

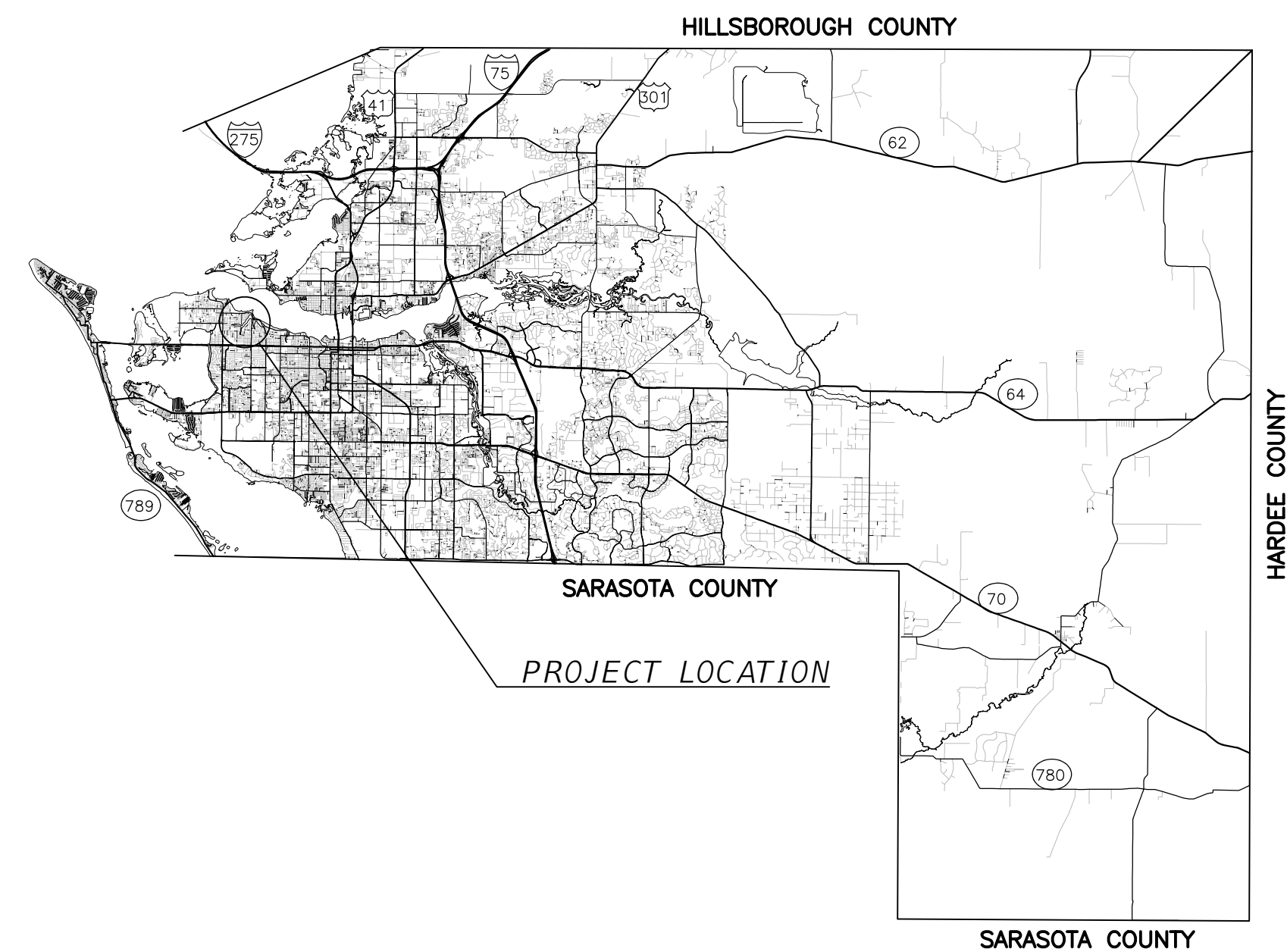
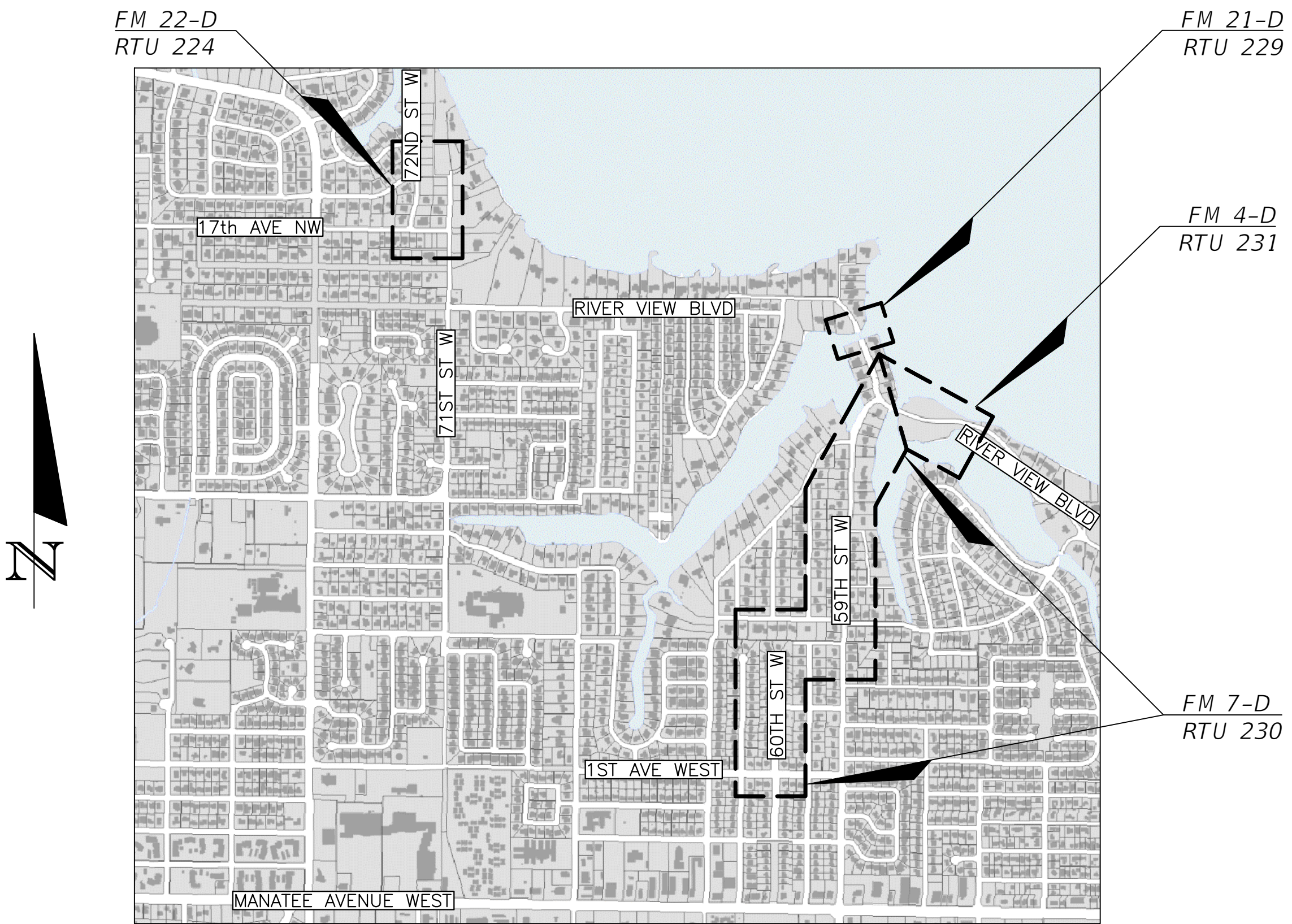
MANATEE COUNTY UTILITY ENGINEERING SECTION

SOUTHWEST SERVICE AREA D FORCE MAIN REPLACEMENT

404-6089781

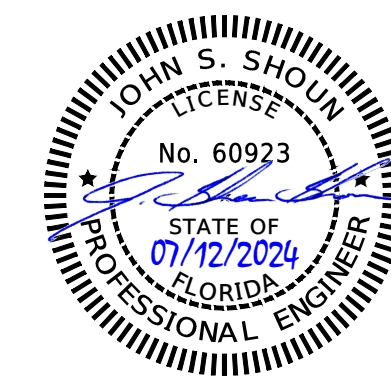
JULY 2024

INDEX OF SHEETS	
Sheet Number	Sheet Title
01	Cover
02	Notes
03	Key Sheet & Abandonment Plan
04	72nd Ave NW [FM 22-D, RTU 224]
05	Riverview Blvd Warners Bayou West [FM 21-D, RTU 229]
06	Riverview Blvd Warners Bayou East [FM 4-D, RTU 231]
07	Riverview Blvd Warners Bayou East [FM 4-D, RTU 231]
08	60th St NW [FM 7-D, RTU 230]
09	60th St NW [FM 7-D, RTU 230]
10	5th Ave NW [FM 7-D, RTU 230]
11	59th St W [FM 7-D, RTU 230]
12	59th St W [FM 7-D, RTU 230]
13	59th St W [FM 7-D, RTU 230]
14	59th St W [FM 7-D, RTU 230]
15	59th St W [FM 7-D, RTU 230]
16	59th St W [FM 7-D, RTU 230]
17	Grout fill FM 7-D, in Easement
18	Restoration 1 of 3
19	Restoration 2 of 3
20	Restoration 3 of 3
21	Survey Control, SUE & VVH Tables
22	Details
23	Details
24	Details
25	Riverview & 59th St W Roadway Asbuilt
26	Warners Bayou West Bridge Utility Asbuilt
27	Warners Bayou East Bridge Utility Asbuilt
28	Erosion Control



BID PLANS

PRE-BUILDER SUBMITTAL 4/22/24

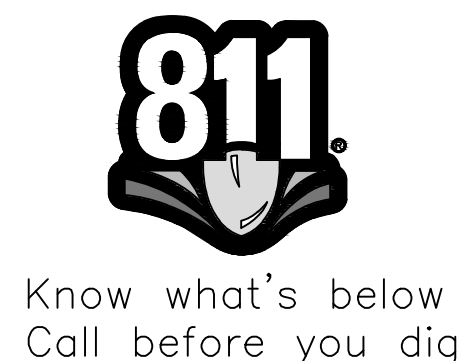


THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
 Digitally signed by John S Shoun
 Date: 2024.07.12 10:55:16 -04'00'
 ON THE DATE ADJACENT TO THE SEAL, PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

