ADDENDUM 2

CONSTRUCTION PLANS FOR

US 301 (SR 43) - SEGMENT B

OLD TAMPA ROAD/ERIE ROAD TO RUTLAND ROAD (CR 675)

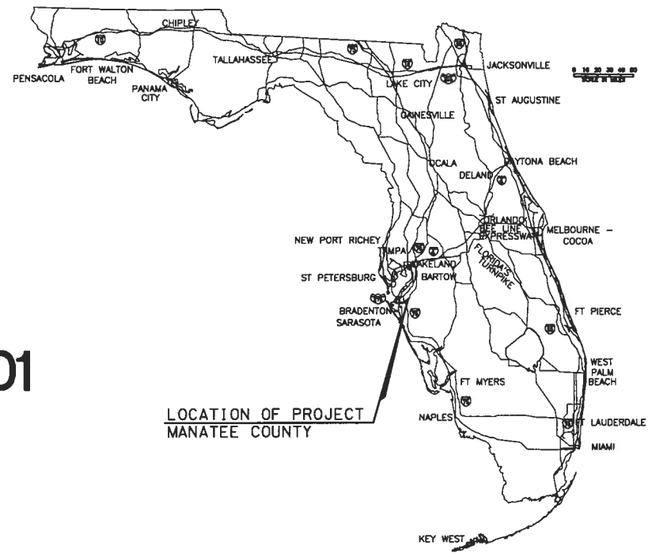
MANATEE COUNTY (SECTION 13020)

PREPARED FOR

WILLIAMS & HEROLD, LLC

714 MANATEE AVENUE EAST, BRADENTON, FL 34208

FDOT FINANCIAL PROJECT ID 422603-1-58-01
MANATEE CO PROJECT ID 6066760



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

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED 2008, AND APPLICABLE SECTIONS, ARTICLES AND SUBARTICLES OF DIVISION I, AND ALL DIVISION II & III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2007, AS AMENDED BY CONTRACT DOCUMENTS.

APPLICABLE DESIGN STANDARDS MODIFICATIONS: 07-01-08

FOR DESIGN STANDARDS MODIFICATIONS CLICK ON "DESIGN STANDARDS" AT THE FOLLOWING WEB SITE:
http://www.dot.state.fl.us/rddesign/

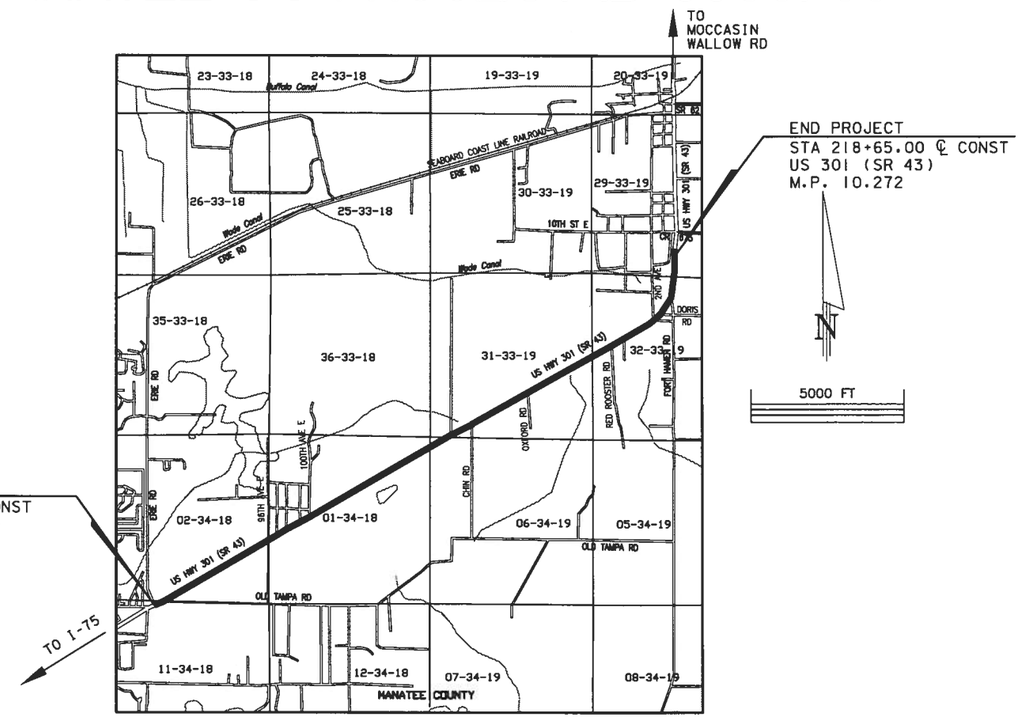
THIS CONTRACT PLAN SET INCLUDES:

ROADWAY PLANS
SIGNING & PAVEMENT MARKING PLANS
SIGNALIZATION PLANS
LIGHTING PLANS
CENTERLINE CONTROL SURVEY

INDEX OF ROADWAY PLANS

* DENOTES SHEETS SUBMITTED TO S.W.F.W.M.D.

REVISIONS		
DATE	BY	DESCRIPTION
1/14/09	SRJ	(A) REV PAVEMENT DESIGN, ADDED OPT. PIPE SHT ADDENDUM 1 (SHTS 1A, 12, 13, 22A & 24)
2/11/09	SRJ	(B) REV FORCE MAIN, UPDATED SUM OF PAY ITEMS, REV UD DETAIL, AND SIGNAL PLANS - ADDENDUM 2 (SHTS 1B, 1C, 171, 335, 336, 353, T1 thru T-10, L-3A)



LOCATION MAP

LENGTH OF PROJECT		
	LINEAR FT.	MILES
ROADWAY	19,460.00	3.686
BRIDGES	N/A	N/A
NET LENGTH OF PROJ.	19,460.00	3.686
EXCEPTIONS	N/A	N/A
GROSS LENGTH OF PROJ.	19,460.00	3.686

ROADWAY PLANS
ENGINEER OF RECORD: P.E. NO.: 41444
MITCHELL D. McKNIGHT, P.E.
DATE

UTILITY PLANS
ENGINEER OF RECORD: P.E. NO.: 40139
ROBERT J. HALBACH, P.E.
DATE

TRAFFIC CONTROL PLANS
ENGINEER OF RECORD: P.E. NO.: 51601
FRANCISCO B. DOMINGO, P.E.
DATE

WilsonMiller, Inc. - FL Lic.# LC-C000170
WilsonMiller, Inc. - Certificate of Authorization #43

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WilsonMiller, Inc.

6900 Professional Parkway East, Suite 100 • Sarasota, Florida 34240-8414 • Phone 941-907-6900 • Fax 941-907-6910 • Web Site www.wilsonmiller.com

FINAL PLANS-NOVEMBER, 2008

Index No. 8-05825-000-00xx

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FDOT ITEM	DESCRIPTION	UNIT	QTY	
440-1-60	UNDERDRAIN, TYPE SPECIAL	LF	13,679	
440-73-2	UNDERDRAIN OUTLET PIPE, 6 "	LF	1,759	
514-72	LINER (IMPERVIOUS) PVC	SY	7,000	
515-2-301	PEDESTRIAN, BICYCLE RAILING, ALUMINUM ONLY, 42" PICKET RAIL	LF	1,260	
520-1-7	CONCRETE CURB & GUTTER, TYPE E	LF	6,755	
520-1-10	CONCRETE CURB & GUTTER, TYPE F	LF	39,166	
520-1-8	CONCRETE CURB & GUTTER, SPECIAL	LF	55	
520-5-12	TRAFFIC SEPARATOR CONCRETE-TYPE I, 6' WIDE	LF	322	
520-5-41	TRAFFIC SEPARATOR CONCRETE- TYPE IV, 4' WIDE	LF	665	
522-1	SIDEWALK CONCRETE, 4 THICK "	SY	20,246	
522-2	SIDEWALK CONCRETE, 6 THICK "	SY	1,793	
530-3-4	RIPRAP, RUBBLE, F&I, DITCH LINING	TN	23	
550-10-220	FENCING, TYPE B, 5.1-6.0, STANDARD	LF	824	
550-10-222	FENCING, TYPE B, 5.1-6.0, W/ VINYL COATING	LF	1,077	
550-60-212	FENCE GATE, TYPE B, SINGLE 6.1-12.0' OPENING	EA	1	
550-60-222	FENCE GATE, TYPE B, DOUBLE, 6.1-12.0' OPENING	EA	3	
555-1-1	DIRECTIONAL BORE, LESS THAN 6 "	LF	465	B
570-1-2	PERFORMANCE TURF, SOD	SY	182,618	
630-1-11	CONDUIT - SIGNALS, FURNISH & INSTALL, ABOVEGROUND	LF	65	
B 630-1-12	CONDUIT - SIGNALS, FURNISH & INSTALL, UNDERGROUND	LF	21,260	B
632-7-1	CABLE, SIGNAL, FURNISH & INSTALL	PI	3	
634-4-112	SPAN WIRE ASSEMBLY, F&I, 2 WIRE, DIAGONAL	PI	1	
635-1-11	PULL & JUNCTION BOXES, F&I, PULL BOX	EA	17	B
639-1-13	SIGNALS, ELECTRICAL POWER SERVICE, OVERHEAD	AS	1	
639-1-22	SIGNALS,ELECTRICAL POWER SERVICE,UNDERGROUND,	AS	2	
639-2-1	SIGNALS, ELECTRICAL SERVICE WIRE	LF	750	
641-2-11	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II PEDESTAL	EA	2	
641-2-15	PRESTRESSED CONCRETE POLE, F&I, TYPE P-V	EA	2	
649-31-202	MAST ARM,F&I, WIND SPEED-130,SINGLE ARM,W/0 LUMINAIRE-46	EA	1	
649-31-203	MAST ARM,F&I, WIND SPEED-130,SINGLE ARM,W/0 LUMINAIRE-60	EA	1	
649-31-204	MAST ARM,F&I, WIND SPEED-130,SINGLE ARM.W/0 LUMINAIRE, ARM LENGTH 70.5	EA	1	
649-31-212	MAST ARM,F&I, WIND SPEED-130,DOUBLE ARM,W/0 LUMINAIRE, 36-60	EA	1	
649-31-216	MAST ARM,F&I, WIND SPEED-130,DOUBLE ARM,W/0 LUMINAIRE, 46-70.5	EA	1	
B 650-51-121	TRAFFIC SIGNAL, F&I, 1 SECTIONS, 2 WAY, STANDARD	AS	4	

FDOT ITEM	DESCRIPTION	UNIT	QTY	
650-51-311	TRAFFIC SIGNAL, F&I, 3 SECTION, 1 WAY, STANDARD	AS	15	
650-51-511	TRAFFIC SIGNAL, F&I, 5 SECTIONS, 1 WAY, STANDARD	AS	2	
653-191	PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 1 DIRECTION	AS	4	
653-192	PEDESTRIAN SIGNAL, F&I, LED - COUNT DOWN, 2 DIRECTIONS	AS	2	
659-101	SIGNAL HEAD AUXILIARIES, F&I, BACK PLATES 3 SECT	EA	15	B
659-106	SIGNAL HEAD AUXILIARIES, F&I, TUNNEL VISOR	EA	63	B
659-107	SIGNAL HEAD AUXILIARIES, F&I, ALUMINUM PEDESTAL	EA	7	
B 659-111	SIGNAL HEAD AUXILIARIES, F&I, BACK PLATES 1 SECTION	EA	8	
659-118	SIGNAL HEAD AUXILIARIES, F&I, BACK PLATES 5 SECT CLUSTER	EA	2	
663-74-11	VEHICLE DETECTOR ASSEM, F&I, OPTICAL TYPE	EA	6	B
665-11	PEDESTRIAN DETECTOR, F&I, DETECTOR STATION, POLE OR CONTROLLER CABINET MOUNTED	EA	8	
B 670-4-1	FLASHING BEACON CONTROLLER ASSEMBLY, F&I	AS	1	
670-5-111	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 1 PREEMPTION	AS	2	
690-10	SIGNAL HEAD TRAFFIC ASSEMBLY REMOVAL	EA	4	
690-32-1	POLE REMOVAL, SHALLOW, DIRECT BURIAL	EA	1	
690-33-1	POLE REMOVAL, DEEP DIRECT BURIAL	LF	20	
690-80	SPAN WIRE ASSEMBLY, REMOVE	EA	1	
690-90	CONDUIT & CABLING REMOVE	PI	1	
690-100	SIGNAL EQUIPMENT MISCELLANOUS REMOVE	PI	1	
699-1-1	INTERNAL ILLUM SIGN, ST NAME	EA	4	
700-20-11	SINGLE POST SIGN, F&I, LESS THAN 12SF	AS	114	
700-20-12	SINGLE POST SIGN, F&I, 12SF - 20SF	AS	10	
700-20-40	SINGLE POST SIGN, RELOCATE	AS	28	
700-20-60	SINGLE POST SIGN, REMOVE	AS	19	
700-21-11	MULTI-POST SIGN, F&I, LESS THAN 50SF	AS	2	
700-48-18	SIGN PANELS, F&I, 15 OR <	EA	23	B
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	EA	39	
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS (RPM)	EA	2,074	
710-11-190	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ISLAND NOSE	SF	237	
710-11-290	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE	SF	412	
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	1	
711-11-111	THERMOPLASTIC, STANDARD, WHITE SOLID 6"	NM	7.871	B
711-11-112	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8"	NM	3.179	
711-11-123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12"	LF	5,529	
711-11-114	THERMOPLASTIC, STANDARD, WHITE, SOLID, 18"	NM	1.749	B

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	REVISED PAY ITEMS - ADDENDUM 2	02/11/09	SRJ/979	

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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6900 Professional Parkway East, Suite 100 • Sarasota, Florida 34240-8414 • Phone 941-907-6900 • Fax 941-907-6910 • Web-Site www.wilsonmiller.com

CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 - SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NTS
VERTICAL SCALE: NTS
SEC: TWP: RGE:

