



CONTRACT DRAWINGS
44TH AVENUE EAST
FROM 19TH STREET COURT EAST TO 30TH STREET EAST
FOR
MANATEE COUNTY, FLORIDA
COUNTY PROJECT NUMBER: 6045660

RELATED STANDARDS AND SPECIFICATIONS

DESCRIPTION

- A. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2015) Δ
- B. MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FLORIDA GREEN BOOK), (2011).
- C. FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (JANUARY 2015) Δ
- D. AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES, (2004),
- E. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009),
- F. CHAPTER 14-96 AND 14-97, FLORIDA ADMINISTRATIVE CODE RULE FOR FDOT CONNECTION PERMIT.
- G. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMITTING (ERP) INFORMATION MANUAL, LATEST EDITION
- H. MANATEE COUNTY HIGHWAY, TRAFFIC AND STORM WATER STANDARDS, (2007).

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

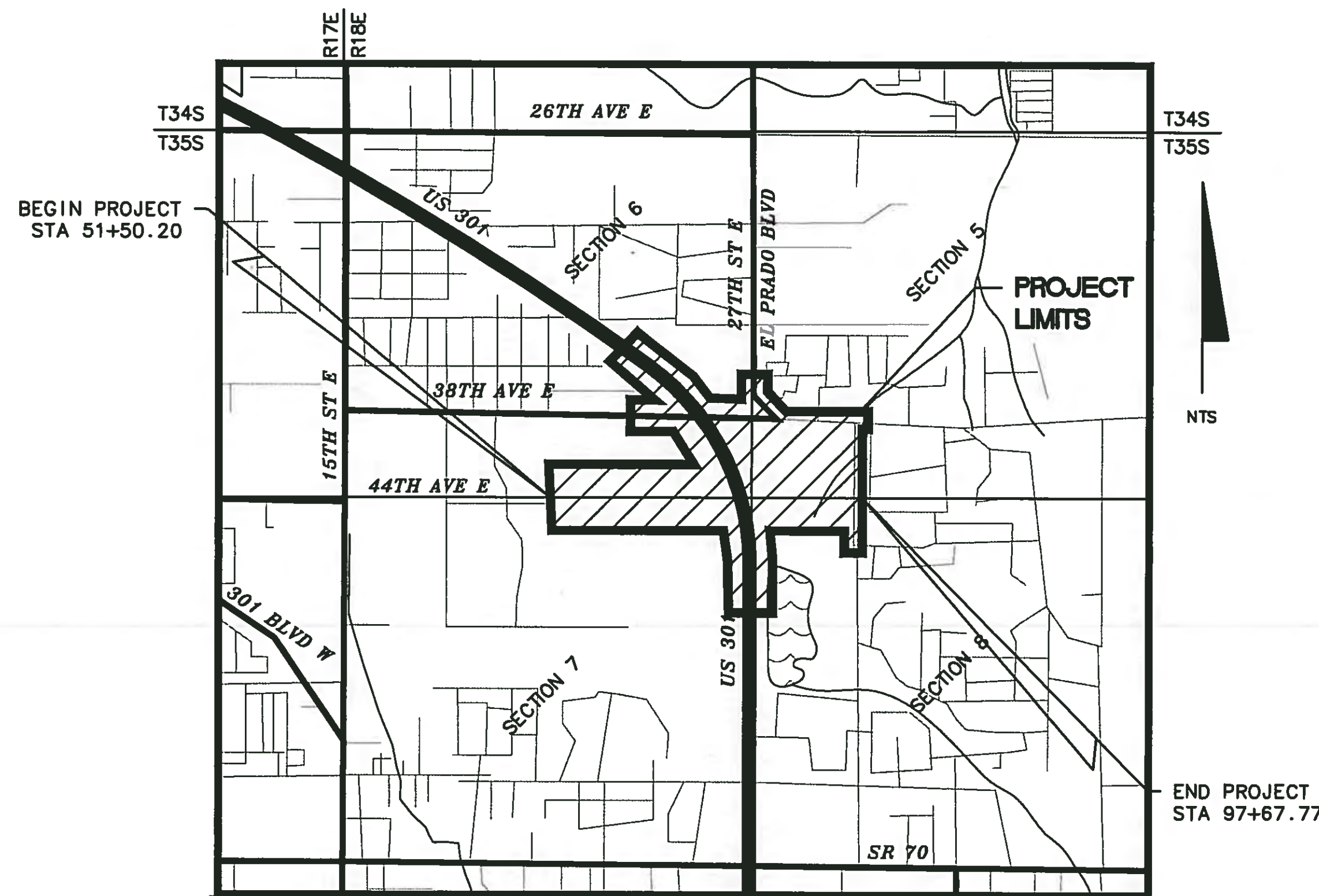
SUMMARY OF REVISIONS

DATE	DESCRIPTION
8/5/15	Δ UPDATED STANDARDS AND SPECIFICATIONS TO 2015

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

LENGTH OF PROJECT *		
	LINEAL FEET	MILES
44TH AVENUE EAST	4562 LF	0.864
30TH STREET EAST	3205 LF	0.607
38TH AVENUE EAST	771 LF	0.146
29TH STREET EAST	322 LF	0.164
US 301 (TURN LANES)	3300 LF	0.625
GROSS LENGTH OF PROJECT	12160 LF	2.408

ROAD CLASSIFICATION: 44TH AVENUE EAST - URBAN ARTERIAL
 ROAD CLASSIFICATION: US 301 - URBAN ARTERIAL
 ROAD CLASSIFICATION: 30TH STREET EAST - URBAN LOCAL
 ROAD CLASSIFICATION: 38TH AVENUE EAST - URBAN LOCAL
 ROAD CLASSIFICATION: 29TH STREET EAST - URBAN LOCAL
 ROAD CLASSIFICATION: 27TH STREET EAST - URBAN LOCAL
 DESIGN SPEED: 45 (44TH AVENUE EAST)



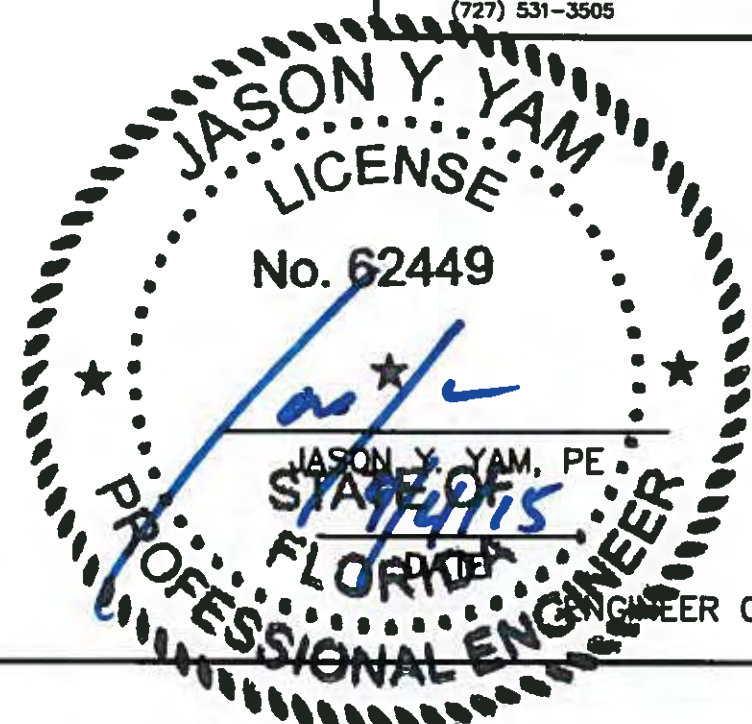
COMPONENTS OF CONTRACT PLANS SET

- ROADWAY PLANS
- SIGNALIZATION PLANS
- LIGHTING PLANS
- POTABLE WATER MAIN PLANS

INDEX OF ROADWAY PLANS

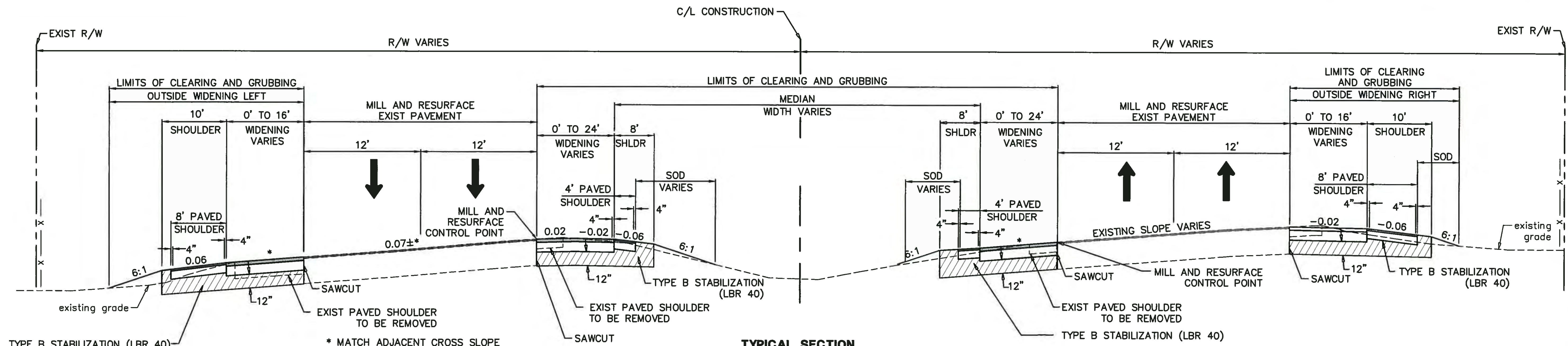
SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2	SURVEY NOTES
3	LEGEND AND ABBREVIATIONS
4-6	EXISTING DRAINAGE MAP
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Δ 9A-9B	SUMMARY OF DRAINAGE STRUCTURES
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15-16	GENERAL NOTES
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141-146	MAINTENANCE OF TRAFFIC
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163	SPECIAL DETAILS

PLANS PREPARED BY:



62449
 FL. LICENSE NO.

DATE: 12/15/08 TIME: 09:49 SCALE: 1 FILENAME: J:\00193\00193001\13\MS\MUNICIPAL\ROADWAY\CY1930013-1.DWG



**TYPICAL SECTION
U.S. HIGHWAY 301**

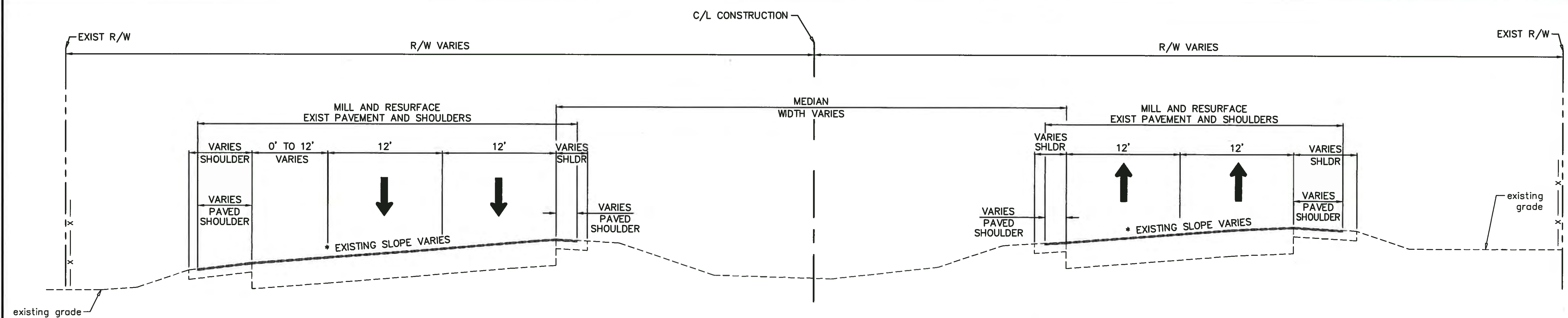
NORTHBOUND
STA. 394+53.29 TO 398+20.00
SOUTHBOUND
STA. 405+60.00 TO 410+47.76
DESIGN SPEED 55 MPH
N.T.S.

MILLING
MILL EXISTING ASPHALT WHERE SHOWN
(2-3/4" AVG DEPTH)

RESURFACING
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D (2")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)

WIDENING
OPTIONAL BASE GROUP 9 (FOR THICKNESS SEE BELOW) WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D (4")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)
BASE COURSE 6" TYPE B-12.5

SHOULDER PAVEMENT
OPTIONAL BASE GROUP 1 (FOR THICKNESS SEE BELOW) WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D (2")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)
BASE COURSE 4" TYPE B-12.5



**TYPICAL SECTION
U.S. HIGHWAY 301**

NORTHBOUND
STA. 393+55.96 TO 394+53.29
STA. 405+60.00 TO 409+00.48
SOUTHBOUND
STA. 393+55.96 TO 398+20.00
STA. 410+47.76 TO 415+08.25
DESIGN SPEED 55 MPH
N.T.S.

MILLING
MILL EXISTING ASPHALT WHERE SHOWN
(2-3/4" AVG DEPTH)

RESURFACING
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D (2")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)

SHOULDER MILLING
MILL EXISTING ASPHALT WHERE SHOWN
(2-3/4" AVG DEPTH)

SHOULDER RESURFACING
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D (2")
FRICTION COURSE FC-5 (3/4")(RUBBER)

NO.	DESCRIPTION	BY	DATE
1	REVISED DEPTHS		8/24/15

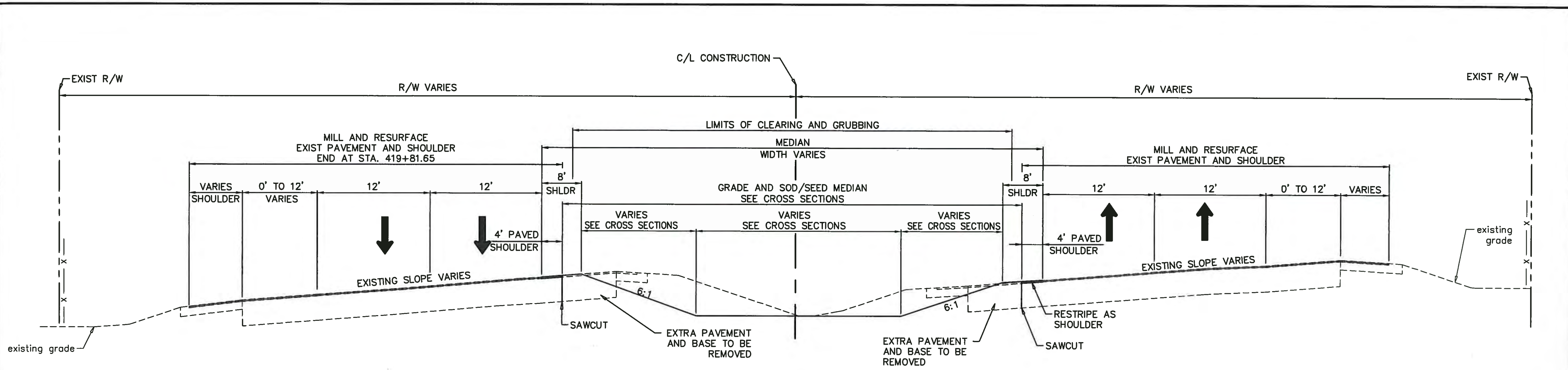
MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**



TYPICAL SECTIONS

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	12



**TYPICAL SECTION
U.S. HIGHWAY 301**

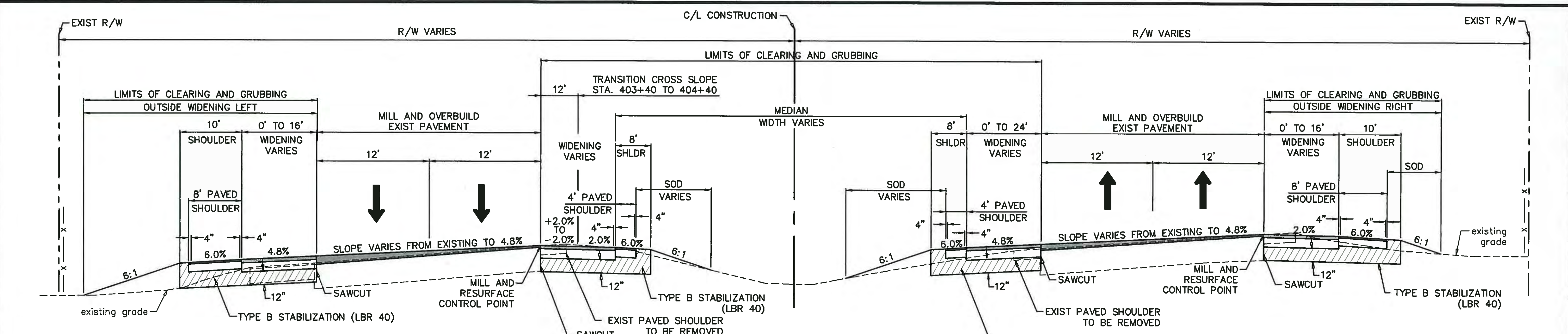
NORTHBOUND
STA. 409+00.48 TO 420+10.00
SOUTHBOUND
STA. 415+08.25 TO 426+11.96
DESIGN SPEED 55 MPH
N.T.S.

MILLING
MILL EXISTING ASPHALT WHERE SHOWN
(2-3/4" AVG DEPTH)

RESURFACING
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D) (2")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)

SHOULDER MILLING
MILL EXISTING ASPHALT WHERE SHOWN
(2-3/4" AVG DEPTH)

SHOULDER RESURFACING
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D) (2")
FRICTION COURSE FC-5 (3/4")(RUBBER)



**TYPICAL SECTION
U.S. HIGHWAY 301**

NORTHBOUND
STA. 398+20.00 TO 405+60.00
SOUTHBOUND
STA. 398+20.00 TO 405+60.00
DESIGN SPEED 55 MPH
N.T.S.

MILLING
MILL EXISTING ASPHALT WHERE SHOWN
(3/4" AVG DEPTH)
RESURFACING
FRICTION COURSE FC-5 (3/4")(RUBBER)

WIDENING
OPTIONAL BASE GROUP 9 (FOR THICKNESS SEE BELOW) WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D) (4")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)
BASE COURSE 6" TYPE B-12.5

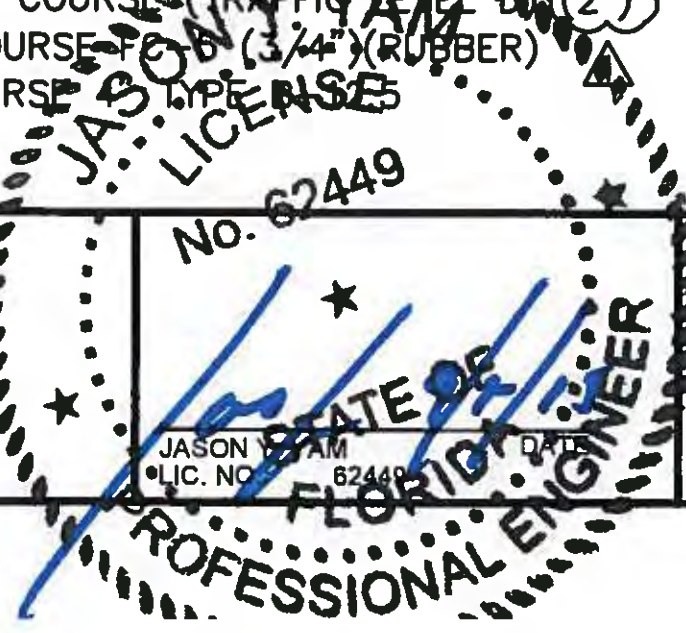
SHOULDER PAVEMENT
OPTIONAL BASE GROUP 1 (FOR THICKNESS SEE BELOW) WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D) (2")
AND FRICTION COURSE FC-5 (3/4")(RUBBER)
BASE COURSE 6" TYPE B-12.5

SUPERELEVATION OVERBUILD PAVEMENT
MILL EXISTING ASPHALT WHERE SHOWN
(3/4" AVG DEPTH)
TYPE SP STRUCTURAL COURSE (TRAFFIC LEVEL D) (VARIABLE DEPTH)
AND FRICTION COURSE FC-5 (3/4")(RUBBER)

NO.	DESCRIPTION	BY	DATE
1	REVISED DEPTHS		8/24/15

MANATEE COUNTY

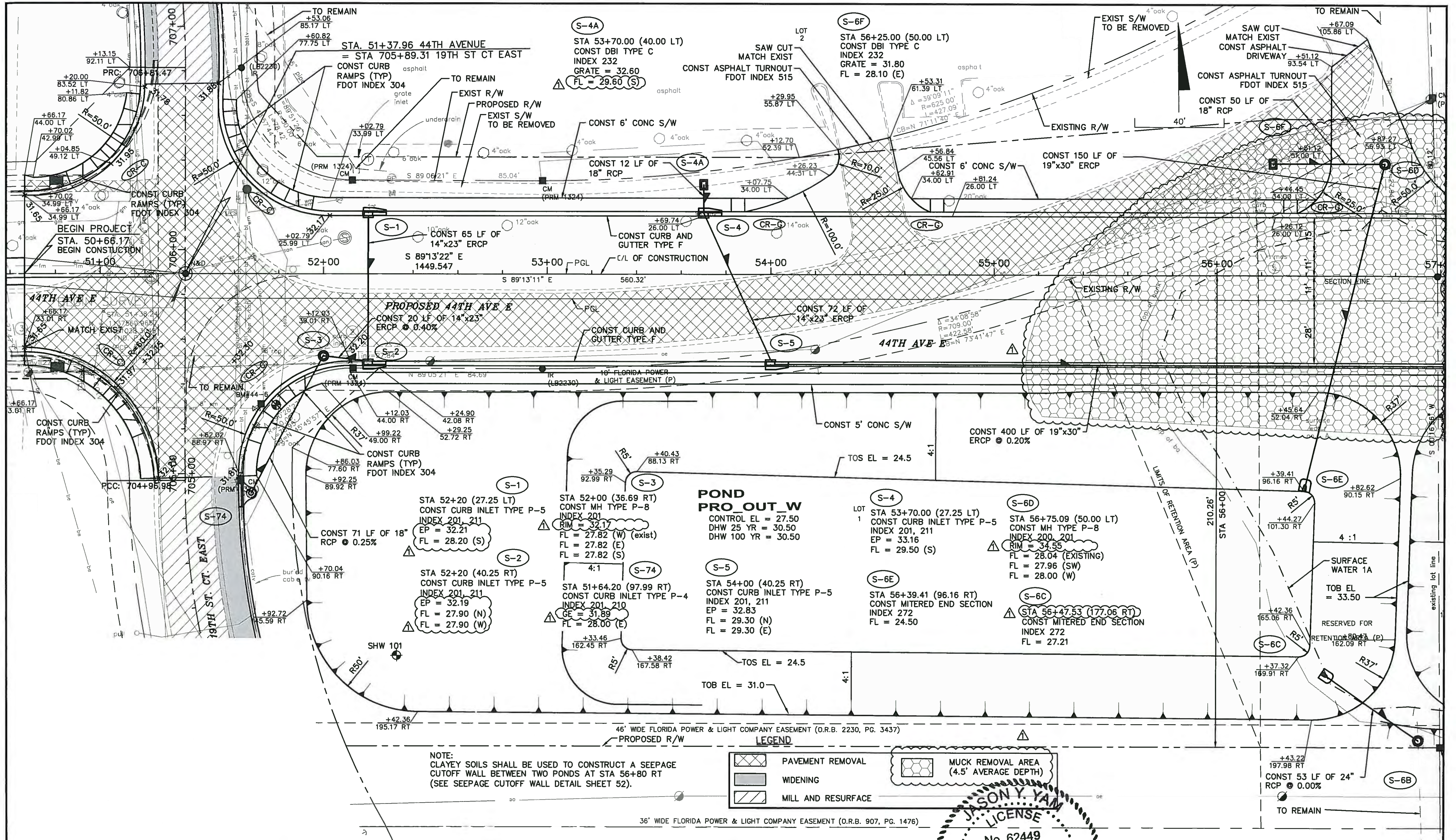
**44TH AVENUE EAST
ROADWAY EXTENSION**



DESIGNED JCC
DRAWN JCC
Q.C.
APPROVED

TYPICAL SECTIONS

PROJECT NO:
00193-001-18
DATE:
6-17-2015
SHEET NO:
13



NO.	DESCRIPTION	BY	DATE
1	LIMITS OF MUCK REMOVAL AND RIM ELEV		8/18/15

MANATEE COUNTY

44TH AVENUE EAST ROADWAY EXTENSION

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380 PARK PLACE BLVD, STE 300, CLEARWATER, FL
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STATE OF FLORIDA
JASON Y. YAM
LICENSE No. 62449
PROFESSIONAL ENGINEER

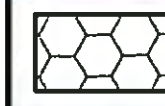
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APPROVED	

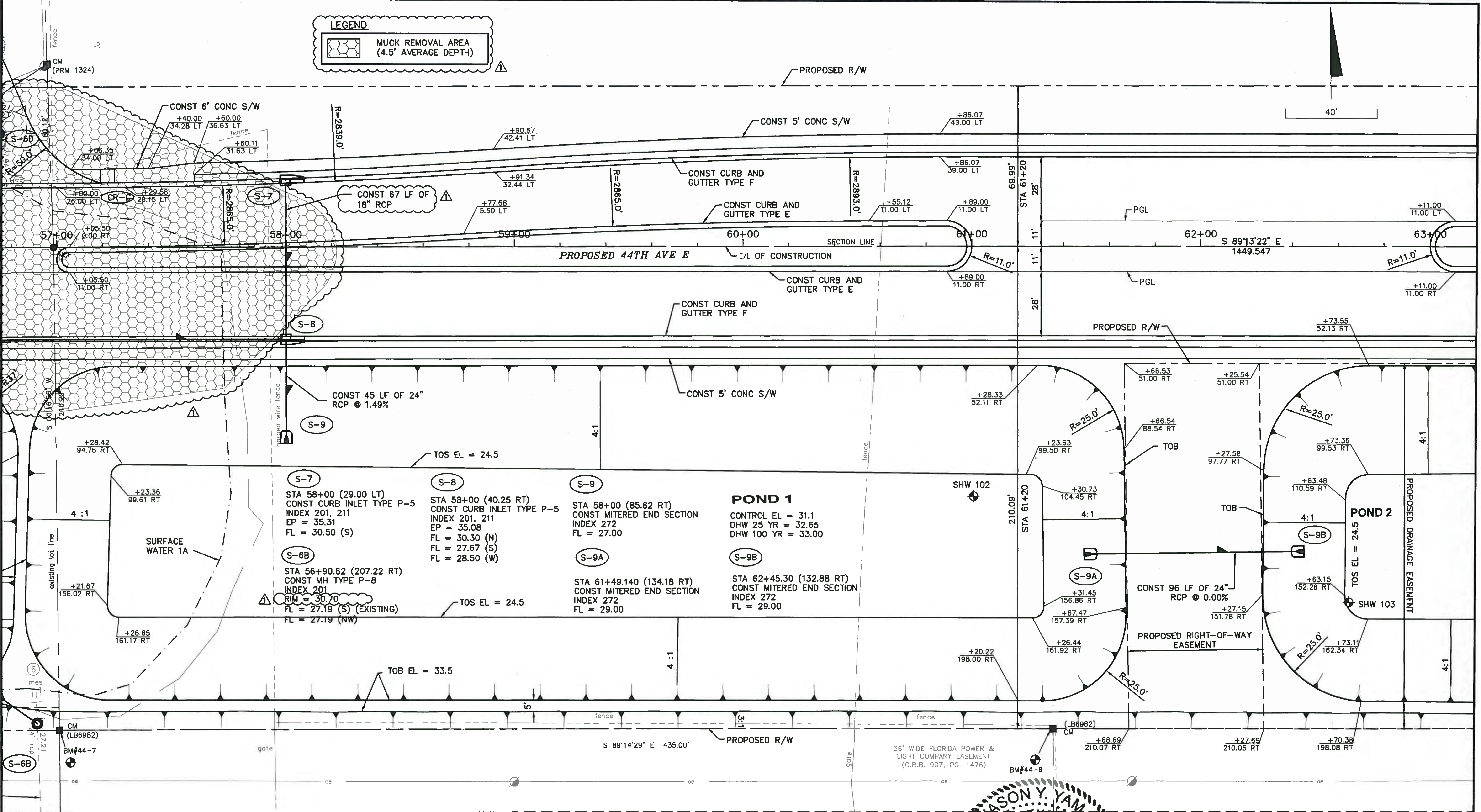
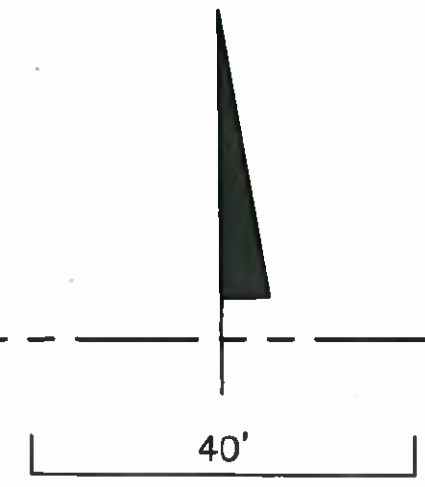
PLAN
44TH AVENUE EAST

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	17

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LEGEND

 MUCK REMOVAL AREA (4.5' AVERAGE DEPTH)



NOTE:
CLAYEY SOILS SHALL BE USED TO CONSTRUCT A SEEPAGE CUTOFF WALL BETWEEN TWO PONDS AT STA 56+80 RT (SEE SEEPAGE CUTOFF WALL DETAIL SHEET 52).

NO.	DESCRIPTION	BY	DATE
1	LIMITS OF MUCK REMOVAL AND RIM ELEV		8/18/15

MANATEE COUNTY

44TH AVENUE EAST ROADWAY EXTENSION

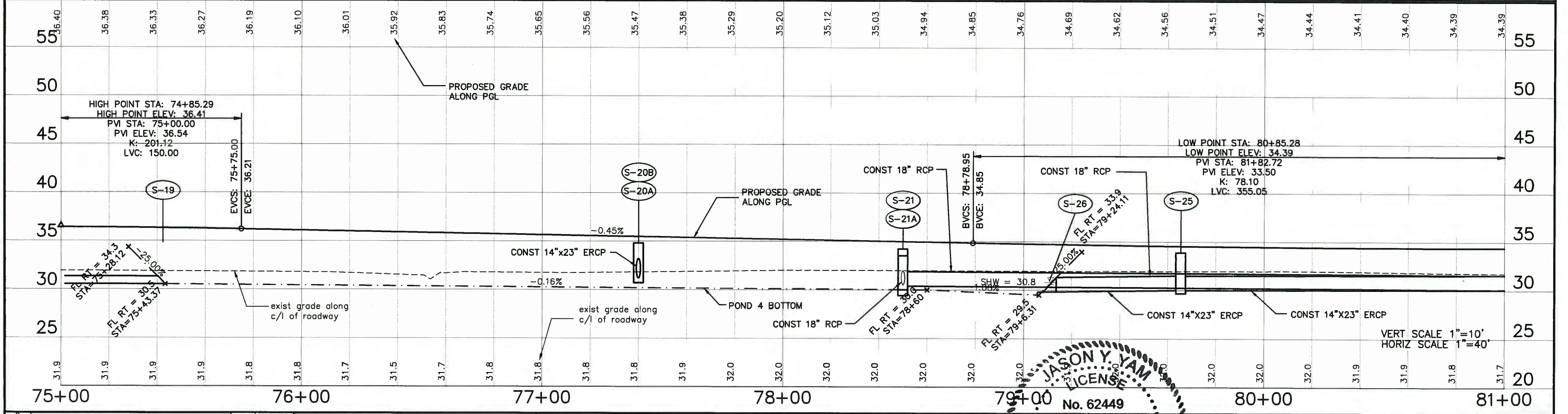
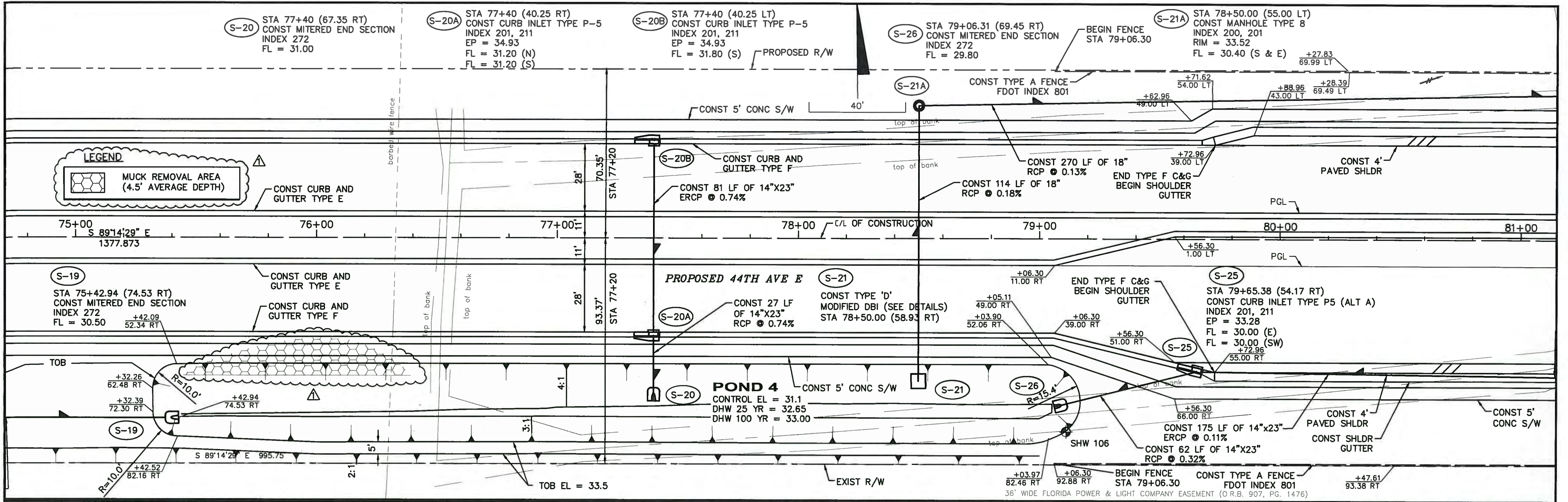
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JASON Y. YAM
LICENSE
No. 62449
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED	JCC
DRAWN	JCC
CHECKED	
APPROVED	

PLAN
44TH AVENUE EAST

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	18



NO.	DESCRIPTION	BY	DATE
1	LIMITS OF MUCK REMOVAL		8/18/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

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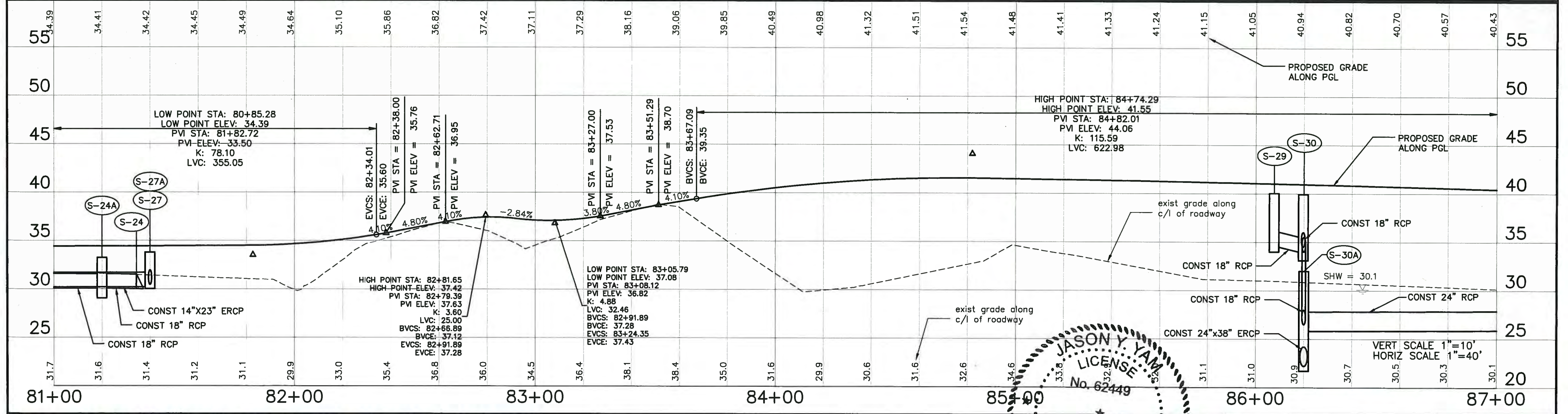
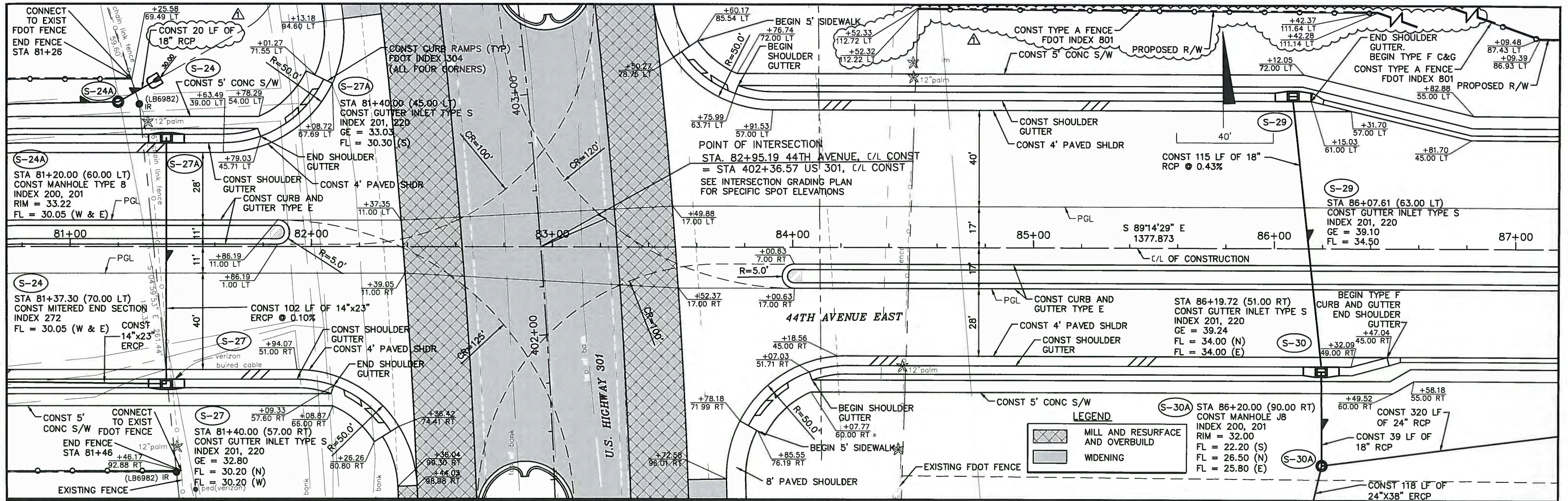
DESIGNED: JCC
DRAWN: JCC
CHECKED: JCC
APPROVED:

**PLAN AND PROFILE
44TH AVENUE EAST**

PROJECT NO: 00193-001-18
DATE: 6-17-2015
SHEET NO: 23



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NO.	DESCRIPTION	BY	DATE
1	ADD PIPE LABEL		8/24/15

MANATEE COUNTY

44TH AVENUE EAST ROADWAY EXTENSION

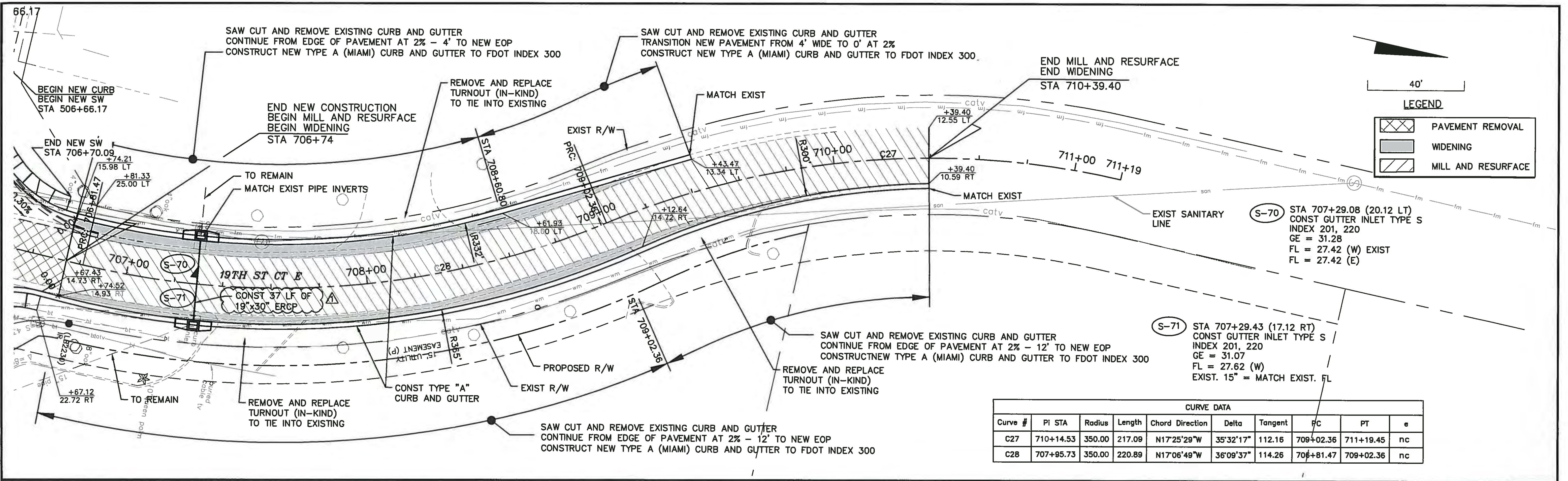
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JASON Y. YAM
 LICENSE
 No. 62449
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

DESIGNED	JCC
DRAWN	JCC
IN CHARGE	JCC
APPROVED	

PLAN AND PROFILE
 44TH AVENUE EAST

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	24



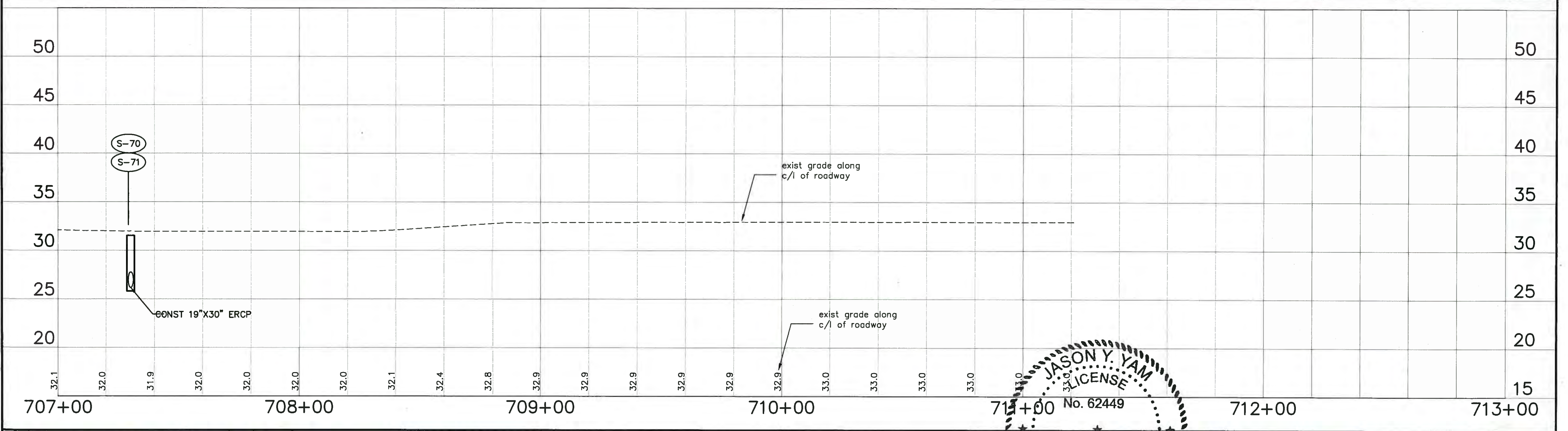
40'

LEGEND

- PAVEMENT REMOVAL
- WIDENING
- MILL AND RESURFACE

CURVE DATA

Curve #	PI STA	Radius	Length	Chord Direction	Delta	Tangent	PC	PT	e
C27	710+14.53	350.00	217.09	N17°25'29"W	35°32'17"	112.16	709+02.36	711+19.45	nc
C28	707+95.73	350.00	220.89	N17°06'49"W	36°09'37"	114.26	706+81.47	709+02.36	nc



NO.	REVISION LABEL	DESCRIPTION	BY	DATE
1	REVISE LABEL			8/18/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

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www.cardno.com Certificate of Authorization No. 25915

