

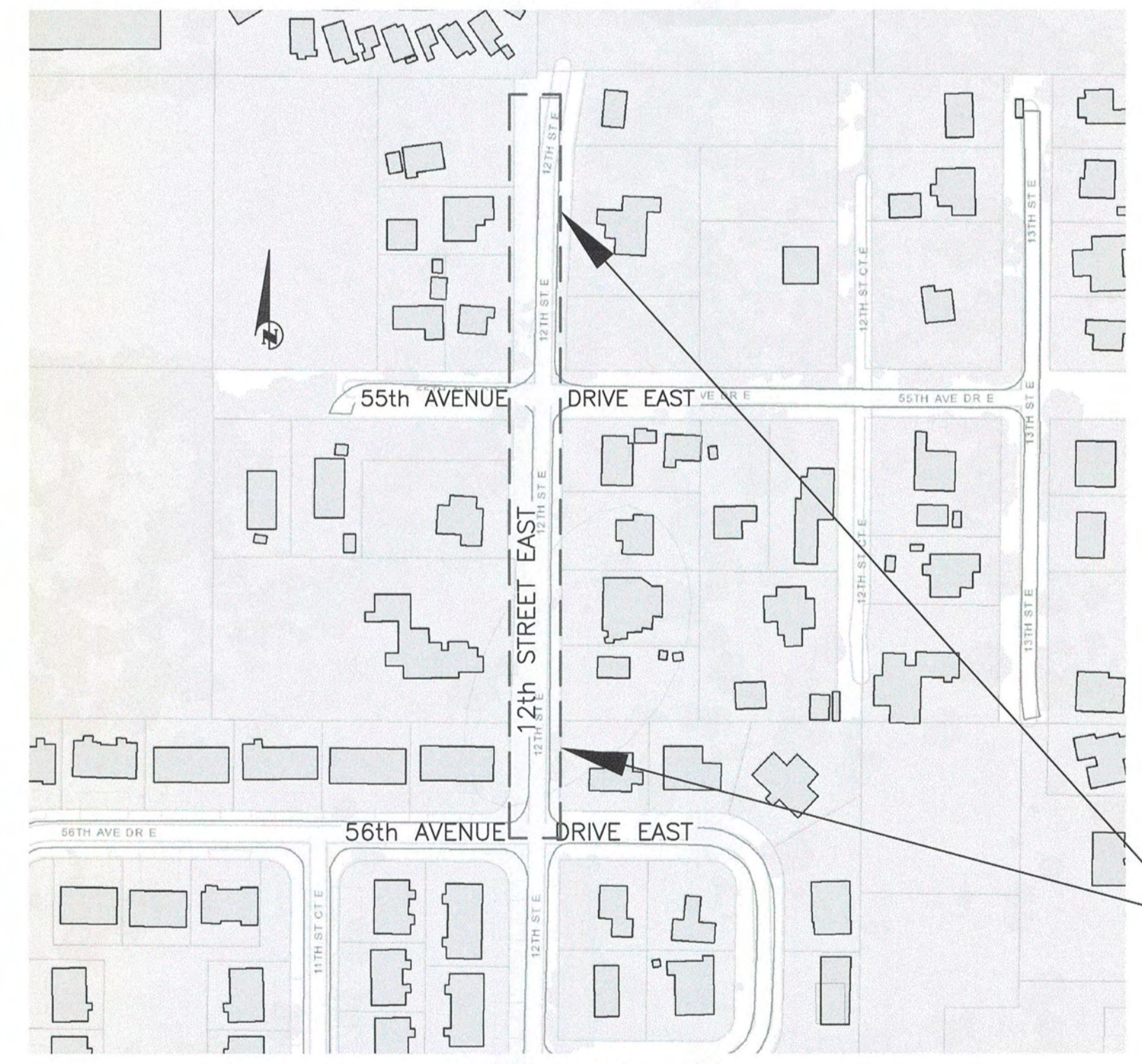


STORM & WATER IMPROVEMENTS

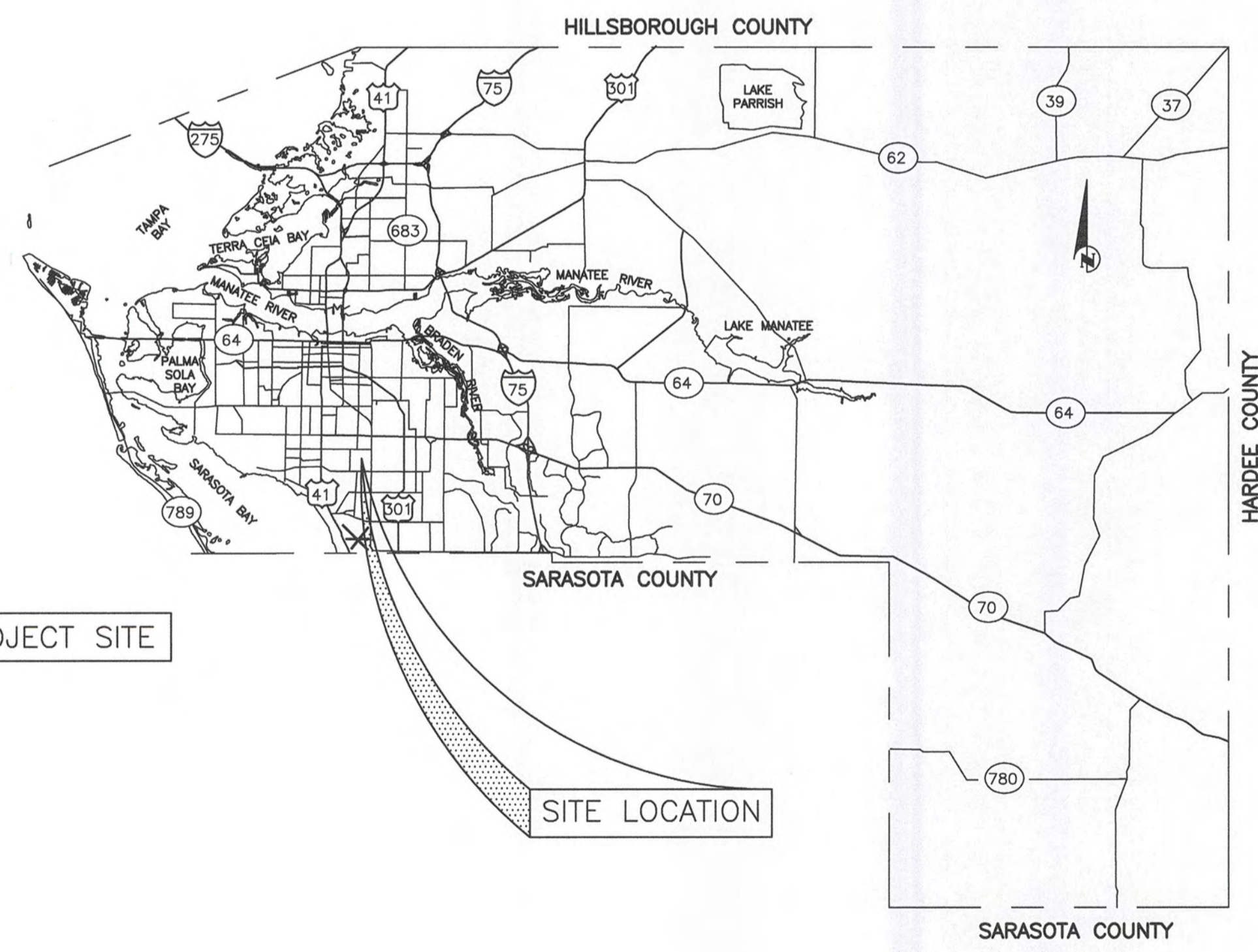
12th STREET EAST

5133970

MARCH 2015



VICINITY MAP
N.T.S.



SITE LOCATION

100% PLANS


NO.	INDEX OF SHEETS
1.	COVER SHEET
2.	GENERAL NOTES & LEGEND
3.	QUANTITY SHEET
4.-7.	PLAN & PROFILE
8.	RESTORATION AREAS
9.-11.	DETAILS
12.	SURVEY CONTROL
13.	EROSION CONTROL

PROJECT DESCRIPTION
 INSTALL APPROXIMATELY 850 LF OF 15"-24"Ø STORM DRAIN
 AND APPROXIMATELY 570 LF OF 6" Ø WATER MAIN.

STORM & WATER IMPROVEMENTS
12th STREET EAST
COVER SHEET

NO.	REVISION DESCRIPTION	DATE
1	CHANGED A2000 PIPE TO RCP ON SHEETS 3, 4 & 5	5/11/15

PROJECT #	5133970
SURVEY #	14.061
SEC./TWN./RGE	13/35/17
SCALE	SEE PAGES
	BY DATE
SURVEYED	MC 12/2013
DESIGNED	JKP 06/2014
DRAWN	JKP 08/2014
CHECKED	MS 08/2014

JOHN K. PARI, P.E.
 FLORIDA P.E. # 56368

 Signature & Date

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\PWD_Engineering\Shara\Stormwater_Engineering\12th St. E Drain_Improvements\DWG\12th ST. E Storm_Improvements_revised.dwg, Cover, 5/11/2015 1:13 PM, Koria Ripley, 1:1, D 22x34" Oversize



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

12th St E Drainage Improvements Engineer 100% Quantities

LINE NO.	ITEM NO.	DESCRIPTION	EST. QTY	U/M
1.	101-1	Mobilization	1.00	LS
2.	102-1	Maintenance of Traffic	1.00	LS
3.	102-99	Portable Changeable Message Sign - Temporary	84.00	ED
4.	104-10-3	Staked Silt Fence (Type III)	600.00	LF
5.	104-11	Floating Turbidity Barrier	20.00	LF
6.	104-18	Inlet Protection System	14.00	EA
7.	110-1-MC	Clearing & Grubbing, incl. riprap, trees, pipes, structures, wells, & underdrain removal	0.26	AC
8.	160-4	6" Stabilized Sub-base (LBR 60)	377.00	SY
9.	285-704	Optional Base Group 4:	377.00	SY
10.	327-70-1	Milling Exis. Asph. Pavment (1" Ave. Depth)	737.00	SY
11.	334-1-MC1	1" Type S-I Asphalt Concrete (Incl Tack Coat)	22.60	TN
12.	334-1-MC2	1" Type S-III Asphalt Concrete	44.20	TN
13.	400-1-2	Class I (Endw all), Incl. Reinforcing Steel	3.26	CY
14.	425-1-521	Inlet (Dt Bot) (Type C) (<10')	6.00	EA
15.	425-1-541	Inlet (Dt Bot) (Type D) (<10')	2.00	EA
16.	425-1-549	Inlet (Dt Bot) (Type D Modified) (<10')	1.00	EA
17.	425-1-MC1	County Junction Box	2.00	EA
18.	430-175-115	Pipe Storm Sew er Culv (RCP)(15")	295.00	LF
19.	430-175-118	Pipe Storm Sew er Culv (RCP)(18")	90.00	LF
20.	430-175-124	Pipe Storm Sew er Culv (RCP)(24")	319.00	LF
21.	430-175-130	Pipe Storm Sew er Culv (RCP)(30")	28.00	LF
22.	430-175-142	Pipe Storm Sew er Culv (RCP)(42")	32.00	LF
23.	430-175-218	Pipe Storm Drain Culv (ERCP) (14"x23")	31.00	LF
24.	430-175-224	Pipe Storm Sew er Culv (ERCP) (19"x30")	40.00	LF
25.	430-984-123	MES (Conc Pipe Round) (15") (SD)	1.00	EA
26.	430-984-625	MES (Conc Pipe Ellip) (14"x23") (SD)	2.00	EA
27.	522-2	6" Concrete Sidew alk, Reinforced Drivew ay	118.00	SY
28.	550-10-228	Fence, Removal and Reinstall	160.00	LF
29.	570-1-2	Sodding (Performance Turf, Bahia) (Includes Mow ing)	893.00	SY
30.		6" PVC (C-900) (Direct Bury)	380.00	LF
31.		6" DIP (CL350) (Direct Bury)	50.00	LF
32.		6" Gate Valve	3.00	EA
33.		4" DIP (CL350) (Direct Bury)	140.00	LF
34.		4" Gate Valve	2.00	EA
35.		Ductile Iron Fittings, Water	326.00	LB
36.		Service Connection, Water (short, single)	5.00	EA
37.		Service Connection, Water (short, double)	1.00	EA
38.		Service Connection, Water (long, single)	1.00	EA
39.		Service Connection, Water (long, double)	1.00	EA
40.		Connection to Existing Water Lines	4.00	EA
41.		Remove existing 4" and 6" w ater mains	565.00	LF
42.		Pipe Joint Restraints	12.00	EA

STORM & WATER IMPROVEMENTS

12th STREET EAST

QUANTITIES

NO.	1	REVISION DESCRIPTION	DATE	BY	KR
		CHANGED A2000 PIPE TO RCP	5/11/15		

PROJECT #	5133970
SURVEY #	14.061
SEC./TWN./RGE	13/35/17
SCALE	NA
	BY DATE
SURVEYED	MC 12/2013
DESIGNED	JKP 06/2014
DRAWN	JKP 08/2014
CHECKED	MS 08/2014