TITLE: SUMMARY OF PAY ITEMS

CROSS REFERENCE FILE NO.:

PROJECT NUMBER: 05925-000-000

MITCHELL D. McKNIGHT, P.E.
FLORIDA LIC. NO. 41444

INDEX NUMBER: D-05925-000-000XXX

SHEET NUMBER: 1B

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FDOT ITEM	DESCRIPTION	UNIT	QTY
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24"	LF	822
711-11-131	THERMOPLASTIC, STANDARD, WHITE, SKIP, 6"	GM	8
711-11-141	THERMOPLASTIC, STANDARD, WHITE, SKIP, 6"	LF	1,644
711-11-160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE	EA	158
711-11-170	THERMOPLASTIC, STANDARD, WHITE, ARROW	EA	115
711-11-211	THERMOPLASTIC, STANDARD, YELLOW, SOLID 6"	NM	8.183 △B
711-11-222	THERMOPLASTIC, STANDARD, YELLOW, SOLID 8"	LF	1,991
711-11-224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18"	LF	1,384
711-11-241	THERMOPLASTIC, STANDARD, YELLOW, SKIP, 6"	LF	1,467
715-1-13	CONDUTOR #4 INSULATED	LF	109,450
715-1-63	REMOVE EXIST. 3#4 CONDUCTORS - DISPOSE	LF	150
715-2-11	CONDUIT UNDERGROUND PVC SCH 40 - 2"	LF	23,090
715-7-11	LOAD CENTER (SECONDARY VOLTAGE)	EA	3
715-7-21	REWORK EXIST. LOAD CENTER '50'	EA	1
715-10-2	CONCRETE FOUNDATION RELOCATED POLE	EA	1
715-14-12	PULL BOX (SIDEWALK)	EA	226
715-500-1	POLE CABLE DISTRIBUTION SYSTEM (CONVENTIONAL)	EA	146
715-516-150	LIGHTING POLE COMPLETE (ALUM) POLE TOP MOUNT 50'	EA	129
715-516-414	LIGHTING POLE COMPLETE (FIBERGLASS) POLE TOP MOUNT 14'	EA	16
715-540-000	RELOCATE EXIST. LIGHT POLE	EA	1

MAN. CO.* ITEM	DESCRIPTION	UNIT	QTY
153	WEIR (TEMPORARY)	EA	1
154	REPLACE BRICK PAVERS AND RIBBON CURB	SY	140
155	POND 5 WELL AND CONTROLS	LS	1
156	POND 5 AERATOR	EA	3
157	POND 5 PIPING	LS	1

* SEE SPECIAL PROVISIONS

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	REVISED PAY ITEMS – ADDENDUM 2	2/11/09	SRJ/979	

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:		
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WM APPROVED BY:		

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PROJECT: US 301 – SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NTS
VERTICAL SCALE: NTS
SEC: TWP: RGE:

TITLE: SUMMARY OF PAY ITEMS

CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000

MITCHELL D. McKNIGHT, P.E.
FLORIDA LIC. NO. 41444
INDEX NUMBER: D-05925-000-000XXX
SHEET NUMBER: 1C

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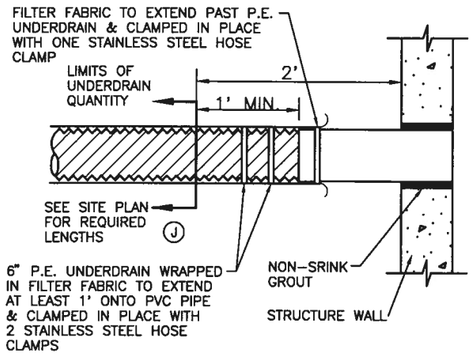
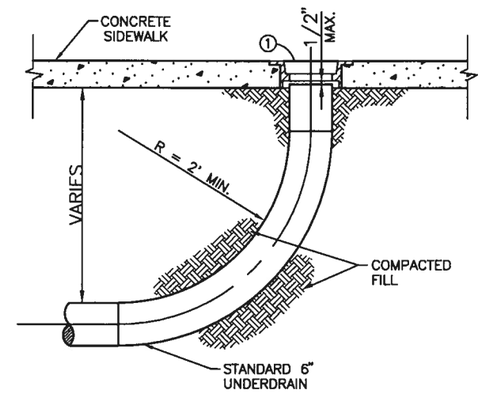


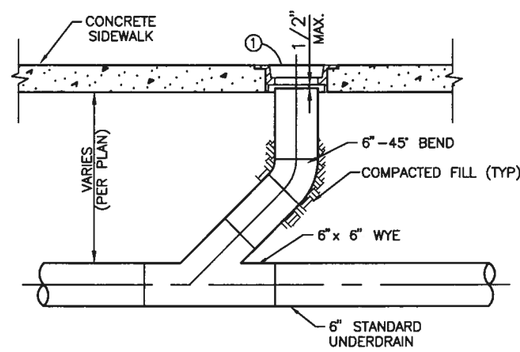
TYPICAL CONNECTION FOR UNDERDRAIN TO STRUCTURE

S-D019 N.T.S.



END OF LINE CLEANOUT

N.T.S.



IN LINE CLEANOUT

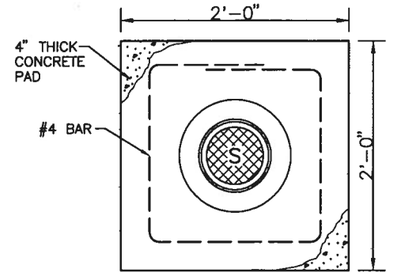
N.T.S.

① CAST IRON REVERSIBLE HANDHOLE RING & COVER. UNITED STATES FOUNDARY NUMBER 7621 OR EQUAL SET FLUSH TO SIDEWALK.

② WHERE PROPOSED CLEANOUTS ARE NOT IN SIDEWALK AREAS, THE CLEANOUT SHALL INCLUDE A CONCRETE PAD AS DETAILED, SET FLUSH TO FINAL GRADE. CONCRETE = 3000 P.S.I. @ 28 DAYS MINIMUM COMPRESSIVE STRENGTH.

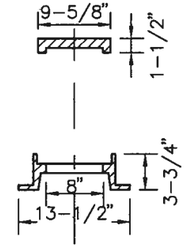
UNDERDRAIN CLEANOUT DETAILS

S-D031 (11/04/05) N.T.S.



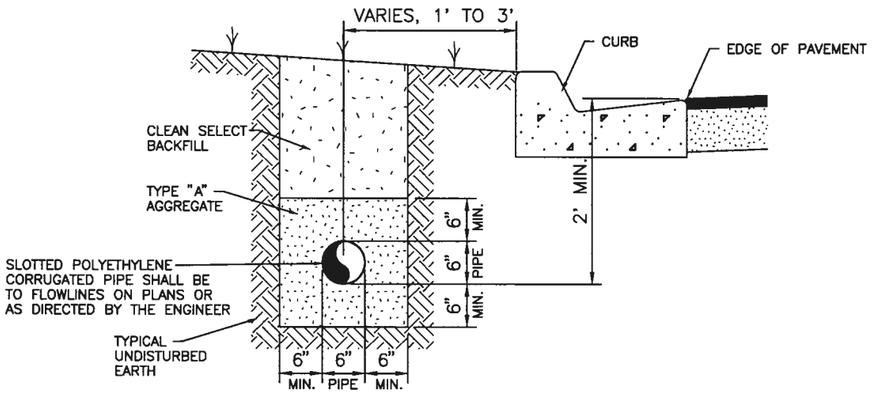
CLEANOUT PAD DETAIL ②

N.T.S.



RING AND COVER USF #7621

N.T.S.



TYPE "A" AGGREGATE: FILTER AGGREGATE FOR UNDERDRAIN SHALL CONSIST OF WASHED MATERIAL MEETING F.D.O.T. ROAD & BRIDGE SPECIFICATIONS FOR SILICA SAND & QUARTZ GRAVEL, OR MIXTURES THEREOF CONTAINING LESS THAN 1% (BY WEIGHT) OF SILT, CLAY, & ORGANIC MATTER. SAID MATERIAL SHALL HAVE A UNIFORMITY COEFFICIENT OF 1.5 OR GREATER, AN EFFECTIVE GRAIN SIZE OF 0.20 TO 0.55 MILLIMETER AND MEET THE FOLLOWING GRADATION. GRAIN SIZE ANALYSIS AND PERCOLATION TEST RESULTS FROM AN INDEPENDENT LAB SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO UNDERDRAIN INSTALLATION.

SIEVE SIZE	%PASSING (BY WEIGHT)
3/8"	100
#4	85 TO 100
#10	65 TO 100
#20	40 TO 85
#40	10 TO 40
#60	0 TO 25
#100	0 TO 7
#200	0 TO 2

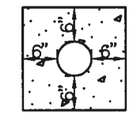
UNDERDRAIN PIPE: THE UNDERDRAIN SHALL BE SLOTTED POLYETHYLENE CORRUGATED PIPE A.S.T.M F-405-77 OR A.A.S.H.T.O. M-252 WRAPPED WITH SPUN BONDED SYNTHETIC FABRIC FACTORY INSTALLED EQUAL TO TYPAR (DUPONT) 3401. HAVING A MINIMUM SLOTTED AREA OF 1 SQ. IN./FT. OF PIPE MANUFACTURED BY A.D.S. OR HANCOR.

CLEAN-OUTS: CLEAN-OUT POINTS SHALL BE PROVIDED AS SHOWN ON THE PLANS, BUT IN NO INSTANCE BE MORE THAN 250 FEET FROM AN OPENING.

BACKFILLING: TRENCH SHALL BE BACKFILLED IN SUCH A MANNER AS TO AVOID DAMAGE TO PIPE OR BARRIER OR DISPLACEMENT OF THE FILTER MATERIAL. TRENCH SHALL BE COMPACTED TO A DENSITY EQUAL TO THE ADJACENT SOILS.

⚠B UNDERDRAIN, TYPE SPECIAL

N.T.S.



CONCRETE PAD DETAIL

CLEANOUT DETAIL FOR SINGLE UNDERDRAIN FILTER SYSTEM

N.T.S.

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	REVISED UNDERDRAIN TYPE 1 TO TYPE SPECIAL	2/11/09	SRJ/979	

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 – SEGMENT B

DATE: 8/07
HORIZONTAL SCALE: AS SHOWN
VERTICAL SCALE: AS SHOWN
SEC: TWP: RGE:

TITLE: DRAINAGE DETAILS

CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000

MITCHELL D. McKNIGHT, P.E.
FLORIDA LIC. NO. 41444

INDEX NUMBER: B-05925-000-000XXX
SHEET NUMBER: 171

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ADDENDUM 2

Vh 197
Vh 198
Vh 199
Vh 200
Vh 201
Vh 202
Vh 203
Vh 204
Vh 205
Vh 206
Vh 207
Vh 208
Vh 209

1" BELOW-GROUND ARV ASSEM IN MH (5'DIA) RIM EL 45.61

1-50PR BT
OE & CATV
EXIST AERIAL CATV TO REMAIN
EXIST U.G. CATV TO REMAIN
FDOT R/W Line
4" CATV
60" RCP
54" RCP
574 LF 4" PVC (C-900, DR-18) FM
Exist B.H.N. Pole Vault
18" MIN
10 20 40

42" RCP
18" RCP
24" RCP
24" x38" RCP
14" X23" ERCP
34" X53" ERCP
30" RCP
24" RCP
18" HDPE FM (DR-11) DIRECTIONAL BORE
PT +34.02

S-951
S-952
S-953
S-954
S-954A
S-955
S-813
S-814
S-815
S-816

TOB
Edge of Pavt
℄ CONST
STA 206+19.98 ℄ CONST US 301 = STA 50+00.00 ℄ CONST FORT HAMER RD

U.S. 301 (SR 43)
FORT HAMER RD

(2) 18" HDPE 45° BENDS (VERT)
RELOCATE FH ASSEM 6" 90° BEND
6 LF 6" PVC (C-900, DR-18) R.J. WM
20 LF 16" PVC (C-905, DR-18) R.J. FM
18" HDPE x 16" M.J. ADAPTER
248 LF 18" HDPE (DR-11) FM
16" PLUG VALVE
18" HDPE x 16" M.J. ADAPTER
EXIST U.G. CATV TO REMAIN
2" BELOW-GROUND ARV ASSEM IN MH (5'DIA) RIM EL 47.55

2X4" BT
3-BT
2X900PR BT
2" CATV
ADJ BFV (Typ)
ADJ Gv (Typ)
24" CMP
24" DIP WM
14" X23" ERCP
Co R/W Line
Maintained R/W Line

NOTE:
36" MINIMUM COVER UNLESS SHOWN OTHERWISE.

