



MANATEE COUNTY FLORIDA

FACSIMILE

December 18, 2008

TO: All Interested Bidders

SUBJECT: Invitation for Bid #08-3280DC
17th St East (US41 to Canal Road) Road and Utility improvements
ADDENDUM #1

Bidders are hereby notified that this Addendum shall be acknowledged on the Bid Form signature pages and made a part of the above named bidding and contract documents.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

1. Bid Opening has been extended to **January 30, 2009 at 3:00 P.M.**, same location. Addendum 2 will include revised Bid Form and respond to other questions.
2. Scope of Work: Construct the Designed Four Lanes of a Divided Urban Roadway with Sidewalks, Drainage, Traffic Signals, Bike Lanes and Streetlights. The length of the project will be approx. 3900 feet from US41 to Canal Road. The existing two-lane urban roadway will be expanded to four-lane divided urban roadway with a median ditch, bike lanes, sidewalks on both sides, improved drainage facilities, improved County water and sewer facilities, improved traffic signals at both ends, and roadway lighting improvement. A new 6+ acre storm water facility to the east of Sylvan Oaks subdivision will be added to alleviate flooding in the subdivision. The construction schedule duration includes contract days to allow the contractor to initially move into the area to clear and grub the 3900 feet and stop for approx three months to allow the local utilities to come in and relocate all of their facilities.
3. The Construction Cost Estimate is attached.

Financial Management Department - Purchasing Division
1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205
PHONE: 941.749.3074 * FAX: 941.749.3034
www.mymanatee.org

4. The cost of the handicap ramps is included in the unit price item for sidewalk and the drop curbs along the road are included in the unit price for curb in accordance with FDOT Index 304, Sheet 1 of 6, General Note #8: *“Public sidewalk curb ramps are to be paid for as follows: Ramps, reconstructed sidewalks, walk around sidewalks, sidewalk landings and sidewalk curbs are to be paid for under the contract unit price for Sidewalk Concrete, (___" Thick), SY. Curb transitions and reconstructed curbs are to be paid for under the contract unit price for the parent curb, i.e., Curb Conc., (Type ___), LF or Curb and Gutter Conc., (Type ___), LF.”*
5. There are no Minority Business Enterprise or Women Business Enterprise (MBE/WBE) goals included in this project.
6. Since the original survey was performed at the US41 intersection, an exclusive right-turn land has been added for the eastbound approach to the intersection resulting in a right-turn lane and a through/left-turn lane. Should the design be revised to preserve this lane usage?

Response: The design is for a left-turn lane and a through/right-turn lane for the eastbound approach to the intersection. Preserving the existing lane usage while maintaining the proposed layout would result in eastbound through traffic aligning with westbound left-turn movements and would require the through traffic to shift 12' right while crossing the intersection. In order to avoid this situation and maintain an eastbound exclusive right-turn lane, the eastbound approach would need to be widened 12' to the south, resulting in a left-turn lane, a through lane, and a right-turn-only lane. The layout and lane usage as currently proposed should sufficiently serve the needs being remedied by the existing condition. The plans are therefore not being changed.

7. The Typical Sections specifying 10" lime rock base (or approved equal) requirement for base at 850 lbs. per square yard are being deleted.
8. No lift stations are allowed to be shut down; pump around is to be utilized.
9. Special Provisions (page 8), Utility Coordination – Delete last sentence; a Bid Form item is being added for Utility Coordination.
10. The FDOT driveway connection and drainage permit applications are currently being prepared for submittal to FDOT. Permits will be made available when approved.
11. Bid Form Item 2 Maintenance of Traffic shall include payment for Off Duty Police Officer for work within FDOT right-of-way.
12. Bid Form Item 11 Removal of Existing Structures is being deleted; Manatee County will remove the house.

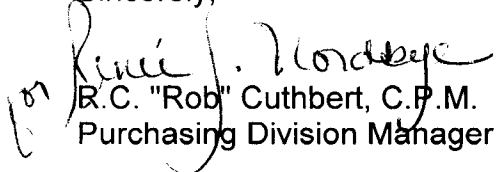
13. Bid Form Item 12 Removal of Exist. Conc. Pvmt. - Quantity of 11,600 is changed to 1,928 cubic yards.
14. Bid Form Item 24 S-III Asphalt is changed to Type SP.
15. Bid Form Items 37 and 38 Manholes – Quantity is revised.
16. Bid Form Item 54 Pipe Cross Drain Culv is changed to 5'x8' Box Culvert.
17. Bid Form Item 88 Concrete Collar for Pipe is for concrete encasement of a proposed 8" water main. Unit of Measure shall remain linear feet.
18. Bid Form Item 175 Landscape – Tree sizes are 3 gallon and plants are bare root (no specified size).
19. Bid Form Item added for fencing and gates, ref. ponds 1,2,3 and attenuation pond.
Note: Fencing is no longer required around the diversion structure. The fence for the diversion structure is being removed from the plans.
20. Bid Form Item added in reference to Rock Removal per the FDOT Specification Section 120-14.2.2: Hauling and disposal of Rock and Unsuitable Material is included in the price for Excavation, Subsoil (Roadway) and Excavation, Subsoil (Rock). Earthwork Bid Form Items shall be: Regular Excavation-CY, Excavation Subsoil (Roadway)-CY, Excavation Subsoil (Rock)-CY, Embankment (Regular)-CY, Embankment (Replacement for Rock Removed)-CY

A Bid Form Item for Borrow Material is not being added. There should be adequate excavation of suitable material to satisfy the required embankment.
21. Sign-in sheet for attendees at the Information Conference on November 21, 2008 is attached.
22. Revised plan sheets (PDF) are attached.

If you have submitted a bid prior to receiving this addendum you may request in writing that your original, sealed bid be returned to your firm. All sealed bids received will be opened on the date stated.

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Suite 803, Bradenton, Florida 34205 until **January 30, 2009 at 3:00 P.M.**

Sincerely,


R.C. "Rob" Cuthbert, C.P.M.
Purchasing Division Manager

/dcr
Attachments



August 5, 2008

To All Bidders

Re: 17th Street East, from US 41 to East of Canal Road

The "construction cost estimate" for the 17th Street East, from US 41 to East of Canal Road project is \$6,510,000 (six million five hundred ten thousand dollars).

The construction cost estimate was determined as of July 2, 2008. The construction cost estimate is based on the original specifications and drawings issued with the 17th Street East, from US 41 to East of Canal Road project. Changes to the specifications subsequent to the original documents by addenda to this bid may not be accounted in this construction cost estimate.

Sincerely,

WADE TRIM, INC.

A handwritten signature in cursive script that reads 'Jeffrey D. Trim'.

Jeffrey D. Trim, PE

Engineer of Record for the 17th Street East, from US 41 to East of Canal Road Project

JDT:jml

MTE2057.01M

P:\Mte2057\01m\Admin-support\constructioncostestimate.doc

cc: Tim Hochuli, Manatee County, Director, Project Management Department
Bruce Simington, Manatee County, Senior Project Manager
Paul Schamell, Manatee County, Project Manager
Sue Sandhoff, Manatee County, Fiscal Services Manager
Project File: 6035260

Wade Trim, Inc. 813.882.8366
8745 Henderson Road 888.499.9624
Suite 220, Renaissance 5 813.884.5990 fax
Tampa, FL 33634 www.wadetrim.com

**INFORMATION CONFERENCE
ATTENDANCE RECORD**

TITLE: IFB #08-3280DC 17TH ST E (US41 TO CANAL RD)

DATE: NOVEMBER 21, 2008

TIME: 10:00 A.M.

TELEPHONE NO. FAX NO., EMAIL	NAME (PLEASE PRINT)	REPRESENTING CO/FIRM/DEPT
941-708-7450	Paul Schamell	M. County
772-879-6510 bieterman@felixassociates.net	SCOTT BIETERMAN	FELIX ASSOCIATES
941-757-0080 941-757-0085 roy.5@russellengineering.com	Jeremy Wilson Roy SMITH	Harbord Construction RUSSELL ENGINEERING INC
741-753-1011 224-3305 fax Mike@WestraConst.com	Mike Beukema	Westra Const. Corp.
Phone 756-4700 FAX 756-4540	Thomas McPuffie Jr.	STATELY CONTRACTORS
941-351-7178 941-359-9728 rsh11@apac.com	Bandy Hill	APAC-Southeast, Inc.
941-355-8575 941-351-8854 gator@frederickdeer.com	GATOR CARTER	FREDERICK DEER & Co, Inc
441-746-1191 441-729-5434 jack@gigliotticontracting.com	Jack Morsink	Gigliotti Contracting, Inc.
441-756-1871 941-735-1379 fax www.woodruffandsons.com	Don Woodruff	Woodruff & Sons, Inc.
1-756-1871 @WOODRUFFANDSONS.COM	Rick Hoffman	WOODRUFF + SONS, INC.
-3950 -3949 MOB.ATC@CAP.COM	Mike Nault	Carter Grading & Paving

INFORMATION CONFERENCE ATTENDANCE RECORD

IFB #08-3280DC 17TH ST E (US41 TO CANAL RD) ROAD & UTILITY IMPROVEMENTS
 NOVEMBER 21, 2008 @ 10:00 A.M.

TELEPHONE NO. FAX NO., EMAIL	NAME (PLEASE PRINT)	REPRESENTING CO/FIRM/DEPT
941-379-6003 FAX 377-9873 KUXCE@MSN.COM	PAUL S. Kuxhausen DANA Bulger	Kuxhausen Const. Inc.
941-749-3074 F 941-749-3034 d.karah@carney-steel.com	DOROTHY CARNEY REED	Purchasing
813 435 7777 F 813 626 6814 BLUNA@KEARNEYCONSTRUCTION.COM	Tom King	KEARNEY CONSTRUCTION
415 597 1289 cmee@cs.com	JEFF MEER	UNITED RENTALS. FRENCH SAFETY
813-882-8366	BLAKE GROSS	Wade Trim
941-723-4580 fwoodard@palmettbl.org	FRANK WOODARD II	CITY OF PALMETTO PUBLIC WORKS

CONSTRUCTION				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
1	101-1	Mobilization	LS	1
2	102-1	Maintenance of Traffic	LS	1
3		Special Provisions Utility Coordination	LS	1
4	102-3	Commercial Mat for Drwy Maint	CY	300
5	104-10-2	Synthetic Bales	LF	950.0
6	104-11	Floating Turbidity Barrier	LF	400
7	104-13-1	Staked Silt Fence (Type III)	LF	9,600
8	104-15	Soil Tracking Prevention Device	EA	3
9	104-16	Rock Bags	EA	500
10	110-1-1	Clearing & Grubbing	AC	32
11	110-4	Removal of Exist. Conc. Pymt.	SY	1,928
12	110-7-1	Mailbox (Furnish & Install)	EA	2
13	120-1	Regular Excavation	CY	41,128
14	120-4	Excavation, Subsoil (Roadway)	CY	26,576
15	120-4	Excavation, Subsoil (Rock)	CY	59,857
16	120-6	Embankment (Regular)	CY	28,124
17	120-6	Embankment (Replacement for Rock Removal)	CY	12,000
18	160-6	12" Stabilized Sub-base	SY	38,100
19	285-701	4" Type ABC-III Base	SY	100
20	285-709	10" Limerock Base	SY	34,300
21	327-70-6	Milling Exist. Asph. Pavement (1.5" Avg. Depth)	SY	1,850
22	334-1-14	2" Type S-1 Asphalt Concrete (Incl Tack Coat)	TN	4,900
23	337-7-31	Asph. Friction Course (FC-12.5) (Traffic B)(Rubber)(165 lbs/sy)	TN	165
24	334-1-14	1" Type S-III Asphalt Concrete	TN	4,150
25	400-1-2	Class I Concrete (Endwalls)	CY	80
26	400-1-15	Class I Concrete (Misc)	CY	22
27	400-2-2	Class II Concrete (Endwalls)	CY	22
28	410-70-085	Precast Box Culvert (8'x5')	LF	220
29	415-1-6	Reinforcing Steel	LB	2,300
30	425-1-351	Inlets (Curb) (Type P-5) (<10')	EA	10
31	425-1-381	Inlets (Curb) (Type P-6) (<10')	EA	12
32	425-1-451	Inlets (Curb) (Type J-5) (<10')	EA	2
33	425-1-461	Inlets (Curb) (Type J-6) (<10')	EA	3
34	425-1-521	Inlet (Dt Bot) (Type C) (<10')	EA	3
35	425-1-531	Inlet (Dt Bot) (Type C Modified) (<10')	EA	3
36	425-1-589	Inlet (Dt Bot) (Type H Modified) (<10')	EA	2
37	425-1-900	Diversion Structure (Attenuation Pond)	EA	1
38	425-2-41	Manholes (P-7) (<10')	EA	5
39	425-2-71	Manholes (J-7) (<10')	EA	9
40	430-171-101	Pipe Storm Sewer Culv (RCP)(15')	LF	430
41	430-171-101	Pipe Storm Sewer Culv (RCP)(18')	LF	1,020
42	430-171-101	Pipe Storm Sewer Culv (RCP)(24')	LF	1,320
43	430-171-102	Pipe Storm Sewer Culv (RCP)(30')	LF	1,540
44	430-171-102	Pipe Storm Sewer Culv (RCP)(36')	LF	570
45	430-171-105	Pipe Storm Sewer Culv (RCP)(84')	LF	18
46	430-171-201	Pipe Storm Sewer Culv (ERCP) (14"x23")	LF	980
47	430-171-202	Pipe Storm Sewer Culv (ERCP) (29"x45")	LF	75
48	430-171-204	Pipe Storm Sewer Culv (ERCP) (43"x88")	LF	280
49	430-171-204	Pipe Storm Sewer Culv (ERCP) (48"x76")	LF	155
50	430-172-201	Pipe Cross Drain Culv (ERCP) (12"x18")	LF	105
51	430-172-205	Pipe Cross Drain Culv (ERCP) (68"x91")	LF	245
52	430-984-129	MES (Round) (24" SD)	EA	2
53	430-984-138	MES (Round) (36" SD)	EA	1
54	430-984-825	MES (Conc Pipe Ellip) (14"x23") (SD)	EA	3
55	430-984-838	MES (Conc Pipe Ellip) (29"x45") (SD)	EA	1
56	430-984-843	MES (Conc Pipe Ellip) (Double) (48"x76") (SD)	EA	1

CONSTRUCTION				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
57	515-1-2	Pipe Handrail (Aluminum)	LF	170
58	520-1-7	Type E Curb & Gutter	LF	6,200
59	520-1-10	Type F Curb & Gutter	LF	9,350
60	520-70	Concrete Traffic Separator (Special)(VW)	SY	75
61	522-1	4" Concrete Sidewalk	SY	4,800
62	522-2	6" Concrete Sidewalk	SY	1,150
63	530-1	Rip-Rap (Sand Cement)	CY	45
64	530-3-4	Rip-Rap (Rubble) (Ditch Lining)	TN	425
65	536-73	Guardrail Removal	LF	70
66	536-85-22	Guardrail End Anchorage Assembly	EA	1.0
67	550-10-222	Fencing, Type B, 6' Height w/Vinyl Coating, Green	LF	5,553
68	550-60-233	Fence Gate, Type B, Sliding, 15' Opening, w/Vinyl Coating, Green	EA	1
69	550-60-237	Fence Gate, Type B, Sliding, 44' Opening, w/Vinyl Coating, Green	EA	3
70	570-1-2	Sodding (Performance Turf) (Includes Mowing)	SY	35,200

SEWER IMPROVEMENTS				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
71	1050-11-222	Pipe, F&I, PVC, FM, 4" (SDR 26) (Incl all flgs and jnts)	LF	205
72	1050-11-224	Pipe, F&I, PVC, Sanitary, 8" (SDR 26) (Incl all jnts)	LF	776
73	1050-11-92	Service, Sanitary, F&I, 6" (Incl connects and cleanouts)	EA	11
74	1050-16-2	Pipe, Remove, 4"	LF	455
75	1050-16-4	Pipe, Remove, 8"	LF	85
76	1055-11-254	Fittings, F&I, Plug, 8"	EA	12
77	1060-11-223	Manhole, Sanitary (> 12' Deep)	EA	3
78	1060-15	Adjust Existing Manhole, Adjust Rim	EA	17
79	1060-15	Modify Existing Manhole, Core Bore Manhole (4'-6" Deep)	EA	1
80	1060-15	Modify Existing Manhole, Core Bore Manhole (12'-14" Deep)	EA	3
81	1060-15	Modify Existing Manhole, Core Bore Manhole (14'-16" Deep)	EA	4
82	1060-15	Modify Existing Manhole, Retrofit Inside Drop, 4", (4'-6" Drop)	EA	1
83	1060-15	Modify Existing Manhole, Remove and Plug Existing Stub-out	EA	3
84	1060-15	Modify Existing Manhole, New Connection, 4", (4'-6" Deep)	EA	1
85	1060-15	Modify Existing Manhole, New Connection, 8", (12'-14" Deep)	EA	8
86	1060-15	Modify Existing Manhole, New Connection, 8", (14'-16" Deep)	EA	4
87	1060-16	Remove Existing Manhole (14'-16" Deep)	EA	2

WATER IMPROVEMENTS				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
88	1050-11-114	Conc. Collar for 8" DIP Pipe	LF	1
89	1050-11-223	Pipe, F&I, PVC, Water, 6" (C-900) (Incl all flgs and jnts)	LF	137
90	1050-11-223	Pipe, F&I, PVC, Water, 6" (C-900) (Incl all flgs and jnts) (R.J.)	LF	60
91	1050-11-224	Pipe, F&I, PVC, Water, 8" (C-900) (Incl all jnts)	LF	2892
92	1050-11-224	Pipe, F&I, PVC, Water, 8" (C-900) (Incl all jnts) (R.J.)	LF	358
93	1050-11-423	Pipe, F&I, DIP, Water, 6" (Class 50) (Incl all flgs and jnts) (R.J.)	LF	703
94	1050-11-424	Pipe, F&I, DIP, Water, 8" (Class 50) (Incl all jnts) (R.J.)	LF	858
95	1050-11-92	Service, Water, F&I (Incl Connects, Valves, Meters and Boxes)	EA	22
96	1050-16-223	Pipe, Remove, 8"	LF	1585
97	1050-16-224	Pipe, Remove, 8"	LF	755
98	1055-11-414	Fittings, F&I, Ductile Iron, Bend, 8"	EA	20
99	1055-11-424	Fittings, F&I, Ductile Iron, Tee, 8"x6"	EA	5
100	1055-11-424	Fittings, F&I, Ductile Iron, Tee, 8"x8"	EA	3
101	1055-11-424	Fittings, F&I, Ductile Iron, Tee, 10"x10"	EA	1
102	1055-11-434	Fittings, F&I, Ductile Iron, Reducer, 8"x6"	EA	2
103	1055-11-434	Fittings, F&I, Ductile Iron, Reducer, 10"x8"	EA	1
104	1055-11-454	Fittings, F&I, Ductile Iron, Plug, 8"	EA	1
105	1055-11-494	Fittings, F&I, Ductile Iron, Cross, 8"x6"	EA	1
106	1080-11-34	Fixtures, F&I, 5", Gate Valve Assembly (Cast Iron) (250 PSI)	EA	11
107	1080-11-35	Fixtures, F&I, Blowoff Assembly	EA	6
108	1080-11-43	Fixtures, F&I, Solid Sleeve, 8"	EA	2
109	1080-11-44	Fixtures, F&I, 8", Gate Valve Assembly (Cast Iron) (250 PSI)	EA	9
110	1080-11-44	Fixtures, F&I, 10", Gate Valve Assembly (Cast Iron) (250 PSI)	EA	1
111	1080-11-46	Fixtures, F&I, 8", Air Release Valve Assembly (150 PSI)	EA	5
112	1644-13	Fire Hydrant Assembly, F&I, Standard, 6"	EA	7

SIGNING AND PAVEMENT MARKING				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
113	700-20-11	R1-1 (30"x30") (Stop)	AS	5
114	700-20-11	R2-1 (24"x30") (Speed Limit)	AS	4
115	700-20-11	R3-16 (24"x30") (Bike Lane Ahead)	AS	2
116	700-20-11	R3-16A (24"x30") (Bike Lane Ends)	AS	2
117	700-20-11	R3-7R (30"x30") (Right Lane Must Turn Right)	AS	6
118	700-20-11	R4-7 (24"x30") (Keep Right)	AS	2
119	700-20-11	S1-1 (30"x30") (Watch for Children)	AS	1
120	700-20-11	W3-3 (30"x30") (Signal Ahead)	AS	1
121	700-20-40	Sign Single Post, Relocate	AS	7
122	705-10-2	Delinicator, Double Unit	EA	10
123	706-3	Bi-Dir Yellow RPM's	EA	222
124	706-3	Bi-Dir W/R RPM's	EA	343
125	710-11-190	Reflective Paint (Island Nose) (White)	SF	8
126	710-12-190	Reflective Paint (Island Nose) (Yellow)	SF	113
127	711-11-160	Pavement Messages, Thermoplastic (Bike Lane Markings)	EA	13
128	711-11-160	Pavement Messages, Thermoplastic (School)	EA	1
129	711-11-160	Pavement Messages, Thermoplastic (Only)	EA	5
130	711-11-170	Directional Arrows, Thermoplastic	EA	41
131	711-11-131	Skip Traffic Stripe, 10'-30" White, Thermoplastic	GM	1,288
132	711-11-241	Skip Traffic Stripe, 10'-30" Yellow, Thermoplastic	LF	106
133	711-11-141	Skip Traffic Stripe, 2'-4" White, Thermoplastic	LF	218
134	711-11-123	Solid Traffic Stripe, 12" White, Thermoplastic (Crosswalk)	LF	1,521
135	711-11-124	Solid Traffic Stripe, 18" White, Thermoplastic (Chevron)	LF	28
136	711-11-125	Solid Traffic Stripe, 24" White, Thermoplastic (Stop Bar)	LF	343
137	711-11-224	Solid Traffic Stripe, 18" Yellow, Thermoplastic (Chevron)	LF	165
138	711-11-111	Solid Traffic Stripe, 6" White, Thermoplastic	NM	1,792
139	711-11-211	Solid Traffic Stripe, 6" Yellow, Thermoplastic	NM	1,567

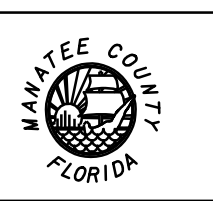
PAY ITEMS FOOTNOTES

- SPEC. PROV. SEE SPECIAL PROVISIONS IN CONTRACT DOCUMENTS FOR DESCRIPTION OF WORK FOR THIS PAY ITEM.
- 104-13-1 BASED ON REPLACEMENT EVERY 12 MONTHS
- 110-1-1 INCLUDES COST FOR CLEARING AND GRUBBING REMOVAL OF ALL ABOVE GROUND ITEMS LOCATED ON ±5.5 ACRE AREA LOCATED SOUTH OF PROPOSED POND 3
- 400-1-15 INCLUDES 20 CY FOR MISCELLANEOUS CONSTRUCTION, AS DIRECTED BY THE ENGINEER.
- 522-1 ADDITIONAL CONCRETE UNDER HANDRAIL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR 4" SIDEWALK, S.Y.
- 536-73 EXISTING GUARDRAIL TO BE DISMANTLED AND STOCKPILED WITHIN THE RIGHT-OF-WAY IN AREAS DESIGNATED BY THE ENGINEER FOR REMOVAL BY MANATEE COUNTY MAINTENANCE FORCES.
- 530-3-4 BASED ON 1.5' THICKNESS
- 639-2-1 PAYMENT SHALL BE BASED ON THE LINEAR FOOT OF A SINGLE CONDUCTOR

THE CONTRACTOR WILL MAKE WHATEVER ADDITIONAL GEOTECHNICAL INVESTIGATION HE FEELS NECESSARY TO DETERMINE HIS BID.