JOHN K. PARI, P.E.
FLORIDA P.E. # 56368

John K. Pari
5/13/15

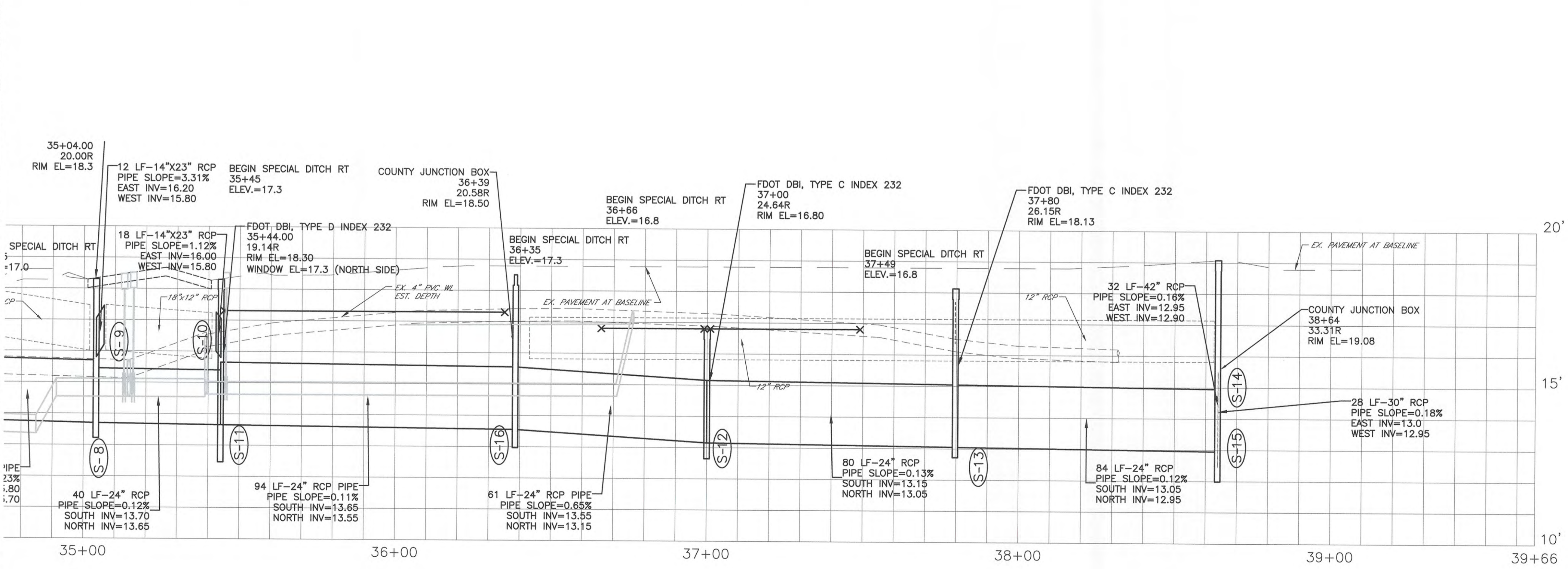
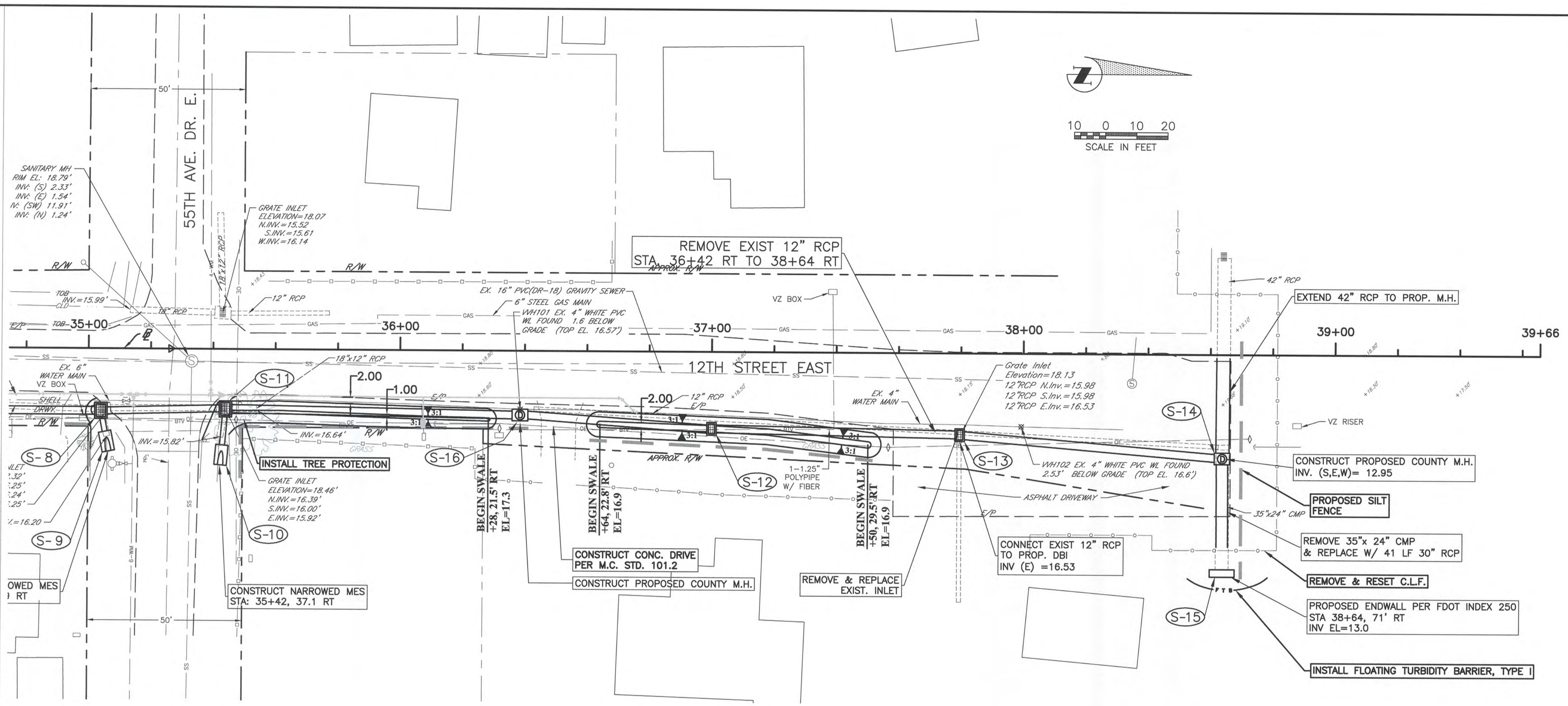
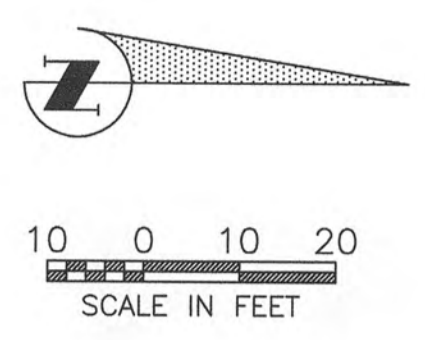
Signature & Date

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT I:\P\DWG\Engineering\Stormwater\Stormwater\12th St E Drain Improve\12th St E Storm Improvements\redlined.dwg\Quantity.sht, 5/11/2015 1:14 PM, Kataro Ripley, L1, D 22"x34" Oversize



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

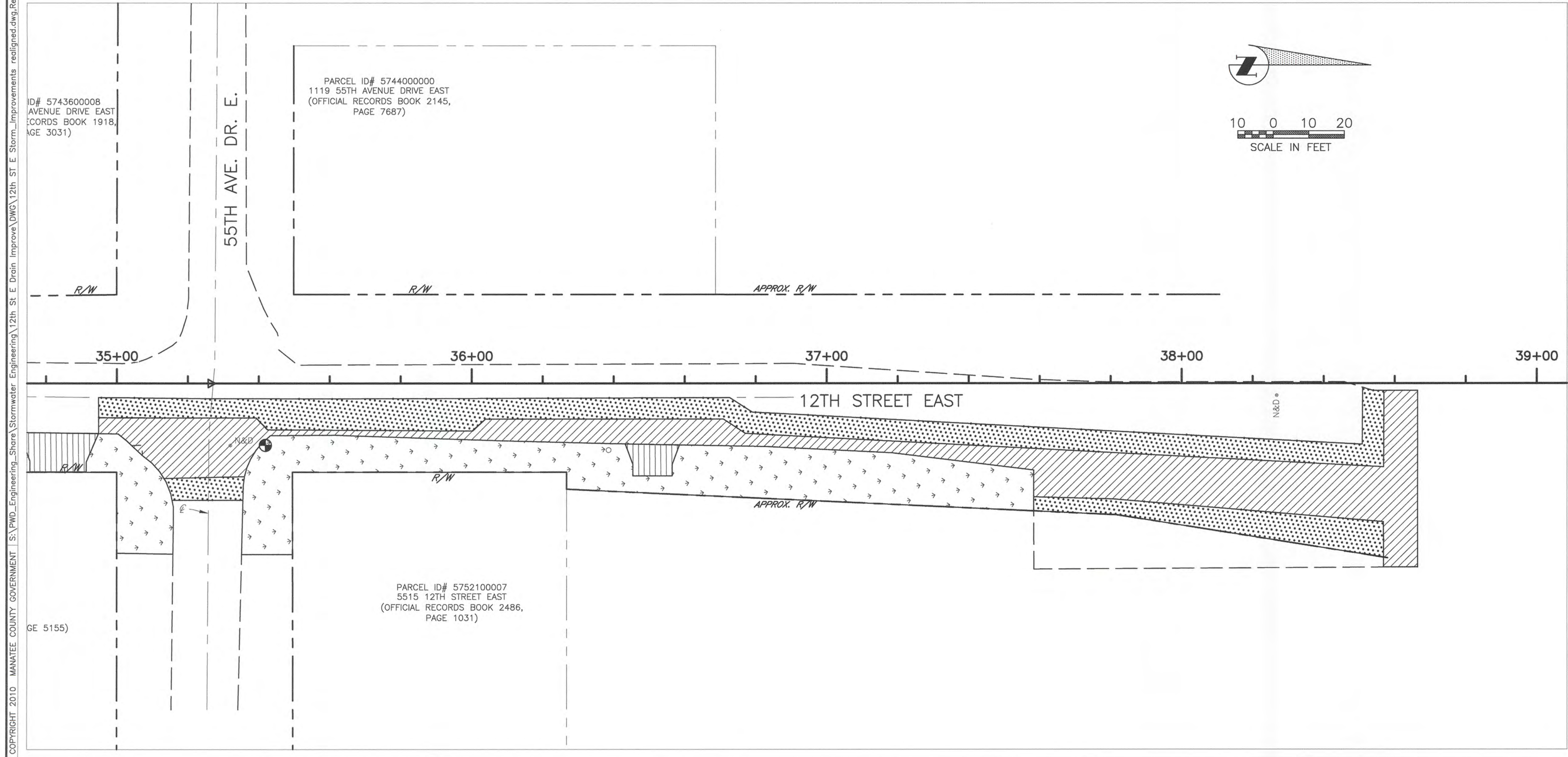
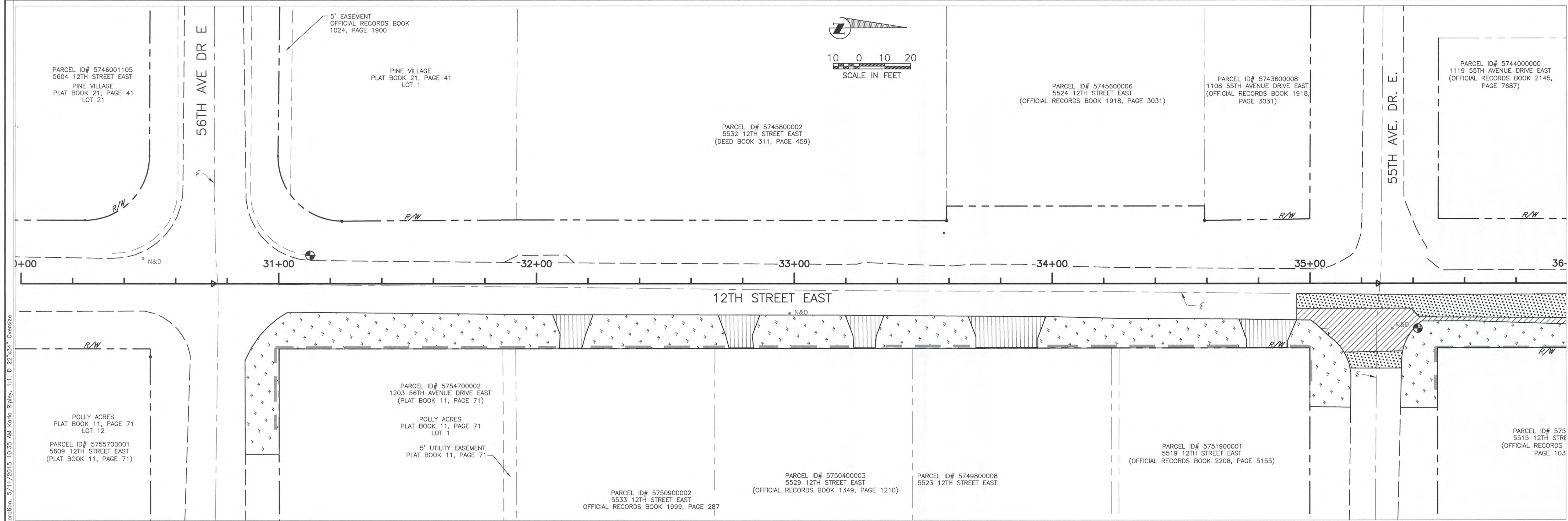
STORM & WATER IMPROVEMENTS 12th STREET EAST STORM WATER PLAN & PROFILE



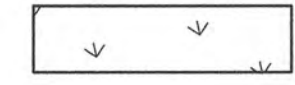
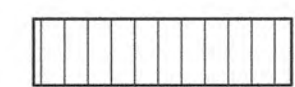


NO.	REVISION DESCRIPTION	BY	DATE
1	CHANGED A2000 PIPE TO RCP	KR	5/11/15

PROJECT #	5133970
SURVEY #	14.061
SEC./TWN./RGE	13/35/17
VERT. SCALE	1"=2'
HORZ. SCALE	1"=20'
SURVEYED	MC 12/2013
DESIGNED	JKP 06/2014
DRAWN	JKP 08/2014
CHECKED	MS 08/2014
JOHN K. PARI, P.E. FLORIDA P.E. # 56368 <i>John K. Pari</i> 5/13/15 Signature & Date	

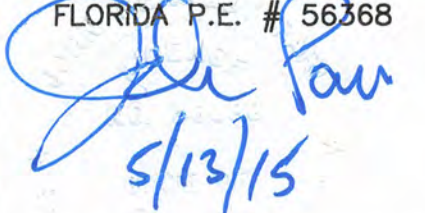
STORM & WATER IMPROVEMENTS
12th STREET EAST
PAVEMENT RESTORATION AND SODDING



-  6" BASE AND 1" MILL & RESURFACE
W/1" ASPHALT CONCRETE TYPE III
-  1" MILL & RESURFACE W/1"
ASPHALT CONCRETE TYPE III
-  SOD
-  CONCRETE DRIVEWAY RESTORATION

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	5133970
SURVEY #	14.061
SEC./TWN./RGE	13/35/17
SCALE	1"=20'
	BY DATE
SURVEYED	MC 12/2013
DESIGNED	JKP 06/2014
DRAWN	JKP 08/2014
CHECKED	MS 08/2014