STA 203+90, 61'LT 1" BELOW-GROUND ARV ASSEM IN MH (5'DIA)
STA 206+41, 80'RT 18" HDPE x 16" M.J. ADAPTER
STA 206+50, 78'RT 16" PLUG VALVE
STA 206+60, 76'RT 18" HDPE x 16" M.J. ADAPTER
STA 208+00, 60'RT 2" BELOW-GROUND ARV ASSEM IN MH (5'DIA)
STA 208+21, 66'RT RELOCATE FH ASSEM 6" 90° BEND
STA 208+77, 60'RT 18" HDPE 45° BEND (VERT)
STA 208+90, 60'RT 18" HDPE 45° BEND (VERT)

Exist Grade @ ℄ Const
Vvh 173 42.51
Vvh 174 40.78
1-600PR BT
4" CATV
3-BT
2X4" BT
6" PE GAS
24" DIP WM
18" MIN
4" PVC (C-900, DR-18) FM
24" x38" ERCP
(2) 24" RCP
18" HDPE (DR-11) DIRECTIONAL BORE FM
16" PVC (C-905, DR-18) R.J. FM
FIELD DEFLECTION
18" HDPE (DR-11) FM
FH ASSEM
GAS

SEE FT HAMER UTILITY ADJUSTMENTS FOR ADDITIONAL INFORMATION, SHEET 342

50
46
42
38
34

203 204 205 206 207 208 209

REV. NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	ADDENDUM 2 – REVISED 4"PVC FM	1/29/09	MRK/2473	

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 – SEGMENT B

DATE:
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=4'
SEC: TWP: RGE:

TITLE: US 301 UTILITY ADJUSTMENTS 203+00 TO 209+00

CROSS REFERENCE FILE NO.:

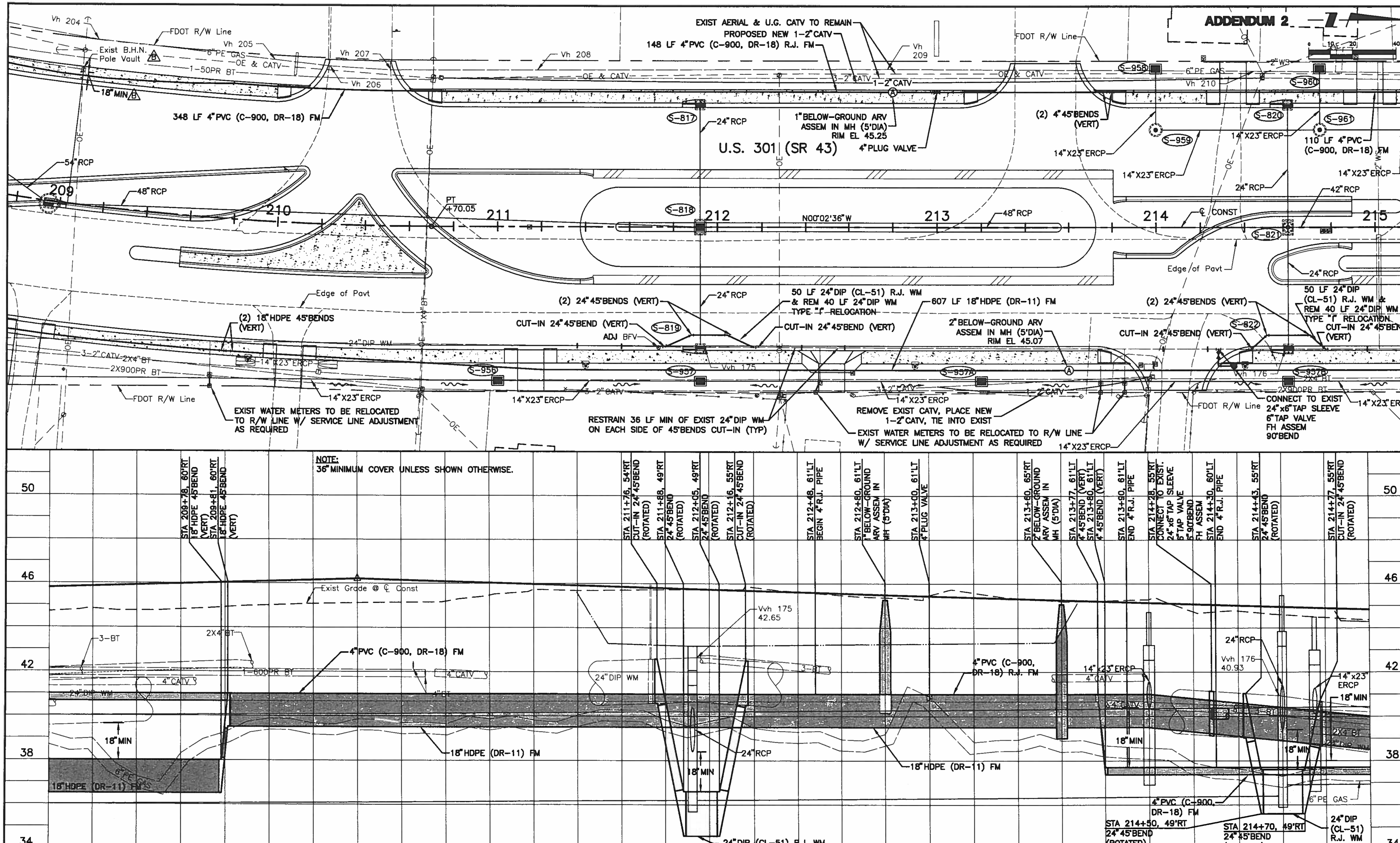
PROJECT NUMBER: 05925-000-000

ROBERT J. HALBACH, P.E.
FLORIDA LICENSE NO. 40139

INDEX NUMBER: B-05925-000-000XXX

SHEET NUMBER: 335

Saved: 1/29/2009 3:10:35 PM MKRKLAH | Plotted: 1/29/2009 3:12:47 PM MKRKLAH | X:\ENG\05925\001\Rev08\05925-001335.dwg\Layout1


ADDENDUM 2
U.S. 301 (SR 43)
EXIST AERIAL & U.G. CATV TO REMAIN
PROPOSED NEW 1-2" CATV
148 LF 4" PVC (C-900, DR-18) R.J. FM
348 LF 4" PVC (C-900, DR-18) FM
1" BELOW-GROUND ARV ASSEM IN MH (5'DIA) RIM EL 45.25
4" PLUG VALVE
(2) 4" 45°BENDS (VERT)
110 LF 4" PVC (C-900, DR-18) FM
FDOT R/W Line
Exist B.H.N. Pole Vault
6" PE GAS
OE & CATV
1-50PR BT
18" MIN
54" RCP
48" RCP
42" RCP
24" RCP
14" X23" ERCP
PT +70.05
N00°02'36" W
Edge of Pavt
C CONST
(2) 18" HDPE 45°BENDS (VERT)
(2) 24" 45°BENDS (VERT)
CUT-IN 24" 45°BEND (VERT)
ADJ BFV
50 LF 24" DIP (CL-51) R.J. WM & REM 40 LF 24" DIP WM TYPE "I" RELOCATION
607 LF 18" HDPE (DR-11) FM
2" BELOW-GROUND ARV ASSEM IN MH (5'DIA) RIM EL 45.07
EXIST WATER METERS TO BE RELOCATED TO R/W LINE W/ SERVICE LINE ADJUSTMENT AS REQUIRED
RESTRAIN 36 LF MIN OF EXIST 24" DIP WM ON EACH SIDE OF 45°BENDS CUT-IN (TYP)
REMOVE EXIST CATV, PLACE NEW 1-2" CATV, TIE INTO EXIST
CONNECT TO EXIST 24"x6" TAP SLEEVE 6" TAP VALVE FH ASSEM 90°BEND
NOTE: 36" MINIMUM COVER UNLESS SHOWN OTHERWISE.
STA 209+78, 60'RT 18" HDPE 45°BEND (VERT)
STA 209+81, 60'RT 18" HDPE 45°BEND (VERT)
STA 211+76, 54'RT CUT-IN 24" 45°BEND (ROTATED)
STA 211+88, 49'RT 24" 45°BEND (ROTATED)
STA 212+05, 49'RT 24" 45°BEND (ROTATED)
STA 212+16, 55'RT CUT-IN 24" 45°BEND (ROTATED)
STA 212+48, 61'LT BEGIN 4" R.J. PIPE
STA 212+80, 61'LT 1" BELOW-GROUND ARV ASSEM IN MH (5'DIA)
STA 213+00, 61'LT 4" PLUG VALVE
STA 213+60, 65'RT 2" BELOW-GROUND ARV ASSEM IN MH (5'DIA)
STA 213+77, 61'LT 4" 45°BEND (VERT)
STA 213+80, 61'LT 4" 45°BEND (VERT)
STA 213+90, 61'LT END 4" R.J. PIPE
STA 214+28, 55'RT CONNECT TO EXIST. 24"x6" TAP SLEEVE 6" TAP VALVE 6" 90°BEND FH ASSEM
STA 214+30, 60'LT END 4" R.J. PIPE
STA 214+43, 55'RT 24" 45°BEND (ROTATED)
STA 214+77, 55'RT CUT-IN 24" 45°BEND (ROTATED)
Exist Grade @ C Const
4" PVC (C-900, DR-18) FM
4" PVC (C-900, DR-18) R.J. FM
18" HDPE (DR-11) FM
24" DIP (CL-51) R.J. WM
Vvh 175 42.65
Vvh 176 40.93
STA 214+50, 49'RT 24" 45°BEND (ROTATED)
STA 214+70, 49'RT 24" 45°BEND (ROTATED)
50
46
42
38
34
209
210
211
212
213
214
215

B	ADDENDUM 2 - REVISED 4" PVC FM	1/29/09	MRK/2473	
ΔREV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 - SEGMENT B

HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=4'

TITLE: US 301 UTILITY ADJUSTMENTS 209+00 TO 215+00

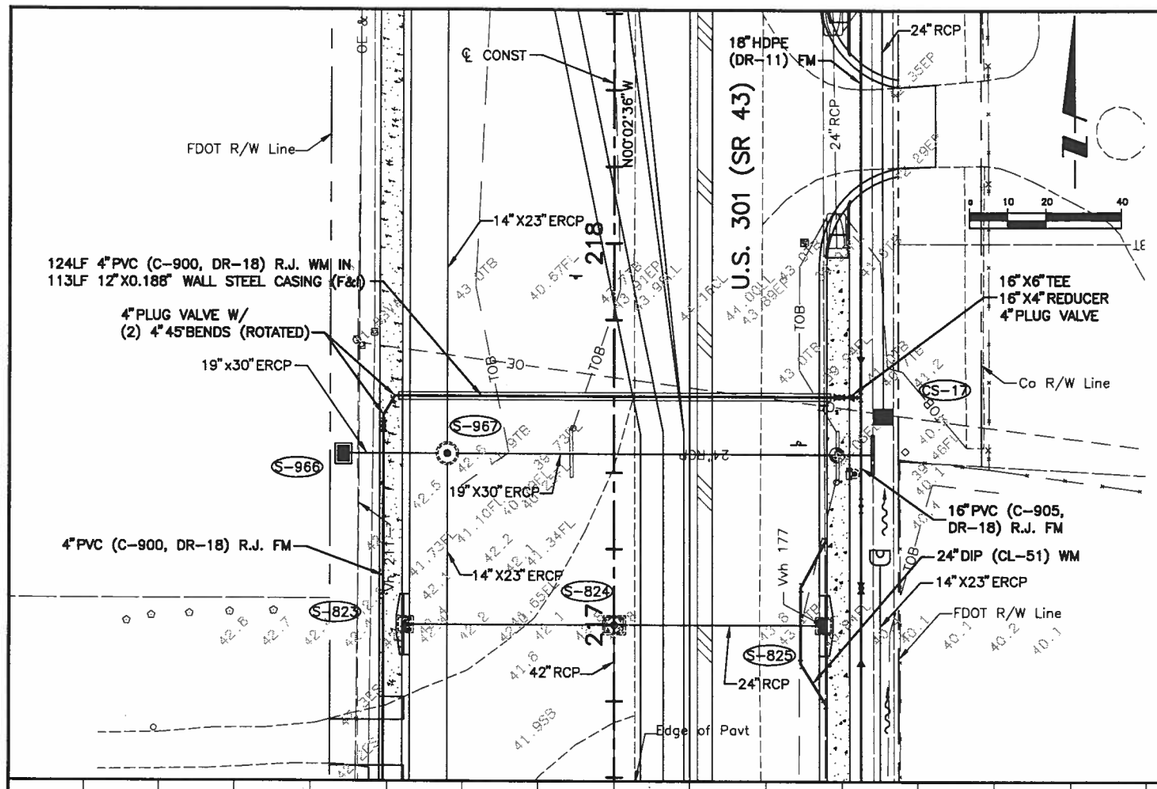
PROJECT NUMBER: 05925-000-000

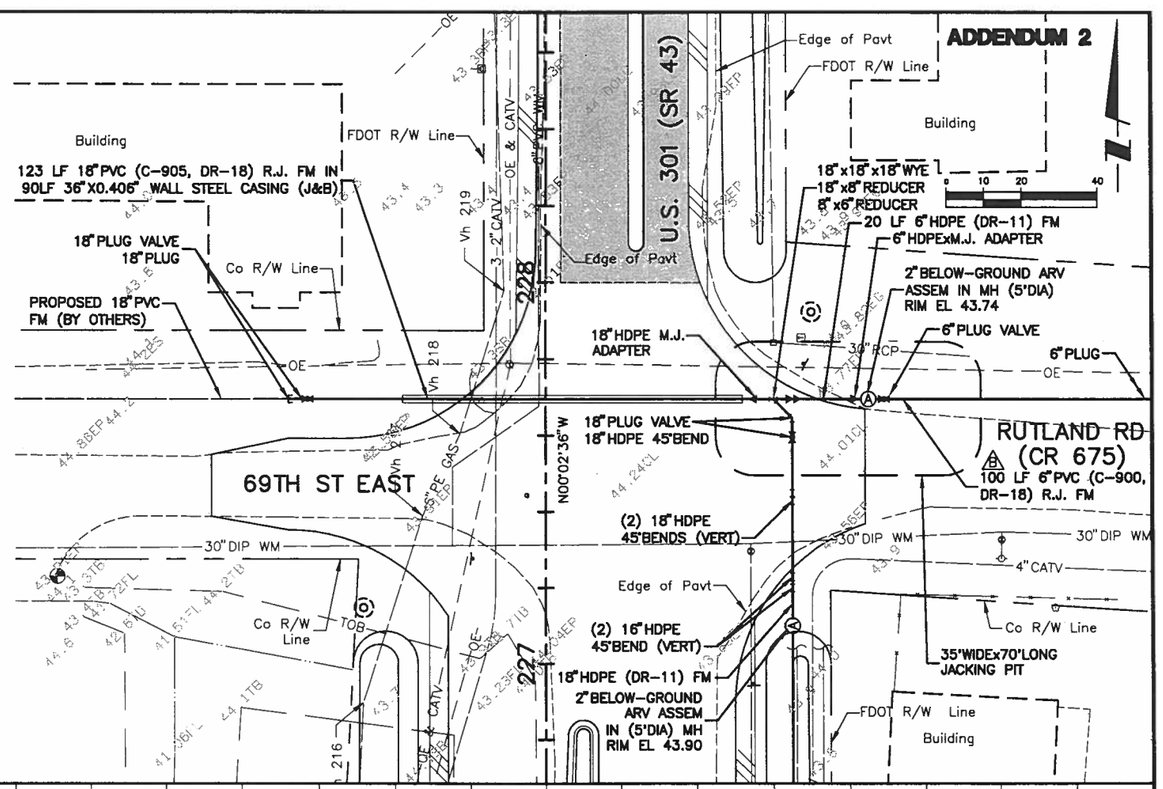
ROBERT J. HALBACH, P.E. FLORIDA LICENSE NO. 40139