UTILITY PLANS
 PROFESSIONAL OF RECORD:
 J. SHEA SHOUN, P.E.
 FL LICENSE No: 60923

MANATEE COUNTY PUBLIC WORKS
 1022 26th AVENUE EAST
 BRADENTON, FL 34208

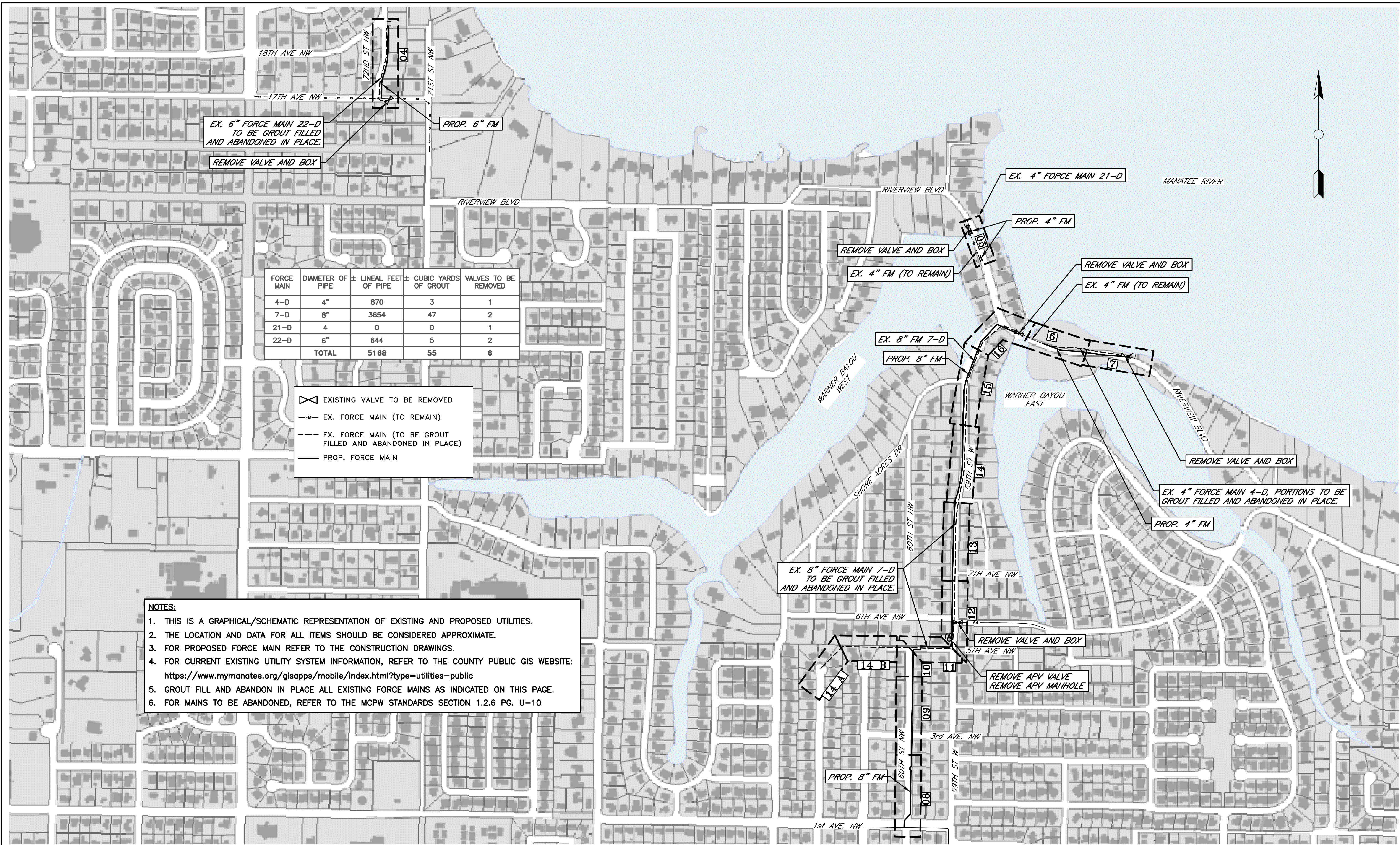
PROJECT DESCRIPTION
 INSTALL APPROXIMATELY A TOTAL OF 5,700 LF OF 4, 6 & 8-INCH REPLACEMENT SEWAGE FORCE MAINS FOR VARIOUS LIFT STATIONS.



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

FISCAL YEAR	SHEET NO.
2024	01 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



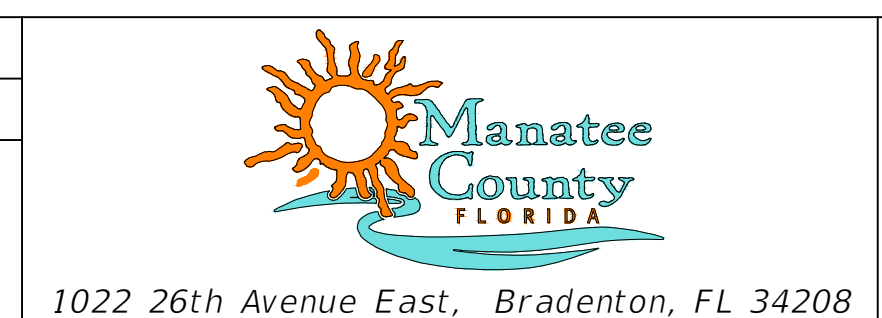
FORCE MAIN	DIAMETER OF PIPE	LINEAL FEET OF PIPE	CUBIC YARDS OF GROUT	VALVES TO BE REMOVED
4-D	4"	870	3	1
7-D	8"	3654	47	2
21-D	4"	0	0	1
22-D	6"	644	5	2
TOTAL		5168	55	6

EXISTING VALVE TO BE REMOVED
 EX. FORCE MAIN (TO REMAIN)
 EX. FORCE MAIN (TO BE GROUT FILLED AND ABANDONED IN PLACE)
 PROP. FORCE MAIN

NOTES:

1. THIS IS A GRAPHICAL/SCHEMATIC REPRESENTATION OF EXISTING AND PROPOSED UTILITIES.
2. THE LOCATION AND DATA FOR ALL ITEMS SHOULD BE CONSIDERED APPROXIMATE.
3. FOR PROPOSED FORCE MAIN REFER TO THE CONSTRUCTION DRAWINGS.
4. FOR CURRENT EXISTING UTILITY SYSTEM INFORMATION, REFER TO THE COUNTY PUBLIC GIS WEBSITE:
<https://www.myanatee.org/gisapps/mobile/index.html?type=utilities-public>
5. GROUT FILL AND ABANDON IN PLACE ALL EXISTING FORCE MAINS AS INDICATED ON THIS PAGE.
6. FOR MAINS TO BE ABANDONED, REFER TO THE MCPW STANDARDS SECTION 1.2.6 PG. U-10

REVISIONS	
DATE	DESCRIPTION

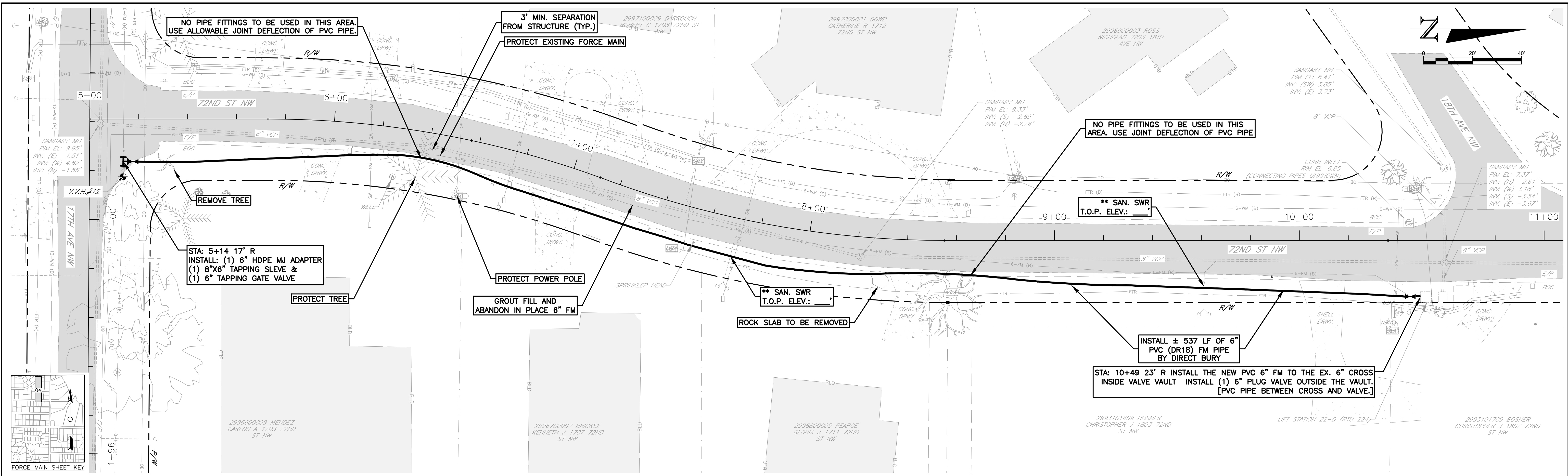


J. SHEA SHOUN, STATE OF FLORIDA,
 PROFESSIONAL ENGINEER, LICENSE NO. 60923.
 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
 J. SHEA SHOUN ON THE DATE INDICATED HERE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT
 CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
 MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

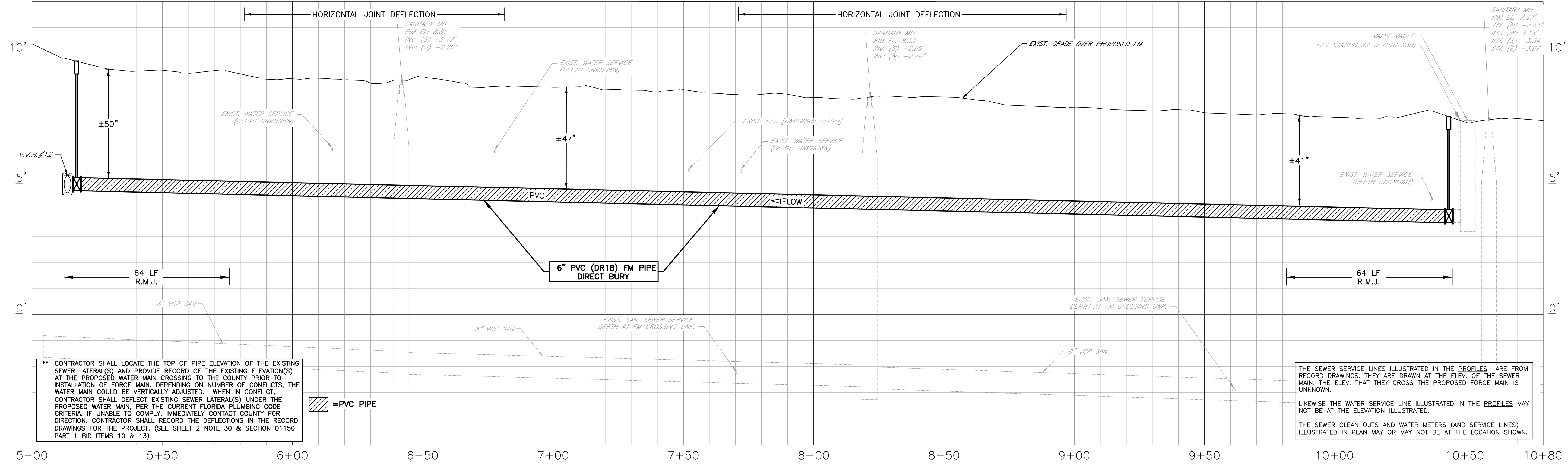
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19.20.29./34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
 FORCE MAIN REPLACEMENT
 KEY SHEET & ABANDONMENT PLAN**

SHEET NO.
 03 of 28



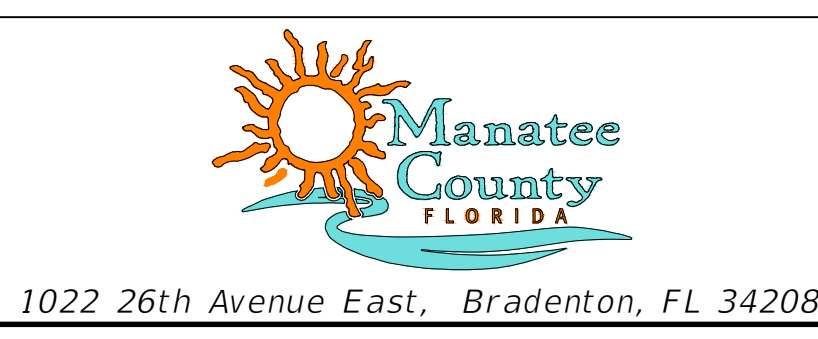
72ND ST NW STA: 5+00 to 10+80



** CONTRACTOR SHALL LOCATE THE TOP OF PIPE ELEVATION OF THE EXISTING SEWER LATERAL(S) AND PROVIDE RECORD OF THE EXISTING ELEVATION(S) AT THE PROPOSED WATER MAIN CROSSING TO THE COUNTY PRIOR TO INSTALLATION OF FORCE MAIN. DEPENDING ON NUMBER OF CONFLICTS, THE WATER MAIN COULD BE VERTICALLY ADJUSTED. WHEN IN CONFLICT, CONTRACTOR SHALL DEFLECT EXISTING SEWER LATERAL(S) UNDER THE PROPOSED WATER MAIN, PER THE CURRENT FLORIDA PLUMBING CODE CRITERIA. IF UNABLE TO COMPLY, IMMEDIATELY CONTACT COUNTY FOR DIRECTION. CONTRACTOR SHALL RECORD THE DEFLECTIONS IN THE RECORD DRAWINGS FOR THE PROJECT. (SEE SHEET 2 NOTE 30 & SECTION 01150 PART 1 BID ITEMS 10 & 13)

THE SEWER SERVICE LINES ILLUSTRATED IN THE PROFILES ARE FROM RECORD DRAWINGS. THEY ARE DRAWN AT THE ELEV. OF THE SEWER MAIN. THE ELEV. THAT THEY CROSS THE PROPOSED FORCE MAIN IS UNKNOWN. LIKEWISE THE WATER SERVICE LINE ILLUSTRATED IN THE PROFILES MAY NOT BE AT THE ELEVATION ILLUSTRATED. THE SEWER CLEAN OUTS AND WATER METERS (AND SERVICE LINES) ILLUSTRATED IN PLAN MAY OR MAY NOT BE AT THE LOCATION SHOWN.