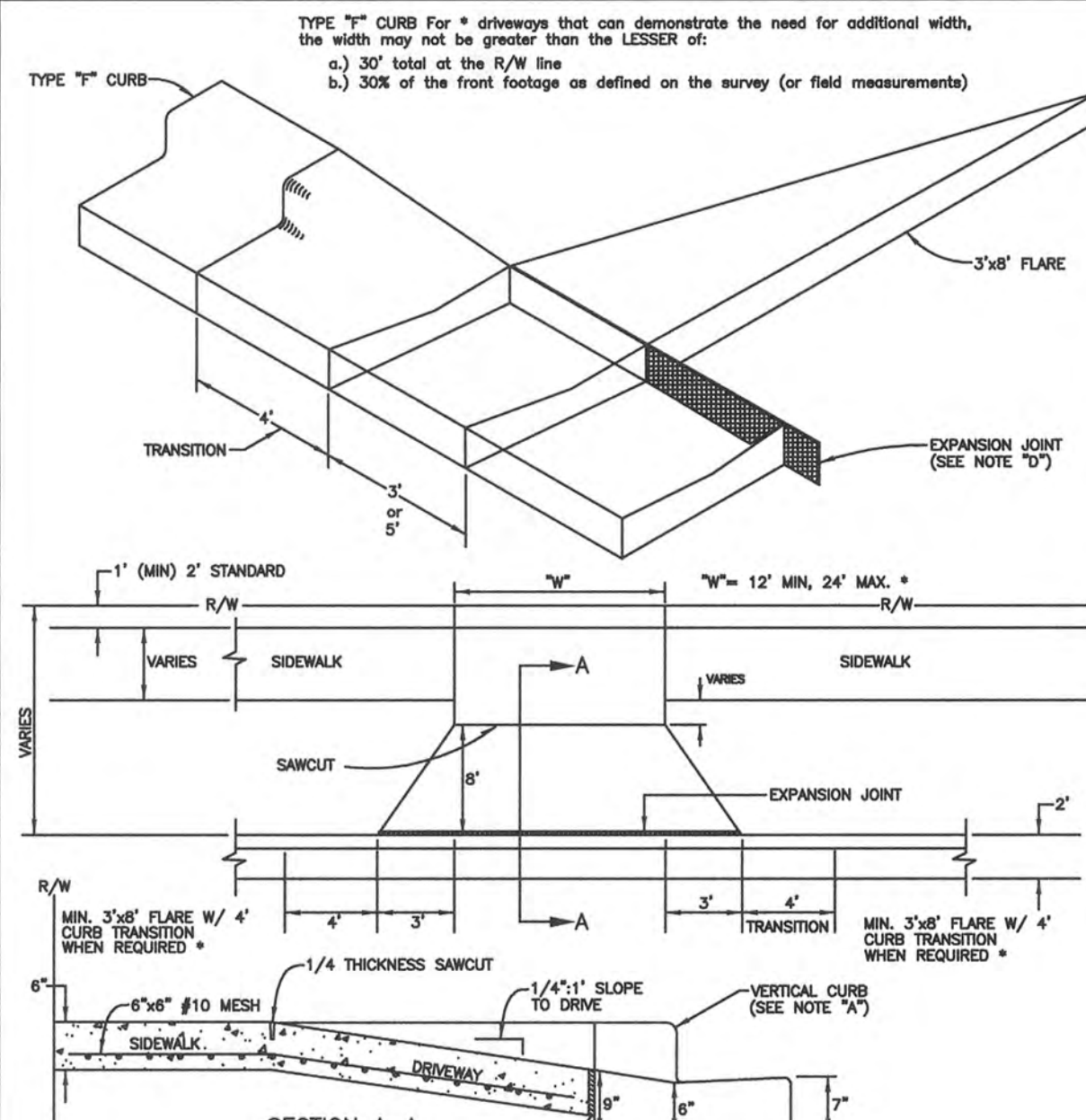
JOHN K. PARI, P.E.
FLORIDA P.E. # 56368

5/13/15
Signature & Date

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | SA:\PWD_Engineering\Shara\Stormwater_Engineering\12th St. E Drain Improve\DWG\12th St. E Storm_Improvements_realigned.dwg, Restriction, 5/11/2015 10:35 AM, Kadir Ripley, 1:1, D: 22"x34", Overseas

STORM & WATER IMPROVEMENTS

12th STREET EAST

STORM WATER DETAILS

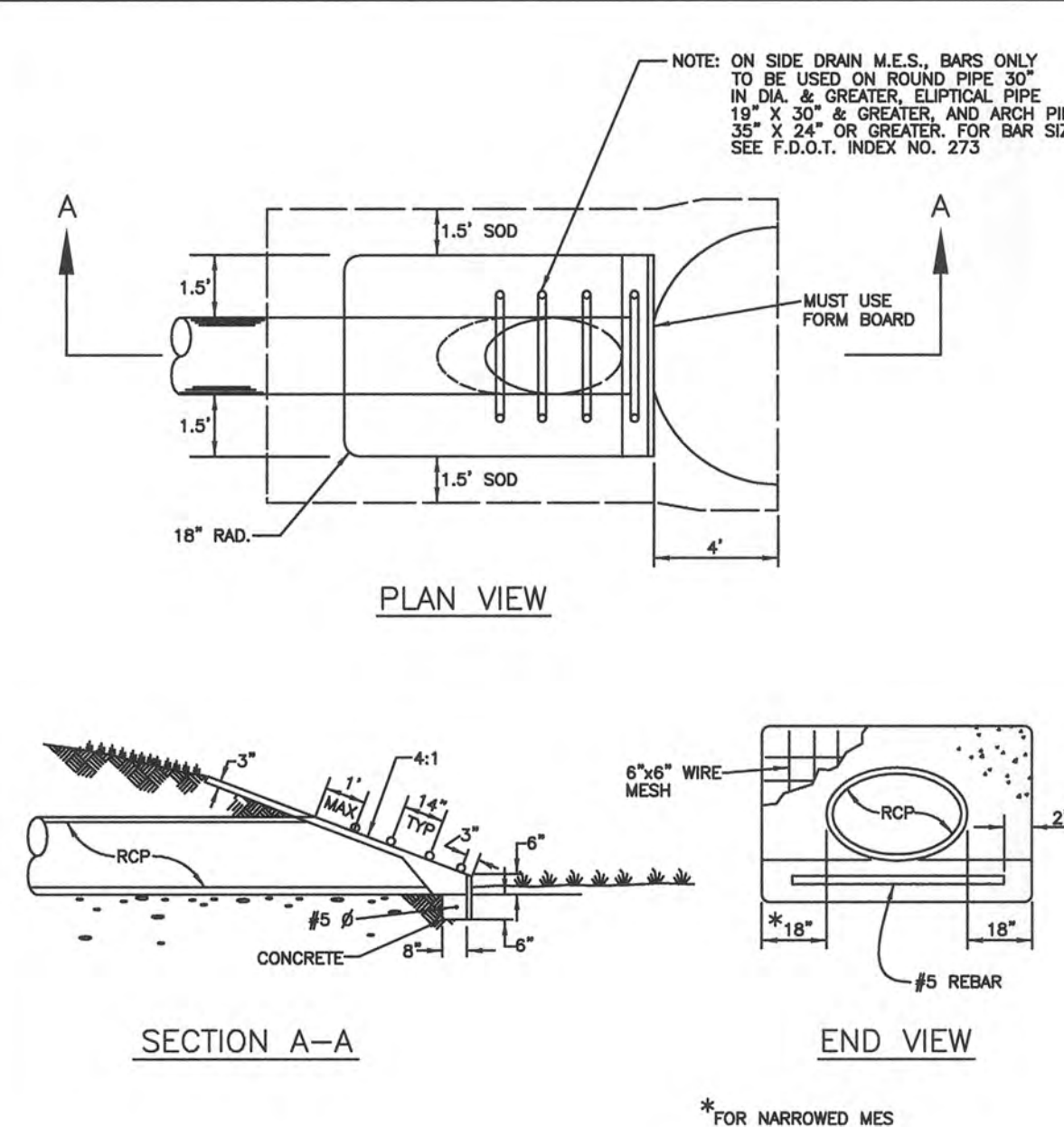


TYPE "T" CURB For driveways that can demonstrate the need for additional width, the width may not be greater than the LESSER of:
a.) 30' total at the R/W line
b.) 30% of the front footage as defined on the survey (or field measurements)

3"x8" FLARE
EXPANSION JOINT (SEE NOTE "D")
TRANSITION
1' (MIN) 2' STANDARD
R/W
SIDWALK
SAWCUT
EXPANSION JOINT
MIN. 3"x8" FLARE W/ 4" CURB TRANSITION WHEN REQUIRED
1/4 THICKNESS SAWCUT
6"x6" #10 MESH
1/4" SLOPE TO DRIVE
VERTICAL CURB (SEE NOTE "A")
EXPANSION JOINT
8'-12"
24"

A) REMOVE TYPE "T" CURB AND GUTTER, REPLACE WITH MIAMI CURB AND GUTTER.
* NO CHANGE WITH 3' VALLEY CROSSING
B) REMOVE EXISTING SIDEWALK, REPLACE WITH 6" CONCRETE, 6"x6" #10 MESH 3000 PSI AT 28 DAYS.
C) DRIVEWAY CONSTRUCTED WITH 6" CONCRETE WITH 6"x6" #10 MESH 3000 PSI AT 28 DAYS
D) EXPANSION JOINT 1/2" PREFORMED JOINT FILLER PER FDOT SECTION 932-1.1 OR APPROVED ALTERNATE
E) 5' SIDEWALK ON LOCAL STREETS, 5' SIDEWALK ON THOROUGHFARES. MIXED USE PATHS MAY REQUIRE 6' SIDEWALKS PER LAND DEVELOPMENT CODE.
F) SAWCUT (1/4 THICKNESS MINIMUM) ON 10' CENTERS. IF DRIVE IS WIDER THAN 12', ADD JOINTS AT 10' CENTERS.

MANATEE COUNTY TRANSPORTATION DEPARTMENT		CURB CUT & TRANSITION W/ T-FLARE FOR RESIDENTIAL DRIVES	101.2
REV. BY	DATE		
	6/12/07		
DATE OF B.O.C.C. APPROVAL			



NOTE: ON SIDE DRAIN M.E.S., BARS ONLY TO BE USED ON ROUND PIPE 30" IN DIA. & GREATER, ELLIPTICAL PIPE 19" X 30" & GREATER, AND ARCH PIPE 36" X 24" OR GREATER. FOR BAR SIZE SEE F.D.O.T. INDEX NO. 273

1.5' SOD
1.5' SOD
18" RAD.
4'
MUST USE FORM BOARD

PLAN VIEW

SECTION A-A

END VIEW

6"x6" WIRE MESH
#5 REBAR
* FOR NARROWED MESH WIDTH = 15"

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 TRANSPORTATION DEPARTMENT		DRIVEWAY AND ROAD PIPE MITERED END SECTION	103.0
REV. BY	DATE		
	6/12/07		
DATE OF B.O.C.C. APPROVAL			

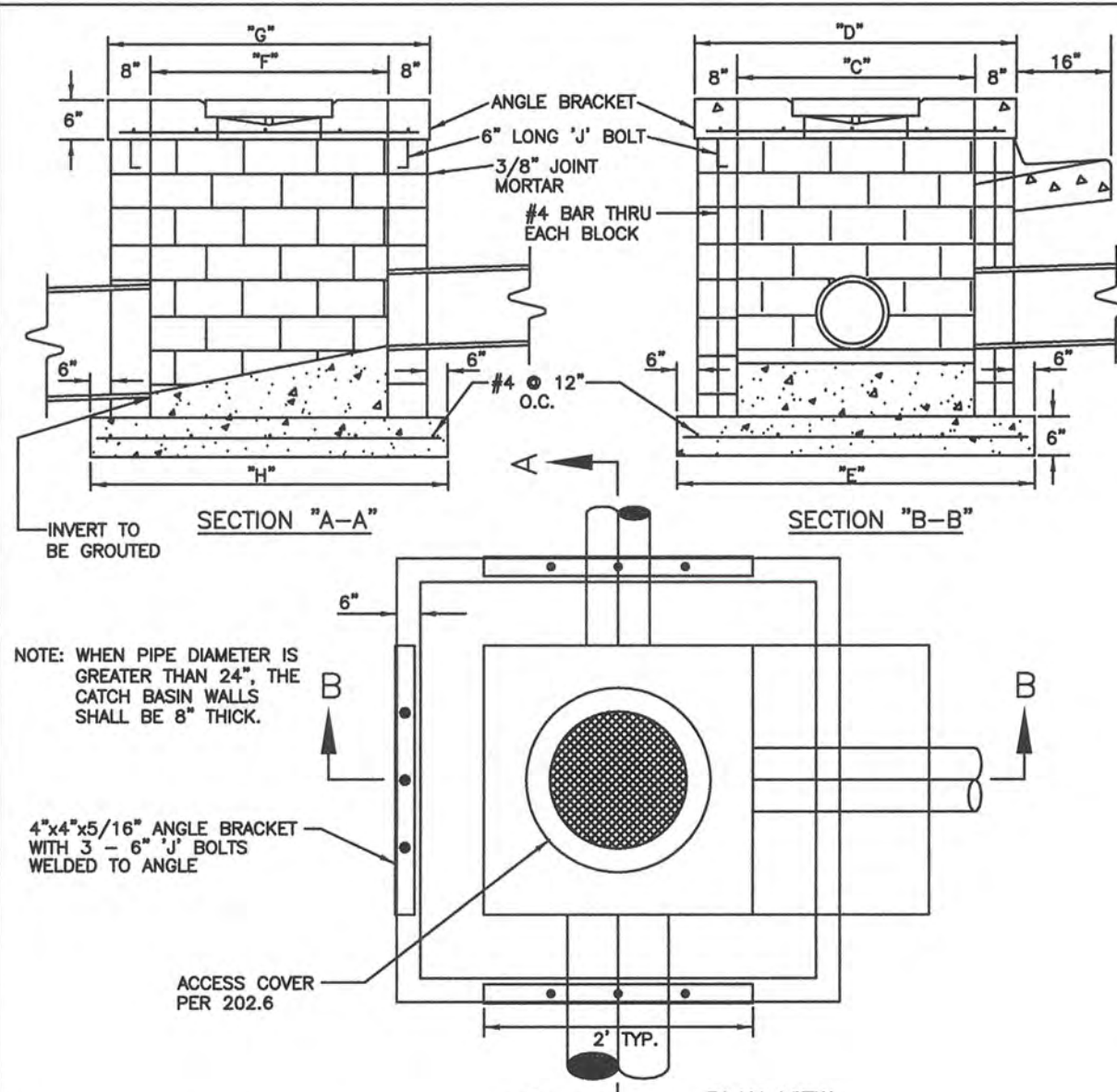
GENERAL NOTES

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

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

PIPE SIZE	TYPE	DIMENSION INDEX					
		"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 TRANSPORTATION DEPARTMENT		DRAINAGE CONTROL SHEET	202.0
REV. BY	DATE		
	6/12/07		
DATE OF B.O.C.C. APPROVAL			