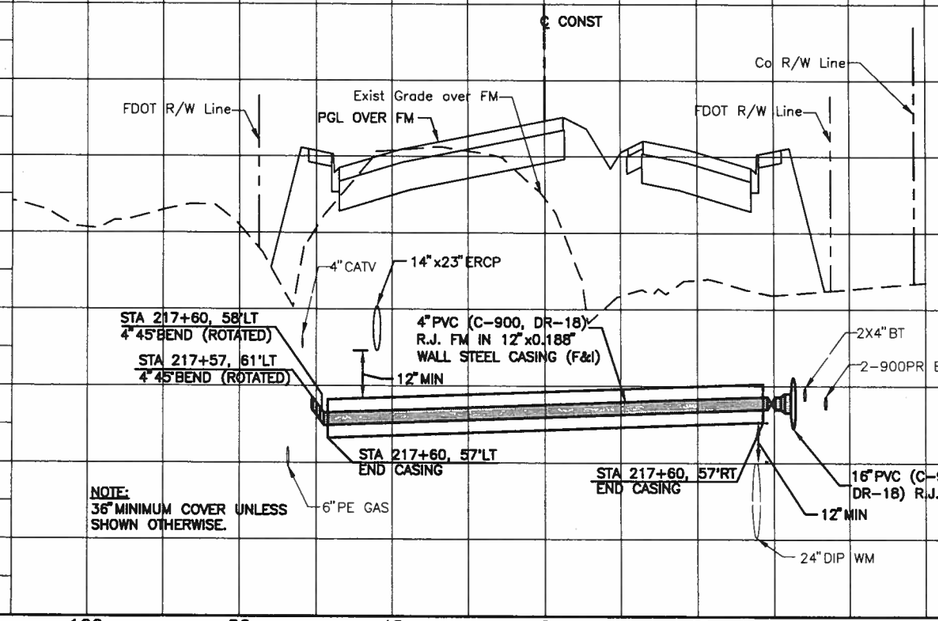
INDEX NUMBER: B-05925-000-000XXX

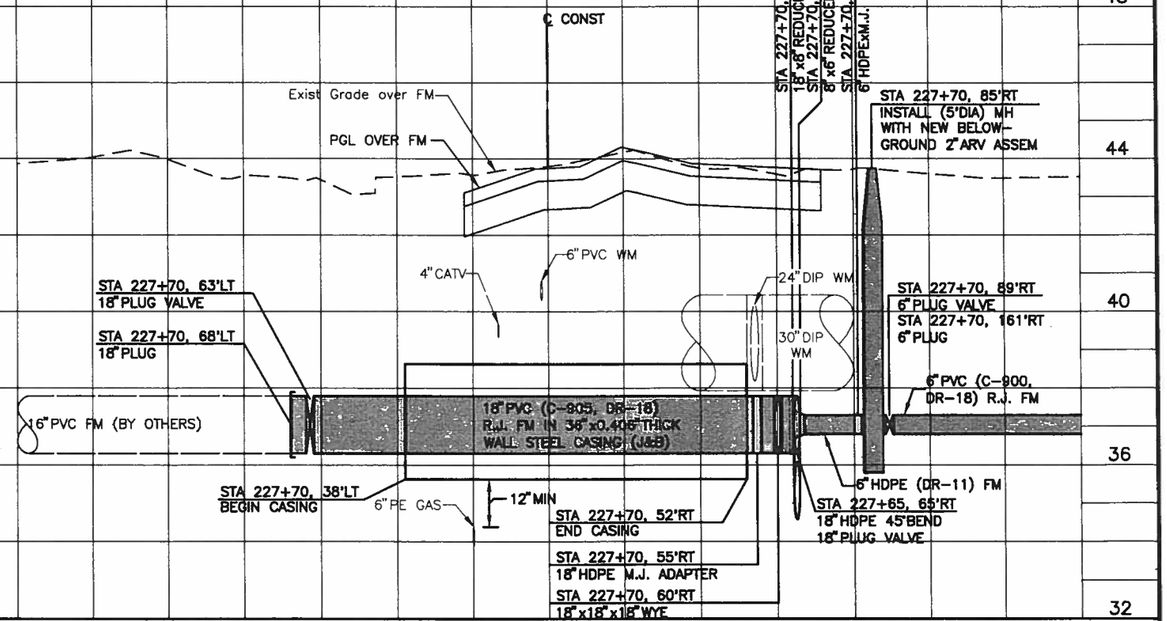
SHEET NUMBER: 336

ADDENDUM 2









REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	ADDENDUM 2 – REVISED 6" PVC FM	1/29/09	MRK/2473	

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CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 – SEGMENT B

DATE: 02/08
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'
SEC: TWP: RGE:
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000

TITLE: US 301
UTILITY ROAD CROSSING
4" FM STA 217+60 AND 16" FM STA 227+70

ROBERT J. HALBACH, P.E.
FLORIDA LICENSE NO. 40139

INDEX NUMBER: B-05925-000-000XXX
SHEET NUMBER: 353

CONSTRUCTION PLANS FOR

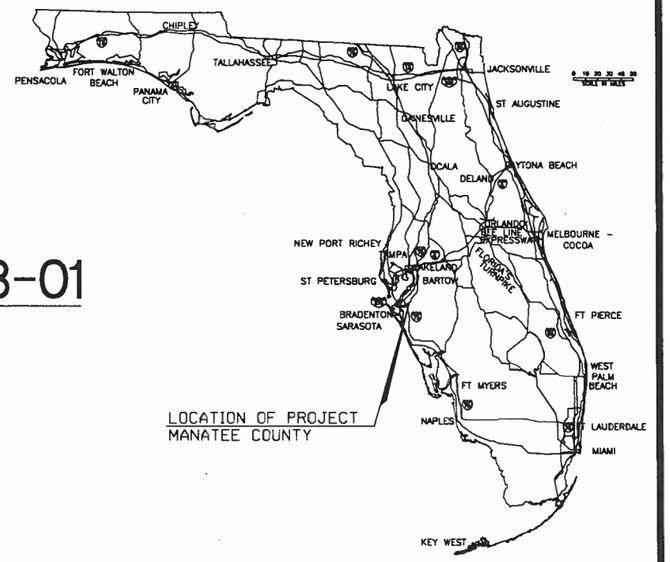
US 301 (SR 43) - SEGMENT B

OLD TAMPA ROAD/ERIE ROAD TO RUTLAND ROAD (CR 675)

MANATEE COUNTY

FDOT FINANCIAL PROJECT ID No. 422603-1-58-01

SIGNALIZATION PLANS



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

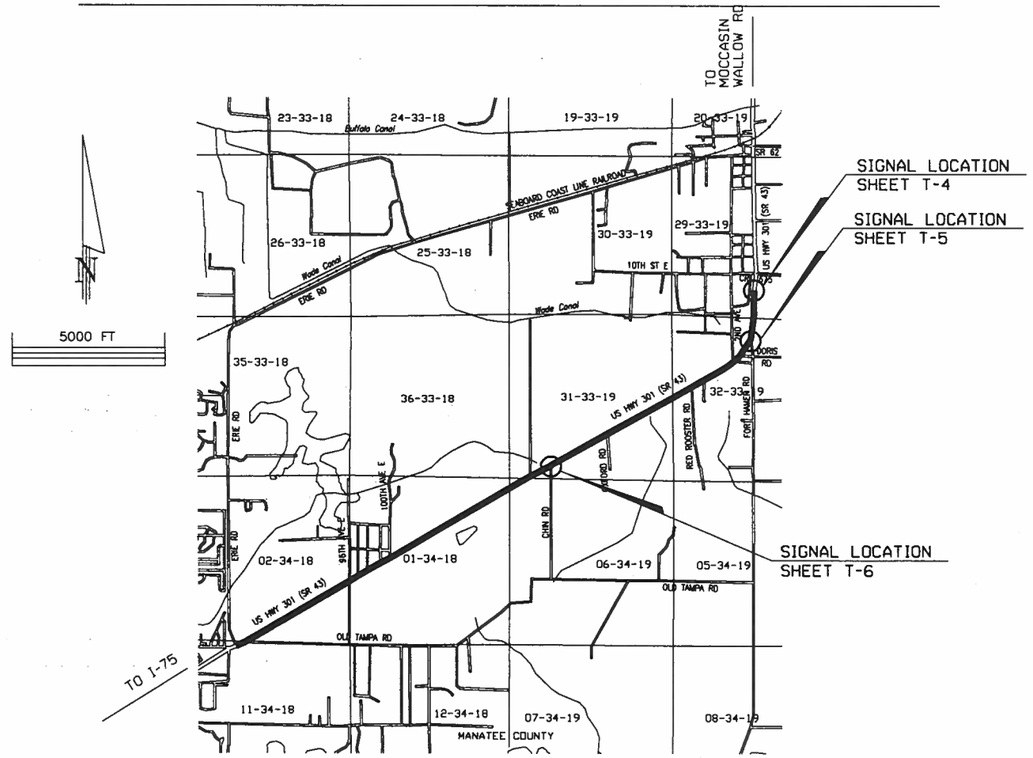
GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED 2008, AND APPLICABLE SECTIONS, ARTICLES AND SUBARTICLES OF DIVISION I AND ALL DIVISION II & III OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2007, AS AMENDED BY CONTRACT DOCUMENTS.

APPLICABLE DESIGN STANDARDS MODIFICATIONS: 07-01-08

FOR DESIGN STANDARDS MODIFICATIONS CLICK ON "DESIGN STANDARDS" AT THE FOLLOWING WEB SITE:
http://www.dot.state.fl.us/rddesign/

INDEX OF LIGHTING PLANS

REVISIONS		
DATE	BY	DESCRIPTION
02/11/09	GAR	(B) ADDENDUM 2



LOCATION MAP

PREPARED FOR

WILLIAMS & HEROLD, LLC

714 MANATEE AVENUE EAST
BRADENTON, FL 34208

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SIGNALIZATION PLANS
ENGINEER OF RECORD:
WAYNE P. HARTT, P.E.

P.E. NO.: 48062

FINAL PLANS

Saved: 1/9/2008 3:04:28 PM SJOHNSON | Plotted: 1/9/2008 3:08:25 PM SJOHNSON | X:\ENC\050925\001\WM-Sent\WM-TR-2008-01-09\Signal Key Sht.dwg Layout: 1

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS T-4 PLAN	T-4 FINAL	T-5 PLAN	T-5 FINAL	T-6 PLAN	T-6 FINAL	TOTAL THIS SHEET PLAN	TOTAL THIS SHEET FINAL	GRAND TOTAL PLAN	GRAND TOTAL FINAL	REF. SHEET
555-1-1	DIRECTIONAL BORE (< 6")	LF			170		295		465		465		
630-1-11	CONDUIT - SIGNALS (F & I) (ABOVEGROUND)	LF	25		20		20		65		65		
630-1-12	CONDUIT - SIGNALS (F & I) (UNDERGROUND)	LF			230		1105		1335		1335		
632-7-1	CABLE (SIGNAL) (F&I)	PI	1		1		1		3		3		
634-4-112	SPAN WIRE ASSEMBLY (F&I) (TWO WIRE) (DIAGONAL)	PI	1						1		1		
635-1-11	PULL & JUNCTION BOXES (F & I) (PULL BOX)	EA			5		12		17		17		
639-1-13	ELECTRICAL POWER SERVICE (OVERHEAD)	AS	1						1		1		
639-1-22	ELECTRICAL POWER SERVICE (UNDERGROUND)												
	(PURCHASED BY CONTRACTOR FROM POWER COMPANY)	AS			1		1		2		2		
639-2-1	ELECTRICAL SERVICE WIRE (F&I)	LF	390		180		180		750		750		
641-2-11	PRESTRESSED CONCRETE POLES (F&I) (TYPE P-II)	EA			1		1		2		2		
641-2-16	PRESTRESSED CONCRETE POLES (F&I) (TYPE P-VI)	EA	2						2		2		
649-31-202	MAST ARM ASSEMBLY (F & I) (130) (46)	EA			1				1		1		
649-31-203	MAST ARM ASSEMBLY (F & I) (130) (60)	EA					1		1		1		
649-31-204	MAST ARM ASSEMBLY (F & I) (130) (70.5)	EA					1		1		1		
649-31-210	MAST ARM ASSEMBLY (F & I) (130) (36-36)	EA			1				1		1		
649-31-216	MAST ARM ASSEMBLY (F & I) (130) (46-70.5)	EA					1		1		1		
650-51-121	TRAFFIC SIGNAL (F & I) (1 SECTION, 2 WAY)	AS	4						4		4		
650-51-311	TRAFFIC SIGNAL (F & I) (3 SECTION, 1 WAY)	AS			6		9		15		15		
650-51-511	TRAFFIC SIGNAL (F & I) (5 SECTION, 1 WAY) (STANDARD)	AS					2		2		2		
653-191	PEDESTRIAN SIGNAL (F & I) (LED COUNTDOWN)												
	(STANDARD) (1 WAY)	EA					4		4		4		
653-192	PEDESTRIAN SIGNAL (F & I) (LED COUNTDOWN)												
	(STANDARD) (2 WAY)	EA					2		2		2		
659-101	SIGNAL HEAD AUX'S (F & I) (BACK PLATES) (3 SECTION)	EA			6		9		15		15		
659-106	SIGNAL HEAD AUX'S (F & I) (TUNNEL VISORS)	EA	8		18		37		63		63		
659-107	SIGNAL HEAD AUX'S (F & I) (ALUMINUM PEDESTAL)	EA					7		7		7		
659-111	SIGNAL HEAD AUX'S (F & I) (BACK PLATES) (1 SECTION)	EA	8						8		8		
659-118	SIGNAL HEAD AUX'S (F & I) (BACK PLATES) (5 SECTION)	EA					2		2		2		
663-74-11	VEHICLE DETECTOR ASSEMBLIES (F & I) (OPTICAL TYPE)	EA					6		6		6		
665-11	PEDESTRIAN DETECTOR (F & I) (POLE OR CONTROLLER												
	CABINET MOUNTED DETECTOR STATION)	EA					8		8		8		
670-4-1	FLASHING BEACON CONTROLLER ASSEMBLY (F&I)	AS	1						1		1		
670-5-111	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA)												
	(ONE PREEMPTION PLAN)	AS			1		1		2		2		
690-10	SIGNAL HEAD TRAFFIC ASSEMBLY, REMOVAL	EA	4						4		4		
690-32-1	POLE REMOVAL (SHALLOW)	EA	1						1		1		
690-33-1	POLE REMOVAL (DEEP)	LF	20						20		20		
690-80	SPAN WIRE ASSEMBLY, REMOVE	EA	1						1		1		
690-90	CONDUIT AND CABLING, REMOVE	PI	1						1		1		
690-100	SIGNAL EQUIPMENT, MISCELLANEOUS REMOVE	PI	1						1		1		
699-1-1	INTERNALLY ILLUMINATED SIGN	EA					4		4		4		
700-48-18	SIGN PANEL (F & I) (15 OR LESS)	EA			2				2		2		

