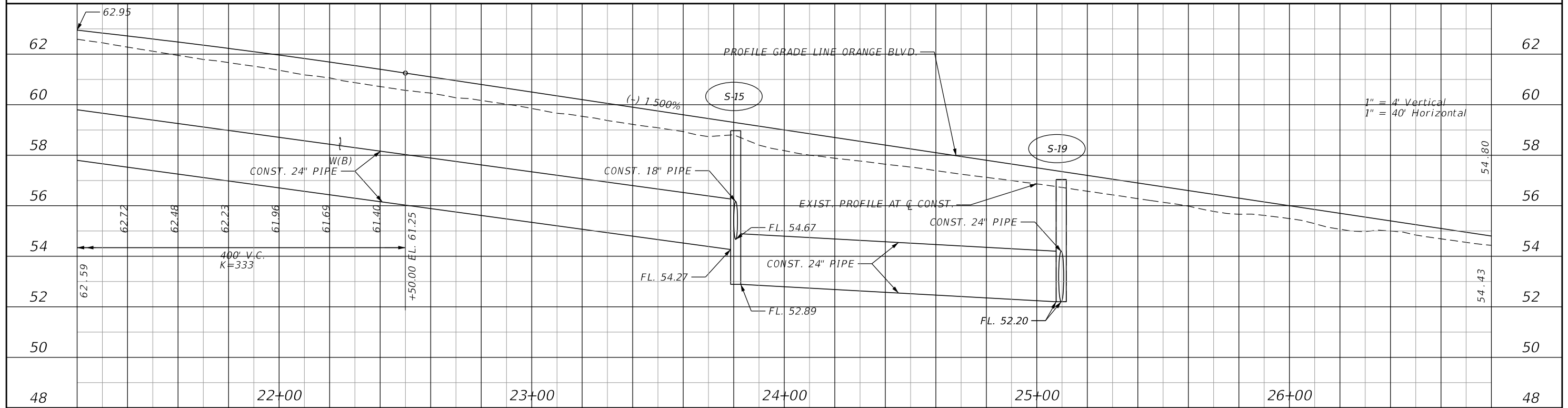
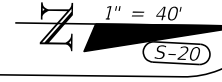
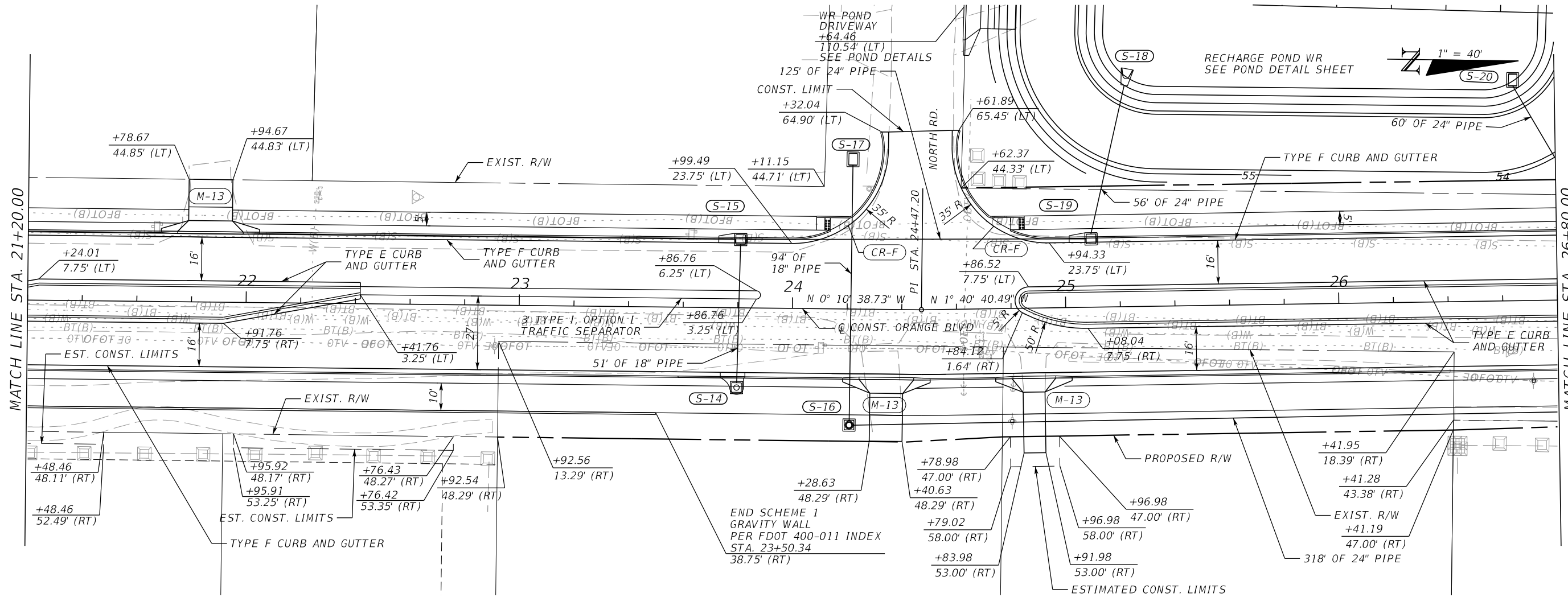
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		37

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 21+20.00

MATCH LINE STA. 26+80.00



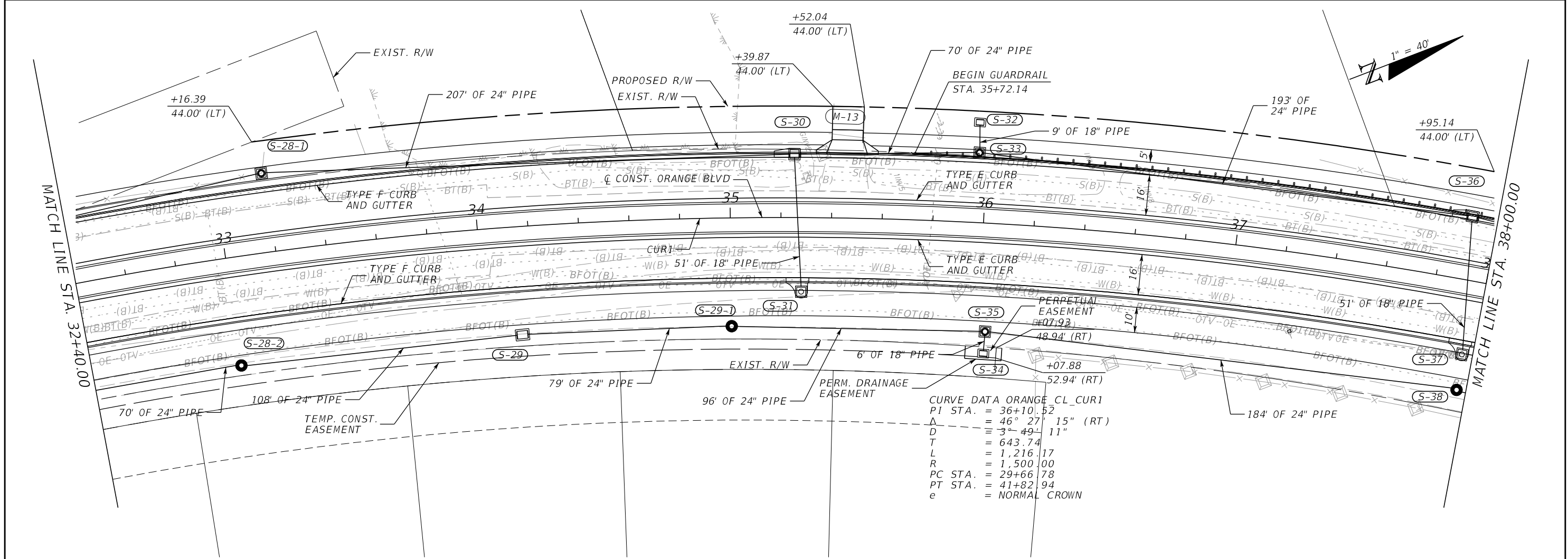
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRIMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

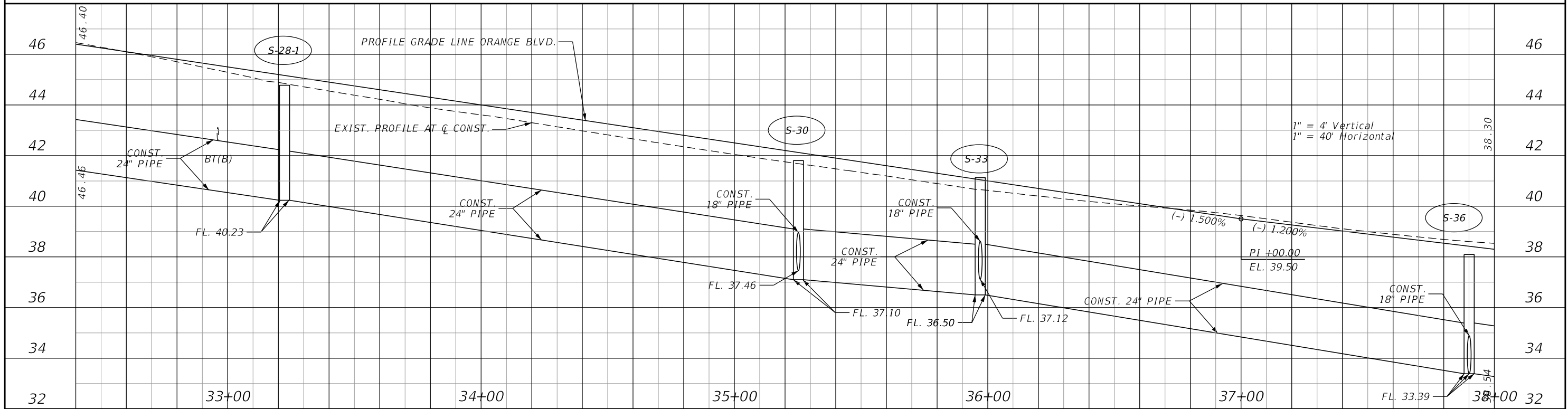
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	38

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR1
 PI STA. = 36+10.52
 Δ = 46° 27' 15" (RT)
 D = 3° 49' 11"
 T = 643.74
 L = 1,216.17
 R = 1,500.00
 PC STA. = 29+66.78
 PT STA. = 41+82.94
 e = NORMAL CROWN



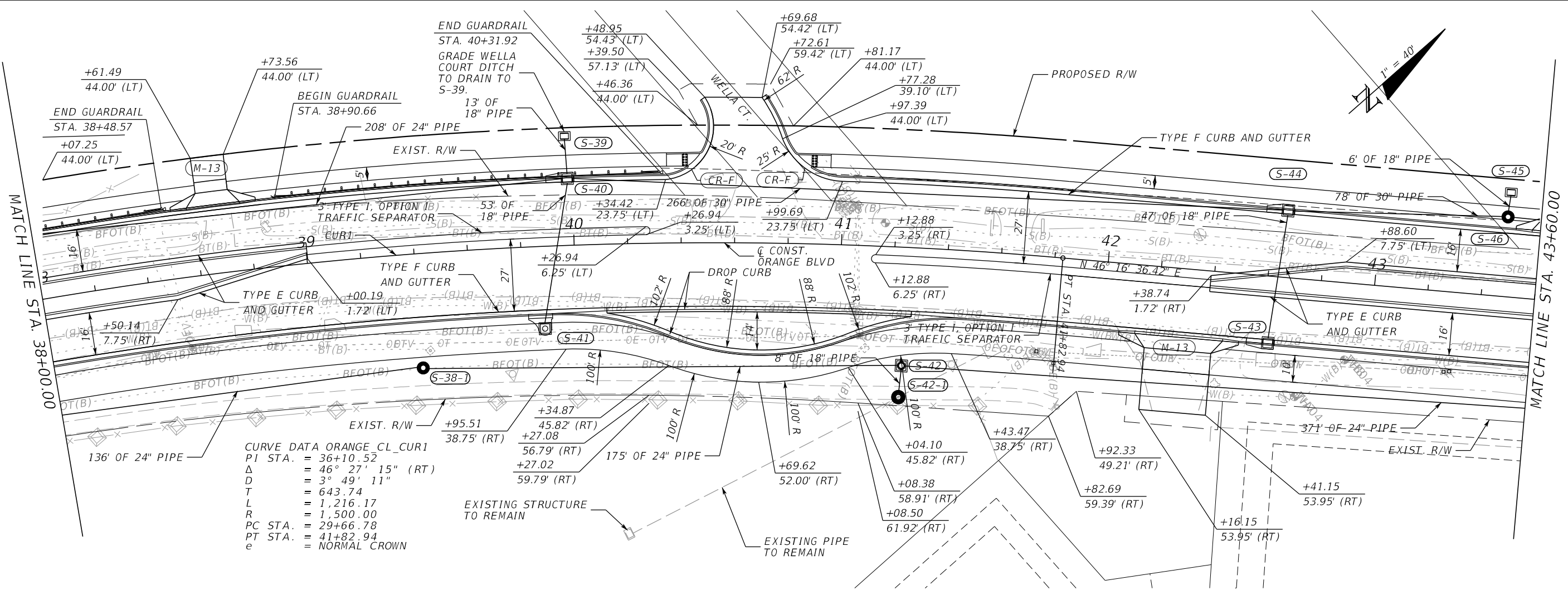
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

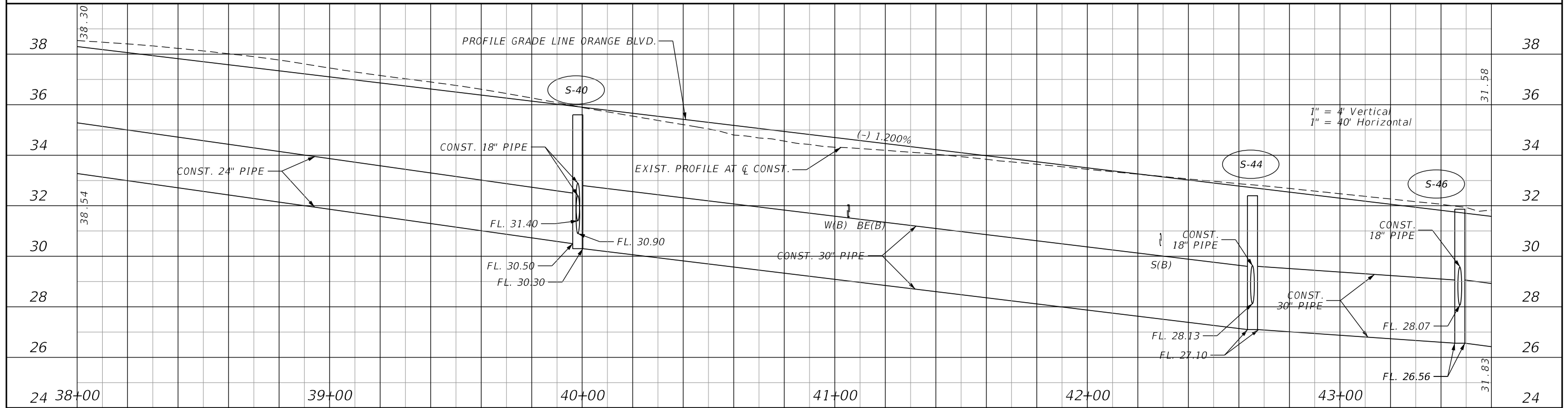
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		40

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR1
 PI STA. = 36+10.52
 Δ = 46° 27' 15" (RT)
 D = 3° 49' 11"
 T = 643.74
 L = 1,216.17
 R = 1,500.00
 PC STA. = 29+66.78
 PT STA. = 41+82.94
 e = NORMAL CROWN



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

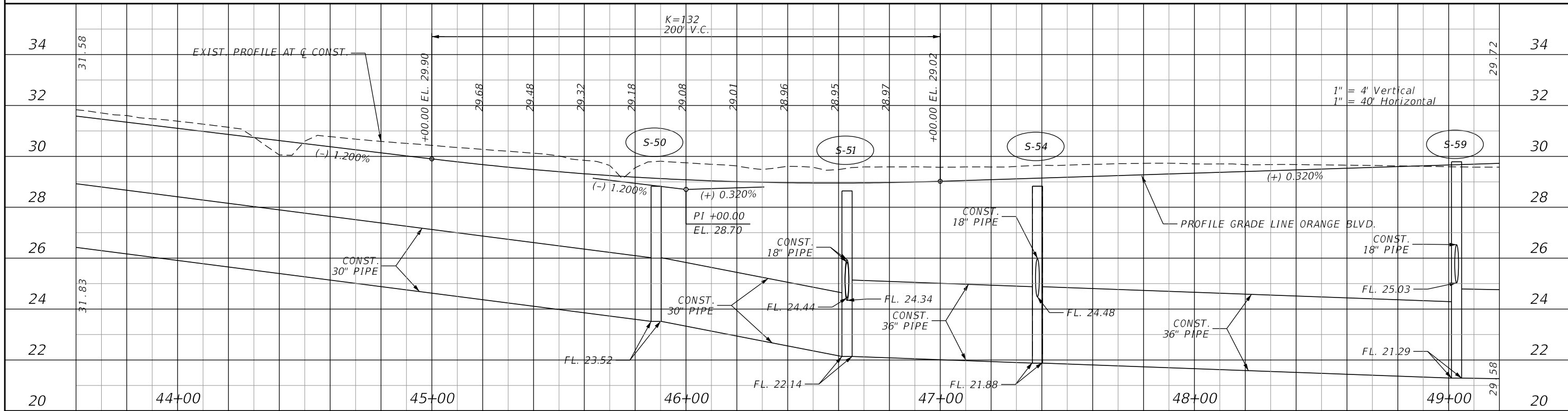
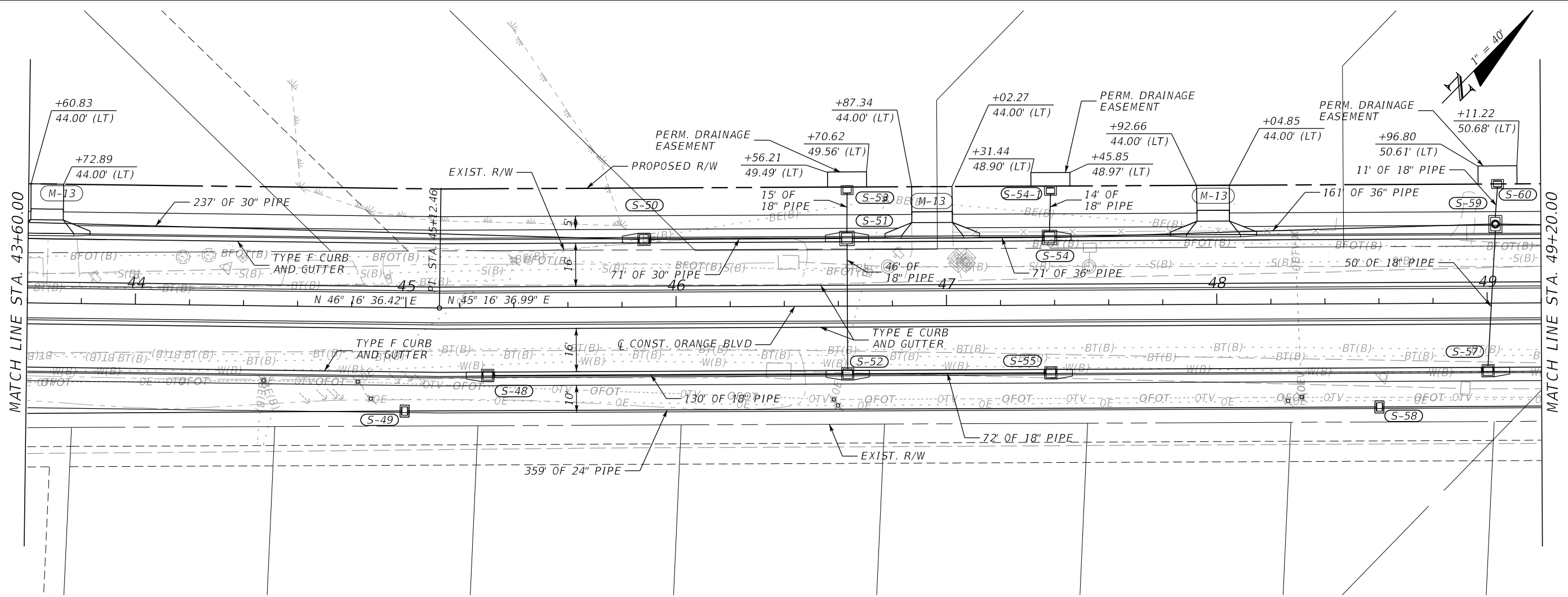
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	41

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 43+60.00

MATCH LINE STA. 49+20.00



1" = 4' Vertical
1" = 40' Horizontal

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

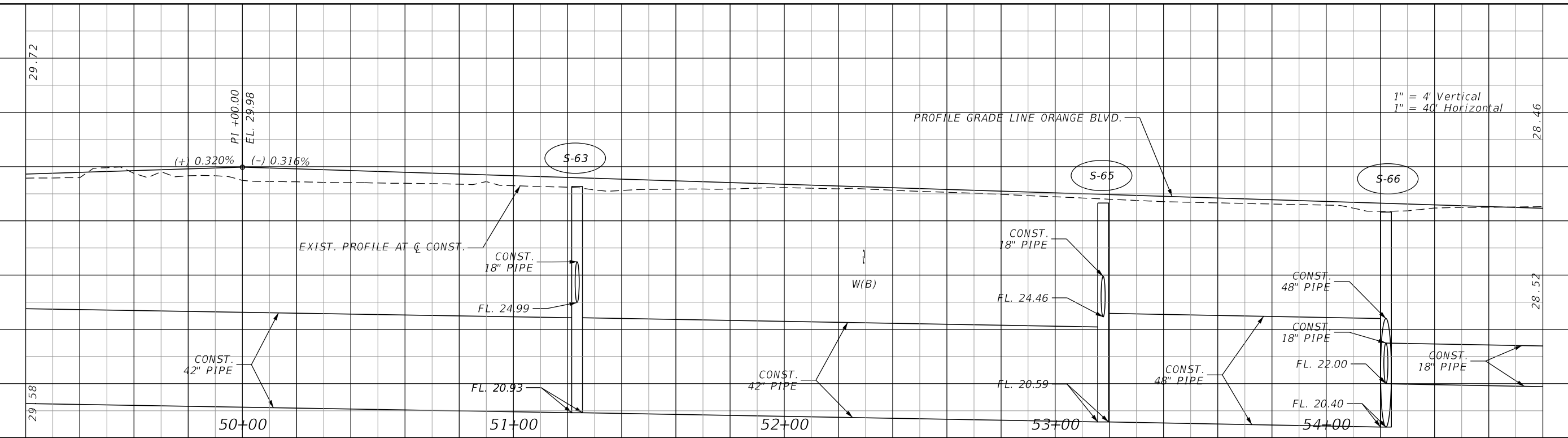
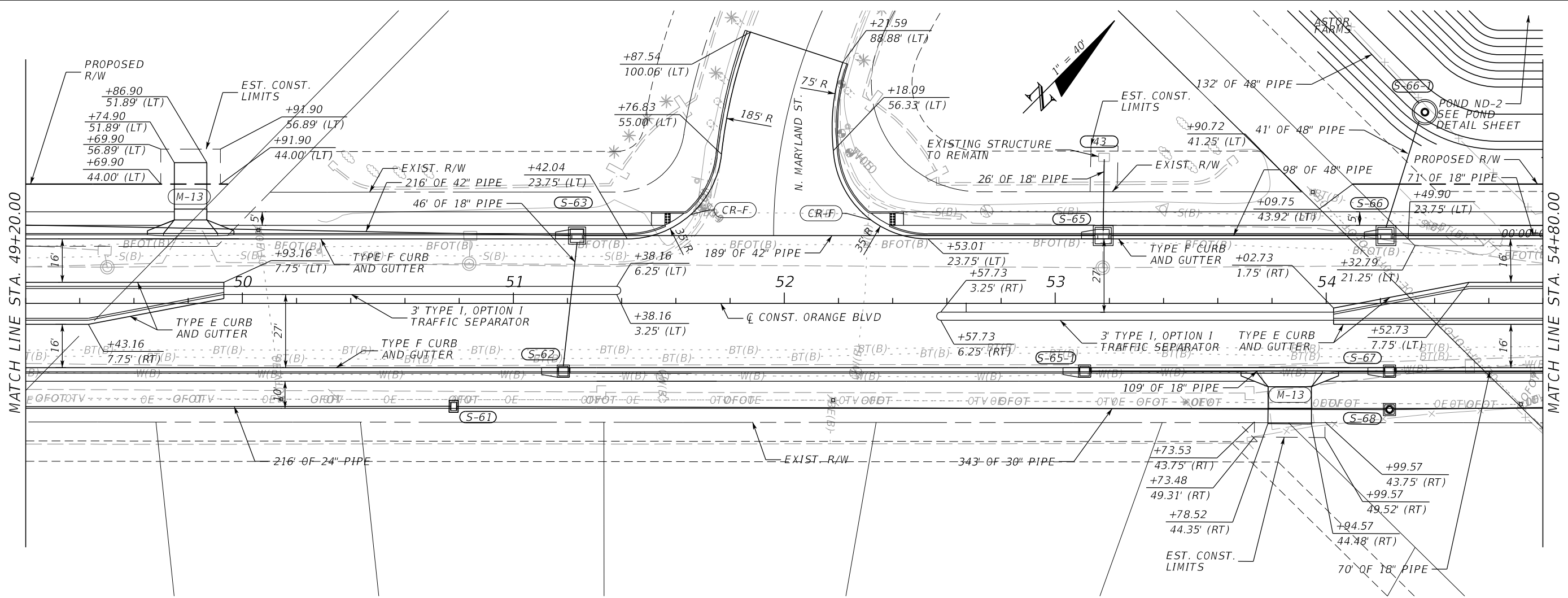
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	42

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 49+20.00

MATCH LINE STA. 54+80.00



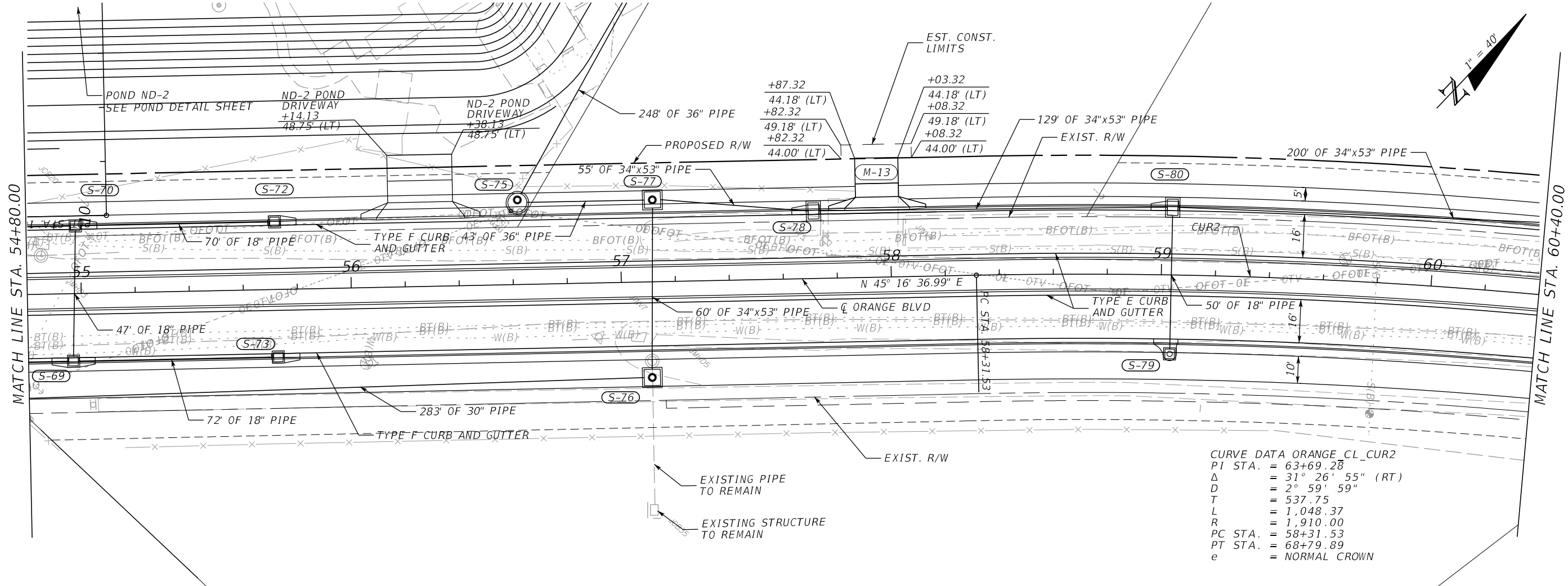
REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

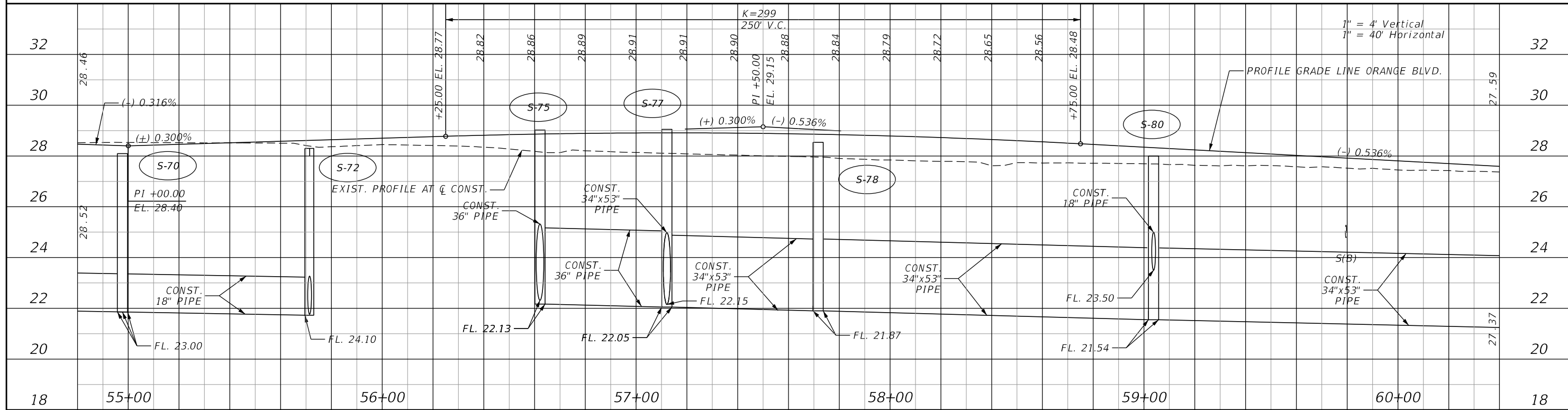
ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	43

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR2

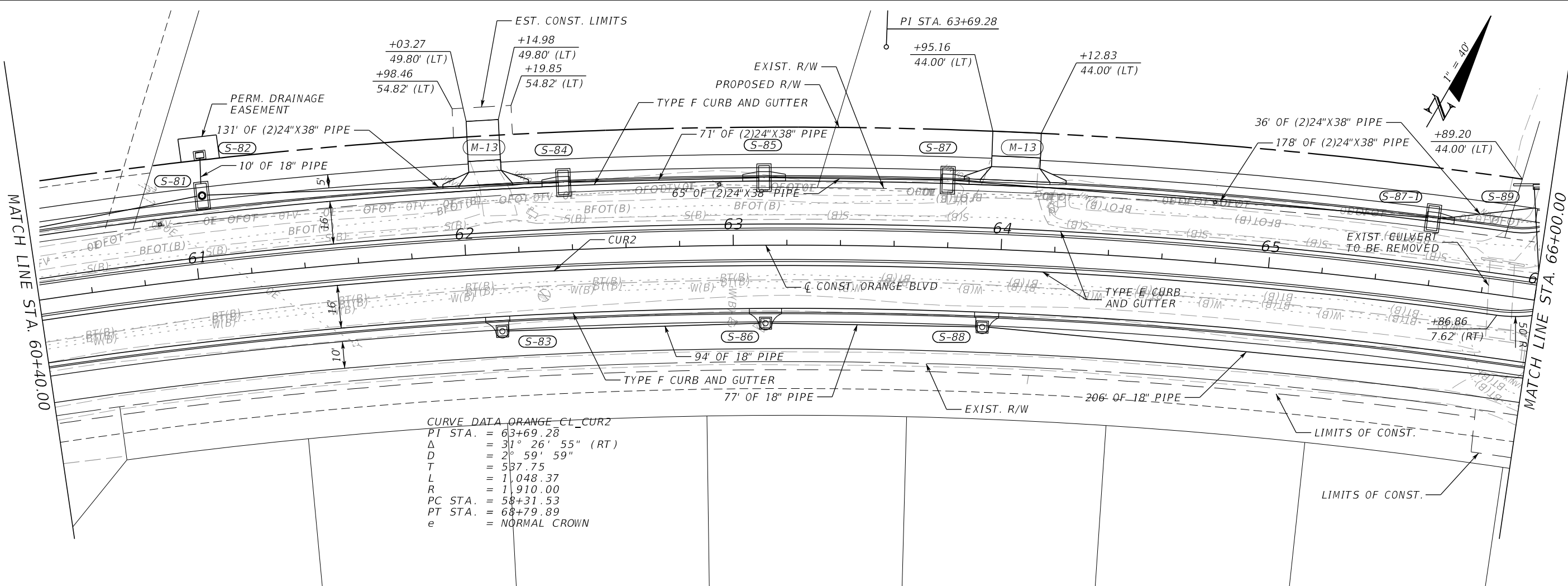
PI STA.	= 63+69.28
Δ	= 31° 26' 55" (RT)
D	= 2° 59' 59"
T	= 537.75
L	= 1,048.37
R	= 1,910.00
PC STA.	= 58+31.53
PT STA.	= 68+79.89
e	= NORMAL CROWN



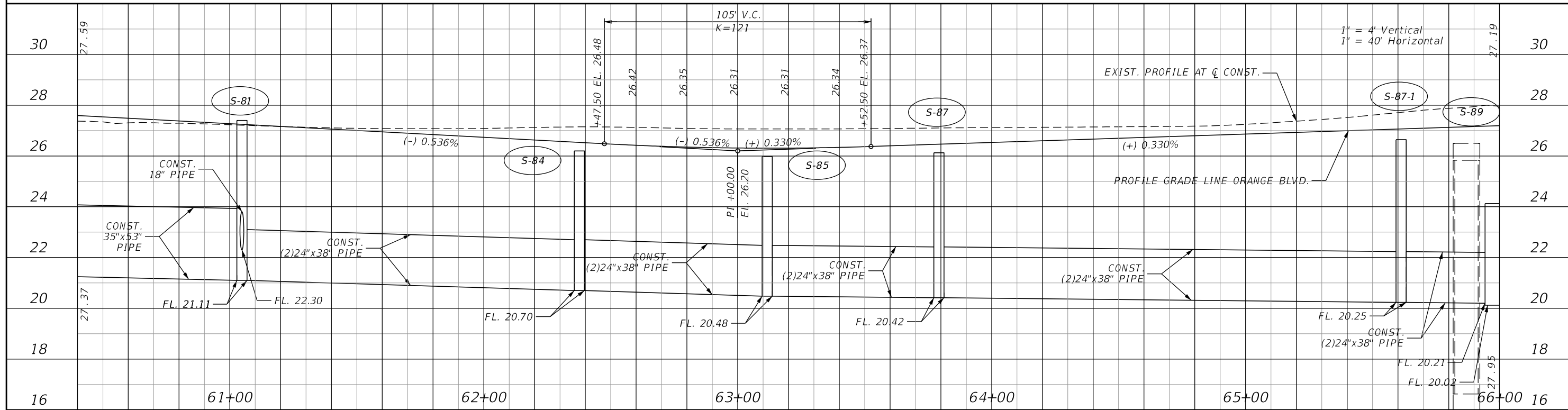
REVISIONS		DATE		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION		

PRELIMINARY NOT FOR CONSTRUCTION	JASON R. FLICK, P.E. P.E. LICENSE NUMBER 74741 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			ROADWAY PLAN & PROFILE	SHEET NO.
	ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	CR 431	SEMINOLE	01785303		44

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR2
 PT STA. = 63+69.28
 Δ = 31° 26' 55" (RT)
 D = 2° 59' 59"
 T = 537.75
 L = 1,048.37
 R = 1,910.00
 PC STA. = 58+31.53
 PT STA. = 68+79.89
 e = NORMAL CROWN



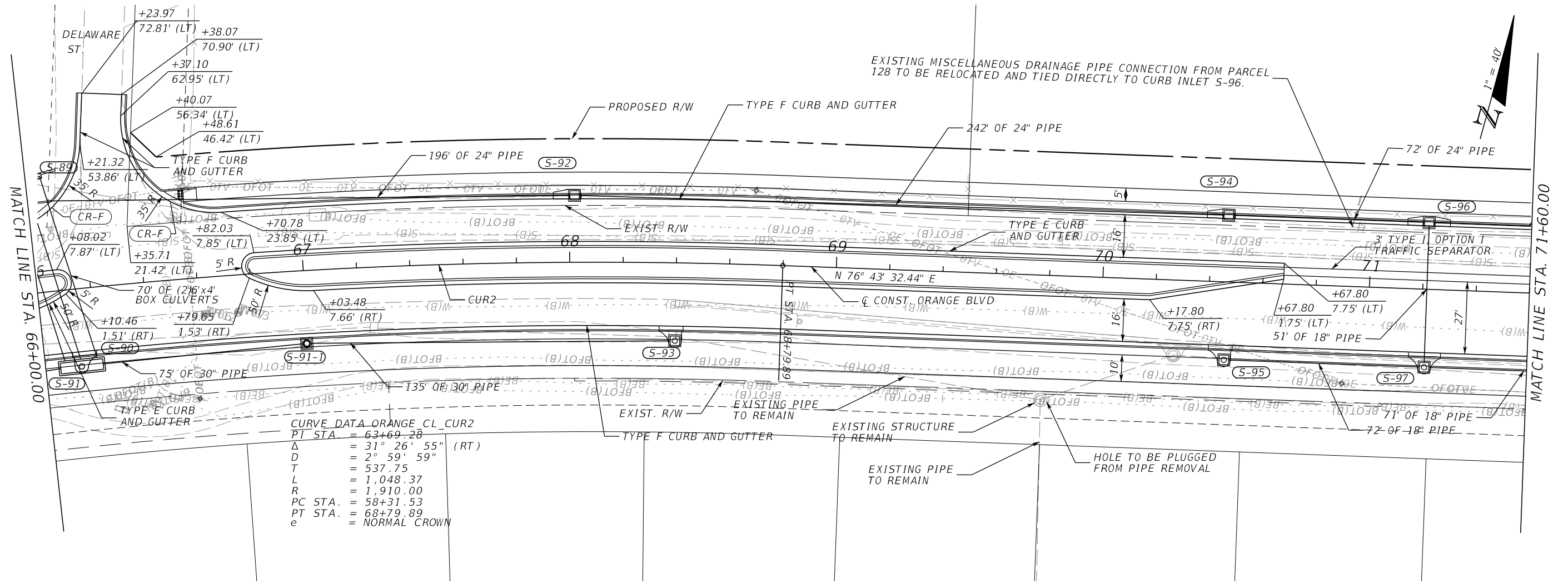
REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

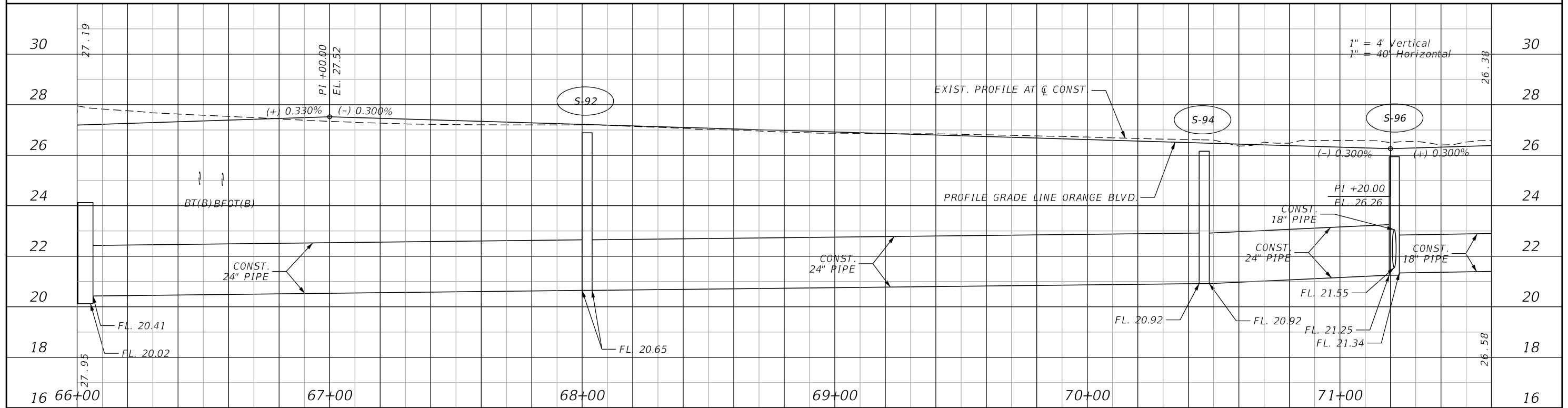
ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	45

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR2

PT STA.	= 63+69.28
Δ	= 31° 26' 55" (RT)
D	= 2° 59' 59"
T	= 537.75
L	= 1,048.37
R	= 1,910.00
PC STA.	= 58+31.53
PT STA.	= 68+79.89
e	= NORMAL CROWN



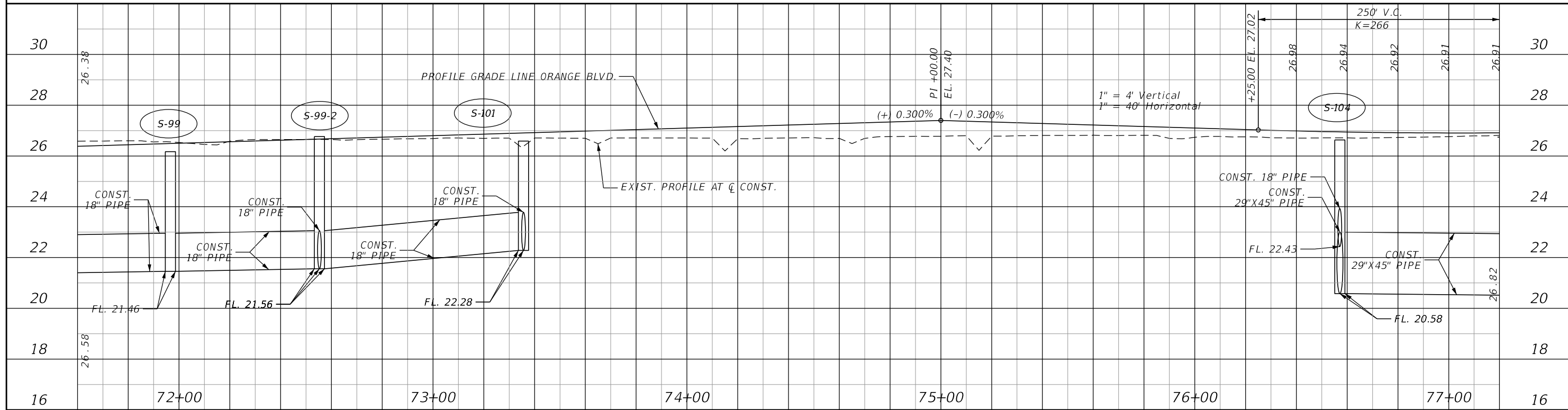
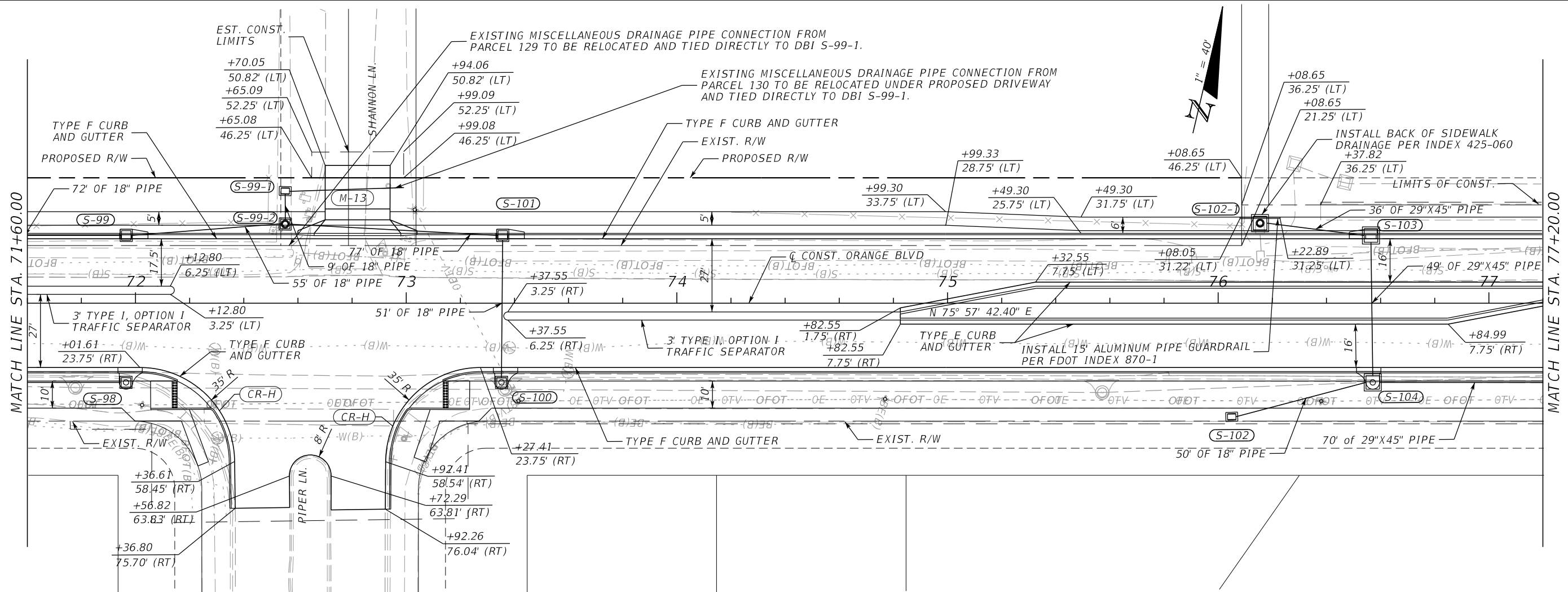
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		46

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

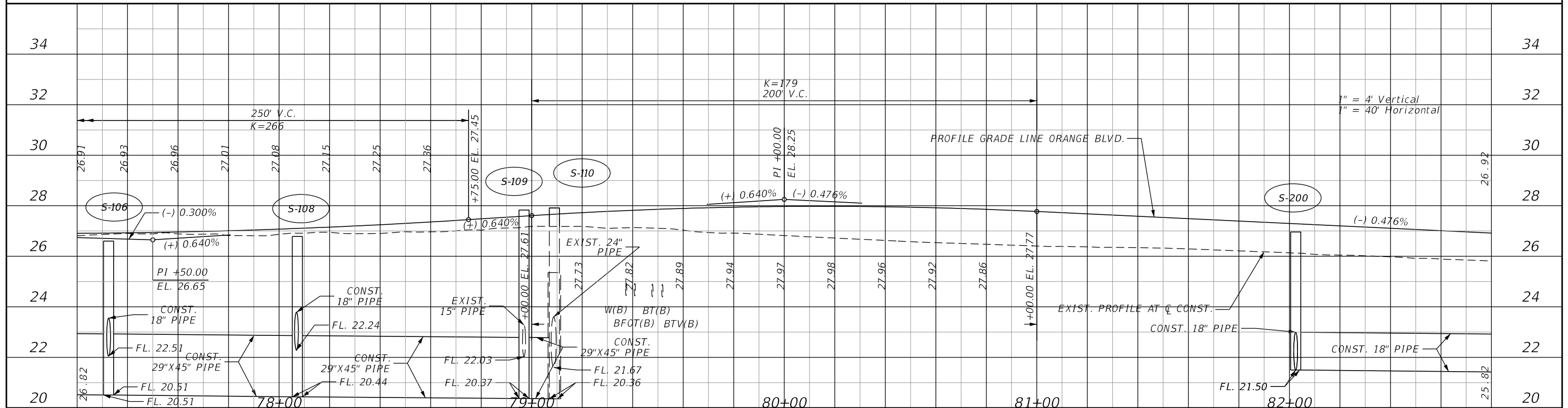
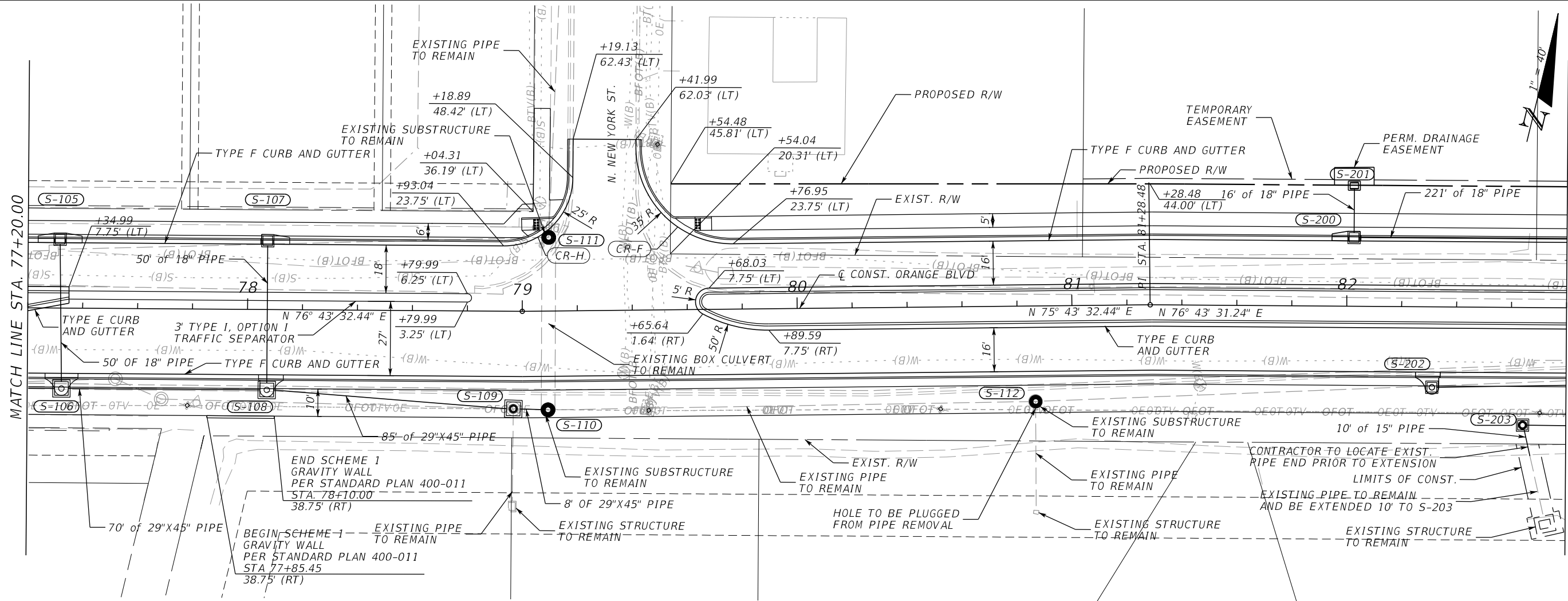
ROADWAY PLAN & PROFILE

SHEET NO.
47

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 77+20.00

MATCH LINE STA. 82+80.00



REVISIONS	
DATE	DESCRIPTION

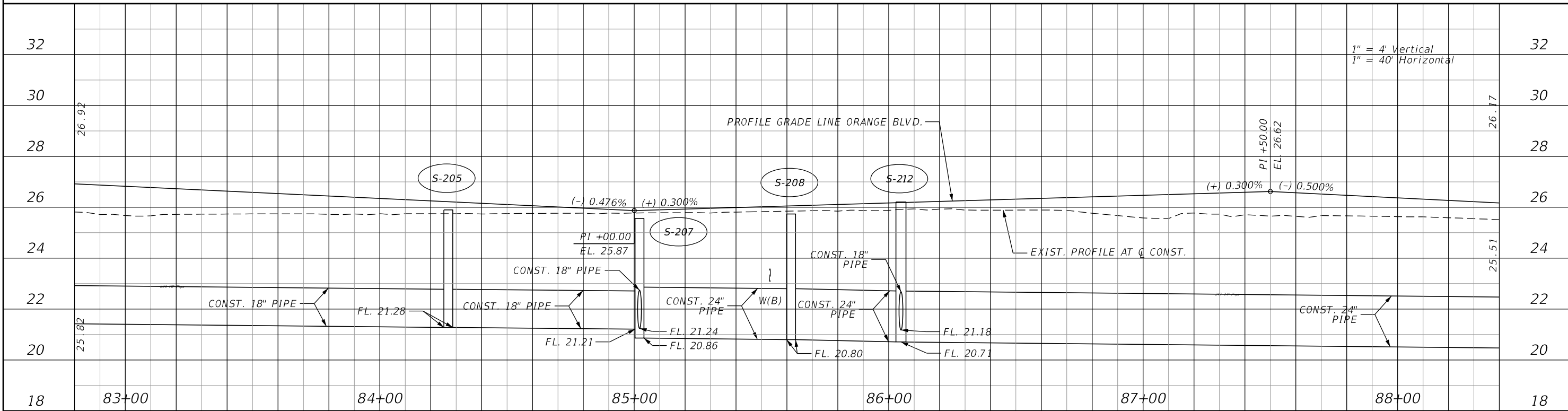
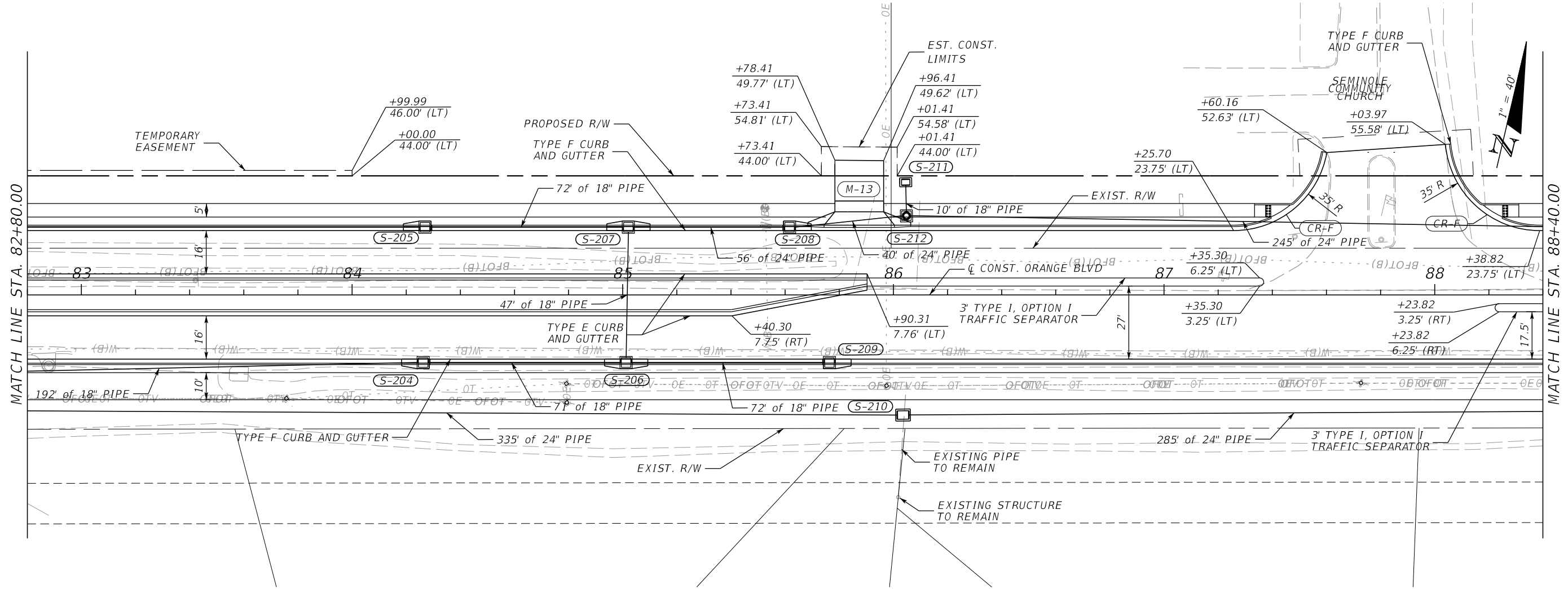
JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE

SHEET NO.
48

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



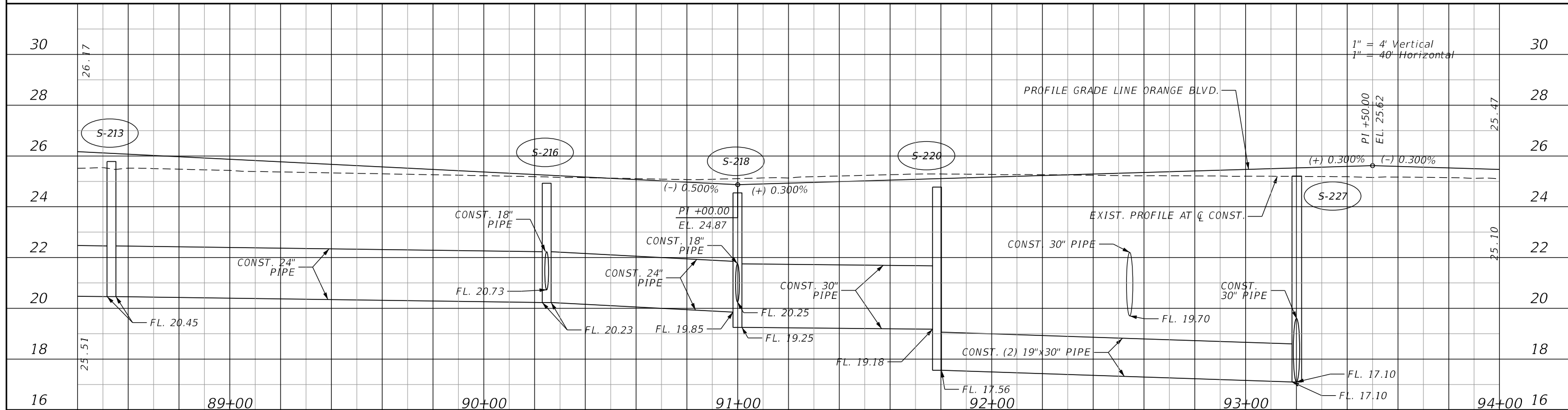
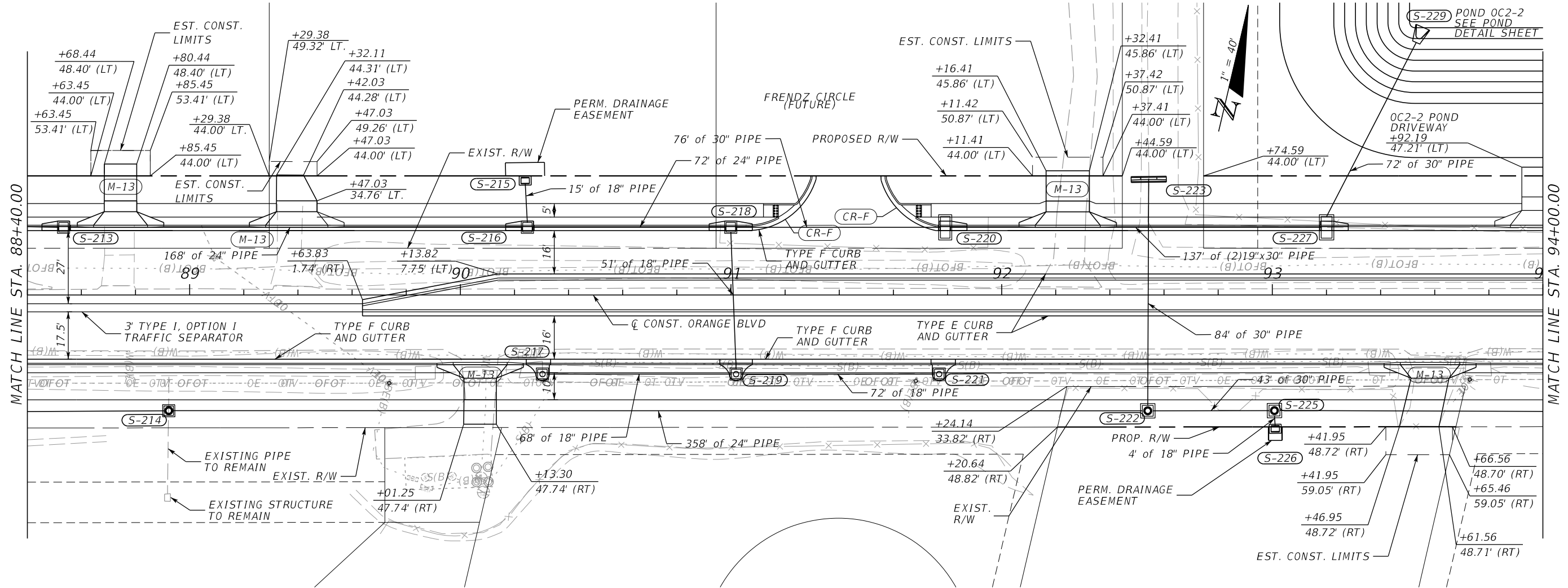
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
10/10/2022 3:47:23 PM Default	49

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



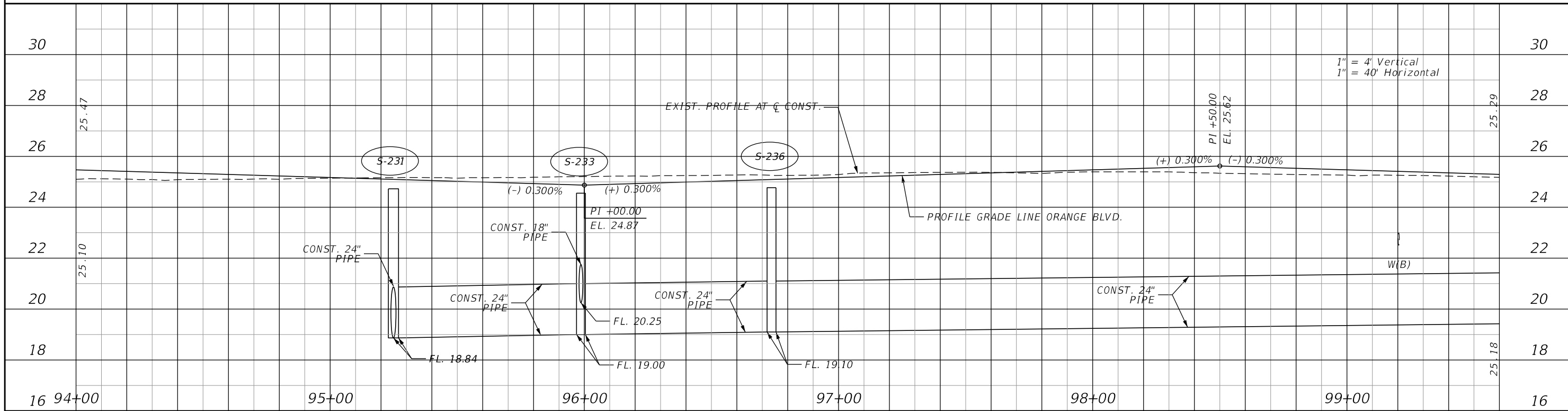
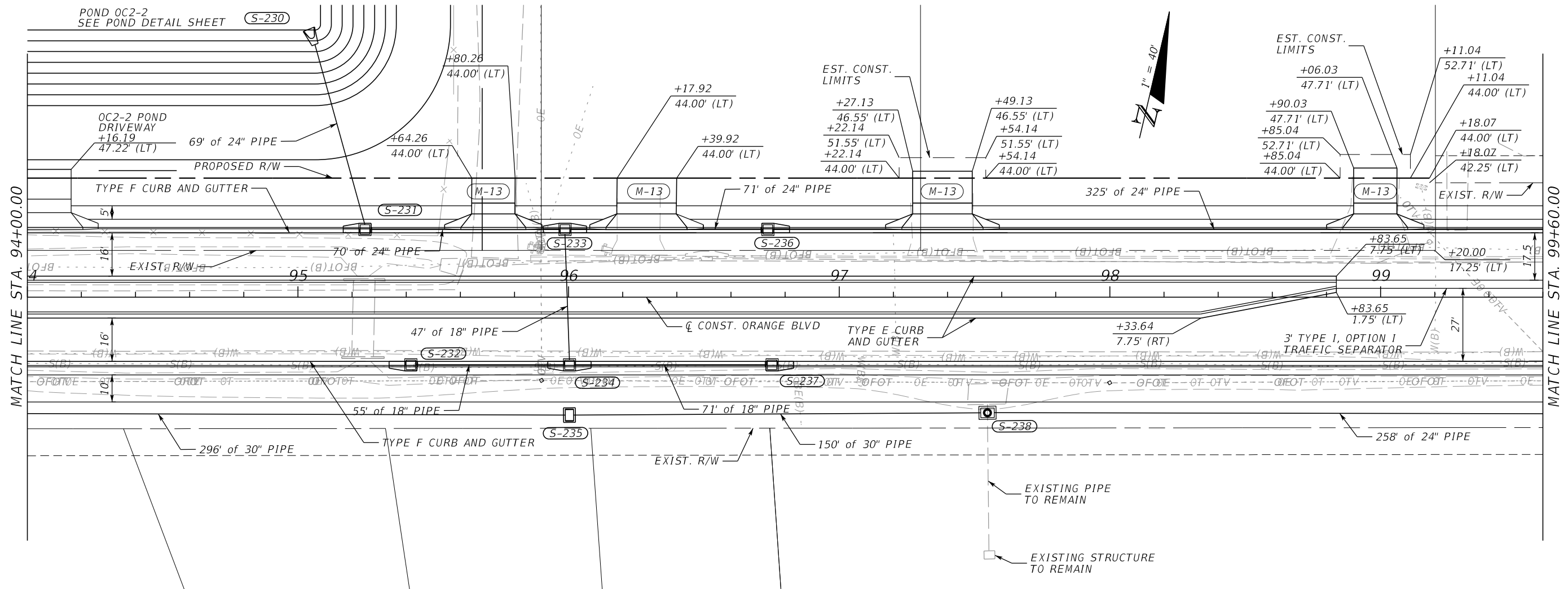
REVISIONS	
DATE	DESCRIPTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

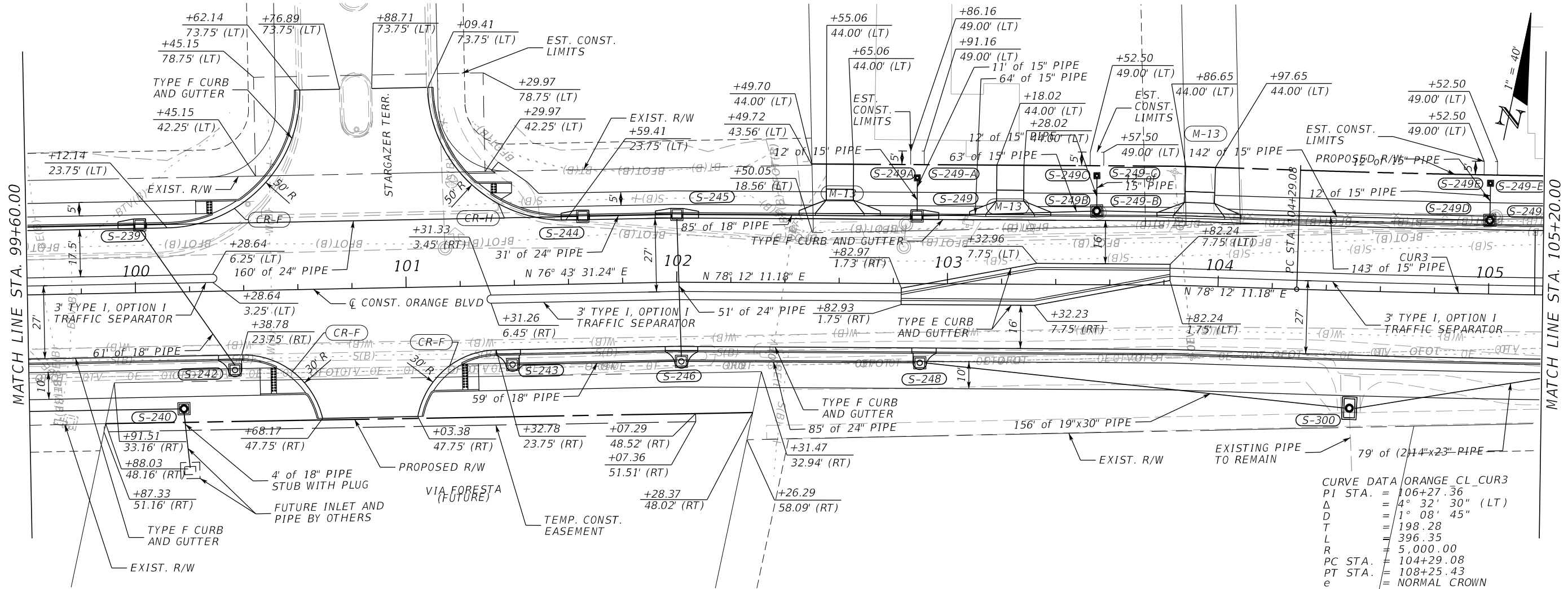
ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	50

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

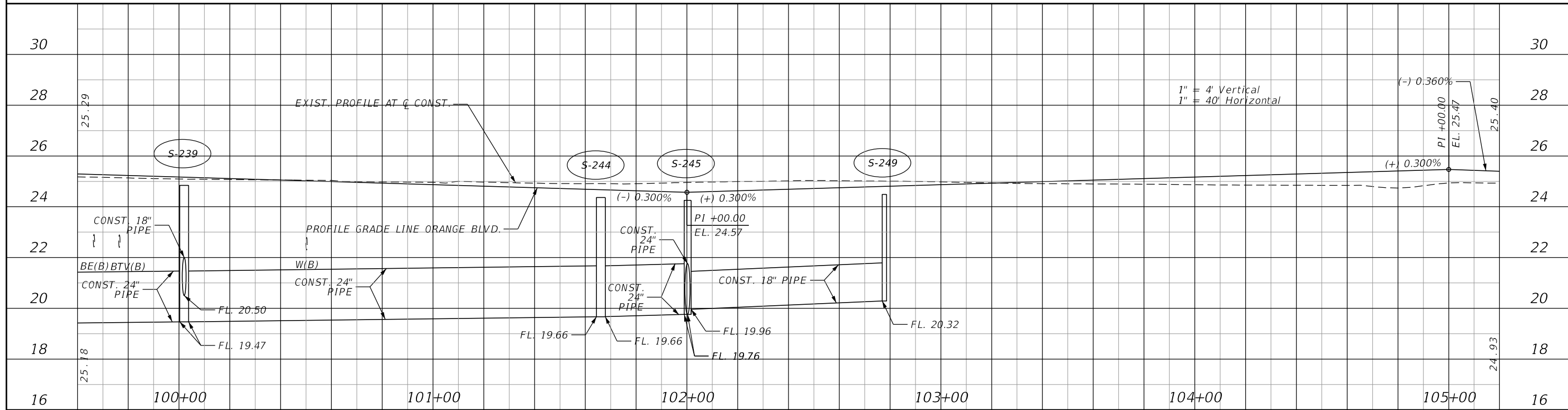


REVISIONS		DESCRIPTION		DATE	DESCRIPTION	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION								51
					CR 431	SEMINOLE	01785303		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR3
 PI STA. = 106+27.36
 Δ = 4° 32' 30" (LT)
 D = 1° 08' 45"
 T = 198.28
 L = 396.35
 R = 5,000.00
 PC STA. = 104+29.08
 PT STA. = 108+25.43
 e = NORMAL CROWN

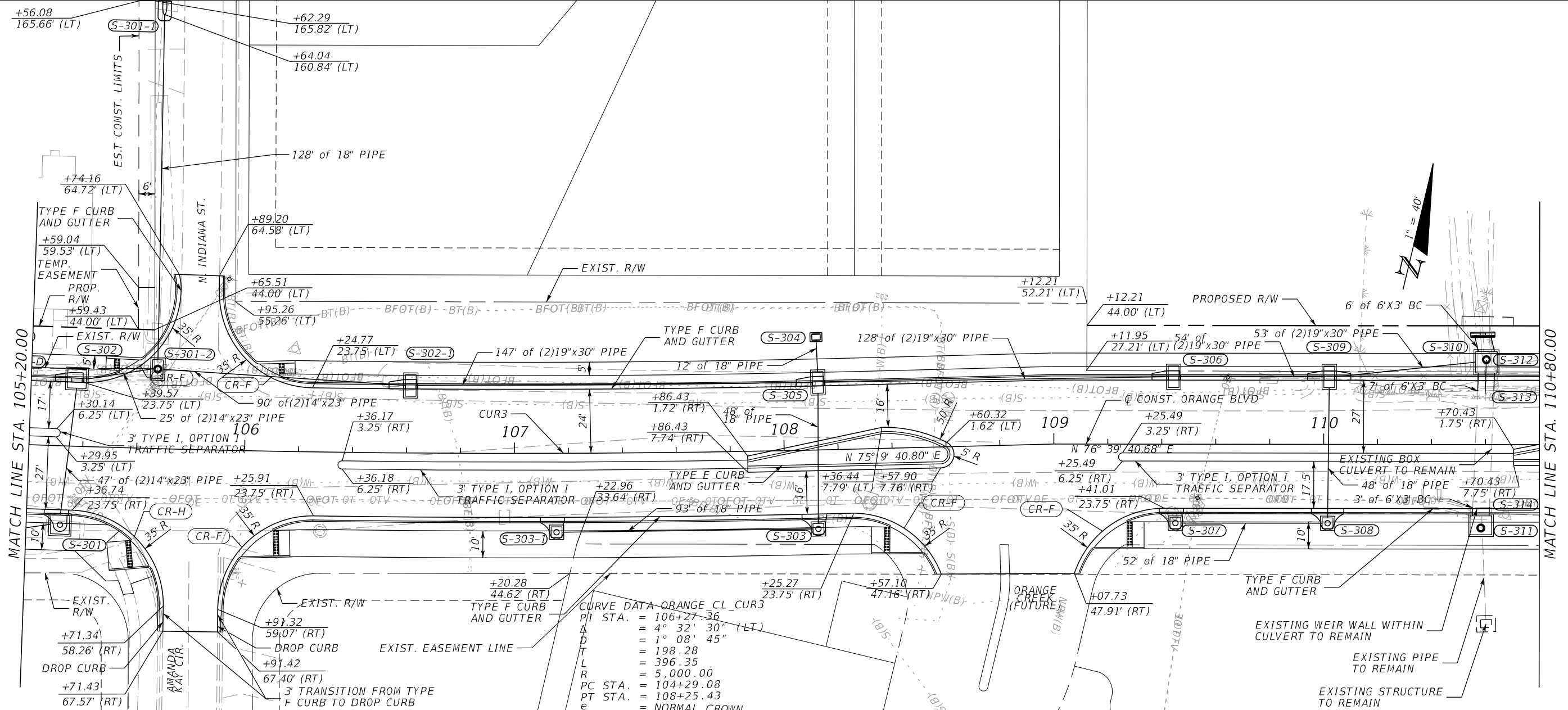


REVISIONS	
DATE	DESCRIPTION

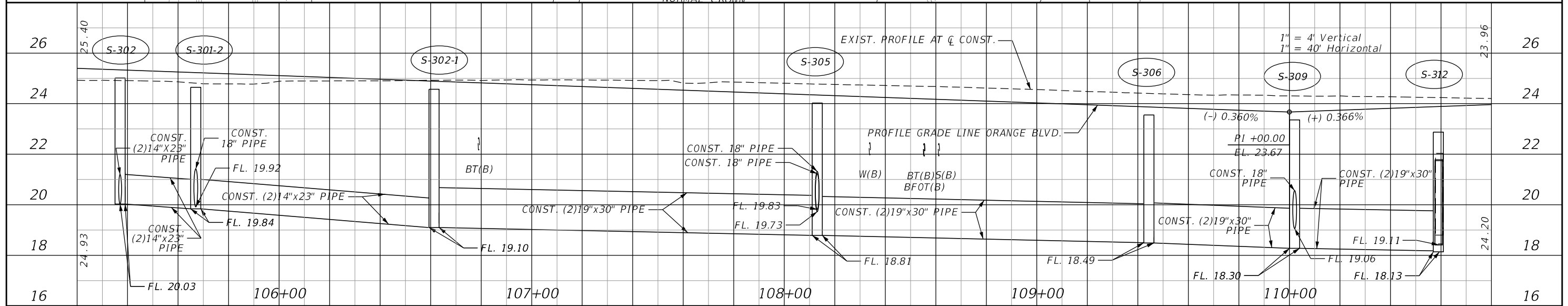
JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	52



CURVE DATA - ORANGE CL_CUR3
 PI STA. = 106+27.36
 Δ = 4° 32' 30" (LT)
 D = 1° 08' 45"
 T = 198.28
 L = 396.35
 R = 5,000.00
 PC STA. = 104+29.08
 PT STA. = 108+25.43
 e = NORMAL CROWN



REVISIONS	
DATE	DESCRIPTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

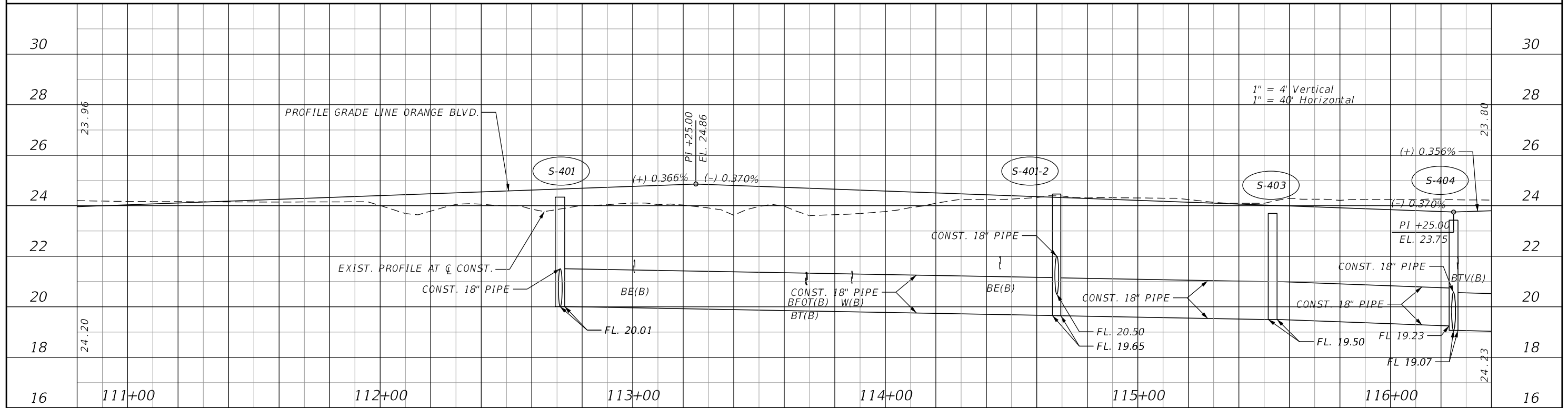
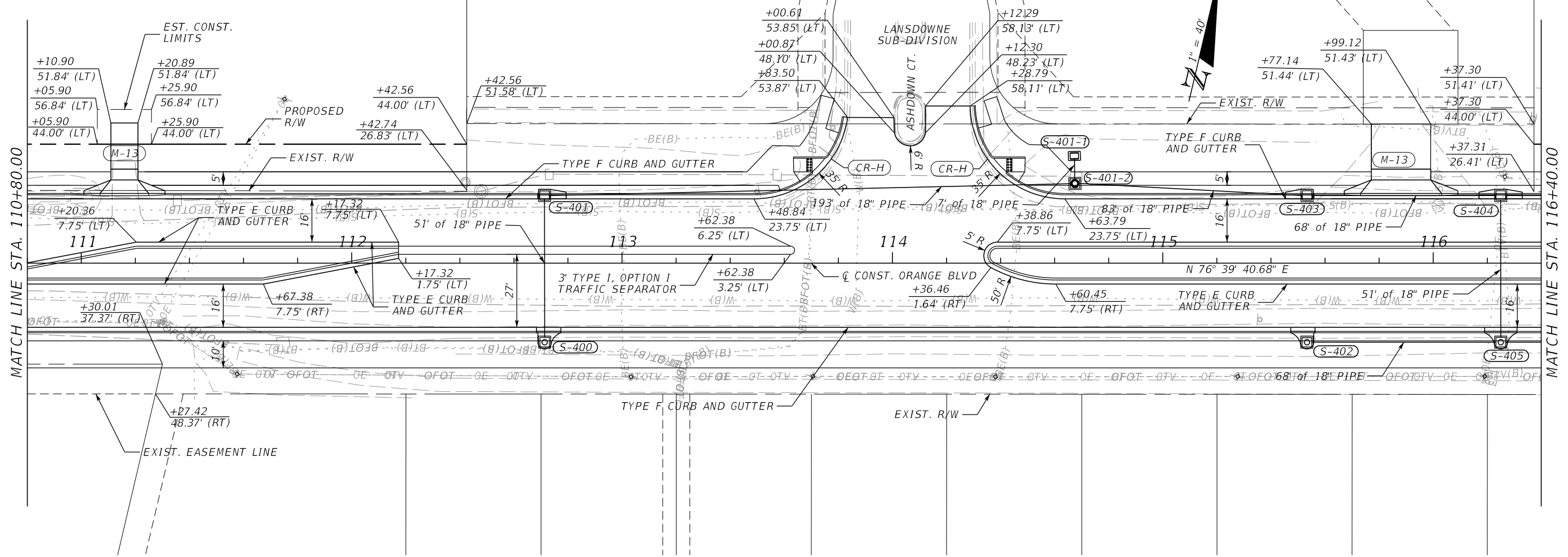
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	53

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 110+80.00

MATCH LINE STA. 116+40.00



1" = 4' Vertical
1" = 40' Horizontal

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

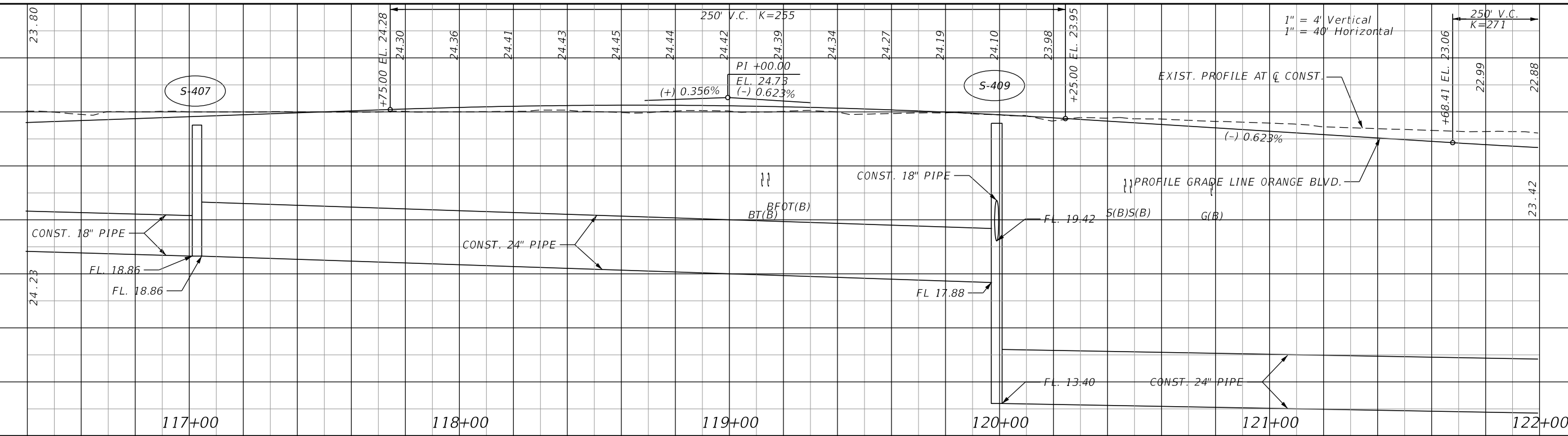
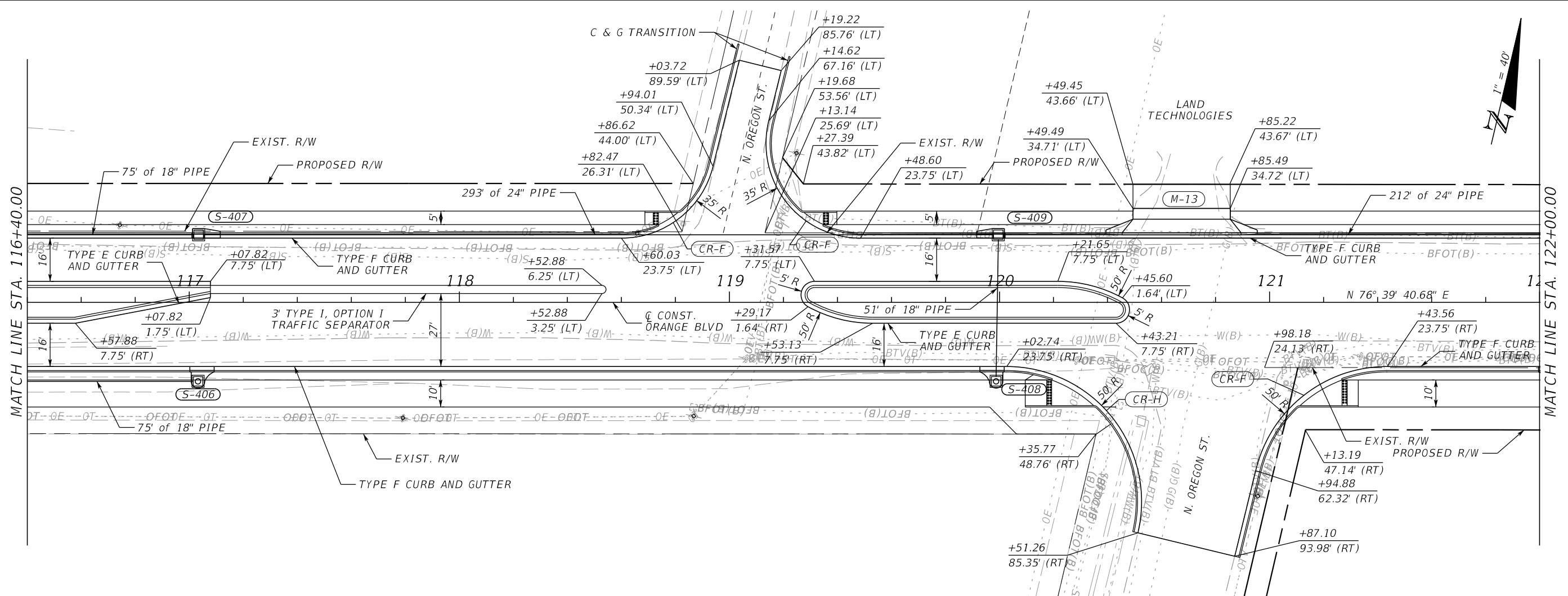
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		54

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 116+40.00

MATCH LINE STA. 122+00.00



REVISIONS		DESCRIPTION		DATE	DESCRIPTION	DATE	DESCRIPTION	SEMINOLE COUNTY CIP	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION						
	PRELIMINARY NOT FOR CONSTRUCTION							01785303	55

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS
 ROAD NO. CR 431
 COUNTY SEMINOLE
 SEMINOLE COUNTY CIP 01785303

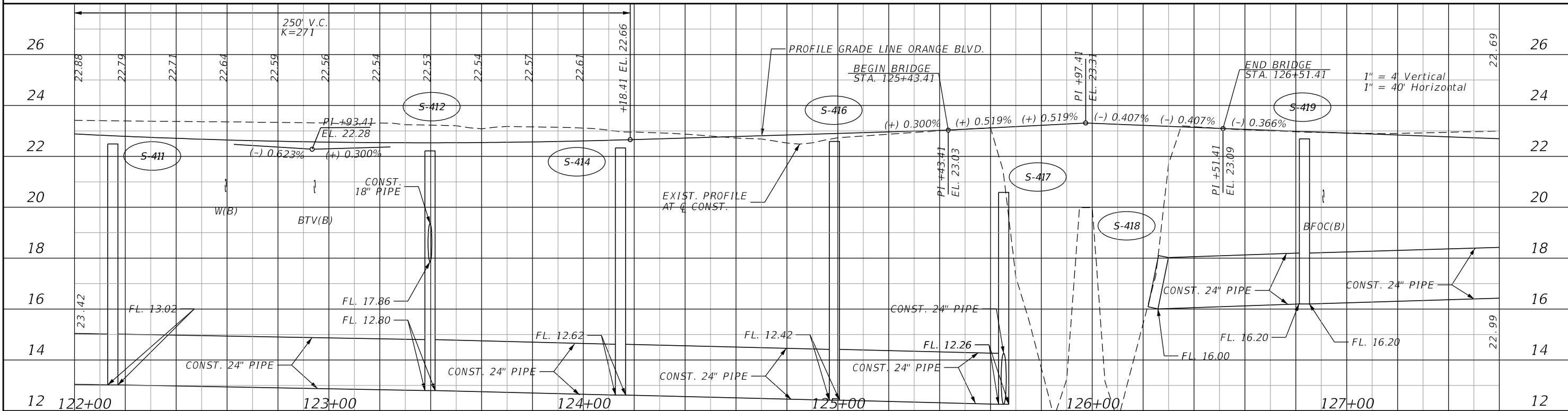
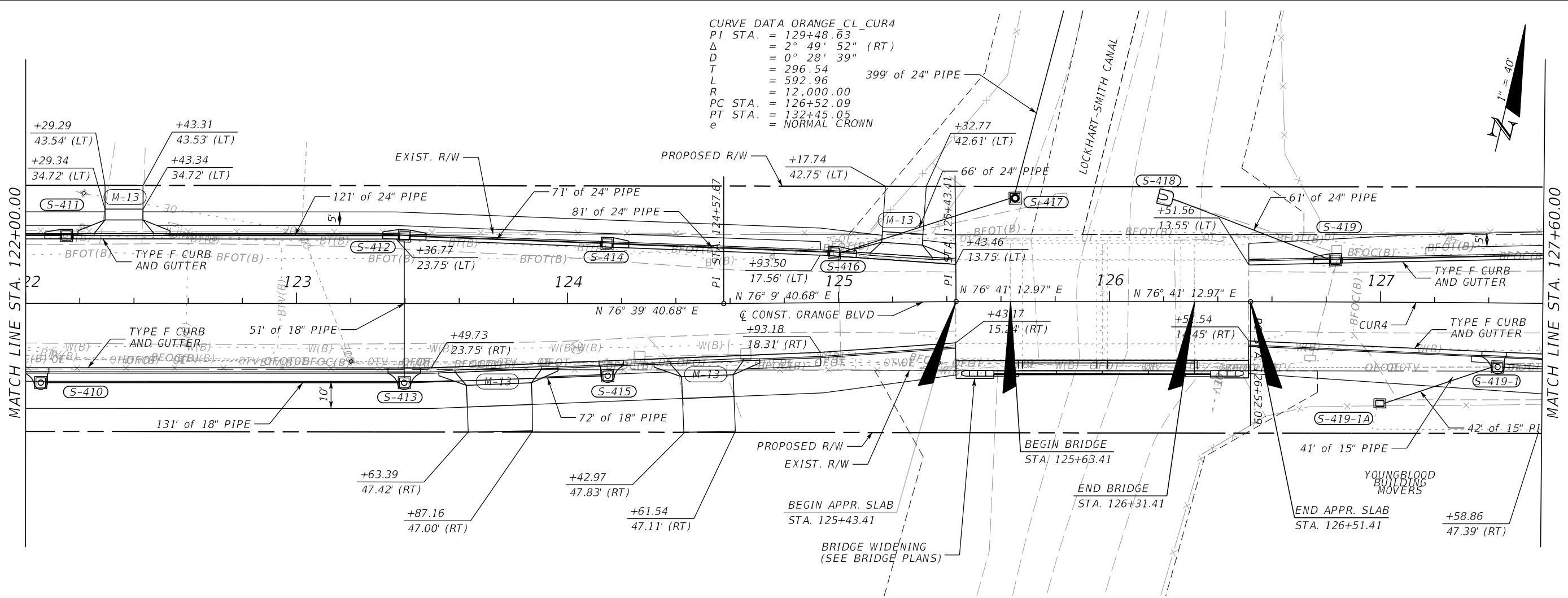
ROADWAY PLAN & PROFILE

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

CURVE DATA ORANGE_CL_CUR4
 PI STA. = 129+48.63
 Δ = 2° 49' 52" (RT)
 D = 0° 28' 39"
 T = 296.54
 L = 592.96
 R = 12,000.00
 PC STA. = 126+52.09
 PT STA. = 132+45.05
 e = NORMAL CROWN

MATCH LINE STA. 122+00.00

MATCH LINE STA. 127+60.00



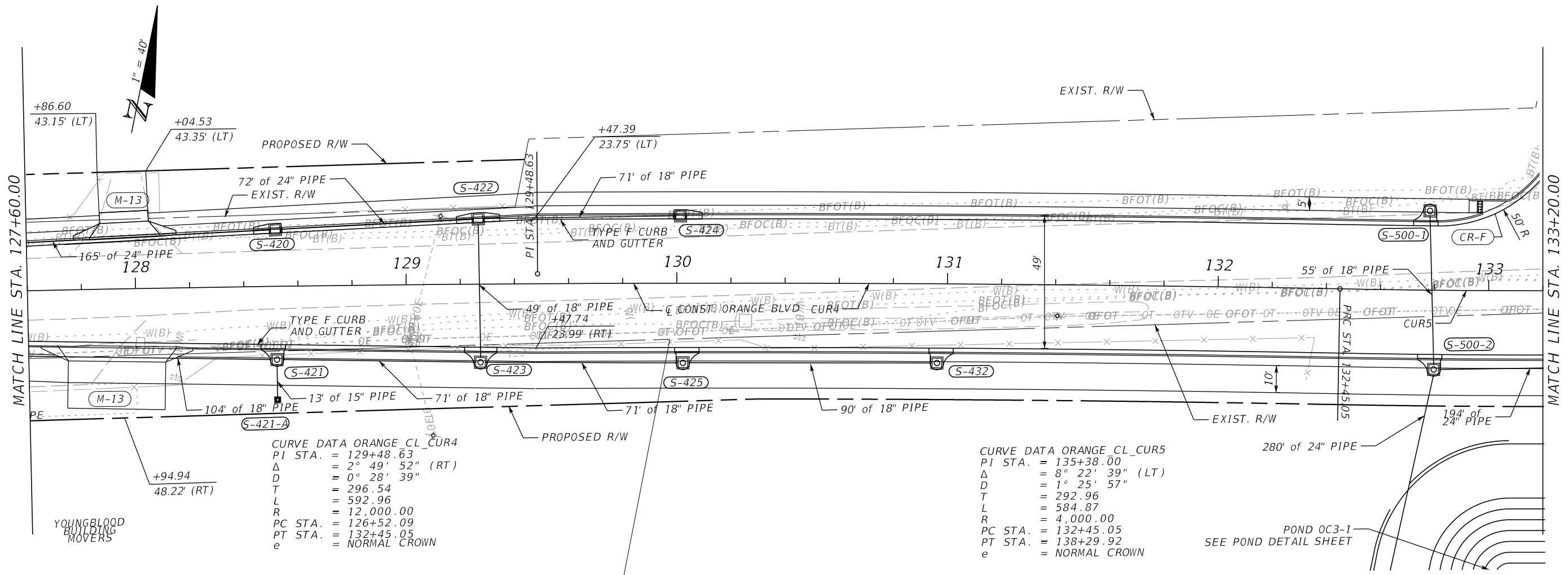
REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

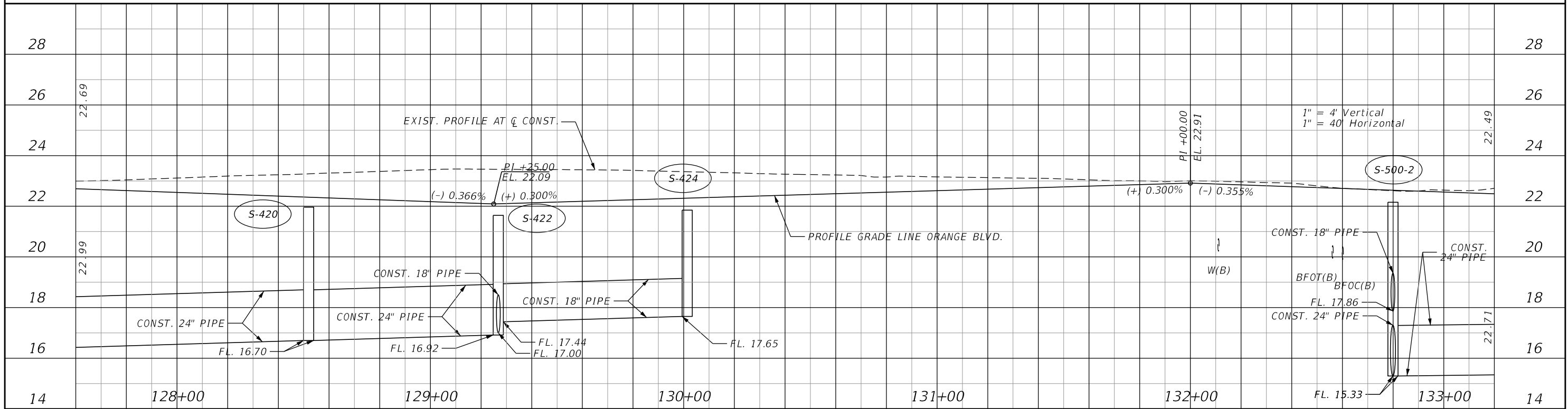
ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	56