JASON Y. YAM
LICENSE
No. 62449
STATE OF FLORIDA
PROFESSIONAL ENGINEER

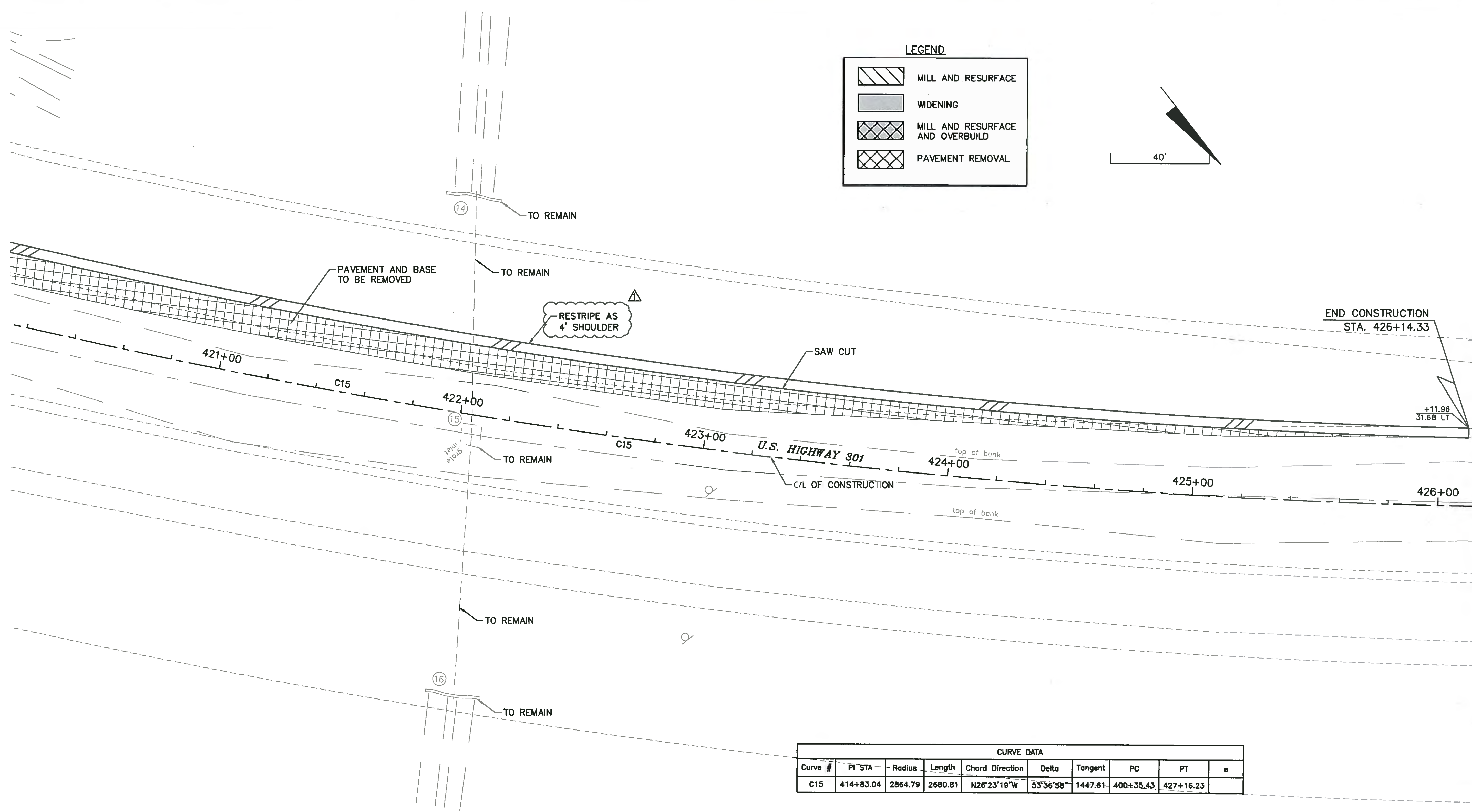
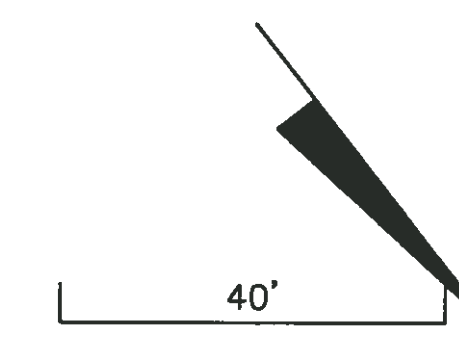
DESIGNED JCC
DRAWN JCC
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**PLAN AND PROFILE
19TH STREET COURT EAST**

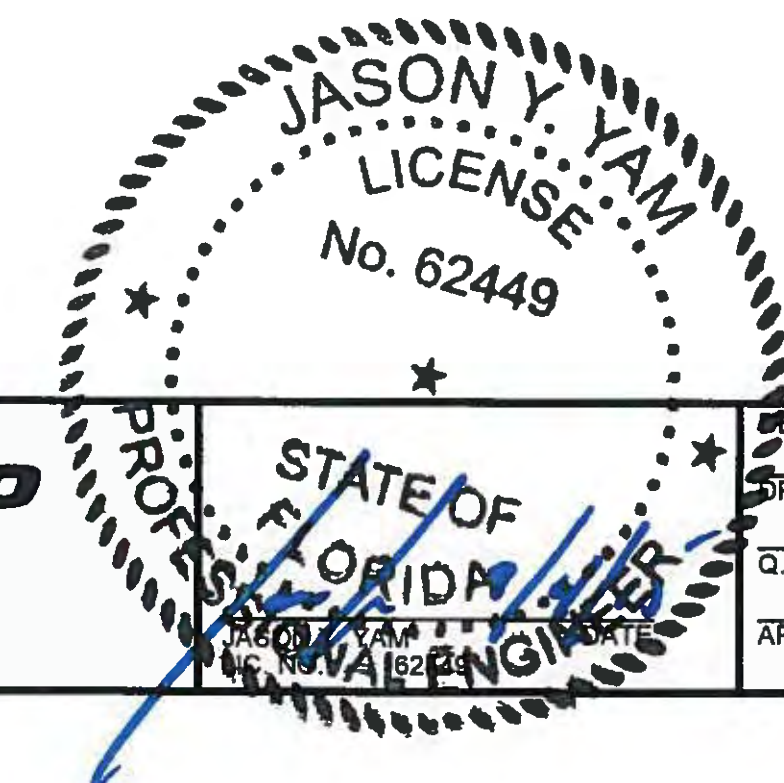
PROJECT NO: 00193-001-18
DATE: 6-17-2015
SHEET NO: 28

LEGEND

	MILL AND RESURFACE
	WDENING
	MILL AND RESURFACE AND OVERBUILD
	PAVEMENT REMOVAL



CURVE DATA									
Curve #	PI STA	Radius	Length	Chord Direction	Delta	Tangent	PC	PT	e
C15	414+83.04	2864.79	2680.81	N26°23'19"W	53°36'58"	1447.61	400+35.43	427+16.23	



NO.	REVISION LABEL	BY	DATE
1	REVISE LABEL		8/24/15

MANATEE COUNTY

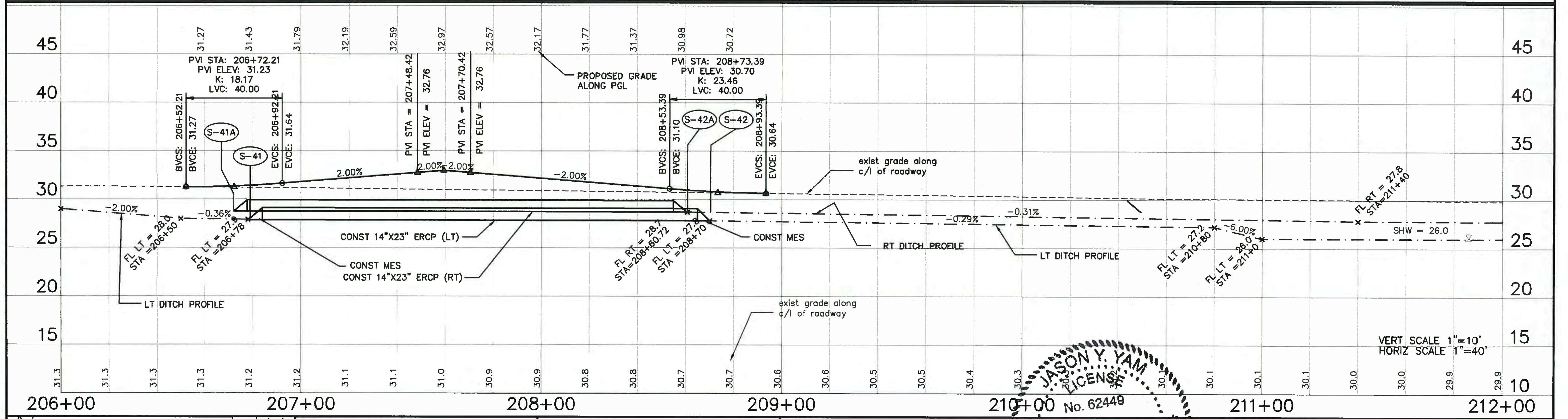
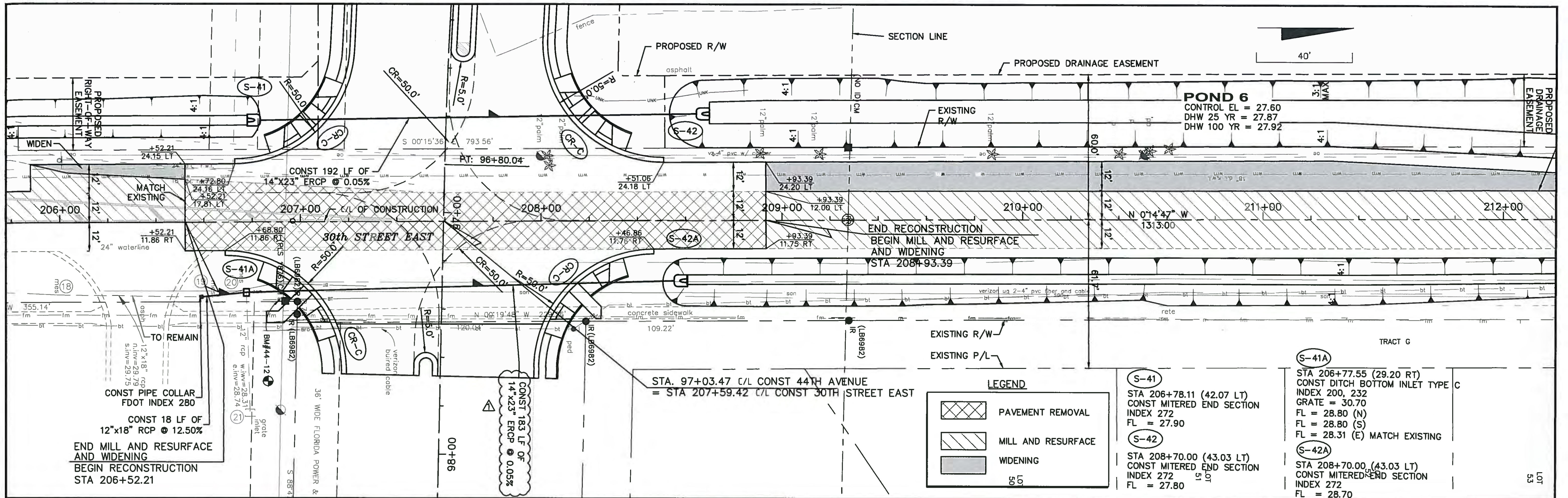
44TH AVENUE EAST ROADWAY EXTENSION

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Q.C.	
APPROVED	

PLAN
US 301

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	34



NO.	DESCRIPTION	BY	DATE
1	REVISED LABELS		8/18/15

MANATEE COUNTY

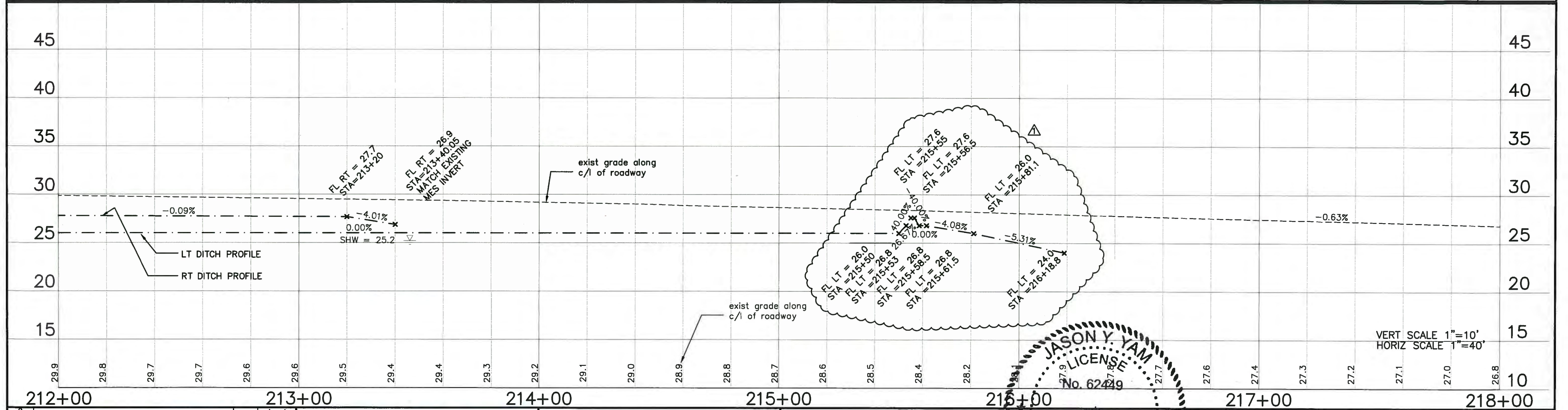
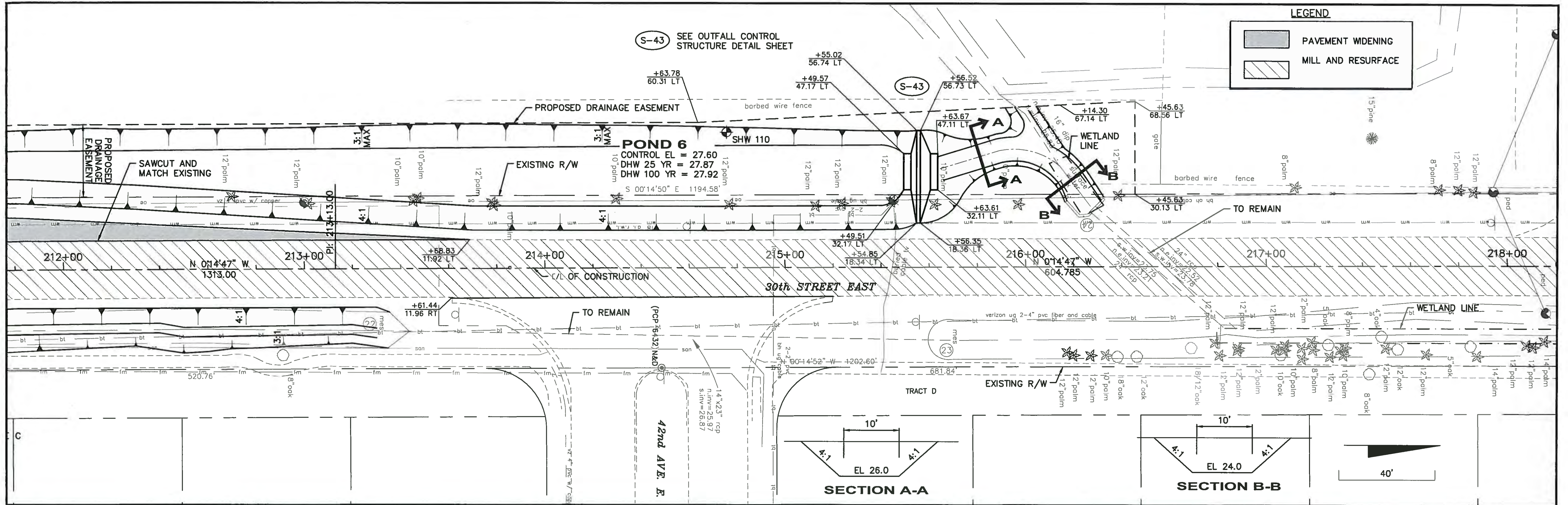
**44TH AVENUE EAST
 ROADWAY EXTENSION**

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**PLAN AND PROFILE
 30TH STREET EAST**

PROJECT NO:
00193-001-18
 DATE:
6-17-2015
 SHEET NO.
36

FILE: J:\00193001\93001\18ACAD\dwg\PP19300118-1.dwg LAST SAVED: Fri, 05/04/15 2:09p PLOTTED: Fri, 05/04/15 2:20p BY: John Hutchison

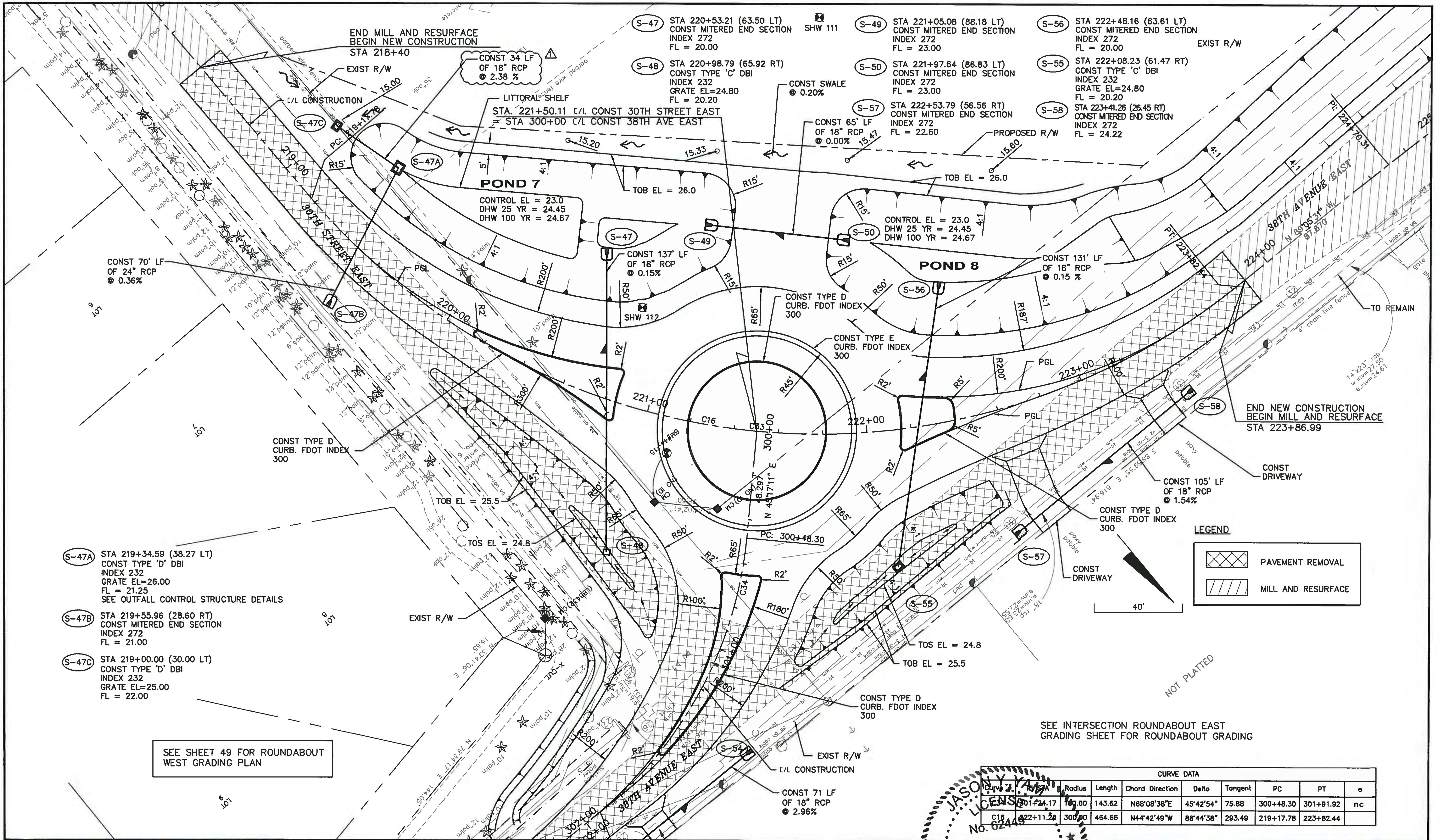


NO.	DESCRIPTION	BY	DATE
1	ADD DITCH PROFILE LABELS		8/24/15

MANATEE COUNTY	44TH AVENUE EAST ROADWAY EXTENSION	DESIGNED JCC	PROJECT NO: 00193-001-18
		DRAWN JCC	DATE: 6-17-2015
		APPROVED	SHEET NO: 37

FILE: J:\00193001\18\ACAD\dwg\18\18\18-1.dwg LAST SAVED: Fri, 08/04/15 9:28a PLOTTED: Fri, 08/04/15 9:28a BY: John Hutchison





- S-47A STA 219+34.59 (38.27 LT)
CONST TYPE 'D' DBI
INDEX 232
GRATE EL=26.00
FL = 21.25
SEE OUTFALL CONTROL STRUCTURE DETAILS
- S-47B STA 219+55.96 (28.60 RT)
CONST MITERED END SECTION
INDEX 272
FL = 21.00
- S-47C STA 219+00.00 (30.00 LT)
CONST TYPE 'D' DBI
INDEX 232
GRATE EL=25.00
FL = 22.00

SEE SHEET 49 FOR ROUNDABOUT WEST GRADING PLAN

LEGEND

- PAVEMENT REMOVAL
- MILL AND RESURFACE

CURVE DATA

Curve	Radius	Length	Chord Direction	Delta	Tangent	PC	PT	e
C16	300	143.62	N68°08'38"E	45°42'54"	75.88	300+48.30	301+91.92	nc
C15	300	464.66	N44°42'49"W	88°44'38"	293.49	219+17.78	223+82.44	

REVISED LABELS	8/18/15		
NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

44TH AVENUE EAST ROADWAY EXTENSION

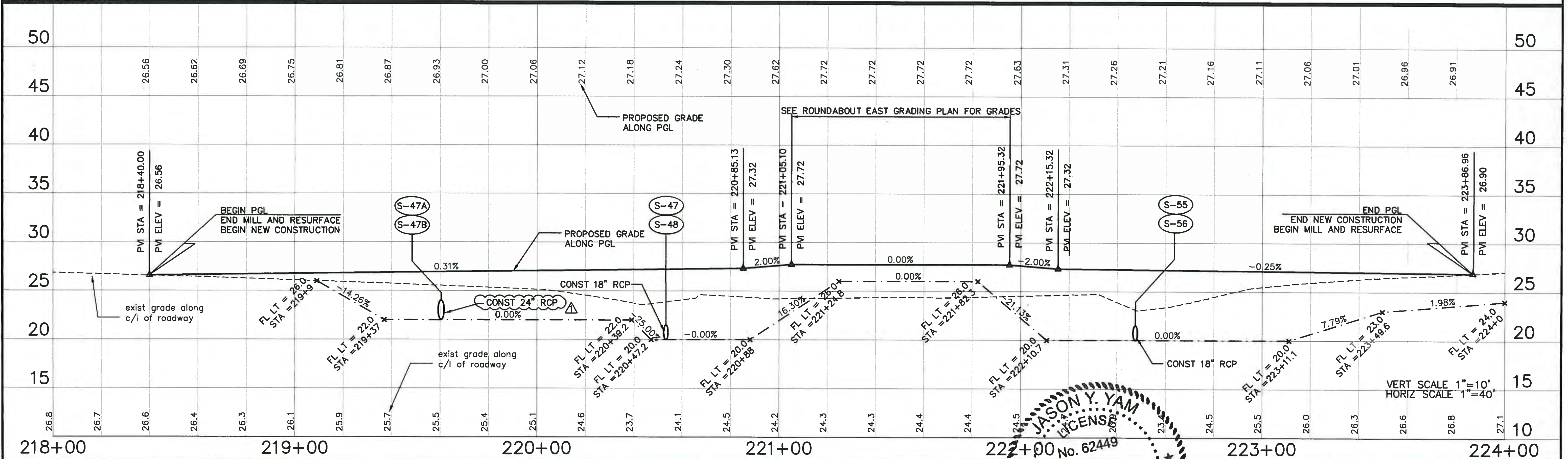
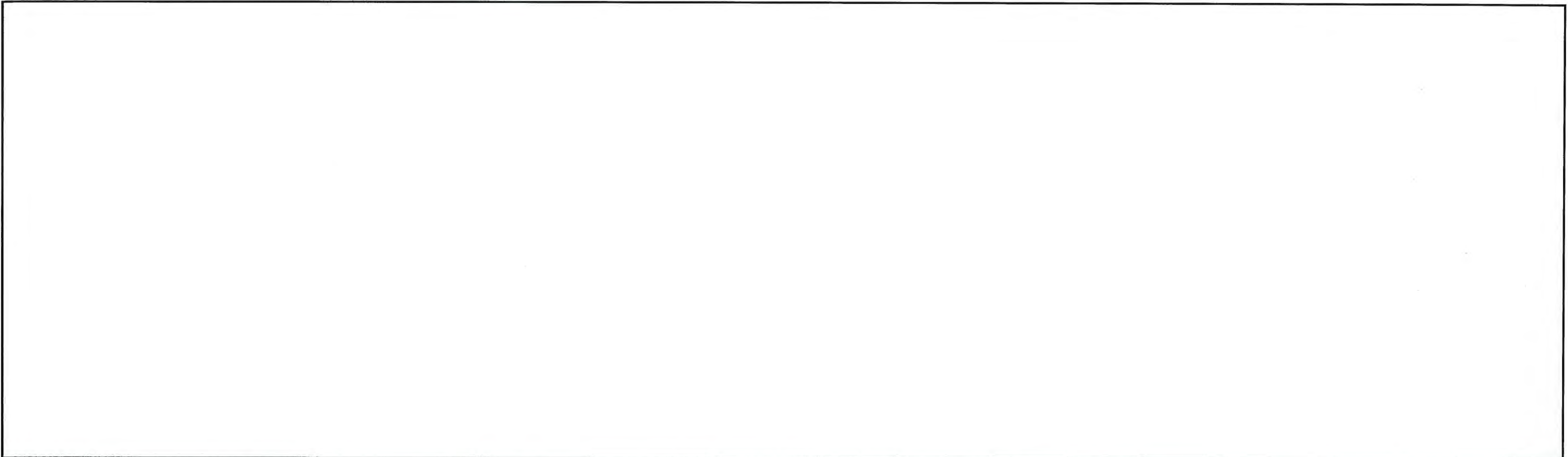
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www.cardno.com Certificate of Authorization No. 29915

JASON Y. YAN
LICENSED PROFESSIONAL ENGINEER
No. 82449

DESIGNED	JCC
DRAWN	JCC
IN CHARGE	JCC
APPROVED	

PLAN 30TH STREET EAST

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	38



NO.	DESCRIPTION	BY	DATE
1	REVISED LABELS		8/18/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

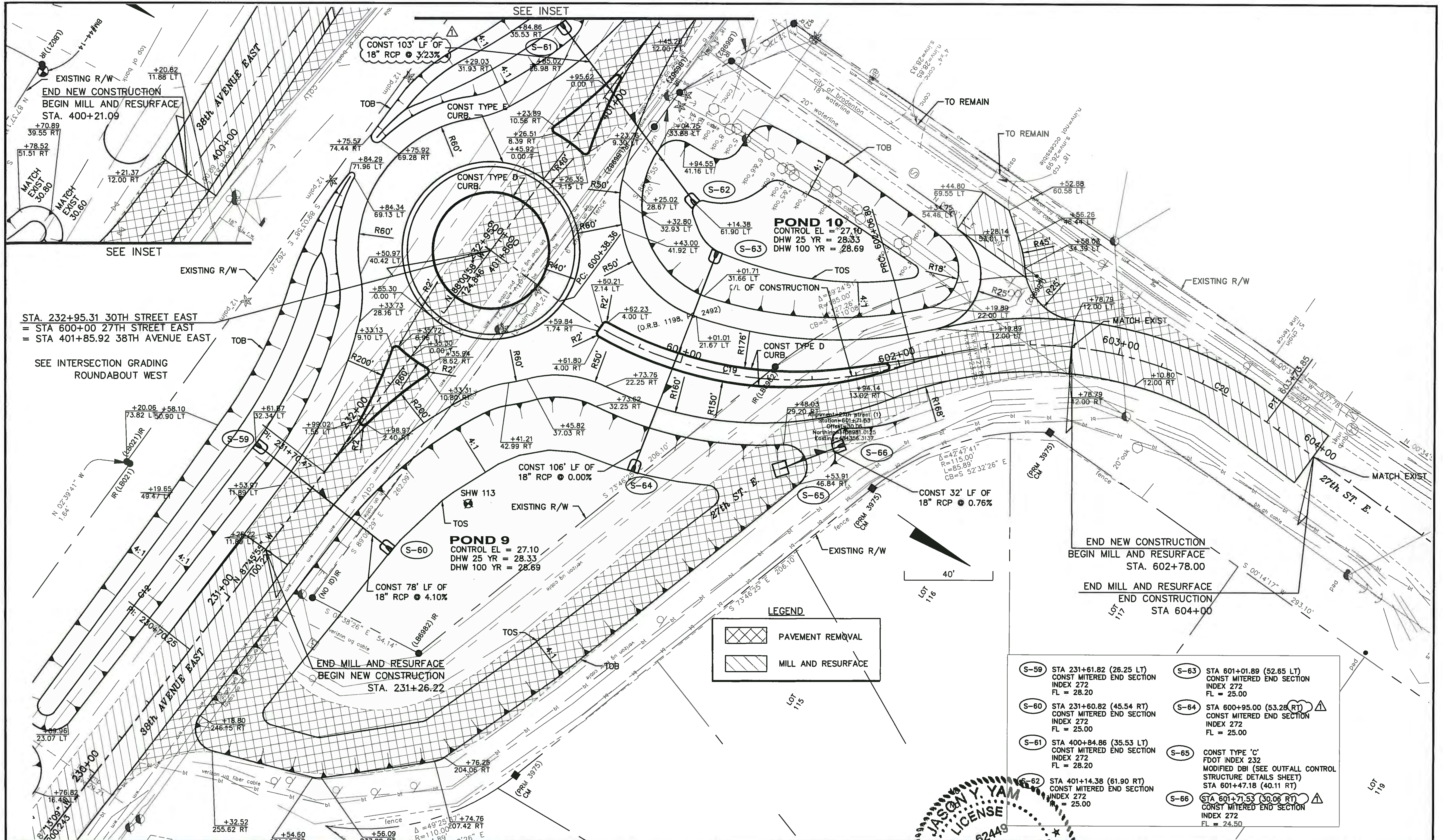
Cardno
Shaping the Future
380 PARK PLACE BLVD, STE 300, CLEARWATER, FL
33759 TEL: (727) 531-3505 (800) 861-8314
www.cardno.com Certificate of Authorization No. 29915

JASON Y. YAM
LICENSE
No. 62449
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED JCC
DRAWN JCC
CHECKED JCC
APPROVED

**PROFILE
30TH STREET EAST**

PROJECT NO:
00193-001-18
DATE:
6-17-2015
SHEET NO:
39



NO.	DESCRIPTION	BY	DATE
	REVISED LABELS		8/18/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**


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 33759 TEL: (727) 531-3505 (800) 861-8314
 www.cardno.com Certificate of Authorization No. 29915

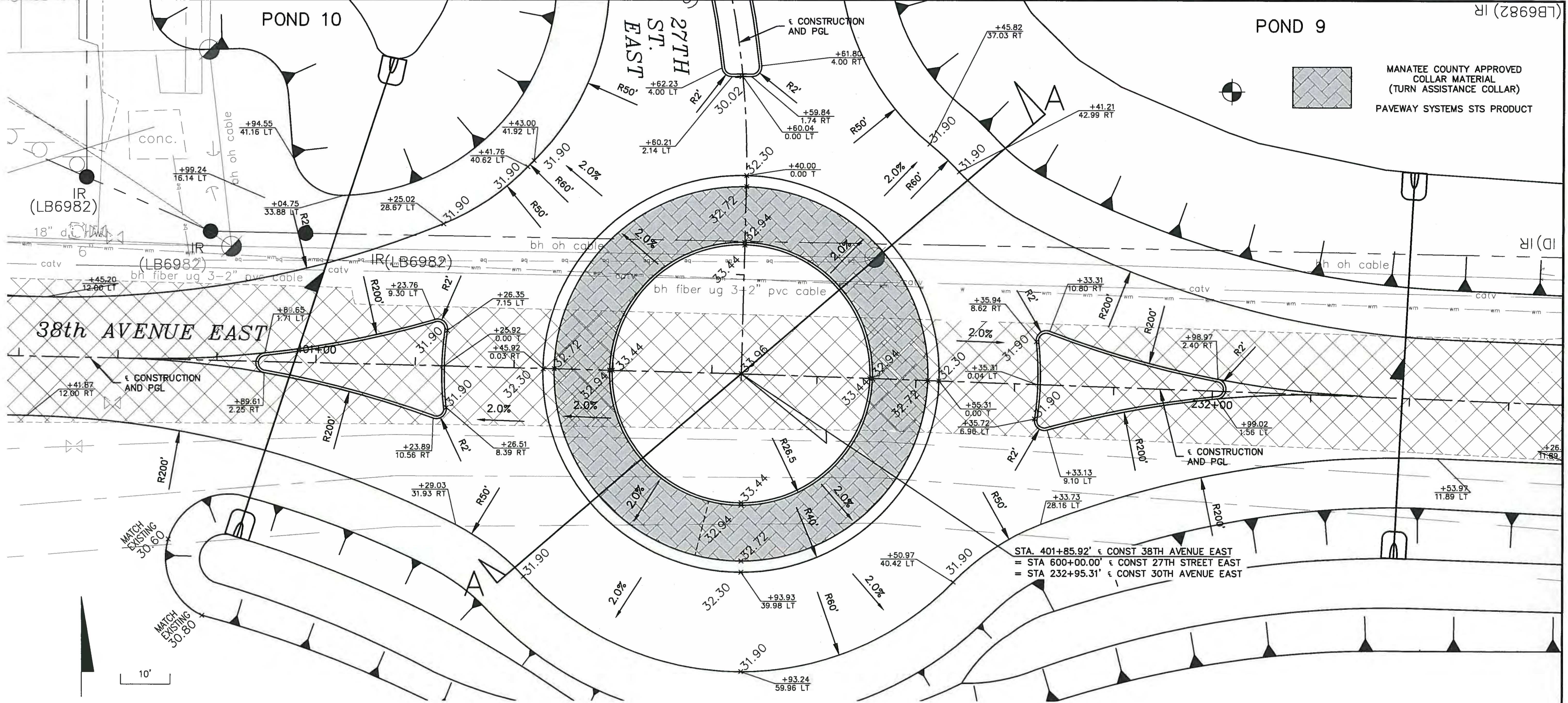
DESIGNED JCC
 DRAWN JCC
 A.C.
 APPROVED

PLAN
30TH STREET EAST
27TH STREET EAST

PROJECT NO:
 00193-001-18
 DATE:
 6-17-2015
 SHEET NO:
 41

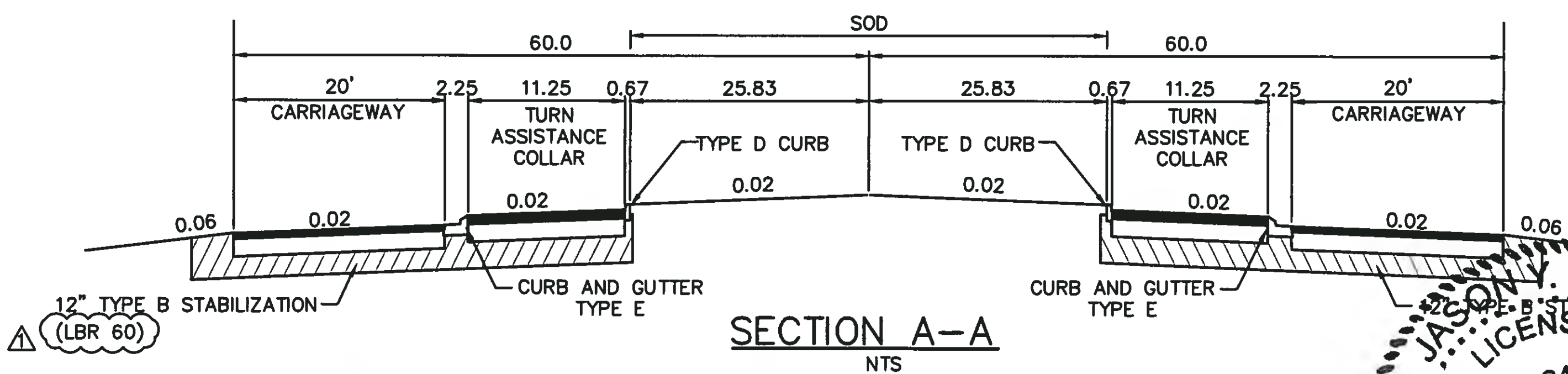


FILE: J:\00193\00193001.18\ACAD\dwg\PP19300118-1.dwg LAST SAVED: Fri, 08/04/15 2:09p PLOTTED: Fri, 08/04/15 2:44p BY: John Hutchison



MANATEE COUNTY APPROVED
COLLAR MATERIAL
(TURN ASSISTANCE COLLAR)
PAVEWAY SYSTEMS STS PRODUCT

STA. 401+85.92' ε CONST 38TH AVENUE EAST
= STA 600+00.00' ε CONST 27TH STREET EAST
= STA 232+95.31' ε CONST 30TH AVENUE EAST



NOTE:
THE PAVEMENT UNDER THE TURN ASSISTANCE COLLAR
MATERIAL SHALL BE CONSTRUCTED OF OPTIONAL BASE
GROUP 9 WITH TYPE SP STRUCTURAL COURSE
(TRAFFIC LEVEL C) (3").

ADD NOTE AND REVISE STABILIZATION		8/24/15
NO.	DESCRIPTION	BY DATE

MANATEE COUNTY

44TH AVENUE EAST
ROADWAY EXTENSION

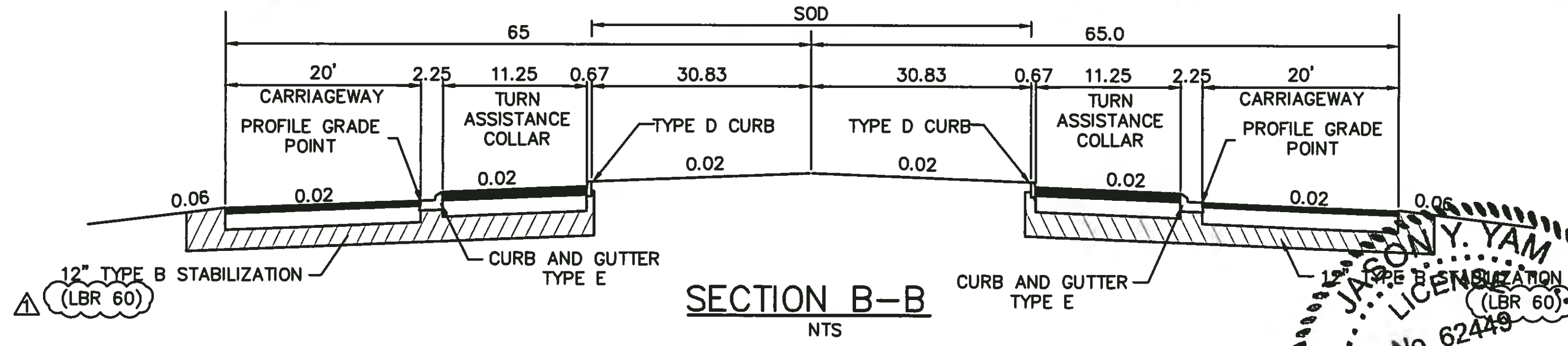
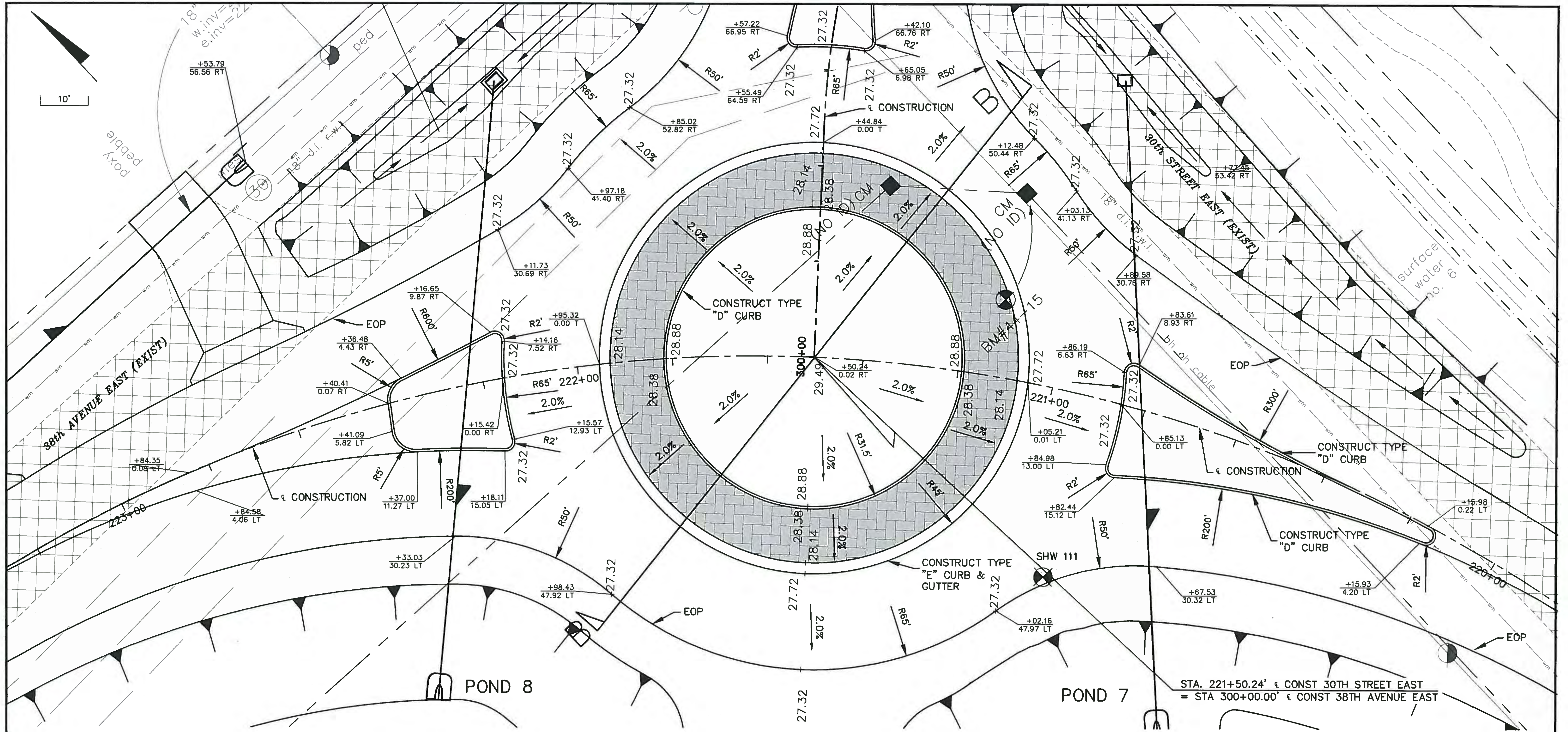
Cardno
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33759 TEL: (727) 531-3505 (800) 861-8314
www.cardno.com Certificate of Authorization No. 29915

JASON YAM
LICENSED PROFESSIONAL ENGINEER
No. 62449
STATE OF FLORIDA

DESIGNED JCC
DRAWN JCC
Q.C.
APPROVED

**INTERSECTION GRADING
ROUNDBOUT WEST**

PROJECT NO:
00193-001-18
DATE:
6-17-2015
SHEET NO:
48



MANATEE COUNTY APPROVED
COLLAR MATERIAL
(TURN ASSISTANCE COLLAR)
PAVEWAY SYSTEMS STS

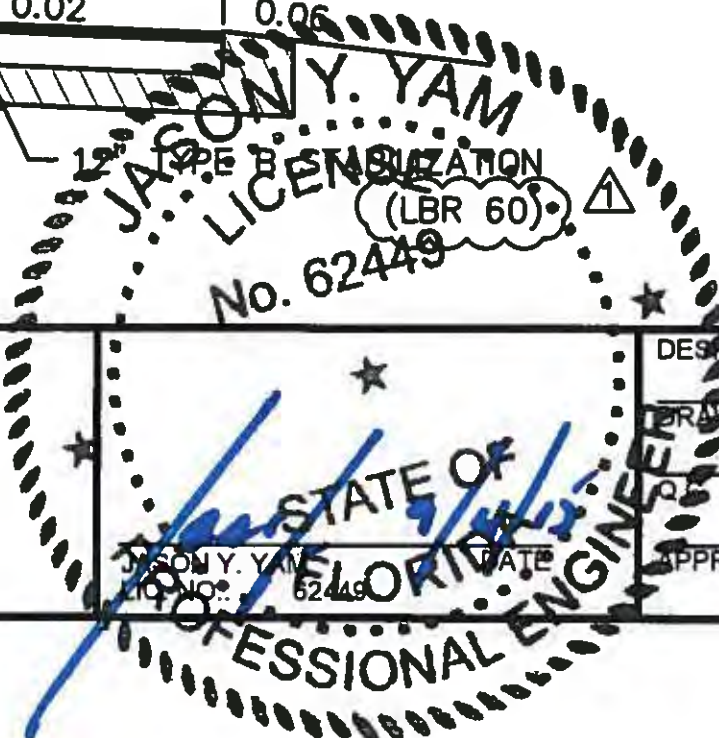
NOTE:
THE PAVEMENT UNDER THE TURN ASSISTANCE COLLAR
MATERIAL SHALL BE CONSTRUCTED OF OPTIONAL BASE
GROUP 9 WITH TYPE SP STRUCTURAL COURSE
(TRAFFIC LEVEL C) (3").

