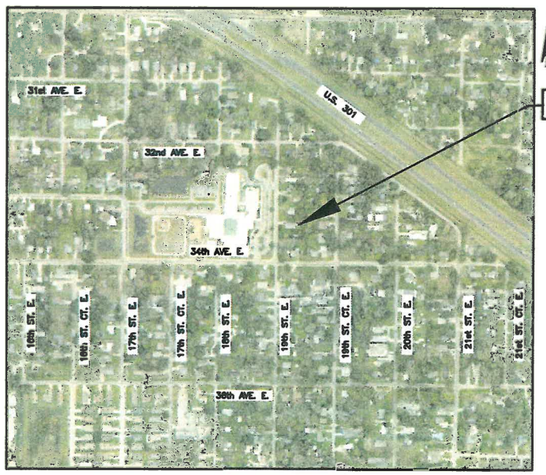
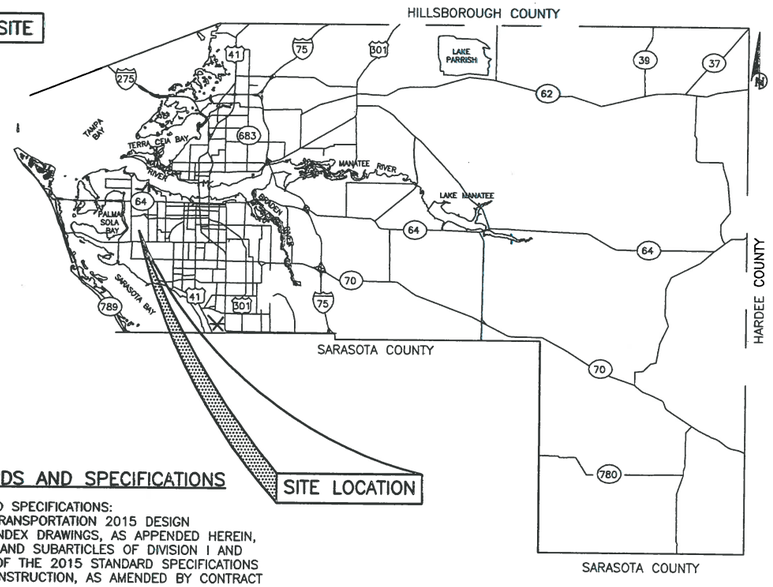
SAMOSET AREA
INTERSECTION IMPROVEMENTS
CIP 9012220

DECEMBER 2016



VICINITY MAP
N.T.S.



PROJECT DESCRIPTION

INTERSECTION RADIUS AND DRAINAGE IMPROVEMENTS ALONG 31ST, 32ND, 34TH AND 36TH AVENUES EAST.

RELATED STANDARDS AND SPECIFICATIONS

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION 2015 DESIGN STANDARDS AND REVISED INDEX DRAWINGS, AS APPENDED HEREIN, AND APPLICABLE ARTICLES AND SUBARTICLES OF DIVISION I AND ALL OF DIVISIONS II & III OF THE 2015 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS.

FOR DESIGN STANDARDS CLICK ON THE "DESIGN STANDARDS" LINK AT THE FOLLOWING WEB SITE:
HTTP://WWW.DOT.STATE.FL.US/RDDESIGN/

FOR THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION CLICK ON THE "SPECIFICATIONS" LINK AT THE FOLLOWING WEB SITE:
HTTP://WWW.DOT.STATE.FL.US/SPECIFICATIONSOFFICE/

ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO:
ANTHONY D. RUSSO P.E.
1022 26TH AVENUE EAST BRADENTON FLORIDA 34208

CONSTRUCTION PLANS

NO.	INDEX OF SHEETS
1	COVER SHEET
2	QUANTITY SHEET
3	GENERAL NOTES & LEGEND
4	REPAIR LOCATION MAP
5	REPAIR DETAILS
6–8	PLAN VIEW
9–10	GENERAL DETAILS
11	EROSION CONTROL DETAILS

ANTHONY DAVID RUSSO
LICENSE
No. 45367
STATE OF FLORIDA
PROFESSIONAL ENGINEER
12/14/16

811
Know what's below
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Manatee County FLORIDA

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

SAMOSET AREA
INTERSECTION IMPROVEMENTS
COVER SHEET

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220	
SURVEY #	000	
SEC./TWN./RGE	06/35S/18E	
SCALE	N.T.S.	
	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB/JEA	07/2016
CHECKED	CM/GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367

Signature & Date

SHEET 1

SAMOSET INTERSECTION IMPROVEMENTS

LINE NO.	FDOT ITEM NO.	DESCRIPTION	EST. QTY	U/M
1.	101-1	MOBILIZATION	1	LS
2.	102-1	MAINTENANCE OF TRAFFIC	1	LS
3.	104-10-3	Erosion Control	1	LS
4.	110-7-1	MAILBOX, F&I SINGLE (field directed)	10	EA
5.	120-1	REGULAR EXCAVATION (field directed)	100	CY
6.	120-6	EMBANKMENT (REGULAR) (field directed)	100	CY
7.	MC	Crushed Concrete Base (field directed)	100	TN
8.	285-710	6.5" ABC-3 BASE COURSE (field directed)	50	SY
9.	337-MC	TYPE S-III ASPHALT CONCRETE 1" (INCL TACK COAT) (field directed)	60	TN
10.	425	Type 1 Inlet Repair	2	LS
11.	425	Type 2 Inlet Repair	7	LS
12.	425	Type 3 Inlet Repair	6	LS
13.	425	Type 4 Inlet Repair	4	LS
14.	425	Type 5 Inlet Repair	2	LS
15.	425	Type 6 Inlet Repair	4	LS
16.	425	Type 7 Inlet Repair	1	LS
17.	430-174-112	PIPE STORM SEWER CULV (RCP) (12")	80	LF
18.	430-174-115	PIPE STORM SEWER CULV (RCP) (15")	64	LF
19.	430-174-118	PIPE STORM SEWER CULV (RCP) (18")	80	LF
20.	430-174-136	PIPE STORM SEWER CULV (RCP) (36")	16	LF
21.	430-174-215	PIPE STORM SEWER CULV (ERCP) (12"X18")	336	LF
22.	430-174-218	PIPE STORM SEWER CULV (ERCP) (14"X23")	96	LF
23.	MC	Endwall 12" (field directed)	5	EA
24.	MC	Endwall 15" (field directed)	4	EA
25.	MC	Endwall 18" (field directed)	5	EA
26.	430-984-138	MITERED END SECTION-RCP- ROUND, 36" SD (field directed)	1	EA
27.	MC	Endwall 12"x18" (field directed)	21	EA
28.	MC	Endwall 14"x23" (field directed)	6	EA
29.	522-1	SIDEWALK CONCRETE 4" (field directed)	200	SY
30.	522-1	SIDEWALK CONCRETE 6" (field directed)	80	SY
31.	522-1	Miscelaneaous Concrete 3,000psi (field directed)	10	CY
32.	527-2	DETECTABLE WARNINGS (field directed)	90	SF
33.	530-3-4	RIP RAP-RUBBLE (field directed)	10	TN
34.	550-MC	EXISTING FENCE TO BE REMOVED AND RELOCATED (field directed)	100	LF
35.	550-MC	4' Chain Link Fence including end and intermediate posts (field directed)	200	LF
36.	570-1-2	PERFORMANCE TURF (BAHIA SOD)	1,000	SY
37.	700-1-50	SINGLE POST SIG, RELOCATE (field directed)	16	AS
38.	711-11-125	THERMOPLASTIC, STANDARD, WHITE SOLID, 12" (field directed)	1,000	LF
39.	711-11-125	THERMOPLASTIC, STANDARD, WHITE SOLID, 24" (field directed)	600	LF
40.	MC	Valve Box Adjustment (field directed)	15	LS
41.	ASTM	Modified Proctor	5	EA
42.	ACI	Field Density Test	44	EA
43.	ACI	Plastic Properties Tests (Slump, Air, Temp)	44	EA
44.	ACI	Compressive Strength Cylinders set of 5	44	EA
45.	ACI	Compressive Strength Testing	44	EA

ANTHONY DAVID RUSSO ★ LICENSE No. 45367 STATE OF FLORIDA ★ PROFESSIONAL ENGINEER
12/14/16

Manatee County FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS
QUANITY SHEET

NO.	REVISION DESCRIPTION	BY	DATE
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PROJECT #	CIP 9012220
SURVEY #	000
SEC./TWN./RGE	06/35S/18E
SCALE	N.T.S.

	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB/JEA	07/2016
CHECKED	CM/GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367
Signature & Date

SHEET 2

S:\PWD_Engineering_Shore Highway Engineering\INTERSECTION STUDIES AND IMPROVEMENTS\20 inters\32_34_36\DWG\32_34_36_Cov-Gn.dwg,Quantity Sheet, 12/14/2016 7:07 AM Ken Lasher, 1:1, 11x17

GENERAL

1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: ANTHONY D. RUSSO AND CAN BE REACHED AT (941) 708-7450 EXT. 7348.

2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER .

3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.

4. VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED BY A MINIMUM OF TWO REFERENCE BENCHMARKS DESCRIBED ON THE "THE NATIONAL GEODETIC VERTICAL DATUM OF 1929", (NGVD '29).

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.

6. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.

7. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.

8. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.

9. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO SECTION 01310 OF THE SPECIFICATIONS.

SAFETY

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.

11. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.

12. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.

13. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

14. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION ALL SEDIMENT AND EROSION CONTROL (SEC) DEVICES (E.G., BARRIERS, SEDIMENT TRAPS/BASINS, VEGETATIVE BUFFERS, ETC.) AS SPECIFIED IN THE FDEP EROSION MANUAL. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SEC DEVICES UTILIZED DURING THE PROJECT, AS WELL AS INSTALLATION & MAINTENANCE OF ANY ADDITIONAL MEASURES DEEMED NECESSARY DURING PROJECT IMPLEMENTATION, TO PREVENT EROSION AND OFF-SITE SEDIMENT MIGRATION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL SEC DEVICES UPON CONCLUSION OF THE PROJECT, AND UPON ADEQUATE STABILIZATION OF DISTURBED SOILS.

15. WHEN A BENTONITE SPILL OR FRACK-OUT OCCURS OR THERE IS A LOSS OF RETURN INDICATING EXCESSIVE SEEPAGE OR LOSS OF DRILLING FLUID, DRILLING MUST BE STOPPED UNTIL THE LOCATION OF THE SPILL IS IDENTIFIED. UNDER NO CIRCUMSTANCES WILL DRILLING CONTINUE WHEN A SPILL IS APPARENT.

16. ONCE LOCATED, THE BENTONITE SPILL MUST BE ISOLATED AND SEEPAGE INTO ANY NEARBY WATER BODIES WILL BE BLOCKED DEPENDING ON THE DEGREE OF THE SPILL, THE ISOLATED BENTONITE MUST BE REMOVED MANUALLY OR MECHANICALLY AND DISPOSED OF BY APPROPRIATE MEANS OR REUSED.

17. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.

18. STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.

19. STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.

20. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, EARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.

21. ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.

22. SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.

23. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.

24. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR THE CONSTRUCTION SITE. ALL WORK IN THE VICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AND/OR PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT CONDITIONS.

25. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.

RIGHT-OF-WAY

26. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.

27. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

28. THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHTS-OF-WAY USE PERMIT AND A TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES". A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND HEADWALLS WHETHER SHOWN ON THE PLANS OR NOT. THE HEADWALLS SHALL BE REPLACED IN ACCORDANCE WITH F.D.O.T. STANDARDS.

30. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), CENTER LINES, AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.

31. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER SECTION 02575.

32. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRIVEWAY CONSTRUCTION WORK IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.

UTILITIES

33. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY EFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.

34. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.

35. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY FLORIDA POWER AND LIGHT TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ALL RELATED COSTS.

36. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTRUCTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED WITH AND APPROVED BY THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IT IS NOTED THAT TEMPORARY SHUTDOWNS MAY BE RESTRICTED TO CERTAIN HOURS AT ANY TIME OF THE DAY OR NIGHT AND WILL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.

37. FOR WORK BEING DONE ON EXISTING SANITARY SEWER LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE FLOW OF ALL SEWAGE DURING CONSTRUCTION, WHICH MAY REQUIRE BY-PASS PUMPING AND/OR PUMPER TRUCKS. THE CONTRACTOR SHALL SUBMIT A DETAILED BY-PASS PUMPING PLAN PER SECTION 02720.

LOCATES

70. THE FOLLOWING IDENTIFIES THE QUALITY LEVEL OF EXISTING UTILITY LINEWORK IN ASCENDING ORDER.
LEVEL "D" -EXISTING RECORDS OR GIS
LEVEL "C" -SURFACE VISIBLE FEATURES SURVEY
LEVEL "B" -DESIGNATED BY GPR OR FLAGGING (HORIZONTAL)
LEVEL "A" -LOCATED VISUALLY OR SOFT DIGS (HORIZONTAL AND VERTICAL)
REFENCE FDOT 2010 UTILITIES ADJUSTMENT MANUAL (UAM)

RESTORATION

71. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.

72. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.

73. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE OPERATION OF THE PIPELINE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.

74. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.

75. CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN, SECTION 522, AND SECTION 310 OF THE F.D.O.T. DESIGN STANDARDS.

76. WHENEVER A PERMANENT ROADWAY SURFACE IS NOT PLACED IMMEDIATELY AFTER BACKFILLING AND COMPACTION OF THE NEWLY INSTALLED PIPE LINE IN AREAS WHERE TRAFFIC MUST PASS, THE CONTRACTOR SHALL INSTALL A TEMPORARY SURFACE CONSISTING OF NINE INCHES OF COMPACTED LIME ROCK BASE AND A COAT OF ASPHALT EMULSION. PERMANENT ROADWAY REPAIR SHALL BE PERFORMED A MAXIMUM OF TWENTY-ONE CALENDAR DAYS AFTER THE INITIAL OPEN CUTTING.

77. RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE, OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION, WHICHEVER OCCURS FIRST.

CONSTRUCTION

78. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.

79. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEPT DAILY AS PART OF DAILY CLEAN UP.

80. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.

81. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.

82. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.

83. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.

84. ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENT AND SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS AND PROFILES.

85. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.

86. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.

87. ALL FITTINGS FOR PRESSURE CLASS-RATED PIPE SHALL BE RESTRAINED DUCTILE IRON. RESTRAINED LENGTHS OF PIPE SHALL ADHERE TO THE REQUIREMENTS AS SHOWN ON THE DETAIL SHEETS.

88. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE RECOMMENDED DEFLECTION.

89. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.

90. ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.

91. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.

92. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.

93. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.

94. THE CONTRACTOR, PRIOR TO ANY TEMPORARY WATER SHUT-OFFS DURING WATER MAIN TIE-IN, ETC., SHALL NOTIFY THE AFFECTED RESIDENTS BY POSTING INFORMATIONAL SIGNS IN THE NEIGHBORHOOD AT LEAST TWO DAYS (48 HRS) PRIOR TO THE WATER SHUT-OFF. REFERENCE SECTION 01580, PARAGRAPH 1.03 OF THE SPECIFICATIONS. WHEN FEASIBLE, "DOOR HANGERS" SHALL BE DELIVERED TO AFFECTED RESIDENCES AT LEAST TWO DAYS (48 HRS) PRIOR TO WATER SHUT-OFF. FOR LARGE PROJECTS WITH HUNDREDS OF HOMES AFFECTED, THE CONTRACTOR SHALL ALSO MAKE EXTENSIVE USE OF THE MEDIA AND SHALL HAVE PRIOR CONTACT WITH HOMEOWNER'S ASSOCIATIONS. WRITTEN NOTIFICATIONS SHALL ALSO BE FAXED TO THE TAMPA TRIBUNE, BRADENTON HERALD, SARASOTA HERALD TRIBUNE, WBRD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT.

95. ALL NEW PIPE LINES SHALL BE PIG CLEANED (4" AND LARGER), FLUSHED, PRESSURE TESTED, DISINFECTED AND CERTIFIED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PIG CLEANING AND PRESSURE TESTING.

96. ALL TEST POINT PIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. A CORPORATION STOP PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.

97. ALL EXISTING MAINS THAT ARE BEING REPLACED SHALL BE ABANDONED IN PLACE UPON ACCEPTANCE AND ACTIVATION OF THE NEW MAINS. ABANDONED MAINS SHALL BE CUT, FILLED WITH GROUT, AND CAPPED. REFER TO SECTION 02064 OF THE SPECIFICATIONS FOR GROUTING OF ABANDONED PIPE.

98. WATER MAINS CROSSING OVER OR UNDER SANITARY SEWERS, FORCE MAINS, AND RECLAIMED WATER LINES SHALL BE LAID PER CURRENT EDITION OF "10 STATE STANDARDS" AND MANATEE COUNTY UTILITY STANDARDS UNLESS NOTED OTHERWISE ON THE PLANS.

99. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.

CONTACTS

MANATEE COUNTY
PUBLIC WORKS DEPT.
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SCOTT MAY, P.E.
1022 26TH AVENUE EAST
BRADENTON, FL. 34208
(941) 708-7450 EXT. 7650
FAX: (941) 708-7431

TECO/PEOPLES GAS CO.
DAN SHANAHAN
8261 VICO COURT
SARASOTA, FL. 34240
(941) 342-4030
FAX: (941) 342-4011
EMERGENCY: 1-877-832-6911
djshanahan@tecoenergy.com

SUNSHINE STATE ONE CALL OF FLORIDA
1-(800) 432-4770

FRONTIER
WAYNE SUMNER
1701 RINGLING BLVD.
SARASOTA, FL. 34236
(941) 330-9203
WAYNE.SUMNER@ftr.com

FLORIDA POWER & LIGHT DISTRIBUTION
GREG COKER
1253 12TH AVENUE EAST
PALMETTO, FL 34221
(941) 723-4430
FAX: (941) 723-4444
EMERGENCY: 1-800-4-OUTAGE
Greg_Coker@fpl.com

FLORIDA POWER & LIGHT TRANSMISSION
GARY PETERSON
15430 ENDEAVOR DRIVE
JUPITER, FL 33478
(561) 904-3665
Gary.n.peterson@fpl.com

MANATEE COUNTY HEALTH DEPT.
HANS C. ROESE
410 6th AVENUE EAST
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FAX: (941) 750-9364
hans_roese@doh.state.fl.us

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
SARASOTA SERVICE OFFICE
STEVE LOPES, P.E.
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SARASOTA, FL. 34240
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FAX: (941) 373-7660

FLORIDA GAS TRANSMISSION
SAFETY HARBOR TEAM
7804 ANDERSON RD.
TAMPA, FL. 33634
CHRIS LEE
(813) 466-3327
CELL : (727) 639-7512
christopher.lee@sug.com

CHARTER COMMUNICATIONS
TOM WRIGHT
5413 E. STATE ROAD 64
BRADENTON, FL. 34208-5535
(941) 748-3816 EXT. 21348
tom.wright@charter.com

DEPARTMENT OF ENVIRONMENTAL PROTECTION
ED WATSON
13051 N. TELECOM PKWY
TEMPLE TERRACE, FL 33637
PHONE: (813) 470-5875
FAX: (813) 470-5993

PEACE RIVER ELECTRIC COOPERATIVE, INC.
P.O. BOX 1310
WACHULA, FL 33873
ERIN RUHTZ
(863) 767-4660
erin.ruhtz@preco.coop

MANATEE COUNTY
PUBLIC WORK DEPT.
TRAFFIC ENGINEERING
VISHAL KAKKAD, P.E.
(941) 749-3500 EXT. 7812
FAX: (941) 749-3571

LEGEND

EXISTING

BENCH MARK
CONCRETE MONUMENT
IRON PIPE
IRON ROD
HUB
NAIL & DISK
ELEVATION
PARCEL ID NO.
PARCEL ID NO.
LOT NO.
GUY WIRE
POWER POLE
LIGHT POLE
MAIL BOX
SIGN
REFLECTOR
SPRINKLER
GAS MARKER
BACKFLOW PREVENTER
BLOW OFF VALVE
FIRE HYDRANT
WATER VALVE
AIR RELEASE VALVE
WATER METER
SANITARY SEWER MANHOLE
SANITARY SEWER CLEAN OUT
SOIL BORING LOCATION
TELEPHONE SERVICE BOX
FLOW DIRECTION
GRATE INLET
MITERED END SECTION

BUSH
TREE
OAK TREE
PALM TREE
PINE TREE
EDGE OF VEGETATION
CHAIN LINK FENCE
WOOD FENCE
BARBED WIRE FENCE
FORCE MAIN
POTABLE WATER
RECLAIMED WATER
SANITARY SEWER
STORM DRAIN
GAS LINE
OVERHEAD_CHARTER_TV
BURIED_CHARTER_TV
OVERHEAD ELECTRIC
BURIED_ELECTRIC
OVERHEAD FRONTIER
BURIED FRONTIER
FRONTIER
BURIED_UTILITY
OVERHEAD UTILITY
RAIL ROAD TRACKS
EDGE OF CONCRETE
EDGE OF ROAD
TOE OF SLOPE
TOP OF BANK
PROPERTY LINE
RIGHT OF WAY

ABBREVIATIONS

R/W	RIGHT OF WAY
CONC	CONCRETE
ASPH	ASPHALT
DRWY	DRIVEWAY
SWK	SIDEWALK
EP	EDGE OF PAVEMENT
BOC	BACK OF CURB

PROPOSED

MAIN
SERVICE LINE
PROPOSED EASEMENT
FIRE HYDRANT
VALVE
SANITARY SEWER MANHOLE
BLOW OFF ASSEMBLY
REDUCER
TEE
HORIZONTAL BEND
VERTICAL BEND
PLUG
MASTER METER ASSEMBLY
SERVICE LINE & METER
DOUBLE SERVICE

ANTHONY DAVID RUSSO LICENSE No. 45367 STATE OF FLORIDA PROFESSIONAL ENGINEER 12/14/16

Manatee County FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS
GENERAL NOTES & LEGEND

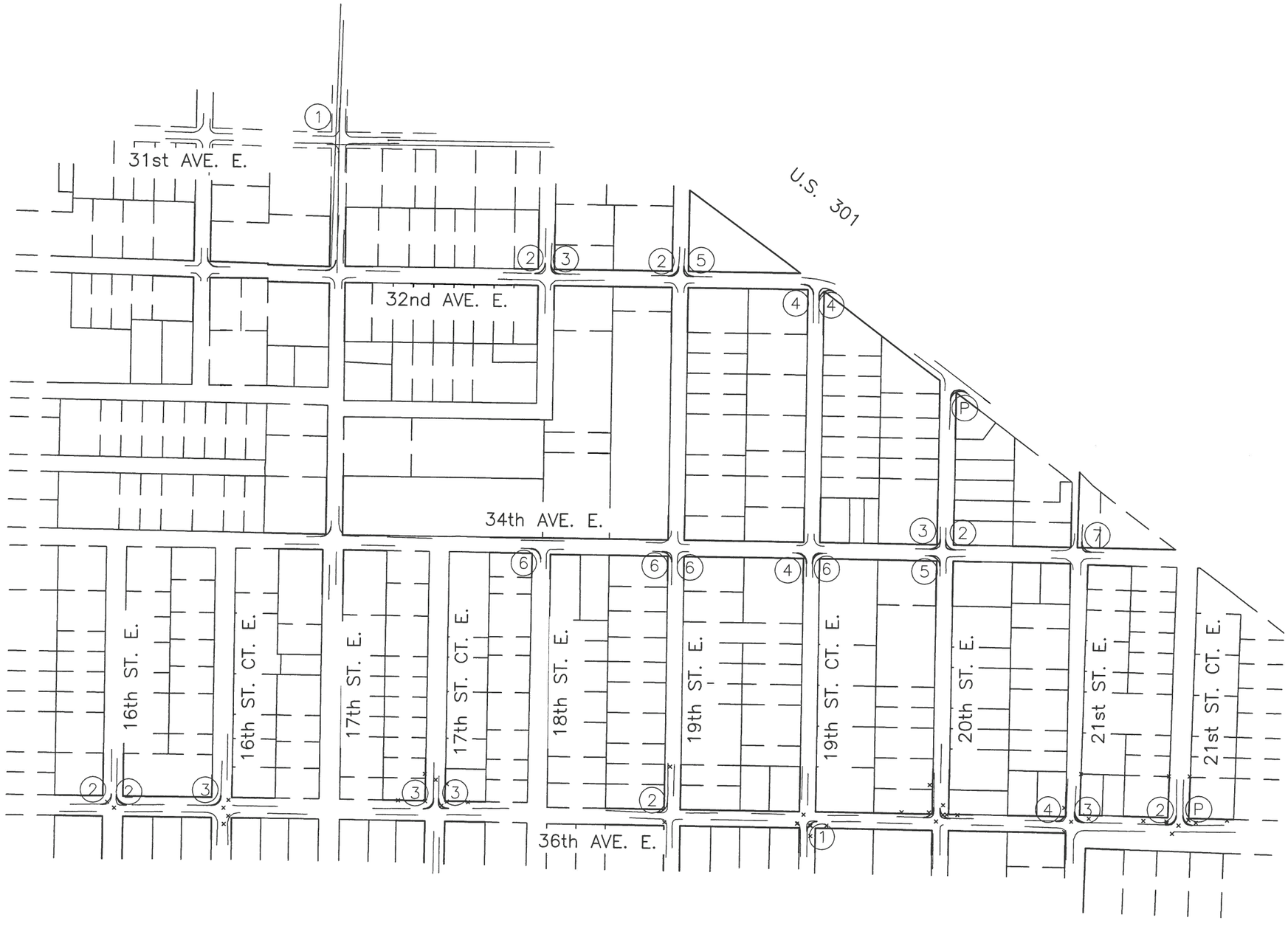
NO	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220
SURVEY #	000
SEC., TWP., RGE.	06/35S/18E
SCALE	N.T.S.

	BY	DATE
APPROVED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB/JEA	07/2016
CHECKED	CM/GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367
Signature & Date

SHEET 3



(#) – REPAIR TYPE (SEE DETAIL SHEET)

(P) – PAVEMENT REPAIR ONLY

NOTE:

NUMBER REPAIR TYPES ARE LUMP SUM INCLUDING EXCAVATION, DEMOLITION, PAVEMENT CUTTING, CONCRETE, FILL, SUB GRADE, BASE, ASPHALT, AND SODDING ALL DISTURBED AREAS, FOR ALL WORK SHOWN IN THE DETAILS AND FOR COMPLETE ASSEMBLY, EXCEPT PIPES AND END WALLS ARE UNIT PRICE AT QUANTITIES AS DIRECTED BY THE PROJECT ENGINEER BASED ON FIELD CONDITIONS.