DESIGN FILE: P:\Mte2057\01m\CADD-deta\dwg\sumpr-01.dwg PLOT FILE: _PLOTFILE_. PLOT DATE: 12/16/2008

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
CHECKED BY	JDT	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE #4206				



17th STREET EAST
FROM US 41 TO EAST OF CANAL ROAD
MANATEE COUNTY, FLORIDA

WADETRIM
www.wadetrtrim.com
8745 Henderson Road, Suite 220, Tampa, FL 33634
813.882.8366 FAX 813.884.5990
Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

ENGINEER	Jeffrey D. Trim, PE No. 4206	Proj. No.	6035260
		Dwg. Date	DECEMBER 12, 2008
SUMMARY OF PAY ITEMS			

SIGNALIZATION				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
140	555-1-2	Directional Bore (Less than 6")	LF	415
141	830-1-12	Conduit (F&I)(Underground)	LF	821
142	832-7-1	Cable (Signal)(F&I)	PI	2
143	832-8-212	Cable Interconnect (1-25)(F&I)(Underground)	LF	188
144	835-1-11	Pull & Junction Boxes	EA	29
145	839-1-22	Electrical Power Service (Underground)	AS	2
146	839-2-1	Electrical Service Wire (3 Wire)	LF	81
147	841-2-12	Prestressed Concrete Poles(Direct Burial)(Type P-II Service Pole)(12")	EA	2
148	849-31-202	M/Arm Assembly (F&I) (E3-T2)	EA	4
149	849-31-203	M/Arm Assembly (F&I) (E3-T3)	EA	3
150	849-31-204	M/Arm Assembly (F&I) (E3-T4)	EA	1
151	850-51-313	Signal Traffic (F&I)(3 Sct 1 Way)(Special)	AS	14
152	850-51-513	Signal Traffic (F&I)(5 Sct 1 Way)(Special)	AS	4
153	853-181	Pedestrian Signals (LED) (Countdown)(One Way)	AS	16
154	859-101	Signal Head Auxiliaries (Back Plates 3 Sct)	EA	12
155	859-107	Signal Head Auxiliaries (Aluminum Pedestal)	EA	8
156	859-118	Signal Head Auxiliaries (Back Plates 5 Sct)	EA	4
157	860-1-109	Loop Assembly (F&I)(Type 9)	EA	5
158	860-2-102	Loop Assembly (F&I)(Type B)	AS	6
159	860-2-106	Loop Assembly (F&I)(Type F)	AS	14
160	865-13	Detector Pedest (F&I) (Det w/ sign only)	EA	16
161	870-5-110	Cntrl Assem Act SS F&I NEMA Pre (None)	AS	2
162	890-10	Remove Traffic Signal Head Assembly	EA	16
163	890-20	Remove Pedestrian Signal Assembly	EA	2
164	890-31	Remove Pedestrian Signal	EA	2
165	890-33-1	Pole Removal (Deep)(Direct Burial)	LF	80
166	890-50	Remove Controller Assembly	EA	2
167	890-80	Remove Span Wire Assembly	EA	1
168	890-90	Remove Cabling and Conduit	PI	2
169	890-100	Remove Miscellaneous Signal Equipment	PI	2
170	899-1-1	Sign Assembly (Double Panel Two Way)	EA	8

LIGHTING				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
171	715-1-13	Conductor (Insulated # 2)	LF	9,810
172	715-2-11	Conduit (Underground)(PVC SCH 40)(2")	LF	3,160
173	715-7-11	Load Center (Secondary Voltage)	EA	1
174	715-14-11	Pull Box (Roadside)(Moulded)	EA	20
175	715-4-121	Lighting Pole Complete (Single Arm)(Shoulder Mount)(Aluminum) (Mounting Height 40')(8' Arm)	EA	15
176	715-4-800	Lighting Pole Complete, Remove	EA	2

LANDSCAPING				
BID ITEM	FDOT ITEM	DESCRIPTION	UNIT	QTY.
177	580-01	Landscaping Complete	LS	1
		Description		
		Pontederia cordata (Pickersweed) (3' O.C.), Plant, 2627 each (bareroot)		
		Thalia geniculata (Alligator Flag) (5' O.C.), Plant, 3490 each (bareroot)		
		Acer rubrum (Red Maple) (10' O.C.), Tree, 100 each (3 gal.)		
		Fraxinus caroliniana (Carolina Ash) (10' O.C.), Tree, 100 each (3 gal.)		
		Nyssa sylvatica (Blackgum) (10' O.C.), Tree, 100 each (3 gal.)		

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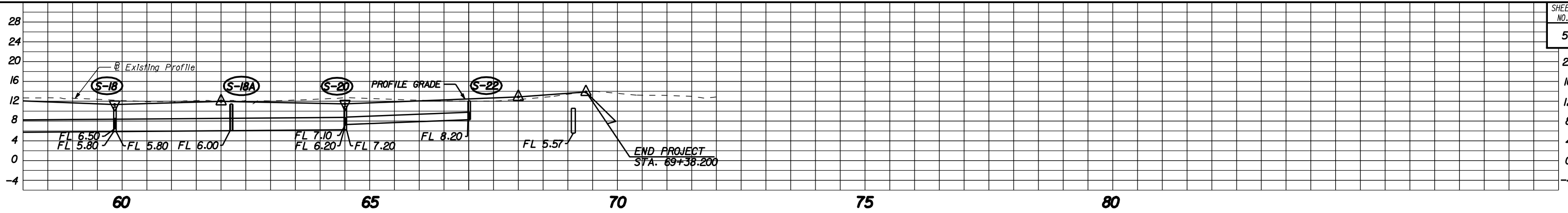
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CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
CHECKED BY	JDT	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE *42106				



17th STREET EAST
FROM US 41 TO EAST OF CANAL ROAD
MANATEE COUNTY, FLORIDA

WADETRIM
www.wadetrtrim.com
8745 Henderson Road, Suite 220, Tampa, FL 33634
813.882.8366 FAX 813.884.5990
Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
SUMMARY OF PAY ITEMS	



SUMMARY OF EXISTING DRAINAGE STRUCTURES

- ① CATCH BASIN, PIPE
18" RCP
INV. 6.53
- ② PIPE, CATCH BASIN, PIPE
24" RCP
INV. 6.31
INV. 6.28
- ③ PIPE, CATCH BASIN, PIPE
24" RCP
INV. 6.02
INV. 6.00
- ④ PIPE, HEADWALL, PIPE
84" RCP
INV. 6.09
INV. 5.34
- ⑤ PIPE, MANHOLE, PIPE
24" RCP
INV. 5.92
INV. 5.96
INV. 5.93

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CHECKED BY	MR/JDT	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				

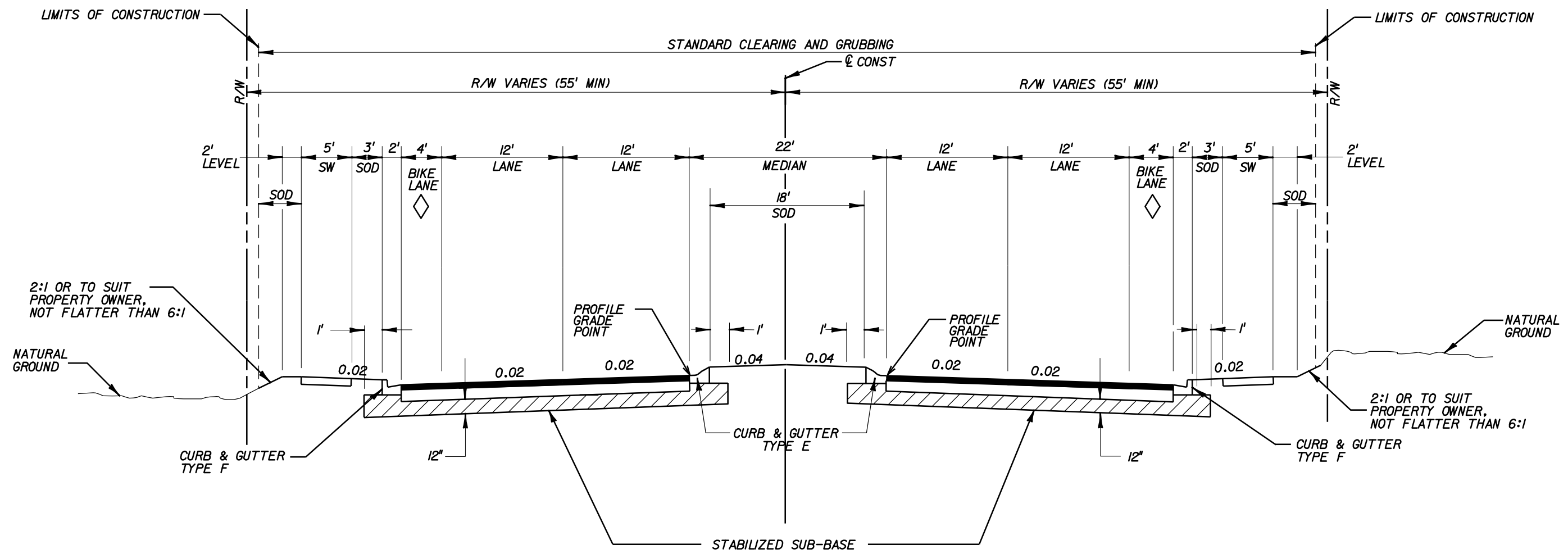


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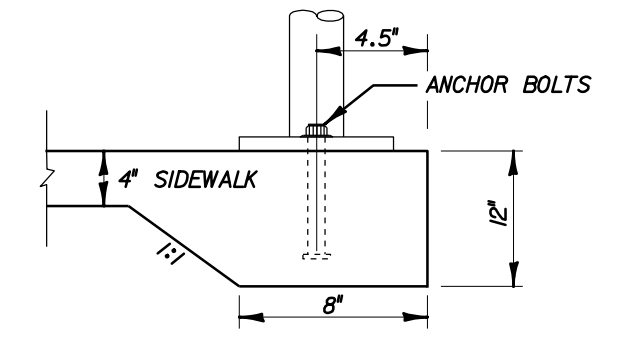
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ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
DRAINAGE MAPS	

AERIAL DATE: 4/14/99



TYPICAL SECTION
17th STREET EAST
STA. 30+34.504 TO STA. 69+38.200



HANDRAIL DETAIL
 STA. 35+72.23 TO STA. 36+7.79 RT (35.5 LF)
 STA. 35+78.23 TO STA. 36+13.79 LT (35.5 LF)
 STA. 54+61.51 TO STA. 55+3.51 RT (42.0 LF)
 STA. 54+36.98 TO STA. 54+78.98 LT (42.0 LF)

TRAFFIC DATA
 DESIGN SPEED = 40 MPH

NOTE: SEE MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS GENERAL NOTES SECTION 400.1 AND 400.2 FOR PAVEMENT SPECIFICATIONS.

NEW CONSTRUCTION
 12" STABILIZED SUB-BASE SHELL MARL BLENDED WITH SANDY SUB-GRADE MINIMUM LBR 60, 98% T180 AASHTO.
 10" BASE COURSE LIMEROCK (OR APPROVED EQUAL, MEETING SAME STRUCTURAL NUMBER) COMPACTED TO 98% T180 AASHTO OR 8" SOIL CEMENT.
 2" STRUCTURAL COURSE TYPE S-1 WITH PRIME COAT.
 1" SURFACE COURSE TYPE-III.

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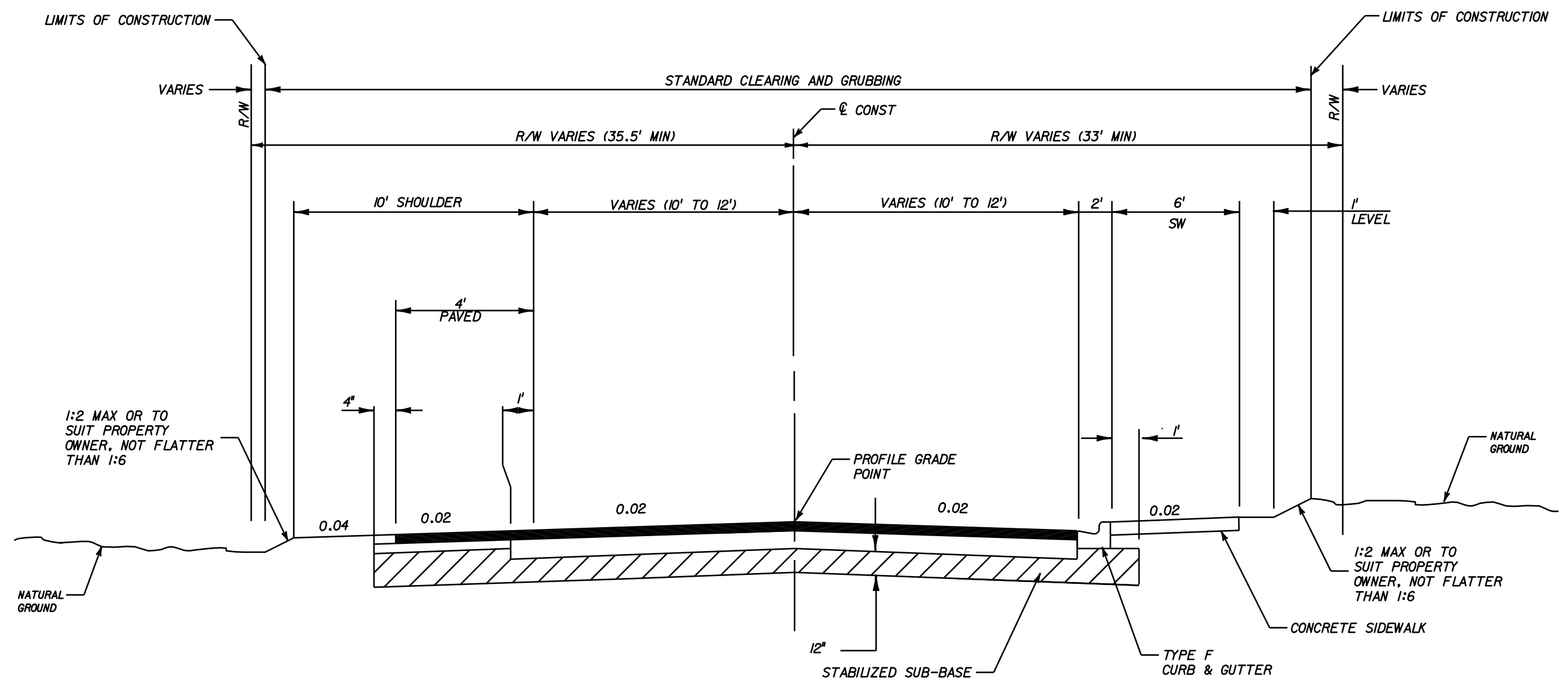
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CHECKED BY	JDT/PJS	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17th STREET EAST
 FROM U.S. 41 TO CANAL ROAD
 MANATEE COUNTY, FLORIDA

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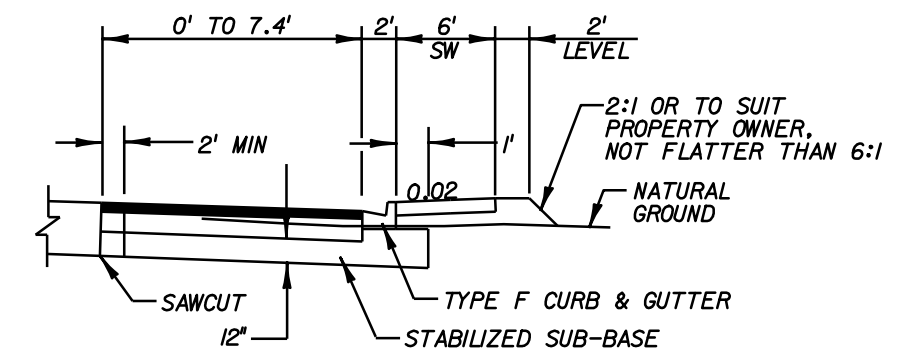
ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
TYPICAL SECTION	



TYPICAL SECTION
17th STREET WEST
STA. 26+93.85 TO STA. 29+63.07

NEW CONSTRUCTION
 12" STABILIZED SUB-BASE SHELL MARL BLENDED WITH SANDY SUB-GRADE MINIMUM LBR 60, 98% T180 AASHTO.
 10" BASE COURSE LIMEROCK (OR APPROVED EQUAL, MEETING SAME STRUCTURAL NUMBER) COMPACTED TO 98% T180 AASHTO OR 8" SOIL CEMENT.
 2" STRUCTURAL COURSE TYPE S-I WITH PRIME COAT.
 1" SURFACE COURSE TYPE-III.

SHOULDER PAVEMENT
 12" STABILIZED SUB-BASE SHELL MARL BLENDED WITH SANDY SUB-GRADE MINIMUM LBR 60, 98% T180 AASHTO.
 4" BASE COURSE ABC-III OR APPROVED EQUAL.
 2" STRUCTURAL COURSE TYPE S-I WITH PRIME COAT.
 1" SURFACE COURSE TYPE-III.



WIDENING DETAIL
STA. 26+48.150 TO STA. 26+93.850

TRAFFIC DATA
DESIGN SPEED = 35 MPH

NOTE: SEE MANATEE COUNTY TRANSPORTATION DEPARTMENT HIGHWAY, TRAFFIC AND STORMWATER STANDARDS GENERAL NOTES SECTION 400.1 AND 400.2 FOR PAVEMENT SPECIFICATIONS.