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR4
 PI STA. = 129+48.63
 Δ = 2° 49' 52" (RT)
 D = 0° 28' 39"
 T = 296.54
 L = 592.96
 R = 12,000.00
 PC STA. = 126+52.09
 PT STA. = 132+45.05
 e = NORMAL CROWN

CURVE DATA ORANGE CL_CUR5
 PI STA. = 135+38.00
 Δ = 8° 22' 39" (LT)
 D = 1° 25' 57"
 T = 292.96
 L = 584.87
 R = 4,000.00
 PC STA. = 132+45.05
 PT STA. = 138+29.92
 e = NORMAL CROWN



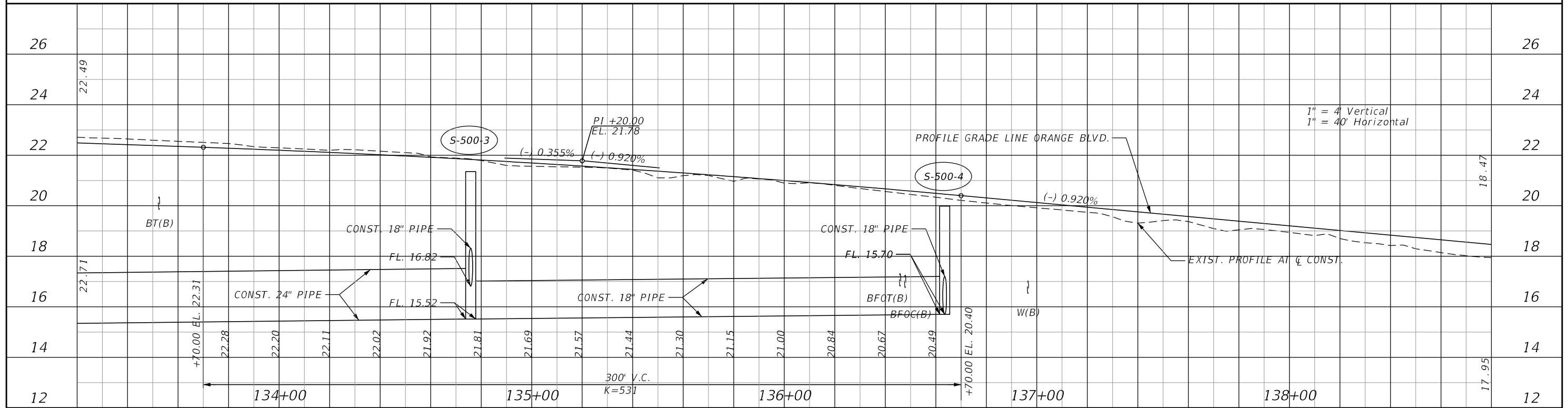
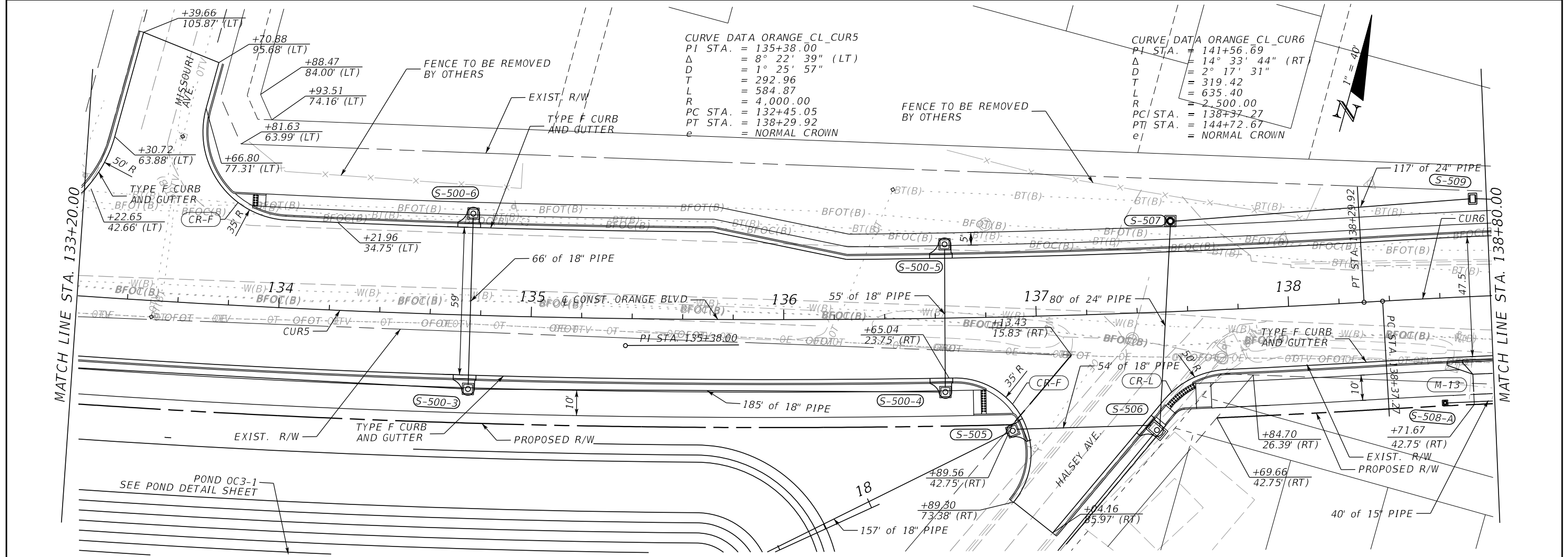
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		57

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS	
DATE	DESCRIPTION

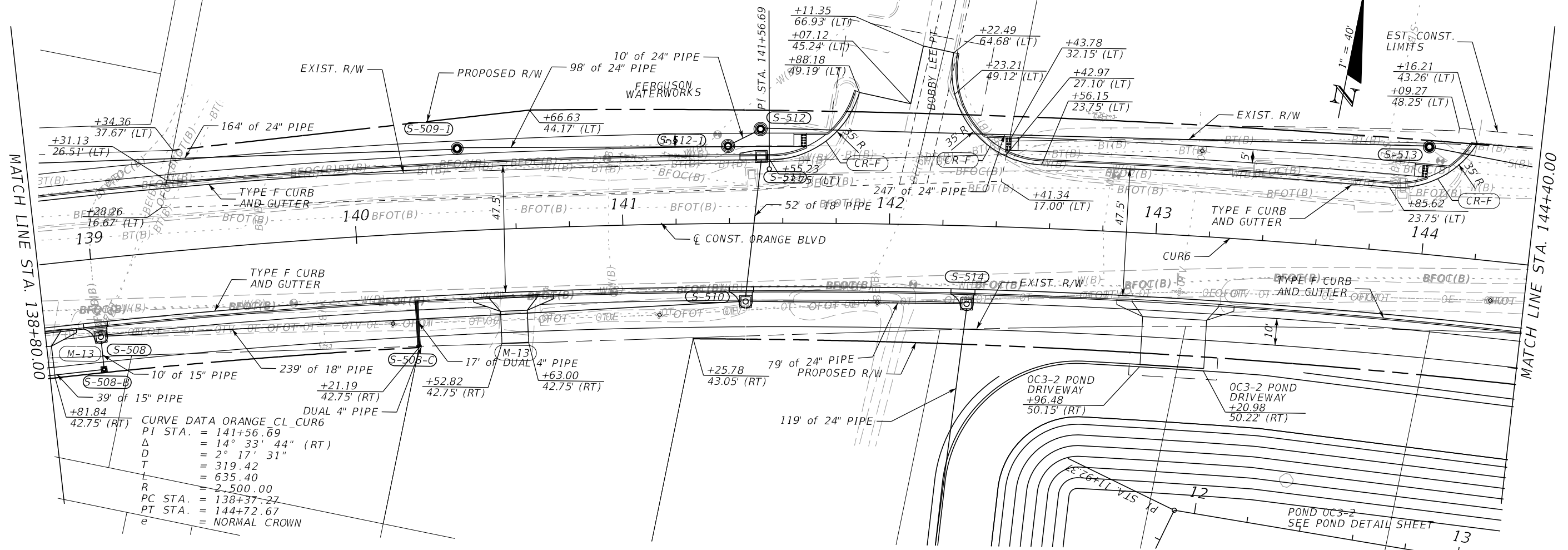
JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

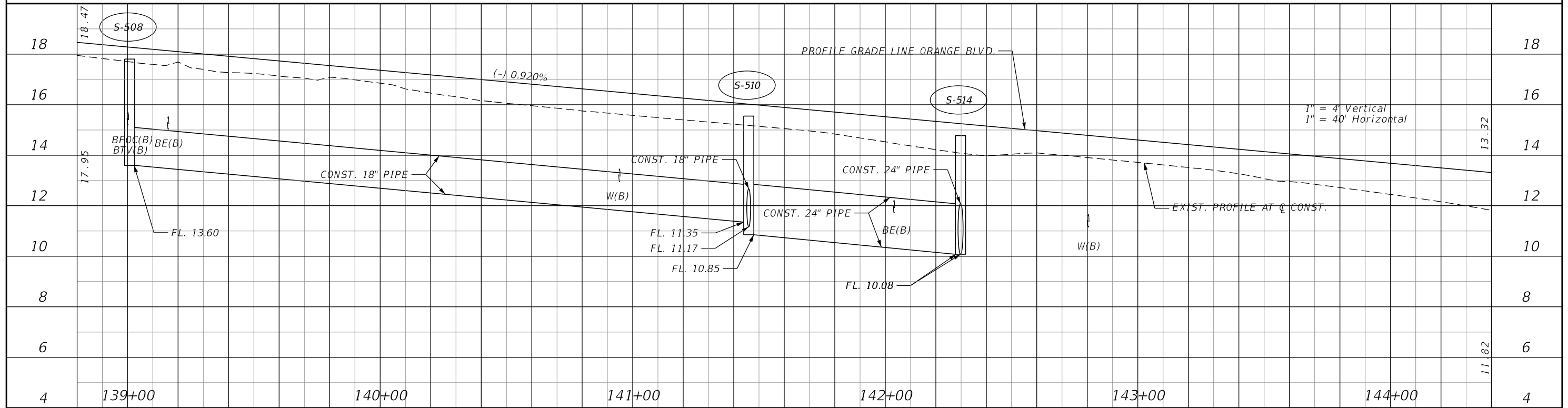
ROADWAY PLAN & PROFILE

SHEET NO. 58

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR6
 PI STA. = 141+56.69
 Δ = 14° 33' 44" (RT)
 D = 2° 17' 31"
 T = 319.42
 L = 635.40
 R = 2,500.00
 PC STA. = 138+37.27
 PT STA. = 144+72.67
 e = NORMAL CROWN



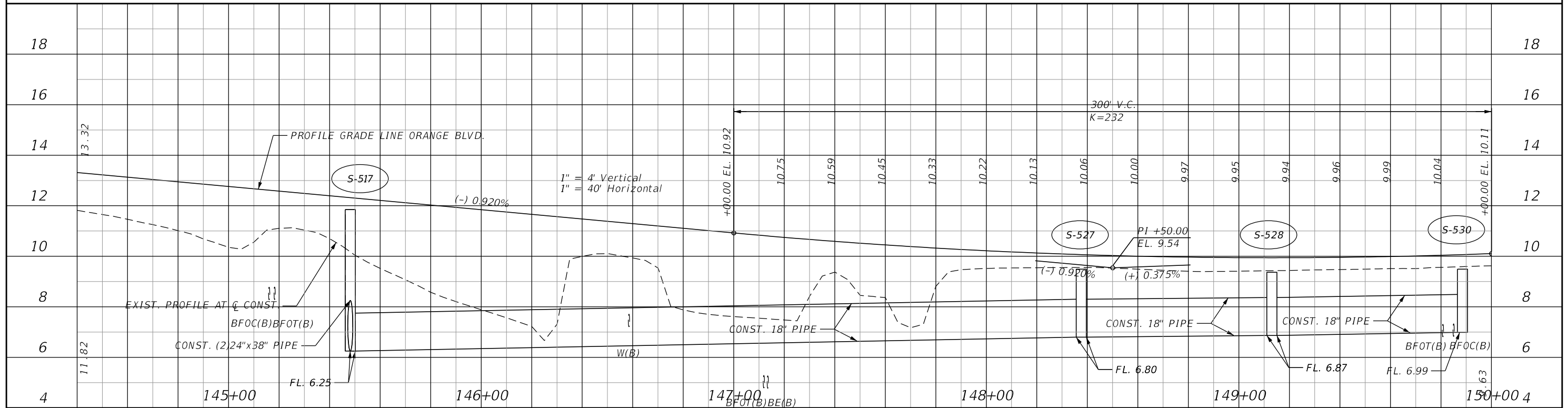
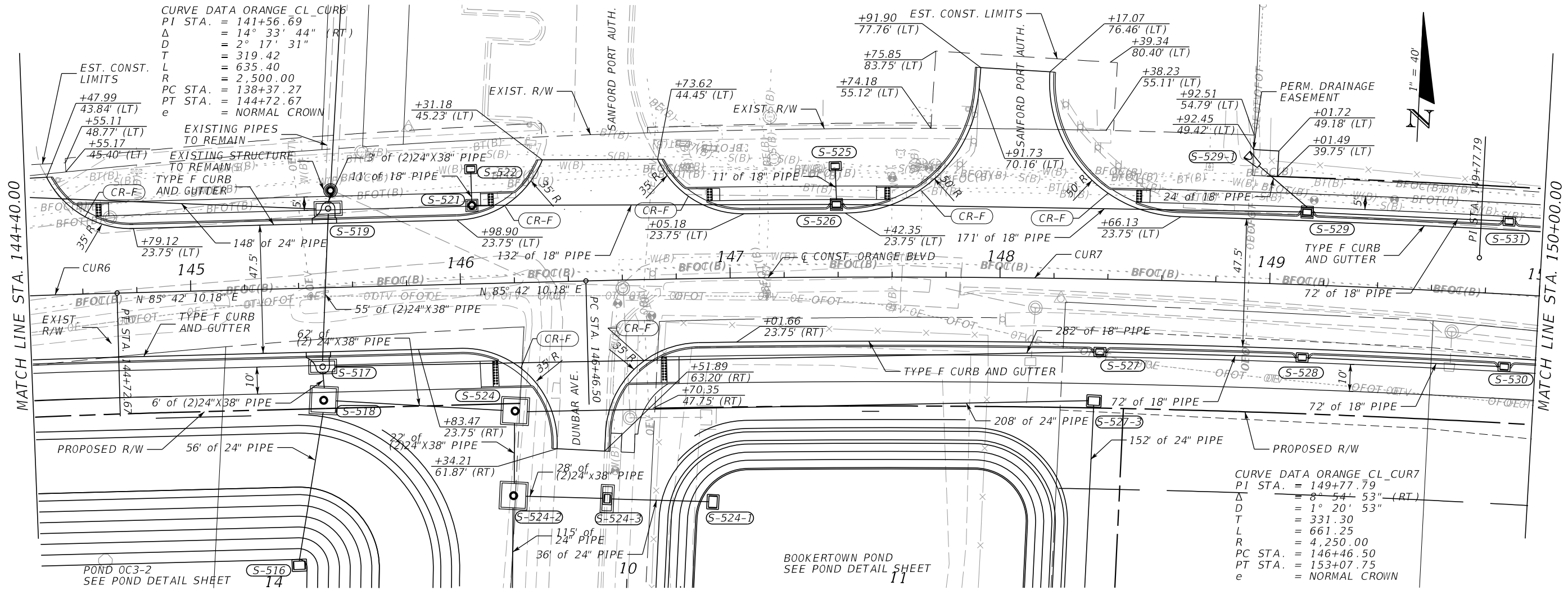
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		59

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



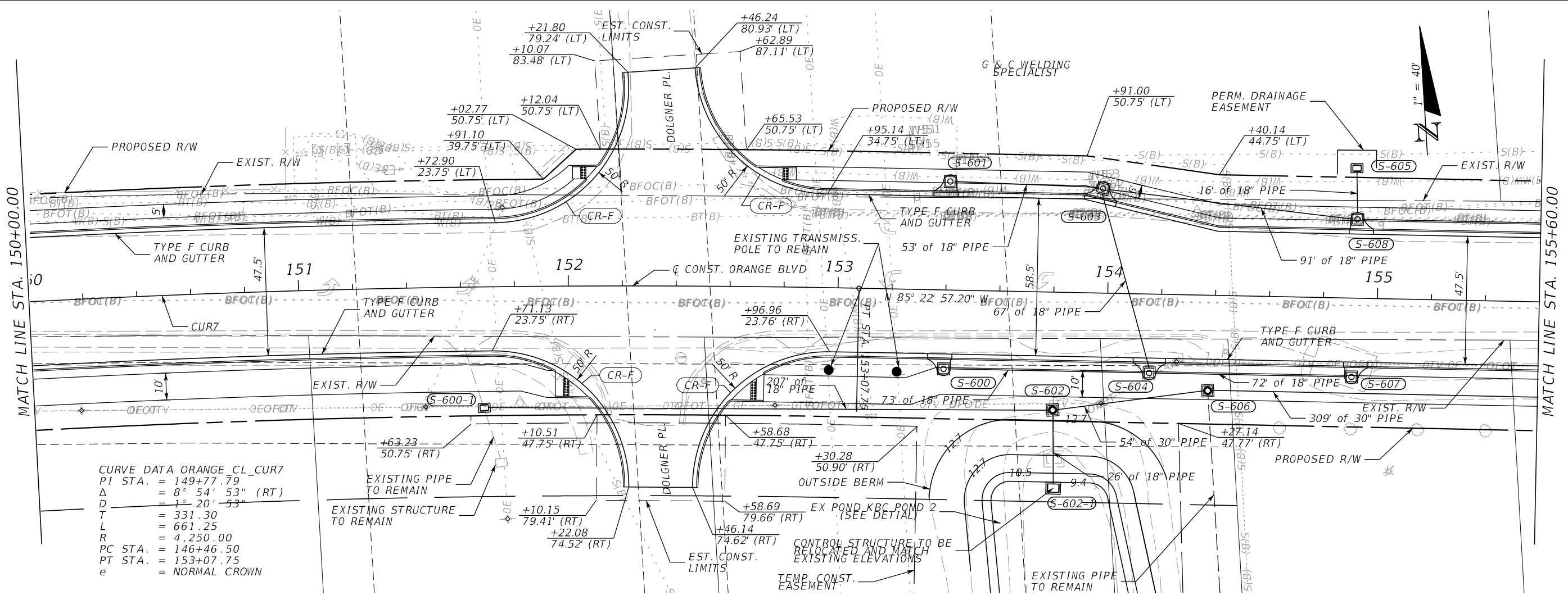
REVISIONS	
DATE	DESCRIPTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

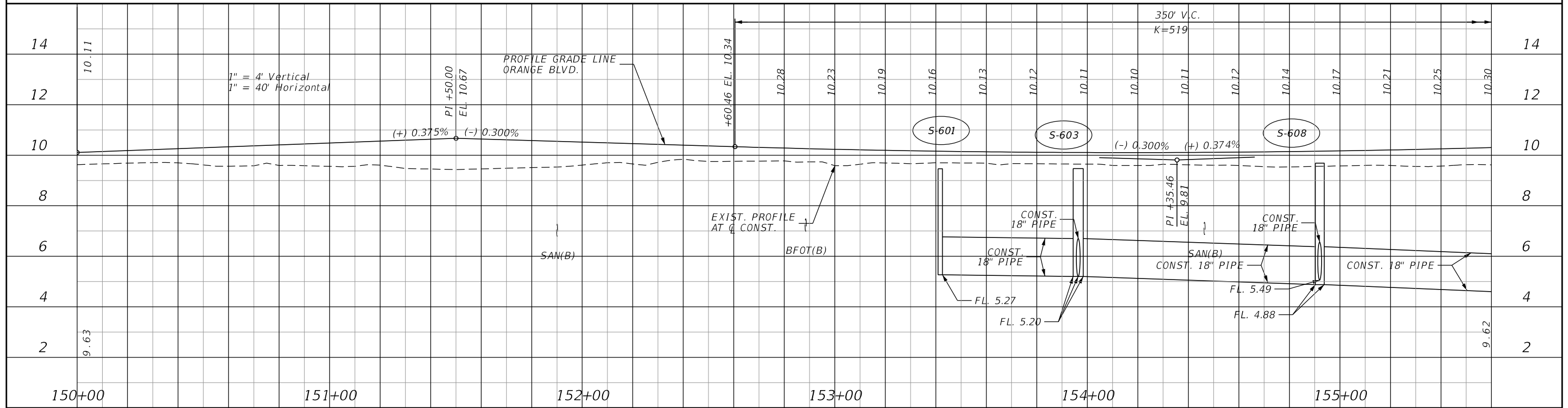
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE	
DATE	SHEET NO.
	60

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



CURVE DATA ORANGE CL_CUR7
 PI STA. = 149+77.79
 Δ = 8° 54' 53" (RT)
 D = 1° 20' 53"
 T = 331.30
 L = 661.25
 R = 4,250.00
 PC STA. = 146+46.50
 PT STA. = 153+07.75
 e = NORMAL CROWN



REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

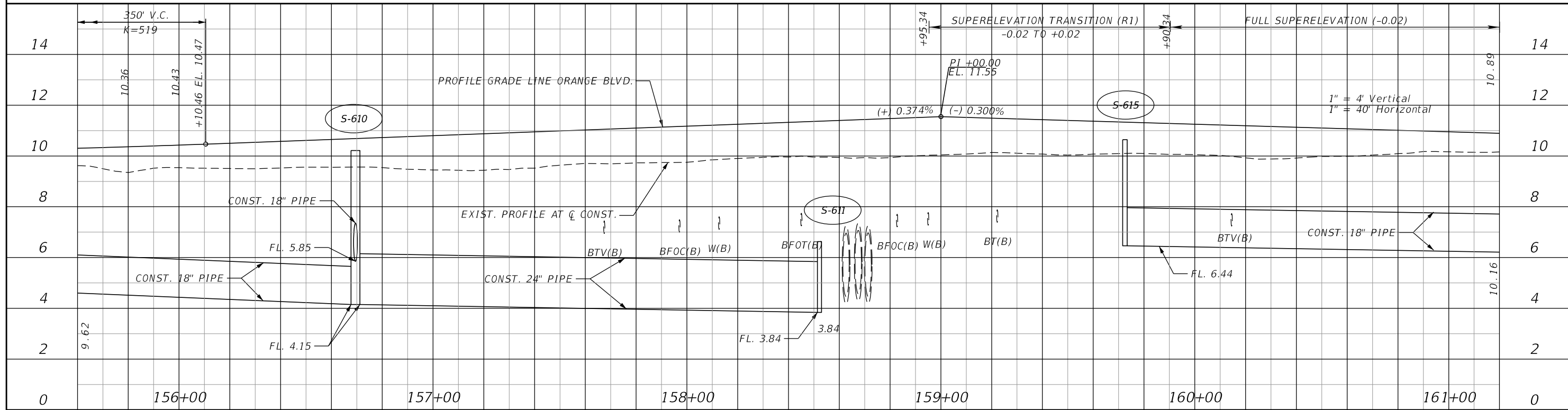
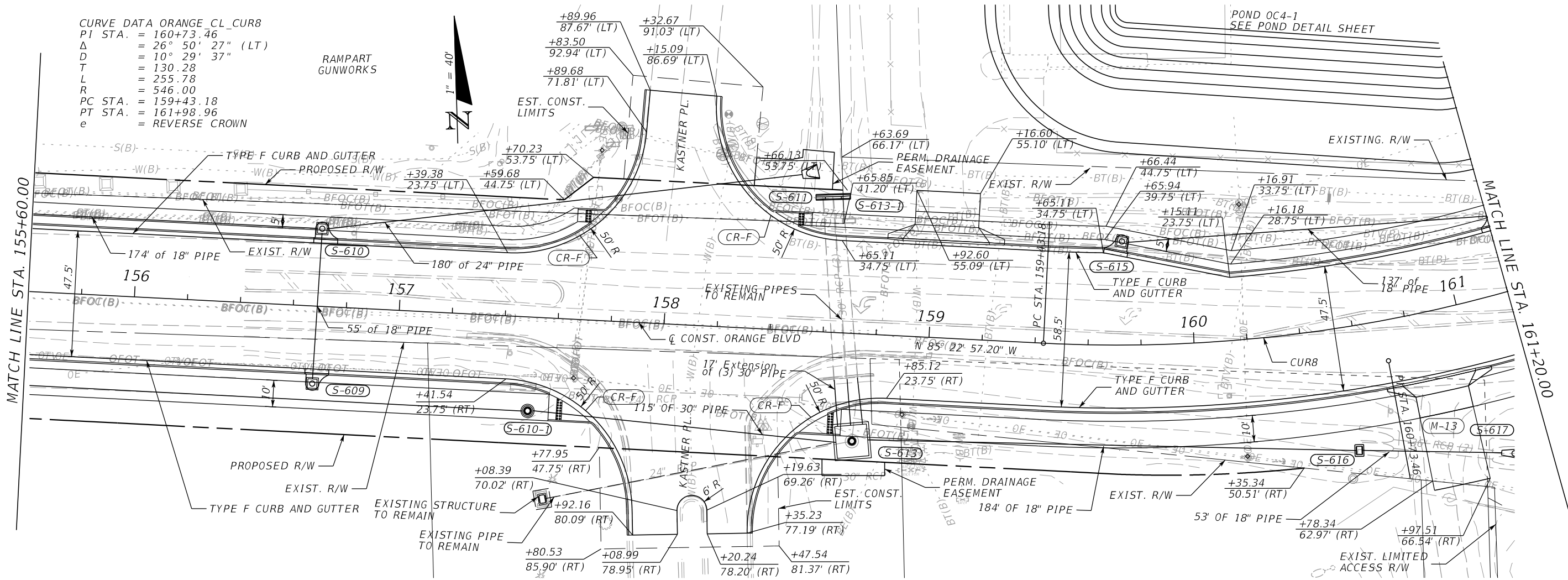
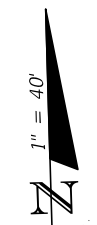
ROADWAY PLAN & PROFILE

SHEET NO.
61

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

CURVE DATA ORANGE_CL_CURB
 PI STA. = 160+73.46
 Δ = 26° 50' 27" (LT)
 D = 10° 29' 37"
 T = 130.28
 L = 255.78
 R = 546.00
 PC STA. = 159+43.18
 PT STA. = 161+98.96
 e = REVERSE CROWN

RAMPART
 GUNWORKS



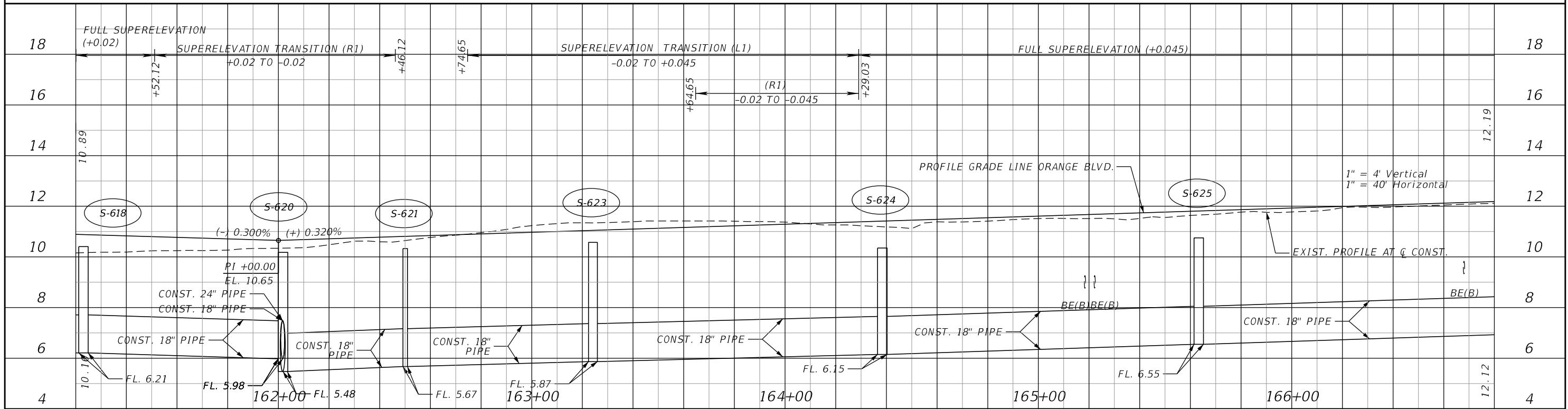
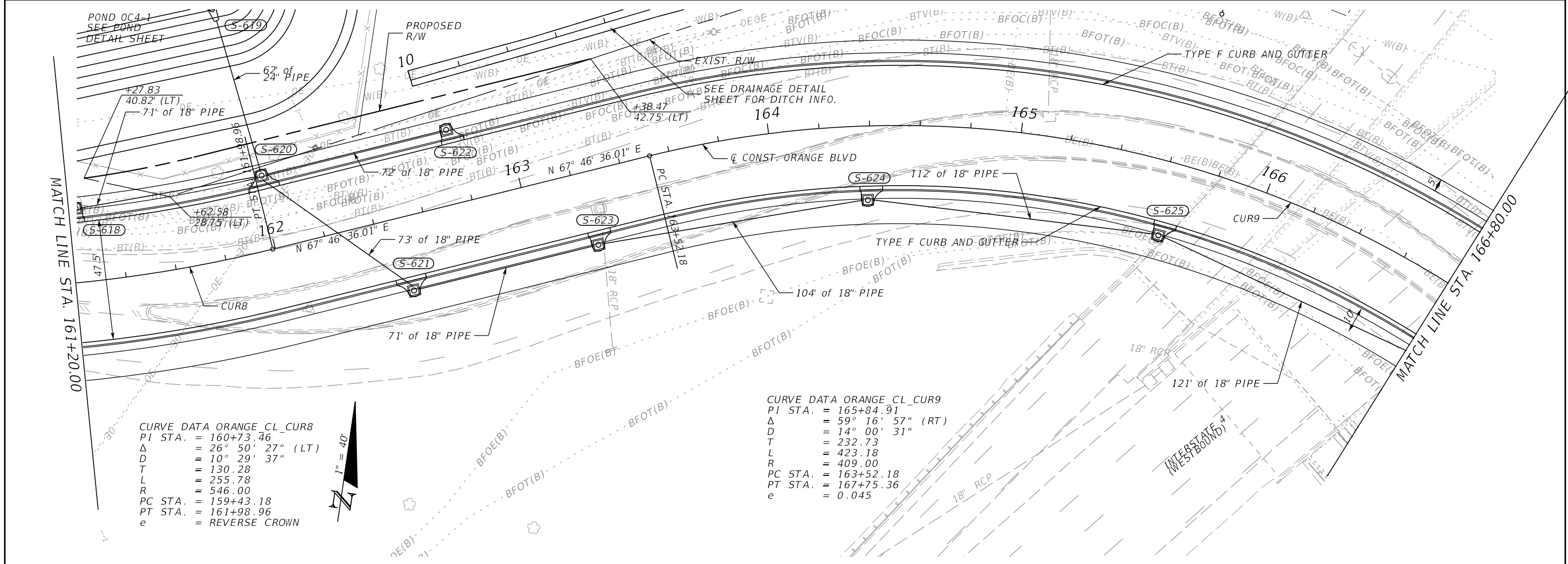
REVISIONS		DATE	DESCRIPTION
DATE	DESCRIPTION	DATE	DESCRIPTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE		SHEET NO.
		62

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



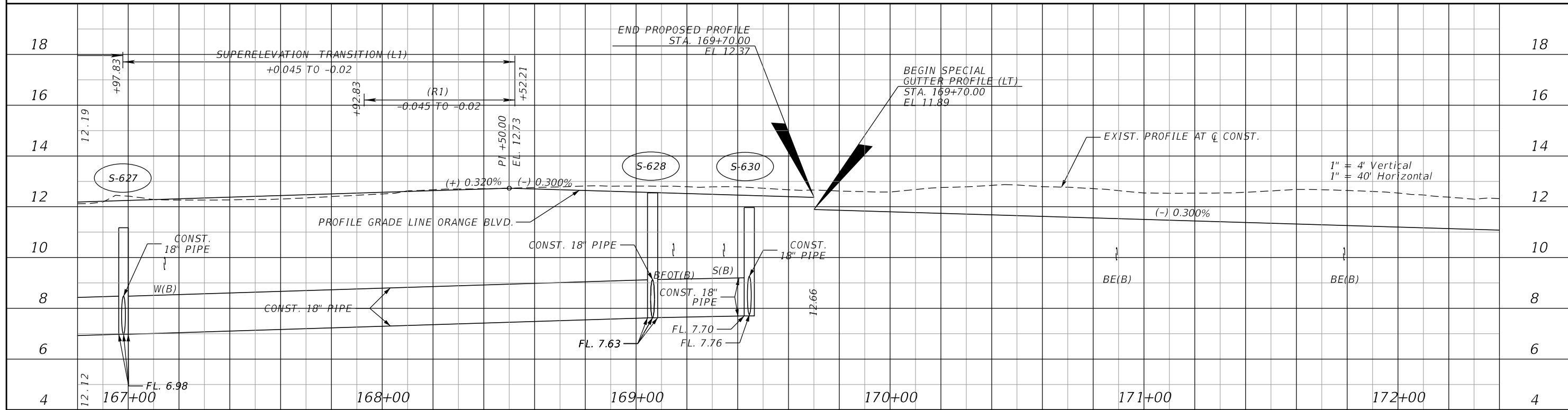
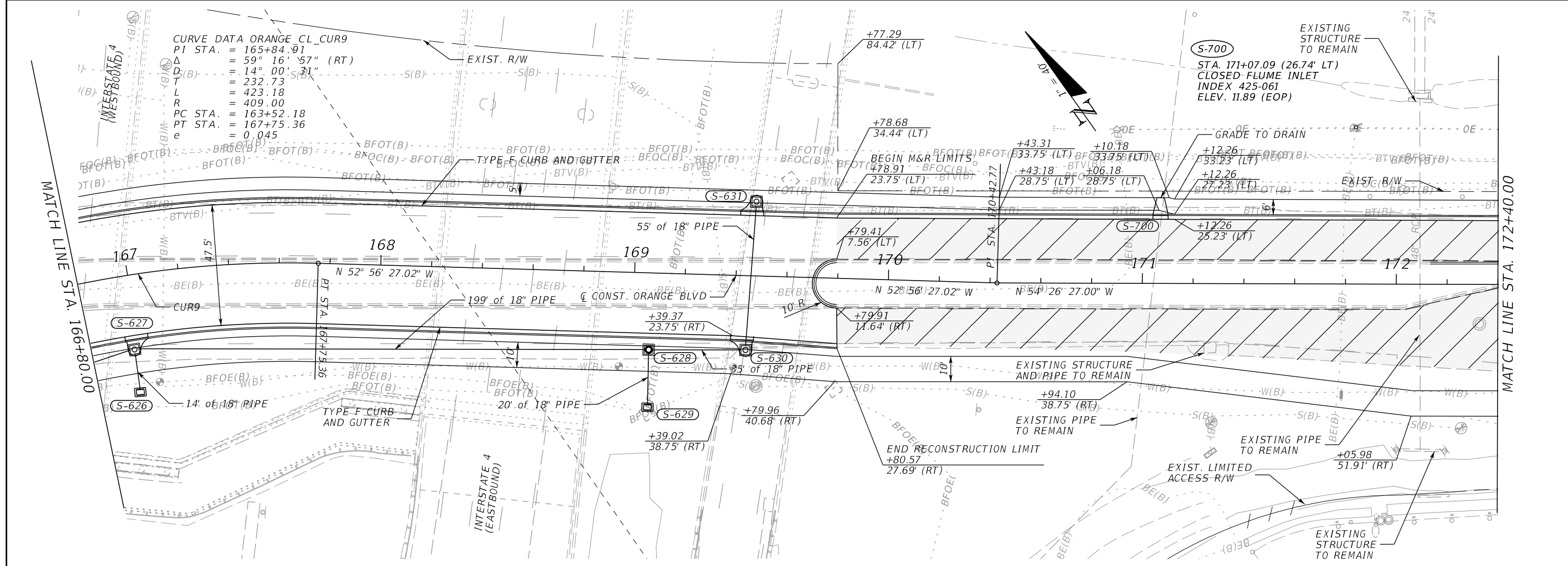
REVISIONS		DESCRIPTION		DATE	DESCRIPTION	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION								63
					CR 431	SEMINOLE	01785303		

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

710/10/2022 3:49:12 PM Default

710/10/2022 3:49:12 PM Default

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

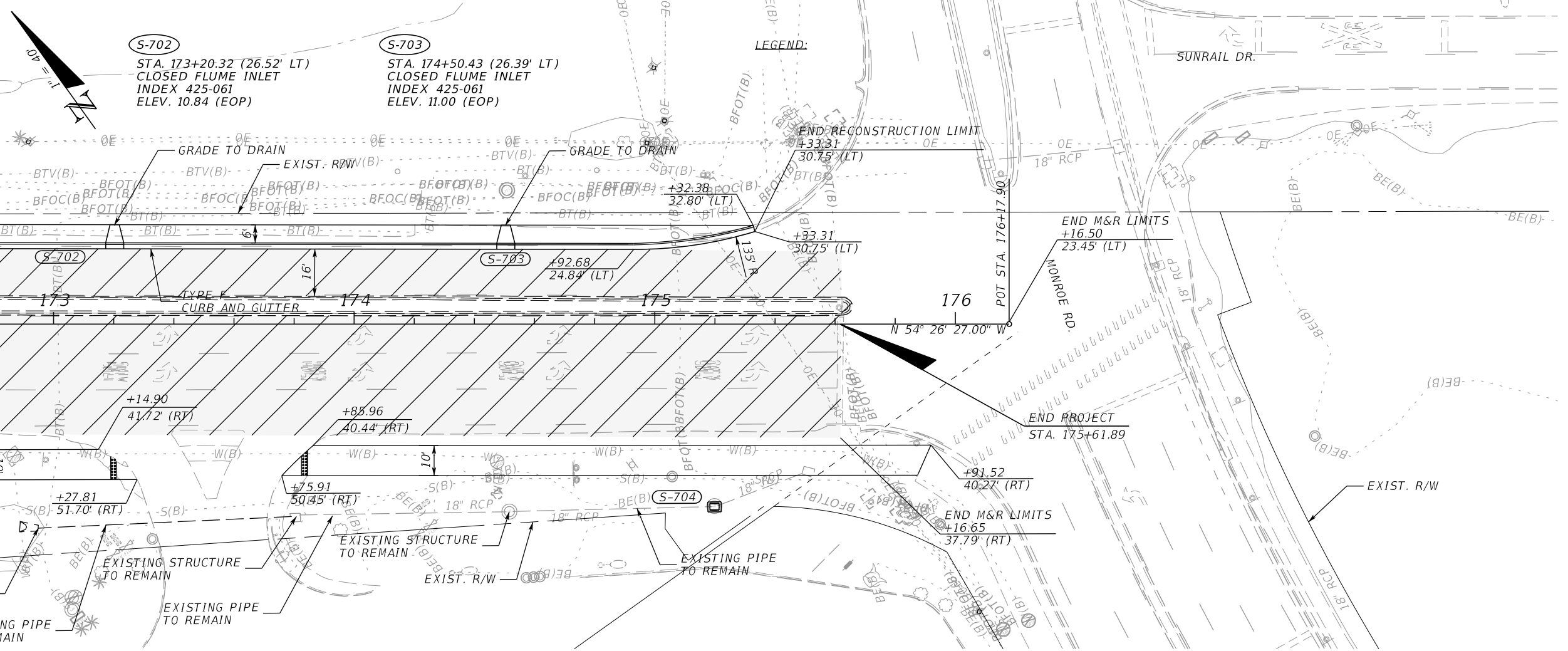


REVISIONS		DATE		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION		

PRELIMINARY NOT FOR CONSTRUCTION		JASON R. FLICK, P.E. P.E. LICENSE NUMBER 74741 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917		SEMINOLE COUNTY PUBLIC WORKS		ROADWAY PLAN & PROFILE	SHEET NO. 64
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP					
CR 431	SEMINOLE	01785303					

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MATCH LINE STA. 172+40.00

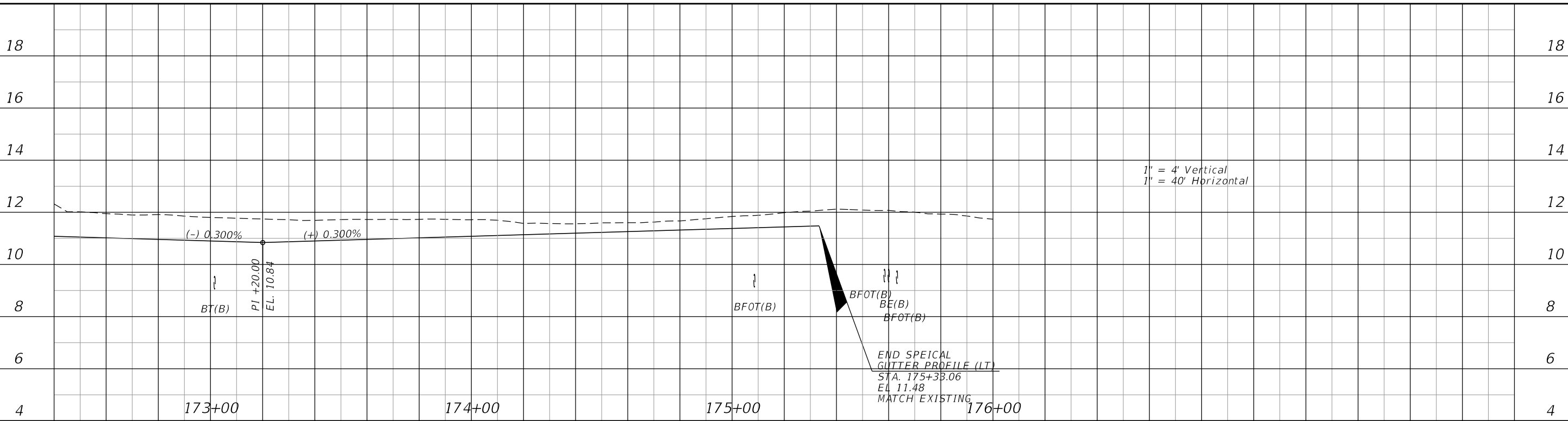


LEGEND:

S-702
 STA. 173+20.32 (26.52' LT)
 CLOSED FLUME INLET
 INDEX 425-061
 ELEV. 10.84 (EOP)

S-703
 STA. 174+50.43 (26.39' LT)
 CLOSED FLUME INLET
 INDEX 425-061
 ELEV. 11.00 (EOP)

1" = 4' Vertical
 1" = 40' Horizontal



REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

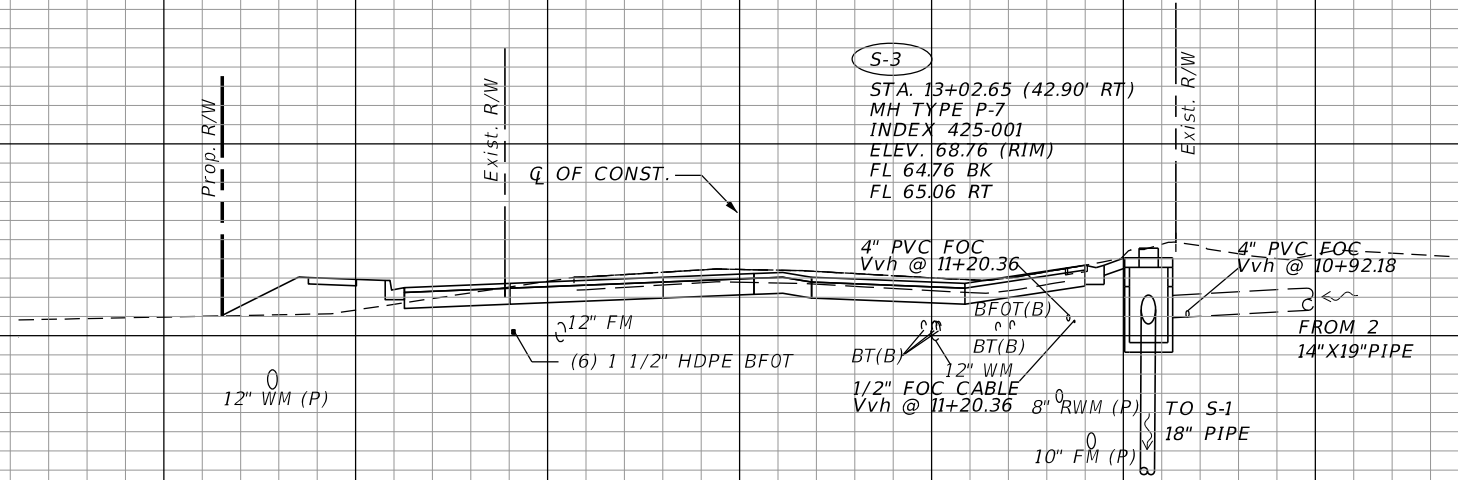
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY PLAN & PROFILE

SHEET NO.
 65

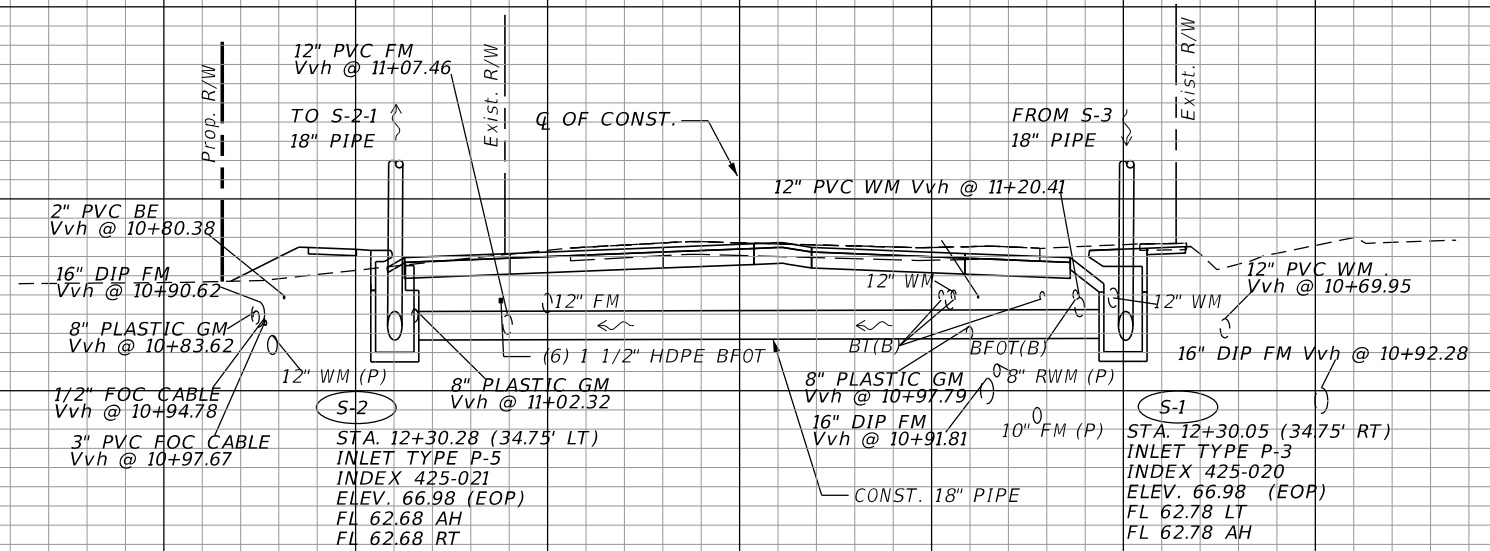
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

80
78
76
74
72
70
68
66
64
62
60
58



S-3
13+02.52

80
78
76
74
72
70
68
66
64
62
60
58
56
54
52



S-2
S-1
12+30.05

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

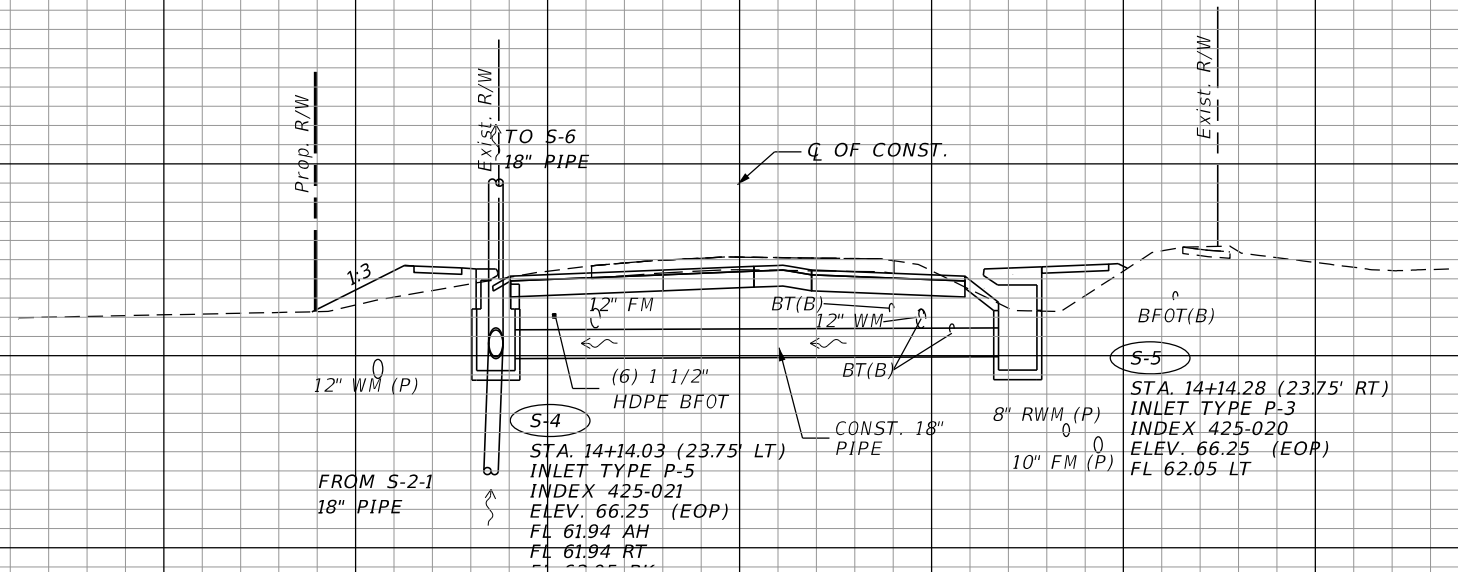
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

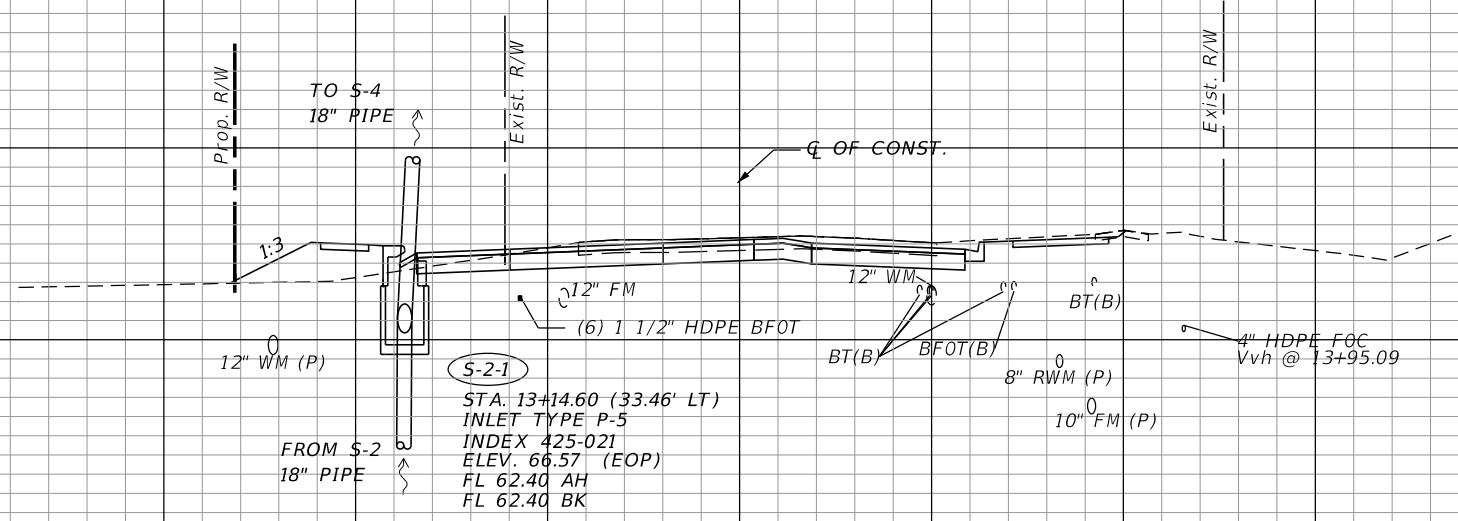
SHEET NO.
66

80
78
76
74
72
70
68
66
64
62
60
58
56
54
52



S-5
S-4
14+14.28

78
76
74
72
70
68
66
64
62
60
58
56
54



S-2-1
13+14.60

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

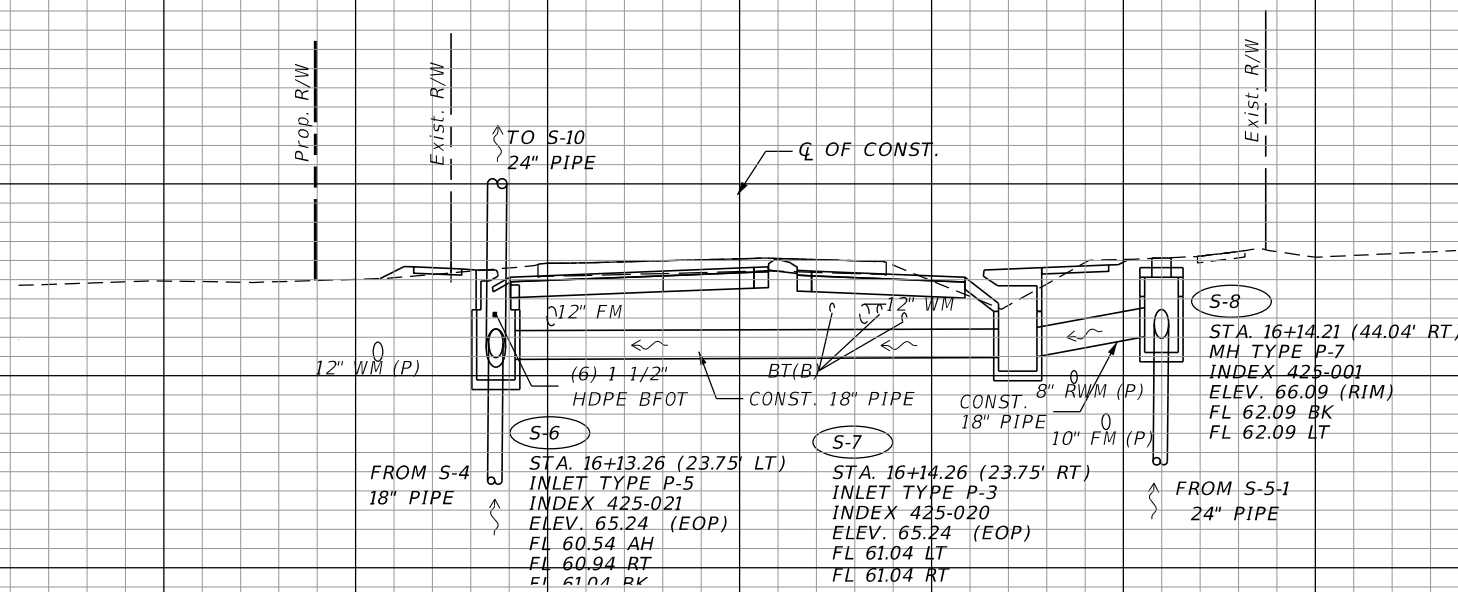
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

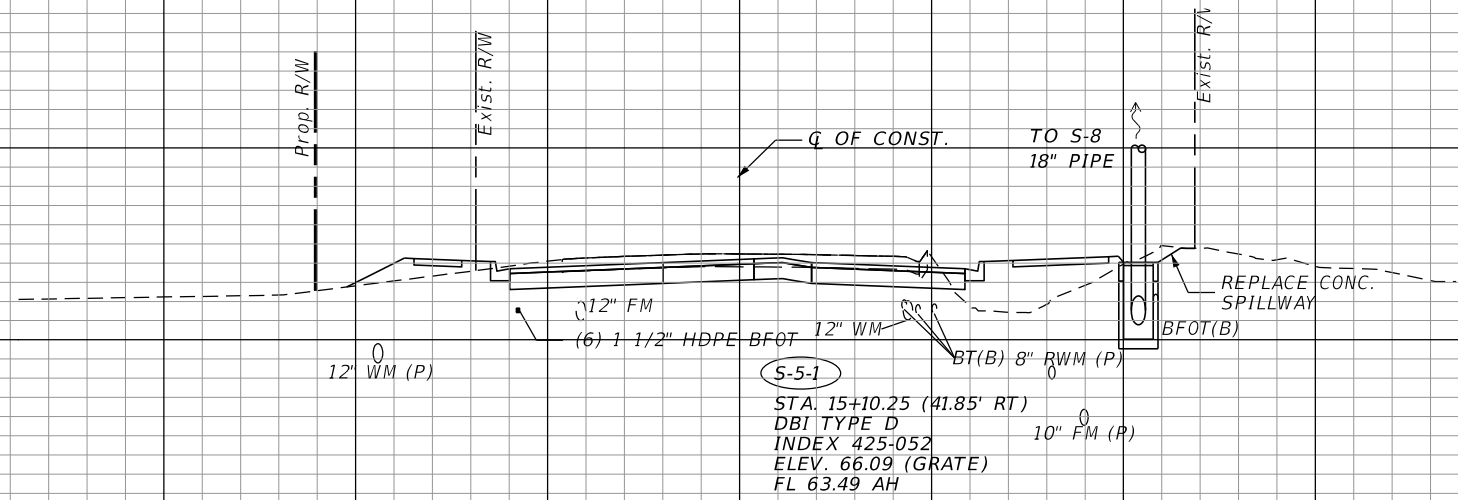
SHEET NO.
67

78
76
74
72
70
68
66
64
62
60
58
56
54
52
50



S-8
S-7
S-6
16+13.76

78
76
74
72
70
68
66
64
62
60
58
56
54



S-5-1
15+10.25

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

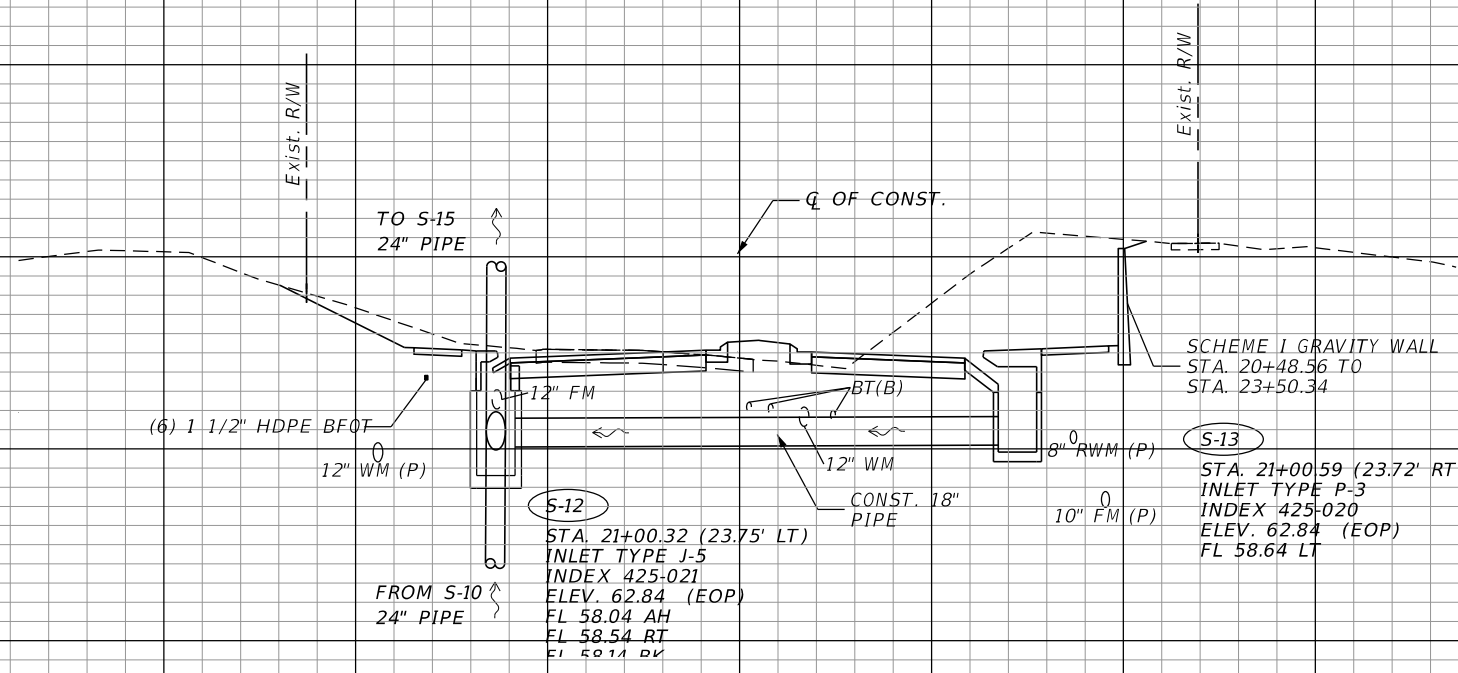
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
68

80
78
76
74
72
70
68
66
64
62
60
58
56
54
52
50
48

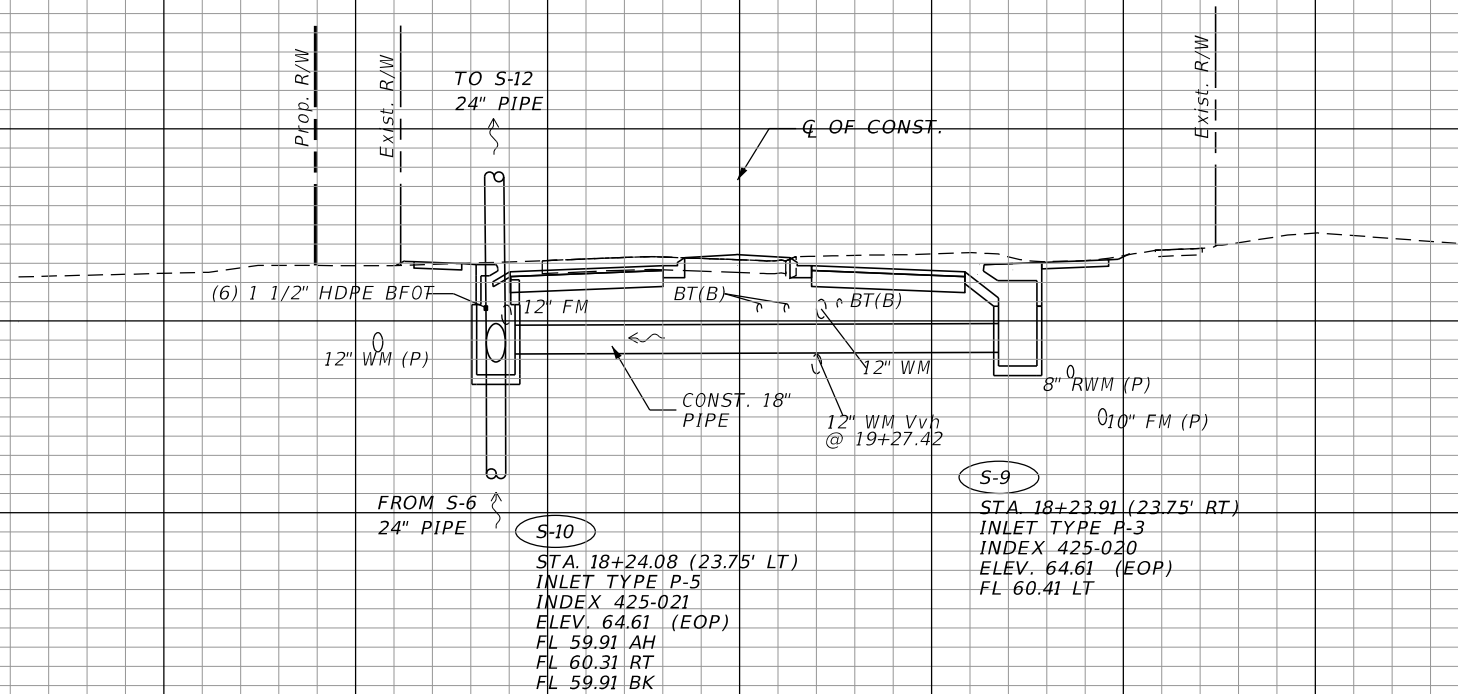


S-12
 STA. 21+00.32 (23.75' LT)
 INLET TYPE J-5
 INDEX 425-021
 ELEV. 62.84 (EOP)
 FL 58.04 AH
 FL 58.54 RT
 FL 59.14 BK

S-13
 STA. 21+00.59 (23.72' RT)
 INLET TYPE P-3
 INDEX 425-020
 ELEV. 62.84 (EOP)
 FL 58.64 LT

S-13
S-12
 21+00.45

78
76
74
72
70
68
66
64
62
60
58
56
54
52
50
48
46
44



S-10
 STA. 18+24.08 (23.75' LT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 64.61 (EOP)
 FL 59.91 AH
 FL 60.31 RT
 FL 59.91 BK

S-9
 STA. 18+23.91 (23.75' RT)
 INLET TYPE P-3
 INDEX 425-020
 ELEV. 64.61 (EOP)
 FL 60.41 LT

S-10
S-9
 18+24.00

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

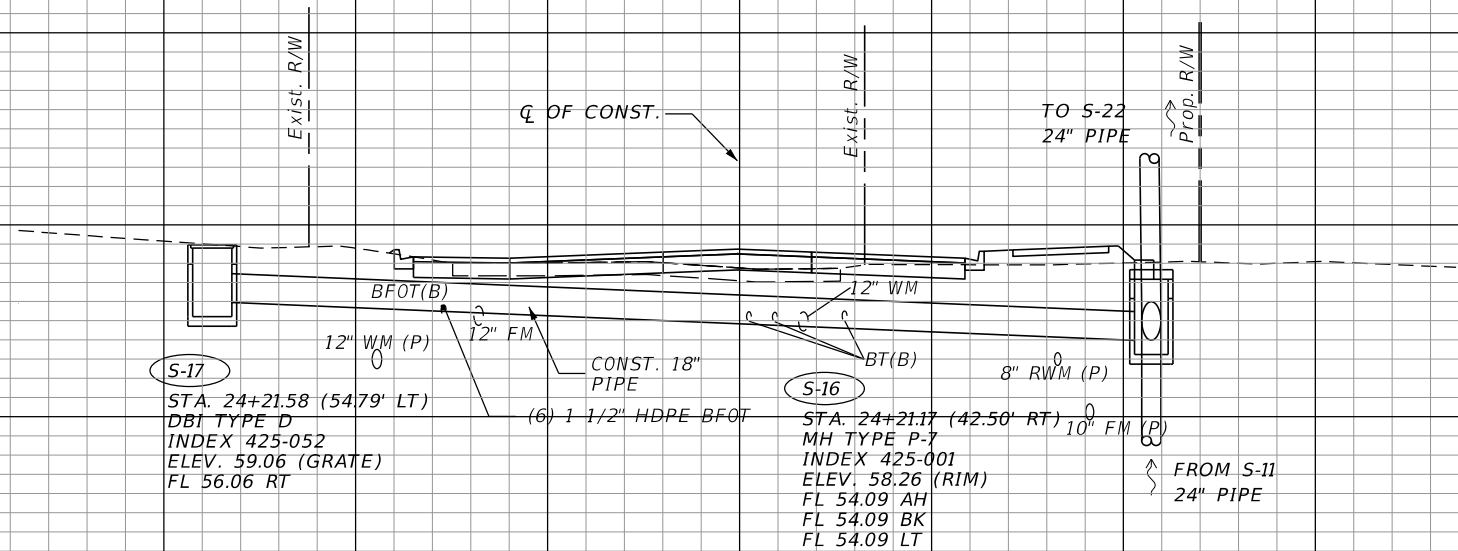
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
 69

70
68
66
64
62
60
58
56
54
52
50
48
46
44

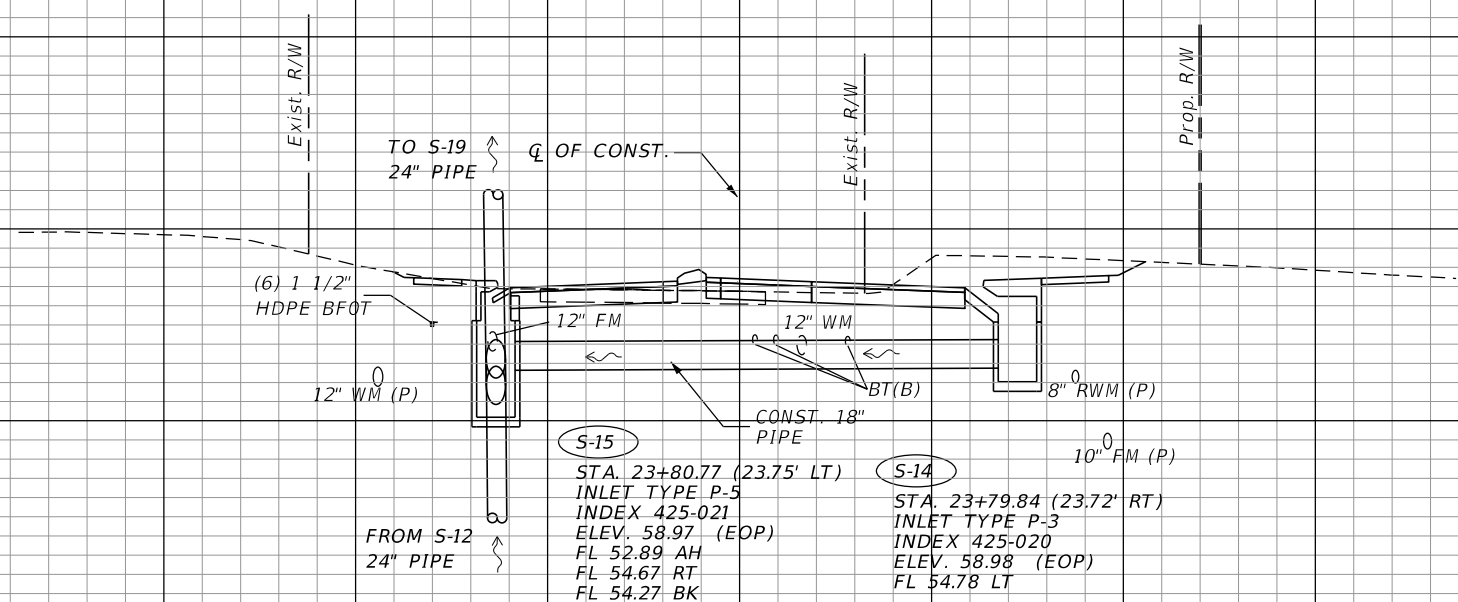


S-17
STA. 24+21.58 (54.79' LT)
DBI TYPE D
INDEX 425-052
ELEV. 59.06 (GRATE)
FL 56.06 RT

S-16
STA. 24+21.17 (42.50' RT)
MH TYPE P-7
INDEX 425-001
ELEV. 58.26 (RIM)
FL 54.09 AH
FL 54.09 BK
FL 54.09 LT

S-17
S-16
24+21.46

72
70
68
66
64
62
60
58
56
54
52
50
48
46
44



S-15
STA. 23+80.77 (23.75' LT)
INLET TYPE P-5
INDEX 425-021
ELEV. 58.97 (EOP)
FL 52.89 AH
FL 54.67 RT
FL 54.27 BK

S-14
STA. 23+79.84 (23.72' RT)
INLET TYPE P-3
INDEX 425-020
ELEV. 58.98 (EOP)
FL 54.78 LT

S-15
S-14
23+80.30

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

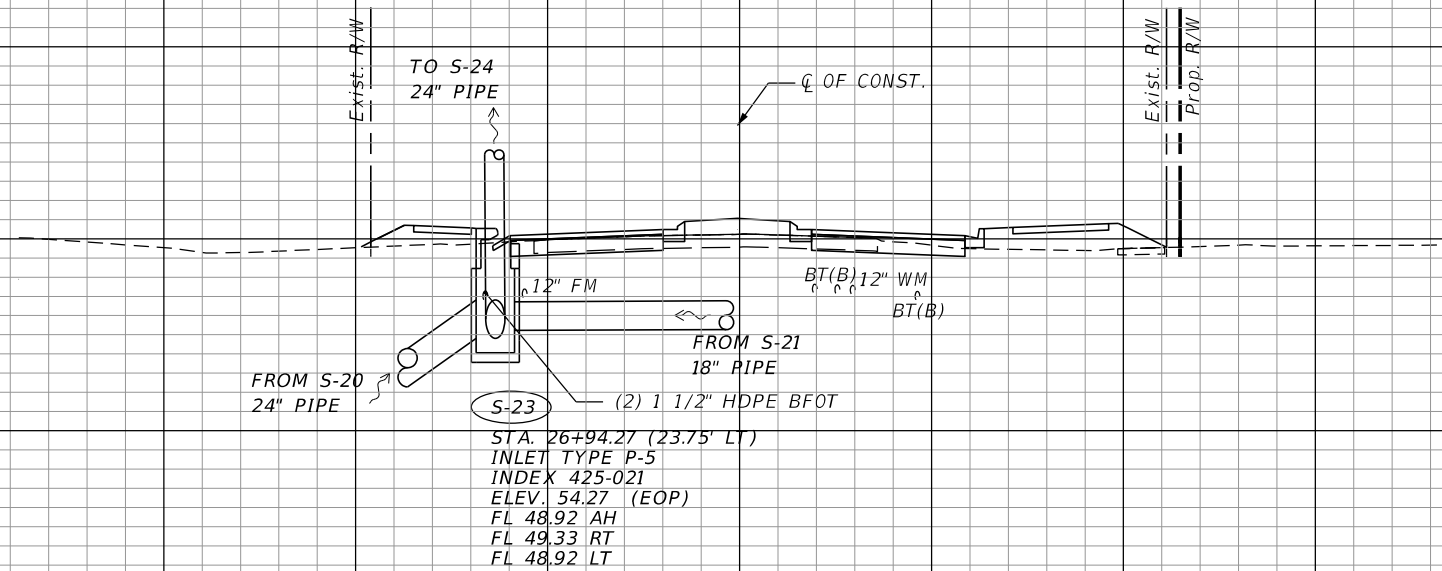
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
70

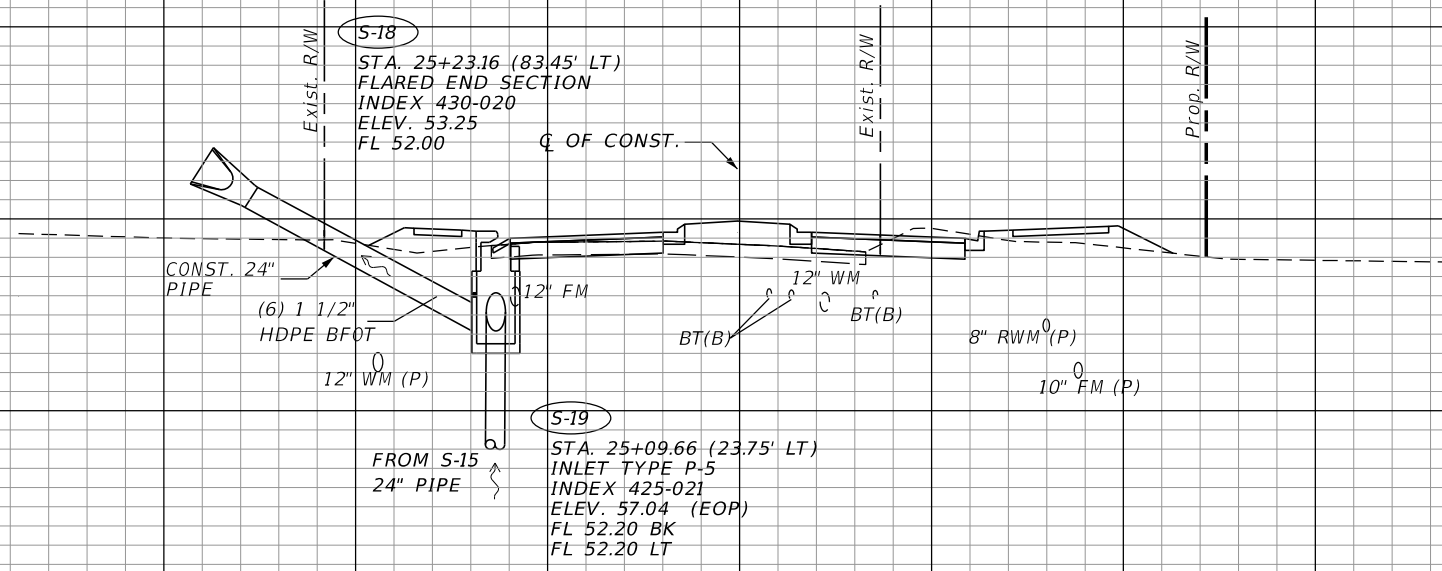
66
64
62
60
58
56
54
52
50
48
46
44
42
40
38



S-23
 STA. 26+94.27 (23.75' LT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 54.27 (EOP)
 FL 48.92 AH
 FL 49.33 RT
 FL 48.92 LT

S-23
 26+94.27

68
66
64
62
60
58
56
54
52
50
48
46
44
42
40



S-18
 STA. 25+23.16 (83.45' LT)
 FLARED END SECTION
 INDEX 430-020
 ELEV. 53.25
 FL 52.00

S-19
 STA. 25+09.66 (23.75' LT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 57.04 (EOP)
 FL 52.20 BK
 FL 52.20 LT

S-19
 S-18
 25+09.66

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

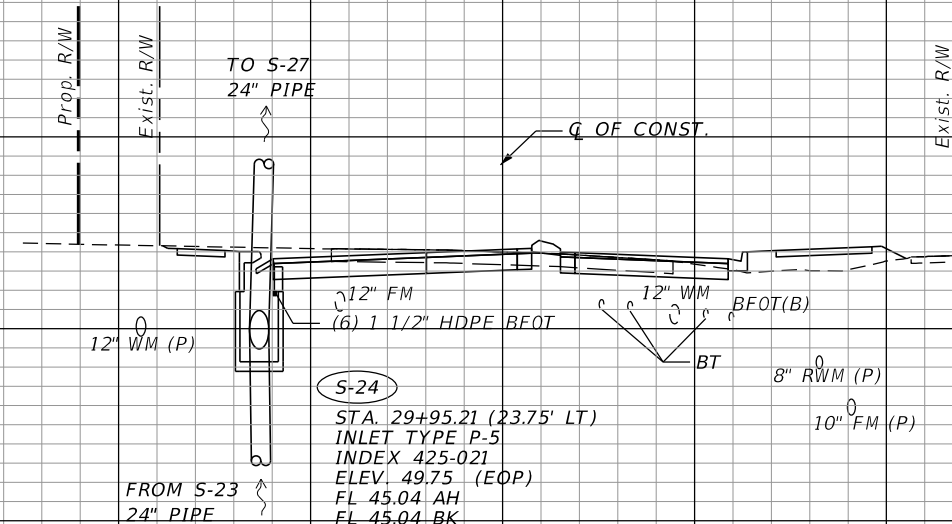
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

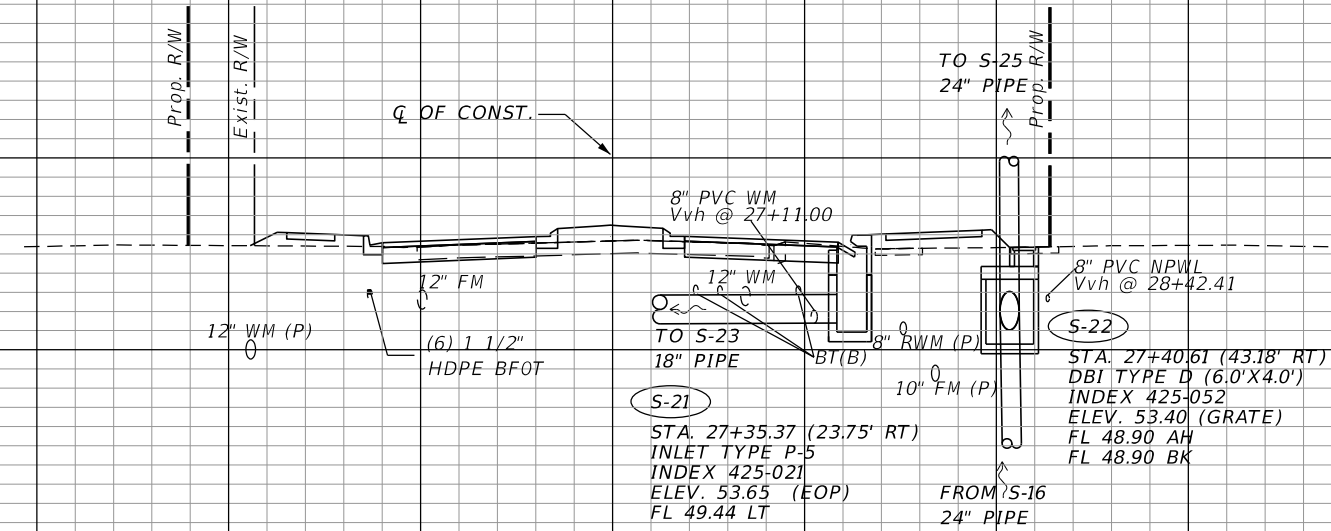
SHEET NO.
 71

62
60
58
56
54
52
50
48
46
44
42
40
38
36



S-24
29+95.21

64
62
60
58
56
54
52
50
48
46
44
42
40



S-22
S-21
27+36.34

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

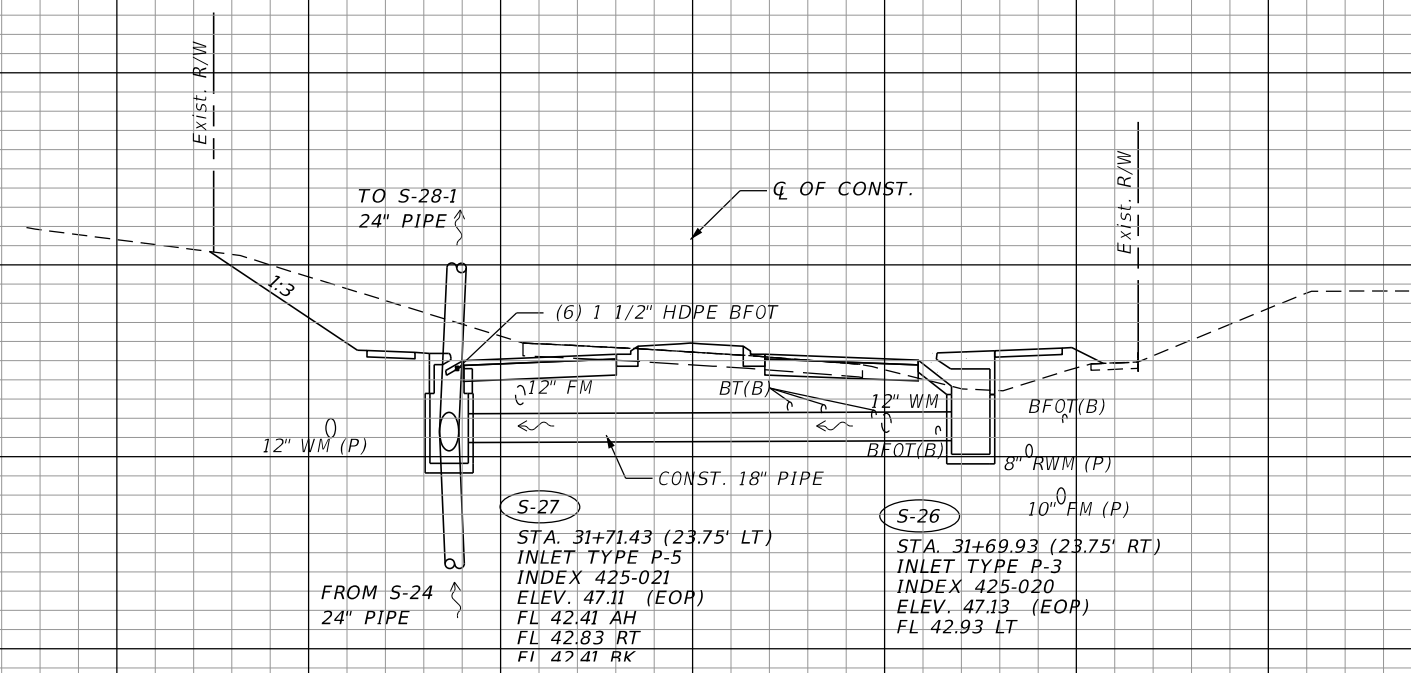
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

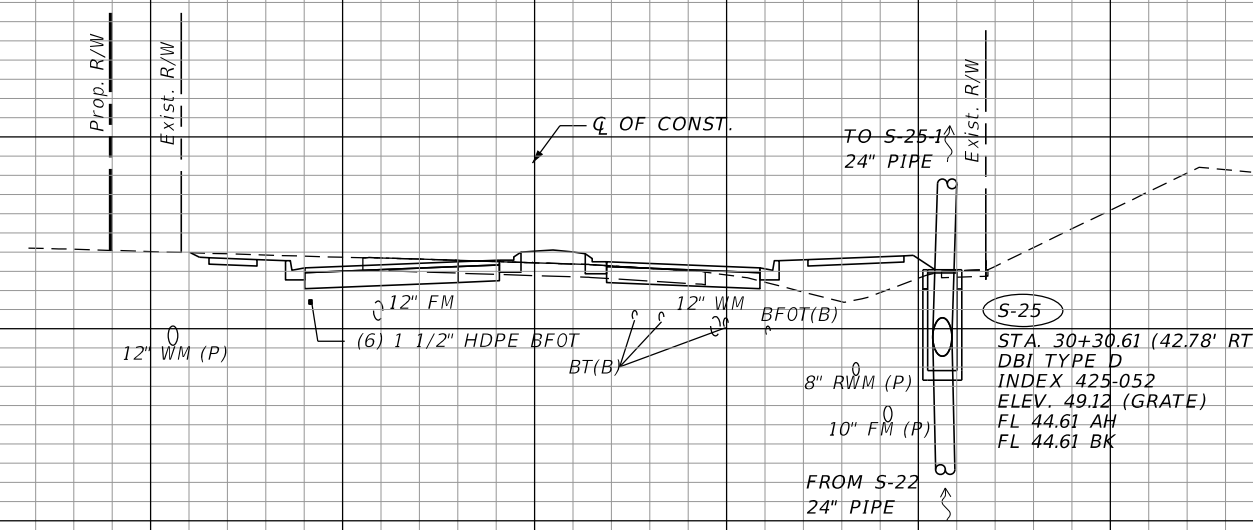
SHEET NO.
72

64
62
60
58
56
54
52
50
48
46
44
42
40
38
36
34
32



S-26
S-27
31+70.69

62
60
58
56
54
52
50
48
46
44
42
40
38



S-25
30+30.61

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

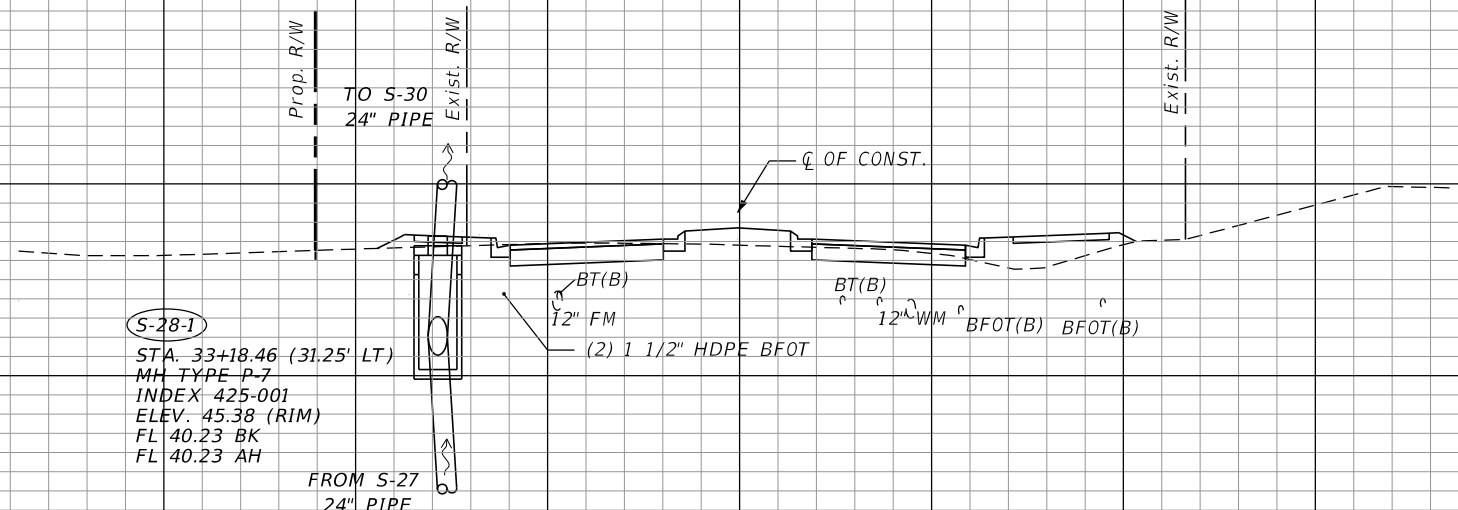
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
73

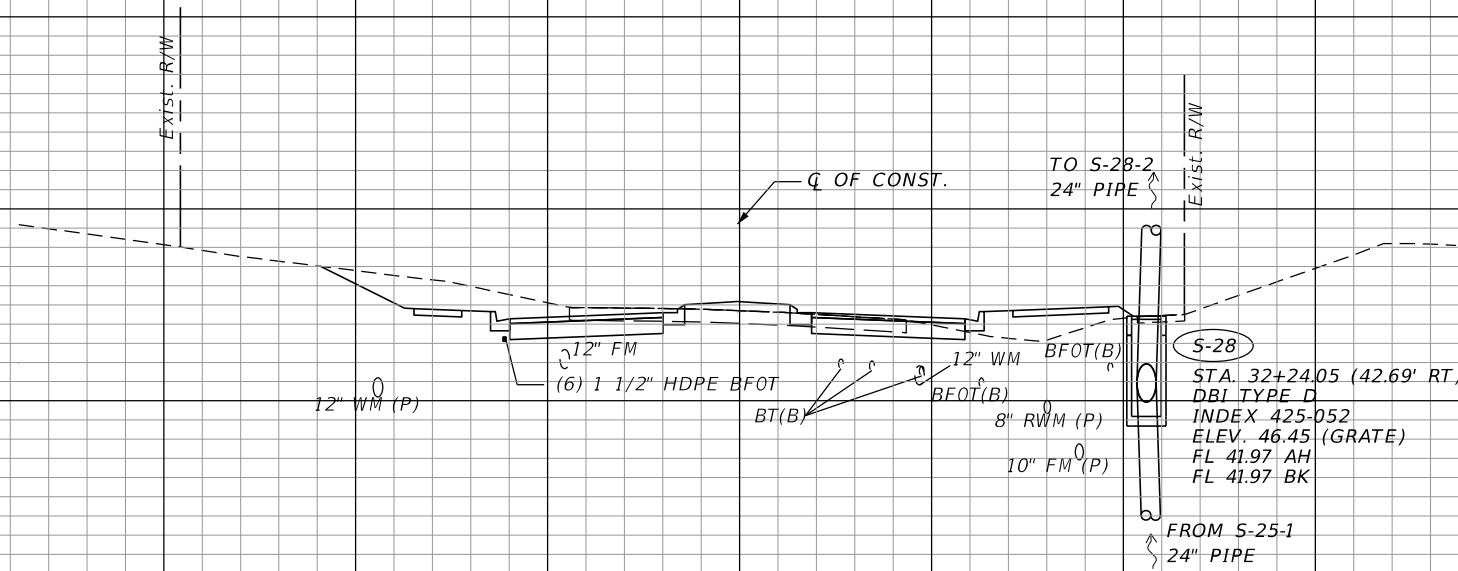
56
54
52
50
48
46
44
42
40
38
36
34
32



S-28-1
 STA. 33+18.46 (31.25' LT)
 MH TYPE P-7
 INDEX 425-001
 ELEV. 45.38 (RIM)
 FL 40.23 BK
 FL 40.23 AH

S-28-1
 33+18.46

62
60
58
56
54
52
50
48
46
44
42
40
38
36
34



S-28
 STA. 32+24.05 (42.69' RT)
 DBI TYPE D
 INDEX 425-052
 ELEV. 46.45 (GRATE)
 FL 41.97 AH
 FL 41.97 BK

S-28
 32+24.05

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

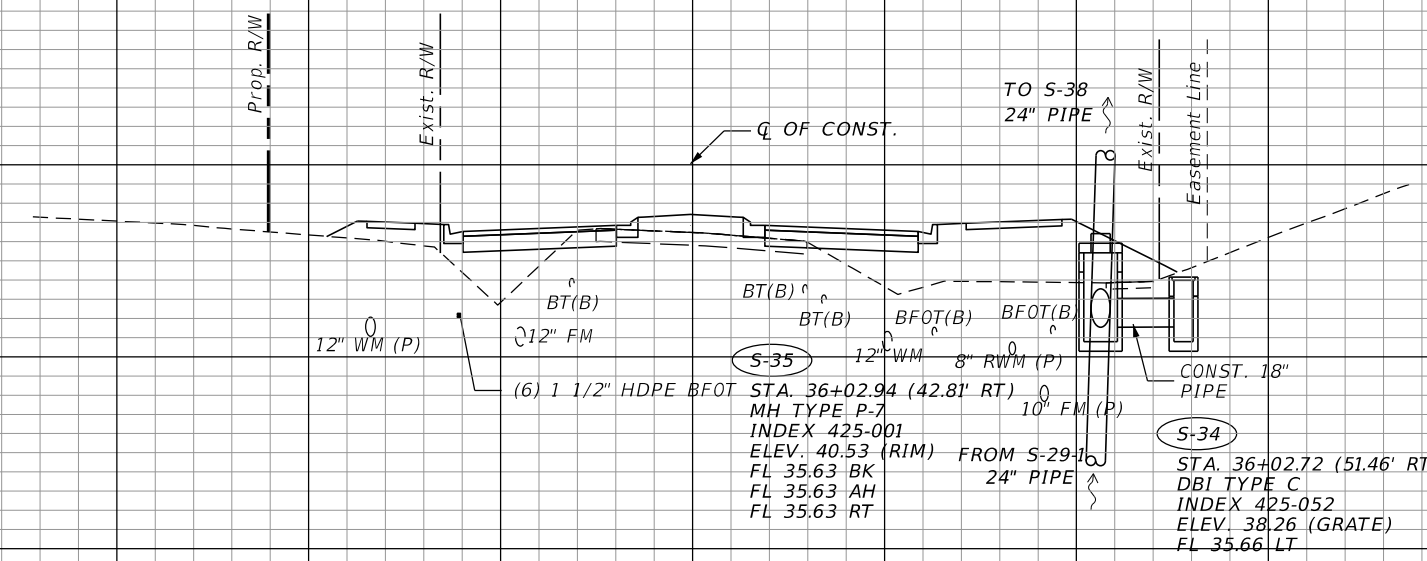
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