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

SAMOSET AREA INTERSECTION IMPROVEMENTS
REPAIR LOCATION MAP

NO.	REVISION DESCRIPTION	BY	DATE
---	---	---	---

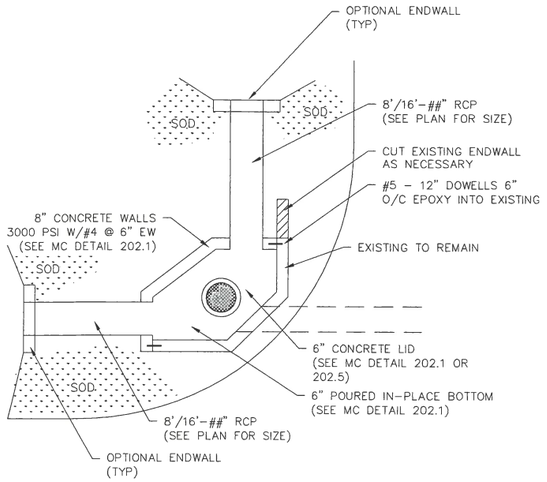
PROJECT #		CIP 9012220
SURVEY #		000
SEC./TWN./RGE		06/35S/18E
SCALE		N.T.S.
	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB/JEA	07/2016
CHECKED	CM/GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367

ANTHONY DAVID RUSSO ★ LICENSE No. 45367 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER ★
12/14/16

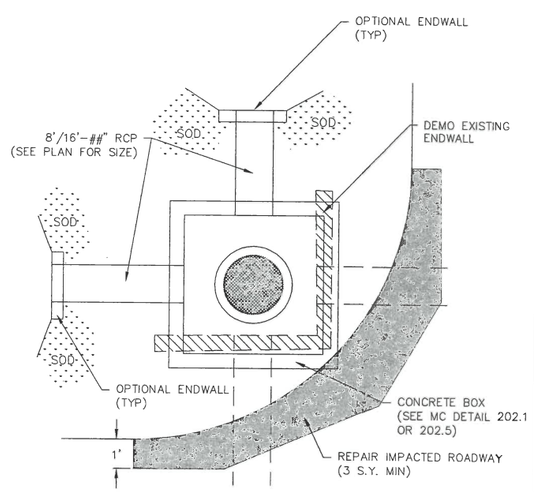
Signature & Date

SHEET 4



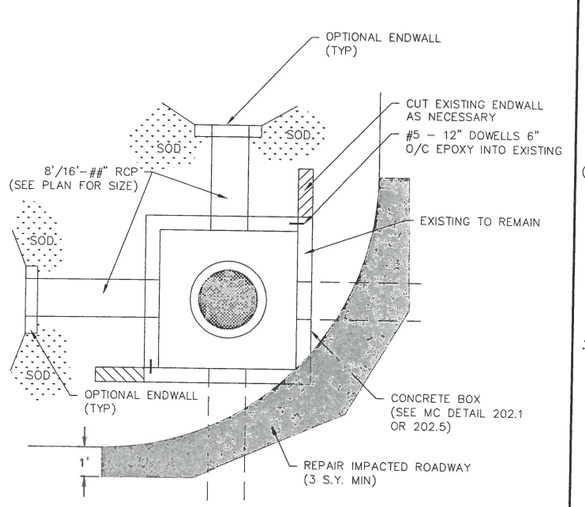
NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 1 REPAIR
EXISTING ANGLED HEADWALL



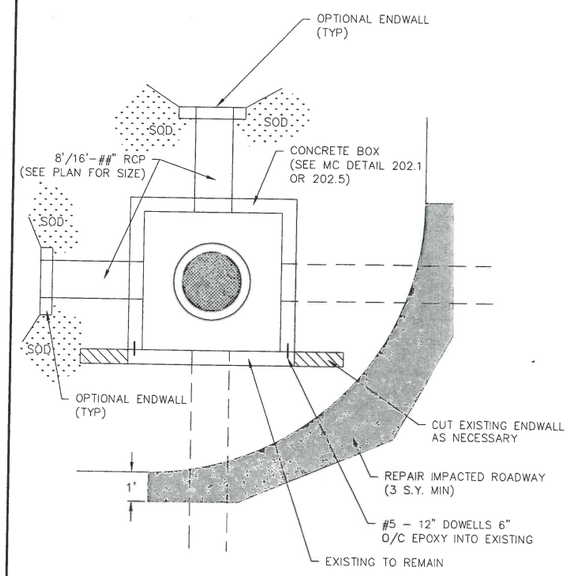
NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 2 REPAIR
DAMAGED EXISTING DOUBLE HEADWALL



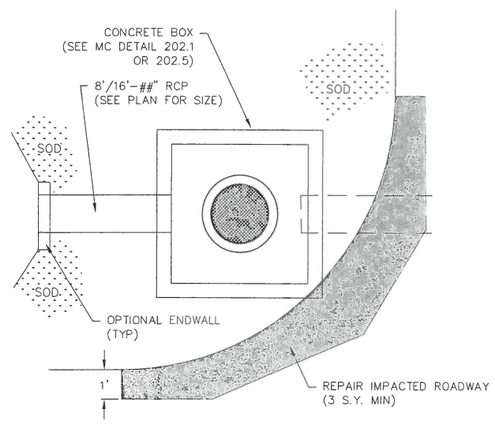
NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 3 REPAIR
EXISTING DOUBLE HEADWALL



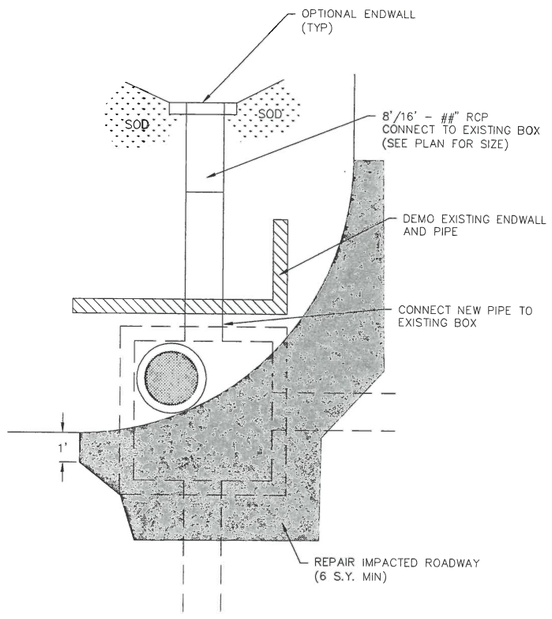
NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 4 REPAIR
EXISTING SINGLE HEADWALL



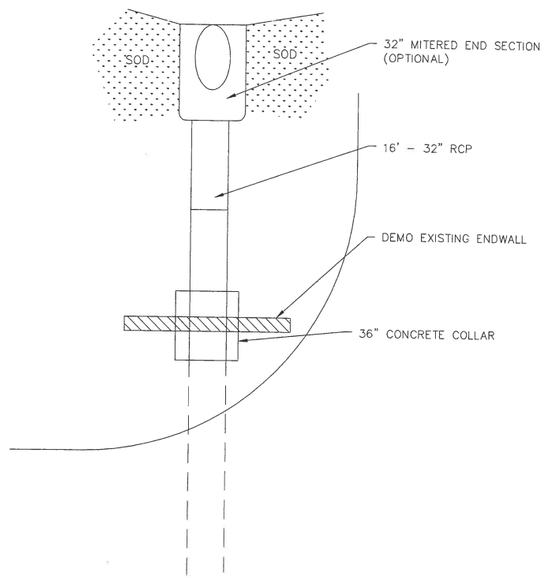
NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 5 REPAIR
NO HEADWALL



NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 6 REPAIR
EXTEND PIPE TO EXISTING BOX



NOTE: ALL WORK LUMP SUM EXCEPT PIPE AND ENDWALL ARE UNIT PRICE AT QUANTITIES PER FIELD CONDITIONS. MATCH EXISTING GRADES TO PROVIDE POSITIVE FLOW.

TYPE 7 REPAIR
EXTEND EXISTING PIPE

Manatee County
FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS
REPAIR DETAILS

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220
SURVEY #	----
SEC./TWN./RGE	----
SCALE	N.T.S.

	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB	07/2016
CHECKED	CM/GB	07/2016

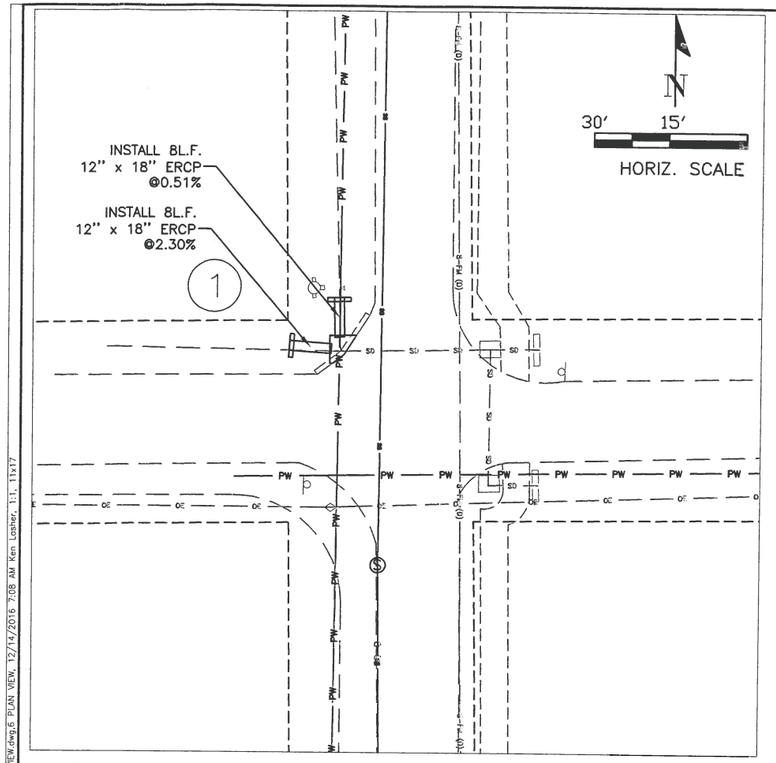
ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367

ANTHONY DAVID RUSSO LICENSE No. 45367 STATE OF FLORIDA PROFESSIONAL ENGINEER
12/14/16

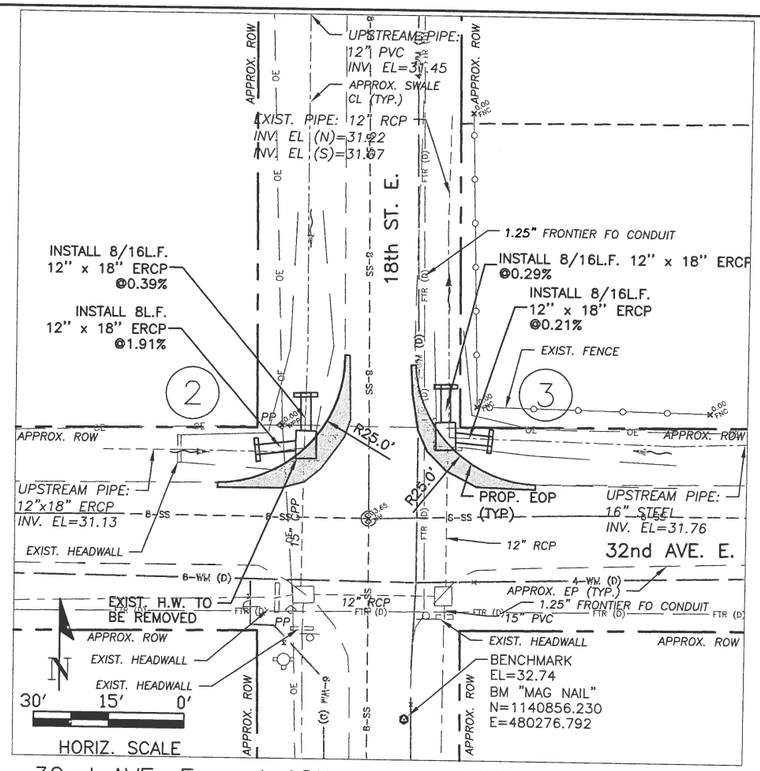
Signature & Date

SHEET 5

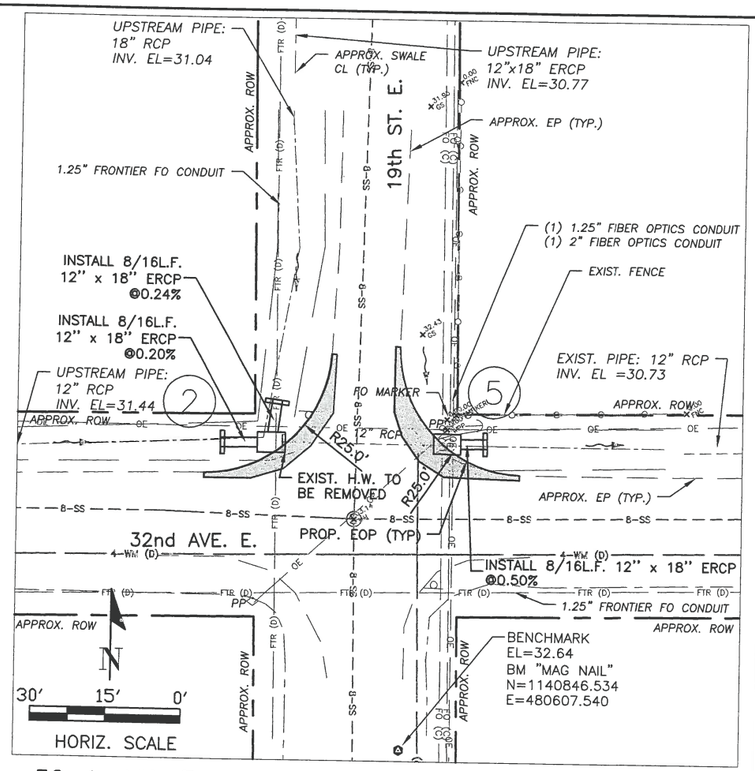
S:\PWD_Engineering_Shore\Highway Engineering\INTERSECTION STUDIES AND IMPROVEMENTS\20' inters\32_34_36\DWG\32_34_36-Repair_Details.dwg,5. REPAIR DETAILS, 12/14/2016 7:18 AM, Ken Lasher, 1:1, 11x17