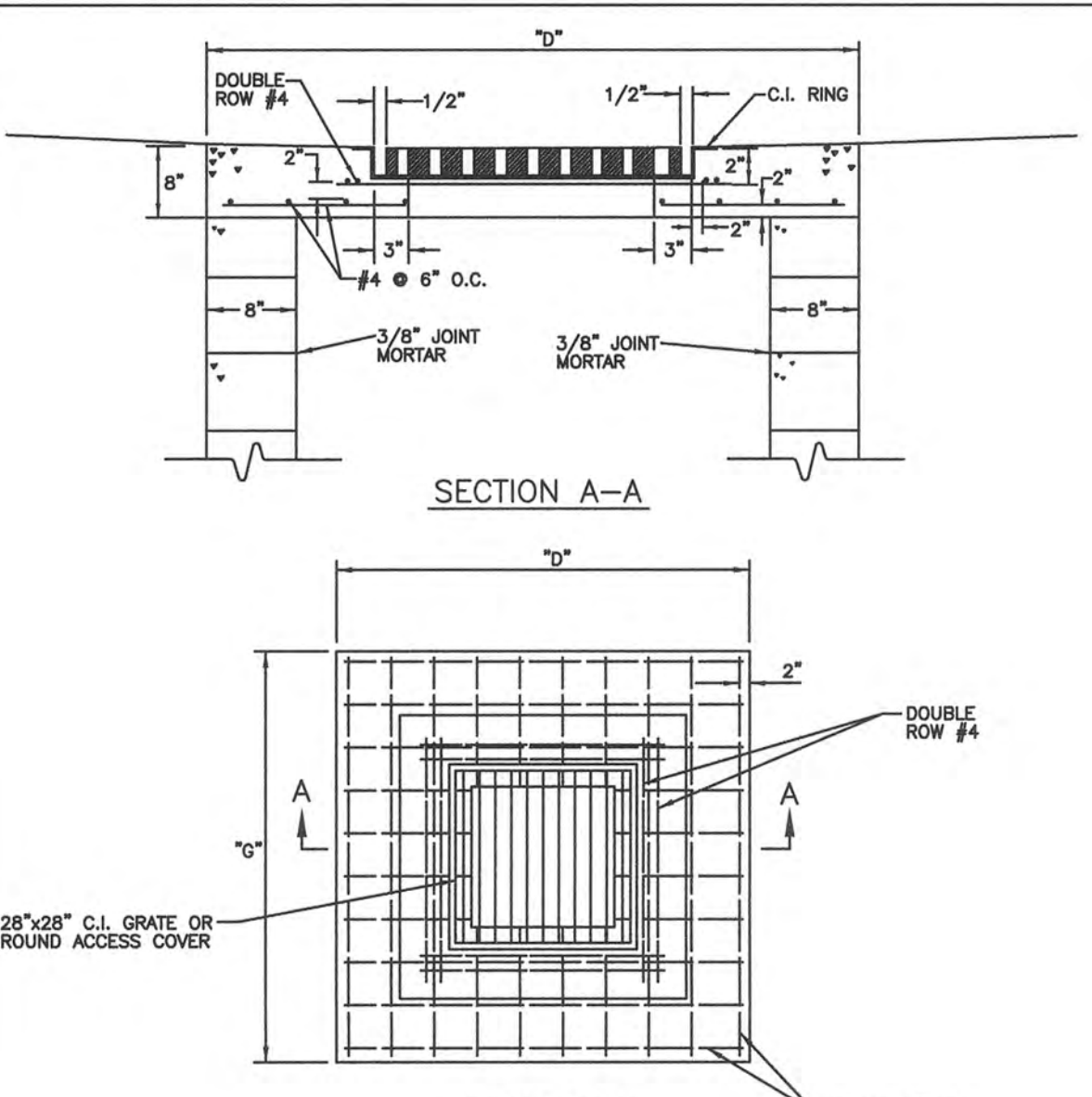


ANGLE BRACKET
6" LONG 1/2" BOLT
3/8" JOINT MORTAR
#4 BAR THRU EACH BLOCK
#4 @ 12" O.C.
INVERT TO BE GROUTED
SECTION "A-A"
SECTION "B-B"
NOTE: WHEN PIPE DIAMETER IS GREATER THAN 24", THE CATCH BASIN WALLS SHALL BE 8" THICK.
4"x4"x5/16" ANGLE BRACKET WITH 3 - 6" 1/2" BOLTS WELDED TO ANGLE
ACCESS COVER PER 202.6
PLAN VIEW

NOTE: DIMENSIONS PER SECTION 202.0

- 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.
- FILL BLOCKS WITH 3,000 psi CONCRETE, USE #4 ROD IN EACH BLOCK, 16" O/C.
- 2" MINIMUM COVER ON ALL REBAR.
- USE #4 REBARS ON 6" CENTERS BOTH WAYS ON LID; NO.4 REBARS ON 12" CENTERS BOTH WAYS ON FLOOR SLAB.
- SEE SHEET 202.0 FOR GENERAL NOTES AND DIMENSION INDEX.
- ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
- 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.
- ALL PIPE ENTRIES TO CATCH BASIN TO BE GROUTED AND SEALED.

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

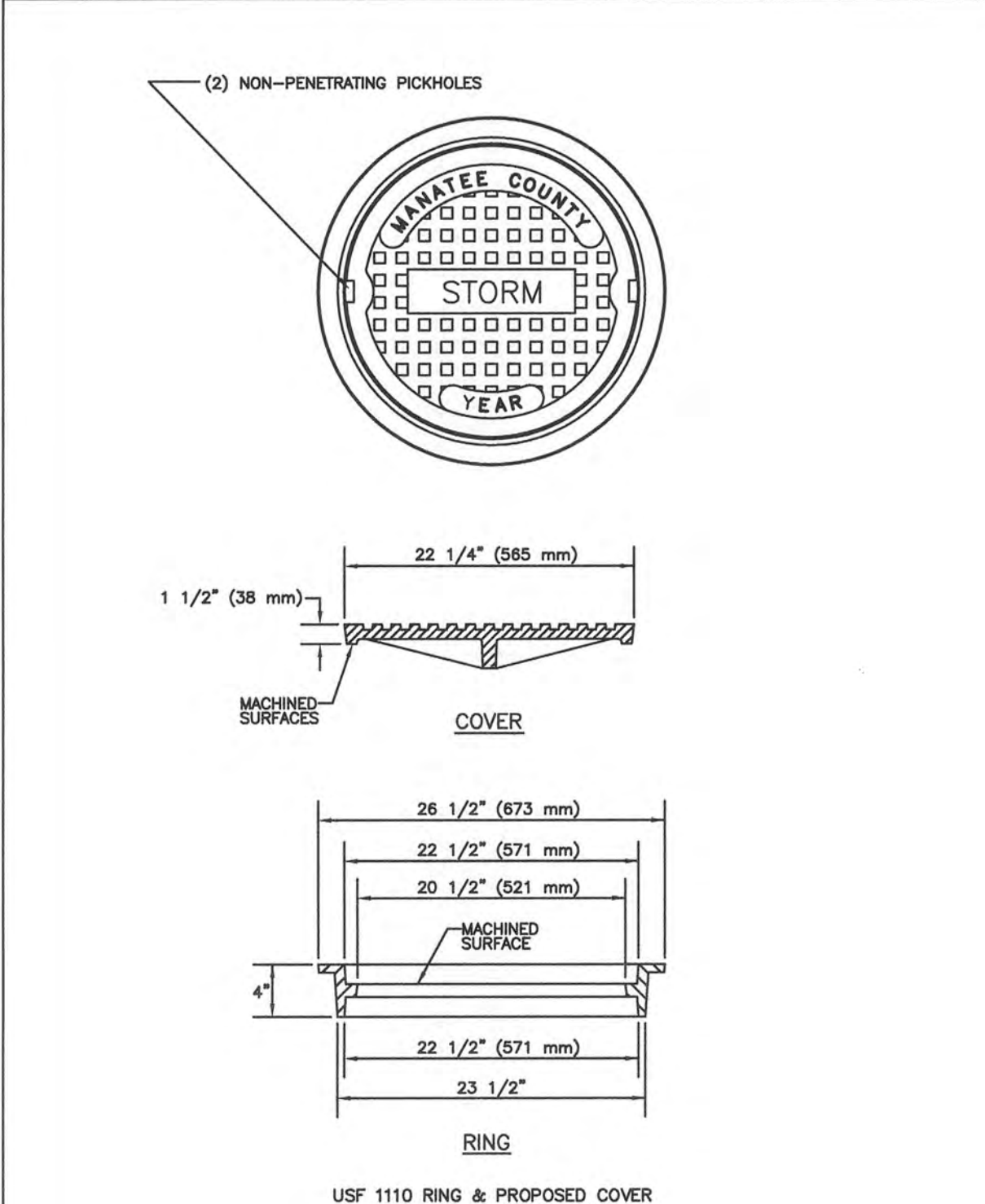


DOUBLE ROW #4
1/2"
1/2"
C.I. RING
#4 @ 6" O.C.
3/8" JOINT MORTAR
3/8" JOINT MORTAR
SECTION A-A
28"x28" C.I. GRATE OR ROUND ACCESS COVER
PLAN VIEW
#4 @ 6" O.C.

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

- ALTERNATE C.I. GRATES, 18"x 24", 24"x 24", 28"x 36" OR ACCESS COVER (202.6).
- 8" TRAFFIC BEARING LID W/ REINFORCING C.I. RING & DOUBLE ROW OF #4 REBAR.
- 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.
- FILL BLOCKS WITH 3,000 P.S.I. CONCRETE (EACH CELL), USE #4 ROD IN EACH BLOCK, 16" O/C.
- USE #4 ROD ON 6" CENTERS BOTH WAYS ON LID. (SEE 202.3 E)
- SEE SHEET # 202.0 GENERAL NOTES AND DIMENSIONS INDEX, ALSO SHEET 202.1 TYP. CONC. BOX.
- INVERT TO BE GROUTED (SEE 202.1).
- 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.
- ANGLE BRACKETS SHOWN ON 202.1 NOT REQUIRED.

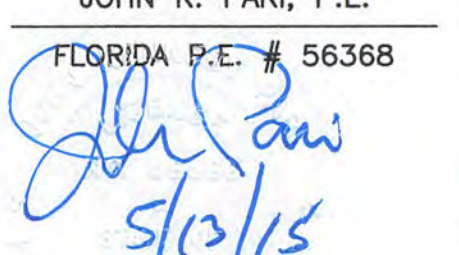
MANATEE COUNTY TRANSPORTATION DEPARTMENT		TRAFFIC BEARING BOX LID	202.5
REV. BY	DATE		
	6/12/07		
DATE OF B.O.C.C. APPROVAL			



(2) NON-PENETRATING PICKHOLES
MANATEE COUNTY
STORM
YEAR
22 1/4" (568 mm)
1 1/2" (38 mm)
MACHINED SURFACES
COVER
28 1/2" (673 mm)
22 1/2" (571 mm)
20 1/2" (521 mm)
MACHINED SURFACE
22 1/2" (571 mm)
23 1/2"
RING
USF 1110 RING & PROPOSED COVER

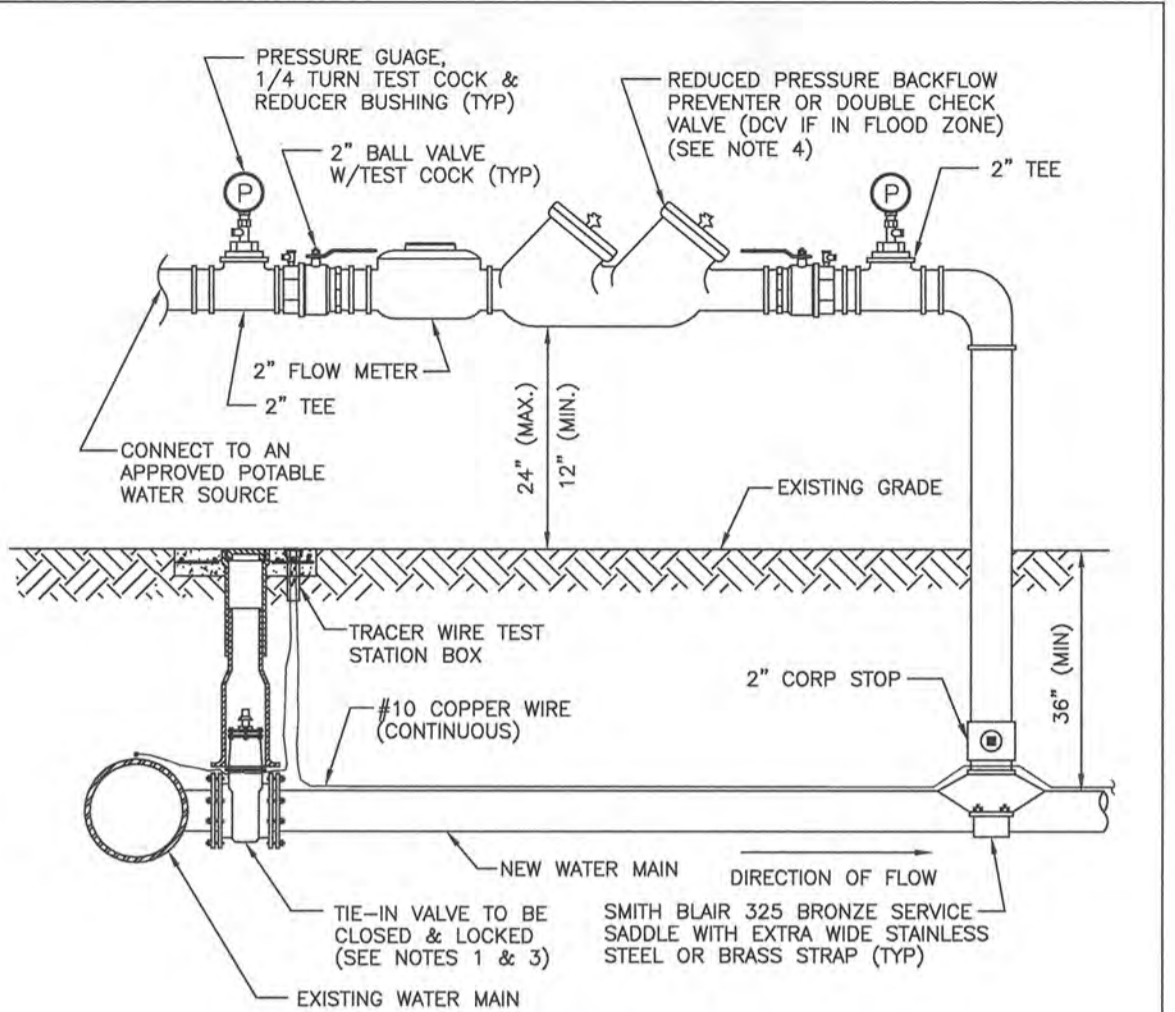
NOTE:
1 - MATERIAL: ASTM-A48 CLASS 30B GRAY IRON.
2 - COVER WEIGHT: 105 LBS. APPROX.
3 - RING WEIGHT: 90 LBS. APPROX.

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

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	5133970		
SURVEY #	14.061		
SEC./TWN./RGE	13/35/17		
SCALE	1"=20'		
		BY	DATE
		MC	12/2013
		JKP	06/2014
		JKP	08/2014
		MS	08/2014
JOHN K. PARI, P.E.			
FLORIDA P.E. # 56368			
			
Signature & Date			

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\P\DW\Engineering\Sharon\Stormwater\Engineering\12th St. E. Storm Improvements\DWG\12th St. E. Storm Improvements redesigned.dwg\Storm Details_111.D 22:33:34 Oversez

STORM & WATER IMPROVEMENTS
12th STREET EAST
WATER DETAILS



PROFILE

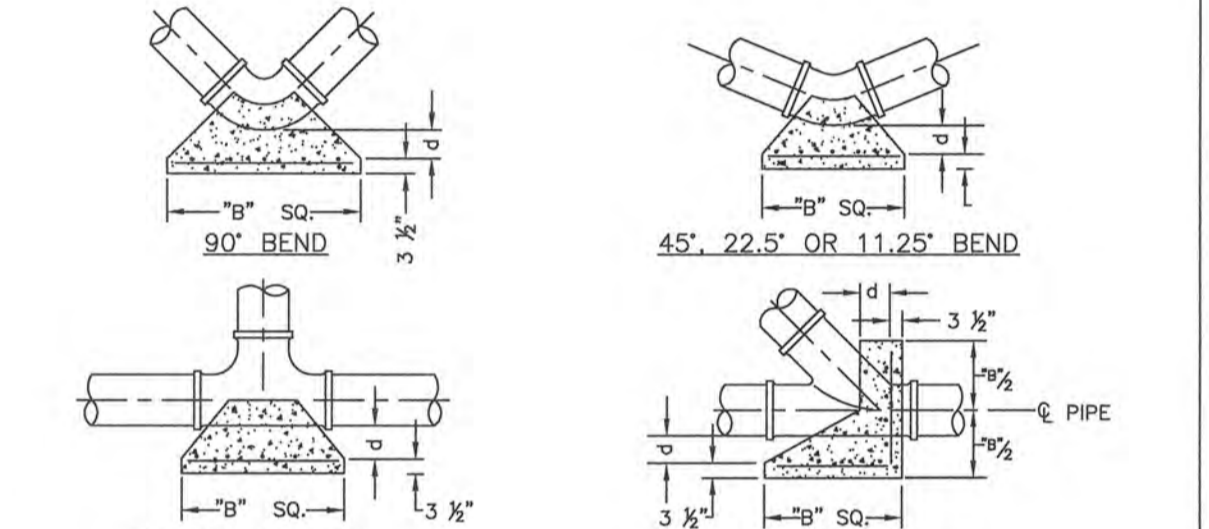
- NOTES:
1. FOR TIE-IN VALVE, SEE DETAIL UW-4 FOR TAPPING SLEEVE VALVE, DETAIL UW-2 FOR GATE VALVE AND DETAIL UW-3 FOR BUTTERFLY VALVE.
2. CORPORATION STOP CONNECTIONS TO WATER MAINS SHALL BE AT A SUFFICIENT DISTANCE FROM NEW TAPPING SLEEVE AND VALVE...