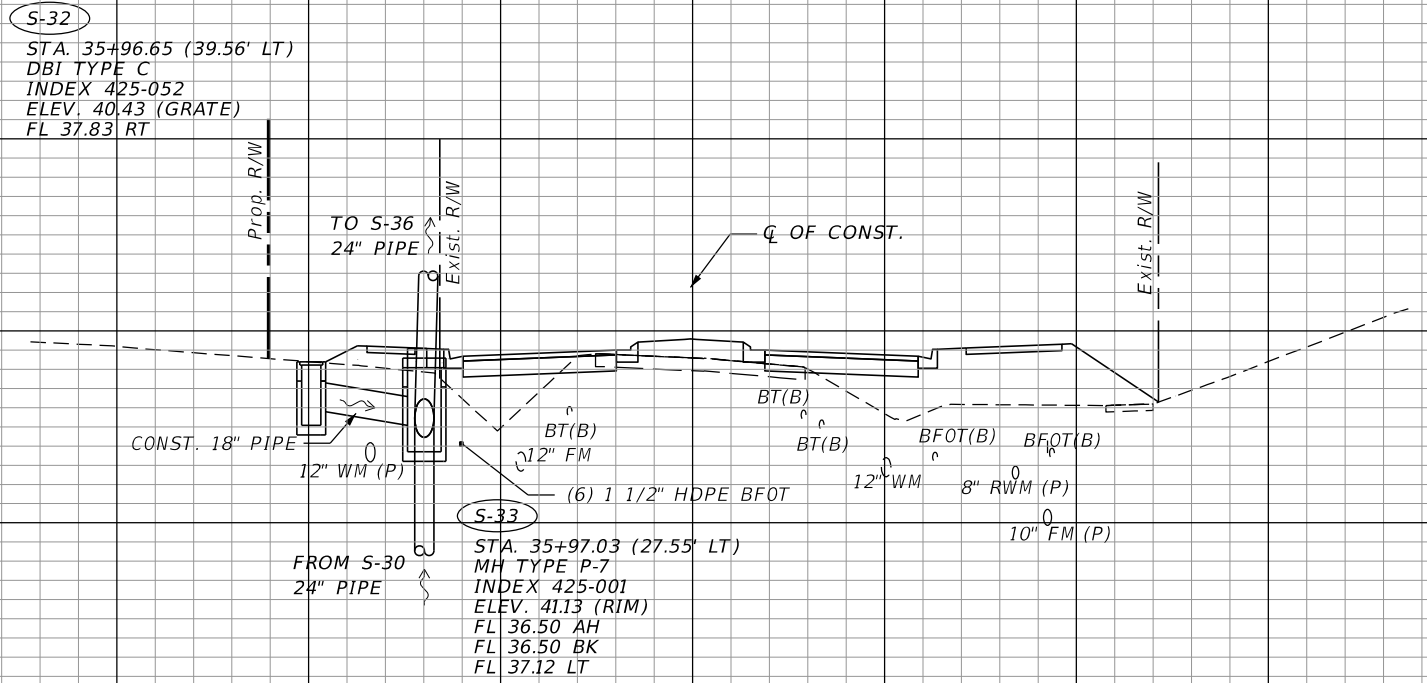
SHEET NO.
 74

52
50
48
46
44
42
40
38
36
34
32
30
28
26
24



S-35
S-34
36+02.94

58
56
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24



S-33
S-32
35+97.03

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

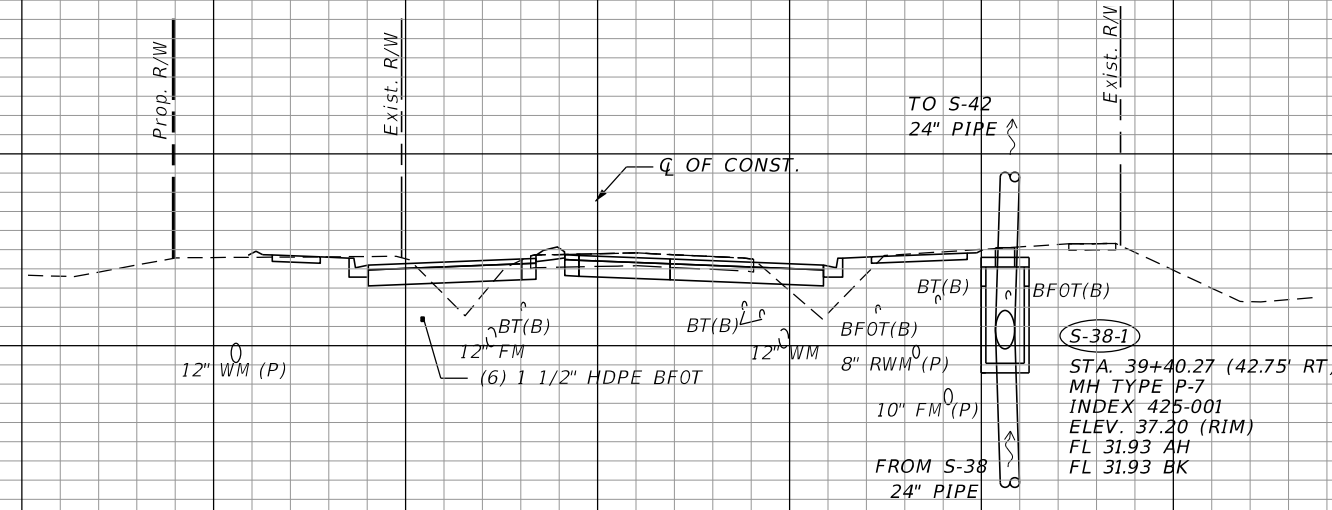
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
76

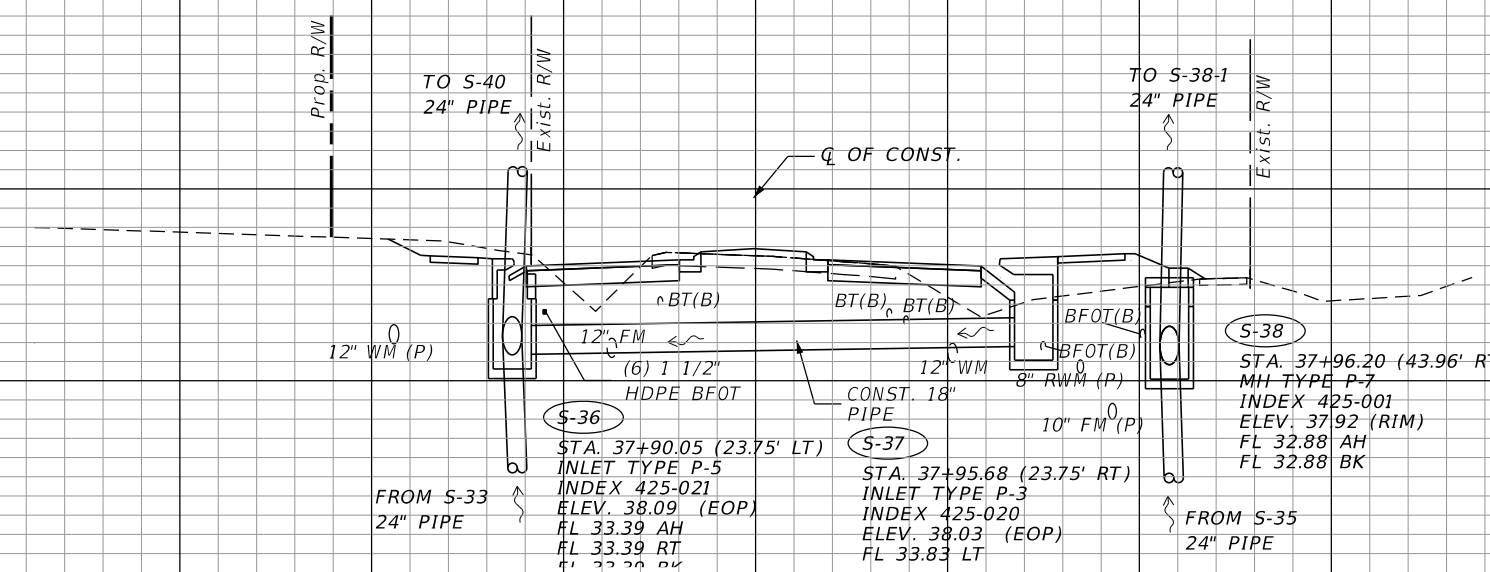
48
46
44
42
40
38
36
34
32
30
28
26
24



S-38-1
 STA. 39+40.27 (42.75' RT)
 MH TYPE P-7
 INDEX 425-001
 ELEV. 37.20 (RIM)
 FL 31.93 AH
 FL 31.93 BK

S-38-1
 39+40.27

50
48
46
44
42
40
38
36
34
32
30
28
26
24



S-36
 STA. 37+90.05 (23.75' LT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 38.09 (EOP)
 FL 33.39 AH
 FL 33.39 RT
 FL 33.39 BK

S-37
 STA. 37+95.68 (23.75' RT)
 INLET TYPE P-3
 INDEX 425-020
 ELEV. 38.03 (EOP)
 FL 33.83 LT

S-38
 STA. 37+96.20 (43.96' RT)
 MH TYPE P-7
 INDEX 425-001
 ELEV. 37.92 (RIM)
 FL 32.88 AH
 FL 32.88 BK

S-38
S-37
S-36
 37+95.68

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

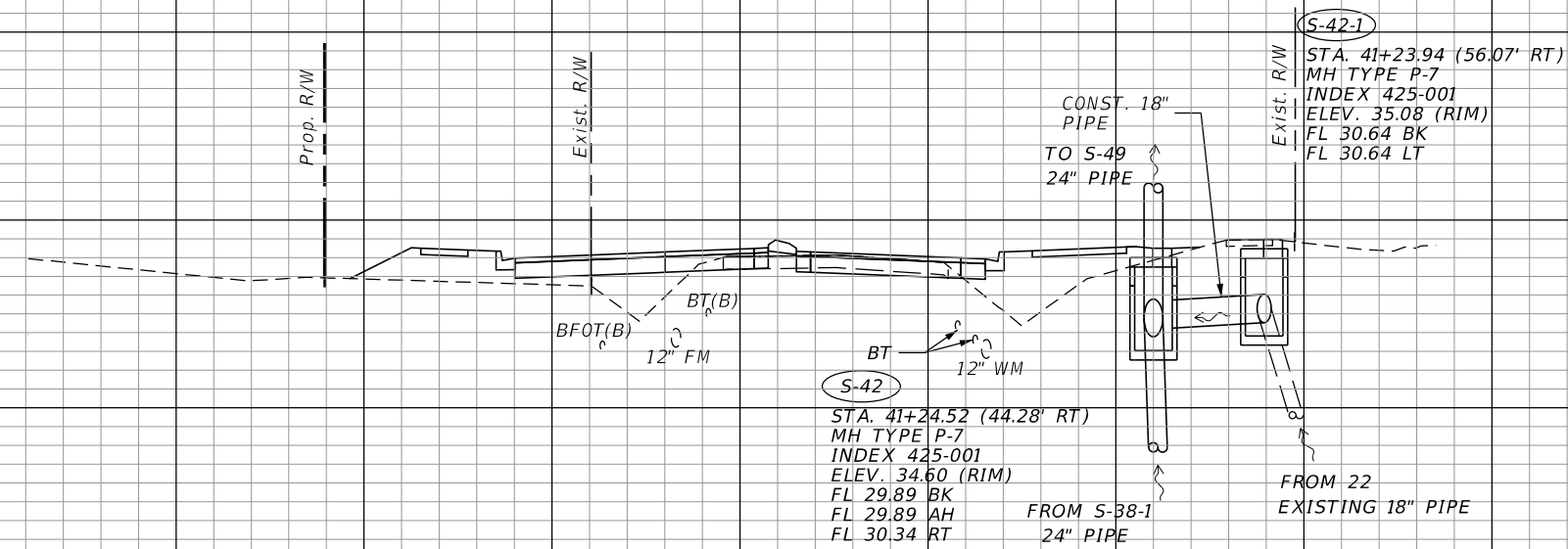
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

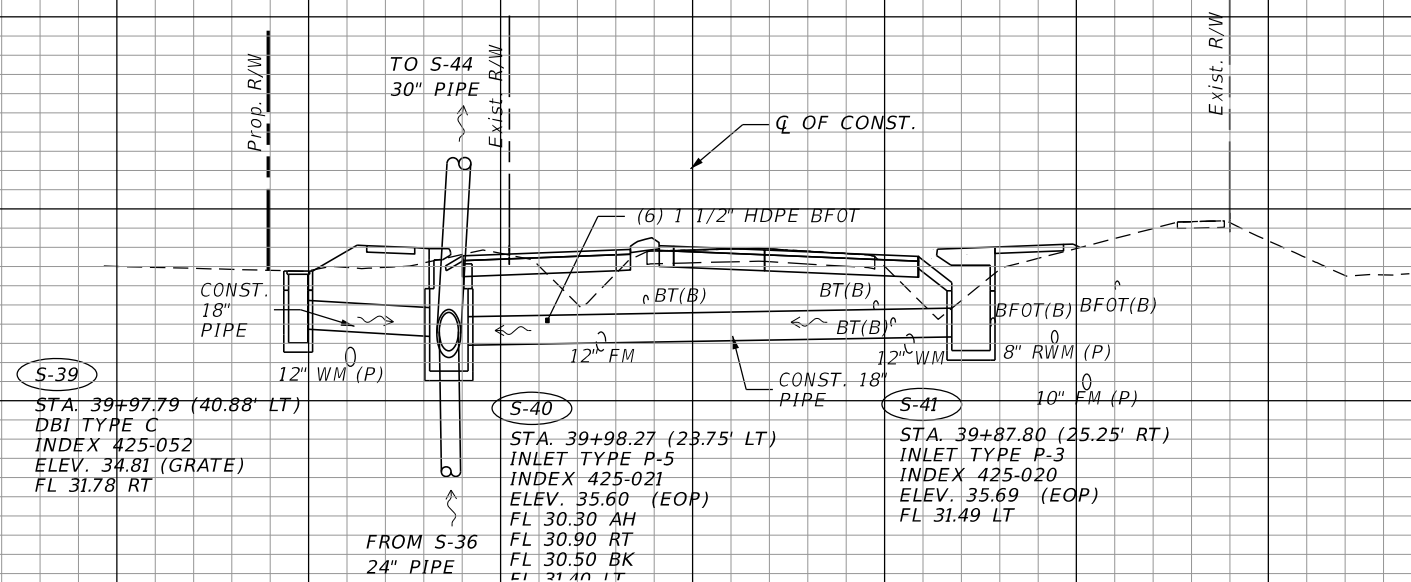
SHEET NO.
 77

46
44
42
40
38
36
34
32
30
28
26
24
22
20



S-42-1
S-42
41+24.87

48
46
44
42
40
38
36
34
32
30
28
26
24
22
20



S-41
S-40
S-39
39+99.37

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

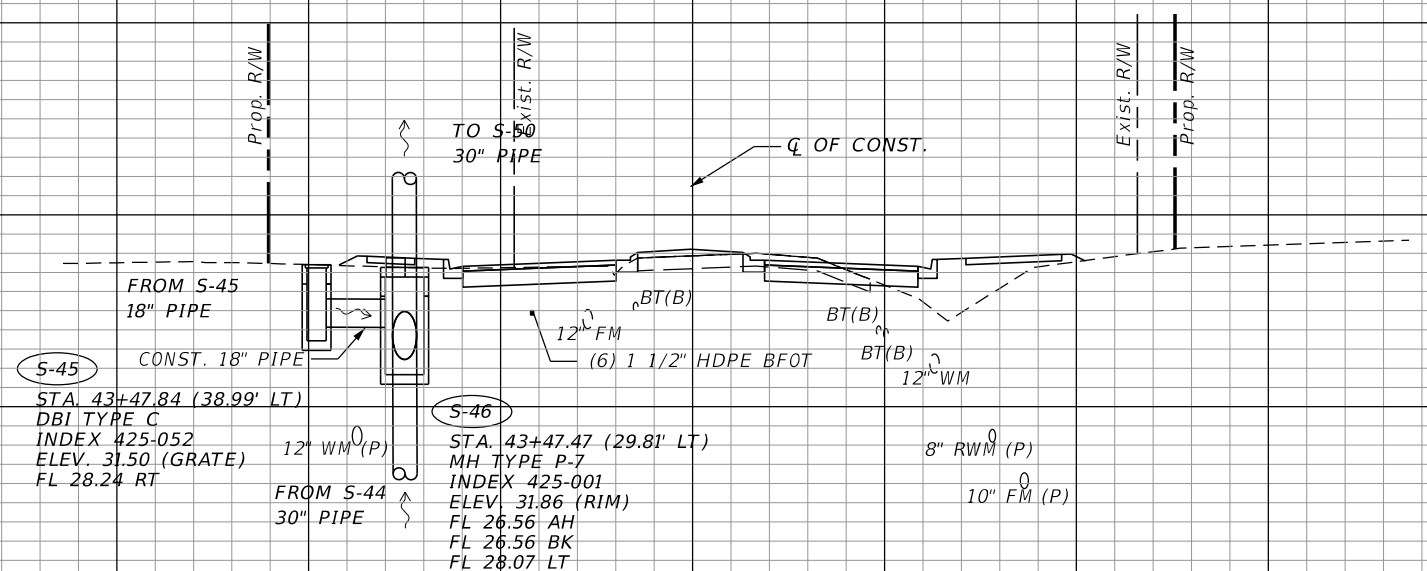
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

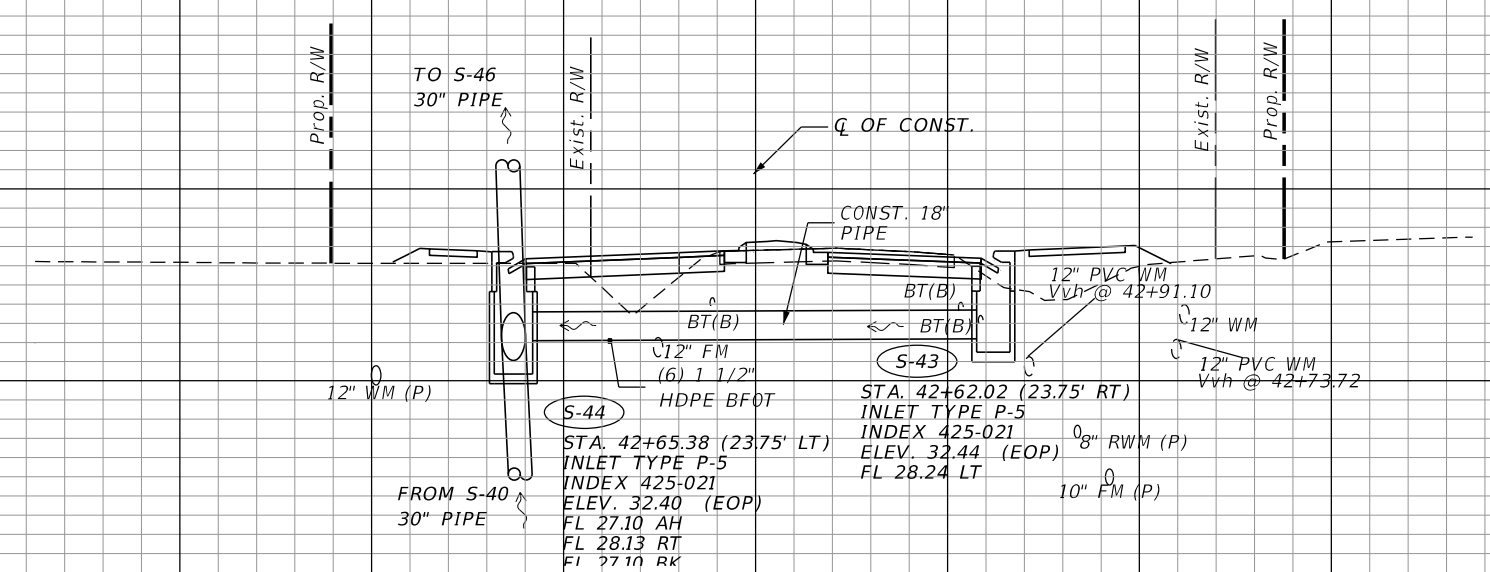
SHEET NO.
78

44
42
40
38
36
34
32
30
28
26
24
22
20
18
16



S-46
S-45
43+47.47

44
42
40
38
36
34
32
30
28
26
24
22
20
18



S-44
S-43
42+63.70

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

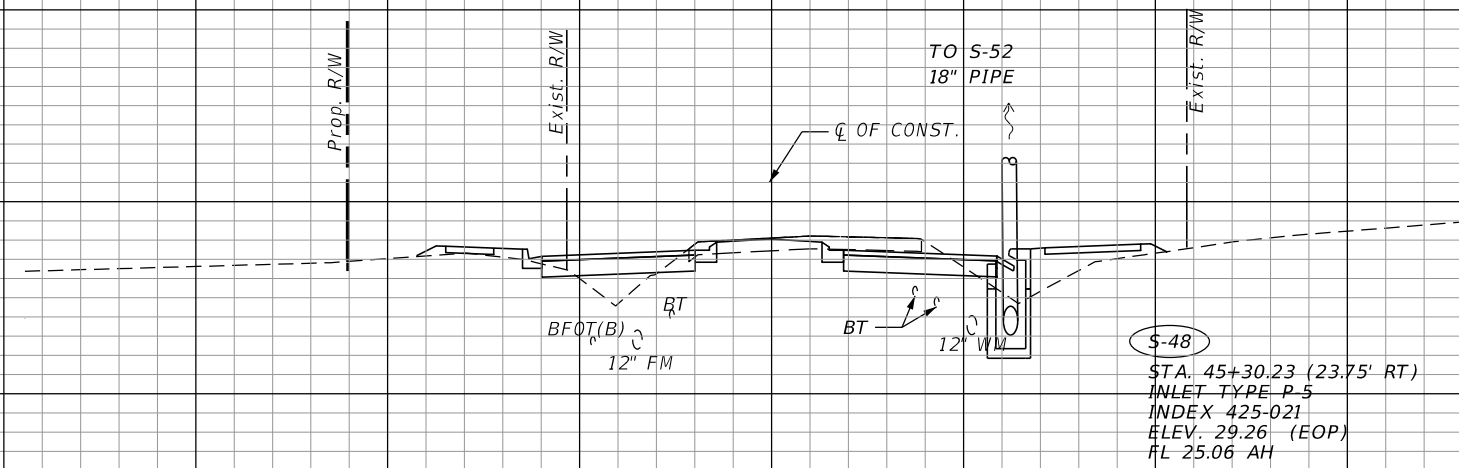
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

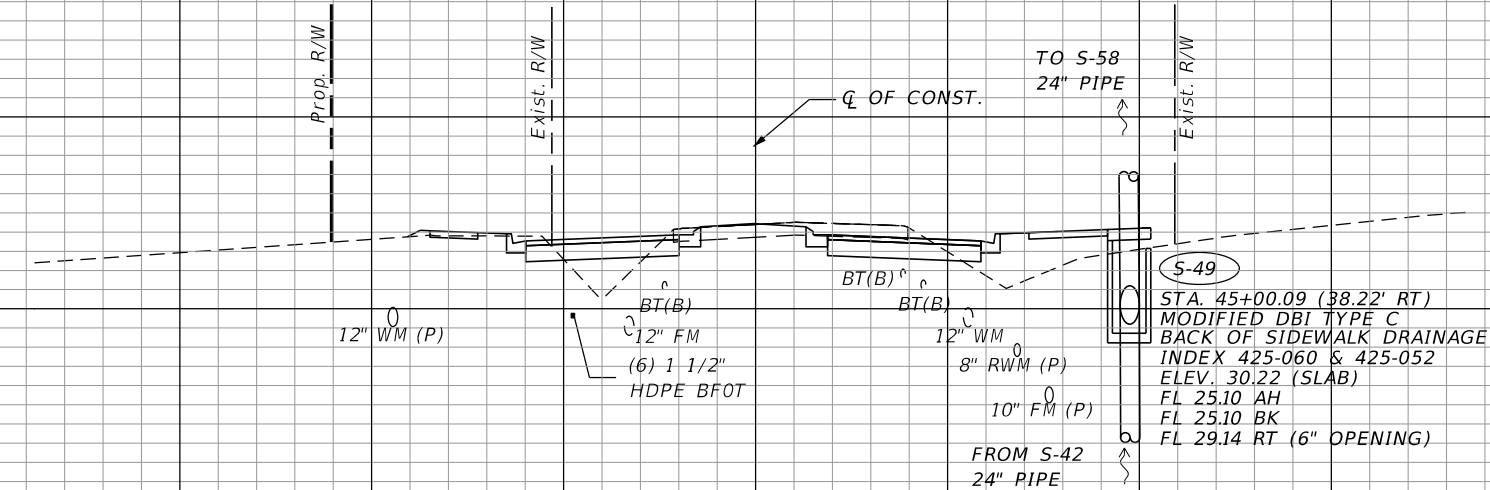
SHEET NO.
79

42
40
38
36
34
32
30
28
26
24
22
20



S-48
45+30.23

40
38
36
34
32
30
28
26
24
22
20
18



S-49
44+99.94

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

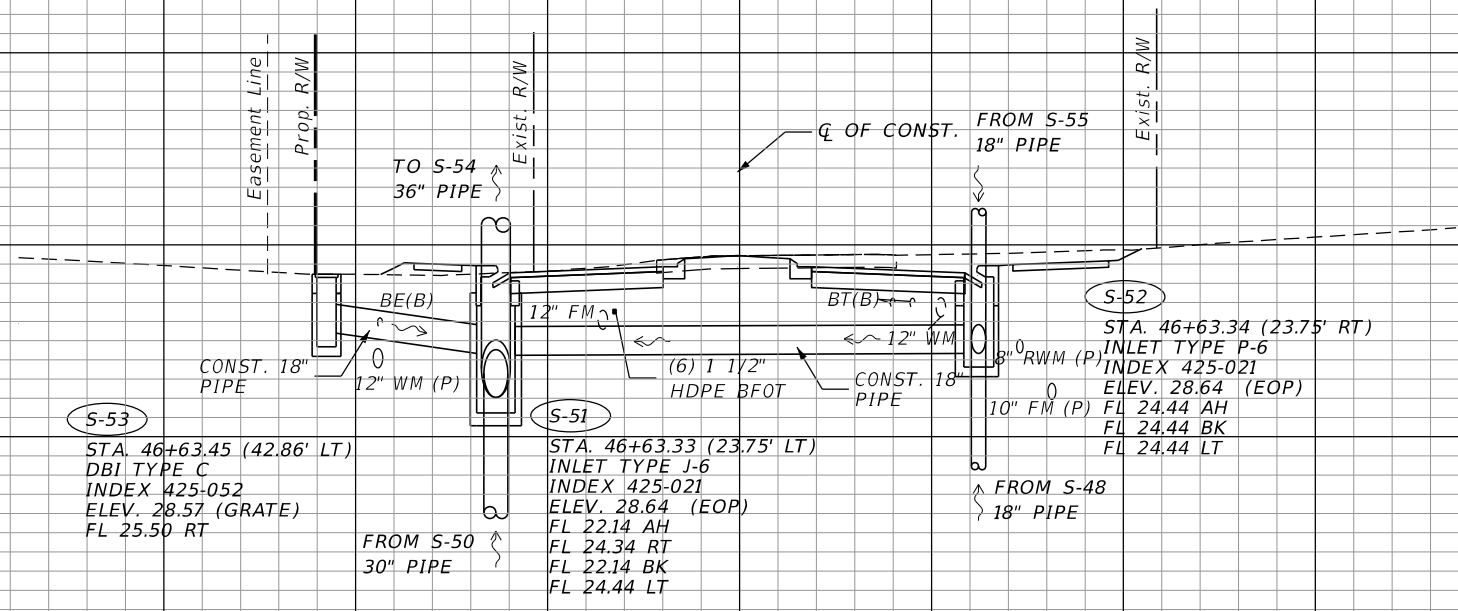
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

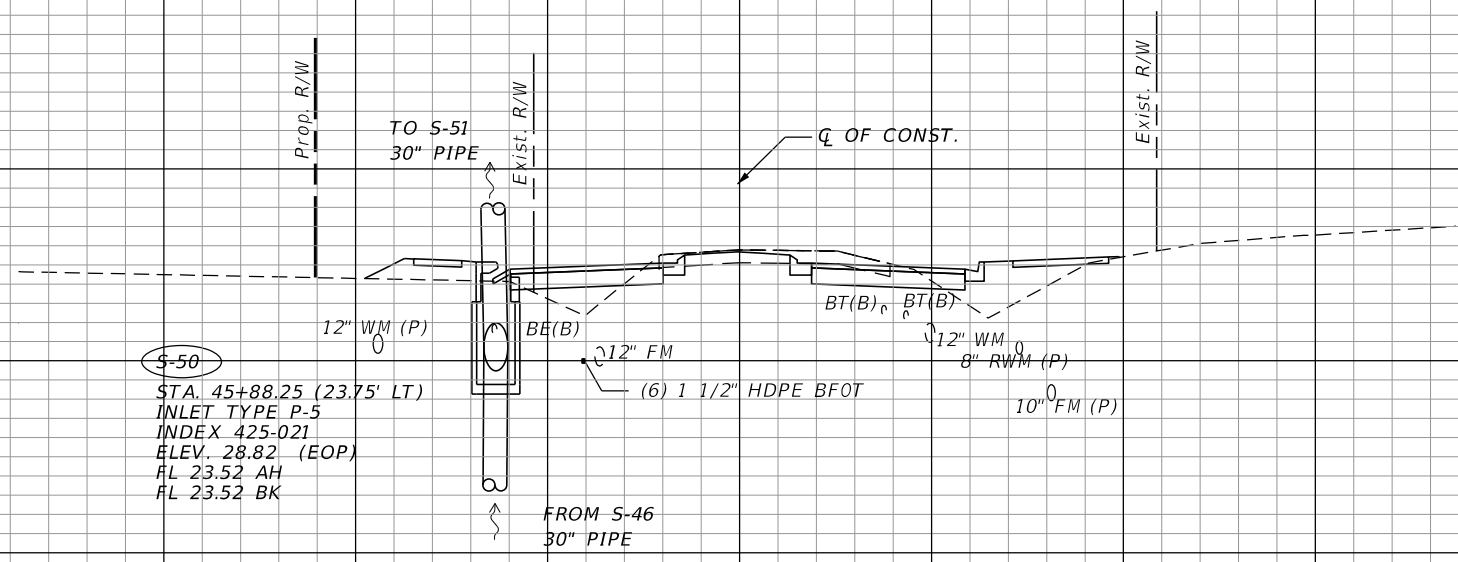
80

42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-53
S-52
S-51
46+63.34

42
40
38
36
34
32
30
28
26
24
22
20
18
16



S-50
45+88.25

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

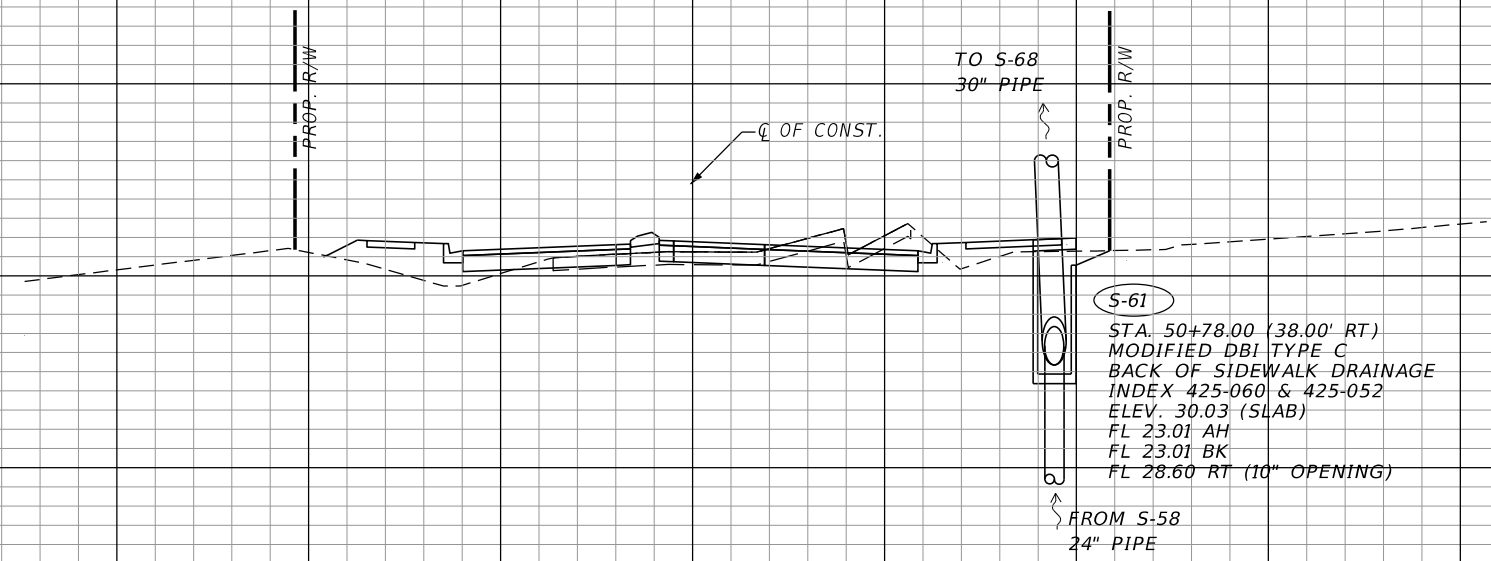
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
81

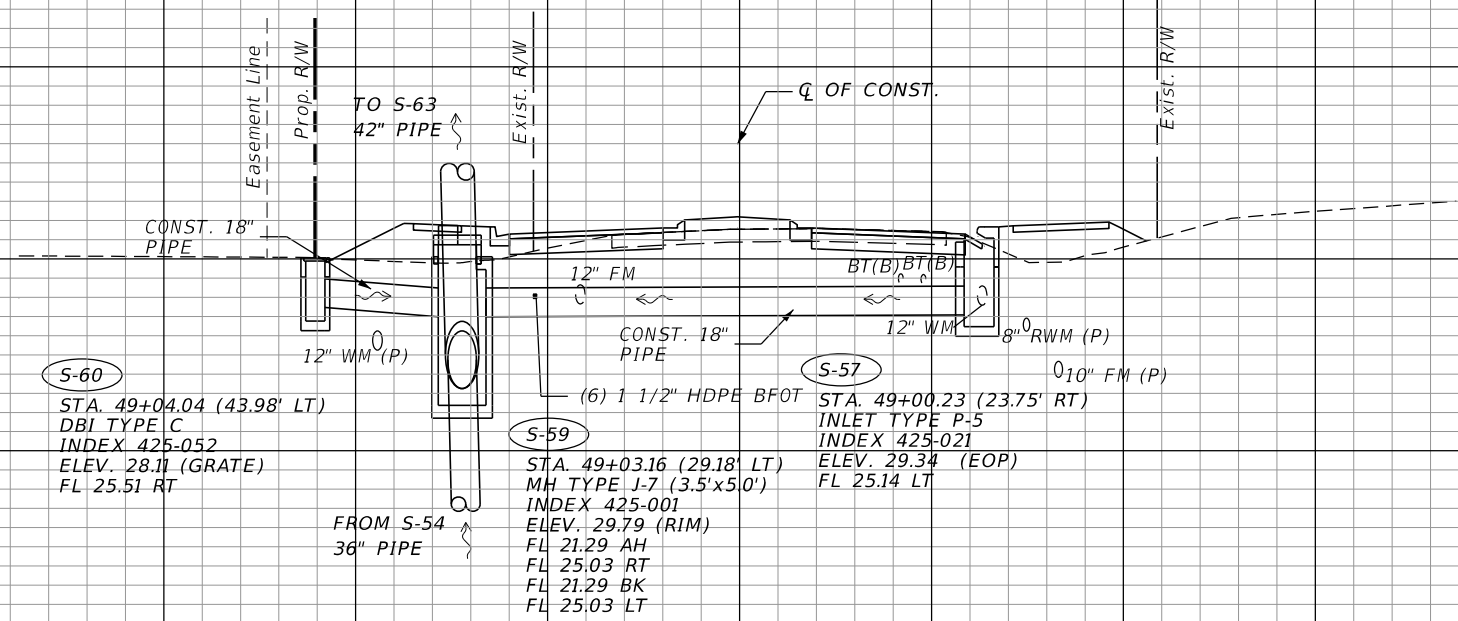
40
38
36
34
32
30
28
26
24
22
20
18
16
14



S-61
STA. 50+78.00 (38.00' RT)
MODIFIED DBI TYPE C
BACK OF SIDEWALK DRAINAGE
INDEX 425-060 & 425-052
ELEV. 30.03 (SLAB)
FL 23.01 AH
FL 23.01 BK
FL 28.60 RT (10" OPENING)

S-61
50+78.00

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-60
STA. 49+04.04 (43.98' LT)
DBI TYPE C
INDEX 425-052
ELEV. 28.11 (GRATE)
FL 25.51 RT

S-59
STA. 49+03.16 (29.18' LT)
MH TYPE J-7 (3.5'x5.0')
INDEX 425-001
ELEV. 29.79 (RIM)
FL 21.29 AH
FL 25.03 RT
FL 21.29 BK
FL 25.03 LT

S-57
STA. 49+00.23 (23.75' RT)
INLET TYPE P-5
INDEX 425-021
ELEV. 29.34 (EOP)
FL 25.14 LT

S-60
S-59
S-57
49+01.70

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

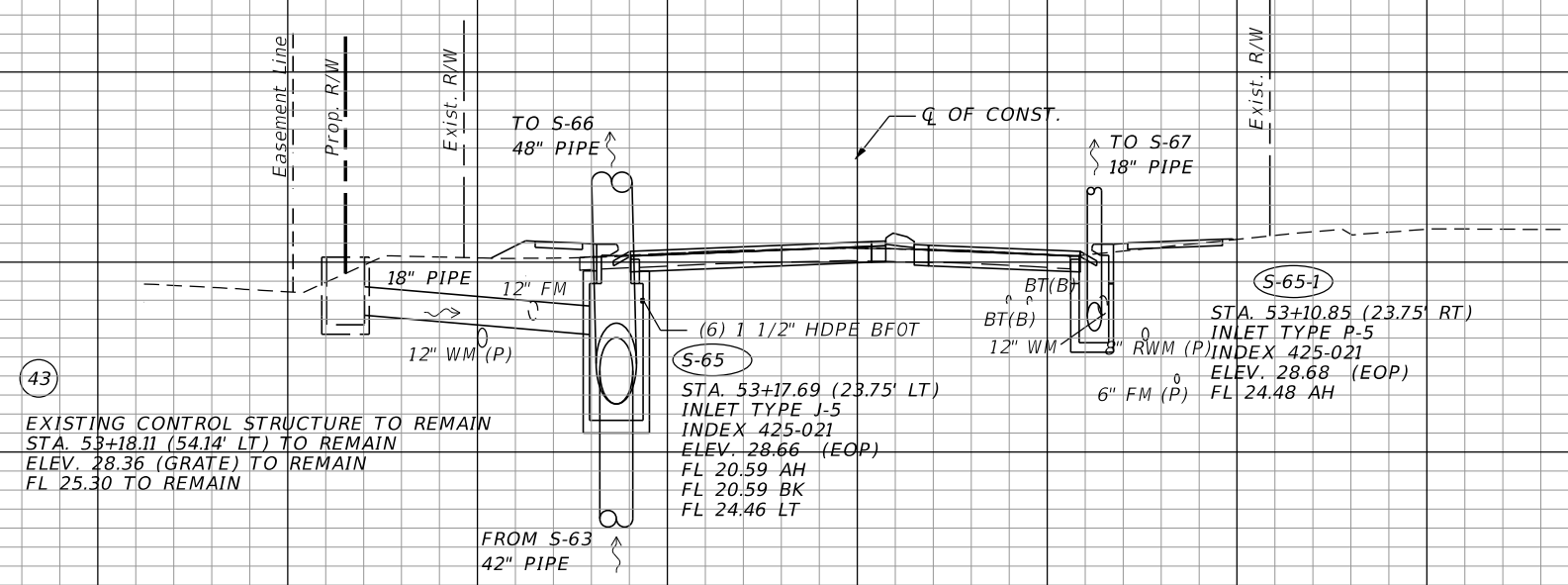
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

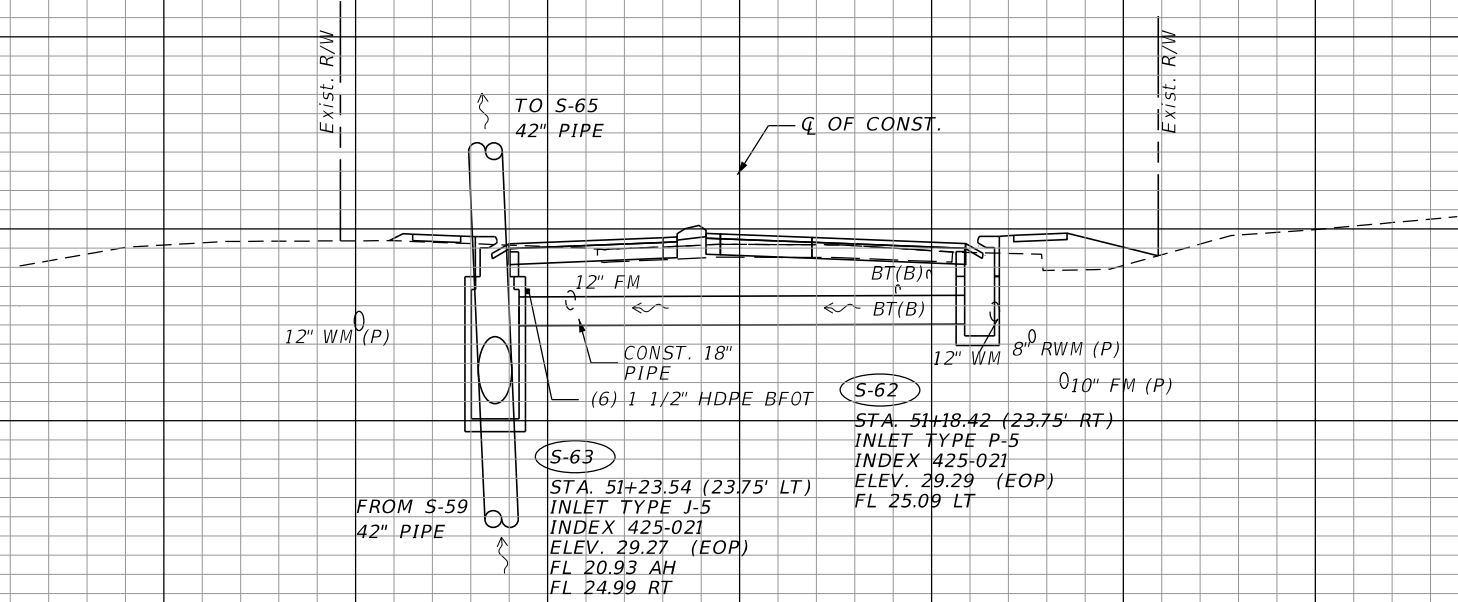
SHEET NO.
83

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



(S-65-1)
(S-65)
53+10.85

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



(S-63)
(S-62)
51+20.98

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

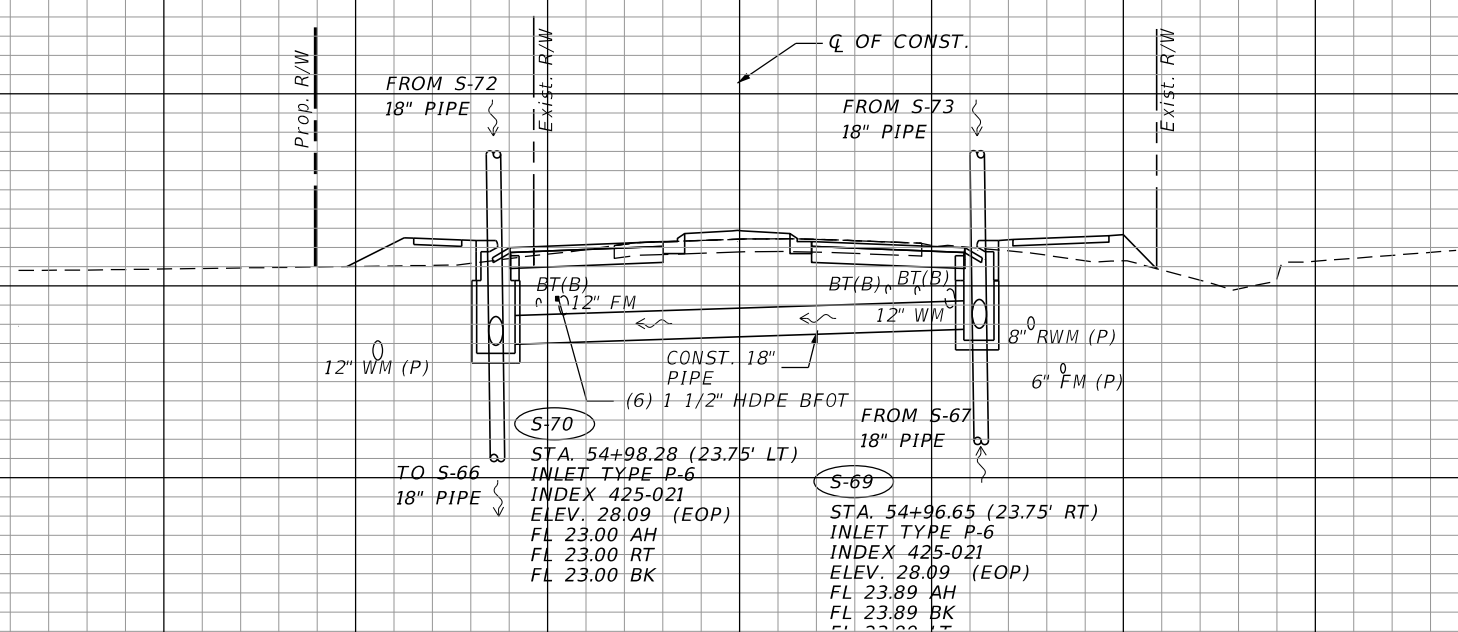
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

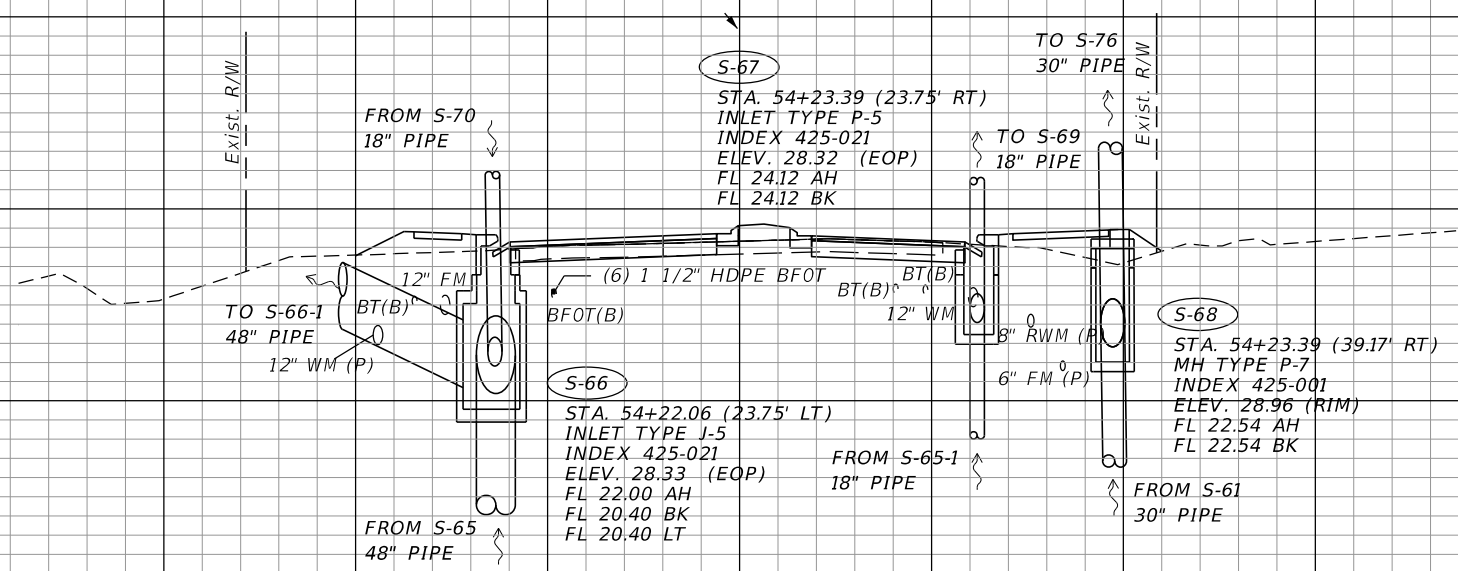
SHEET NO.
84

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-70
S-69
54+97.47

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-68
S-67
S-66
54+23.39

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

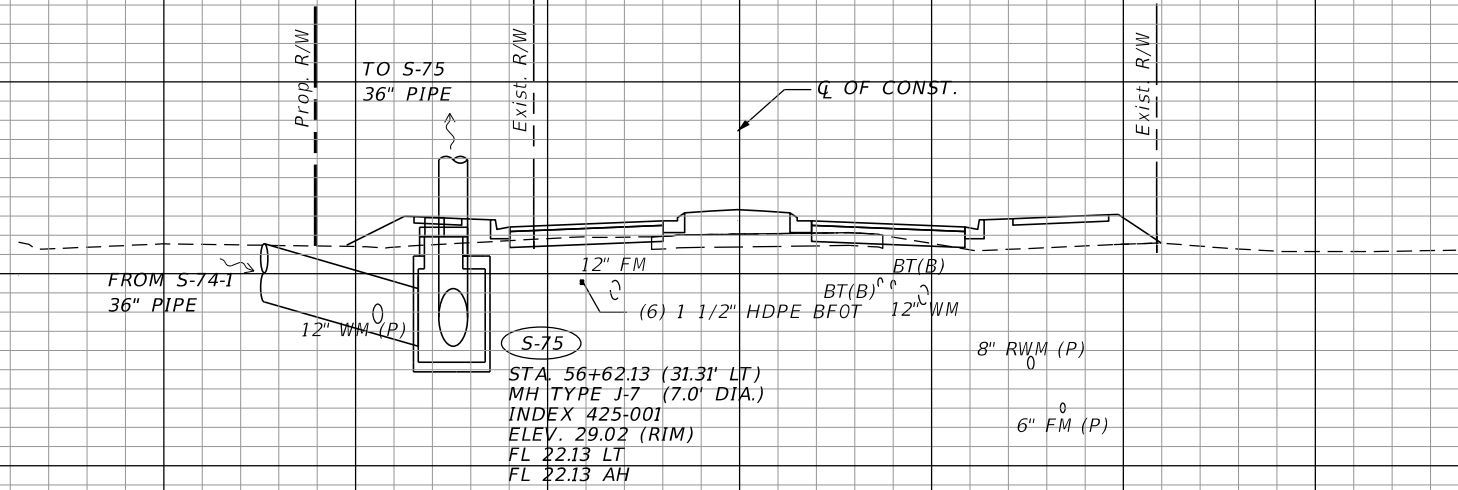
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
85

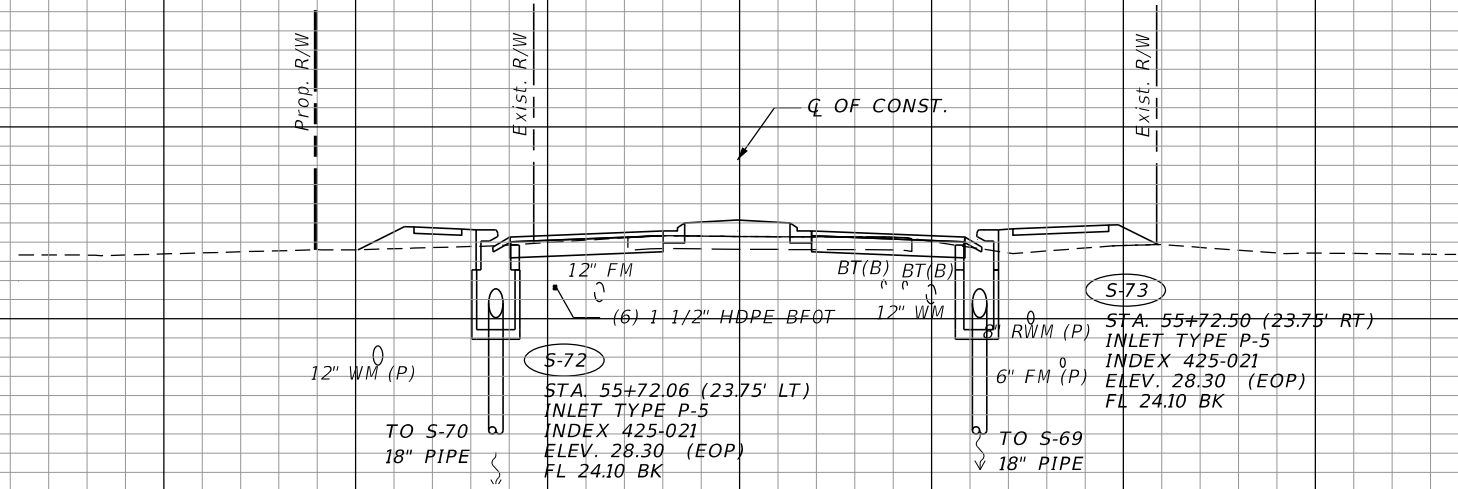
40
38
36
34
32
30
28
26
24
22
20
18
16



S-75
 STA. 56+62.13 (31.31' LT)
 MH TYPE J-7 (7.0' DIA.)
 INDEX 425-001
 ELEV. 29.02 (RIM)
 FL 22.13 LT
 FL 22.13 AH

S-75
 56+62.13

40
38
36
34
32
30
28
26
24
22
20
18
16



S-72
 STA. 55+72.06 (23.75' LT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 28.30 (EOP)
 FL 24.10 BK

S-73
 STA. 55+72.50 (23.75' RT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 28.30 (EOP)
 FL 24.10 BK

S-73
S-72
 55+72.50

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

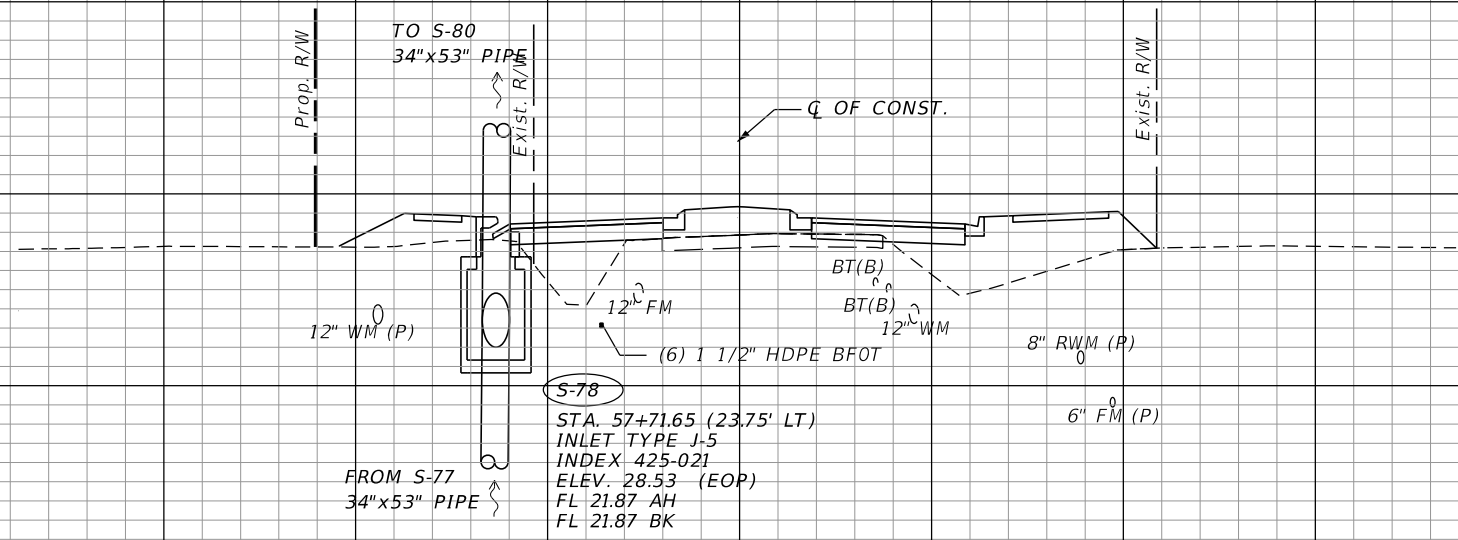
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

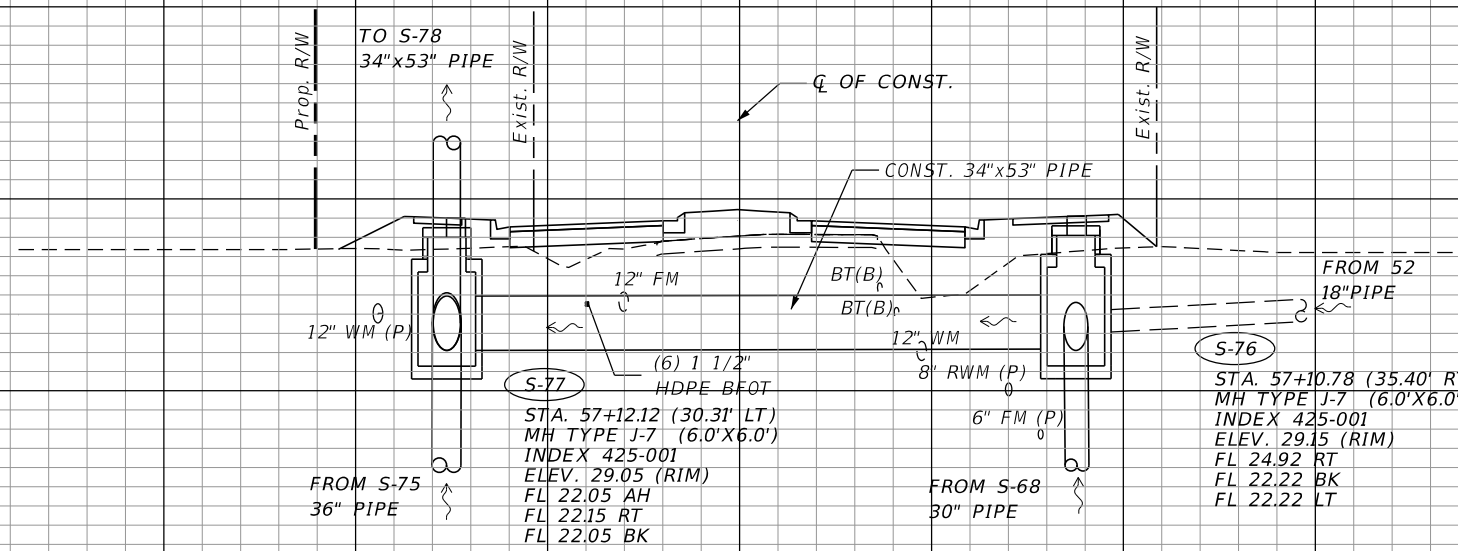
SHEET NO.
 86

38
36
34
32
30
28
26
24
22
20
18
16
14



S-78
57+71.65

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-77
S-76
57+11.54

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

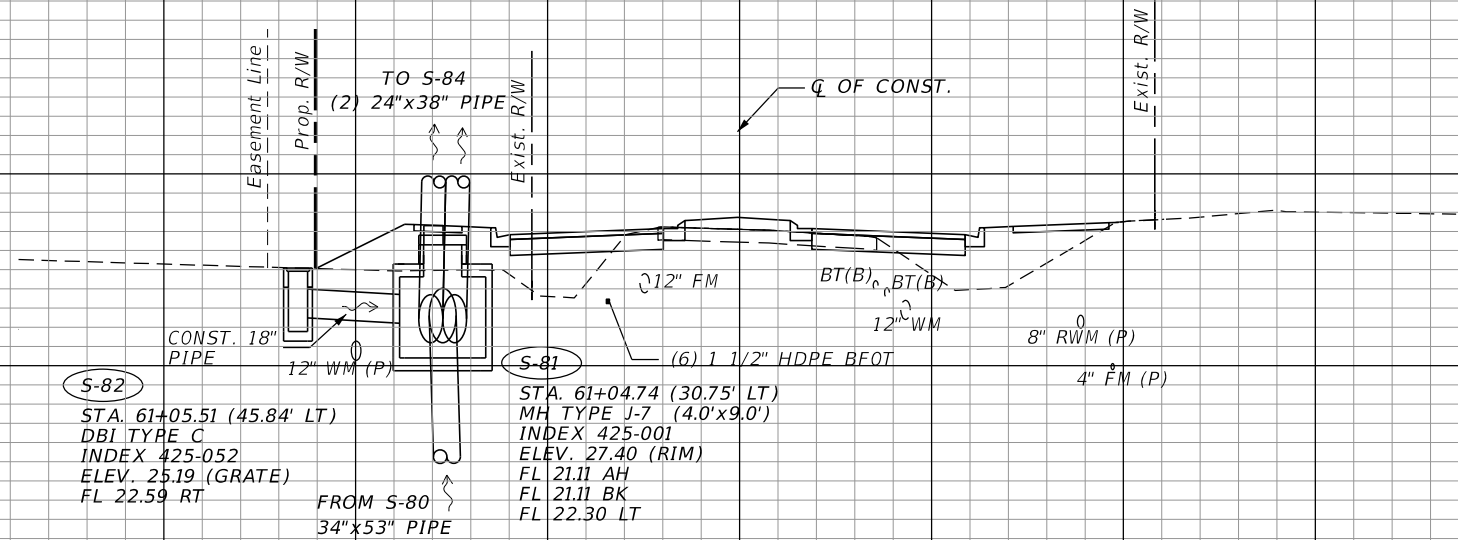
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

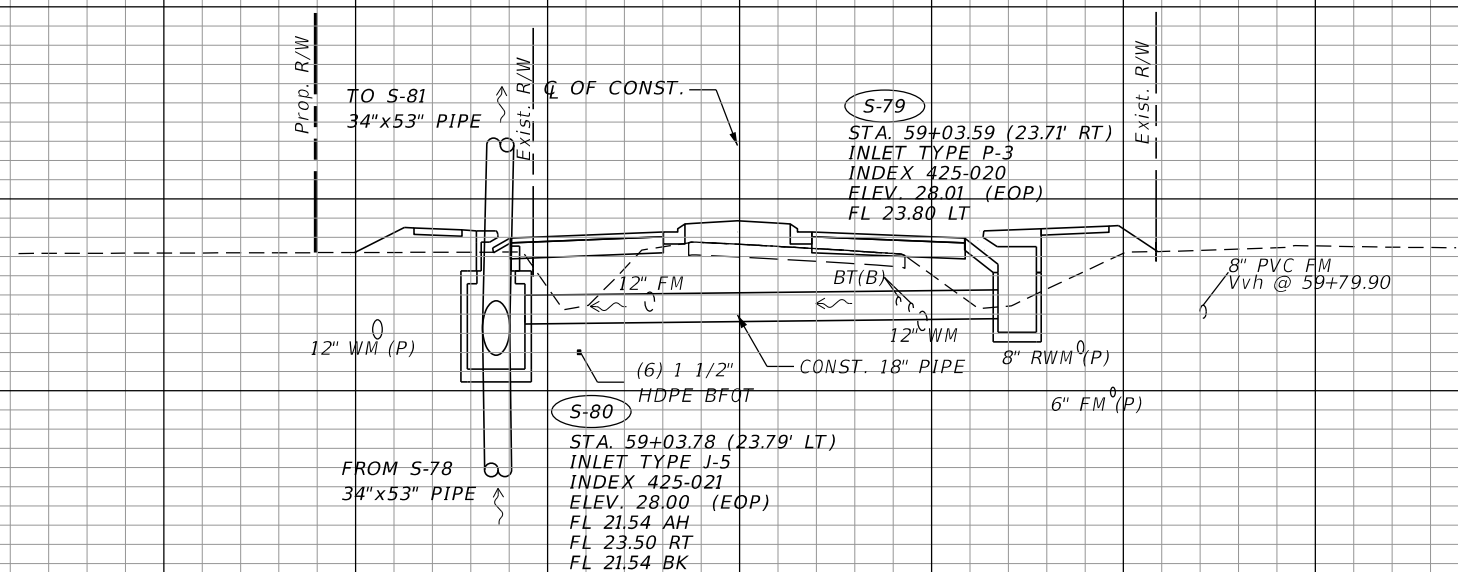
SHEET NO.
87

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-82
S-81
61+04.74

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-80
S-79
59+03.59

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

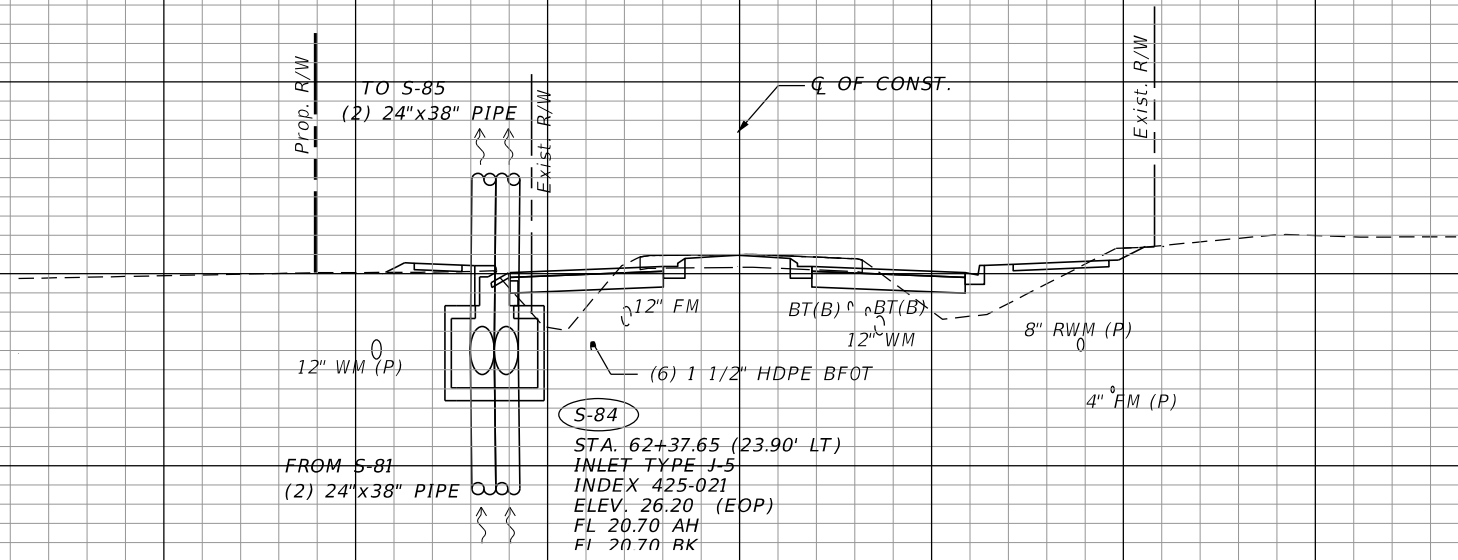
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

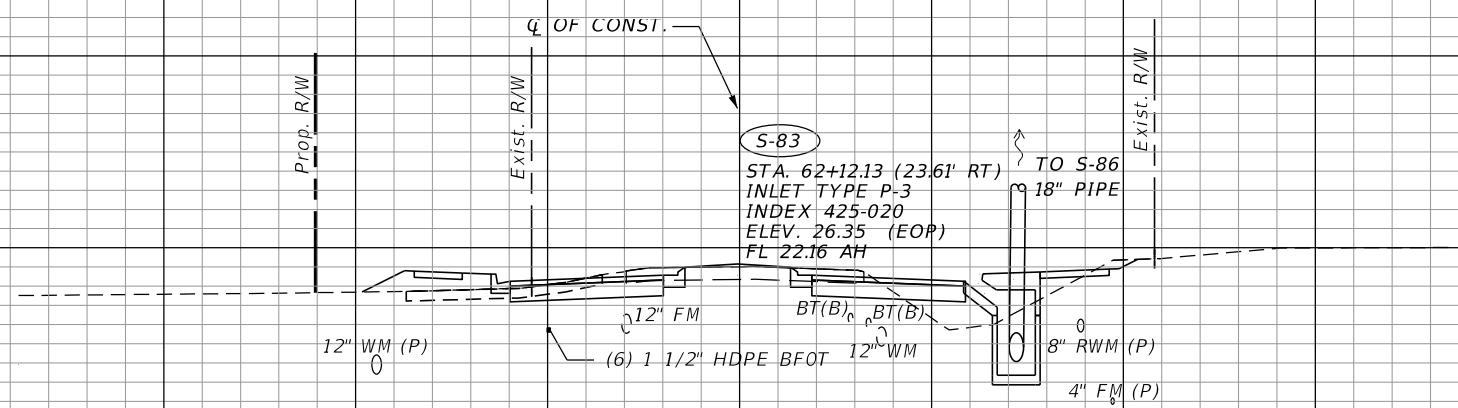
SHEET NO.
88

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-84
62+37.65

40
38
36
34
32
30
28
26
24
22
20



S-83
62+12.13

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

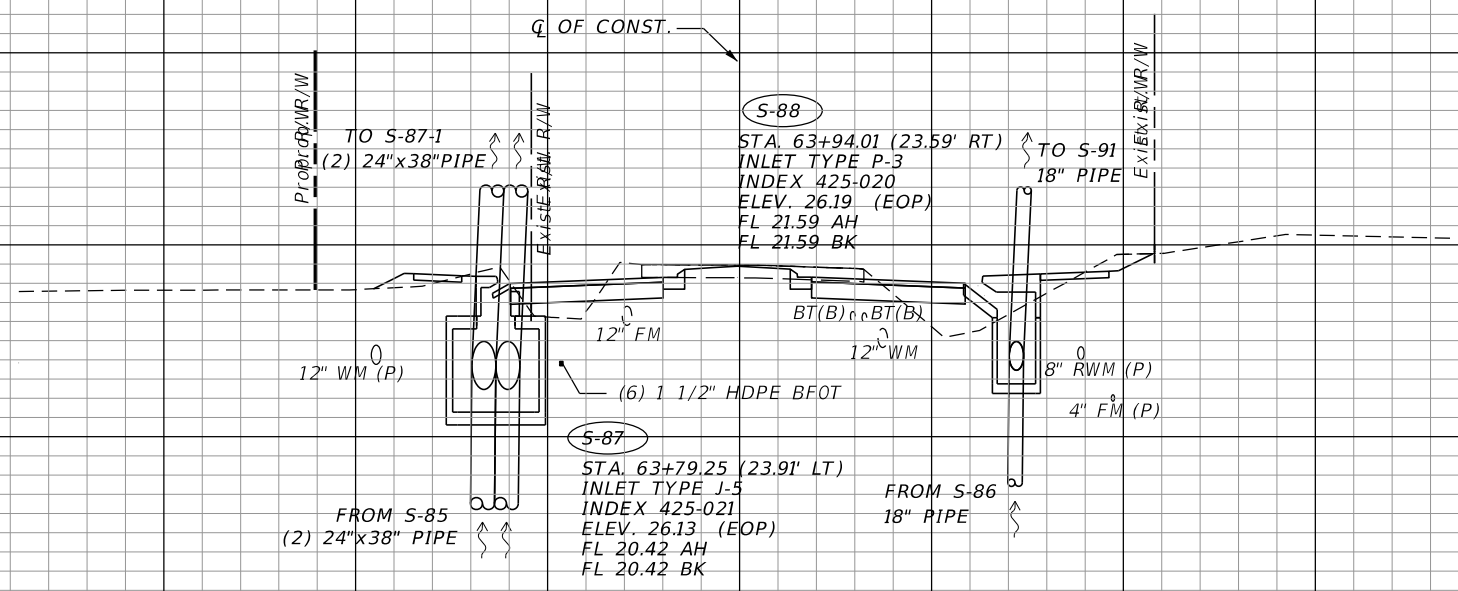
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

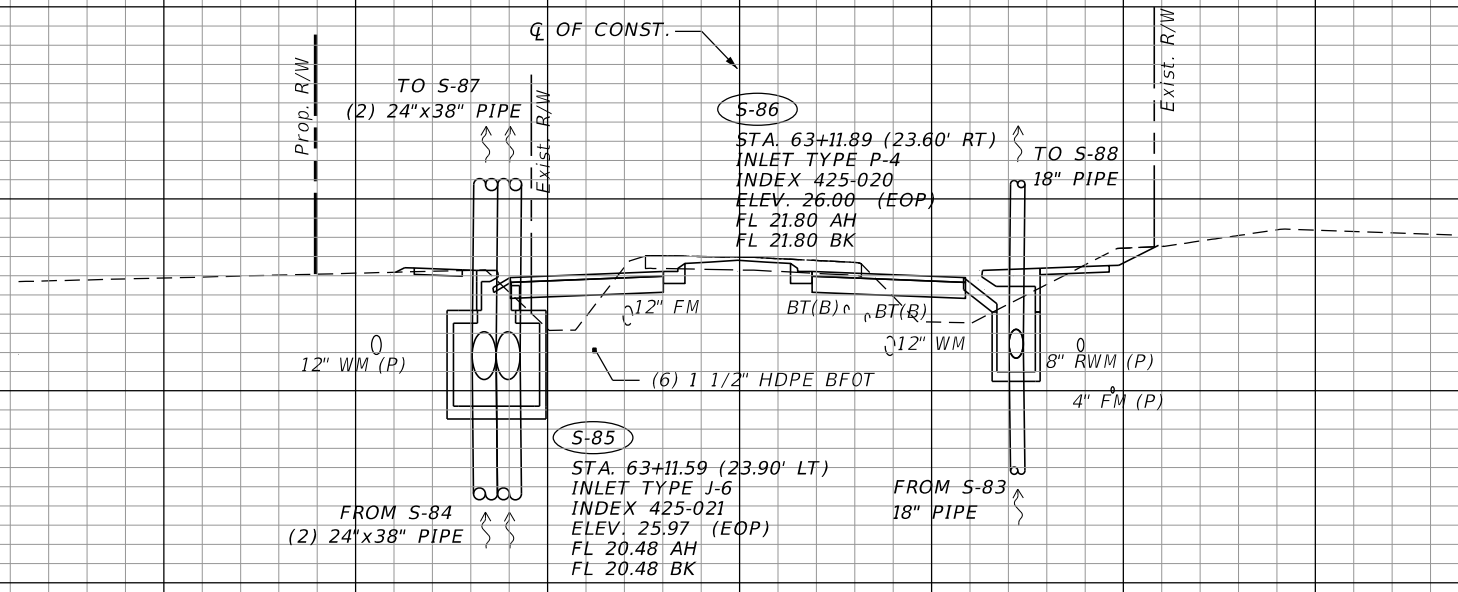
SHEET NO.
89

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-88
S-87
63+80.37

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-86
S-85
63+11.59

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

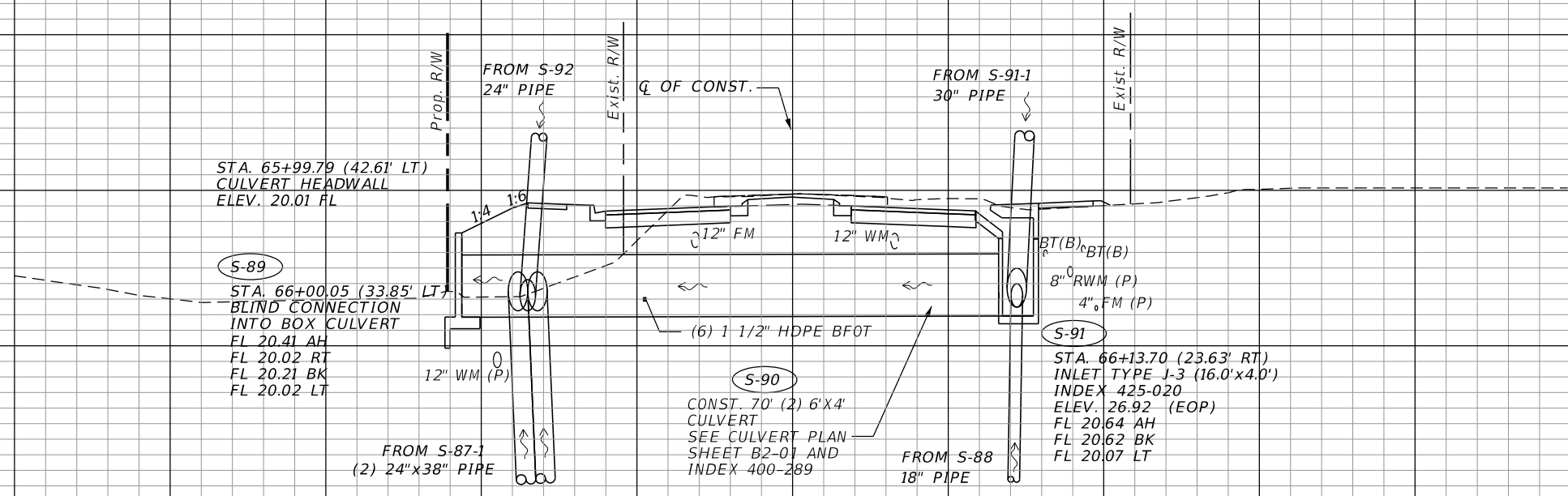
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

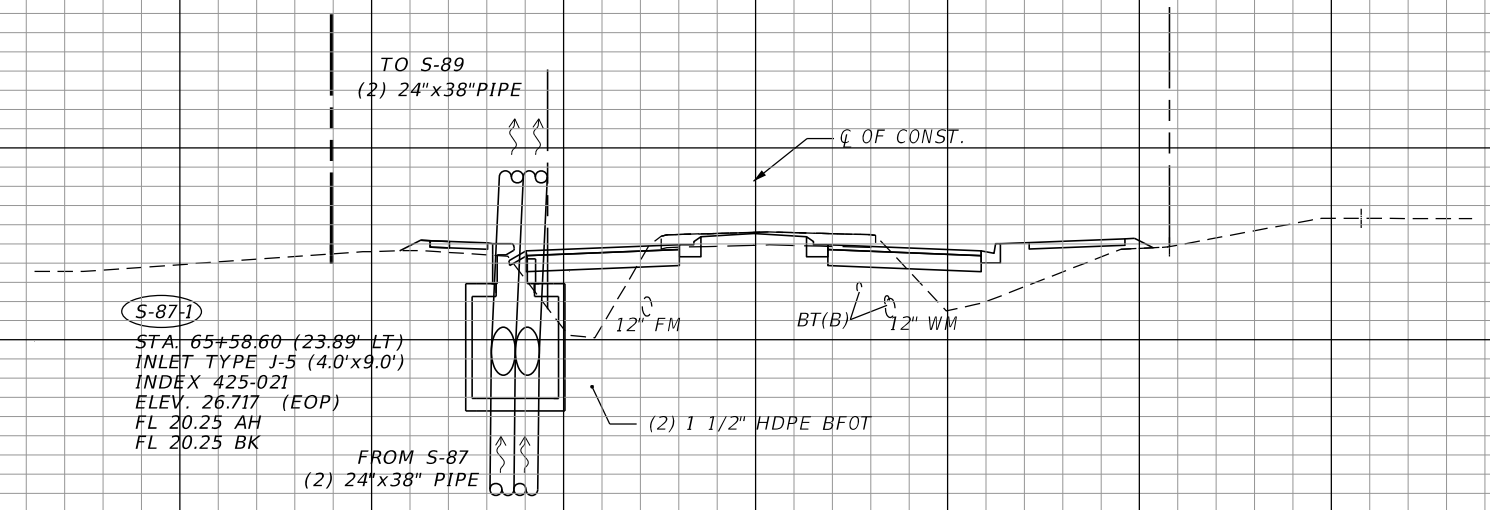
SHEET NO.
90

38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8



(S-91)
(S-90)
(S-89)
65+87.12

38
36
34
32
30
28
26
24
22
20
18
16
14



(S-87-1)
65+58.60

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

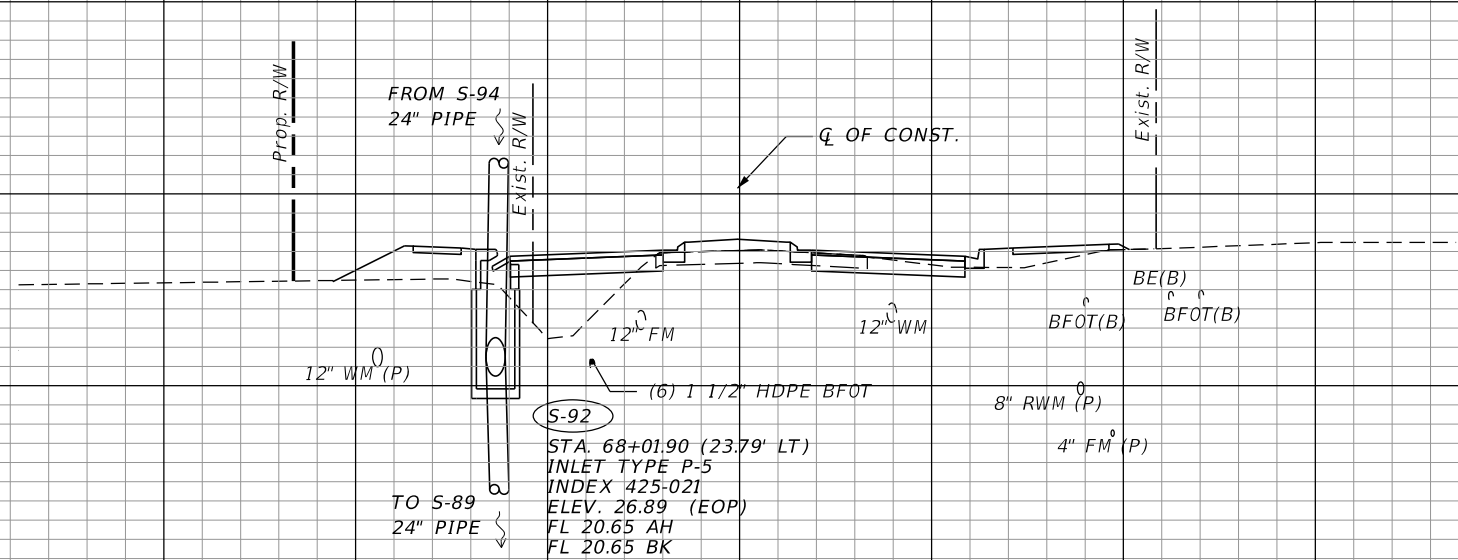
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

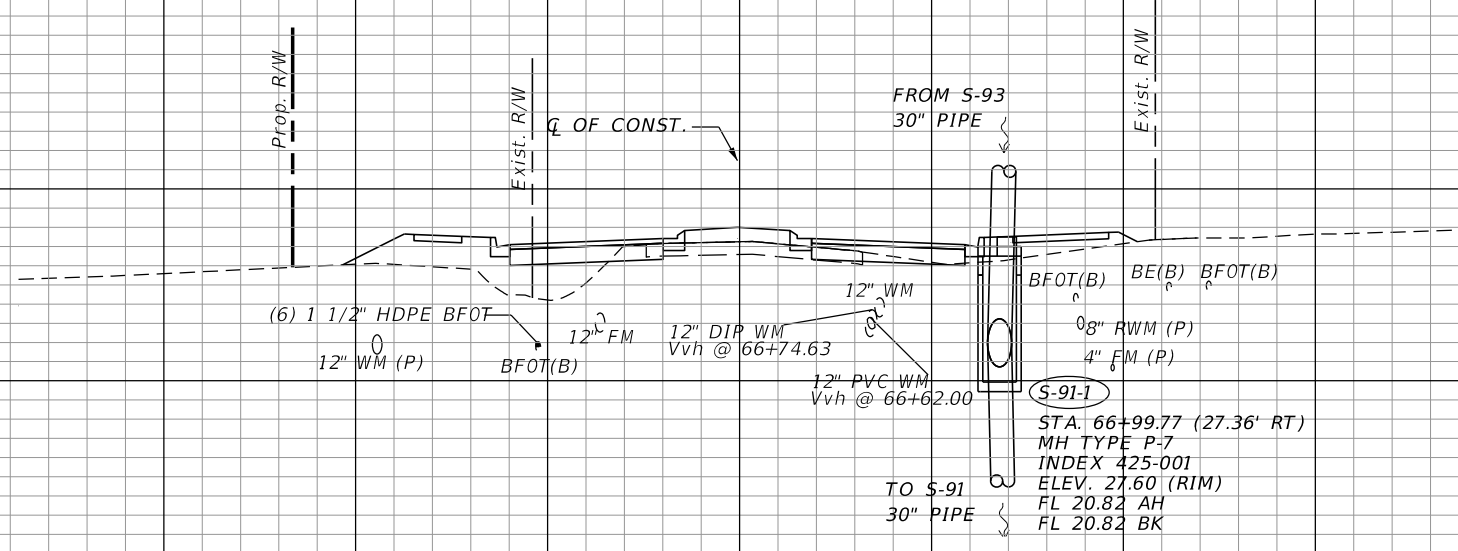
DRAINAGE STRUCTURES

SHEET NO.
91

38
36
34
32
30
28
26
24
22
20
18
16
14
12



38
36
34
32
30
28
26
24
22
20
18
16
14
12



1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

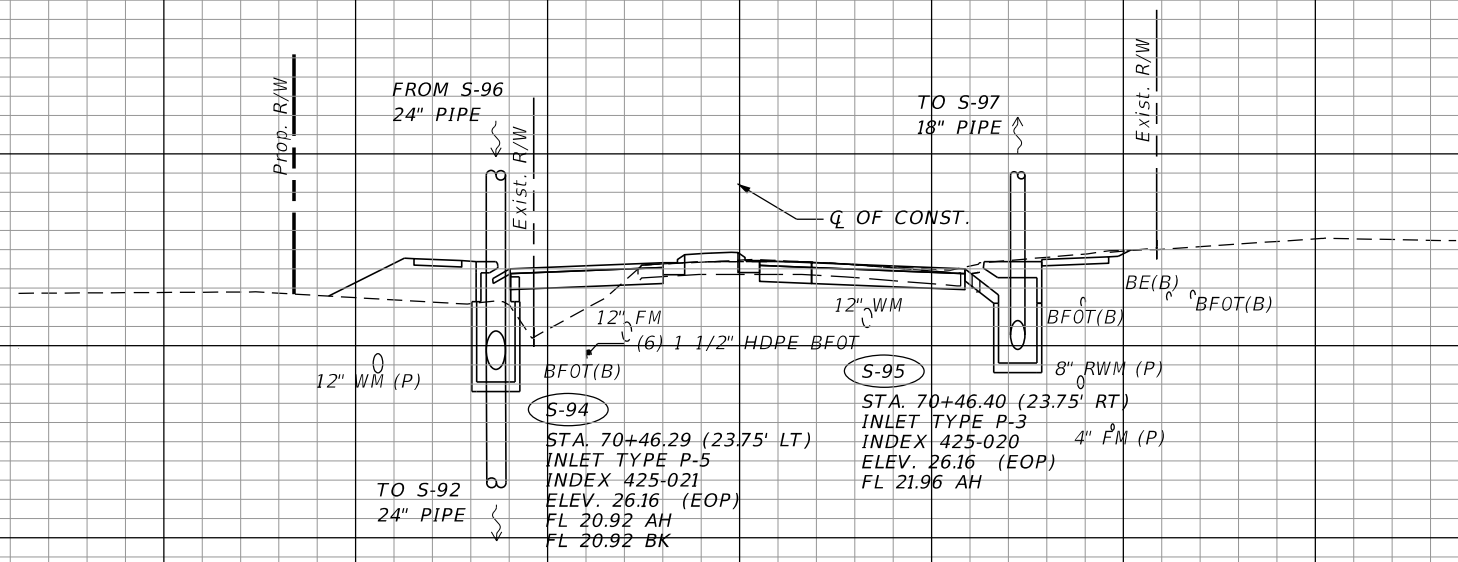
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

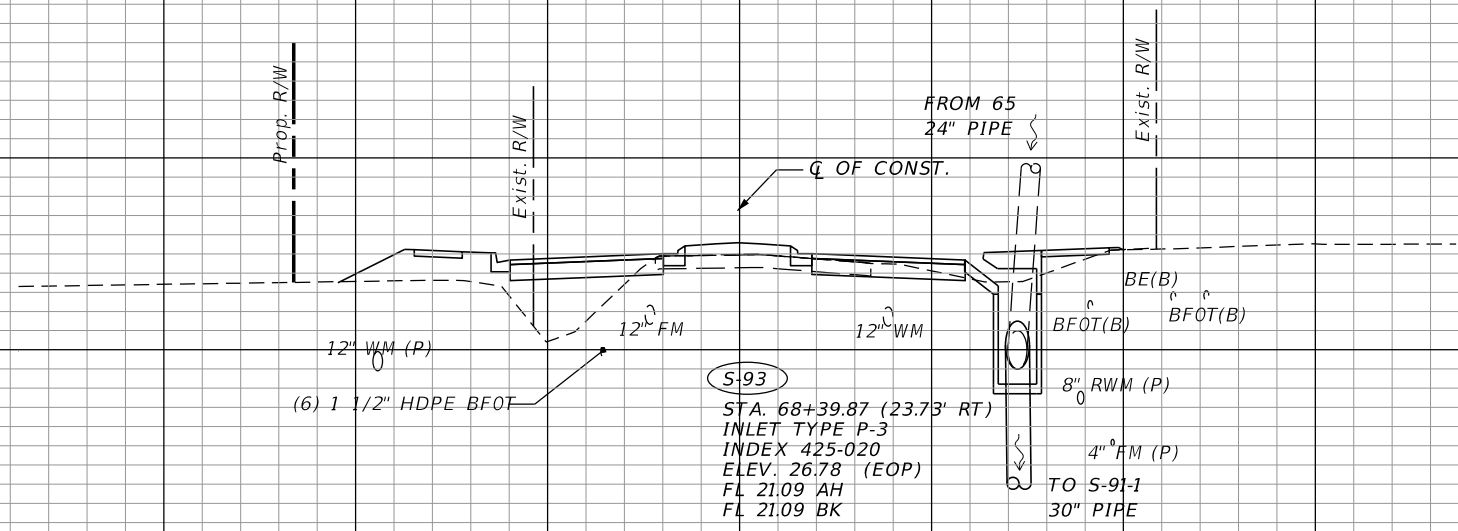
92

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-95
S-94
70+46.40

38
36
34
32
30
28
26
24
22
20
18
16
14



S-93
68+39.87

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

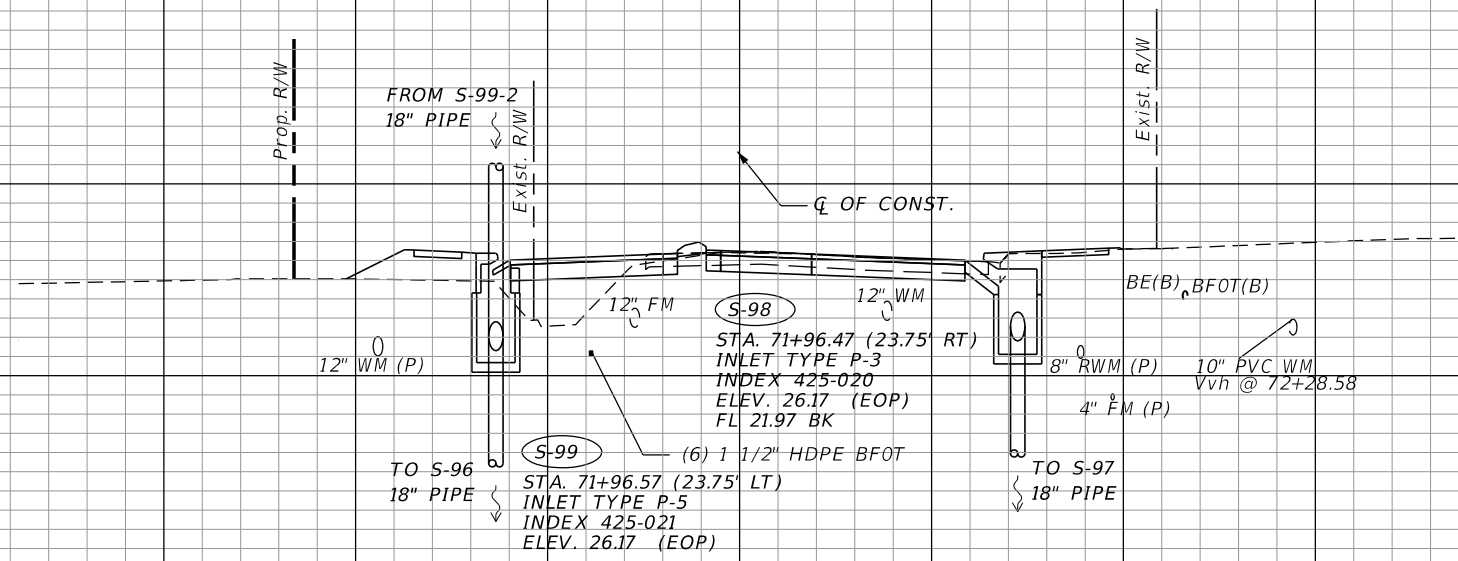
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

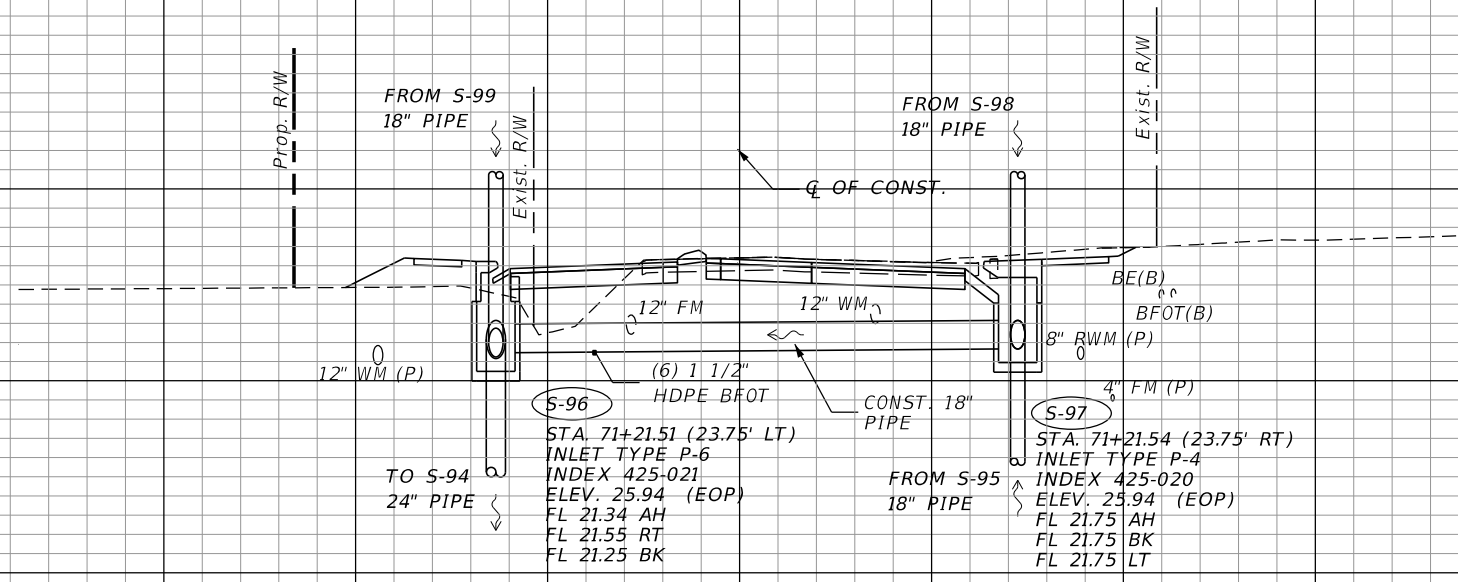
SHEET NO.
93

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-99
S-98
71+96.47

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-97
S-96
71+21.51

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

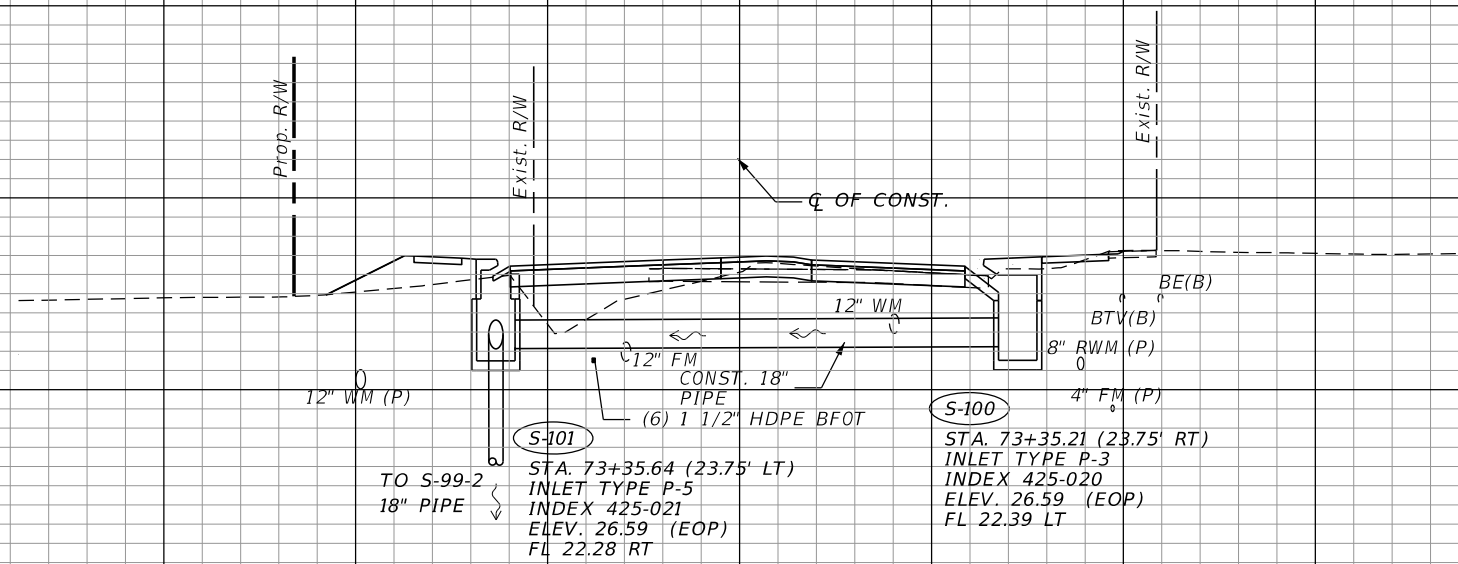
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