REV NO.	REVISION	DATE	DRAWN BY / DEP. NO.	CHECKED BY / DEP. NO.
1	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475

ACTIVITY	INITIALS/DEP. NO.	DATE
DESIGNED BY:	RDM/1475	06/08
DRAWN BY:	GAR/1980	06/08
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 – SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NA
VERTICAL SCALE: NA
SEC: TWP: RGE:

TITLE: TABULATION OF QUANTITIES

CROSS REFERENCE FILE NO.:

PROJECT NUMBER: 05925-000-000

INDEX NUMBER: B-05925-000-000XXX

SHEET NUMBER: T-2

SIGNALIZATION GENERAL NOTES:

1. THE IMPLEMENTATION OF THE SIGNALIZATION PLANS SHALL BE IN ACCORDANCE WITH THE 2003 EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE 2000 EDITION OF THE MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNAL DEVICES, AND MANATEE COUNTY TRAFFIC MANAGEMENT'S TRAFFIC SIGNAL AND STREET LIGHTING DESIGN AND CONSTRUCTION GUIDE, LATEST EDITION.

2. THE MAINTAINING AGENCY IS MANATEE COUNTY. CONTRACTOR SHALL CONTACT THE MANATEE COUNTY TRAFFIC DIVISION MANAGER SEVEN DAYS PRIOR TO BEGINNING WORK.

3. THE LOCATIONS OF UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED Vv, Vh AND Vvh) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATION/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN POINTS HAVE NOT BEEN VERIFIED. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS PRIOR TO PERFORMING ANY EXCAVATION OPERATION AND COORDINATE ANY NECESSARY RELOCATIONS.

4. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS THROUGH SUNSHINE ONE CALL OF FLORIDA, INC. (1-800-432-4770) AND UTILITY OWNERS LISTED TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION ON THE JOB SITE.

5. CONSTRUCTION SHALL NOT DEVIATE FROM THE APPROVED PLANS. CONTRACTOR SHALL FURNISH MANATEE COUNTY WITH TWO SETS OF "AS-BUILT" PLANS AT THE TIME OF FINAL ACCEPTANCE INSPECTION.

6. MANATEE COUNTY
   TRAFFIC DIVISION MANAGER
   P.O. BOX 1000
   BRADENTON, FL 34206-1000
   (941) 708-7450

7. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY COMPANY AT LEAST TWO WORKING DAYS IN ADVANCE OF POLE SETTING OPERATIONS WHERE CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED. ALL SAFETY CLEARANCES TO PRIMARY ELECTRICAL LINES SHALL BE STRICTLY ADHERED TO.

8. THE CONTRACTOR SHALL MEET ALL CRITERIA OUTLINED IN "THE MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNALS AND DEVICES".

9. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY DIRECTIONAL DRILLING OR TRENCHING.

10. A #14 AWG INSULATED PULL WIRE SHALL BE INSTALLED IN ALL SPARE CONDUITS. AT LEAST TWO FEET OF PULL WIRE SHALL BE ACCESSIBLE AT EACH CONDUIT TERMINATION AND BE SECURED WITHIN THE PULL BOX. PAYMENT FOR THE PULL WIRE SHALL BE INCIDENTAL TO THE CONDUIT.

11. ALL UNDERGROUND CONDUIT ENTRY HOLES ON SIGNAL POLES SHALL BE STUBBED OUT AND CAPPED IN A PROPOSED PULL BOX.

12. AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE IN CLOSE PROXIMITY TO THE SIGNAL POLE FOUNDATION OR CONDUIT RUN AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL HAND-DIG THE FIRST 48 INCHES OF DEPTH FOR THE POLE FOUNDATION OR THE CONDUIT RUN.

13. ALL FIELD WIRING, INCLUDING SIGNAL HEAD WIRING SHALL BE IDENTIFIED WITH CLEARLY MARKED WEATHERPROOF TAGS. THE PROPOSED TAGGING SYSTEM SHALL BE IN ACCORDANCE WITH THE FDOT AND THE MAINTAINING AGENCY'S STANDARD SPECIFICATIONS.

14. ALL SIGNAL HEADS SHALL BE MOUNTED VERTICALLY.

SIGNALIZATION PAY ITEM NOTES:

555-1-1:
CONDUITS INSTALLED WITH THE DIRECTIONAL BORE METHOD SHALL BE HDPE WITH A MINIMUM SIZE OF 2 INCHES UNLESS OTHERWISE NOTED IN THE PLANS.

630-1-12:
ALL CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC AND FIELD ADJUSTMENTS MAY BE NECESSARY. ALL CONDUIT SHALL BE SCHEDULE 40 PVC WITH A MINIMUM SIZE OF 2 INCHES UNLESS OTHERWISE NOTED IN THE PLANS. INSTALL CONDUIT UNDER PROPOSED ROADWAY AND/OR SIDEWALK 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 SEVEN (7) CONDUCTOR SIGNAL CABLE.

635-1-11:
PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. WHERE 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.

639-1-13:
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.

641-2-16:
USE TWO 2" CONDUITS (EXCEPT FOR THE POLE LOCATED ADJACENT TO THE CONTROLLER CABINET, WHICH WILL HAVE THREE 2" CONDUITS) STUBBED OUT THROUGH PRESTRESSED CONCRETE POLE FOOTER AND TEMPORARILY SEAL. ADD AUXILIARY HOLES FOR FUTURE SIGNALIZATION.

649-31-202, 649-31-203, 649-31-204, 649-31-210 AND 649-31-216:
ALL MAST ARMS AND POLES ARE TO BE GALVANIZED AND NON-PAINTED. USE THREE 2" AND ONE 3/43" CONDUITS STUBBED OUT THROUGH THE MAST ARM FOUNDATION AND TEMPORARILY SEAL.

650-51-121, 650-51-311, 653-191 AND 653-192:
ALL LIGHT SOURCES FOR TRAFFIC SIGNALS SHALL BE LIGHT EMITTING DIODE (LED). PEDESTRIAN SIGNALS SHALL BE INTERNATIONAL SYMBOL WITH COUNTDOWN CLOCK. ON MAST ARMS, USE SIGNAL HEAD SUPPORTING TUBE THAT IS CAPABLE OF ADJUSTING VERTICALLY A MINIMUM OF 1.5 FEET. ON SPAN WIRE, DISCONNECTS AND SIGNALS ARE TO BE HARDWIRED (NO CINCH JONES PLUG CONNECTORS). USE B-CAP (NON-SILICONE FILLED) TWIST WIRE NUTS FOR ALL CONNECTIONS IN THE DISCONNECT. USE RED, YELLOW, GREEN AND WHITE THHN #14 COPPER WIRES FROM DISCONNECT TO SIGNAL HEAD. PLACE A PERMANENT MARKING ON THE WIRE DESIGNATING THE PHASE USED.

659-101, 659-111 AND 659-118:
USE LOUVERED POLYCARBONATE (OR EQUIVALENT) SIGNAL BACK PLATES.

659-107:
USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOOR FOR PEDESTRIAN PEDESTALS. INSIDE DIAMETER OF PEDESTALS SHALL BE FOUR INCHES (4").

663-74-11:
SEE PLAN SHEETS FOR NUMBER OF VIDEO CAMERAS INCLUDED IN THE VIDEO DETECTION ASSEMBLY.

665-11:
USE PEDESTRIAN BUTTON SIGNAL SIGNS FTP-69B-06 AT ALL DETECTOR LOCATIONS. STREET NAME SHALL BE IN ACCORDANCE WITH STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.

670-4-1:
INCLUDES ALL MOUNTING HARDWARE AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER FOR MOUNTING TO THE CONCRETE STRAIN POLE.

670-5-111:
INCLUDE AN UNINTERUPTED 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'S EXISTING SYSTEM. BASE OF CONTROLLER TO BE AT SAME ELEVATION AS CROWN OF ROADWAY OR GREATER. USE A NEMA 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 TO CONFIRM.

699-1-1:
ALL INTERNALLY ILLUMINATED STREET NAME SIGNS ARE TO BE MOUNTED FREE-SWINGING ON POLE BRACKET ARM ATTACHED TO POLE. CONNECT SIGN CONDUCTORS TO PHOTOELECTRIC CELL LOCATED ON THE ELECTRICAL SERVICE DISCONNECT BOX AND PHOTOELECTRIC CELL CONDUCTORS TO DEDICATED 15 AMP/120 VOLT CIRCUIT BREAKER LOCATED INSIDE THE ELECTRICAL SERVICE DISCONNECT BOX. ALL INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE LIGHT EMITTING DIODE (LED).

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
1	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:	RDM/1475	06/08
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CONTRACT ADMIN. BY:		
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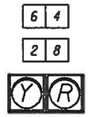
CLIENT: WILLIAMS & HEROLD, LLC
PROJECT: US 301 – SEGMENT B
DATE: 3/07
HORIZONTAL SCALE: NA
VERTICAL SCALE: NA
SEC. TWP. RGE.
TITLE: GENERAL NOTES
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000
INDEX NUMBER: B-05925-000-000XXX
SHEET NUMBER: T-3

SIGNAL HEAD DETAIL

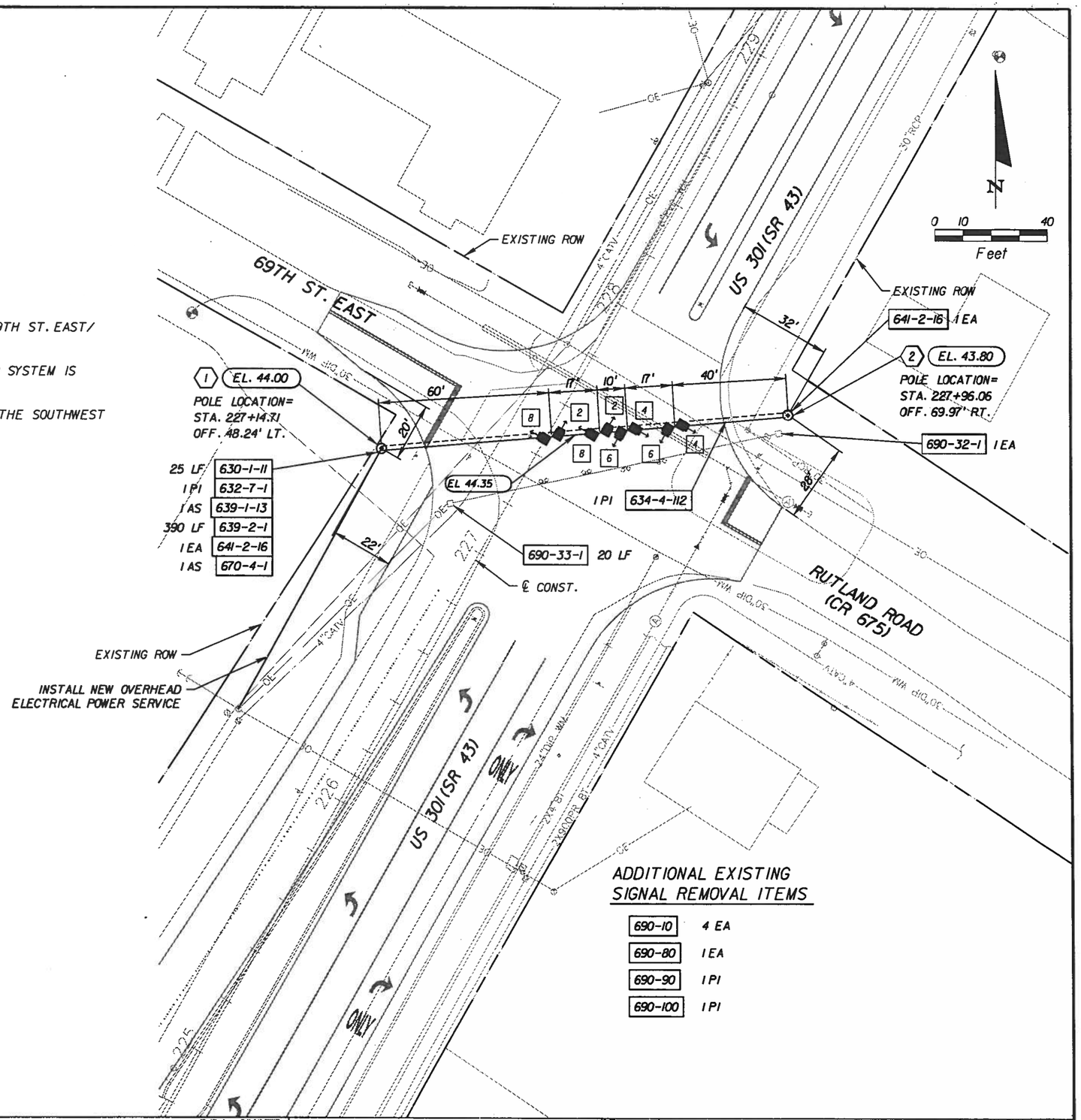


1-SECT., 2-WAY
4 AS
650- 51-121

ALL SIGNAL INDICATIONS SHALL BE INSTALLED WITH TUNNEL VISORS, ITEM 659-106, 8 EA.
ALL SIGNAL HEADS SHALL BE INSTALLED WITH BACK PLATES, ITEM 659-111, 8 EA.