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
TEMPORARY JUMPER CONNECTION
UW-21
MAY 10, 2011 DATE OF APPROVAL
PAGE 139

- 1. A temporary jumper connection is required at all connections between existing active potable water mains and proposed new water main improvements with the following exceptions:
A. Projects that include a permanent backflow preventer at the right-of-way which is adjacent to the existing water main;
B. Projects that include new water mains that are less than or equal to 18 linear feet in length; or
C. Other proposed cases that are approved by Manatee County...

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
TEMPORARY JUMPER CONNECTION NOTES
UW-22
MAY 10, 2011 DATE OF APPROVAL

Table with columns: PIPE SIZE, THRUST BLOCK DIMENSIONS B ft. x d inches (90° BEND, 45° BEND, 22.5° BEND, 11.25° BEND, DEAD END & TEE, 45° WYE), REINFORCEMENT MAT SCHEDULE.



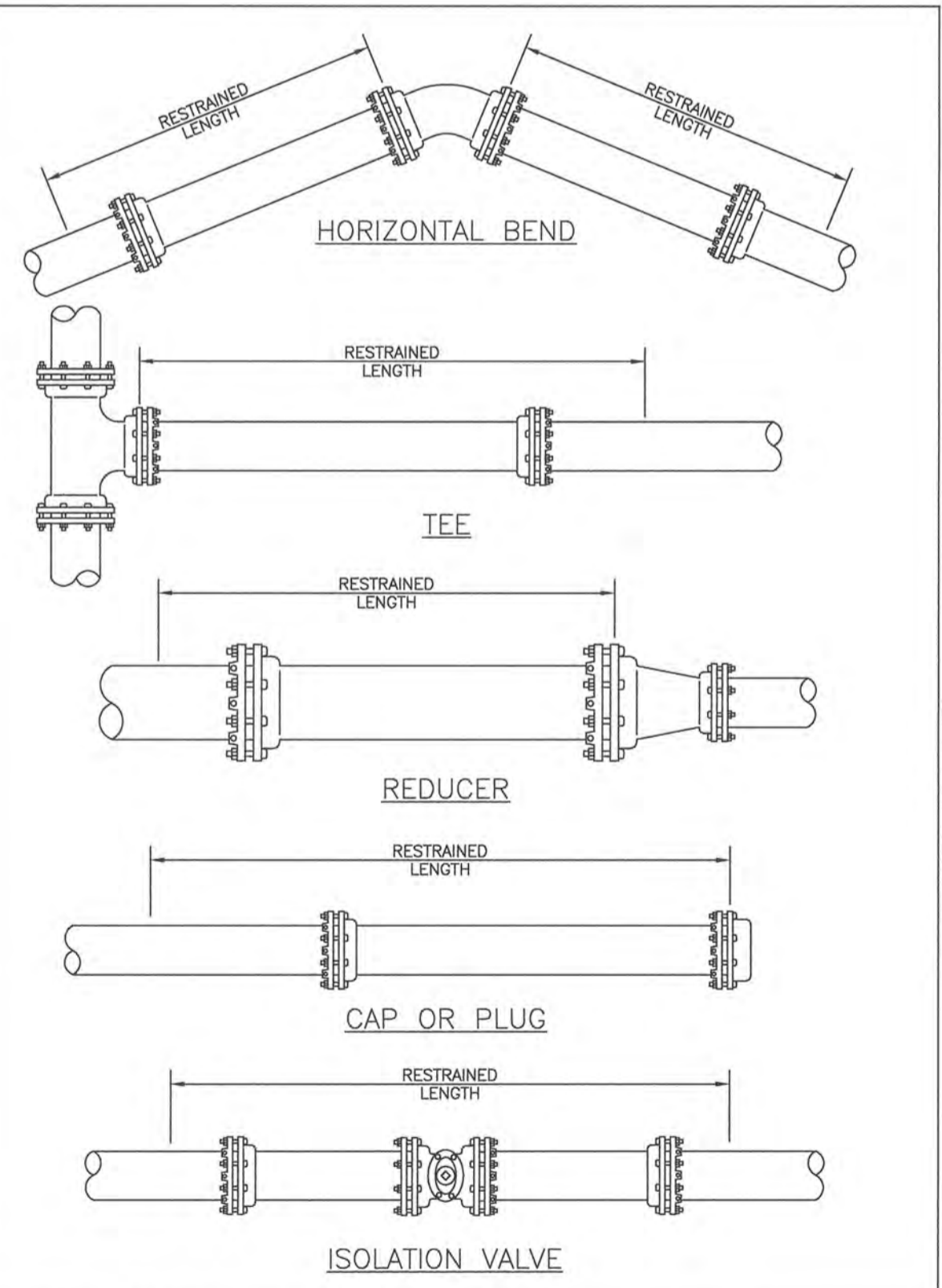
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
CONCRETE THRUST BLOCKS
UG-7
MAY 10, 2011 DATE OF APPROVAL
PAGE 107

Table: REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED). Columns: MAIN PIPE SIZE, HORIZ. BENDS (90°, 45°, 22.5°), TEES (SIZE, LENGTH), REDUCERS (SIZE, LENGTH), PLUGS & VALVES.

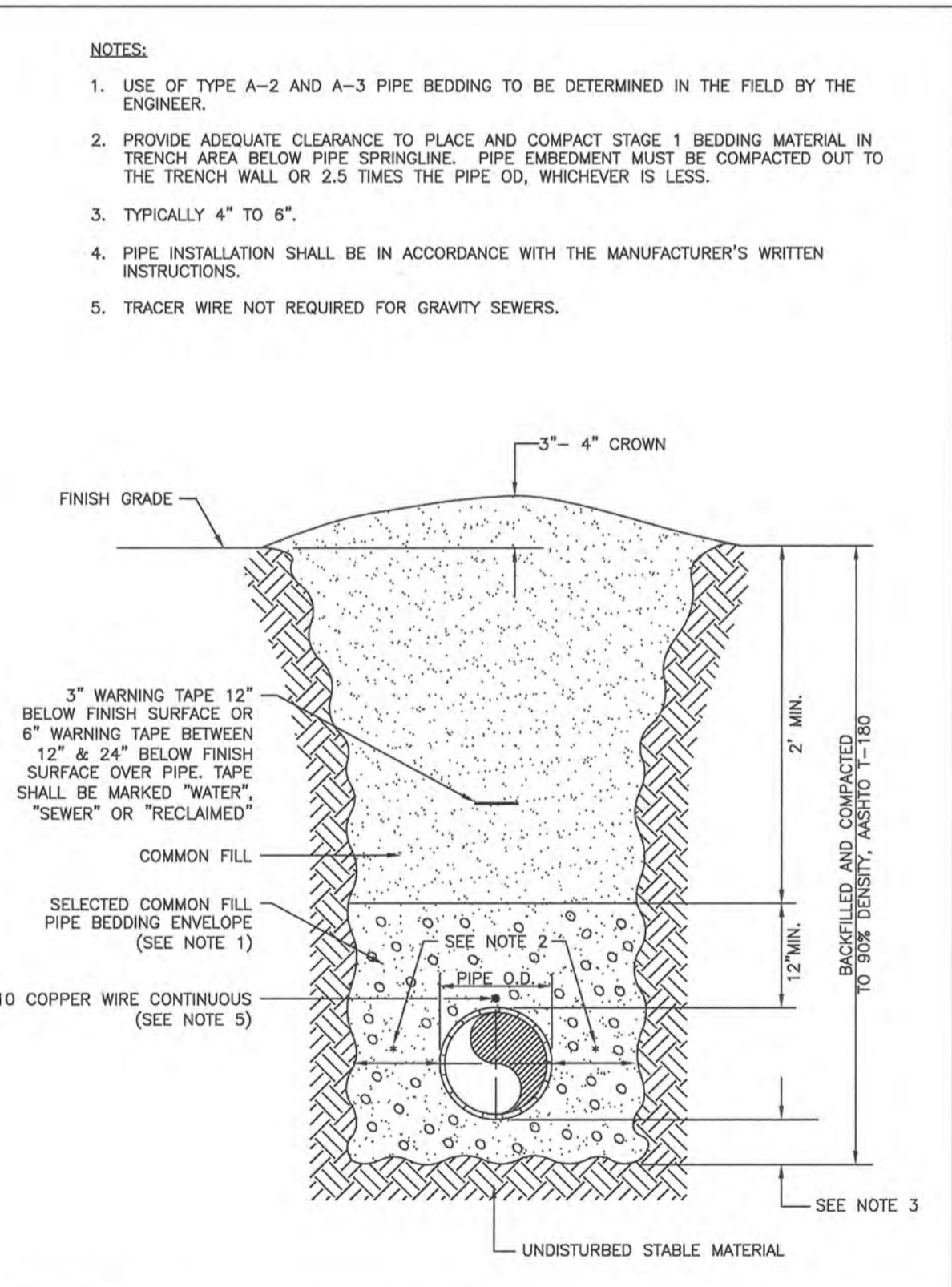
Table: REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (NON-WRAPPED). Columns: MAIN PIPE SIZE, HORIZ. BENDS (90°, 45°, 22.5°), TEES (SIZE, LENGTH), REDUCERS (SIZE, LENGTH), PLUGS & VALVES.

NOTE: SEE RESTRAINED LENGTHS FOR PVC PIPE DETAIL FOR NOTES 1 THROUGH 8 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

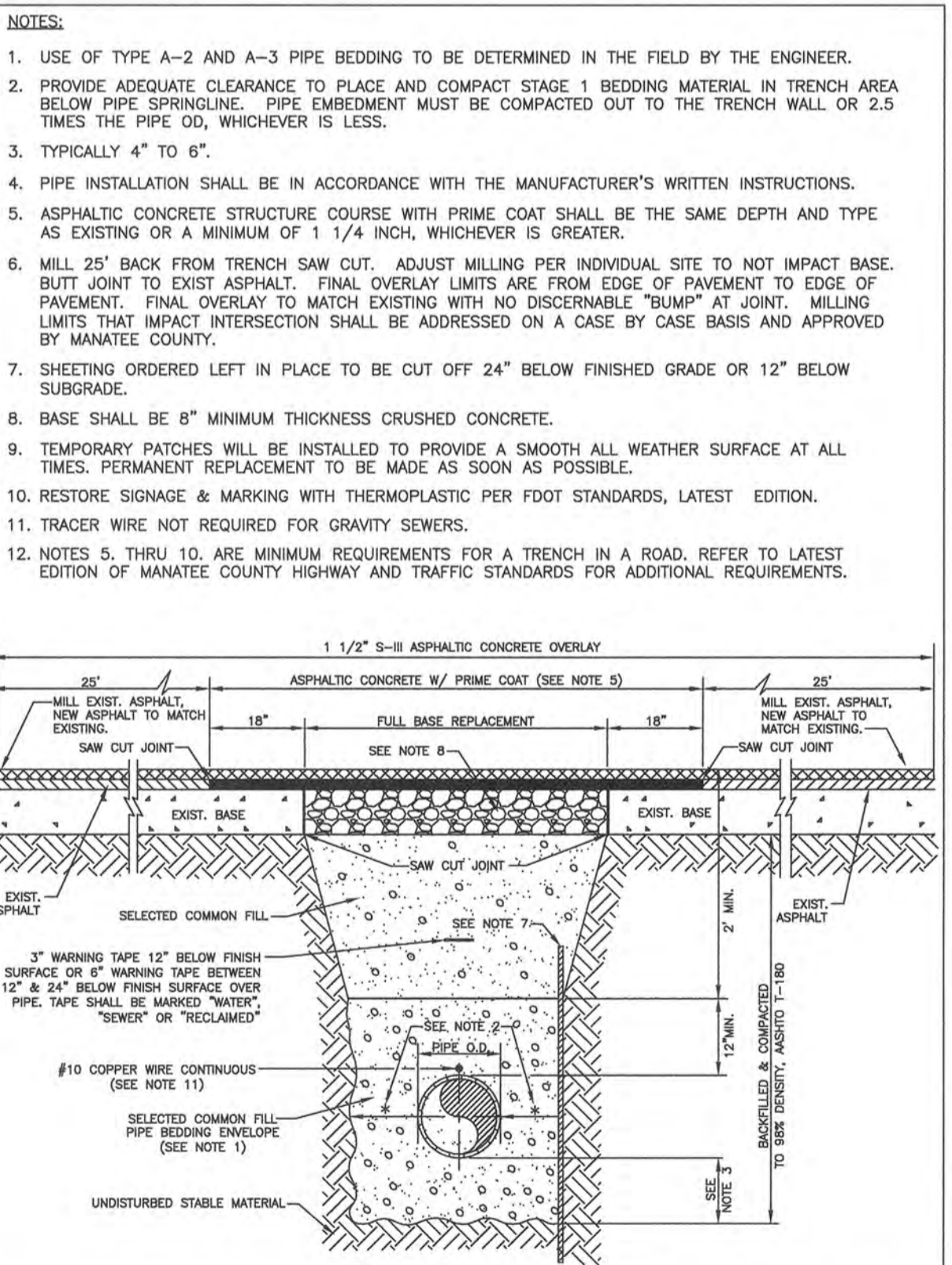
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
RESTRAINED LENGTHS FOR DIP
UG-9
MAY 10, 2011 DATE OF APPROVAL
PAGE 109