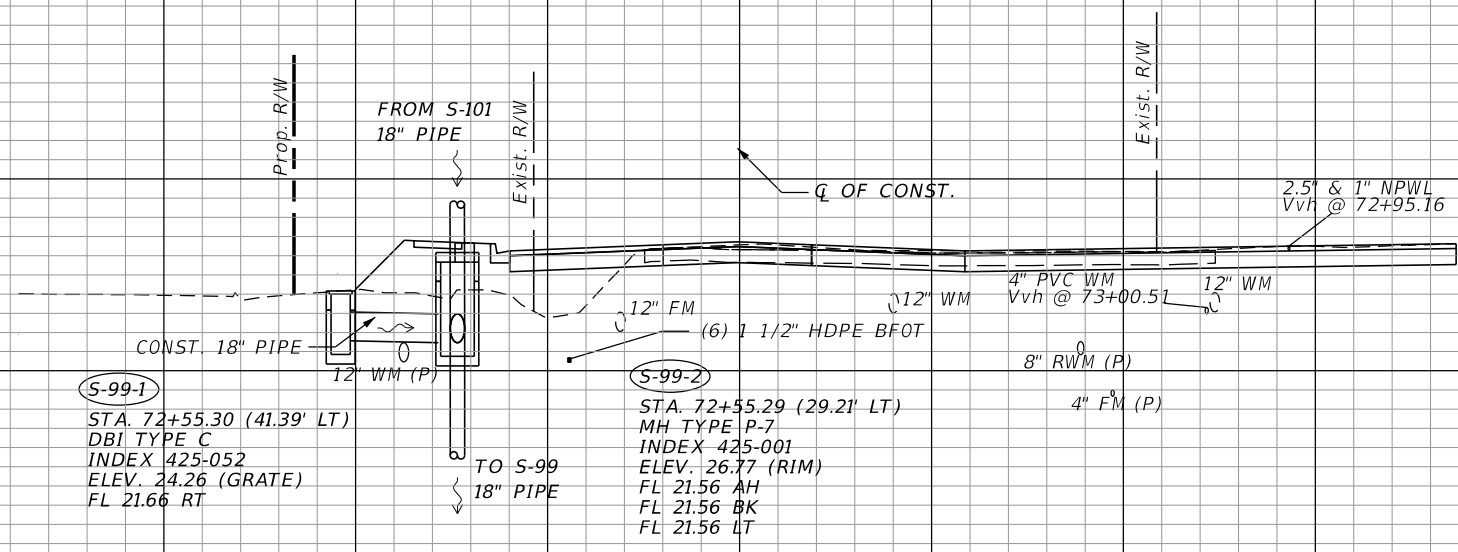
SHEET NO.
94

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-101
S-100
73+35.64

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-99-2
S-99-1
72+55.29

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

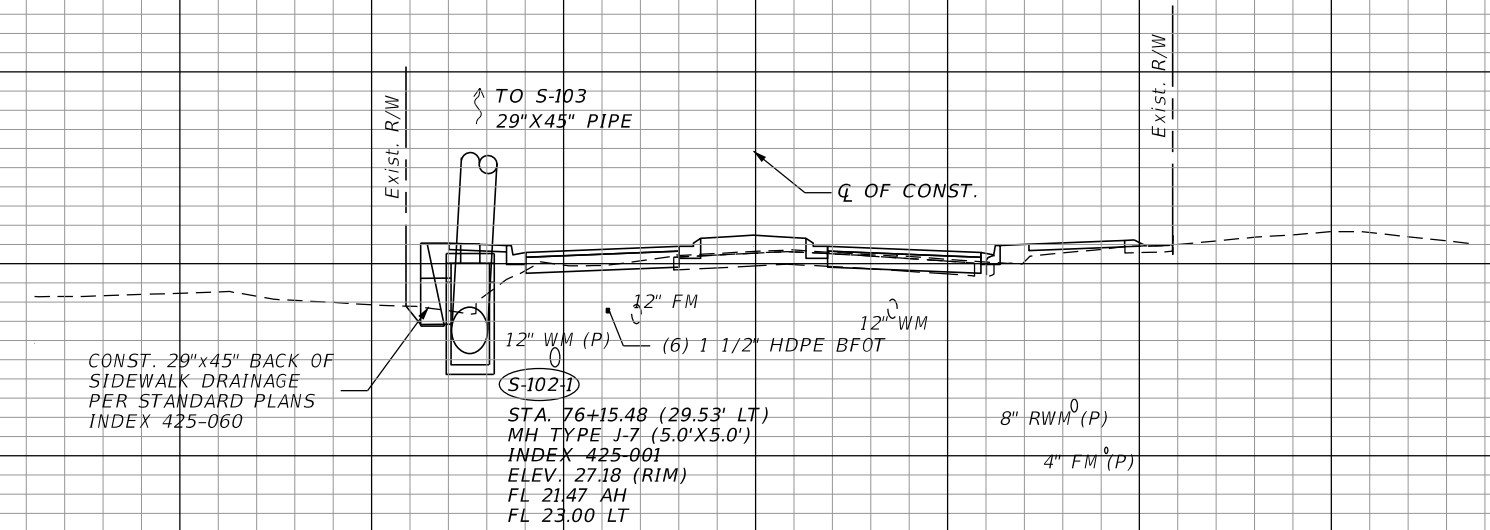
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
95

38
36
34
32
30
28
26
24
22
20
18
16
14

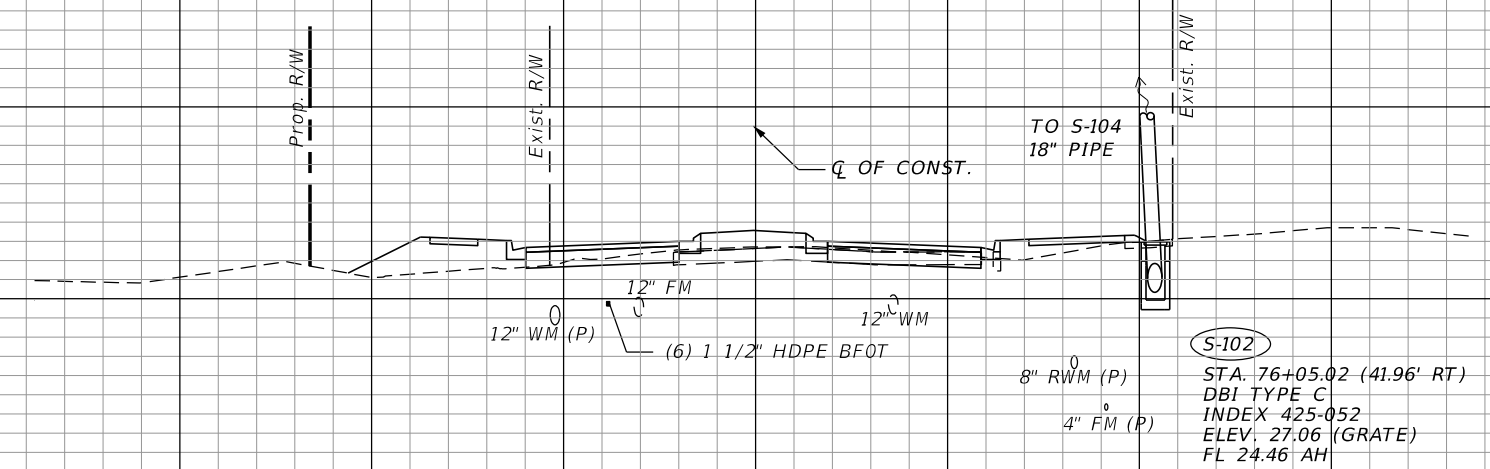


CONST. 29"x45" BACK OF
SIDEWALK DRAINAGE
PER STANDARD PLANS
INDEX 425-060

S-102-1
STA. 76+15.48 (29.53' LT)
MH TYPE J-7 (5.0'X5.0')
INDEX 425-001
ELEV. 27.18 (RIM)
FL 21.47 AH
FL 23.00 LT

S-102-1
76+15.16

38
36
34
32
30
28
26
24
22
20
18
16



S-102
STA. 76+05.02 (41.96' RT)
DBI TYPE C
INDEX 425-052
ELEV. 27.06 (GRATE)
FL 24.46 AH

S-102
76+05.02

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

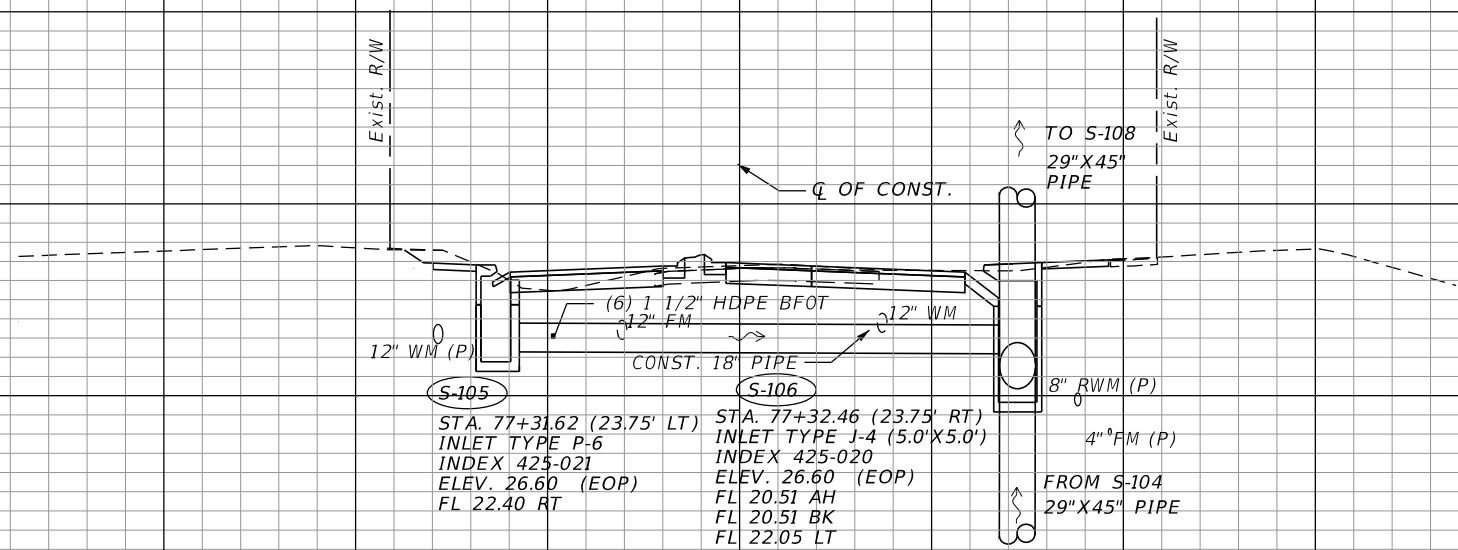
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

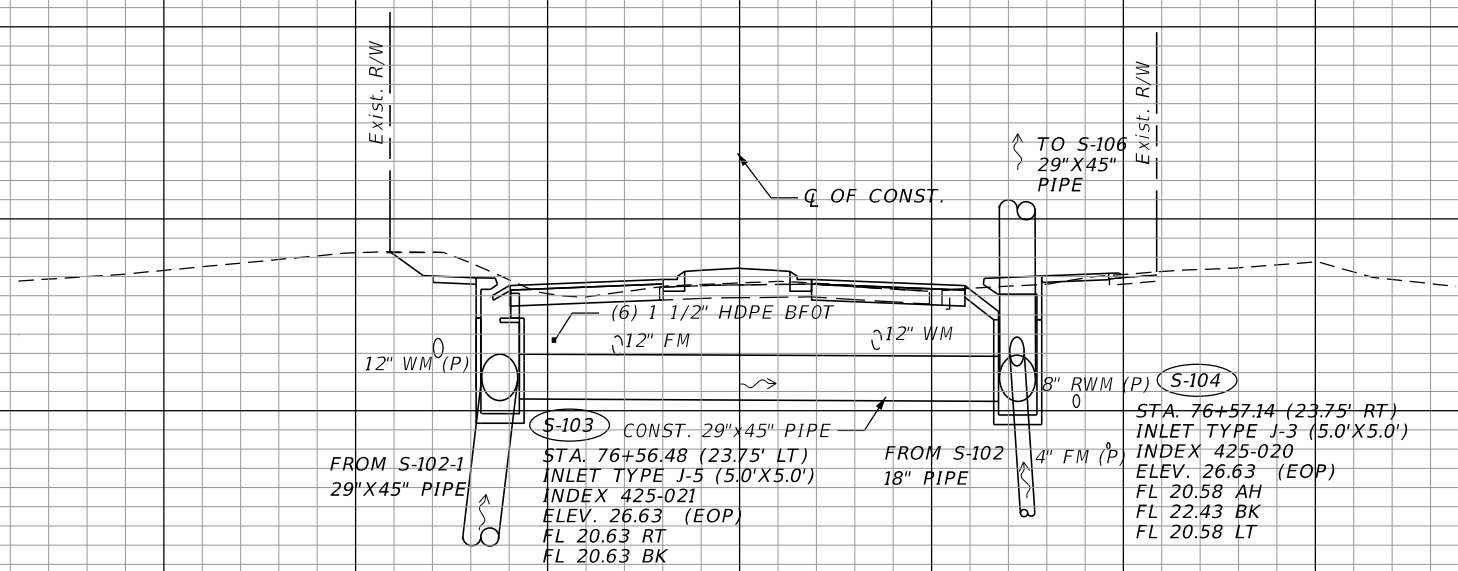
SHEET NO.
96

40
38
36
34
32
30
28
26
24
22
20
18
16
14

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-106
S-105
77+32.04



S-104
S-103
76+57.14

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

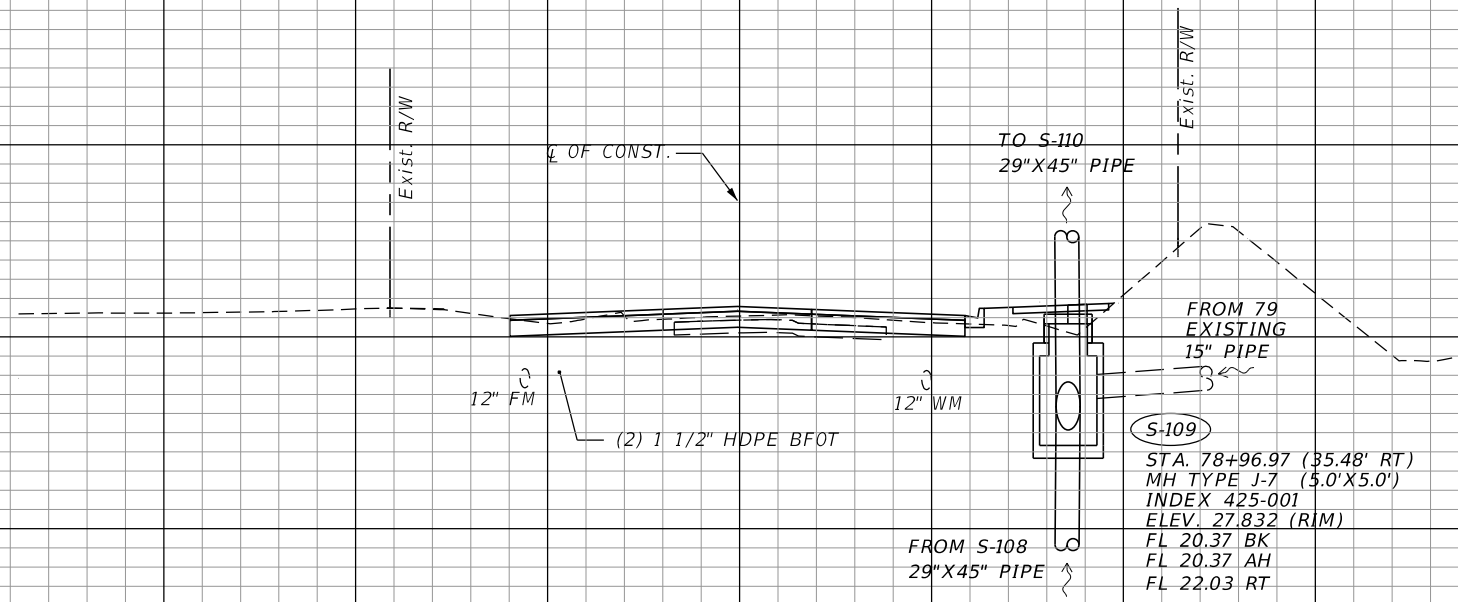
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

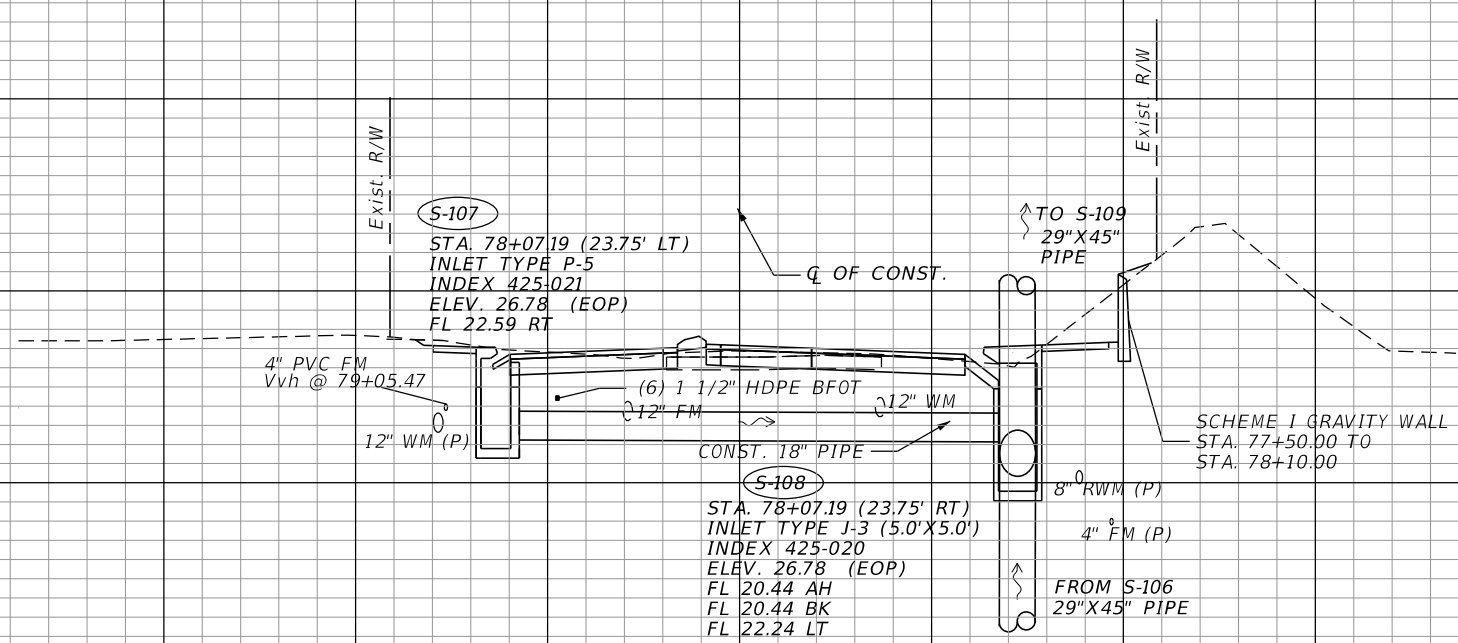
SHEET NO.
97

42
40
38
36
34
32
30
28
26
24
22
20
18
16
14



(S-109)
78+96.97

44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



(S-108)
(S-107)
78+07.19

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

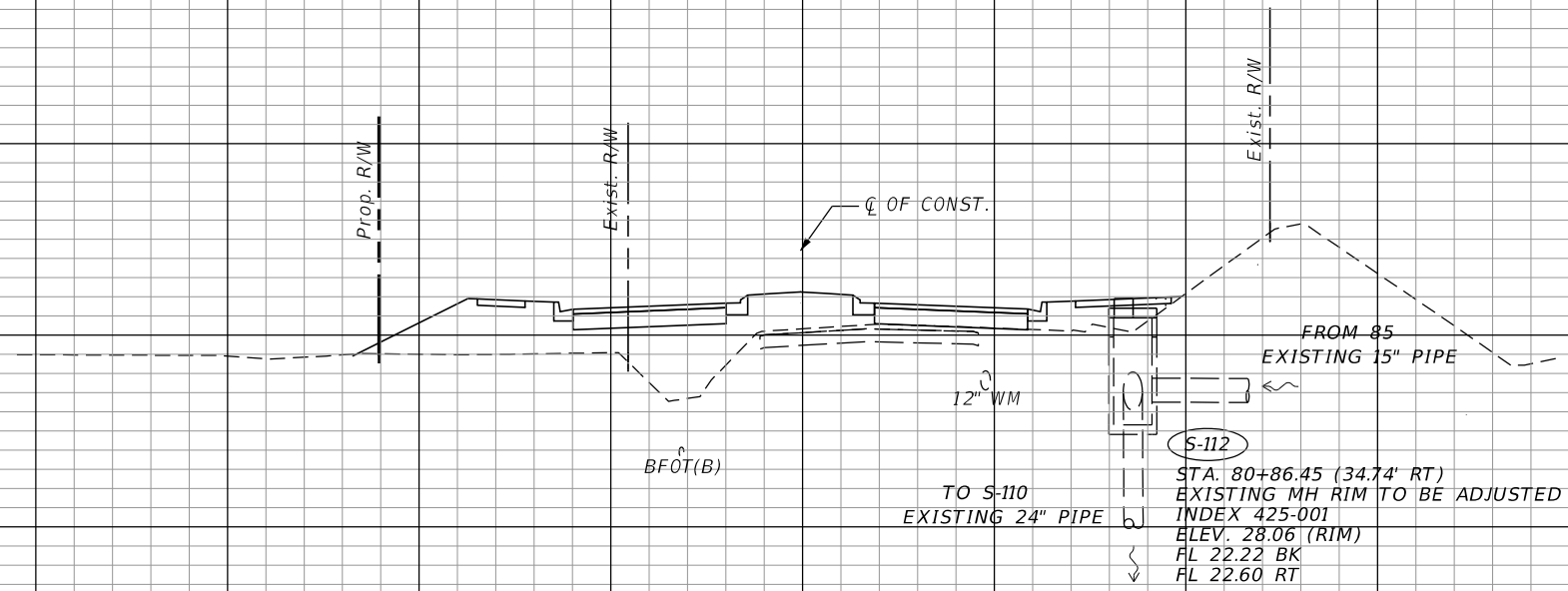
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

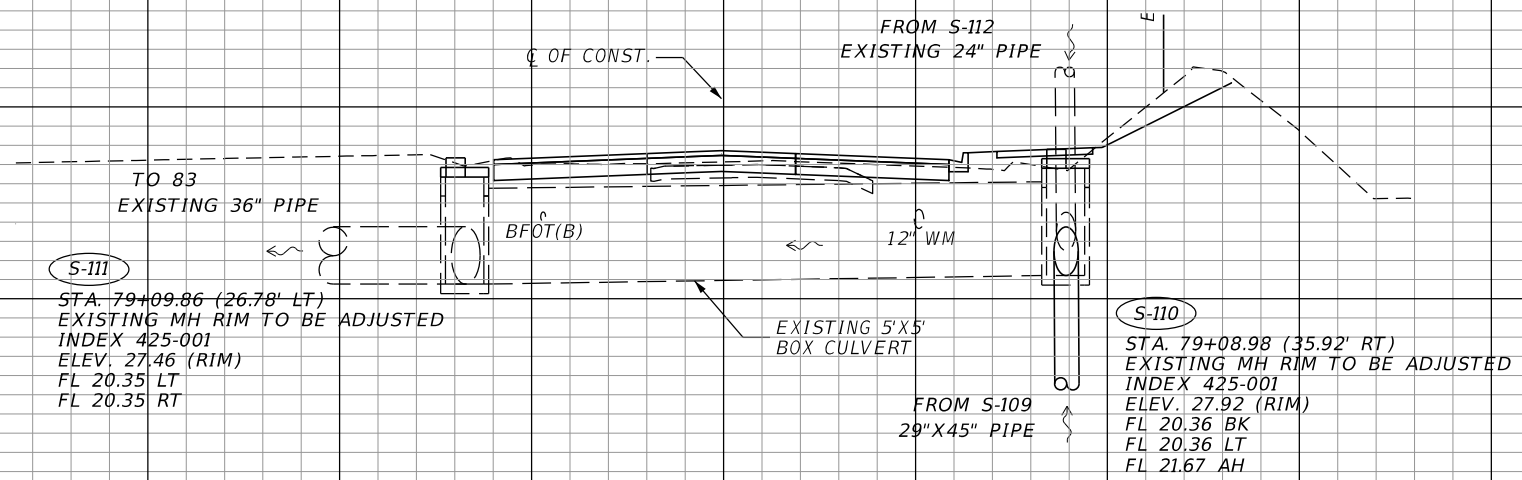
SHEET NO.
98

42
40
38
36
34
32
30
28
26
24
22
20
18
16
14



S-112
80+86.56

34
32
30
28
26
24
22
20
18
16
14
12



S-110
S-110
79+09.52

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

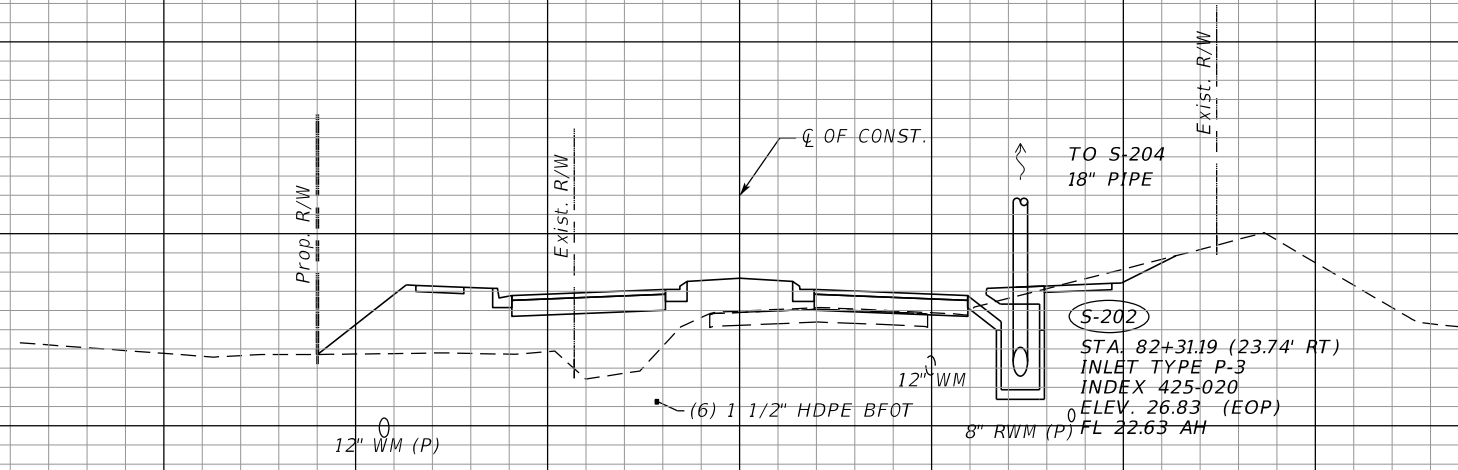
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

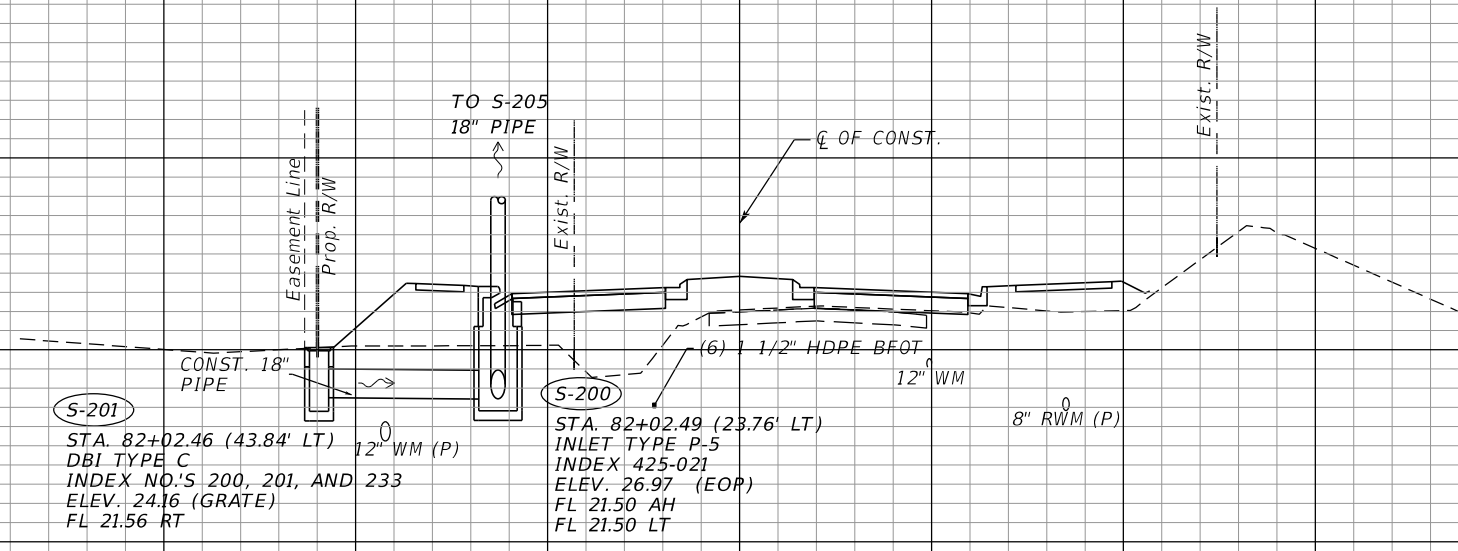
SHEET NO.
99

40
38
36
34
32
30
28
26
24
22
20



(S-202)
82+31.19

40
38
36
34
32
30
28
26
24
22
20
18
16



(S-201)
STA. 82+02.46 (43.84' LT)
DBI TYPE C
INDEX NO.'S 200, 201, AND 233
ELEV. 24.16 (GRATE)
FL 21.56 RT

(S-200)
STA. 82+02.49 (23.76' LT)
INLET TYPE P-5
INDEX 425-021
ELEV. 26.97 (EOP)
FL 21.50 AH
FL 21.50 LT

(S-201)
(S-200)
82+02.07

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

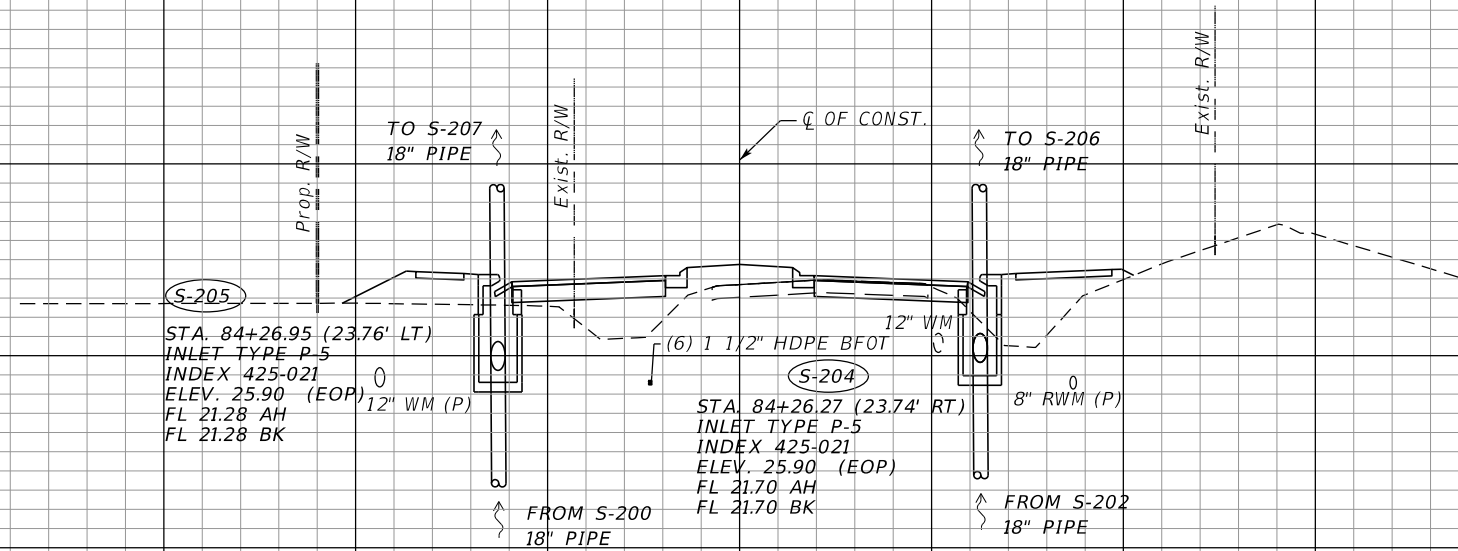
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

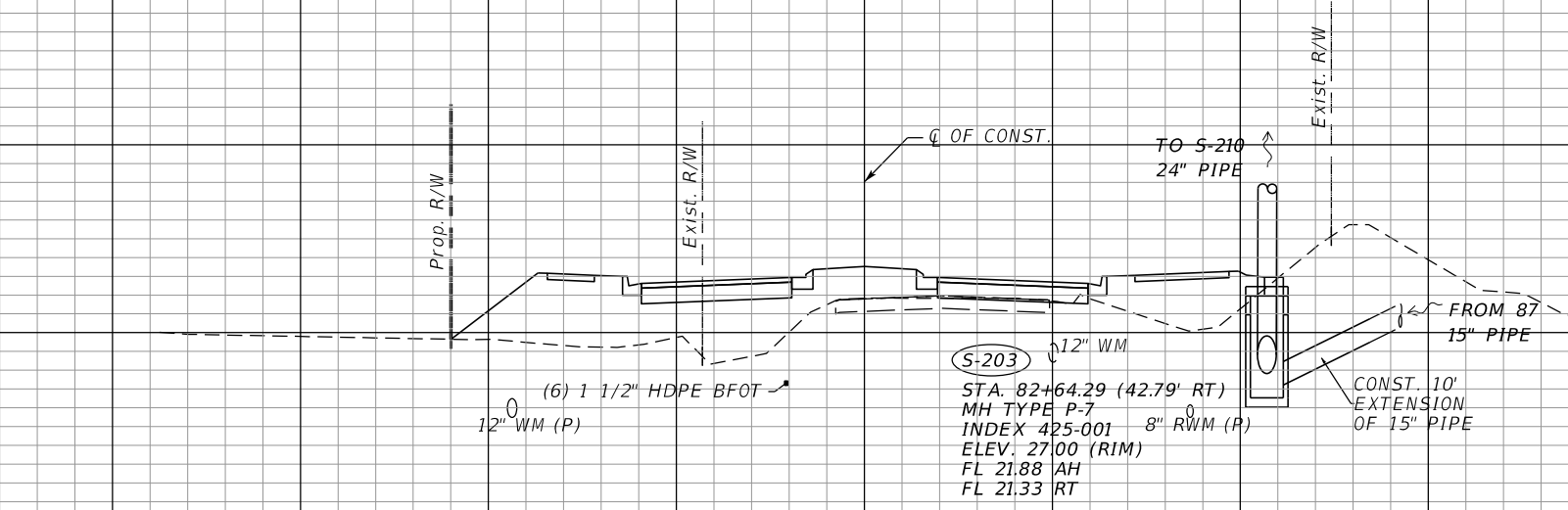
SHEET NO.
100

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-205
S-204
84+26.61

40
38
36
34
32
30
28
26
24
22
20
18
16



S-203
82+64.29

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

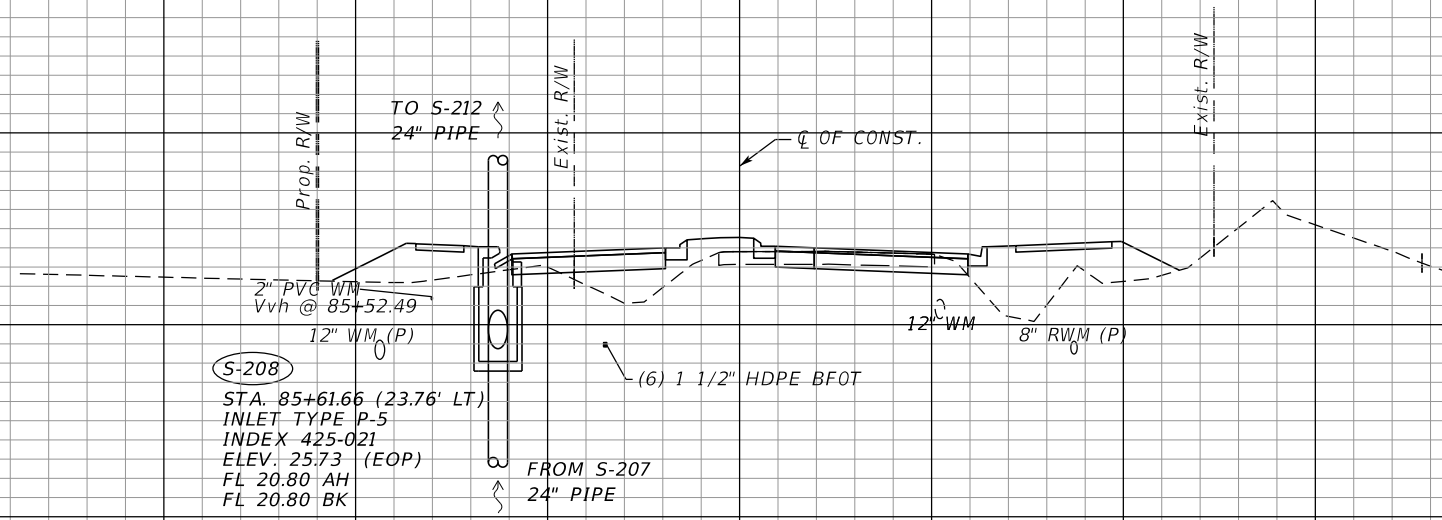
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

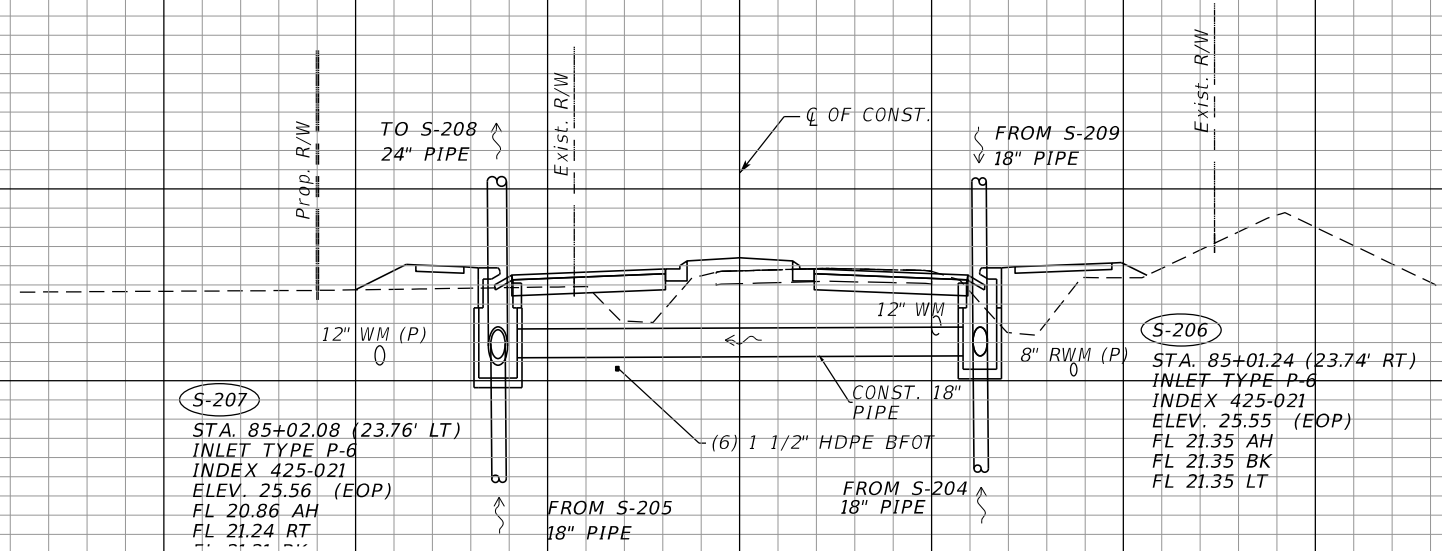
SHEET NO.
101

38
36
34
32
30
28
26
24
22
20
18
16
14



S-208
85+61.66

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-207
S-206
85+01.66

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

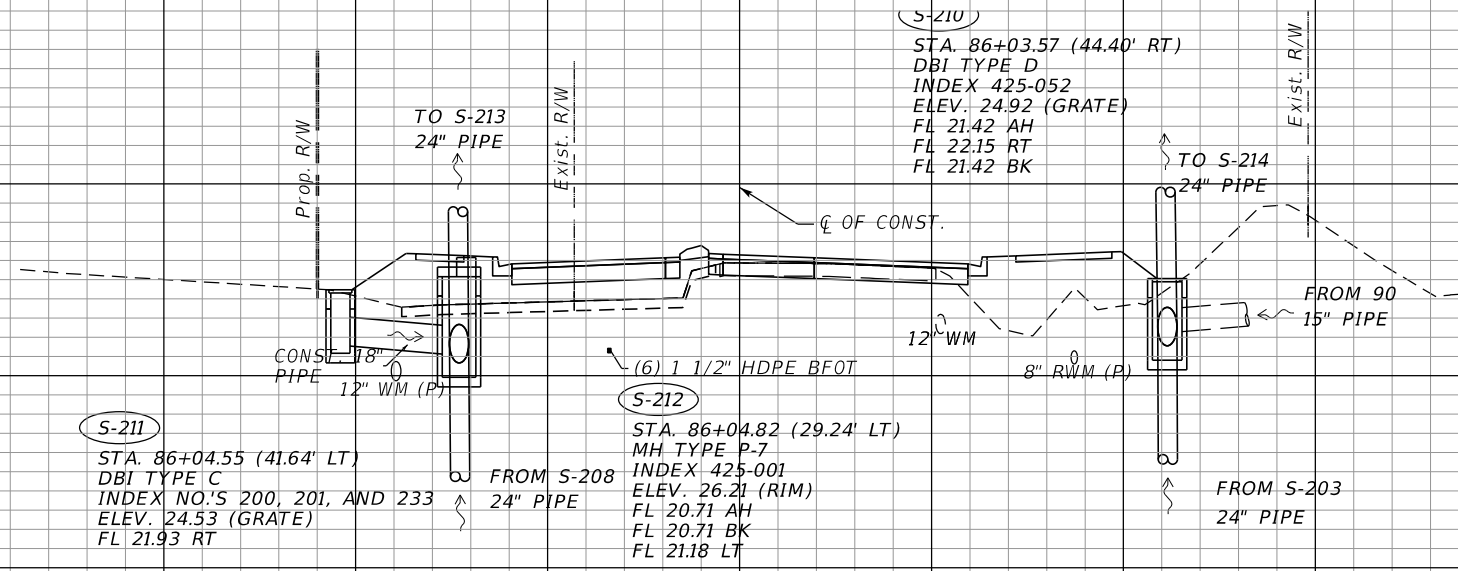
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

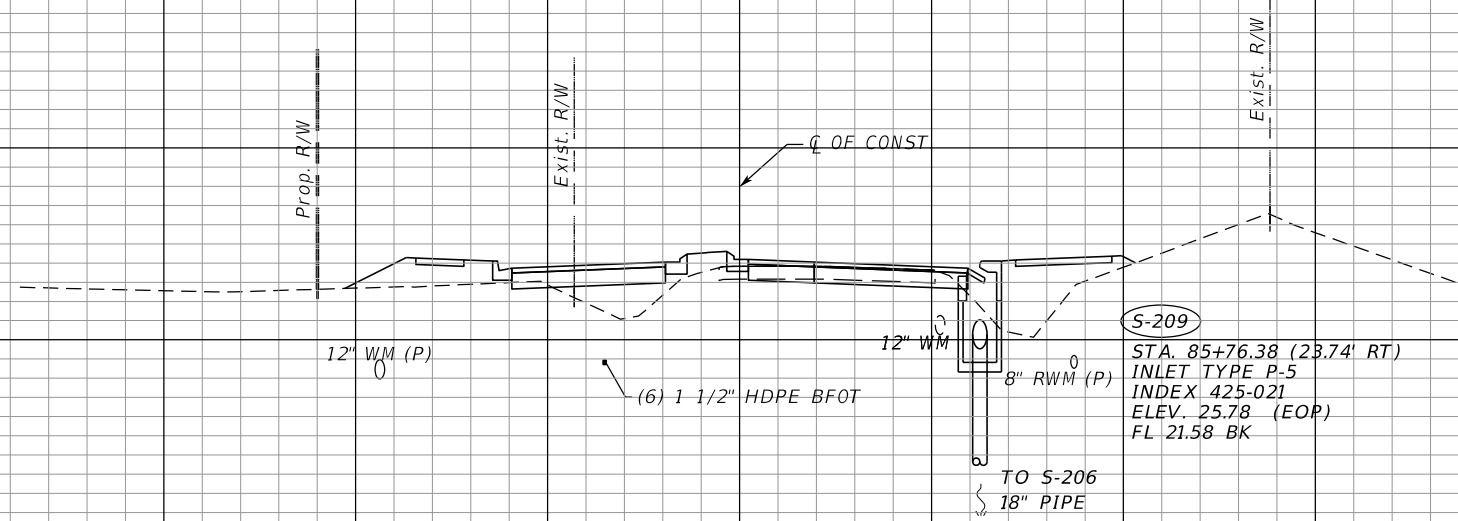
SHEET NO.
102

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-210
S-211
S-212
86+04.33

40
38
36
34
32
30
28
26
24
22
20
18
16
14



S-209
85+76.38

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

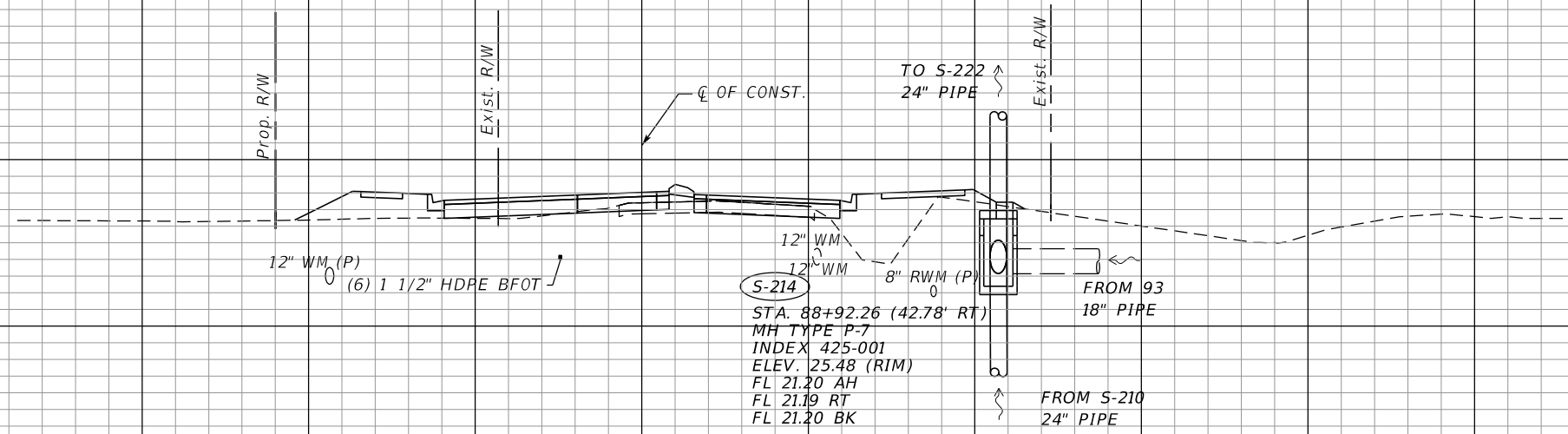
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

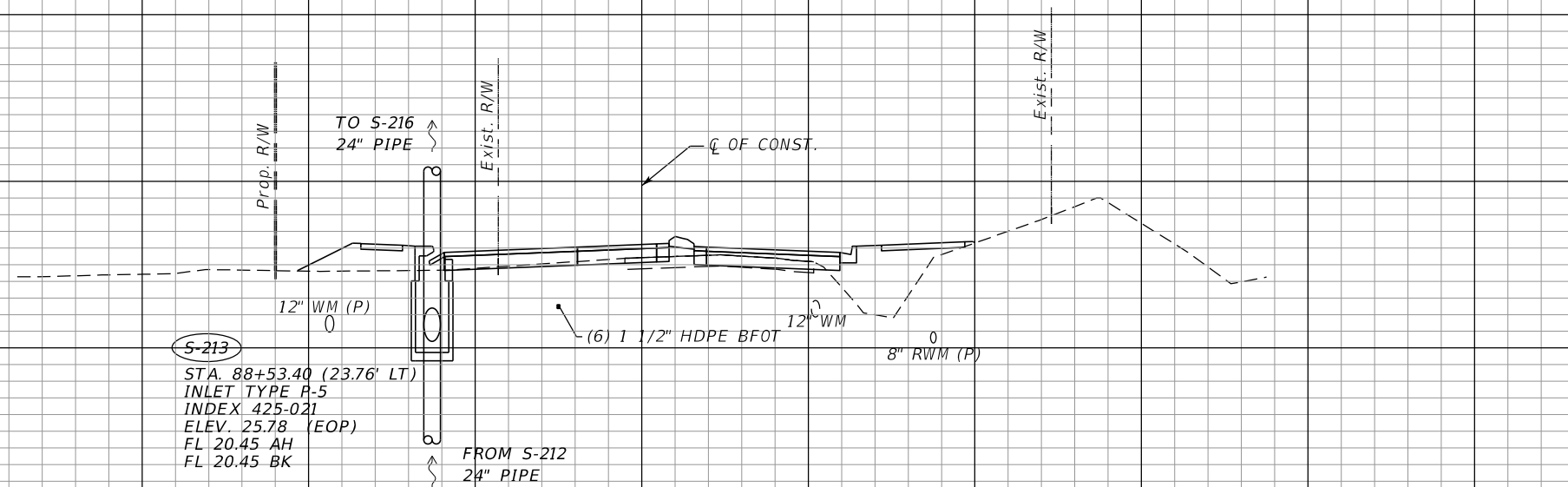
SHEET NO.
103

36
34
32
30
28
26
24
22
20
18
16
14
12



S-214
88+92.26

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-213
88+53.40

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

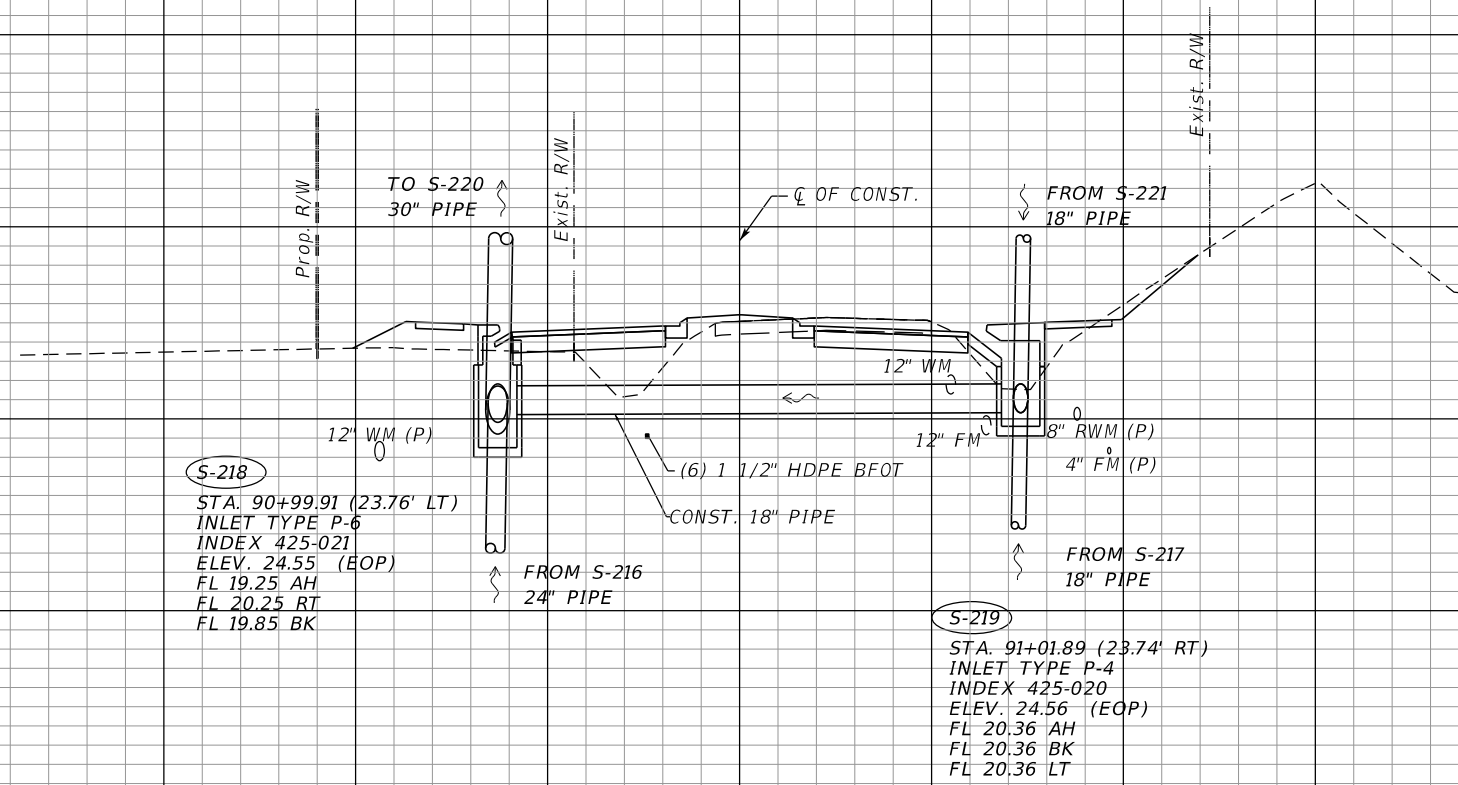
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

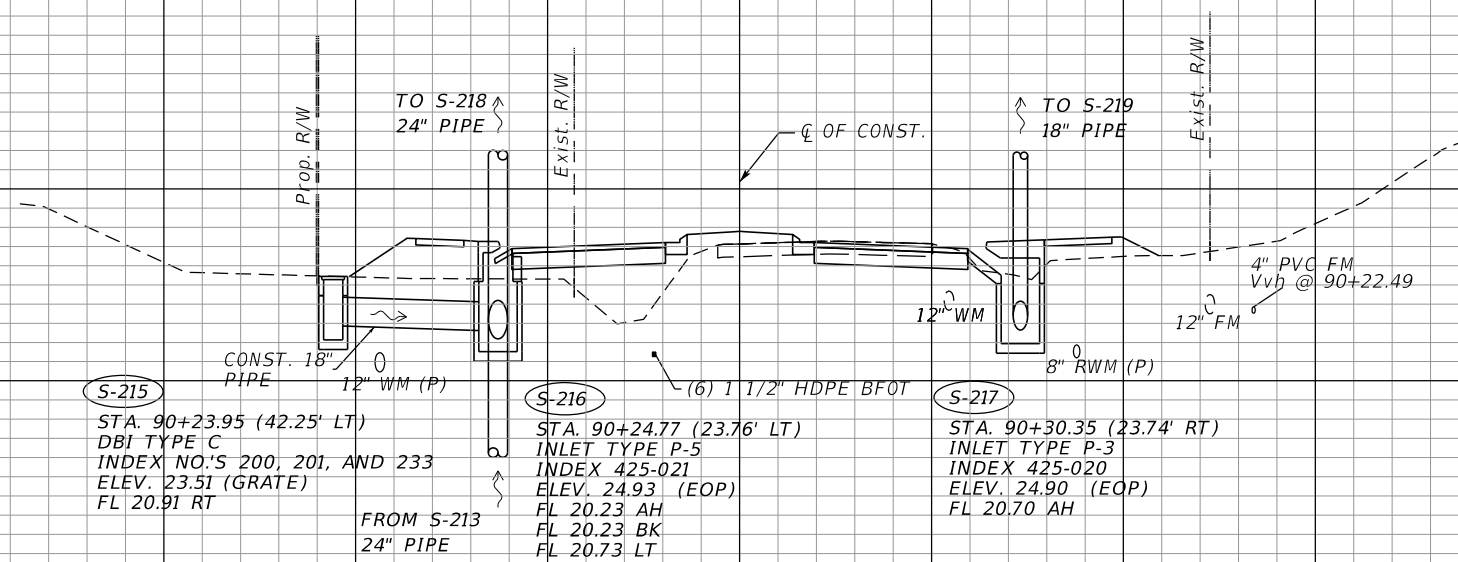
SHEET NO.
104

40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2



S-219
S-218
91+00.90

36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-217
S-216
S-215
90+24.77

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

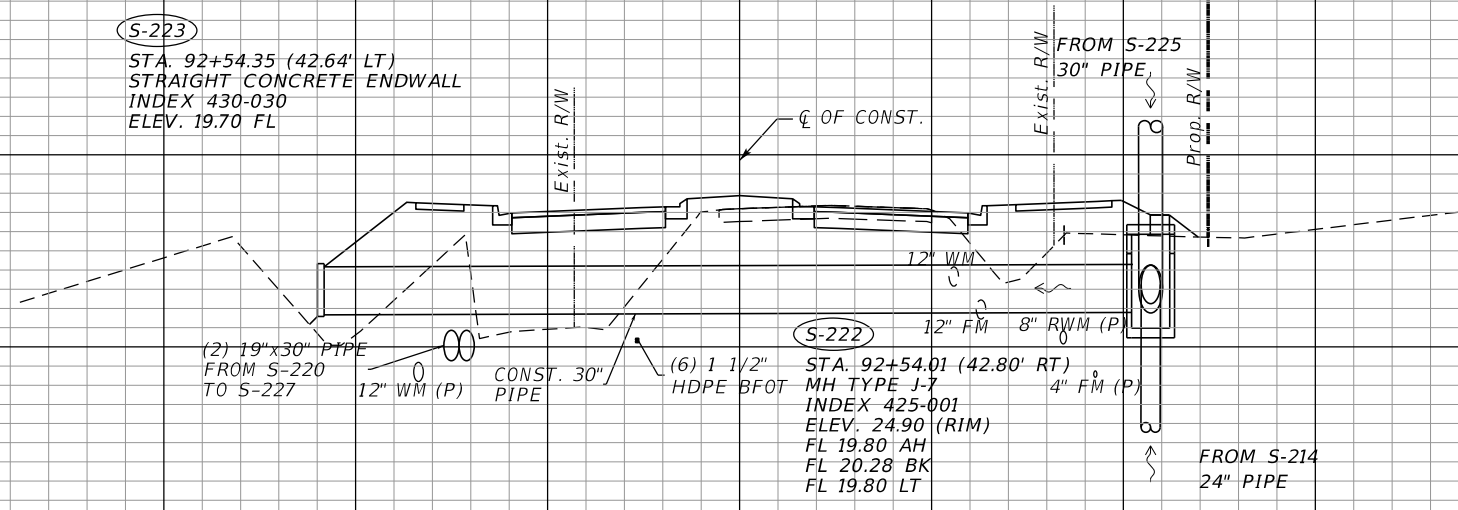
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

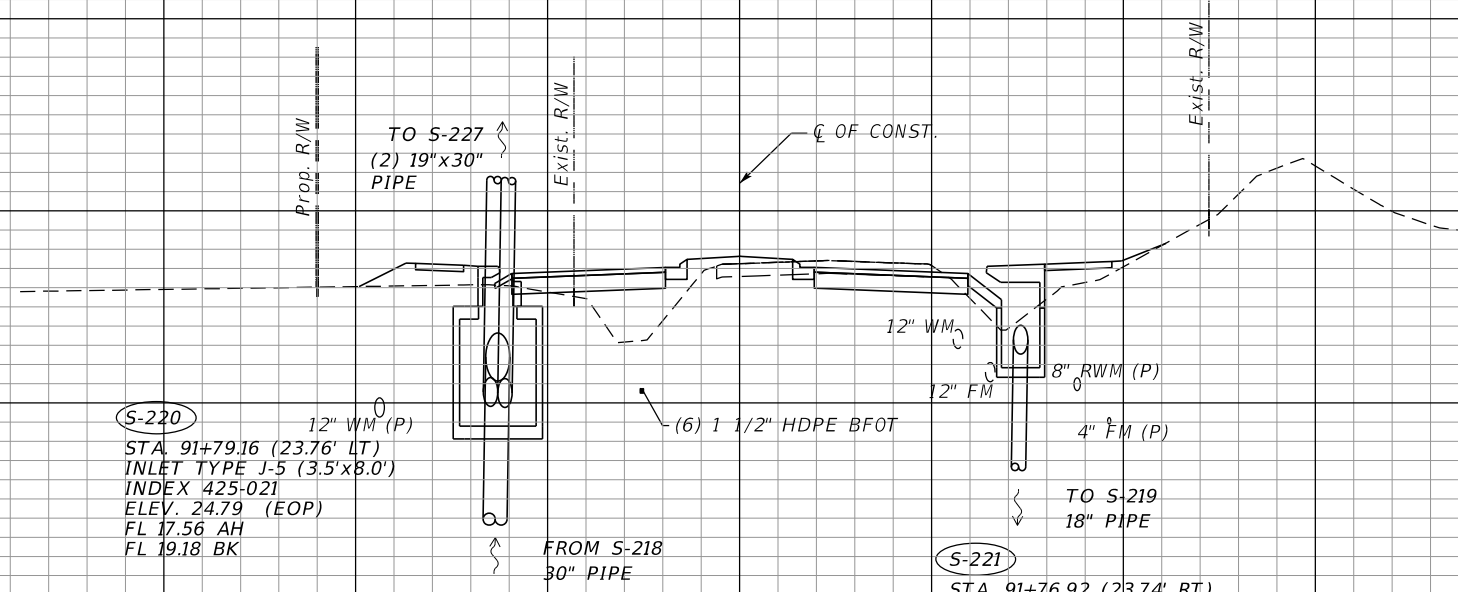
SHEET NO.
105

36
34
32
30
28
26
24
22
20
18
16
14
12

38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2



S-223
S-222
92+54.01



S-221
S-220
91+75.97

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

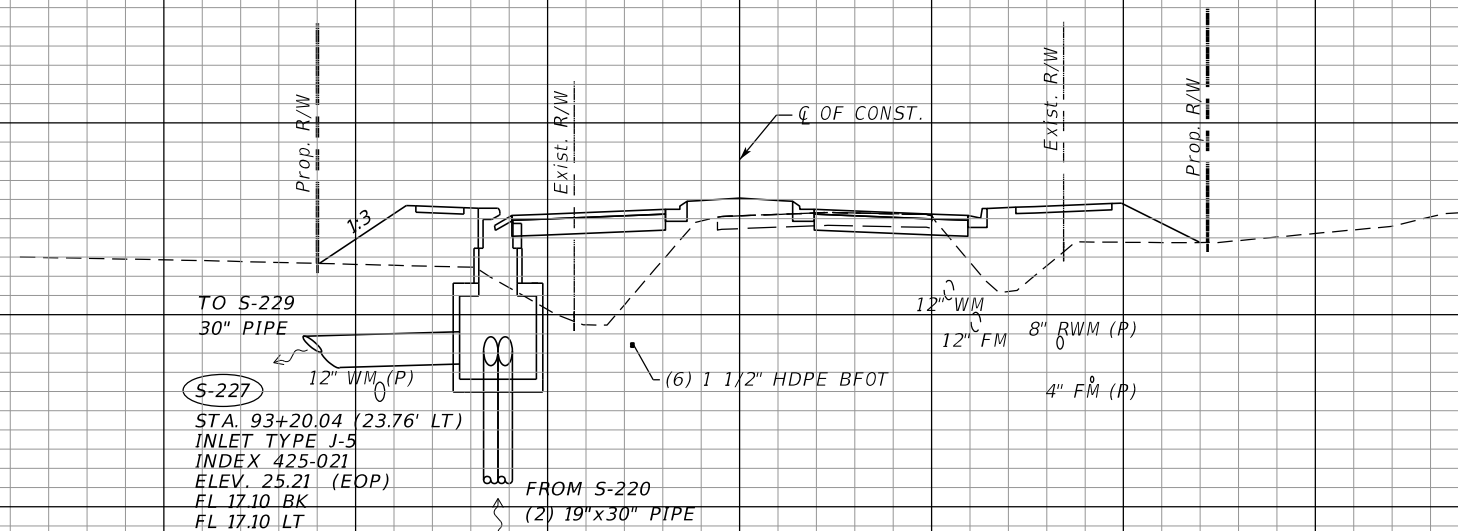
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

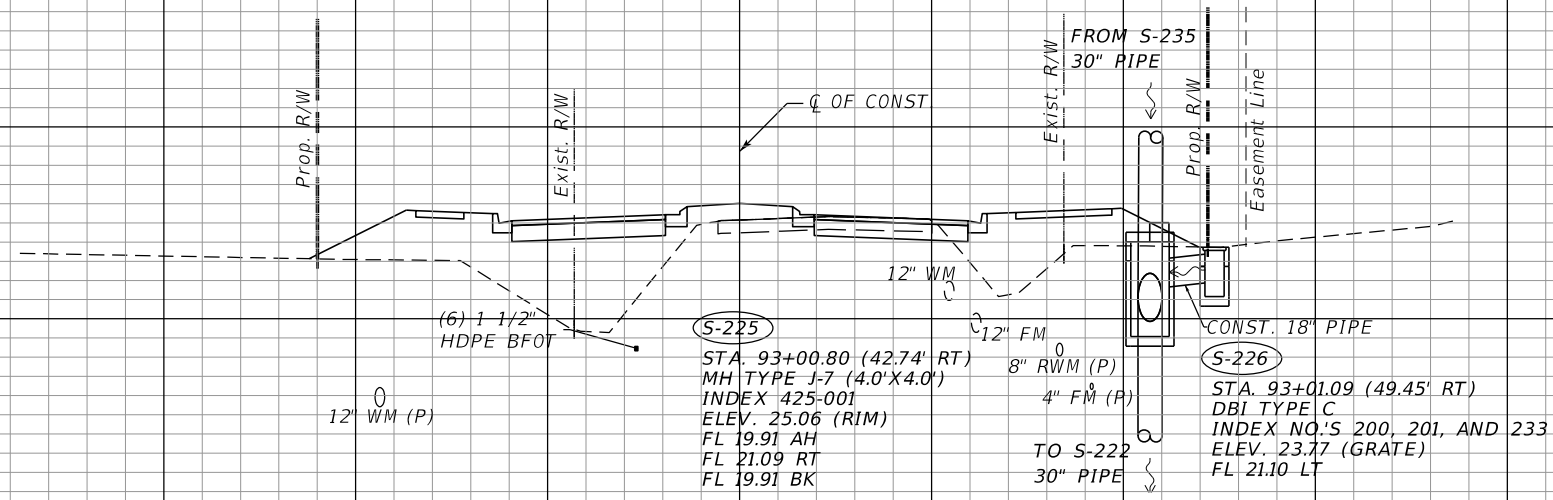
DRAINAGE STRUCTURES

SHEET NO.
106

36
34
32
30
28
26
24
22
20
18
16
14
12
10



36
34
32
30
28
26
24
22
20
18
16
14
12



1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

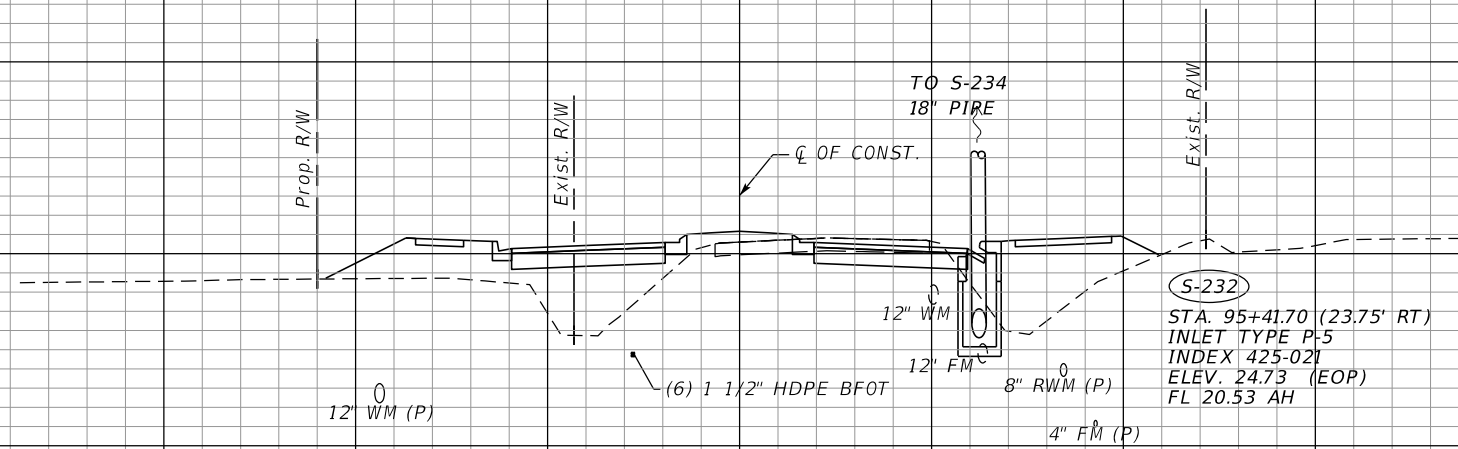
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
107

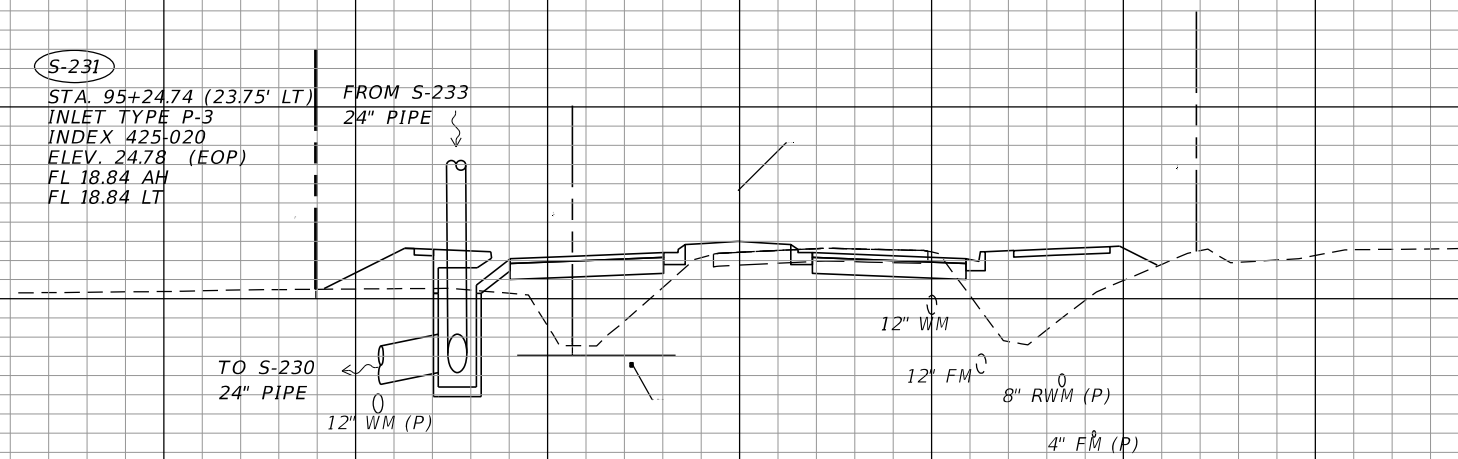
36
34
32
30
28
26
24
22
20
18
16
14
12



S-232
STA. 95+41.70 (23.75' RT)
INLET TYPE P-5
INDEX 425-021
ELEV. 24.73 (EOP)
FL 20.53 AH

S-232
95+41.70

36
34
32
30
28
26
24
22
20
18
16



S-231
STA. 95+24.74 (23.75' LT)
INLET TYPE P-3
INDEX 425-020
ELEV. 24.78 (EOP)
FL 18.84 AH (EOP)
FL 18.84 LT

S-231
95+24.74

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

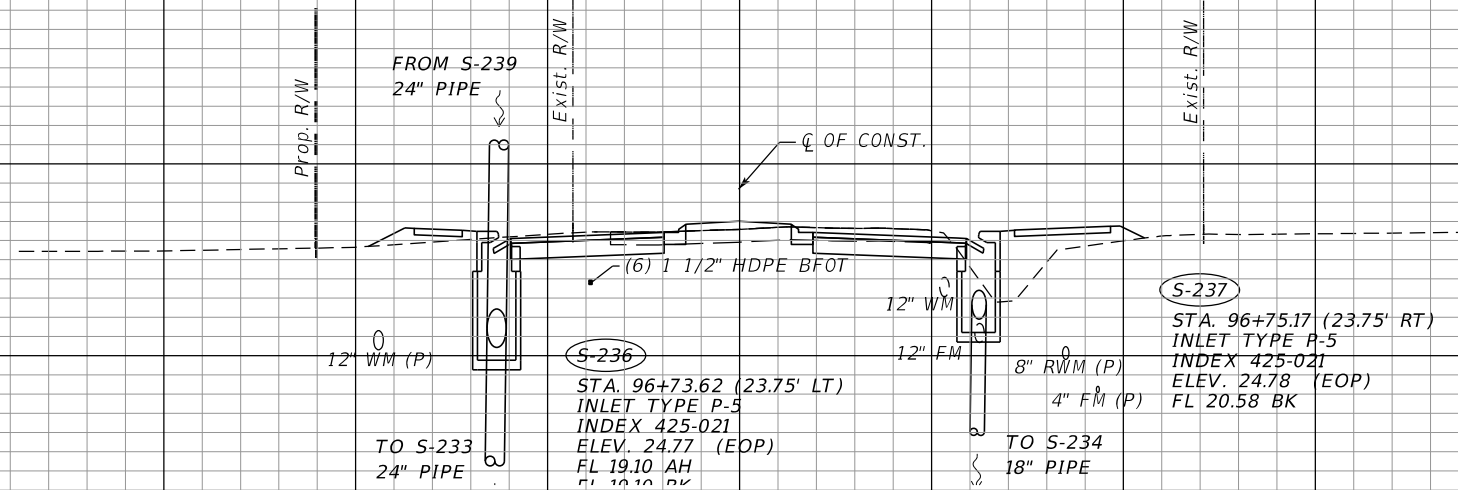
REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

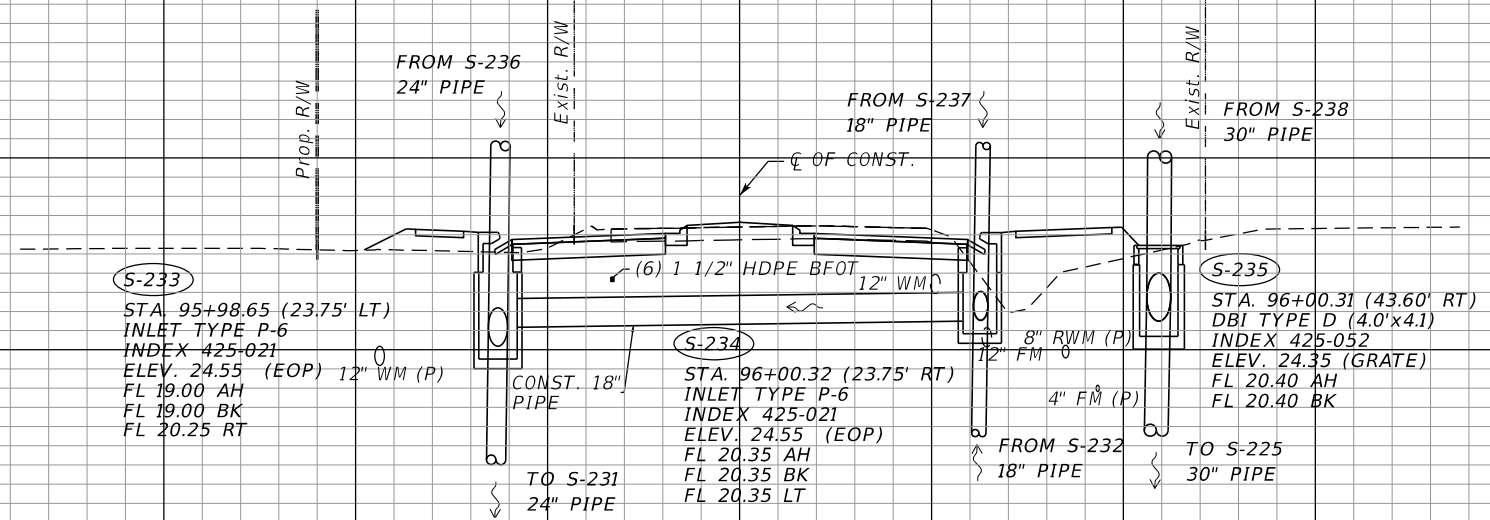
DRAINAGE STRUCTURES	
DATE	SHEET NO.
	108

36
34
32
30
28
26
24
22
20
18
16
14
12



S-237
S-236
96+74.39

36
34
32
30
28
26
24
22
20
18
16
14
12



S-235
S-234
S-233
95+99.48

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

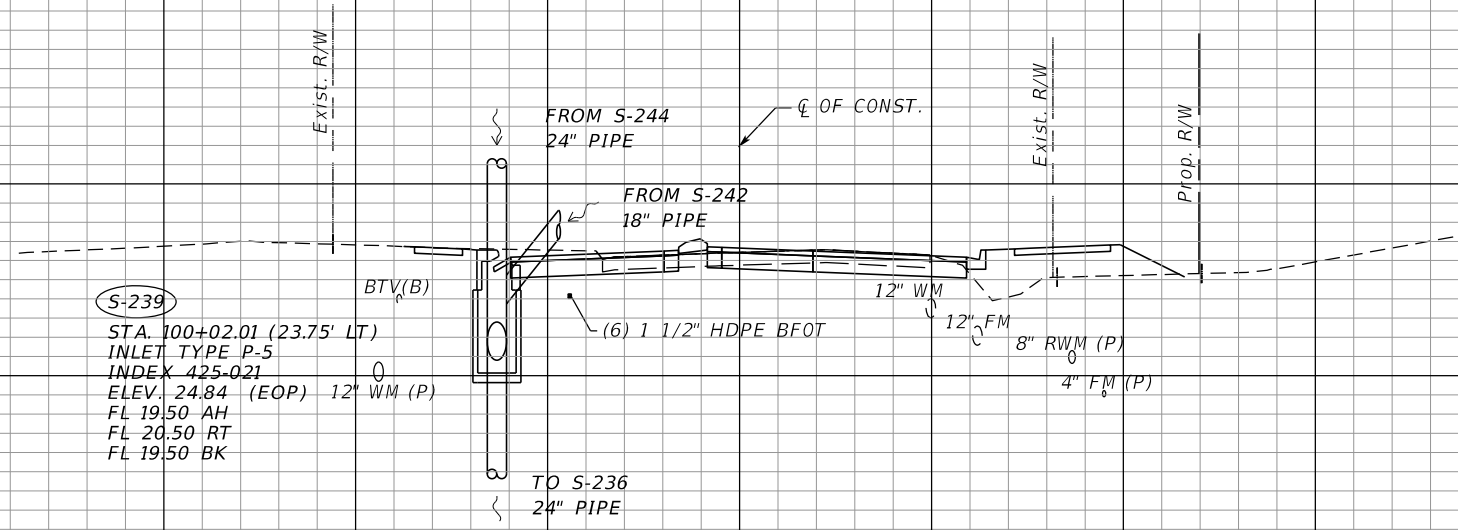
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
109

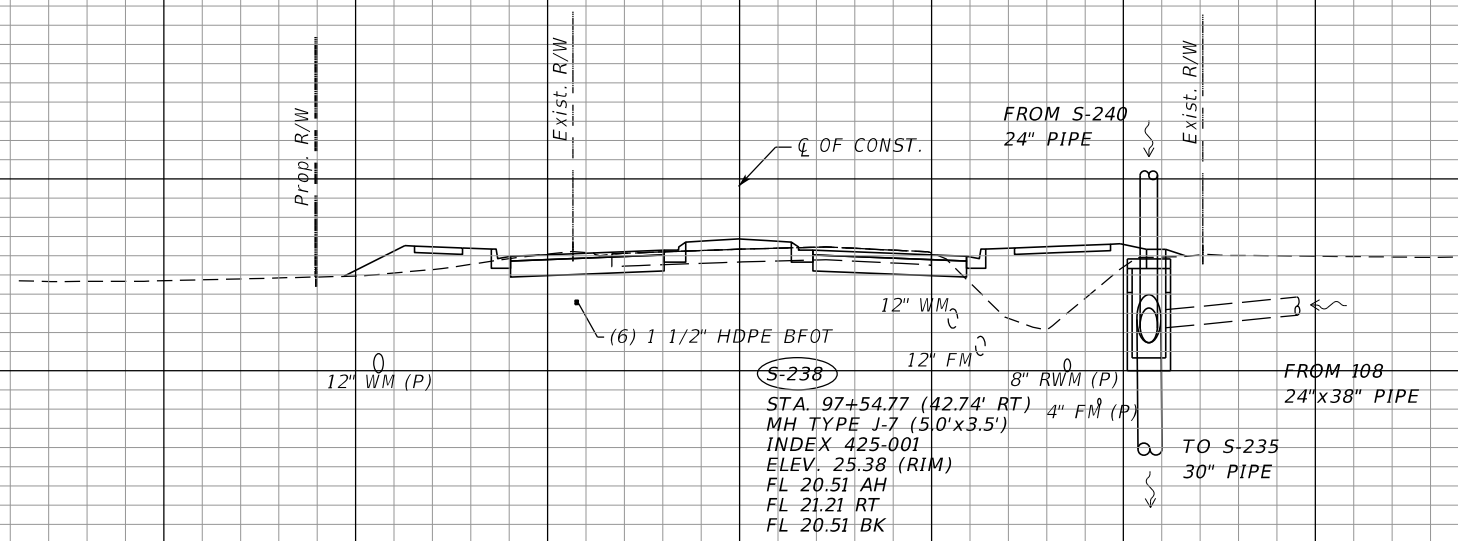
36
34
32
30
28
26
24
22
20
18
16
14



S-239
STA. 100+02.01 (23.75' LT)
INLET TYPE P-5
INDEX 425-021
ELEV. 24.84 (EOP)
FL 19.50 AH
FL 20.50 RT
FL 19.50 BK

S-239
100+02.01

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-238
STA. 97+54.77 (42.74' RT)
MH TYPE J-7 (5.0' x 3.5')
INDEX 425-001
ELEV. 25.38 (RIM)
FL 20.51 AH
FL 21.21 RT
FL 20.51 BK

S-238
97+54.77

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

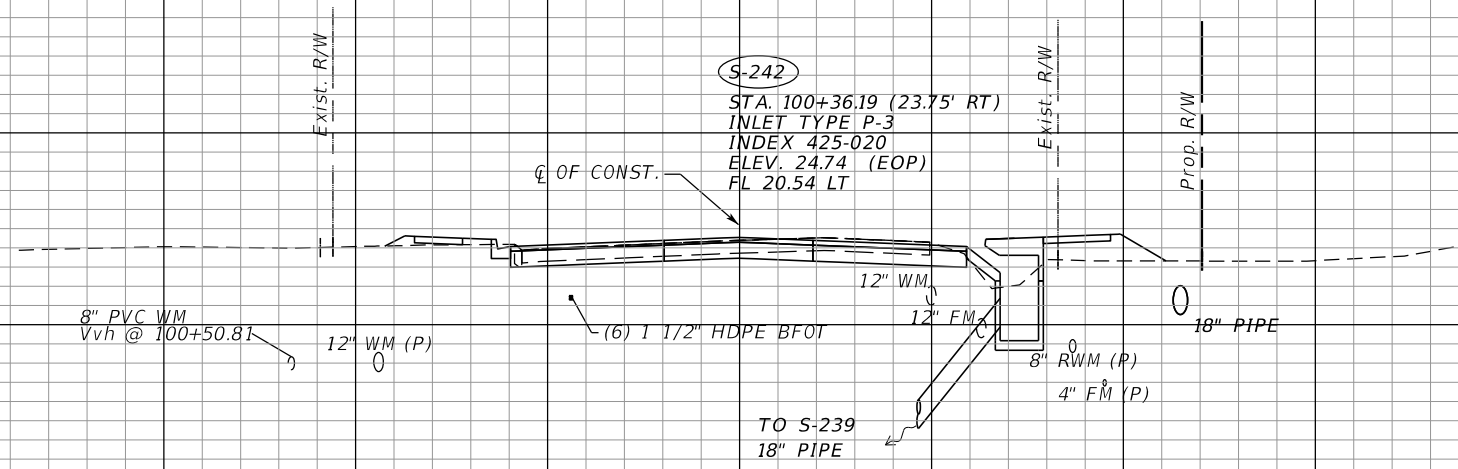
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

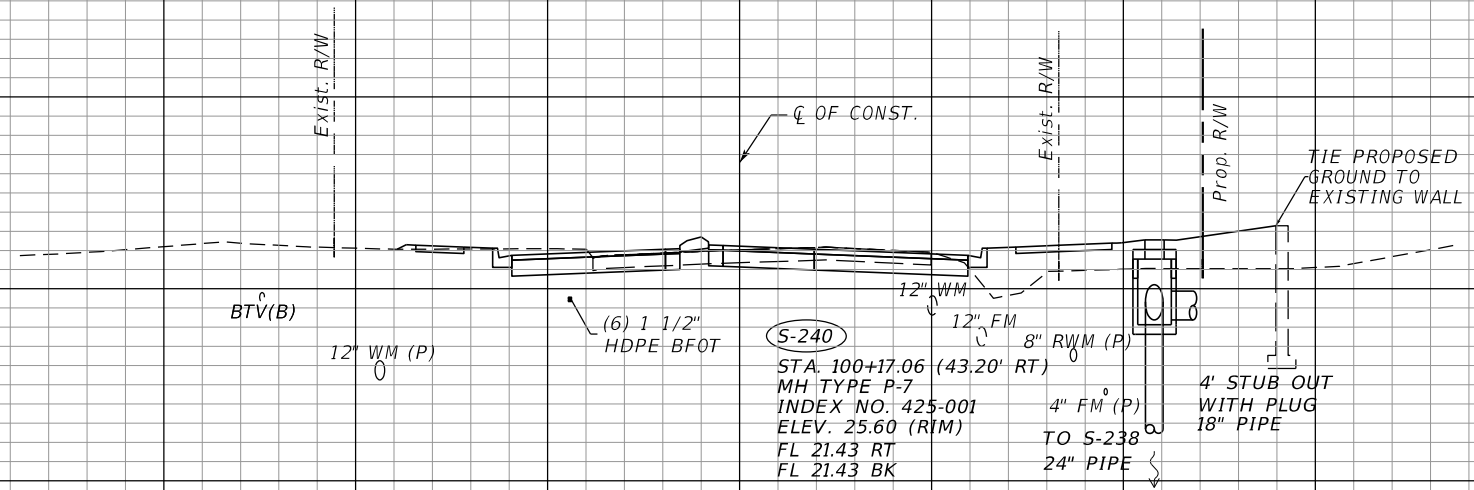
SHEET NO.
110

36
34
32
30
28
26
24
22
20
18
16



S-242
100+36.19

36
34
32
30
28
26
24
22
20
18
16
14



S-240
100+18.81

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

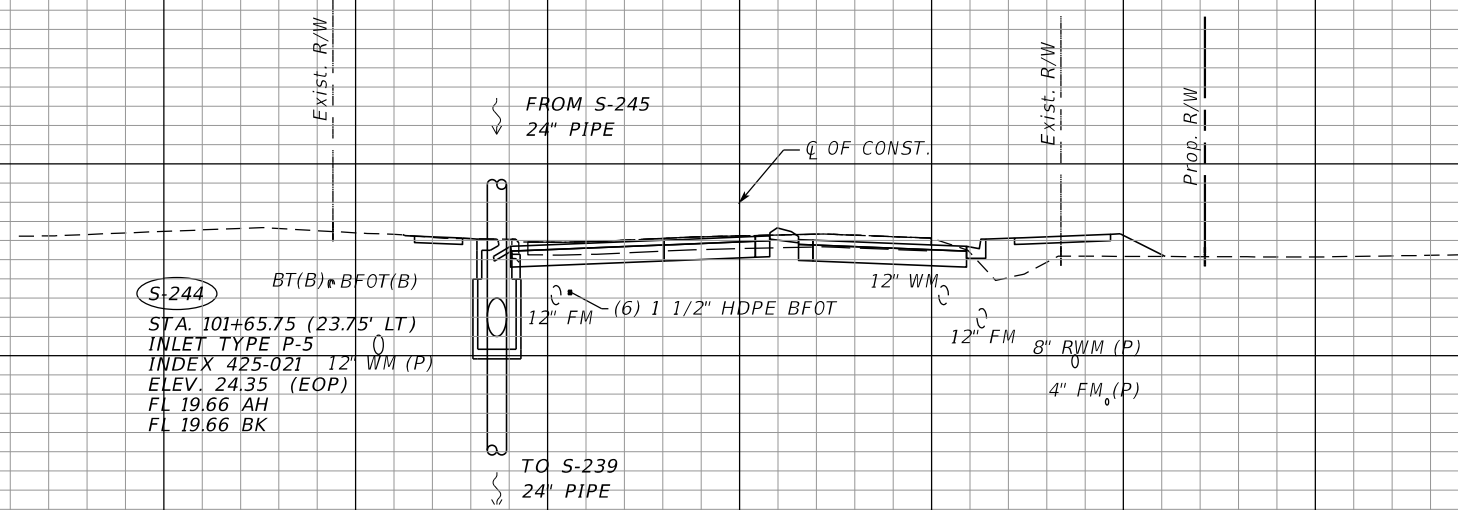
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

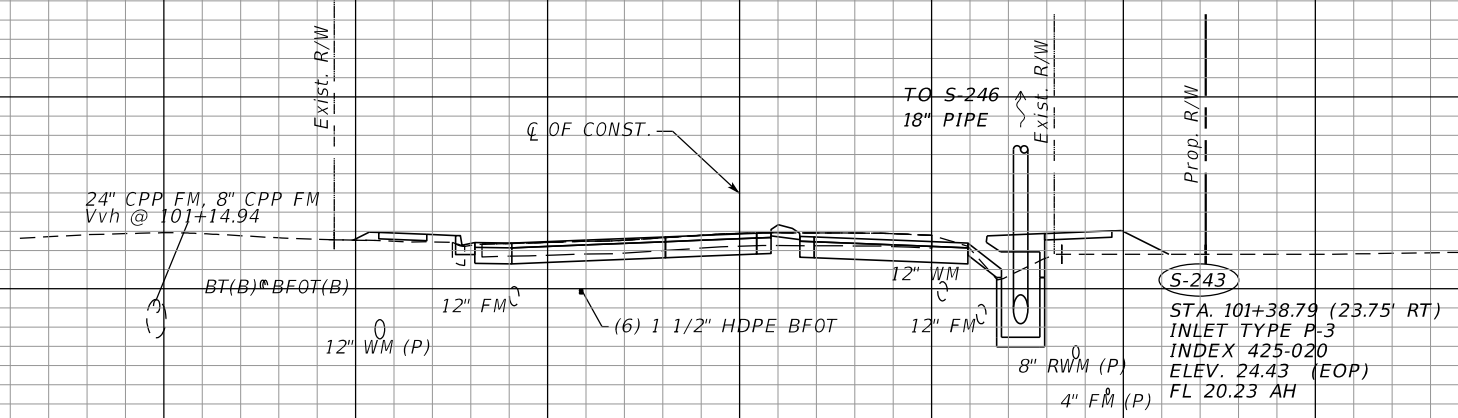
SHEET NO.
111

36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-244
101+61.34

36
34
32
30
28
26
24
22
20
18
16
14
12



S-243
101+38.79

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

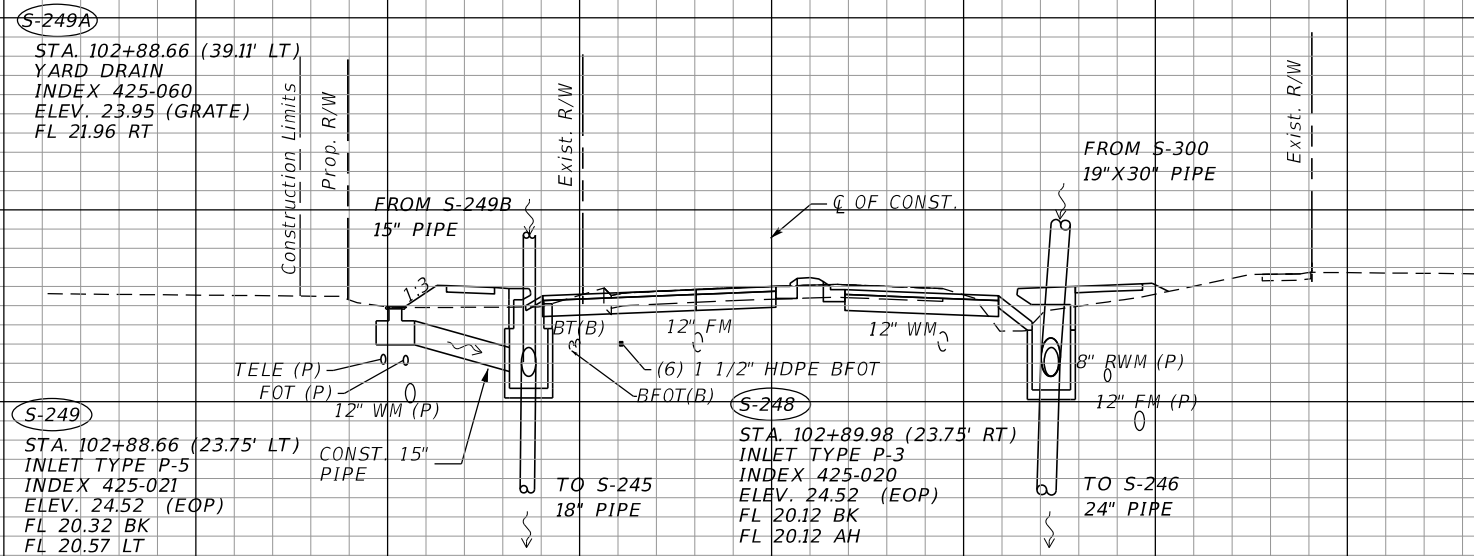
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

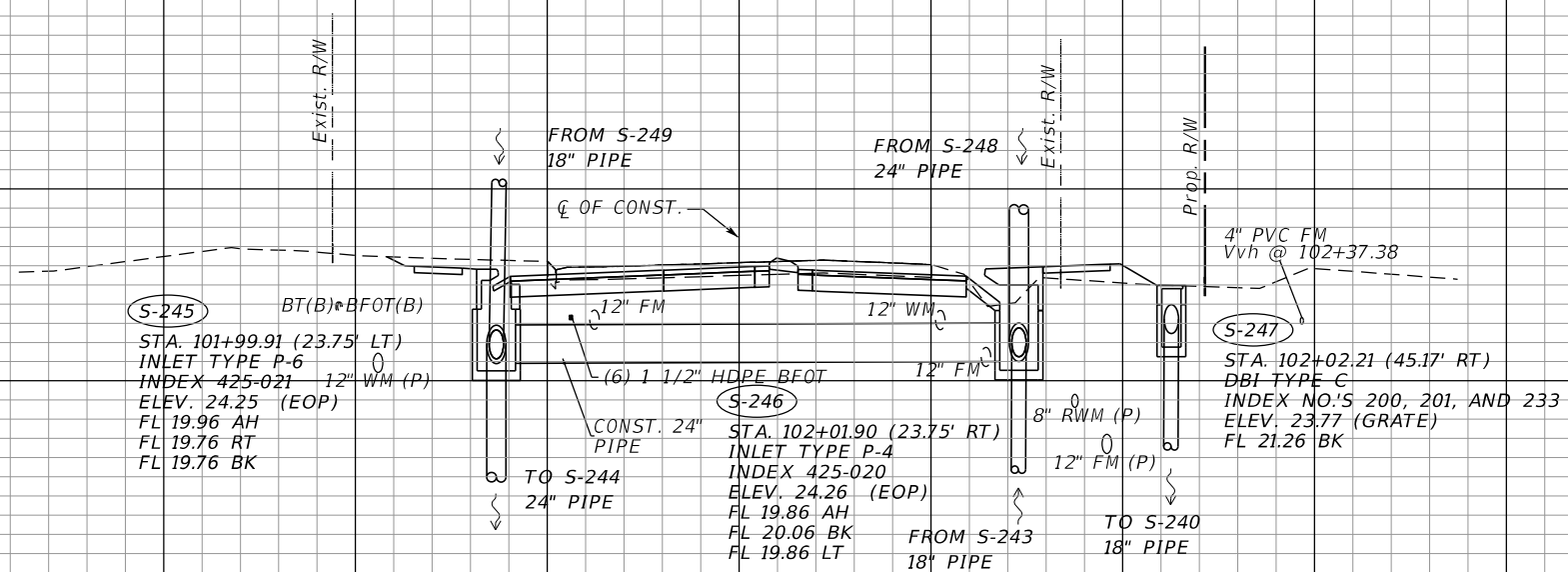
SHEET NO.
112

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-249A
S-248
S-249
102+89.32

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-247
S-246
S-245
102+00.90

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

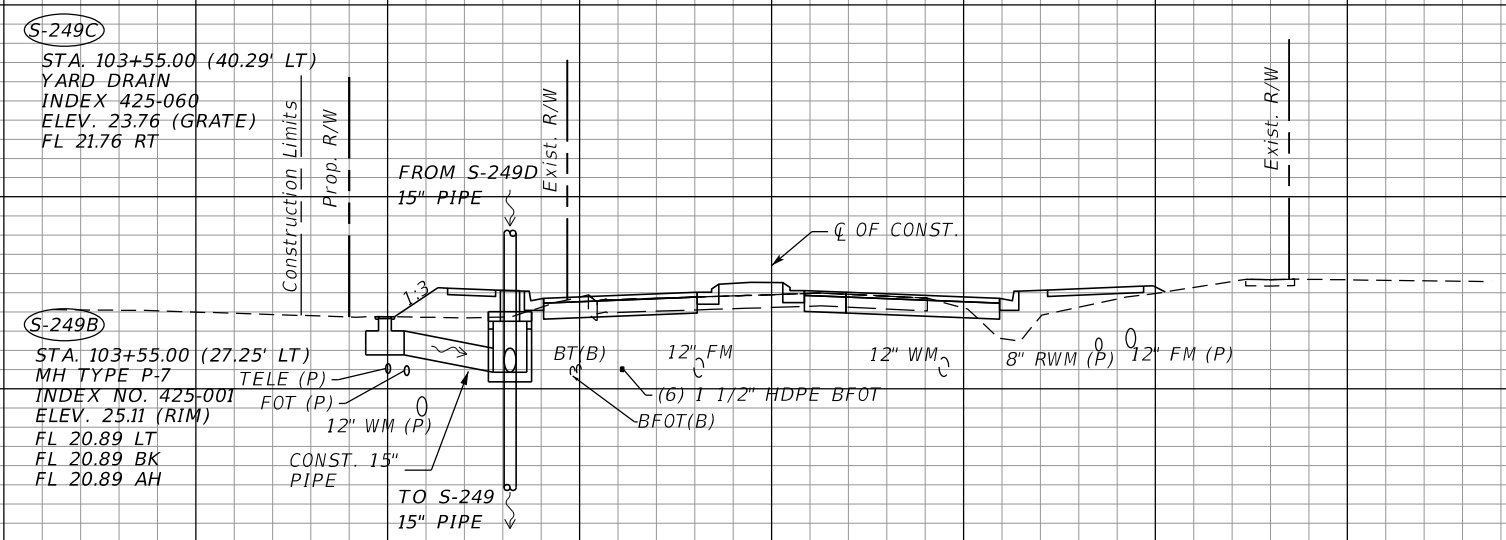
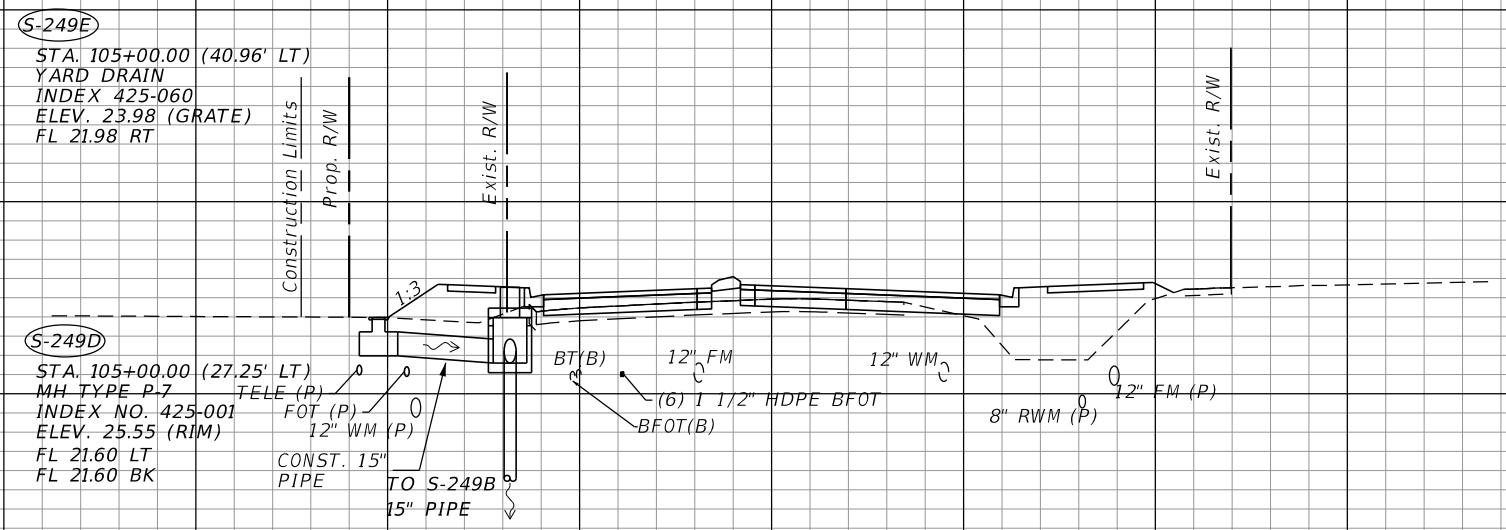
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
113