ADD NOTE AND REVISE STABILIZATION	8/24/15		
NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

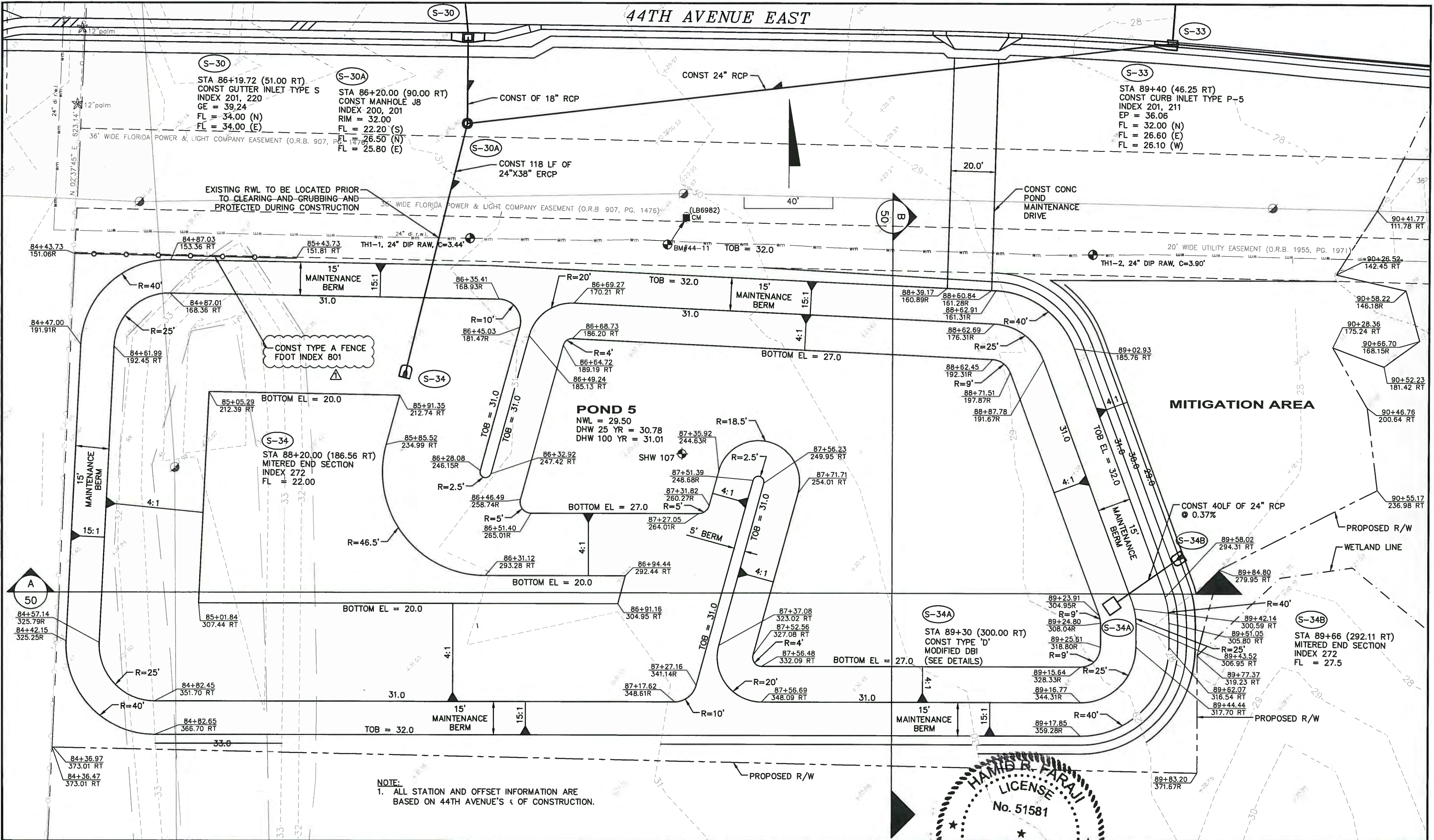
44TH AVENUE EAST
ROADWAY EXTENSION

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380 PARK PLACE BLVD, STE 300, CLEARWATER, FL
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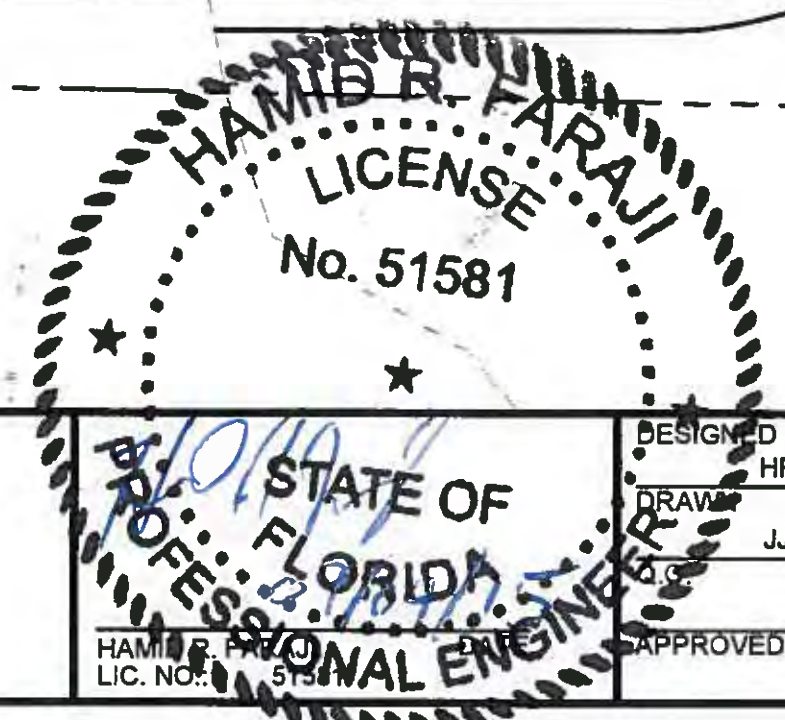


INTERSECTION GRADING
ROUNDAABOUT EAST

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	49



NOTE:
1. ALL STATION AND OFFSET INFORMATION ARE BASED ON 44TH AVENUE'S $\frac{1}{4}$ OF CONSTRUCTION.



NO.	DESCRIPTION	BY	DATE
1	REVISED FENCE LABEL		8/24/15

MANATEE COUNTY

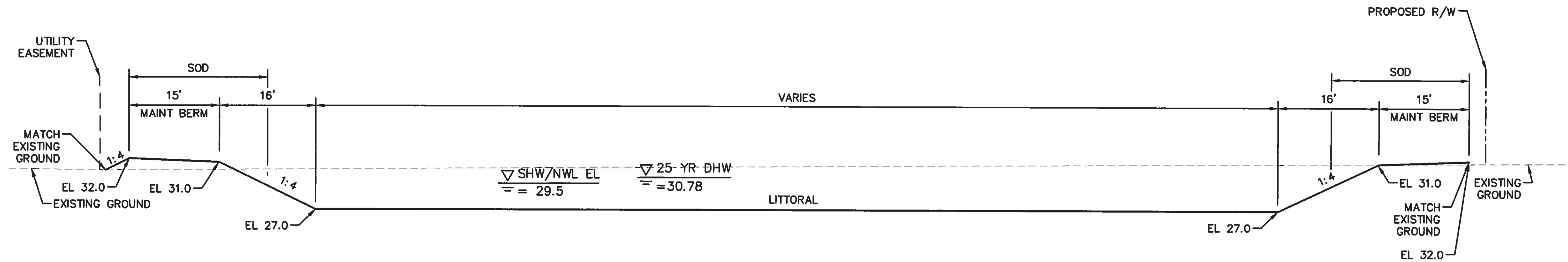
44TH AVENUE EAST ROADWAY EXTENSION

Cardno
Shaping the Future
380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33799
TEL: (727) 531-3505 (800) 861-8314
www.cardno.com Certificate of Authorization No. 29915

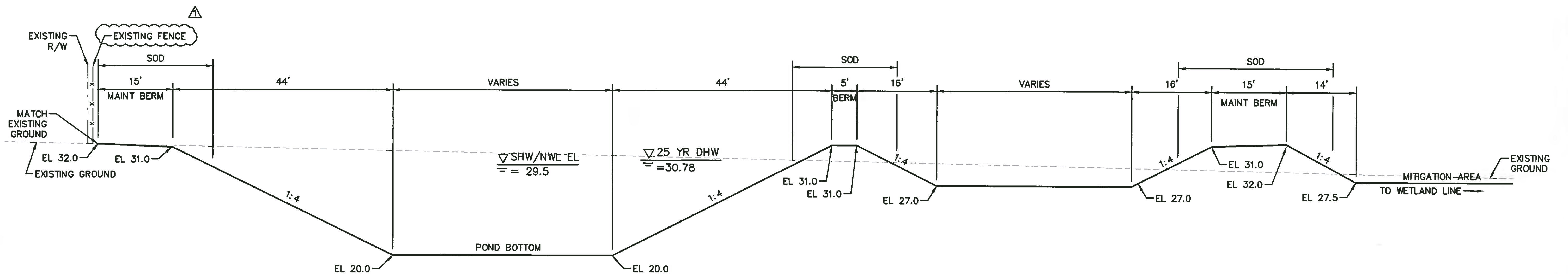
DESIGNED: HRF
DRAWN: JJH
APPROVED: [Signature]

POND 5 SITE PLAN

PROJECT NO: 00193-001-18
DATE: 6-17-2015
SHEET NO: 50



B
50 POND 5 44TH AVENUE
NTS



A
50 POND 5 44TH AVENUE
NTS



NO.	DESCRIPTION	BY	DATE
1	REVISED FENCE LABEL		8/24/15

MANATEE COUNTY

44TH AVENUE EAST
ROADWAY EXTENSION

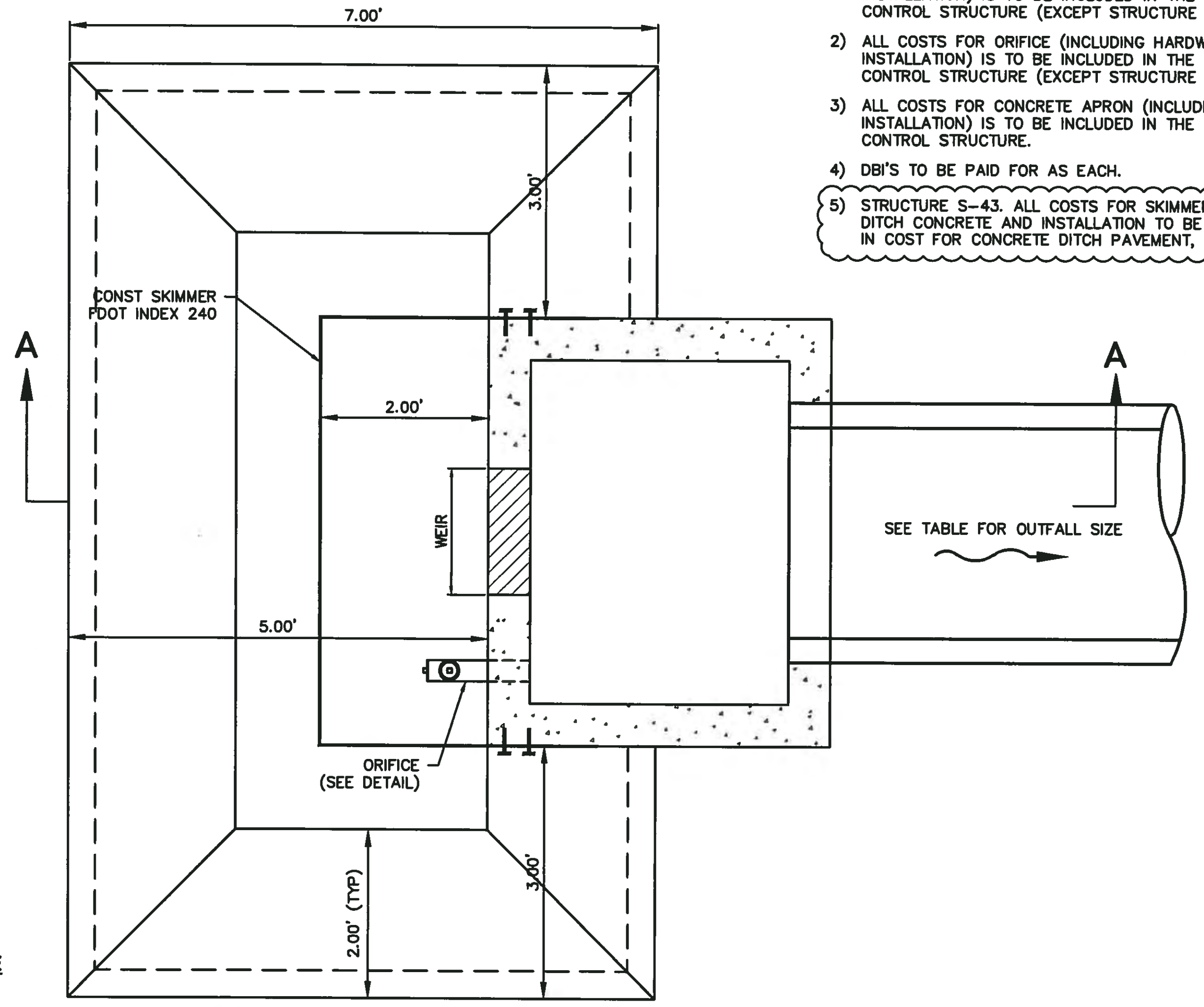
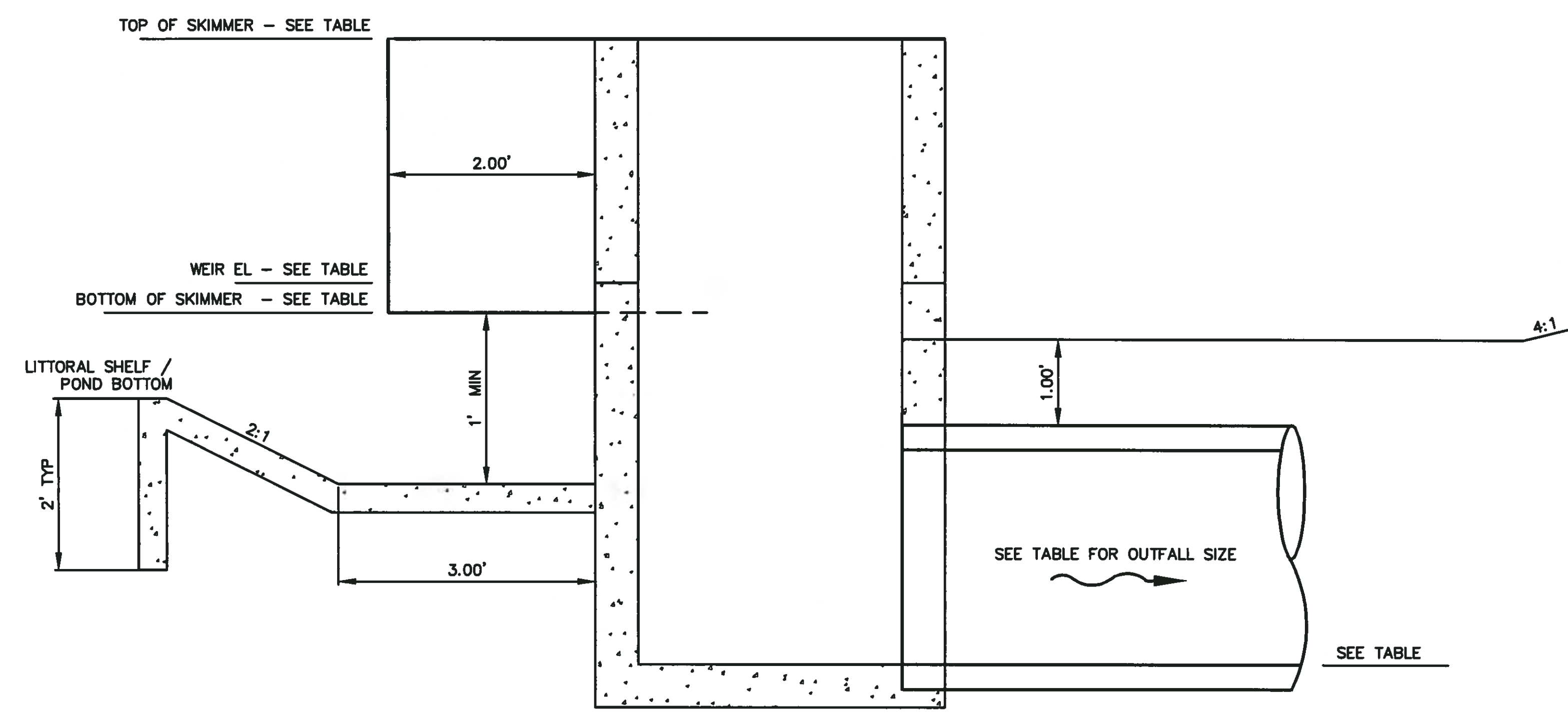
Cardno
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33759 TEL: (727) 531-3505 (800) 861-8314
www.cardno.com Certificate of Authorization No. 25915

DESIGNED	HRF
DRAWN	JJH
Q.C.	
APPROVED	

POND 5 TYPICAL
SECTIONS

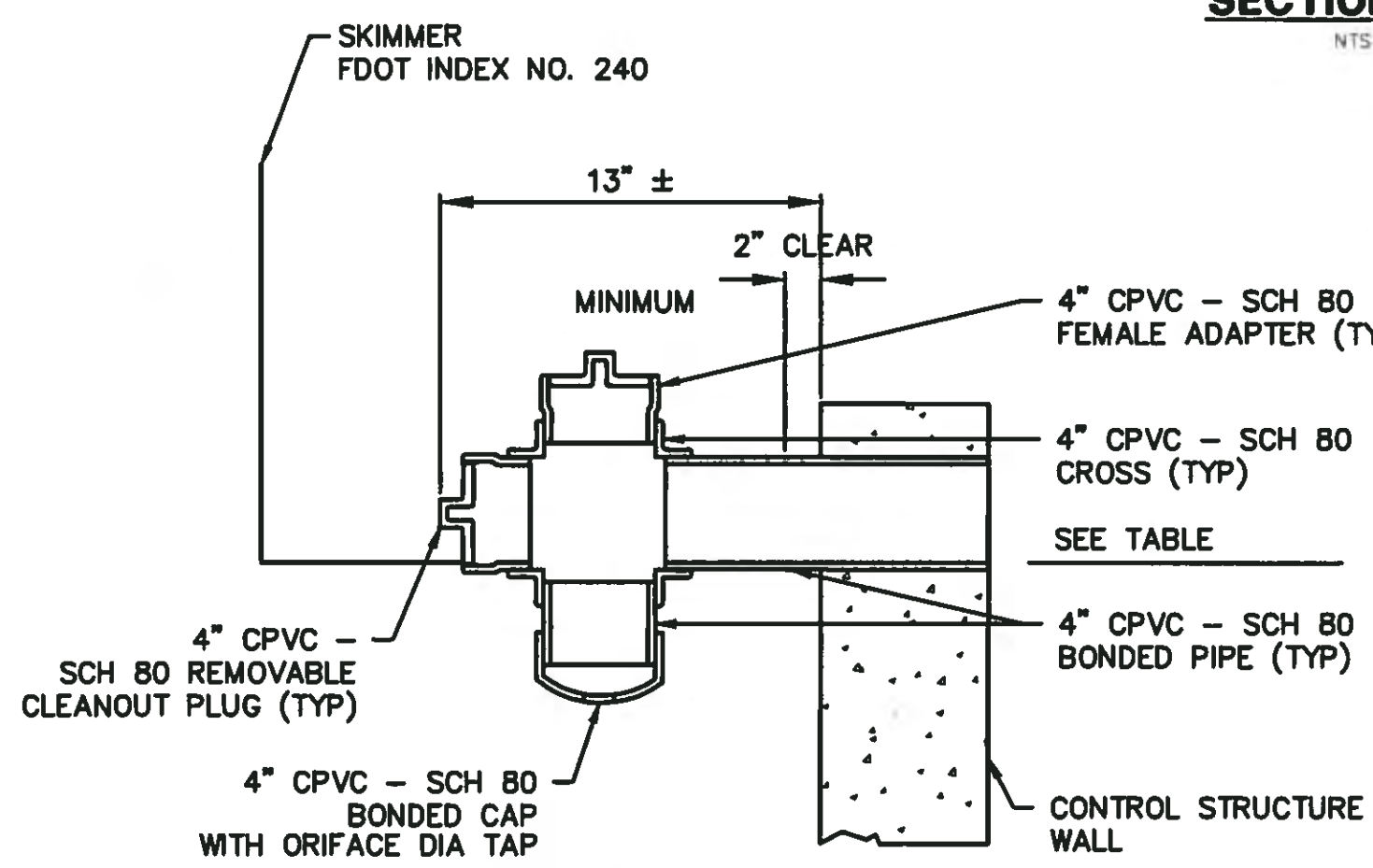
PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	51

- NOTES:**
- 1) ALL COSTS FOR SKIMMER (INCLUDING HARDWARE AND INSTALLATION) IS TO BE INCLUDED IN THE COST OF CONTROL STRUCTURE (EXCEPT STRUCTURE S-43).
 - 2) ALL COSTS FOR ORIFICE (INCLUDING HARDWARE AND INSTALLATION) IS TO BE INCLUDED IN THE COST OF CONTROL STRUCTURE (EXCEPT STRUCTURE S-43).
 - 3) ALL COSTS FOR CONCRETE APRON (INCLUDING HARDWARE AND INSTALLATION) IS TO BE INCLUDED IN THE COST OF CONTROL STRUCTURE.
 - 4) DBI'S TO BE PAID FOR AS EACH.
 - 5) STRUCTURE S-43. ALL COSTS FOR SKIMMER, ORIFACE, DITCH CONCRETE AND INSTALLATION TO BE INCLUDED IN COST FOR CONCRETE DITCH PAVEMENT, REINFORCED.

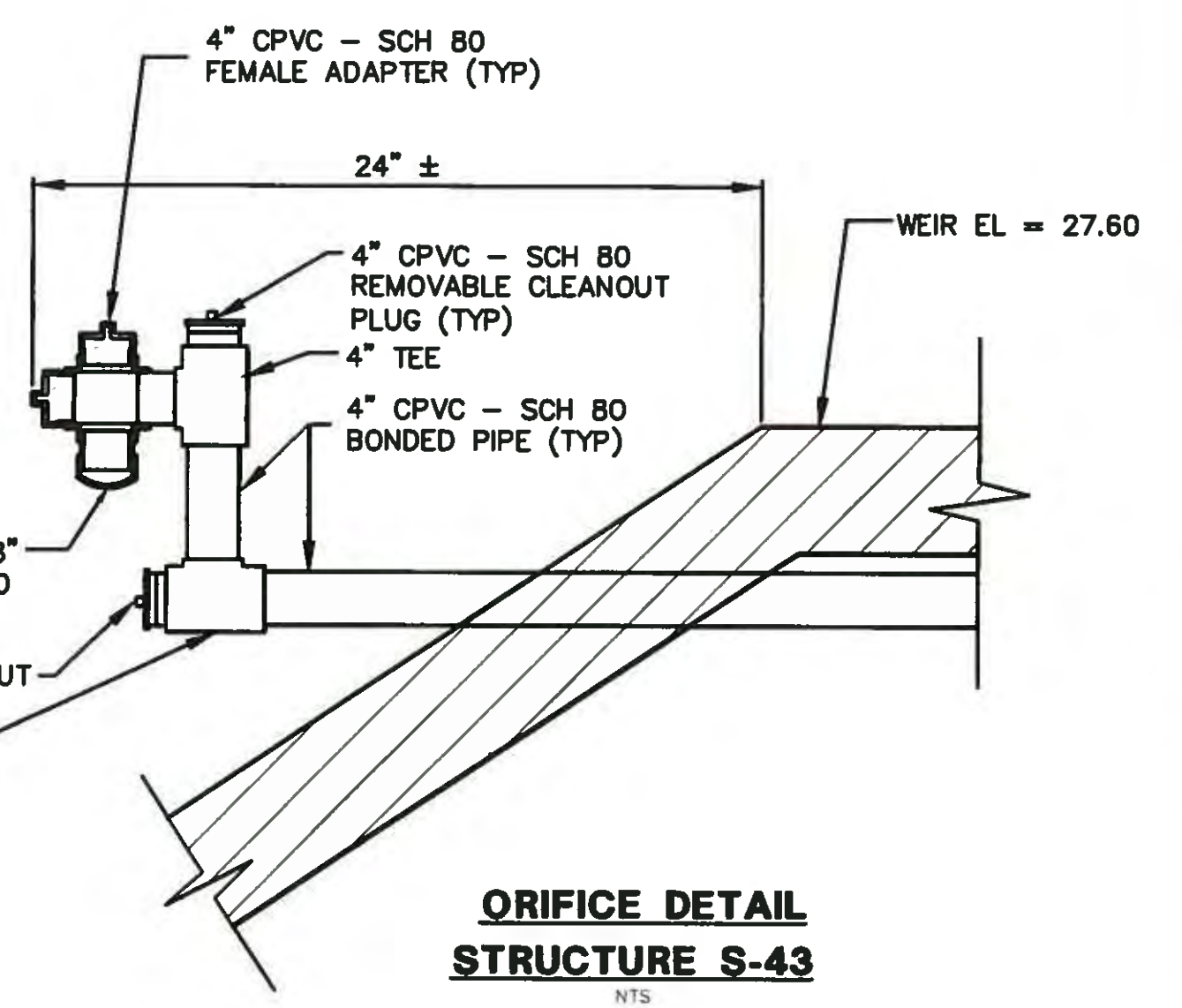


OUTFALL CONTROL STRUCTURE STRUCTURE INFORMATION

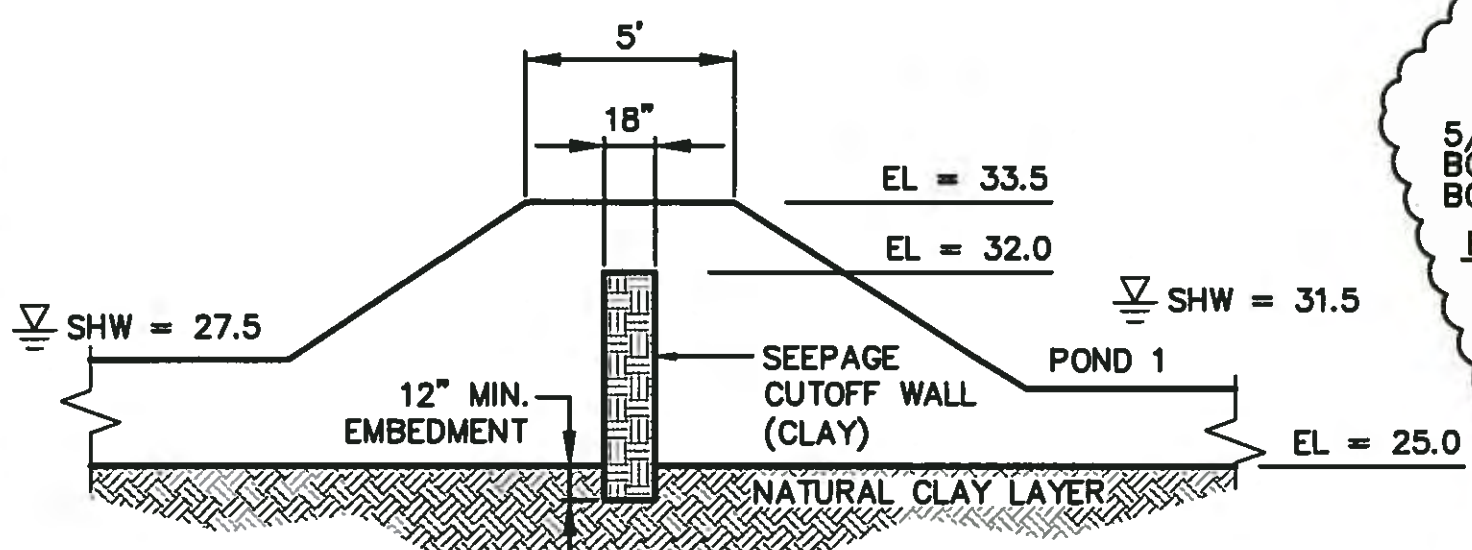
Pond	Structure		Orifice		Weir		Skimmer EL		Outfall Pipe		
	Number	Type	Top EL	Diam (in)	EL	Width (in)	EL	Top	Bottom	Size (in)	FL
1,2,3 & 4	S-21	D	33.25	1.87	31.10	30W, 6H	31.42	33.25	30.75	18	30.60
5	S-34A	D	31.00	1.31	29.50	18	29.77	31.00	29.40	24	27.70
7 & 8	S-47A	D	26.00	0.56	23.00	24W, 18H	23.40	26.00	23.00	24	21.25
9&10	S-65	C	28.75	0.66	26.90	12W, 6H	27.10	28.75	26.75	18	25.25



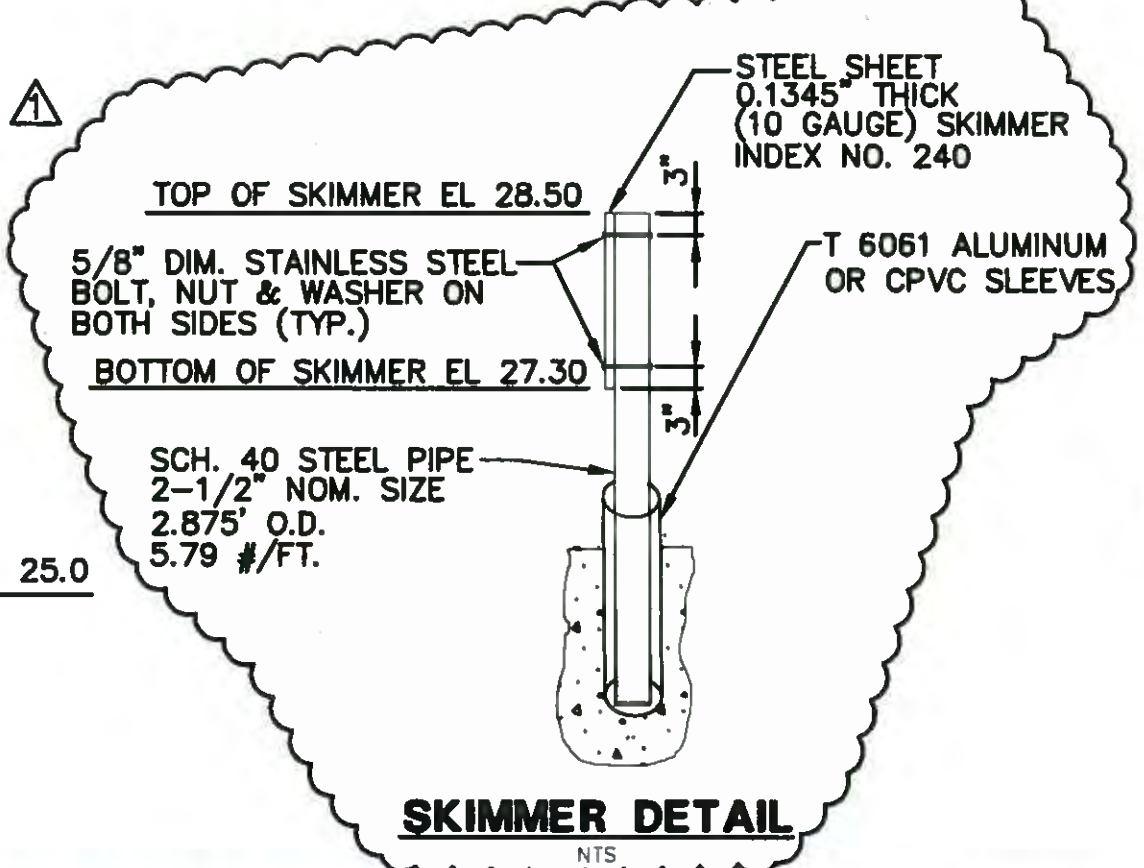
ORIFICE DETAIL



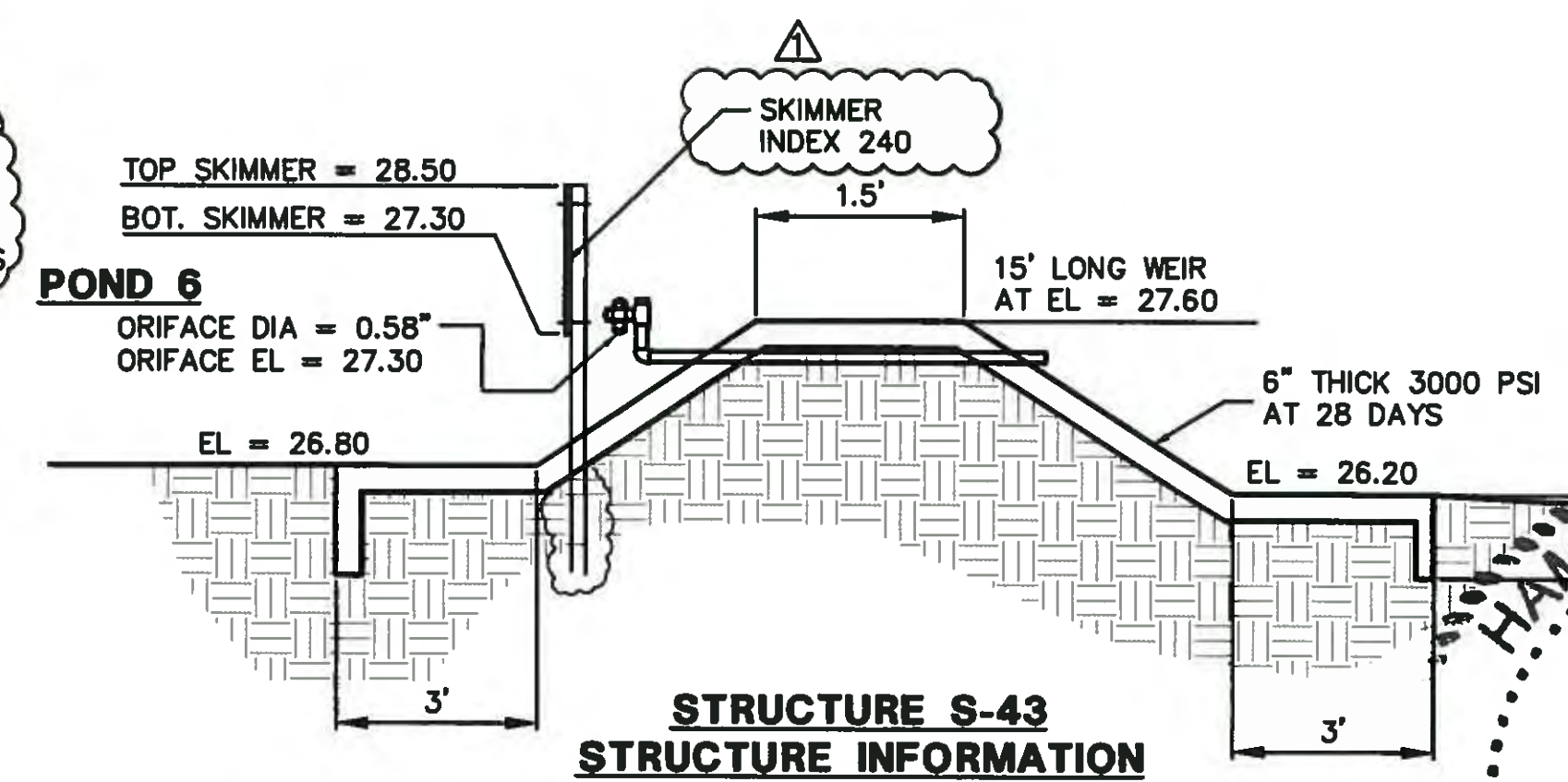
ORIFICE DETAIL STRUCTURE S-43



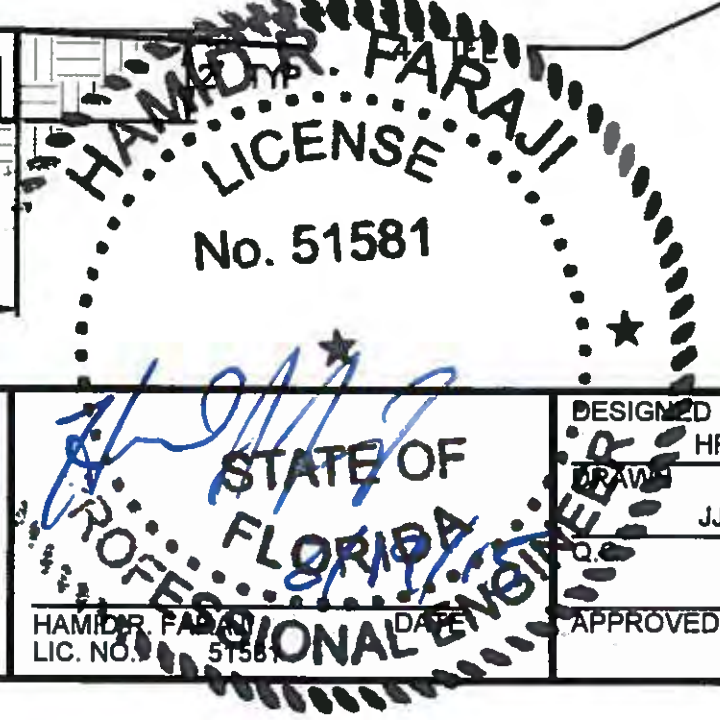
SEEPAGE CUTOFF WALL DETAIL



SKIMMER DETAIL



STRUCTURE S-43 STRUCTURE INFORMATION



NO.	DESCRIPTION	BY	DATE
	ADDED SKIMMER DETAIL AND REVISED NOTE		8/18/15

MANATEE COUNTY

44TH AVENUE EAST ROADWAY EXTENSION


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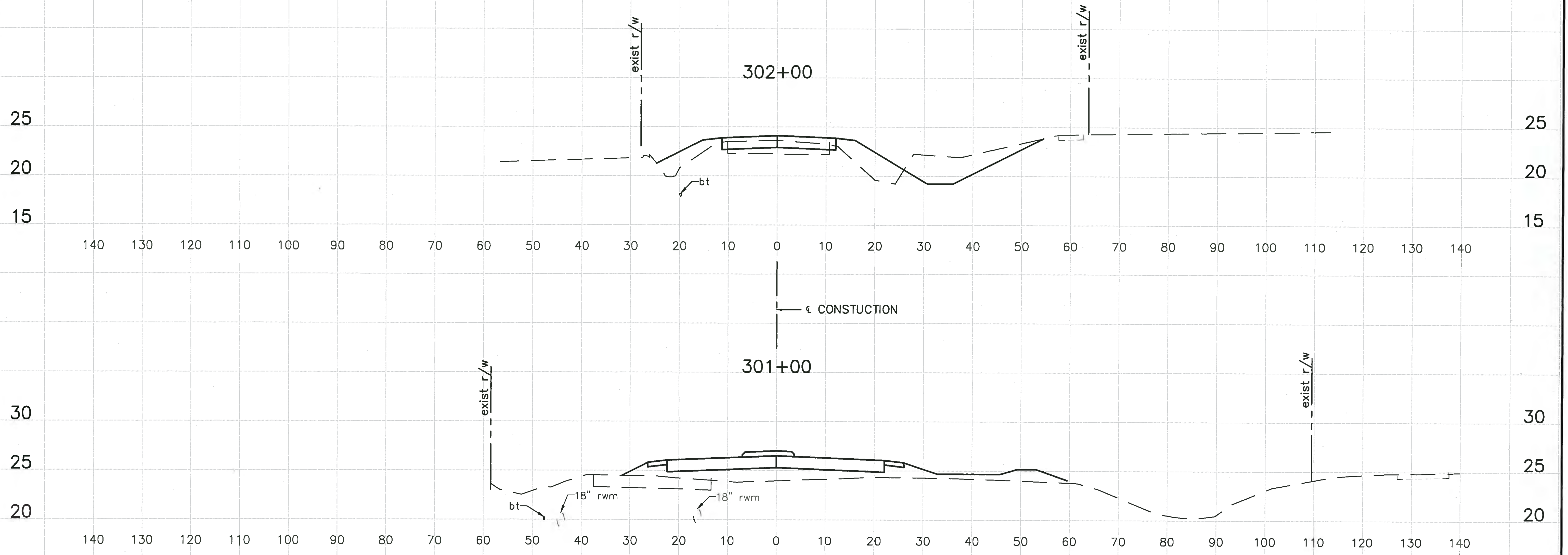
DESIGNED HRF
DRAWN JWH
CHECKED
APPROVED

OUTFALL CONTROL STRUCTURE DETAILS

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	52

TOTAL PROJECT EARTHWORK SUMMARY

	EXCAVATION	FILL
44TH AVE	32,839 CY	95,636 CY
US 301	4,817 CY	6,441 CY
19TH ST CT E	748 CY	0 CY
30TH ST	6,924 CY	3,058 CY
38TH AVE	763 CY	493 CY
POND 5	14,780 CY	1,424 CY
MITIGATION AREA	609 CY	0 CY
TOTAL PROJECT EXCAVATION	61,480 CY	
TOTAL PROJECT FILL		107,052 CY
TOTAL NET FILL		45,572 CY 



HORIZ SCALE: 1"=20'
VERT SCALE: 1"=10'

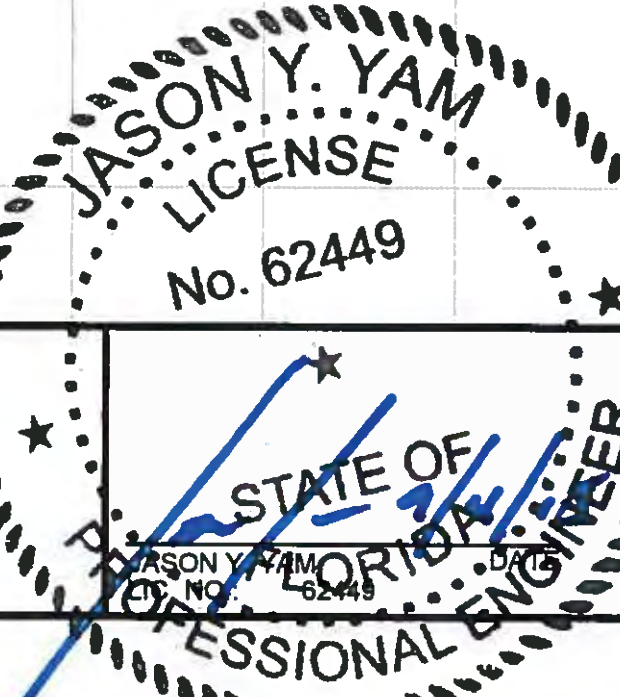
NO.	DESCRIPTION	BY	DATE
1	REVISE EARTHWORK TOTALS		8/24/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**



Cardno
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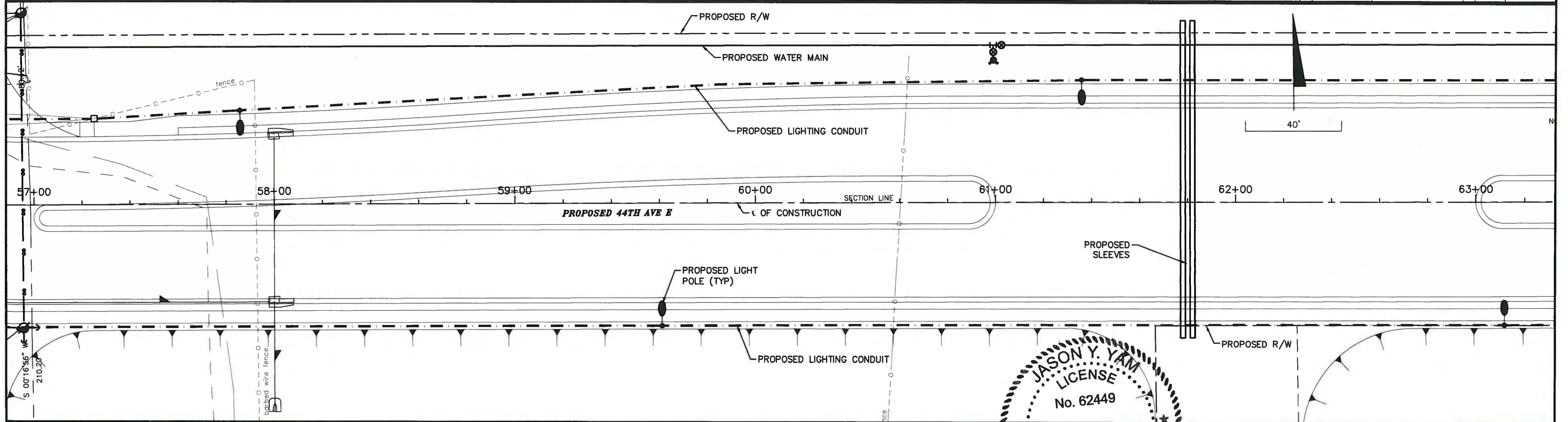
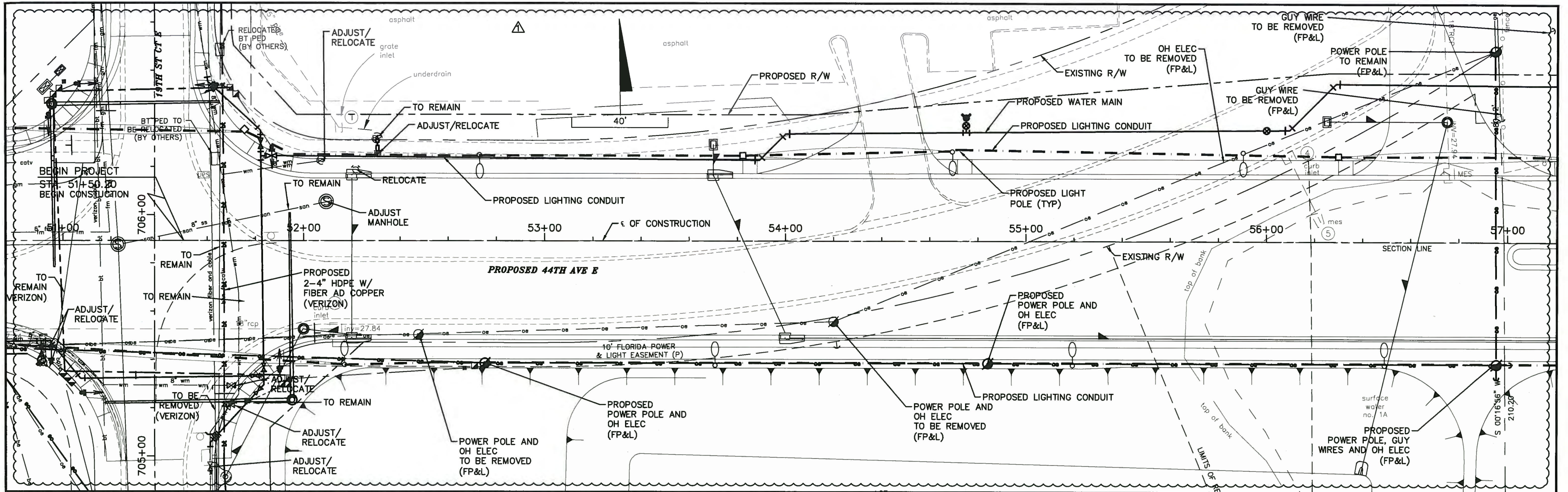