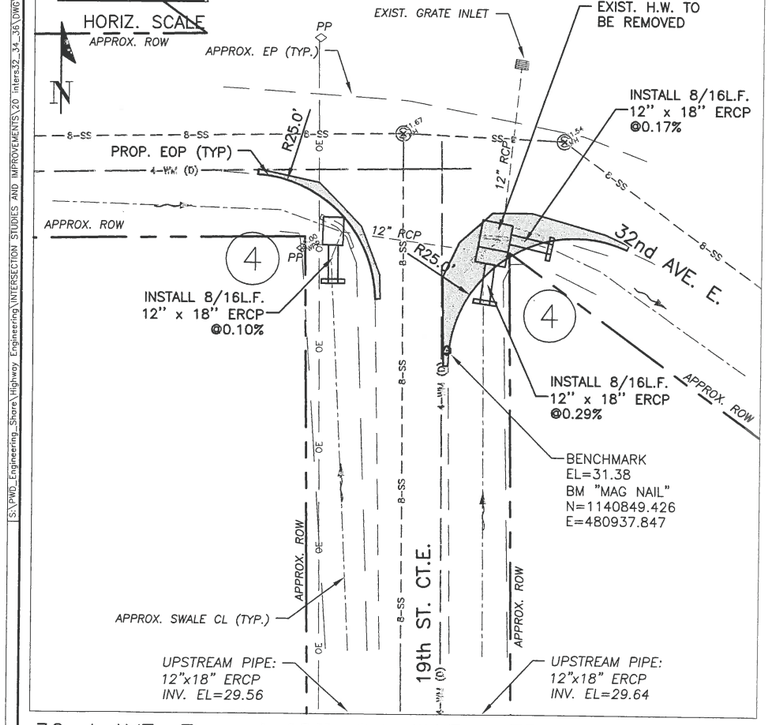
31st AVE. E. and 17th ST. E. INTERSECTION (NW)



32nd AVE. E. and 18th ST. E. INTERSECTION(NE;NW)



32nd AVE. E. and 19th ST. E. INTERSECTION(NE;NW)



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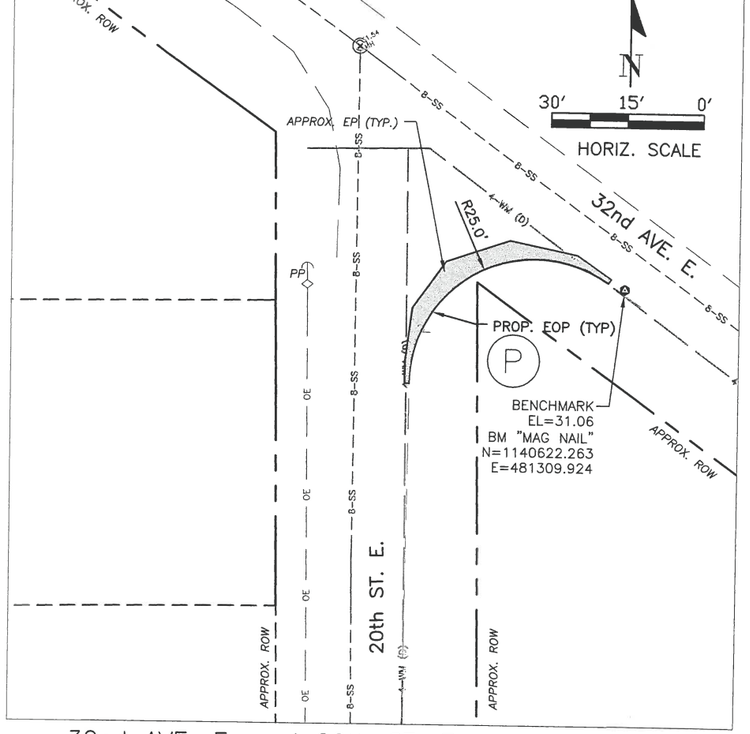

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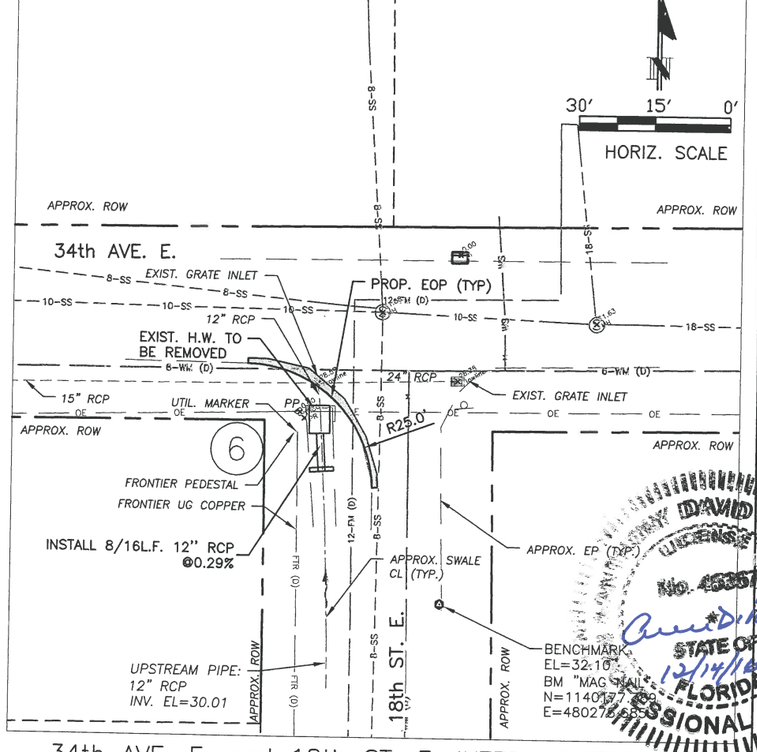


34th AVE. E. and 18th ST. E. INTERSECTION (SW)

Manatee County
FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS

PLAN VIEW

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220
SURVEY #	000
SEC./TWN./RGE	06/35S/18E
SCALE	AS NOTED

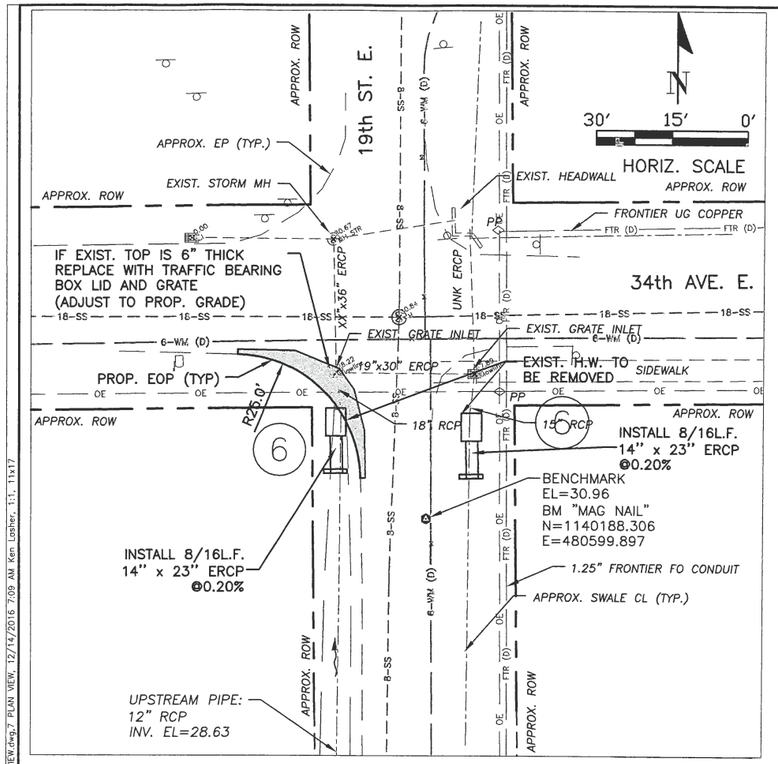
	BY	DATE
REVIEWED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	MJEA	07/2016
CHECKED	GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA REG. # 45367
STATE OF FLORIDA
PROFESSIONAL ENGINEER
No. 45367
12/14/16

Signature & Date

SHEET 6

S:\PWD_Engineering_Shore\Highway Engineering\INTERSECTION STUDIES AND IMPROVEMENTS\20 Intersx32_34_35\DWG\32_34_35-PLAN VIEW.dwg,6 PLAN VIEW, 12/14/2016 7:08 AM Ken Lasher, 1:1, 11x17



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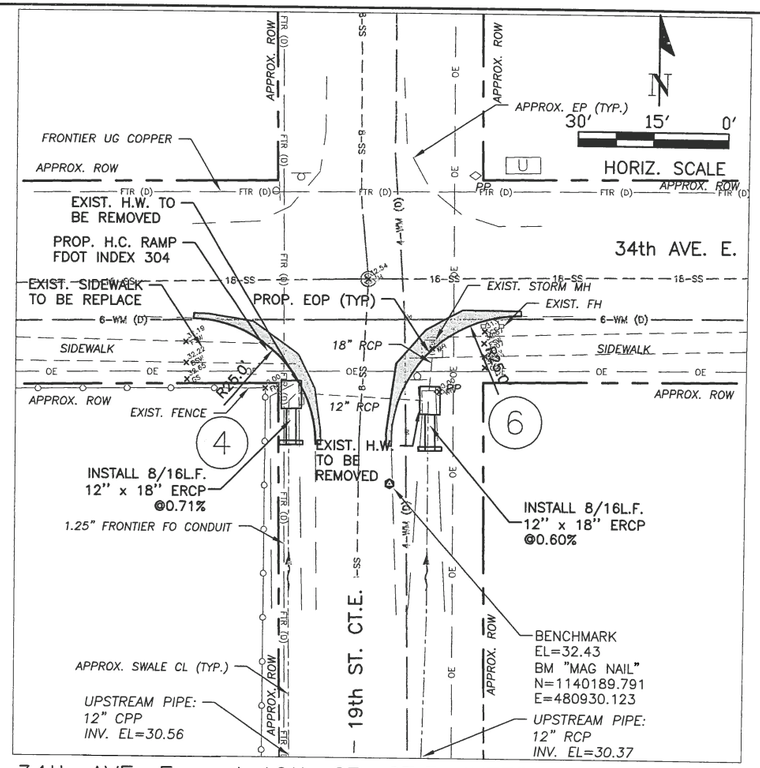

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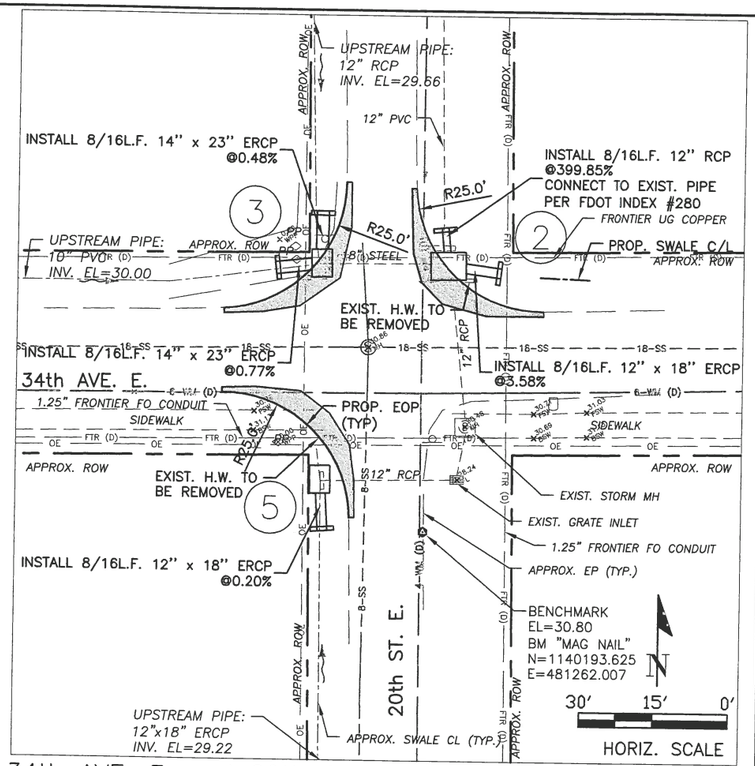
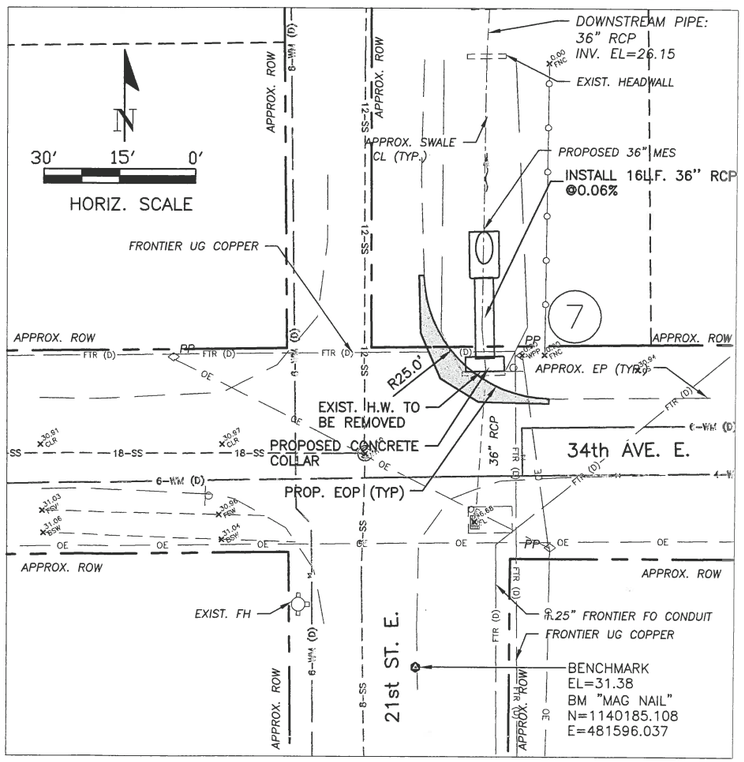


34th AVE. E. and 20th ST. E. INTERSECTION(NE;NW;SW)