38
36
34
32
30
28
26
24
22
20
18
16
14
12

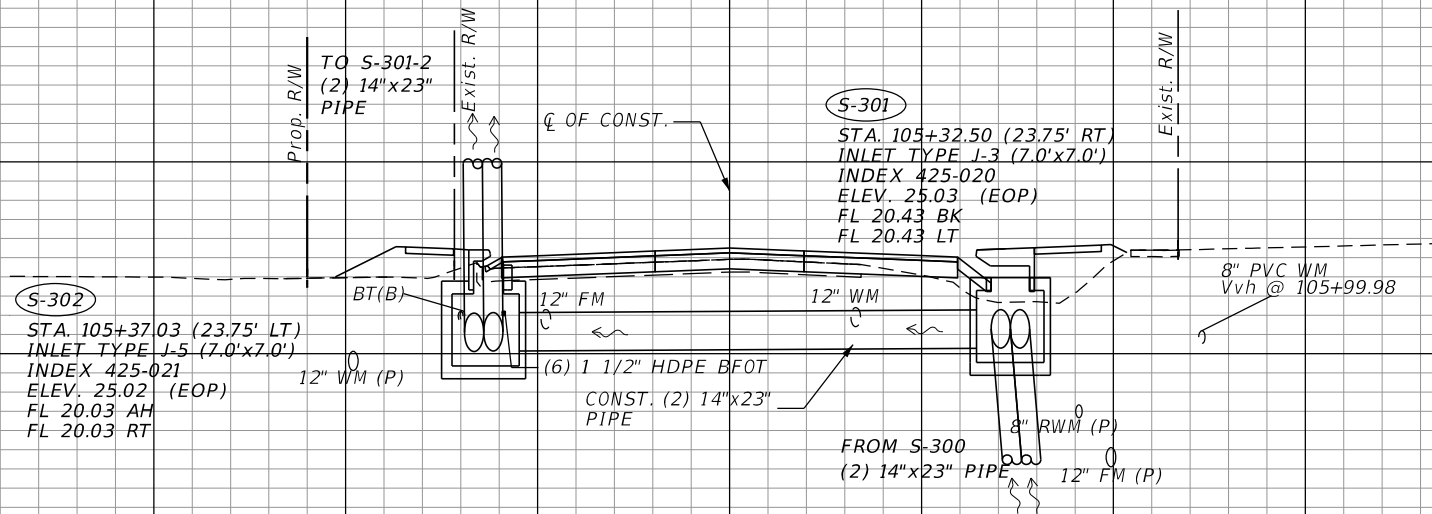


(S-249D)
(S-249E)
105+00.00

(S-249B)
(S-249C)
103+55.00

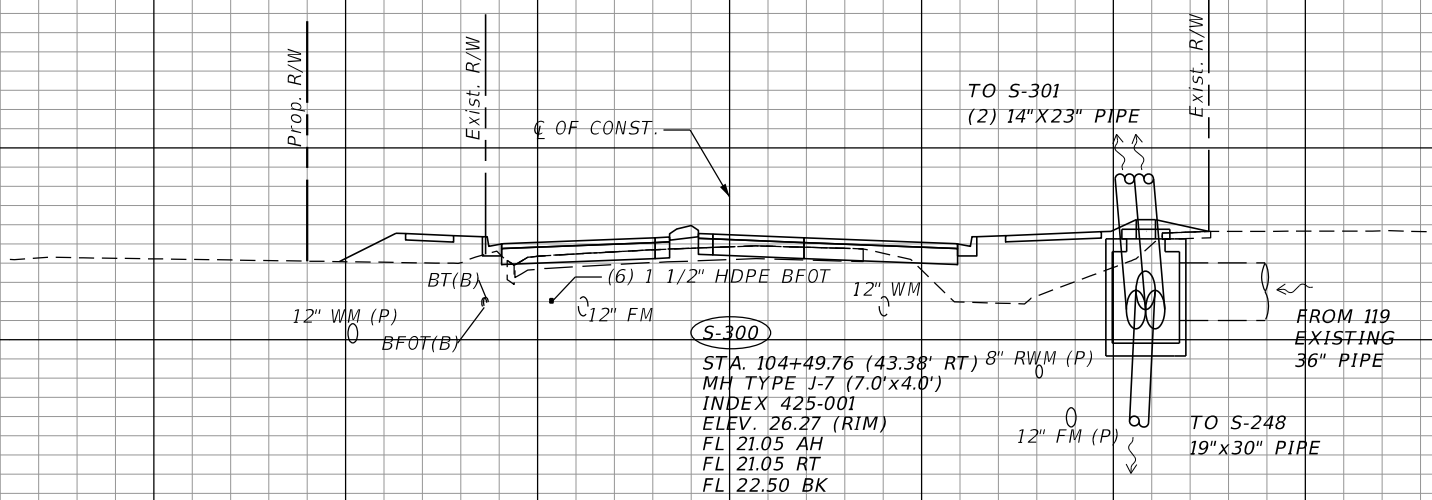
REVISIONS				STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			DRAINAGE STRUCTURES	SHEET NO. 113A
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		

36
34
32
30
28
26
24
22
20
18
16
14
12



S-302
S-301
105+32.50

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-300
104+49.76

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

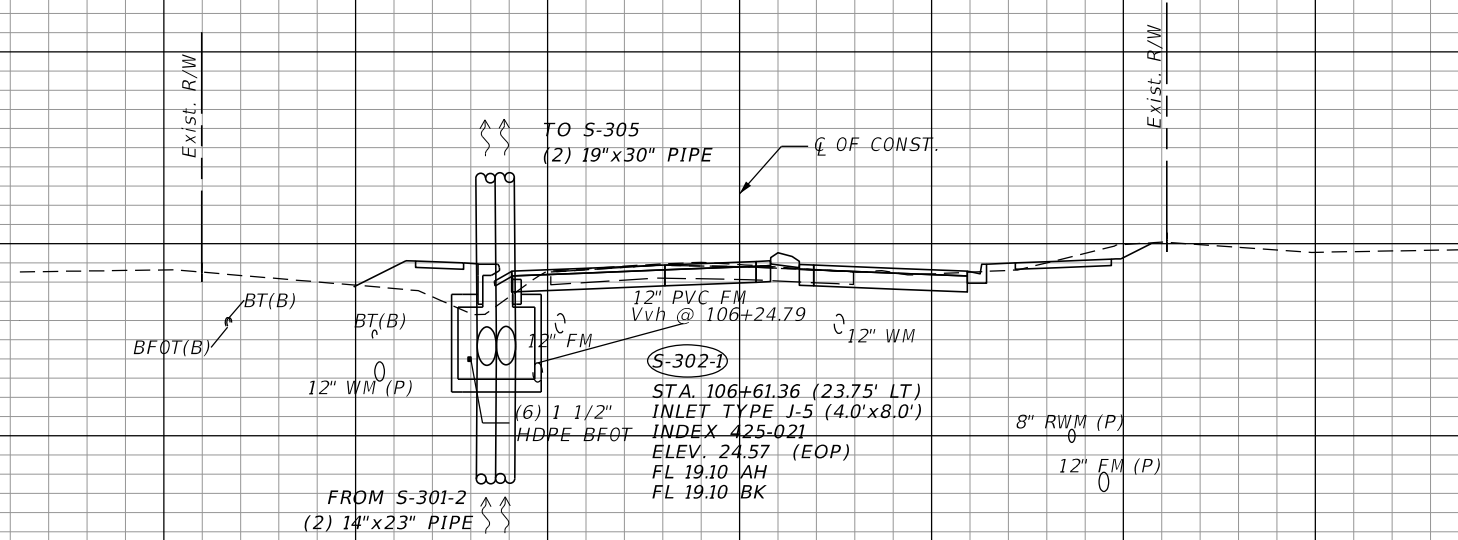
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

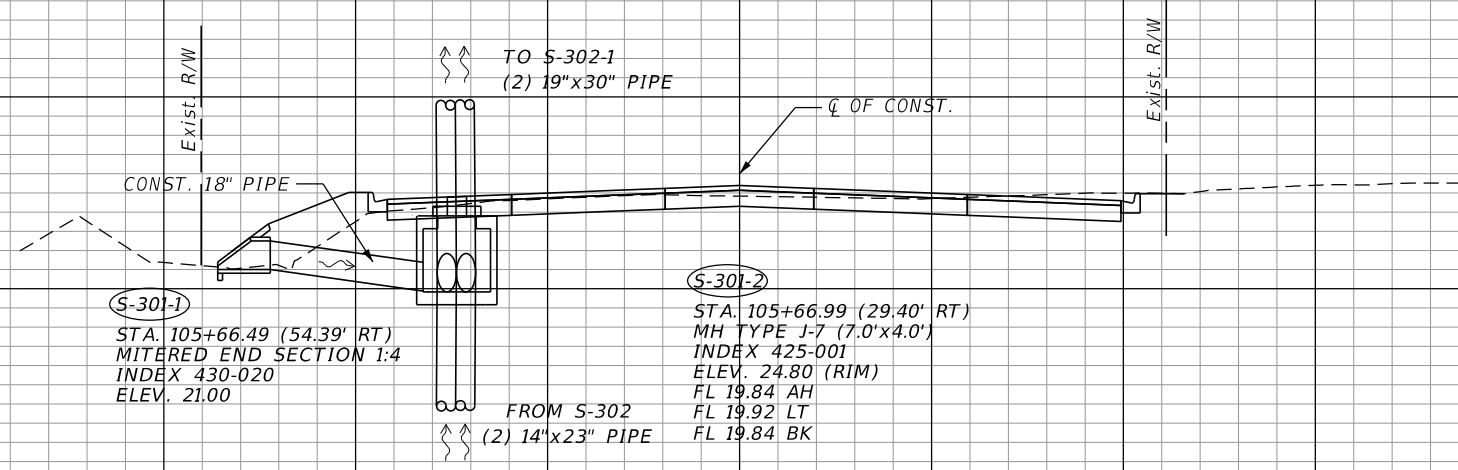
SHEET NO.
114

38
36
34
32
30
28
26
24
22
20
18
16
14
12



(S-302-1)
106+61.36

32
30
28
26
24
22
20
18
16
14
12



(S-301-2)
(S-301-1)
105+66.00

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

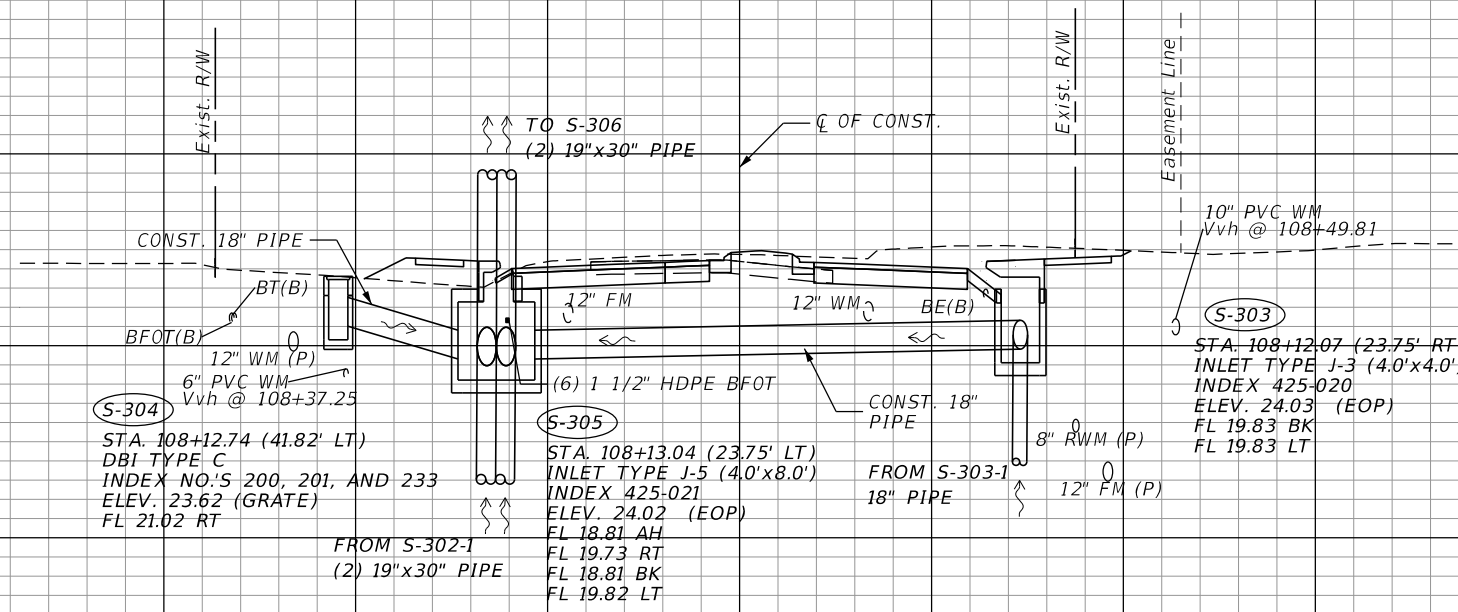
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

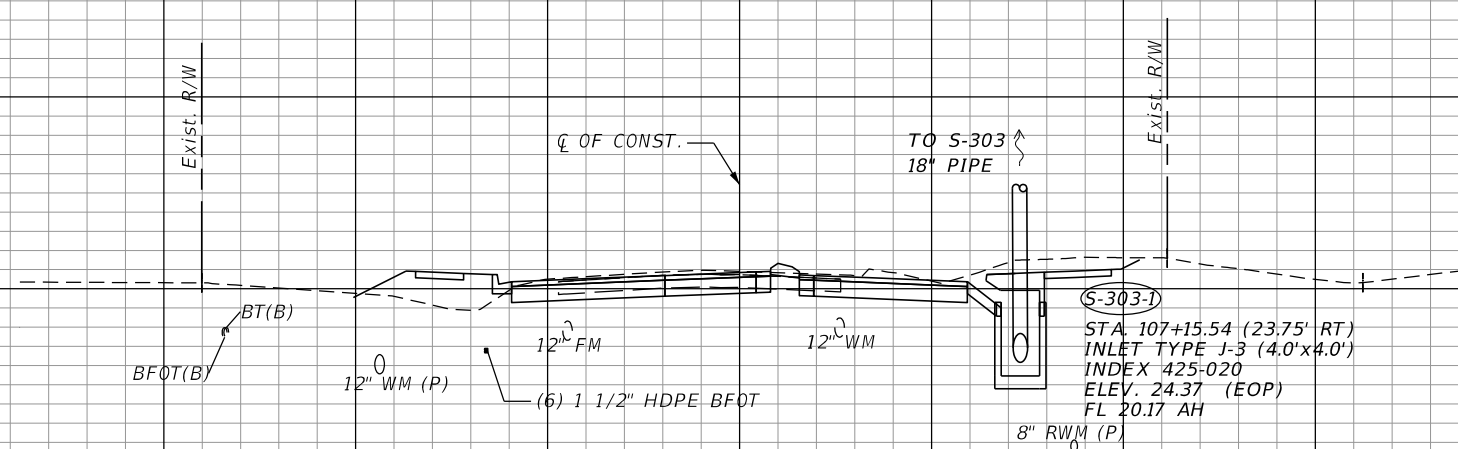
SHEET NO.
115

36
34
32
30
28
26
24
22
20
18
16
14
12
10
8



S-305
S-304
S-303
108+12.07

38
36
34
32
30
28
26
24
22
20
18
16



S-303-1
107+15.54

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

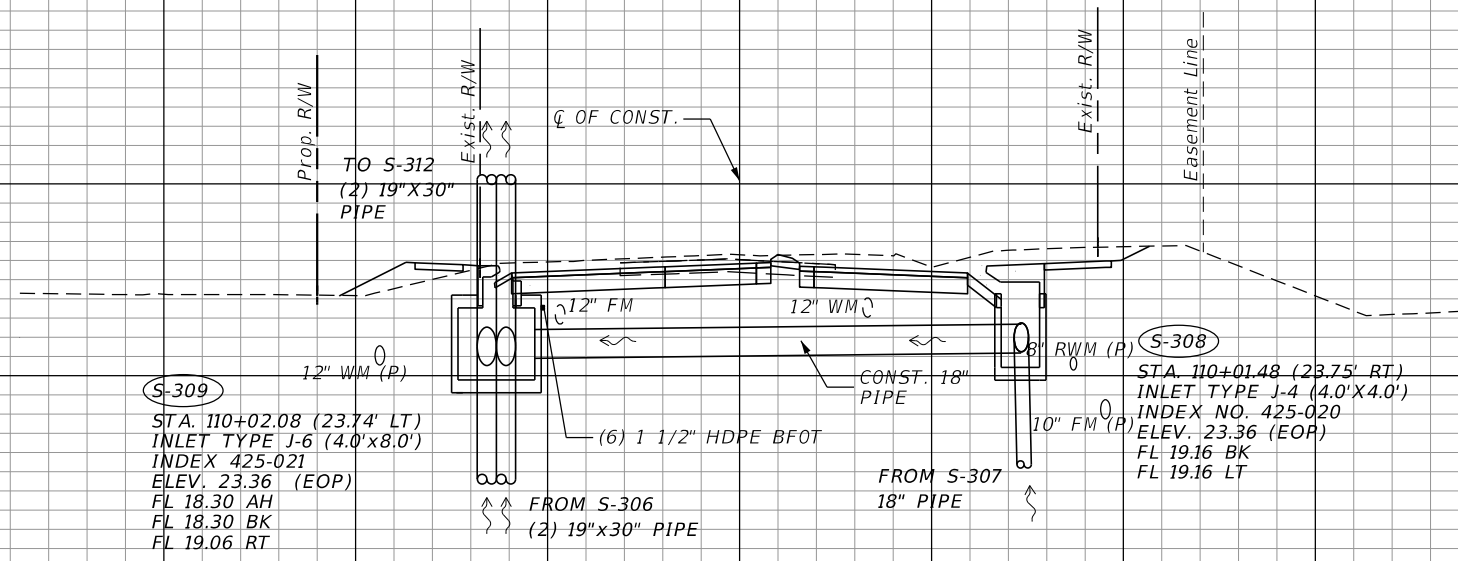
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

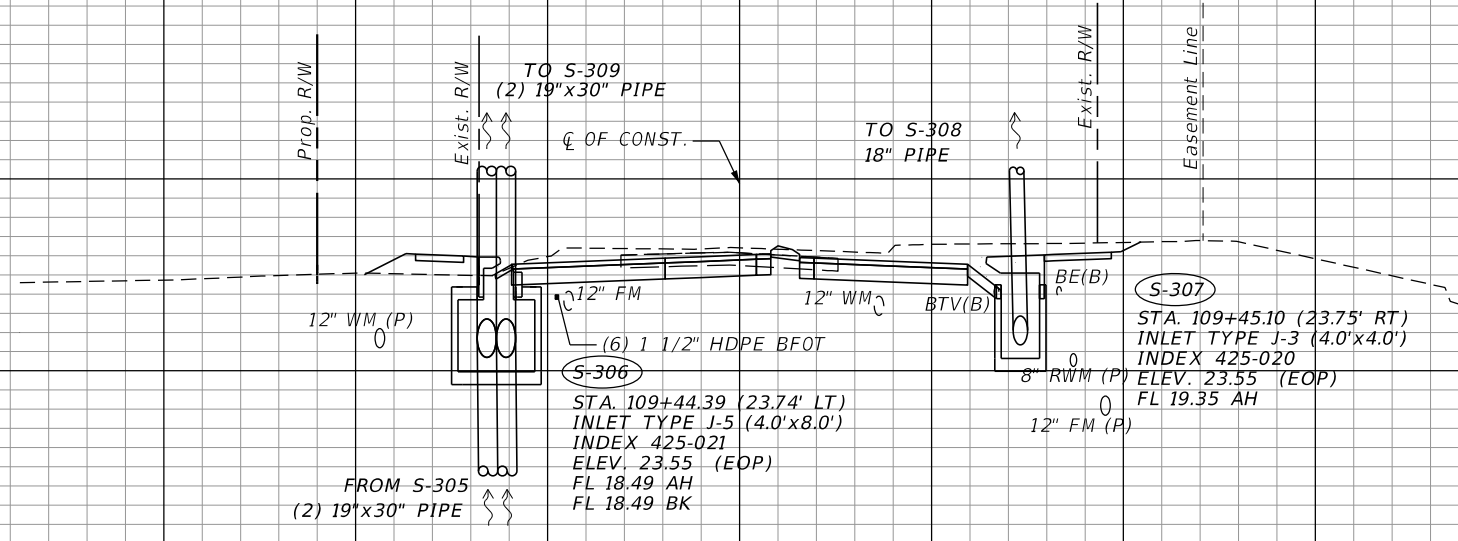
SHEET NO. 116

36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-309
S-308
110+01.48

36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-307
S-306
109+44.39

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

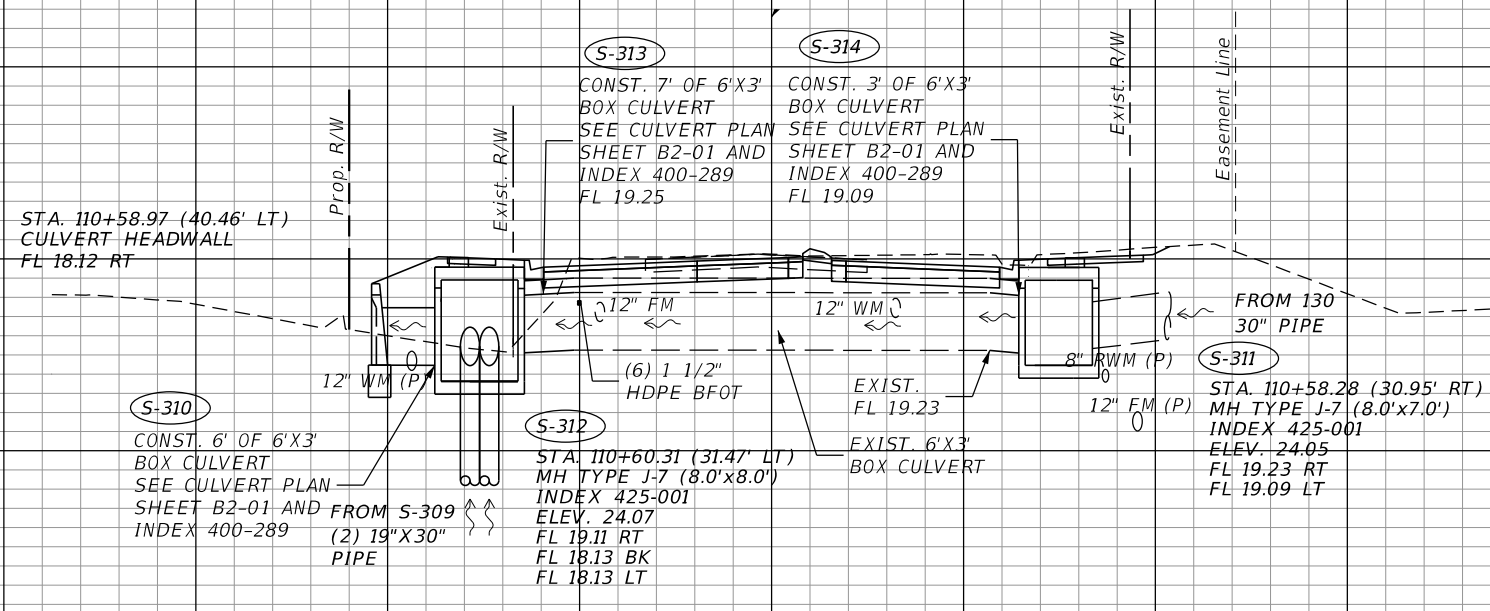
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
117

36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6



S-314
S-313
S-312
S-311
S-310
110+57.75

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

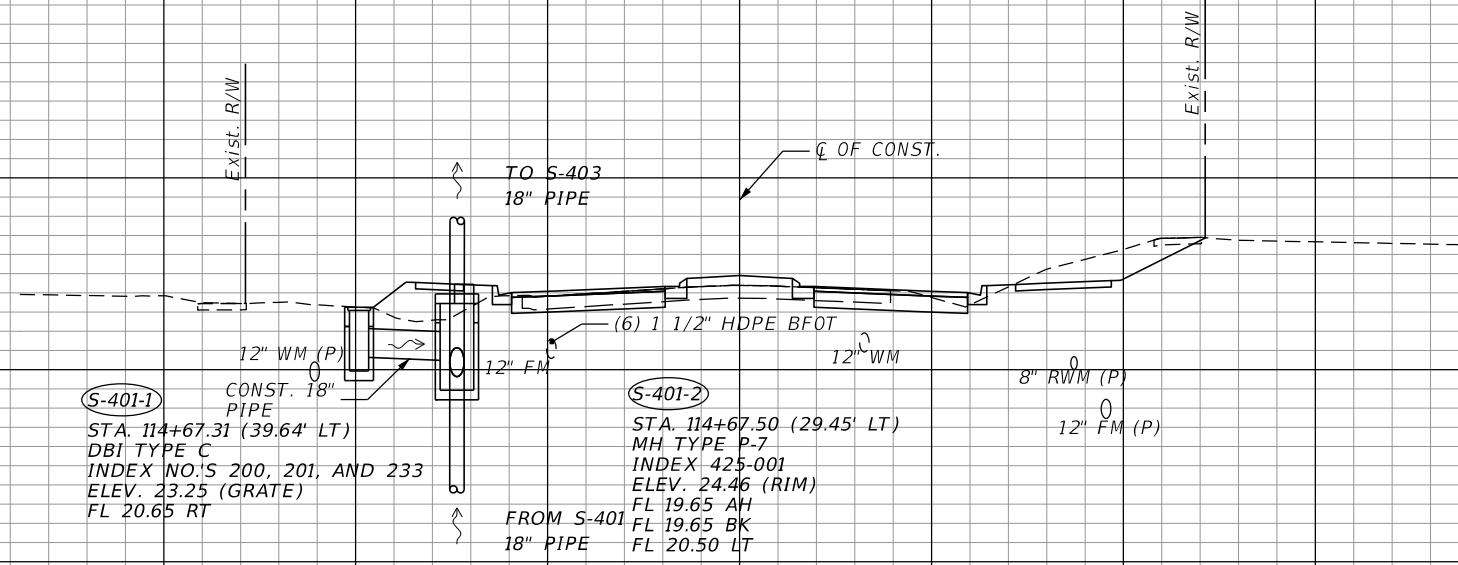
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

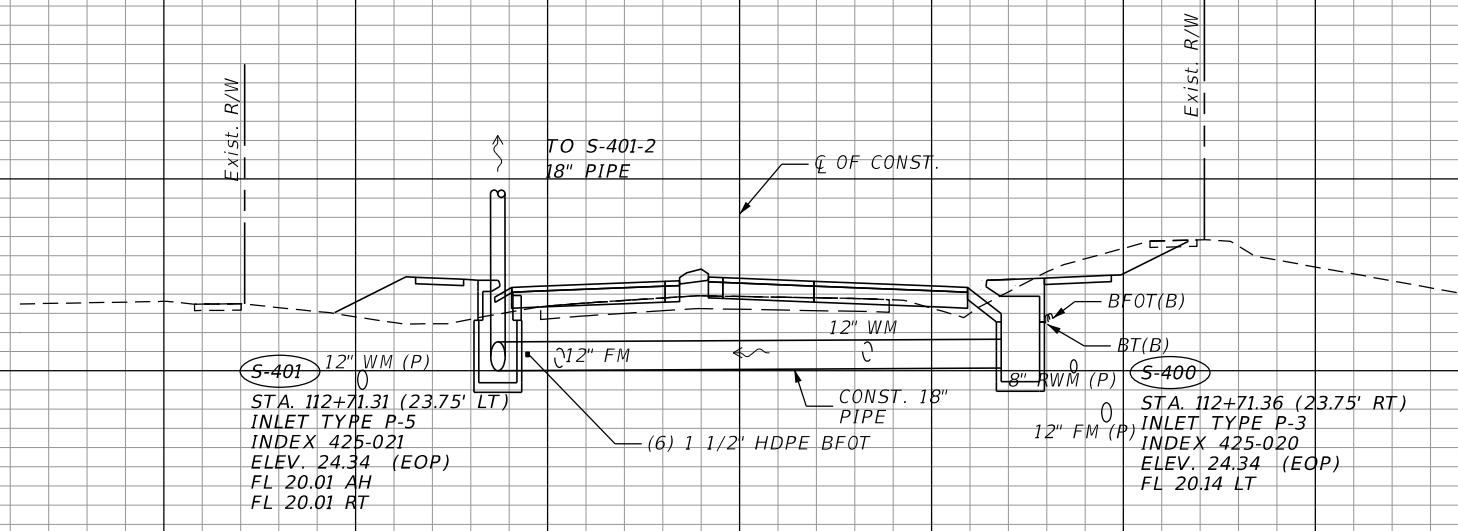
SHEET NO.
118

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-401-2
S-401-1
114+67.31

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-401
S-400
112+71.31

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

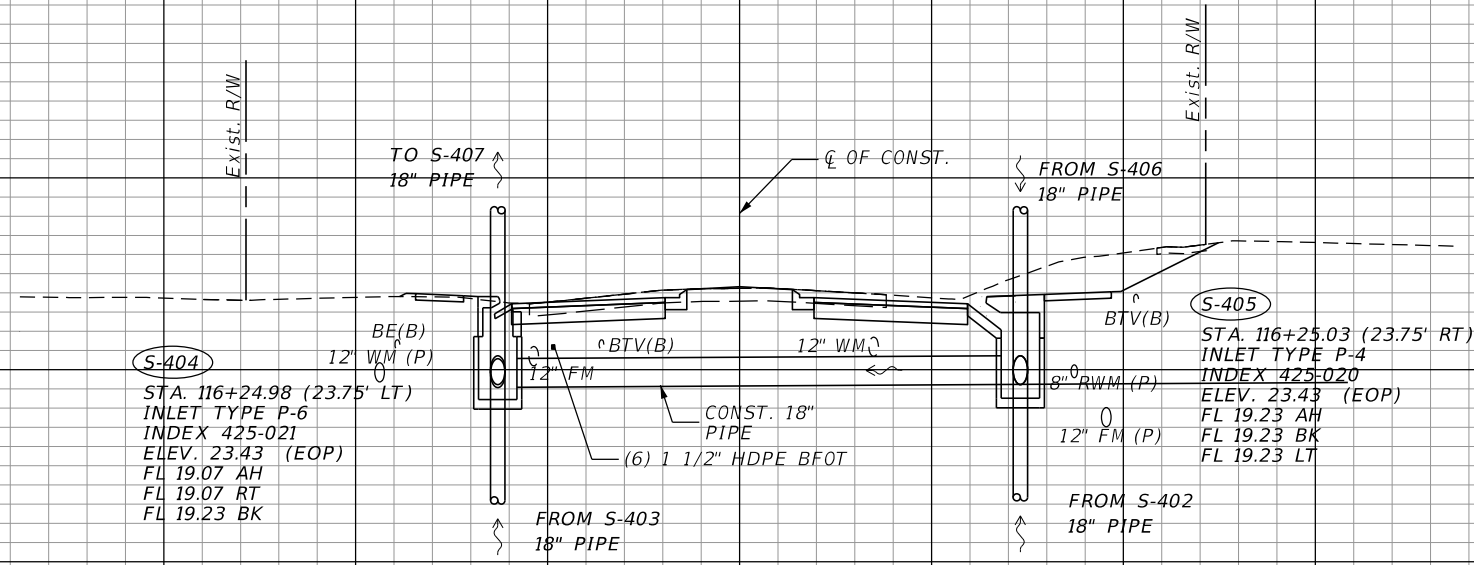
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

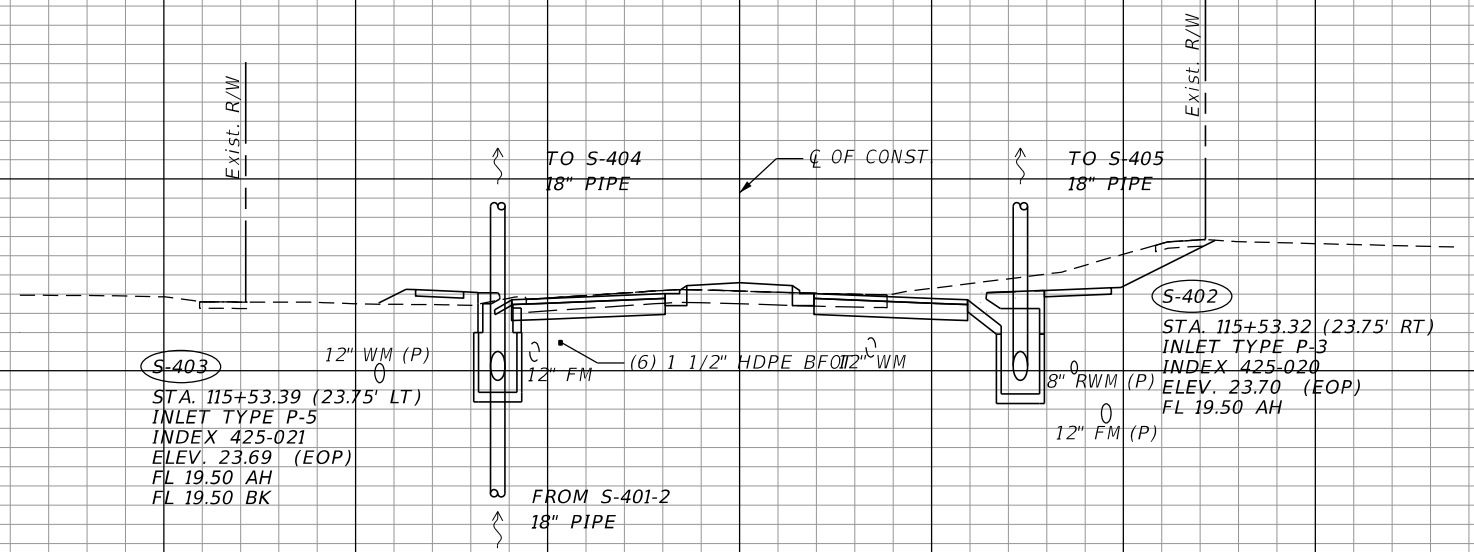
SHEET NO.
119

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-405
S-404
116+24.98

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-403
S-402
115+53.32

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

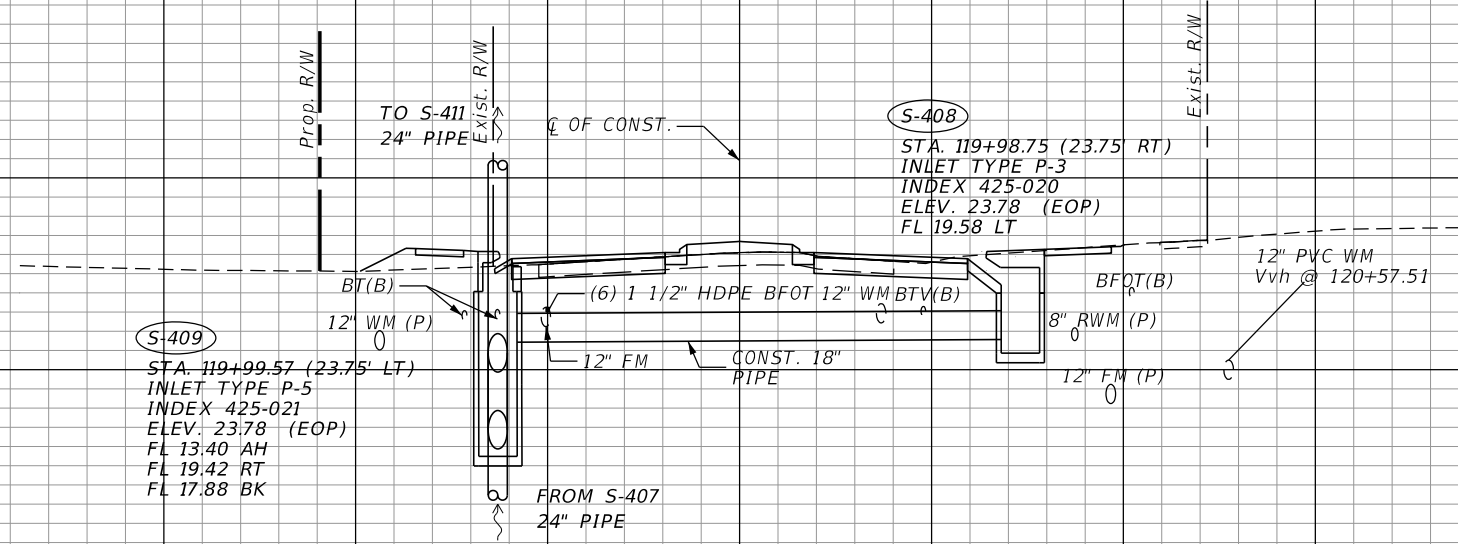
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

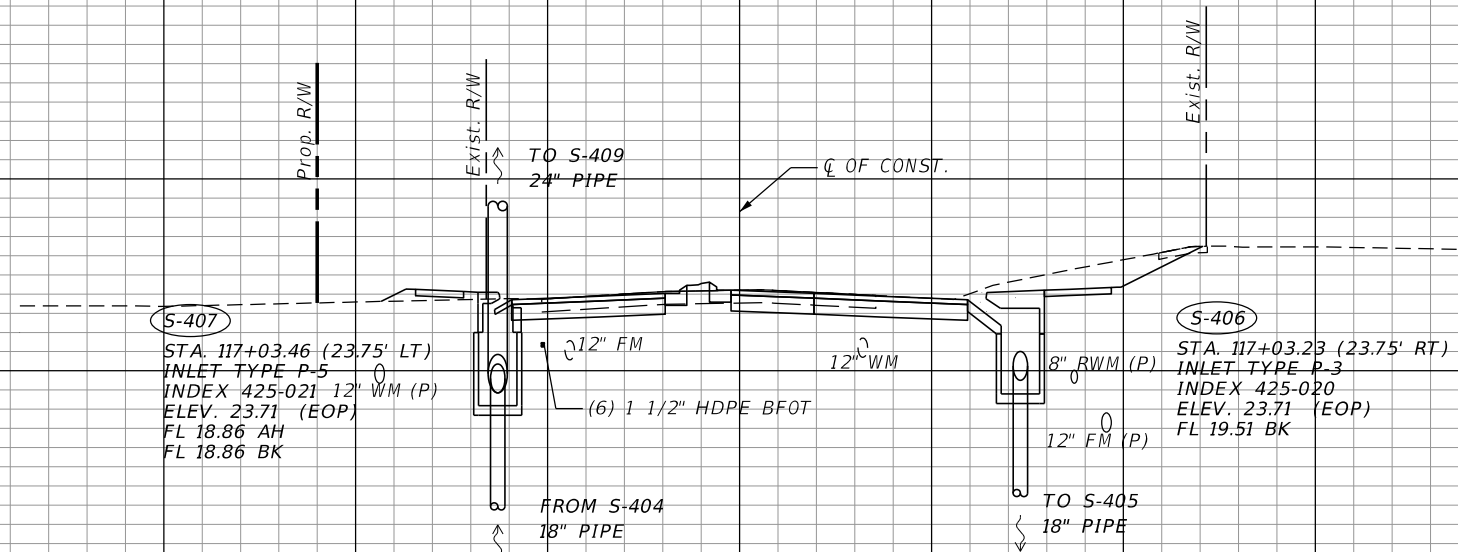
SHEET NO.
120

36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-409
S-408
119+98.75

38
36
34
32
30
28
26
24
22
20
18
16
14
12



S-407
S-406
117+03.23

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

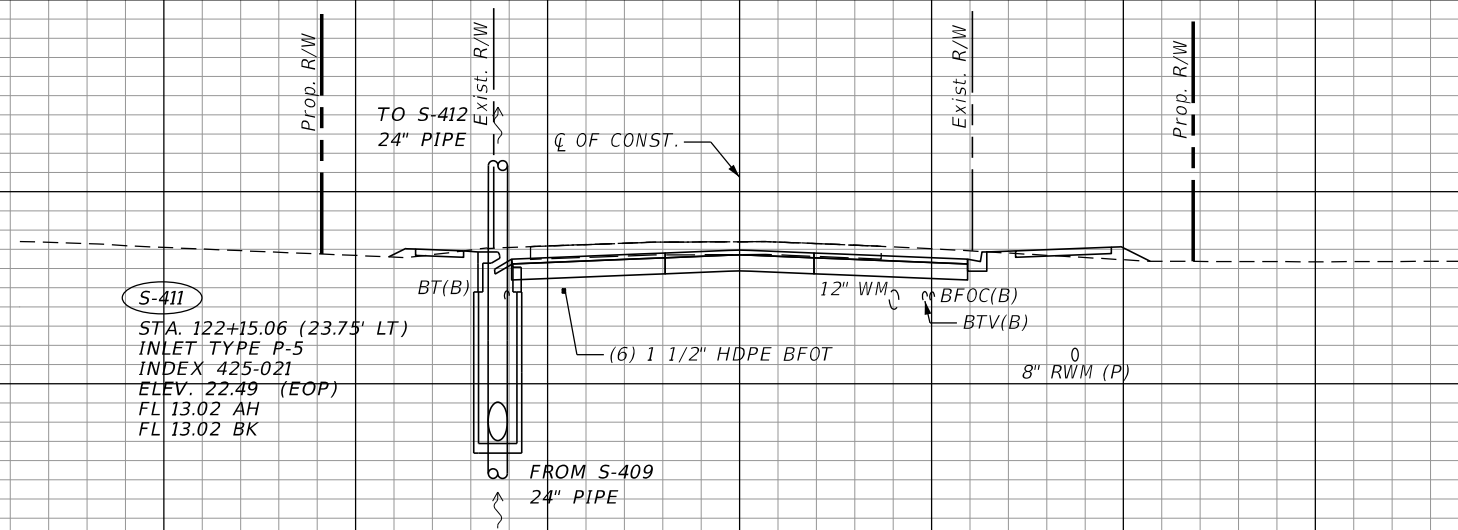
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
121

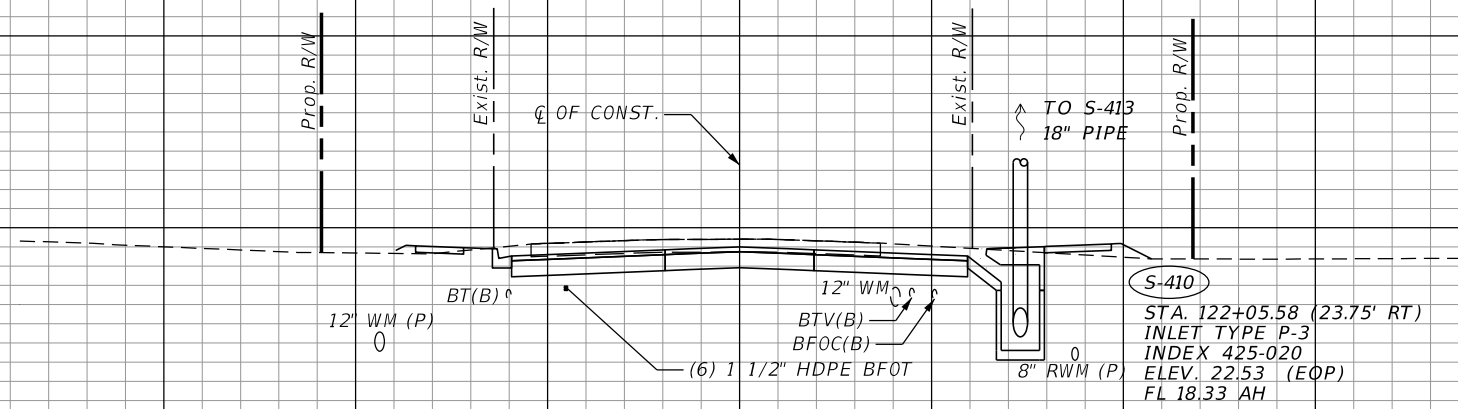
34
32
30
28
26
24
22
20
18
16
14
12
10



S-411
STA. 122+15.06 (23.75' LT)
INLET TYPE P-5
INDEX 425-021
ELEV. 22.49 (EOP)
FL 13.02 AH
FL 13.02 BK

S-411
122+15.06

34
32
30
28
26
24
22
20
18
16



S-410
STA. 122+05.58 (23.75' RT)
INLET TYPE P-3
INDEX 425-020
ELEV. 22.53 (EOP)
FL 18.33 AH

S-410
122+05.58

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

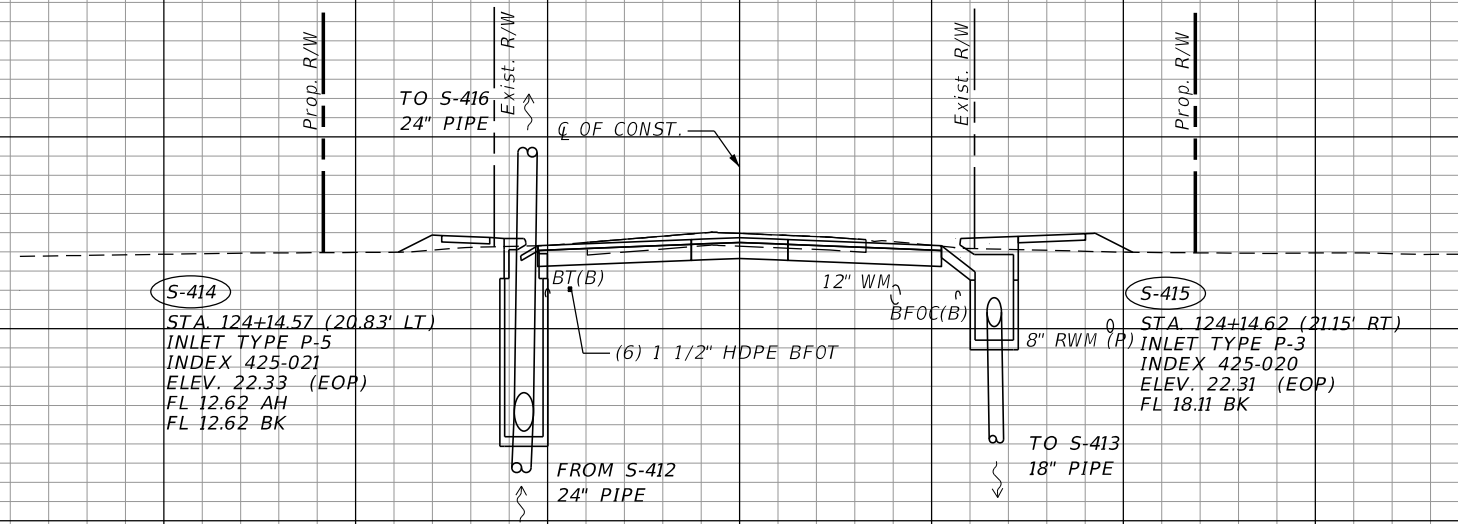
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

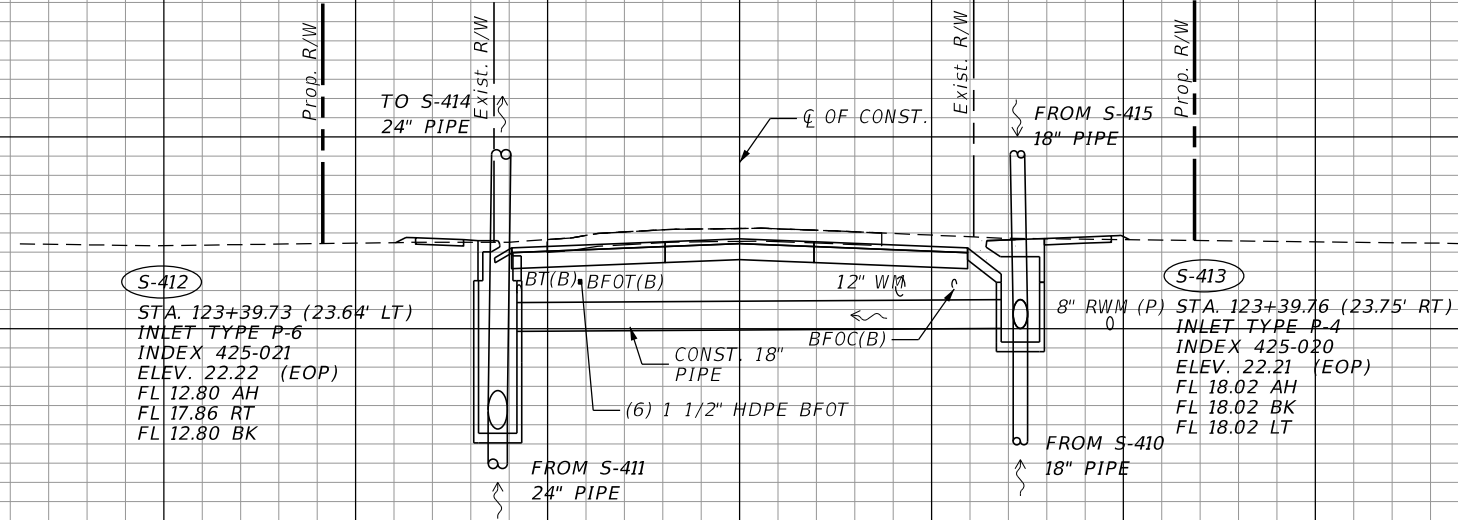
SHEET NO.
122

34
32
30
28
26
24
22
20
18
16
14
12
10
8



S-415
S-414
124+14.57

34
32
30
28
26
24
22
20
18
16
14
12
10



S-413
S-412
123+39.73

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

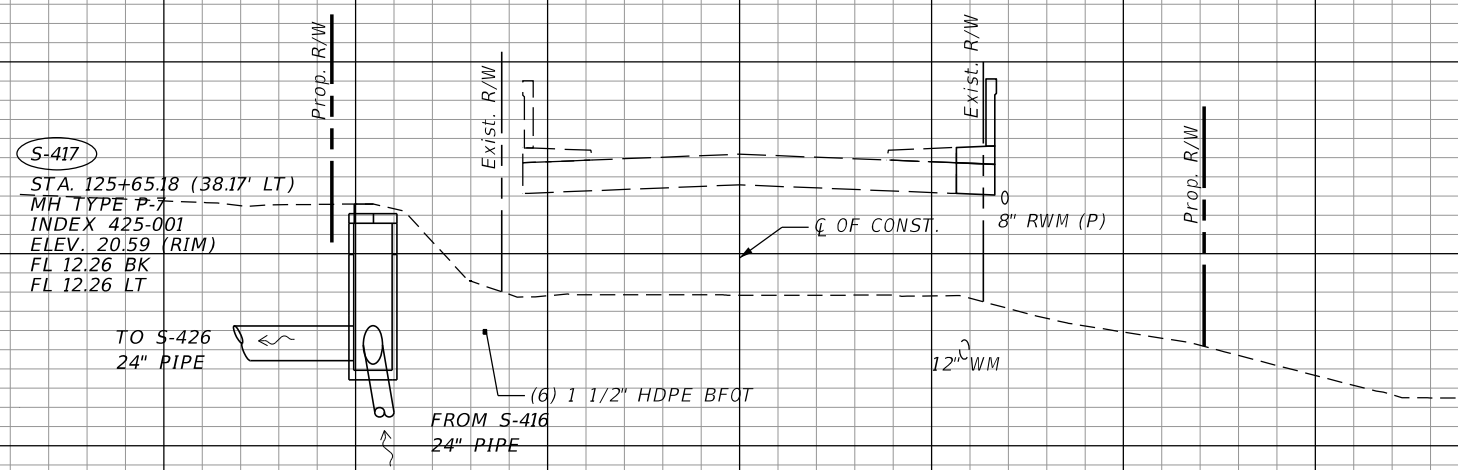
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

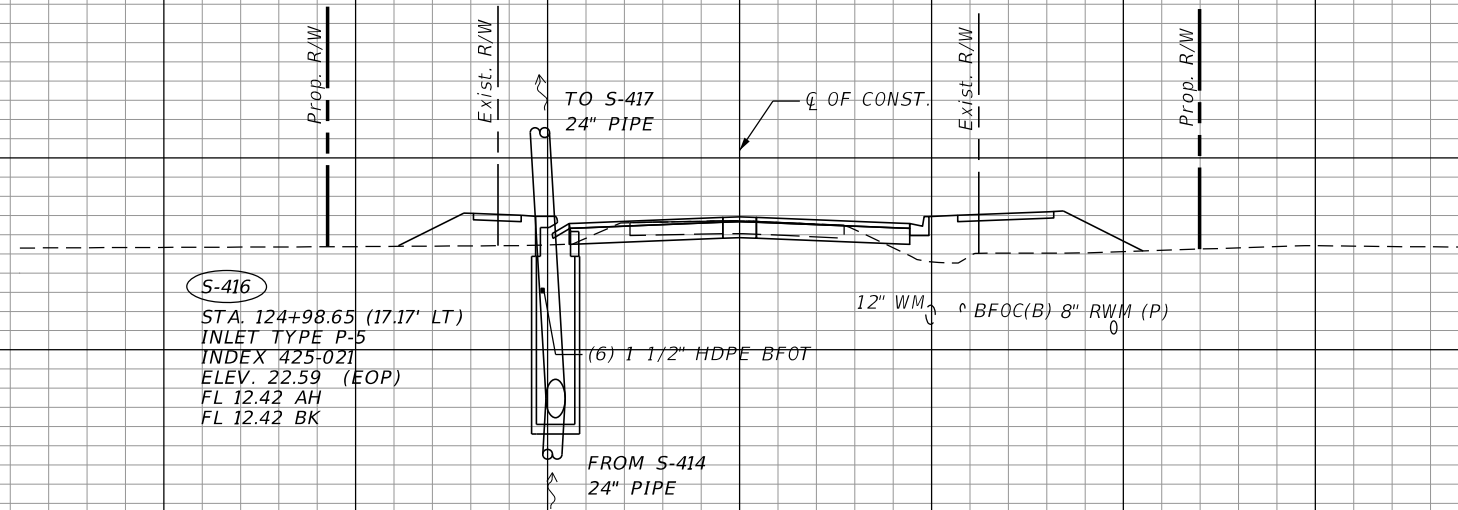
SHEET NO.
123

30
28
26
24
22
20
18
16
14
12
10
8



S-417
125+74.35

32
30
28
26
24
22
20
18
16
14
12
10
8



S-416
124+98.65

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

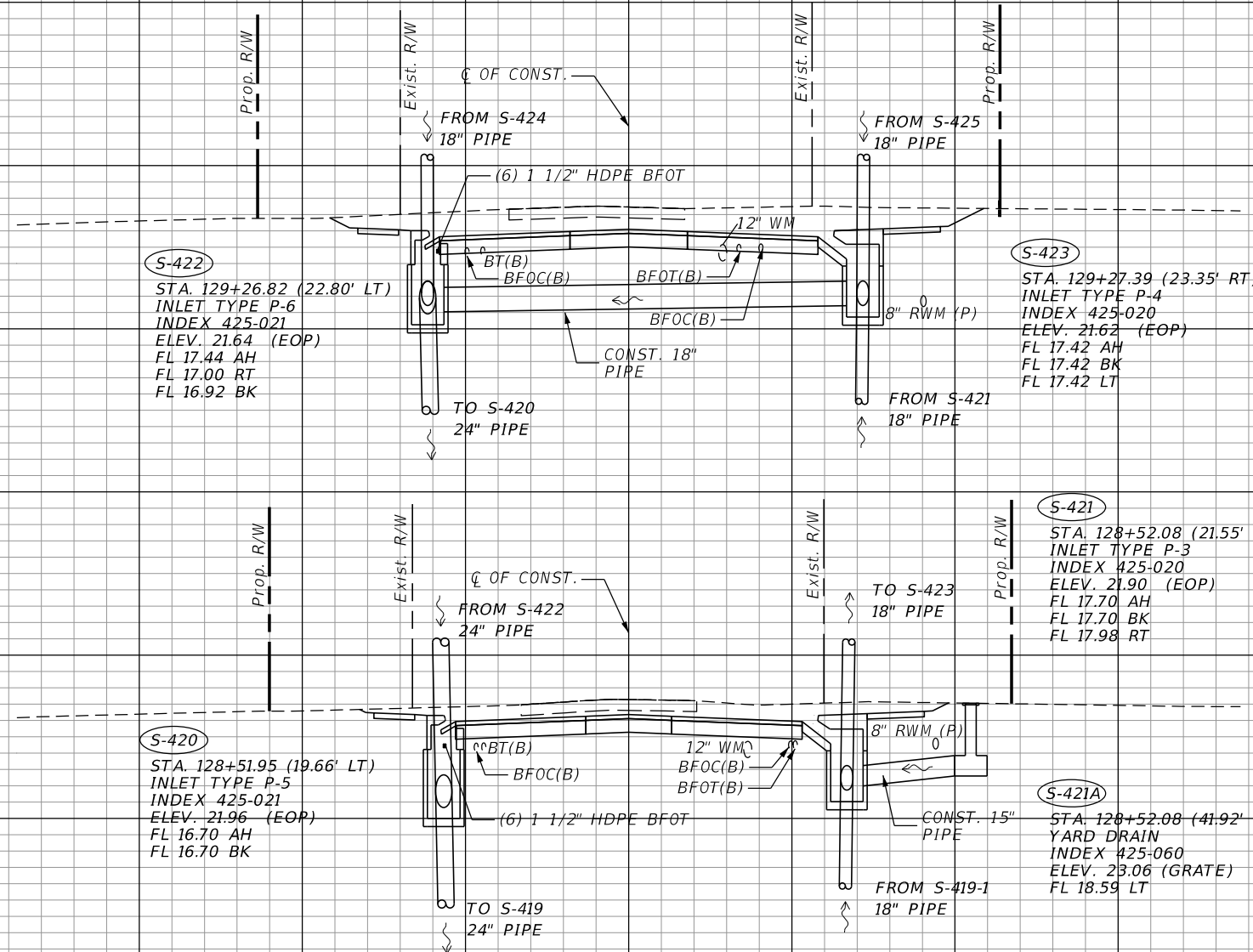
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
124

36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
34
32
30
28
26
24
22
20
18
16
14
12
10



S-423
S-422
129+26.82

S-421A
S-421
S-420
128+51.95

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

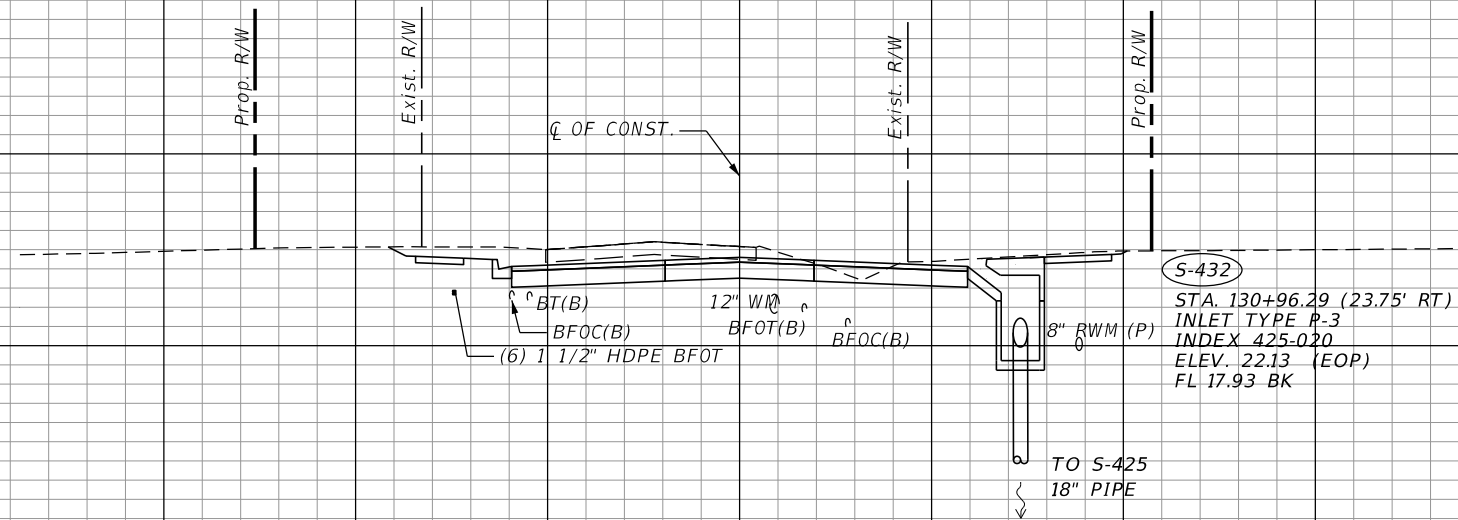
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

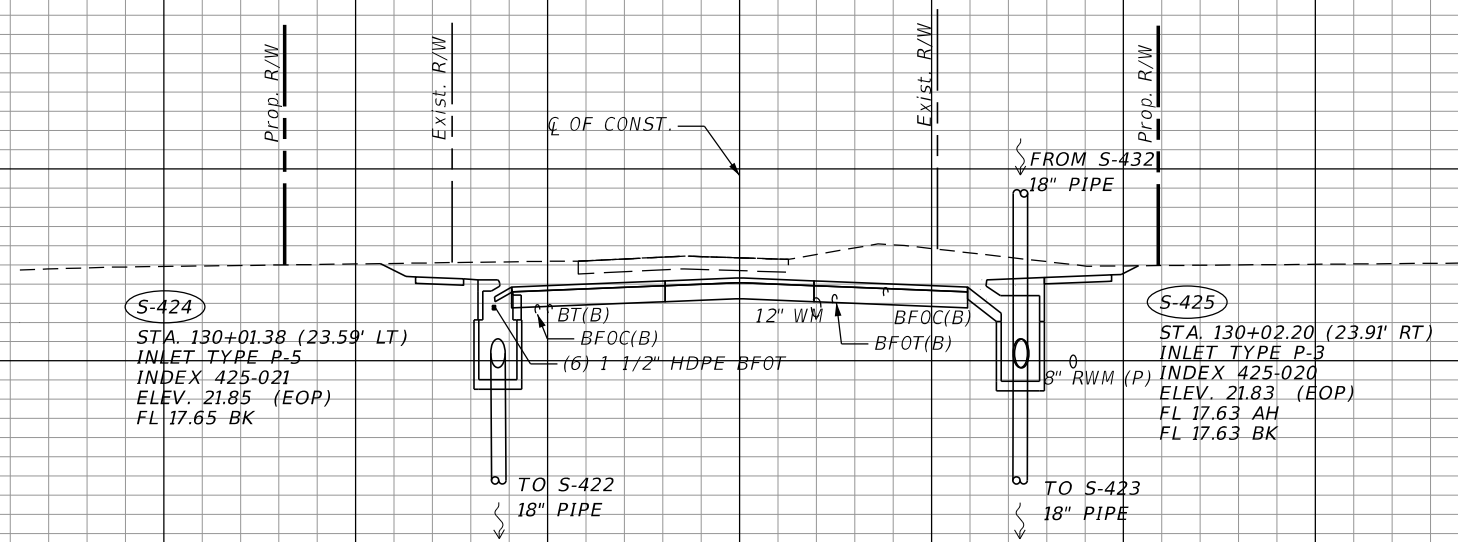
SHEET NO.
126

34
32
30
28
26
24
22
20
18
16
14
12
10



S-432
130+96.29

36
34
32
30
28
26
24
22
20
18
16
14
12
10



S-425
S-424
130+01.38

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

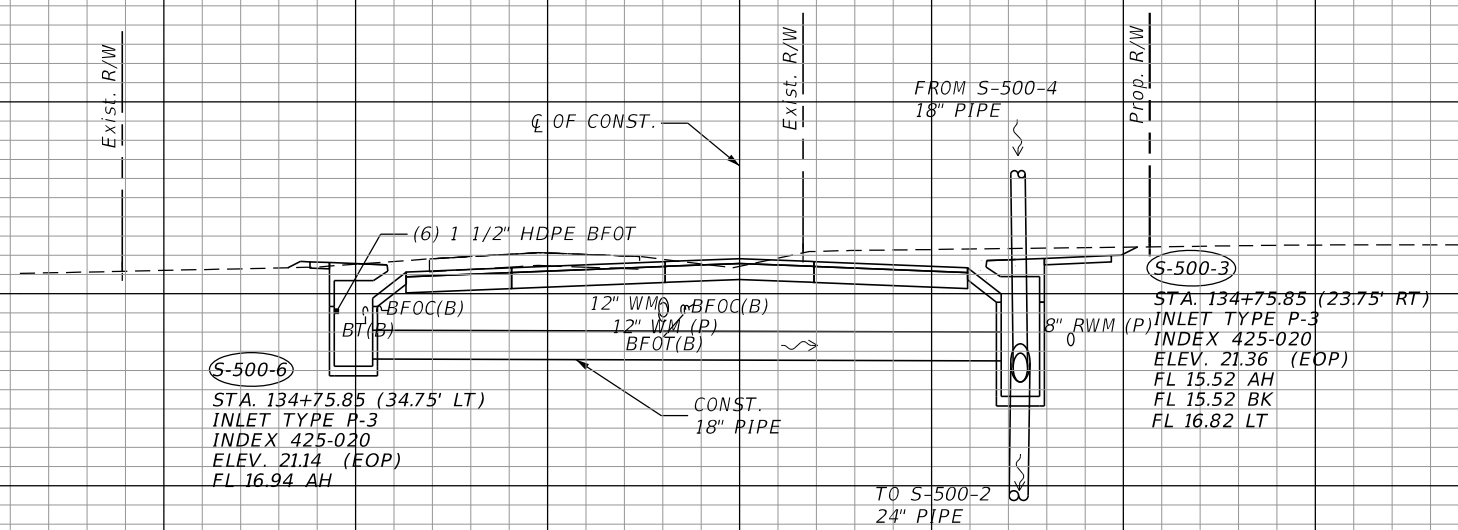
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

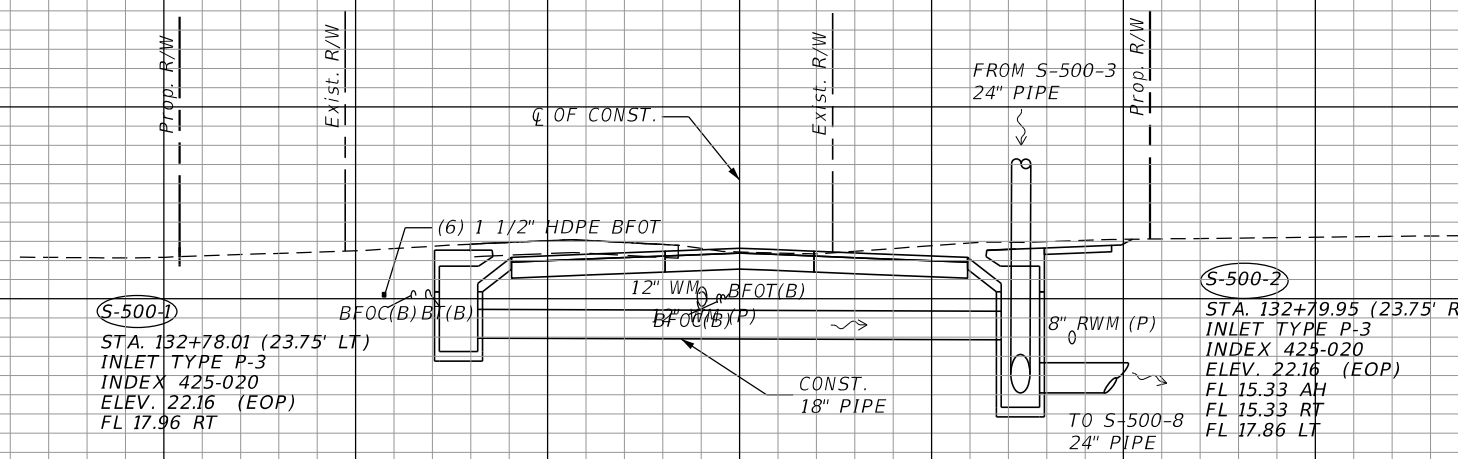
SHEET NO.
127

34
32
30
28
26
24
22
20
18
16
14
12
10
8



S-500-6
134+75.97

34
32
30
28
26
24
22
20
18
16
14
12



S-500-2
132+79.06

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

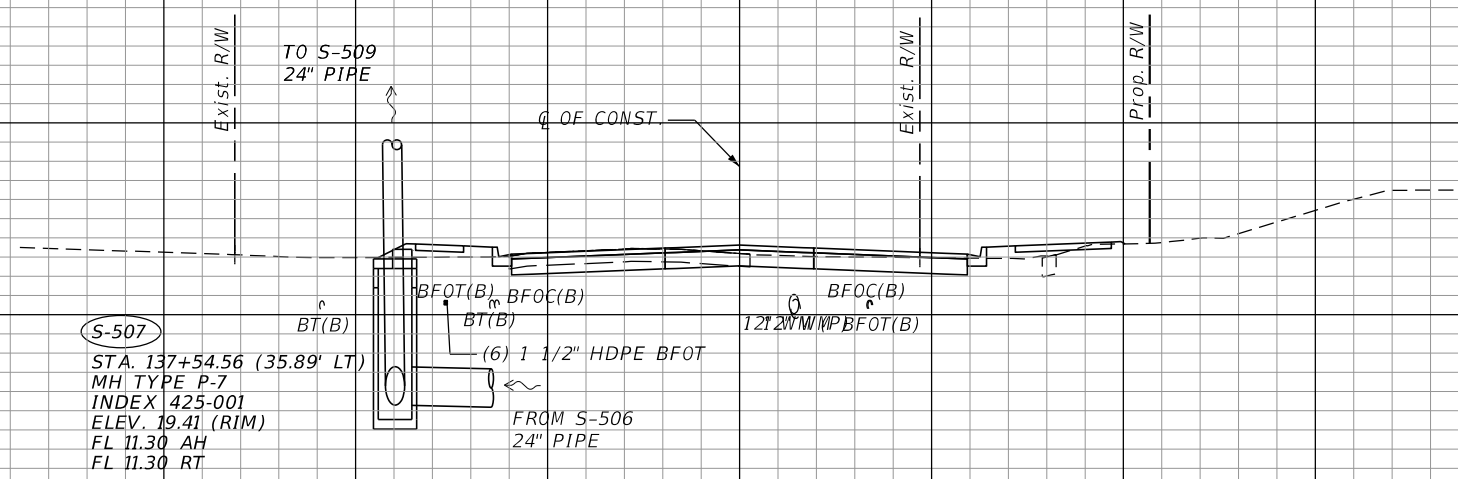
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

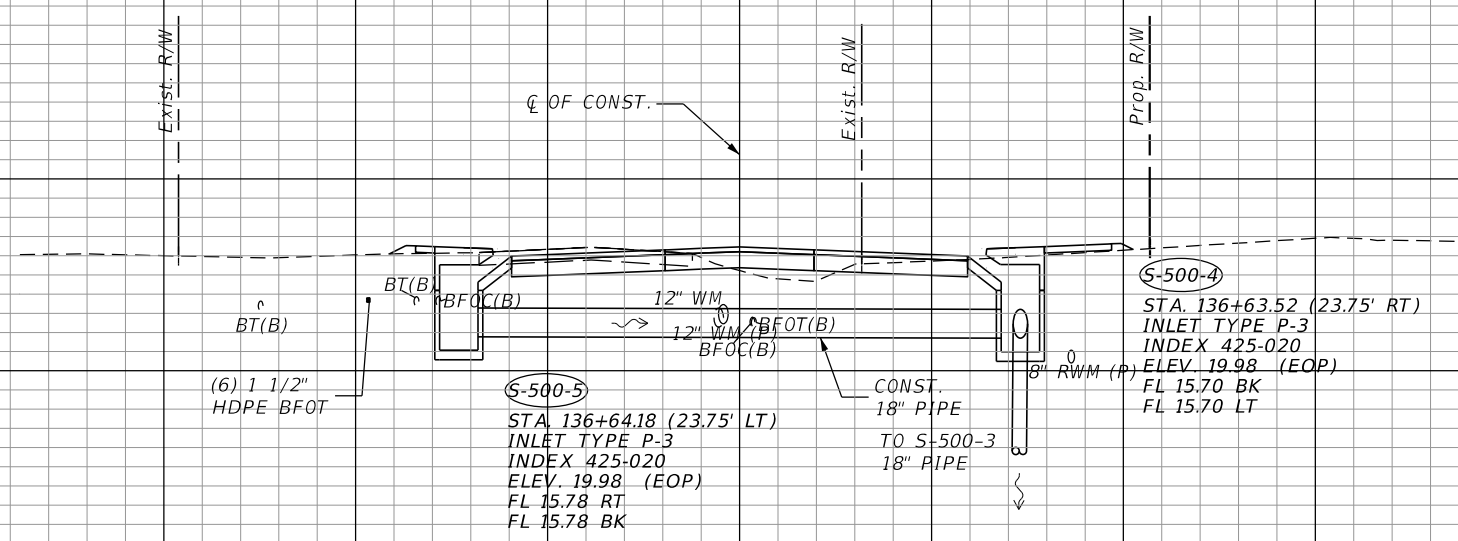
DRAINAGE STRUCTURES

SHEET NO.
128

30
28
26
24
22
20
18
16
14
12
10
8



32
30
28
26
24
22
20
18
16
14
12
10
8
6



1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

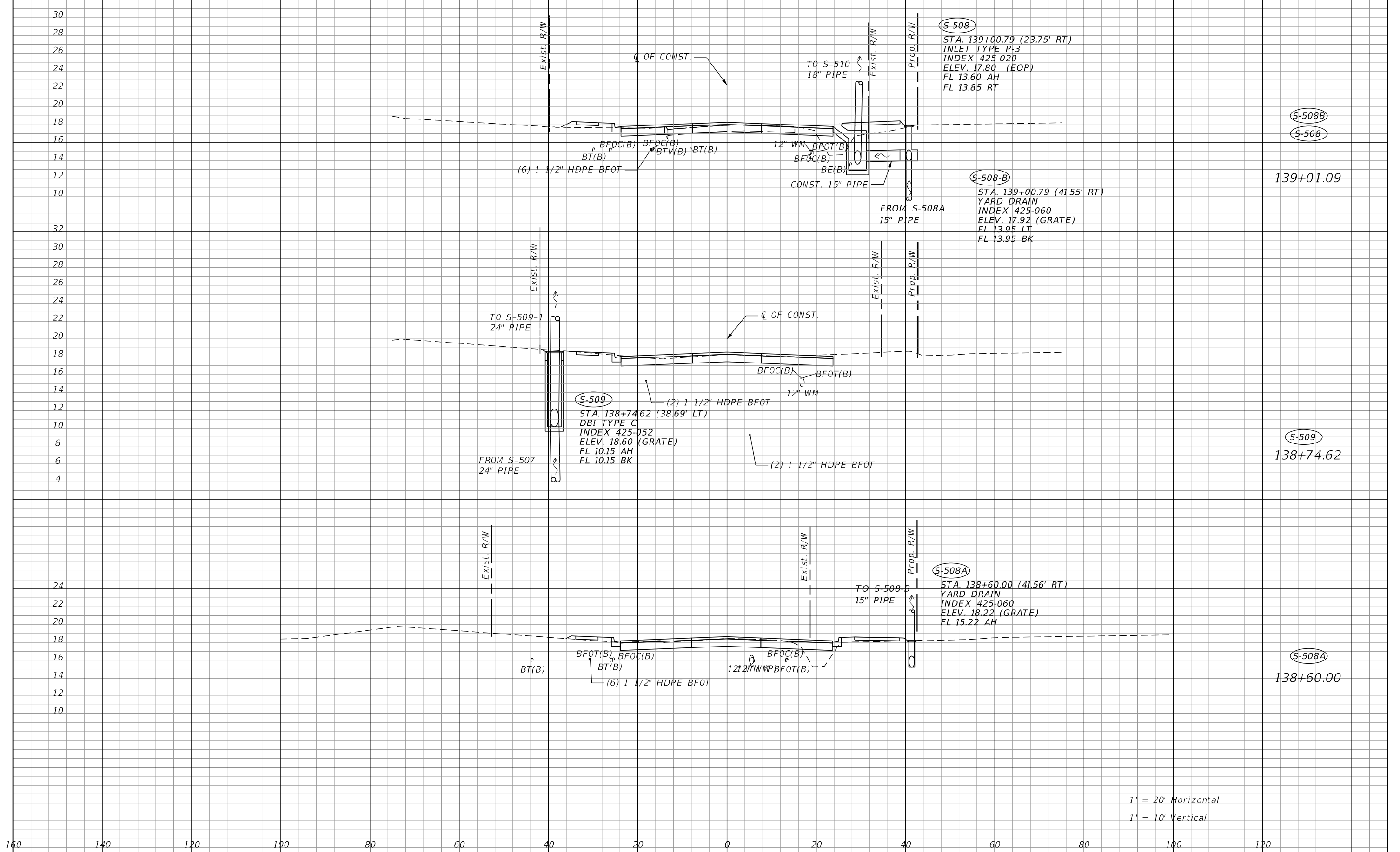
REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

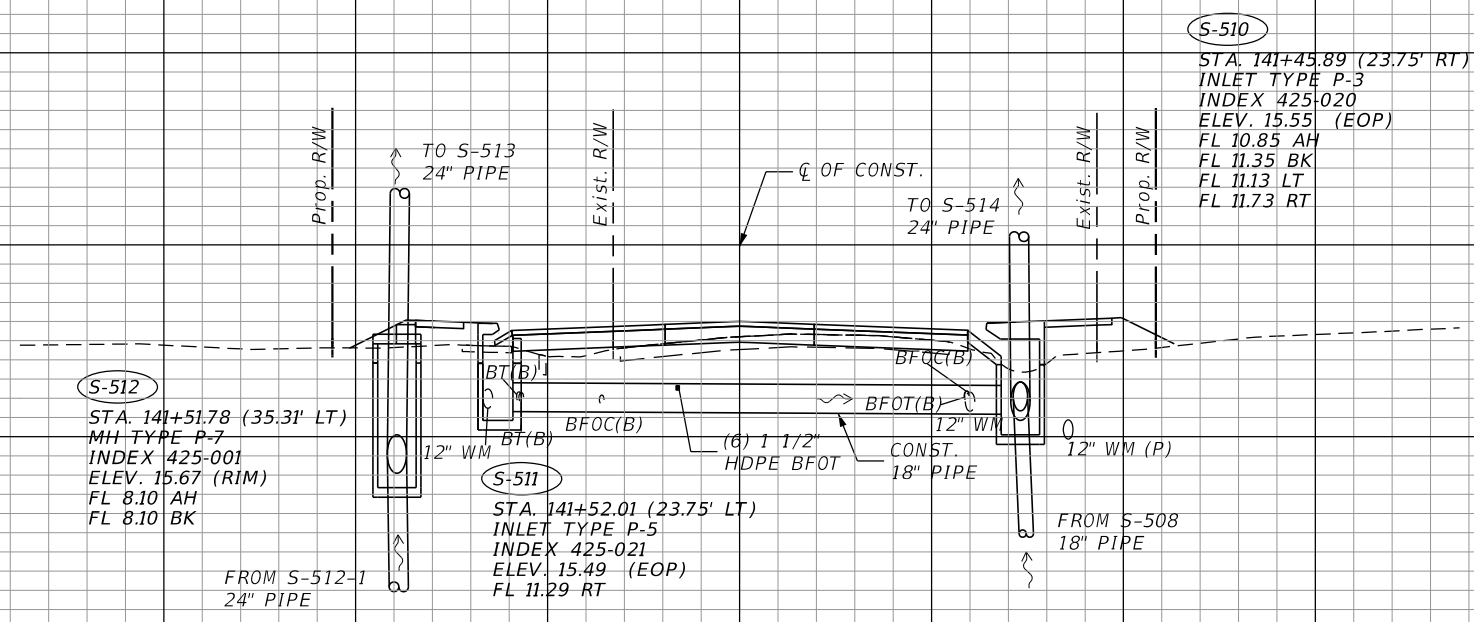
SHEET NO.
129



1" = 20' Horizontal
 1" = 10' Vertical

REVISIONS		DATE		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION	DATE	DESCRIPTION
STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917					
SEMINOLE COUNTY PUBLIC WORKS					
ROAD NO.		COUNTY		SEMINOLE COUNTY CIP	
CR 431		SEMINOLE		01785303	
DRAINAGE STRUCTURES					SHEET NO. 130

28
26
24
22
20
18
16
14
12
10
8
6
4
2



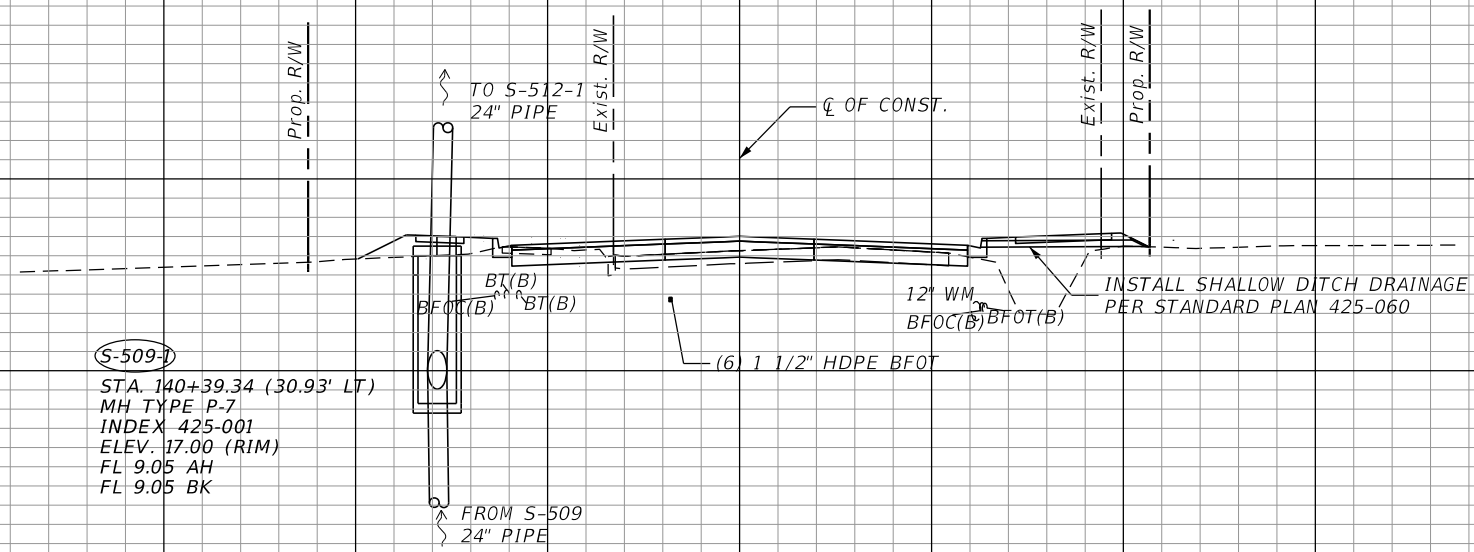
S-510
 STA. 141+45.89 (23.75' RT)
 INLET TYPE P-3
 INDEX 425-020
 ELEV. 15.55 (EOP)
 FL 10.85 AH
 FL 11.35 BK
 FL 11.13 LT
 FL 11.73 RT

S-512
 STA. 141+51.78 (35.31' LT)
 MH TYPE P-7
 INDEX 425-001
 ELEV. 15.67 (RIM)
 FL 8.10 AH
 FL 8.10 BK

S-511
 STA. 141+52.01 (23.75' LT)
 INLET TYPE P-5
 INDEX 425-021
 ELEV. 15.49 (EOP)
 FL 11.29 RT

S-512
S-511
S-510
 141+46.90

28
26
24
22
20
18
16
14
12
10
8
6
4
2



S-509-I
 STA. 140+39.34 (30.93' LT)
 MH TYPE P-7
 INDEX 425-001
 ELEV. 17.00 (RIM)
 FL 9.05 AH
 FL 9.05 BK

S-509-I
 140+38.98

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

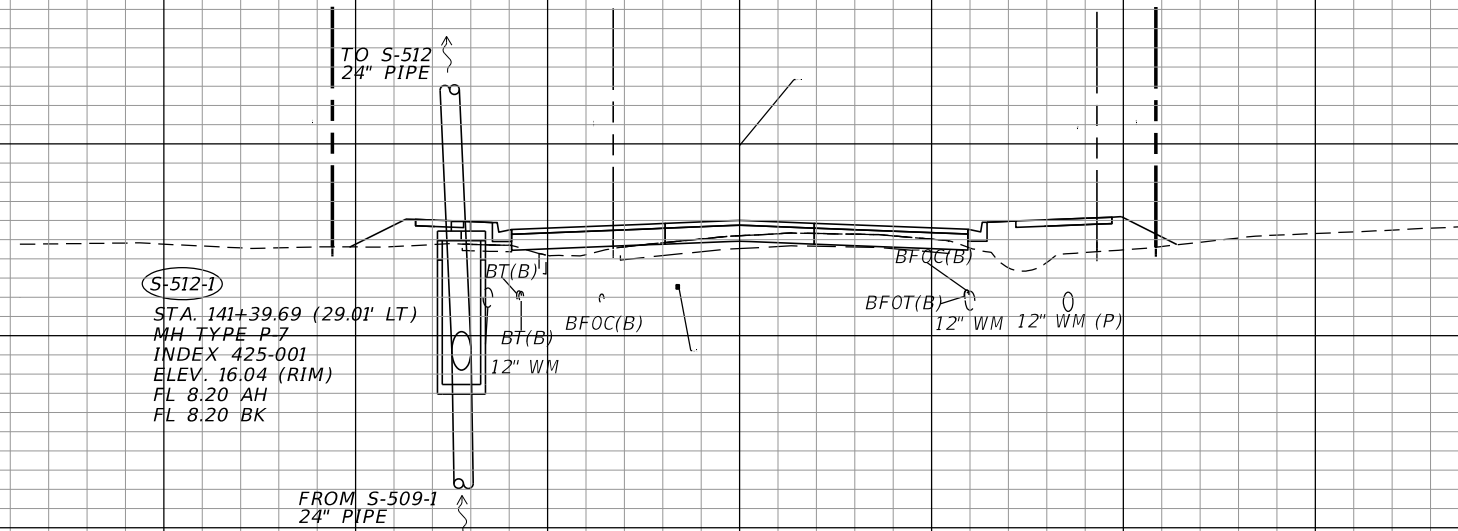
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
 131

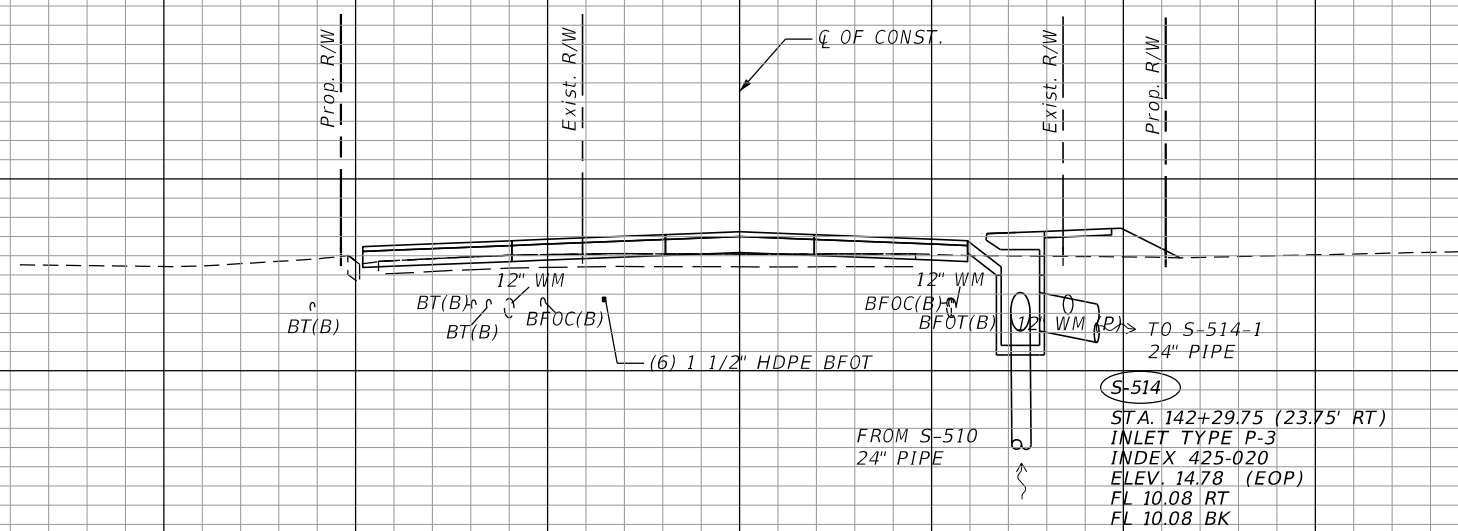
26
24
22
20
18
16
14
12
10
8
6
4
2



(S-512-1)
STA. 141+39.69 (29.01' LT)
MH TYPE P-7
INDEX 425-001
ELEV. 16.04 (RIM)
FL 8.20 AH
FL 8.20 BK

(S-512-1)
141+39.69

26
24
22
20
18
16
14
12
10
8
6
4
2



(S-514)
STA. 142+29.75 (23.75' RT)
INLET TYPE P-3
INDEX 425-020
ELEV. 14.78 (EOP)
FL 10.08 RT
FL 10.08 BK

(S-514)
142+29.75

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

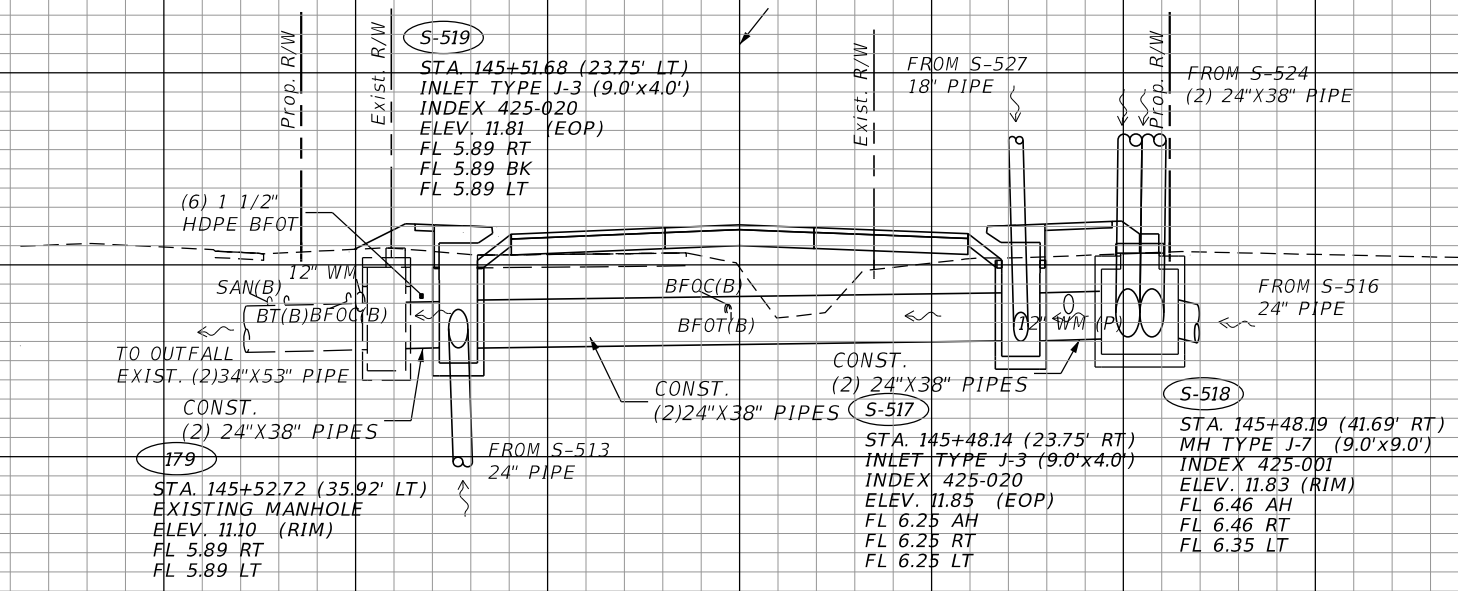
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
132