DESIGN FILE: P:\Mtw20057\01m\CADD-deta\dwg\Tjgsr-d01a.dgn PLOT FILE: _PLOTFILE_ PLOT DATE: 12/16/2008

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CHECKED BY	JDT/PJS	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				

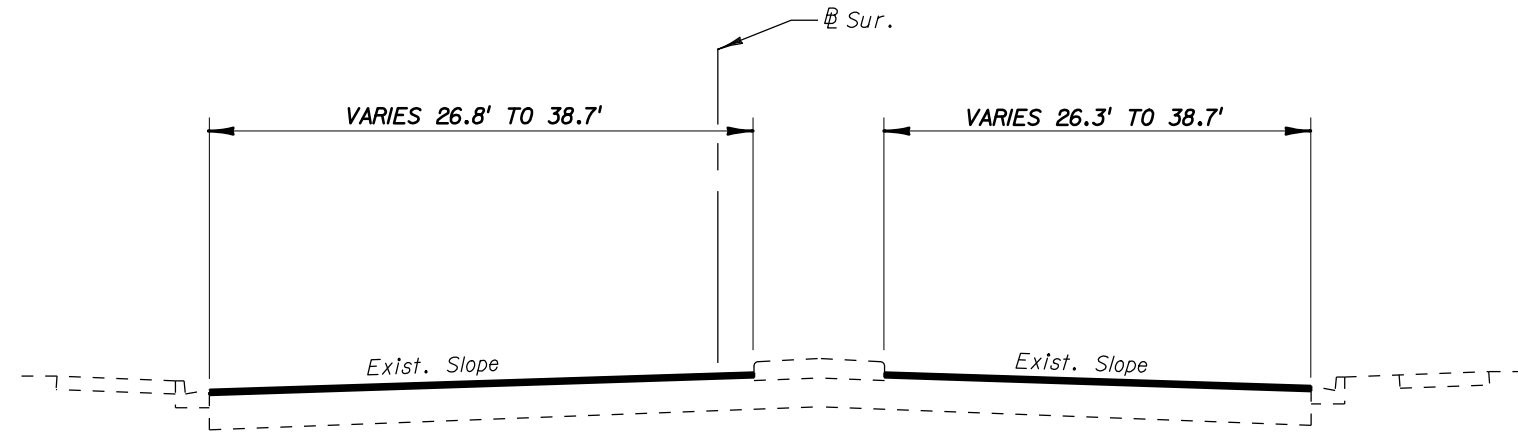


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ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date DECEMBER 12, 2008
TYPICAL SECTION



TYPICAL SECTION
U.S. 41
 STA. 283+30 TO STA. 285+50

MILLING
 MILL EXISTING ASPHALT PAVEMENT (1.5" AVG. DEPTH)

RESURFACING
 FRICTION COURSE FC-12.5 (TRAFFIC B) (1.5") (RUBBER)

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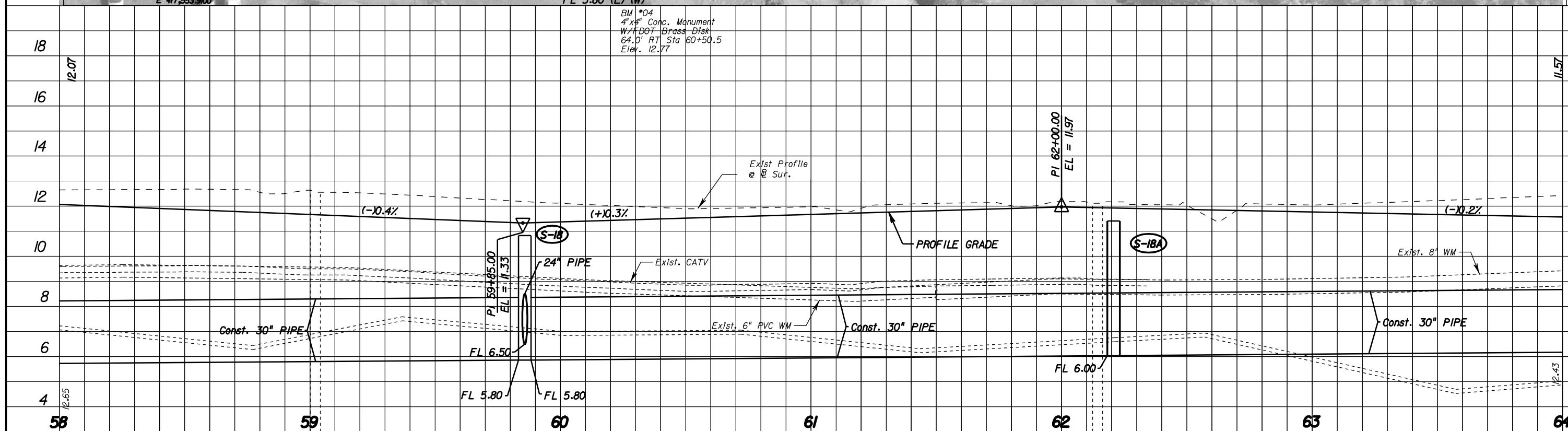
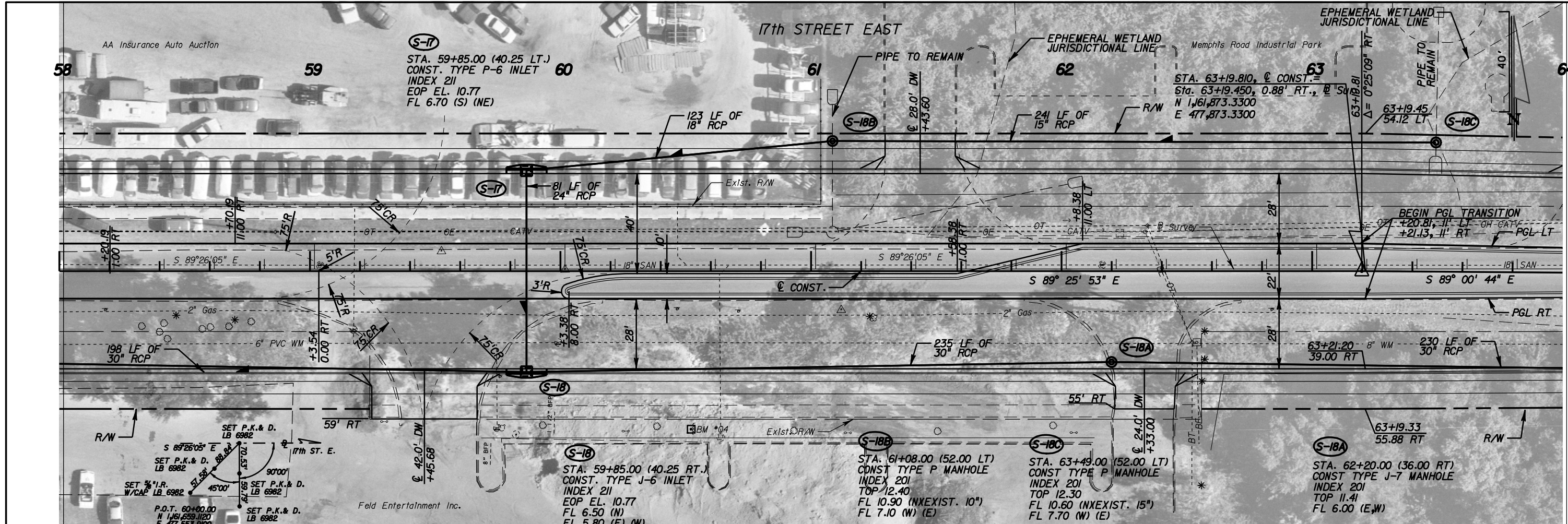
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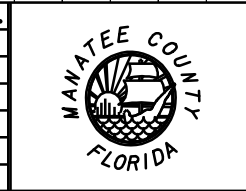
ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
TYPICAL SECTION	



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CHECKED BY	JDT/PJS	DATE	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION	DESCRIPTION & DATE	BY	NO.

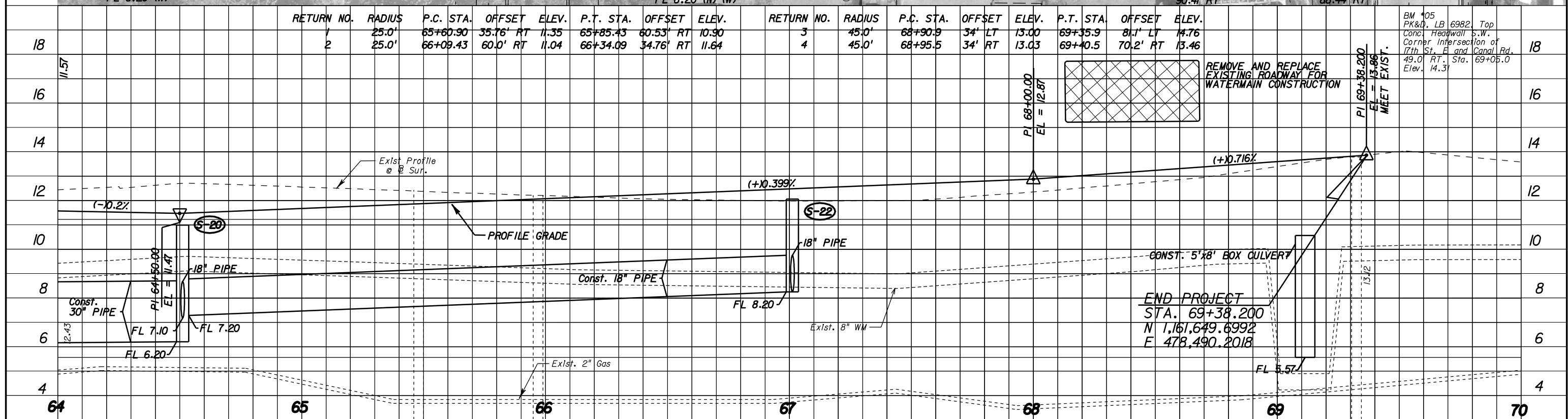
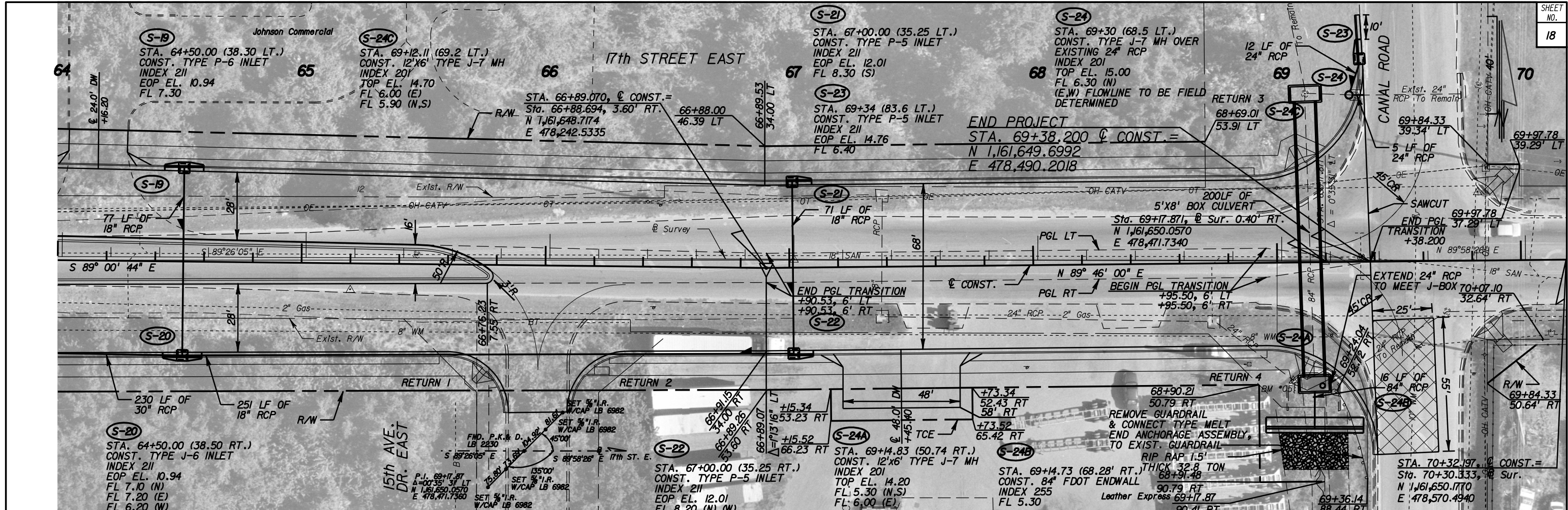


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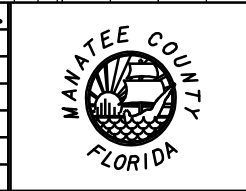
ENGINEER
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Proj. No. 6035260
Dwg. Date DECEMBER 12, 2008
PLAN AND PROFILE



DESIGN FILE: P:\Mtw20057\01m\CADD\data\dwg\p\prr-d07.dgn PLOT FILE: _PLOTFILE_ PLOT DATE: 12/16/2008

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CHECKED BY	JDT/PJS	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17TH STREET EAST

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ENGINEER Jeffrey D. Trim, PE No. 42106	Proj. No. 6035260 Dwg. Date DECEMBER 12, 2008
PLAN AND PROFILE	



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PLOT DATE: 12/16/2008

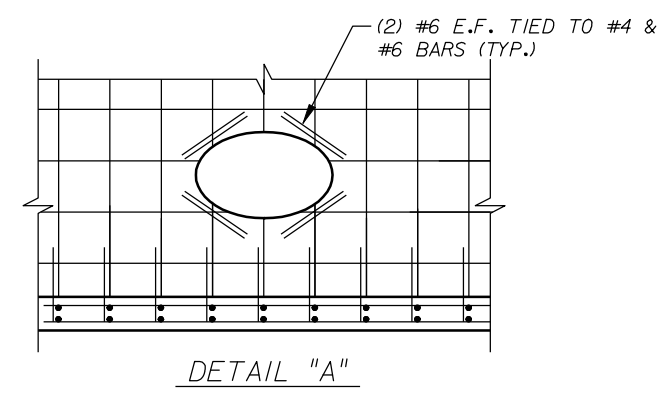
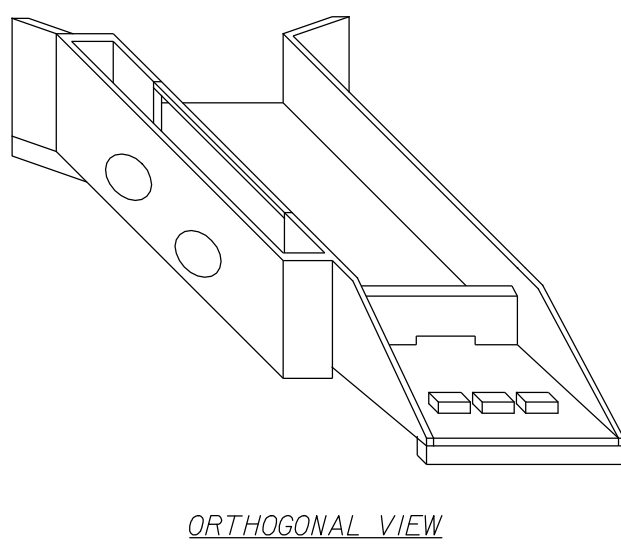
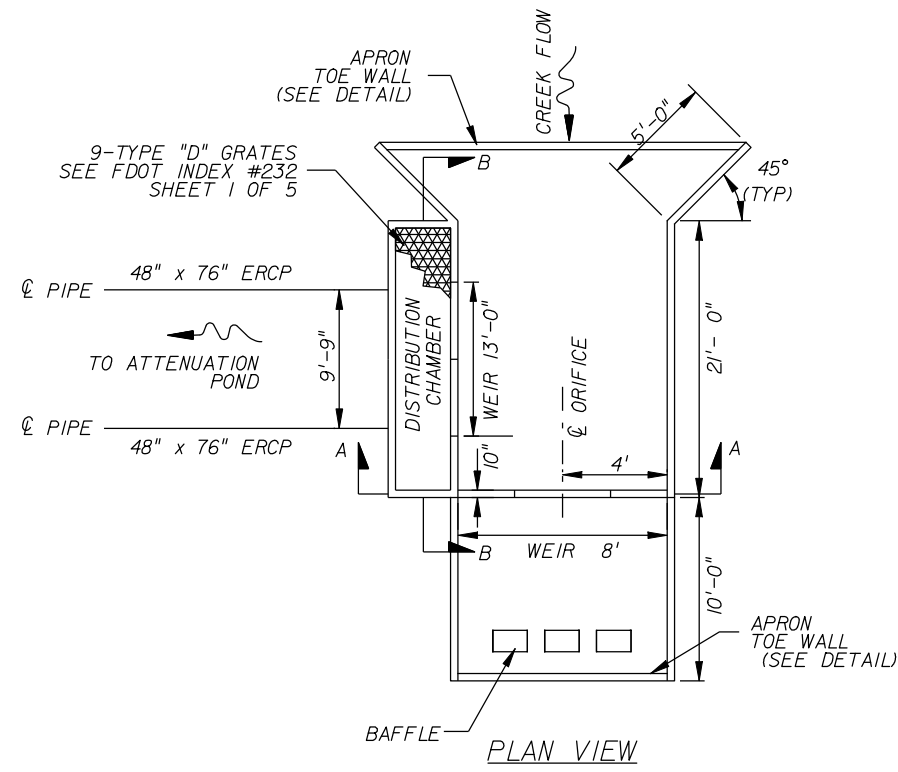
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CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
CHECKED BY	MR/PJS	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17th STREET EAST
FROM US 41 TO EAST OF CANAL ROAD
MANATEE COUNTY, FLORIDA

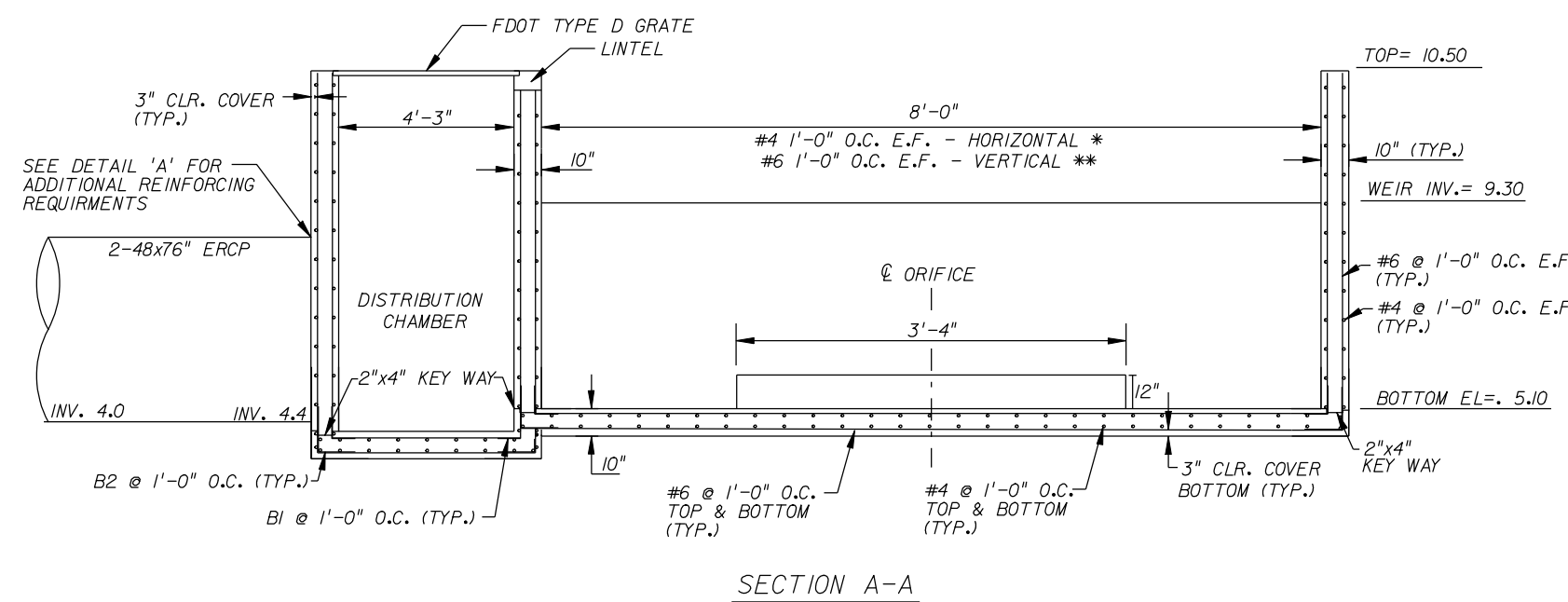
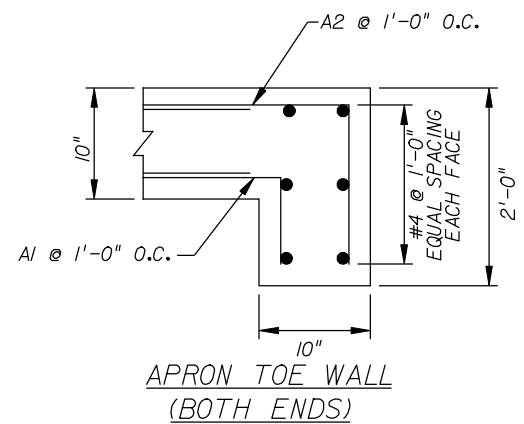
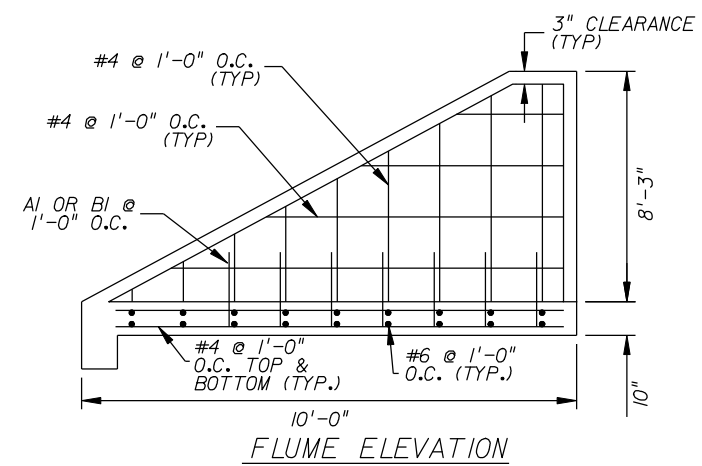
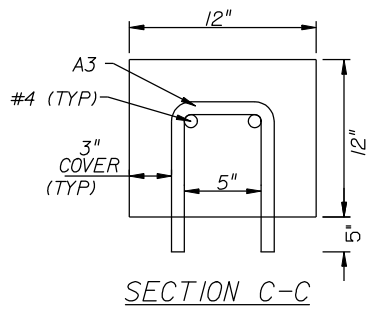
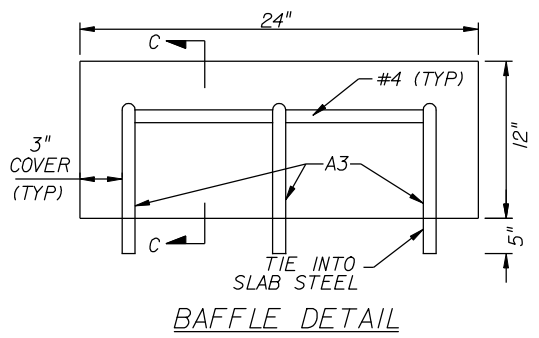
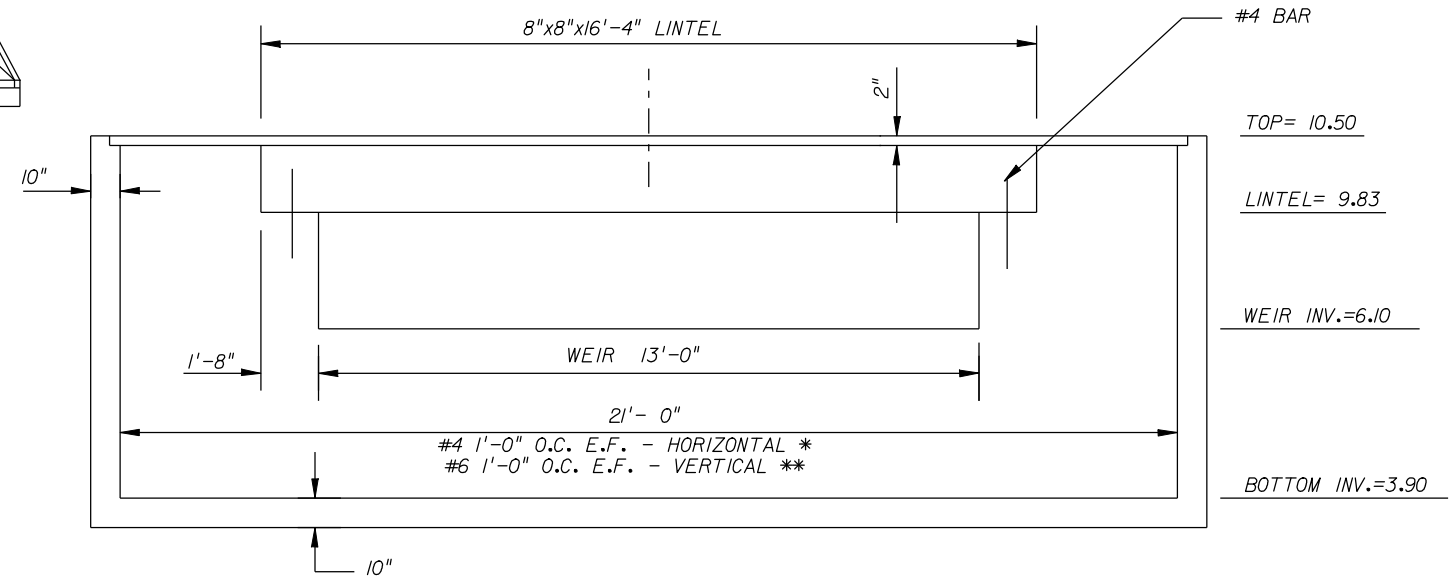
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ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
POND DETAILS	