NOTES

1. MAJOR STREET IS US 301 (S.R. 43), MOVEMENTS 2 AND 6 (YELLOW INDICATION). MINOR STREET IS 69TH ST. EAST/ RUTLAND RD. (C.R. 675), MOVEMENTS 4 AND 8 (RED INDICATION).
2. THE EXISTING FLASHING BEACON SHALL REMAIN IN OPERATION AT ALL TIMES UNTIL THE PROPOSED SYSTEM IS FULLY OPERATIONAL AND HAS BEEN ACCEPTED BY MANATEE COUNTY.
3. FLASHING BEACON CONTROLLER ASSEMBLY SHALL BE MOUNTED TO THE CONCRETE STRAIN POLE IN THE SOUTHWEST QUADRANT.



ADDITIONAL EXISTING SIGNAL REMOVAL ITEMS

690-10	4 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	ACTIVITY	INITIALS/EMP. NO.	DATE
					DESIGNED BY:	RDM/1475	06/08
					DRAWN BY:	GAR/1980	06/08
					CHECKED BY:		
1	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475	CONTRACT ADMIN. BY:		
					WM APPROVED BY:		

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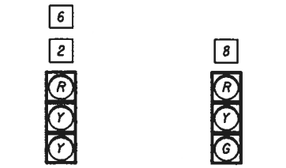
CLIENT: WILLIAMS & HEROLD, LLC
PROJECT: US 301 – SEGMENT B
DATE: 5/07
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: NA
SEC. TWP. RGE:
TITLE: SIGNALIZATION PLANS
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000
INDEX NUMBER: B-05925-000-000XXX
SHEET NUMBER: T-4

SIGNAL HEAD DETAIL



ALL SIGNAL HEADS SHALL BE INSTALLED WITH BACK PLATES, ITEM 659-101, 6 EA. ALL INDICATIONS SHALL BE INSTALLED WITH TUNNEL VISORS, ITEM 659-106, 18 EA.

NOTES

1. ALL SIGNAL HEADS SHALL BE PROGRAMMED TO OPERATE IN FLASH MODE. MOVEMENTS 2 AND 6 SHALL DEFAULT TO FLASHING YELLOW, MOVEMENTS 1 AND 8 FLASHING RED. PRE-EMPTION SIGNAL SHALL ACTUATE STEADY YELLOW FOLLOWED BY STEADY RED INDICATIONS FOR MOVEMENTS 2 AND 6 AND A STEADY GREEN INDICATION FOR MOVEMENT 8.

2. PROJECT ENGINEER IS TO COORDINATE FINAL LOCATION OF PUSH BUTTONS AND CONDUIT IN FIRE STATION WITH STATION PERSONNEL.

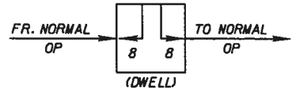
3. THE FLASHING OPERATION SHALL BE TERMINATED BY AN ACTUATION FROM THE FIRE STATION WITH A MINIMUM OF 5.0 SECONDS OF STEADY YELLOW CLEARANCE TIME ON THE MAIN LINE. THE TIMINGS FOR THE EMERGENCY PRE-EMPTION PHASE SHALL BE DETERMINED BY AVERAGING A MINIMUM OF TWO PRACTICE RUNS OF THE EMERGENCY VEHICLES. THIS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE FIRE STATION, MAINTAINING AGENCY, AND PROJECT ENGINEER. A COPY OF THE FINAL TIMINGS SHALL BE SENT TO:

   DISTRICT 1 TRAFFIC OPERATIONS ENGINEER
   P.O. BOX 1249
   BARTOW, FL 33831

PRE-EMPTION TIMINGS	
MINIMUM GREEN BEFORE PRE-EMPTION	N/A
YELLOW CLEARANCE	5
ALL RED CLEARANCE	2
MINIMUM DWELL	TBD*
YELLOW CLEARANCE	3.5
ALL RED CLEARANCE	2

* TIMING TO BE DETERMINED BASED ON ON-SITE TEST-RUN STUDY AS DESCRIBED IN THE MUTCD, SECTION 4F.03. (SEE NOTE 3)

SPECIAL P.O.P.

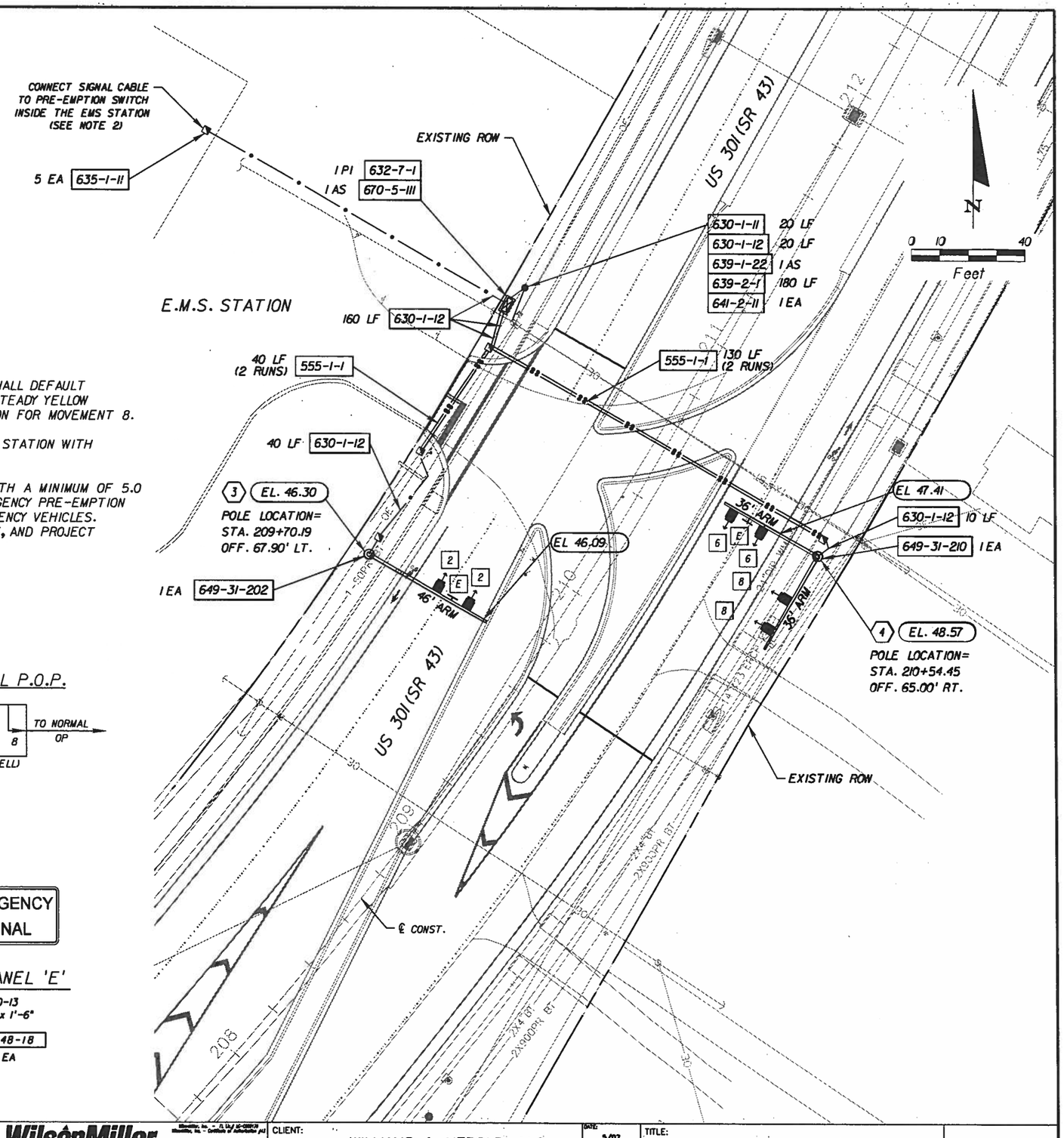


EMERGENCY SIGNAL

SIGN PANEL 'E'

R10-13
3'-0" x 1'-6"

700-48-18
2 EA



REV NO.	REVISION	DATE	DRAWN BY / DEP. NO.	CHECKED BY / DEP. NO.	ACTIVITY	INITIALS/DEP. NO.	DATE
					DESIGNED BY:	RDM/1475	06/08
					DRAWN BY:	GAR/1980	06/08
					CHECKED BY:		
A	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475	CONTRACT ADMIN. BY:		
					WM APPROVED BY:		

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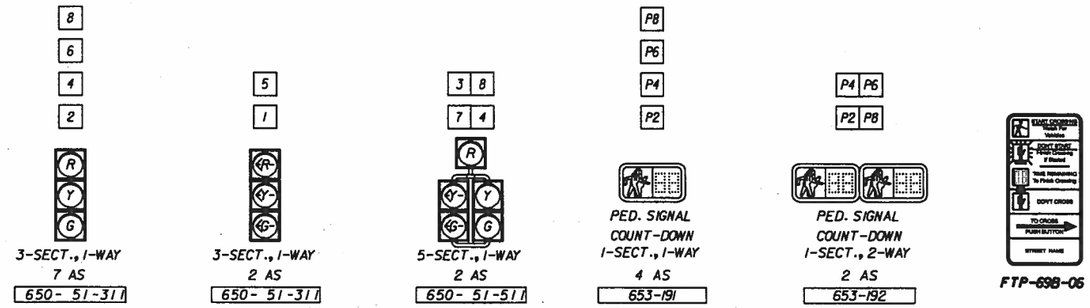
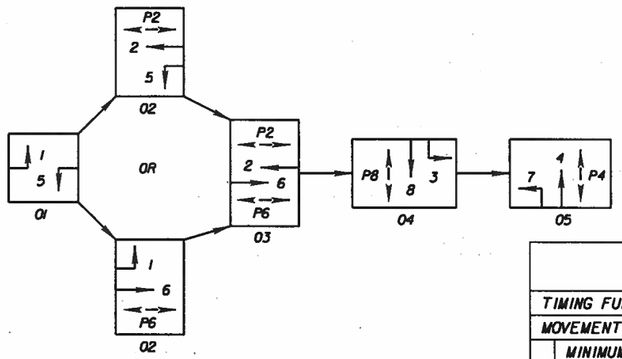
CLIENT: WILLIAMS & HEROLD, LLC
PROJECT: US 301 – SEGMENT B
DATE: 9/07
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: NA
SEC: TWP: RGE:
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000
TITLE: SIGNALIZATION PLANS
INDEX NUMBER: 0-05925-000-000XXX
SHEET NUMBER: T-5

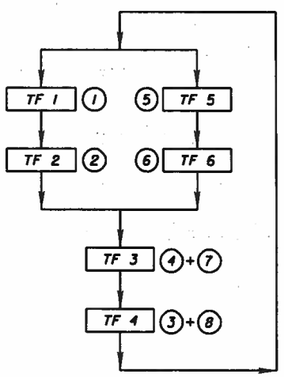
SIGNAL HEAD DETAIL



ALL SIGNAL HEADS SHALL BE INSTALLED WITH BACK PLATES, ITEM 659-101, 9 EA. AND 659-118, 2 EA.
ALL INDICATIONS SHALL BE INSTALLED WITH TUNNEL VISORS, ITEM 659-106, 37 EA.

SOP NO. 9





INTERNALLY ILLUMINATED SIGNS

A	B	C
US 301	CHIN RD	PALM BLVD
699-1-1 2 EA	699-1-1 1 EA	699-1-1 1 EA

NOTE: INTERNALLY ILLUMINATED STREET SIGN ASSEMBLIES SHALL BE DOUBLE-FACED, TWO- WAY MOUNTED FREE SWINGING PER INDEX 17748.