JASON Y. YAM
LICENSE
No. 62449
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED	JCC
DRAWN	JCC
Q.C.	
APPROVED	

**CROSS SECTIONS
38TH AVENUE EAST**

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	98

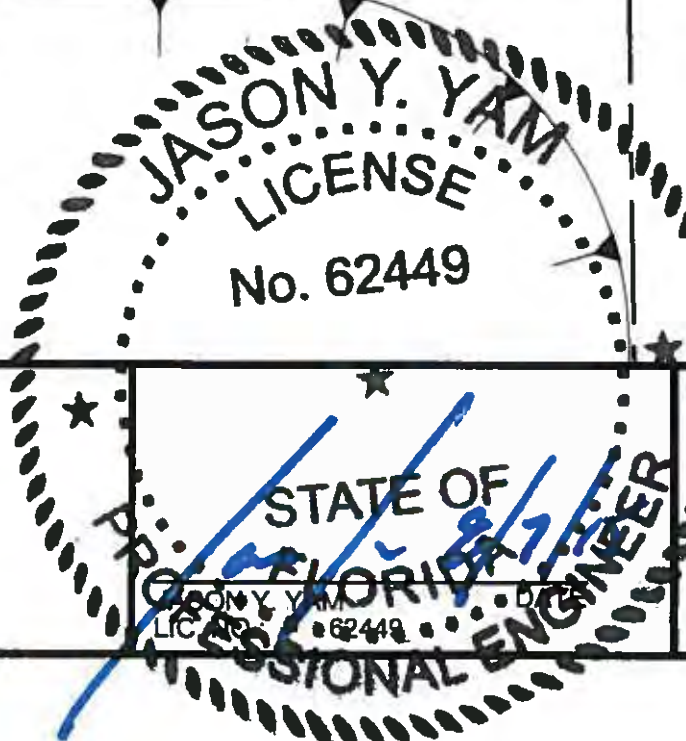


NO.	DESCRIPTION	BY	DATE
1	REVISED LIGHTING		8/5/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

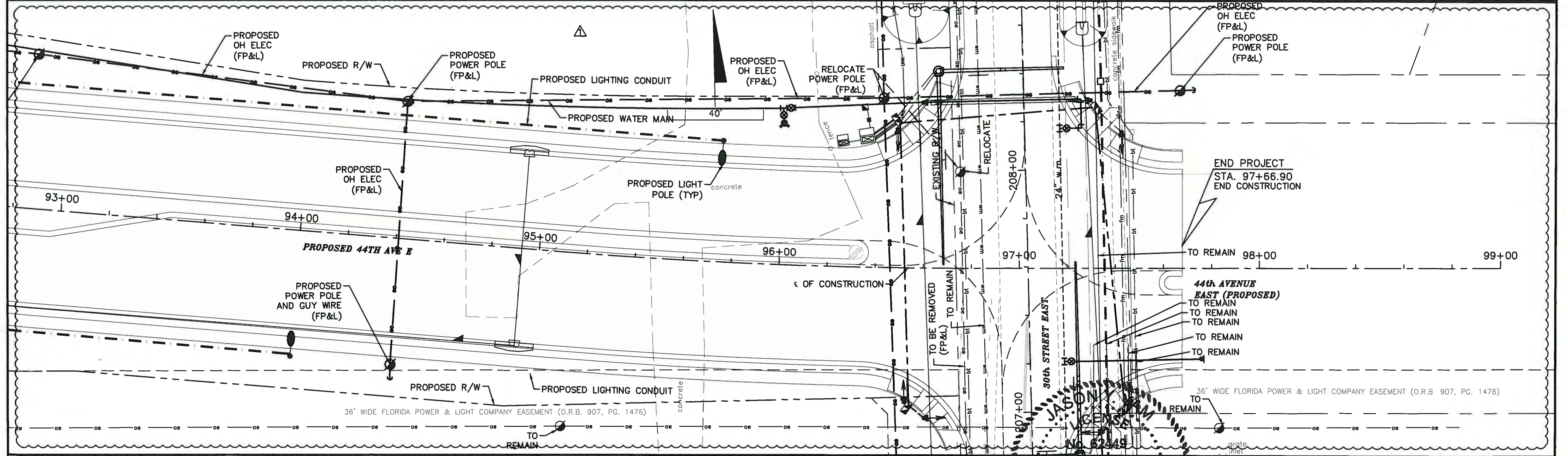
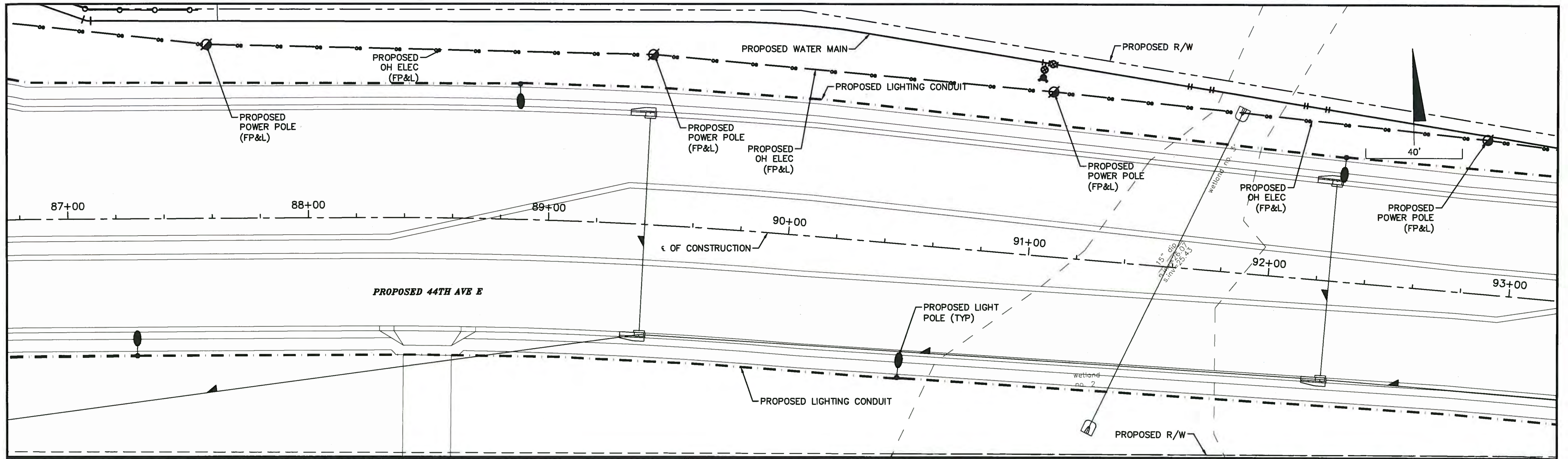
Cardno
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33759 TEL: (727) 531-3505 (800) 861-8314
www.cardno.com Certificate of Authorization No. 29915



DESIGNED	JCC
DRAWN	JCC
CHECKED	J.C.
APPROVED	

**UTILITY ADJUSTMENT PLAN
44TH AVENUE EAST**

PROJECT NO:	00193-001-18
DATE:	6-17-2015
SHEET NO:	147



NO.	DESCRIPTION	BY	DATE
1	REVISED LIGHTING		8/5/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

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33759 TEL: (727) 531-3505 (800) 861-8314
www.cardno.com Certificate of Authorization No. 25915

DESIGNED JCC
DRAWN JCC
APPROVED

**UTILITY ADJUSTMENT PLAN
44TH AVENUE EAST**

PROJECT NO:
00193-001-18
DATE:
6-17-2015
SHEET NO:
150

FILE: J:\00193\00193001\18\ACAD\dwg\UT19300118-1.dwg LAST SAVED: Fri, 08/07/15 8:43a PLOTTED: Fri, 08/07/15 8:47a BY: Tim Bowe



CONTRACT DRAWINGS

44TH AVENUE EAST FROM 19TH STREET COURT EAST TO 30TH STREET EAST

FOR
MANATEE COUNTY, FLORIDA
COUNTY PROJECT NUMBER: 6045660
SIGNALIZATION PLANS

RELATED STANDARDS AND SPECIFICATIONS

DESCRIPTION

- A. MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FDOT GREEN BOOK), (2011),
- B. FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (2015),
- C. AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES, (2004),
- D. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009),
- E. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, (2015),
- F. FDOT PLANS PREPARATION MANUAL (2014).
- G. MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS (2007).
- H. FDOT MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNAL DEVICES (2010)
- I. MANATEE COUNTY TRAFFIC SIGNAL DESIGN GUIDE (MAY 2013)

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

SUMMARY OF REVISIONS	
DATE	DESCRIPTION
08/05/15	UPDATE STANDARDS AND SPECS TO 2015 AND ADJUST PAY ITEM NUMBERS

AT LEAST 72 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL CONTACT THE LOCAL MAINTENANCE FDOT ENGINEER'S OFFICE TO SECURE GENERAL USE PERMITS AND/OR OTHER PERMITS AS REQUIRED FOR WORKING WITHIN THE DEPARTMENTS RIGHT-OF-WAY.

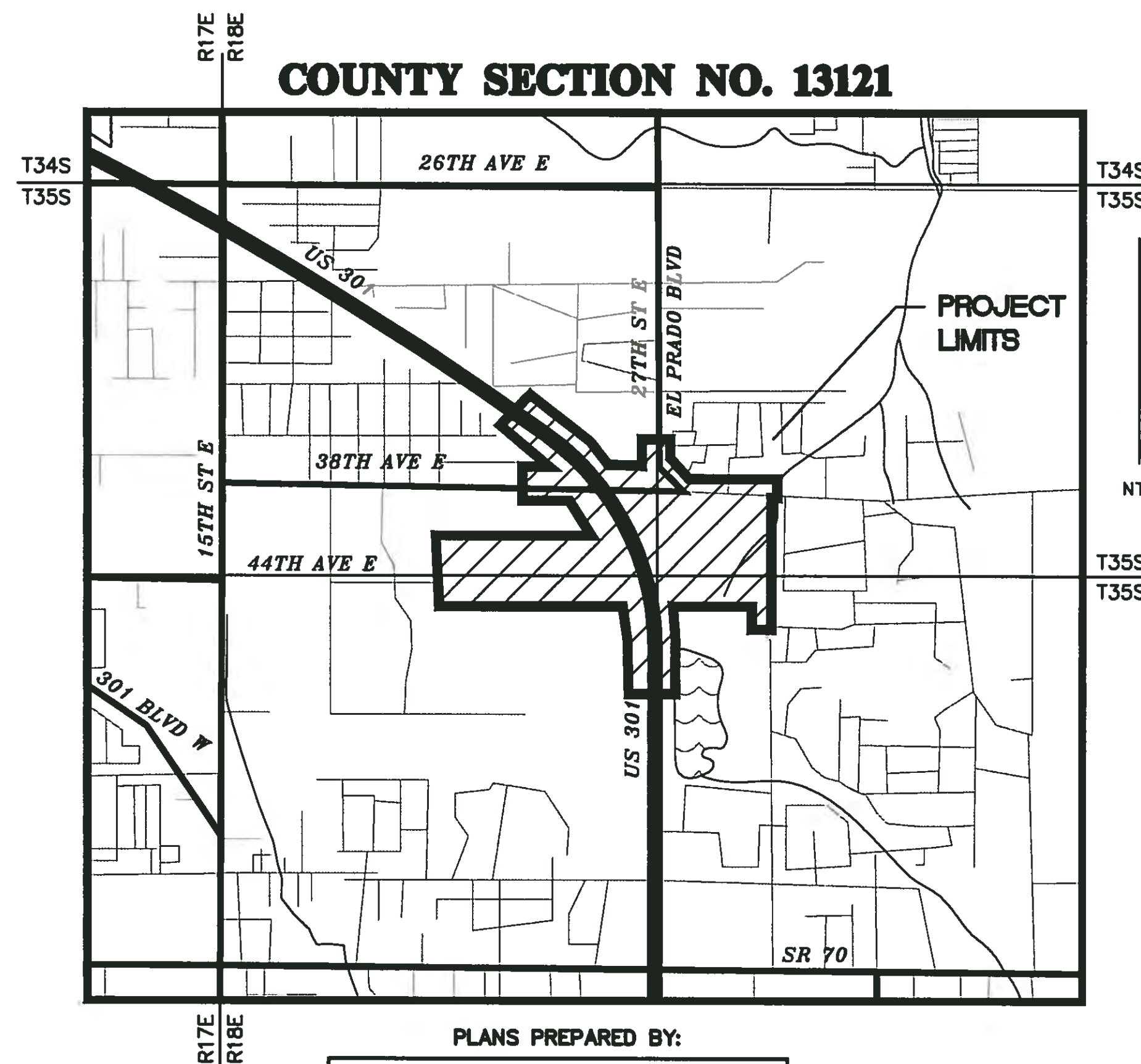
THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND GOVERNED BY THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (DATED 2014) AND DESIGN STANDARDS BOOKLET (DATE 2014), FOR STANDARDS REVISIONS, CLICK ON "DESIGN STANDARDS" AT THE FOLLOWING WEB SITE: [//www.dot.state.fl.us/rddesign/](http://www.dot.state.fl.us/rddesign/).

COMPONENTS OF CONTRACT PLANS SET

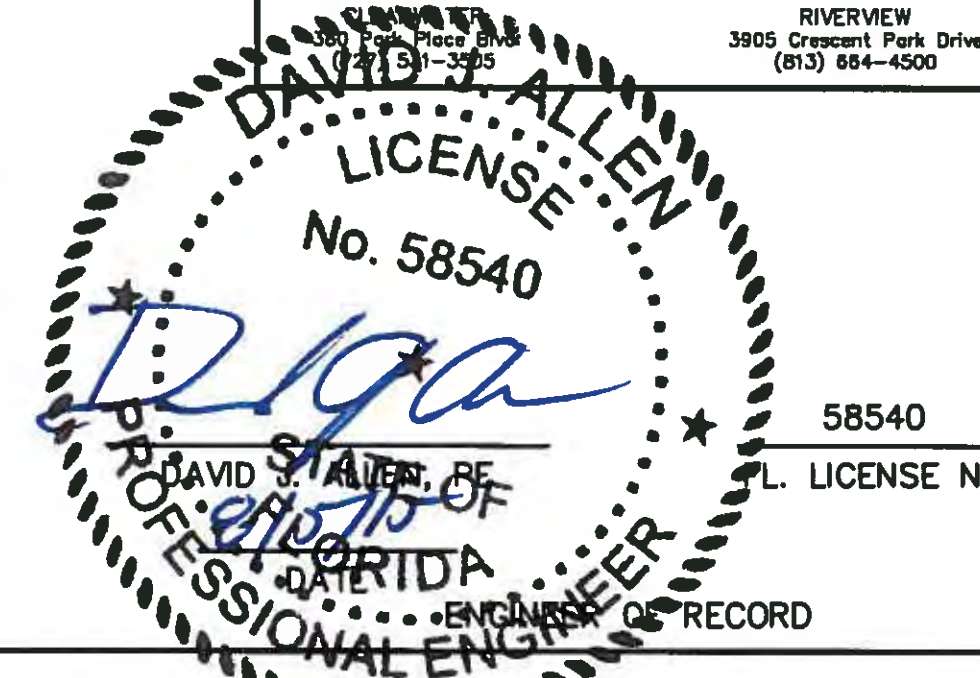
- ROADWAY PLANS
- SIGNALIZATION PLANS
- LIGHTING PLANS
- POTABLE WATER MAIN PLANS

INDEX OF SIGNALIZATION PLANS

SHEET NO	SHEET DESCRIPTION
T-1	COVER SHEET
T-2	TABULATION OF QUANTITIES
T-3	MANATEE COUNTY GENERAL NOTES
T-4	PAY ITEM NOTES
T-5 THRU T-8	SIGNALIZATION PLAN
T-9 THRU T-12	INTERCONNECT PLAN
T-13	MAST ARM TABULATION
T-14	MAST ARM TABULATION CALCULATION CONFIGURATION
T-15	TABLE OF VARIABLES FOR STANDARD MAST ARM ASSEMBLIES
T-16	TABLE OF VARIABLES FOR SPECIAL MAST ARM ASSEMBLIES
T-17 THRU T-19	GUIDE SIGN WORKSHEET
T-20 THRU T-23	REPORT OF CORE BORINGS



PLANS PREPARED BY:



48 HOURS BEFORE DIGGING
"CALL SUNSHINE"
1-800-432-4770

DATE: 8-05-2015
SCALE: HORIZ: N/A
VERT: N/A
SHEET: T-1

TABULATION OF QUANTITIES

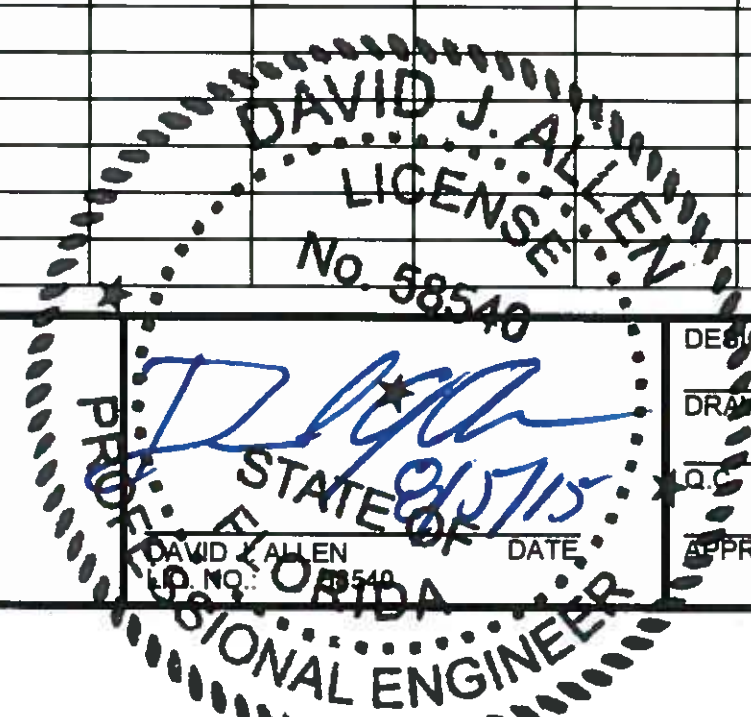
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			T-5		T-6		T-7		T-8		T-9		T-10		T-11		T-12			PLAN	FINAL	PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL							
630-2-11	CONDUIT (F&I) (OPEN TRENCH)	LF	240		190		235		30		1160		1211		1031		1048		5145		5145		
630-2-12	CONDUIT (F&I) (DIRECTIONAL BORE)	LF	290		450		310				210				203		115		1578		1578		
632-7-1	SIGNAL CABLE (NEW OR RECONSTRUCTED INTERSECTION-F&I)	PI	1		1		1												3		3		
632-7-6	SIGNAL CABLE, REMOVE-INTERSECTION	PI							1										1		1		
633-1-121	FO CABLE (F&I)(UNDERGROUND)(2-12 FIBERS)	LF									280				125		100		505		505		
633-1-122	FO CABLE (F&I)(UNDERGROUND)(13-48 FIBERS)	LF									1605		1375		1618		1757		6355		6355		
633-2-31	FO CABLE CONN(INSTALL)(SPLICE)	EA									4				4		4		12		12		
633-2-32	FO CABLE COMM (INSTALL) (TERMINATION)	EA															48		48		48		
633-3-11	FO CABLE CONN HARDWARE(F&I)(SPLICE ENCLOSURE)	EA									2				1		2		5		5		
633-3-12	FO CABLE CONN HARDWARE (F&I) (SPLICE TRAY)	EA	1		1		1				1				1		1		6		6		
633-3-15	FO CABLE COMM HARDWARE (F&I) (PATCH PANEL) (PRETERM)	EA	1		1		1												3		3		
635-2-11	PULL AND SPLICE BOX (F&I) (STANDARD SIZE)	EA	12		12		9		1										34		34		
635-2-12	PULL AND SPLICE BOX (F&I) (24"x36")	EA									4				3		3		12		12		
635-2-13	PULL AND SPLICE BOX (F&I) (30"x60")	EA									1		2		1		2		4		4		
639-1-122	ELECTRICAL POWER SERVICE (F&I)(UNDERGROUND) METER PURCHASED BY CONTRACTOR	AS	1		1		1		1										4		4		
639-2-1	ELECTRICAL SERVICE WIRE (F&I)	LF	885		1170		300		90										2445		2445		
639-3-11	ELECTRICAL SERVICE DISCONNECT (F&I) (POLE)	EA	1		1														2		2		
641-2-12	PRESTRESSED CONCRETE POLE (F&I)(P-11 SERV)(12')	EA	2		2		1		1										6		6		
641-2-80	POLE REMOVAL - DEEP - DIRECT BURIAL	EA																	2		2		
646-1-11	ALUMUNUM SIGNAL POLE (F&I)(PEDESTAL)	EA	8		8		8												24		24		
646-1-60	SIGNAL PEDESTAL REMOVE	EA							4										4		4		
649-31-204	STEEL MAST ARM ASSEMBLE (F&I) (130 MPH) (70.5)	EA			1														1		1		
649-31-205	STEEL MAST ARM ASSEMBLE (F&I) (130 MPH) (78)	EA			1														1		1		
649-31-219	STEEL MAST ARM ASSEMBLY (F&I)(130 MPH)(70.5-70.5)	EA	1																1		1		
649-31-299	STEEL MAST ARM ASSEMBLY (F&I)(130 MPH)(CUSTOM)	EA	1		2		2												5		5		
650-1-14	TRAFFIC SIGNAL (F&I) (3-SECT.)(1-WAY)(ALUMINUM)	AS	6		19		9												34		34		
650-1-19	TRAFFIC SIGNAL (F&I) (5-SECT.)(1-WAY)(ALUMINUM)	AS	4				1												5		5		
653-1-11	PEDESTRIAN SIGNAL (F&I) (LED COUNTDOWN)(1 DIRECTIONAL)	AS	8		8		8												24		24		
660-1-600	VEHICLE DETECTOR ASSEMBLY REMOVE	EA							12										12		12		
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO (F&I) (CABINET EQUIPMENT)	EA	4		4		4												12		12		
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO (F&I) (ABOVE GROUND EQUIPMENT)	EA	4		4		4												12		12		
665-1-11	PEDESTRIAN DETECTOR (F&I)(STANDARD)	EA	8		8		8												24		24		
670-5-112	TRAFFIC CONTROLLER ASSEMBLY (F&I) (NEMA) (2 PREEMPTIONS)	AS	1		1		1												3		3		
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH (F&I)	EA	1		1		1												3		3		
685-106	SYSTEM AUXILIARIES (F&I) (UPS)	EA	1		1		1												3		3		
700-5-22	INTERNALLY ILLUMINATED SIGN (F&I)(12-18 SF)	EA	4		4		4												12		12		

	UPDATED AND REMOVED PAY ITEMS TO MEET 2015 REVISED QUANTITIES ON POWER SERVICE ADJUSTMENTS	DJA	08/05/15
NO.	DESCRIPTION	BY	DATE

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**


Cardno
 Shaping the Future
3905 CRESCENT PARK DRIVE, RIVERVIEW, FL 33578
 TEL: (813) 664-4500 FAX: (813) 664-0440
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TABULATION OF QUANTITIES

PROJECT NO: 00193-001-18
 DATE: 8-05-2015
 SHEET NO: T-2

MANATEE COUNTY GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT MANATEE COUNTY PROJECT MANAGEMENT DIVISION AND THE TRAFFIC ENGINEERING DIVISION BEFORE STARTING WORK. COUNTY STANDARD UPDATES, TRAFFIC SIGNAL DESIGN GUIDE AND/OR OTHER INFORMATION SHALL BE OBTAINED.
2. ONE WEEK PRIOR TO THE BEGINNING OF THE TRAFFIC SIGNAL INSTALLATION, LOOP CUTTING, OR TURN ON OF A NEW SIGNAL, THE CONTRACTOR SHALL NOTIFY:

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
MANATEE COUNTY PROJECT MANAGEMENT DIVISION
1026 26TH AVENUE EAST
BRADENTON, FLORIDA 34208
PHONE: 941-708-7510

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
MANATEE COUNTY TRAFFIC ENGINEERING DIVISION
2101 47TH TERRACE EAST
BRADENTON, FLORIDA 34203
PHONE: 941-749-3502
3. THE CONTRACTOR SHALL PERFORM ALL WORK AS PER LATEST FDOT SPECIFICATIONS AT TIME OF BID, INCLUDING THE 2014 DESIGN STANDARDS AND THE 2014 FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS WITH CURRENT SUPPLEMENTAL SPECIFICATIONS THERETO. FDOT SPECIFICATIONS SHALL BE FOLLOWED. WHEN FDOT AND MANATEE COUNTY SPECIFICATIONS DIFFER, THE MORE STRINGENT SPECIFICATIONS WILL TAKE PRECEDENCE. MANATEE COUNTY TRAFFIC SPECIFICATIONS AND THE TRAFFIC SIGNAL DESIGN GUIDE SHALL BE OBTAINED BY THE CONTRACTOR FROM THE PROJECT MANAGEMENT DEPARTMENT.
4. THE CONTRACTOR SHALL PROVIDE A QUALIFIED TECHNICIAN, TO PERFORM CONSTRUCTION ENGINEERING & INSPECTION SERVICES FOR THE INSTALLATION OF THE TRAFFIC SIGNAL, AND TO CERTIFY THAT ALL WORK HAS BEEN DONE IN ACCORDANCE WITH THE COUNTY'S STANDARDS, SPECIFICATIONS, PERMIT REQUIREMENTS, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL STATUTES, RULES, AND REGULATIONS. IN ADDITION, THE ON-SITE INSPECTOR SHALL BE IMSA LEVEL II CERTIFIED.
5. RESULTS OF FIELD TESTS (I.E., SECTION 611-4) SHALL BE MADE AVAILABLE TO THE PROJECT ENGINEER IN WRITTEN FORM. A QUALIFIED CONTRACTOR'S REPRESENTATIVE SHALL BE PRESENT AT THE CONDITIONAL ACCEPTANCE INSPECTION OF THE CONTROLLER ASSEMBLY. THE QUALIFICATIONS OF THE REPRESENTATIVE SHALL INCLUDE:
 - A) COMPLETE FAMILIARITY WITH ALL SYSTEMS ELEMENTS INCLUDING CONTROLLERS, COORDINATING UNITS, SYSTEM CLOCKS AND SYSTEM COMMUNICATIONS ELEMENTS. THE REPRESENTATIVE SHALL BE QUALIFIED TO INPUT AND RECALL ALL CONTROLLER AND SYSTEM TIMING FUNCTIONS.
6. IN ORDER TO BE CONSISTENT WITH MANATEE COUNTY'S STANDARD VIDEO DETECTION, PROVIDE ITERIS VANTAGE RZ4 ADVANCED WIDE DYNAMIC RANGE COLOR CAMERA SYSTEM. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL COMPONENTS NECESSARY FOR THE VIDEO DETECTION SYSTEM INTEGRATION. A SITE SURVEY SHOULD BE REQUESTED AS WELL AS A COMPLETE MATERIALS LIST FROM ITERIS, (STOKES WALLACE WITH ITERIS). EXTRA MOUNTING HARDWARE MAY BE NECESSARY TO COMPLETE AN ACCEPTABLE INSTALLATION.
7. THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY FOR THE ACCEPTABLE AND COMPATIBLE VIDEO DETECTION SYSTEM TO INSTALL. INSTALL THE ITERIS VANTAGE RZ4 ADVANCED WIDE DYNAMIC RANGE COLOR CAMERA MOUNTED ON PELCO MAST ARM CAMERA BRACKET. INSTALL THE DETECTION SYSTEM IN STRICT ACCORDANCE WITH THE GUIDANCE CONTAINED IN THE VIDEO DETECTION SYSTEM'S INSTALLATION MANUALS. THE CONTRACTOR SHALL ONLY USE MANUFACTURER APPROVED CABLING CONNECTORS AND COMPONENTS TO COMPLETE THE INSTALLATION OF THE VIDEO DETECTION SYSTEM. THE SIGNAL CONTRACTOR SHALL CONSULT WITH THE TECHNICAL REPRESENTATIVES PRIOR TO ORDERING THE SYSTEM COMPONENTS AND TO OBTAIN OPTIMUM CAMERA PLACEMENT AND MOUNTING HEIGHT FOR EACH CAMERA PRIOR TO INSTALLATION. (STOKES WALLACE WITH ITERIS). AFTER THE SYSTEM INSTALLATION IS COMPLETE THE CONTRACTOR SHALL REQUEST A SYSTEM CRITIQUE FROM THE VIDEO DETECTION EQUIPMENT SUPPLY MANUFACTURER. THE RESULTS OF THE SYSTEM CRITIQUE SHALL BE PROVIDED, IN WRITING, TO MANATEE COUNTY PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL SYSTEM.
8. THE CONTRACTOR MUST NOTIFY THE TRAFFIC ENGINEERING DIVISION (MR. VISHAL S. KAKKAD, 941-749-3502) AT LEAST TWO (2) BUSINESS DAYS IN ADVANCE TO SCHEDULE THE FINAL INSPECTION.
9. PRIOR TO ORDERING MATERIALS, THE SIGNAL CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS DIVISION THROUGH THE PROJECT MANAGEMENT DEPARTMENT AND VERIFY CURRENT COLOR CODES TO BE USED FOR SIGNAL CABLE.

10. MINIMUM FIBER OPTIC PULL BOX SIZE SHALL BE 2 FT WIDE BY 3 FT LONG BY 3 FT DEEP. THIS REQUIREMENT SHALL APPLY TO TWISTED PAIR COMMUNICATIONS CABLES AS WELL AS FIBER OPTIC CABLE.
11. SIGNAL TO BE PLACED IN FULL OPERATION ON A MONDAY, TUESDAY, OR WEDNESDAY, BUT SHALL NOT BE PLACED IN FULL OPERATION ON THE DAY PRECEDING A HOLIDAY.
12. THE CONTRACTOR TO PROVIDE A WARRANTY/MAINTENANCE BOND FOR SIGNAL INSTALLATIONS IN ACCORDANCE WITH F.D.O.T. SPECIFICATION SECTION 611-5.
13. THE CONTRACTOR IS RESPONSIBLE TO CONTACT MANATEE COUNTY AT 941-708-7510, FOR THE ASSIGNMENT OF THE PHYSICAL ADDRESS ONCE THE SERVICE DROP LOCATION HAS BEEN ESTABLISHED.
14. EXTREME CARE SHALL BE TAKEN TO INSURE THAT ALL SIGNAL EQUIPMENT IS INSTALLED AS SHOWN IN PLANS WITHIN EXISTING RIGHT-OF-WAY.
15. THE CONTRACTOR SHALL PROVIDE A DETAILED PROJECT WIRING DIAGRAM. THE WIRING DIAGRAM SHALL LIST THE CABLE TYPES, PAIR COUNTS, FIBER COUNTS, MANUFACTURER CABLE PRODUCT ID, PAIR USAGE, AND WIRE GAUGE OF EACH CABLE INSTALLED. THE DIAGRAM SHALL CLEARLY AND ACCURATELY SHOW THE POINT TO POINT ROUTING OF EACH CABLE OR CONDUCTOR INSTALLED WITHIN THE SCOPE OF THE PROJECT. THREE COPIES OF THE WIRING DIAGRAM SHALL BE DELIVERED TO MANATEE COUNTY PRIOR TO SCHEDULING THE FINAL INSPECTION.
16. UPON PROJECT COMMENCEMENT THE SIGNAL SUBCONTRACTOR SHALL BE AVAILABLE TO RESPOND TO ALL SIGNAL RELATED MALFUNCTIONS AND POWER OUTAGES. THE CONTRACTOR SHALL MAINTAIN AN ADEQUATE REPAIR INVENTORY, EQUIPMENT AND NEARBY PERSONNEL TO RESPOND AND CORRECT TRAFFIC SIGNAL MALFUNCTIONS AND MOT RELATED PHASING AND TIMING ISSUES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE A QUALIFIED SIGNAL TECHNICIAN WHO CAN RESPOND WITHIN A MINIMUM OF TWO HOURS, 24 HOURS A DAY, 7 DAYS A WEEK.
17. UPON PASSING THE FINAL INSPECTION, THE CONTRACTOR SHALL SEND A WRITTEN REQUEST TO THE MANATEE COUNTY TRAFFIC OPERATIONS DIVISION, 2904 12TH STREET COURT EAST, BRADENTON FLORIDA 34208 (ATTN: MR. AARON BURKETT) REQUESTING TO TRANSFER MAINTENANCE FROM THE CONTRACTOR TO MANATEE COUNTY, MANATEE COUNTY WILL RESPOND WITHIN 5 WORKING DAYS TO ESTABLISH A TIME TABLE FOR THE TRANSFER OF MAINTENANCE RESPONSIBILITY.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL POWER COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING FEE IS REQUIRED. ANY FEE SHALL BE INCLUDED AS PART OF PAYMENT FOR THE ELECTRICAL POWER SERVICE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS OF THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION, INSPECTION AND ENERGIZING OF THE NEW POWER SERVICE IN A TIMELY MANNER IN ORDER TO PROMOTE PROJECT COMPLETION WITHIN CONTRACT TIME.
19. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND IN ALL CASES WHERE JOINT USE POLES ARE CALLED FOR.
20. THE CONTRACTOR SHALL HAND DIG THE FIRST 48 INCHES OF THE HOLE FOR THE POLE FOUNDATION OR CONDUIT RUN WHERE UTILITIES ARE IN CLOSE PROXIMITY.
21. THE CONTRACTOR IS TO DE-WATER THE POLE FOUNDATION EXCAVATION IF THE ELEVATION OF WATER IS HIGHER THAN THE ELEVATION OF THE FOUNDATION BASE.
22. UNLESS OTHERWISE NOTED ALL REMOVED EQUIPMENT EXCEPT CONCRETE POLES SHALL BE TURNED OVER TO MANATEE COUNTY AND DELIVERED TO THE TRAFFIC OPERATIONS DIVISION, LOCATED AT 2404 12TH STREET COURT EAST, BRADENTON, FLORIDA 34208, AS DIRECTED BY THE ENGINEER. CONCRETE POLES SHALL BE DISPOSED OF BY THE SIGNAL CONTRACTOR IN AREAS PROVIDED BY THE CONTRACTOR.
23. THE CONTRACTOR SHALL CONTACT THE LOCAL POWER COMPANY FOR ITS ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES AT SIGNAL POLES, SUCH AS THE INSTALLATION OF SIGNAL CABLE, FIBERGLASS INSULATORS AND SIGNAL POLES.
24. THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL UTILITIES.
25. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.

26. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS OF ANY EXCAVATION OR DEMOLITION ACTIVITY THROUGH SUNSHINE ONE CALL OR FLORIDA INC. (1-800-432-4770) AND SHALL ALSO NOTIFY THOSE UTILITY OWNERS/AGENCIES LISTED WITHIN OR IMPACTED BY THESE PLANS, NOT LESS THAN TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE.
27. THE TYPE OF EQUIPMENT USED IN THE INSTALLATION OF MAST ARMS/FOUNDATIONS, OVERHEAD CANTILEVER SIGNS/FOUNDATIONS, AND THE MOVEMENT/INSTALLATION OF STRAIN POLES SHALL MEET THE FOLLOWING REQUIREMENTS: 1) OVERHEAD LINES SHALL STAY IN PLACE BOTH VERTICALLY AND HORIZONTALLY AND; 2) CONTRACTOR SHALL MEET ALL LATEST APPLICABLE OSHA REQUIREMENTS. ANY COST ASSOCIATED WITH THE TYPE OF EQUIPMENT REQUIRED FOR THIS INSTALLATION IS INCLUDED IN THE RELATED PAY ITEMS.
28. THE CONTRACTOR SHALL FIELD VERIFY ALL CRITICAL ELEVATIONS PRIOR TO ORDERING MAST ARMS.
29. DETECTION MUST BE MAINTAINED FOR VEHICLES AND PEDESTRIANS FOR THE LIFE OF THE PROJECT. ANY DAMAGE TO THE EXISTING DETECTION SYSTEM AT AN INTERSECTION MUST BE RESTORED WITHIN TWENTY-FOUR (24) HOURS AT NO ADDITIONAL COST TO THE COUNTY. THE COST FOR ANY TEMPORARY DETECTION SHALL BE INCLUDED IN PAY ITEM 102-1, MOT.
30. WHEN A CONTRACTOR IS WORKING ON A SIGNAL IN AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, LOOPS, HOMERUNS OR TURNING ON OF NEW SIGNAL) WHERE A LANE IS CLOSED, THE ENGINEER MAY REQUIRE AN OFF DUTY LAW ENFORCEMENT OFFICER TO DIRECT TRAFFIC. THE HOURLY RATE OF PAY FOR AN OFF DUTY LAW ENFORCEMENT OFFICER CAN BE OBTAINED FROM THE LOCAL LAW ENFORCEMENT OFFICE. THE COST OF THE OFFICER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED IN PAY ITEM 102-1, MOT.
31. EARTHING CONDUCTORS (FORMERLY GROUNDING ELECTRODE CONDUCTOR), TRANSIENT VOLTAGE AND SURGE PROTECTION DEVICES SHALL TAKE THE SHORTEST PATH TO ITS TERMINATION POINT WITHIN THE STRUCTURE THAT IS TO BE PROTECTED. SHARP BENDS AND ROUTING THAT CREATES UNNECESSARY CABLE LENGTH WILL NOT BE ACCEPTED.
32. GROUNDING: ALL GROUND ROD EQUIPMENT SHALL BE BONDED TOGETHER TO FORM AN INTEGRATED GROUNDING SYSTEM USING #6 AWG THHN COPPER WIRE. THE UPPER END OF ALL GROUND RODS SHALL BE 18 INCHES BELOW GROUND ELEVATION. MARK GROUND ROD LOCATIONS WITH PERMANENT MARKER SUCH AS AN EPOXY STICKER LOCATED ON THE NEAREST CURB AND PROVIDE AS-BUILT DRAWINGS WITH THE LOCATION OF GROUND RODS MARKED. GROUNDING CONDUCTOR MUST BE #6 OR LARGER INSULATED COPPER. EQUIPMENT SHALL NOT BE PLACED INTO OPERATIONAL SERVICE UNTIL THE ASSOCIATED GROUNDING SYSTEM HAS BEEN INSPECTED AND APPROVED BY A MEMBER OF THE MANATEE COUNTY TRAFFIC OPERATIONS STAFF.
33. GROUND RESISTANCE TESTER, OR OTHER APPROVED MEANS WILL BE USED TO ACQUIRE ACQUIRE THE GROUND ROD RESISTANCE. A MEMBER OF THE TRAFFIC OPERATIONS DIVISION STAFF SHALL BE PRESENT DURING THE TEST.
34. ELEVATION OF THE TOP OF THE MAST ARM FOUNDATION SHALL BE SIX INCHES ABOVE FINAL GRADE. IF LOCATED DIRECTLY BACK OF SIDEWALK, THE FOUNDATION ELEVATION SHALL MATCH SIDEWALK GRADE.
35. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR BORING.
36. CONTRACTOR SHALL SUPPLY ALL MATERIAL SUBMITTALS TO MANATEE COUNTY TRAFFIC OPERATIONS DIVISION PRIOR TO CONSTRUCTION FOR APPROVAL.
37. ALL FIBER OPTIC CABLE, FIBER OPTIC SPLICING HARDWARE AND SPLICE CASES SHALL BE THE SAME AS OR EQUAL TO THAT WHICH WAS INSTALLED AS PART OF THE ATMS PROJECT. THIS INCLUDES FIBER OPTIC SPLICES AND PULL BOXES.
38. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION FOR A LIST OF APPROVED ITS COMPONENTS FOR ALL ATMS MATERIAL PRIOR TO SUBMITTING SHOP DRAWINGS. THIS INCLUDES BUT NOT LIMITED TO ETHERNET SWITCH, FIBER PULL BOXES, SPLICE BOXES AND ROUTE MARKERS WITH CORRECT WORDING.
39. AT EXISTING SIGNALIZED INTERSECTIONS THAT ARE UPGRADED DETECTION MUST BE MAINTAINED FOR VEHICLE AND PEDESTRIAN MOVEMENTS FOR THE LIFE OF THE PROJECT.
40. THE COST FOR ANY EXISTING SIGNAL PULL BOXES THAT ARE NOT NEEDED AND TO BE REMOVED AT US 301 AND 38TH AVENUE EAST SHALL BE INCLUDED UNDER THE ROADWAY PLANS CLEARING AND GRUBBING PAY ITEM.

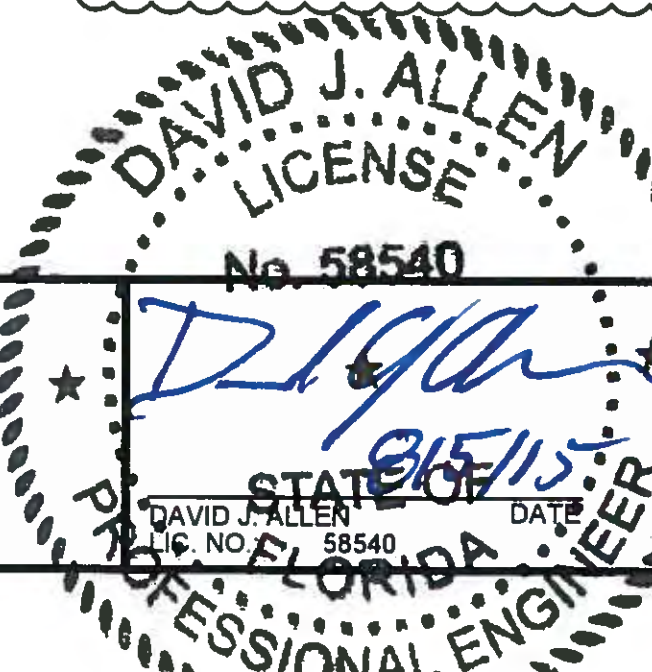
CONDUIT LEGEND
 LV = SIGNAL LOW VOLTAGE CONDUIT
 HV = SIGNAL HIGH VOLTAGE CONDUIT
 VID = VIDEO DETECTION CONDUIT
 SP = SPARE CONDUIT
 PS = POWER SERVICE CONDUIT

NO.	DESCRIPTION	BY	DATE
40	ADDED NOTE 40.	DJA	08/05/15

MANATEE COUNTY

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ROADWAY EXTENSION**

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DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

**MANATEE COUNTY
GENERAL NOTES**

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	T-3

PAY ITEM FOOTNOTES:

1. 630-2-11: ALL CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC AND FIELD ADJUSTMENTS MAY BE NECESSARY. WITH THE EXCEPTION OF ELECTRICAL POWER SERVICE DUCTS, JACK AND BORE SLEEVES, AND DIRECTIONAL BORE CONDUITS, ALL UNDERGROUND AND UNDER PAVEMENT CONDUITS SHALL BE SCHEDULE 40 PVC WITH A MINIMUM SIZE OF TWO INCHES UNLESS OTHERWISE SPECIFIED IN THE PLANS. COST FOR PULL WIRE IS INCLUDED UNDER THIS PAY ITEM.

INSTALL CONDUIT UNDER PROPOSED ROADWAY AND/OR SIDEWALK PRIOR TO INSTALLATION OF ROADWAY BASE AND SURFACE OR CONCRETE.

INTERCONNECT CONDUIT INSTALLED USING TRENCHING METHOD SHALL BE COMPOSED OF TWO 3-INCH HDPE CONDUITS.

2. 630-2-12 CONDUIT INSTALLED WITH THE DIRECTIONAL BORE METHOD SHALL BE HDPE WITH A MINIMUM SIZE OF TWO-INCHES UNLESS OTHERWISE NOTED IN THE PLANS. COST FOR PULL WIRE IS INCLUDED UNDER THIS PAY ITEM.

INTERCONNECT CONDUIT INSTALLED USING DIRECTIONAL BORE SHALL BE COMPOSED OF TWO 3-INCH HDPE CONDUITS.

3. 632-7-1: VERIFY THE COLOR CODE OF SIGNAL CABLE WITH THE MAINTAINING AGENCY PRIOR TO WIRING INTERSECTION. USE A MINIMUM OF 7 CONDUCTOR SIGNAL CABLE.

4. 635-2-11: FDOT APPROVED PULL BOXES SHALL BE TRAFFIC BEARING, ALL POLYMER CONSTRUCTION (NOT CONCRETE), PULL BOXES AND LIDS. THE PULL BOX AND LIDS SHALL BE QUARTZITE OR ANOTHER EQUIVALENT FDOT APPROVED MANUFACTURER. PULL BOXES SHALL BE PLACED BEHIND CURB AND GUTTER. WHERE THERE IS NO CURB AND GUTTER PULL BOXES SHALL BE PLACED A MINIMUM OF 7 FEET FROM THE EDGE OF THE PAVEMENT. THE TOP OF THE LID SHALL READ "MANATEE COUNTY TRAFFIC SIGNAL" IN STAMPED RAISED LETTERS. PULL BOX DIMENSION IS 17"x30"x12".

5. 635-2-12: PULL BOX SHALL BE FDOT APPROVED POLYMER TYPE WITH DIMENSIONS OF 24"x36"x36" WITH "MANATEE COUNTY FIBER OPTIC SYSTEM" STAMPED ON THE COVER IN RAISED LETTERS.