BAR SCHEDULE										
SIZE	DESCRIPTION	LENGTH		TYPE BAR	B		C		D	
		FT	IN		FT	IN	FT	IN	FT	IN
4	A1	2	4	10	1	2	1	2	--	--
4	A2	3	0	10	1	6	1	6	--	--
4	A3	2	10	11	0	6	1	2	1	2
6	B1	2	4	10	1	2	1	2	--	--
6	B2	3	0	10	1	6	1	6	--	--

* USE BAR A1 & A2 ON ENDS
** USE BAR B1 & B2 ON ENDS



S-35

DESIGN FILE: P:\m\20057\01m\CADD\data\dwg\SPD\TL\05.dwg PLOT FILE: _PLOTFILE_ PLOT DATE: 12/16/2008

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SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



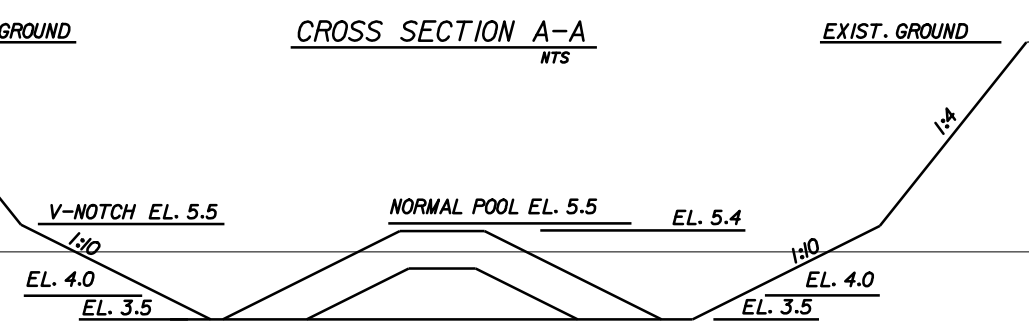
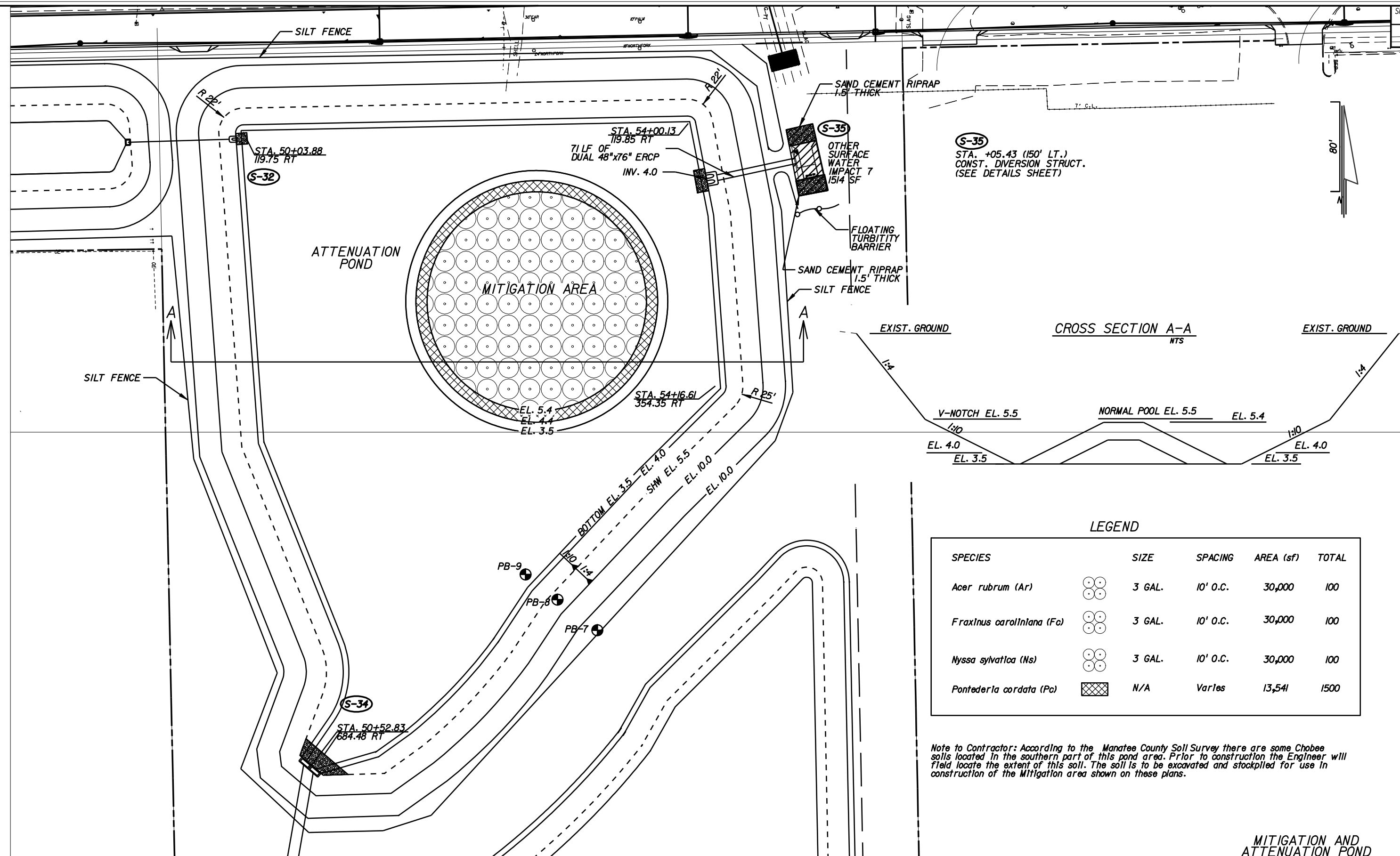
17TH STREET EAST
FROM US 41 TO CANAL ROAD
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Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date DECEMBER 12, 2008

POND DETAILS



LEGEND

SPECIES	SIZE	SPACING	AREA (sf)	TOTAL
<i>Acer rubrum</i> (Ar)	3 GAL.	10' O.C.	30,000	100
<i>Fraxinus caroliniana</i> (Fc)	3 GAL.	10' O.C.	30,000	100
<i>Nyssa sylvatica</i> (Ns)	3 GAL.	10' O.C.	30,000	100
<i>Pontederia cordata</i> (Pc)	N/A	Varies	13,541	1500

Note to Contractor: According to the Manatee County Soil Survey there are some Chobee soils located in the southern part of this pond area. Prior to construction the Engineer will field locate the extent of this soil. The soil is to be excavated and stockpiled for use in construction of the Mitigation area shown on these plans.

MITIGATION AND ATTENUATION POND

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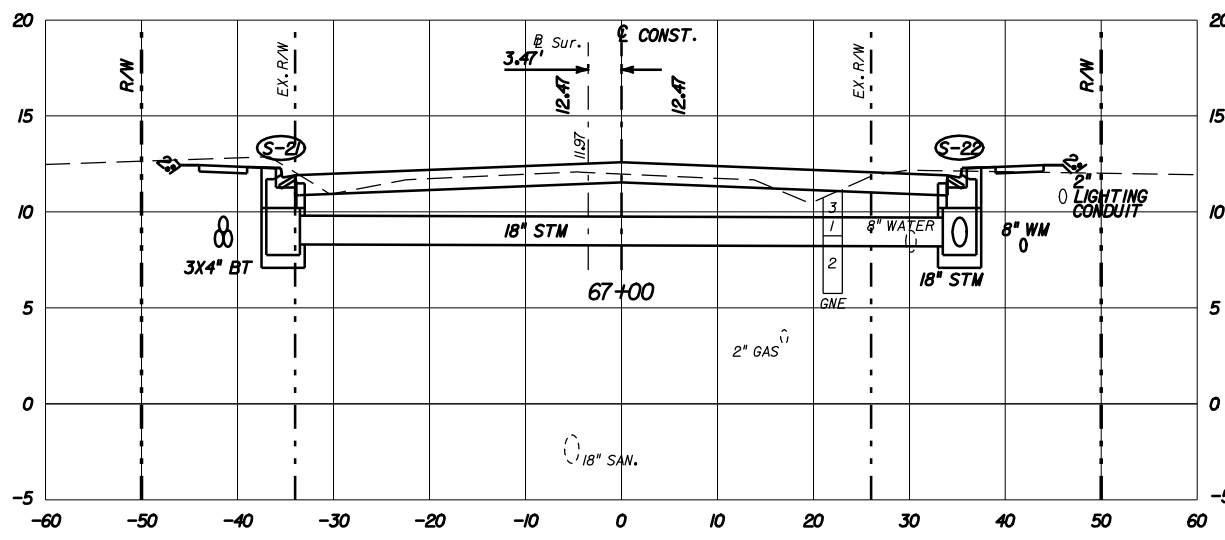
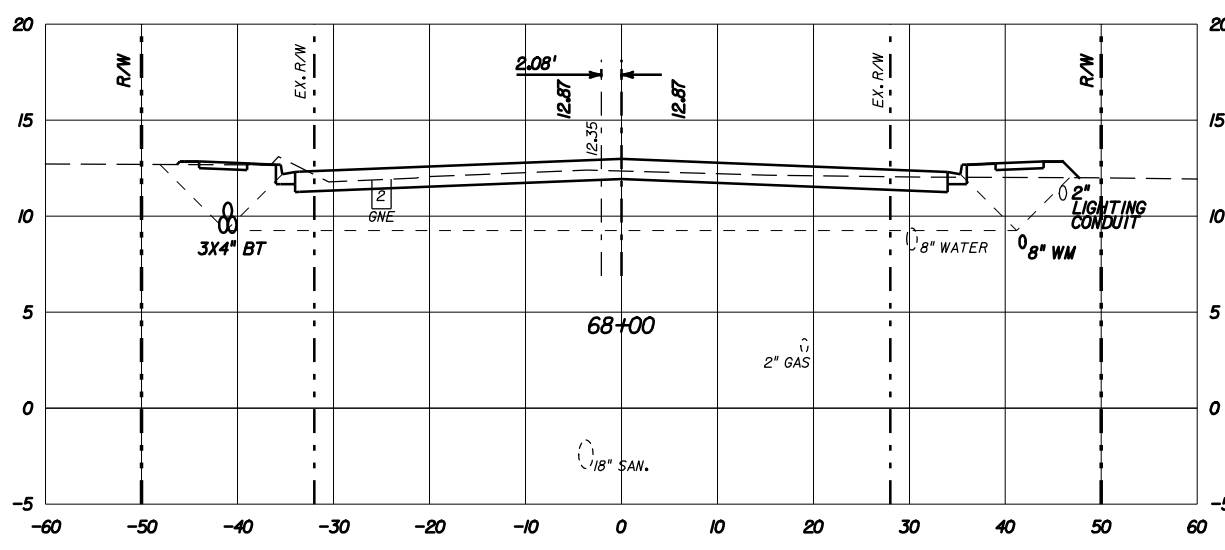
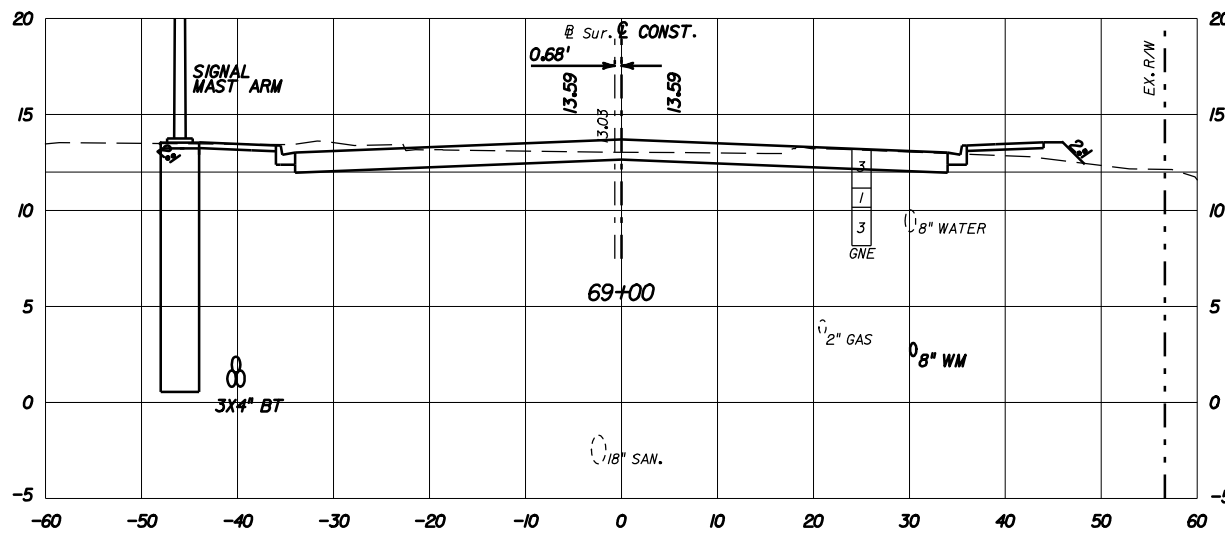
ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date DECEMBER 12, 2008

PLANTING DETAILS

DESIGN FILE: *****DESIGNSPECIFICATION***** PLOT FILE: *****PREFSPECIFICATION*****

END PROJECT
END EARTHWORK
STA. 69+38.200



SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V
0	0	59	1	1	0
406	219	224	37	17	8
406	406	137	37	24	8
454	0	159	37	33	5

DESCRIPTION	CY	
	P	F
ROADWAY EXCAVATION, 17th ST. E	14,790	
ROADWAY EXCAVATION, Widening	118	
REGULAR EXCAVATION, POND 1	7,638	
REGULAR EXCAVATION, POND 3	10,580	
REGULAR EXC. ATTENUATION POND	8,000	
TOTAL REGULAR EXCAVATION	41,126	
SUBSOIL EXCAVATION ROADWAY	26,576	
TOTAL EXCAVATION, SUBSOIL ROADWAY	26,576	
EXCAVATION, ROCK, POND 2	7,849	
EXCAVATION, ROCK, POND 3	3,600	
EXC., ROCK, ATTENUATION POND	36,408	
EXCAVATION, ROCK, TRENCHING	12,000	
TOTAL EXCAVATION, SUBSOIL, ROCK	59,857	
EMBANKMENT, ROADWAY	1,548	
EMBANKMENT, REPLACEMENT FOR SUBSOIL EXCAVATION	26,576	
TOTAL EMBANKMENT, REGULAR	28,124	
EMBANKMENT, REPLACEMENT FOR TRENCHING ROCK EXCAVATION	12,000	
TOTAL EMBANKMENT, REPLACEMENT FOR ROCK REMOVED	12,000	

Earthwork has been calculated using the Limerock base option. If another option is constructed, there shall not be any revision to the earthwork quantities for which payment is made by Plan Quantity.

THE CONTRACTOR WILL MAKE WHATEVER ADDITIONAL GEOTECHNICAL INVESTIGATION HE FEELS NECESSARY TO DETERMINE HIS BID.

SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V

DESIGN FILE: P:\Mts\2057\01m\CADD\data\dwg\dksr-d07.dgn PLOT FILE: _PLOTFILE_ PLOT DATE: 12/16/2008

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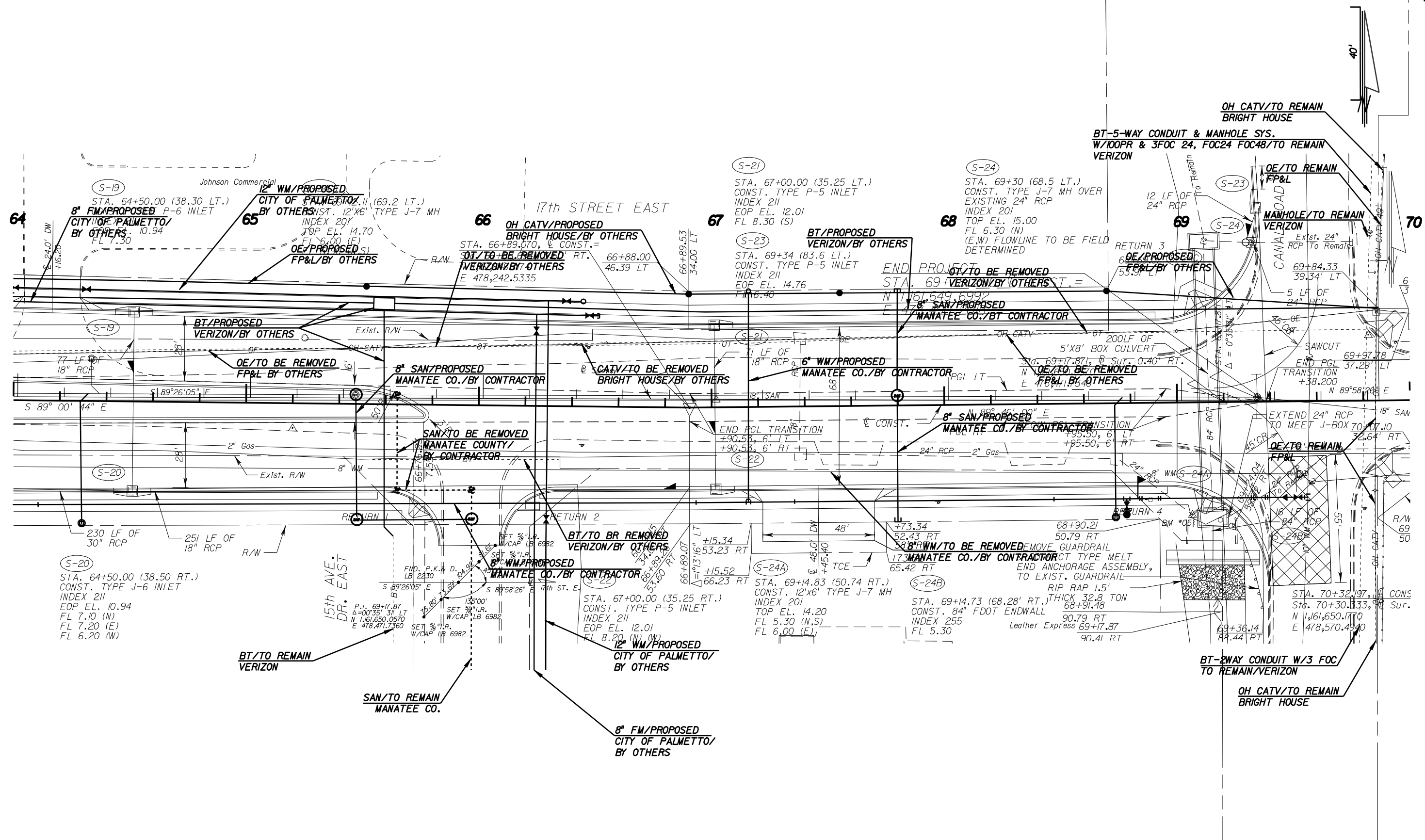
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ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date DECEMBER 12, 2008

CROSS SECTIONS



DESIGN FILE: P:\N\20057\01m\CA00D-ds\ta\UTAD007.dgn PLOT FILE: _PLOTFILE_

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SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.