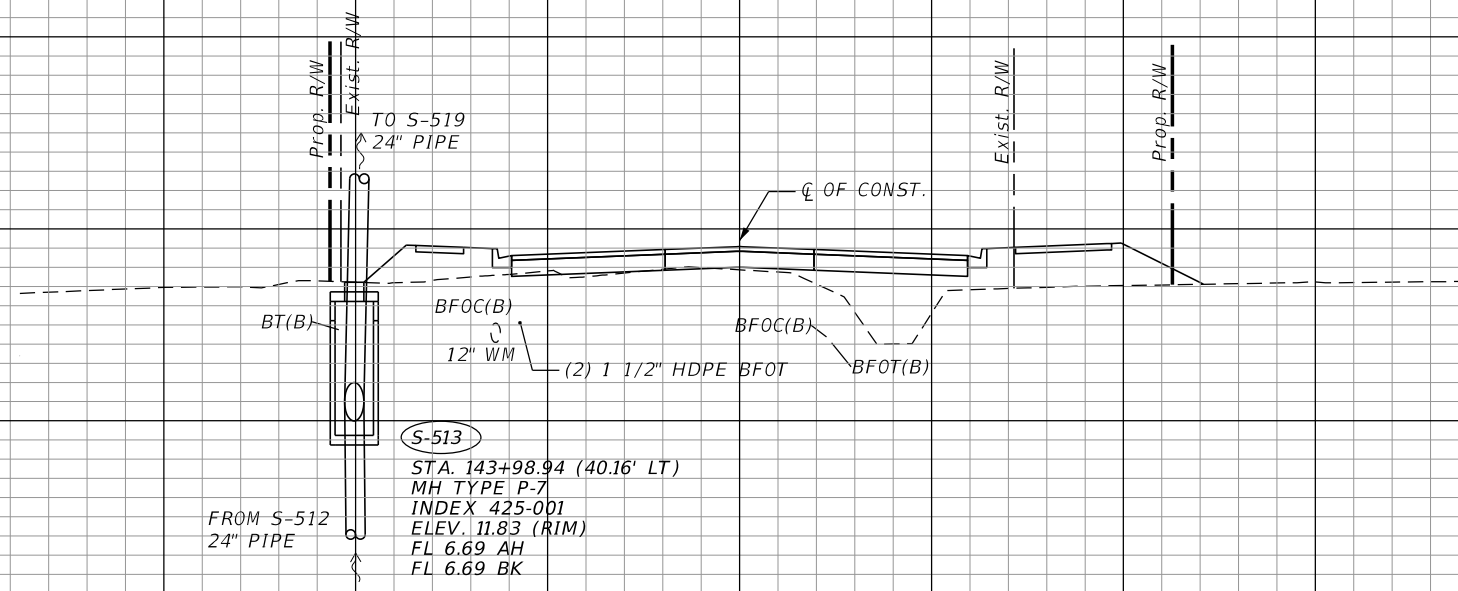
22
20
18
16
14
12
10
8
6
4
2
0
-2
-4



(179)
S-519
S-518
S-517

145+49.91

24
22
20
18
16
14
12
10
8
6
4
2
0
-2



S-513

143+98.90

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

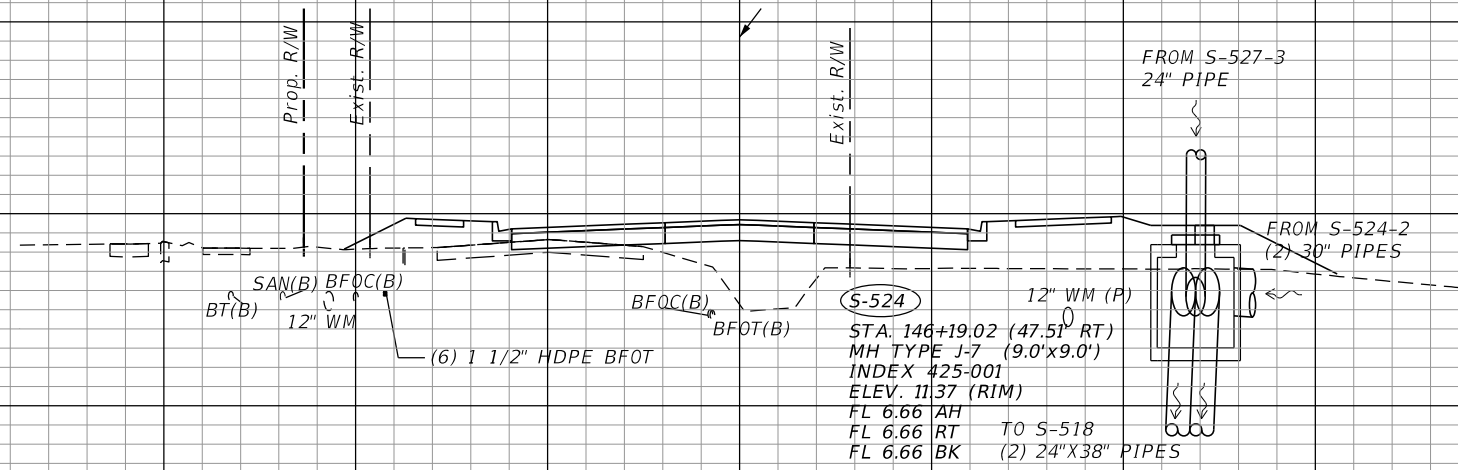
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

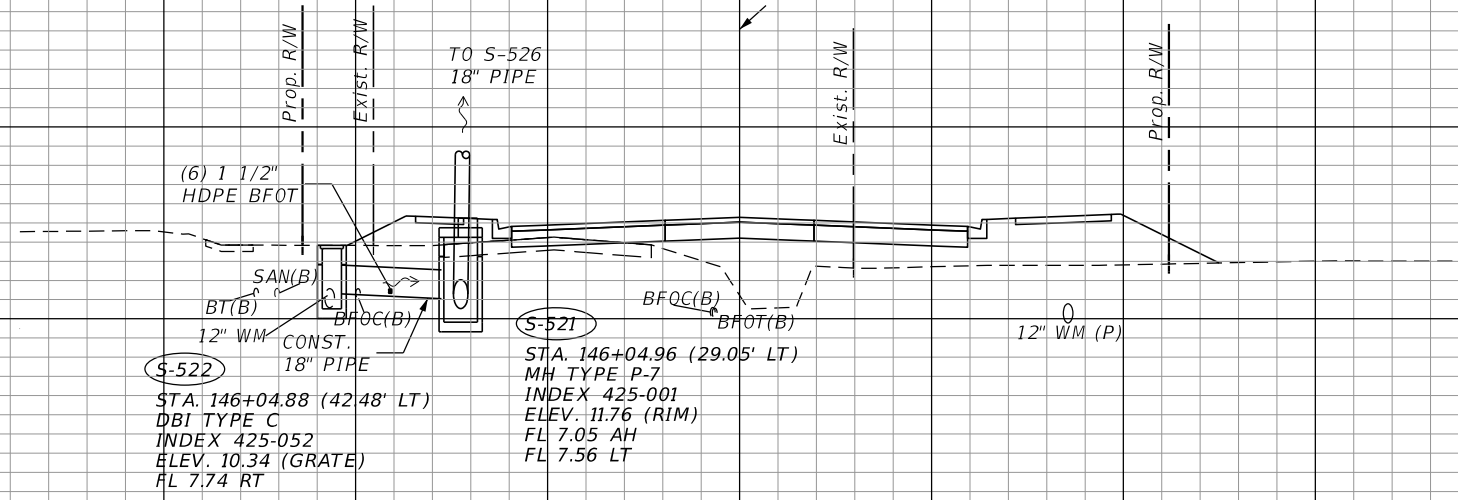
SHEET NO. 133

22
20
18
16
14
12
10
8
6
4
2
0



S-524
146+19.02

22
20
18
16
14
12
10
8
6
4
2
0



S-522
S-521
146+04.96

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

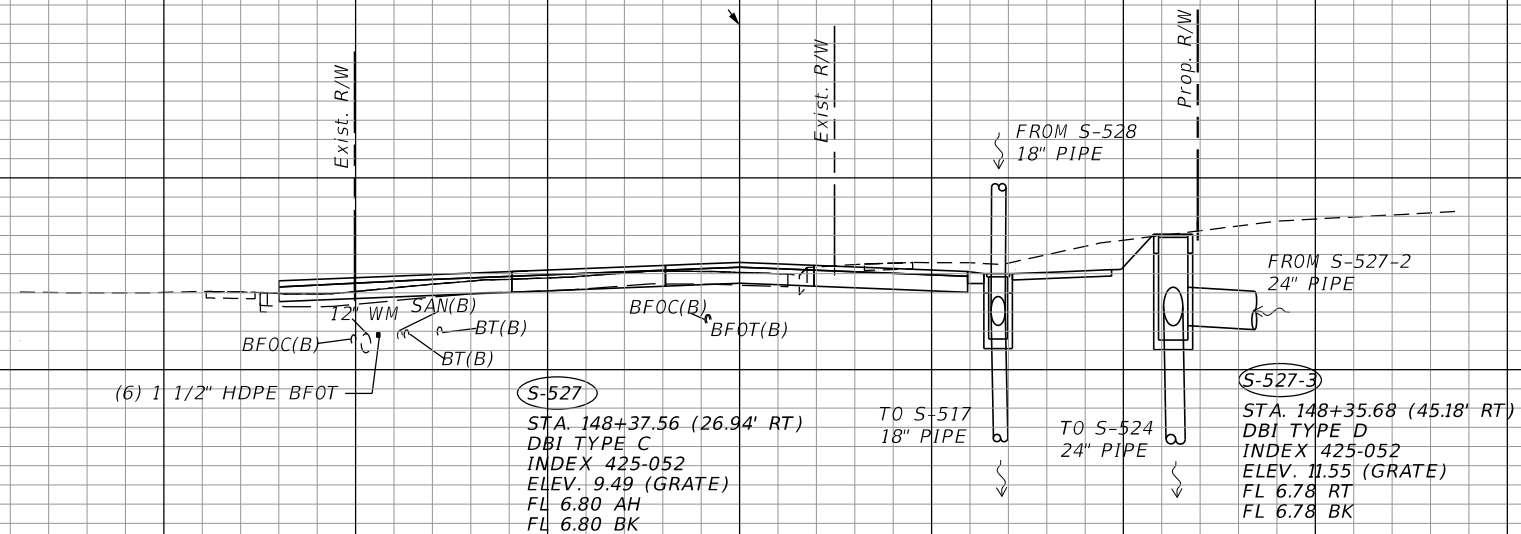
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

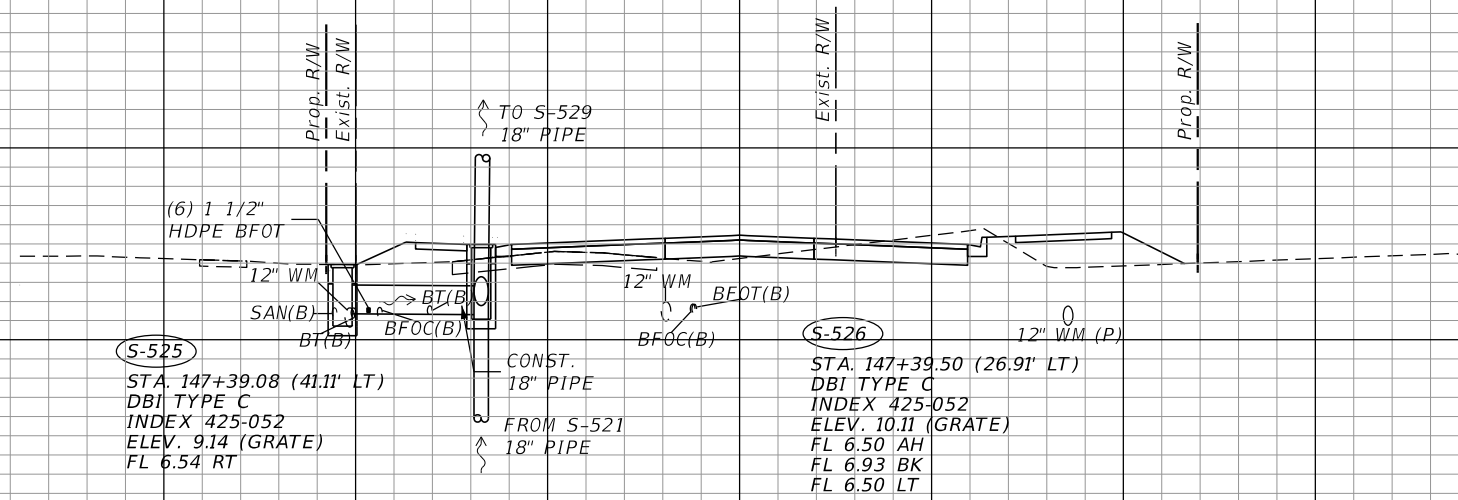
SHEET NO.
134

22
20
18
16
14
12
10
8
6
4
2
0
-2



S-527-3
S-527
148+35.68

22
20
18
16
14
12
10
8
6
4
2
0
-2



S-526
S-525
147+39.50

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

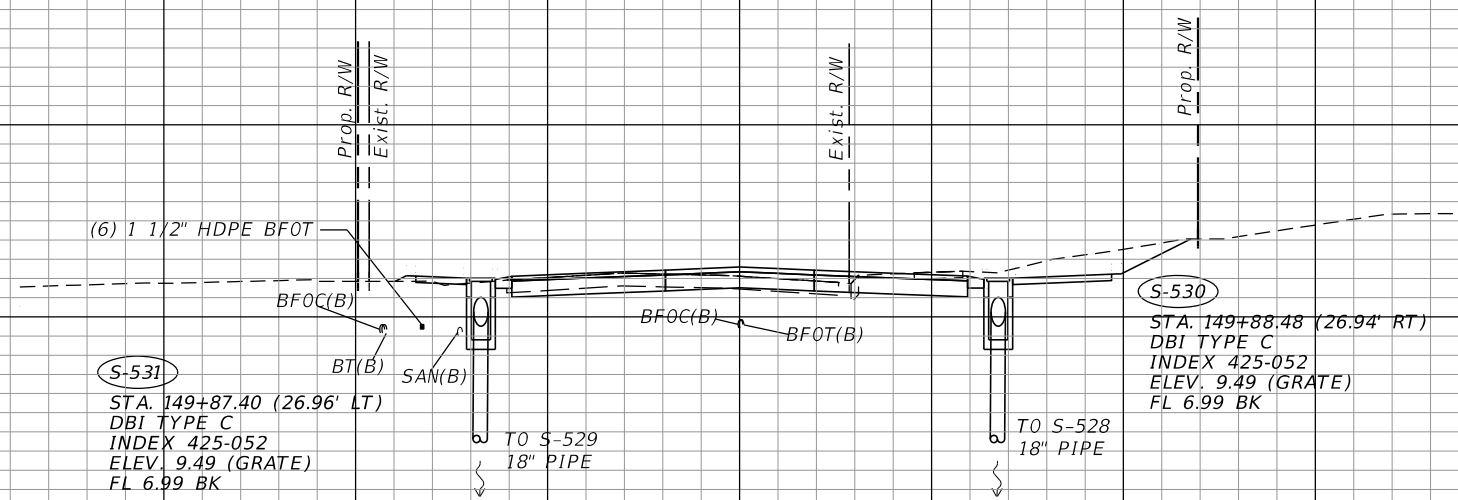
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

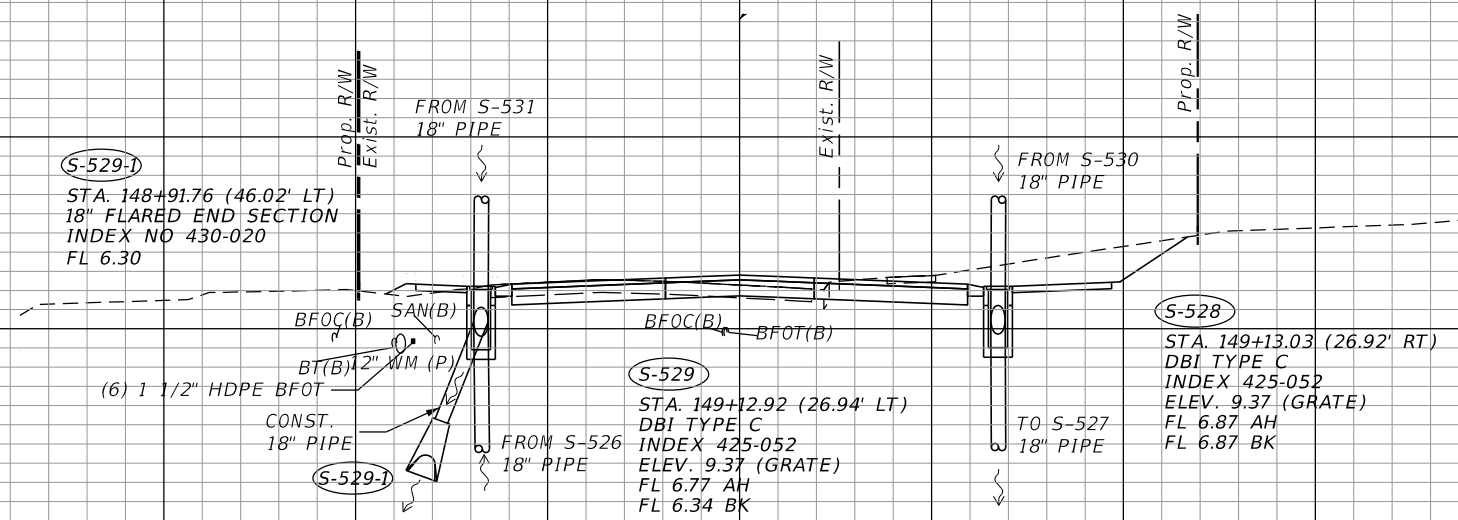
SHEET NO.
135

22
20
18
16
14
12
10
8
6
4
2
0



(S-531)
(S-530)
149+87.94

22
20
18
16
14
12
10
8
6
4
2
0



(S-529-1)
(S-529)
(S-528)
149+12.92

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

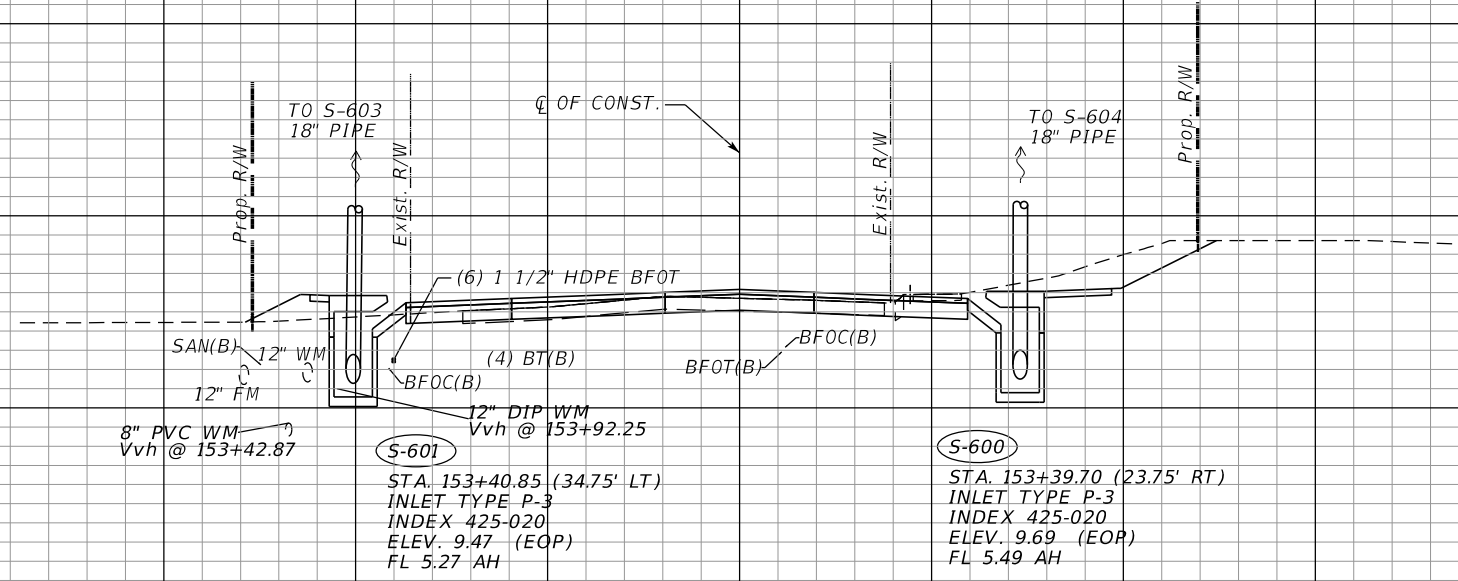
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

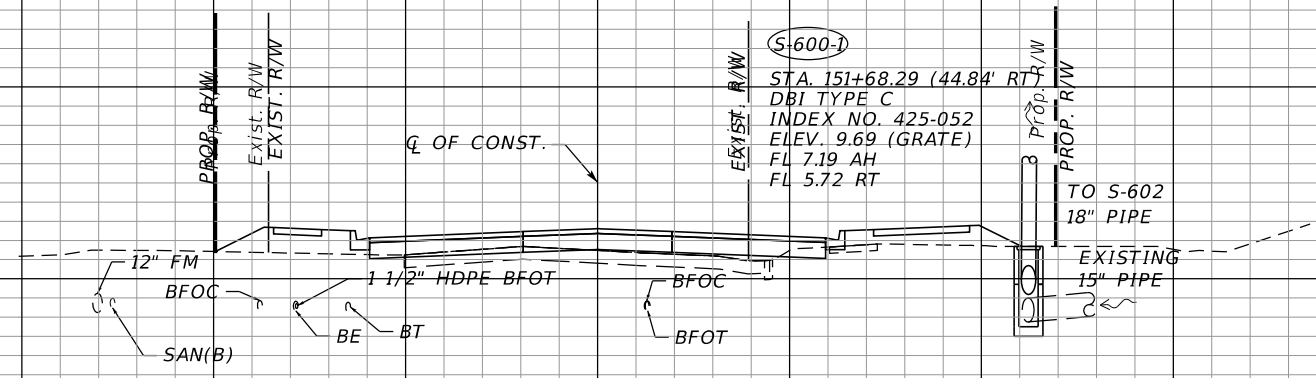
SHEET NO.
136

24
22
20
18
16
14
12
10
8
6
4
2
0
-2



S-600
S-601
153+40.98

36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2



S-600-1
151+68.46

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

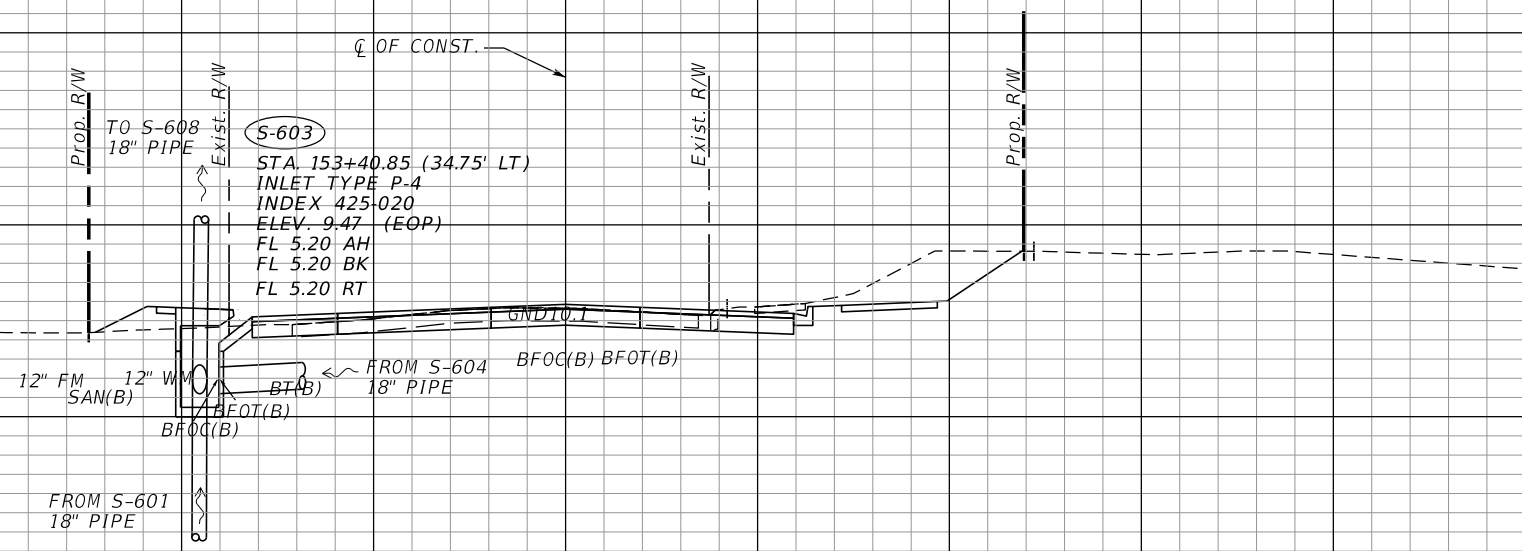
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

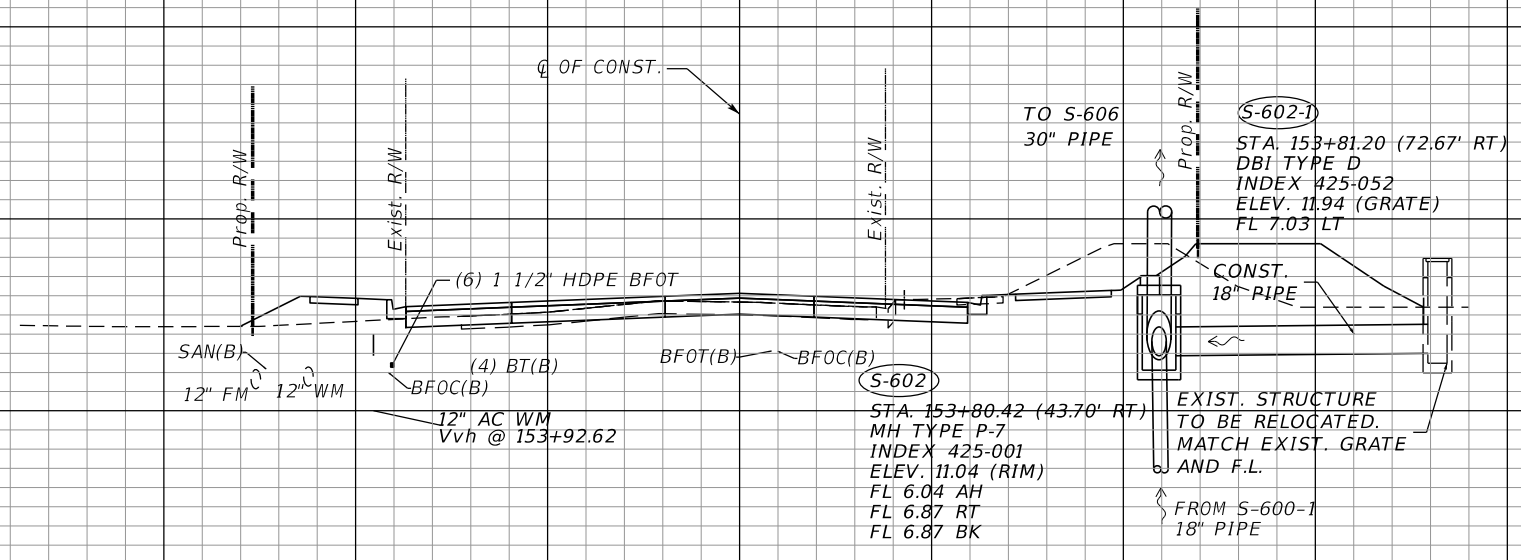
SHEET NO.
137

24
22
20
18
16
14
12
10
8
6
4
2
0



S-603
153+40.85

24
22
20
18
16
14
12
10
8
6
4
2
0
-2



S-602
153+80.42

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

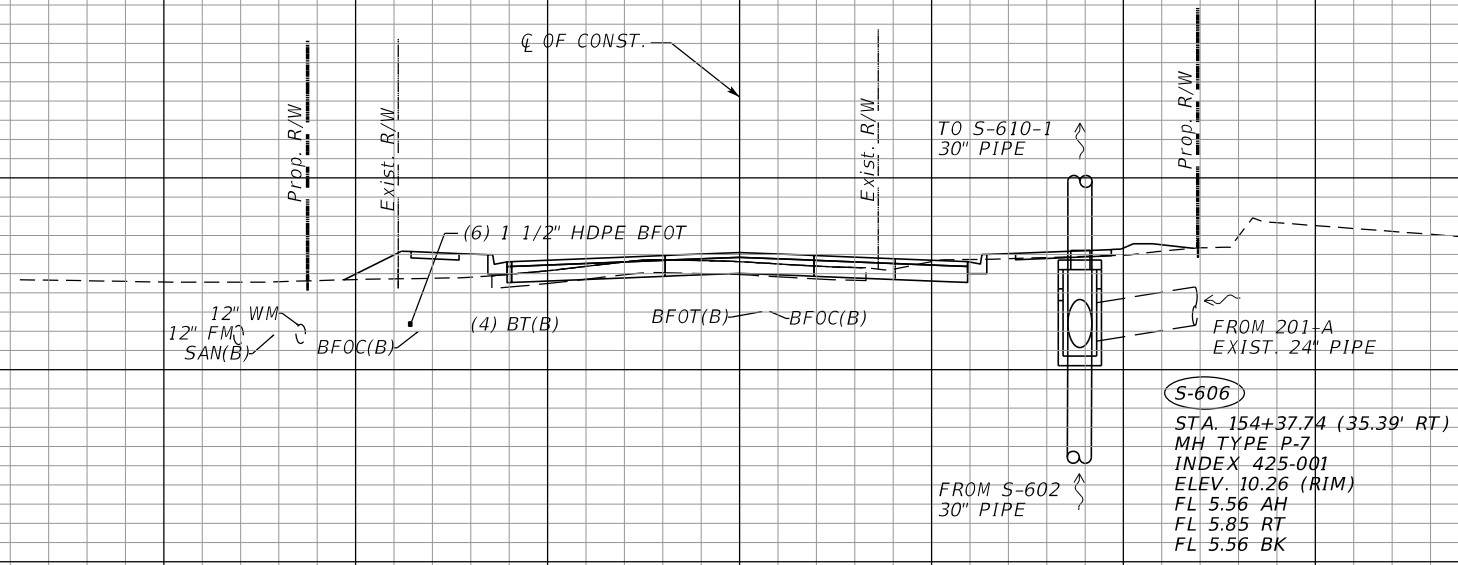
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
138

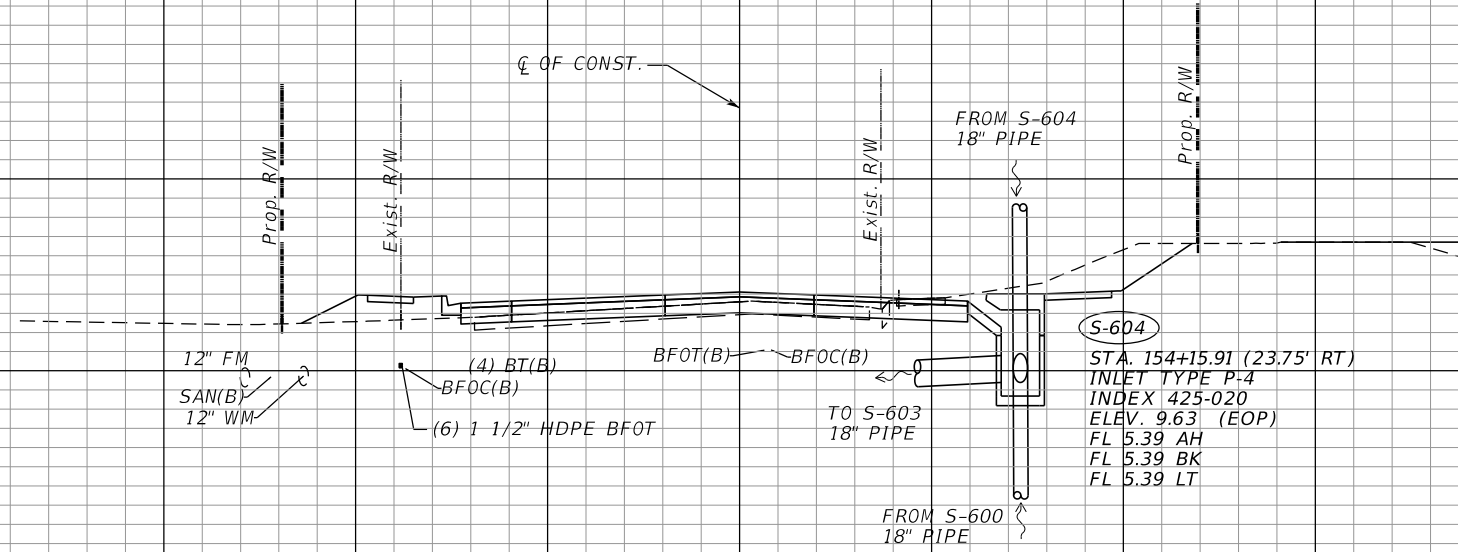
22
20
18
16
14
12
10
8
6
4
2
0
-2
-4



S-606
 STA. 154+37.74 (35.39' RT)
 MH TYPE P-7
 INDEX 425-001
 ELEV. 10.26 (RIM)
 FL 5.56 AH
 FL 5.85 RT
 FL 5.56 BK

S-606
 154+38.25

24
22
20
18
16
14
12
10
8
6
4
2
0
-2



S-604
 STA. 154+15.91 (23.75' RT)
 INLET TYPE P-4
 INDEX 425-020
 ELEV. 9.63 (EOP)
 FL 5.39 AH
 FL 5.39 BK
 FL 5.39 LT

S-604
 154+16.16

1" = 20' Horizontal
 1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

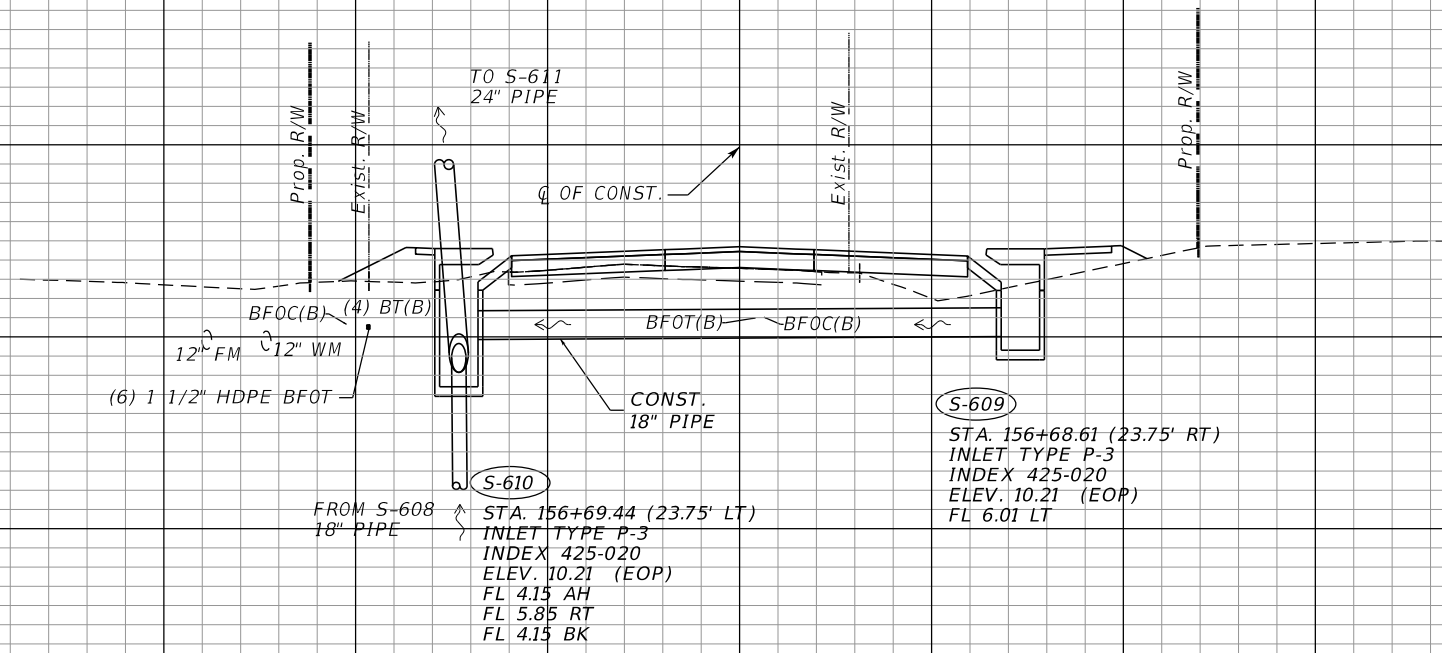
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

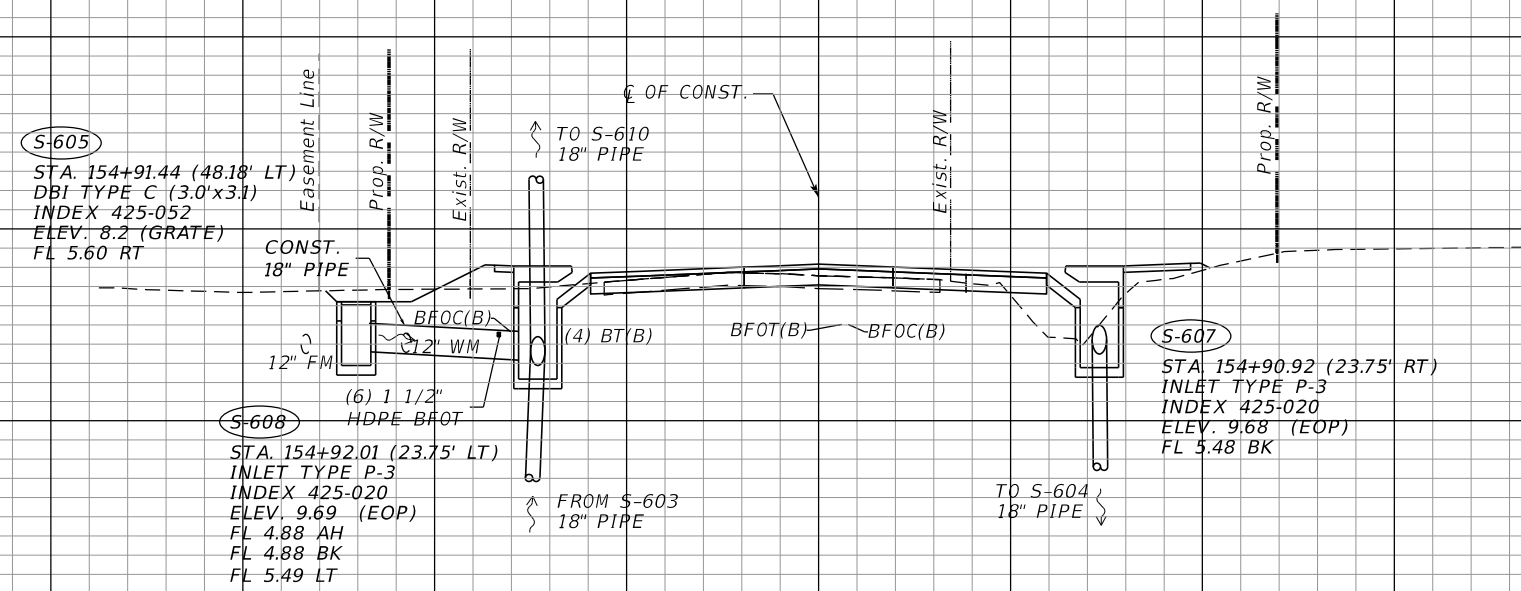
SHEET NO.
 139

22
20
18
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8



(S-610)
(S-609)
156+69.03

22
20
18
16
14
12
10
8
6
4
2
0
-2
-4



(S-605)
(S-608)
(S-607)
154+91.46

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

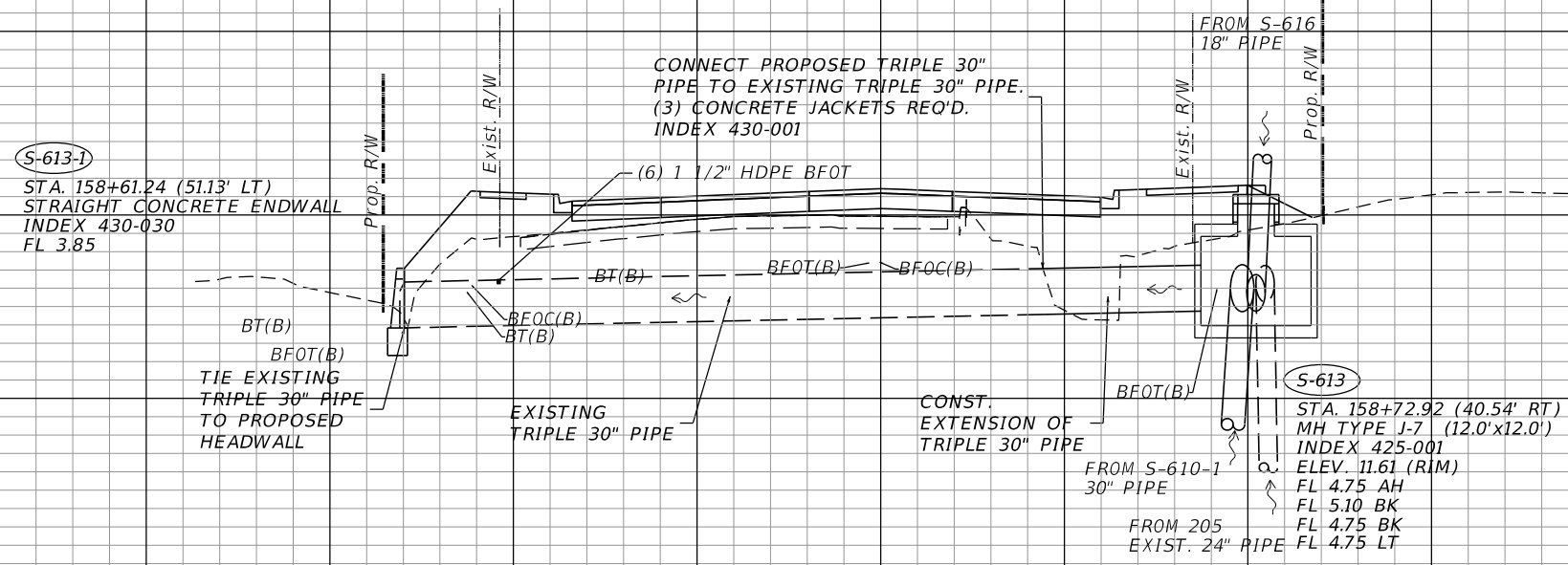
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

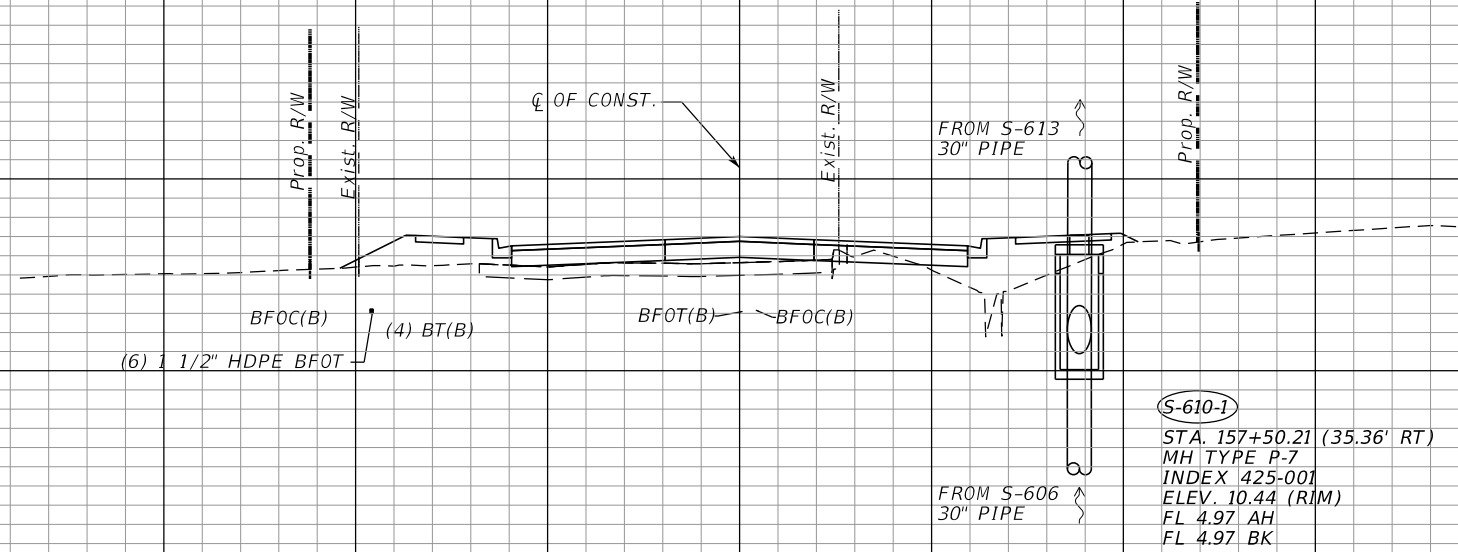
SHEET NO.
140

22
20
18
16
14
12
10
8
6
4
2
0
-2
-4
-6



S-613-1
S-613
158+67.75

22
20
18
16
14
12
10
8
6
4
2
0
-2
-4



157+50.11
S-610-1

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

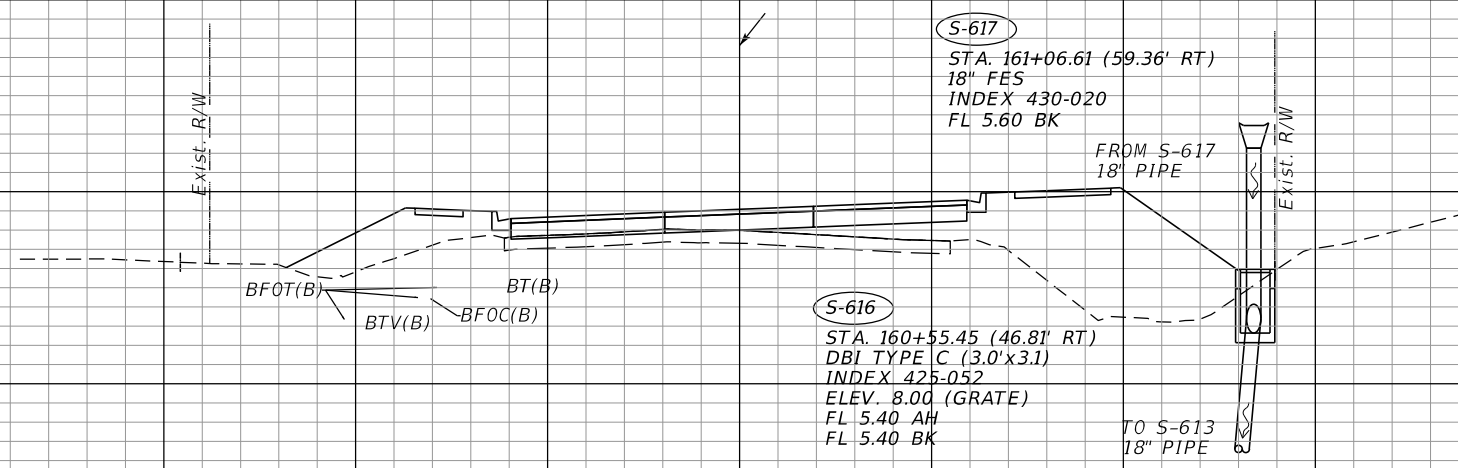
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO. 141

20
18
16
14
12
10
8
6
4
2
0



S-617
S-616
160+55.45

20
18
16
14
12
10
8
6
4
2



S-615
159+72.91

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

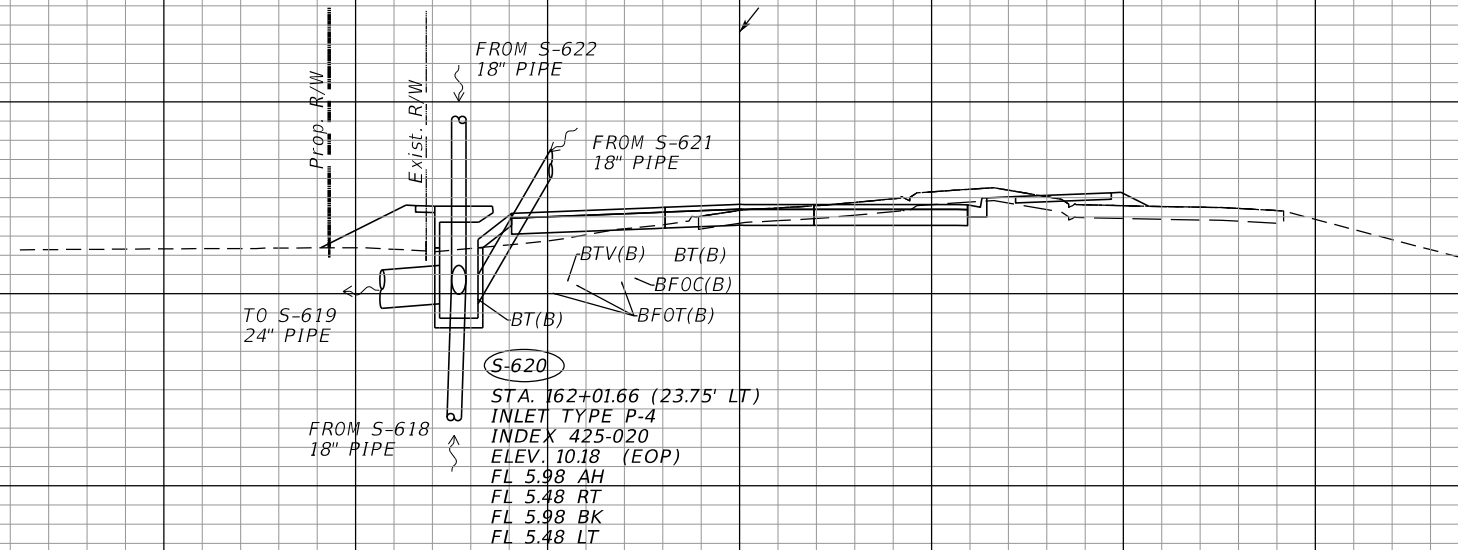
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

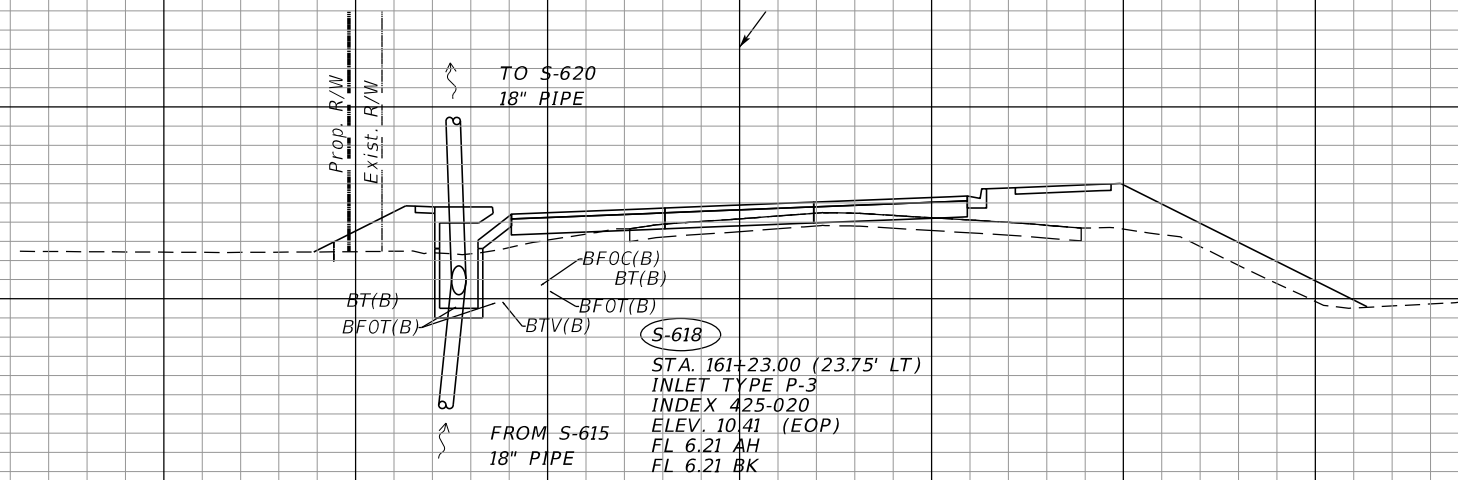
SHEET NO.
142

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



S-620
162+01.66

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



161+23.00

S-618

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

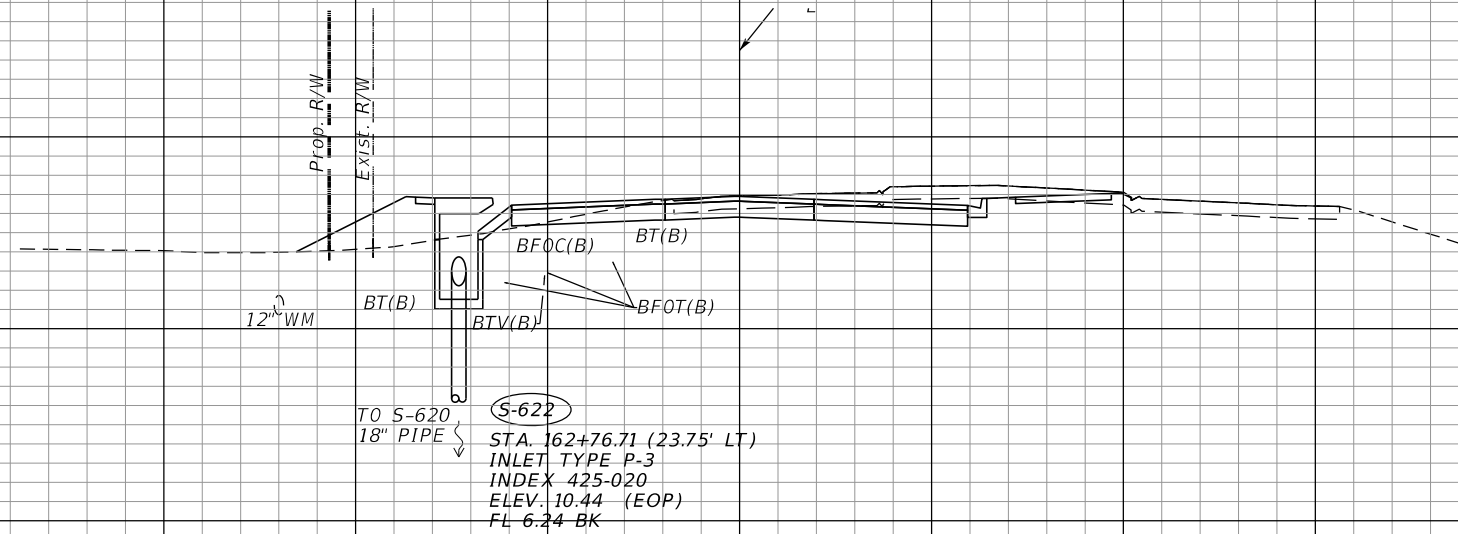
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

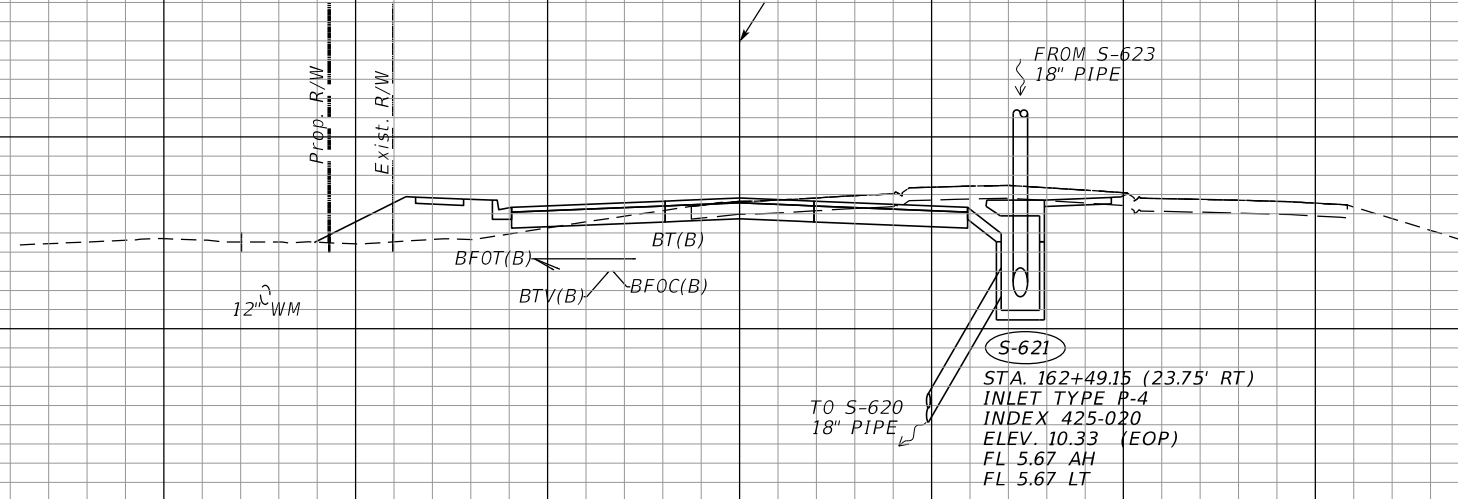
SHEET NO.
143

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



S-622
162+76.71

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



162+49.15
S-621

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION

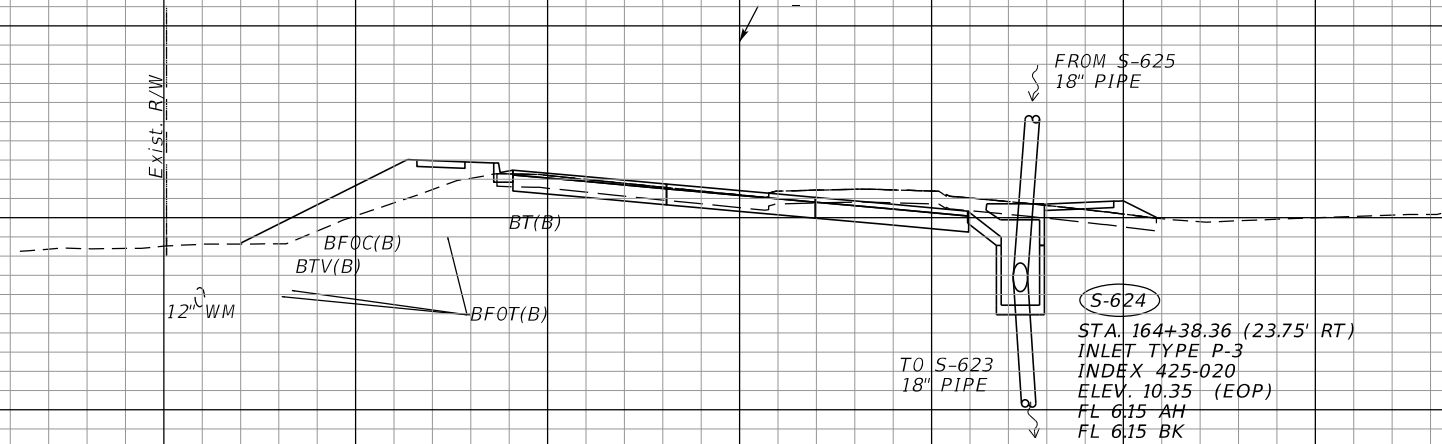
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
144

20
18
16
14
12
10
8
6
4
2
0

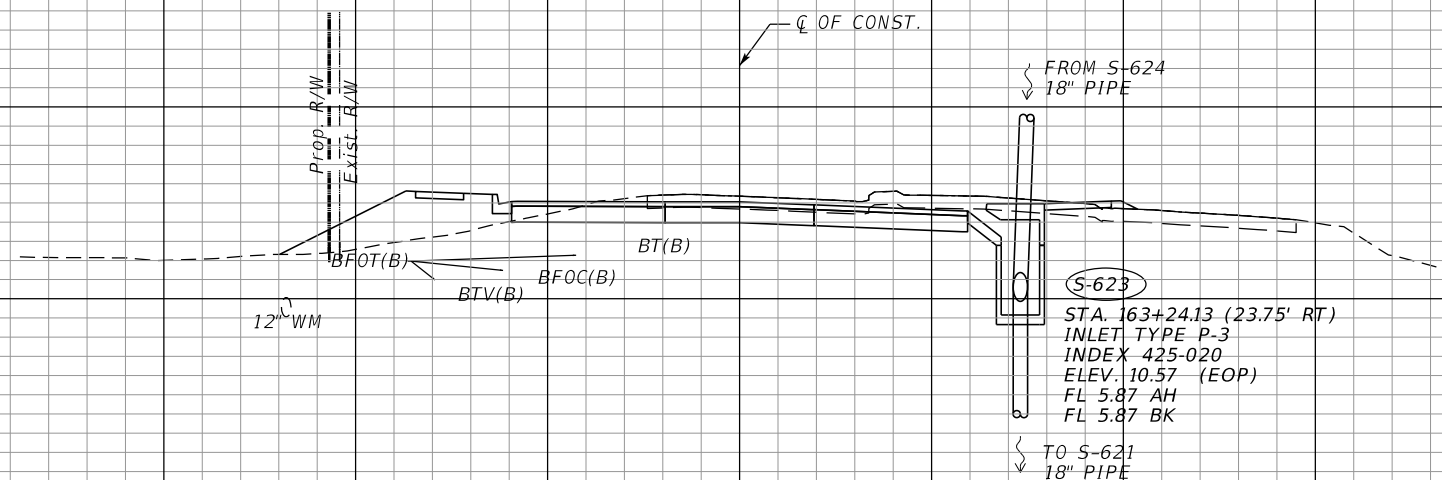


S-624
STA. 164+38.36 (23.75' RT)
INLET TYPE P-3
INDEX 425-020
ELEV. 10.35 (EOP)
FL 6.15 AH
FL 6.15 BK

S-624

164+38.36

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



S-623
STA. 163+24.13 (23.75' RT)
INLET TYPE P-3
INDEX 425-020
ELEV. 10.57 (EOP)
FL 5.87 AH
FL 5.87 BK

S-623

163+24.13

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

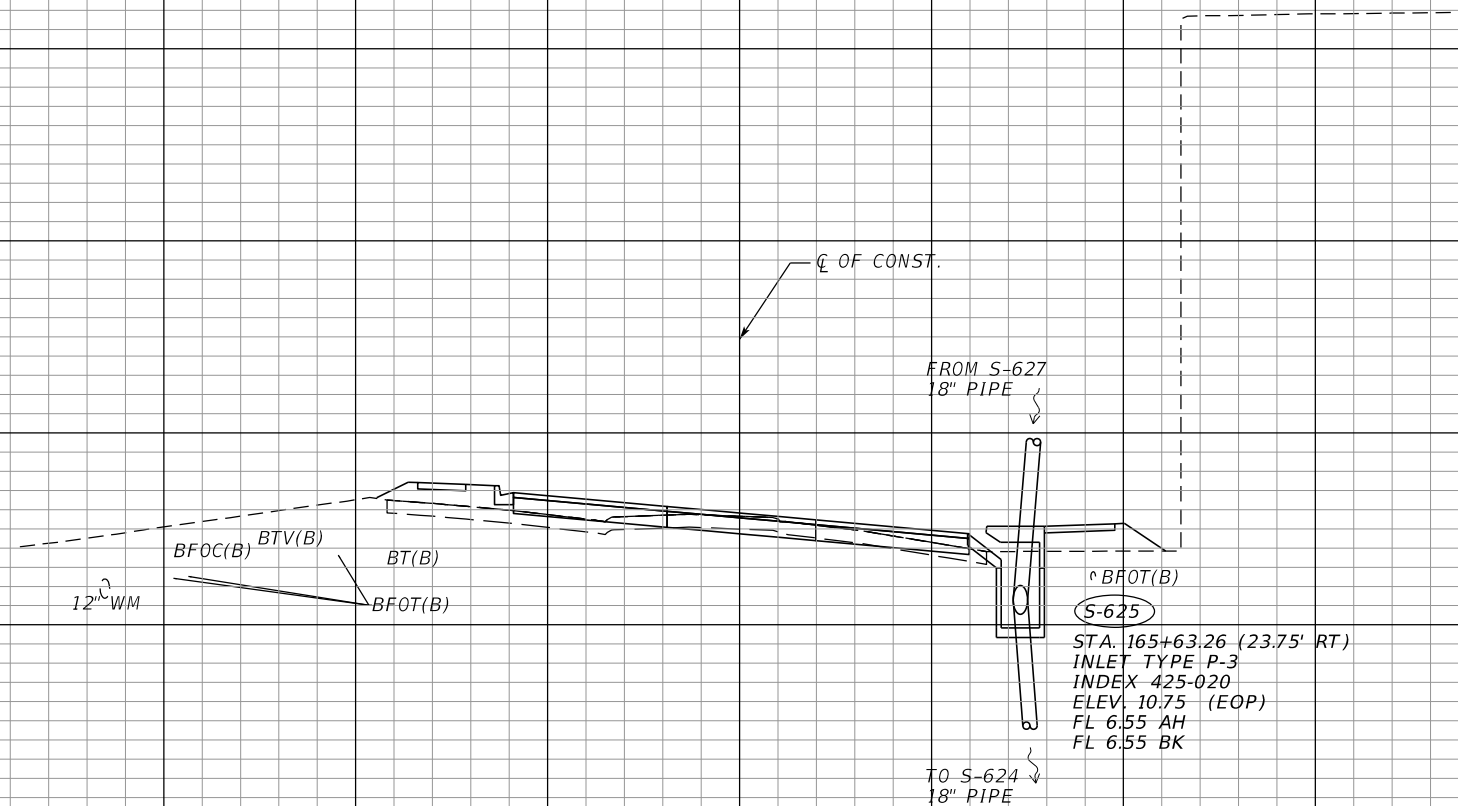
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
145

36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
-2



S-625
165+63.26

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION	

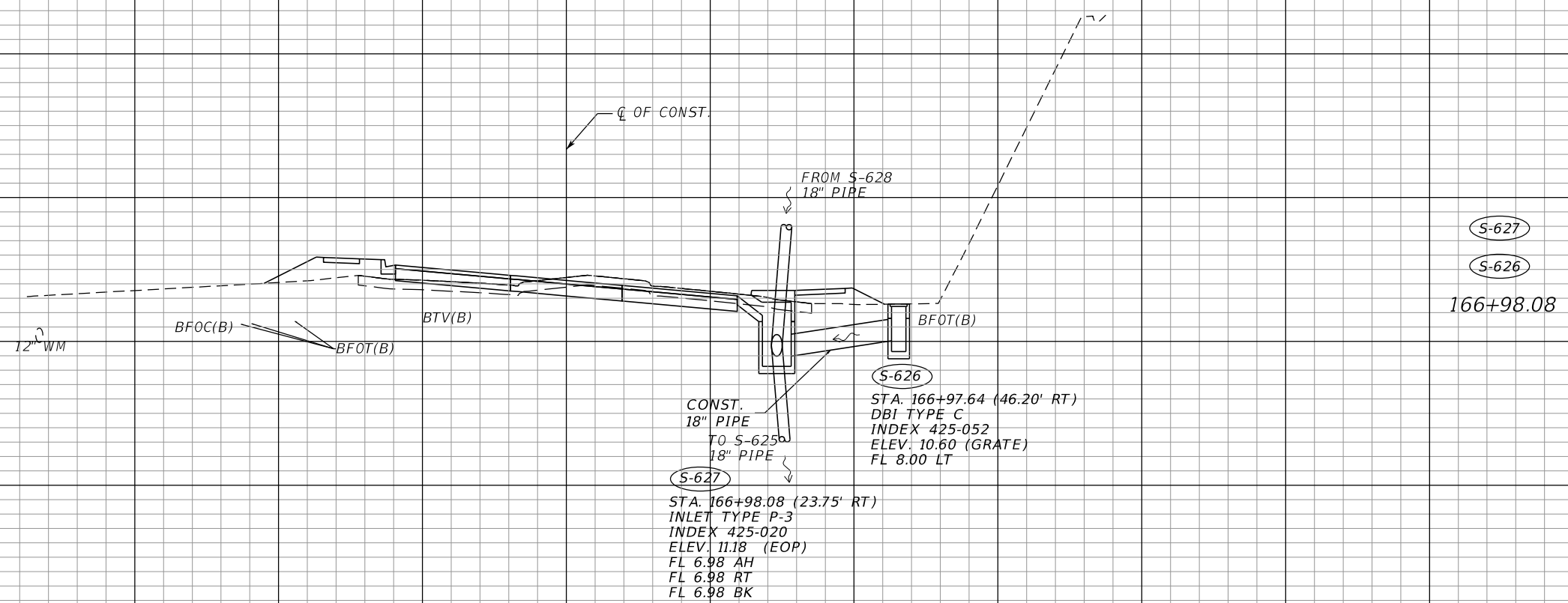
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
146

30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
-22
-24
-26
-28
-30
-32
-34
-36
-38
-40



1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

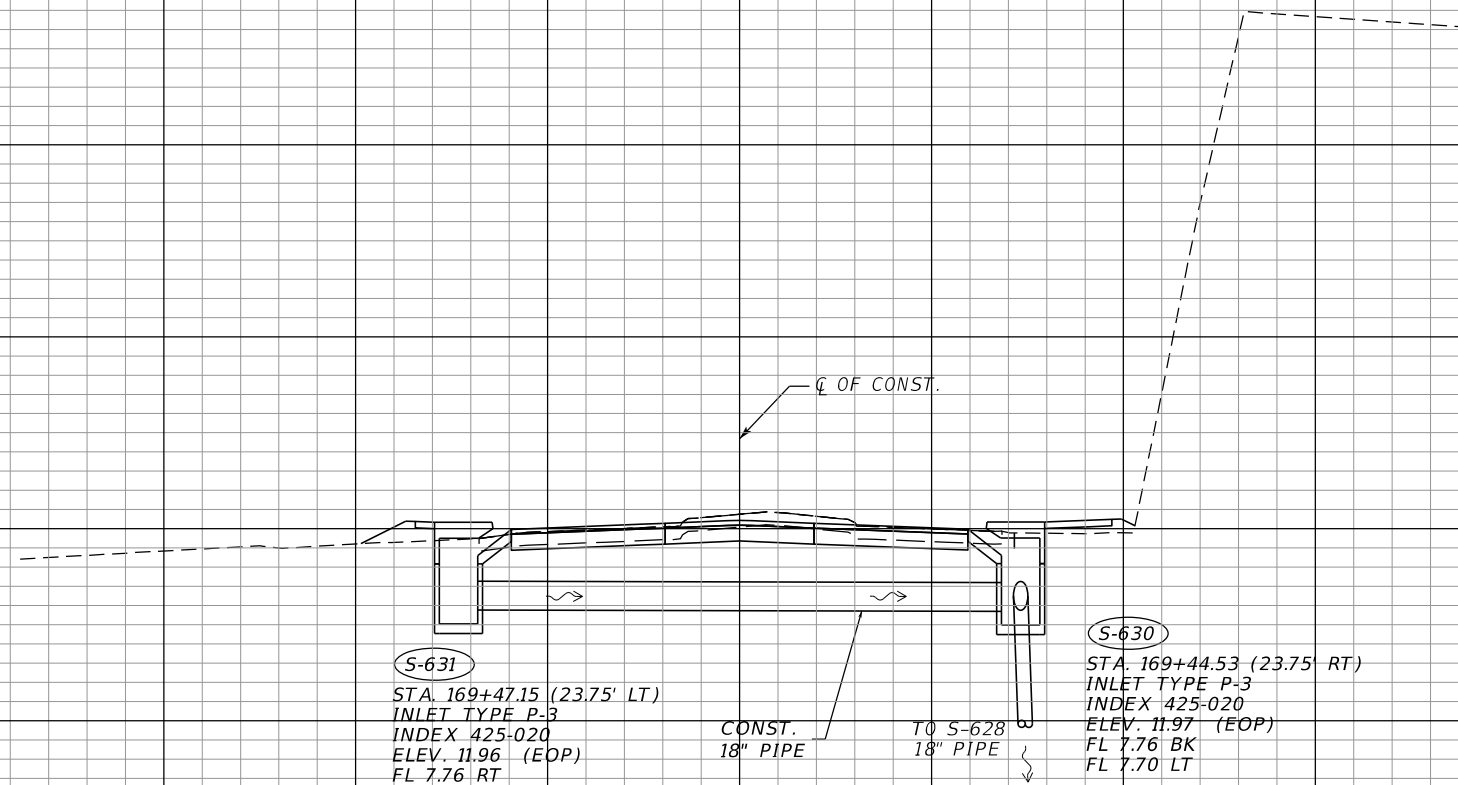
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

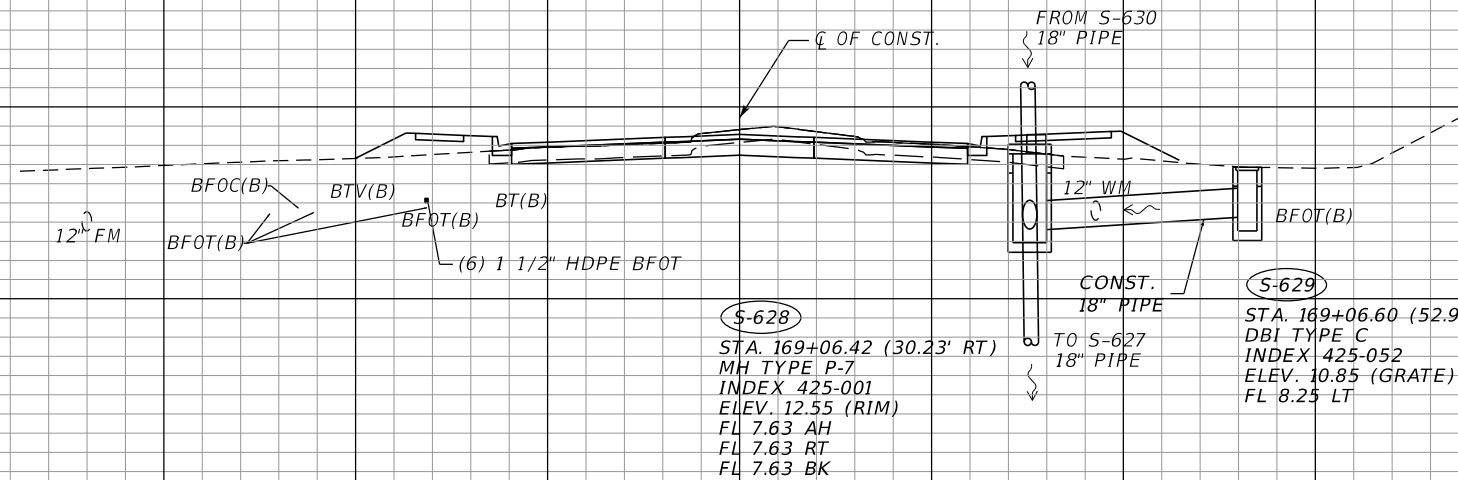
SHEET NO.
147

38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0

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



S-631
S-630
169+45.84



S-629
S-628
169+06.42

1" = 20' Horizontal
1" = 10' Vertical

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120

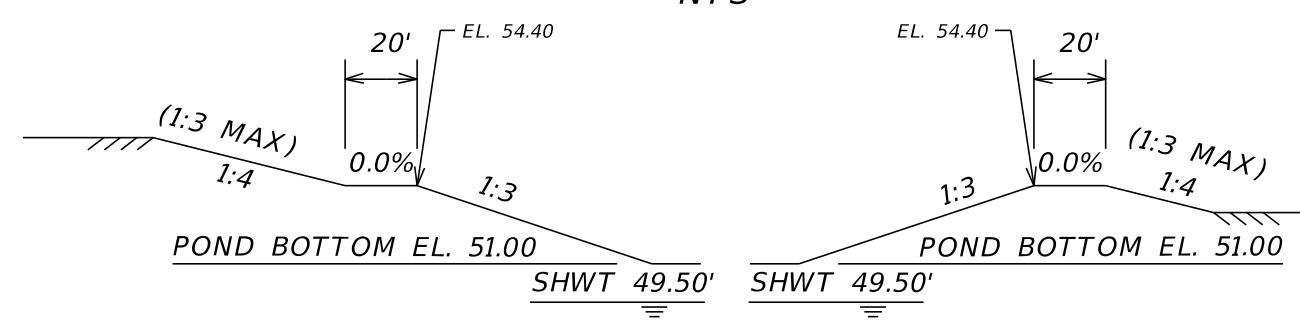
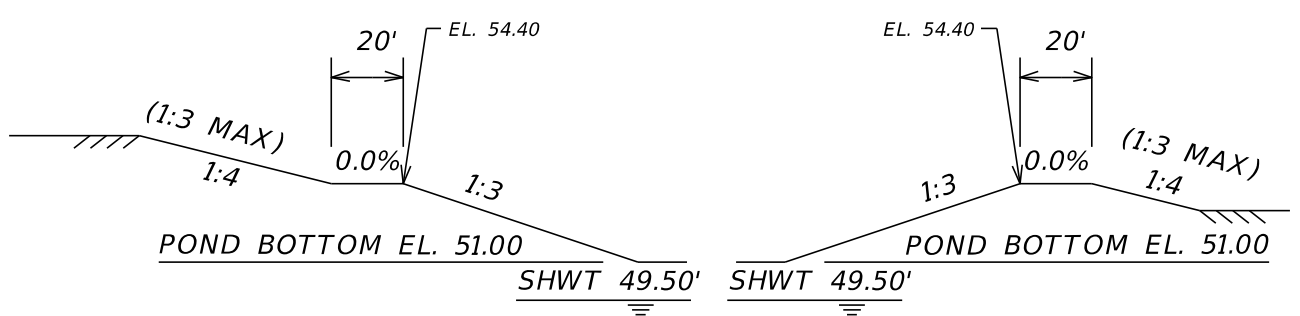
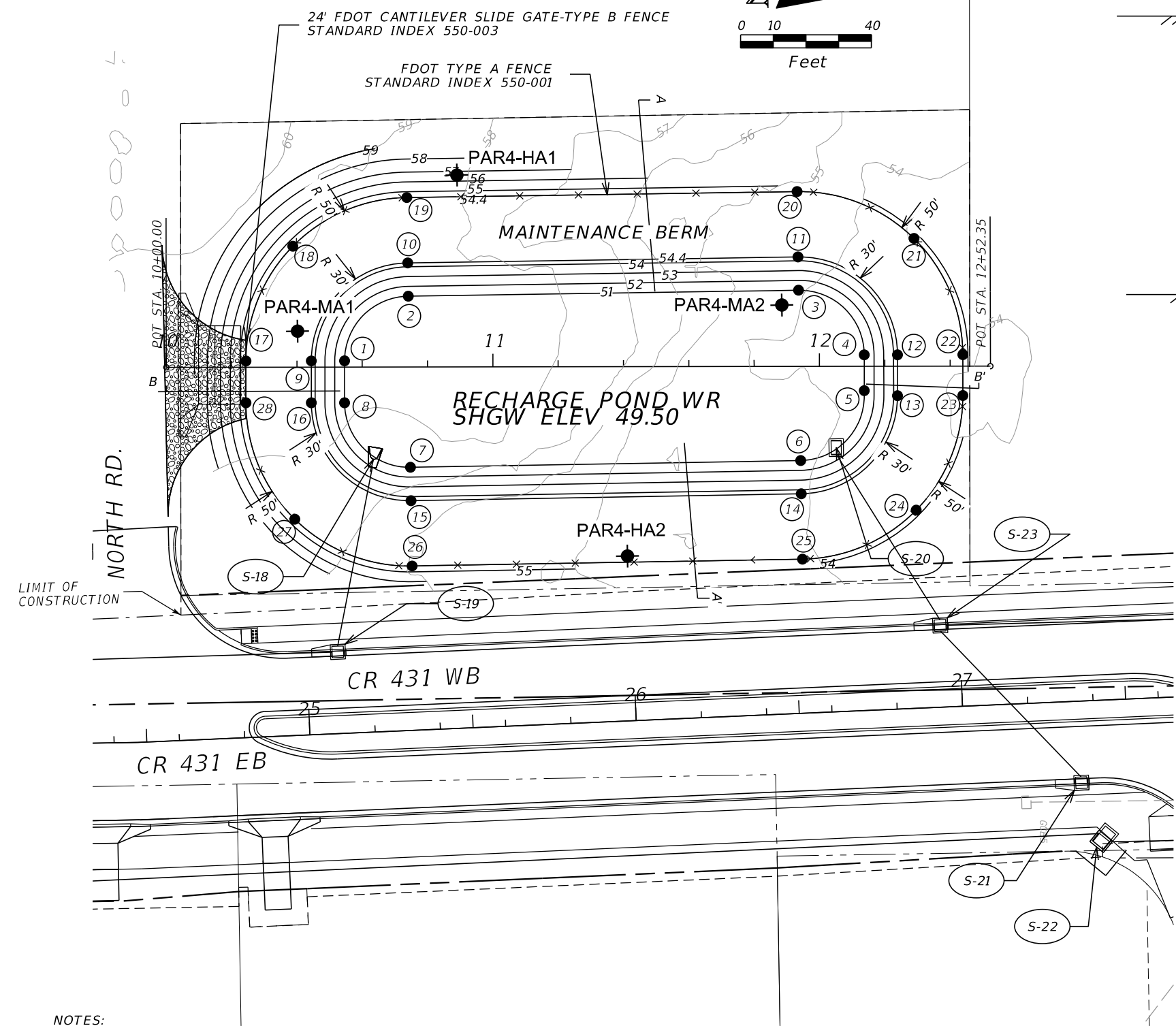
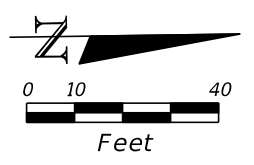
REVISIONS	
DATE	DESCRIPTION

STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

DRAINAGE STRUCTURES

SHEET NO.
148



STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	10+54.60	1.89' LT	51.0
2	10+74.13	21.68' LT	51.0
3	11+93.59	26.33' LT	51.0
4	12+16.70	3.54' LT	51.0
5	12+13.70	7.45' RT	51.0
6	11+94.22	28.79' RT	51.0
7	10+74.71	30.72' RT	51.0
8	10+54.59	10.91' RT	51.0
9	10+44.40	1.90' LT	54.4
10	10+73.98	31.88' LT	54.4
11	11+93.49	33.53' LT	54.4
12	12+23.90	3.54' LT	54.4
13	12+23.90	8.99' RT	54.4
14	11+94.39	38.99' RT	54.4
15	10+74.88	40.92' RT	54.4
16	10+44.39	10.91' RT	54.4
17	10+24.40	1.91' LT	54.4
18	10+38.81	37.00' LT	54.4
19	10+73.71	51.88' LT	54.4
20	11+93.21	53.53' LT	54.4
21	12+29.01	39.14' LT	54.4
22	12+43.90	3.54' LT	54.4
23	12+43.90	8.99' RT	54.4
24	12+29.54	44.06' RT	54.4
25	11+94.71	58.98' RT	54.4
26	10+75.20	60.92' RT	54.4
27	10+39.31	46.56' RT	54.4
28	10+24.39	10.90' RT	54.4

POND WR-1	
DHW EL. = 53.39' (25 YR/24 HR)	
WEIR. EL. = 52.30'	
SHW EL. = 49.50'	
BOTTOM EL. = 51.00'	

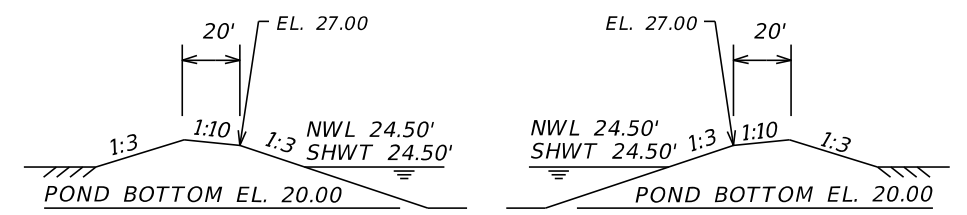
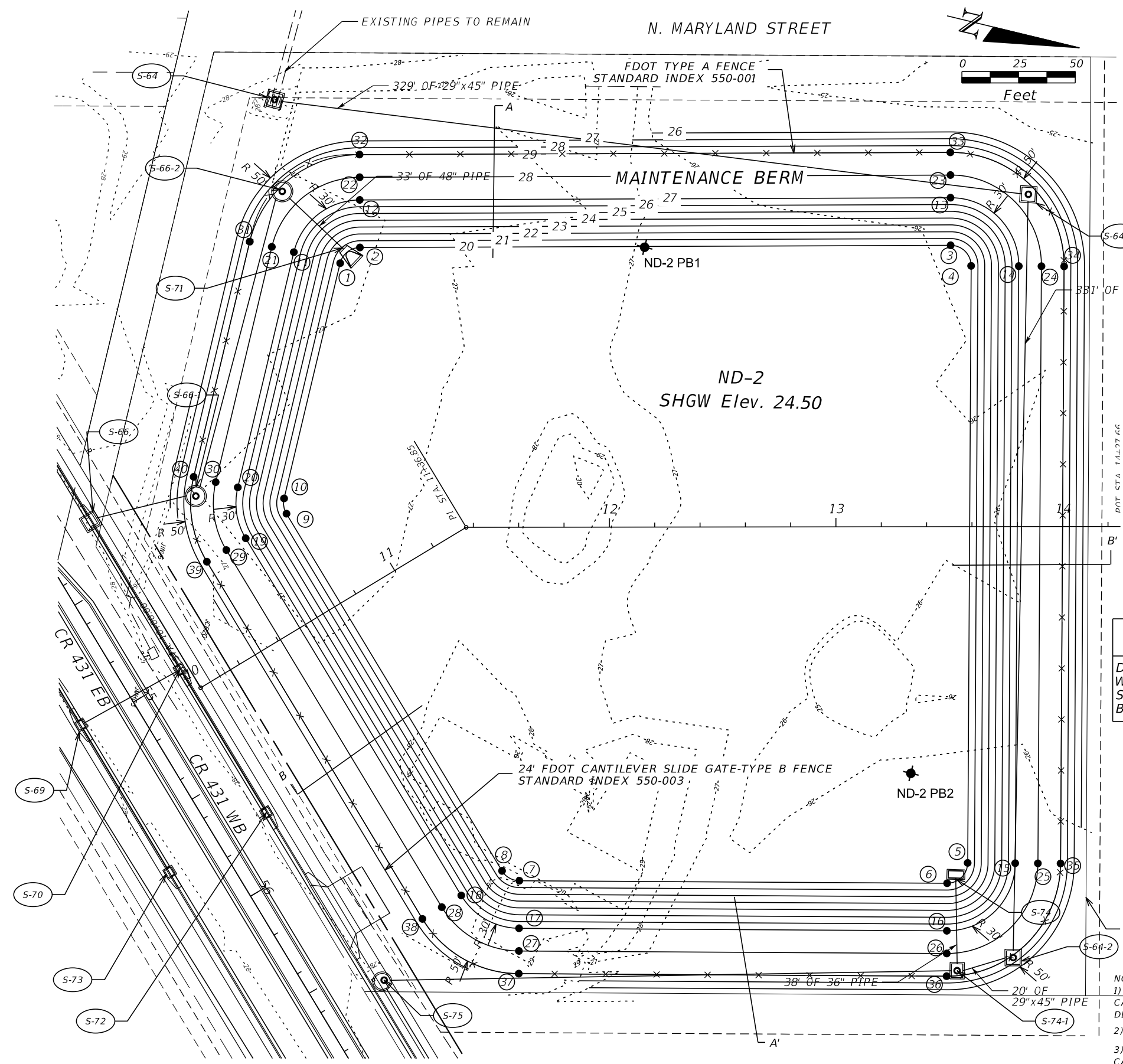
- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) BORING LOCATION

10/10/2022 3:51:23 PM G:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\CADD\drainage\DRDTRD01.dgn

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 149
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303		

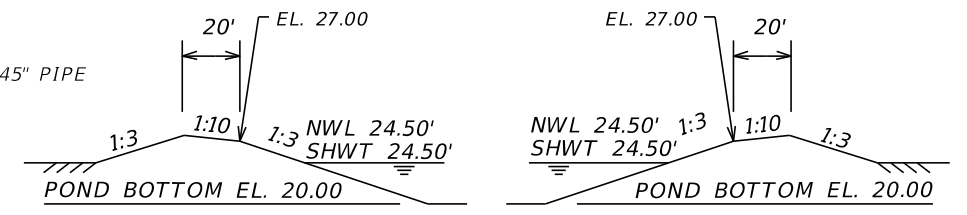
POND DETAIL (WR-1)

10/10/2022 3:51:29 PM G:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\CADD\drainage\DRD1RD02.dgn



SECTION A-A'

NTS



SECTION B-B'

NTS

POND ND-2
 DHW EL. = 27.94' (25 YR/24 HR)
 WEIR EL. = 25.02'
 SHW EL. = 24.50'
 BOTTOM EL. = 20.00'

STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	11+36.85	129.09' LT	20.0
2	11+36.85	132.02' LT	20.0
3	13+50.77	124.08' LT	20.0
4	13+59.79	115.02' LT	20.0
5	13+57.88	148.30' RT	20.0
6	13+48.81	157.23' RT	20.0
7	10+76.37	145.52' RT	20.0
8	10+72.07	137.84' RT	20.0
9	10+72.07	46.15' LT	20.0
10	10+74.65	52.46' LT	20.0
11	11+34.48	143.20' LT	27.0
12	11+36.85	151.86' LT	27.0
13	13+50.72	145.08' LT	27.0
14	13+80.79	114.86' LT	27.0
15	13+78.88	148.45' RT	27.0
16	13+48.66	178.23' RT	27.0
17	10+65.41	163.43' RT	27.0
18	10+51.07	137.84' RT	27.0
19	10+51.07	46.15' LT	27.0
20	10+59.68	67.19' LT	27.0
21	11+27.35	1150.22' LT	28.0
22	11+36.85	1161.41' LT	28.0
23	13+50.70	155.08' LT	28.0
24	13+90.79	114.79' LT	28.0
25	13+88.88	148.52' RT	28.0
26	13+48.59	188.23' RT	28.0
27	10+60.19	171.96' RT	28.0
28	10+41.07	137.84' RT	28.0
29	10+41.07	46.15' LT	28.0
30	10+52.56	74.20' LT	28.0
31	11+20.22	157.23' LT	29.0
32	11+36.85	171.01' LT	29.0
33	13+50.68	165.08' LT	29.0
34	14+00.79	114.72' LT	29.0
35	13+98.88	148.60' RT	29.0
36	13+48.52	198.23' RT	29.0
37	10+54.97	180.49' RT	29.0
38	10+31.07	137.84' RT	29.0
39	10+31.07	46.15' LT	29.0
40	10+45.43	81.22' LT	29.0

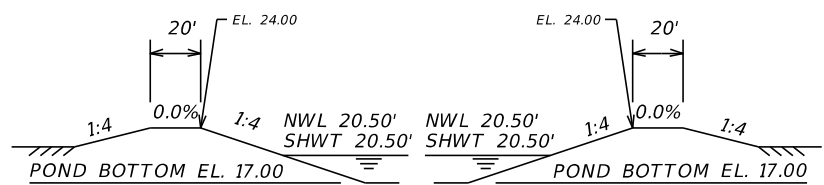
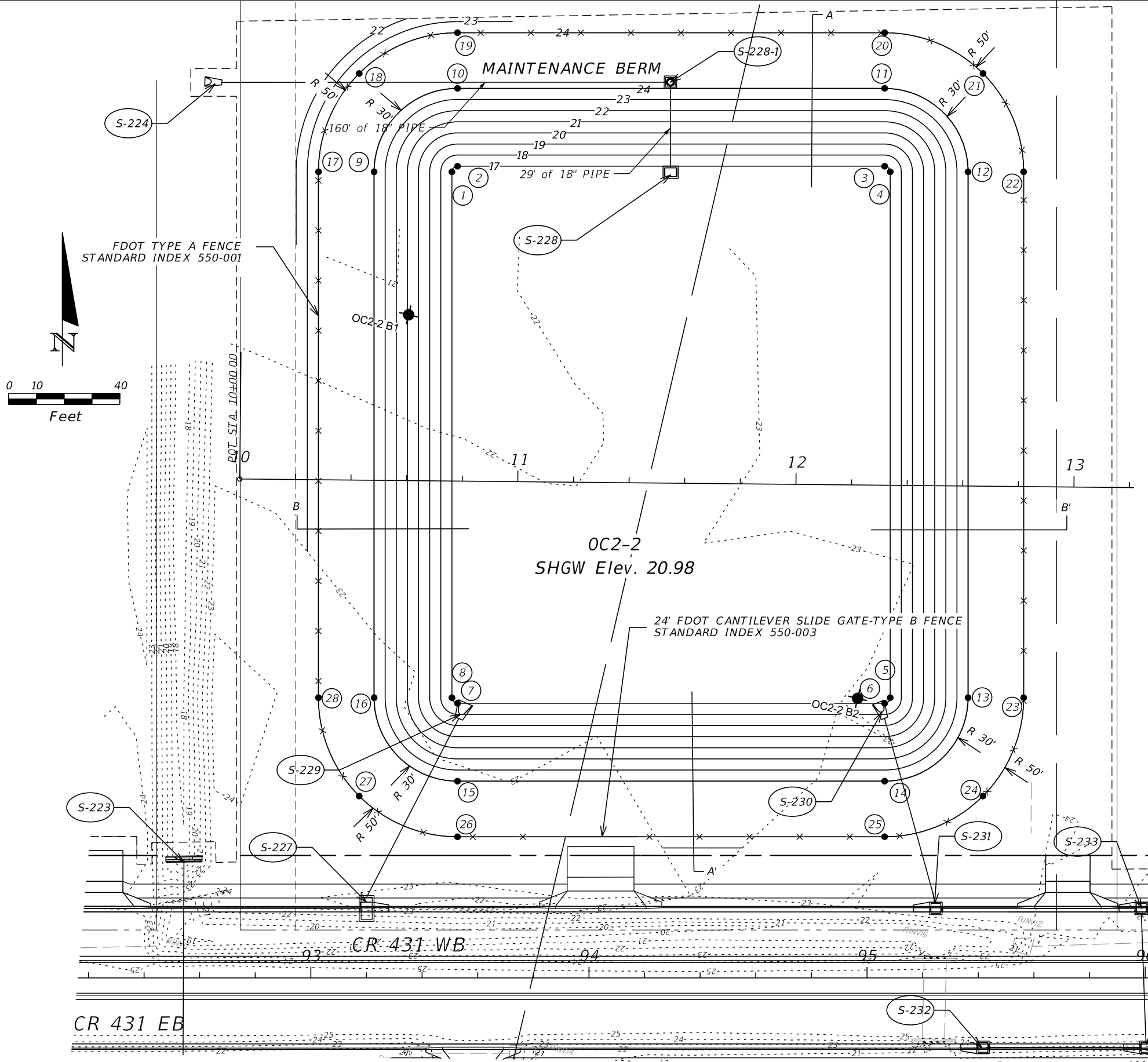
LIMITS OF CONSTRUCTION

- NOTES:
 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 2) BORING LOCATION
 3) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 150
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303		

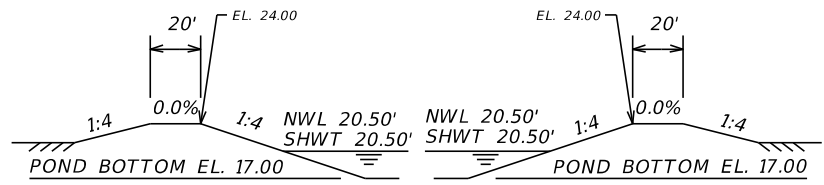
POND DETAIL (ND-2)

10/10/2022 3:51:46 PM O:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\DRD1RD03.dgn



SECTION A-A'

NTS



SECTION B-B'

NTS

- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) BORING LOCATION
 - 3) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	10+75.23	111.20' LT	17.0
2	10+77.21	113.22' LT	17.0
3	12+30.80	114.70' LT	17.0
4	12+32.82	112.72' LT	17.0
5	12+34.65	76.36' RT	17.0
6	12+32.67	78.38' RT	17.0
7	10+79.07	79.86' RT	17.0
8	10+77.05	77.88' RT	17.0
9	10+47.23	110.93' LT	24.0
10	10+76.94	141.22' LT	24.0
11	12+30.53	142.70' LT	24.0
12	12+60.82	112.99' LT	24.0
13	12+62.65	76.09' RT	24.0
14	12+32.94	106.38' RT	24.0
15	10+79.34	107.86' RT	24.0
16	10+49.06	78.15' RT	24.0
17	10+27.23	110.74' LT	24.0
18	10+41.54	146.23' LT	24.0
19	10+76.75	161.22' LT	24.0
20	12+30.34	162.70' LT	24.0
21	12+65.84	148.40' LT	24.0
22	12+80.82	113.19' LT	24.0
23	12+82.64	75.90' RT	24.0
24	12+68.34	111.39' RT	24.0
25	12+33.13	126.38' RT	24.0
26	10+79.54	127.86' RT	24.0
27	10+44.04	113.55' RT	24.0
28	10+29.06	78.34' RT	24.0

POND OC2-2
 DHW EL. = 23.06' (24 YR/24 HR)
 WEIR EL. = 21.40'
 SHW EL. = 20.50'
 BOTTOM EL. = 17.00'

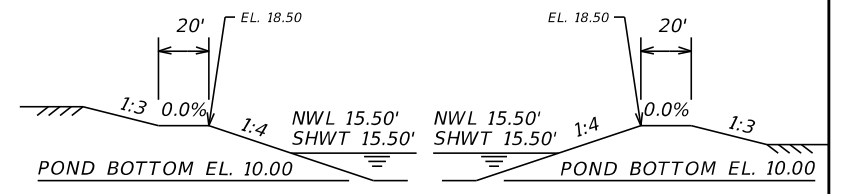
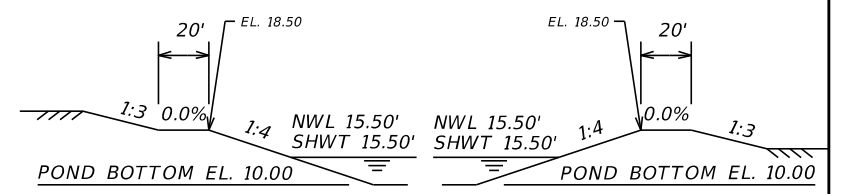
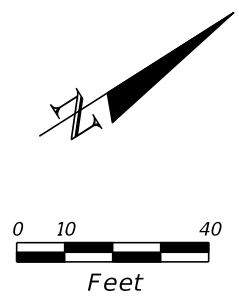
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

STEVEN D. COLLINS, P.E., Ph.D.
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

POND DETAIL (OC2-2)

SHEET NO.
151



FDOT TYPE A FENCE
STANDARD INDEX 550-001

MAINTENANCE BERM

LS-2
SHGW Elev. 15.50

LS-2 B1

24' FDOT CANTILEVER SLIDE GATE-TYPE B FENCE
STANDARD INDEX 550-003

LS-2 B3

LIMIT OF CONSTRUCTION

104' of 24" PIPE

POND LS-2
DHW EL. = 17.28' (25 YR/24 HR)
WEIR EL. = 16.20
SHW EL. = 15.50'
BOTTOM EL. = 10.00'

STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	10+82.40	1.91' LT	10.0
2	12+69.94	81.77' LT	10.0
3	12+69.94	81.68' LT	10.0
4	14+11.38	1.78' LT	10.0
5	14+11.38	1.82' RT	10.0
6	10+82.41	1.86' RT	10.0
7	10+54.94	28.32' LT	18.5
8	12+69.94	110.35' LT	18.5
9	12+69.94	110.09' LT	18.5
10	14+37.33	27.01' LT	18.5
11	14+37.37	27.00' RT	18.5
12	10+54.99	28.33' RT	18.5
13	10+48.33	47.20' LT	18.5
14	12+69.94	128.41' LT	18.5
15	12+69.94	138.81' LT	18.5
16	12+74.20	128.01' LT	18.5
17	14+46.03	45.02' LT	18.5
18	14+74.29	0.03' LT	18.5
19	14+46.10	45.00' RT	18.5
20	10+48.43	47.22' RT	18.5
21	10+14.84	0.04' RT	18.5

- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) BORING LOCATION
 - 3) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

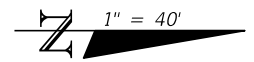
10/10/2022 3:52:01 PM G:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\drainage\DRD1RD04.dgn

REVISIONS		DATE		DESCRIPTION	

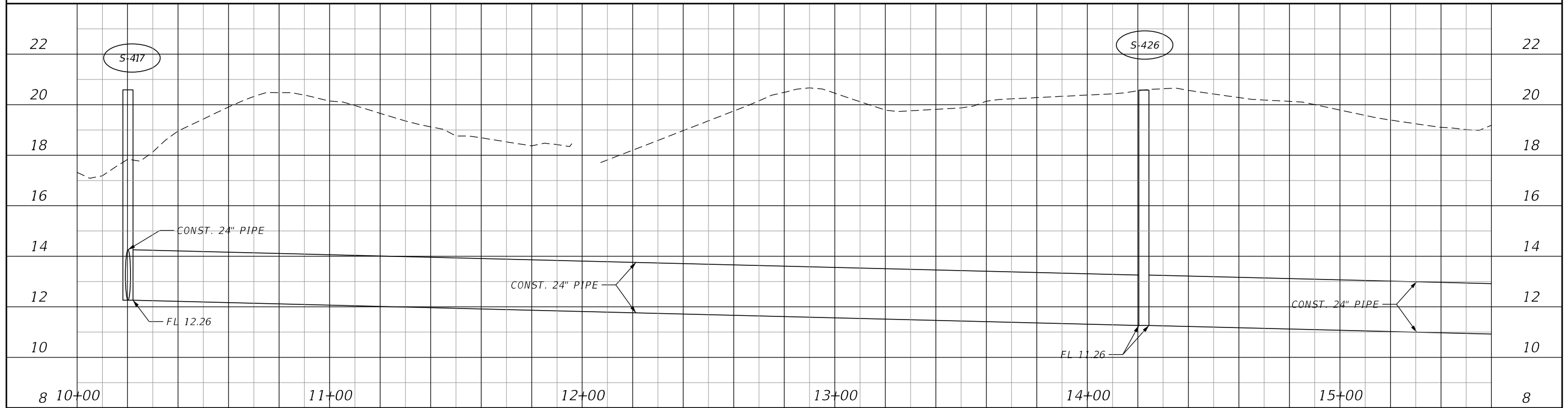
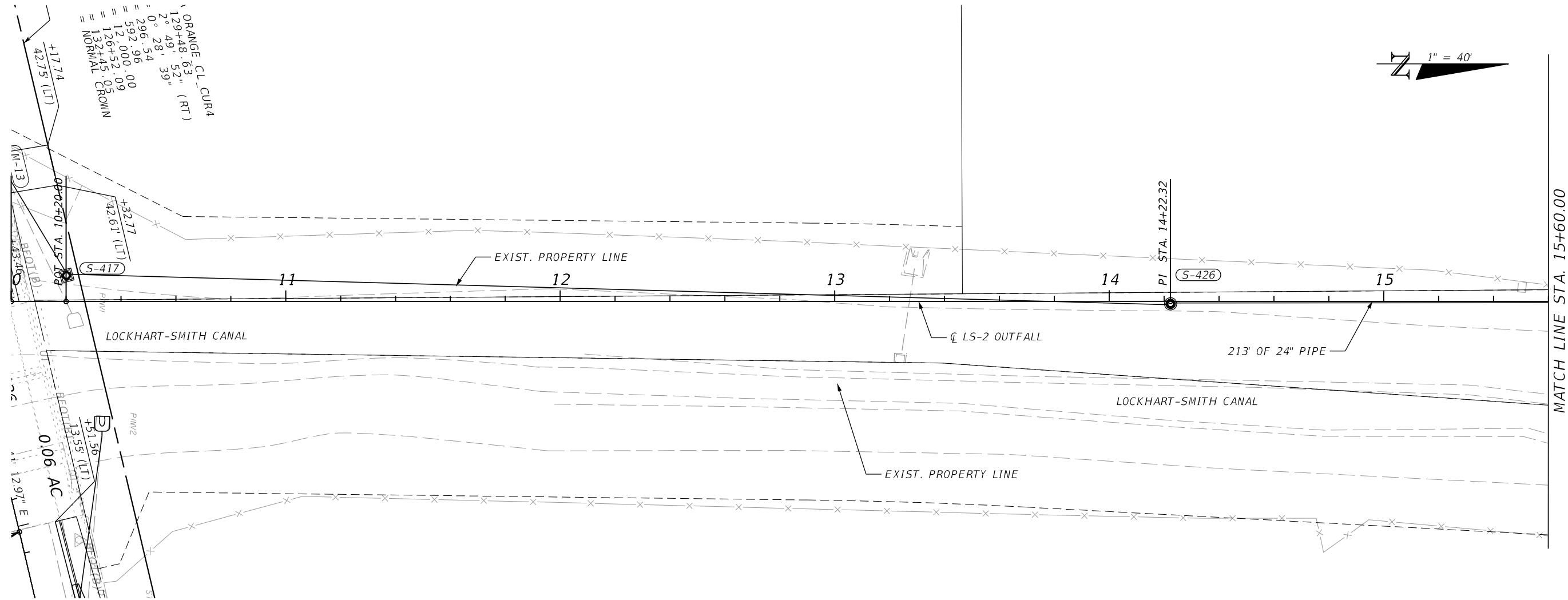
STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 152
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	CR 431	SEMINOLE	01785303	

PRELIMINARY NOT FOR CONSTRUCTION

POND DETAIL (LS-2)



ORANGE CL_CUR4
 1.29+48.63" (RT)
 2° 49' 39"
 = 0.28' 54"
 = 296.54
 = 592.96
 = 126+52.09
 = 132+45.05
 = NORMAL CROWN



REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

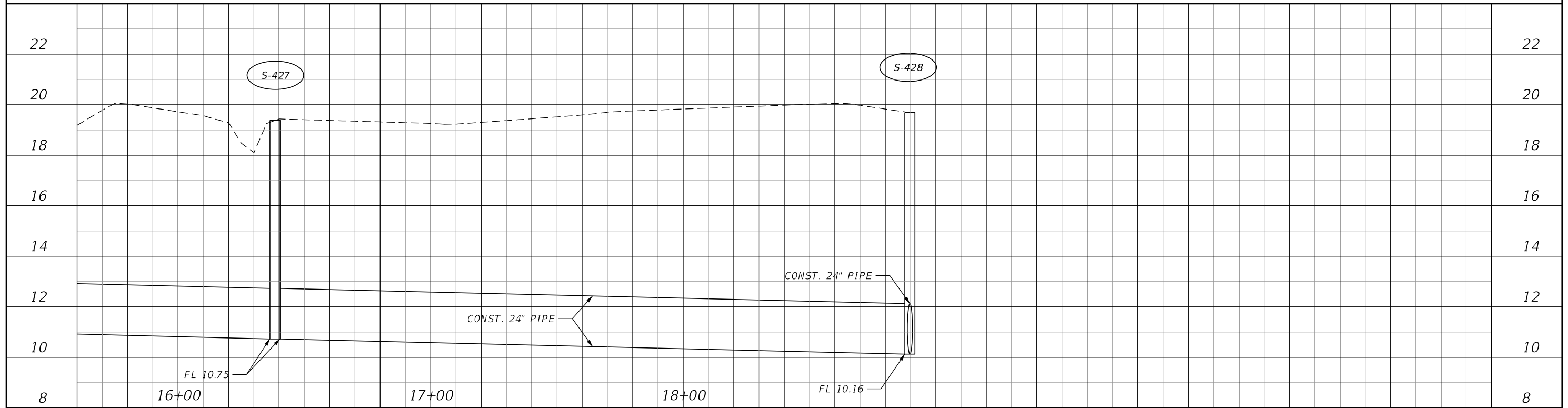
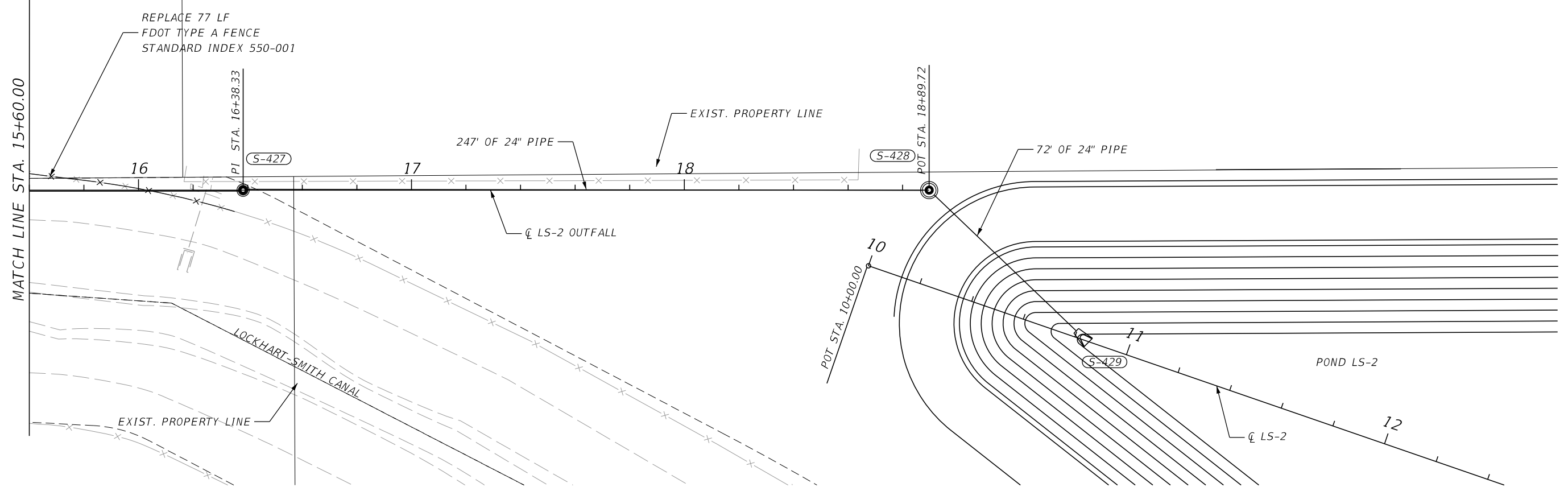
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

POND DETAIL
(LS-2 OUTFALL)

SHEET NO.
153

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

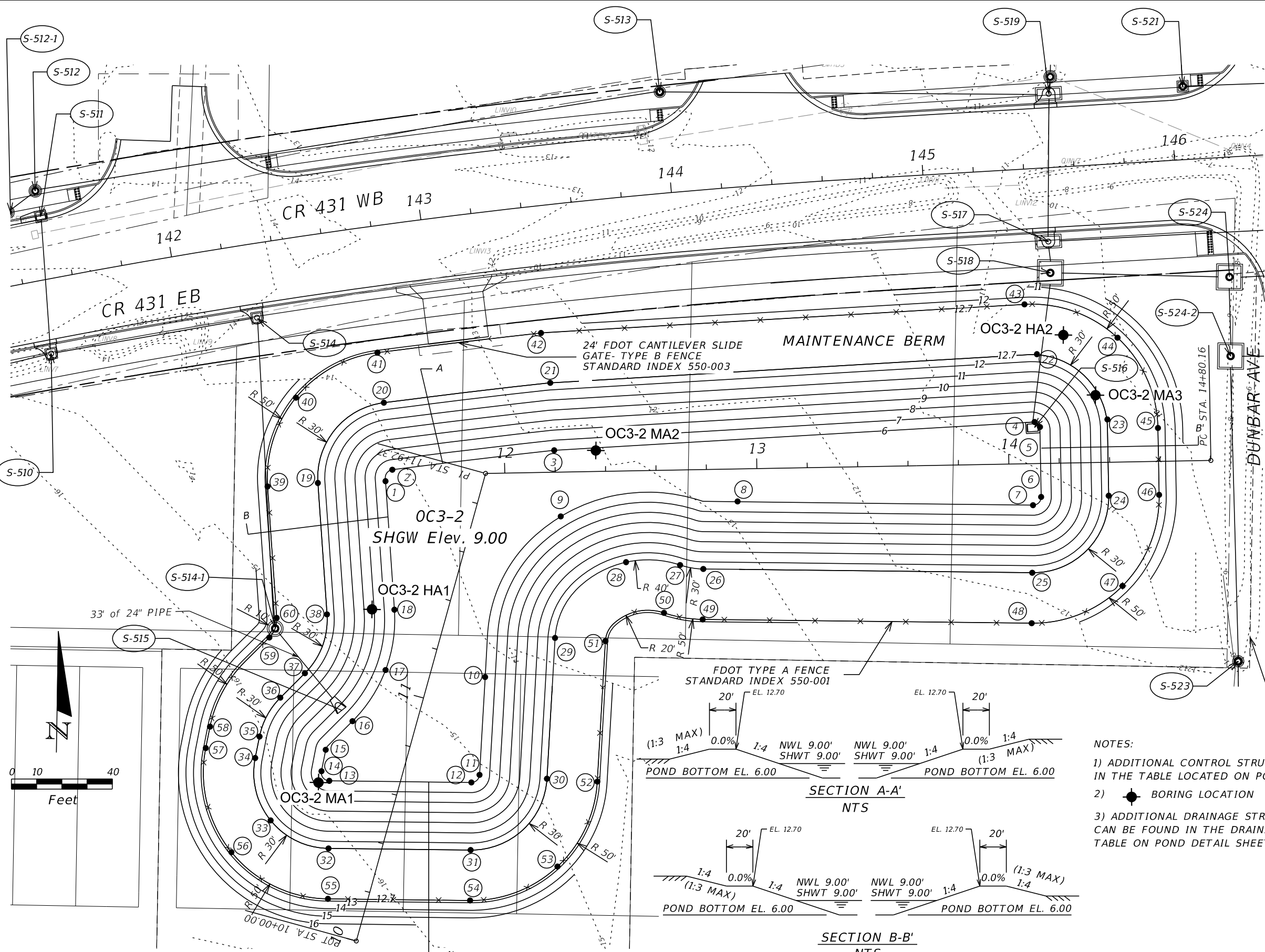
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

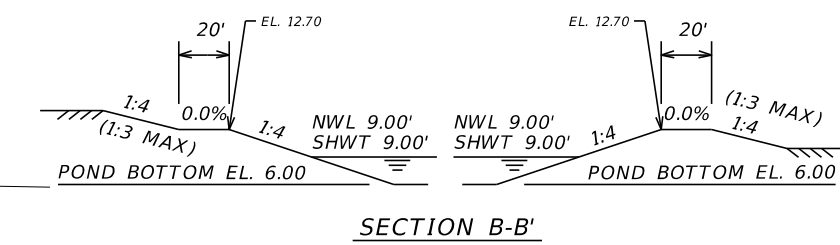
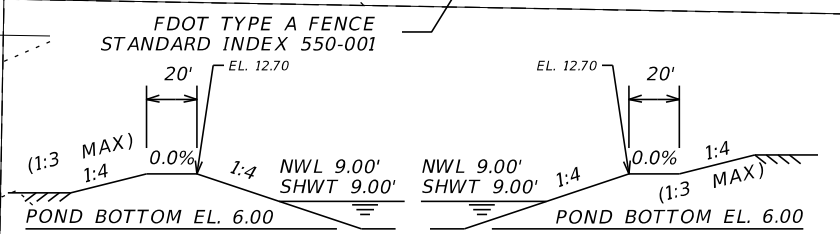
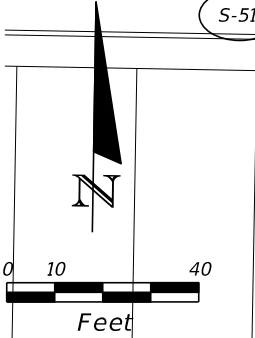
POND DETAIL (LS-2 OUTFALL)		SHEET NO.
		154

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

10/10/2022 3:52:39 PM G:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\CADD\drainage\DRD17RD05.dgn



STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	11+78.84	37.44 LT	6.0
2	11+83.92	36.04 LT	6.0
3	12+19.78	8.67 LT	6.0
4	14+10.51	16.50 LT	6.0
5	14+12.59	14.50 LT	6.0
6	14+12.59	13.25 RT	6.0
7	14+09.30	16.45 RT	6.0
8	12+92.14	12.88 RT	6.0
9	12+21.91	17.57 RT	6.0
10	11+14.52	21.37 RT	6.0
11	10+76.54	29.56 RT	6.0
12	10+72.77	27.25 RT	6.0
13	10+58.37	27.25 LT	6.0
14	10+61.23	31.26 LT	6.0
15	10+69.88	31.89 LT	6.0
16	10+83.62	24.68 LT	6.0
17	11+06.68	17.44 LT	6.0
18	11+30.66	20.45 LT	6.0
19	11+70.99	63.09 LT	12.7
20	11+92.37	49.14 LT	12.7
21	12+18.68	35.44 LT	12.7
22	14+11.91	43.38 LT	12.7
23	14+39.39	17.00 LT	12.7
24	14+39.39	13.25 RT	12.7
25	14+08.51	43.24 RT	12.7
26	12+78.07	39.43 RT	12.7
27	12+68.88	37.70 RT	12.7
28	12+47.48	36.19 RT	12.7
29	11+36.79	43.98 RT	12.7
30	10+82.20	55.76 RT	12.7
31	10+46.86	34.10 RT	12.7
32	10+32.46	20.40 LT	12.7
33	10+37.04	45.50 LT	12.7
34	10+59.28	57.99 LT	12.7
35	10+67.93	58.62 LT	12.7
36	10+84.97	54.76 LT	12.7
37	10+96.90	47.96 LT	12.7
38	11+21.75	45.72 LT	12.7
39	11+64.33	81.95 LT	12.7
40	11+92.37	80.99 LT	12.7
41	11+92.37	64.27 LT	12.7
42	12+15.37	55.26 LT	12.7
43	14+07.34	63.21 LT	12.7
44	14+44.01	49.33 LT	12.7
45	14+59.39	13.25 LT	12.7
46	14+59.39	13.25 RT	12.7
47	14+44.23	49.12 RT	12.7
48	14+07.93	63.23 RT	12.7
49	12+77.48	59.42 RT	12.7
50	12+62.18	56.54 RT	12.7
51	11+41.01	63.53 RT	12.7
52	10+86.41	75.31 RT	12.7
53	10+49.74	69.06 RT	12.7
54	10+27.53	39.21 RT	12.7
55	10+13.12	15.29 LT	12.7
56	10+20.76	57.11 LT	12.7
57	10+57.82	77.94 LT	12.7
58	10+66.47	78.57 LT	12.7
59	11+06.81	65.33 LT	12.7
60	11+15.09	64.58 LT	12.7

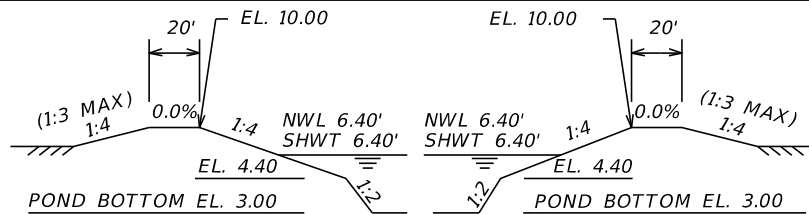


- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) BORING LOCATION
 - 3) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

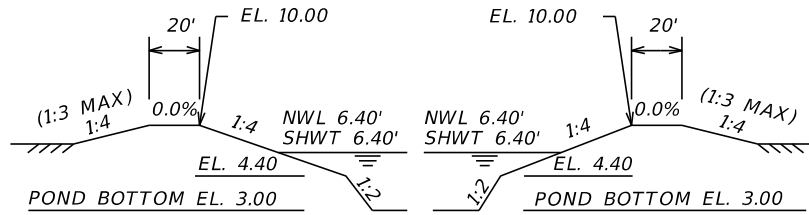
POND OC3-2	
DHW EL. = 11.69' (25 YR/24 HR)	
WEIR EL. = 10.50'	
SHW EL. = 9.00'	
BOTTOM EL. = 6.00'	

REVISIONS		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS		SHEET NO. 155
DATE	DESCRIPTION		ROAD NO.	COUNTY	
	PRELIMINARY NOT FOR CONSTRUCTION		CR 431	SEMINOLE	
				SEMINOLE COUNTY CIP	
				01785303	

POND DETAIL (OC3-2)



SECTION A-A'
NTS

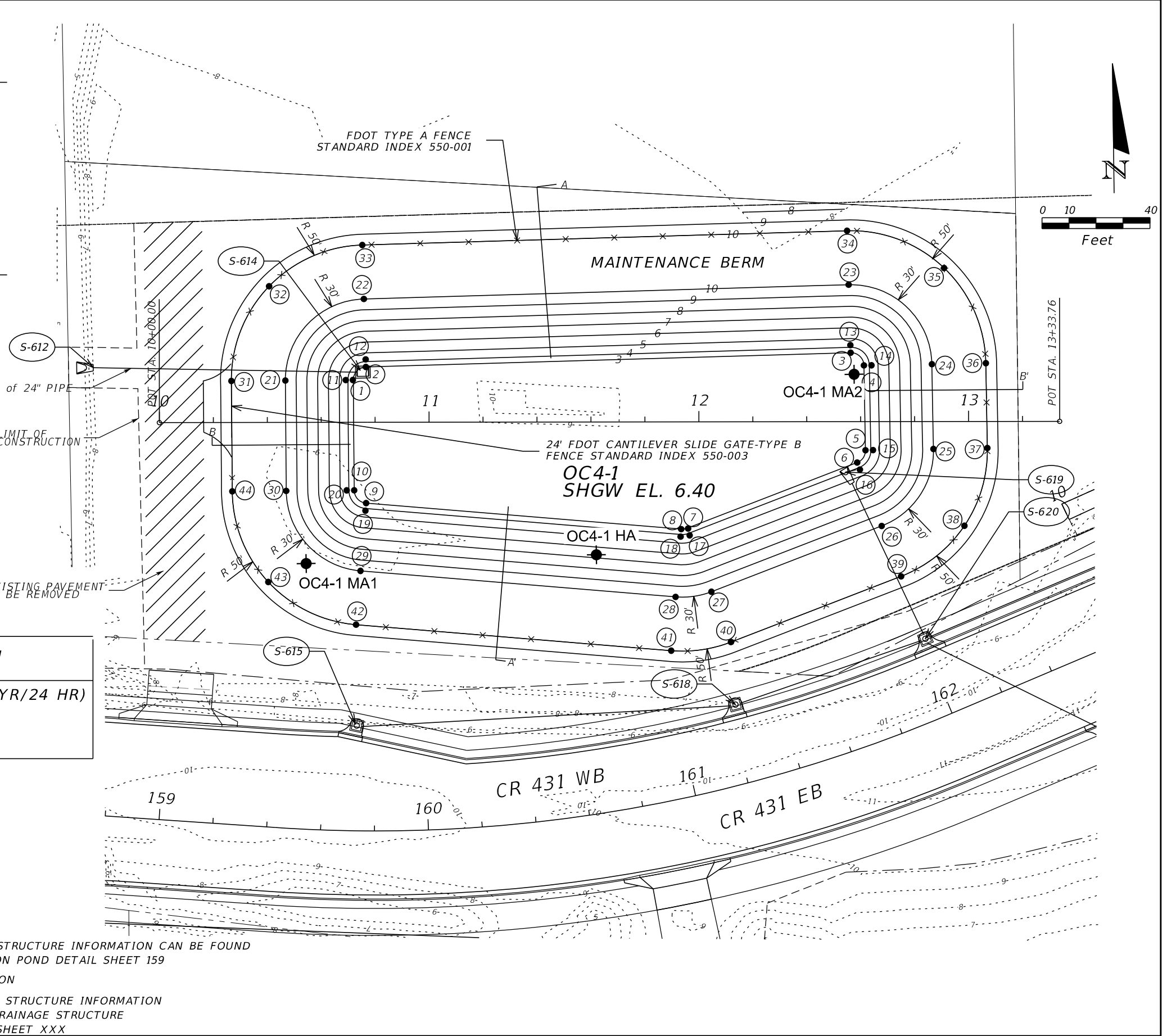


SECTION B-B'
NTS

STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	10+71.76	15.69' LT	3.0
2	10+76.59	20.53' LT	3.0
3	12+56.30	25.56' LT	3.0
4	12+61.23	20.84' LT	3.0
5	12+61.75	10.59' RT	3.0
6	12+58.68	15.15' RT	3.0
7	11+95.96	39.51' RT	3.0
8	11+93.41	39.73' RT	3.0
9	10+76.59	29.93' RT	3.0
10	10+72.19	25.18' RT	3.0
11	10+69.12	15.68' LT	4.4
12	10+76.51	23.33' LT	4.4
13	12+56.22	28.36' LT	4.4
14	12+64.03	20.89' LT	4.4
15	12+64.55	10.54' RT	4.4
16	12+59.68	17.76' RT	4.4
17	11+96.53	42.04' RT	4.4
18	11+93.17	42.52' RT	4.4
19	10+76.36	32.72' RT	4.4
20	10+69.39	25.20' RT	4.4
21	10+46.72	15.53' LT	10.0
22	10+75.88	45.72' LT	10.0
23	12+55.59	50.75' LT	10.0
24	12+86.43	21.26' LT	10.0
25	12+86.95	10.17' RT	10.0
26	12+67.72	38.67' RT	10.0
27	12+04.57	62.95' RT	10.0
28	11+91.30	64.84' RT	10.0
29	10+74.49	55.04' RT	10.0
30	10+46.99	25.35' RT	10.0
31	10+26.72	15.40' LT	10.0
32	10+40.76	50.47' LT	10.0
33	10+75.32	65.72' LT	10.0
34	12+55.04	70.74' LT	10.0
35	12+90.99	56.90' LT	10.0
36	13+06.43	21.59' LT	10.0
37	13+06.95	9.84' RT	10.0
38	12+98.40	38.63' RT	10.0
39	12+74.90	57.34' RT	10.0
40	12+11.75	81.62' RT	10.0
41	11+89.63	84.77' RT	10.0
42	10+72.81	74.97' RT	10.0
43	10+40.30	59.12' RT	10.0
44	10+27.00	25.49' RT	10.0

POND OC4-1
 DHW EL. = 9.14 (25 YR/24 HR)
 WEIR EL. = 7.40
 SHW EL. = 6.40
 BOTTOM EL. = 3.00'

- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) ● BORING LOCATION
 - 3) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

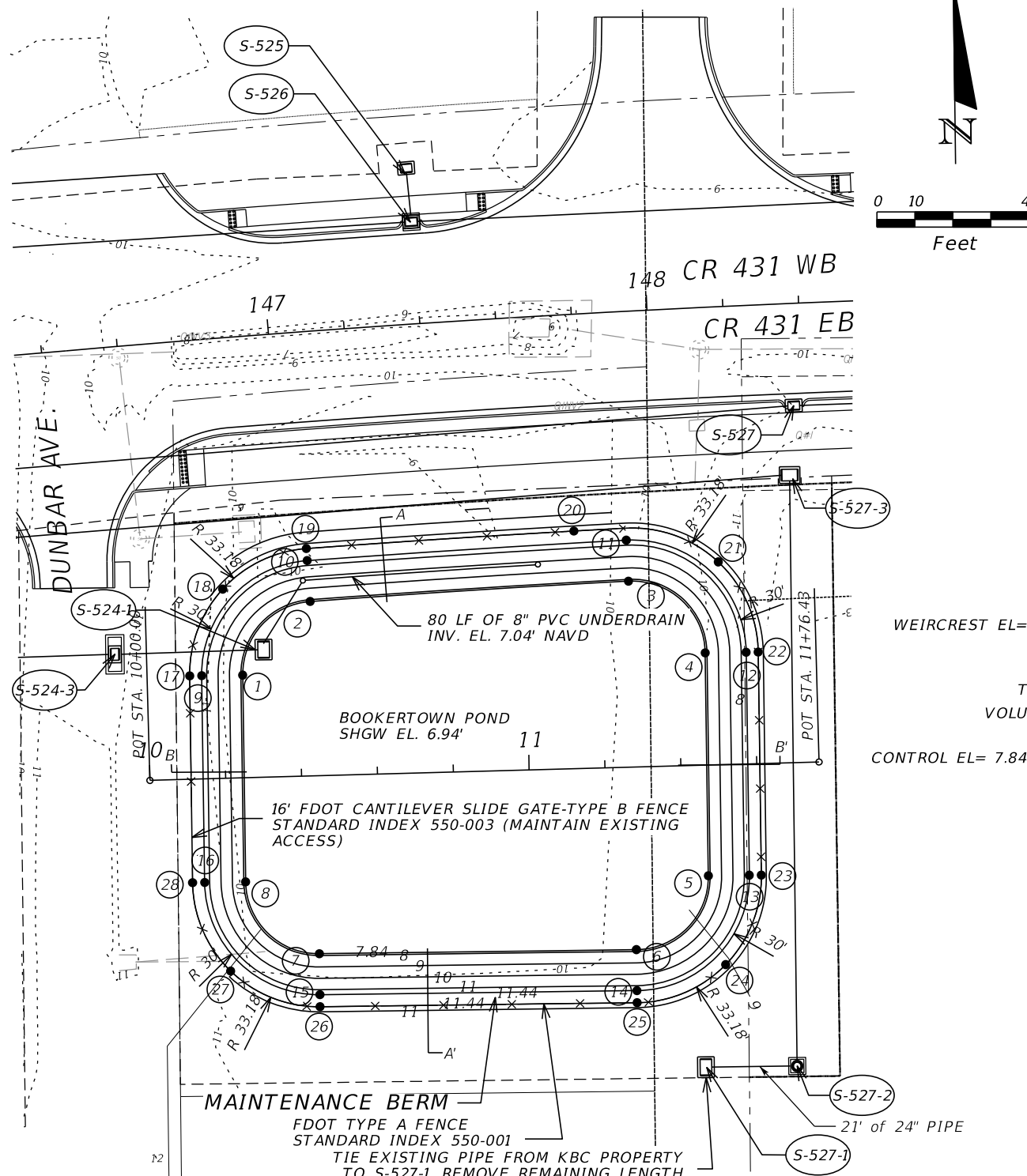


10/10/2022 3:53:02 PM G:\2017\1710782_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\DRDTRD06.dgn

REVISIONS		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS		SHEET NO. 156
DATE	DESCRIPTION		ROAD NO.	COUNTY	
	PRELIMINARY NOT FOR CONSTRUCTION		CR 431	SEMINOLE	
				SEMINOLE COUNTY CIP	
				01785303	

POND DETAIL (OC4-1)

0:\2017\1710782_002_Orange_Bldg_Cr_431\Orange_Bldg_CADD\Drawings\DRPT\RD07.dgn
 0:\2017\1710782_002_Orange_Bldg_Cr_431\Orange_Bldg_CADD\Drawings\DRPT\RD07.dgn
 3:53:08 PM
 10/10/2022

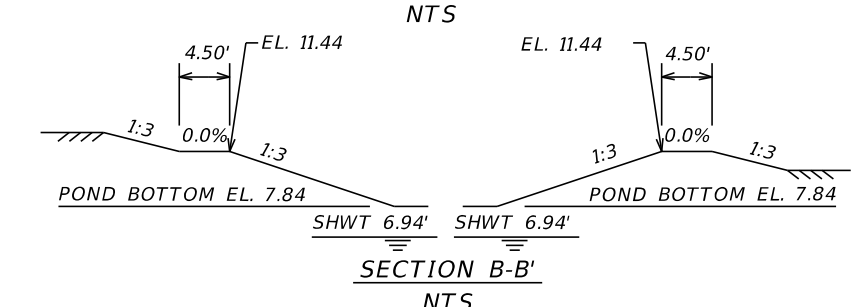
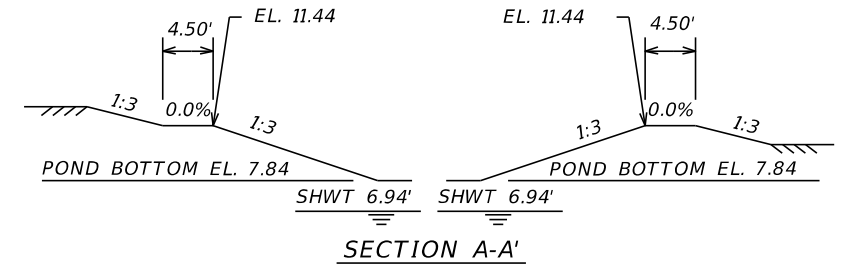


POND BOOKERTOWN

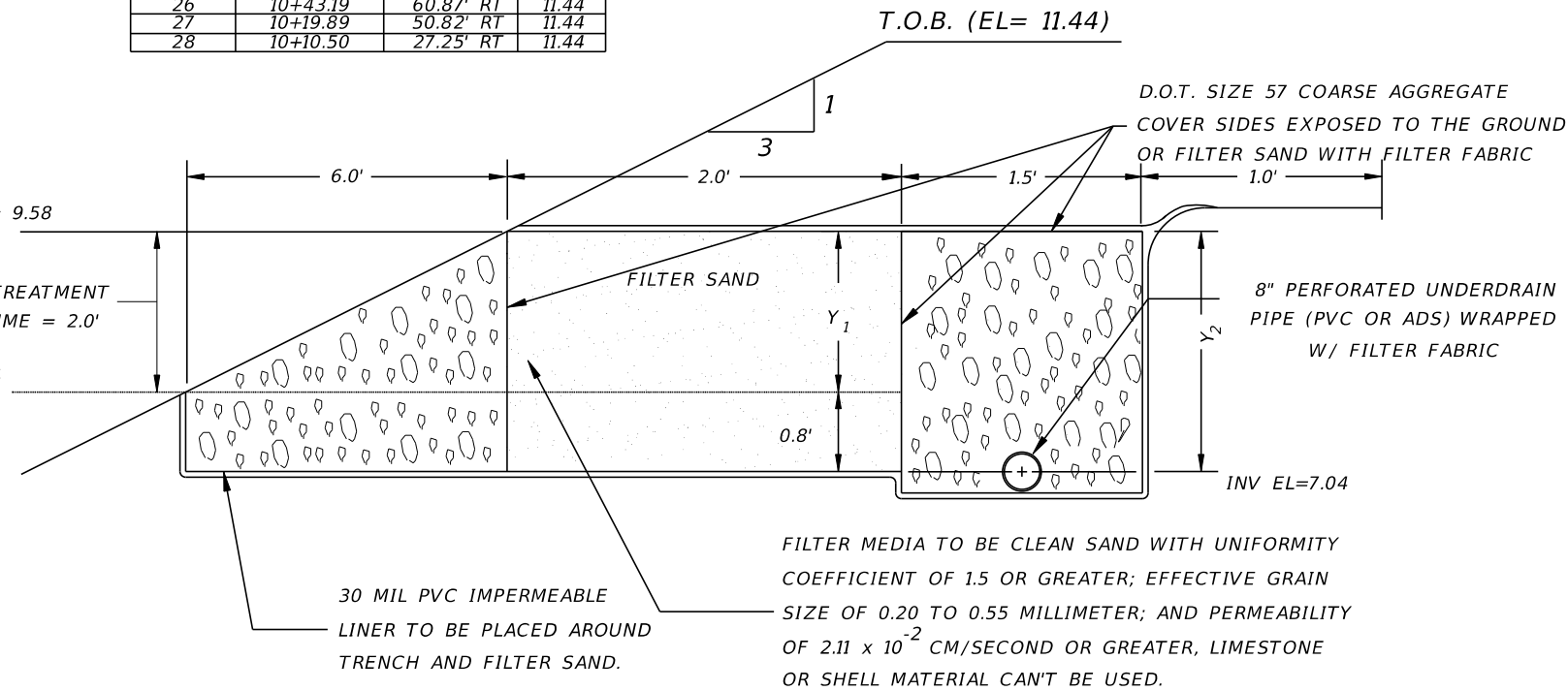
DHW EL. = 10.69'
 WEIR EL. = 9.58'
 SHW EL. = 6.94'
 BOTTOM EL. = 7.84'

- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) BORING LOCATION
 - 3) POND STAGE-STORAGE, SIDE SLOPES, AND MAINTENANCE BERM WIDTHS MATCH EXISTING PERMITTED PLANS.
 - 4) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

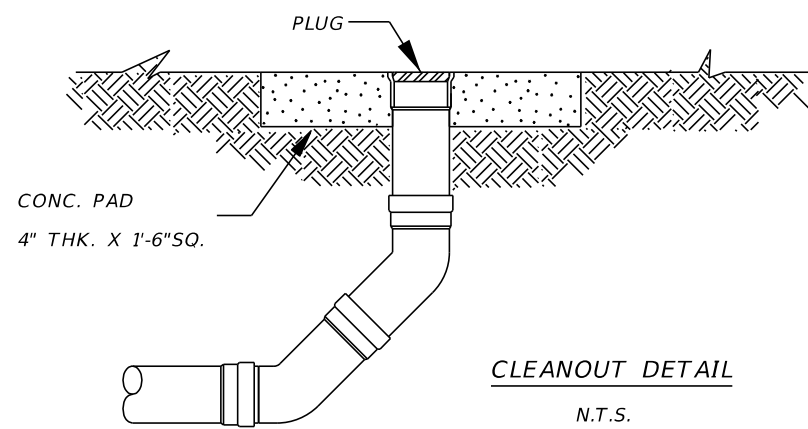
STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	10+25.21	27.06' LT	7.84
2	10+43.52	45.99' LT	7.84
3	11+27.52	49.04' LT	7.84
4	11+47.22	29.59' LT	7.84
5	11+46.44	29.18' RT	7.84
6	11+26.96	48.12' RT	7.84
7	10+43.40	46.89' RT	7.84
8	10+24.48	27.44' RT	7.84
9	10+14.41	27.21' LT	11.44
10	10+43.02	56.77' LT	11.44
11	11+27.24	59.83' LT	11.44
12	11+58.02	29.44' LT	11.44
13	11+57.24	29.32' RT	11.44
14	11+26.80	58.92' RT	11.44
15	10+43.24	57.69' RT	11.44
16	10+13.68	27.29' RT	11.44
17	10+11.23	27.25' LT	11.44
18	10+20.56	49.88' LT	11.44
19	10+42.87	59.95' LT	11.44
20	11+13.49	62.63' LT	11.44
21	11+51.33	53.45' LT	11.44
22	11+61.20	29.40' LT	11.44
23	11+60.42	29.36' RT	11.44
24	11+50.37	52.71' RT	11.44
25	11+26.75	62.10' RT	11.44
26	10+43.19	60.87' RT	11.44
27	10+19.89	50.82' RT	11.44
28	10+10.50	27.25' RT	11.44



WEIRCREST EL= 9.58
 TREATMENT VOLUME = 2.0'
 CONTROL EL= 7.84



FILTER MEDIA TO BE CLEAN SAND WITH UNIFORMITY COEFFICIENT OF 1.5 OR GREATER; EFFECTIVE GRAIN SIZE OF 0.20 TO 0.55 MILLIMETER; AND PERMEABILITY OF 2.11×10^{-2} CM/SECOND OR GREATER, LIMESTONE OR SHELL MATERIAL CAN'T BE USED.



UNDERDRAIN DETAIL
N.T.S.

UNDERDRAIN DATA

POND	Y ₁	Y ₂	WEIRCREST	DESIGN DRAWDOWN
BOOKERTOWN	2.04'	2.84'	9.58	7.84

REVISIONS	
DATE	DESCRIPTION

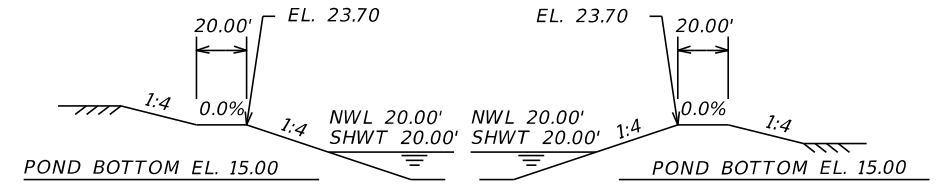
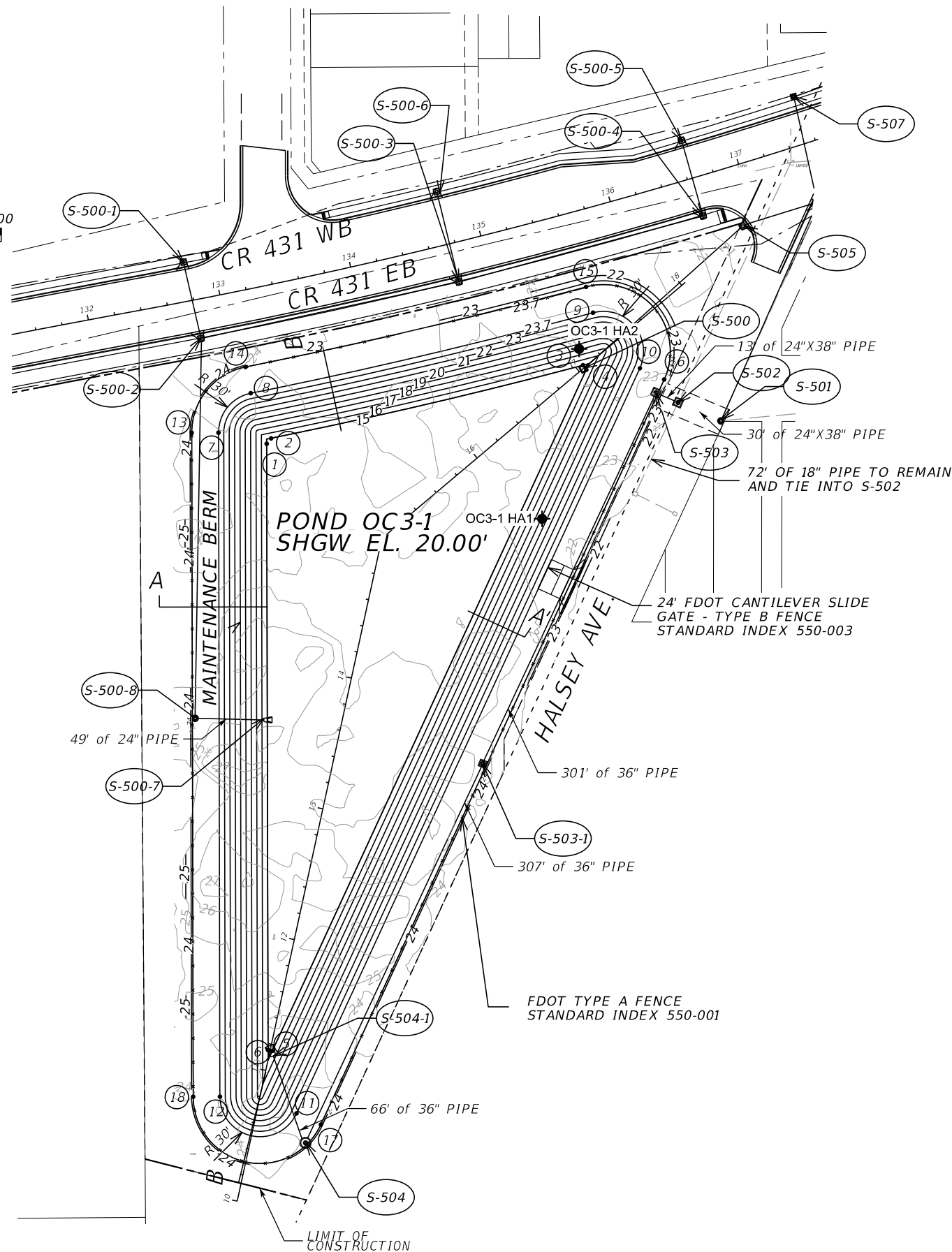
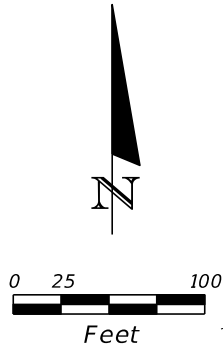
PRELIMINARY NOT FOR CONSTRUCTION

STEVEN D. COLLINS, P.E., Ph.D.
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

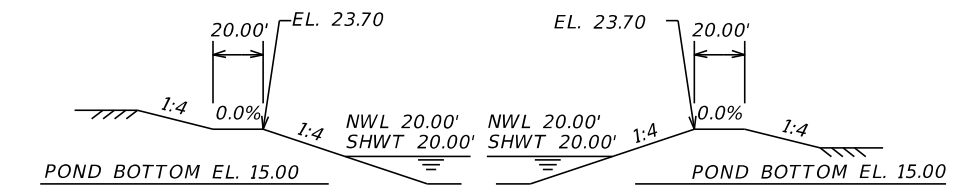
SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

POND DETAIL (BOOKERTOWN)

SHEET NO. 157



SECTION A-A'
NTS



SECTION B-B'
NTS

STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	133+12.27	116.01 RT	15.0
2	133+16.08	112.55 RT	15.0
3	135+49.04	112.36 RT	15.0
4	135+50.58	116.46 RT	15.0
5	132+35.56	562.09 RT	15.0
6	132+32.19	560.95 RT	15.0
7	132+79.45	100.80 RT	23.7
8	133+08.15	76.55 RT	23.7
9	135+66.01	76.55 RT	23.7
10	135+88.35	125.83 RT	23.7
11	132+45.13	611.39 RT	23.7
12	131+88.34	588.57 RT	23.7
13	132+60.28	97.08 RT	23.7
14	133+08.15	56.55 RT	23.7
15	135+66.01	56.55 RT	23.7
16	136+03.12	138.75 RT	23.7
17	132+59.26	622.96 RT	23.7
18	131+67.68	584.86 RT	23.7

POND OC3-1
 DHW EL. = 22.19'
 WEIR EL. = 20.80'
 SHW EL. = 20.00'
 BOTTOM EL. = 15.00'

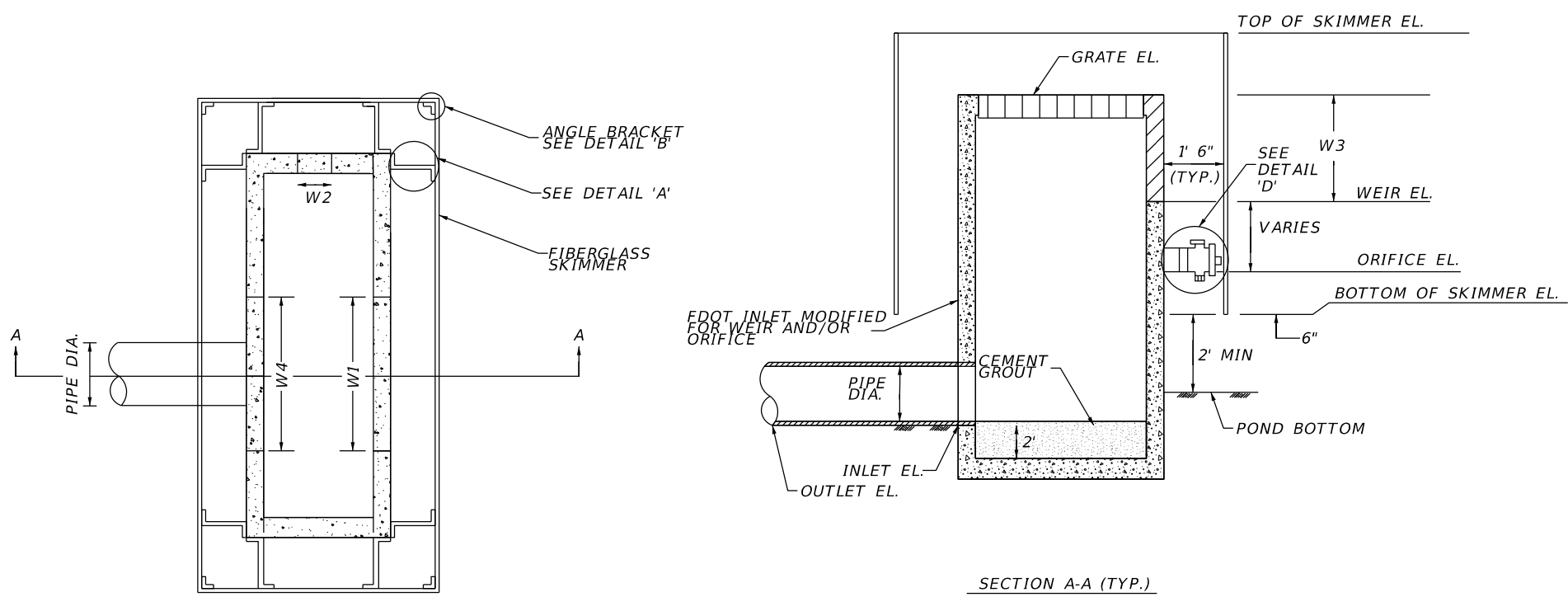
- NOTES:
- 1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159
 - 2) BORING LOCATION
 - 3) ADDITIONAL DRAINAGE STRUCTURE INFORMATION CAN BE FOUND IN THE DRAINAGE STRUCTURE TABLE ON POND DETAIL SHEET XXX

10/10/2022 3:53:19 PM G:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\drainage\DRD17RD08.dgn

REVISIONS		REVISIONS		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 158
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303	

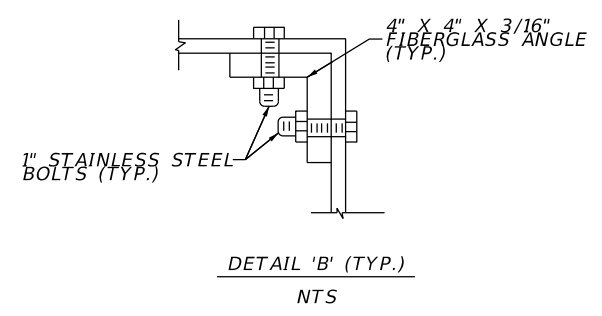
POND DETAIL (OC3-1)

10/10/2022 3:53:21 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\DRD1RD09.dgn

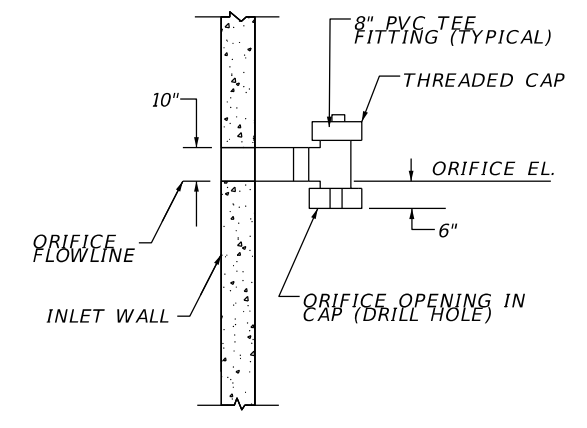


PLAN VIEW
NTS

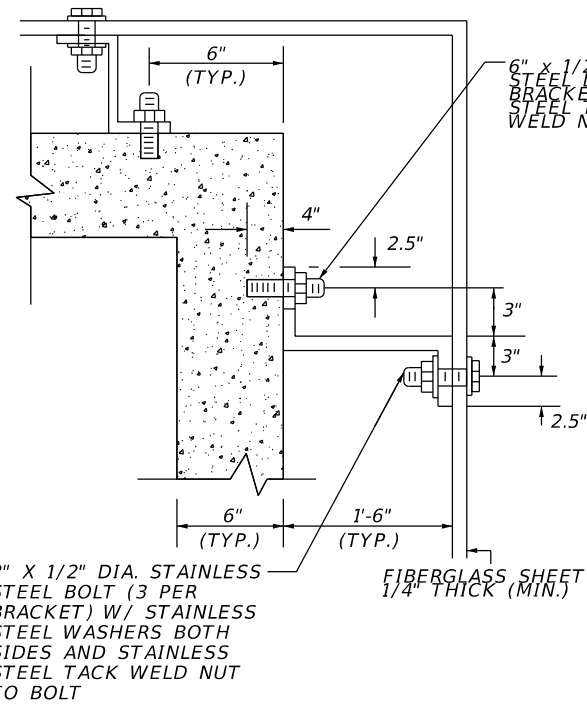
SECTION A-A (TYP.)
NTS



DETAIL 'B' (TYP.)
NTS



ORIFICE DETAIL 'D'
NTS

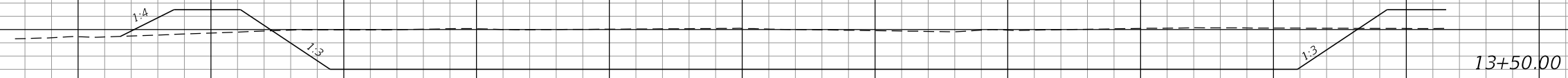


SKIMMER DETAIL 'A' (TYP.)
NTS

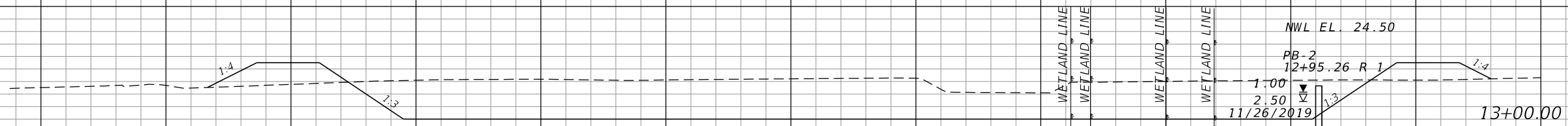
OUTFALL CONTROL STRUCTURES															
POND	STRUCT. NO.	STRUCT. TYPE	GRATE EL.	WEIR EL.	WEIR LENGTH (IN) W1 (LONG SIDE)	WEIR LENGTH (IN) W4 (LONG SIDE)	WEIR LENGTH (IN) W2 (SHORT SIDE)	WEIR HEIGHT (IN) W3	ORIFICE SIZE (IN.)	ORIFICE EL.	TOP OF SKIMMER EL.	BOTTOM OF SKIMMER EL.	UPSTREAM PIPE EL. (INLET)	PIPE DIAMETER (IN.)	DOWNSTREAM PIPE EL. (OUTLET)
WR-1	S-20	TYPE D	53.40	52.30	25.2	N/A	24	13.20	N/A	N/A	53.90	51.8	50	24	48.92
ND-2	S-74	TYPE H	28.00	25.02	60.0	N/A	N/A	35.76	4.08	24.50	28.50	24.0	22.6	36	22.32
OC2-2	S-228	TYPE D	23.00	21.40	14.4	N/A	N/A	19.2	3.24	20.5	23.50	20.0	19.5	18	18
LS-2	S-430	TYPE D	17.30	16.20	16.8	N/A	N/A	13.20	3.00	15.5	20.00	15.0	10	24	8
OC3-1	S-500	TYPE D	22.20	20.80	12	N/A	N/A	16.80	4.44	20.0	22.70	19.5	15	18	12
OC3-2	S-516	TYPE D	11.70	10.5	36	N/A	N/A	14.40	2.76	9.0	12.2	8.5	7	24	6.46
BOOKERTOWN	S-524-1	TYPE D	10.75	9.58	36	36	24	14.04	N/A	N/A	11.25	9.08	7.04	24	6.90
OC4-1	S-614	TYPE D	9.20	7.4	5.4	N/A	N/A	21.6	1.75	6.40	9.70	5.9	5	24	4.42

<p>PRELIMINARY NOT FOR CONSTRUCTION</p>		<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	DESCRIPTION	DATE	DESCRIPTION					<p>STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917</p>		<p>SEMINOLE COUNTY PUBLIC WORKS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ROAD NO.</th> <th>COUNTY</th> <th>SEMINOLE COUNTY CIP</th> </tr> </thead> <tbody> <tr> <td>CR 431</td> <td>SEMINOLE</td> <td>01785303</td> </tr> </tbody> </table>		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	CR 431	SEMINOLE	01785303	<p>POND DETAIL</p>		<p>SHEET NO. 159</p>
		DATE	DESCRIPTION	DATE	DESCRIPTION																			
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP																						
CR 431	SEMINOLE	01785303																						
<p>10/10/2022 3:53:21 PM</p>																								

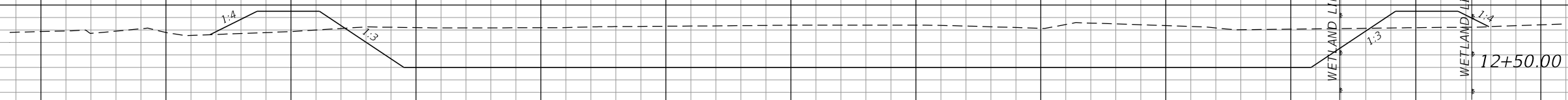
28
26
24
22
20



28
26
24
22
20



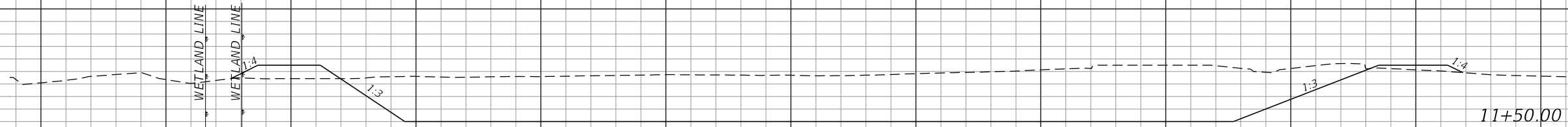
28
26
24
22
20



30
28
26
24
22
20



30
28
26
24
22
20



SCALE
 1" = 40' Horizontal
 1" = 20' Vertical

280 240 200 160 120 80 40 0 40 80 120 160 200

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

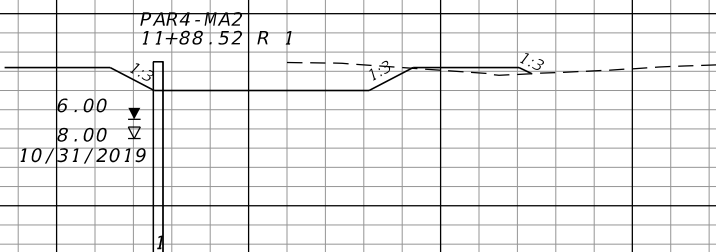
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

POND CROSS-SECTIONS
 (ND-2 POND)

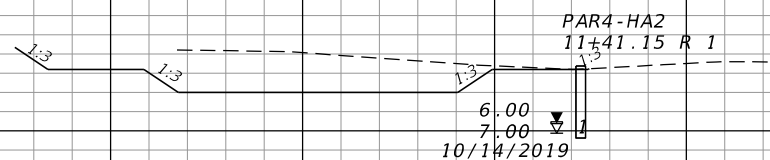
SHEET NO.
160

56
54
52



12+10.00

56
54
52



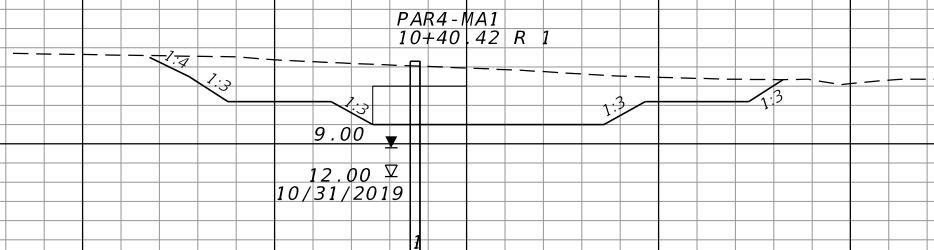
11+60.00

58
56
54
52



11+10.00

60
58
56
54
52



10+60.00

SCALE
1" = 40' Horizontal
1" = 20' Vertical

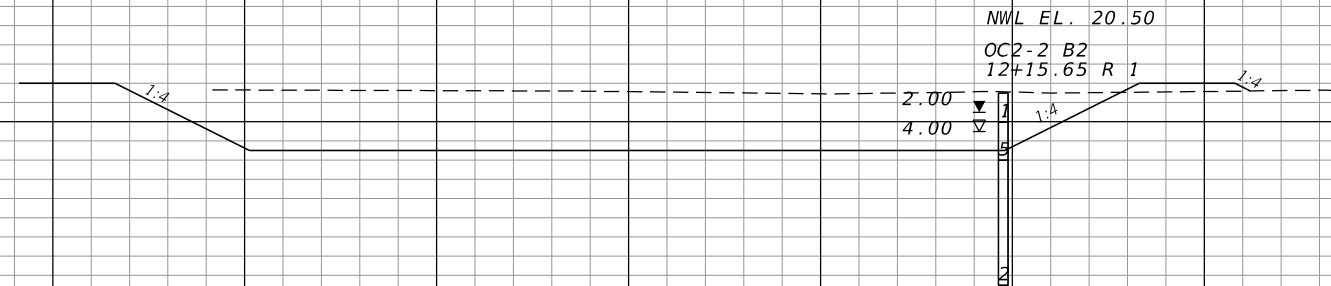
280 240 200 160 120 80 40 0 40 80 120 160 200

REVISIONS		DATE		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION		
	PRELIMINARY NOT FOR CONSTRUCTION				

STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP			
CR 431	SEMINOLE	01785303			

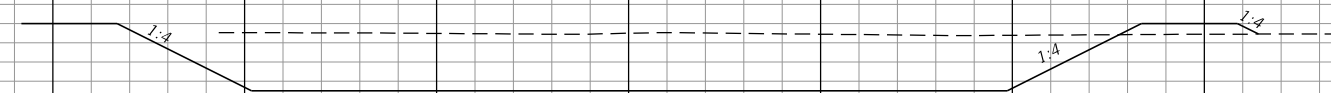
POND CROSS-SECTIONS (WR-1 POND)		SHEET NO. 161
---	--	------------------

26
24
22
20
18



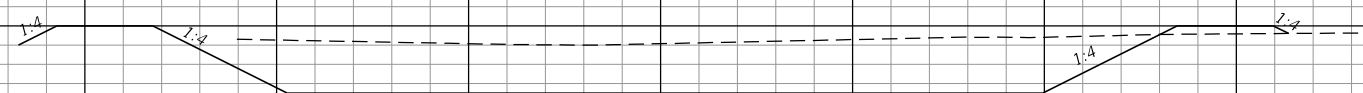
12+30.00

26
24
22
20
18



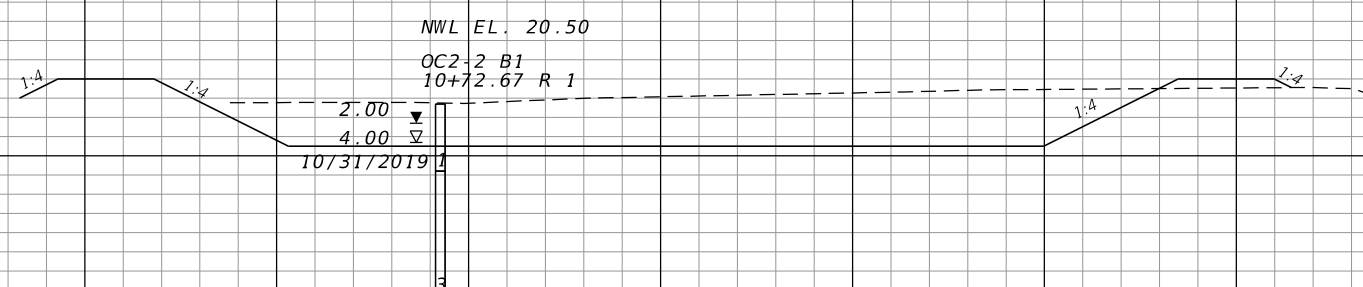
11+80.00

26
24
22
20
18



11+30.00

26
24
22
20
18



10+80.00

SCALE
1" = 40' Horizontal
1" = 20' Vertical

280 240 200 160 120 80 40 0 40 80 120 160 200

REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

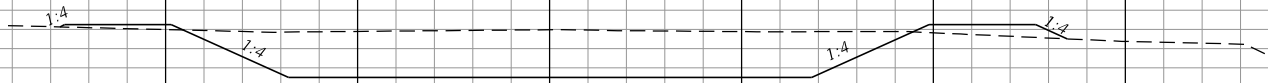
STEVEN D. COLLINS, P.E., Ph.D
 P.E. LICENSE NUMBER 80872
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

POND CROSS-SECTIONS
(OC2-2 POND)

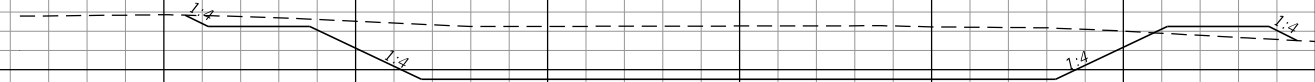
SHEET NO.
162

20
18
16
14



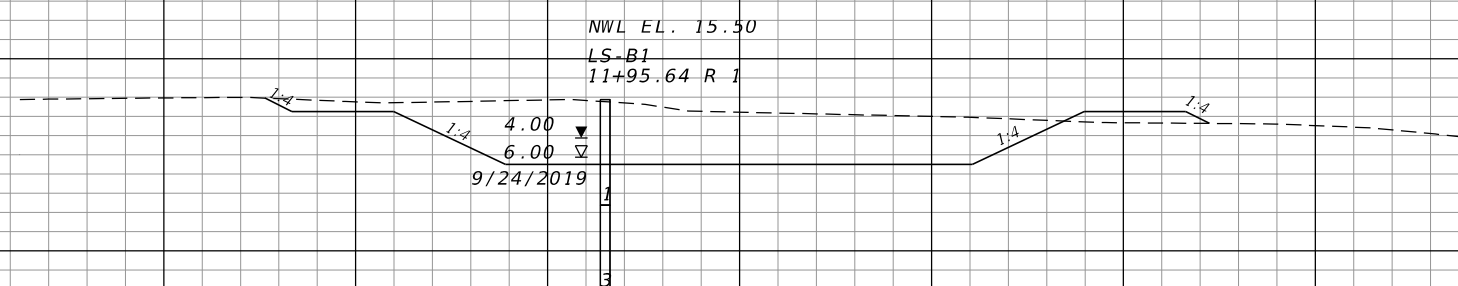
13+30.00

20
18
16
14



12+30.00

20
18
16
14



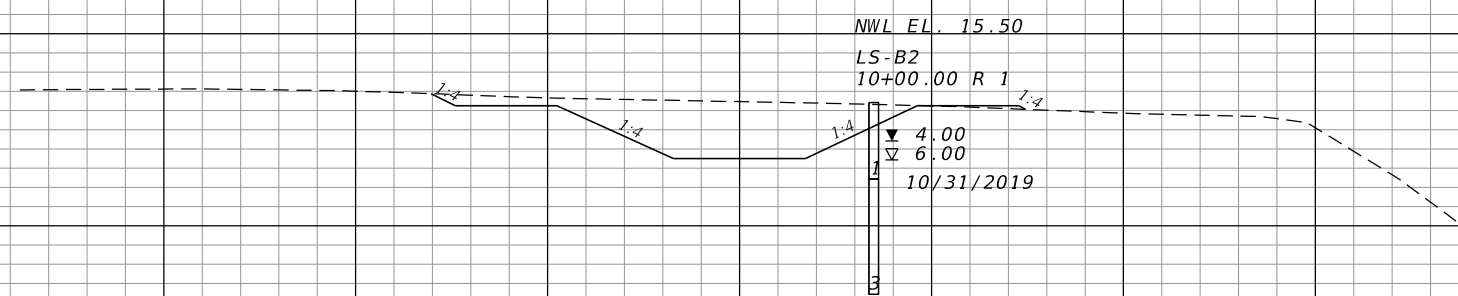
11+80.00

20
18
16
14
12



11+30.00

20
18
16
14
12
10
8



10+80.00

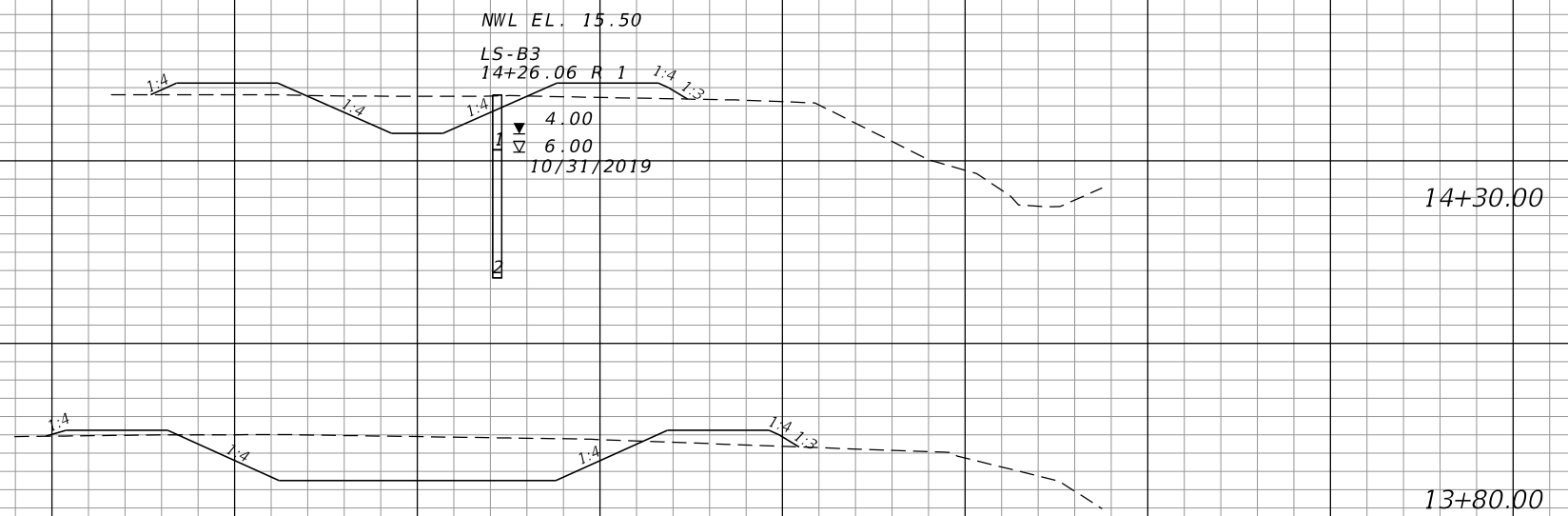
SCALE
1" = 40' Horizontal
1" = 20' Vertical

280 240 200 160 120 80 40 0 40 80 120 160 200

DATE		DESCRIPTION		REVISIONS		STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			POND CROSS-SECTIONS (LS-2 POND)		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	CR 431	SEMINOLE	01785303	163				
		PRELIMINARY NOT FOR CONSTRUCTION												

20
18
16
14
12
10
8
6

20
18
16
14
12
10



NWL EL. 15.50
LS-B3
14+26.06 R 1
4.00
6.00
10/31/2019

14+30.00

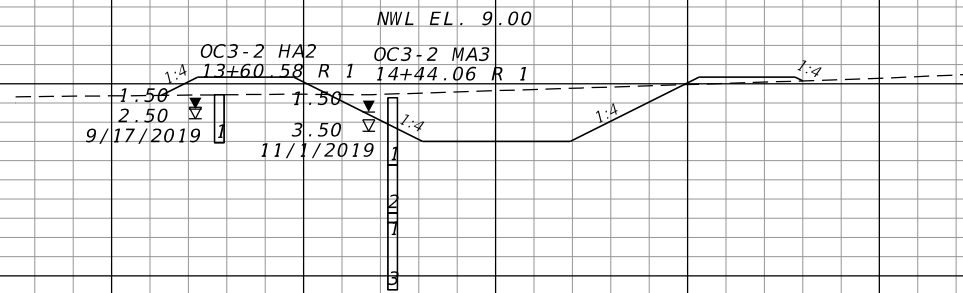
13+80.00

SCALE
1" = 40' Horizontal
1" = 20' Vertical

280 240 200 160 120 80 40 0 40 80 120 160 200

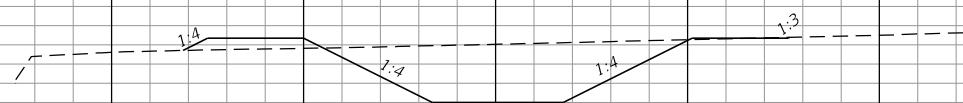
DATE		DESCRIPTION		REVISIONS		STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			POND CROSS-SECTIONS (LS-2 POND)		SHEET NO.
DATE		DESCRIPTION		REVISIONS		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	CR 431	SEMINOLE	01785303			164
		PRELIMINARY NOT FOR CONSTRUCTION												

14
12
10
8
6



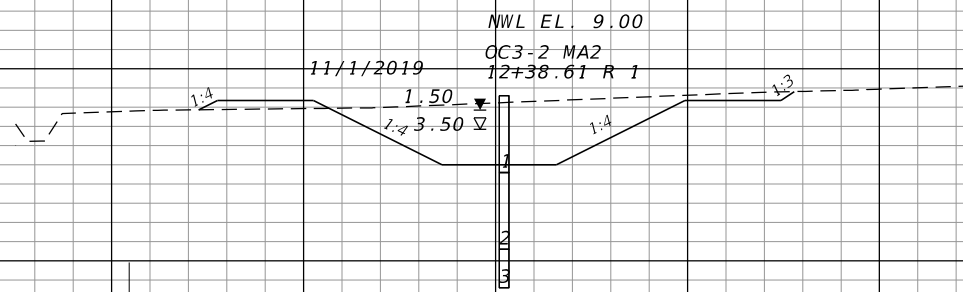
13+80.00

14
12
10
8
6



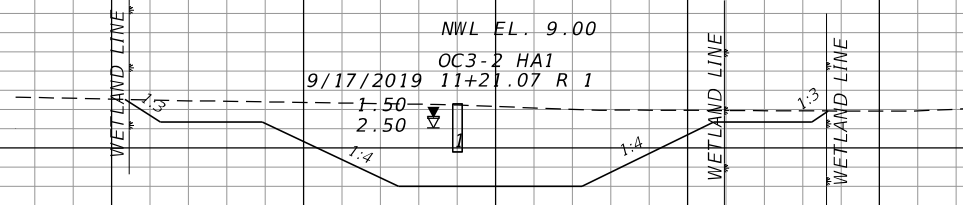
13+30.00

14
12
10
8
6



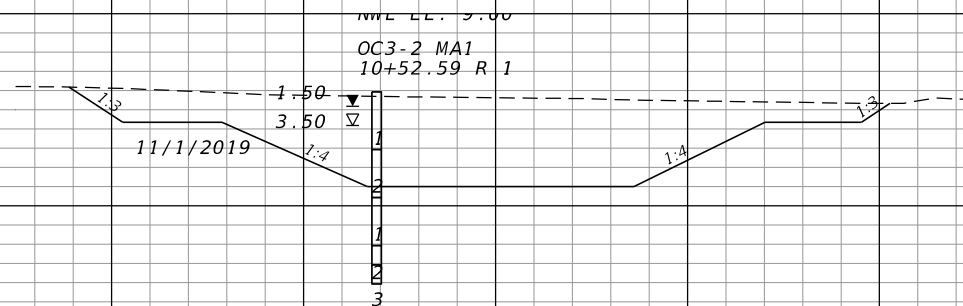
12+80.00

16
14
12
10
8
6



11+30.00

16
14
12
10
8
6



10+80.00

SCALE
1" = 40' Horizontal
1" = 20' Vertical

280 240 200 160 120 80 40 0 40 80 120 160 200

REVISIONS	
DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION

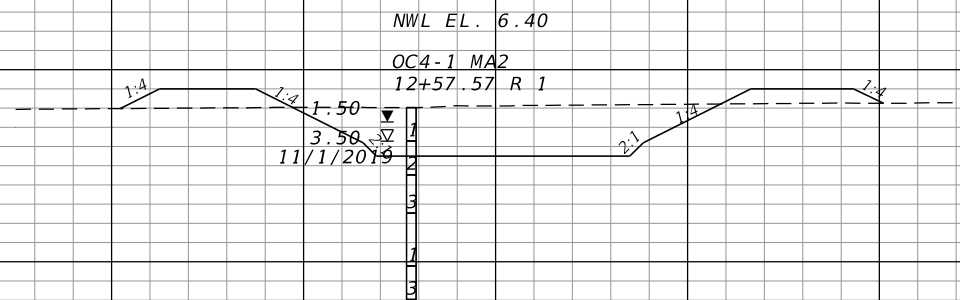
STEVEN D. COLLINS, P.E., Ph.D
P.E. LICENSE NUMBER 80872
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

POND CROSS-SECTIONS
(OC3-2 POND)

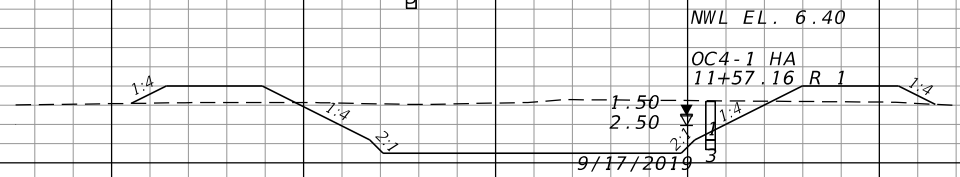
SHEET NO.
165

10
8
6
4



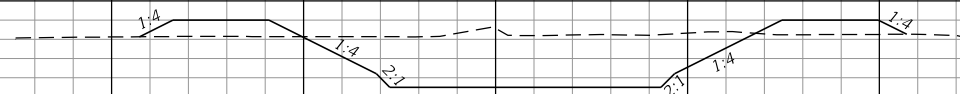
12+30.00

10
8
6
4



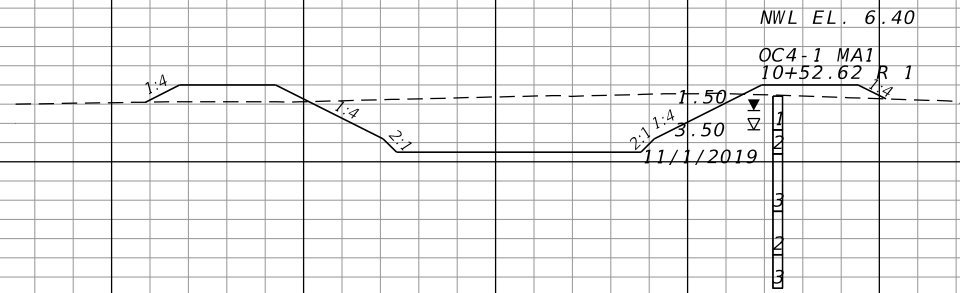
11+80.00

10
8
6
4



11+30.00

10
8
6
4

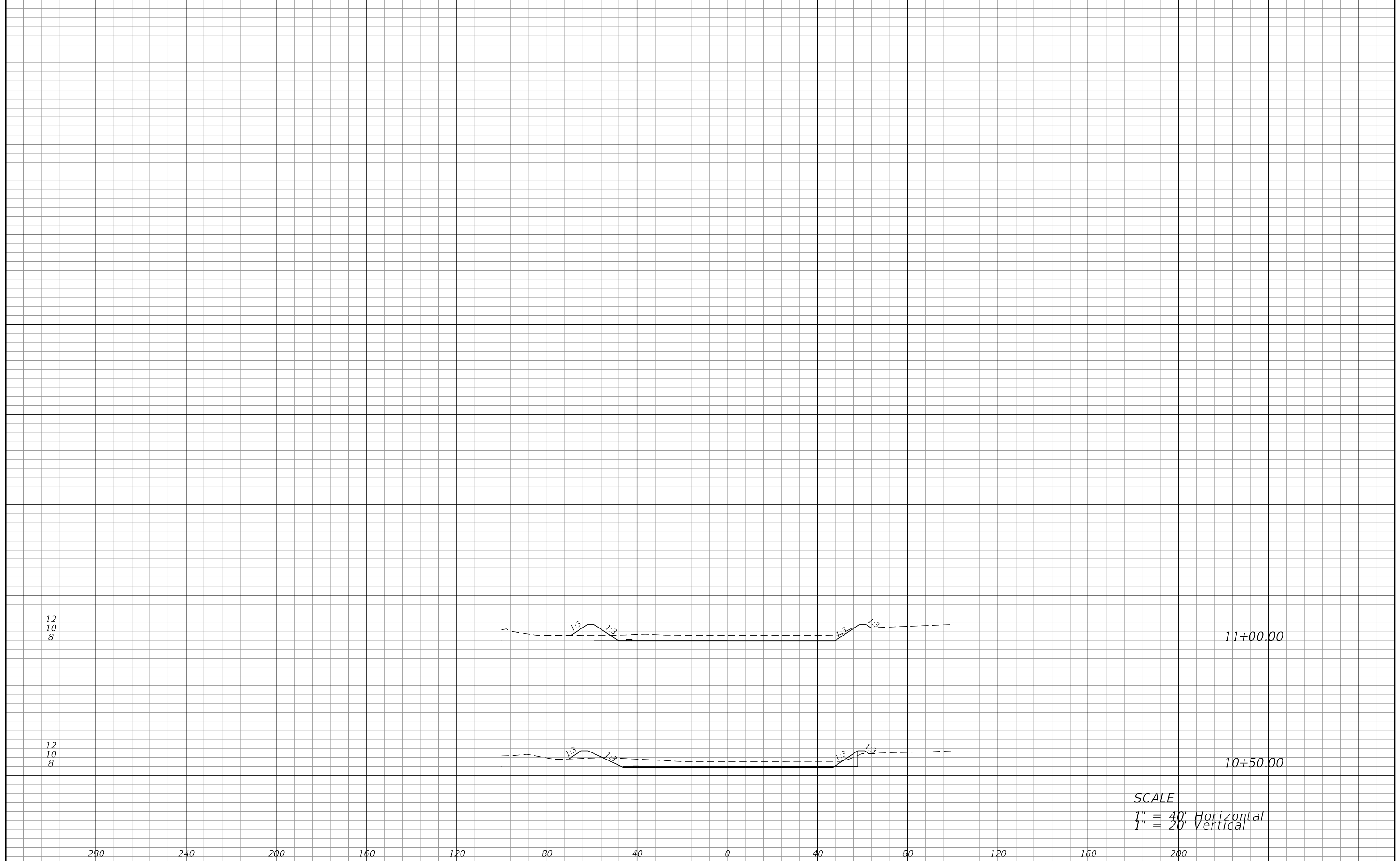


10+80.00

SCALE
1" = 40' Horizontal
1" = 20' Vertical

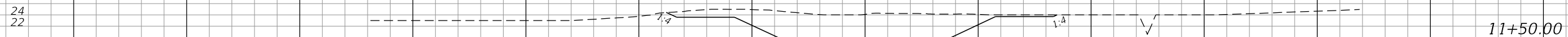
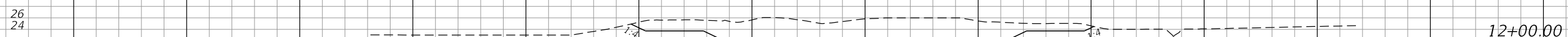
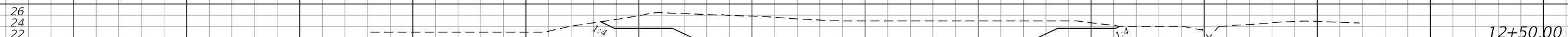
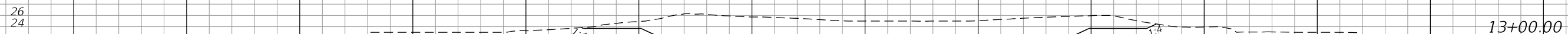
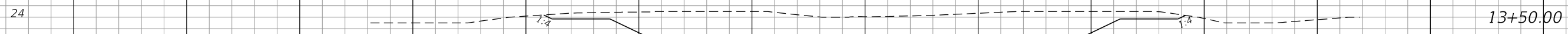
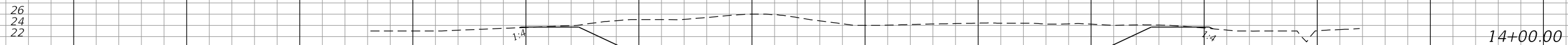
280 240 200 160 120 80 40 0 40 80 120 160 200

REVISIONS		DESCRIPTION		STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			POND CROSS-SECTIONS (OC4-1 POND)	SHEET NO. 166
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303		



SCALE
 1" = 40' Horizontal
 1" = 20' Vertical

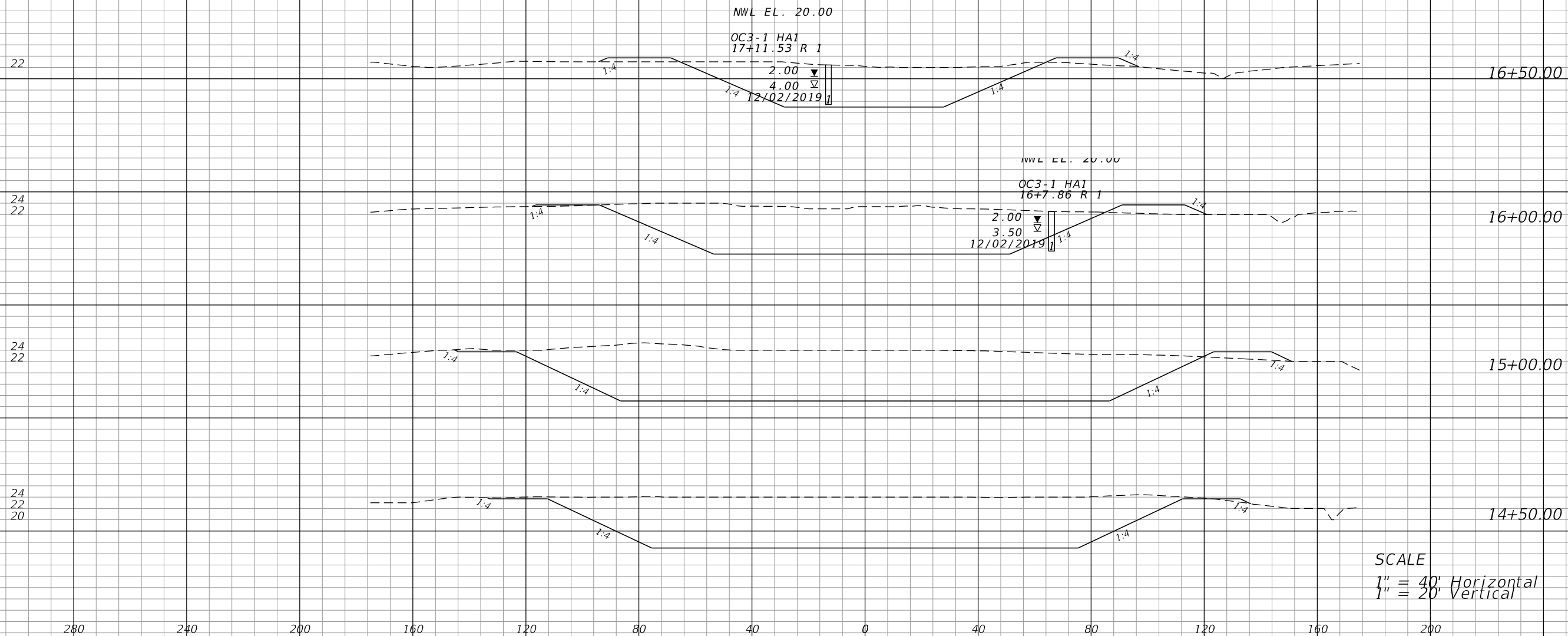
DATE		DESCRIPTION		REVISIONS		STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			POND CROSS-SECTIONS (BOOKERTOWN POND)		SHEET NO.
DATE		DESCRIPTION		REVISIONS		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP			167			
		PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303						



SCALE
 1" = 40' Horizontal
 1" = 20' Vertical

280 240 200 160 120 80 40 0 40 80 120 160 200

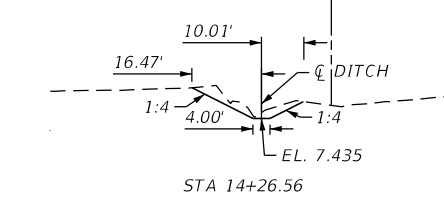
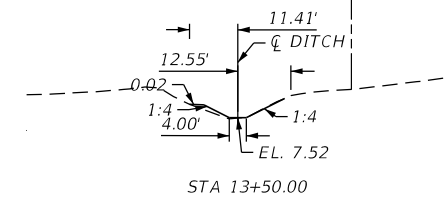
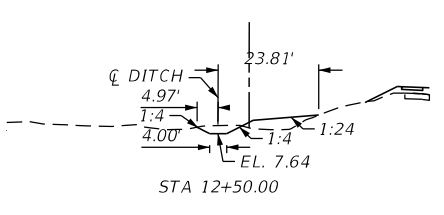
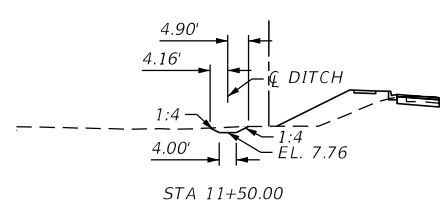
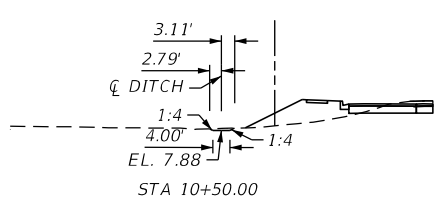
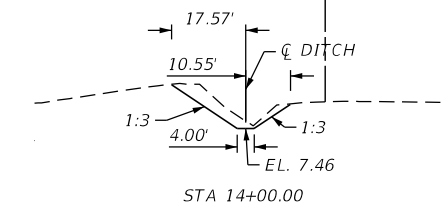
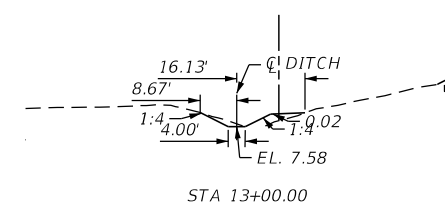
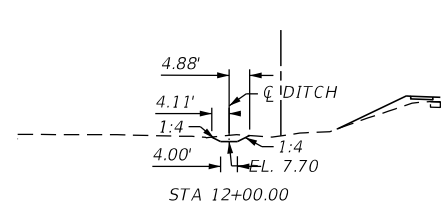
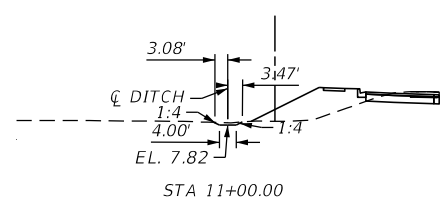
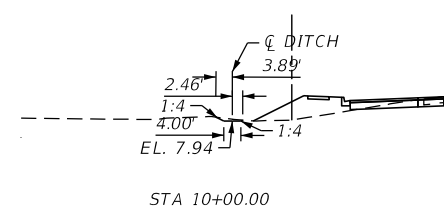
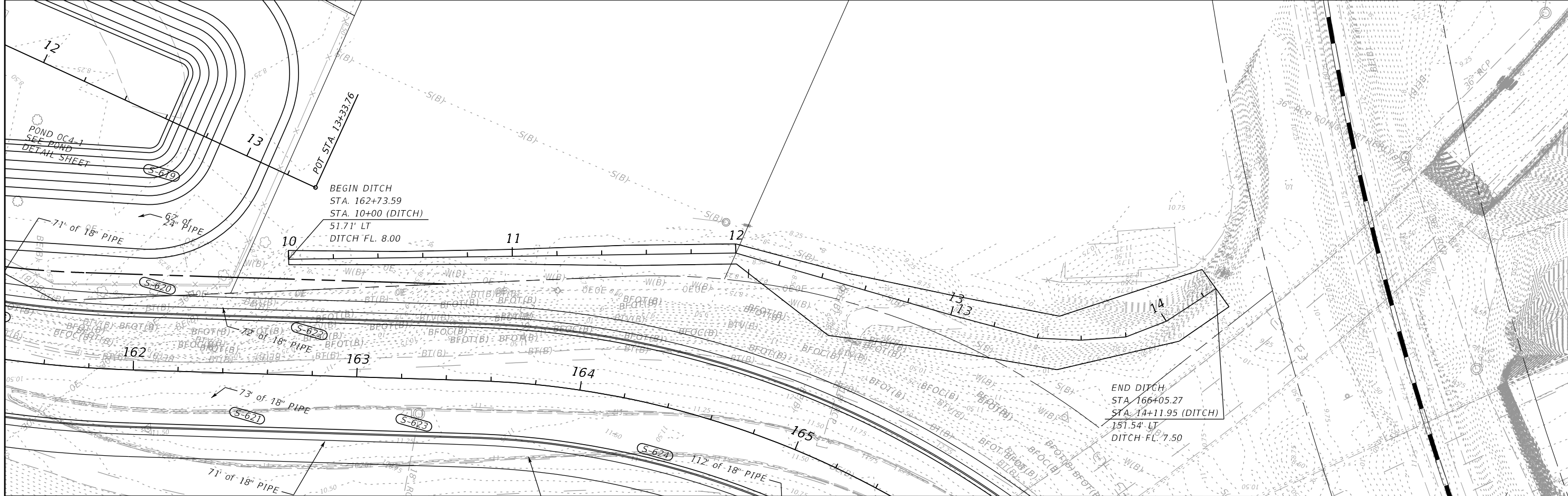
DATE		DESCRIPTION		REVISIONS		DATE		DESCRIPTION		STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS ROAD NO. COUNTY SEMINOLE COUNTY CIP CR 431 SEMINOLE 01785303			SHEET NO. 168	
PRELIMINARY NOT FOR CONSTRUCTION													POND CROSS-SECTIONS (OC3-1 POND)				



SCALE
 1" = 40' Horizontal
 1" = 20' Vertical

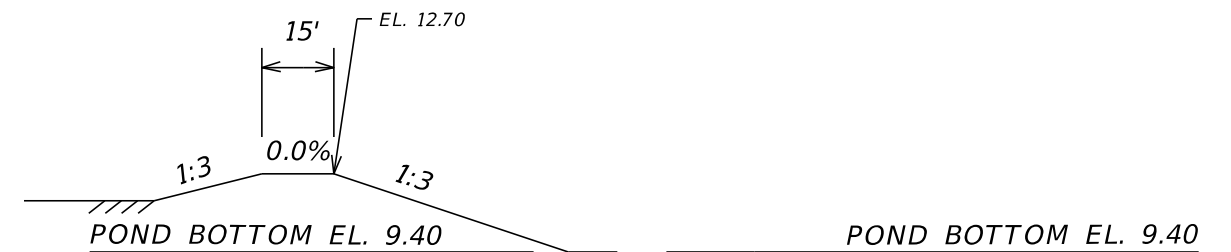
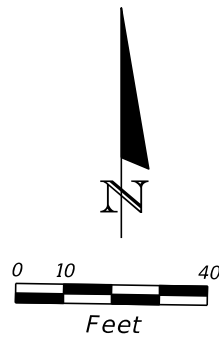
DATE		DESCRIPTION		REVISIONS		STEVEN D. COLLINS, P.E., Ph.D P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 169
DATE		DESCRIPTION		REVISIONS		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	POND CROSS-SECTIONS (OC3-1 POND)			
		PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303				

10/10/2022 3:54:20 PM G:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\drainage\DRDTRD10.dgn

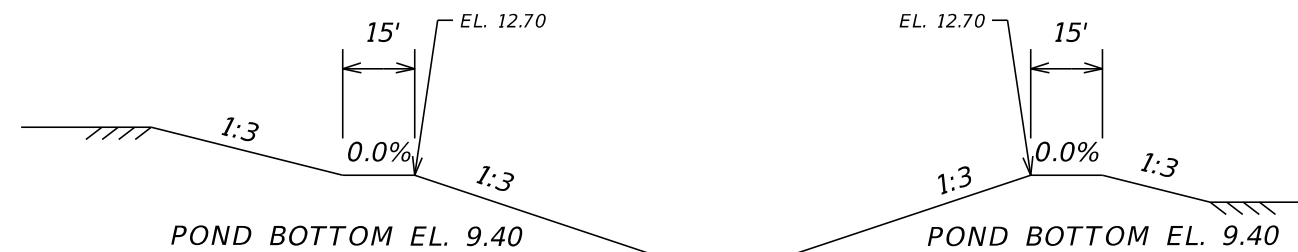


REVISIONS		REVISIONS		STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO. 170
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
	PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303	