6. 635-2-13: PULL BOX SHALL BE FDOT APPROVED POLYMER TYPE WITH DIMENSIONS OF 30"x60"x48" WITH "MANATEE COUNTY FIBER OPTIC SYSTEM" STAMPED ON THE COVER IN RAISED LETTERS.

7. 639-1-122 AND 639-3-11: THE BREAKERS SHALL BE CLEARLY MARKED. THE ELECTRICAL SERVICE DISCONNECT IS 100 AMP, COMPRISING OF A SIX (6) CIRCUIT DISCONNECT BOX WITH FOUR CIRCUIT BREAKERS - ONE 40 AMP/120 VOLT FOR CONTROLLER, ONE 30 AMP FOR INTERNALLY ILLUMINATED STREET NAME SIGNS, ONE 15 AMP/120 VOLT FOR LIGHTING LUMINAIRE AND ONE 15 AMP/120 VOLT FOR FUTURE USE.

THIS PAY ITEM INCLUDES THE PHOTO CELL FOR THE INTERNALLY ILLUMINATED SIGNS. INSTALL A PHOTOELECTRIC CELL FOR ILLUMINATED STREET NAME SIGNS ON THE TRAFFIC SIGNAL ELECTRIC SERVICE DISCONNECT.

USE ALUMINUM RIGID ABOVE GROUND CONDUIT FOR ELECTRICAL POWER SERVICE.

8. 639-2-1: THE PAYMENT OF THIS ITEM SHALL BE BASED ON THE LINEAR FOOT OF A SINGLE CONDUCTOR.

9. 641-2-80: THIS PAY ITEM INCLUDES THE COST OF REMOVAL AND DELIVERY OF ALL ATTACHEMENTS INCLUDING BUT NOT LIMITED TO VEHICULAR SIGNAL HEADS, SPAN WIRE, INTERNALLY LIT STREETNAME SIGNS AND MOUNTING HARDWARE.

10. 646-1-11: USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS FOR PEDESTRIAN PEDESTALS. INSIDE DIAMETER OF PEDESTALS SHALL BE FOUR INCHES (4"). USE LOCKING COLLARS WHEN MOUNTING PEDESTRIAN SIGNAL HEADS TO PEDESTRIAN PEDESTALS. USE LOCKING COLLARS WHEN MOUNTING ALUMINUM PEDESTRIAN POLES TO PEDESTRIAN PEDESTAL BASES.

11. 646-1-80: THIS PAY ITEM INCLUDES THE COST OF REMOVAL AND DELIVERY OF ALL ATTACHEMENTS INCLUDING BUT NOT LIMITED TO PEDESTRIAN SIGNAL HEADS, PEDESTRIAN DETECTOR SIGNS/BUTTONS AND MOUNTING HARDWARE.

12. 649-31-204, 649-31-205, 649-31-219 AND 649-31-299: THE CONTRACTOR SHALL CONTACT THE LOCAL POWER COMPANY FOR THEIR ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES AT SIGNAL POLE(S), SUCH AS THE INSTALLATION OF MAST ARM FOUNDATIONS OR POLES. A SPARE 2 INCH UNDERGROUND CONDUIT RUN SHALL BE PROVIDED FOR EACH MAST ARM POLE. THE CONDUIT SHALL BE CAPPED IN THE NEAREST PULL BOX. USE THREE 2-INCH AND ONE 3/4" CONDUITS STUBBED OUT THROUGH THE MAST ARM POLE FOUNDATION AND TEMPORARY POLE. THE ELEVATION OF THE TOP OF THE MAST ARM BASE(S) SHALL BE SIX INCHES ABOVE EXISTING GRADE. IF LOCATED DIRECTLY BEHIND SIDEWALK, AT SIDEWALK GRADE.

13. 650-1-14 & 650-1-19: USE SIGNAL HEAD SUPPORTING TUBE THAT IS CAPABLE OF ADJUSTING VERTICALLY A MINIMUM OF 1.5 FEET.

THE EXTERNAL COLOR OF SIGNAL HOUSING SHALL BE BLACK. ALL TRAFFIC SIGNAL HEAD INDICATIONS SHALL BE 12 INCH LED. ALL SIGNAL HEADS SHALL HAVE TUNNEL VISORS AND LOUVERED BACK PLATES WITH A 2" YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER. THE COST FOR THE TUNNEL VISORS AND BACK PLATES SHALL BE INCLUDED UNDER THIS PAY ITEM. DO NOT USE PLASTIC GARBAGE BAGS AS A COVER FOR CONCEALING SIGNAL HEAD.

14. 653-1-11: PEDESTRIAN SIGNAL HEADS TO BE FDOT APPROVED 16-INCH INTERNATIONAL SYMBOL, LED COUNTDOWN TYPE.

15. 660-4-11 AND 660-4-12: VIDEO DETECTION CAMERA SHALL BE ITERIS VANTAGE RZ4 ADVANCED WIDE DYNAMIC RANGE COLOR CAMERA MOUNTED ON PELCO MAST ARM CAMERA BRACKET. INSTALL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CONSULTATION WITH THE VIDEO DETECTION MANUFACTURER SHALL OCCUR DURING THE DESIGN PROCESS TO ASCERTAIN THE SUITABILITY AND PROPER PLACEMENT OF THE VIDEO DETECTION EQUIPMENT. IN ADDITION TO THE CAMERAS AND OTHER RELATED EQUIPMENT, THE VIDEO DETECTION SYSTEM MUST INCLUDE THE FOLLOWING: ITERIS VANTAGE EDGE 2 PROCESSOR, ITERIS EDGE CONNECT MODULE, ITERIS VANTAGE EDGE2 TS2 I/O MODULE.

USE A 7/2" LONG GUSSET TUBE FOR VIDEO DETECTION CAMERA ATTACHMENT BRACKET. VIDEO DETECTION TO BE COMPATIBLE WITH MAINTAINING AGENCY'S EXISTING VIDEO DETECTION SYSTEM.

THE VIDEO VEHICLE SYSTEM INSTALLER SHALL LEAVE A MINIMUM OF 30 INCHES OF SPARE CABLE AT EACH CAMERA BRACKET. THE SLACK SHALL BE NEATLY FORMED INTO A LOOP AND SECURED TO THE CAMERA. A MINIMUM OF 10 FEET OF VIDEO CABLE SLACK SHALL BE NEATLY STORED AT EACH PULL BOX LOCATION WITHIN A CONDUIT RUN. A MINIMUM OF 30 FEET OF SLACK SHALL BE AVAILABLE FOR EACH NEW VIDEO DETECTION CABLE RUN.

16. 665-1-11: USE PEDESTRIAN BUTTON SIGNAL SIGN FTP-68B-06. STREET NAME SHALL BE IN ACCORDANCE WITH THE STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.

17. 670-5-112: USE A NEMA TS2 TYPE I CONTROLLER IN A TYPE 5 ENCLOSURE - COMPATIBLE WITH EXISTING TRAFFIC SIGNAL SYSTEM. THE CONTROLLER SUPPLIED WITH THE CABINET SHALL BE A NAZTEC 980 TS2 TYPE I. THE NAZTEC 980 CONTROLLER SHALL COME EQUIPPED WITH 4 SERIAL PORTS AND ONE ETHERNET PORT. ALL CONTROLLER EQUIPMENT TO BE COMPATIBLE WITH MANATEE COUNTY'S EXISTING ATMS SYSTEM (NAZTEC'S ATMS.NOW). THE CABINET SHALL COME EQUIPPED WITH A ETHERNET SWITCH PAID UNDER A SEPARATE PAY ITEM NUMBER AND ALL THE NECESSARY SYSTEM COMPONENTS FOR INTEGRATION INTO AN ETHERNET-BASED FIBER OPTIC NETWORK. CONTACT MANATEE COUNTY PRIOR TO ORDERING CONTROLLER ASSEMBLY TO CONFIRM EQUIPMENT COMPATIBILITY.

THE CONTRACTOR SHALL COORDINATE WITH MANATEE COUNTY TO PICK UP AND INSTALL THE GENERATOR CABINET ON THE NEW FOUNDATION. ALL COSTS OF LABOR, CONCRETE AND OTHER MATERIALS FOR THE CONTROLLER ASSEMBLY AND EGC BASES, TECHNICIAN PADS, STEPS AS REQUIRED, AND INSTALLATION OF THE GENERATOR CABINET ARE INCLUDED IN THIS ITEM. THE CONTROLLER AND EGC BASE SHALL BE AT LEAST 2' HIGH OR THE SAME ELEVATION AS THE CROWN OF THE ROADWAY, WHICHEVER IS GREATER. THE MAXIMUM DISTANCE FROM THE TECHNICIAN PAD OR STEP TO THE FOUNDATION TOP IS 24". THE CABINET DOORS SHALL OPEN TOWARDS OR PARALLEL TO THE RIGHT-OF-WAY LINE AND AWAY FROM TRAFFIC.

18. 684-1-1: THE ETHERNET SWITCH SHALL BE A RUGGEDCOM SWITCH MODEL NUMBER RS900 HI-D-C2-C2-00.

19. 685-106: INCLUDE AN UNINTERRUPTED POWER SUPPLY UNIT (UPS) WITH NOMINAL OPERATING RANGE OF 850W TO 110W WITH A STANDARD RS232 ETHERNET PORT. UPS SHALL BE ALPHA FXM 1100 WITH ETHERNET CONNECTION AND SNMP (PROTOCOL). THE UPS SHALL BE SIZED TO ACCOMMODATE THE MAXIMUM CONNECTED LOAD. THE BATTERY BANK SHALL BE SIZED TO PROVIDE A MINIMUM 4 HOURS RUN TIME UNDER FULL LOAD. ATTACH UPS UNIT TO THE OUTSIDE OF THE CONTROLLER CABINET. INSTALL UPS UNIT IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

20. 700-5-22: ALL INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE EDGE LIT LED TYPE AND SHALL BE LISTED IN THE FDOT APPROVED PRODUCT LIST. THE COST OF THIS ITEM SHALL INCLUDE PROPERLY DESIGNED AND SIZED ADJUSTABLE HANGERS, BRACKETS, CLAMPS, AND ALL MISCELLANEOUS HARDWARE NECESSARY TO RIGID MOUNT THE SIGNS AS SHOWN IN THE PLANS. THE SIGNS SHALL BE POWERED USING IMSA 50-2 CABLE. PAYMENT INCLUDES INSTALLATION OF THE PHOTOCELL OUTSIDE THE SERVICE DISCONNECT. THE STREET NAME SIGN SHALL BE RIGIDLY MOUNTED ON THE MAST ARM.

NO.	DESCRIPTION	DJA	08/05/15
▲	UPDATED PAY ITEMS AND FOOTNOTES TO MEET 2015	DJA	08/05/15

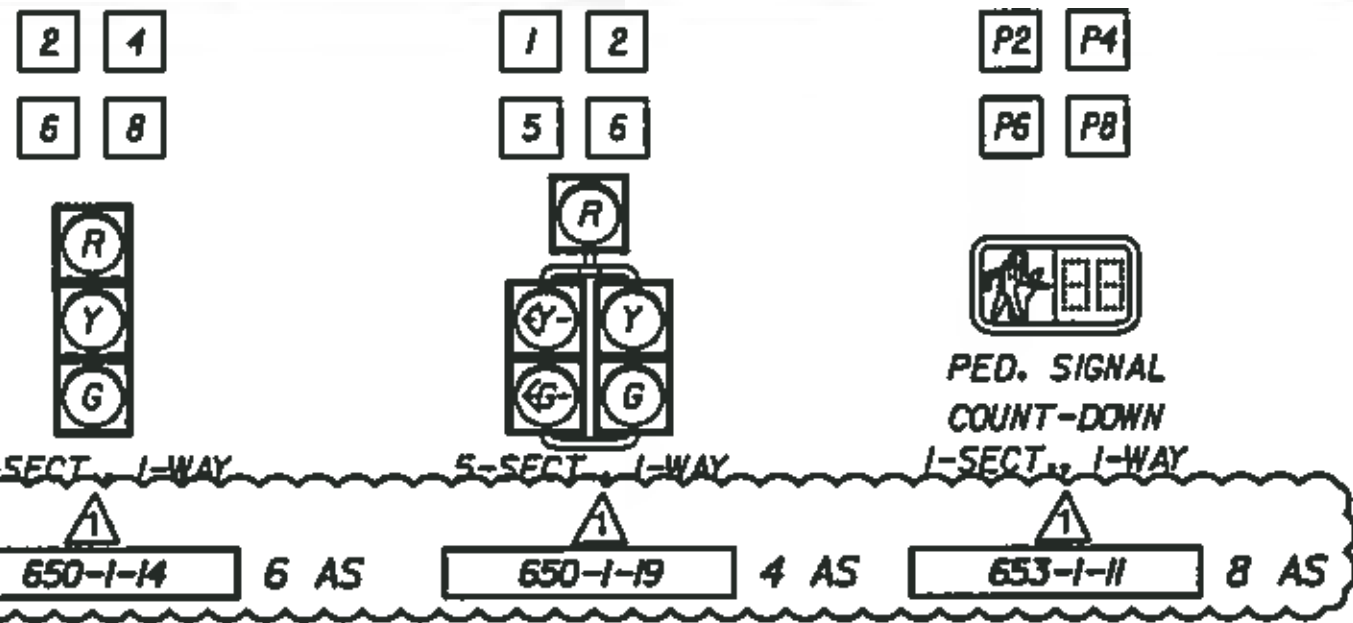
MANATEE COUNTY

44TH AVENUE EAST
ROADWAY EXTENSION

DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

PAY ITEM NOTES

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	T-4

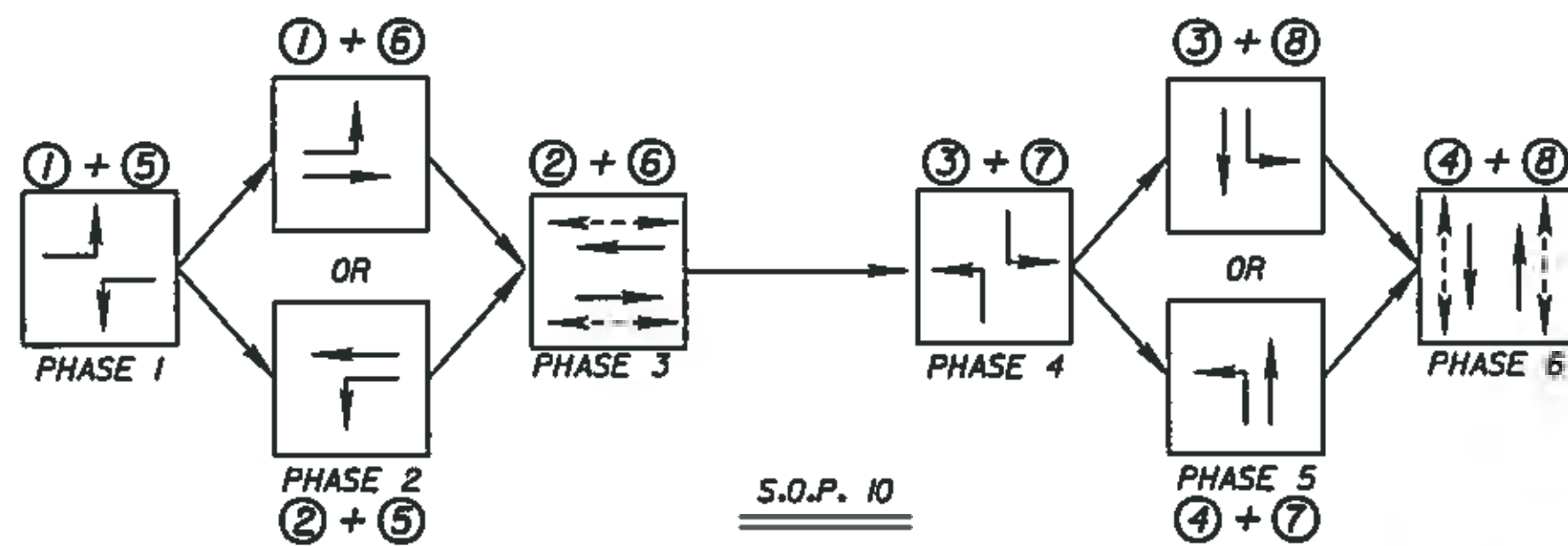


* ALL SIGNALS SHALL USE LOUVERED ALUMINUM SIGNAL HEAD BACK PLATES WITH A 2" YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER

- NOTES:**
1. POWER SERVICE METER BASE AND DISCONNECT SHALL BE INSTALLED ON THE CONCRETE SERVICE POLE AS SHOWN ON THE PLANS AND FDOT INDEX 17504 AND 17736.
 2. VIDEO DETECTION CAMERA PLACEMENT IS TO BE REVIEWED BY VIDEO DETECTION ENGINEER PRIOR TO FIELD PLACEMENT.
 3. DESIGN SPEED FOR 44TH AVENUE EAST IS 45 MPH AND DESIGN SPEED FOR 19TH STREET COURT EAST IS 30 MPH.

CONTROLLER NOTES:

1. MAJOR STREET IS 44TH AVE E
MINOR STREET IS 19TH ST CT EAST
2. CONTROLLER CABINET SHALL BE WIRED FOR S.O.P. 10. CONTROLLER SHALL OPERATE AS INDICATED.
3. FLASHING OPERATION IS YELLOW FOR MOVEMENTS 2 & 6 AND RED FOR ALL OTHER MOVEMENTS.
4. CONCURRENT/ACTUATED PEDESTRIAN TIMING FOR MOVEMENTS P2, P4, P6 & P8.
5. EACH PHASE/ MOVEMENT SHALL BE WIRED FROM THE SIGNAL DISPLAY TO THE CONTROLLER AS A SEPARATE PHASE/ MOVEMENT. THIS INCLUDES LEFT TURN MOVEMENTS. EACH LEFT TURN MOVEMENT SHALL HAVE CONDUCTORS AVAILABLE FOR PROTECTED AND PERMISSIVE OPERATION.
6. THE CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER AND LIGHT REPRESENTATIVE GREG COKER AT 941-723-4430 PRIOR TO CONSTRUCTION FOR POWER SERVICE FINAL LOCATION.



CONTROLLER TIMINGS								
TIMING FUNCTION	1	2	3	4	5	6	7	8
MOVEMENT NUMBER	1	2	3	4	5	6	7	8
MINIMUM GREEN	10	20	10	15	10	20	10	15
EXTENSION	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MAXIMUM GREEN 1	35	60	35	40	35	60	35	40
MAXIMUM GREEN 2								
YELLOW CLEARANCE	4.5	4.5	3.5	4.0	4.5	4.5	3.5	4.0
ALL RED	3.5	3.0	4.5	4.0	3.5	3.0	4.5	4.0
PEDESTRIAN WALK		7		7		7		7
PED. CLEARANCE		18		26		18		26
RECALL		MIN				MIN		

TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

VIDEO DETECTOR ZONES			
ZONE LOCATION NO.	VIDEO CAMERA NO.	NO. OF DETECTION ZONES	DELAY TIME (SEC)
DZ-1	3	1	3
DZ-2	1	2	0
DZ-3	4	1	3
DZ-4D	2	1	8
DZ-5	1	1	3
DZ-6	3	2	0
DZ-7	2	1	3
DZ-8D	4	1	8

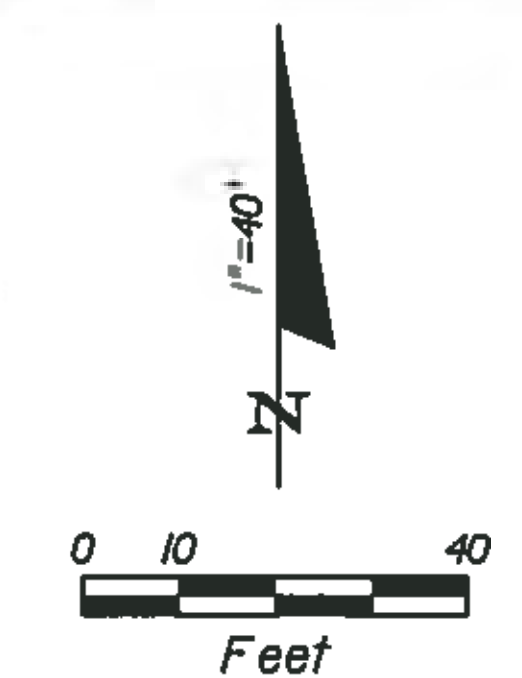
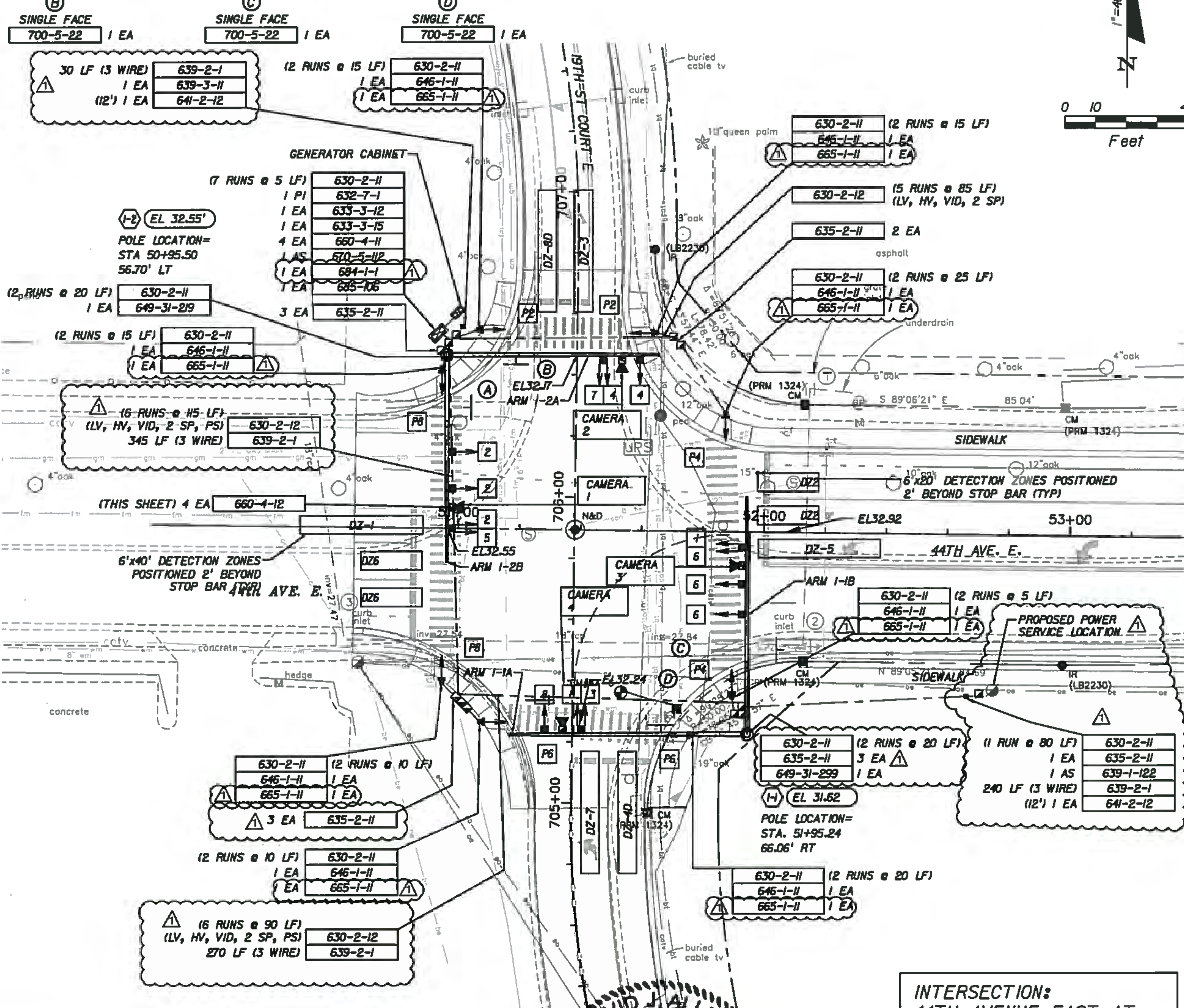
DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

19th St Ct E
4400 4300

44th Ave E
1900 2000

19th St Ct E
4300 4400

44th Ave E
2000 1900



INTERSECTION:
44TH AVENUE EAST AT
19TH STREET COURT EAST

NO.	DESCRIPTION	BY	DATE
1	UPDATED PAY ITEMS TO 2015, SHIFT POWER SERVICE TO SE CORNER	DJA	08/05/15

MANATEE COUNTY

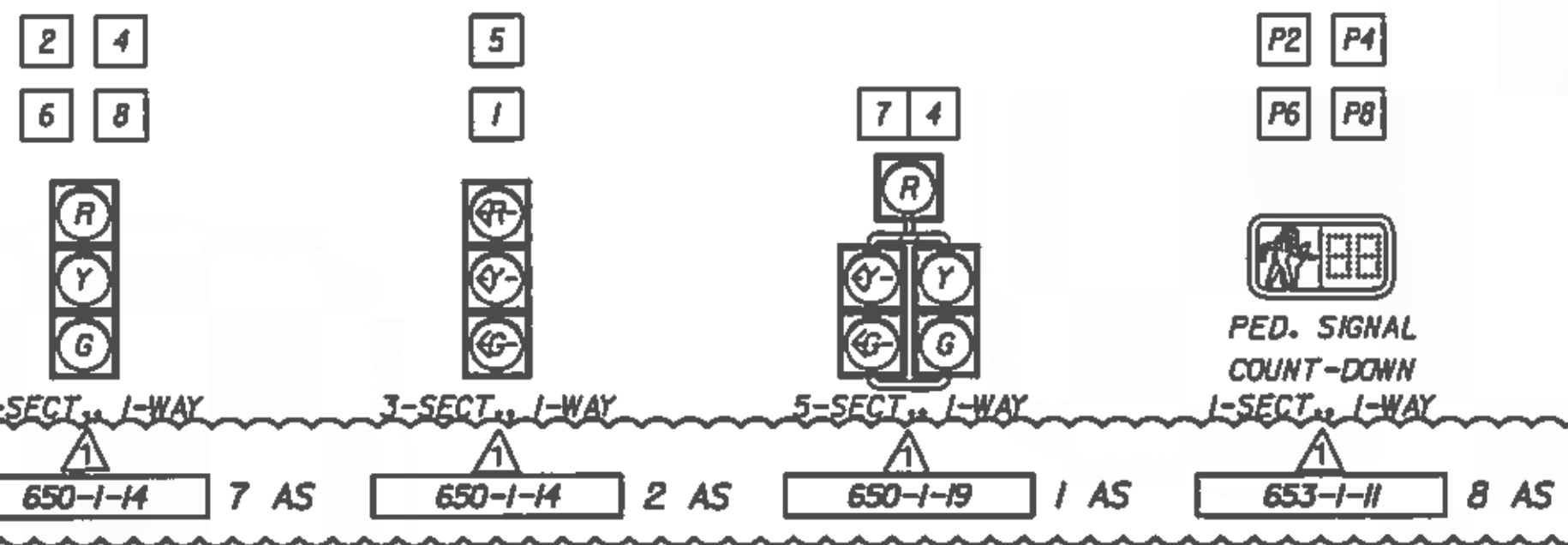
44TH AVENUE EAST
ROADWAY EXTENSION

Cardno
Shaping the Future
3905 CRESCENT PARK DRIVE, RIVERVIEW, FL 33578
TEL: (813) 664-4300 FAX: (813) 664-0440
www.cardno.com Certificate of Authorization No. 23915

DAVID ALLEN
LICENSE
No. 58540
PROFESSIONAL ENGINEER

SIGNALIZATION PLAN
44TH AVE EAST/19TH ST
COURT EAST

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	T-5



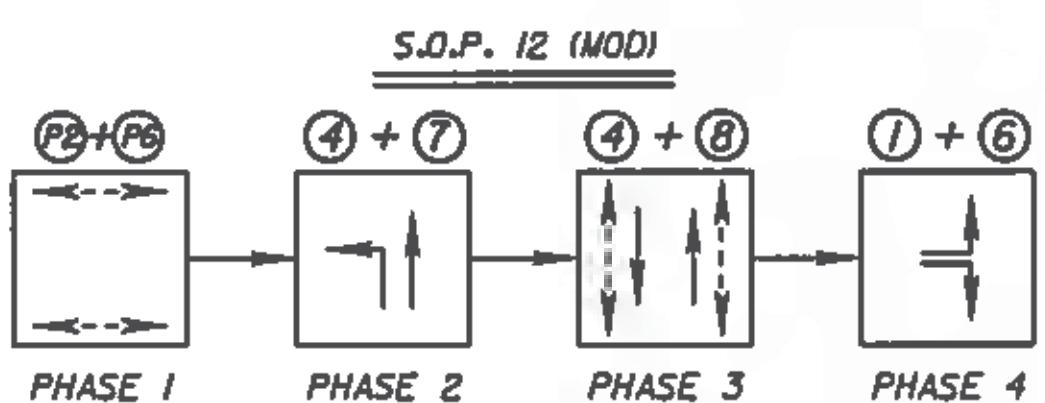
* ALL SIGNALS SHALL USE LOUVERED ALUMINUM SIGNAL HEAD BACK PLATES WITH A 2" YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER

NOTES:

1. POWER SERVICE METER BASE AND DISCONNECT SHALL BE INSTALLED ON THE CONCRETE SERVICE POLE AS SHOWN ON THE PLANS AND FDOT INDEX 17504 AND 17736.
2. SIGNAL HEADS FOR MOVEMENT 2 AND 5 (FOR FUTURE USE) SHALL BE BAGGED
3. VIDEO DETECTION CAMERA PLACEMENT IS TO BE REVIEWED BY VIDEO DETECTION ENGINEER PRIOR TO FIELD PLACEMENT.
4. DESIGN SPEED FOR 44TH AVENUE EAST IS 45 MPH AND DESIGN SPEED FOR 30TH STREET EAST IS 30 MPH.

CONTROLLER NOTES:

1. MAJOR STREET IS 44TH AVE. EAST
MINOR STREET IS 30TH ST. EAST
2. CONTROLLER CABINET SHALL BE WIRED FOR SOP 10. CONTROLLER SHALL INITIALLY OPERATE AS INDICATED.
3. FLASHING OPERATION IS YELLOW FOR MOVEMENTS 2 & 6 AND RED FOR ALL OTHER MOVEMENTS.
4. CONCURRENT/ ACTUATED PEDESTRIAN TIMING FOR MOVEMENTS P4 & P8.
EXCLUSIVE/ ACTUATED PEDESTRIAN TIMING FOR MOVEMENTS P2 & P6.
5. EACH PHASE/ MOVEMENT SHALL BE WIRED FROM THE SIGNAL DISPLAY TO THE CONTROLLER AS A SEPARATE PHASE/ MOVEMENT. THIS INCLUDES LEFT TURN MOVEMENTS. EACH LEFT TURN MOVEMENT SHALL HAVE CONDUCTORS AVAILABLE FOR PROTECTED AND PERMISSIVE OPERATION.
6. THE CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER AND LIGHT REPRESENTATIVE GREG COKER AT 941-723-4430 PRIOR TO CONSTRUCTION FOR POWER SERVICE FINAL LOCATION.



INITIAL CONTROLLER TIMINGS									
TIMING FUNCTION		1	2	3	4	5	6	7	8
TIMING FUNCTION	MOVEMENT NUMBER	1	2	3	4	5	6	7	8
	MINIMUM GREEN	20		10		20	7	10	
	EXTENSION	3.0		3.0		3.0	3.0	3.0	
	MAXIMUM GREEN 1	40		35		40	20	35	
	MAXIMUM GREEN 2								
	YELLOW CLEARANCE	4.5		4.0		4.5	3.5	4.0	
	ALL RED	5.0		4.0		3.0	5.0	4.0	
	PEDESTRIAN WALK		7	7		7	7		
PEDE. CLEARANCE		18	29		18	29			
RECALL							MIN		

TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

VIDEO DETECTOR ZONES				
ZONE LOCATION NO.	VIDEO CAMERA NO.	NO. OF DETECTION ZONES	CONNECT TO MOVEMENT	DELAY TIME (SEC)
DZ-1	2	1	1	0
DZ-4	1	1	4	0
DZ-7	1	1	7	0
DZ-8D	3	1	8	8

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

30th St E
4400 4300

44th Ave E
2900 3000

30th St E
4300 4400

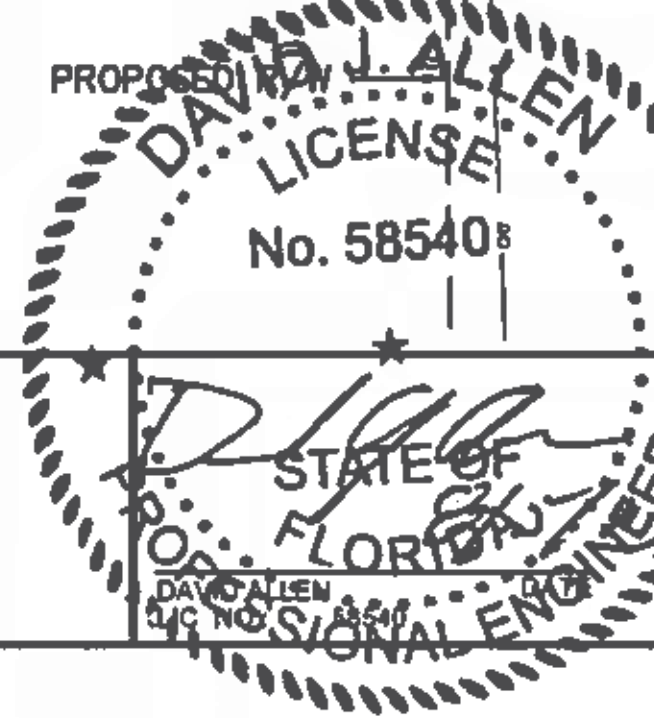
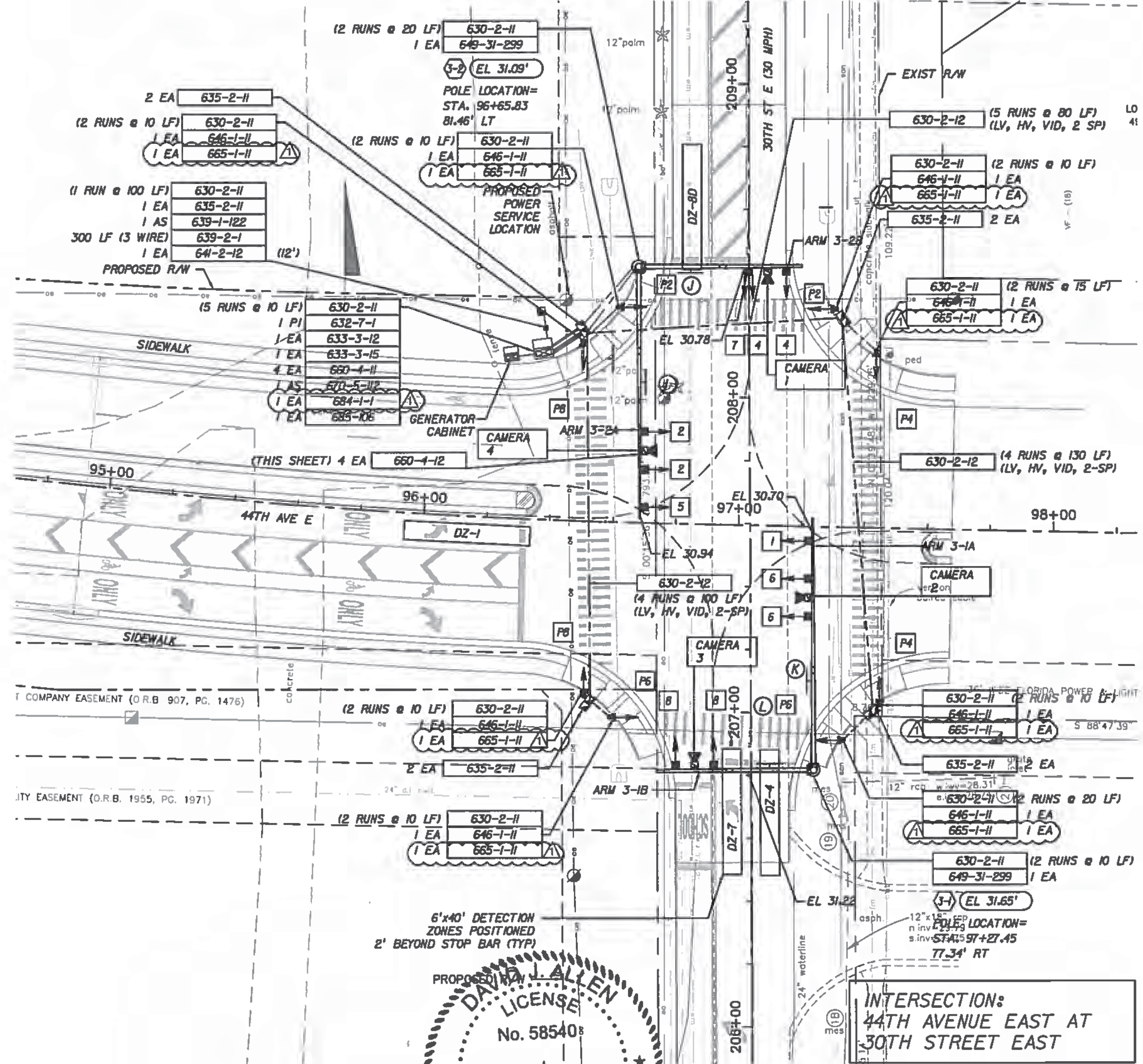
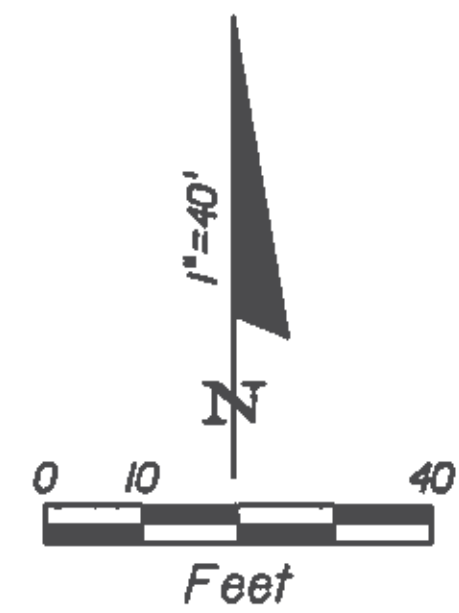
44th Ave E
3000 2900

① SINGLE FACE
700-5-22 1 EA

② SINGLE FACE
700-5-22 1 EA

③ SINGLE FACE
700-5-22 1 EA

④ SINGLE FACE
700-5-22 1 EA



INTERSECTION:
44TH AVENUE EAST AT
30TH STREET EAST

NO	DESCRIPTION	BY	DATE
1	UPDATED PAY ITEMS TO 2015	DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**



DESIGNED JTP
DRAWN JTP
APPROVED

SIGNALIZATION PLAN
44TH AVE EAST/30TH ST EAST

PROJECT NO
00193-001-18
DATE
8-05-2015
SHEET NO:
T-7

NOTES:

1. REMOVE ENTIRE EXISTING SIGNAL SYSTEM.

REMOVAL ITEMS:

632-7-6	1 PI
641-2-80	2 EA
646-1-60	4 EA
660-1-600	12 EA

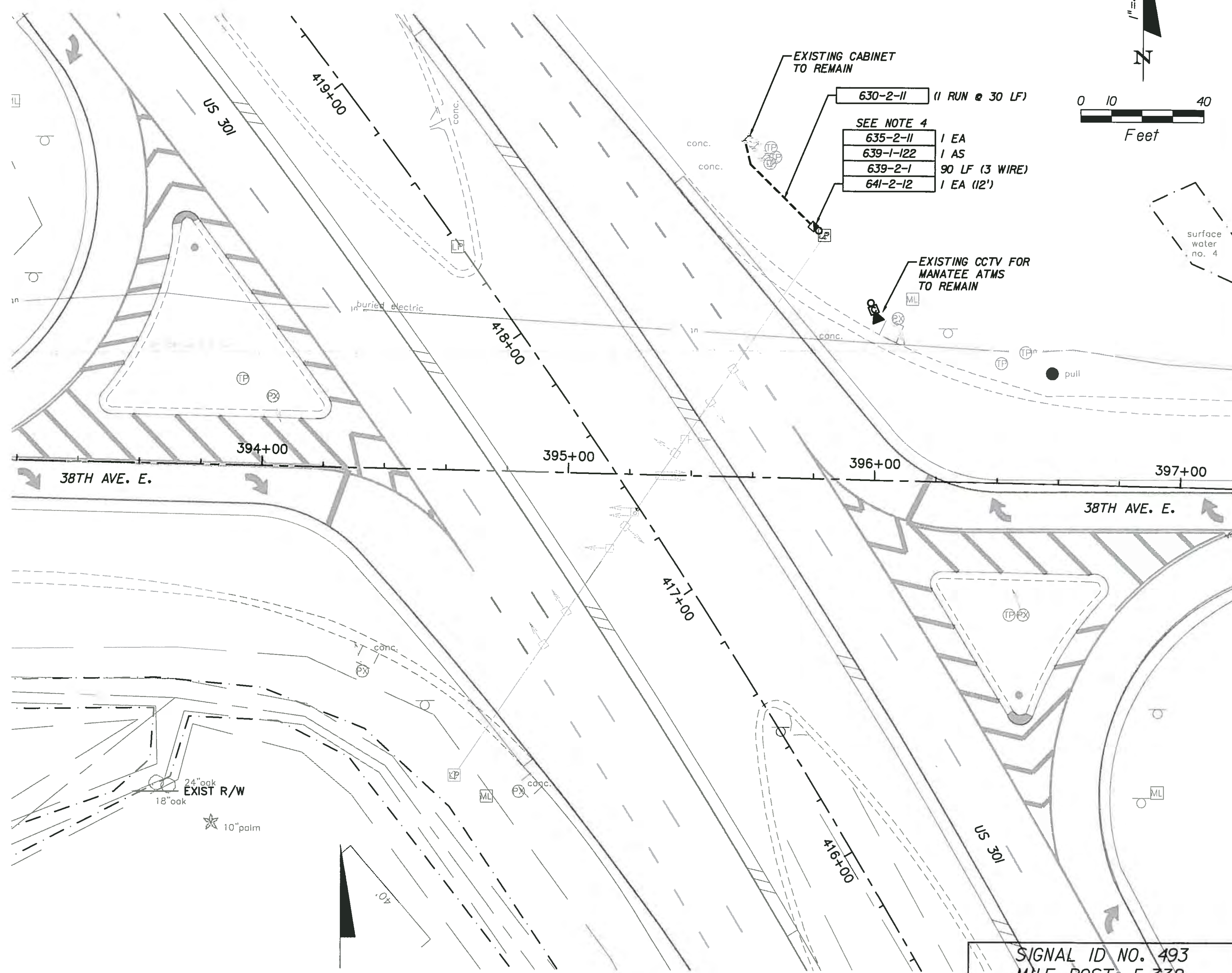
2. THE CONTRACTOR SHALL NOT DISTURB THE EXISTING ROADWAY LIGHTING AND ROADWAY LIGHTING POWER SERVICE FOR THIS INTERSECTION.

3. THE CONTRACTOR SHALL PERFORM DUE DILIGENCE TO PREVENT DAMAGING ALL MANATEE ATMS COMPONENTS TO REMAIN INCLUDING BUT NOT LIMITED TO ATMS PULL BOXES, ATMS CONDUIT, ATMS CONDUIT, ATMS FIBER OPTIC CABLE AND CCTV.

4. THE CONTRACTOR SHALL PLACE NEW POWER SERVICE PEDESTAL WHERE IT WILL INTERSECT THE EXISTING POWER SERVICE LOCATED ON THE STRAIN POLE. THE CONTRACTOR SHALL CONTACT THE POWER COMPANY PRIOR TO CONSTRUCTION FOR A FIELD REVIEW WITH A POWER COMPANY FIELD TECHNICIAN TO DETERMINE THE EXACT LOCATION.

5. ALL WORK DONE AT THIS INTERSECTION SHALL BE COORDINATED WITH MANATEE COUNTY TRAFFIC DIVISION TO MINIMIZE ISSUES WITH THE EXISTING ATMS EQUIPMENT. A REPRESENTATIVE FROM THE TRAFFIC ENGINEERING DIVISION SHALL BE PRESENT WHEN WORK IS COMMENCING AT THIS INTERSECTION FOR ALL TASKS.