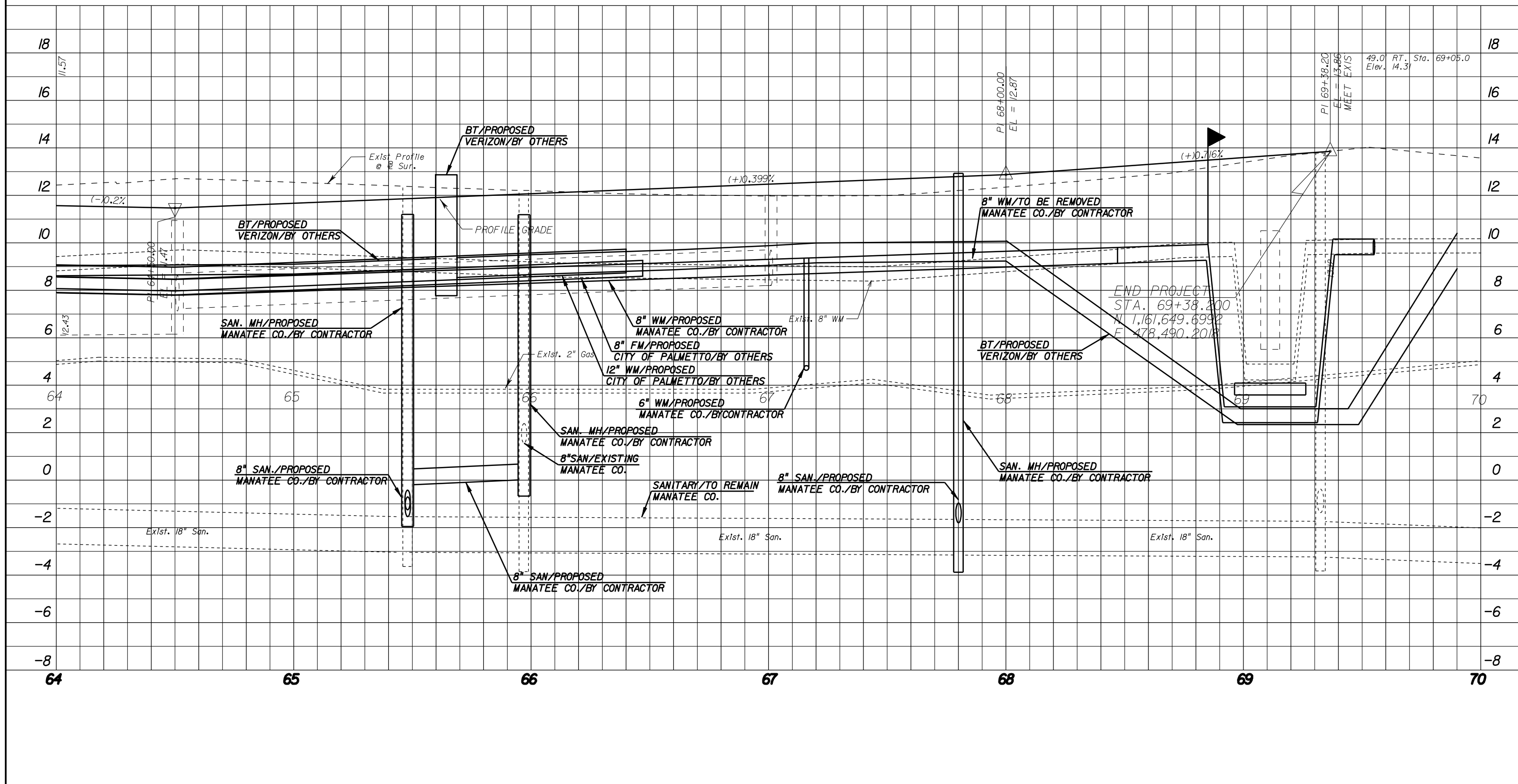


17TH STREET EAST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

WADETRIM
www.wadetrिम.com
8745 Henderson Road, Suite 220, Tampa, FL 33634
813.882.8366 FAX 813.884.5990
Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

ENGINEER	Jeffrey D. Trim, PE No. 42106	ProJ. No.	6035260
		Dwg. Date	DECEMBER 12, 2008
UTILITY ADJUSTMENTS			

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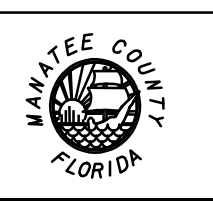
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UTILITY ADJUSTMENTS	

TABULATION OF QUANTITIES

BID ITEM NO.	FDOT PAY ITEM	DESCRIPTION	UNIT	SHEET NUMBERS												TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET		
				69		71		73		75		77		79		81		PLAN	FINAL		PLAN	FINAL
				PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL							
SEWER																						
71	1050-11-222	PIPE, F&I, PVC, FM, 4" (SDR 26) (INCL ALL FTGS AND JNTS)	LF	0	0	205	0	0	0	0	0	0	0	0	205	205						
72	1050-11-224	PIPE, F&I, PVC, SANITARY, 8" (SDR 26) (INCL ALL JNTS)	LF	100	0	151	0	156	165	204	776	776										
73	1050-11-92	SERVICE, SANITARY, F&I, 6" (INCL CONNECTS AND CLEANOUTS)	EA	0	1	1	2	3	2	2	11	11										
74	1050-16-2	PIPE, REMOVE, 4"	LF	0	0	185	270	0	0	0	455	455										
75	1050-16-4	PIPE, REMOVE, 8"	LF	0	0	0	0	0	0	85	85	85										
76	1055-11-254	FITTINGS, F&I, PLUG, 8"	EA	2	0	3	0	2	3	2	12	12										
77	1060-11-223	MANHOLE, SANITARY (> 12' DEEP)	EA	0	0	0	0	0	0	3	3	3										
78	1060-15	ADJUST EXISTING MANHOLE, ADJUST RIM	EA	3	5	2	1	2	2	2	17	17										
79	1060-15	MODIFY EXISTING MANHOLE, CORE BORE (4'-6' DEEP)	EA	0	0	1	0	0	0	0	1	1										
80	1060-15	MODIFY EXISTING MANHOLE, CORE BORE (12'-14' DEEP)	EA	0	0	0	0	3	0	0	3	3										
81	1060-15	MODIFY EXISTING MANHOLE, CORE BORE (14'-16' DEEP)	EA	0	0	0	0	0	3	1	4	4										
82	1060-15	MODIFY EXISTING MANHOLE, RETROFIT INSIDE DROP, 4", (4'-6' DROP)	EA	0	0	1	0	0	0	0	1	1										
83	1060-15	MODIFY EXISTING MANHOLE, REMOVE AND PLUG EXISTING STUB-OUT	EA	0	0	0	1	1	0	1	3	3										
84	1060-15	MODIFY EXISTING MANHOLE, NEW CONNECTION, 4", (4'-6' DEEP)	EA	0	0	1	0	0	0	0	1	1										
85	1060-15	MODIFY EXISTING MANHOLE, NEW CONNECTION, 8" (12'-14' DEEP)	EA	2	0	3	0	3	0	0	8	8										
86	1060-15	MODIFY EXISTING MANHOLE, NEW CONNECTION, 8" (14'-16' DEEP)	EA	0	0	0	0	0	3	1	4	4										
87	1060-16	REMOVE EXISTING MANHOLE (14'-16' DEEP)	EA	0	0	0	0	0	0	2	2	2										
WATER																						
88	1050-11-114	CONC. COLLAR FOR 8" DIP PIPE	LF	0	0	0	1	0	0	0	1	1										
89	1050-11-223	PIPE, F&I, PVC, WATER, 6" (C-900) (INCL ALL FTGS AND JNTS)	LF	0	0	0	137	0	0	0	137	137										
90	1050-11-223	PIPE, F&I, PVC, WATER, 6" (C-900) (INCL ALL FTGS AND JNTS) (R.J.)	LF	0	0	0	60	0	0	0	60	60										
91	1050-11-224	PIPE, F&I, PVC, WATER, 8" (C-900) (INCL ALL JNTS)	LF	272	237	537	516	367	569	394	2892	2892										
92	1050-11-224	PIPE, F&I, PVC, WATER, 8" (C-900) (INCL ALL JNTS) (R.J.)	LF	42	0	63	85	84	31	53	358	358										
93	1050-11-423	PIPE, F&I, DIP, WATER, 8" (CLASS 50) (INCL ALL FTGS AND JNTS) (R.J.)	LF	161	30	112	100	200	0	100	703	703										
94	1050-11-424	PIPE, F&I, PVC, WATER, 8" (CLASS 50) (INCL ALL JNTS) (R.J.)	LF	50	505	0	20	169	0	114	858	858										
95	1050-11-92	SERVICE, WATER, F&I (INCL CONNECTS, VALVES, METERS AND BOXES)	EA	0	1	4	2	6	5	4	22	22										
96	1050-16-223	PIPE, REMOVE, 6"	LF	85	0	0	495	600	405	0	1585	1585										
97	1050-16-224	PIPE, REMOVE, 8"	LF	0	0	0	0	0	195	560	755	755										
98	1055-11-414	FITTINGS, F&I, DUCTILE IRON, BEND, 8"	EA	2	8	0	0	6	0	4	20	20										
99	1055-11-424	FITTINGS, F&I, DUCTILE IRON, TEE, 8"X6"	EA	1	0	1	0	2	0	1	5	5										
100	1055-11-424	FITTINGS, F&I, DUCTILE IRON, TEE, 8"X8"	EA	0	3	0	0	0	0	0	3	3										
101	1055-11-424	FITTINGS, F&I, DUCTILE IRON, TEE, 10"X10"	EA	0	0	0	0	0	0	1	1	1										
102	1055-11-434	FITTINGS, F&I, DUCTILE IRON, REDUCER, 8"X6"	EA	1	1	0	0	0	0	0	2	2										
103	1055-11-434	FITTINGS, F&I, DUCTILE IRON, REDUCER, 10"X8"	EA	0	0	0	0	0	0	1	1	1										
104	1055-11-454	FITTINGS, F&I, DUCTILE IRON, PLUG, 8"	EA	0	0	0	0	0	0	1	1	1										
105	1055-11-494	FITTINGS, F&I, DUCTILE IRON, CROSS, 8"X6"	EA	0	0	0	1	0	0	0	1	1										
106	1080-11-34	FIXTURES, F&I, 6", GATE VALVE ASSEMBLY (CAST IRON) (250 PSI)	EA	3	1	1	3	2	0	1	11	11										
107	1080-11-35	FIXTURES, F&I, BLOWOFF ASSEMBLY	EA	1	0	1	1	2	0	1	6	6										
108	1080-11-43	FIXTURES, F&I, SOLID SLEEVE, 8"	EA	1	1	0	0	0	0	0	2	2										
109	1080-11-44	FIXTURES, F&I, 8", GATE VALVE ASSEMBLY (CAST IRON) (250 PSI)	EA	2	3	1	1	1	0	1	9	9										
110	1080-11-44	FIXTURES, F&I, 10", GATE VALVE ASSEMBLY (CAST IRON) (250 PSI)	EA	0	0	0	0	0	0	1	1	1										
111	1080-11-46	FIXTURES, F&I, 8", AIR RELEASE VALVE ASSEMBLY (150 PSI)	EA	0	2	0	0	2	0	1	5	5										
112	1644-13	FIRE HYDRANT ASSEMBLY, F&I, STANDARD, 6"	EA	1	0	1	1	2	1	1	7	7										

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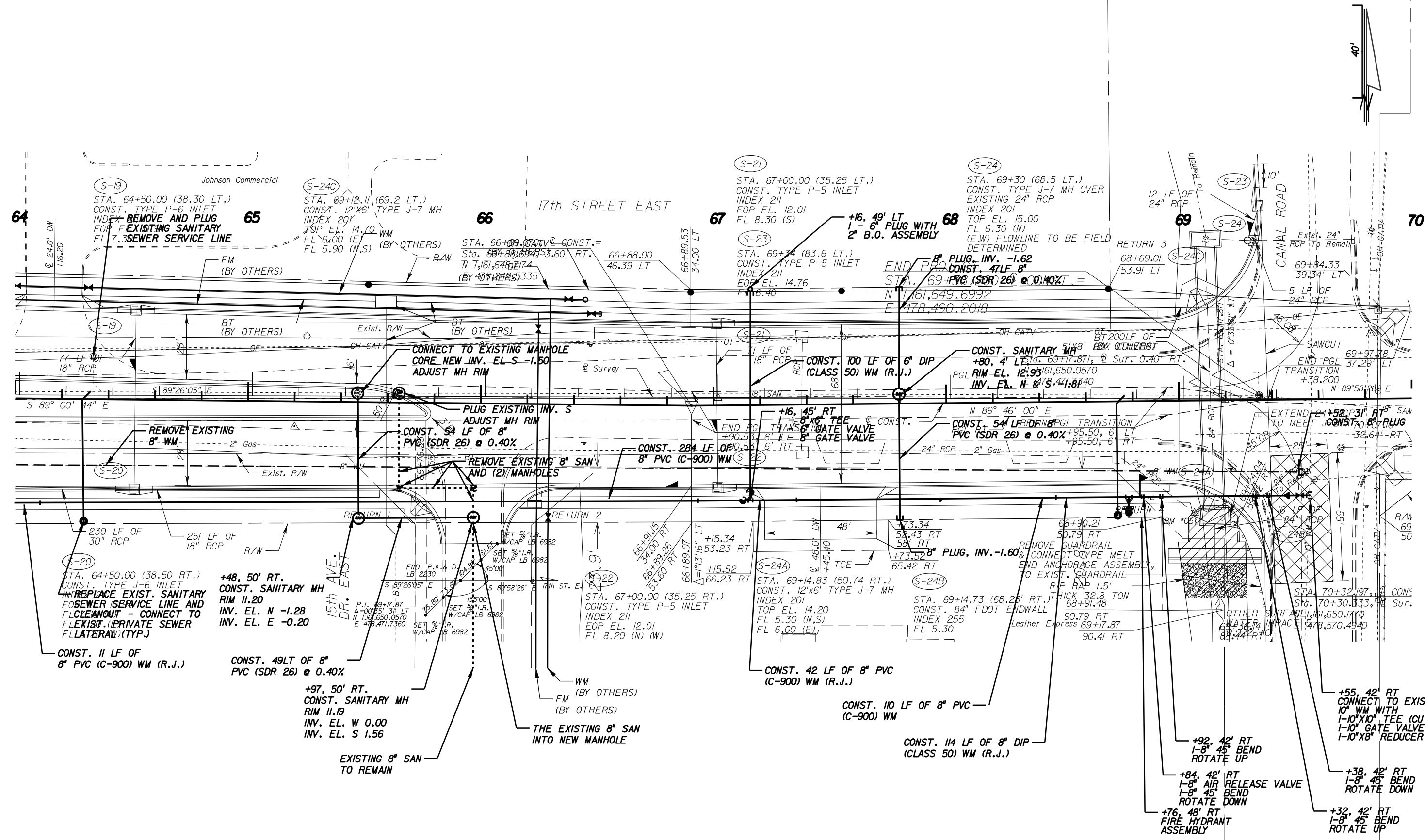
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MANATEE COUNTY UTILITIES	



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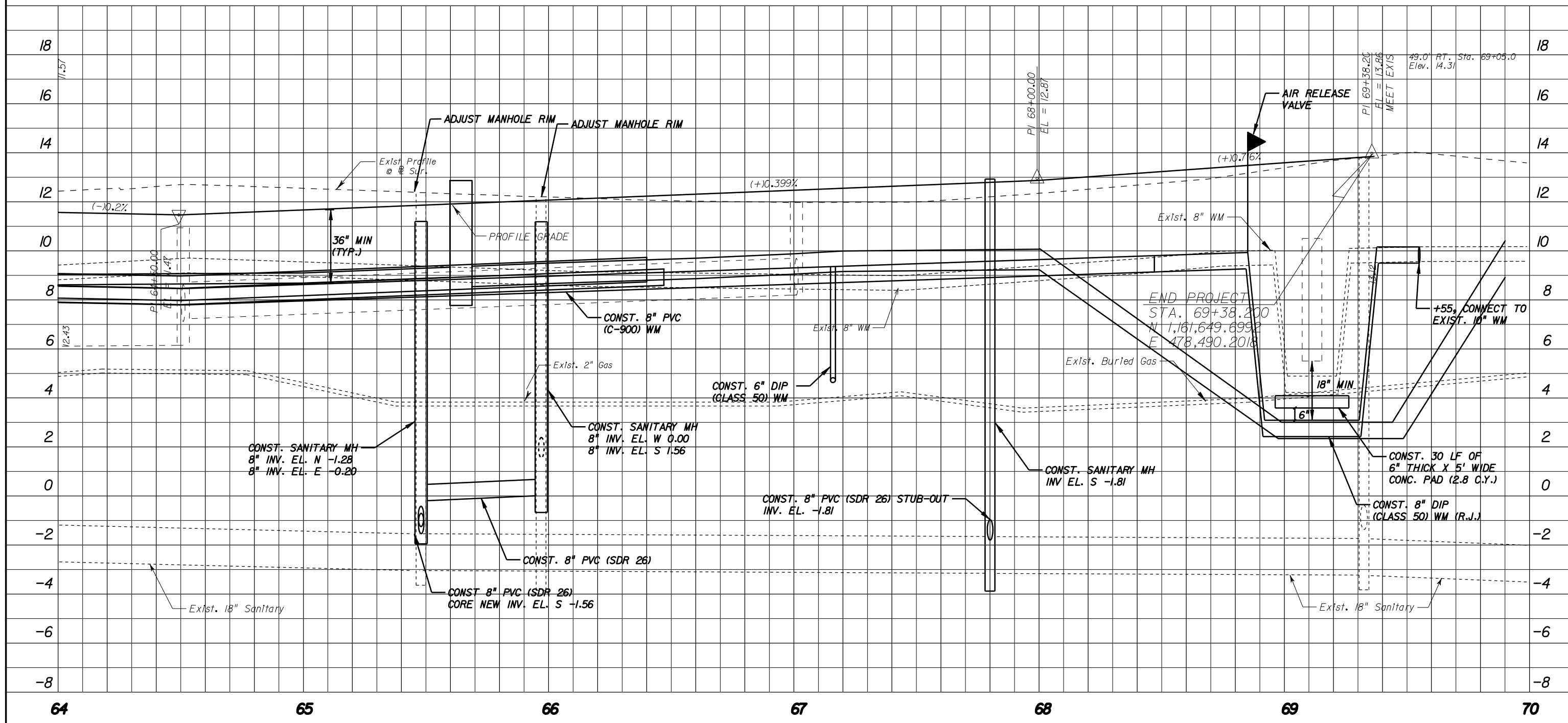
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FDOT PAY ITEM	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET		
			84		85		86		87		88		89		90		91		PLAN	FINAL		PLAN	FINAL
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL							
700-20-11	R 1-1 (30"x30") (STOP)	AS	0		1		2		0		0		0		1		1	23	23				
	R 2-1 (24"x30") (SPEED LIMIT)	AS	0		1		0		1		1		0		0		1						
	R 3-16 (24"x30") (BIKE LANE AHEAD)	AS	0		1		0		0		0		0		0		1						
	R 3-16A (24"x30") (BIKE LANE ENDS)	AS	0		1		0		0		0		0		0		1						
	R 3-7R (30"x30") (RIGHT LANE MUST TURN RIGHT)	AS	0		3		0		0		0		0		0		3						
	R 4-7 (24"x30") (KEEP RIGHT)	AS	0		0		1		0		0		0		0		1						
	S 1-1 (30"x30") (WATCH FOR CHILDREN)	AS	0		0		1		0		0		0		0		0						
	W 3-3 (30"x30") (SIGNAL AHEAD)	AS	0		0		0		0		0		0		1		0						
700-20-40	SIGN SINGLE POST, RELOCATE	AS	2		2		2		0		0		1		0		0	7	7				
705-10-2	DELINEATOR, DOUBLE UNIT	EA	0		0		3		0		4		1		1		1	10	10				
706-3	BI DIR YELLOW RPM'S AT 10' O.C.	EA	60		4		20		0		16		0		0		0	565	565				
	BI DIR YELLOW RPM'S AT 20' O.C.	EA	0		48		14		0		0		0		0		40						
	BI DIR YELLOW RPM'S AT 40' O.C.	EA	0		0		0		0		0		12		8		0						
	BI DIR W/R RPM'S AT 20' O.C.	EA	0		84		22		6		7		7		7		27						
	BI DIR W/R RPM'S AT 40' O.C.	EA	0		13		24		30		30		30		30		26						
710-11-190	REFLECTIVE PAINT (ISLAND NOSE) (WHITE)	SF	0		0		8		0		0		0		0		0	8	8				
710-12-190	REFLECTIVE PAINT (ISLAND NOSE) (YELLOW)	SF	0		0		39		0		50		8		8		8	113	113				
711-11-160	PAVEMENT MESSAGES, THERMOPLASTIC (BIKE LANE MARKINGS)	EA	0		2		4		0		2		2		0		3	19	19				
	PAVEMENT MESSAGES, THERMOPLASTIC (SCHOOL)	EA	1		0		0		0		0		0		0		0						
	PAVEMENT MESSAGES, THERMOPLASTIC (ONLY)	EA	0		3		0		0		0		0		0		2						
711-11-170	DIRECTIONAL ARROWS, THERMOPLASTIC	EA	0		14		4		3		3		5		4		8	41	41				
711-11-131	SKIP TRAFFIC STRIPE, 10'/30' WHITE, THERMOPLASTIC	GM	0		0.080		0.163		0.227		0.227		0.227		0.227		0.137	1.288	1.288				
711-11-241	SKIP TRAFFIC STRIPE, 10'/30' YELLOW, THERMOPLASTIC	LF	0		0		0		0		0		67		39		0	106	106				
711-11-141	SKIP TRAFFIC STRIPE, 2'/4' WHITE, THERMOPLASTIC	LF	0		75		50		0		0		0		0		93	218	218				
711-11-123	SOLID TRAFFIC STRIPE, 12" WHITE, THERMOPLASTIC (CROSSWALK)	LF	0		1030		0		0		0		0		0		491	1521	1521				
711-11-124	SOLID TRAFFIC STRIPE, 18" WHITE, THERMOPLASTIC (CHEVRON)	LF	0		0		0		0		28		0		0		0	28	28				
711-11-125	SOLID TRAFFIC STRIPE, 24" WHITE, THERMOPLASTIC (STOP BAR)	LF	20		147		36		0		0		0		0		140	343	343				
711-11-224	SOLID TRAFFIC STRIPE, 18" YELLOW, THERMOPLASTIC (CHEVRON)	LF	119		2		44		0		0		0		0		0	165	165				
711-11-111	SOLID TRAFFIC STRIPE, 6" WHITE, THERMOPLASTIC	NM	0.020		0.337		0.231		0.247		0.300		0.251		0.251		0.155	1.792	1.792				
711-11-211	SOLID TRAFFIC STRIPE, 6" YELLOW, THERMOPLASTIC	NM	0.119		0.181		0.283		0.227		0.183		0.187		0.180		0.207	1.567	1.567				