REVISIONS	
DATE	DESCRIPTION



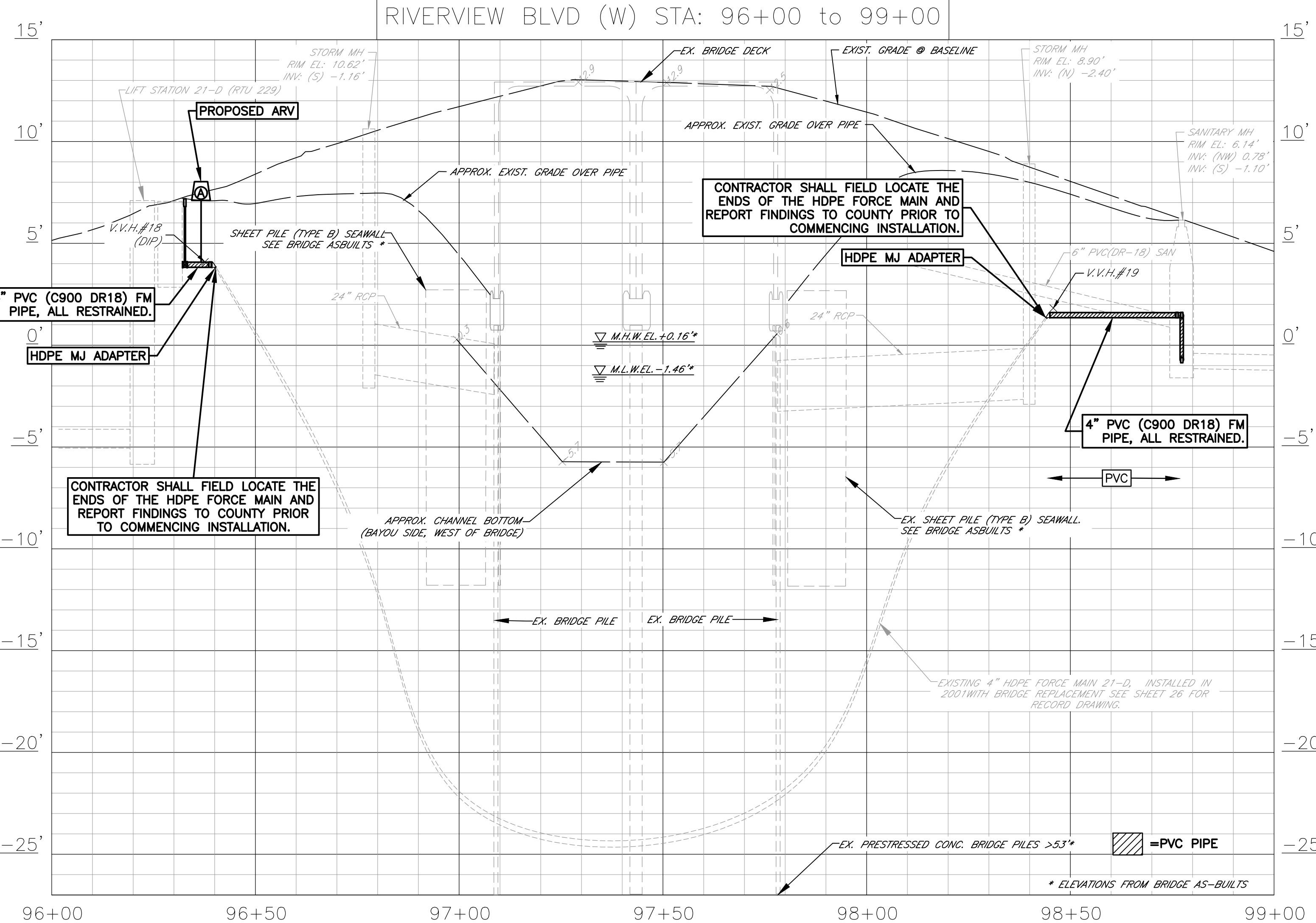
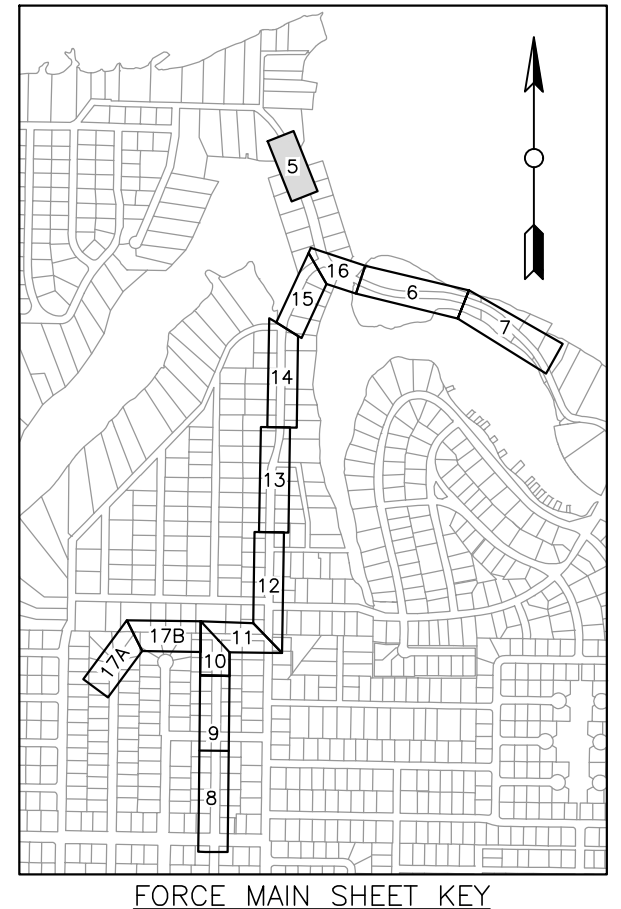
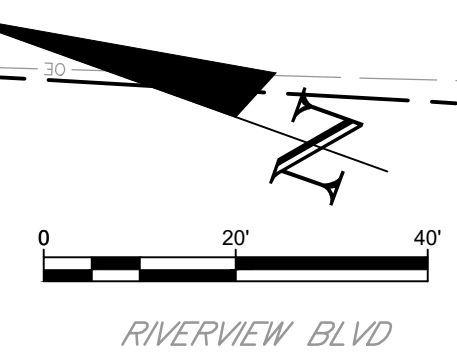
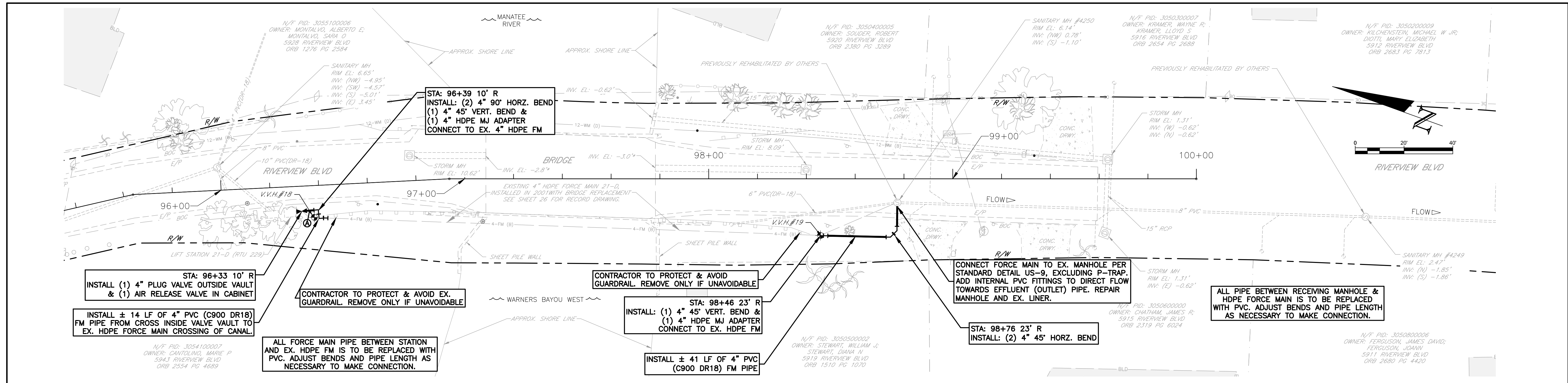
J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
72ND AVE NW [FM 22-D, RTU 224]

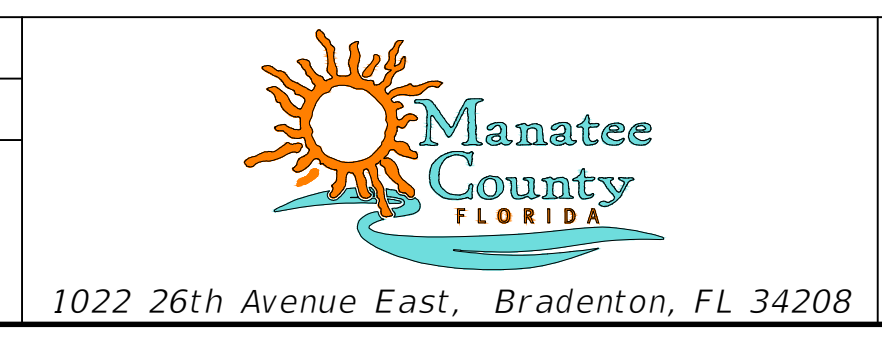
SHEET NO.
04 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C. SOUTHWEST SERVICE AREA D