6. ONLY SIGNAL COMPONENTS SHALL BE REMOVED FROM THE CABINET. ALL OTHER ITEMS SHALL REMAIN.



SIGNAL ID NO. 493
 MILE POST: 5.332
 ROADWAY ID: 13121
 INTERSECTION:
 US 301 AT
 38TH AVENUE EAST

NO.	DESCRIPTION	BY	DATE
1	UPDATED REMOVAL PAY ITEMS TO 2015	DJA	08/05/15

MANATEE COUNTY

44TH AVENUE EAST
 ROADWAY EXTENSION

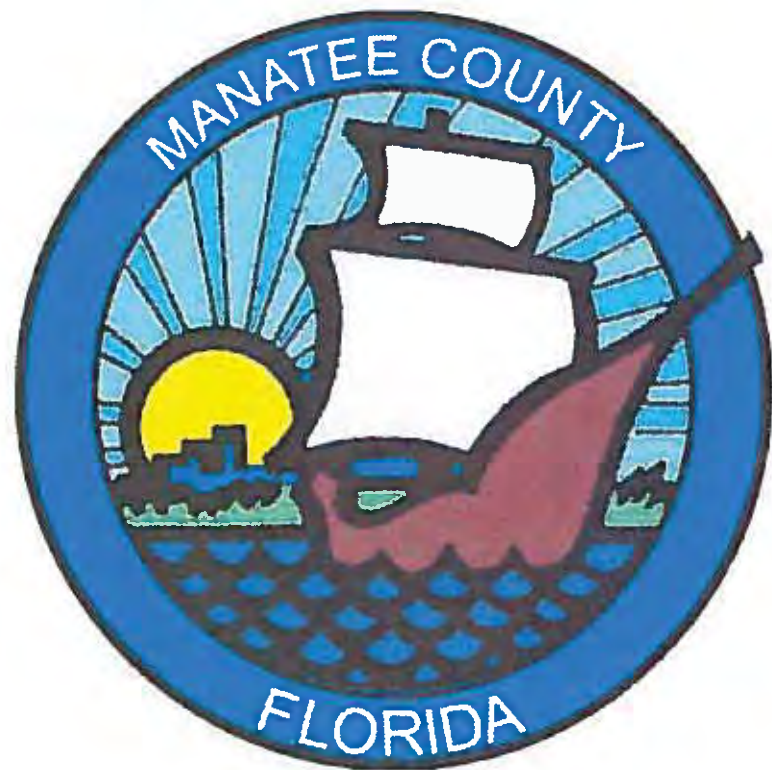
Cardno
 Shaping the Future
 3905 CRESCENT PARK DRIVE, RIVERVIEW, FL 33578
 TEL: (813) 664-4500 FAX: (813) 664-0440
 www.cardno.com Certificate of Authorization No. 29915

DAVID J. ALLEN
 LICENSE
 No. 58540
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

DESIGNED	JTP
DRAWN	JTP
Q.C.	
APPROVED	

SIGNALIZATION PLAN
 38TH AVE EAST/US301

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	T-8



CONTRACT DRAWINGS
44TH AVENUE EAST
FROM 19TH STREET COURT EAST TO 30TH STREET EAST
FOR
MANATEE COUNTY, FLORIDA
COUNTY PROJECT NUMBER: 6045660
LIGHTING PLANS

COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS
 SIGNALIZATION PLANS
 LIGHTING PLANS
 POTABLE WATER MAIN PLANS

INDEX OF LIGHTING PLANS

SHEET NO	SHEET DESCRIPTION
L-1	COVER SHEET
L-2	TABULATION OF QUANTITIES
L-3	LIGHTING GENERAL NOTES
L-4	POLE DATA AND LEGEND
L-5 - L-17	LIGHTING PLAN
L-18 - L-20	SERVICE POINT DETAILS
L-21	UTILITY CONFLICT POLE DETAILS
L-22	MODIFIED SLAB DETAIL

RELATED STANDARDS AND SPECIFICATIONS

DESCRIPTION

- A. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2015)
- B. MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FDOT GREEN BOOK), (2011),
- C. FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (JANUARY 2015),
- D. AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES, (2004),
- E. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009),
- F. CHAPTER 14-96 AND 14-97, FLORIDA ADMINISTRATIVE CODE RULE FOR FDOT CONNECTION PERMIT.
- G. FDOT PLANS PREPARATION MANUAL, 2014

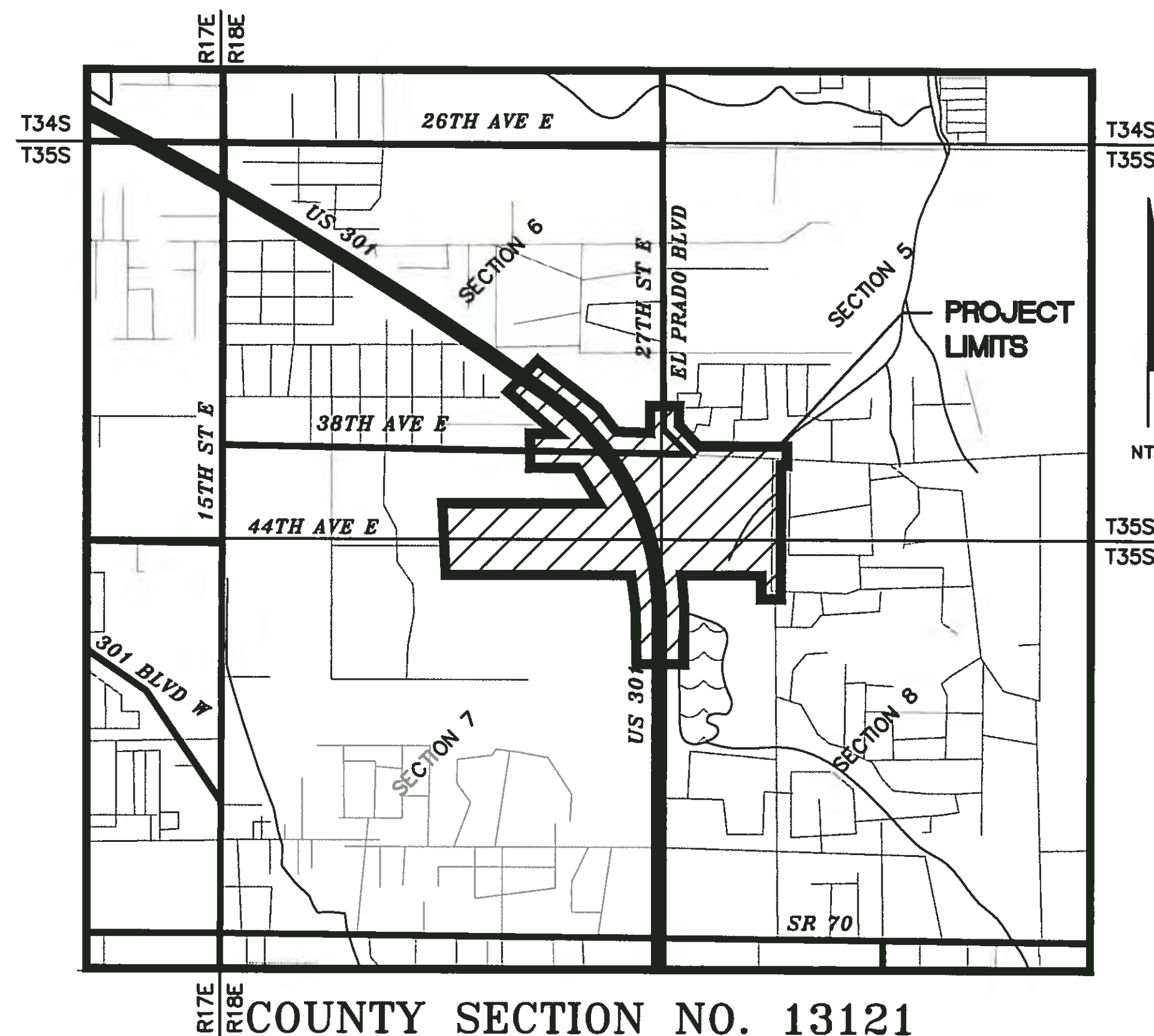
ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

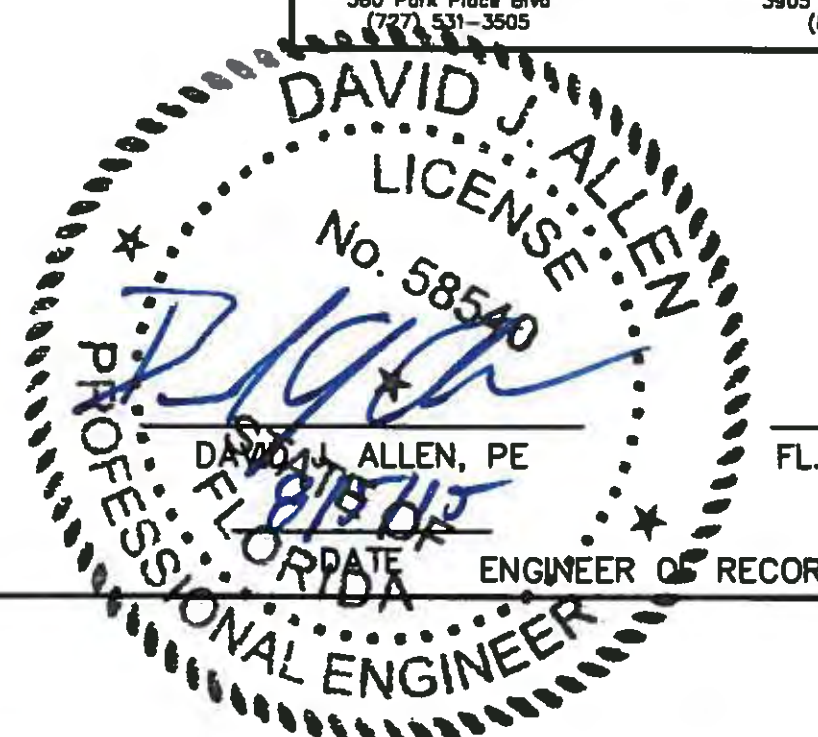
SUMMARY OF REVISIONS	
DATE	DESCRIPTION
08/05/15	MODIFY LABELS AND ADJUST SOME LIGHT POLES

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND GOVERNED BY THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (DATED 2014) AND DESIGN STANDARDS BOOKLET (DATE 2014), FOR STANDARDS REVISIONS, CLICK ON "DESIGN STANDARDS" AT THE FOLLOWING WEB SITE: //www.dot.state.fl.us/rddesign/.



COUNTY SECTION NO. 13121

PLANS PREPARED BY:



58540
FL. LICENSE NO



48 HOURS BEFORE DIGGING
"CALL SUNSHINE"
1-800-432-4770

DATE: 8-05-2015

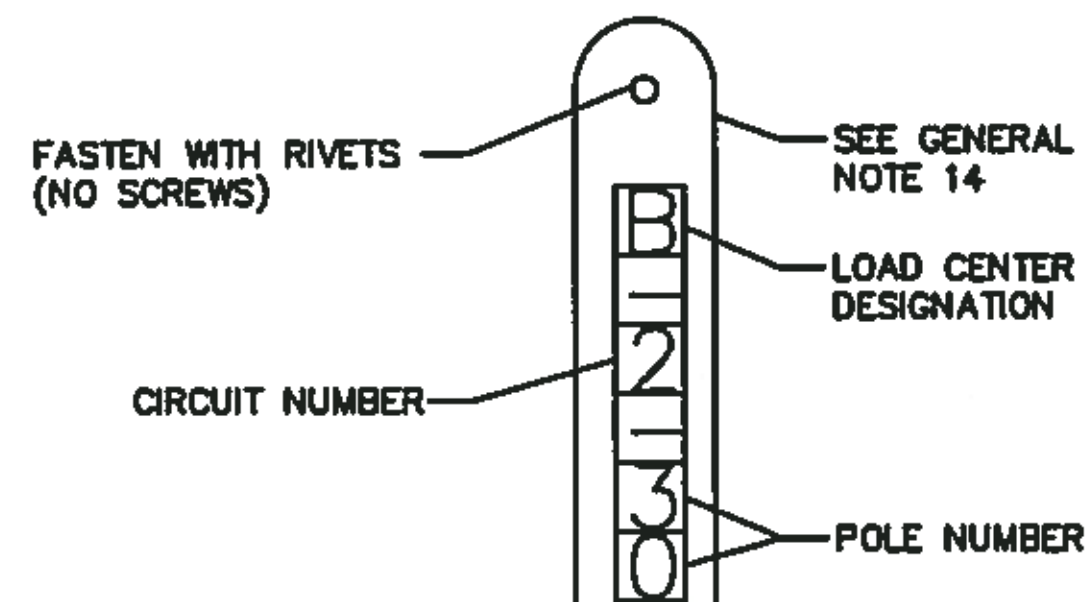
SHEET: L-1

ROADWAY LIGHTING GENERAL NOTES

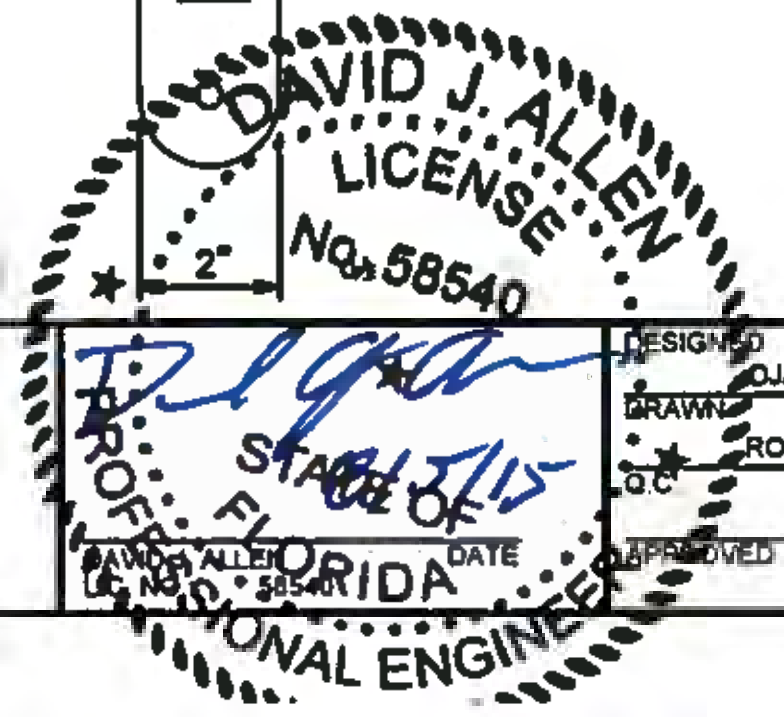
1. SPARE CONDUIT AT PAVEMENT CROSSINGS SHALL BE CAPPED AT BOTH ENDS.
2. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL EQUIPMENT SPECIFICATION OR DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THE PROJECT. THESE ITEMS INCLUDES BUT ARE NOT LIMITED TO THE FOLLOWING:
3. THE LOCATIONS OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, ARE APPROXIMATE AND BASED ON THE INFORMATION FURNISHED TO THE ENGINEER BY THE UTILITY OWNER(S) AND ARE SHOWN AS NOTICE TO THE CONTRACTOR THAT UNDERGROUND UTILITIES EXIST. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OWNER(S) FOR LOCATION AND STAKING OF UNDERGROUND FACILITIES BEFORE EXCAVATING.
4. BEFORE EXCAVATING, NOTICE BE GIVEN TO THE SUNSHINE STATE ONE CALL OF FLORIDA, INC. (SSOCOF) A MINIMUM OF TWO (2) FULL BUSINESS DAYS AT 1-800-432-4770. NOT ALL UTILITY COMPANIES ARE MEMBERS OF SSOCOF.
5. THE LOCATION OF THE POLES, CONDUCTORS, CONDUITS, JUNCTION BOXES AND SERVICE POLES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED BY THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS.
6. ALUMINUM POLES, LUMINAIRES, AND BASES SHALL BE FABRICATED IN ACCORDANCE WITH AASHTO'S "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS", AND SHALL HAVE BEEN TESTED BY F.H.W.A. APPROVED METHODS (LATEST EDITION). CERTIFICATION FOR TESTS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.
7. SHOP DRAWING SUBMITTAL DATA SHALL INCLUDE A COMPUTER PRINTOUT SHOWING HORIZONTAL FOOT-CANDLE LEVELS TO BE OBTAINED USING THE SUBMITTED LUMINAIRES ON THIS PROJECT. AT FINAL INSPECTION THE CONTRACTOR SHALL VERIFY THE HORIZONTAL FOOT-CANDLE LEVELS ON THE ROADWAY WITH AN APPROVED CURRENTLY CALIBRATED LIGHT METER, AND SUBMIT REPORT FOR APPROVAL. PRINT OUT SHALL INCLUDE AN ANALYSIS OF EACH SEPARATE TYPICAL SECTION.
8. ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL COMPONENTS SHALL BE PROPERLY GROUNDED AND BONDED PER THE NATIONAL ELECTRICAL CODE REQUIREMENTS.
9. INSTALL LIGHTNING ARRESTORS, PROPERLY GROUNDED, IN POWER (SECONDARY) ENTRANCES, ON OUTSIDE OF ENCLOSURE.
10. IN ACCORDANCE WITH N.E.C., IDENTIFY ALL CIRCUITS AND EQUIPMENT WITH "LAMACOID TAGS". INSTALL SIMILAR TAGS OF STAINLESS STEEL IDENTIFYING CIRCUIT FOR EACH LUMINAIRE AT ACCESS HANDHOLE FOR EACH POLE.
11. THE CONTRACTOR SHALL NOTIFY FLORIDA POWER AND LIGHT COMPANY AT LEAST 48 HOURS PRIOR TO ANY INSTALLATION THAT IS WITHIN THE DISTANCE PER CURRENT OSHA REQUIREMENTS OF ENERGIZED ELECTRICAL CONDUCTORS. FLORIDA POWER AND LIGHT, AT IT'S OPTION, SHALL ASSIST THE CONTRACTOR TO COVER UP ENERGIZED CONDUCTORS AT INSTALLATION SITES OR TAKE OTHER SAFETY PRECAUTIONS AS NECESSARY. EXTREME CAUTION SHALL BE EXERCISED AT ALL TIMES IN PERFORMANCE OF WORK AROUND THE PRIMARY HIGH VOLTAGE COMPONENTS.
12. PULLING INSTRUCTIONS: CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET AND MEET MANUFACTURER'S REQUIREMENTS. USE PULLING COMPOUND PER MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY THE NATIONAL ELECTRICAL CODE OR NATIONAL ELECTRICAL SAFETY CODE FOR CABLE USED.
13. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND REQUEST UTILITY COMPANIES TO LOCATE AND STAKE UNDERGROUND UTILITIES PRIOR TO EXCAVATING.
14. THE CONTRACTOR SHALL FURNISH AND INSTALL AN ALUMINUM IDENTIFICATION TAG ON EACH ROADWAY LIGHT POLE, LOCATED ONLY ON US 301. TAGS SHALL BE 2" x 8" IN SIZE WITH BLACK LETTERS ON YELLOW BACKGROUND, ATTACHED WITH RIVETS (NO SCREWS). NUMBERS SHALL BE AS SHOWN ON THE POLE DATA SHEET. SEE THE POLE IDENTIFICATION TAG DETAIL ON THIS SHEET FOR MORE INFORMATION. COST OF TAGS SHALL BE INCLUDED IN THE BID ITEMS FOR LIGHT POLE COMPLETE. BOTTOM OF THE TAG SHALL BE 60 INCHES ABOVE THE FINISHED GRADE.
15. THE CONTRACTOR SHALL USE THE CONCRETE FOUNDATION ON FDOT STANDARD INDEX 17515. THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED PROPOSED POLE FOUNDATION CALCULATIONS FOR THE UTILITY CONFLICT POLE FOUNDATIONS WITH THE LIGHT POLE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING MATERIALS.
16. ALL CONDUITS UNDER ROADWAY (AND/OR SIDEWALK) SHALL BE INSTALLED PRIOR TO INSTALLATION OF ROADWAY BASE AND SURFACE (OR CONCRETE), EXCEPT WHERE OTHERWISE SPECIFIED IN THE PLANS.
17. DIRECTIONAL BORE OPERATIONS IF USED SHALL MEET THE REQUIREMENTS OF F.D.O.T.'S UTILITY ACCOMMODATION MANUAL (LATEST EDITION).
18. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN TWO FEET OF THE LIGHTING POLE FOUNDATIONS OR CONDUIT RUN, AS DETERMINED BY THE CONTRACTOR AND/OR ENGINEER. THE CONTRACTOR WILL HAND DIG THE FIRST 4 FEET OF THE HOLE FOR THE POLE FOUNDATION AND CONDUIT RUN.
19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PROVISIONS THAT REQUIRES THE PREPARATION AND APPROVAL OF AN EROSION CONTROL PLAN THAT ADDRESSES PREVENTION, CONTROL AND ABATEMENT OF WATER POLLUTION.
20. ALL CONDUIT TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NOT OPEN ANY AREA THAT CAN NOT BE BACKFILLED IN THE SAME WORK PERIOD.
21. ALL EXCESS DIRT AND DEBRIS EXCAVATED FROM POLE FOUNDATIONS SHALL BE REMOVED DAILY TO AREAS APPROVED BY THE ENGINEER AND PAID FOR UNDER PAY ITEM 715-4-123.
22. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
23. THE LIGHTING SYSTEM WILL BE MAINTAINED BY MANATEE COUNTY (ALONG 44TH AVE EAST AND 30TH ST EAST) AND FDOT AND AMERICAN LIGHTING (ALONG US 301) UPON FINAL ACCEPTANCE. THE CONTRACTOR SHALL SUBMIT THREE SETS OF AS-BUILT PLANS TO THE ENGINEER, PRIOR TO FINAL ACCEPTANCE. THE AS-BUILTS ARE FOR MANATEE COUNTY, FDOT AND AMERICAN LIGHTING.
24. THE CONTRACTOR SHALL NOTIFY MANATEE COUNTY BEFORE ANY TRENCHING OR DIGGING AT ALL SIGNALIZED INTERSECTIONS SO THAT ALL UNDERGROUND LOOP LEAD-INS AND ELECTRICAL CABLES CAN BE IDENTIFIED AND MARKED APPROPRIATELY.
25. HANDHOLE COVERS FOR POLES SHALL BE LOCATED OPPOSITE APPROACHING TRAFFIC.
26. ALL EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
27. THE WIRES AT THE POLE HANDHOLES AND PULL BOXES SHALL BE LOOPED IN THE POLE AND PULL BOXES WITH SUFFICIENT LENGTH TO COMPLETELY REMOVE CONNECTORS AND SPLICES ONE FOOT OUTSIDE OF THE HANDHOLE AND PULL BOXES TO MAKE CONNECTIONS AND SPLICES ACCESSIBLE FOR CHANGING FUSES AND TROUBLE SHOOTING THE SYSTEM.
28. CONDUIT LOCATION AS SHOWN ON THE PLANS IS DIAGRAMMATIC. CONDUIT SHALL BE PLACED WITHIN THE RIGHT-OF-WAY BUT CAN BE ADJUSTED TO FIT AROUND EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL ALSO AVOID THE PROPOSED MAST ARM AND STRAIN POLE FOUNDATIONS.
29. ALL LIGHT POLES SHALL HAVE A PULL BOX INSTALLED BY ITS FOUNDATION AS PER STANDARD INDEX 17500, SHEET 3 OF 3 AND MODIFIED SLAB DETAIL. FOR CLARITY, THE LIGHT POLE PULL BOXES AND MAINTENANCE SLABS ARE NOT SHOWN.
30. THE CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER AND LIGHT REPRESENTATIVE GREG COKER AT 941-723-4430 PRIOR TO CONSTRUCTION FOR VERIFICATION ON THE FINAL POWER POINT OF SERVICE LOCATIONS.
31. THE LIGHT POLES AND PULL BOXES SHALL NOT BE PLACED IN THE BOTTOM OF DITCHES. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR AN APPROVED OFFSET ADJUSTMENT.
32. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION PRIOR TO BIDDING TO VERIFY DESIRED LUMINAIRE LAMP TYPE. IF THE LAMP IS DIFFERENT TO THE LAMP USED IN THE DESIGN AS MENTIONED ON THE POLE DATA SHEET, THE NEW LAMP MUST MATCH THE LUMEN INTENSITY AND PHOTOMETRIC CURVE OF THE HPS LUMINAIRE. THIS WOULD ALLOW THE POLE SPACING TO REMAIN AS SHOWN IN THE PLANS.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL POWER COMPANY PROVIDING ELECTRICAL POWER TO DETERMINE IF A SERVICE PROCESSING OR OTHER FEES ARE REQUIRED. ANY FEE SHALL BE INCLUDED AS PART OF PAYMENT FOR THE LOAD CENTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS OF THE POWER SERVICE AND LOAD CENTER. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION, INSPECTION, AND ENERGIZING OF THE NEW LOAD CENTER IN A TIMELY MANNER IN ORDER TO PROMOTE PROJECT COMPLETION WITHIN CONTRACT TIME.

- ⚠ 34. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH FLORIDA POWER AND LIGHT PRIOR TO CONSTRUCTION ON METHODS AND MATERIALS NECESSARY FOR CONNECTION FROM THE LOAD CENTER TO THE DESIGNATED POWER SOURCE POLE PRIOR TO CONSTRUCTION.
35. THE ROADWAY LIGHTING TO THE NORTH AND SOUTH OF 38TH AVENUE EAST ON US 301 SHALL REMAIN IN SERVICE AND THE CONTRACTOR IS TO MAINTAIN THE LIGHTING THROUGHOUT THE CONSTRUCTION DURATION. THIS IS TO INSURE THAT THE LIGHTS WILL BE OPERATIONAL DURING ANY CONSTRUCTION PROCESS IN THIS AREA.
36. THE CONTRACTOR SHALL SPLICE THE PROPOSED LIGHTING CIRCUITS DESIGNATED AS B-3 AND B-4 TO THE EXISTING B-3 AND B-4 LIGHTING CIRCUITS WEST OF 19TH STREET COURT. FOR ADDITIONAL INFORMATION, SEE SHEET L-14 IN THE PLANS.
- ⚠ 37. DUE TO CLOSE PROXIMITY OF OVERHEAD ELECTRIC, AT CERTAIN LOCATIONS, A "LOW PROFILE" RIG SHALL BE USED FOR DRILLING THE FOUNDATIONS AND INSTALLING THE LIGHT POLES.

POLE IDENTIFICATION TAG DETAIL



LIGHTING CONDUIT LEGEND
 LC = POPULATED LIGHTING CONDUIT
 SP = EMPTY SPARE LIGHTING CONDUIT



NO.	DESCRIPTION	BY	DATE
ADD NOTE 34 AND RENUMBER		DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**



LIGHTING GENERAL NOTES

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-3

POLE DATA

44TH AVENUE SEGMENT

POLE NO.	CIRCUIT	STATION AND OFFSET	ARM LENGTH	LUMINAIRE WATTAGE	MOUNTING HEIGHT	PAY ITEM
11	B-3	52+53.50, 51.48' RT	15'	200	35'	715-511-135
12	B-4	52+57.01, 35.65' LT	15'	200	35'	715-511-135
13	B-3	53+70.88, 51.59' RT	15'	200	35'	715-511-135
14	B-4	54+69.38, 37.08' LT	15'	200	35'	715-511-135
15	B-3	55+19.51, 51.49' RT	15'	200	35'	715-511-135
16	B-4	55+90.26, 36.89' LT	15'	200	35'	715-511-135
17	B-3	56+49.26, 51.33' RT	15'	200	35'	715-511-135
18	B-4	57+85.84, 38.00' LT	12'	400	50'	715-4-123
19	B-3	59+61.09, 50.65' RT	12'	400	50'	715-4-123
20	B-4	61+35.82, 50.58' LT	12'	400	50'	715-4-123
21	B-3	63+11.60, 50.85' RT	12'	400	50'	715-4-123
22	B-4	64+84.76, 50.56' LT	12'	400	50'	715-4-123
23	B-3	66+32.00, 50.50' RT	12'	400	50'	715-4-123
24	B-4	67+93.67, 50.28' LT	12'	400	50'	715-4-123
25	B-3	69+59.31, 50.64' RT	12'	400	50'	715-4-123
26	B-4	71+14.25, 50.50' LT	12'	400	50'	715-4-123
27	B-3	72+86.57, 51.01' RT	12'	400	50'	715-4-123
28	B-4	74+64.05, 50.62' LT	12'	400	50'	715-4-123
29	B-3	76+41.55, 50.77' RT	12'	400	50'	715-4-123
30	B-4	78+14.57, 50.33' LT	12'	400	50'	715-4-123
31	B-3	79+76.73, 67.54' RT	12'	400	50'	715-4-123
32	B-4	81+35.20, 55.55' LT	12'	400	50'	715-4-123
10	D-2	84+31.28, 62.38' RT	12'	400	50'	715-4-123
11	D-1	85+77.03, 74.29' LT	12'	400	50'	715-4-123
12	D-4	87+28.53, 58.83' RT	12'	400	50'	715-4-123
13	D-3	88+86.76, 56.30' LT	12'	400	50'	715-4-123
14	D-4	90+49.85, 55.39' RT	12'	400	50'	715-4-123
15	D-3	92+28.00, 51.74' LT	12'	400	50'	715-4-123
16	D-4	93+99.74, 52.11' RT	12'	400	50'	715-4-123
17	D-3	95+74.10, 50.64' LT	12'	400	50'	715-4-123

CONVENTIONAL LIGHTING DESIGN CRITERIA

Average Initial Intensity 1.5 Foot Candles
 Uniformity Ratio Avg./Min. 4:1 Or Less
 Max./Min. 10:1 Or Less
 Veiling Luminance Ratio 0.3:1 Or Less

Wind Speed 130 MPH

30TH STREET SEGMENT

POLE NO.	CIRCUIT	STATION AND OFFSET	ARM LENGTH	LUMINAIRE WATTAGE	MOUNTING HEIGHT	PAY ITEM
1 *	C-1	202+29.65, 30.76' RT	12'	400	50'	715-4-123
2 *	C-1	204+56.45, 32.86' RT	12'	400	50'	715-4-123
3 *	C-1	206+75.48, 31.81' RT	12'	400	50'	715-4-123
4 *	C-1	208+78.02, 32.21' RT	12'	400	50'	715-4-123
5 *	C-1	211+17.77, 33.39' RT	12'	400	50'	715-4-123
6 *	C-1	213+55.05, 32.14' RT	12'	400	50'	715-4-123
7 *	C-1	215+74.00, 37.00' RT	12'	400	50'	715-4-123
8 *	C-1	217+95.00, 39.00' RT	12'	400	50'	715-4-123
9 *	C-2	219+87.23, 35.50' RT	12'	400	50'	715-4-123
10 *	C-2	221+11.29, 108.54' RT	12'	400	50'	715-4-123
11 **	C-2	221+50.32, 85.15' LT	12'	400	50'	715-4-123

* LUMINAIRE INCLUDES HOUSE SIDE LIGHT SHIELD
 ** LUMINAIRE INCLUDES STREET SIDE LIGHT SHIELD

CONDUIT LEGEND

LC - LIGHTING CONDUIT
 SP - SPARE CONDUIT

38TH AVENUE SEGMENT

POLE NO.	CIRCUIT	STATION AND OFFSET	ARM LENGTH	LUMINAIRE WATTAGE	MOUNTING HEIGHT	PAY ITEM
12 **	C-2	223+09.16, 86.70' LT	12'	400	50'	715-4-123
13 **	C-2	224+11.58, 58.30' LT	12'	400	50'	715-4-123
14 **	C-2	225+53.26, 66.80' LT	12'	400	50'	715-4-123
15 **	C-2	227+11.97, 65.00' LT	12'	400	50'	715-4-123
16 **	C-2	228+99.10, 56.00' LT	12'	400	50'	715-4-123
17 **	C-2	231+34.21, 54.80' LT	12'	400	50'	715-4-123
18	C-2	232+95.08, 75.20' LT	12'	400	50'	715-4-123
19 **	C-2	400+34.70, 46.80' RT	12'	400	50'	715-4-123
20	C-2	398+58.08, 60.70' RT	12'	400	50'	715-4-123
21 *	C-2	601+03.91, 33.50' RT	12'	400	50'	715-4-123
22 *	C-2	602+75.77, 33.20' RT	12'	400	50'	715-4-123

* LUMINAIRE INCLUDES HOUSE SIDE LIGHT SHIELD
 ** LUMINAIRE INCLUDES STREET SIDE LIGHT SHIELD







US 301 SEGMENT

POLE NO.	CIRCUIT	STATION AND OFFSET	ARM LENGTH	LUMINAIRE WATTAGE	MOUNTING HEIGHT	PAY ITEM
1	D-2	393+65.50, 82.94' RT	12'	400	50'	715-4-123
33	B-3	394+79.27, 79.24' LT	12'	400	50'	715-4-123
2	D-2	395+93.83, 81.27' RT	12'	400	50'	715-4-123
34	B-3	397+04.26, 80.89' LT	12'	400	50'	715-4-123
3	D-2	398+17.29, 82.85' RT	12'	400	50'	715-4-123
35	B-3	399+29.26, 82.53' LT	12'	400	50'	715-4-123
4	D-2	400+42.73, 83.20' RT	12'	400	50'	715-4-123
36	B-3	401+57.78, 81.64' LT	12'	400	50'	715-4-123
5	D-1	403+28.84, 80.92' RT	12'	400	50'	715-4-123
37	B-4	404+23.64, 84.10' LT	12'	400	50'	715-4-123
6	D-1	405+32.54, 81.72' RT	12'	400	50'	715-4-123
38	B-4	406+41.47, 84.22' LT	12'	400	50'	715-4-123
7	D-1	407+51.54, 81.26' RT	12'	400	50'	715-4-123
39	B-4	408+61.47, 82.07' LT	12'	400	50'	715-4-123
8	D-1	409+70.36, 82.11' RT	12'	400	50'	715-4-123
40	B-4	410+83.35, 81.88' LT	12'	400	50'	715-4-123
9	D-1	411+88.53, 86.82' RT	12'	400	50'	715-4-123
41	B-4	412+96.38, 81.03' LT	12'	400	50'	715-4-123

LEGEND

SYMBOLS

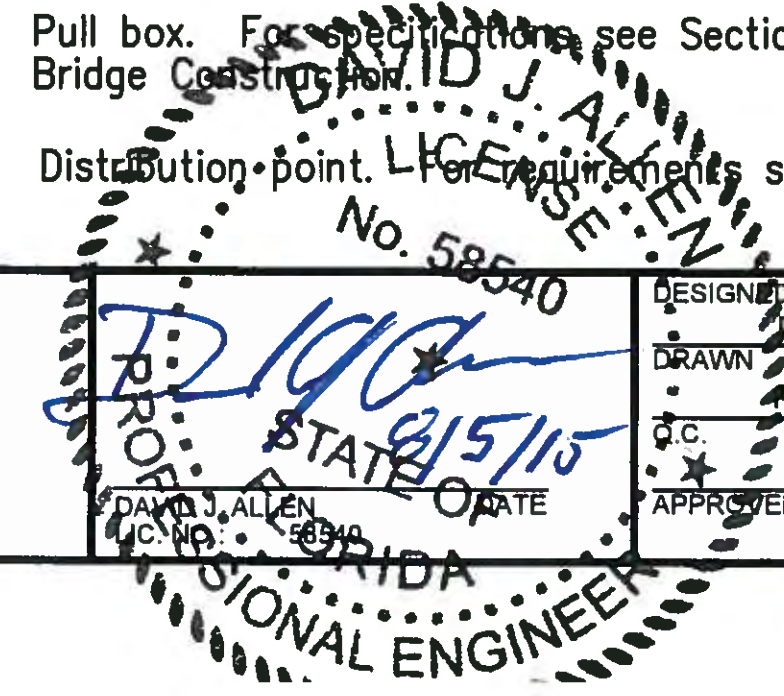
DESCRIPTION

-  400 watt high pressure sodium clear flat glass cobra head luminaire. Designed for full cutoff Type III distribution. Integral regulator type ballast wired for 480 volt operation. Mounting height is 50 ft. Use GE photometric curve 451002 or equal. Light pole includes the maintenance slab. All standard poles shall have a pull box adjacent to the base.
-  200 watt high pressure sodium clear flat glass cobra head luminaire. Designed for full cutoff Type III distribution. Integral regulator type ballast wired for 480 volt operation. Mounting height is 35 ft. Pole is a special utility conflict design. See utility conflict pole details sheet for more information. Use GE photometric curve 451002 and 22,000 lumens or equal. Light pole includes the maintenance slab. All utility conflict poles shall have a pull box adjacent to the base.
-  Schedule 40 PVC conduit with RHW-2 or XHHW conductors inside (conduit and conductor size as shown on plan sheets). Run one (1) minimum 6 AWG sized copper bond conductor (RHW-2 green insulation) inside conduit with other conductors.
-  HDPE conduit, directional bored under pavement with RHW-2 or XHHW conductors inside (conduit and conductor size as shown on plan sheets). Extend conduit beyond edge of pavement to pull boxes. Run one (1) minimum 6 AWG sized copper bond conductor (RHW-2 green insulation) inside conduit with other conductors. All directional bore shall included an empty spare conduit as shown in the plans.
-  Pull box. For specifications see Section 635 of Standard Specifications For Road And Bridge Construction.
-  Distribution point. For requirements see Index No. 17504 of Design Standards.

MANATEE COUNTY

44TH AVENUE EAST ROADWAY EXTENSION

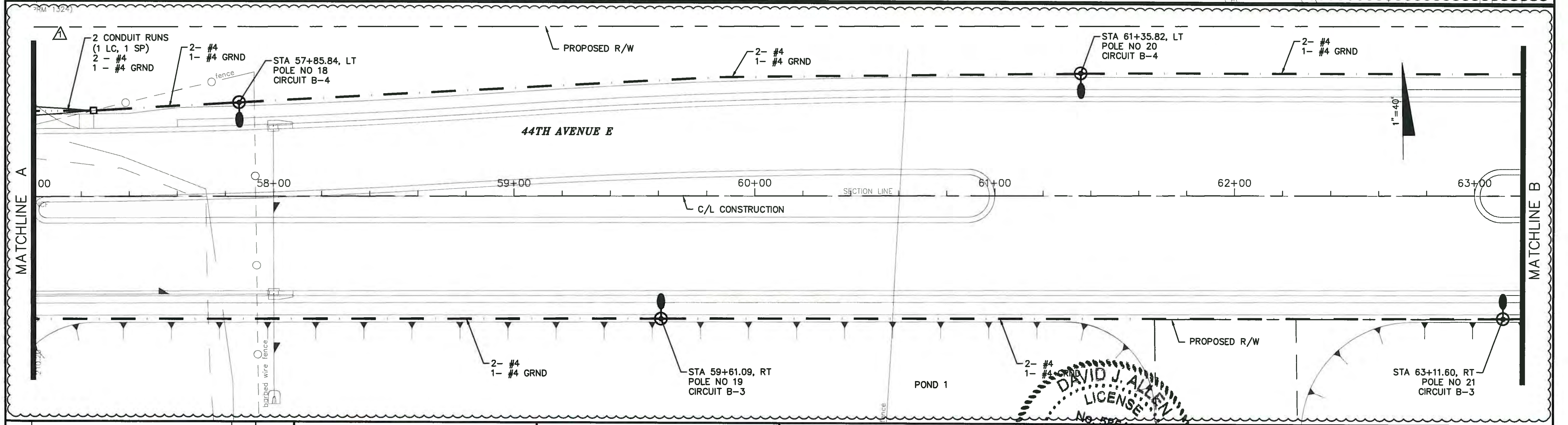
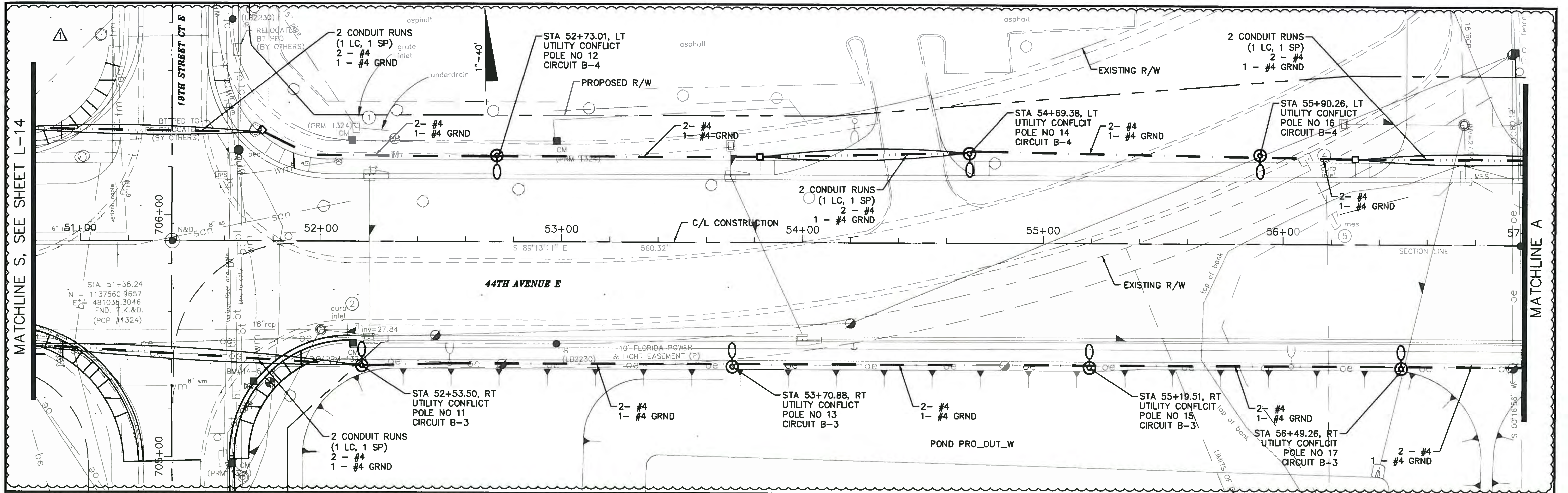
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POLE DATA AND LEGEND

PROJECT NO: 00193-001-18
 DATE: 8-05-2015
 SHEET NO: L-4

NO.	DESCRIPTION	BY	DATE
1	POLE DATA UPDATE TO SHIFTED/ADDED/RENUMBER POLES	DJA	08/05/15



ADD SPECIAL POLES, REMOVE LOAD CENTER, CHANGE CIRCUIT LABELS, RENUMBER POLES	DJA	08/05/15
DESCRIPTION	BY	DATE

MANATEE COUNTY

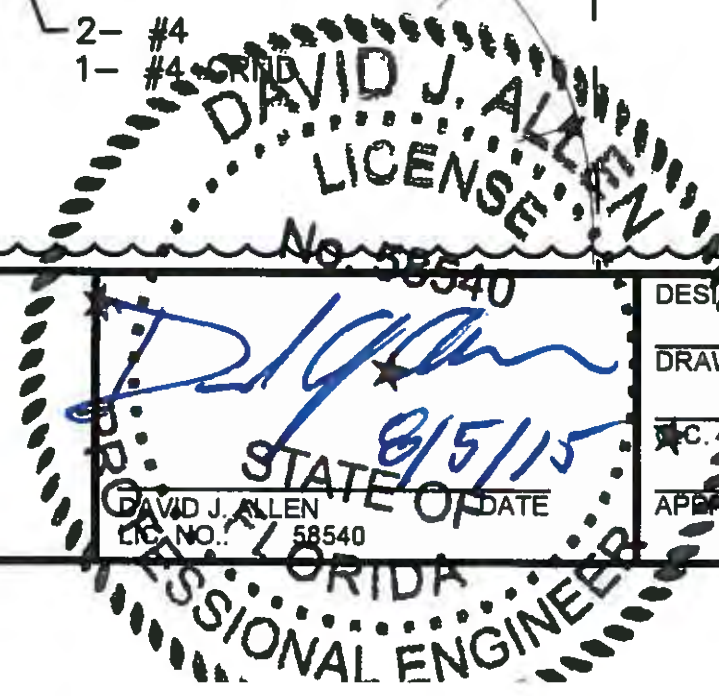
44TH AVENUE EAST ROADWAY EXTENSION

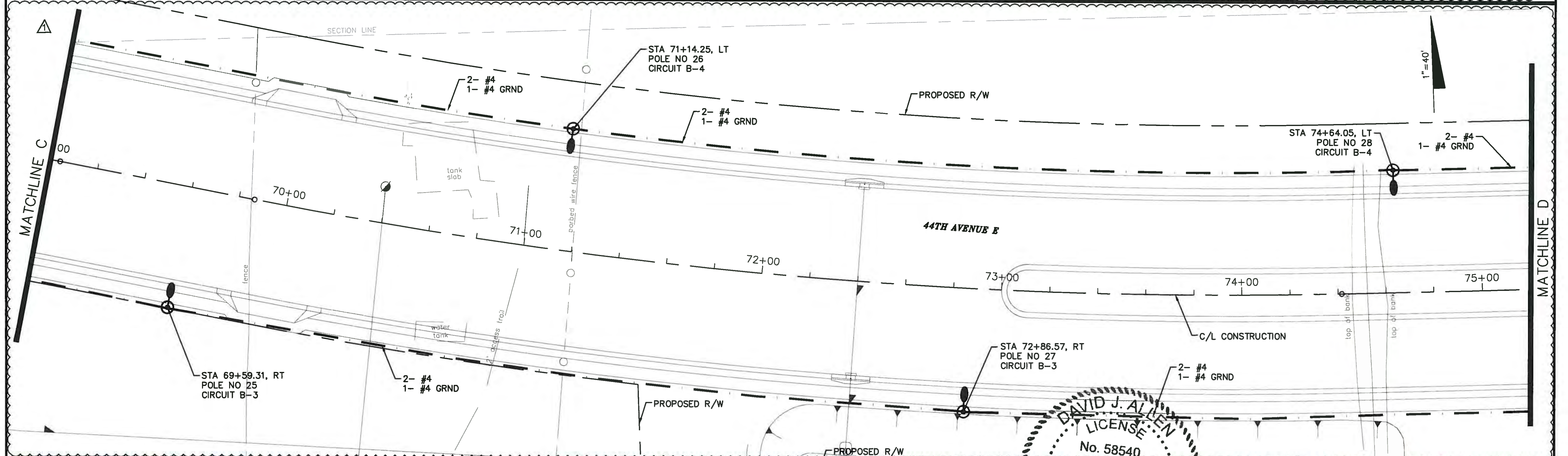
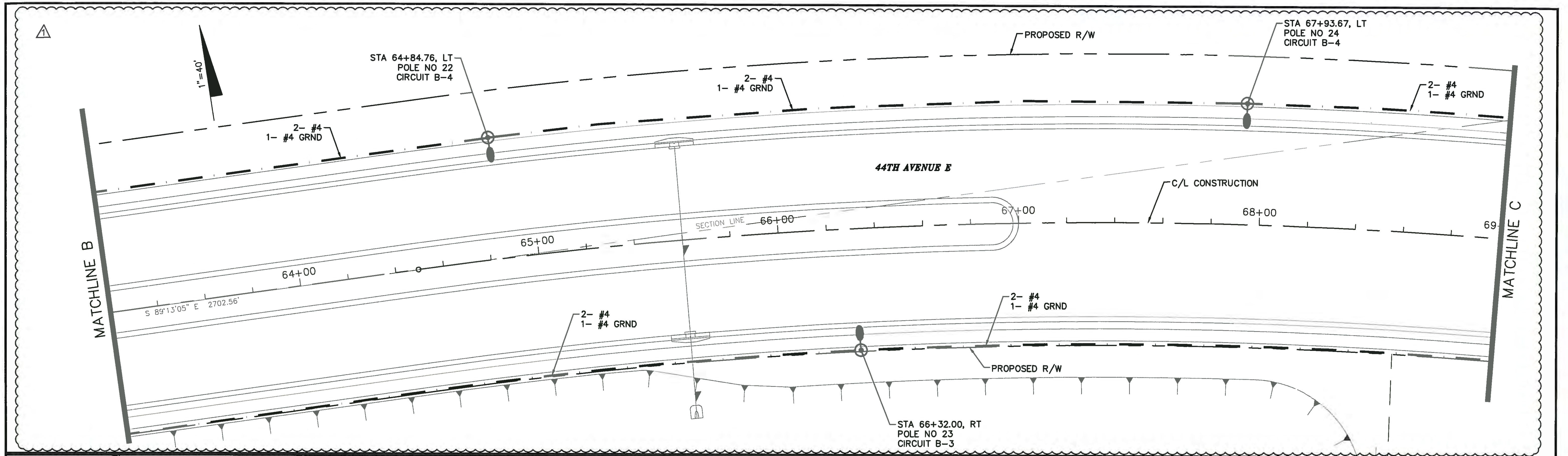
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DESIGNED: DJA
DRAWN: ROH
APPROVED:

**LIGHTING PLAN
44TH AVENUE EAST**

PROJECT NO: 00193-001-18
DATE: 8-05-2015
SHEET NO: L-5





NO.	DESCRIPTION	BY	DATE
1	CHANGE CIRCUIT LABELS, RENUMBER POLES	DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

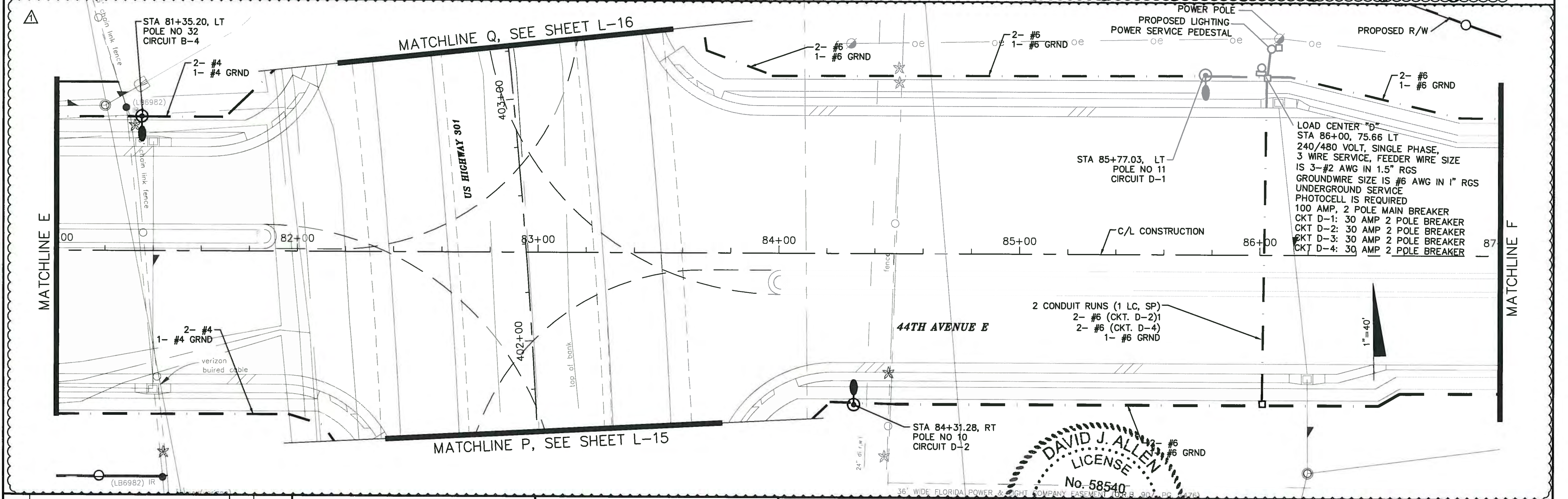
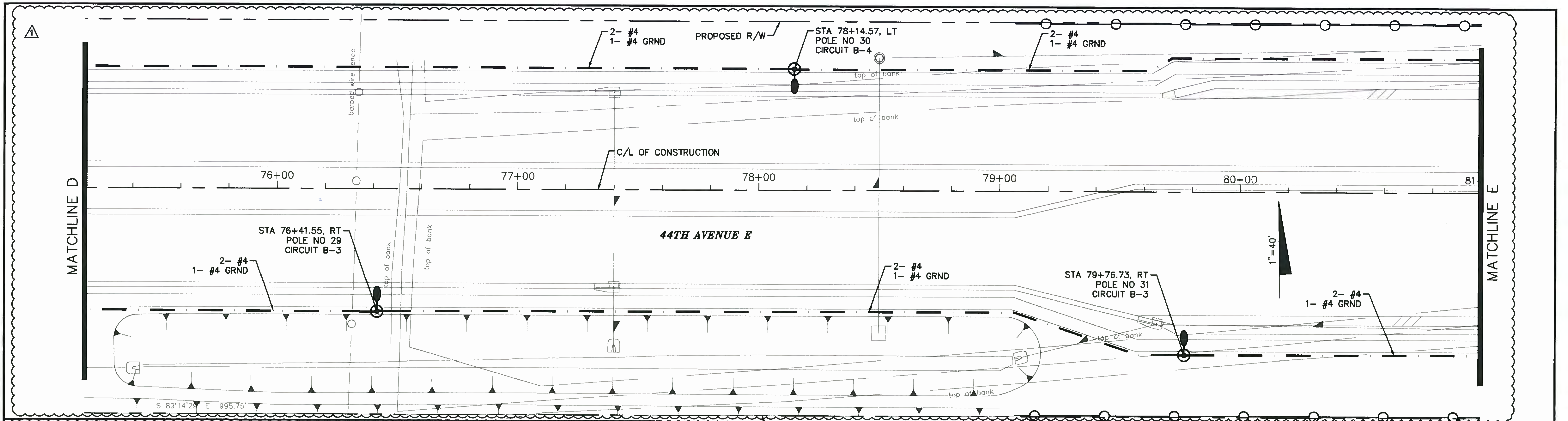
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DAVID J. ALLEN
LICENSED PROFESSIONAL ENGINEER
No. 58540
STATE OF FLORIDA

**LIGHTING PLAN
44TH AVENUE EAST**

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-6

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NO.	DESCRIPTION	BY	DATE
1	CHANGE CIRCUIT LABELS, SHIFT LOAD CENTER TO THIS SHEET, RENUMBER AND SHIFT POLES	DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

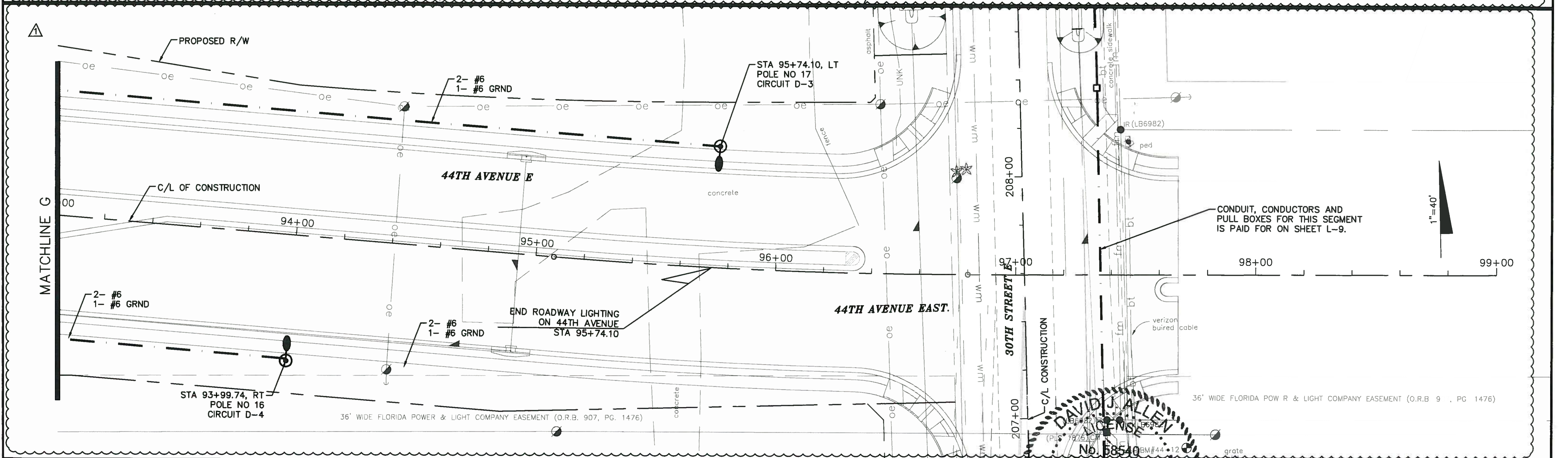
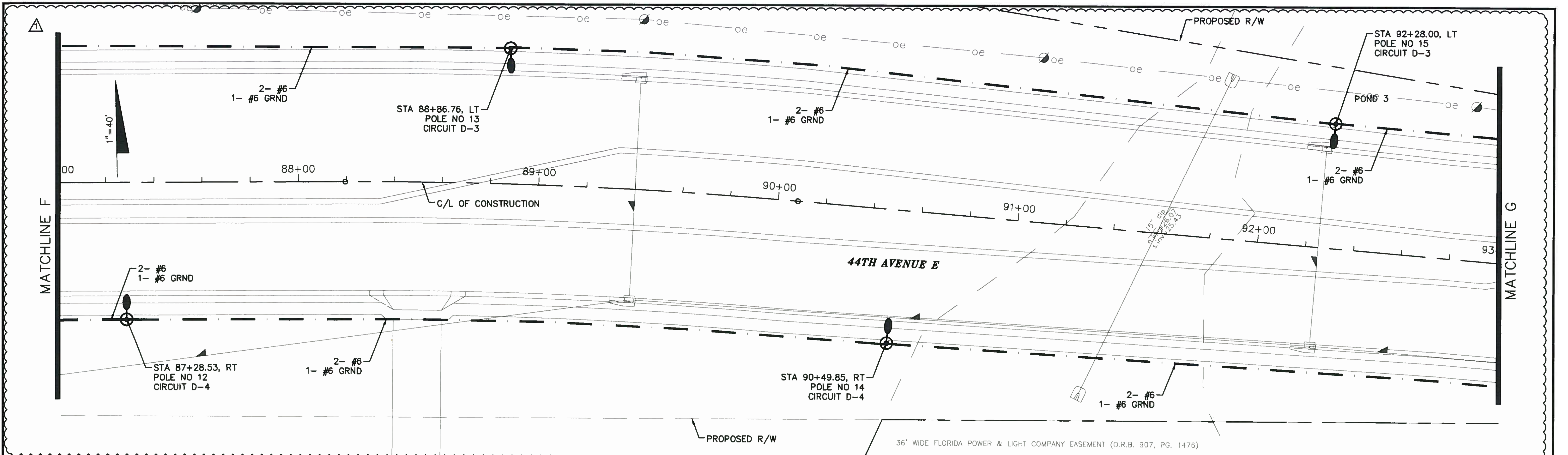
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DESIGNED: DJA
DRAWN: ROH
CHECKED: [Signature]
APPROVED: [Signature]

DAVID J. ALLEN
LICENSED PROFESSIONAL ENGINEER
No. 58540
STATE OF FLORIDA

**LIGHTING PLAN
44TH AVENUE EAST**

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-7



NO.	DESCRIPTION	BY	DATE
1	CHANGE CIRCUIT LABELS, SHIFT LOAD CENTER TO ANOTHER SHEET	DJA	08/05/15

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MANATEE COUNTY

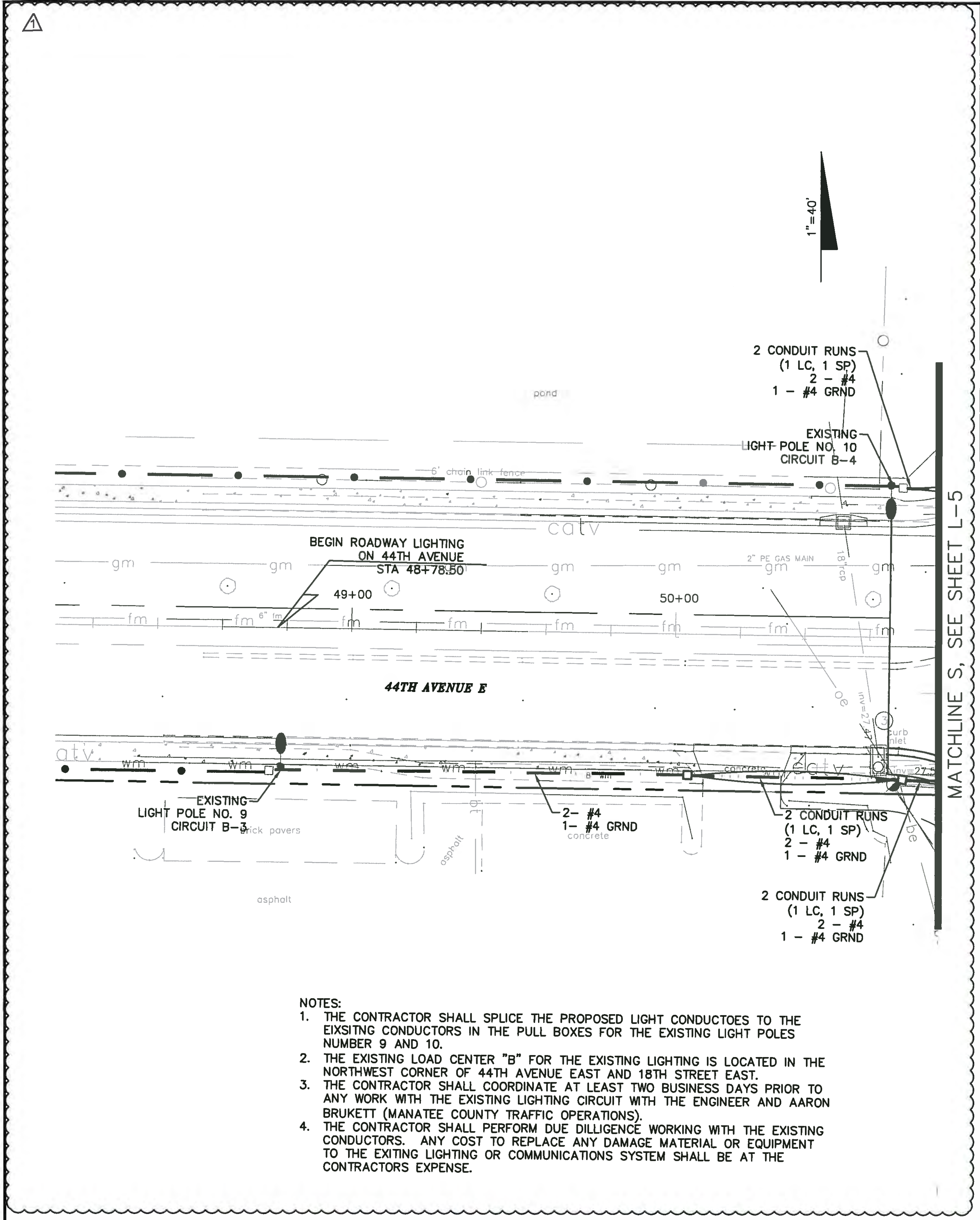
44TH AVENUE EAST
ROADWAY EXTENSION

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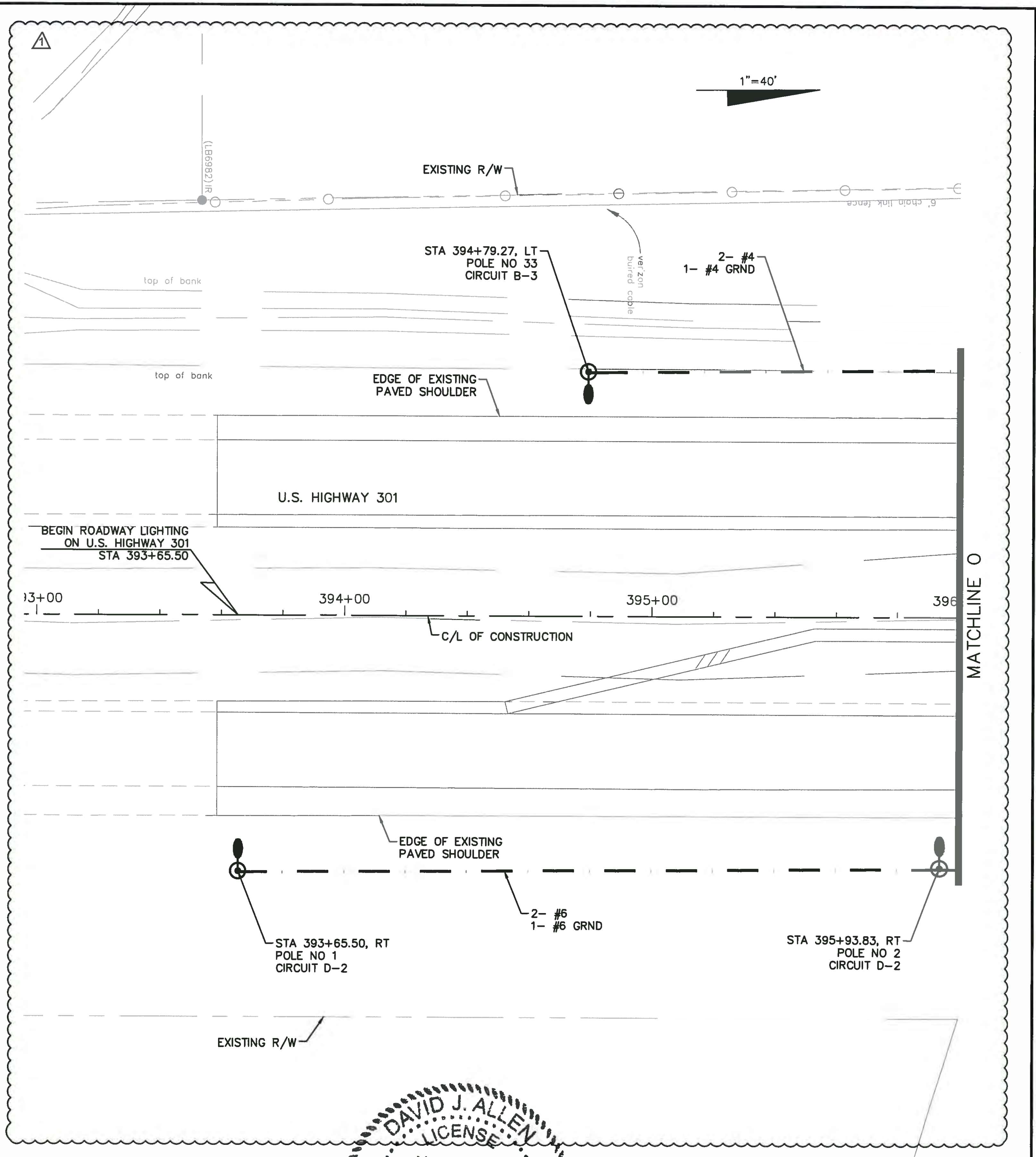
DAVID J. ALLEN
PROFESSIONAL ENGINEER
No. 58540
DATE: 8/5/15
STATION: 87+00

LIGHTING PLAN
44TH AVENUE EAST

PROJECT NO:
00193-001-18
DATE:
8-05-2015
SHEET NO:
L-8



- NOTES:
1. THE CONTRACTOR SHALL SPLICE THE PROPOSED LIGHT CONDUCTOES TO THE EIXSITNG CONDUCTOES IN THE PULL BOXES FOR THE EXISTING LIGHT POLES NUMBER 9 AND 10.
 2. THE EXISTING LOAD CENTER "B" FOR THE EXISTING LIGHTING IS LOCATED IN THE NORTHWEST CORNER OF 44TH AVENUE EAST AND 18TH STREET EAST.
 3. THE CONTRACTOR SHALL COORDINATE AT LEAST TWO BUSINESS DAYS PRIOR TO ANY WORK WITH THE EXISTING LIGHTING CIRCUIT WITH THE ENGINEER AND AARON BRUKETT (MANATEE COUNTY TRAFFIC OPERATIONS).
 4. THE CONTRACTOR SHALL PERFORM DUE DILLIGENCE WORKING WITH THE EXISTING CONDUCTORS. ANY COST TO REPLACE ANY DAMAGE MATERIAL OR EQUIPMENT TO THE EXITING LIGHTING OR COMMUNICATIONS SYSTEM SHALL BE AT THE CONTRACTORS EXPENSE.



NO.	DESCRIPTION	BY	DATE
1	ADD CIRCUIT TO WEST PROJECT, CHANGE CIRCUIT LABELS	DJA	08/05/15
2	RENUMBER POLES		

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

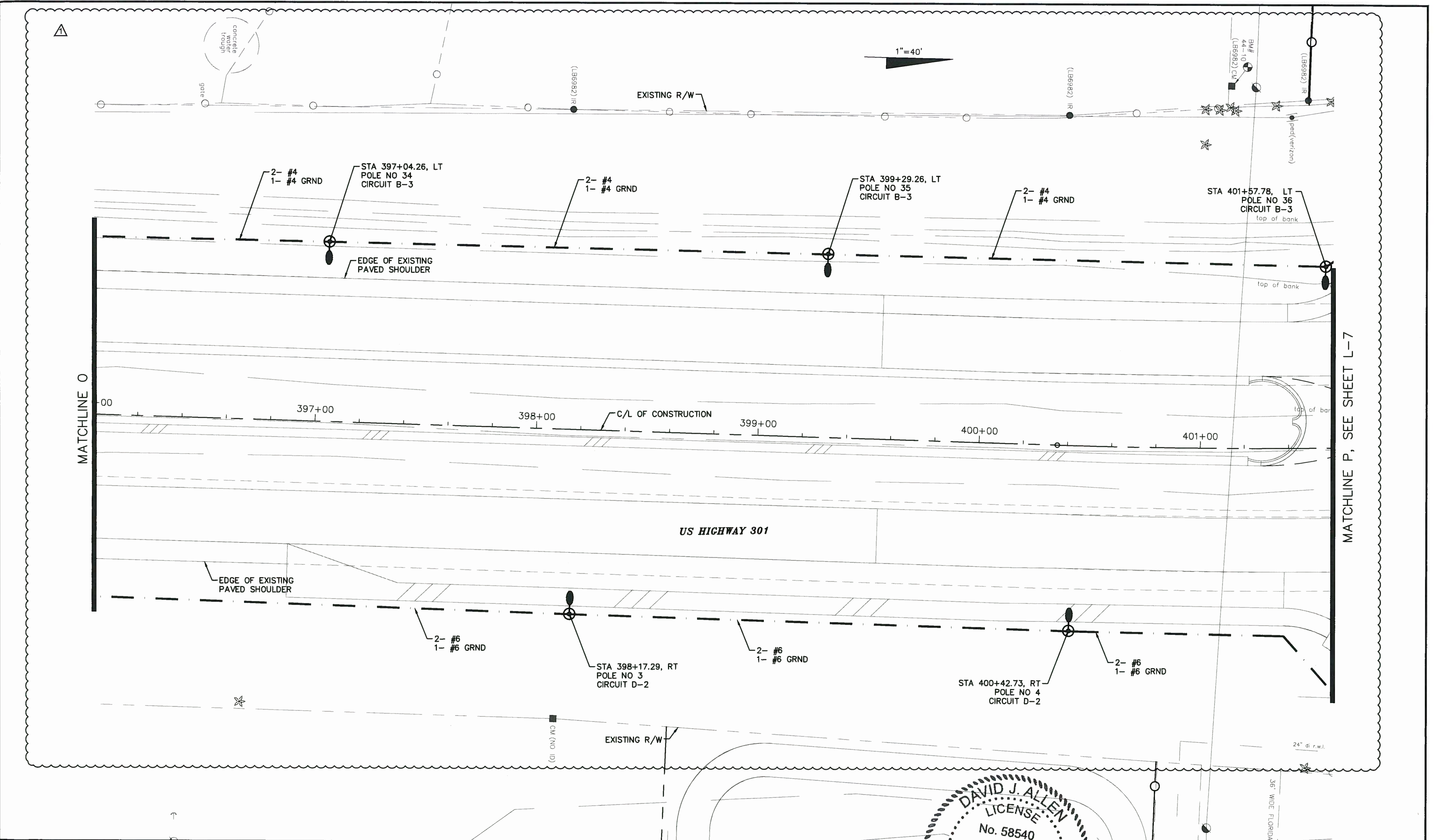
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DAVID J. ALLEN
LICENSE
No. 58540
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED DJA
DRAWN ROH
C.C.
APPROVED

**LIGHTING PLAN
US 301**

PROJECT NO:
00193-001-18
DATE:
8-05-2015
SHEET NO:
L-14



NO.	DESCRIPTION	BY	DATE
1	CHANGE CIRCUIT LABELS, RENUMBER POLES	DJA	08/05/15

MANATEE COUNTY

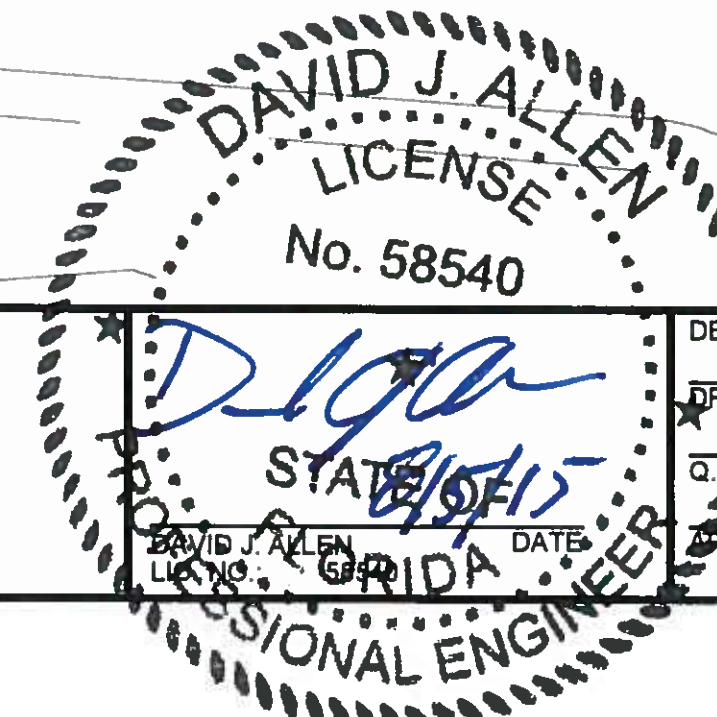
**44TH AVENUE EAST
ROADWAY EXTENSION**

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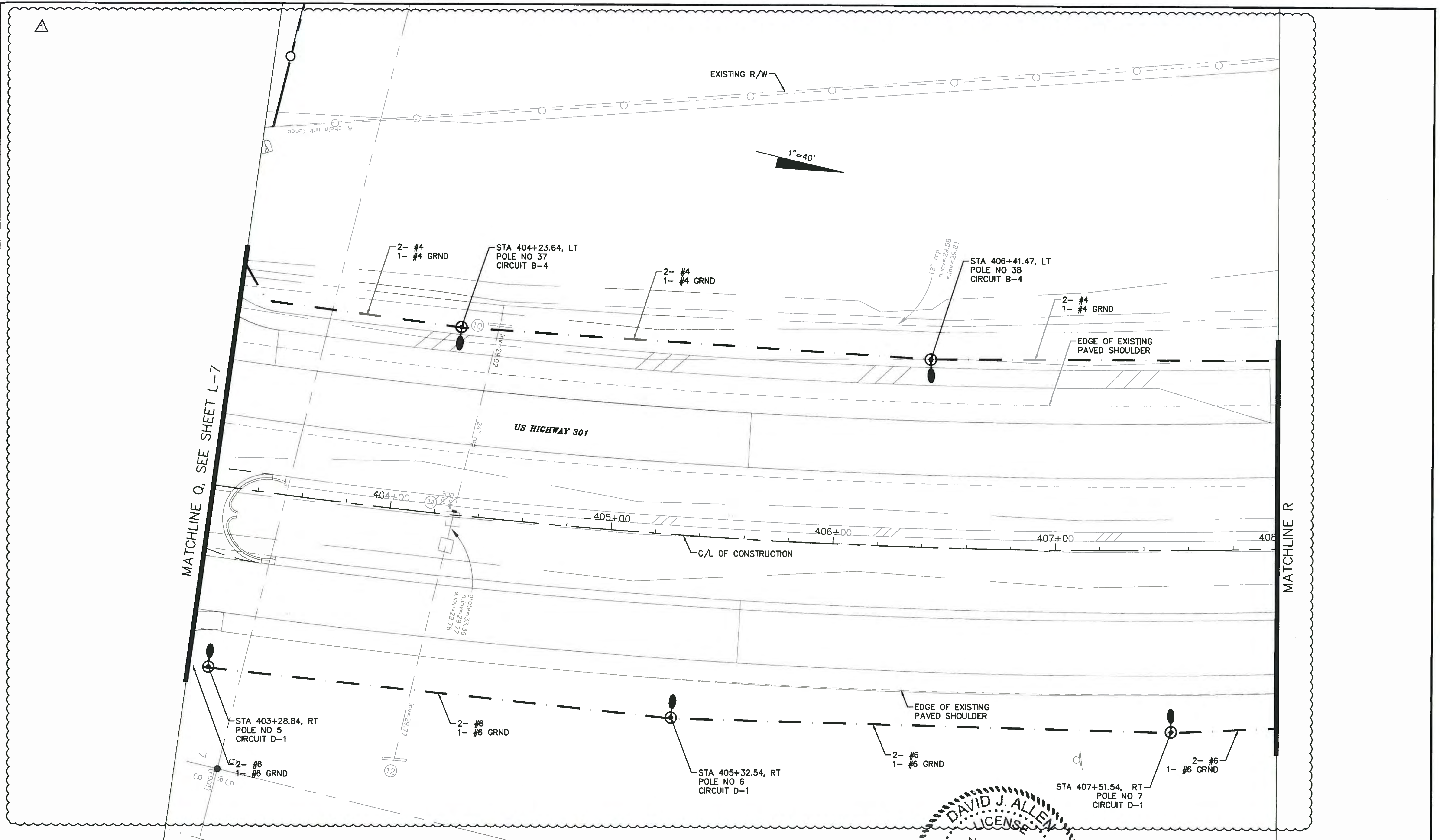
DESIGNED: DJA
DRAWN: ROH
DATE: 8/5/15
APPROVED:

**LIGHTING PLAN
US 301**

PROJECT NO:
00193-001-18
DATE:
8-05-2015
SHEET NO:
L-15



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NO.	DESCRIPTION	BY	DATE
1	CHANGE CIRCUIT LABELS, RENUMBER POLES SHIFT POLE 5	DJA	08/05/15

MANATEE COUNTY

44TH AVENUE EAST
ROADWAY EXTENSION

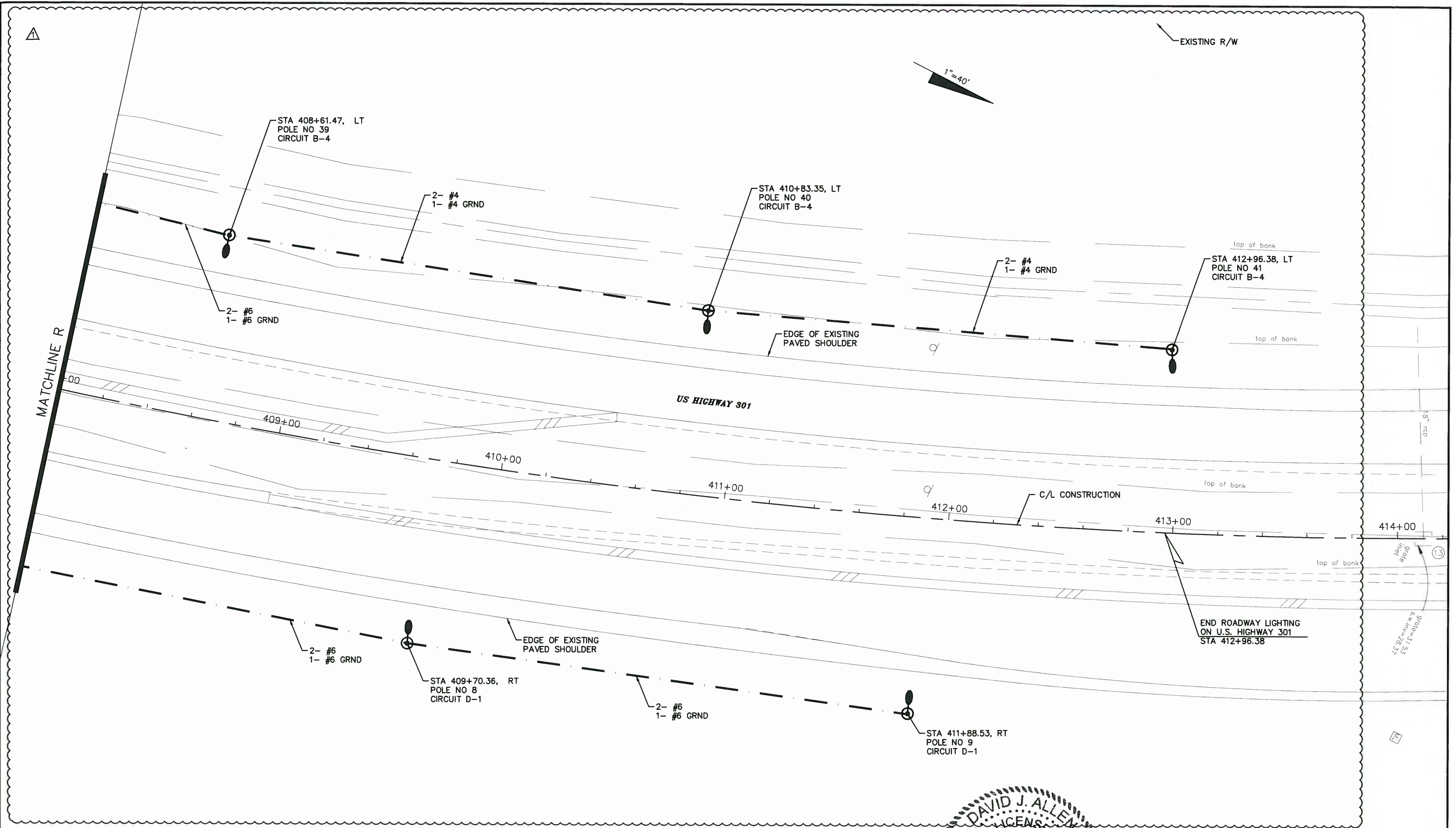
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DAVID J. ALLEN
LICENSE
No. 58540
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

LIGHTING PLAN
US 301

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-16

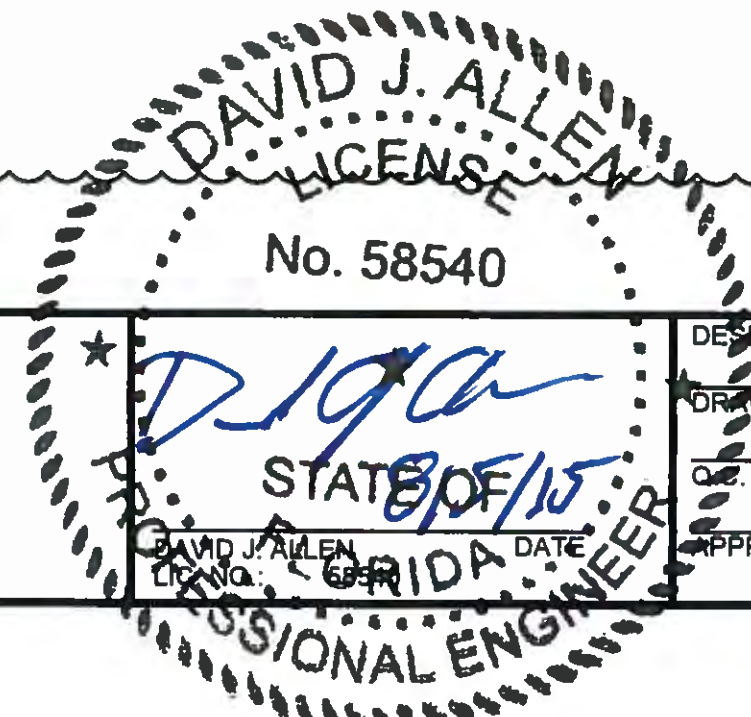


NO.	DESCRIPTION	BY	DATE
1	CHANGE CIRCUIT LABELS, RENUMBER POLES	DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

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DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

**LIGHTING PLAN
US 301**

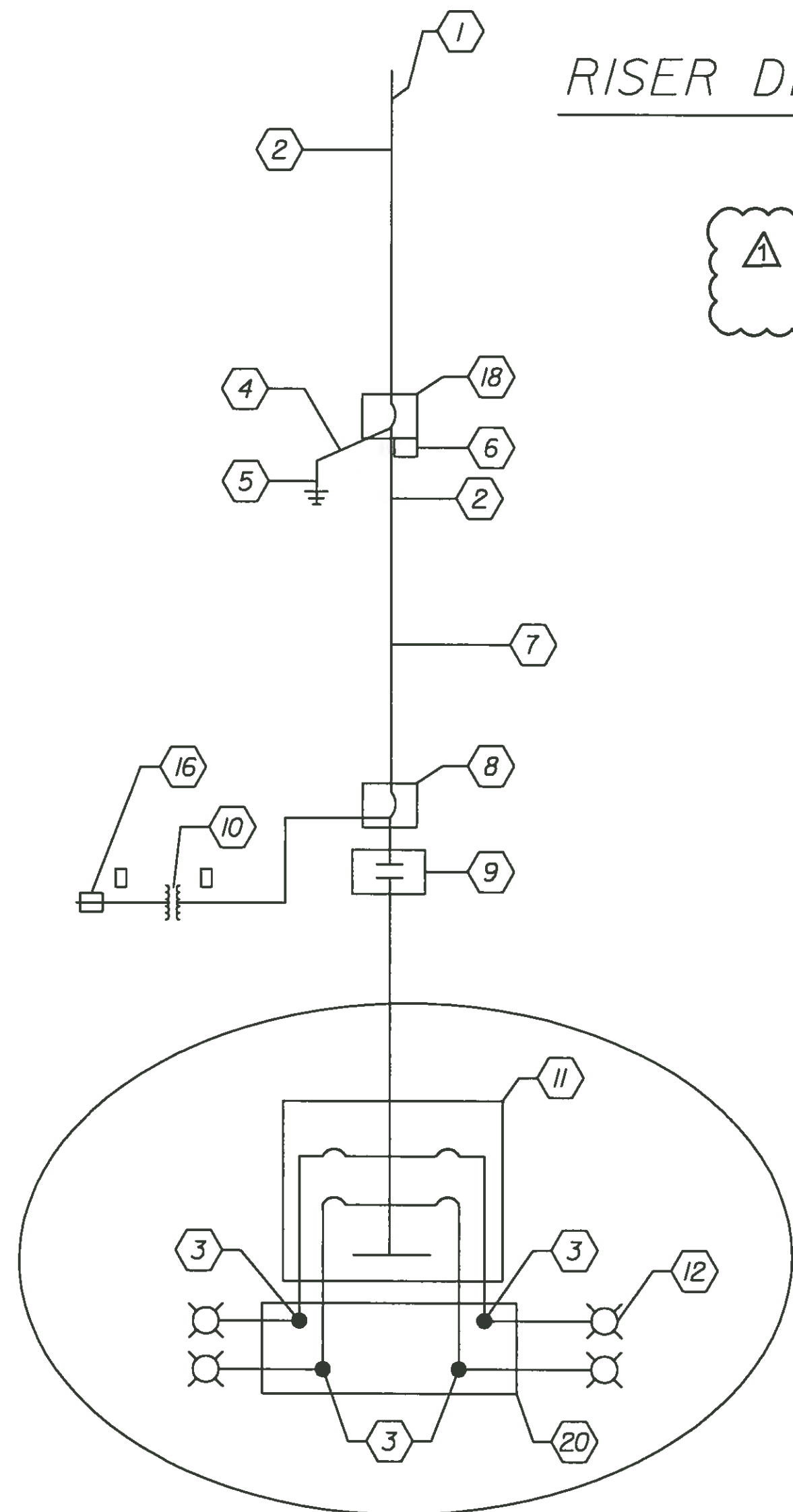
PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-17

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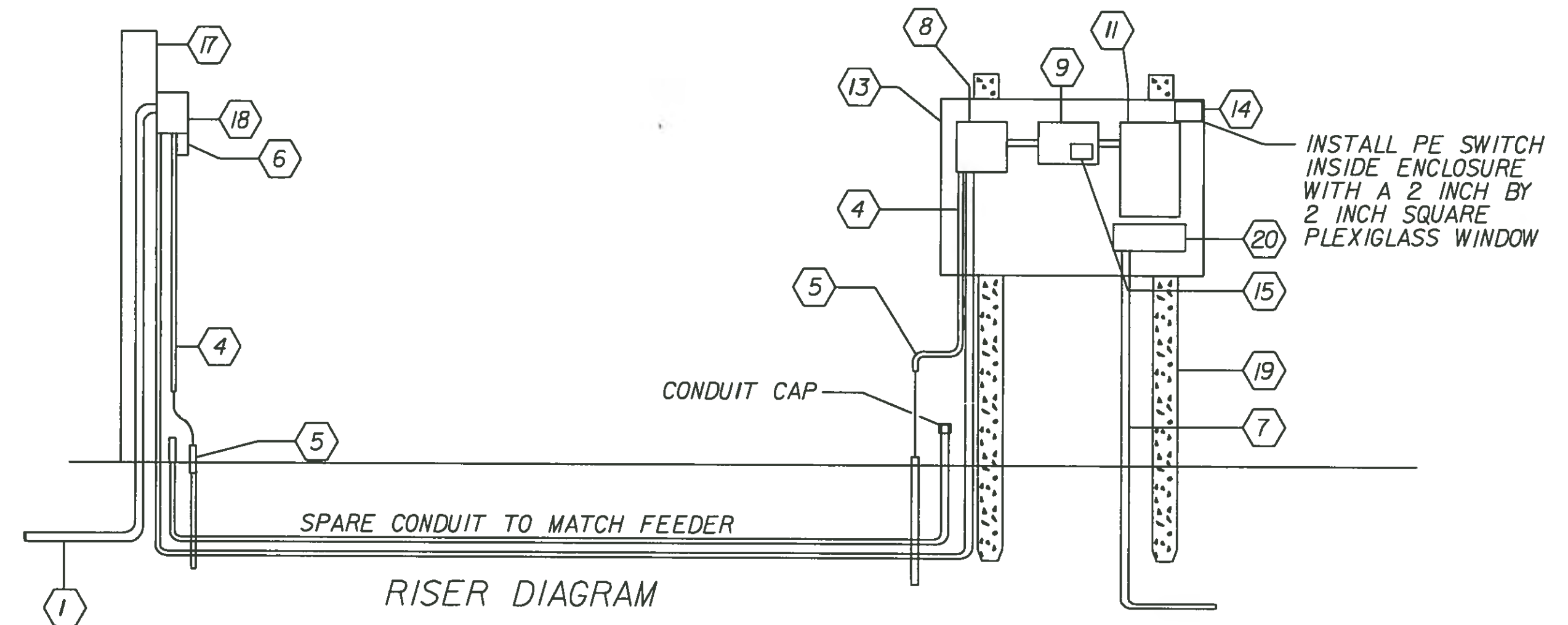
RISER DIAGRAM AND SCHEMATIC

KEYED NOTES:

- ⚠ (1) 240/480V SINGLE PHASE 3-WIRE FP & L UNDERGROUND SERVICE CONNECTION CONDUIT RUN TO UNDERGROUND STREET LIGHT SERVICE RISER INSTALLED ON DESIGNATED FP & L SOURCE POLE.
- (2) SEE FEEDER SIZE IN PLANS
- (3) MECHANICAL CONNECTION
- (4) INSULATED #6 COPPER GROUND WIRE IN 1" RIGID GALVANIZED STEEL.
- (5) COPPER CLAD GROUND ROD 5/8" DIA. 40 FEET LONG.
- (6) LIGHTNING ARRESTOR
- (7) CONDUITS FOR THE CONDUCTORS COMPOSING THE LIGHTING CIRCUITS. THE CONTRACTOR SHALL DETERMINE THE NUMBER OF NECESSARY CONDUIT DROPS.
- (8) MAIN CIRCUIT BREAKER 2-POLE, 480V. SEE PLANS FOR SIZE.
- (9) 2-POLE, ELECTRICALLY HELD CONTACTOR. SAME SIZE AS MAIN CIRCUIT BREAKER.
- (10) CONTROL TRANSFORMER 1 KVA, SINGLE PHASE, 480V PRIMARY 120V SECONDARY.
- (11) PANELBOARD, 480V, SINGLE PHASE, 3-WIRE WITH GROUND BAR AND CIRCUIT BREAKERS. SEE PLANS FOR CIRCUIT BREAKER SIZES.
- (12) ROADWAY LUMINAIRE CONNECTED TO A CIRCUIT.
- (13) POST-MOUNTED 3R STAINLESS STEEL ENCLOSURE WITH LOCKABLE HINGED DOOR. SIZE PER EQUIPMENT REQUIREMENT.
- (14) PHOTO ELECTRIC CELL SWITCH INSIDE ENCLOSURE.
- (15) 'HAND-OFF-AUTOMATIC' SELECTOR SWITCH.
- (16) 30 AMP, 2-POLE FUSEBLOCK WITH 20 AMP FUSES FOR CONTROL VOLTAGE.
- (17) 12' PEDESTAL CONCRETE POLE
- (18) 600V, 2-POLE S/N HEAVY DUTY NEMA 3R ENCLOSED BREAKER.
- (19) CONCRETE SUPPORT POSTS WITH GALVANIZED UNISTRUT TO SUPPORT ELECTRICAL EQUIPMENT.
- (20) WIRE TROUGH FOR BRANCH CIRCUIT WIRE MECHANICAL CONNECTION TO CIRCUIT BREAKER WIRE



ONE LINE DIAGRAM (NTS)



RISER DIAGRAM

NO.	MODIFY NOTE	DESCRIPTION	BY	DATE
1			DJA	08/05/15

MANATEE COUNTY

44TH AVENUE EAST
ROADWAY EXTENSION

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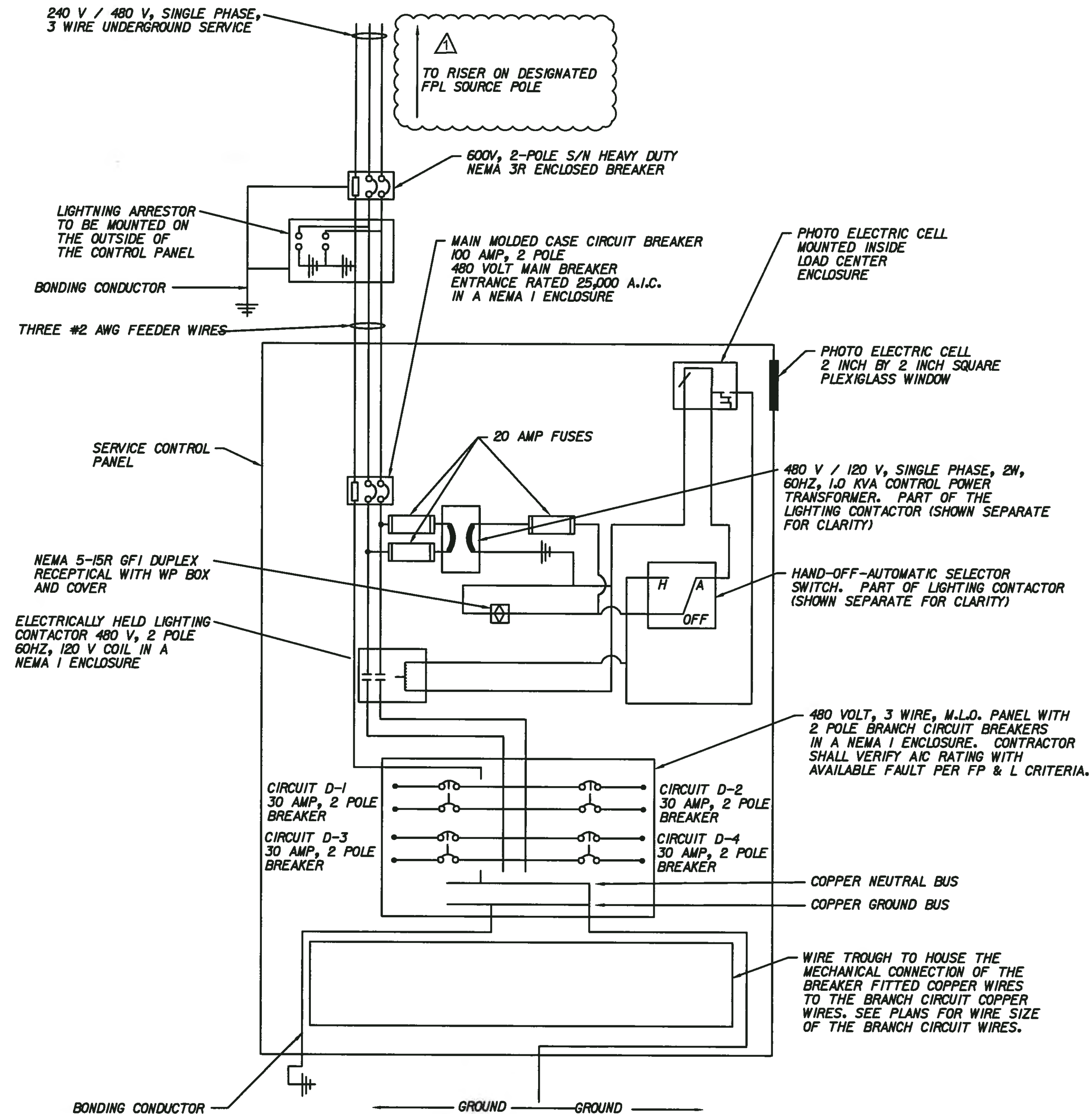
DAVID J. ALLEN
LICENSE
No. 58540
8/5/15
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

SERVICE POINT DETAIL (1)

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-18

**ROADWAY LIGHTING WIRING DIAGRAM
FOR LOAD CENTER "D"
N. T. S.**



NOTES:

- REFER TO THE 2015 FDOT STANDARD DESIGN INDEX I7504 FOR ADDITIONAL SERVICE POINT DETAILS.
- CONTRACTOR SHALL FURNISH A NEMA 3R ENCLOSURE SIZED FOR THE EQUIPMENT FURNISHED.
- THE CIRCUIT PANEL SHALL HAVE AT LEAST 12 CIRCUIT BREAKER BAYS FOR FUTURE USE.