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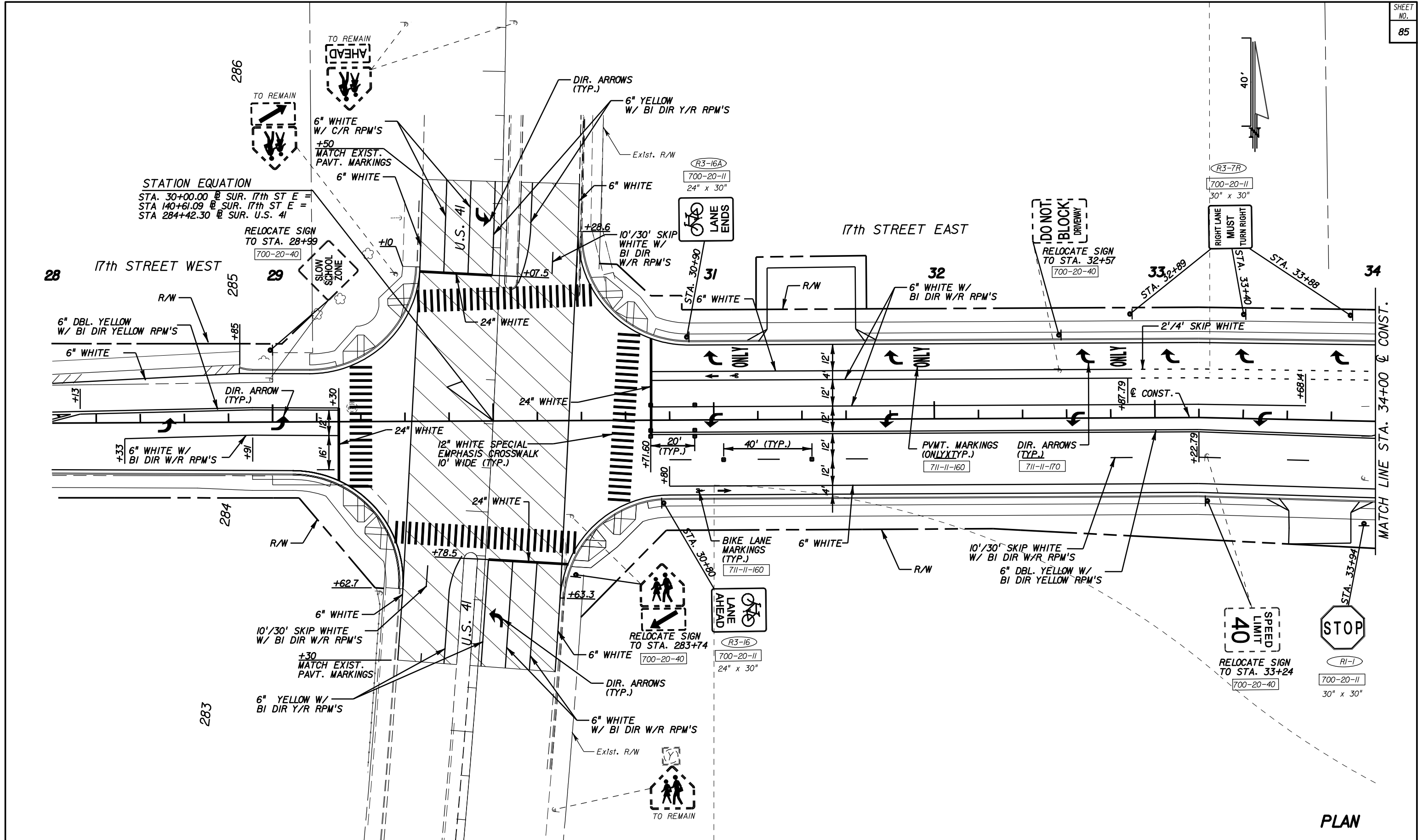


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PLAN

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			93		94												
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
555-1-2	DIRECTIONAL BORE (<6") (6 TO <12")	LF	129		286								415		415		
630-1-12	CONDUIT (UNDERGROUND) (FURNISH AND INSTALL)	LF	605		316								921		921		
632-7-1	SIGNAL CABLE	PI	1		1								2		2		
632-8-212	CABLE INTERCONNECT (1-25) (F&I) (UNDERGROUND)	LF	188		0								188		188		
635-1-11	PULL AND JUNCTION BOXES	EA	16		13								29		29		
639-1-22	ELECTRICAL POWER SERVICE (UNDERGROUND)	AS	1		1								2		2		
639-2-1	ELECTRICAL SERVICE WIRE (3 WIRE)	LF	33		48								81		81		
641-2-12	PRESTRESSED CONCRETE POLES (F&I) (DIRECT BURIAL) (TYPE P-11-SERVICE POLE (12'))	EA	1		1								2		2		
649-31-202	MAST ARM ASSEMBLY (F&I) (E3-T2)	EA	1		3								4		4		
649-31-203	MAST ARM ASSEMBLY (F&I) (E5-T3)	EA	2		1								3		3		
649-31-204	MAST ARM ASSEMBLY (F&I) (E6-T4)	EA	1		0								1		1		
650-51-313	TRAFFIC SIGNAL, 12" STANDARD (3 SECT.) (1 WAY) (R, Y, G LED)	AS	6		8								14		14		
650-51-513	TRAFFIC SIGNAL, 12" STANDARD (5 SECT.) (2 WAY) (R, Y, G, Y, G, LED)	AS	4		0								4		4		
653-191	PEDESTRIAN SIGNALS (LED) (COUNTDOWN) (ONE WAY)	AS	8		8								16		16		
659-101	SIGNAL HEAD AUXILIARIES (BACKPLATES) (3 SECTION)	EA	4		8								12		12		
659-107	PEDESTRIAN SIGNALS HEAD AUXILIARIES (ALUM PEDESTAL)	EA	4		4								8		8		
659-118	SIGNAL HEAD AUX (BACK PLATES) (5 SEC)	EA	4		0								4		4		
660-1-109	INDUCTIVE LOOP DETECTOR (TYPE 9)	EA	3		2								5		5		
660-2-102	LOOP ASSEMBLY (TYPE B)	AS	4		2								6		6		
660-2-106	LOOP ASSEMBLY (TYPE F)	AS	7		7								14		14		
665-13	PEDESTRIAN DETECTOR (DETECTOR W/SIGN ONLY)	EA	8		8								16		16		
670-5-110	ACTUATED SOLID STATE CONTROLLER ASSEMBLY (NEMA)	AS	1		1								2		2		
690-10	REMOVE TRAFFIC SIGNAL HEAD ASSEMBLY	EA	8		8								16		16		
690-20	REMOVE PEDESTRIAN ASSEMBLY	EA	2		0								2		2		
690-31	REMOVE PEDESTRIAN SIGNAL	EA	2		0								2		2		
690-33-1	POLE REMOVAL (DEEP) (DIRECT BURIAL)	LF	40		40								80		80		
690-50	REMOVE CONTROLLER ASSEMBLY	EA	1		1								2		2		
690-80	REMOVE SPAN WIRE ASSEMBLY	EA	0		1								1		1		
690-90	REMOVE CABLING AND CONDUIT	PI	1		1								2		2		
690-100	REMOVE MISCELLANEOUS SIGNAL EQUIPMENT	PI	1		1								2		2		
699-1-1	SIGN ASSEMBLY, (DOUBLE PANEL TWO-WAY)	EA	4		4								8		8		

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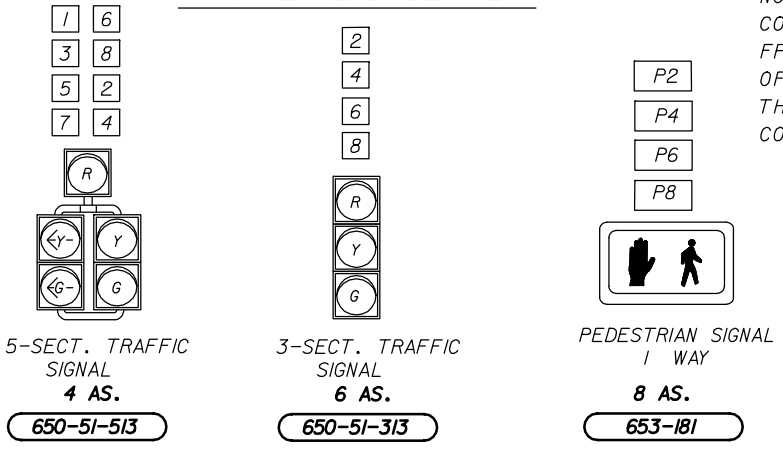


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MANATEE COUNTY, FLORIDA

WADE TRIM
www.wadetrिम.com
8745 Henderson Road, Suite 220, Tampa, FL 33634
813.882.8366 FAX 813.884.5990
Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

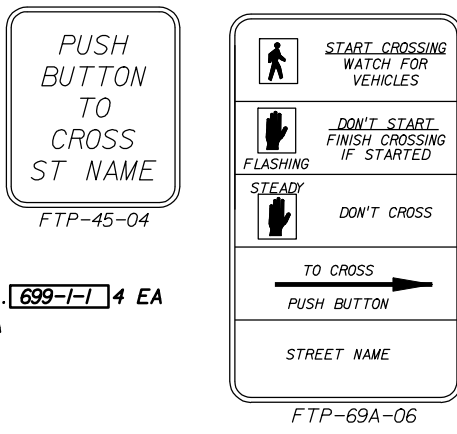
ENGINEER Jeffrey D. Trim, PE No. 42106	Proj. No. 6035260 Dwg. Date DECEMBER 12, 2008
SIGNALIZATION	

SIGNAL HEAD DETAILS



NOTE:
CONTRACTOR TO INSTALL SERVICE RISER ON FP&L POLE AT STA. 30+89, LEFT, AND LEAVE 10' OF ADDITIONAL WIRE COILED AT THE TOP OF THE RISER. THIS WORK TO BE INCLUDED IN THE COST ITEM 639-1-22

PED SIGNAL SIGNS

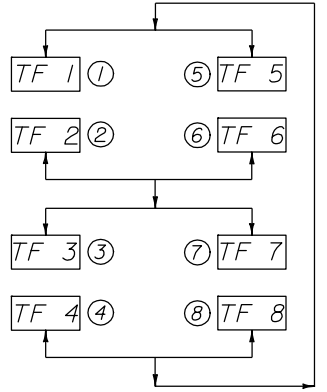
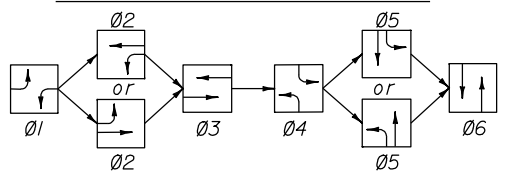


POLE MOUNTED SIGNS (A), (B), (C) & (D) ARE DETAILED ON THE SIGN DETAIL SHEET. 699-1-1 4 EA
ALL SIGNAL HEADS REQUIRE BACKPLATES 659-101 4 EA 659-118 4 EA

CONTROLLER OPERATIONS

- MAJOR STREET IS U.S. 41, PHASES 1, 2 & 3 (MOVEMENTS 1, 2, 5, & 6), AND MINOR STREET IS 17TH STREET, PHASES 4, 5 & 6 (MOVEMENTS 3, 4, 7 & 8). STANDARD SIGNAL OPERATION WILL BE THE RESPONSIBILITY OF MANATEE COUNTY.
- STANDARD SIGNAL OPERATING PLAN NO. 10 WITH THE FOLLOWING:
 - NAZTEC 2070 CONTROLLER WITH TRANSYT 3000 TYPE V CABINET.
 - COORDINATION ON PHASE 3 (MOVEMENTS 2 AND 6) - TIME-BASE BACKUP. SIGNAL IS COORDINATED WITH 23RD STREET (NORTH).
 - CONCURRENT/ACTUATED PEDESTRIANS FOR MOVEMENTS 2 (P2), 4 (P4), 6 (P6) AND 8 (P8). THE FORCE-OFF FUNCTION FOR PHASE 3 SHALL NOT BE EFFECTIVE DURING THE TIMING OF PEDESTRIAN CLEARANCE INTERVAL FOR P4 AND P8. SYNCHRONIZATION SHALL BE MAINTAINED. THE CONTROLLER SHALL REMAIN IN THE COORDINATED MODE AND SHALL NOT REVERT TO ISOLATED OPERATION AS A RESULT OF PEDESTRIAN ACTUATION.
 - THE YIELD POINT SHALL BE THE POINT IN THE CYCLE WHERE THE COORDINATED PHASE 3 (MOVEMENTS 2 AND 6) IS TERMINATED SUBJECT TO THE PRESENCE OF A CONFLICTING CALL. THE YIELD POINT SHALL BE THE ZERO PERCENT OFFSET OF THE LOCAL CYCLE LENGTH.

SOP 10



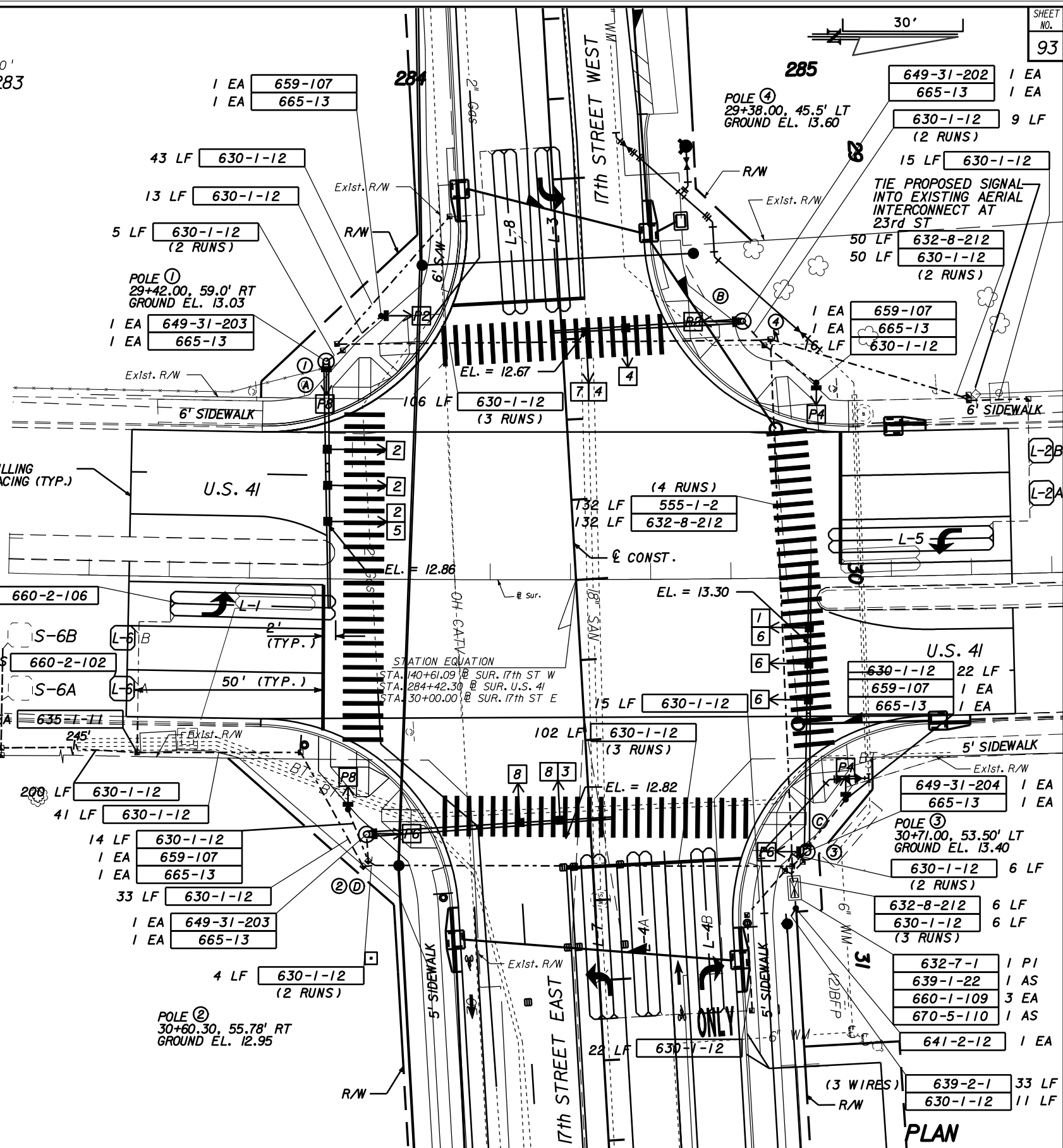
CONTROLLER TIMINGS								
TIMING FUNCTION	1	2	3	4	5	6	7	8
MINIMUM GREEN	10	20	10	15	10	20	10	15
EXTENSION	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MAXIMUM GREEN 1	15	40	15	30	15	40	15	30
MAXIMUM GREEN 2	25	50	20	25	25	50	20	25
YELLOW CLEARANCE	3.5	5.0	3.5	4.0	3.5	5.0	3.5	4.0
ALL RED	1.0	1.0	1.0	1.5	1.0	1.0	1.0	1.5
PEDESTRIAN WALK		7				7		7
PED. CLEARANCE		11				11		17
RECALL		MAX				MAX		

DETECTORS FOR LOOPS				
LOOP	NO. OF LOOPS	NO. OF NEW DETS.	CHANNEL NO.	DELAY TIME (SEC)
L-1	1		1	--
L-2	2	1	2	--
L-3	1		1	--
L-4	2	1	2	--
L-5	1	1	1	--
L-6	2		2	--
L-7	1	1	1	--
L-8	1	1	2	--

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

REMOVAL PAY ITEMS

690-10	8 EA
690-20	2 EA
690-31	2 EA
690-33-1	40 LF
690-50	1 EA
690-90	1 PI
690-100	1 PI



DESIGN FILE: *****DONSPECIFICATION***** PLOT FILE: *****PRFSPECIFICATION*****

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
CHECKED BY	SRR	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				

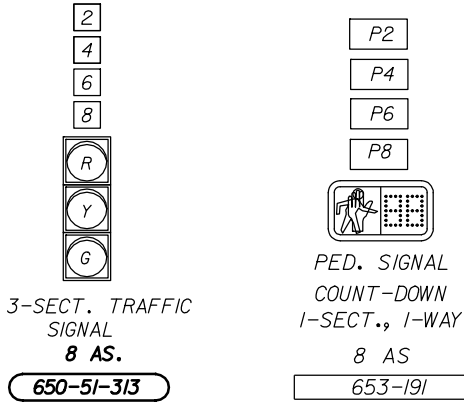


17TH STREET EAST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

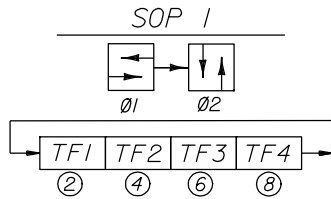
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Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

ENGINEER	Jeffrey D. Trim, PE No. 42106	Prj. No.	6035260
		Dwg. Date	DECEMBER 12, 2008
SIGNALIZATION			

SIGNAL HEAD DETAILS



NOTE:
CONTRACTOR TO INSTALL SERVICE RISER ON FP&L POLE AT STA. 68+70, LEFT, AND LEAVE 10' OF ADDITIONAL WIRE COILED AT THE TOP OF THE RISER. THIS WORK TO BE INCLUDED IN THE COST ITEM 639-1-22



POLE MOUNTED SIGNS (E, F, G & H) ARE DETAILED ON THE SIGN DETAIL SHEET 699-1-1 4 EA
ALL SIGNAL HEADS REQUIRE BACKPLATES 659-101 8 EA

CONTROLLER OPERATIONS

1. MAJOR STREET IS 17TH ST E, PHASE 1 (MOVEMENTS 2 & 6 AND MINOR STREET IS CANAL ROAD, PHASE 2 (MOVEMENTS 4 & 8) STANDARD SIGNAL OPERATION WILL BE THE RESPONSIBILITY OF MANATEE COUNTY.

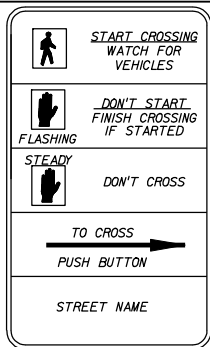
2. STANDARD SIGNAL OPERATING PLAN NO. 1 WITH THE FOLLOWING:

NAZTEC 900 CONTROLLER WITH TS 2 TYPE 1 CABINET.
CONCURRENT/ACTUATED PEDESTRIANS FOR MOVEMENTS 2 (P2), 4 (P4), 6 (P6) AND 8 (P8).

THE CONTROLLER CABINET SHALL BE WIRED IN ACCORDANCE WITH THE SIGNAL OPERATING PLAN.

THE CONTROLLER CABINET SHALL BE WIRED UTILIZING MOVEMENTS 2 & 6 TO PROVIDE PHASE 1 AND MOVEMENTS 4 & 8 TO PROVIDE PHASE 2 OF THE SIGNAL OPERATING PLAN.