- CONSTRUCTION NOTES (APPLICABLE TO ALL PLAN AND PROFILE SHEETS):**
- ANY MAINTENANCE OF TRAFFIC (MOT) PLAN MUST FOLLOW FDOT 102-600 SERIES STANDARDS. NO FULL OR LANE CLOSURES WITHOUT FULL MOT PLAN AND COUNTY DIRECTOR APPROVAL. WORK MAY REQUIRE NIGHT ONLY WORK TO BE APPROVED.
 - LOCATION OF EXISTING SEWER SERVICE LATERALS ARE APPROXIMATE. PRIOR TO INSTALLATION OF THE PROPOSED FORCE MAIN, THE CONTRACTOR SHALL LOCATE AND PROVIDE RECORD OF THE TOP OF PIPE ELEVATION OF THE EXISTING SEWER LATERALS, AND OTHER CONFLICTS AT THE PROPOSED MAIN CROSSING TO THE COUNTY. DEPENDING ON THE POTENTIAL CONFLICTS DISCOVERED, THE PROPOSED MAIN OR SEWER LATERAL(S) MAY BE VERTICALLY ADJUSTED AT THE SOLE-DISCRETION OF THE COUNTY TO AVOID THE NEED FOR THE INSTALLATION OF AIR RELEASE VALVES (ARV). ALL ADJUSTMENTS SHALL BE PER COUNTY STANDARDS AND/OR PLUMBING CODE; WHICHEVER IS MORE STRINGENT. THE CONTRACTOR SHALL RECORD THE SANITARY SEWER LATERAL ELEVATIONS AND/OR ALL RELOCATIONS IN THE PROJECT RECORD DRAWINGS. REFER TO SHEET 2 NOTE 30 AND SECTION 01150 PART 1. 6-INCH MIN. VERTICAL CLEARANCE IS REQUIRED FROM THE MAIN. IF DURING EXPLORATORY DIGGING THE EXISTING SEWER LATERALS CAN NOT BE FOUND WITH 24-INCHES OF THE PROPOSED BOTTOM OF THE FORCE MAIN, THEN NOTE ">24\"".
 - INSTALLATION OF THE PROPOSED PIPE SHALL BE AS SHOWN IN THE PLAN AND PROFILE VIEWS. THE DEPTH OF BURY OR TOP OF PIPE ELEVATION ARE TO BE AS INDICATED BY THE ELEVATION GRID, UNLESS OTHERWISE STATED ON THE PLANS BY ELEVATION CALLOUTS OR SPOT GRADES. IT IS EXPECTED THE INSTALLATION OF THE PIPE OR APPURTENANCES SHALL MATCH THE ELEVATIONS SHOWN IN THE CONSTRUCTION PLANS.
 - ALL NECESSARY DEVIATIONS BEYOND THE ACCEPTED TOLERANCES WILL NOT BE ACCEPTED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE COUNTY.
 - INSTALLATION VERTICAL AND HORIZONTAL TOLERANCES SHALL BE AS STATED IN THE SPECIFICATION DOCUMENT, SECTION 02617, 3.03.H. PIPE PLACED OUT OF TOLERANCE IS SUBJECT TO REMOVAL AND REPLACEMENT AT NO COST TO THE COUNTY. OUT OF TOLERANCE PIPES THAT REQUIRE AN ARV SHALL BE AT THE SOLE-EXPENSE OF THE CONTRACTOR.
 - CONTRACTOR SHALL SURVEY THE EXISTING TOP OF "PIPE" ELEVATION WHEN EXPOSED AT ALL PROPOSED UTILITY CROSSINGS. THIS INFORMATION SHALL BE PROVIDED ON THE RECORD DRAWINGS.
 - CONTRACTOR SHALL USE A TAPE MEASURE AND PROVIDE PHOTOGRAPHIC EVIDENCE THAT ALL MINIMUM REQUIRED VERTICAL DISTANCES HAVE BEEN PROVIDED. THESE PHOTOS SHALL BECOME PART OF THE PROJECT FILE. PHOTOS SHALL BE LABELED WITH THE BASELINE STATION NUMBERING AND UPLOADED TO eBUILDER WITHIN 1 TO 2 DAYS OF THE CROSSING INSTALLATIONS. THIS REQUIREMENTS SHALL APPLY TO ALL CROSSINGS.
 - CONTRACTOR SHALL NOT USE LEVERAGE OR MECHANICAL MEANS TO ALIGN THE PIPE AND/OR FITTINGS FOR ATTACHMENT. THE PIPE SHALL NOT BE "SPRING-LOADED".
 - ALL DISTURBED EX. DRAINAGE DITCHES/SWALES SHALL BE RE-GRADED TO ORIGINAL CONDITION TO PROVIDE POSITIVE DRAINAGE.
 - ALL COST TO RESTORE PROPERTY IN THE ROW DURING PIPE INSTALLATION SHALL BE INCLUDED IN THE COST OF THE PIPE BID ITEM, IF NOT SPECIFICALLY ADDRESSED BY OTHER BID ITEMS.
 - ANY PROPOSED AIR RELEASE VALVES (ARV) SHALL BE INSTALLED AFTER THE FIRST DRAFT OF THE RECORD DRAWINGS ARE REVIEWED TO ENSURE THE ARVS ARE INSTALLED AT THE ACTUAL HIGH POINTS OF THE NEWLY INSTALLED MAINS.

REVISIONS	
DATE	DESCRIPTION

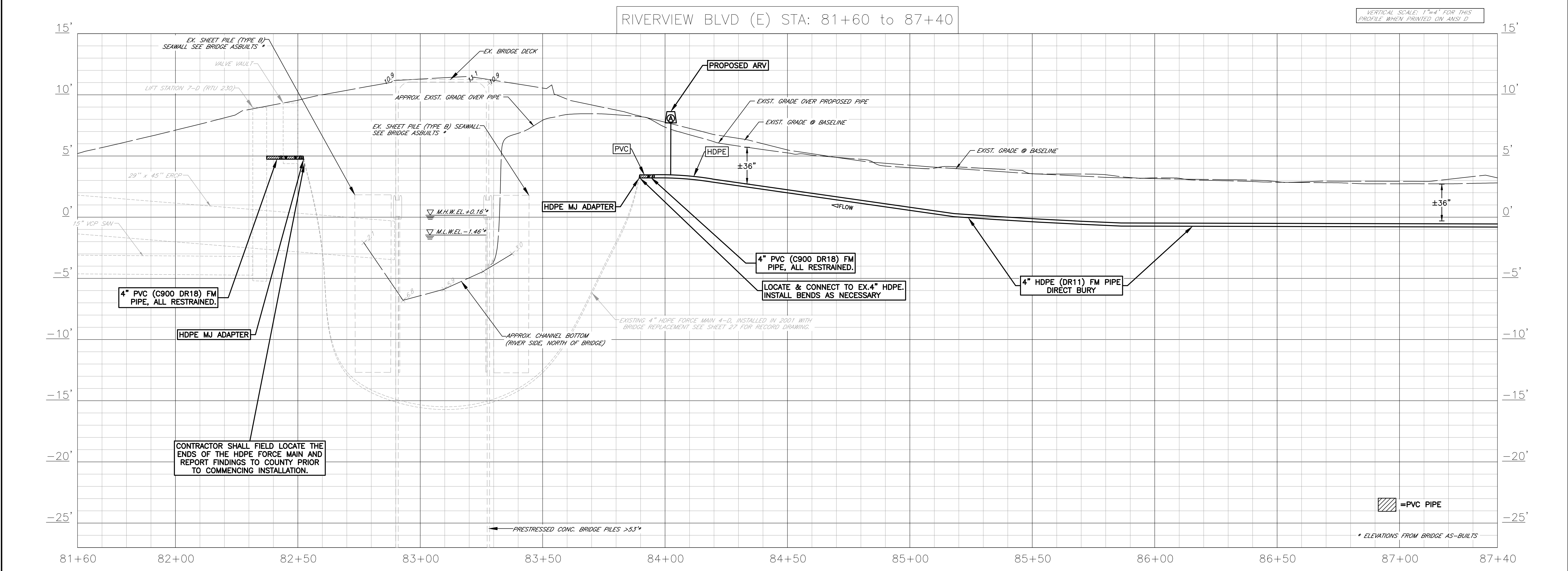
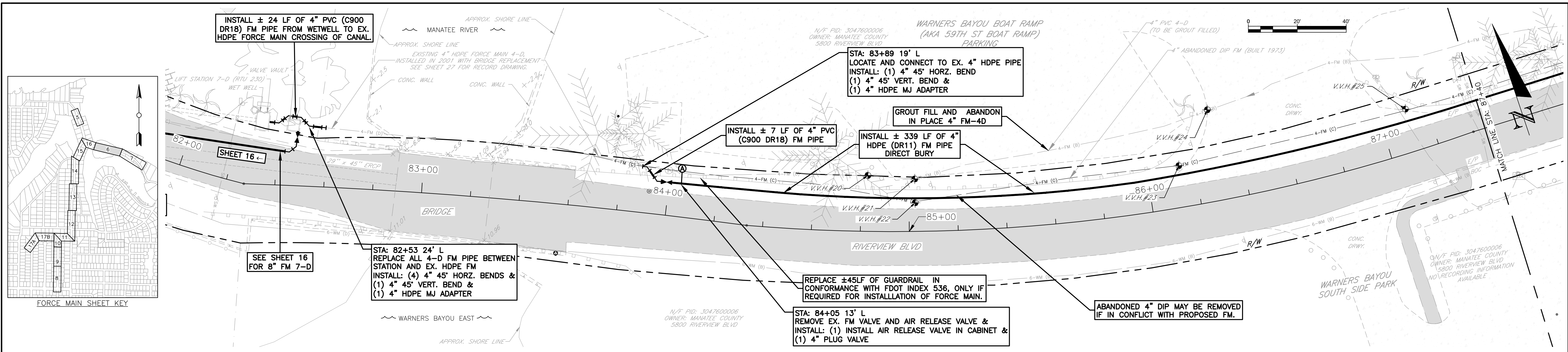


J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

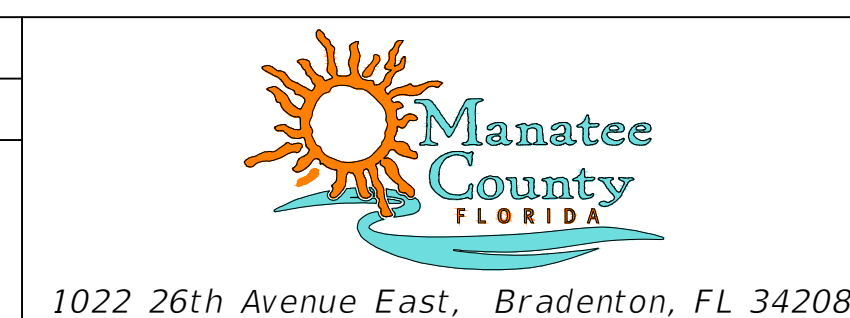
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	20/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
RIVERVIEW BLVD WARNERS BAYOU WEST
[FM 21-D, RTU 229]**