NO.	DESCRIPTION	BY	DATE
1	ADD NOTE AND CHANGE TO 2015 STANDARDS	DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

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DAVID J. ALLEN
LICENSE
No. 58540

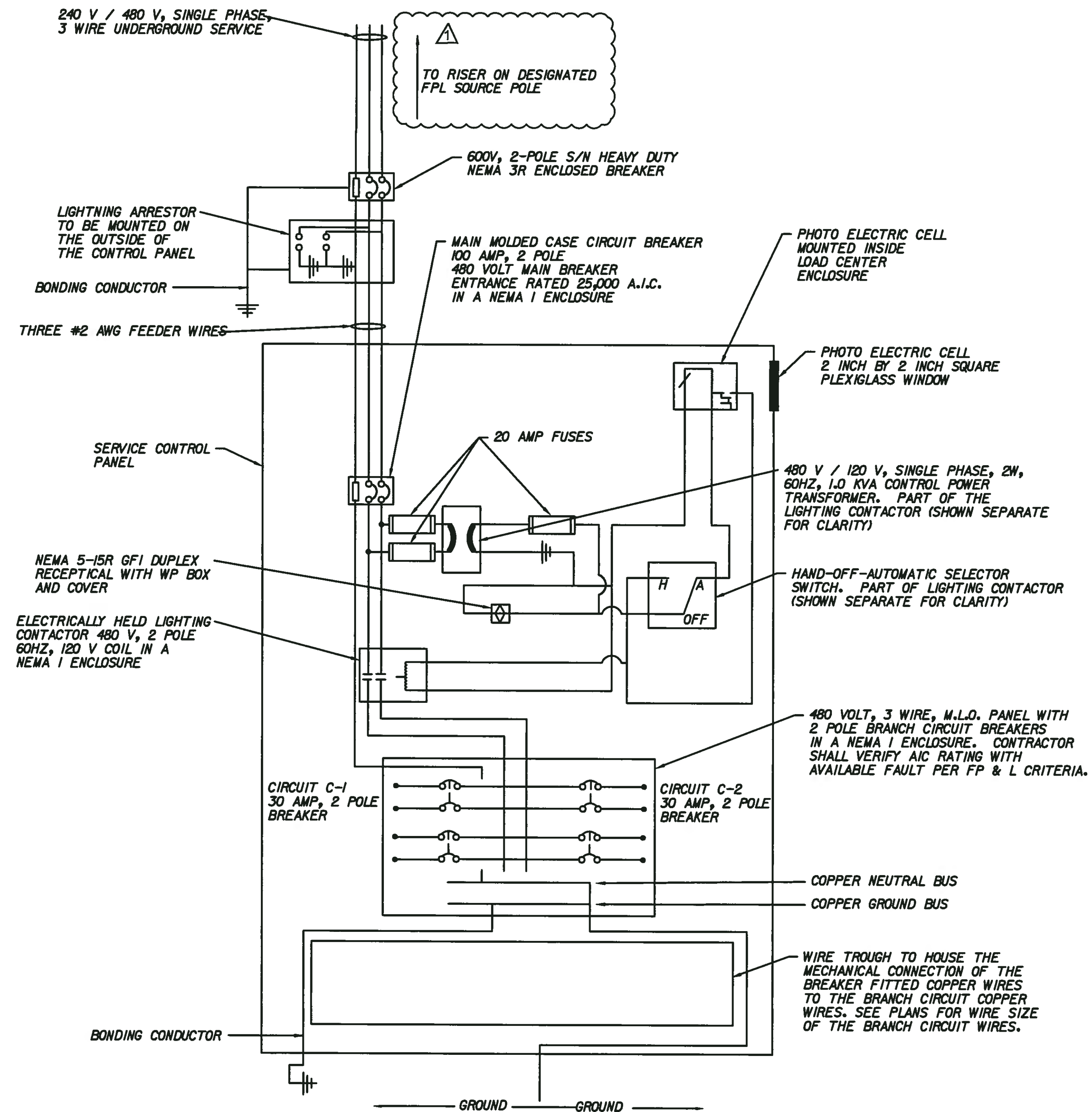
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

SERVICE POINT DETAILS (2)

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-19

**ROADWAY LIGHTING WIRING DIAGRAM
FOR LOAD CENTER "C"
N. T. S.**



NOTES:
 1. REFER TO THE 2015 FDOT STANDARD DESIGN INDEX I7504 FOR ADDITIONAL SERVICE POINT DETAILS.
 2. CONTRACTOR SHALL FURNISH A NEMA 3R ENCLOSURE SIZED FOR THE EQUIPMENT FURNISHED.
 3. THE CIRCUIT PANEL SHALL HAVE AT LEAST 12 CIRCUIT BREAKER BAYS FOR FUTURE USE.

NO.	DESCRIPTION	BY	DATE
1	ADD NOTE AND CHANGE TO 2015 STANDARDS	DJA	08/05/15

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

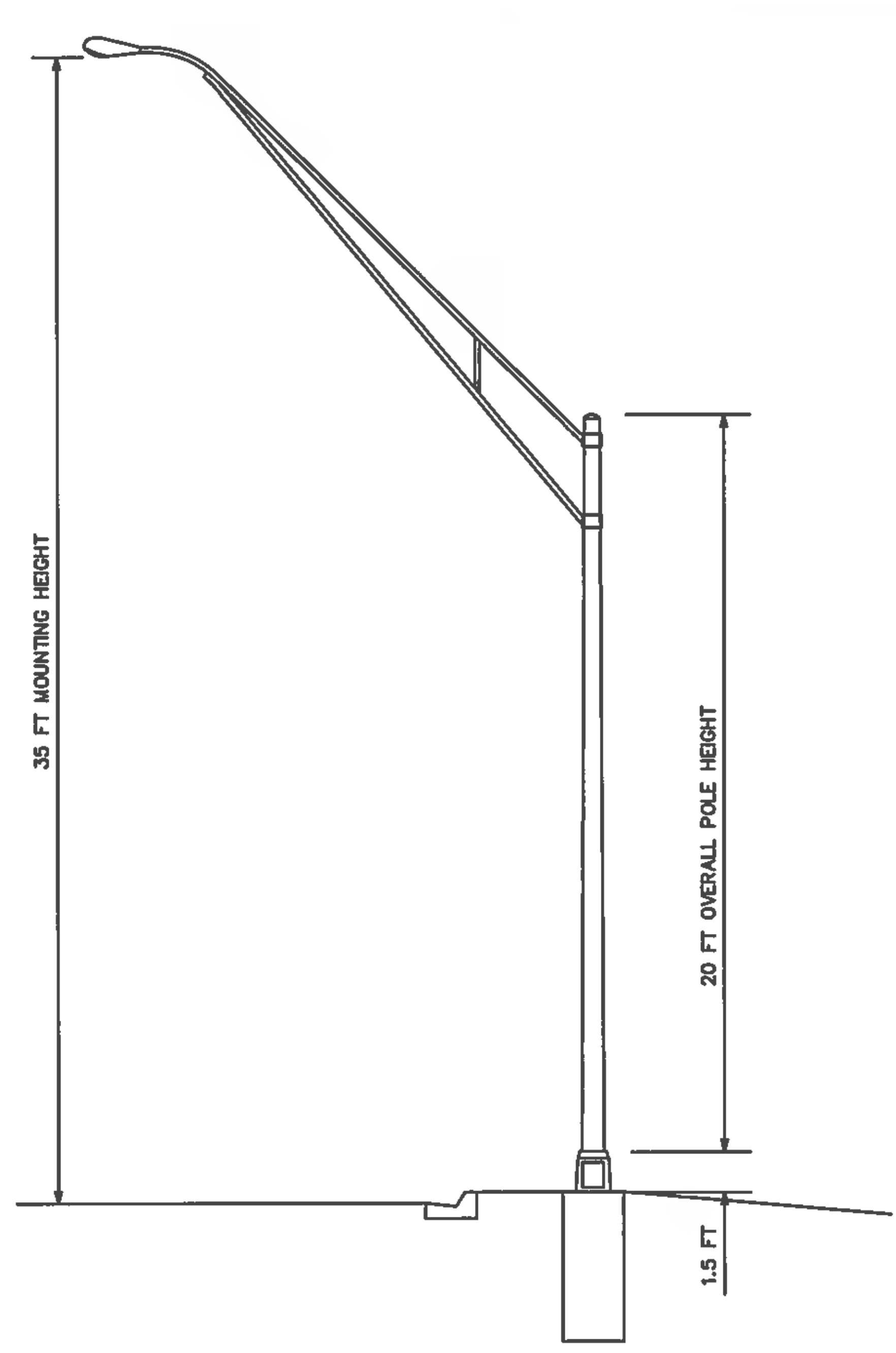
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DAVID J. ALLEN
LICENSE
No. 58540
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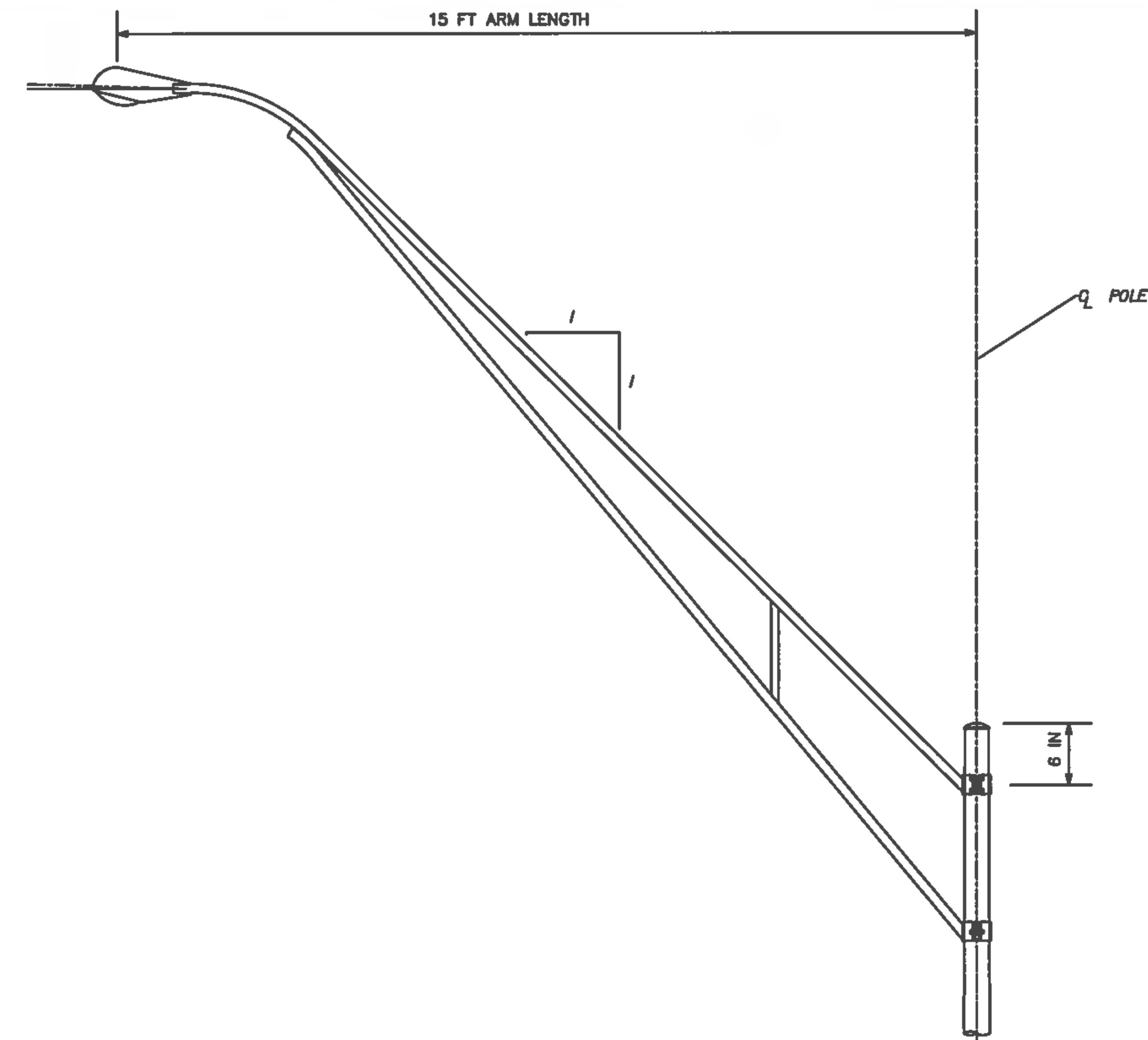
DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

SERVICE POINT DETAIL (3)

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-20



UTILITY CONFLICT POLE
NTS



ARM ELEVATION
NTS

NOTES:

1. THE SPECIAL UTILITY CONFLICT LIGHT POLE AND BRACKET ARM SHALL USE THE SAME MATERIAL AS SPECIFIED IN THE FDOT DESIGN STANDARD INDEX 17515.
2. THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING WITH STRUCTURAL CALCULATIONS FOR THE POLE, FOUNDATION AND BRACKET ARM.
3. THE LIGHT POLE SHALL HAVE A WIND LOAD OF 130 MPH.
4. THIS DESIGN IS FOR ALL LIGHT POLES LABELED AS UTILITY CONFLICT POLES AND UNDER PAY ITEM 715-511-135.

NO	DESCRIPTION	BY	DATE
1	ADD NEW SHEET WITH UTILITY CONFLICT POLE DETAILS	DJA	08/05/15

MANATEE COUNTY

44TH AVENUE EAST
ROADWAY EXTENSION

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DAVID J. ALLMAN
LICENSED PROFESSIONAL ENGINEER
No. 58540
STATE OF FLORIDA
DATE: 8/5/15

DESIGNED	DJA
DRAWN	ROH
CHECKED	
APPROVED	

UTILITY CONFLICT POLE
DETAILS

PROJECT NO:	00193-001-18
DATE:	8-05-2015
SHEET NO:	L-21

CONTRACT DRAWINGS

44TH AVENUE EAST

FROM 19TH STREET COURT EAST TO 30TH STREET EAST



FOR

MANATEE COUNTY, FLORIDA

COUNTY PROJECT NUMBER: 6045660

POTABLE WATER MAIN PLANS

RELATED STANDARDS AND SPECIFICATIONS

DESCRIPTION

- A. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2015)
- B. MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FLORIDA DEPARTMENT OF TRANSPORTATION, (FLORIDA GREEN BOOK), (2011).
- C. FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, (JANUARY 2015)
- D. AASHTO, GUIDE FOR PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES, (2004).
- E. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD), (2009).
- F. CHAPTER 14-96 AND 14-97, FLORIDA ADMINISTRATIVE CODE RULE FOR FDOT CONNECTION PERMIT.
- G. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMITTING (ERP) INFORMATION MANUAL, LATEST EDITION
- H. MANATEE COUNTY HIGHWAY, TRAFFIC AND STORM WATER STANDARDS, (2007).

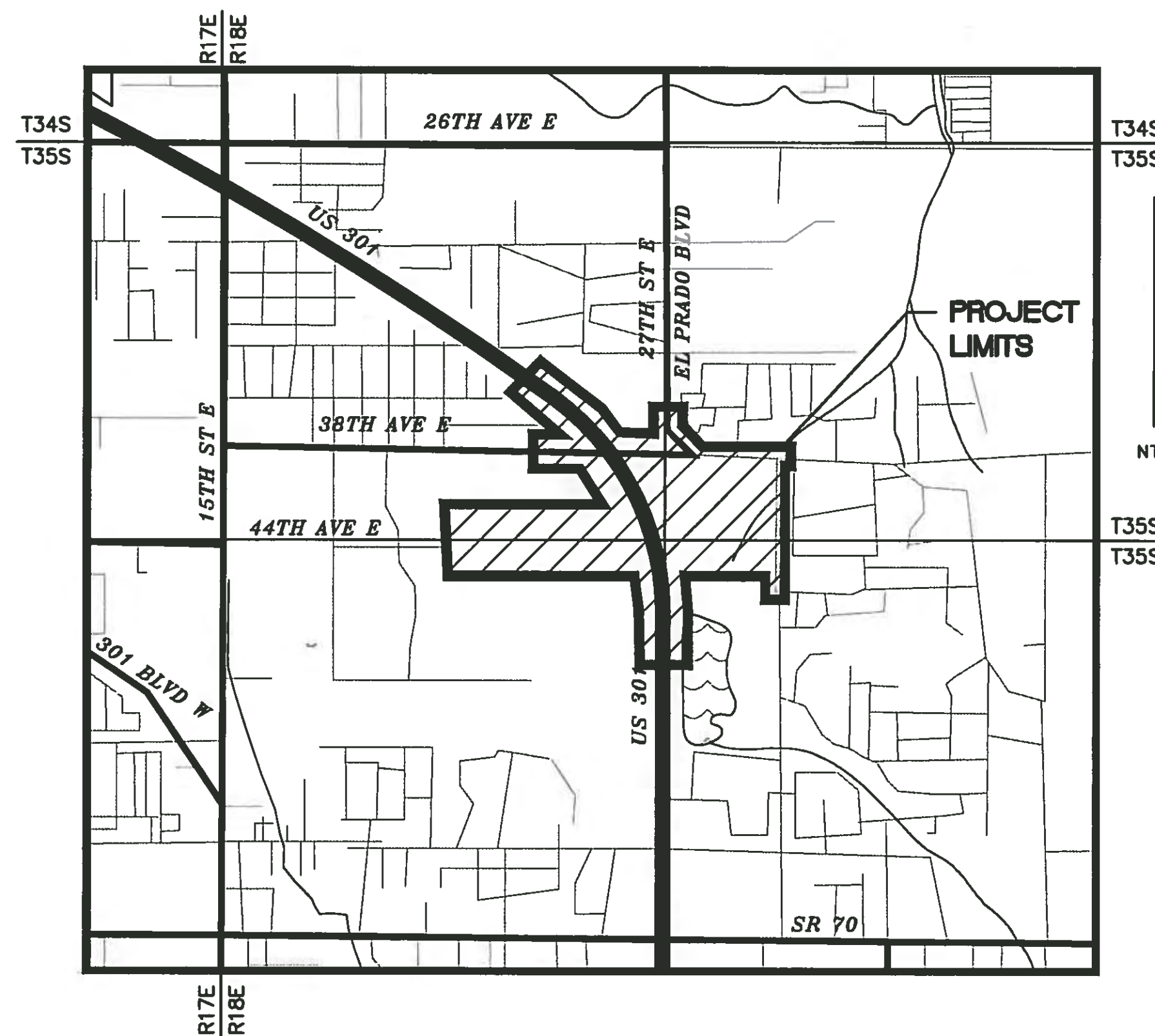
ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

UTILITY WARNING NOTE

ABOVE GROUND AND / OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS PROJECT - PROCEED WITH CAUTION - THE CONTRACTOR SHALL CALL SUNSHINE STATE "ONE CALL" AT 1-800-432-4770 AND THE UTILITY OWNERS IN ADVANCE OF BEGINNING WORK, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.

SUMMARY OF REVISIONS	
DATE	DESCRIPTION
8/5/15	UPDATED STANDARDS AND SPECIFICATIONS TO 2015

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



COMPONENTS OF CONTRACT PLANS SET

- ROADWAY PLANS
- SIGNALIZATION PLANS
- LIGHTING PLANS
- POTABLE WATER MAIN PLANS

INDEX OF PLANS

SHEET NO	SHEET DESCRIPTION
C-1	COVER SHEET
W-1 - W-9	PLAN AND PROFILE
W-10	GENERAL NOTES
W-11 - W-16	DETAILS

PLANS PREPARED BY:

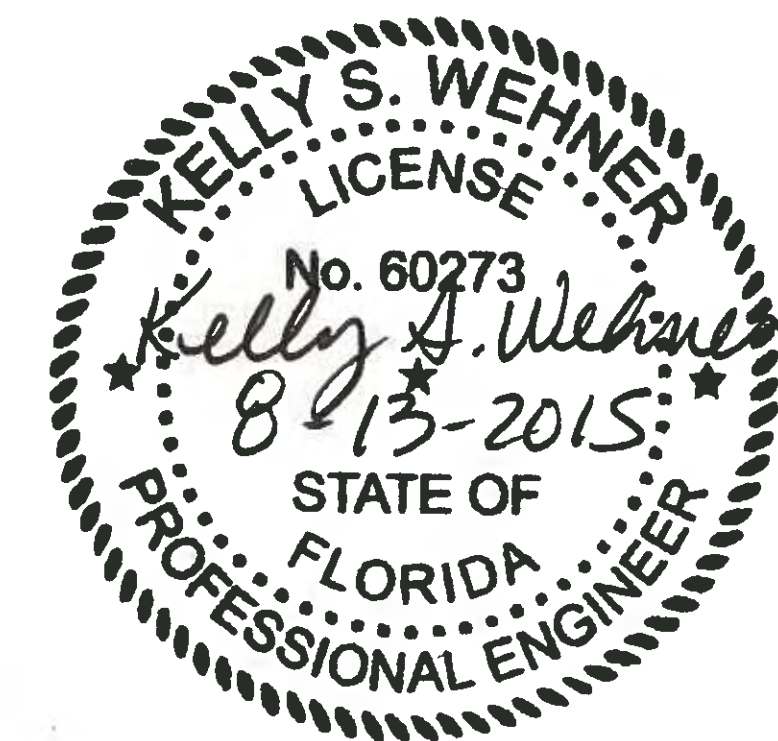


380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759
 TEL: (727) 531-3505 (800) 861-8314
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ENGINEER OF RECORD

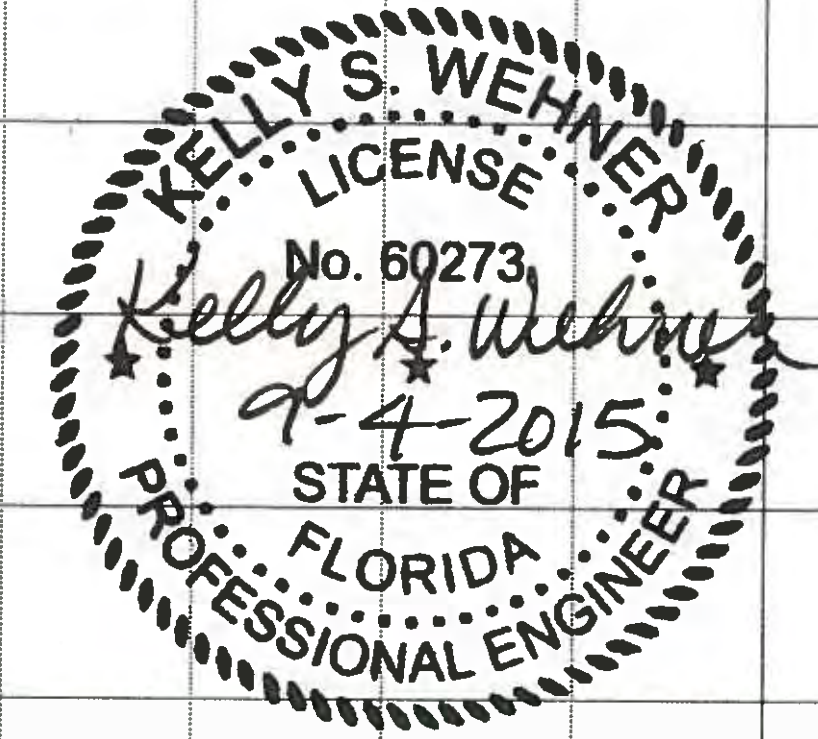
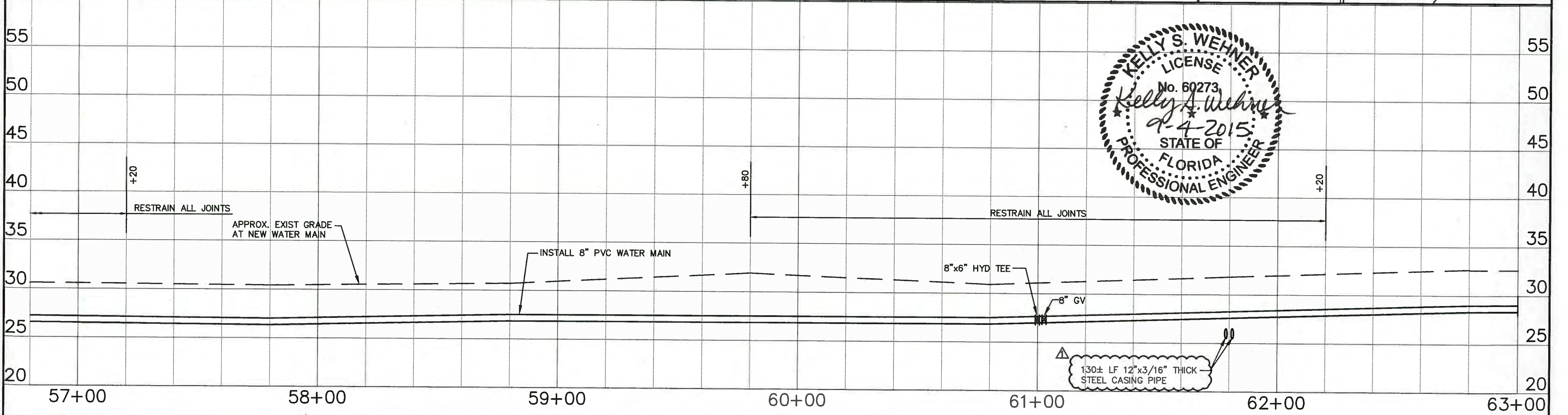
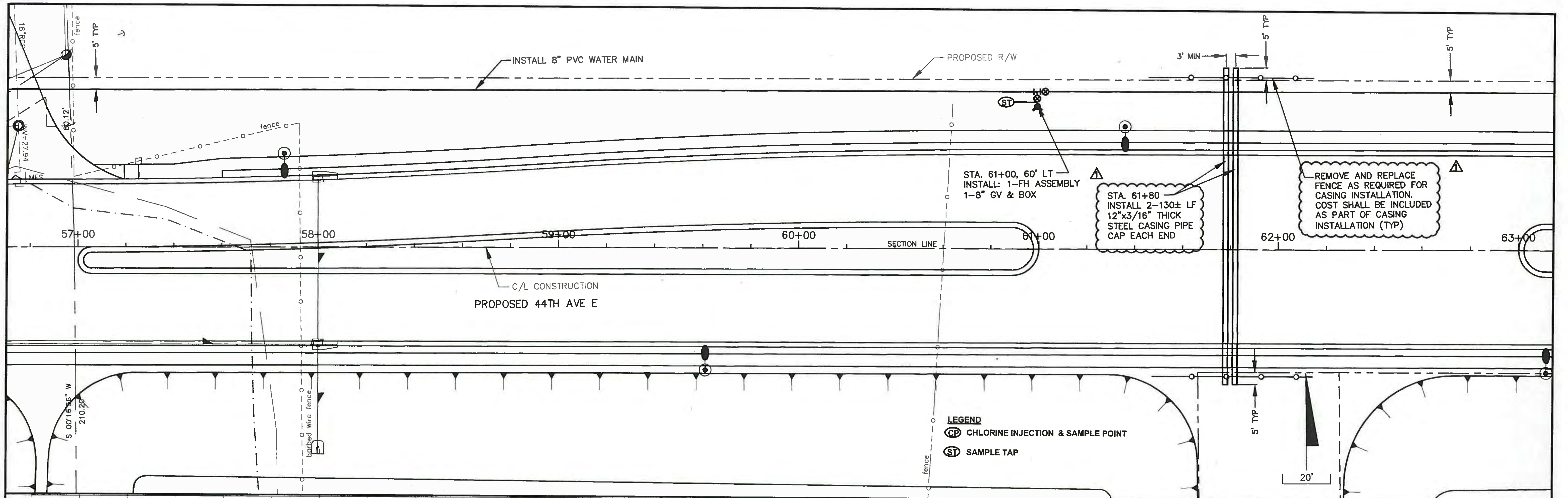
KELLY S. WEHNER, PE

FL. LICENSE NO 60273



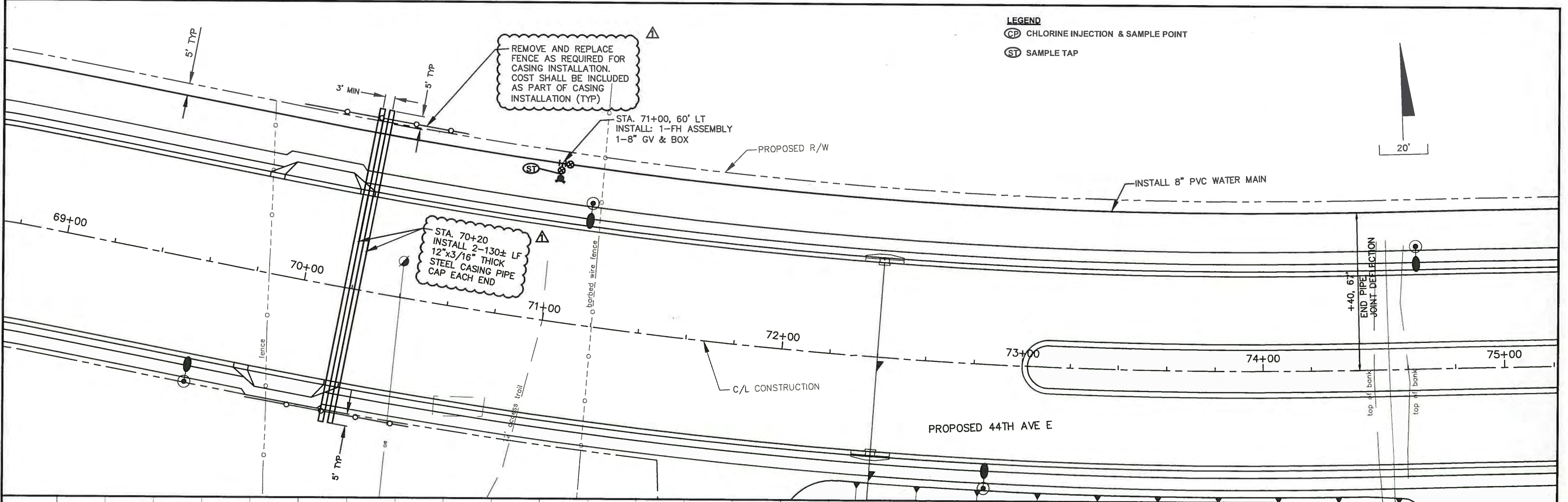
48 HOURS BEFORE DIGGING
 "CALL SUNSHINE"
 1-800-432-4770

DATE: AUGUST 2015
 SCALE: HORIZ: N/A
 VERT: N/A
 SHEET: C-1

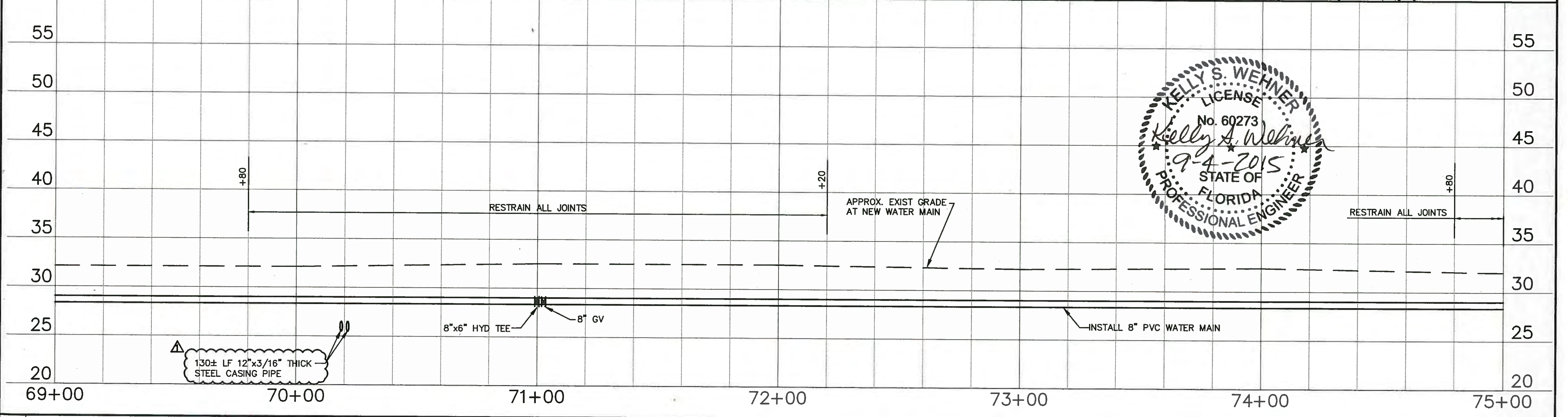


MANATEE COUNTY		44TH AVENUE EAST ROADWAY EXTENSION		 Shaping the Future 380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759 TEL: (727) 531-3505 (800) 861-8314 www.cardno.com Certificate of Authorization No. 29915		DESIGNED: DRM DRAWN: DES Q.C.: KSW APPROVED:		PROJECT NO: 00193-001-18 DATE: AUGUST 2015 SHEET NO: W-3	
CHANGED CASING NOTATION NO. DESCRIPTION BY DATE		DES 9/2015		KELLY S. WEHNER, PE LIC. NO.: 60273		WATER PLAN & PROFILE 44TH AVENUE EAST			

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LEGEND
 (CP) CHLORINE INJECTION & SAMPLE POINT
 (ST) SAMPLE TAP



NO.	DESCRIPTION	BY	DATE
1	CHANGED CASING NOTATION	DES	9/2015

MANATEE COUNTY

**44TH AVENUE EAST
ROADWAY EXTENSION**

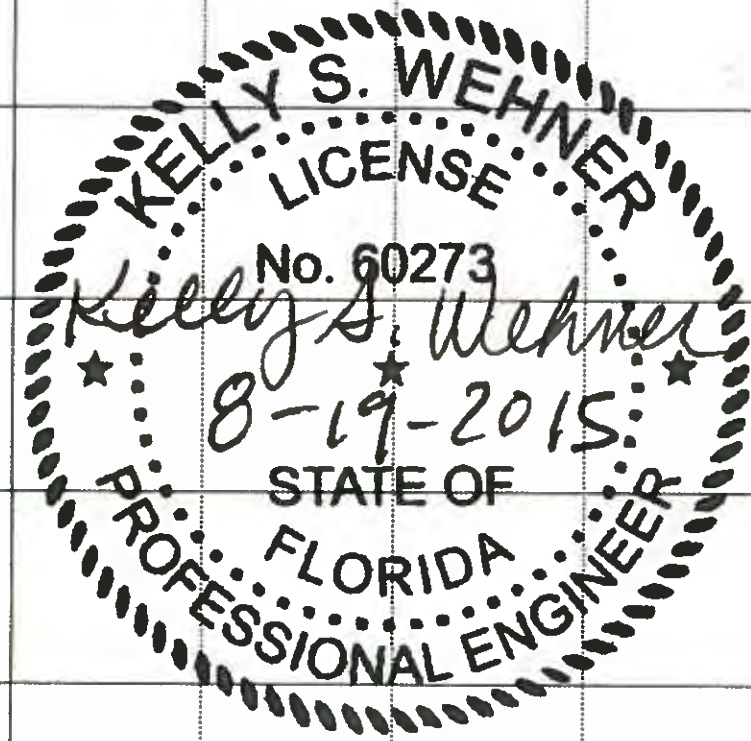
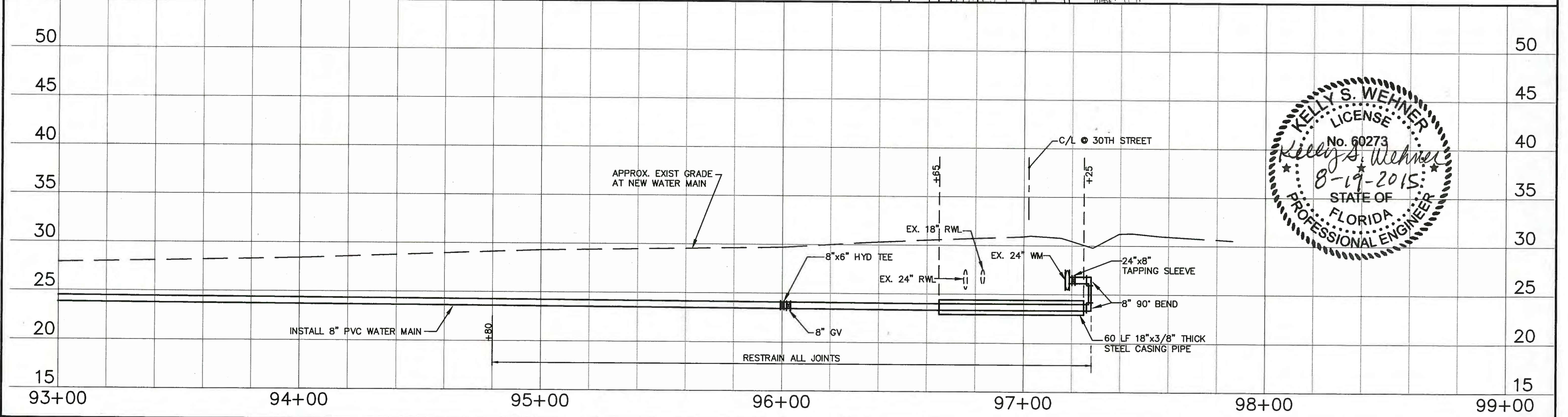
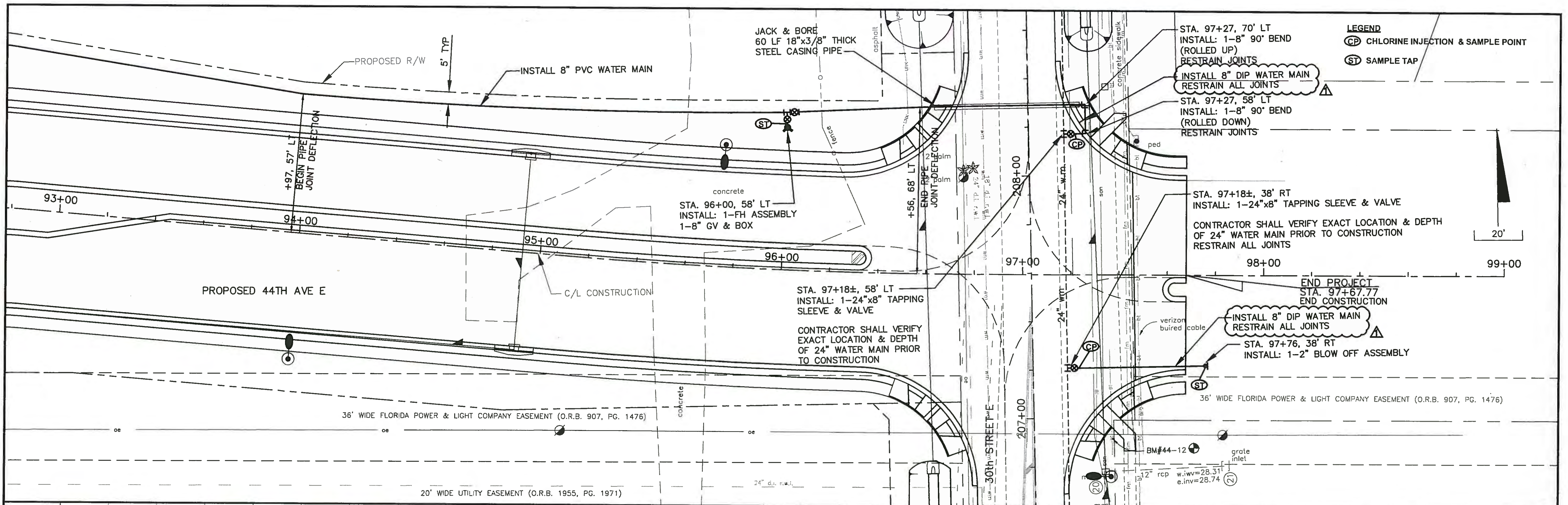
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KELLY S. WEHNER, PE DATE
 LIC. NO.: 60273

DESIGNED: DRM
 DRAWN: DES
 Q.C.: KSW
 APPROVED:

**WATER PLAN & PROFILE
44TH AVENUE EAST**

PROJECT NO: 00193-001-18
 DATE: AUGUST 2015
 SHEET NO: W-5



MANATEE COUNTY 44TH AVENUE EAST ROADWAY EXTENSION		 380 PARK PLACE BLVD, STE 300, CLEARWATER, FL 33759 TEL: (727) 531-3505 (800) 861-8314 www.cardno.com Certificate of Authorization No. 29915		DESIGNED: DRM DRAWN: DES C.C. KSW APPROVED:		WATER PLAN & PROFILE 44TH AVENUE EAST		PROJECT NO: 00193-001-18 DATE: AUGUST 2015 SHEET NO: W-9	
CHANGED PIPE MATERIALS NO. DESCRIPTION BY DATE		DES 8/2015		KELLY S. WEHNER, PE LIC. NO.: 60273		DATE		APPROVED	

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