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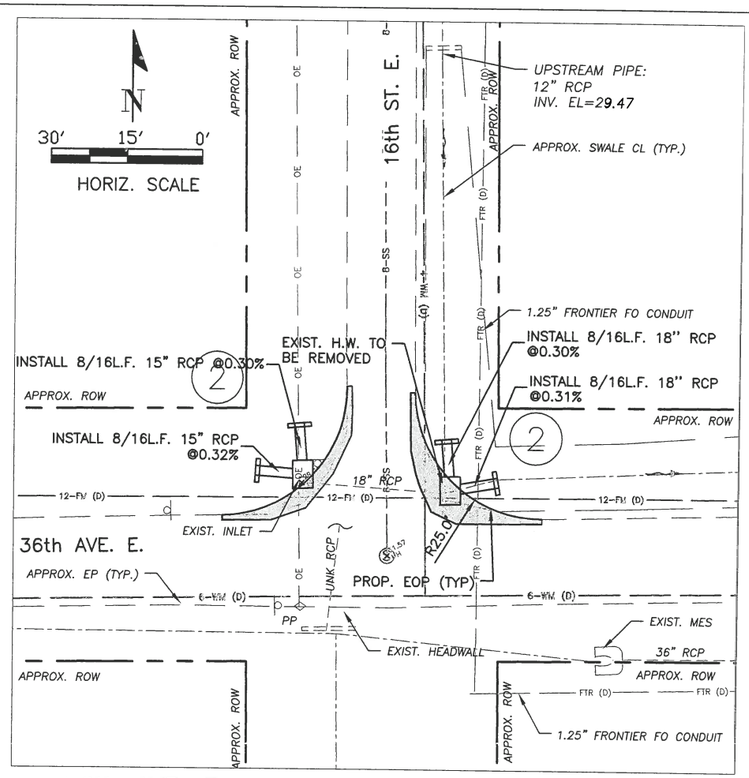

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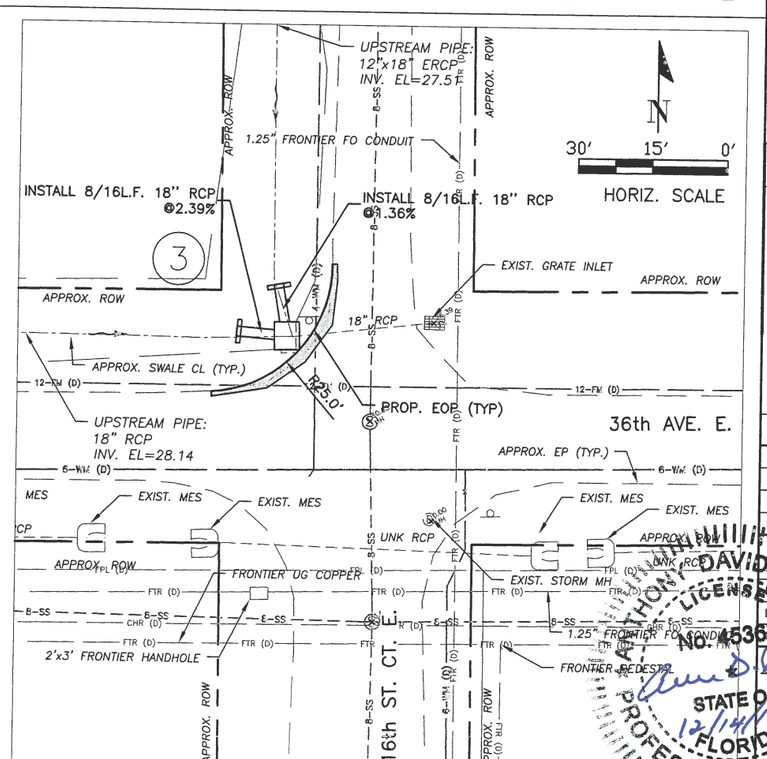


36th AVE. E. and 16th ST. CT.E. INTERSECTION(NW)

Manatee County FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS

PLAN VIEW

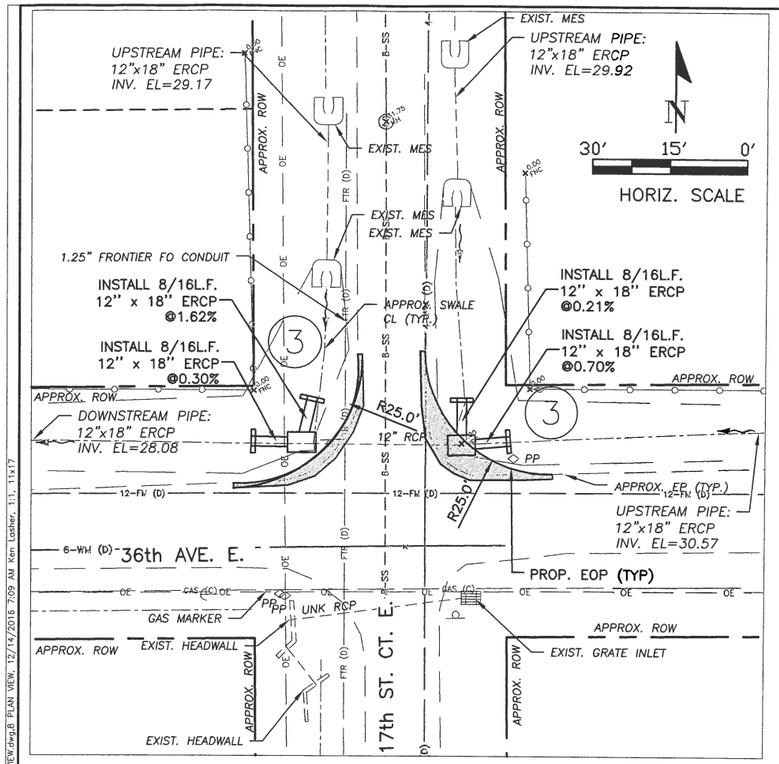
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220	
SURVEY #	000	
SEC./TWN./RGE	06/35S/18E	
SCALE	AS NOTED	
	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB/AEA	07/2016
CHECKED	CM/GB	07/2016

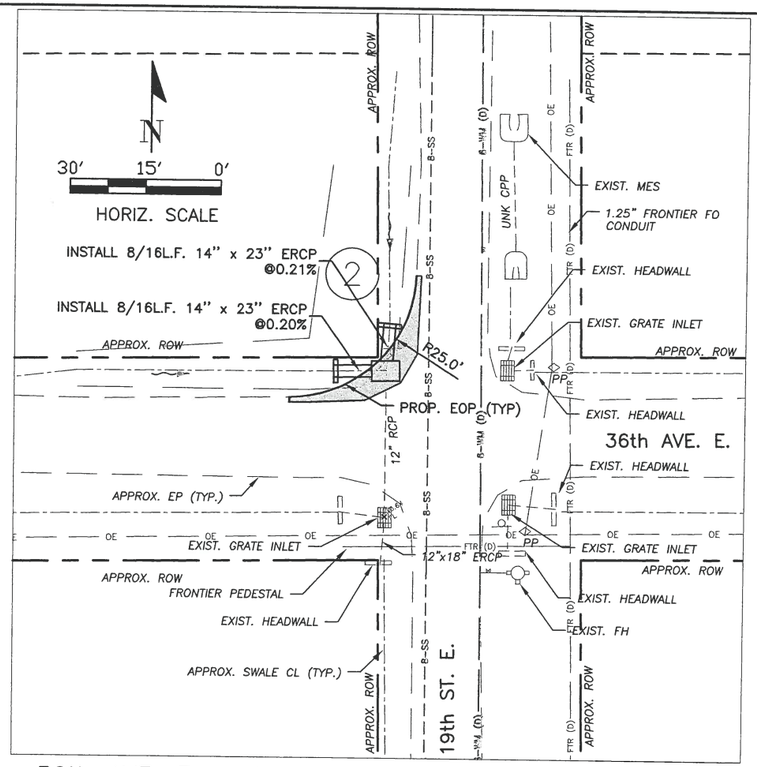
ANTHONY D. RUSSO, P.E.
FLORIDA LIC. # 45367
Signature & Date

SHEET 7

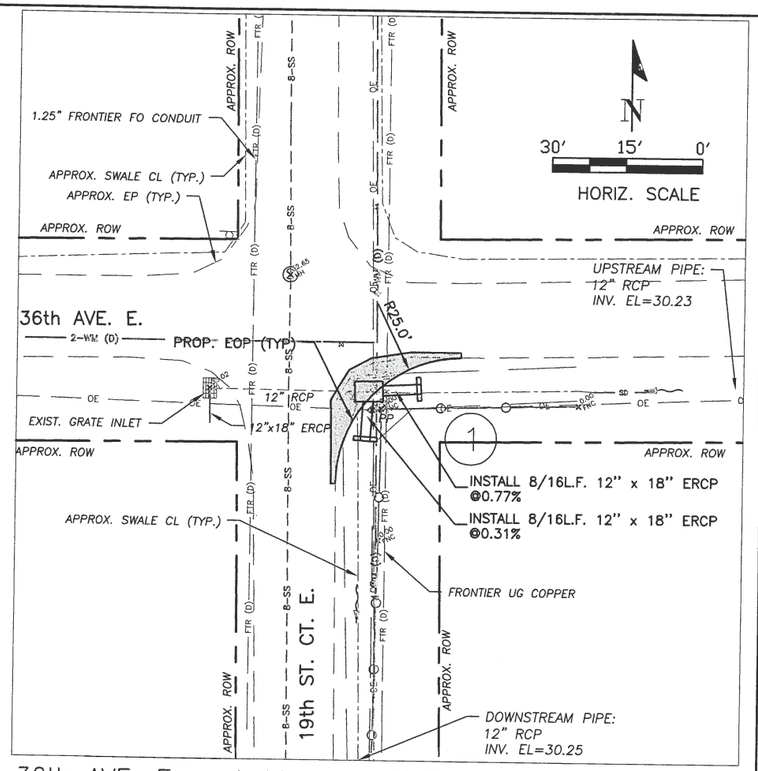
S:\PWD_Engineering_Shore\Highway Engineering\INTERSECTION STUDIES AND IMPROVEMENTS\20 inters\32_34_36\DWG\32_34_36\DWG\32_34_36 PLAN VIEW.dwg, 7 PLAN VIEW, 12/14/2016 7:09 AM Ken Lasher, 1:1, 11x17



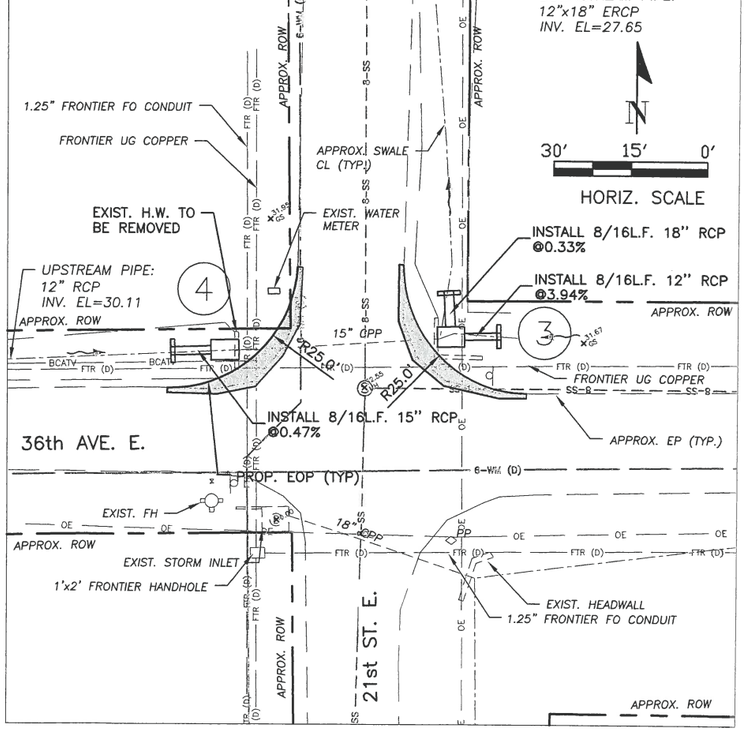
36th AVE. E. and 17th ST. CT.E. INTERSECTION(NE;NW)



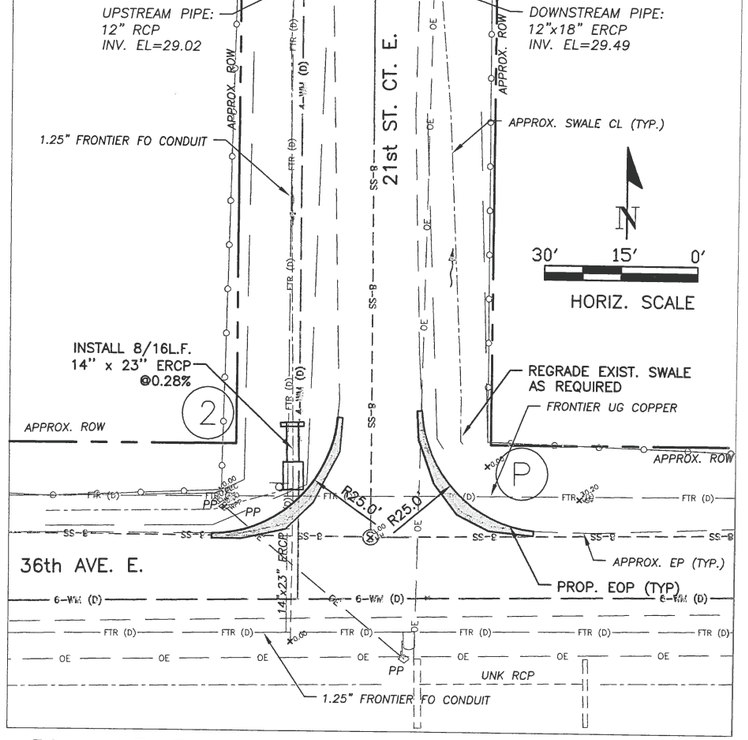
36th AVE. E. and 19th ST. E. INTERSECTION(NW)



36th AVE. E. and 19th ST. CT.E. INTERSECTION(SE)



36th AVE. E. and 21st ST. E. INTERSECTION(NE;NW)



36th AVE. E. and 21st ST. CT.E. INTERSECTION(NE;NW)