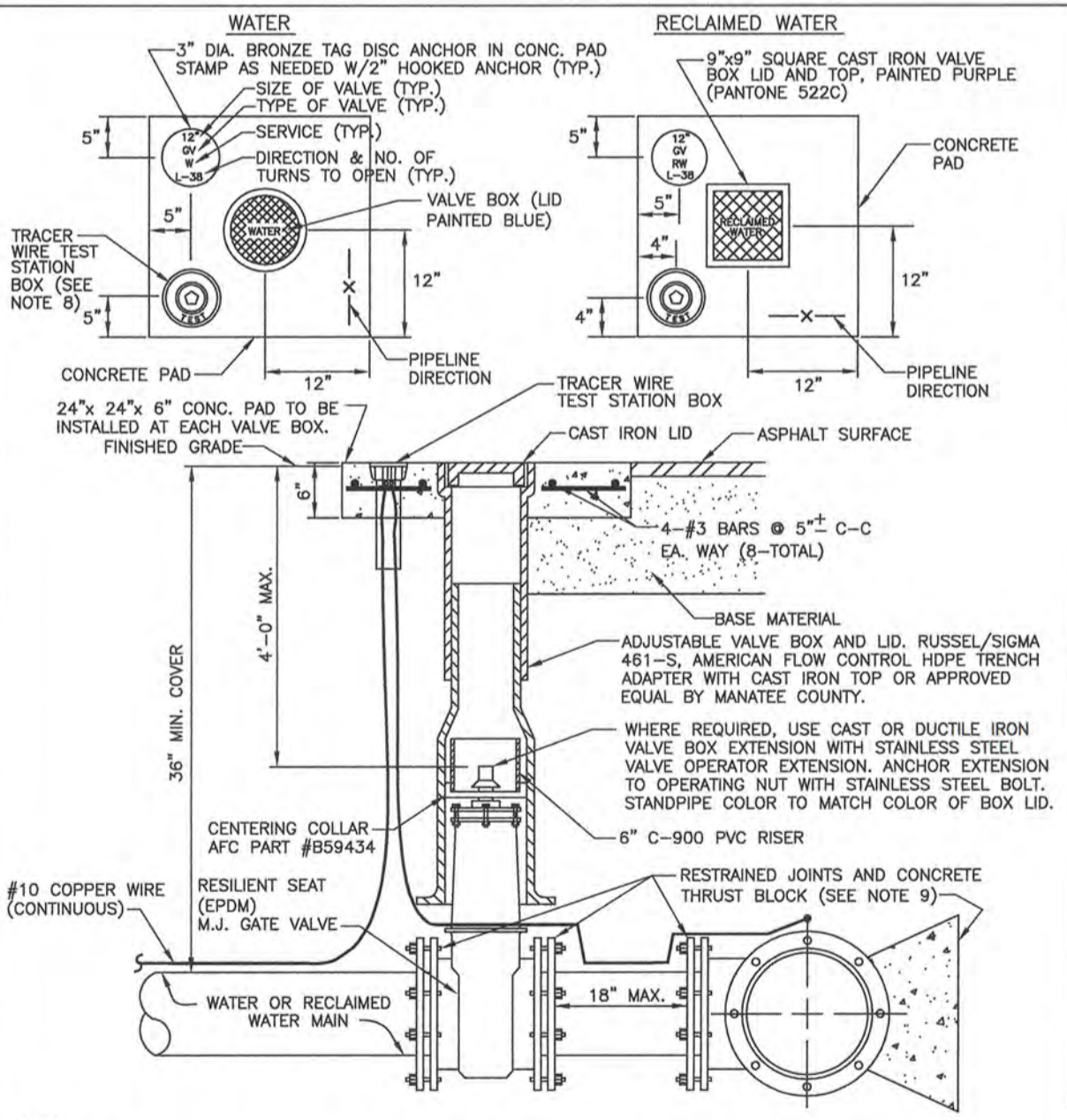
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
RESTRAINED LENGTHS FOR PIPE
UG-10
MAY 10, 2011 DATE OF APPROVAL
PAGE 110



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING
UG-11
MAY 10, 2011 DATE OF APPROVAL
PAGE 111



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING
UG-12
MAY 10, 2011 DATE OF APPROVAL
PAGE 112



- NOTES:
1. "W" OR "RW" TO BE IMPRESSED INTO THE NEWLY-POURED CONCRETE CURB, ALONG WITH DISTANCES IN FEET TO THE VALVE. IF NO CURB, INSTALL A BLUE DISC WITH "W" OR PURPLE DISC WITH "RW" AND A 1/8"x1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
GATE VALVE, BOX, LID AND TAG
UW-2
MAY 10, 2011 DATE OF APPROVAL
PAGE 120

Table with columns: REVISION, NO., DATE, DESCRIPTION.

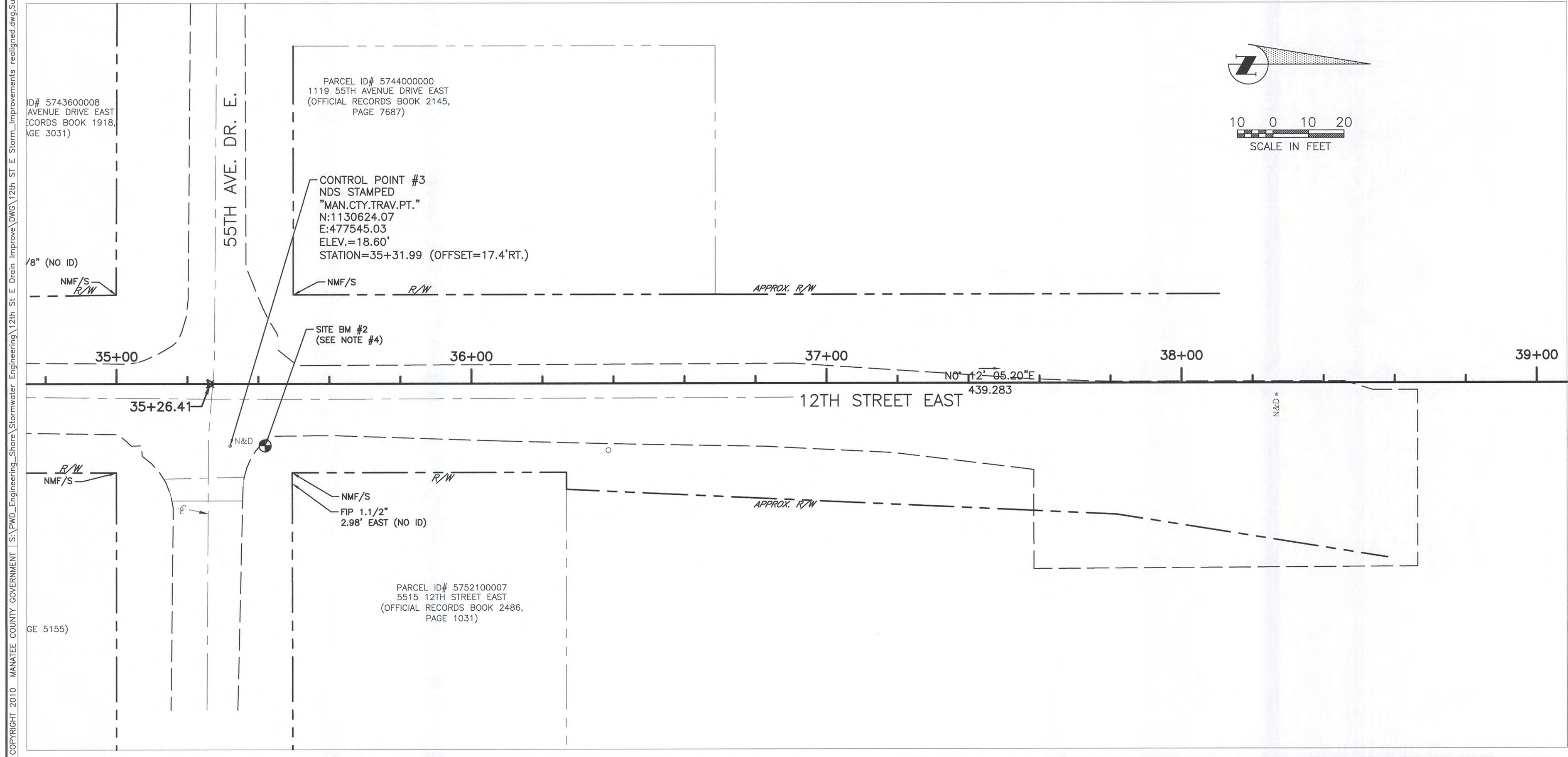
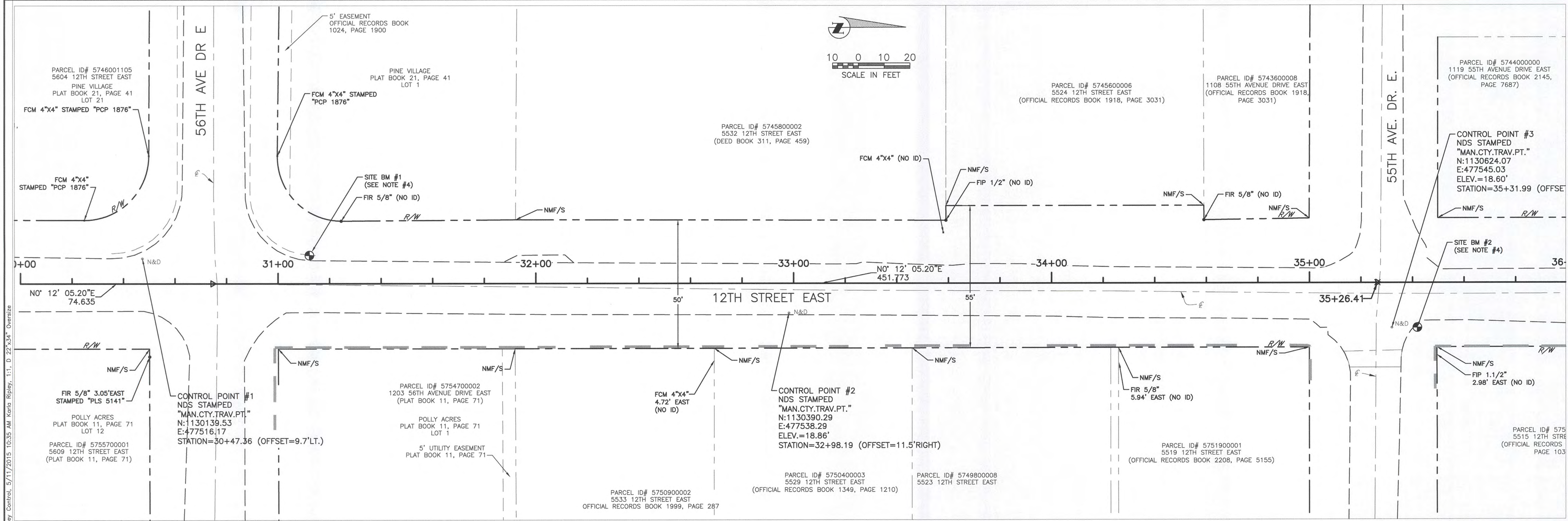
Table with columns: PROJECT # (5133970), SURVEY # (14.061), SEC./TWN./RGE (13/35/17), SCALE (1"=20').

JOHN K. PARI, P.E.
FLORIDA P.E. # 56368
Signature & Date: 5/13/15

STORM & WATER IMPROVEMENTS

12th STREET EAST

SURVEY CONTROL



SURVEYORS NOTES:

- Unless noted, locations limited to - observable, above ground improvements, no underground improvements have been located except those shown hereon. some features may be exaggerated for clarity. dimensions shown supersede scaled dimensions.
- This survey does not certify or warranty: title, zoning, easements, or freedom of encumbrances. This survey does not reflect or determine ownership.
- Subject to easements, dedications and restrictions of record not provided to the Surveyor and Mapper. Title Report provided by Signature Title Company File #13-25573, Dated December 24, 2013. No other instruments of record, rights-of-way and/or ownership are known by, or were furnished this surveyor except as shown hereon.
- This survey meets the requirements of Chapter 5J-17, Florida Administrative Code, as it pertains to Topographic Surveys.
- This drawing is not valid without the original raised seal and signature of the Florida Registered Surveyor & Mapper shown hereon. An electronic copy of this drawing must be verified with a signed and sealed drawing of the same.
- Any additions or deletions to this sketch of survey by other than the signing party without written consent of the signing party is prohibited.
- Subject to easements, dedications and restrictions of record not provided to the surveyor and mapper.
- All measurements shown hereon are ground field measured unless specifically annotated, noted or otherwise stated on this sketch of survey.
- The Bearing Basis for this Survey is the Survey Baseline of 12th Street East, which bears N00°12'05"E (Grid), derived using Real Time Kinematics methods and the Florida Department of Transportation's Permanent Reference Network. The datum for the values is the North American Datum 1983 (1999 Adjustment) Florida West Zone. The published values of "Brevard 2010" (NGS PID D05094) and "Dixie 2010" (NGS PID D01667) were used to validate the project coordinates. However, these values are not to be considered geodetic control.
- The elevations shown hereon are based on a Manatee County Benchmark (BM) "SCRUB PALM", Elevation 29.71' feet, North American Vertical Datum 1988 (NAVD88).
Site BM #1, Set Rivet and Disk Stamped "MAN.CTY.B.M.", elevation=19.167'
Site BM #2, Set Rivet and Disk Stamped "MAN.CTY.B.M.", elevation=18.499'
- Parcel information shown hereon was gathered from the Manatee County Geographic Information Systems property locator web site.
- This survey is intended to be plotted at a scale: 1"=20' on a 22"x34" or scale: 1"=40' on a 11"x17".
- The Baseline for this survey will be set on 02/13/14 or shortly thereafter. All of the monumentation set will be a Nail & Disk, stamped "MAN.CTY. BASELINE".

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	5133970
SURVEY #	14.061
SEC./TWN./RGE	13/35/17
SCALE	1"=20'
SURVEYED	MC 12/2013
DESIGNED	JKP 06/2014
DRAWN	JKP 08/2014
CHECKED	MS 08/2014

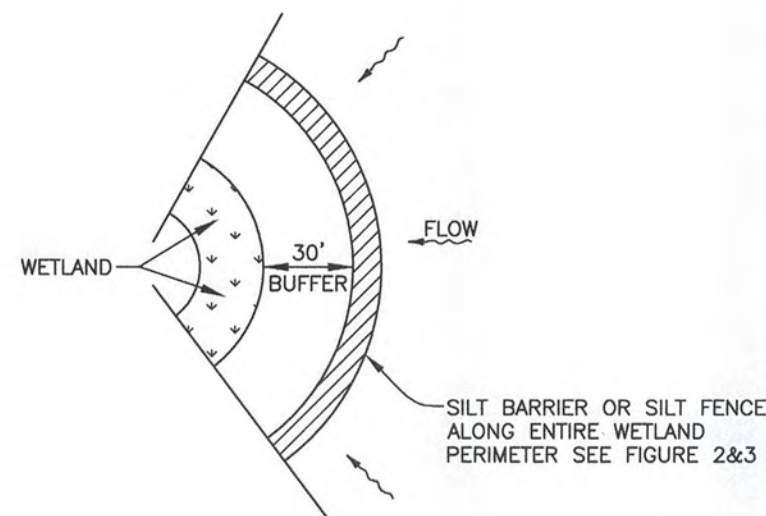
JOHN K. PARI, P.E.