PED SIGNAL SIGNS



REMOVAL PAY ITEMS

690-10	8 EA
690-50	1 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI
690-33-1	40 LF

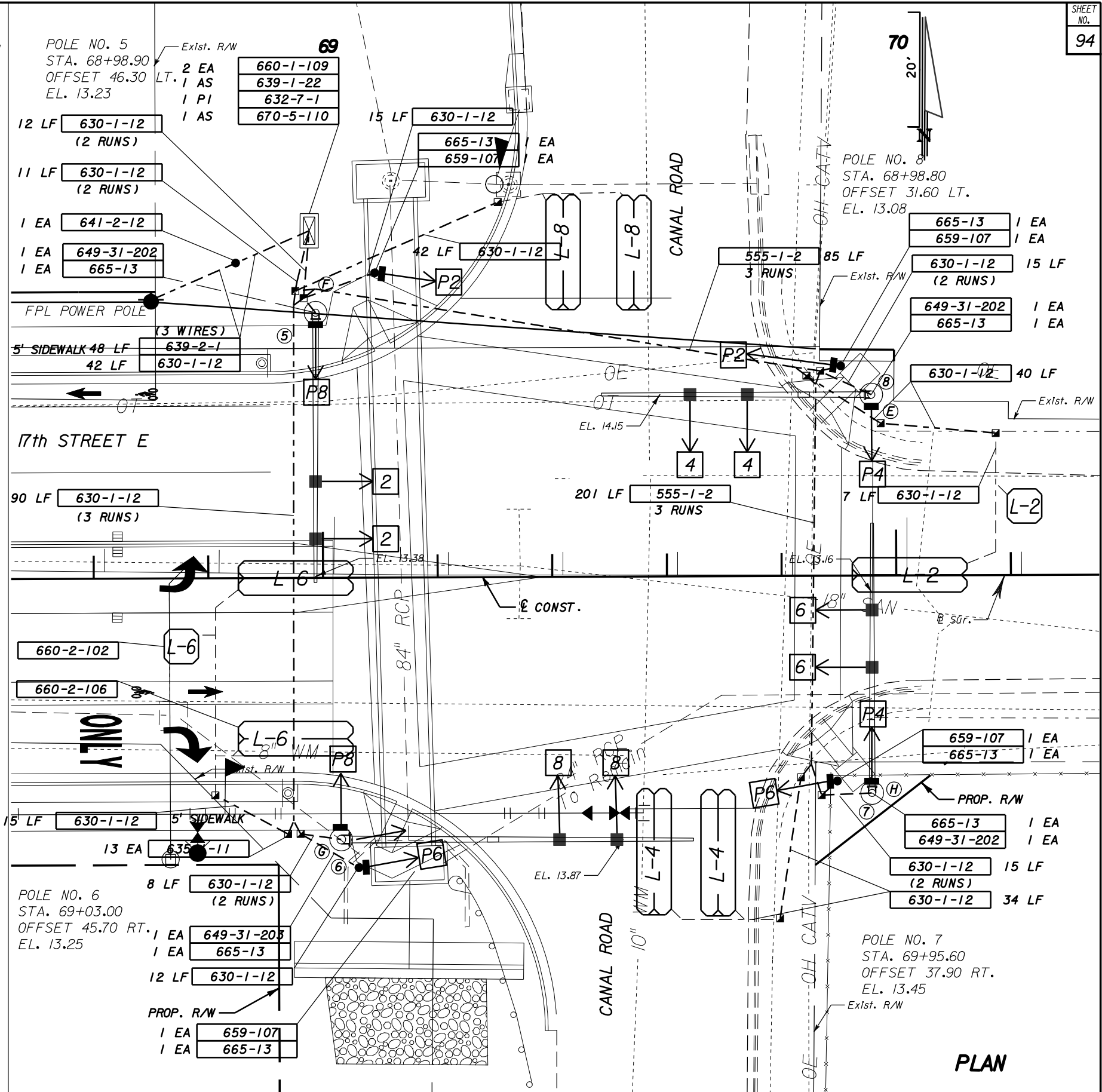
CONTROLLER TIMINGS

TIMING FUNCTION	1	2	3	4	5	6	7	8
MINIMUM GREEN	8	10	8	10				
EXTENSION	4	4	4	4				
MAXIMUM GREEN 1	25	25	25	25				
MAXIMUM GREEN 2	30	30	30	30				
YELLOW CLEARANCE	4	4	4	4				
ALL RED	2	2	2	2				
PEDESTRIAN WALK	7	7	7	7				
PED. CLEARANCE	20	20	20	20				
RECALL								

DETECTORS FOR LOOPS

LOOP	NO. OF LOOPS	NO. OF NEW DETS.	CHANNEL NO.	DELAY TIME (SEC)
L-2	2	1	1	--
L-8	2	1	2	--
L-4	2	1	1	--
L-6	3	1	2	--
L-				
L-				
L-				
L-				
L-				
L-				

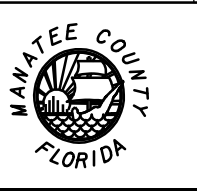
DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.



PLAN

DESIGN FILE: P:\wta2057\01m\CADD\data\dwg\plansig02.dwg PLOT FILE: _PLOTFILE_ PLOT DATE: 12/16/2008

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
CHECKED BY	SRR	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17TH STREET EAST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

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Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

ENGINEER	Proj. No.
Jeffrey D. Trim, PE No. 42106	6035260
	Dwg. Date DECEMBER 12, 2008
SIGNALIZATION	

GENERAL NOTES

555-1-2:

USE A MINIMUM OF 3" IN DIAMETER CONDUIT FOR INTERCONNECT CABLE.

630-1-12:

IN LIEU OF THE INSTALLATION OF NEW CONDUIT, EXISTING CONDUIT (IF NOT DAMAGED) MAY BE RE-USED, AS DIRECTED BY THE PROJECT ENGINEER.

PAYMENT SHALL INCLUDE THE COST OF TRENCHING AND ALL CONDUIT IN TRENCH.

ALL CONDUIT UNDER PROPOSED ROADWAY AND/OR SIDEWALK SHALL BE INSTALLED PRIOR TO INSTALLATION OF ROADWAY BASE AND SURFACE OR CONCRETE.

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.

632-8-212:

USE REA SPECIFICATION PE-39, 25 PAIR, 300 VOLT VOICE GRADE, WITH COATED ALUMINUM SHIELD AND #22 AWG CONDUCTORS FOR COMPUTER INTERCONNECT CABLE.

INTERCONNECT CABLE IS NOT TO SHARE A PULL BOX OR CONDUIT WITH OTHER CABLES.

635-1-11:

APPROPRIATELY SIZE EACH PULL BOX SO THE COMMUNICATION AND/OR INTERCONNECT CABLE DOES NOT EXCEED MANUFACTURERS RECOMMENDED BENDING RADIUS.

USE POLYMER CONCRETE CONSTRUCTION PULL BOX WITH A POLYMER CONCRETE COVER MARKED *TRAFFIC SIGNAL* FOR COMMUNICATION AND/OR INTERCONNECT CABLE. USE 24" X 36" PULL BOXES PLACED A MINIMUM OF 800" APART.

PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, PULL BOXES SHALL BE PLACED A MINIMUM OF 7' FROM THE EDGE OF PAVEMENT.

USE CONCRETE PULL BOXES WITH POLYMER LIDS

639-1-22:

THIS ITEM SHALL INCLUDE THE COST OF ALL SPECIAL IMPACT CONNECTION FEES CHARGED BY LOCAL POWER COMPANIES FOR ELECTRICAL SERVICE CONNECTION.

USE ALUMINUM RIGID ABOVEGROUND CONDUIT FOR ELECTRICAL POWER SERVICE.

ELECTRICAL SERVICE DISCONNECT IS COMPRISED OF A SIX (6) CIRCUIT DISCONNECT BOX WITH THREE CIRCUIT BREAKERS * ONE 30 AMP/120 VOLT FOR CONTROLLER CABINET, ONE 15 AMP/120 VOLT FOR INTERNALLY ILLUMINATED STREET NAME SIGNS AND ONE 15 AMP/120 VOLT FOR FUTURE USE.

639-1-22:

PAYMENT SHALL BE BASED ON THE LINEAR FOOT OF A SINGLE CONDUCTOR.

649-31-202 AND 649-31-203:

USE THREE 2" AND ONE 3/4" CONDUITS STUBBED OUT THROUGH THE MAST ARM POLE FOUNDATION AND TEMPORARILY SEAL.

650-51-313 AND 650-51-513:

USE SIGNAL HEAD SUPPORTING TUBE THAT IS CAPABLE OF ADJUSTING VERTICALLY A MINIMUM OF 1.5 FEET.

653-1B1:

PEDESTRIAN SIGNALS SHALL BE SINGLE-SECTION, INTERNATIONAL SYMBOL HEADS, L.E.D. HEADS.

659-101 AND 659-118:

USE LOUVERED POLYCARBONATE (OR EQUIVALENT) SIGNAL BACK PLATES.

659-107:

USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS FOR PEDESTRIAN PEDESTALS. INSIDE DIAMETER OF PEDESTALS SHALL BE FOUR INCHES (4").

660-2-102 AND 660-2-106:

PERMANENTLY MARK EACH LOOP PER PHASE AND PER VEHICLE MOVEMENT AT EACH SPLICE POINT AND AT THE CABINET TERMINATION POINT.

665-13:

USE PEDESTRIAN BUTTON SIGNAL SIGNS FTP-69A-06 OR FTP-69B-06. STREET NAME SHALL BE IN ACCORDANCE WITH THE STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.

670-5-110:

INCLUDE AN UNINTERRUPTED POWER SUPPLY UNIT (UPS) WITH AN 8 HOUR RUN TIME AT 450 WATTS. ATTACH UPS UNIT TO THE OUTSIDE OF THE CONTROLLER CABINET. INSTALL UPS UNIT IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. UPS EQUIPMENT TO BE COMPATIBLE WITH MAINTAINING AGENCY EXISTING SYSTEM.

THE COORDINATION TIMINGS WILL BE SUPPLIED TO THE PROJECT ENGINEER UPON HIS REQUEST. REQUESTS SHOULD BE MADE TO MR. KENNETH E. BASS, SENIOR TRAFFIC SIGNAL SYSTEMS SPECIALIST AT (863)519-2788.

USE A TS2 TYPE 1 WITH A TYPE 5 CONTROLLER CABINET. ALL CONTROLLER EQUIPMENT TO BE COMPATIBLE WITH MANATEE COUNTY'S EXISTING STREETWISE CENTRAL SOFTWARE SYSTEM. CONTACT MANATEE COUNTY PRIOR TO ORDERING EQUIPMENT.

CONTROLLER AND CABINET TO BE COMPATIBLE WITH THE EXISTING MANATEE COUNTY CLOSED-LOOP COMPUTER SYSTEM. USE AN INTERFACE PANEL, LIGHTNING AND ARRESTORS NECESSARY FOR A COMPLETE AND ACCEPTABLE INSTALLATION.

USE COORDINATION UNITS WITH CAPABILITIES OF GENERATING SEPARATE FORCEOFFS AND PERMISSIVE PERIODS FOR MOVEMENTS 1, 3, 4, 5, 7, AND/OR 8.

699-1-1:

ALL INTERNALLY ILLUMINATED STREET NAME SIGNS TO BE MOUNTED FREE SWINGING ON POLE BRACKET ARM ATTACHED TO POLE.

CONNECT INTERNALLY ILLUMINATED STREET NAME SIGN CONDUCTORS TO PHOTOELECTRIC CELL LOCATED OUTSIDE THE ELECTRICAL SERVICE DISCONNECT BOX AND PHOTOELECTRIC CELL CONDUCTORS TO DEDICATED 15 AMP./120 VOLT CIRCUIT BREAKER LOCATED INSIDE THE ELECTRICAL SERVICE DISCONNECT BOX.

INSTALL PHOTOELECTRIC CELL FOR INTERNALLY ILLUMINATED STREET NAME SIGNS ON TRAFFIC SIGNAL ELECTRICAL SERVICE DISCONNECT.

USE LED INTERNALLY ILLUMINATED STREET NAME SIGNS.

THE PERMITTEE SHALL SECURE, UPON PRIOR APPROVAL FROM THE DEPARTMENT, THE SERVICES OF A QUALIFIED INSPECTOR IN ACCORDANCE TO CHAPTER 471, FLORIDA STATUTES, 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 DEPARTMENT'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.

FOR OWNERSHIP OF REMOVED SIGNAL EQUIPMENT CONTACT FDOT. ANY REMOVED SIGNAL EQUIPMENT NOT CLAIMED WILL BE DISPOSED OF BY THE CONTRACTOR.

MAINTAINING AGENCY: MANATEE COUNTY

FOR PAVEMENT MARKINGS, SEE PAVEMENT MARKING PLANS.

INSURANCE AS REFERENCED IN SECTION 7-13 IN THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION (EDITION AS SHOWN ON KEY SHEET) SHALL BE PROVIDED BY THE CONTRACTOR WHEN INSTALLING OR WHEN WORKING ON OR IN THE VICINITY OF JOINT-USE POLES OR WHEN WORKING IN THE VICINITY OF POWER LINES.

FLORIDA POWER AND LIGHT POWER COMPANY TO ASSIST CONTRACTOR IN PERFORMING ALL NECESSARY WORK UNDER THEIR POWER LINES, SUCH AS THE INSTALLATION OF SPAN WIRE, SIGNAL CABLE, FIBERGLASS INSULATORS AND SIGNAL POLES. CONTRACTOR SHALL NOTIFY THE POWER COMPANY AT LEAST 72 HOURS PRIOR TO INSTALLATION OF THIS EQUIPMENT.

THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE MAINTAINING AGENCY MANATEE COUNTY, AT TELEPHONE NUMBER _____, FOR THE ASSIGNMENT OF THE PHYSICAL ADDRESS ONCE THE SERVICE DROP LOCATION HAS BEEN ESTABLISHED.

THE CONTRACTOR TO PROVIDE A WARRANTY/MAINTENANCE BOND FOR SIGNAL INSTALLATIONS IN ACCORDANCE WITH F.D.O.T. SPECIFICATION SECTION 611-5.

MAINTAINING AGENCY SHALL COORDINATE UTILITY RELOCATIONS IF NECESSARY.

ALL TRAFFIC SIGNAL POLES SHALL BE LOCATED IN ACCORDANCE WITH PLANS PREPARATION MANUAL (LATEST EDITION), SECTION 2.11 AND TABLE 2.11.9 (CLEAR ZONE WIDTHS). IN THE EVENT R/W OR IRRESOLVABLE UTILITY CONFLICTS PROHIBIT POLE PLACEMENT ACCORDING TO SECTION 2.11, PERMITTEE TO CONTACT TRAFFIC SIGNAL INSPECTOR/LIAISON TO OBTAIN PERMISSION TO PLACE POLES IN ACCORDANCE WITH THE RRR CRITERIA FOR CLEAR ZONE.

SECTION 611, TRAFFIC SIGNAL ACCEPTANCE:

SCHEDULING OF THE PARTIAL AND FINAL ACCEPTANCE INSPECTIONS SHALL BE COORDINATED WITH F.D.O.T TRAFFIC SIGNAL INSPECTOR/LIAISON WITH A MINIMUM OF 48 HOURS NOTICE.

RESULTS OF FIELD TESTS (I.E., SECTION 614) 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 SYSTEM 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.

THE PERMITTEE TO SECURE, UPON PRIOR APPROVAL FROM THE DEPARTMENT, THE SERVICES OF A QUALIFIED INSPECTOR IN ACCORDANCE TO CHAPTER 471, FLORIDA STATUTES, 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 DEPARTMENT'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.

AT LEAST 48 HOURS PRIOR TO BEGINNING THE TRAFFIC SIGNAL INSTALLATION, CONTRACTOR SHALL CONTACT THE TRAFFIC SIGNAL INSPECTOR/LIAISON:

MANATEE AND SARASOTA COUNTY
MR. SCOTT J. GUTHRIE PH: 941-359-7353
FLORIDA DEPARTMENT OF TRANSPORTATION (SUNCOM 537-7353)
SARASOTA OPERATIONS CENTER
1838 61ST STREET
SARASOTA, FL 34243

FORTY-EIGHT (48) HOURS PRIOR TO BEGINNING CONSTRUCTION, CONTACT F.D.O.T. MAINTENANCE OFFICE IN SARASOTA, TELEPHONE 941-359-7300.

WHEN CONSTRUCTION IS COMPLETE, PROVIDE A SET OF *AS-BUILT* PLANS TO:

MANATEE COUNTY
TRAFFIC DIVISION MANAGER
P. O. BOX 1000
BRADENTON, FL 34206-1000

SUBMITTAL DATA FOR ALL PERMIT JOBS MUST BE DONE IN ACCORDANCE WITH F.D.O.T. SPECIFICATION SECTION 603.5.

WHEN CONSTRUCTION DEVIATES FROM APPROVED PERMIT PLANS, INCLUDING POSSIBLE EASEMENTS, PERMITTEE TO FURNISH THE DEPARTMENT OF TRANSPORTATION ONE SET OF "AS BUILT" PLANS FOR OUR RECORDS:

DEPARTMENT OF TRANSPORTATION
P.O. BOX 1249
(STREET ADDRESS: 801 N. BROADWAY AVE.)
BARTOW, FLORIDA 33831
ATTN: TRAFFIC OPERATIONS - SIGNAL DIVISION

GENERAL NOTES

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
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SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17TH STREET EAST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

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813.882.8366 FAX 813.884.5990
Engineer of Record: Jeffrey D. Trim, PE No. 42106
Certificate of Authorization No. 3952

ENGINEER	Proj. No.
Jeffrey D. Trim, PE No. 42106	6035260
	Dwg. Date
	DECEMBER 12, 2008
SIGNALIZATION	

DESIGN FILE: P:\Mta2007\01m\CADD-deta\GNOTESS001.dwg PLOT FILE: _PLOTFILE_

PLOT DATE: 12/16/2008

GENERAL NOTES (CONT.)

PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THEN PULL BOXES SHALL BE PLACED A MINIMUM OF 7' FROM THE EDGE OF PAVEMENT.

EXTREME CARE SHALL BE TAKEN TO INSURE THAT ALL SIGNAL EQUIPMENT IS INSTALLED AS SHOWN IN PLANS WITHIN EXISTING RIGHT-OF-WAY. IN THE EVENT THAT EXISTING UTILITIES OR OTHER PHYSICAL CONDITIONS NECESSITATE INSTALLATION OF ANY SIGNAL EQUIPMENT OUTSIDE OF RIGHT-OF-WAY, IT WILL BE THE RESPONSIBILITY OF THE PERMITTEE TO ACQUIRE ALL NECESSARY LEGAL, PERPETUAL EASEMENTS PRIOR TO INSTALLATION OF SAID EQUIPMENT.

INFORMATION REQUIRED FOR ACQUISITION OF EASEMENTS CONSIST OF:

1. A SURVEY SKETCH OF THE AREA TO BE DONATED, WHICH IS PREPARED AND CERTIFIED BY A LICENSED PROFESSIONAL LAND SURVEYOR.
2. A LEGAL DESCRIPTION WHICH CONFORMS TO THE SURVEYOR'S SKETCH OF THE AREA TO BE DONATED AND WHICH IS ADEQUATE FOR USE IN DEEDS OF CONVEYANCE.
3. A TITLE SEARCH (LESS THAN SIX MONTHS OLD) CERTIFIED BY AN ABSTRACT COMPANY WHICH RELATES TO THE PARENT TRACT OF THE PARCEL TO BE DONATED TO THE DEPARTMENT.

COPIES OF THESE EASEMENTS SHALL BE SENT TO:

TRAFFIC SIGNAL DESIGN ENGINEER
 ASSISTANT DISTRICT TRAFFIC OPERATIONS ENGINEER
 FLORIDA DEPARTMENT OF TRANSPORTATION
 P.O. BOX 1249
 801 N. BROADWAY
 BARTOW, FL. 33831

WORK ZONE TRAFFIC CONTROL (REWORK EXISTING SIGNAL)

- A. THE CRITERIA AS OUTLINED IN THE "MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNALS AND DEVICES", SHALL BE ADHERED TO FOR ALL SIGNALS, BOTH PERMANENT AND TEMPORARY. MAINTAIN TRAFFIC BY USE OF TRAFFIC CONTROL INDEXES IN THE F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS BOOKLET DATED JANUARY 2000. NO LANE CLOSURES WILL BE ALLOWED BETWEEN 6:00 A.M. AND 9:00 A.M. AND BETWEEN 4:00 P.M. AND 7:00 P.M.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFE AND EFFICIENT OPERATION OF ALL SIGNALS, AND THE SIGNALIZED MOVEMENT OF TRAFFIC WITHIN THE LIMITS OF THE PROJECTS. THIS IS TO INCLUDE DETERMINING TRAFFIC SIGNAL TIMINGS, AND ADJUSTING SIGNAL TIMINGS AS NECESSARY DURING EACH PHASE OF CONSTRUCTION. THIS SHALL ALSO INCLUDE MAINTAINING SIGNAL COORDINATION WITH SIGNALS BOTH INSIDE AND OUTSIDE THE PROJECT LIMITS.
- C. MODIFICATION TO PERMANENT SIGNAL EQUIPMENT FOR TEMPORARY MAINTENANCE OF TRAFFIC PHASING SHALL BE ACCOMPLISHED IN A MANNER SO AS NOT TO CAUSE DAMAGE TO MAST ARMS, POLES, OR OTHER SIGNAL EQUIPMENT.
- D. DURING EACH PHASE OF CONSTRUCTION, THE CONTRACTOR SHALL PROPERLY ALIGN SIGNAL HEADS.
- E. "ALL SIGNALS SHALL REMAIN IN ACTUATED OPERATION THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR MAY UTILIZE STANDARD LOOPS, PREFORMED LOOPS, OR AN ALTERNATIVE METHOD. ANY ALTERNATIVE DEVICE MUST BE ON THE APPROVED PRODUCTS LIST AND APPROVED BY THE PROJECT ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT AND ANY NECESSARY RELOCATION, ADJUSTMENT OR REPLACEMENT OF THESE DETECTORS AS NECESSARY TO MAINTAIN ACTUATED OPERATION FOR ALL MAIN STREET AND SIDE STREET MOVEMENTS FOR THE DURATION OF THE PROJECT. ALL COSTS OF TEMPORARY VEHICLE DETECTION, INCLUDING DETECTORS, INSTALLATION, RELOCATION, ADJUSTMENT, OR REPLACEMENT SHALL BE INCLUDED AND PAID FOR UNDER PAY ITEMS 2102-1 OR 102-1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH LOCAL UTILITY COMPANIES AND VERIFY THAT TEMPORARY POLES WILL NOT CONFLICT WITH ANY EXISTING UTILITIES".