Manatee County FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS

PLAN VIEW

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220
SURVEY #	000
SEC./TWN./RGE	06/35S/18E
SCALE	AS NOTED

	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB/JEA	07/2016
CHECKED	CM/GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367

ANTHONY DAVID RUSSO LICENSE No. 45367 STATE OF FLORIDA PROFESSIONAL ENGINEER
12/14/16

Signature & Date

SHEET 8

S:\PWD_Engineering_Share\Highway Engineering\INTERSECTION STUDIES AND IMPROVEMENTS\20 inters\32_34_36\DWG\32_34_36-PLAN VIEW.dwg,8 PLAN VIEW, 12/14/2016 7:09 AM Ken Lasher, 1:1, 11x17

GENERAL NOTES

1. ALL REFERENCED STANDARDS SHALL BE LATEST REVISION.
2. CONCRETE SHALL BE CLASS "I" AS SPECIFIED IN SECTION 345 OF F.D.O.T. SPECIFICATIONS
3. SEE SECTION 425-2.2 "MORTAR" OF FLORIDA D.O.T. SPECIFICATIONS.
4. IRON CASTING SHALL BE AS SPECIFIED IN SECTION 962-8 OF F.D.O.T. SPECIFICATIONS. SEE SECTION 425-5.
5. ALL REINFORCEMENT STEEL SHALL BE AS SPECIFIED IN SECTIONS 415 & 931.1 OF F.D.O.T. SPECIFICATIONS.
6. SEE FLORIDA D.O.T. SPECIFICATIONS FOR GRATINGS.
7. SEE FLORIDA D.O.T. SPECIFICATIONS FOR SECTION 125 "EXCAVATION FOR STRUCTURES."
8. PRECAST TOP AND BOTTOM TO BE F.D.O.T. STANDARDS WITH MINIMUM TRAFFIC BEARING 8" THICKNESS.
9. ALL STORMWATER PIPE SHALL BE INSTALLED BEHIND THE CURB OR EDGE OF PAVEMENT AND WITHIN THE RIGHT OF WAY AND WITHIN THE DRAINAGE EASEMENTS.
10. THE FOLLOWING IS THE DRAINAGE STRUCTURE WALL MINIMUM THICKNESS:

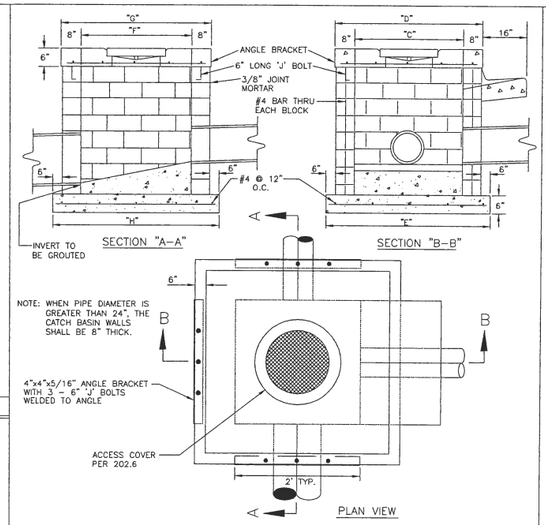
PRECAST	BLOCK
NON-TRAFFIC 6"	8" EITHER WAY

NOTE: FOR DRAINAGE STRUCTURES WITH PIPE DIAMETERS UP TO AND INCLUDING 24". 6" PRECAST WALLS ARE ACCEPTABLE FOR TRAFFIC BEARING.

DIMENSION INDEX

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

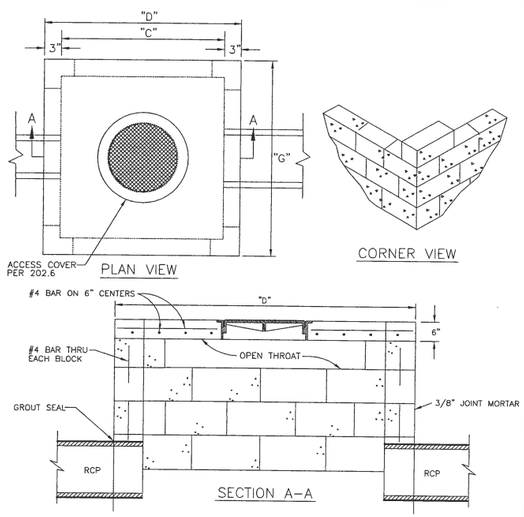
MANATEE COUNTY FLORIDA | REV.BY | DATE | 6/12/07 DATE OF B.O.C.C. APPROVAL | DRAINAGE CONTROL SHEET | 202.0



NOTE: DIMENSIONS PER SECTION 202.0

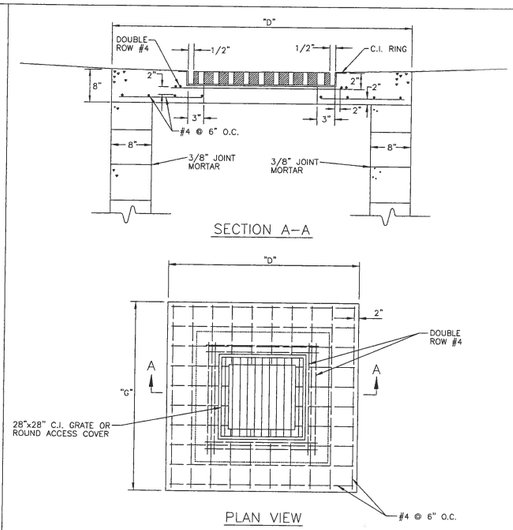
A) THE FOLLOWING MATERIALS TO BE AS SPECIFIED IN THE FLORIDA D.O.T. SPEC'S. 1991, SECTION 346 CONCRETE, SECT. 962-8 IRON CASTING, SECT. 931-1 REINFORCEMENT STEEL, SECT. 425 INLETS, MANHOLES & JUNCTION BOXES.
B) FILL BLOCKS WITH 3,000 psi CONCRETE, USE #4 ROD IN EACH BLOCK, 16" O/C.
C) 2" MINIMUM COVER ON ALL REBAR.
D) USE #4 REBARS ON 6" CENTERS BOTH WAYS ON LID; NO.4 REBARS ON 12" CENTERS BOTH WAYS ON FLOOR SLAB.
E) SEE SHEET 202.0 FOR GENERAL NOTES AND DIMENSION INDEX.
F) ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
G) PRECAST BOXES AS SPECIFIED IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS (2000) ARE AN ACCEPTABLE ALTERNATIVE AS APPROVED BY THE TRANSPORTATION DIRECTOR OR HIS DESIGNEE.
H) ALL PIPE ENTRIES TO CATCH BASIN TO BE GROUTED AND SEALED.

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



A) DROP INLET IS NOT DESIGNED TO BE SUBJECTED TO VEHICULAR TRAFFIC.
B) NUMBER OF SIDES OPEN FOR DRAINAGE DEPENDS UPON FLOW VOLUME REQUIREMENTS.
C) THE FOLLOWING MATERIALS SHALL BE AS SPECIFIED IN FLORIDA D.O.T. SPEC'S., 2000. SEC 346 CONCRETE, SEC 962-8 IRON CASTING, SEC 931-1 REINFORCED STEEL.
D) FILL BLOCKS WITH 3,000 P.S.I. CONCRETE (EACH CELL), USE #4 ROD IN EACH BLOCK, 16" O/C.
E) USE #4 ROD ON 6" CENTERS BOTH WAYS ON LID.
F) SEE SHEET # 202.0 GENERAL NOTES AND DIMENSIONS INDEX, ALSO SHEET 202.1 TYP. CONC. BOX.
G) PRECAST BOXES TO F.D.O.T. SPECIFICATIONS ARE AN ACCEPTABLE ALTERNATE.
H) INVERT TO BE GROUTED (SEE 202.1).
I) PRECAST BOXES AS SPECIFIED IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS ARE AN ACCEPTABLE ALTERNATIVE AS APPROVED BY THE TRANSPORTATION DIRECTOR OR HIS DESIGNEE.
J) ANGLE BRACKETS SHOWN ON 202.1 NOT REQUIRED.

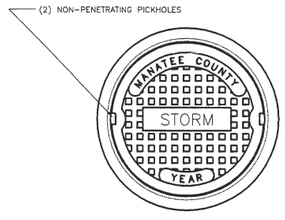
MANATEE COUNTY FLORIDA | REV.BY | DATE | 6/12/07 DATE OF B.O.C.C. APPROVAL | THROAT DETAIL FOR DROP INLET | 202.3

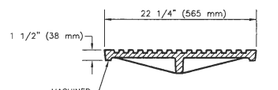


NOTE: DIMENSIONS "D" & "G" PER SECTION 202.0

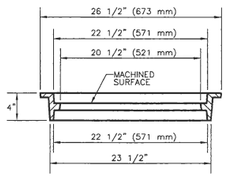
A) ALTERNATE C.I. GRATES, 18"X 24", 24"X 24", 28"X 36" OR ACCESS COVER (202.6).
B) 8" TRAFFIC BEARING LID W/ REINFORCING C.I. RING & DOUBLE ROW OF #4 REBAR.
C) FOLLOWING MATERIALS ARE SPECIFIED IN FLORIDA D.O.T. SPEC'S., 2000. SEC 346 CONCRETE, SEC 962-8 IRON CASTING, SEC 931-1 REINFORCED STEEL.
D) FILL BLOCKS WITH 3,000 P.S.I. CONCRETE (EACH CELL), USE #4 ROD IN EACH BLOCK, 16" O/C.
E) USE #4 ROD ON 6" CENTERS BOTH WAYS ON LID. (SEE 202.3 E)
F) SEE SHEET # 202.0 GENERAL NOTES AND DIMENSIONS INDEX, ALSO SHEET 202.1 TYP. CONC. BOX.
G) INVERT TO BE GROUTED (SEE 202.1).
H) PRECAST BOXES AS SPECIFIED IN F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS ARE AN ACCEPTABLE ALTERNATIVE AS APPROVED BY THE TRANSPORTATION DIRECTOR OR HIS DESIGNEE.
I) ANGLE BRACKETS SHOWN ON 202.1 NOT REQUIRED.

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





COVER



RING

USF 1110 RING & PROPOSED COVER

NOTE:
1 - MATERIAL; ASTM-A48 CLASS 30B GRAY IRON.
2 - COVER WEIGHT: 105 LBS. APPROX.
3 - RING WEIGHT: 90 LBS. APPROX.

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

GENERAL NOTES

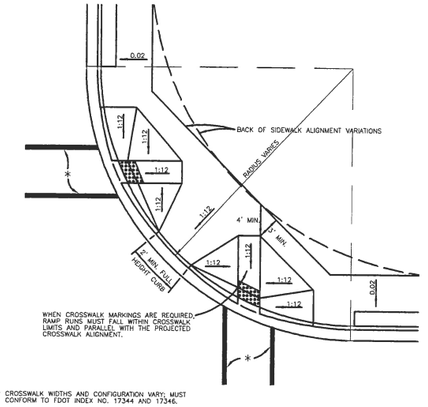
1. SIDEWALK SHALL BE CONSTRUCTED A MINIMUM OF 4" THICK, USING 3000 psi CONCRETE. WHERE SIDEWALK BISECTS A DRIVEWAY, THE MINIMUM SHALL BE 6" OF CLASS I CONCRETE REINFORCED WITH 6"x6" #10 WIRE MESH.
   * SEE SHEETS #101.2 & 101.3.
2. ALL SIDEWALKS SHALL BE CONSTRUCTED TO THE SPECIFICATIONS OF THE MANATEE COUNTY LAND DEVELOPMENT CODE, SECTION 722. A MINIMUM (5) FOOT WIDE SIDEWALK SHALL BE INSTALLED ALONG THE NORTH AND WEST SIDES OF ALL NEW LOCAL STREETS WHICH ARE CONSTRUCTED IN CONJUNCTION WITH A NEW RESIDENTIAL DEVELOPMENT. A SIDEWALK A MINIMUM OF (5) FEET IN WIDTH SHALL BE INSTALLED ON BOTH SIDES OF ALL THOROUGHFARES. REFER TO F.D.O.T. ROADWAY AND TRAFFIC STANDARDS, LATEST REVISION FOR CURB CUT RAMP SPECIFICATIONS.
3. THE CONCRETE SHALL BE GIVEN A BROOM FINISH. THE SURFACE VARIATIONS SHALL NOT BE MORE THAN 1/4" UNDER A TEN FOOT STRAIGHTEDGE, NOR MORE THAN 1/8" ON A FIVE-FOOT TRAVERSE SECTION. THE EDGE OF THE SIDEWALK SHALL BE CAREFULLY FINISHED WITH AN EDGING TOOL HAVING A RADIUS OF 1/2".
4. EXPANSION JOINT: EXPANSION JOINTS BETWEEN THE SIDEWALKS AND THE CURB OR DRIVEWAY OR AT FIXED OBJECTS AND SIDEWALK INTERSECTIONS SHALL BE 1/2" MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO M153 OR AASHTO M213. FOR LONG POORS, AN EXPANSION JOINT SHALL BE PLACED AT INTERVALS NOT TO EXCEED 120'.
5. CONTRACTION JOINTS:

   OPEN TYPE JOINTS
   OPEN TYPE CONSTRACTION JOINTS SHALL BE FORMED BY STAKING A METAL BULKHEAD IN PLACE AND DEPOSITING THE CONCRETE ON BOTH SIDES. AFTER THE CONCRETE HAS SET SUFFICIENTLY TO PRESERVE THE WIDTH AND THE SHAPE OF THE JOINT, THE BULKHEAD SHALL BE REMOVED. AFTER THE SIDEWALK HAS BEEN FINISHED OVER THE JOINT, THE SLOT SHALL BE FINISHED WITH A TOOL HAVING A 1/2" RADIUS.