FLORIDA P.E. # 58368

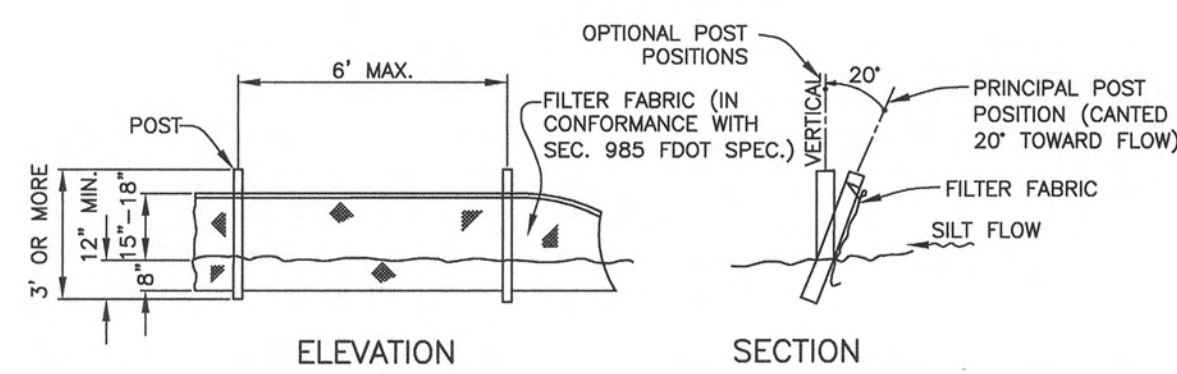
John K. Pari
5/13/15

Signature & Date

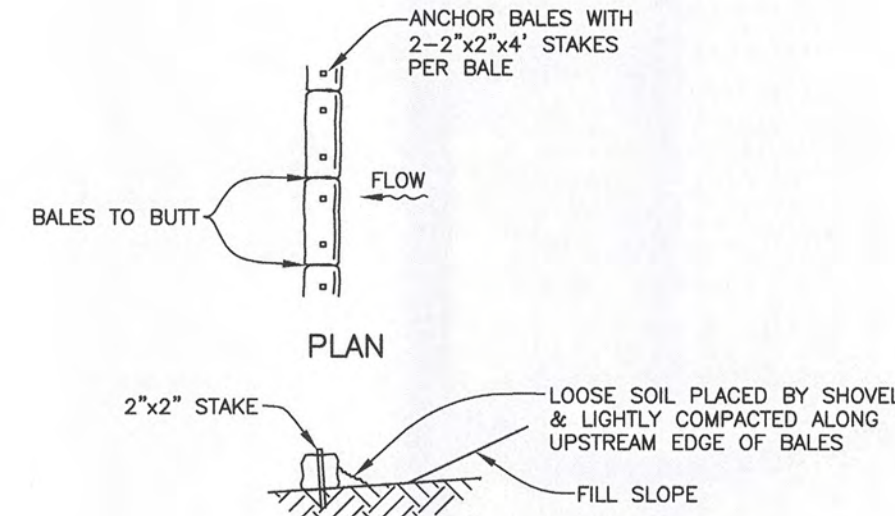
COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT | S:\P\O\Engineering\Shara Stormwater Engineering\12th St E Drain Improv\DWG\12th St E Storm Improvements realigned.dwg, Survey Control, 5/11/2015 10:35 AM, Karda Ripley, 1:1, D: 22"x34" Oversize



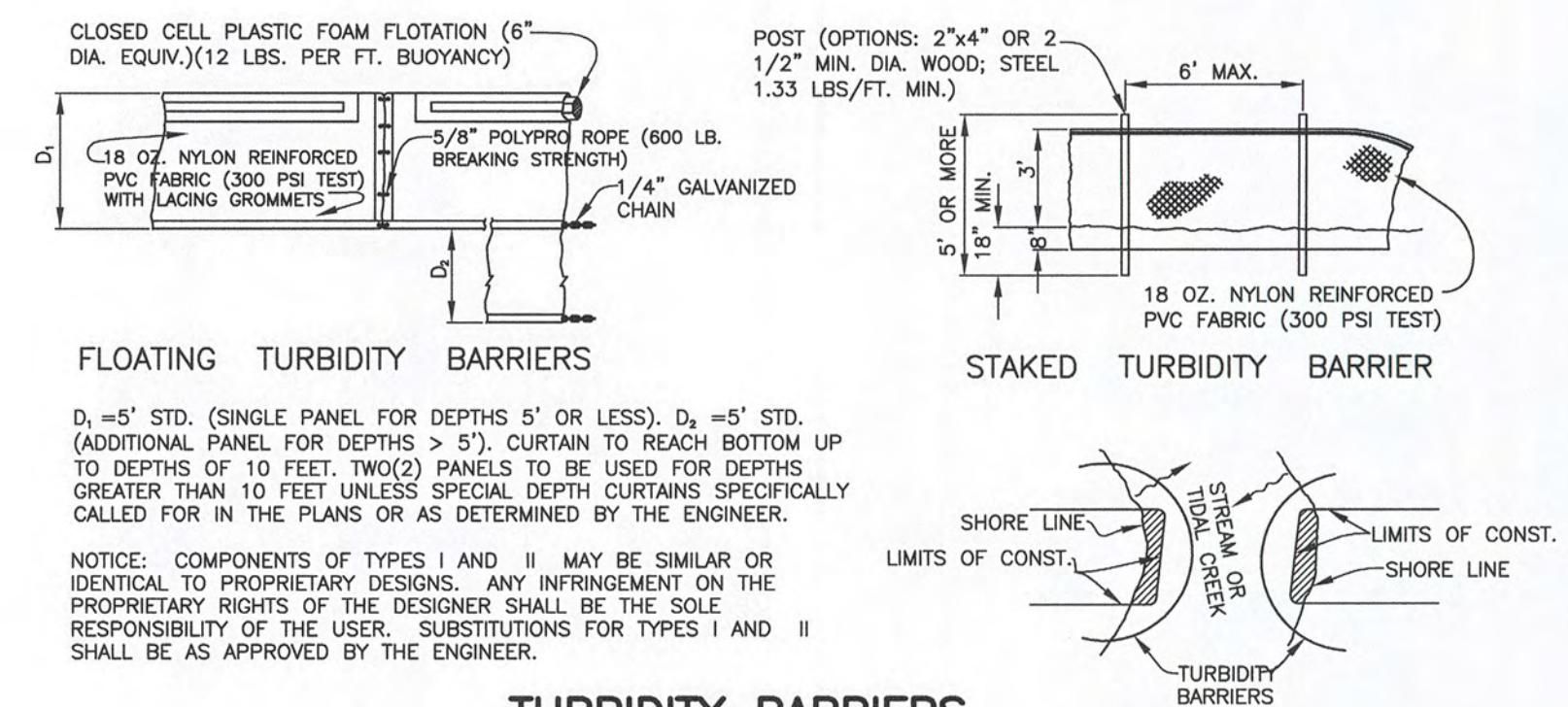
WETLAND BUFFER
FIGURE 1



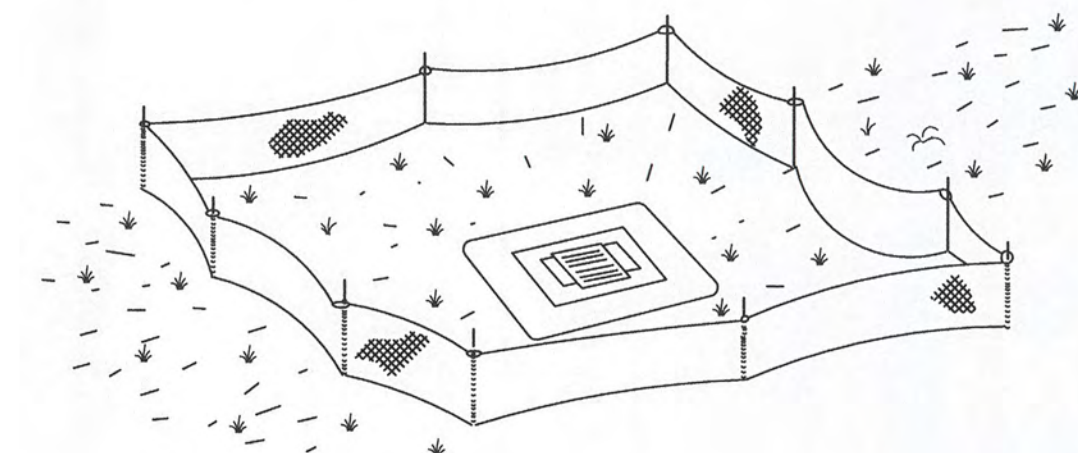
TYPICAL SILT FENCE
FIGURE 2



TYPICAL BALE SILT BARRIER
FIGURE 3

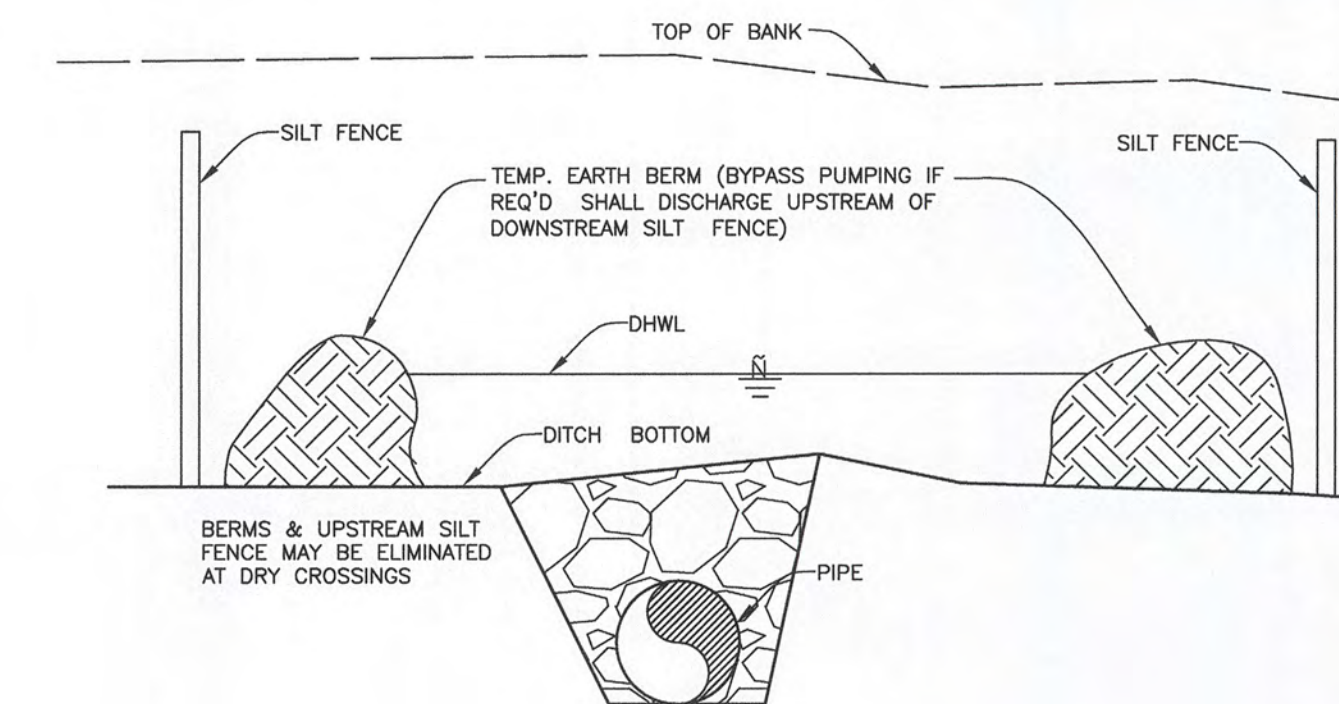


TURBIDITY BARRIERS
FIGURE 4

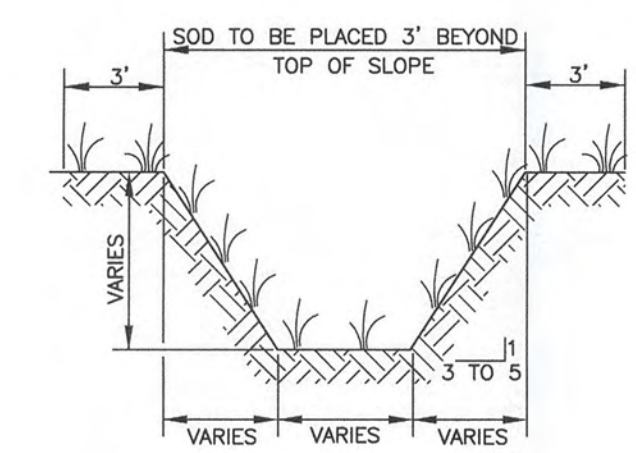


TYPE III SILT FENCE PROTECTION
AROUND DITCH BOTTOM INLETS

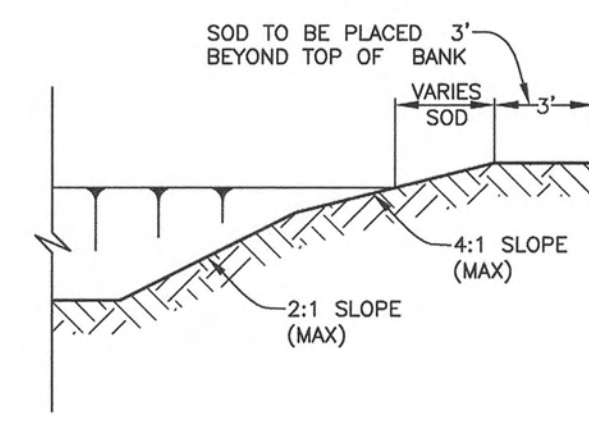
STAKED SILT BARRIER OR SILT FENCE
PROTECTION AROUND DITCH BOTTOM INLETS
FIGURE 8