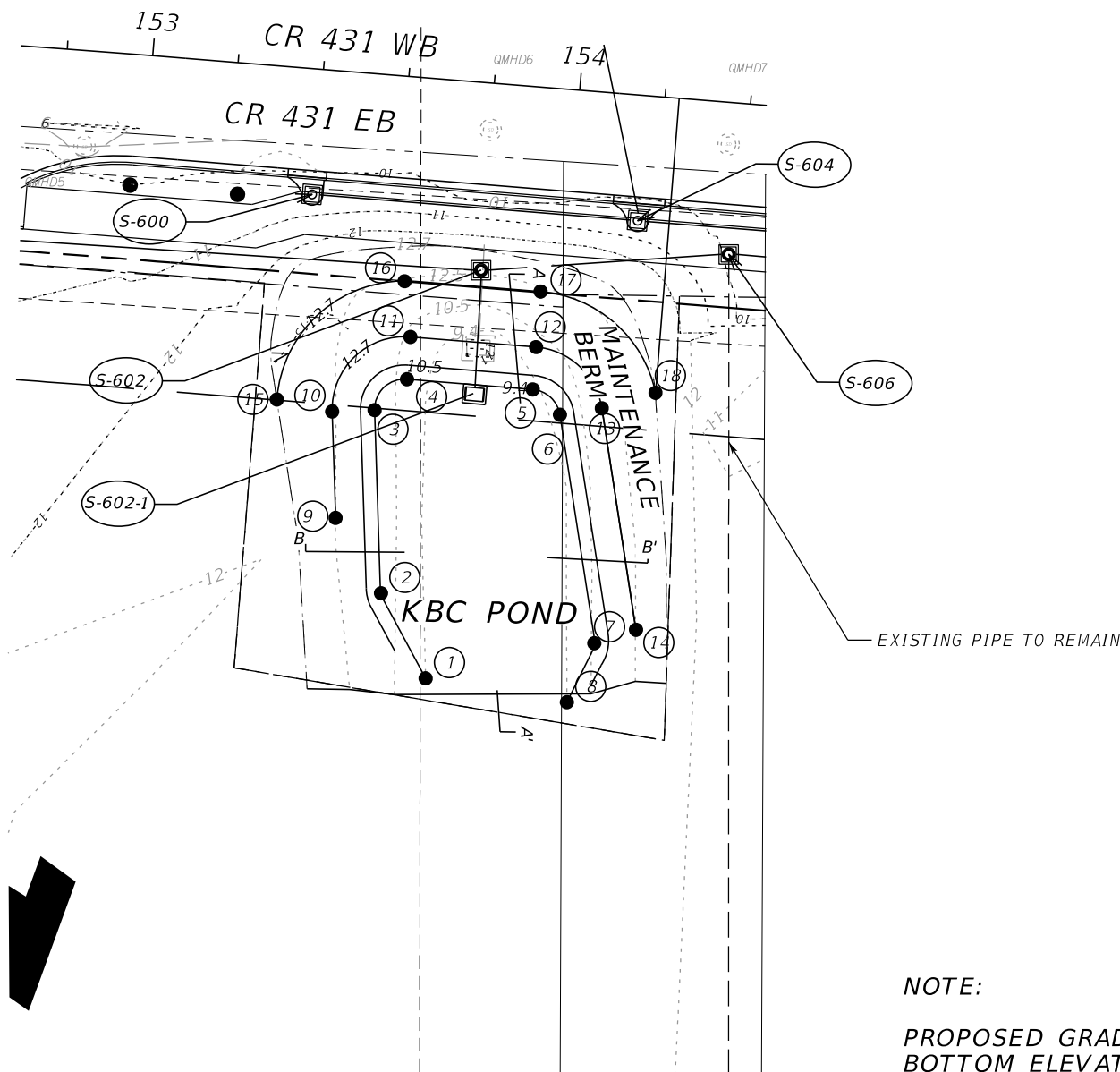
DRAINAGE DETAIL



SECTION A-A'
NTS



SECTION B-B'
NTS



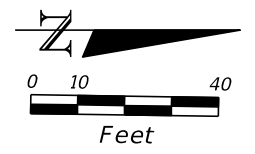
STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	153+75.18	139.64' RT	9.4
2	153+63.19	120.69' RT	9.4
3	153+58.27	78.28' RT	9.4
4	153+65.23	70.44' RT	9.4
5	153+94.65	70.44' RT	9.4
6	154+01.46	75.82' RT	9.4
7	154+13.76	128.30' RT	9.4
8	154+8.49	142.51' RT	9.4
9	153+51.22	104.03' RT	12.7
10	153+48.43	79.34' RT	12.7
11	153+65.23	60.54' RT	12.7
12	153+94.65	60.54' RT	12.7
13	154+11.09	73.53' RT	12.7
14	154+23.20	124.38' RT	12.7
15	153+35.33	77.59' RT	12.7
16	153+62.83	47.70' RT	12.7
17	153+94.65	47.54' RT	12.7
18	154+23.29	68.91' RT	12.7

NOTE:

PROPOSED GRADING TO MATCH EXISTING STORAGE, MAINTENANCE BERM ELEVATIONS, AND POND BOTTOM ELEVATION, ALL BASED ON 2020 TOPOGRAPHIC SURVEY CONDUCTED BY JONES, WOOD & GENTRY, INC. SEE EXISTING PERMIT ERP 108330-1

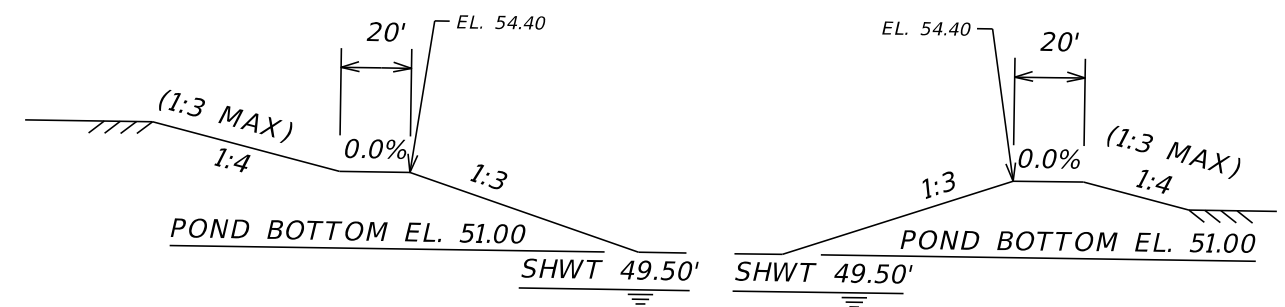
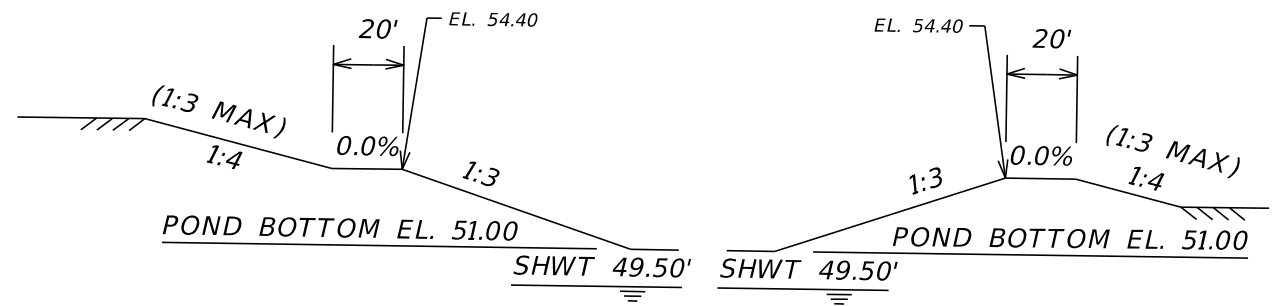
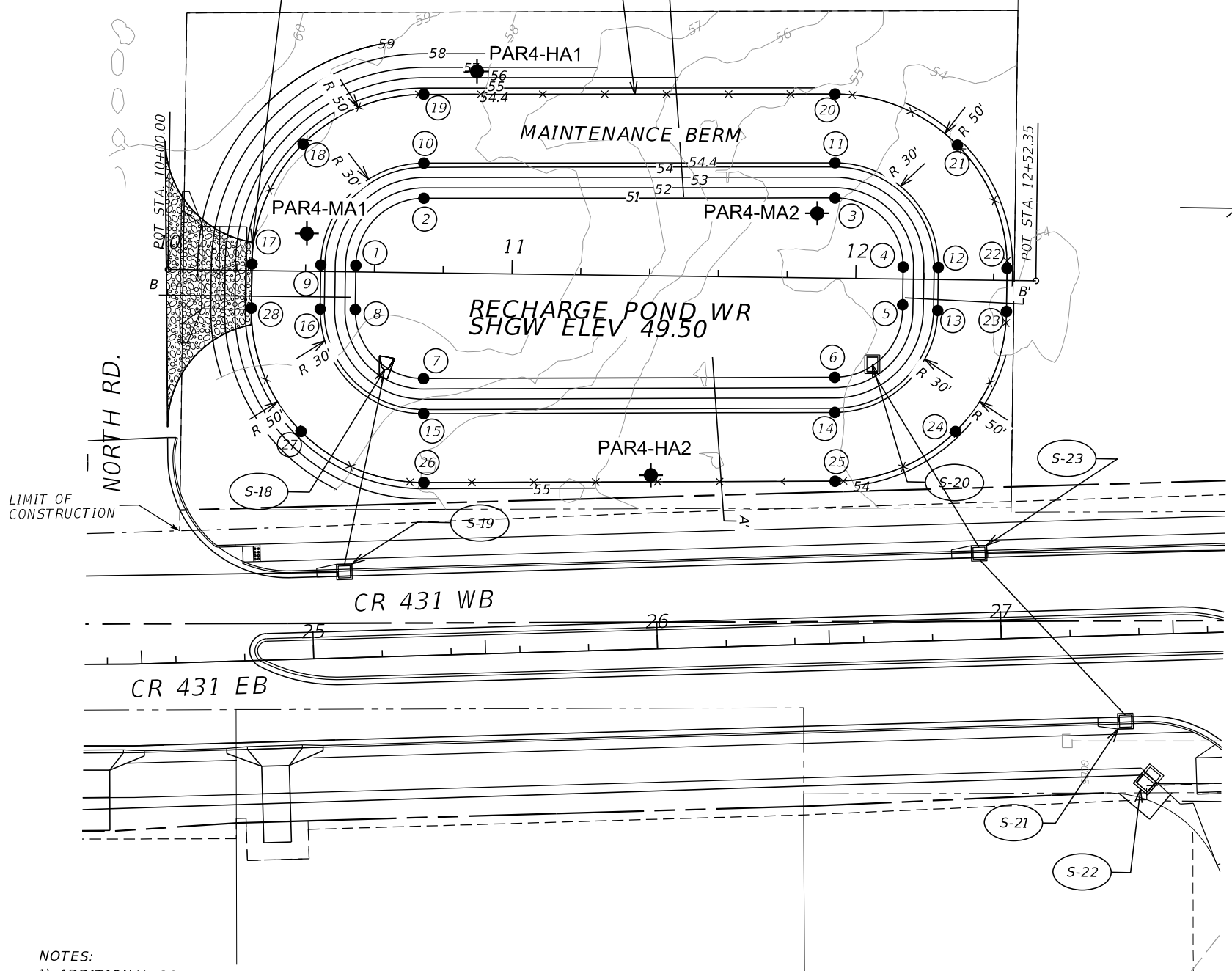
10/10/2022 3:54:55 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CR_431\drainage\DRDTRD11.dgn

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			POND DETAIL (KBC POND)	SHEET NO. 171
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		
	PRELIMINARY NOT FOR CONSTRUCTION			CR 431	SEMINOLE	01785303			



24' FDOT CANTILEVER SLIDE GATE-TYPE B FENCE
STANDARD INDEX 550-003

FDOT TYPE A FENCE
STANDARD INDEX 550-001



STAKEOUT TABLE			
POINT	STATION	OFFSET	EL.
1	10+54.60	1.89' LT	51.0
2	10+74.13	21.68' LT	51.0
3	11+93.59	26.33' LT	51.0
4	12+16.70	3.54' LT	51.0
5	12+13.70	7.45' RT	51.0
6	11+94.22	28.79' RT	51.0
7	10+74.71	30.72' RT	51.0
8	10+54.59	10.91' RT	51.0
9	10+44.40	1.90' LT	54.4
10	10+73.98	31.88' LT	54.4
11	11+93.49	33.53' LT	54.4
12	12+23.90	3.54' LT	54.4
13	12+23.90	8.99' RT	54.4
14	11+94.39	38.99' RT	54.4
15	10+74.88	40.92' RT	54.4
16	10+44.39	10.91' RT	54.4
17	10+24.40	1.91' LT	54.4
18	10+38.81	37.00' LT	54.4
19	10+73.71	51.88' LT	54.4
20	11+93.21	53.53' LT	54.4
21	12+29.01	39.14' LT	54.4
22	12+43.90	3.54' LT	54.4
23	12+43.90	8.99' RT	54.4
24	12+29.54	44.06' RT	54.4
25	11+94.71	58.98' RT	54.4
26	10+75.20	60.92' RT	54.4
27	10+39.31	46.56' RT	54.4
28	10+24.39	10.90' RT	54.4

POND WR-1

DHW EL. = 53.39' (25 YR/24 HR)
WEIR. EL. = 52.30'
SHW EL. = 49.50'
BOTTOM EL. = 51.00'

NOTES:
1) ADDITIONAL CONTROL STRUCTURE INFORMATION CAN BE FOUND IN THE TABLE LOCATED ON POND DETAIL SHEET 159

2) BORING LOCATION

10/10/2023 3:54:55 PM 0:\2017-1710782_002_Orange Blvd (CR 431)\Orange Blvd_CADD\drainage\DRDTR011.dgn

REVISIONS		DATE	DESCRIPTION	STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917	SEMINOLE COUNTY PUBLIC WORKS			SHEET NO.
DATE	DESCRIPTION				ROAD NO.	COUNTY	SEMINOLE COUNTY CIP	
					CR 431	SEMINOLE	01785303	149
POND DETAIL (WR-1)								

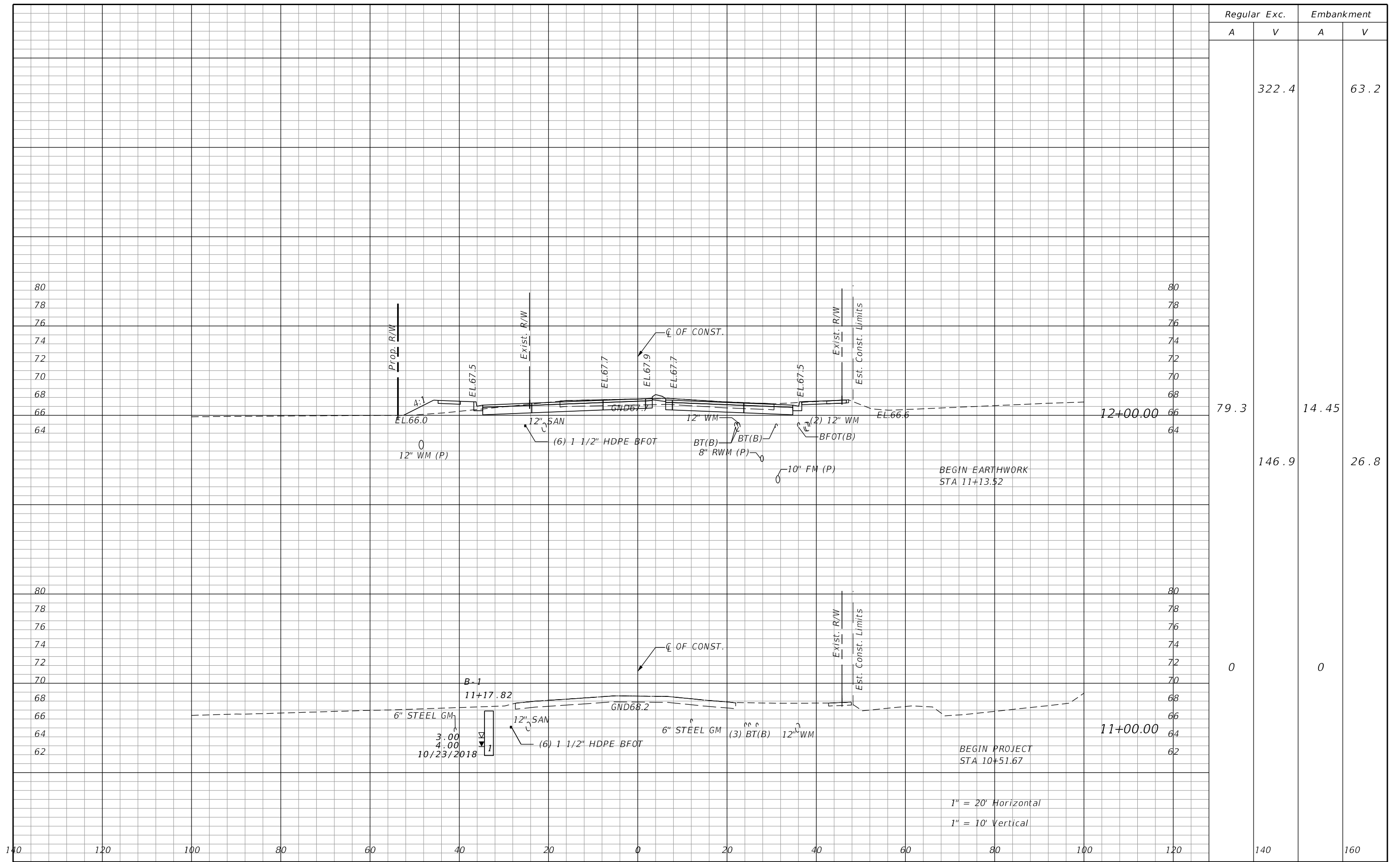
PRELIMINARY NOT FOR CONSTRUCTION

Drainage Structure Table

Structure ID	Alignment	Station	Offset	RT/LT	Structure Type	Index No.	Elevation	Rim/Grate/EOP	AH	BK	LT	RT
S-64	Orange	53+04.71	190.65	LT	MH Type J-7 (6.0X6.0)	425-001	28.81	Rim		(2)18" F.L. 25.18	29"x45" F.L. 24.10	
S-64-1	Orange	55+12.38	453.78	LT	MH Type J-7 (6.0X6.0)	425-001	29.00	Rim	29"x45" F.L. 23.29			29"x45" F.L. 23.29
S-64-2	Orange	57+97.08	274.07	LT	MH Type J-7 (6.0X6.0)	425-001	29.00	Rim		29"x45" F.L. 22.60		29"x45" F.L. 22.60
S-66-1	Orange	54+36.44	70.53	LT	MH Type J-7 (8.0 Dia)	425-001	29.00	Rim			48" F.L. 20.33	48" F.L. 20.33
S-66-2	Orange	53+41.11	172.64	LT	MH Type J-7 (8.0 Dia)	425-001	29.00	Rim	48" F.L. 20.06			48" F.L. 20.06
S-71	Orange	53+79.02	183.20	LT	48" FES	430-020	24.42	Rim		48" F.L. 20.00		
S-74-1	Orange	57+89.23	249.88	LT	MH Type J-7 (5.0X6.0)	425-001	29.00	Rim		36" F.L. 22.56	29"x45" F.L. 22.56	36" F.L. 22.56
S-224	Orange	92+64.15	322.20	LT	18" FES	430-020	19.71	Rim	18" F.L. 18.00			
S-229	Orange	93+53.84	94.78	LT	30" FES	430-020	19.79	Rim				30" F.L. 17.00
S-228-1	Orange	94+29.30	322.05	LT	MH Type P-7 (3.5X3.5)	425-001	24.00	Rim		18" F.L. 19.26		18" F.L. 19.26
S-230	Orange	95+05.37	95.66	LT	24" FES	430-020	20.90	Rim				24" F.L. 18.65
S-418	Orange	126+21.52	90.00	LT	24" MES	430-021	18.00	Rim	24" F.L. 16.00			
S-426	Orange	126+67.22	427.26	LT	MH Type P-7 (3.5 Dia)	425-001	20.53	Rim			24" F.L. 11.26	24" F.L. 11.26
S-427	Orange	127+13.40	637.77	LT	MH Type P-7 (3.5 Dia)	425-001	19.41	Rim			24" F.L. 10.75	24" F.L. 10.75
S-428	Orange	127+66.12	882.84	LT	MH Type J-7 (5.0 Dia)	425-001	19.69	Rim	24" F.L. 10.16			24" F.L. 10.16
S-429	Orange	128+25.78	925.52	LT	24" FES	430-020	12.25	Rim		24" F.L. 10.00		
S-431	Orange	131+39.16	1105.02	LT	24" FES	430-020	10.25	Rim		24" F.L. 8.00		
S-500-7	Orange	132+74.70	318.43	RT	24" FES	430-020	17.25	Rim		24" F.L. 15.00		
S-500-8	Orange	132+23.78	307.33	RT	MH Type P-7 (4.0 Dia)	425-001	23.70	Rim	24" F.L. 15.06		24" F.L. 15.06	
S-501	Orange	136+34.22	180.09	RT	Existing MH	425-001	21.80	Rim	23"x36" F.L. 16.50		24"x38" F.L. 16.41	
S-502	Orange	136+08.30	158.12	RT	MH Type J-7 (5.0X5.0)	425-001	21.91	Rim		18" F.L. 16.88	24"x38" F.L. 16.30	24"x38" F.L. 16.30
S-503	Orange	135+94.81	146.61	RT	MH Type J-7 (5.0X5.0)	425-001	23.70	Rim		36" F.L. 16.22		24"x38" F.L. 16.22
S-503-1	Orange	134+13.36	383.65	RT	MH Type J-7 (4.0X4.0)	425-001	23.70	Rim	36" F.L. 16.06	36" F.L. 16.06		
S-504	Orange	132+47.34	634.29	RT	MH Type J-7 (7.0 Dia)	425-001	23.70	Rim	36" F.L. 15.90		36" F.L. 15.90	
S-504-1	Orange	132+34.79	563.23	RT	36" FES	430-020	18.83	Rim				36" F.L. 15.50
S-505	Orange	136+94.73	43.24	RT	Inlet Type P-3	425-020	20.00	EOP	18" F.L. 12.00	18" F.L. 12.00		
S-506	Orange	137+42.02	42.94	RT	Inlet Type P-3	425-020	19.56	EOP		18" F.L. 11.89	24" F.L. 11.89	
S-514-1	Orange	142+16.95	152.08	RT	MH Type J-7 (5.0 Dia)	425-001	12.70	Rim			24" F.L. 9.25	24" F.L. 9.25
S-515	Orange	142+37.62	185.12	RT	24" FES	430-020	11.25	Rim			24" F.L. 9.00	
S-523	Orange	146+13.53	199.83	RT	MH Type P-7 (3.5 Dia)	425-001	12.00	Rim			24" F.L. 9.01	24" F.L. 9.01
S-524-2	Orange	146+17.66	78.83	RT	MH Type J-7 (9.0X9.0)	425-001	11.06	Rim	(2)24"X38" F.L. 6.83		(2)24"X38" F.L. 6.83	24" F.L. 6.83
S-524-3	Orange	146+52.41	80.83	RT	DBI Type C (9.0X3.5)	425-052	10.85	Grate	24" F.L. 6.90	(2)24"X38" F.L. 6.90		
S-527-1	Orange	148+05.47	200.06	RT	DBI Type D	425-052	11.06	Grate	24" F.L. 6.91			
S-527-2	Orange	148+30.70	200.89	RT	MH Type P-7 (3.5X3.5)	425-001	11.08	Rim		24" F.L. 6.90	24" F.L. 6.90	
S-611	Orange	158+50.72	59.22	LT	30" FES	430-020	6.63	Rim		30" F.L. 3.84		
S-612	Orange	158+61.81	165.25	LT	24" FES	430-020	6.67	Rim	24" F.L. 4.42			
S-619	Orange	161+98.51	96.69	LT	24" FES	430-020	7.63	Rim				24" F.L. 5.38
S-704	Orange	175+19.88	60.78	RT	DBI Type C	425-052	10.22	Grate	18" F.L. 5.38	18" F.L. 4.79		

10/10/2022 3:54:58 PM O:\2017\1710762_002_Orange_Bldg_CR_431\Orange_Bldg_CADD\drainage\DRD1RD12.dgn

REVISIONS				STEVEN D. COLLINS, P.E., Ph.D. P.E. LICENSE NUMBER 80872 JMT - JOHNSON, MIRMIRAN & THOMPSON 615 CRESCENT EXECUTIVE COURT, SUITE 106 LAKE MARY, FL 32746 CERTIFICATE OF AUTHORIZATION NO.: 5917			SEMINOLE COUNTY PUBLIC WORKS			POND DETAIL	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION				ROAD NO.	COUNTY	SEMINOLE COUNTY CIP		172
PRELIMINARY NOT FOR CONSTRUCTION				CR 431	SEMINOLE	01785303					



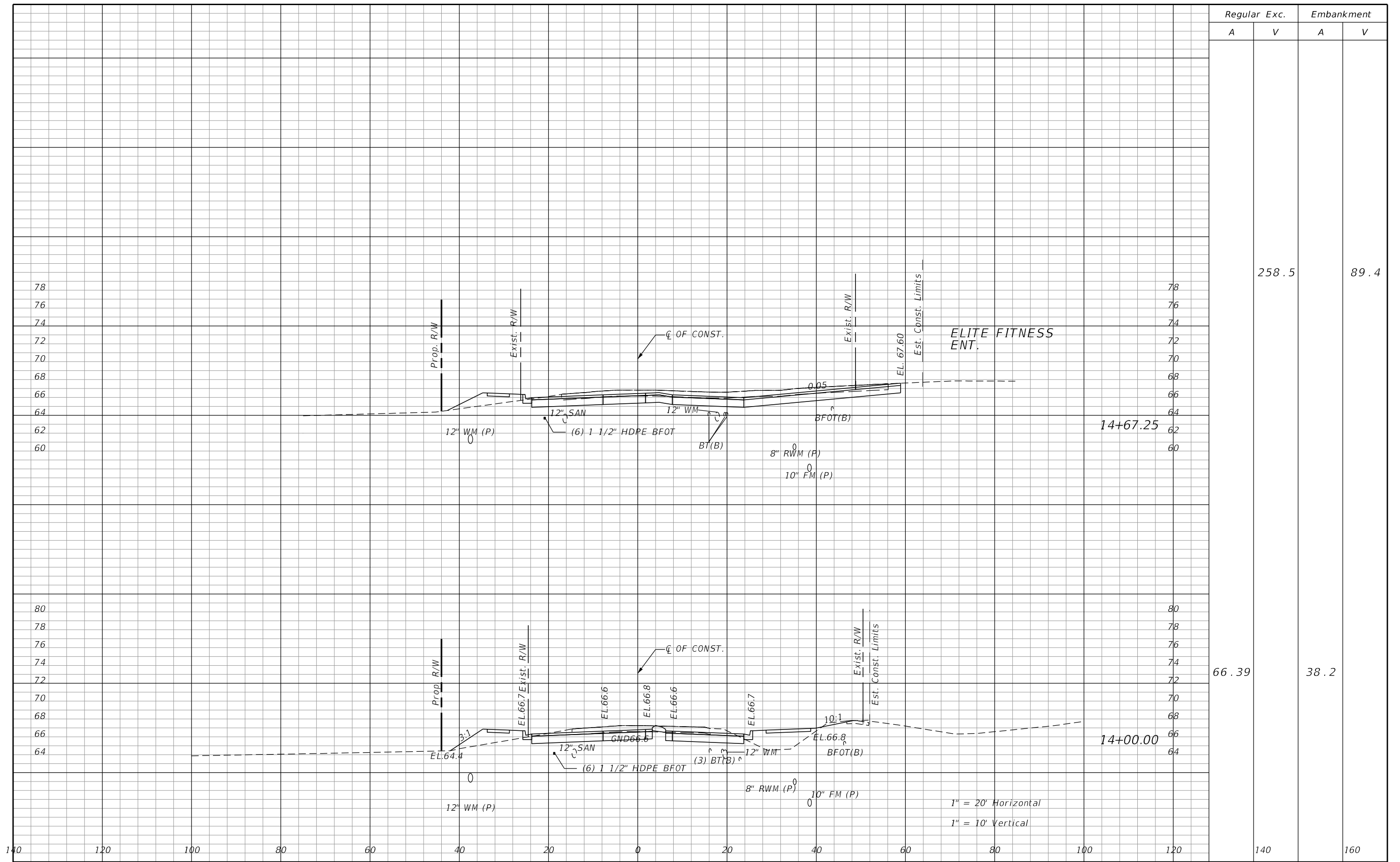
Regular		Exc.		Embankment	
A	V	A	V	A	V
			322.4		63.2
79.3		14.45			
	146.9			26.8	
0		0			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		173



Regular		Exc.		Embankment	
A	V	A	V	A	V
			258.5		89.4
		66.39			38.2

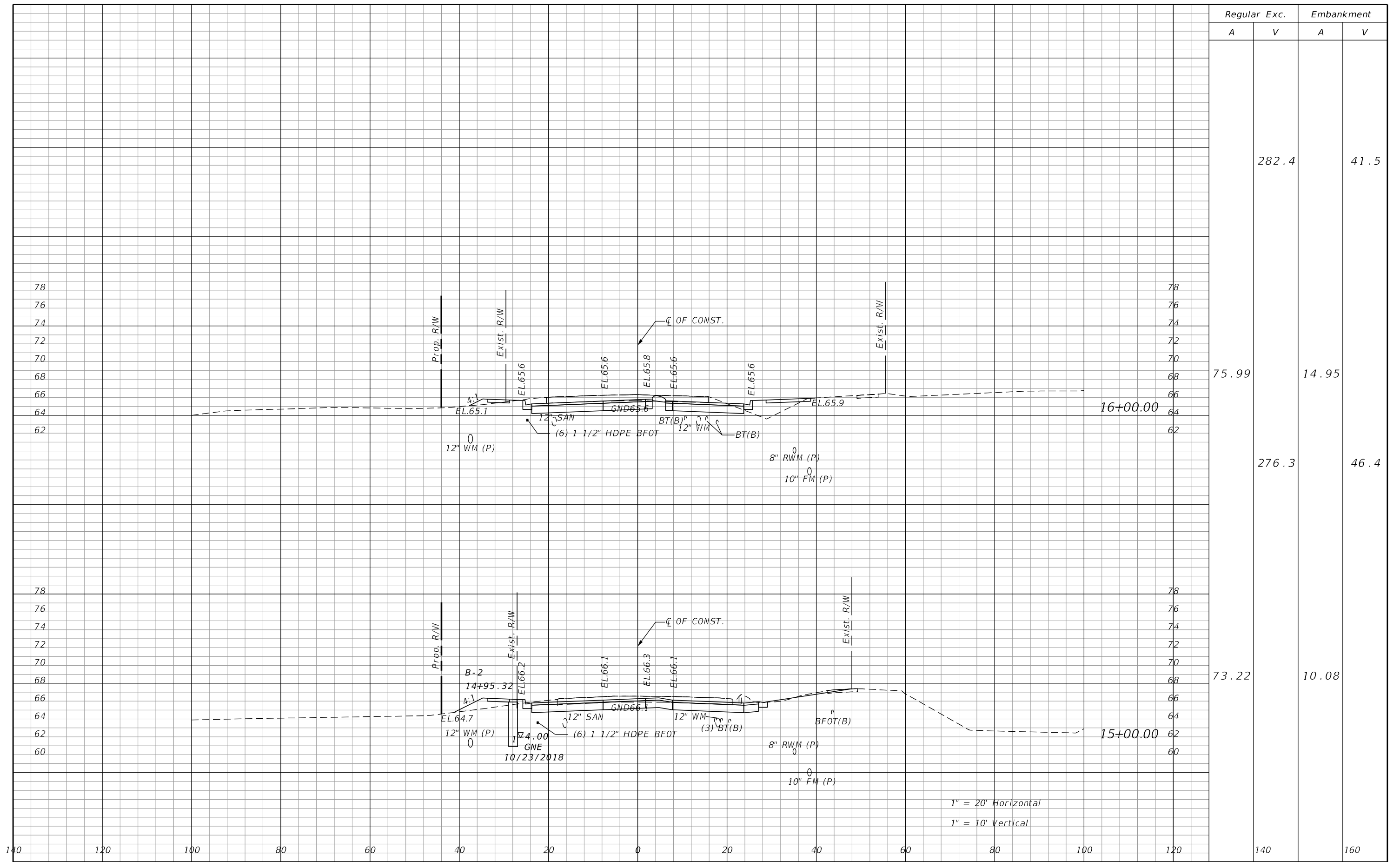
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS
298.5

SHEET NO.
1707.1



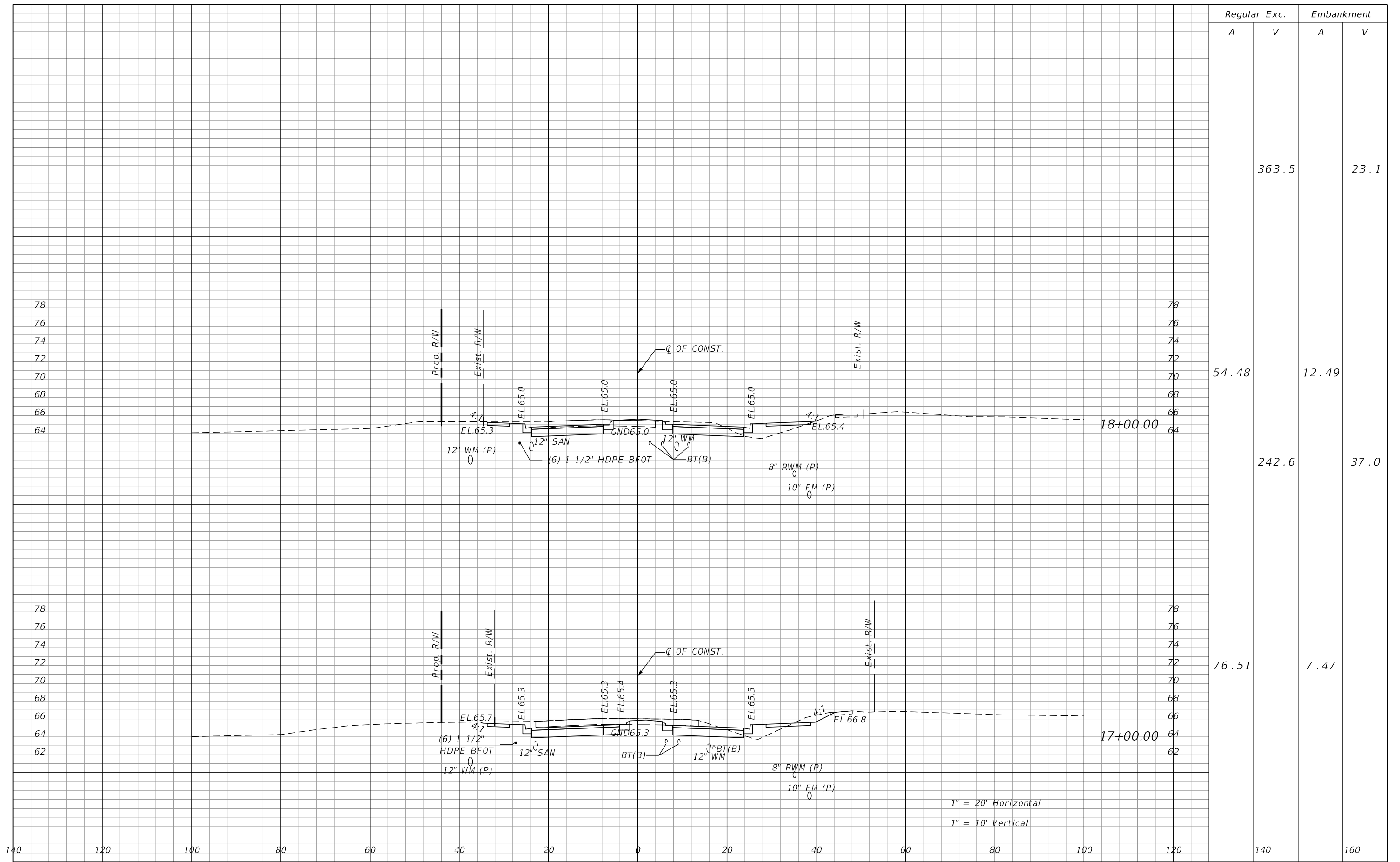
Regular		Exc.		Embankment	
A	V	A	V	A	V
			282.4		41.5
75.99			14.95		
			276.3		46.4
73.22			10.08		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		176



Regular		Exc.		Embankment	
A	V	A	V	A	V
			363.5		23.1
54.48		12.49			
	242.6				37.0
76.51		7.47			

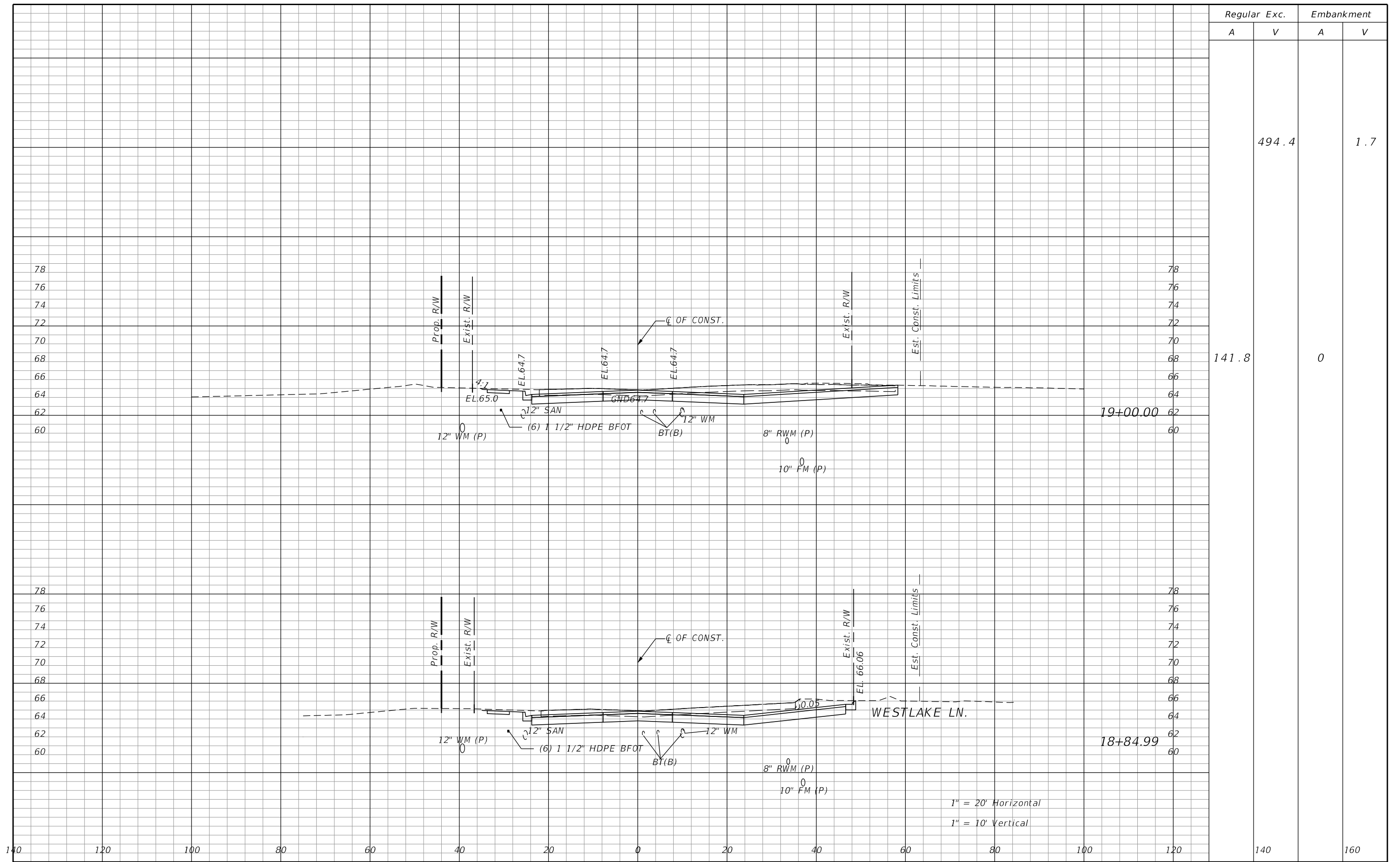
1" = 20' Horizontal
 1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		177



Regular		Exc.		Embankment	
A	V	A	V	A	V
			494.4		1.7
141.8				0	

1" = 20' Horizontal
1" = 10' Vertical

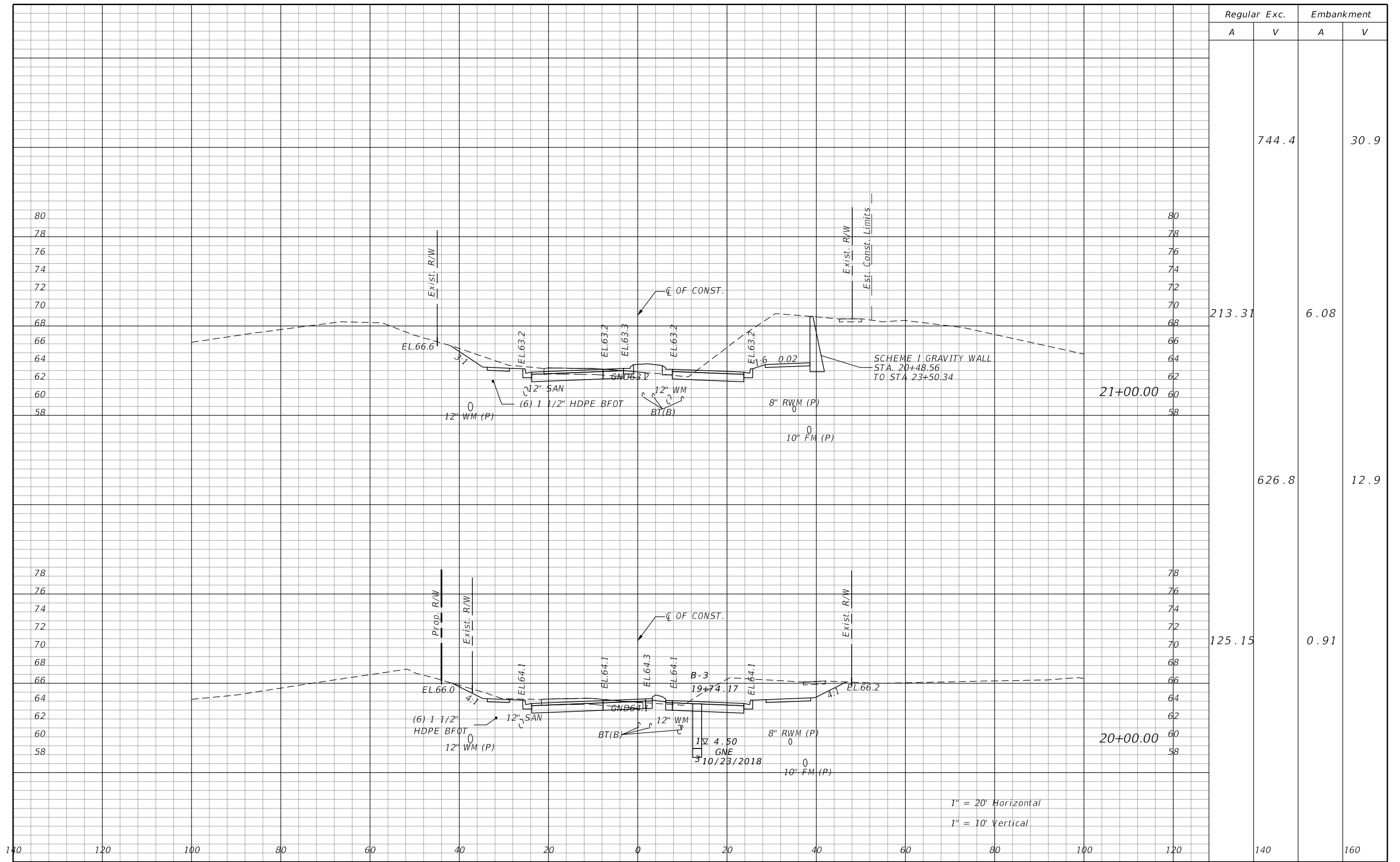
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS

SHEET NO.
178



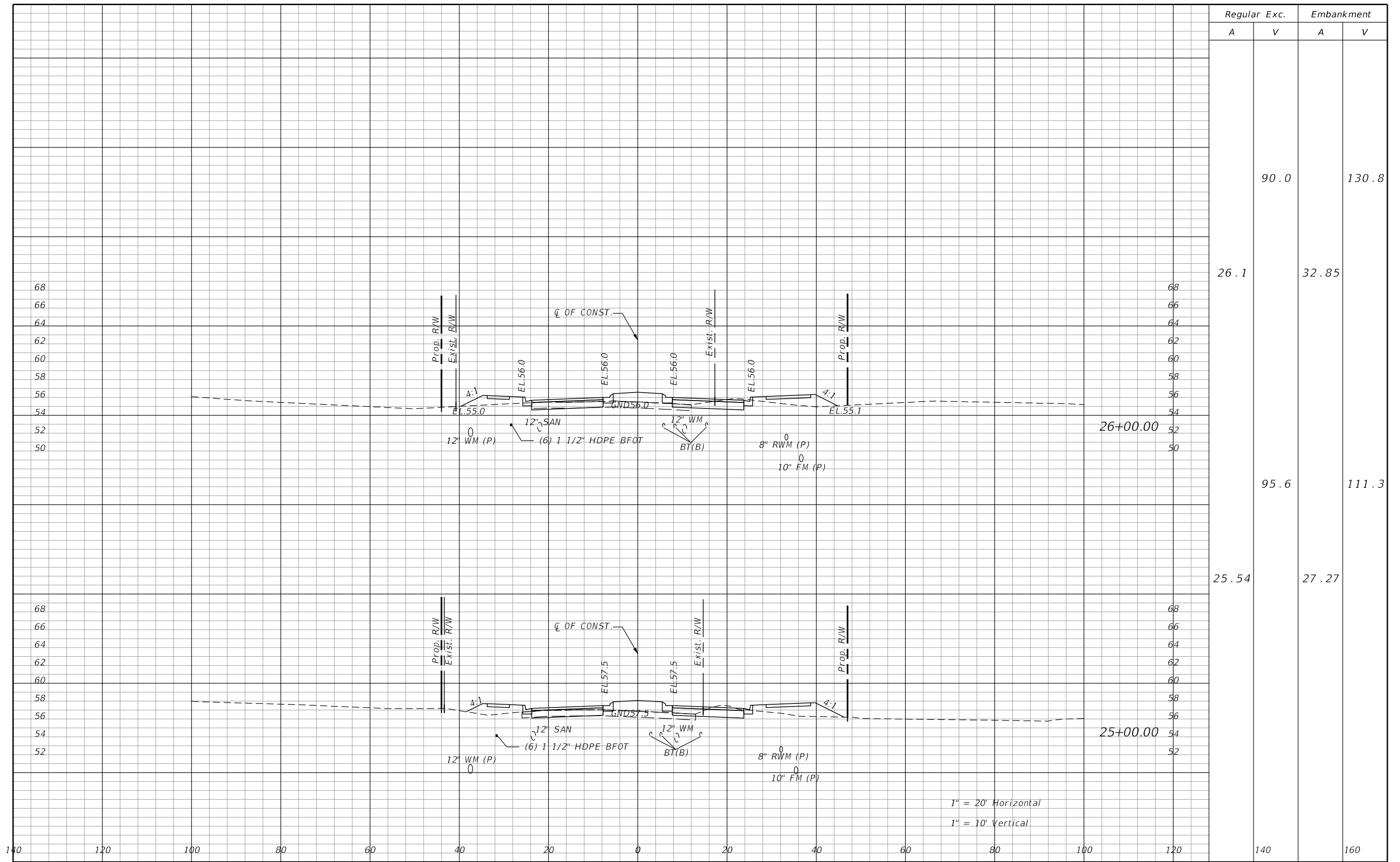
Regular		Exc.		Embankment	
A	V	A	V	A	V
			744.4		30.9
213.31			6.08		
		626.8			12.9
125.15			0.91		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		179



Regular		Exc.		Embankment	
A	V	A	V	A	V
			90.0		130.8
26.1			32.85		
			95.6		111.3
25.54			27.27		

1" = 20' Horizontal
1" = 10' Vertical

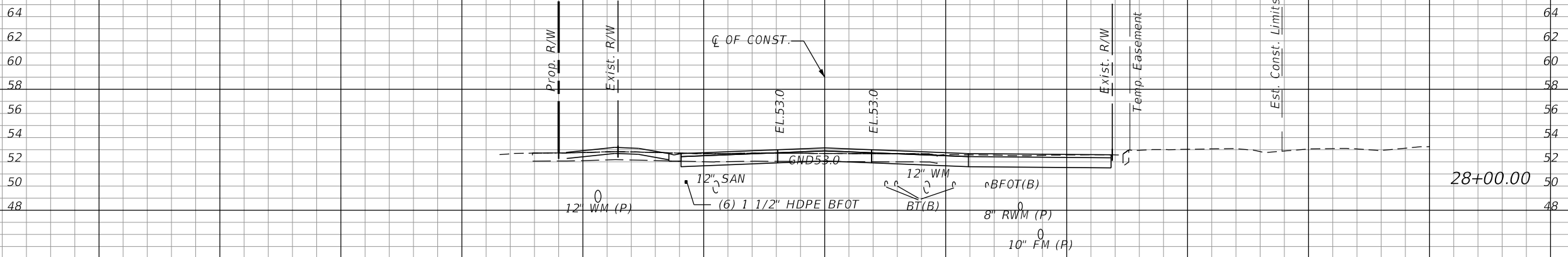
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		182

Regular		Exc.		Embankment	
A	V	A	V	A	V



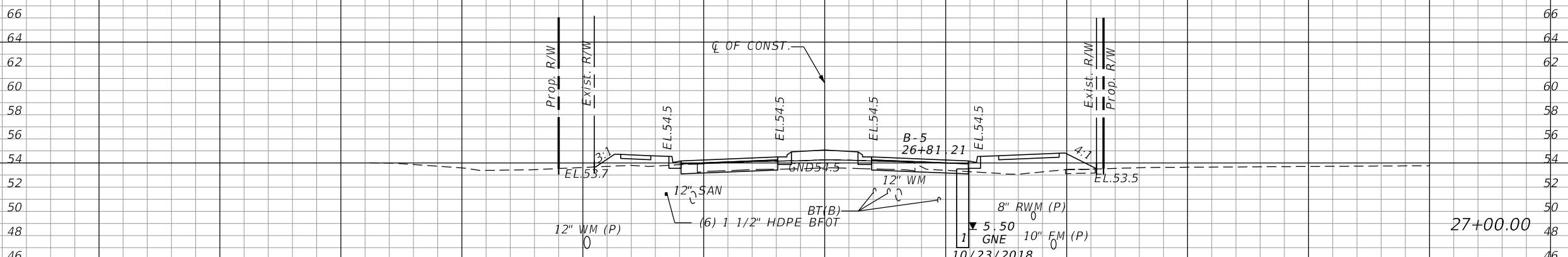
243.1

70.32

171.9

22.48

140 160



1" = 20' Horizontal
1" = 10' Vertical

140 120 100 80 60 40 20 0 20 40 60 80 100 120

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

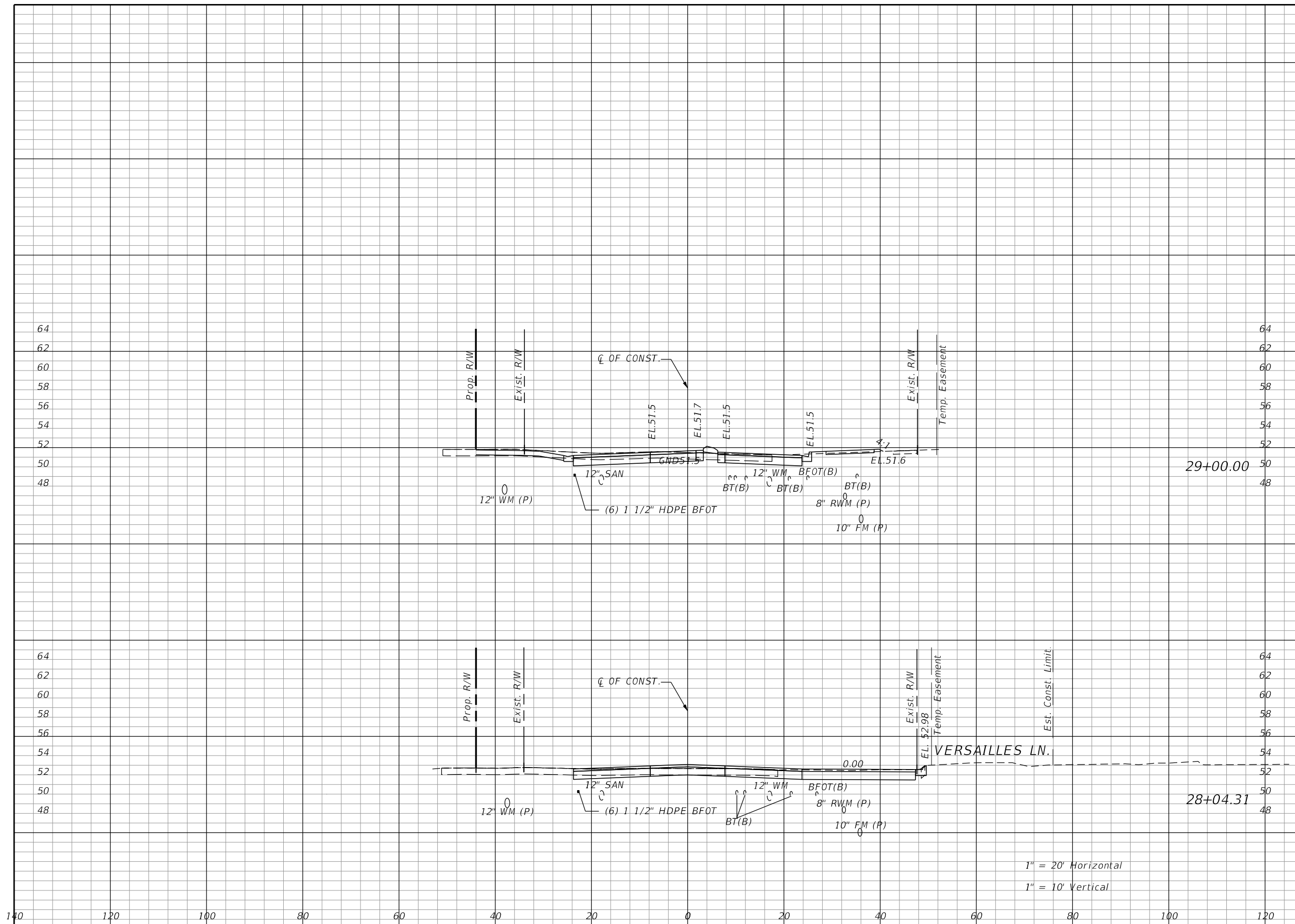
ROADWAY CROSS-SECTIONS

SHEET NO.
183

Regular		Exc.		Embankment	
A	V	A	V	A	V

214.0 50.8

60.95 1.11



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS

SHEET NO.
184



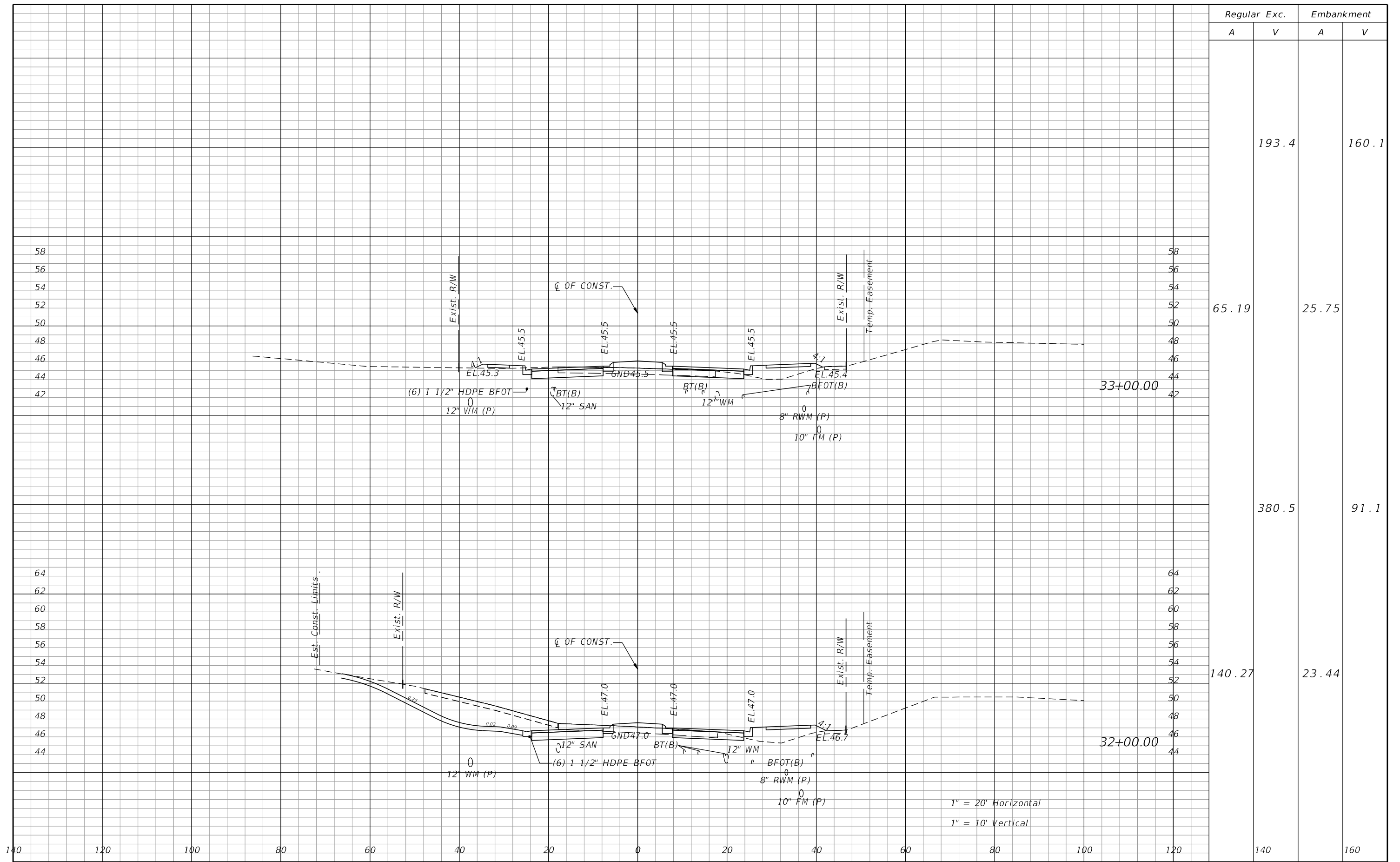
Regular		Exc.		Embankment	
A	V	A	V	A	V
			372.0		98.3
60.62		29.63			
		213.4			103.7
54.62		26.34			

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS	SHEET NO. 185
-------------------------------	-------------------------

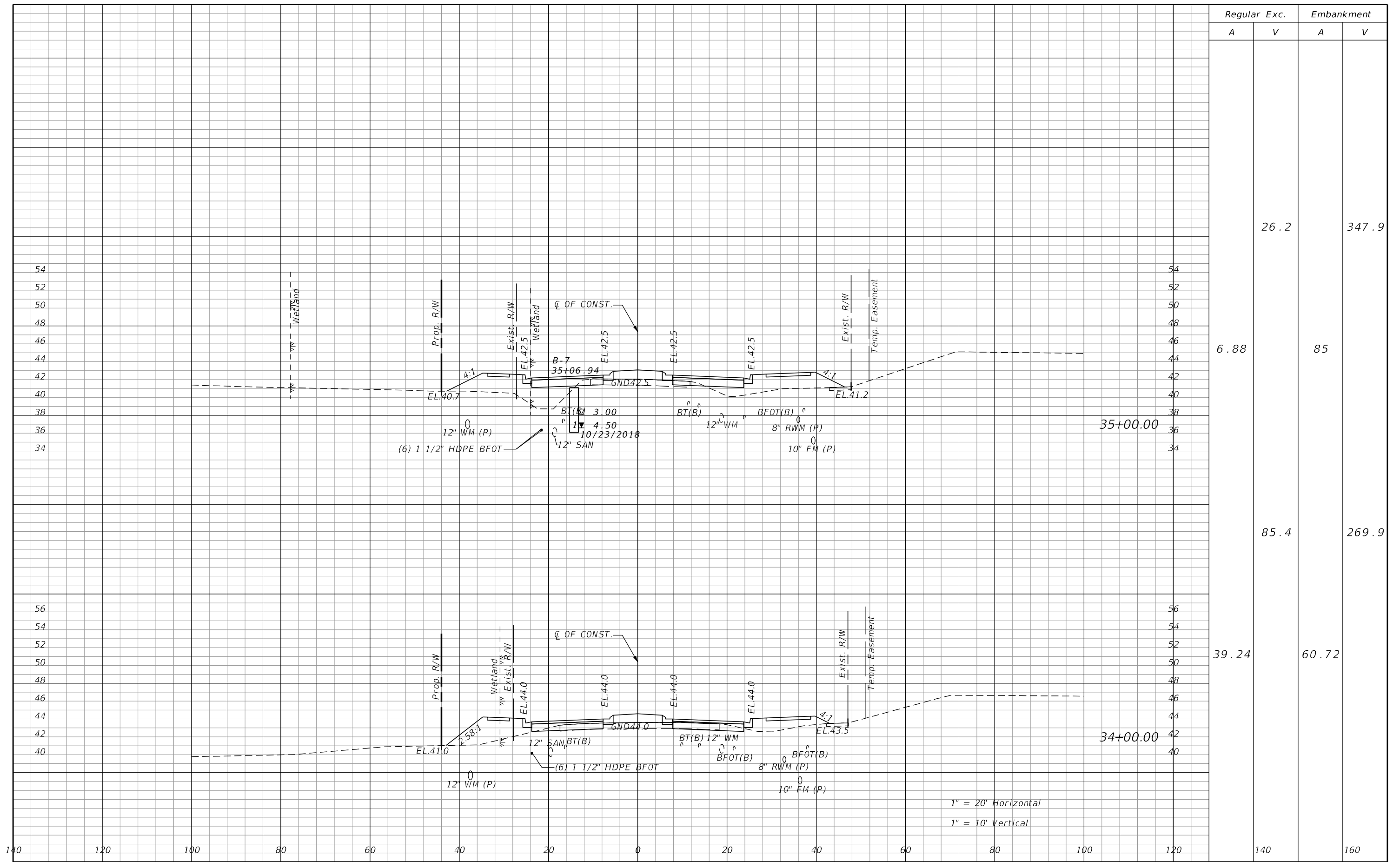


REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		186



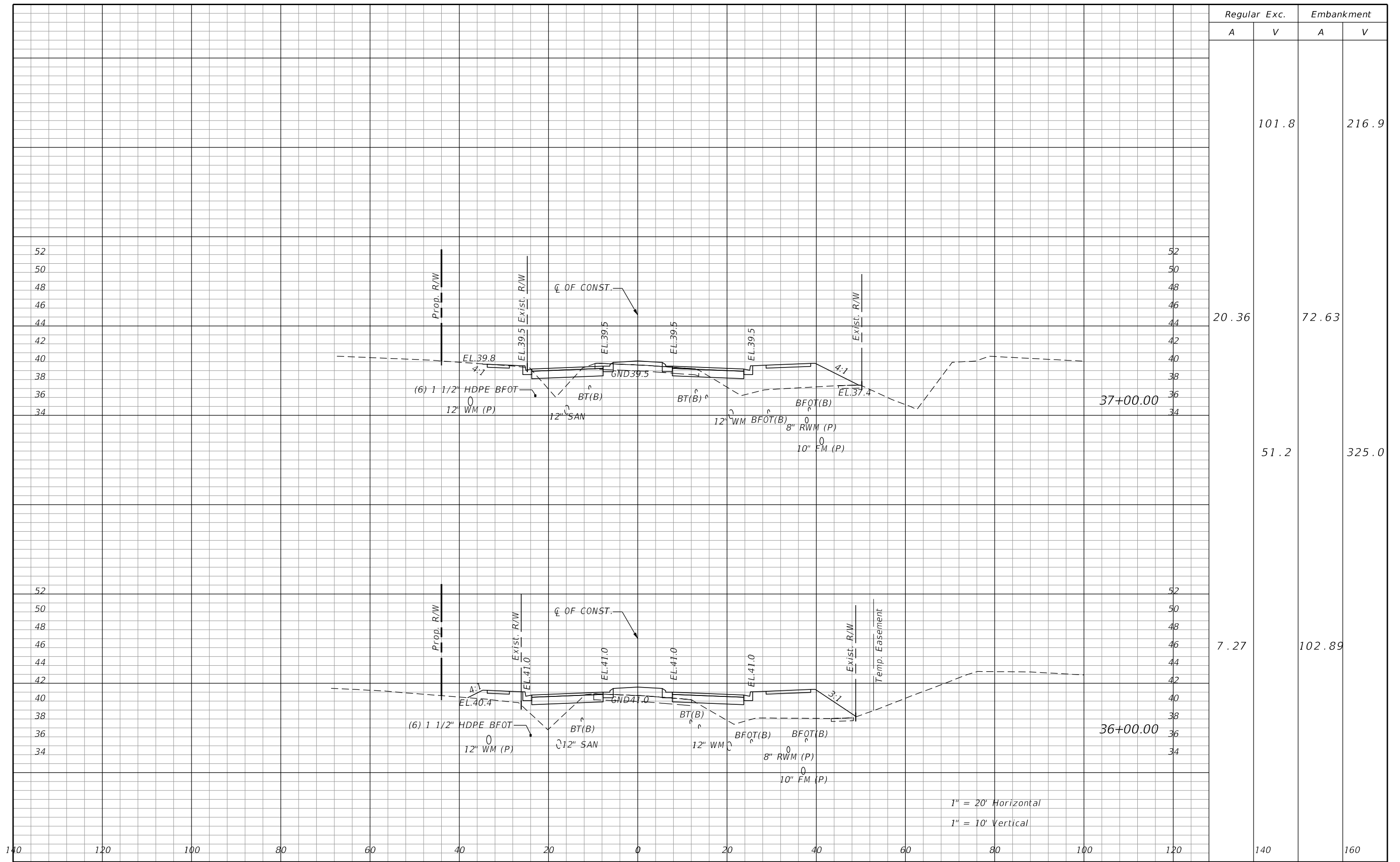
Regular		Exc.		Embankment	
A	V	A	V	A	V
			26.2		347.9
6.88			85		
		85.4			269.9
39.24			60.72		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		187



Regular		Exc.		Embankment	
A	V	A	V	A	V
			101.8		216.9
20.36		72.63			
			51.2		325.0
7.27		102.89			

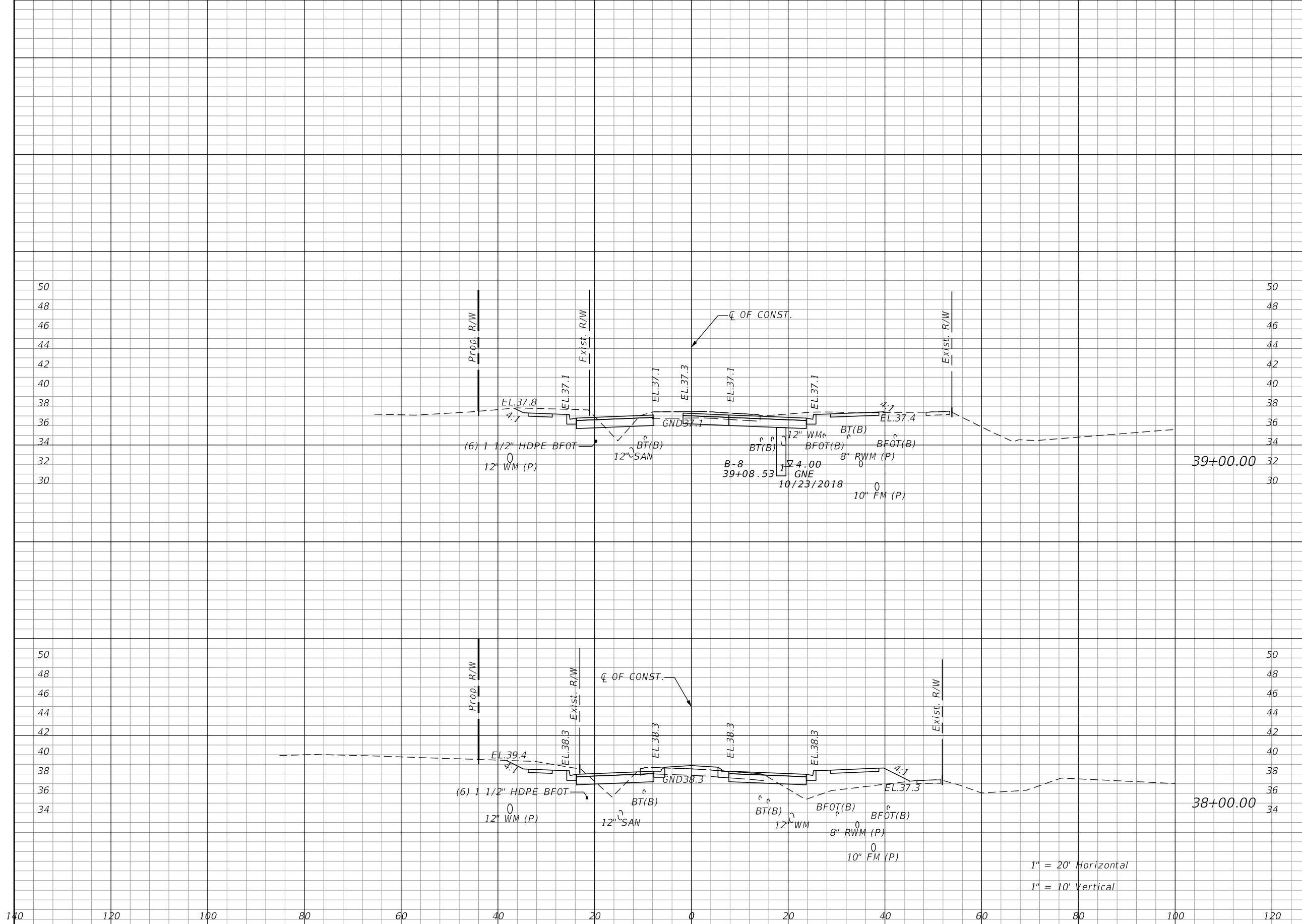
1" = 20' Horizontal
1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		188



Regular		Exc.		Embankment	
A	V	A	V	A	V
			183.6		81.7
63.69			3.85		
			182.0		89.5
34.59			44.48		

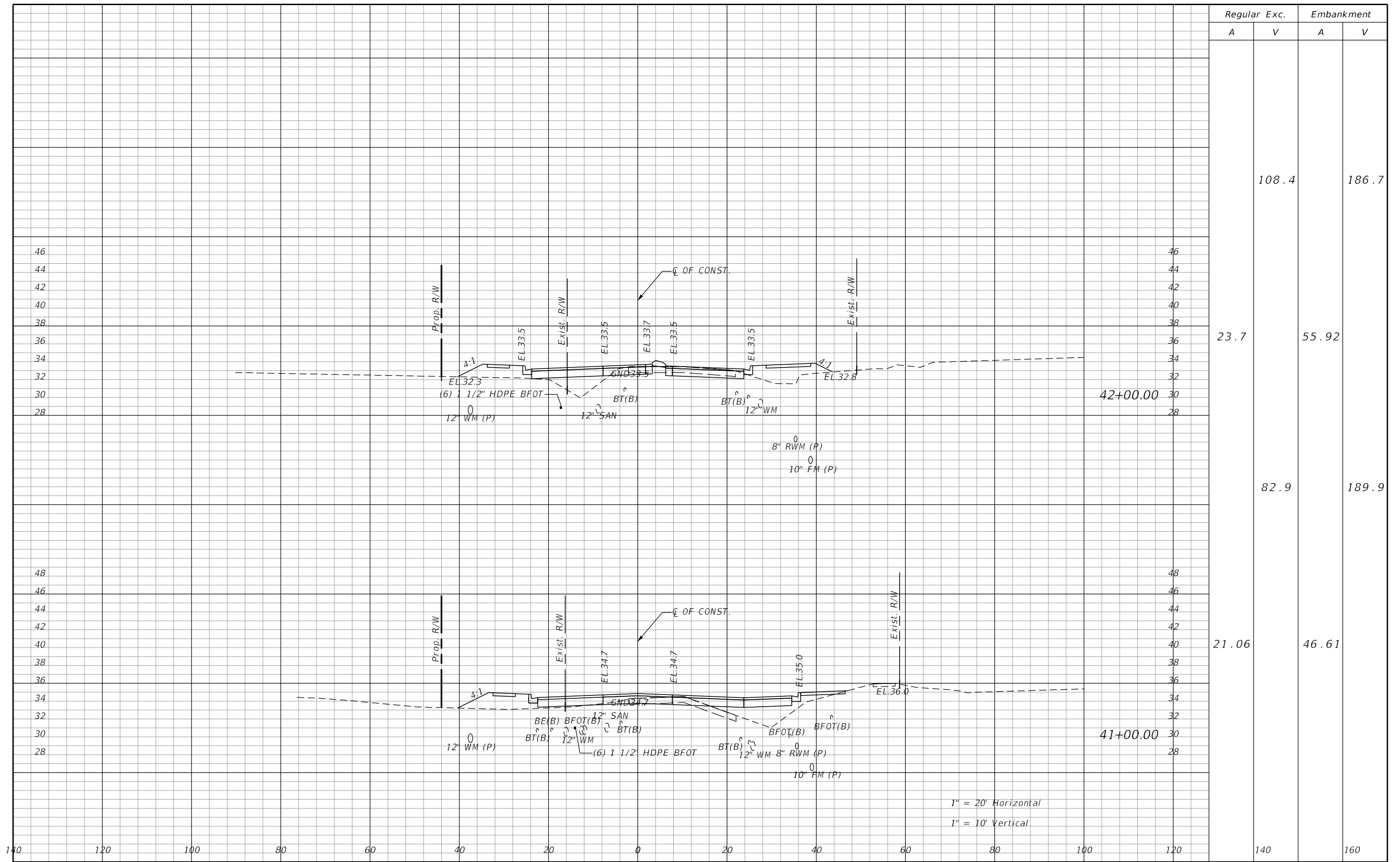
1" = 20' Horizontal
1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
PRELIMINARY NOT FOR CONSTRUCTION			

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		189



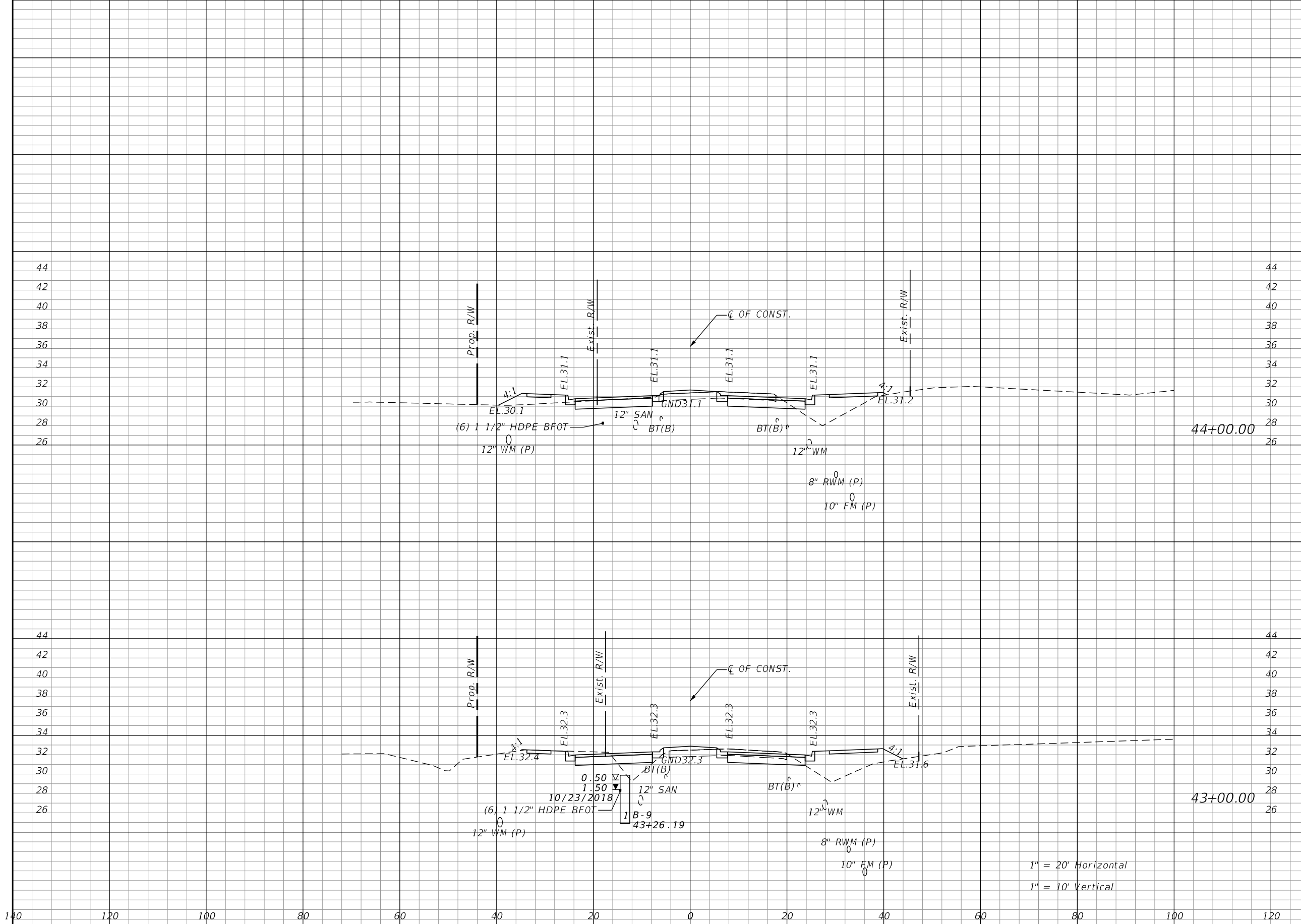
Regular		Exc.		Embankment	
A	V	A	V	A	V
			108.4		186.7
23.7			55.92		
		82.9			189.9
21.06			46.61		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		191



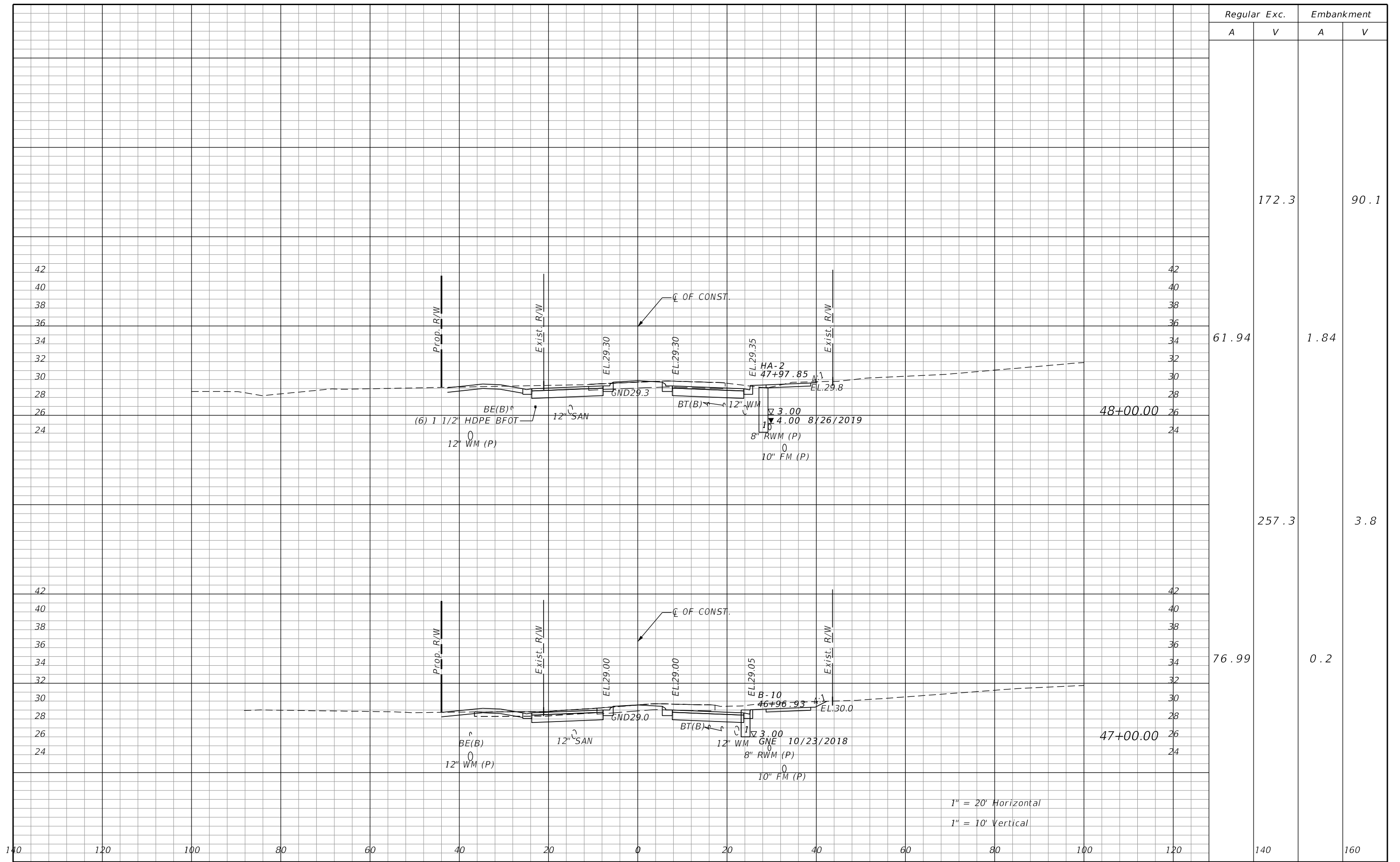
Regular		Exc.		Embankment	
A	V	A	V	A	V
			126.2		139.1
34.83				37.42	
			129.0		152.4
34.82				44.87	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		192



Regular		Exc.		Embankment	
A	V	A	V	A	V
			172.3		90.1
61.94			1.84		
			257.3		3.8
76.99			0.2		

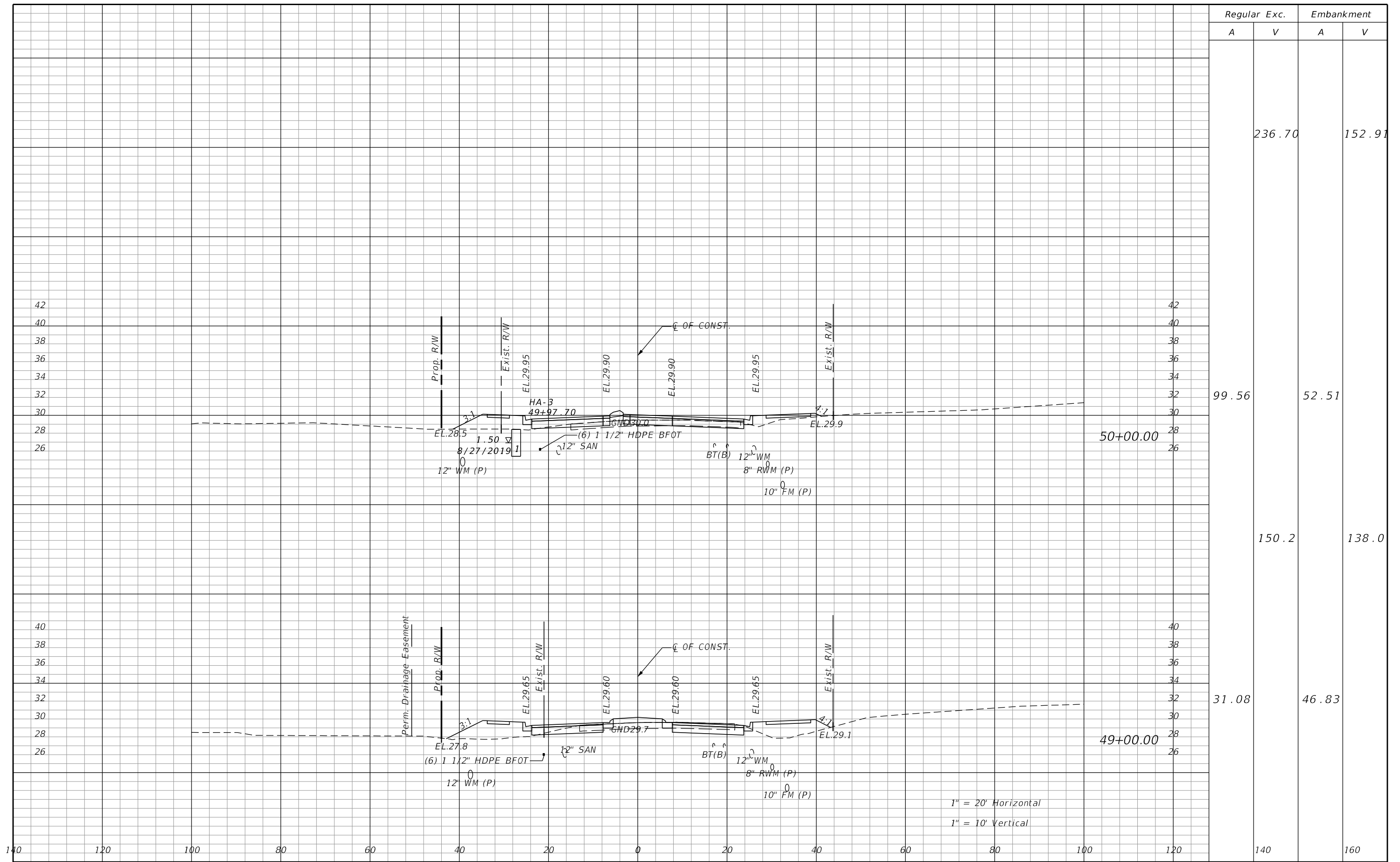
1" = 20' Horizontal
 1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
 P.E. LICENSE NUMBER 74741
 JMT - JOHNSON, MIRMIRAN & THOMPSON
 615 CRESCENT EXECUTIVE COURT, SUITE 106
 LAKE MARY, FL 32746
 CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		194



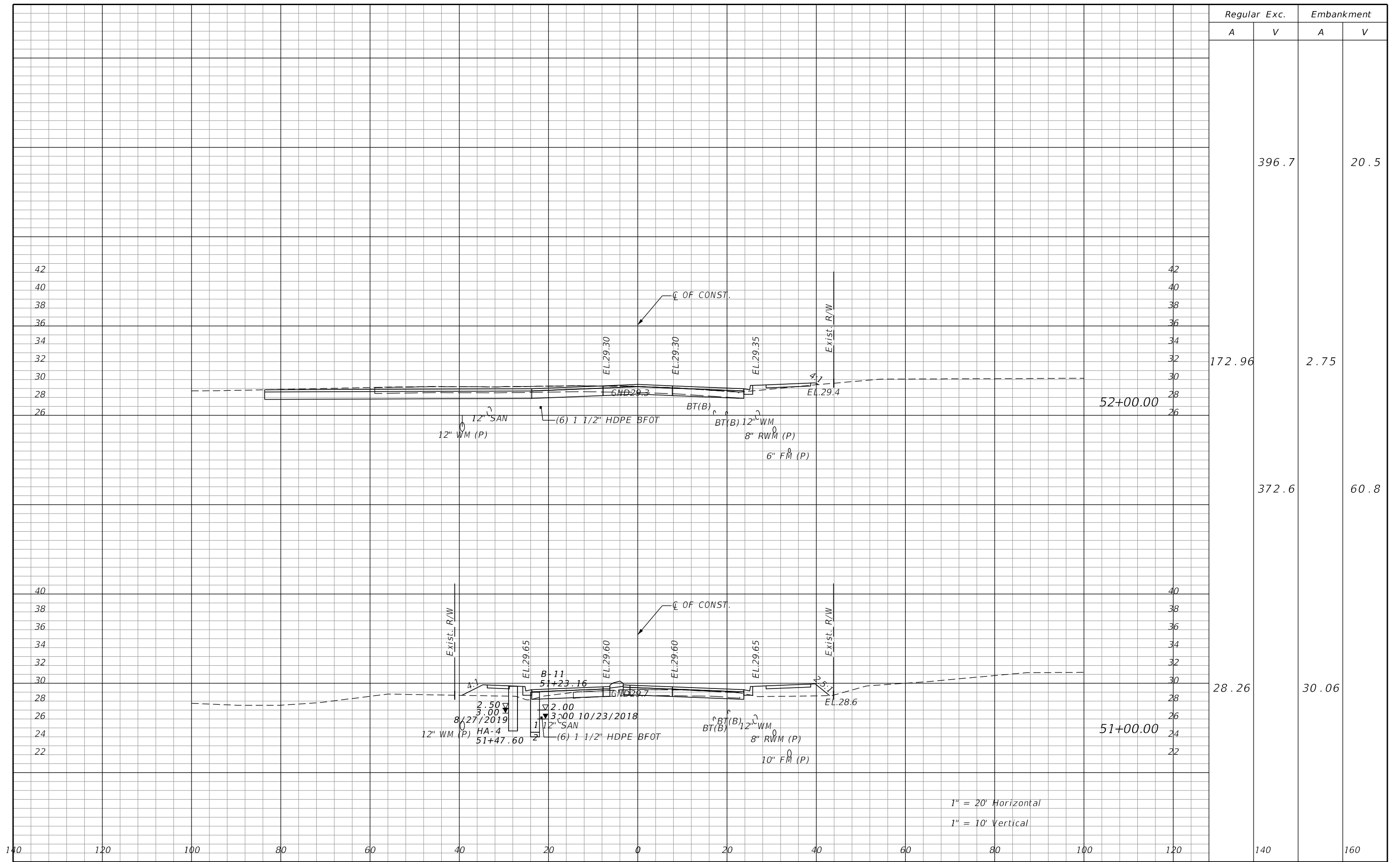
Regular		Exc.		Embankment	
A	V	A	V	A	V
			236.70		152.91
99.56				52.51	
		150.2			138.0
31.08				46.83	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		195



Regular		Exc.		Embankment	
A	V	A	V	A	V
			396.7		20.5
	172.96		2.75		
			372.6		60.8
	28.26		30.06		

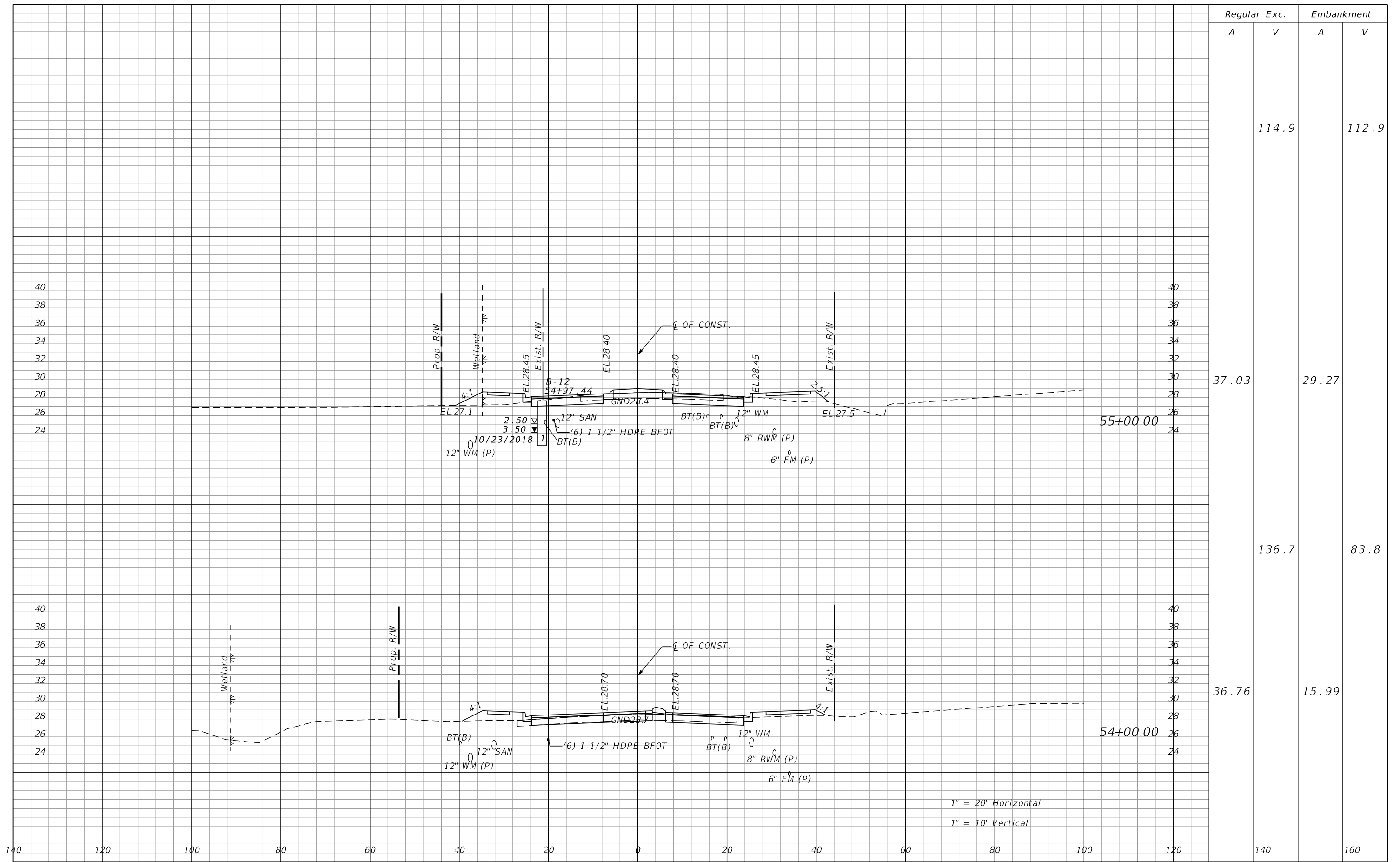
1" = 20' Horizontal
1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		196



Regular		Exc.		Embankment	
A	V	A	V	A	V
			114.9		112.9
37.03			29.27		
		136.7			83.8
36.76			15.99		

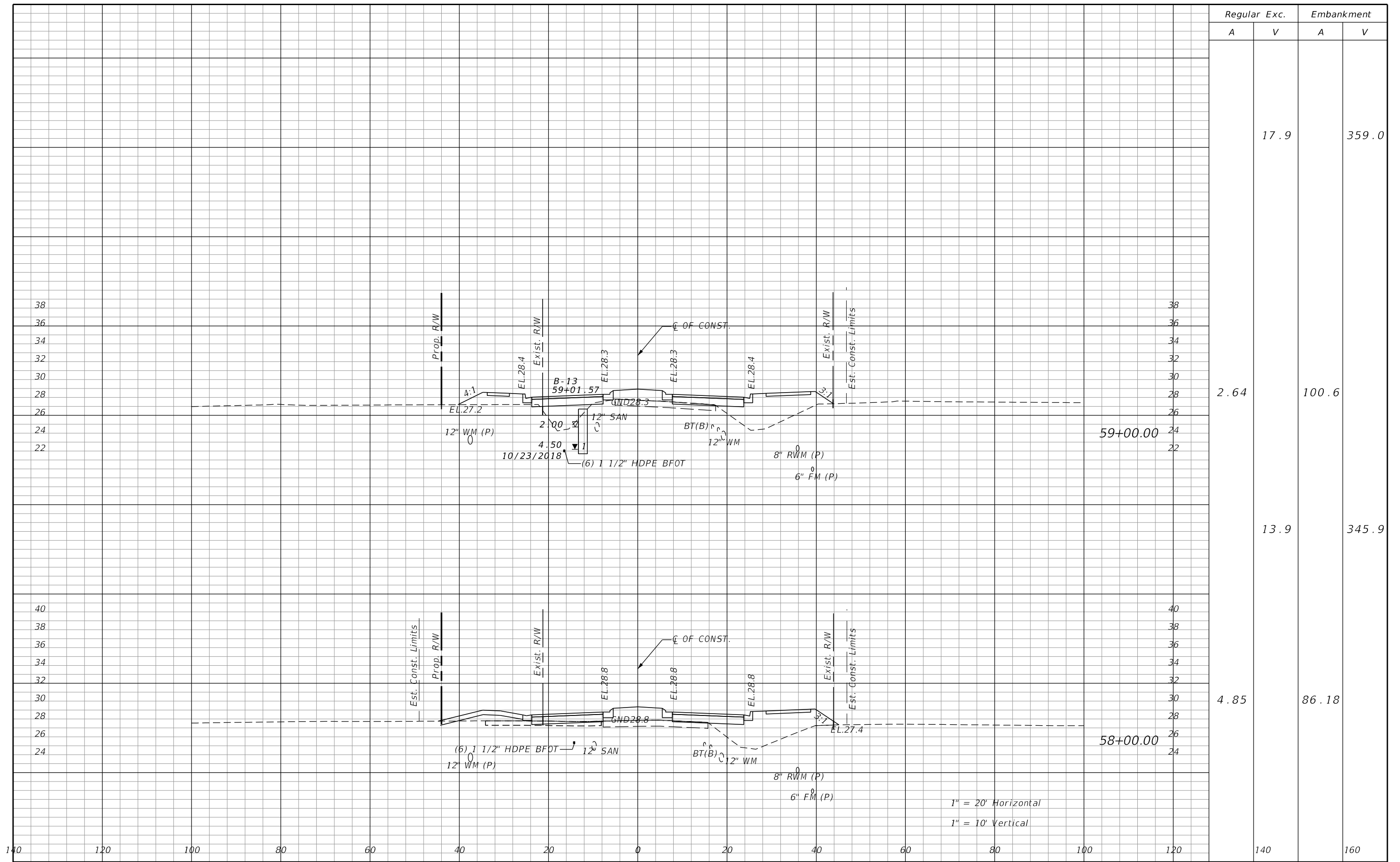
1" = 20' Horizontal
1" = 10' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		198



Regular		Exc.		Embankment	
A	V	A	V	A	V
			17.9		359.0
2.64				100.6	
			13.9		345.9
4.85				86.18	

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
	PRELIMINARY NOT FOR CONSTRUCTION		

JASON R. FLICK, P.E.
P.E. LICENSE NUMBER 74741
JMT - JOHNSON, MIRMIRAN & THOMPSON
615 CRESCENT EXECUTIVE COURT, SUITE 106
LAKE MARY, FL 32746
CERTIFICATE OF AUTHORIZATION NO.: 5917

SEMINOLE COUNTY PUBLIC WORKS		
ROAD NO.	COUNTY	SEMINOLE COUNTY CIP
CR 431	SEMINOLE	01785303

ROADWAY CROSS-SECTIONS		SHEET NO.
		200