   SAWED JOINTS
   A SLOT APPROXIMATELY 3/16" WIDE AND NOT LESS THAN 1" DEEP AT 10' CENTERS SHALL BE CUT WITH A CONCRETE SAW AFTER THE CONCRETE HAS SET.
6. SIDEWALKS ALONG OTHER STREETS SHALL BE CONSTRUCTED AND DEDICATED AS REQUIRED BY THE APPROVING AUTHORITY WHEN NECESSARY TO CONTINUE AN EXISTING OR PROPOSED SIDEWALK.
7. HANDICAP RAMPS SHALL MEET FLORIDA ACCESSIBILITIES STANDARDS, AND SECTIONS 301.0, 301.1 AND 301.2.
8. ALL SIDEWALKS ON R/W WITHIN 10' OF AN EXISTING OR PROPOSED TREE THAT WILL EXCEED 6" IN DIAMETER AT MATURITY SHALL BE 5" THICK AND CONTAIN 2-#3 REBAR CENTERED VERTICALLY AND SPACED 3' ON CENTER. PALMS ARE NOT CONSIDERED TREES.

*NOTE: FOR COMPLETE SIDEWALK DETAILS, SEE F.D.O.T. DESIGN STANDARDS, 2006 EDITION, INDEX 304, SHEETS 1 THROUGH 6 AND INDEX 310, SHEETS 1 & 2.

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

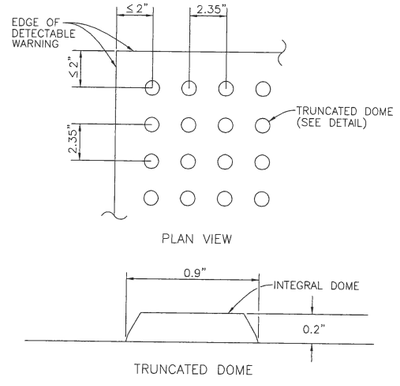


* CROSSWALK WIDTHS AND CONFIGURATION VARY; MUST CONFORM TO FDOT INDEX NO. 17344 AND 17346.

1) CURB CUT RAMPS ARE TO BE LOCATED AS SHOWN ON PLANS.
2) SEE SHEETS # 300.1 "GENERAL NOTES" & # 301.2 "HANDICAPPED RAMP" SHT 2 FOR FURTHER REQUIREMENTS.
3) RADIUS OF CURB VARIES AS FOLLOWS:
   A) 25' RAD. LOCAL STREET WITH ALLEY.
   B) 25' RAD. LOCAL STREET WITH LOCAL STREET.
   C) 35' RAD. LOCAL STREET WITH THOROUGHFARE OR COLLECTOR.
   D) 50' RAD. THOROUGHFARE WITH THOROUGHFARE
4) CURB RADIUS SHOULD BE A MINIMUM OF 50' WHERE INDUSTRIAL AND BUS TRAFFIC (5% OR MORE) IS ANTICIPATED ON LOWER CLASSIFICATION ROADWAYS.
5) BOTH LOCATION OPTIONS FOR HANDICAPPED RAMP ARE SHOWN. ENGINEER MAY SELECT EITHER, WHICHEVER FITS THE SITUATION.

NOTE: FOR COMPLETE HANDICAP, PUBLIC SIDEWALK AND CURB RAMP DETAILS, SEE F.D.O.T. DESIGN STANDARDS, 2006 EDITION, INDEX 304, SHEETS 1 THROUGH 6.

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



CURB RAMP DETECTABLE WARNING DETAIL

NOTES:

DETECTABLE WARNINGS ON WALKING SURFACES

THE DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH AND DEPTH OF THE CURB RAMP.

DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCH, A HEIGHT OF NOMINAL 0.2 INCH AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCH AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT.

THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70%. CONTRAST IN PERCENT IS DETERMINED BY:

CONTRAST = [(B1-B2)/B1] x 100

WHERE B1 = LIGHT REFLECTANCE VALUE (LRV) OF THE LIGHTER AREA AND B2 = LIGHT REFLECTANCE VALUE (LRV) OF THE DARKER AREA.

NOTE THAT IN ANY APPLICATION BOTH WHITE AND BLACK ARE NEVER ABSOLUTE; THUS B1 NEVER EQUALS 100 AND B2 IS ALWAYS GREATER THAN 0.

MANATEE COUNTY FLORIDA | REV.BY | DATE | 6/12/07 DATE OF B.O.C.C. APPROVAL | CURB RAMP DETECTABLE WARNINGS | 303.1

Manatee County FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS

GENERAL DETAILS

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	CIP 9012220
SURVEY #	----
SEC./TWN./RGE	----
SCALE	N.T.S.

	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB	07/2016
CHECKED	TW/GB	07/2016

ANTHONY P. RUSSO, P.E.
FLORIDA REG. # 45367

ANTHONY DAVID RUSSO LICENSE No. 45367 STATE OF FLORIDA PROFESSIONAL ENGINEER

12/14/16
Signature & Date

SHEET 9

MINIMUM FACE OF CURB RADIUS FOR INTERSECTING ROADS

ROAD CLASSIFICATION	LOCAL RESIDENTIAL (URBAN & RURAL)	INDUSTRIAL (URBAN & RURAL)	MINOR COLLECTOR	MAJOR COLLECTOR	ARTERIAL
LOCAL RESIDENTIAL (URBAN & RURAL)	25'	40'	35'	35'	35'
INDUSTRIAL (URBAN & RURAL)	40'	50'	50'	50'	50'
MINOR COLLECTOR	35'	50'	50'	50'	50'
MAJOR COLLECTOR	35'	50'	50'	50'	50'
ARTERIAL	35'*	50'	50'	50'	50'

INCREASE PER MPO FREIGHT MANAGEMENT STUDY

* WITHOUT TURN LANE = 50'

MANATEE COUNTY
TRANSPORTATION DEPARTMENT
REV.BY | DATE
6/12/07
DATE OF B.O.C.C. APPROVAL

MINIMUM CURB RADIUS | 402.0

GENERAL NOTES

(1) All county road construction shall conform to these Manatee County Department Of Transportation Standards.

(2) Asphaltic Concrete Type S: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 331

Asphaltic Concrete Type III: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 333.

(A) Superpave mixes equivalent to F.D.O.T. Type S mixes are an accepted alternative upon directors approval.

(B) Surface material will be consistent with existing surface, or better.

(3) Limerock Base Course: Shall be per Florida Department Of Transportation 2000 Standard Specifications: Section 200.

(4) Crushed concrete base course is acceptable unless otherwise noted.

(5) Stabilized Sub-Grade: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Sections 160, and 914.

(6) Drainage: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 941.

Soft, yielding or super-saturated material that will not readily compact shall be considered unacceptable for backfill. This is at the discretion of the field engineer. This type of existing material must be excavated from the road footprint to a depth as set by an approved testing lab.

(7) Soil Cement: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 270, excluding Sub-Section 270-4.3.1 ("Mix in place").

(8) Concrete Gutters; Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 520.

(9) Topsoil: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 987.

Sodding: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 575.

Grassing: Shall be per Florida Department Of Transportation 2000 Standard Specifications; Section 570.

(A) Entire R/W between road and property line, including median, shall be fertilized (1000 lbs. of slow-release 8-12-6 per acre), and seeded (30 lbs. Bahia and 30 lbs. of Rye per acre) and mulched, or sodded, as directed by the engineer.

(B) Hydromulch: Shall be per Florida Department Of Transportation Specifications Section 571.

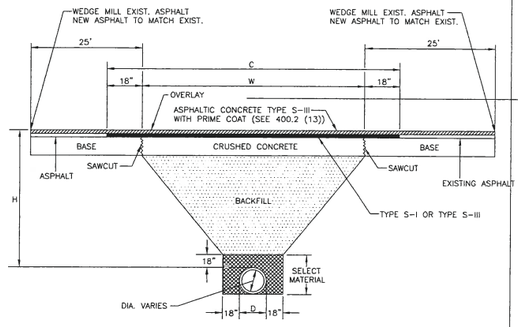
(10) Visibility Triangles: Shall be in accordance with the Manatee County Land Development Code 1994; Section 713, latest revision, and Section 600.7-600.9.

(11) Handicap Ramps shall meet Florida Accessibilities Standards, and Section 302 series.

(12) Prime coat shall be applied @ a rate of 0.2 gal/sy. Tack coat of 0.08 gal/sy rate to be applied for overlay of existing roads.

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

GENERAL NOTES | 400.1



A. CRUSHED CONCRETE BASE SHALL BE A MINIMUM OF 8" THICK AND A MINIMUM OF "W" IN WIDTH, OR GREATER, WHERE DISTURBED AREA IS GREATER THAN "W" FROM EQUATION: W=(2 X H) + D + (2 X 18"). SAND ASPHALT BASE WILL BE AN ACCEPTABLE ALTERNATE.

B. BACKFILL: AASHTO M145-66 SHALL BE PLACED IN LAYERS NOT TO EXCEED 6", EACH LAYER WILL BE THOROUGHLY TAMPED AND/OR ROLLED TO 98% OF MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180). NON-SHRINK, HIGH SLUMP, 1,500 PSI CONC. BACKFILLL MAY BE USED AS AN ALTERNATIVE IF APPROVED BY TRANSPORTATION DEPARTMENT.

C. SELECT MATERIAL, AASHTO M-146-70, SHALL BE PLACED ON BOTH SIDES OF THE PIPE SIMUTANEOUSLY, COMPACT AREA UNDER HAUNCHES OF THE PIPE W/ MECHANICAL TAMPERS, AND THROUGHOUT THE REMAINDER OF THE SELECT MATERIAL.

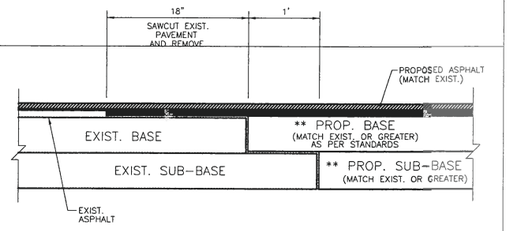
D. ASPHALTIC CONCRETE FRICTION COURSE, SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF ONE INCH, WHICHEVER IS GREATER. C = W+36

E. "H" = THE DEPTH FROM TOP OF PIPE TO THE CENTERLINE OF THE ROAD (MINIMUM OF 36") MINIMUM OF 30" UNDER FLOWLINE OF SIDE DITCHES.

F. RESTORE EXISTING SIGNAGE & MARKING WITH THERMOPLASTIC PER F.D.O.T. STANDARDS.

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

UTILITY ROAD CUT REPLACEMENT | 403.2



** NOTE: CONNECTION TO OLDER (SUBSTANDARD THICKNESS) ROADS MAY REQUIRE THICKER PROPOSED BASE AND SUB-BASE TO MEET CURRENT STANDARDS.

SIGNAGE AND MARKING PLAN SHALL ACCOMPANY CONSTRUCTION PLAN.

ROAD CONNECTION DETAIL

N.T.S.

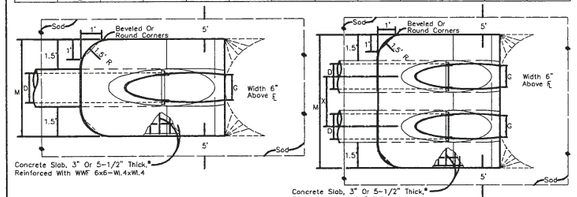
MANATEE COUNTY
FLORIDA
REV.BY | DATE
6/12/07
DATE OF B.O.C.C. APPROVAL

ROAD CONNECTION DETAIL | 403.3

ROUND PIPE

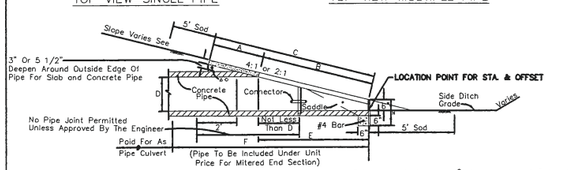
DIMENSIONS AND QUANTITIES

	D	X	A	B	C	E	F	G	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe
2:1 Slope	15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	4.63'	7.21'	9.79'	12.37'
	18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	4.92'	7.75'	10.58'	13.42'
	24"	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	5.50'	8.92'	12.33'	15.75'
	30"	4'-3"	2.15'	4.95'	7.10'	4.56'	8'	2.00'	6.08'	10.33'	14.58'	18.83'
	36"	5'-1"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	6.67'	11.75'	16.83'	21.92'
	42"	6'-0"	2.34'	7.21'	9.55'	6.56'	10'	2.45'	7.25'	13.25'	19.25'	25.25'
	48"	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	7.83'	14.58'	21.33'	28.08'
	54"	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	8.42'	16.08'	23.75'	31.42'
	60"	8'-6"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	9.00'	17.50'	26.00'	34.50'
	66"	9'-2"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	9.58'	18.75'	27.92'	37.08'
	72"	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	10.16'	20.16'	30.16'	40.16'
4:1 Slope	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	7.21'	9.79'	12.37'
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.75'	10.58'	13.42'
	24"	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	5.50'	8.92'	12.33'	15.75'
	30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58'	18.83'
	36"	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	6.67'	11.75'	16.83'	21.92'
	42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	13.25'	19.25'	25.25'
	48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	7.83'	14.58'	21.33'	28.08'
	54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	16.08'	23.75'	31.42'
	60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	17.50'	26.00'	34.50'
	66"	9'-2"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	9.58'	18.75'	27.92'	37.08'
	72"	10'-0"	3.91'	22.68'	26.59'	23.03'	27'	3.30'	10.16'	20.16'	30.16'	40.16'



TOP VIEW-SINGLE PIPE

TOP VIEW-MULTIPLE PIPE



* Slope: 4:1 Miter: To ℄ Pipe For Pipes 18" And Smaller.
2:1 For Pipes 24" And Larger.
2:1 Miter: To ℄ Pipe For Pipes 18" And Smaller.
1:1 For Pipes 24" And Larger.