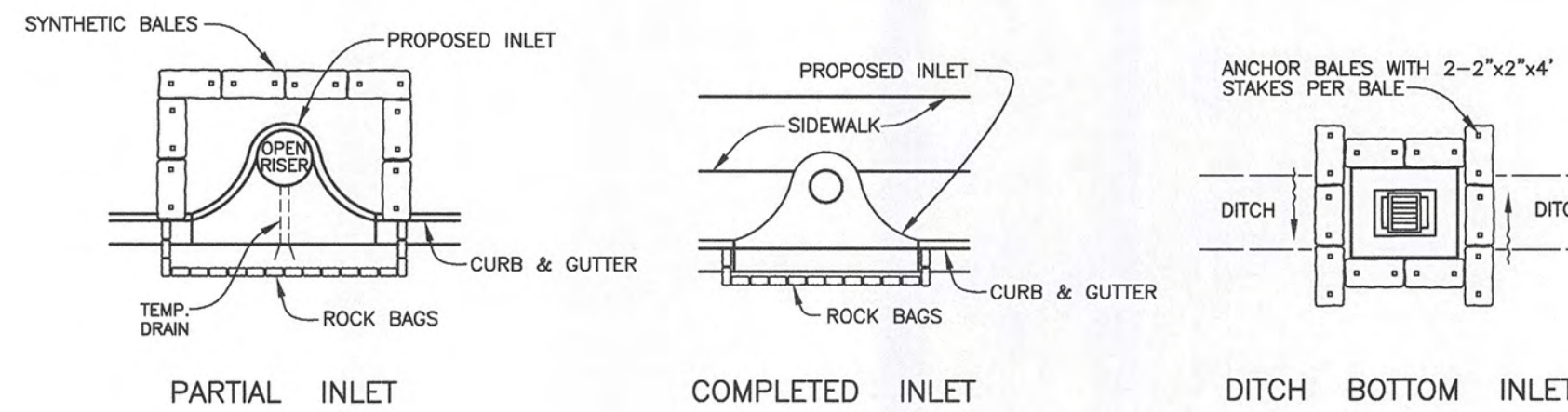
UNDERGROUND PIPE CROSSING
FIGURE 12



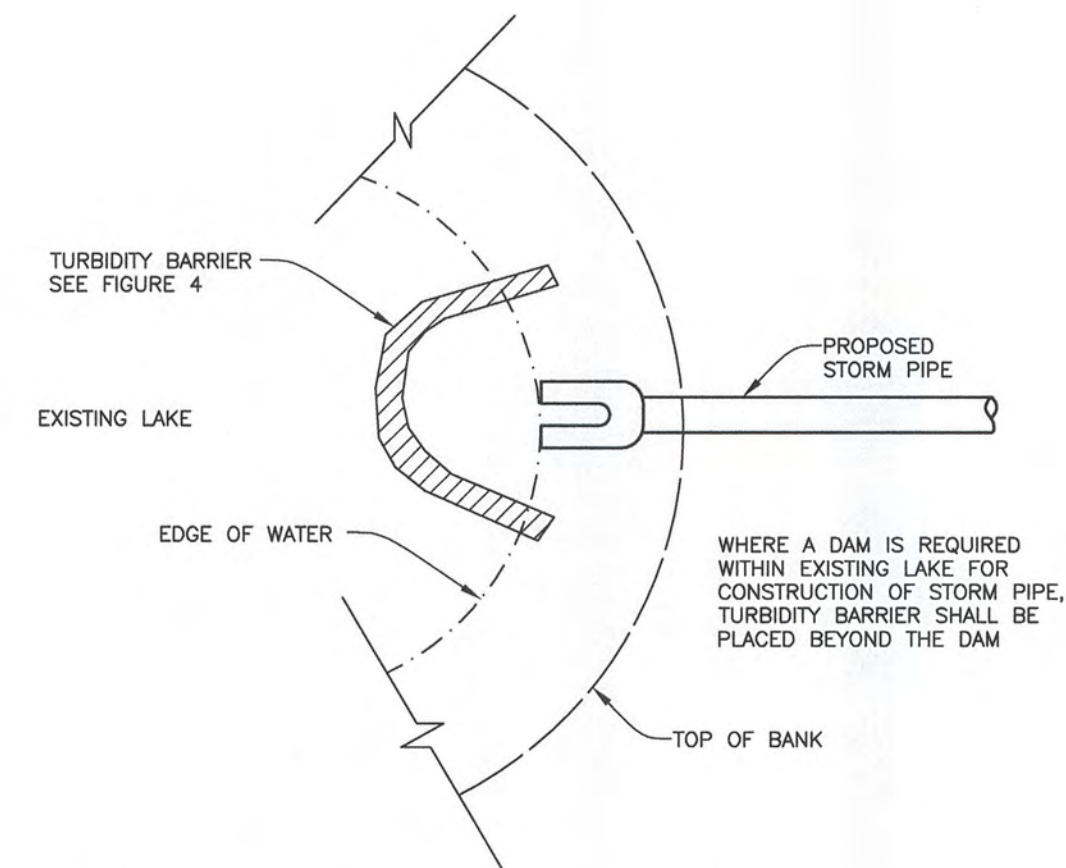
TYPICAL SWALE SECTION
FIGURE 5



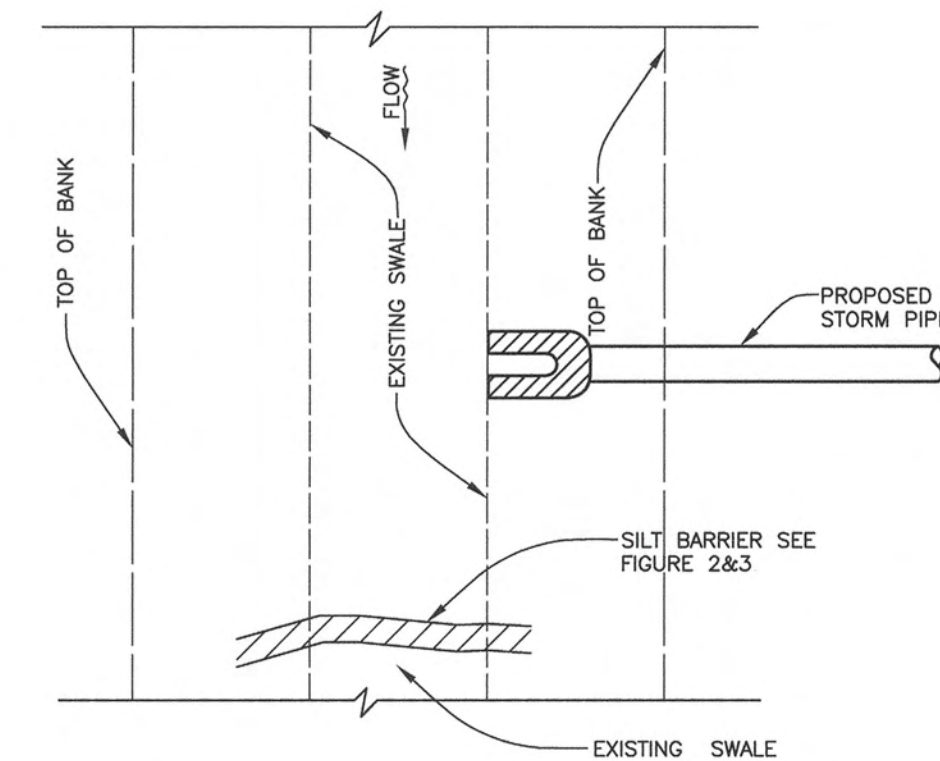
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



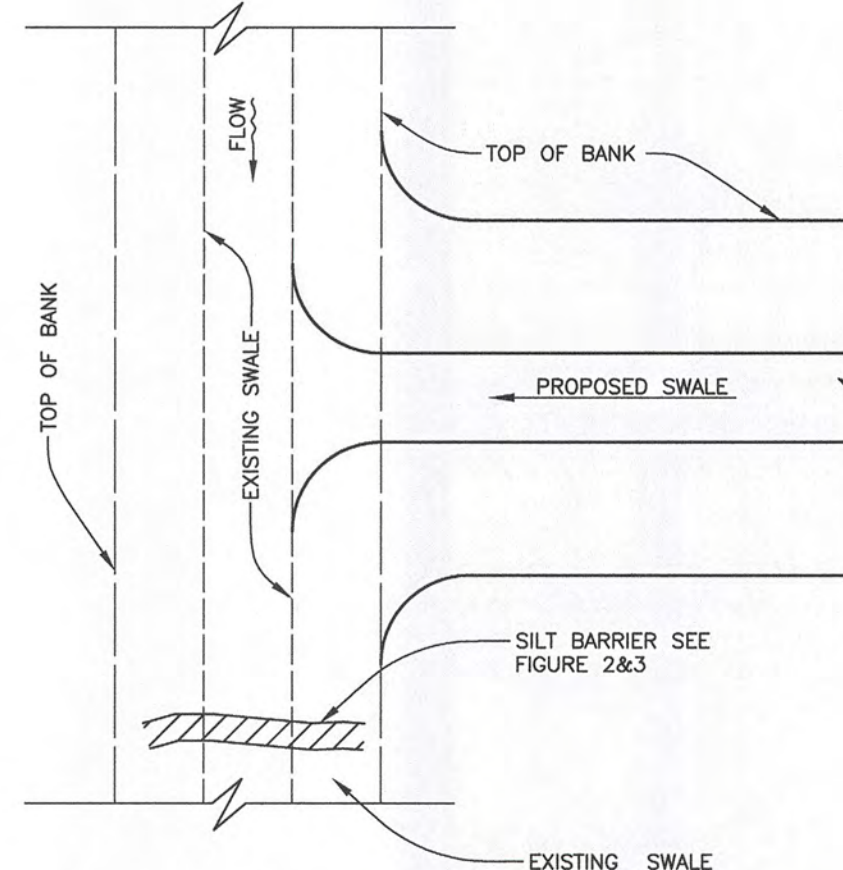
SYNTHETIC BALE PROTECTION AROUND
INLETS OR SIMILAR STRUCTURES
FIGURE 7



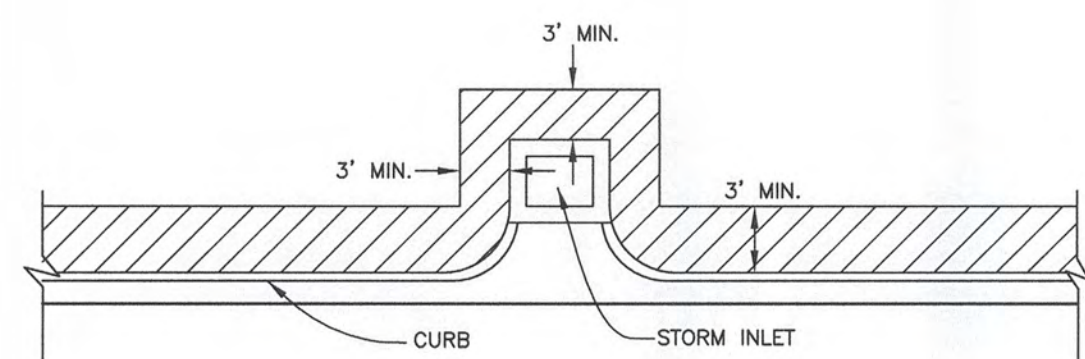
TURBIDITY BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING LAKE
FIGURE 9



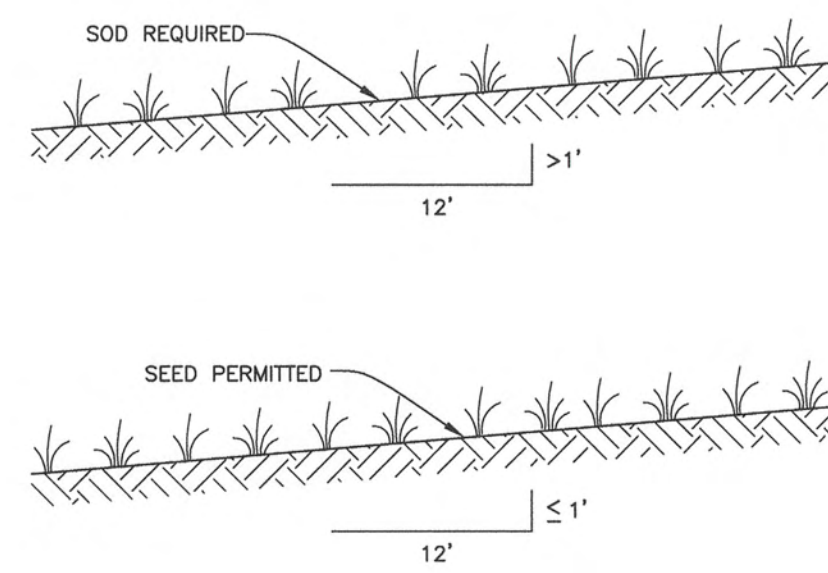
SILT BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING SWALE
FIGURE 10



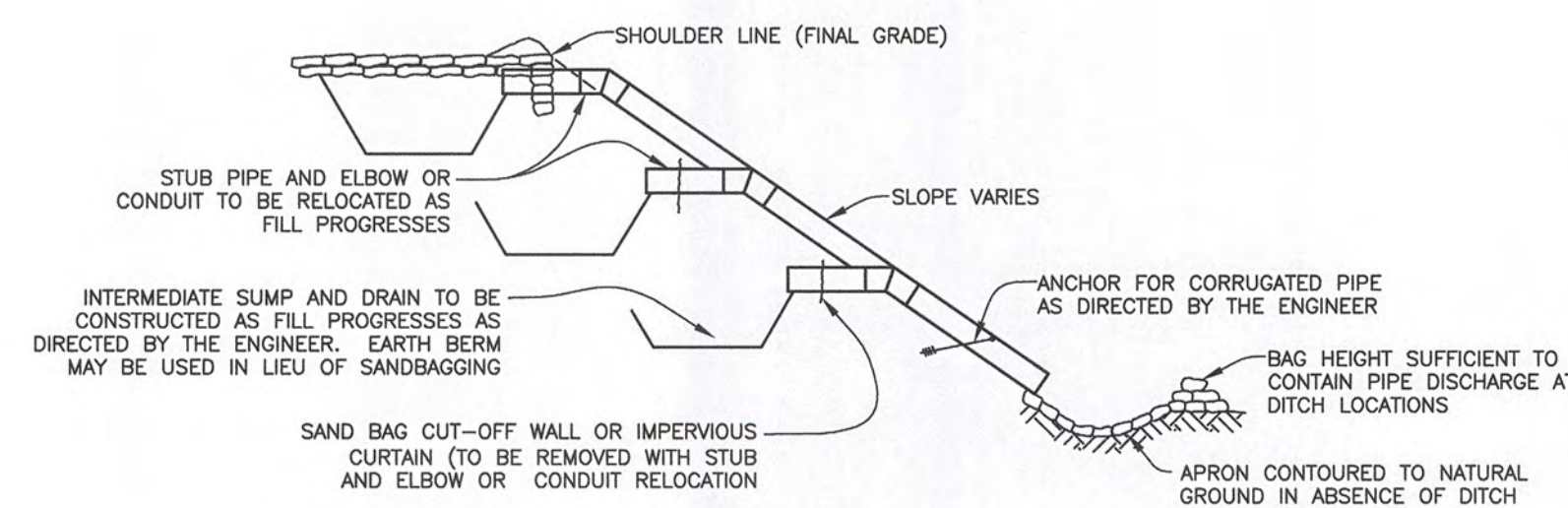
SILT BARRIER AT CONNECTION
OF SWALE TO EXISTING SWALE
FIGURE 11



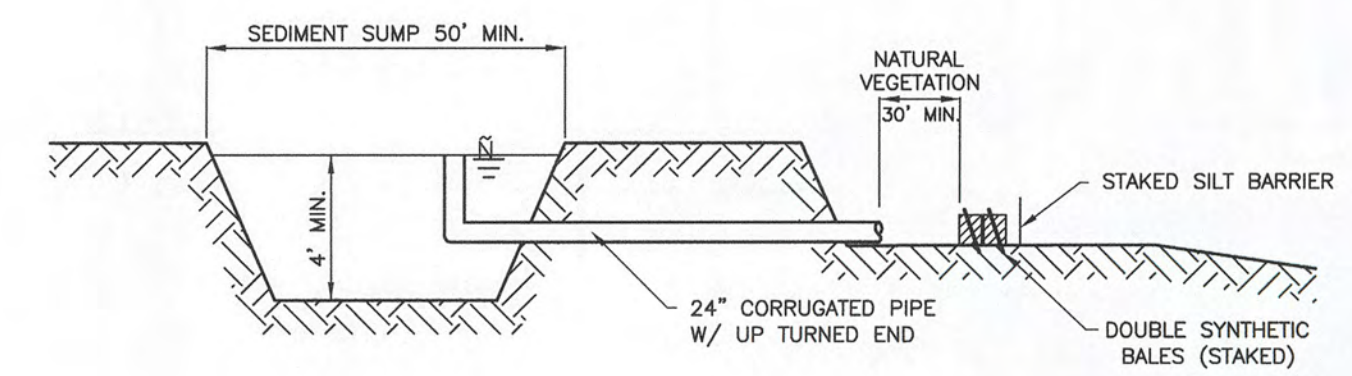
SOD ALONG CURB
AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

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

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	5133970
SURVEY #	14.061
SEC./TWN./RGE	13/35/17
SCALE	1"=20'

BY DATE
SURVEYED MC 12/2013
DESIGNED JKP 06/2014
DRAWN JKP 08/2014
CHECKED MS 08/2014

JOHN K. PARI, P.E.
FLORIDA P.E. # 56368
John K. Pari
5/13/15
Signature & Date

COPYRIGHT 2010 MANATEE COUNTY GOVERNMENT \S:\PMD_Engineering\Shara\Stormwater_Engineering\12th St. E. Drain_Improvements\DWG\12th St. E. Storm_Improvements_realigned.dwg\Erosion_Control_5/11/2015 10:35: AM Karla Bishop, 1:1, D 22'x34' Overseas