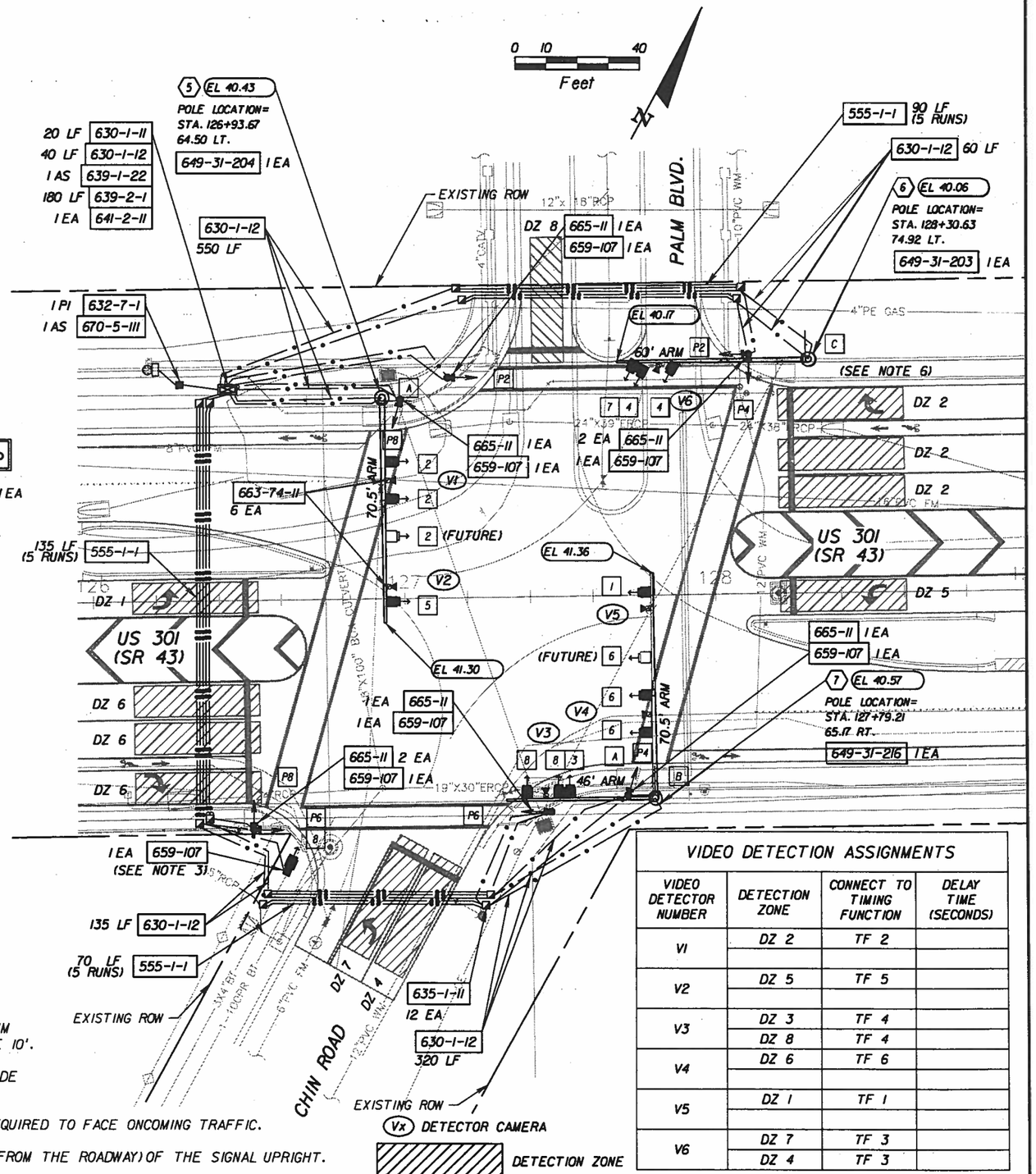
CONTROLLER TIMINGS

	TIMING FUNCTION	1	5	2	6	3	3	4	4
	MOVEMENT NUMBER	1	5	2	6	7	4	3	8
TIMING FUNCTION	MINIMUM GREEN	7	7	20	20	7	7	7	7
	EXTENSION	3	3	3	3	3	3	3	3
	MAXIMUM GREEN 1	8	8	37	37	16	16	16	16
	MAXIMUM GREEN 2					45	45	45	45
	YELLOW CLEARANCE	3.5	3.5	4.7	4.7	3.5	3.5	3.5	3.5
	ALL RED	1	1	1	1	1	1	1	1
	PEDESTRIAN WALK			7	7		7		7
	PED. CLEARANCE			24	20		37		37
	RECALL			MIN	MIN				

NOTE: TIMINGS ARE INITIAL AND MAY REQUIRE ADJUSTMENT BY THE PROJECT ENGINEER. INSTALL CONCURRENT TIMING OF INITIAL AND EXTENSION INTERVALS.

NOTES

1. MAJOR STREET IS US 301 (MOVEMENTS 1, 2, 5, & 6). MINOR STREET IS CHIN RD./PALM BLVD. (MOVEMENTS 3, 4, 7 AND 8).
2. STANDARD SIGNAL OPERATING PLAN NO. 9
3. MOUNT ONE 3-SECTION SIGNAL HEAD FOR MOVEMENT 8 ON STANDARD ALUMINUM PEDESTAL. MINIMUM MOUNTING HEIGHT TO BOTTOM OF SIGNAL HEAD SHALL BE 10'.
4. INSTALL FTP-69B-06 SIGNS AT ALL PEDESTRIAN DETECTOR LOCATIONS. INCLUDE PAYMENT UNDER ITEM 665-11.
5. ROTATE SIGNAL HEADS AND DETECTOR CAMERA FOR MOVEMENTS 4 & 7 AS REQUIRED TO FACE ONCOMING TRAFFIC.
6. MOUNT INTERNALLY ILLUMINATED STREET SIGN "C" TO THE BACK SIDE (AWAY FROM THE ROADWAY) OF THE SIGNAL UPRIGHT.



VIDEO DETECTION ASSIGNMENTS

VIDEO DETECTOR NUMBER	DETECTION ZONE	CONNECT TO TIMING FUNCTION	DELAY TIME (SECONDS)
V1	DZ 2	TF 2	
V2	DZ 5	TF 5	
V3	DZ 3	TF 4	
	DZ 8	TF 4	
V4	DZ 6	TF 6	
V5	DZ 1	TF 1	
V6	DZ 7	TF 3	
	DZ 4	TF 3	

REV NO.	REVISION	DATE	DRAWN BY / DSP. NO.	CHECKED BY / DSP. NO.	ACTIVITY	INITIALS/DSP. NO.	DATE
					DESIGNED BY:	RDM/1475	06/08
					DRAWN BY:	GAR/1980	06/08
					CHECKED BY:		
2	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475	CONTRACT ADMIN. BY:		
					WM APPROVED BY.		

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CLIENT: WILLIAMS & HEROLD, LLC
PROJECT: US 301 – SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: NA
SEC. TWP. RGE.

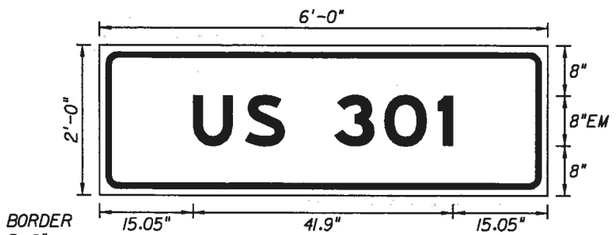
TITLE: SIGNALIZATION PLANS
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925-000-000
WORK NUMBER: B-05925-000-000XXX
SHEET NUMBER: T-6

SIGN NUMBER	A
QUANITY	2 **
WIDTH	6'-0"
HEIGHT	2'-0"
BORDER WIDTH	1"
BORDER RADII	2"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATIONS(S)	White

SYMBOL(S)	X	Y	WID	HT

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH

** INDICATES THE NUMBER OF PANELS REQUIRED FOR SIGN ASSEMBLY. SIGN ASSEMBLY SHALL BE DOUBLE-SIDED, TWO-WAY INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY.



INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY

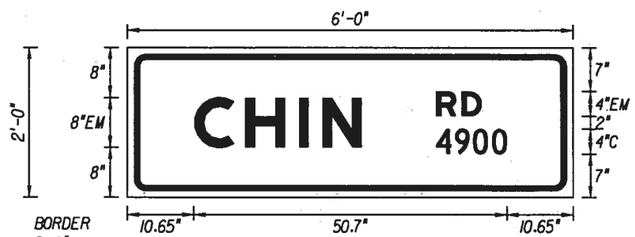
COPY	U	S		3	0	1		L
SPACE	15	23.5	30	38	46.1	54.6		41.9
COPY								
SPACE								
COPY								
SPACE								
COPY								
SPACE								
COPY								
SPACE								
COPY								
SPACE								

SIGN NUMBER	B
QUANITY	2
WIDTH	6'-0"
HEIGHT	2'-0"
BORDER WIDTH	1"
BORDER RADII	2"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATIONS(S)	White

SYMBOL(S)	X	Y	WID	HT

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH

** INDICATES THE NUMBER OF PANELS REQUIRED FOR SIGN ASSEMBLY. SIGN ASSEMBLY SHALL BE DOUBLE-SIDED, TWO-WAY INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY.



INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY

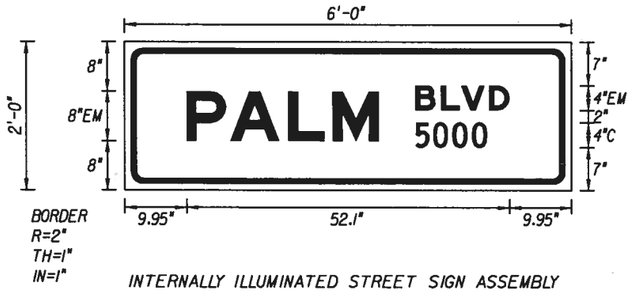
COPY	R	D		L																							
SPACE	50	54.1		7.3																							
COPY	C	H	I	N		L																					
SPACE	10.6	18.9	27.6	31.4		27.3																					
COPY	4	9	0	0		L																					
SPACE	50	53.1	55.9	59		11.4																					
COPY																											
SPACE																											
COPY																											
SPACE																											
COPY																											
SPACE																											

SIGN NUMBER	C
QUANITY	2
WIDTH	6'-0"
HEIGHT	2'-0"
BORDER WIDTH	1"
BORDER RADII	2"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATIONS(S)	White

SYMBOL(S)	X	Y	WID	HT

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH

** INDICATES THE NUMBER OF PANELS REQUIRED FOR SIGN ASSEMBLY. SIGN ASSEMBLY SHALL BE DOUBLE-SIDED, TWO-WAY INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY.



INTERNALLY ILLUMINATED STREET SIGN ASSEMBLY

COPY	B	L	V	D		L																					
SPACE	47.1	51.2	54.4	58.8		15																					
COPY	P	A	L	M		L																					
SPACE	9.9	17.1	26.6	33.8		31.3																					
COPY	5	0	0	0		L																					
SPACE	47.1	49.9	53	56.1		11.4																					
COPY																											
SPACE																											
COPY																											
SPACE																											
COPY																											
SPACE																											

SIGN NUMBER	
QUANITY	
WIDTH	
HEIGHT	
BORDER WIDTH	
BORDER RADII	
BACKGROUND COLOR	
LEGEND & BORDER COLOR	
STATIONS(S)	

SYMBOL(S)	X	Y	WID	HT

SIGN NUMBER	CLEARANCE EDGE OF LANE	COLUMN SIZE		AVERAGE LENGTH

COPY																											
SPACE																											
COPY																											
SPACE																											
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REV NO.	REVISION	DATE	DRWN BY / DSP. NO.	CHECKED BY / DSP. NO.
1	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475

ACTIVITY	INITIALS/DSP. NO.	DATE
DESIGNED BY:	RDM/1475	06/08
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WM APPROVED BY:		

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PROJECT: US 301 – SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NA
VERTICAL SCALE: NA
SEC: TWP: RGE:

TITLE: GUIDE SIGN WORK SHEET

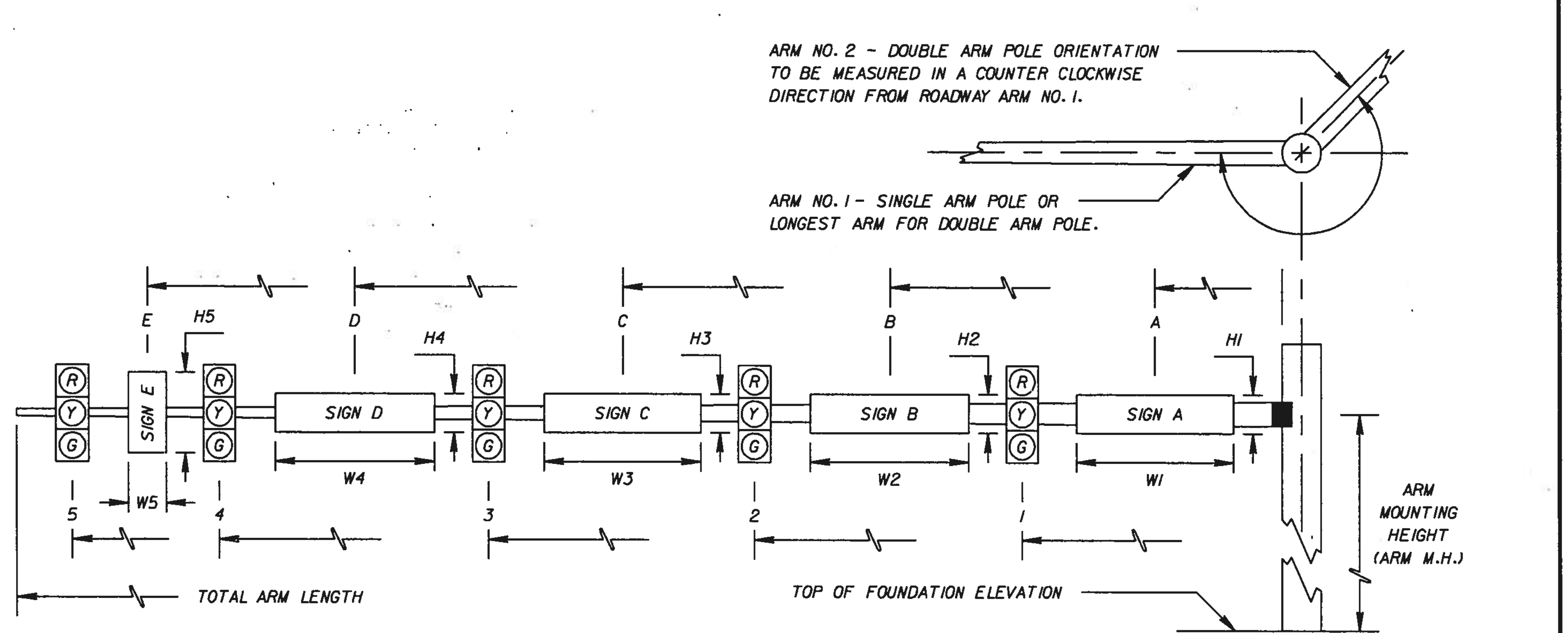
CROSS REFERENCE FILE NO.:

PROJECT NUMBER: 05925-000-000

INDEX NUMBER: B-05925-000-000XXX

SHEET NUMBER: T-7

SPECIAL INSTRUCTIONS			
ID NO.	PED. BUTTON	PED. SIGNALS	HANDHOLE LOCATION



* 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 DATA: SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	DISTANCE FROM POLE: 1	*	2	*	3	*	4	*	5	*	TOTAL ARM LENGTH	ARM M.H.	∠ BETWEEN DUAL ARMS 90/270
3	T-5	209+70.33	46.30	1	46.09	V	Y	N	26.0	3	38.0	3							46	21	
				2																	
4	T-5	210+53.01	48.57	1	47.41	V	Y	N	20.0	3	32.0	3							36	20	90
				2	N/A	V	Y	N	18.0	3	30.0	3							36	20	
5	T-6	126+93.67	40.43	1	41.30	V	Y	N	19.5	3	31.5	3	(43.5)	3	64.5	3			70.5	21.5	
				2																	
6	T-6	128+30.63	40.06	1	40.17	V	Y	N	42.0	3	53.0	5							60	20.5	
				2																	
7	T-6	127+79.21	40.57	1	41.36	V	Y	N	20.0	3	32.0	3	(44.0)	3	65.0	3			70.5	21.5	90
				2	N/A	V	Y	N	28.0	5	40.0	3							46	21.5	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	
				1																	
				2																	

ID NO.	RDWY ARM NO.	SIGN DATA — DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN: A	H1	W1	B	H2	W2	C	H3	W3	D	H4	W4	E	H5	W5	PAINT COLOR
3	1	32.0	1.5	3													N/A
	2																
4	1	26.0	1.5	3													N/A
	2																
5	1	68.5	3	3													N/A
	2																
6	1	58.0	3	3													N/A
	2																
7	1	68.5	3	3													N/A
	2	44.0	3	3													N/A
	1																
	2																
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	2																

( ) DENOTES FUTURE SIGNAL HEAD

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:	RDM/1475	06/08
DRAWN BY:	GAR/1980	06/08
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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WilsonMiller, Inc.

CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 - SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NA
VERTICAL SCALE: NA

TITLE: MAST ARM TABULATION SHEET

PROJECT NUMBER: 05925-000-000

INDEX NUMBER: B-05925-000-000XXX

SHEET NUMBER: T-8

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
3	E3-T2	E3								T2		21					
4	E1-E1-T1	E1			E1					T1		20					
5	E6-T4	E6								T4		21.5					
6	E5-T3	E5								T3		20.5					
7	E6-E4-T4	E6			E4					T4		21.5					

TABLE NOTES:

(1) Assembly Number Legend
Single Arm:

E - T* = Arm Type - Pole Type*

Double Arm:

E - E* - T* = 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" Indexes 17743 and 17745, as necessary.

					ACTIVITY	INITIALS/EMP. NO.	DATE
					DESIGNED BY:	RDM/1475	06/08
					DRAWN BY:	GAR/1980	06/08
					CHECKED BY:		
B	ADDENDUM 2	02/11/09	GAR/1980	RDM/1475	CONTRACT ADMIN. BY:		
REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:		

WilsonMiller
Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants
WilsonMiller, Inc.

CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 - SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NA
VERTICAL SCALE: NA

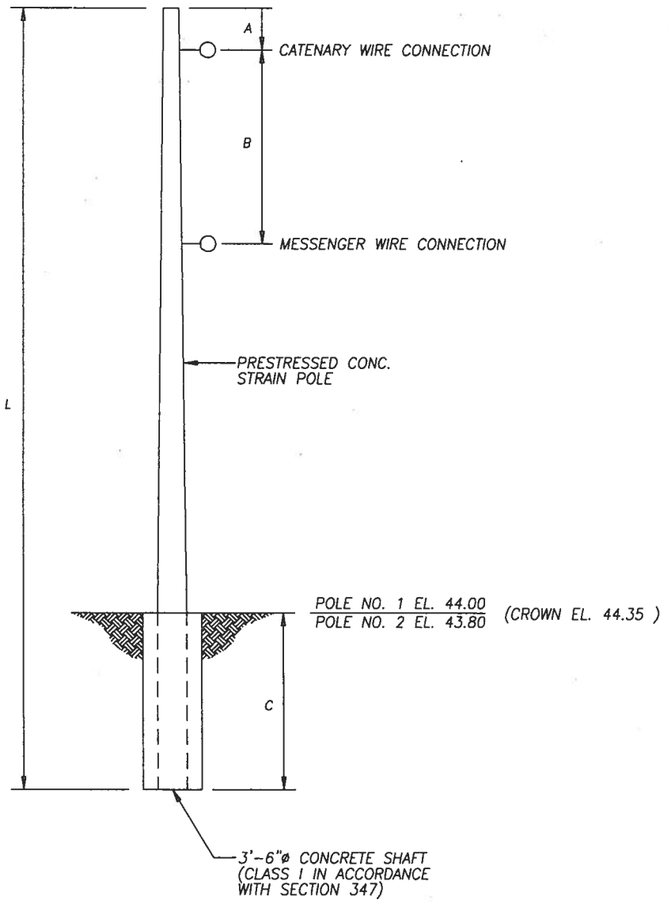
TITLE: STANDARD MAST ARM ASSEMBLIES DESIGN TABLE

PROJECT NUMBER: 05925-000-000

INDEX NUMBER: B-05925-000-000XXX

SHEET NUMBER: T-9

POLE CRITERIA



STRAIN POLE SCHEDULE

POLE NUMBER	POLE TYPE	L	A	B	C	SPAN	CATENARY WIRE	MESSENGER WIRE
1 STA 227+14.71 48.24 FT. LT.	P-VI	44	1'-0"	8'-2"	12'-0"	1	3/8	7/16
2 STA 227+96.06 69.97 FT. RT.	P-VI	44	1'-0"	7'-11"	12'-0"	1	3/8	7/16
3								
4								
5								
6								

STRAIN POLE DIAGONAL SPAN NOTES:

1) PRESTRESSED CONCRETE POLES SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH SECTION 641.

2) ALL MATERIALS FOR SPAN WIRE ASSEMBLY SHALL BE IN ACCORDANCE WITH SECTION 634 AND FDOT INDEX 17727.

3) CONCRETE FOR THE FOUNDATION SHAFT SHALL BE CLASS I WITH f'c = 3000psi.

4) FOUNDATION DESIGN:
   a) DESIGN IS BASED ON FDOT RECOMMENDED CONSERVATIVE CRITERIA.

   b) ASSUMPTIONS AND VALUES USED IN DESIGN:
   - Cohesionless soil – sand
   - Soil Friction Angle = 30 Degrees
   - Soil Weight = 50 lbs/cf (EFFECTIVE SUBMERGED WEIGHT)
   - Groundwater level 0.0 feet below surface

5) DESIGN IS BASED ON 130 MPH WIND.

REVISIONS

Date	By	Description	Date	By	Description
02/11/09	GAR	2 ADDENDUM 2			

	Names	Dates
Drawn by	RWS	6/08
Checked by	RLO	6/08
Designed by	RLO	6/08
Checked by	PEC	6/08
Approved by	RLO	6/08

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SEAL:

MANATEE COUNTY PUBLIC WORKS DEPT.
TRAFFIC ENGINEERING DIVISION
1027 26TH AVENUE EAST
BRADENTON, FLORIDA 34208
941-708-7400

SHEET TITLE:
SPAN WIRE SIGNAL SUPPORT
US 301 (SR43) AT RUTLAND ROAD (CR675)
AND 69TH STREET EAST

T-10

TABULATION OF QUANTITIES

BID ITEM NO	DESCRIPTION	UNIT	L-5 OF L-21 PLAN	L-5 OF L-21 FINAL	L-6 OF L-21 PLAN	L-6 OF L-21 FINAL	L-7 OF L-21 PLAN	L-7 OF L-21 FINAL	L-8 OF L-21 PLAN	L-8 OF L-21 FINAL	L-9 OF L-21 PLAN	L-9 OF L-21 FINAL	L-10 OF L-21 PLAN	L-10 OF L-21 FINAL	L-11 OF L-21 PLAN	L-11 OF L-21 FINAL	L-12 OF L-21 PLAN	L-12 OF L-21 FINAL	L-13 OF L-21 PLAN	L-13 OF L-21 FINAL
			LIGHTING PLAN SHEET NUMBER																	
400-1-15	CONCRETE PAD AROUND POLES & PULL BOXES	CY	–		2.5		–		–		–		–		1.0		–		2.0	
△B 630-1-12	CONDUIT – SIGNALS, F&I, UNDERGROUND	LF	550		1,250		1,225		1,220		1,220		1,220		1,220		1,220		1,220	
715-1-13	CONDUCTOR #4 INSULATED	LF	3,210		6,250		6,500		6,500		6,500		9,000		7,000		6,500		6,500	
715-1-63	REMOVE EXIST. 3#4 CONDUCTORS – DISPOSE	LF	150		–		–		–		–		–		–		–		–	
715-2-11	CONDUIT UNDERGROUND PVC SCH 40 – 2"	LF	600		1,250		1,300		1,300		1,350		2,000		1,700		1,220		1,310	
715-7-11	LOAD CENTER (SECONDARY VOLTAGE)	EA	–		–		–		–		–		–		1		–		–	
715-7-21	REWORK EXIST. LOAD CENTER '50'	EA	1		–		–		–		–		–		–		–		–	
715-10-2	CONCRETE FOUNDATION RELOCATED POLE	EA	1		–		–		–		–		–		–		–		–	
715-14-12	PULL BOX (SIDEWALK), SEE SHEET L-4	EA	6		10		12		13		12		26		11		10		14	
715-500-1	POLE CABLE DISTRIBUTION SYSTEM (CONVENTIONAL)	EA	2		8		8		9		8		22		8		8		9	
715-516-150	LIGHTING POLE COMPLETE (ALUM) POLE TOP MOUNT 50'	EA	1		8		8		9		8		6		8		8		9	
715-516-414	LIGHTING POLE COMPLETE (FIBERGLASS) POLE TOP MOUNT 14'	EA	–		–		–		–		–		16		–		–		–	
715-540-000	RELOCATE EXIST. LIGHT POLE	EA	1		–		–		–		–		–		–		–		–	

TABULATION OF QUANTITIES

BID ITEM NO	DESCRIPTION	UNIT	L-14 OF L-21 PLAN	L-14 OF L-21 FINAL	L-15 OF L-21 PLAN	L-15 OF L-21 FINAL	L-16 OF L-21 PLAN	L-16 OF L-21 FINAL	L-17 OF L-21 PLAN	L-17 OF L-21 FINAL	L-18 OF L-21 PLAN	L-18 OF L-21 FINAL	L-19 OF L-21 PLAN	L-19 OF L-21 FINAL	L-20 OF L-21 PLAN	L-20 OF L-21 FINAL	L-21 OF L-21 PLAN	L-21 OF L-21 FINAL	GRAND TOTAL
			LIGHTING PLAN SHEET NUMBER																
400-1-15	CONCRETE PAD AROUNG POLES & PULL BOXES	CY	–		–		–		–		2.0		0.5		–		–		7.5
△B 630-1-12	CONDUIT – SIGNALS, F&I, UNDERGROUND	LF	1,220		1,220		1,220		1,220		1,220		1,220		1,260		1,000		19,925
715-1-13	CONDUTOR #4 INSULATED	LF	6,750		6,400		7,000		6,400		6,400		6,400		6,600		5,500		109,450
715-1-63	REMOVE EXIST. 3#4 CONDUCTORS – DISPOSE	LF	–		–		–		–		–		–		–		–		150
715-2-11	CONDUIT UNDERGROUND PVC SCH 40 – 2"	LF	1,400		1,320		1,550		1,220		1,320		1,350		1,550		1,350		23,090
715-7-11	LOAD CENTER (SECONDARY VOLTAGE)	EA	–		–		1		–		–		–		–		1		3
715-7-21	REWORK EXIST. LOAD CENTER '50'	EA	–		–		–		–		–		–		–		–		1
715-10-2	CONCRETE FOUNDATION RELOCATED POLE	EA	–		–		–		–		–		–		–		–		1
715-14-12	PULL BOX (SIDEWALK), SEE SHEET L-4	EA	13		13		13		11		13		14		20		15		226
715-500-1	POLE CABLE DISTRIBUTION SYSTEM (CONVENTIONAL)	EA	8		8		8		8		9		9		8		6		146
715-516-150	LIGHTING POLE COMPLETE (ALUM) POLE TOP MOUNT 50'	EA	8		8		8		8		9		9		8		6		129
715-516-414	LIGHTING POLE COMPLETE (FIBERGLASS) POLE TOP MOUNT 14'	EA	–		–		–		–		–		–		–		–		16
715-540-000	RELOCATE EXIST. LIGHT POLE	EA	–		–		–		–		–		–		–		–		1

REV NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.
B	REVISED PAY ITEM DESCRIPTION – ADDENDUM 2	02/11/09	SRJ/979	

ACTIVITY	INITIALS/EMP. NO.	DATE
DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

Smith Engineering, Inc.
Consulting Engineers– #3267
Power • Communications • Lighting • Controls • Energy
P.O. Box 3811 Placido, Fla. 33946
Edward W. Smith, P.E.
Ph: (941) 475-1885
Fax: (941) 697-9606

CLIENT: WILLIAMS & HEROLD, LLC

PROJECT: US 301 – SEGMENT B

DATE: 5/07
HORIZONTAL SCALE: NA
VERTICAL SCALE: NA
SEC: TWP: RGE:

TITLE: TABULATION OF QUANTITIES

CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 05925–000–000

EDWARD W. SMITH, P.E.
FLORIDA LICENSE NO. 21074

INDEX NUMBER: B–05925–000–000XXX
SHEET NUMBER: L–3A