SHEET NO. 05 of 28



REVISIONS	
DATE	DESCRIPTION



J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

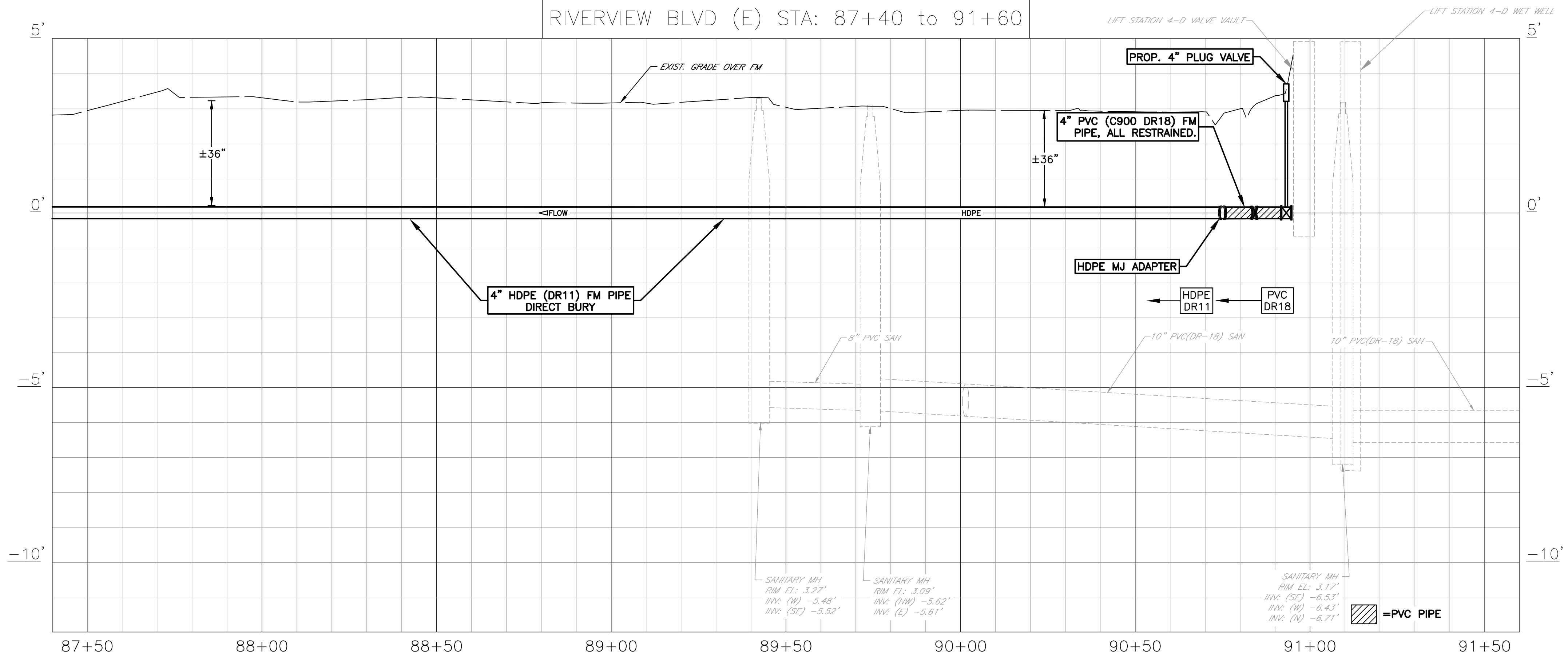
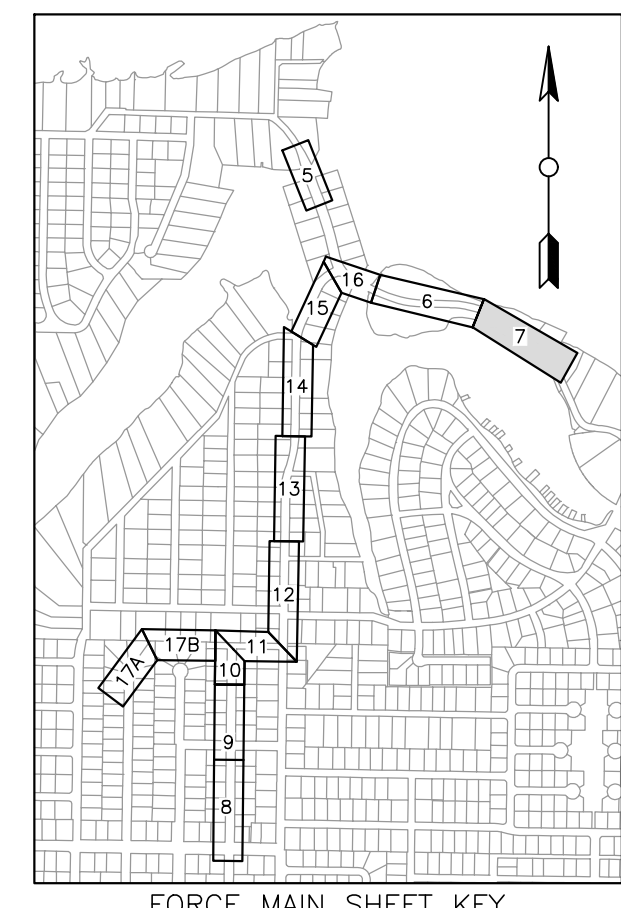
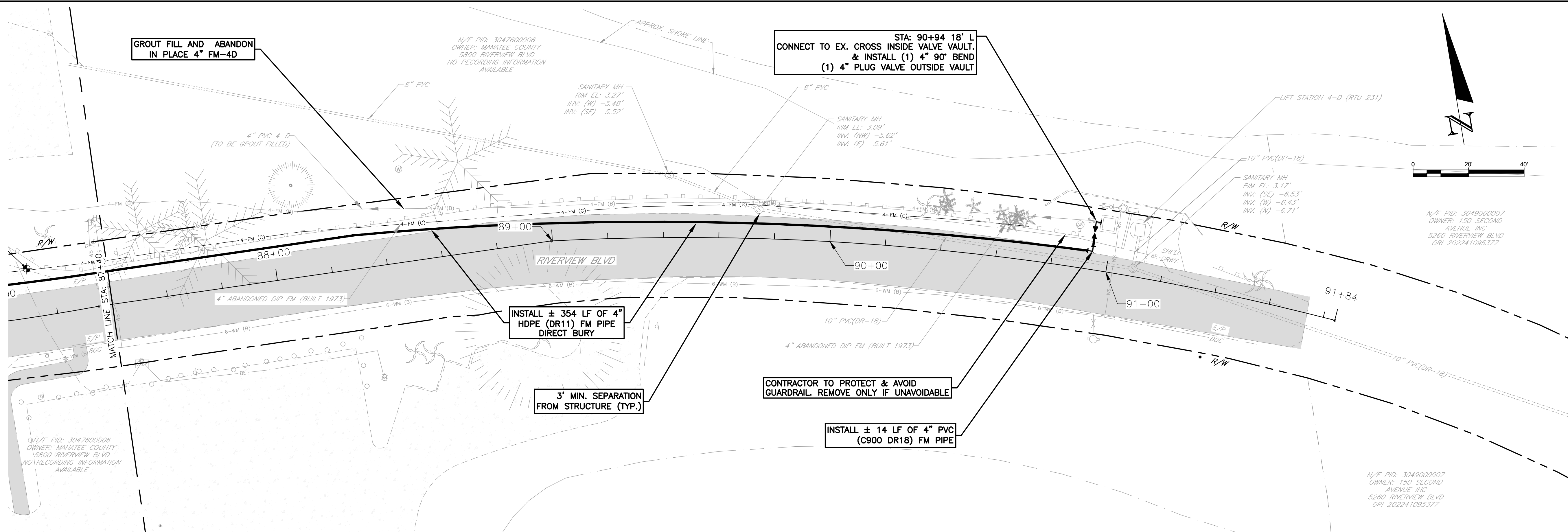
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	20/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
RIVERVIEW BLVD WARNERS BAYOU EAST
[FM 4-D, RTU 231]**

SHEET NO. 06 of 28

Originally plotted by Bruce Robertson at 1:1 scale on 7/11/2024 at 12:38:28 PM on ANSI full bleed D (34.00 x 22.00 Inches) paper using MC-2016.STB. File Name: FM-AREA D P_DESIGN.DWG

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C. SOUTHWEST SERVICE AREA D



REVISIONS	
DATE	DESCRIPTION

1022 26th Avenue East, Bradenton, FL 34208

J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.

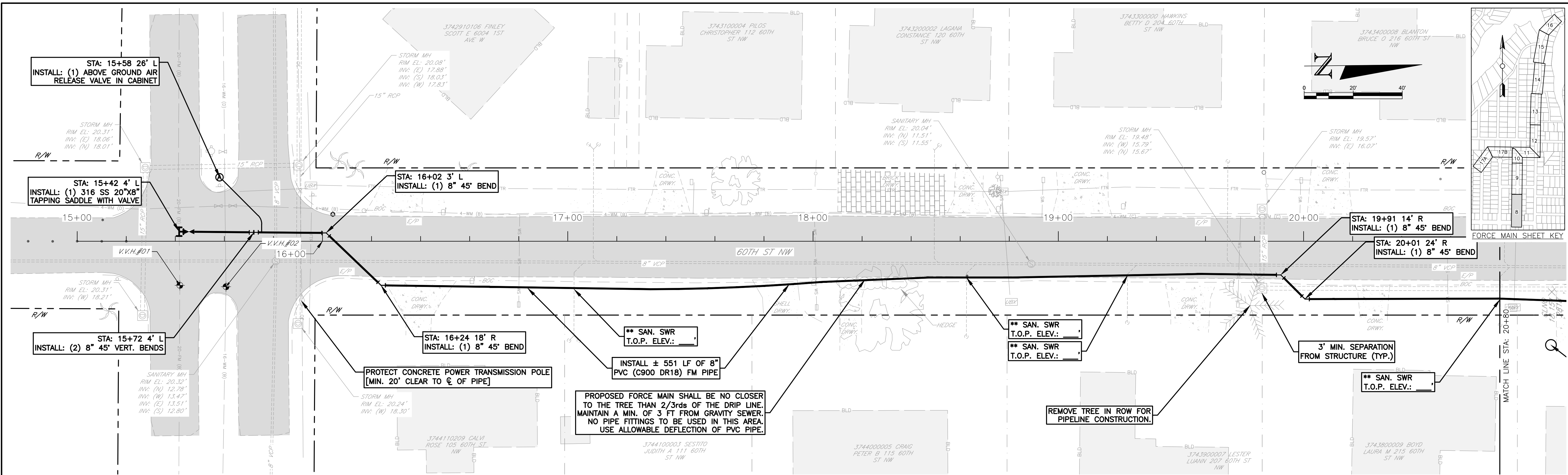
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	20/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

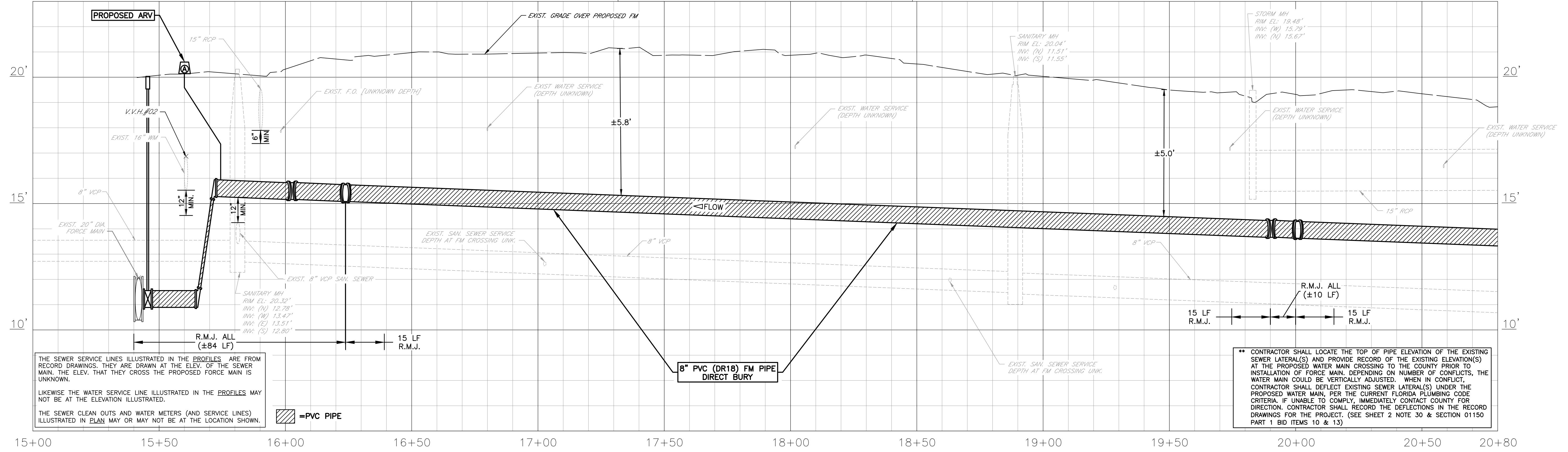
**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
RIVERVIEW BLVD WARNERS BAYOU EAST
[FM 4-D, RTU 231]**