SECTION

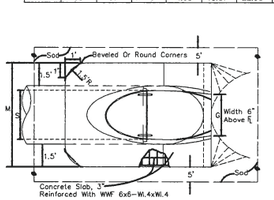
MANATEE COUNTY
FLORIDA
REV.BY | DATE
6/12/07
DATE OF B.O.C.C. APPROVAL

MITERED END SECTION FOR ROUND, SINGLE & MULTIPLE PIPES | 102.2

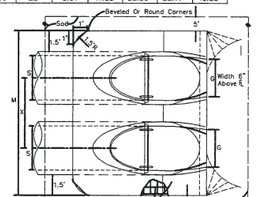
ELIPTICAL PIPE

DIMENSIONS & QUANTITIES

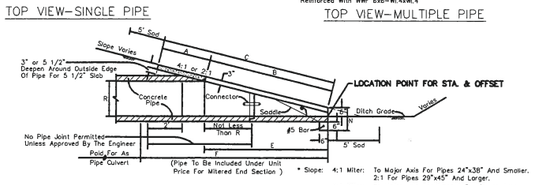
	Rise R	Span S	X	A	B	C	E	F	G	M Single Pipe	M Double Pipe	M Triple Pipe	M Quad. Pipe
2:1 Slope	12"	18"	2'-10"	1.97'	1.62'	3.59'	1.56'	4'	1.50'	4.92'	7.75'	10.58'	13.42'
	14"	23"	3'-4"	2.01'	1.99'	4.00'	1.89'	5'	1.90'	5.38'	8.71'	12.04'	15.38'
	19"	30"	4'-0"	2.11'	2.92'	5.03'	2.73'	6'	2.37'	6.04'	10.04'	14.04'	18.04'
	24"	36"	5'-0"	2.20'	3.85'	6.05'	3.56'	7'	2.85'	6.79'	11.79'	16.79'	21.79'
	29"	45"	5'-11"	2.34'	4.79'	7.13'	4.39'	8'	3.19'	7.50'	13.42'	19.33'	25.25'
	34"	53"	7'-0"	2.43'	5.72'	8.15'	5.23'	9'	3.57'	8.25'	15.25'	22.25'	29.25'
	38"	60"	7'-10"	2.52'	6.46'	8.98'	5.89'	9'	3.95'	8.92'	16.75'	24.58'	32.42'
	43"	68"	8'-11"	2.62'	7.39'	10.01'	6.73'	10'	4.28'	9.67'	18.58'	27.50'	36.42'
	48"	76"	9'-11"	2.71'	8.33'	11.04'	7.56'	11'	4.59'	10.42'	20.33'	30.25'	40.17'
	53"	83"	10'-8"	2.80'	9.26'	12.06'	8.39'	12'	4.77'	11.08'	21.75'	32.42'	43.08'
	58"	91"	11'-8"	2.90'	10.19'	13.09'	9.23'	13'	5.01'	11.83'	23.50'	35.17'	46.83'
4:1 Slope	12"	18"	2'-10"	2.36'	3.06'	5.42'	3.03'	5'	1.50'	4.92'	7.75'	10.58'	13.42'
	14"	23"	3'-4"	2.44'	3.75'	6.19'	3.70'	6'	1.90'	5.38'	8.71'	12.04'	15.38'
	19"	30"	4'-0"	2.62'	5.47'	8.09'	5.36'	8'	2.37'	6.04'	10.04'	14.04'	18.04'
	24"	36"	5'-0"	2.75'	7.18'	9.97'	7.03'	10'	2.85'	6.79'	11.79'	16.79'	21.79'
	29"	45"	5'-11"	3.05'	8.90'	11.95'	8.70'	12'	3.19'	7.50'	13.42'	19.33'	25.25'
	34"	53"	7'-0"	3.22'	10.62'	13.84'	10.36'	13'	3.57'	8.25'	15.25'	22.25'	29.25'
	38"	60"	7'-10"	3.39'	11.99'	15.36'	11.70'	15'	3.95'	8.92'	16.75'	24.58'	32.42'
	43"	68"	8'-11"	3.56'	13.71'	17.27'	13.36'	17'	4.28'	9.67'	18.58'	27.50'	36.42'
	48"	76"	9'-11"	3.73'	15.43'	19.16'	15.03'	19'	4.59'	10.42'	20.33'	30.25'	40.17'
	53"	83"	10'-8"	3.91'	17.15'	21.06'	16.70'	20'	4.77'	11.08'	21.75'	32.42'	43.08'
	58"	91"	11'-8"	4.08'	18.87'	22.95'	18.36'	22'	5.01'	11.83'	23.50'	35.17'	46.83'



TOP VIEW-SINGLE PIPE



TOP VIEW-MULTIPLE PIPE

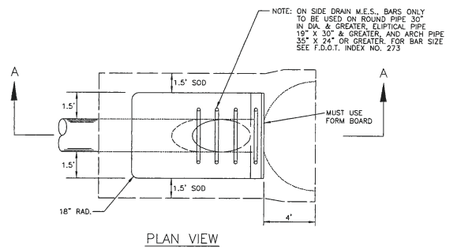


* Slope: 4:1 Miter: To Major Axis For Pipes 24"x38" And Smaller.
2:1 For Pipes 29"x45" And Larger.
2:1 Miter: To Major Axis For Pipes 29"x45" And Smaller.
1:1 For Pipes 34"x53" And Larger.

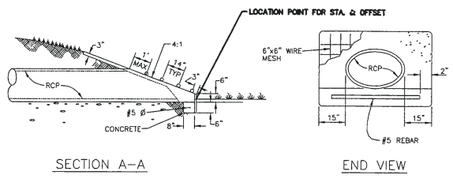
SECTION

MANATEE COUNTY
TRANSPORTATION DEPARTMENT
REV.BY | DATE
6/12/07
DATE OF B.O.C.C. APPROVAL

MITERED END SECTION FOR ELIPTICAL, SINGLE, AND MULTIPLE PIPES | 102.1



PLAN VIEW

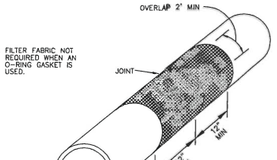


SECTION A-A | END VIEW

SOD TO BE PLACED 1.5 FT AROUND THE PERIMETER OF THE WALL, SOD TO BE BAHIA; ST. AUGUSTINE SOD WHERE THERE IS TIDAL, HEAVY CONCENTRATION OF SALT, OR SURROUNDING PROPERTY IS ST. AUGUSTINE.

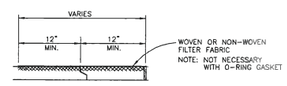
MANATEE COUNTY
FLORIDA
REV.BY | DATE
6/12/07
DATE OF B.O.C.C. APPROVAL

DRIVEWAY AND ROAD PIPE MITERED END SECTION | 103.0

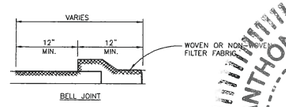


ISOMETRIC VIEW

NOTE: FILTER FABRIC MATERIAL MUST MEET THE FOLLOWING ASTM REQUIREMENTS:
ASTM D 4595
ASTM D 4632
ASTM D 4533
ASTM D 4833
ASTM D 4491



BUTT JOINT



BELL JOINT

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

FILTER FABRIC JACKET | 104.0

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

SAMOSET AREA INTERSECTION IMPROVEMENTS

GENERAL DETAILS

NO.	REVISION DESCRIPTION	BY	DATE

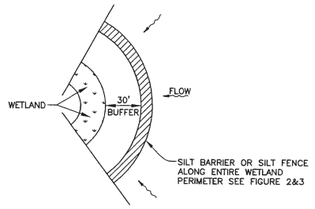
PROJECT #	CIP 9012220
SURVEY #	----
SEC./TWN./RGE	----
SCALE	N.T.S.

	BY	DATE
SURVEY	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	GB	07/2016
CHECKED	CM/GB	07/2016

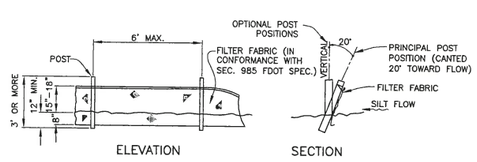
ANTHONY D. RUSSO, P.E.
FLORIDA REG. # 45367

ANTHONY DAVID RUSSO LICENSE No. 45367 STATE OF FLORIDA PROFESSIONAL ENGINEER
12/14/16
Signature & Date

SHEET 10

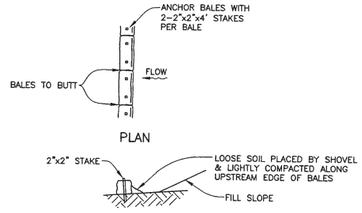


WETLAND BUFFER
FIGURE 1

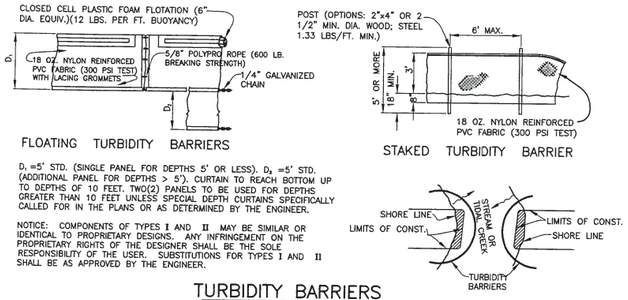


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

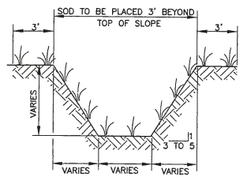
TYPICAL SILT FENCE
FIGURE 2



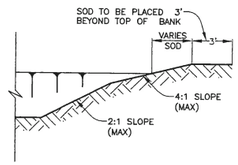
TYPICAL BALE SILT BARRIER
FIGURE 3



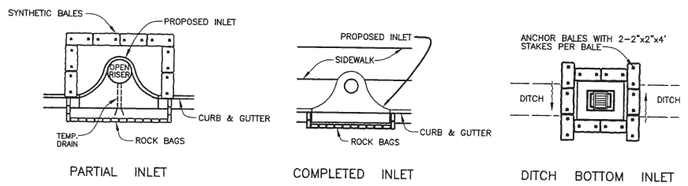
TURBIDITY BARRIERS
FIGURE 4



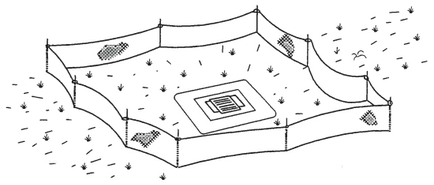
TYPICAL SWALE SECTION
FIGURE 5



TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6

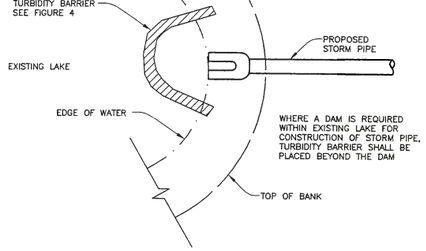


SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7

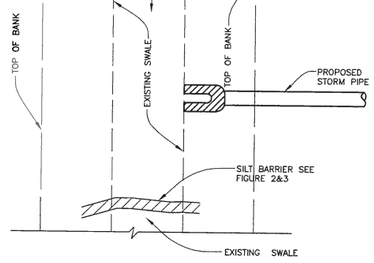


TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

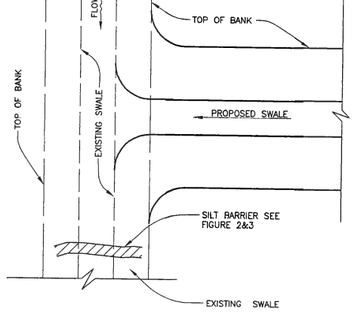
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



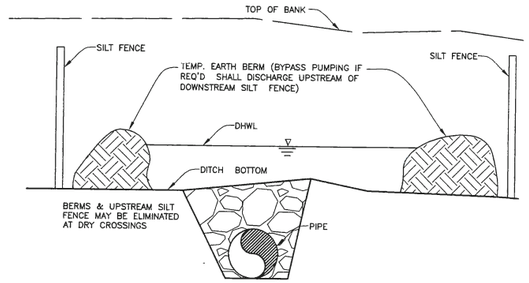
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



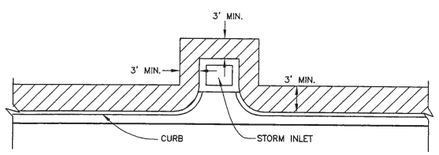
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11

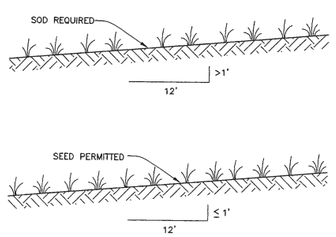


UNDERGROUND PIPE CROSSING
FIGURE 12

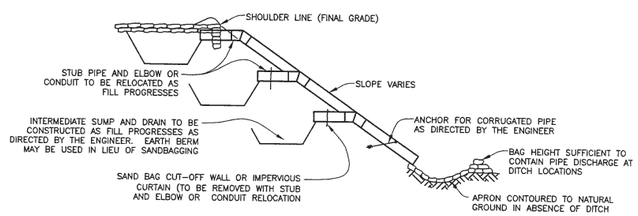


SOD ALONG CURB AND AROUND INLET
FIGURE 14

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

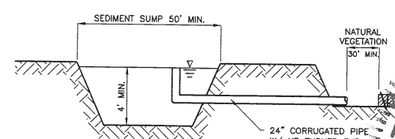


GRASS SLOPES
FIGURE 13



SECTION AA

TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

Manatee County FLORIDA

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

SAMOSET AREA INTERSECTION IMPROVEMENTS

EROSION CONTROL

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #		CIP 9012220
SURVEY #		000
SEC./TWN./RGE		06/35S/18E
SCALE		N.T.S.
	BY	DATE
SURVEYED	N/A	N/A
DESIGNED	GB	07/2016
DRAWN	DJEA	07/2016
CHECKED	GB	07/2016

ANTHONY D. RUSSO, P.E.
FLORIDA P.E. # 45367

ANTHONY DAVID RUSSO LICENSE 45367 STATE OF FLORIDA PROFESSIONAL ENGINEER
12/14/16

Signature & Date

SHEET 11