INSTALLATION NEAR OVERHEAD POWER LINES

THE TYPE OF EQUIPMENT USED IN 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.
2. CONTRACTOR SHALL MEET ALL APPLICABLE OSHA REQUIREMENTS (10' MINIMUM DISTANCE MAINTAINED BETWEEN THE EQUIPMENT AND THE ELECTRICAL OVERHEAD FACILITY).

ANY COST ASSOCIATED WITH THE TYPE OF EQUIPMENT REQUIRED FOR THIS INSTALLATION IS INCLUDED IN THE RELATED PAY ITEM.

DESIGN FILE: P:\Mta2057\01m\CADD-deta\GNOTES\02.dwg PLOT FILE: _PLOTFILE.

PLOT DATE: 12/16/2008

GENERAL NOTES

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	PWJ	DATE			
CHECKED BY	SRR	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				

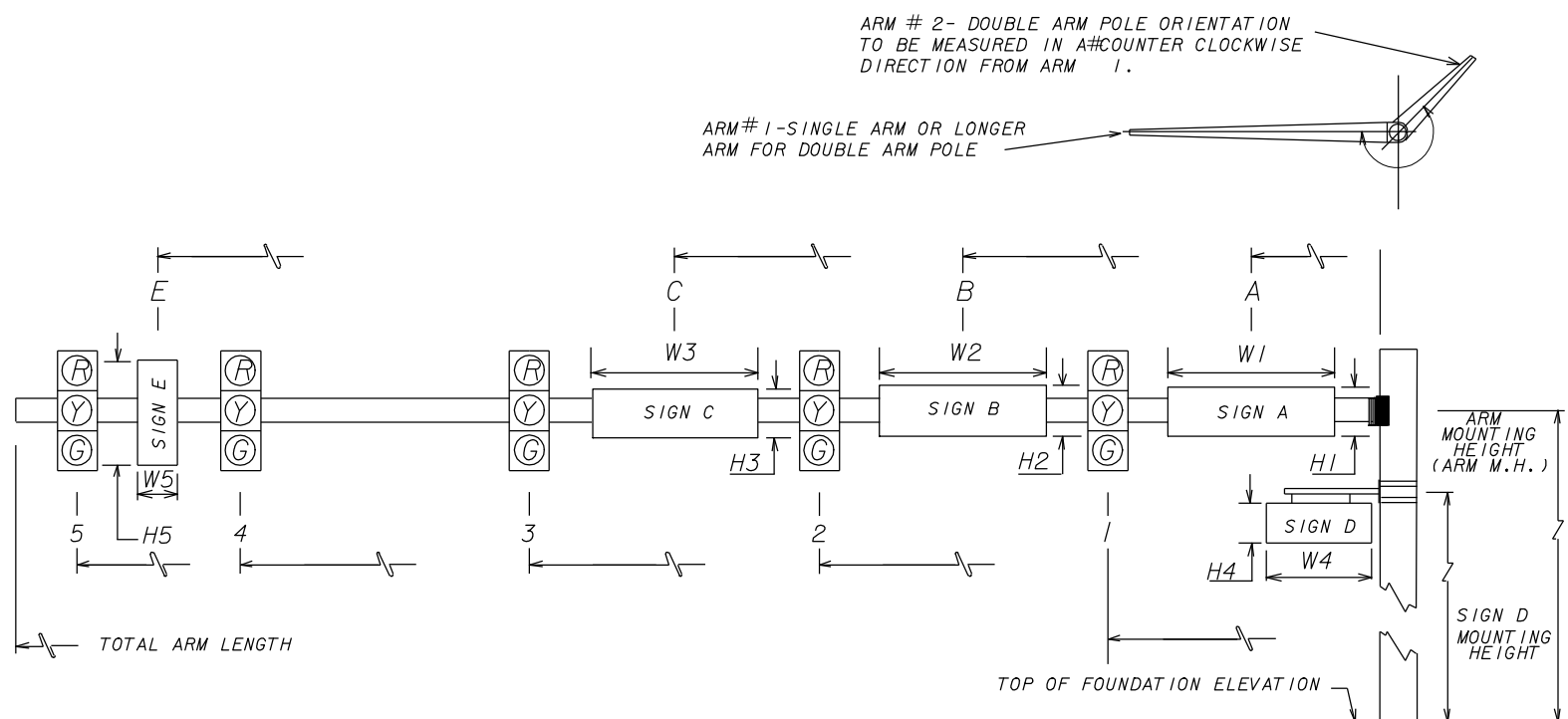


17TH STREET EAST
 FROM US 41 TO CANAL ROAD
 MANATEE COUNTY, FLORIDA

WADE TRIM
 www.wadefirm.com
 8745 Henderson Road, Suite 220, Tampa, FL 33634
 813.882.8366 FAX 813.884.5990
 Engineer of Record: Jeffrey D. Trim, PE No. 42106
 Certificate of Authorization No. 3952

ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
SIGNALIZATION	

SPECIAL INSTRUCTIONS				
ID NO.	PED. BUTTON	PED. SIGNALS	HANDHOLE LOCATION	
1	270	0		
2	270	0		
3	0	90		
4	270	0		
5	0	270	90	0
6	0	270	90	0
7	0	270	90	0
8	0	270	90	0



* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

ID NO.	SHEET NO.	LOCATION BY STA.	TOP OF FOUNDATION ELEVATION	RDWY ARM NO.	CROWN ELEV.	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	SIGNAL DATA										TOTAL ARM LENGTH	ARM M.H.	∠ BETWEEN DUAL ARMS 90/270	SIGN DATA															PAINT COLOR
									DISTANCE FROM POLE													DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN															
									1	*	2	*	3	*	4	*	5	*				A	H1	W1	B	H2	W2	C	H3	W3	D	H4	W4	E	H5	W5	
1	89	29+42.00	13.03	/	12.86	V	Y	Y	20.8	3	29.8	3	38.8	5													2'-0"	6'-0"									
		FUTURE USE		/					22.3	3	33.3	3	44.3	3													2'-0"	6'-0"	38.8	2'-6"	3'-0"						
2	89	30+64.50	12.95	/	12.82	V	Y	Y	36.7	3	46.7	5															2'-0"	4'-0"									
		FUTURE USE		/					36.7	3	44.7	3	52.7	3													2'-0"	4'-0"	48.7	2'-6"	3'-0"						
3	89	30+71.00	13.40	/	13.30	V	Y	Y	36.2	3	45.2	3	54.2	5													2'-0"	6'-0"									
		FUTURE USE		/					37.7	3	48.7	3	59.7	3													2'-0"	6'-0"	54.2	2'-6"	3'-0"						
4	89	29+38.00	13.60	/	12.67	V	Y	Y	28.1	3	38.1	5															2'-0"	4'-0"									
		FUTURE USE		/					28.1	3	36.1	3	44.1	3													2'-0"	4'-0"	40.1	2'-6"	3'-0"						
5	90	68+98.90	13.23	/	13.38	V	Y	Y	28.28	3	39.28	3															2'-6"	7'-0"									
				/					28.28	3	39.28	3															2'-6"	7'-0"	39.2	2'-6"	3'-0"						
6	90	69+03.00	13.25	/	13.87	V	Y	Y	36.51	3	46.51	3															2'-0"	6'-0"									
				/					36.51	3	46.51	3															2'-0"	6'-0"	47.8	2'-6"	3'-0"						
7	90	69+95.60	13.45	/	13.16	V	Y	Y	20.75	3	30.75	3															2'-6"	7'-0"									
				/					20.75	3	30.75	3															2'-6"	7'-0"	31.6	2'-6"	3'-0"						
8	90	68+98.80	13.08	/	14.15	V	Y	Y	20.50	3	30.50	3															2'-6"	7'-0"									
				/					20.50	3	30.50	3															2'-0"	6'-0"	31.9	2'-6"	3'-0"						

DESIGN FILE: P:\M\2057\01m\CADD-data\dwg_210B.dgn PLOT FILE: PLOTFILE.

PLOT DATE: 12/16/2008

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	FWJ	DATE			
CHECKED BY	SRR	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17TH STREET EAST
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Certificate of Authorization No. 3952

MAST ARM TABULATION

ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
SIGNALIZATION	

STANDARD MAST ARM ASSEMBLIES DESIGN TABLE

STRUCTURE ID NUMBER	ASSEMBLY NUMBERS (1)	FIRST ARM			SECOND ARM			UF (DEG.)	LL (DEG.)	POLE				SPECIAL DRILLED SHAFT DATA (4)			
		ARM TYPE	FAA (2) (FT.)	FBA (2) (IN.)	ARM TYPE	FAA (2) (FT.)	FBA (2) (IN.)			POLE TYPE	UAA (3) (FT.)	UB (FT.)	UCA (3) (IN.)	DA (FT.)	DB (FT.)	RA	RB
1	E5-T3	E5	23.0	7.80						T2	22	20	15.92				
2	E5-T3	E5	33.0	6.41						T3	22	20	15.92				
3	E6-T4	E6	32.9	7.42						T3	22	20	18.92				
4	E3-T2	E3								T2	22	20	12.92				
5	E3-T2	E3								T2	22	20	12.92				
6	E5-T3	E5	32.0	6.55						T3		22					
7	E3-T2	E3	30.3	7.78						T2	22	20	12.92				
8	E3-T2	E3	29.3	7.92						T2		22					

TABLE NOTES:

(1) Assembly Number Legend

Single Arm:

- D* - S* = Arm Type - Pole Type
- E* - T* = Arm Type - Pole Type
- F* - W* = Arm Type - Pole Type

Double Arm:

- D* - D* - S* = First Arm Type - Second Arm Type - Pole Type
- E* - E* - T* = First Arm Type - Second Arm Type - Pole Type
- F* - F* - W* = First Arm Type - Second Arm Type - Pole Type

(2) If an entry appears in columns "FAA" and "FBA", a shorter arm is required. This is obtained by removing length from the arm tip. For these cases, the mast arm length shall be shortened from "FA" to "FAA" and the arm tip diameter shall be increased from "FB" to "FBA".

(3) If an entry appears in columns "UAA" and "UCA", a shorter pole is required. This is obtained by removing length from the pole tip. For these cases, the pole height shall be shortened from "UA" to "UAA" and the pole tip diameter shall be increased from "UC" to "UCA".

TABLE NOTES (Continued):

(4) The foundations for Standard Mast Arm Assemblies are pre-designed and are based upon the following conservative soil criteria which covers the great majority of soil types found in Florida. Only complete the "Special Drilled Shaft Data" information if the site conditions dictate drilled shafts in soils of lesser strength properties.

- Classification = Cohesionless (Fine Sand)
- Friction Angle = 30 Degrees (30°)
- Unit Weight = 50 lb./cu. ft. (assumed saturated)

GENERAL NOTES:

- (1) Work this sheet with the Signal Designer's "Mast Arm Tabulation" sheet. See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.
- (2) Work this sheet with "Design Standards" Index I7740 thru I7745, as necessary.

TABULATION OF VARIABLES FOR STANDARD MAST ARM ASSEMBLIES

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	FWJ	DATE			
CHECKED BY	SRR	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



17TH STREET EAST
FROM US 41 TO CANAL ROAD
MANATEE COUNTY, FLORIDA

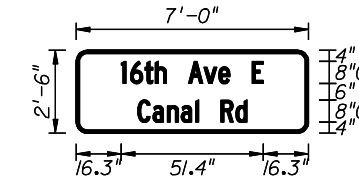
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ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008

SIGNALIZATION

SIGN NAME	name		STATION(S)		
QUANTITY	2 *	1	none		
WIDTH	7'-0"	2			
HEIGHT	2'-6"	3			
BORDER WIDTH	1.25"	4			
BORDER RADII	4"	5			
PANEL COLOR	Green				
LEGEND	White				
BORDER	White				
SYMBOL(S)	ANGLE	X	Y	WID	HT

2'-6" X 7'-0" INTERNALLY ILLUMINATED SIGN ASSEMBLY (LED)



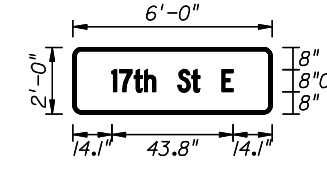
* TWO SIGN PANELS ARE REQUIRED FOR SIGN ASSEMBLY. SIGN ASSEMBLY SHALL BE A DOUBLE-PANEL, TWO-WAY INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY.

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH	

COPY	1	6	t	h	A	v	e	E	L						
SPACE	16.3	19.6	24.9	28.6	32.6	40.6	46.2	51.5	55.6	63.6	61.4				
COPY	C	a	n	a	l	R	d	L							
SPACE	22.2	27.7	32.9	38	43.2	44.3	62.3	57.7	39.6						
COPY															
SPACE															
COPY															
SPACE															
COPY															
SPACE															
COPY															
SPACE															

SIGN NAME	name		STATION(S)		
QUANTITY	4 *	1	none		
WIDTH	6'-0"	2			
HEIGHT	2'-0"	3			
BORDER WIDTH	1.25"	4			
BORDER RADII	3"	5			
PANEL COLOR	Green				
LEGEND	White				
BORDER	White				
SYMBOL(S)	ANGLE	X	Y	WID	HT

2'-0" X 6'-0" INTERNALLY ILLUMINATED SIGN ASSEMBLY (LED)



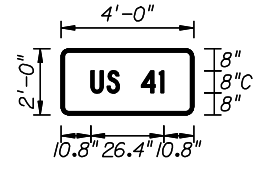
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SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH	

COPY	1	7	t	h	S	t	E	L						
SPACE	14.1	16.9	22.2	25.8	29.9	37.9	43	45.8	53.8	43.8				
COPY														
SPACE														
COPY														
SPACE														
COPY														
SPACE														
COPY														
SPACE														
COPY														
SPACE														

SIGN NAME	name		STATION(S)		
QUANTITY	2 *	1	none		
WIDTH	4'-0"	2			
HEIGHT	2'-0"	3			
BORDER WIDTH	1.25"	4			
BORDER RADII	3"	5			
PANEL COLOR	Green				
LEGEND	White				
BORDER	White				
SYMBOL(S)	ANGLE	X	Y	WID	HT

2'-0" X 4'-0" INTERNALLY ILLUMINATED SIGN ASSEMBLY (LED)



* TWO SIGN PANELS ARE REQUIRED FOR SIGN ASSEMBLY. SIGN ASSEMBLY SHALL BE A DOUBLE-PANEL, TWO-WAY INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY.

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH	

COPY	U	S	4	1	L						
SPACE	10.8	16.6	21.1	26.1	35.5	26.4					
COPY											
SPACE											
COPY											
SPACE											
COPY											
SPACE											
COPY											
SPACE											
COPY											
SPACE											

SIGN NAME	name		STATION(S)		
QUANTITY	1				
WIDTH	2				
HEIGHT	3				
BORDER WIDTH	4				
BORDER RADII	5				
PANEL COLOR					
LEGEND					
BORDER					
SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH	

COPY											
SPACE											
COPY											
SPACE											
COPY											
SPACE											
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SPACE											
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SPACE											
COPY											
SPACE											

DESIGN FILE: P:\Mte2057\01m\CADD\data\dwg\OSWKS601.dgn PLOT FILE: _PLOTFILE_. PLOT DATE: 12/16/2008

GUIDE SIGN WORK SHEET

DESIGNED BY	SRR	DATE	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	BDG	DATE			
DRAWN BY	PNJ	DATE			
CHECKED BY	SRR	DATE			
SUPERVISED BY	JEFFREY D. TRIM, PE 42106				



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ENGINEER	Proj. No.	6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date	DECEMBER 12, 2008
SIGNALIZATION		

TABULATION OF QUANTITIES

FDOT PAY ITEM	DESCRIPTION	UNIT	SHEET NUMBERS														TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			104		105		106		107												
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL			
715-1-13	CONDUCTOR (INSULATED #2)	LF	906		3600		4230		1074								9810		9810		
715-2-11	CONDUIT (UNDERGROUND) (PVC SCHEDULE 40) (2")	LF	302		1200		1300		358								3160		3160		
715-7-11	LOAD CENTER (SECONDARY VOLTAGE)	EA	0		0		1		0								1		1		
715-14-11	PULL BOX (ROADSIDE) (MOULDED)	EA	4		7		7		2								20		20		
715-4-121	LIGHTING POLE COMPLETE (SINGLE ARM) (SHOULDER MOUNT) (ALUMINUM) (MOUNTING HEIGHT 40') (8' ARM)	EA	2		6		5		2								15		15		
715-4-600	LIGHTING POLE COMPLETE, REMOVE	EA	2		0		0		0								2		2		

PLOT DATE: 12/16/2008 DESIGN FILE: P:\Mte20057\01m\CADD-data\dwg\tabq101.dgn PLOT FILE: _PLOTFILE_

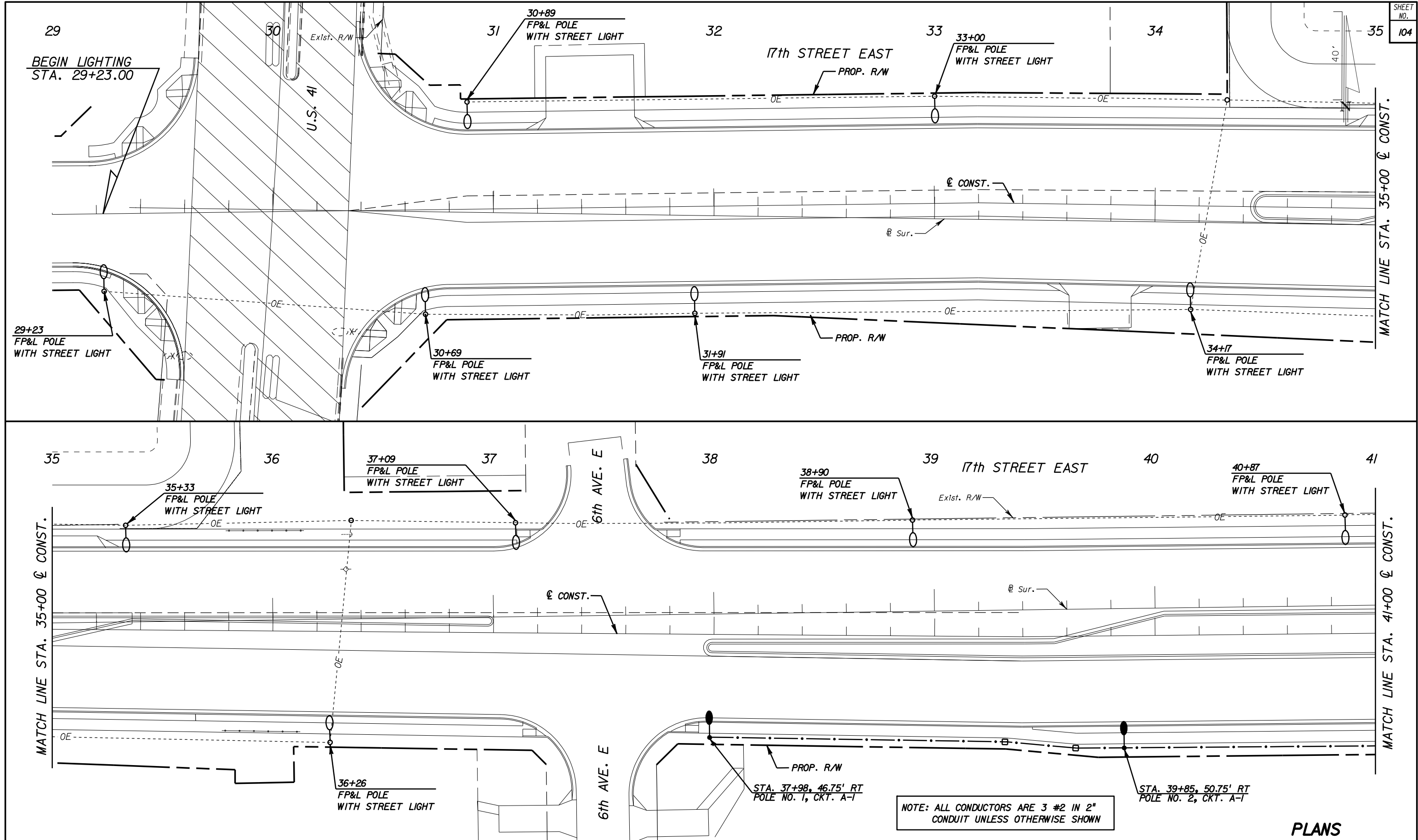
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CHECKED BY	BDG	DATE				
DRAWN BY	PWJ	DATE				
CHECKED BY	JDT	DATE				
SUPERVISED BY	JEFFREY D. TRIM, PE 42106					



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ENGINEER	Proj. No. 6035260
Jeffrey D. Trim, PE No. 42106	Dwg. Date DECEMBER 12, 2008
LIGHTING	

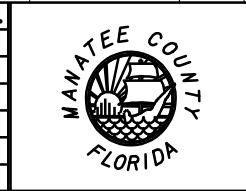


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PLOT DATE: 12/16/2008

DESIGNED BY	SRR	DATE	
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DRAWN BY	RLS	DATE	
CHECKED BY	JDT	DATE	
SUPERVISED BY	JEFFREY D. TRIM, PE 42106		

REVISION DESCRIPTION & DATE	BY	NO.



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ENGINEER
Jeffrey D. Trim, PE No. 42106

Proj. No. 6035260
Dwg. Date DECEMBER 12, 2008
LIGHTING

NOTE: ALL CONDUCTORS ARE 3 #2 IN 2" CONDUIT UNLESS OTHERWISE SHOWN

PLANS