SHEET
NO.
07 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



60TH ST NW STA: 15+00 to 20+80



REVISIONS	
DATE	DESCRIPTION

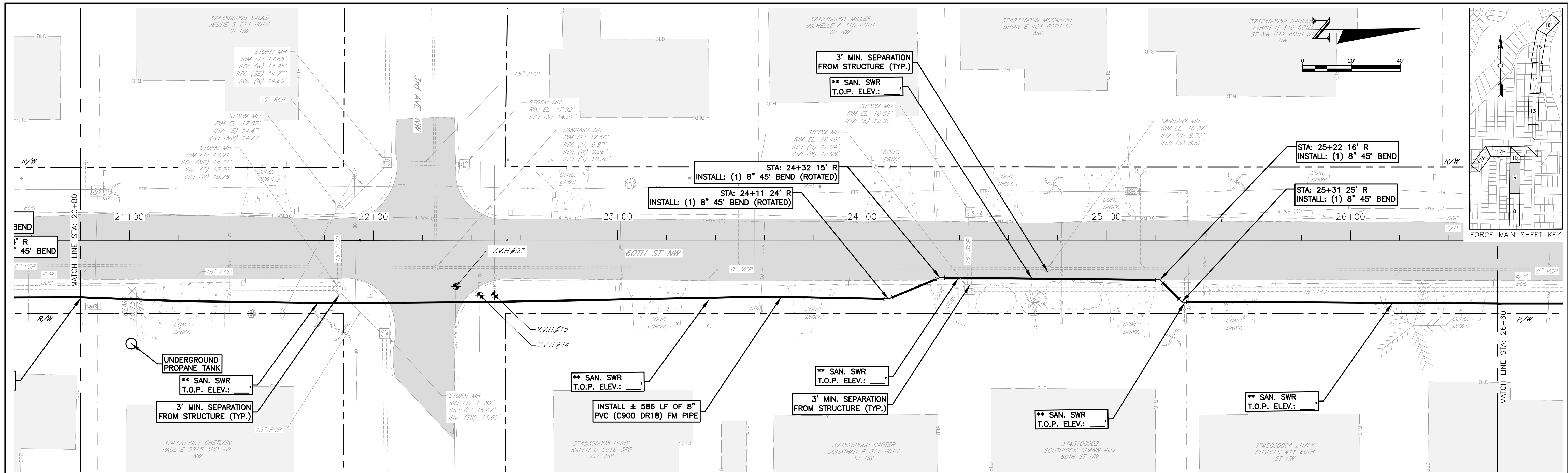
1022 26th Avenue East, Bradenton, FL 34208

J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

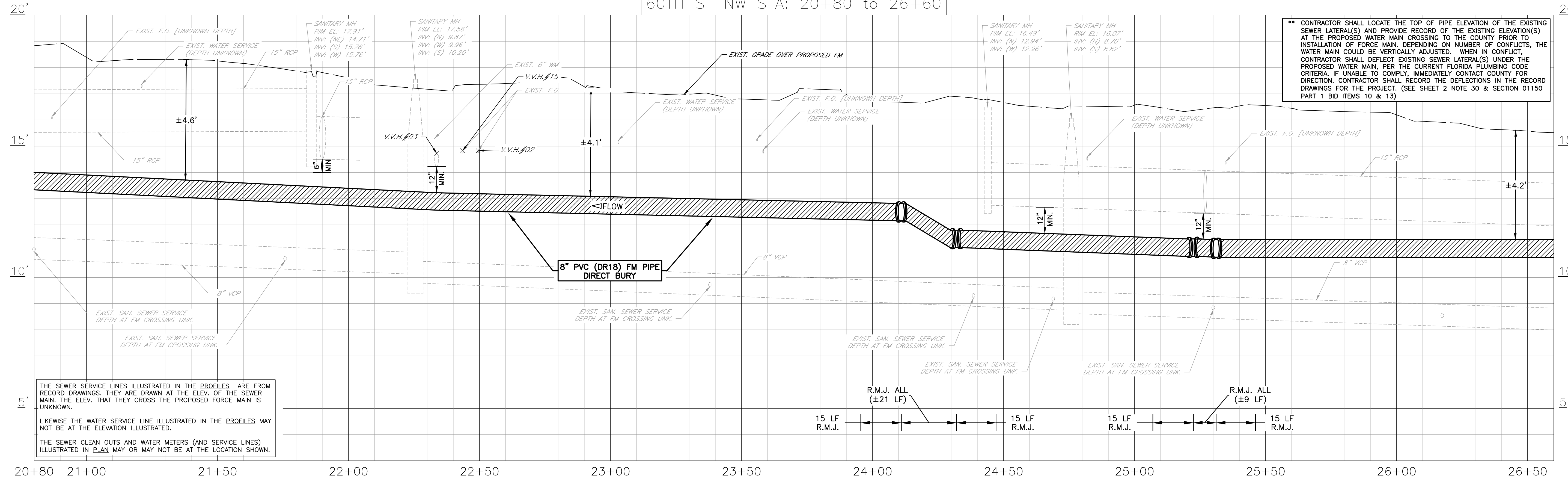
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
60TH ST NW [FM 7-D, RTU 230]**

SHEET
NO.
08 of 28

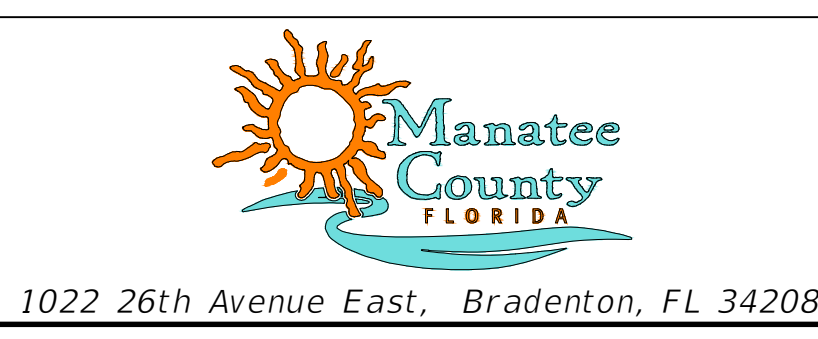


60TH ST NW STA: 20+80 to 26+60



THE SEWER SERVICE LINES ILLUSTRATED IN THE PROFILES ARE FROM RECORD DRAWINGS. THEY ARE DRAWN AT THE ELEV. OF THE SEWER MAIN. THE ELEV. THAT THEY CROSS THE PROPOSED FORCE MAIN IS UNKNOWN.
 LIKEWISE THE WATER SERVICE LINE ILLUSTRATED IN THE PROFILES MAY NOT BE AT THE ELEVATION ILLUSTRATED.
 THE SEWER CLEAN OUTS AND WATER METERS (AND SERVICE LINES) ILLUSTRATED IN PLAN MAY OR MAY NOT BE AT THE LOCATION SHOWN.

REVISIONS	
DATE	DESCRIPTION

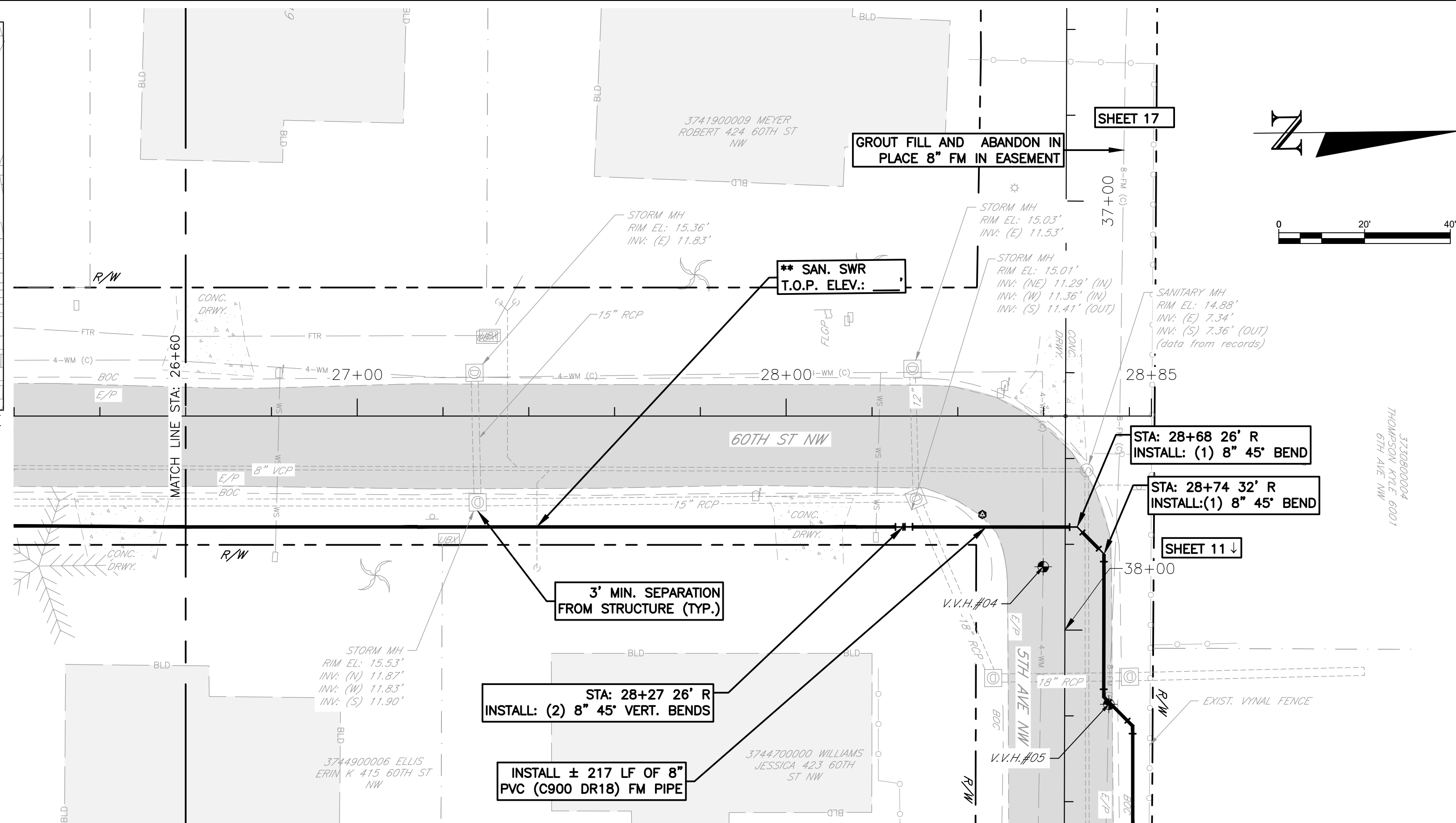
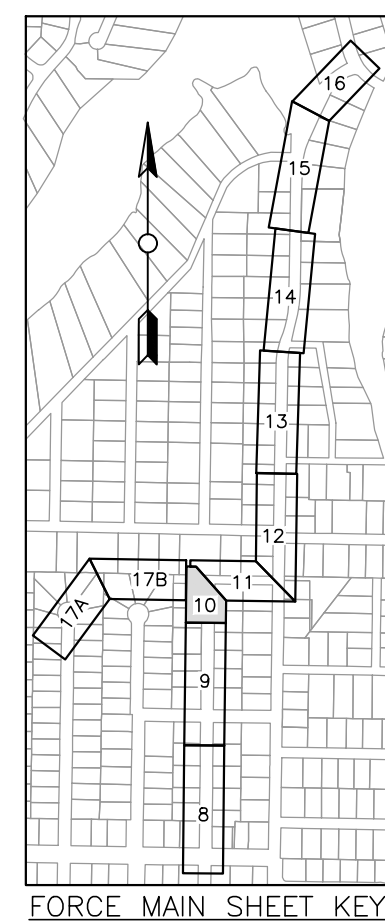


J. SHEA SHOUN, STATE OF FLORIDA,
 PROFESSIONAL ENGINEER, LICENSE NO. 60923.
 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
 J. SHEA SHOUN ON THE DATE INDICATED HERE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT
 CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
 MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

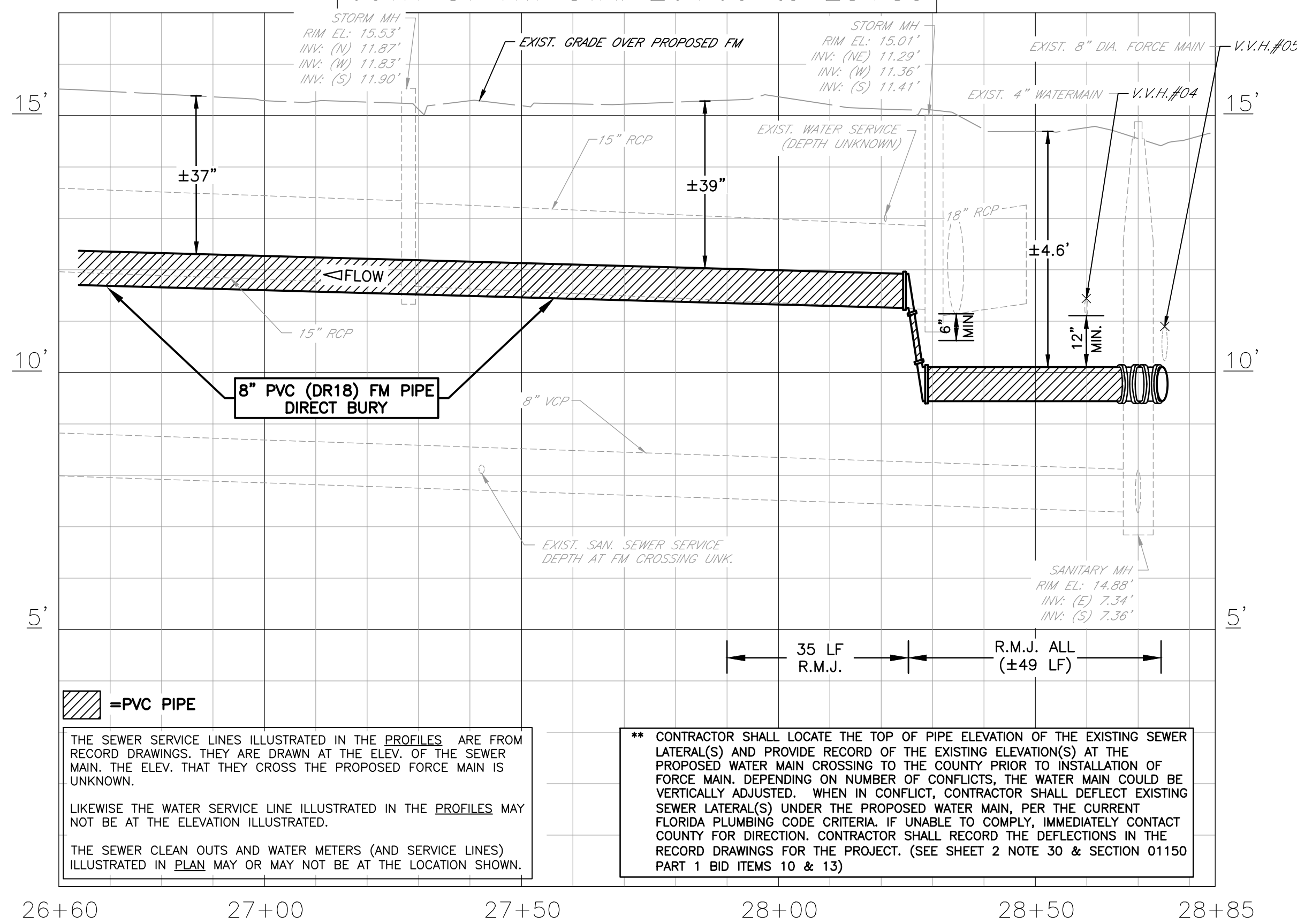
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
 FORCE MAIN REPLACEMENT
 60TH ST NW [FM 7-D, RTU 230]**

SHEET NO.
 09 of 28



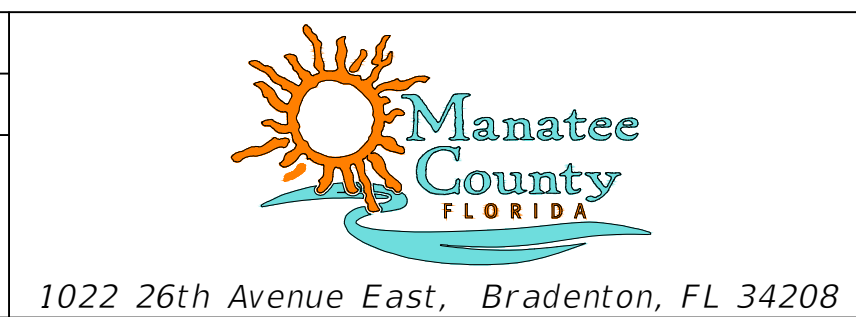
60TH ST NW STA: 26+60 to 28+85



THE SEWER SERVICE LINES ILLUSTRATED IN THE PROFILES ARE FROM RECORD DRAWINGS; THEY ARE DRAWN AT THE ELEV. OF THE SEWER MAIN. THE ELEV. THAT THEY CROSS THE PROPOSED FORCE MAIN IS UNKNOWN.
 LIKEWISE THE WATER SERVICE LINE ILLUSTRATED IN THE PROFILES MAY NOT BE AT THE ELEVATION ILLUSTRATED.
 THE SEWER CLEAN OUTS AND WATER METERS (AND SERVICE LINES) ILLUSTRATED IN PLAN MAY OR MAY NOT BE AT THE LOCATION SHOWN.

** CONTRACTOR SHALL LOCATE THE TOP OF PIPE ELEVATION OF THE EXISTING SEWER LATERAL(S) AND PROVIDE RECORD OF THE EXISTING ELEVATION(S) AT THE PROPOSED WATER MAIN CROSSING TO THE COUNTY PRIOR TO INSTALLATION OF FORCE MAIN. DEPENDING ON NUMBER OF CONFLICTS, THE WATER MAIN COULD BE VERTICALLY ADJUSTED. WHEN IN CONFLICT, CONTRACTOR SHALL DEFLECT EXISTING SEWER LATERAL(S) UNDER THE PROPOSED WATER MAIN, PER THE CURRENT FLORIDA PLUMBING CODE CRITERIA. IF UNABLE TO COMPLY, IMMEDIATELY CONTACT COUNTY FOR DIRECTION. CONTRACTOR SHALL RECORD THE DEFLECTIONS IN THE RECORD DRAWINGS FOR THE PROJECT. (SEE SHEET 2 NOTE 30 & SECTION 01150 PART 1 BID ITEMS 10 & 13)

REVISIONS	
DATE	DESCRIPTION



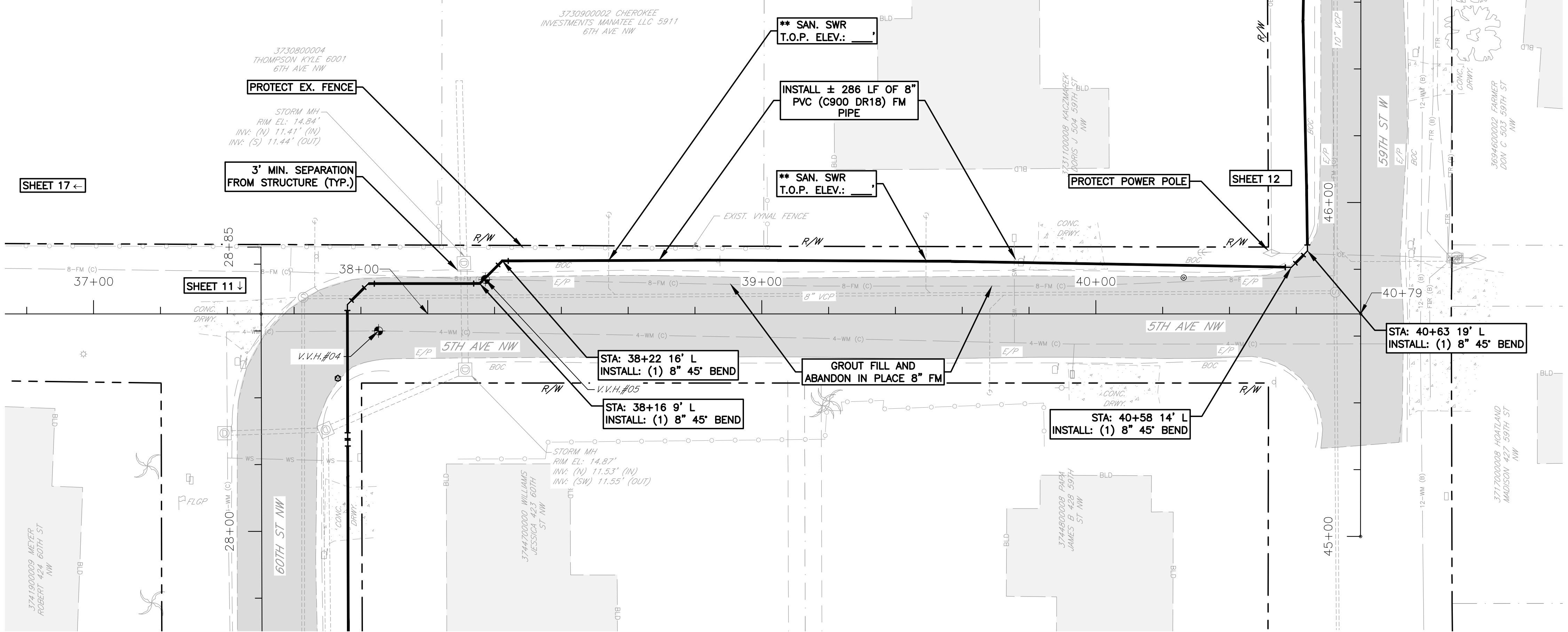
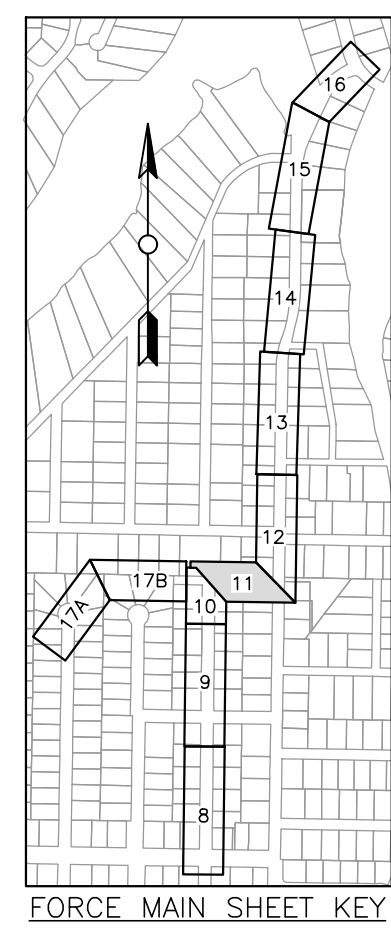
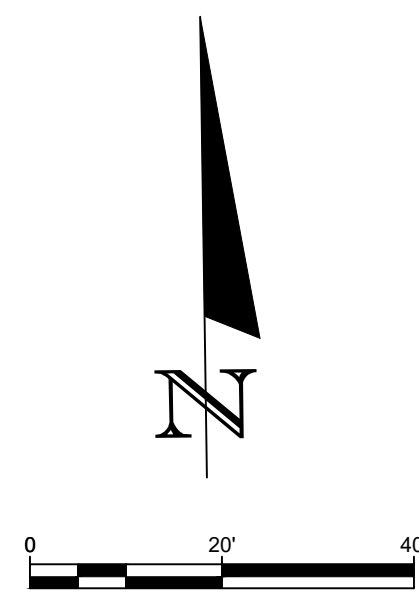
J. SHEA SHOUN, STATE OF FLORIDA,
 PROFESSIONAL ENGINEER, LICENSE NO. 60923.
 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
 J. SHEA SHOUN ON THE DATE INDICATED HERE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT
 CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
 MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

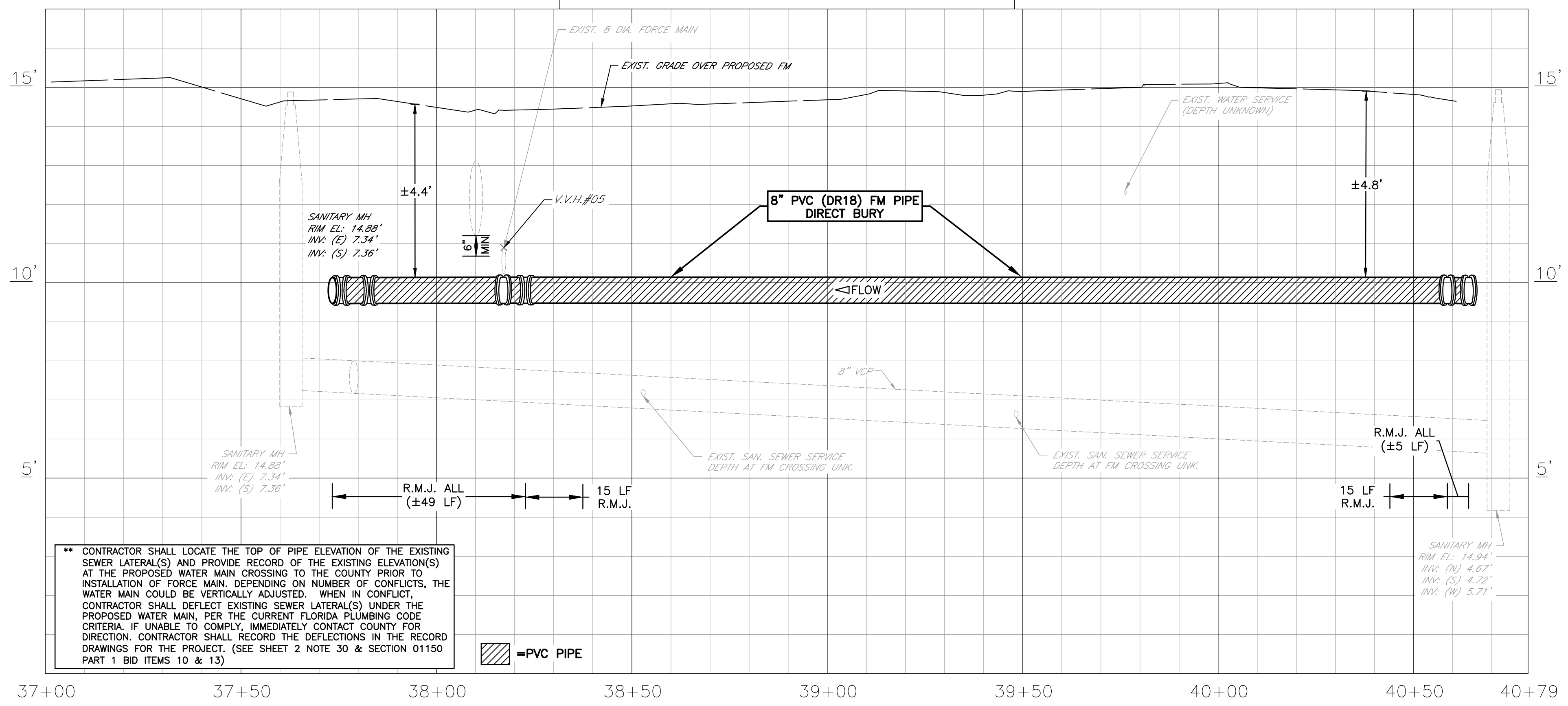
**SOUTHWEST SERVICE AREA D
 FORCE MAIN REPLACEMENT
 5TH AVE NW [FM 7-D, RTU 230]**

SHEET NO.
 10 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C. SOUTHWEST SERVICE AREA D



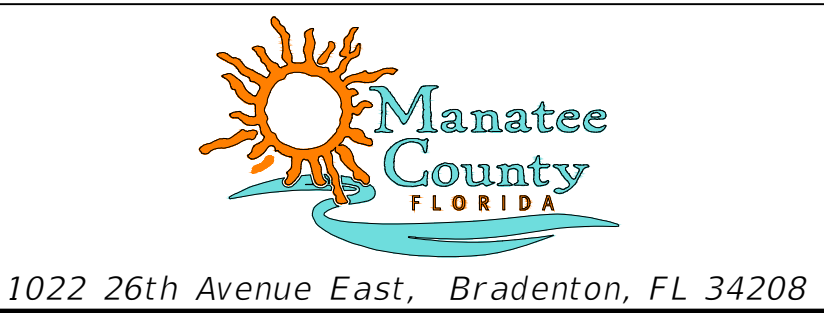
5TH AVE NW STA: 37+00 TO 40+79



** CONTRACTOR SHALL LOCATE THE TOP OF PIPE ELEVATION OF THE EXISTING SEWER LATERAL(S) AND PROVIDE RECORD OF THE EXISTING ELEVATION(S) AT THE PROPOSED WATER MAIN CROSSING TO THE COUNTY PRIOR TO INSTALLATION OF FORCE MAIN, DEPENDING ON NUMBER OF CONFLICTS, THE WATER MAIN COULD BE VERTICALLY ADJUSTED. WHEN IN CONFLICT, CONTRACTOR SHALL DEFLECT EXISTING SEWER LATERAL(S) UNDER THE PROPOSED WATER MAIN, PER THE CURRENT FLORIDA PLUMBING CODE CRITERIA. IF UNABLE TO COMPLY, IMMEDIATELY CONTACT COUNTY FOR DIRECTION. CONTRACTOR SHALL RECORD THE DEFLECTIONS IN THE RECORD DRAWINGS FOR THE PROJECT. (SEE SHEET 2 NOTE 30 & SECTION 01150 PART 1 BID ITEMS 10 & 13)

=PVC PIPE

REVISIONS	
DATE	DESCRIPTION

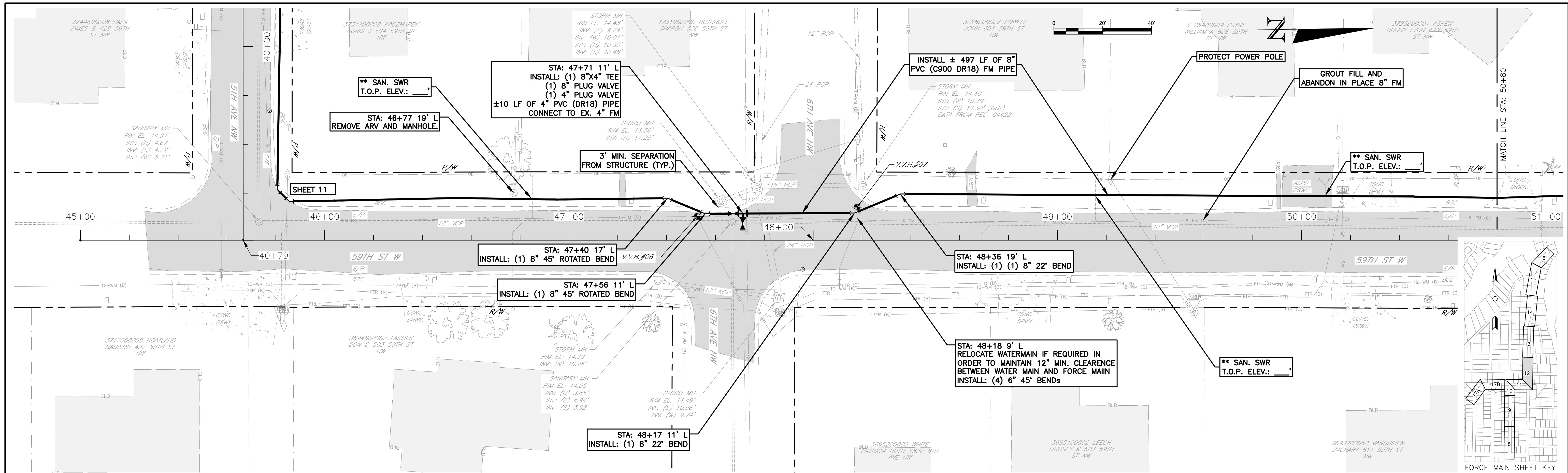


J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

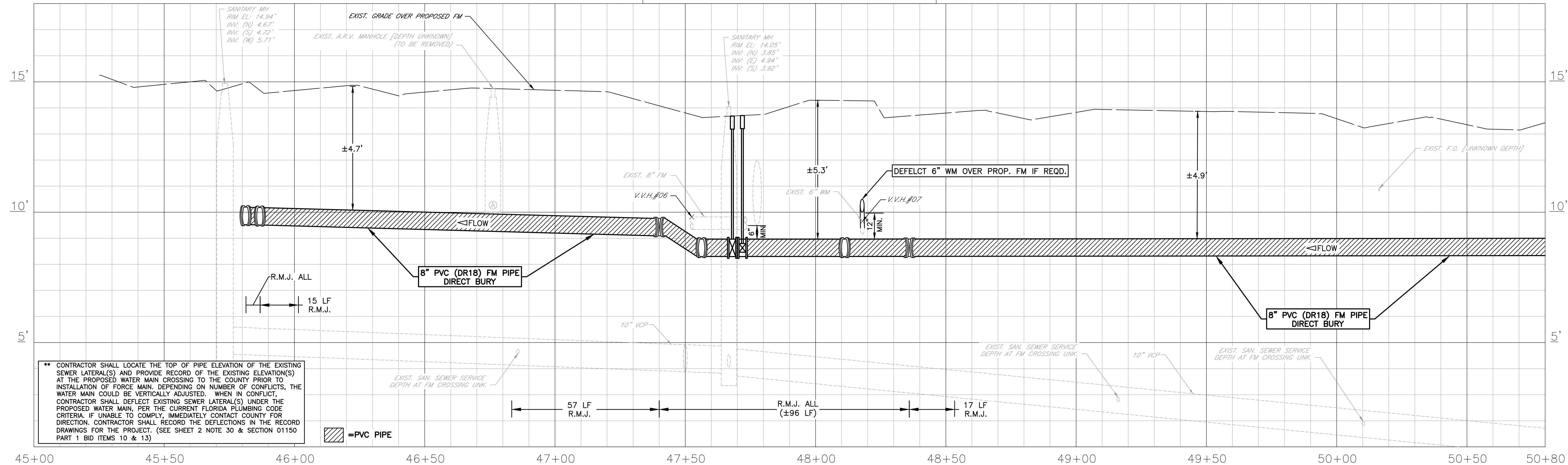
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
59TH ST W [FM 7-D, RTU 230]

SHEET
NO.
11 of 28

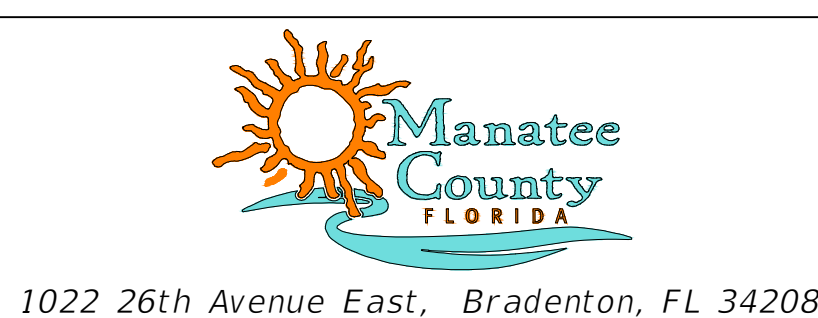


59TH ST W STA: 45+00 TO 50+80



** CONTRACTOR SHALL LOCATE THE TOP OF PIPE ELEVATION OF THE EXISTING SEWER LATERAL(S) AND PROVIDE RECORD OF THE EXISTING ELEVATION(S) AT THE PROPOSED WATER MAIN CROSSING TO THE COUNTY PRIOR TO INSTALLATION OF FORCE MAIN. DEPENDING ON NUMBER OF CONFLICTS, THE WATER MAIN COULD BE VERTICALLY ADJUSTED. WHEN IN CONFLICT, CONTRACTOR SHALL DEFLECT EXISTING SEWER LATERAL(S) UNDER THE PROPOSED WATER MAIN, PER THE CURRENT FLORIDA PLUMBING CODE CRITERIA. IF UNABLE TO COMPLY, IMMEDIATELY CONTACT COUNTY FOR DIRECTION. CONTRACTOR SHALL RECORD THE DEFLECTIONS IN THE RECORD DRAWINGS FOR THE PROJECT. (SEE SHEET 2 NOTE 30 & SECTION 01150 PART 1 BID ITEMS 10 & 13)

REVISIONS	
DATE	DESCRIPTION



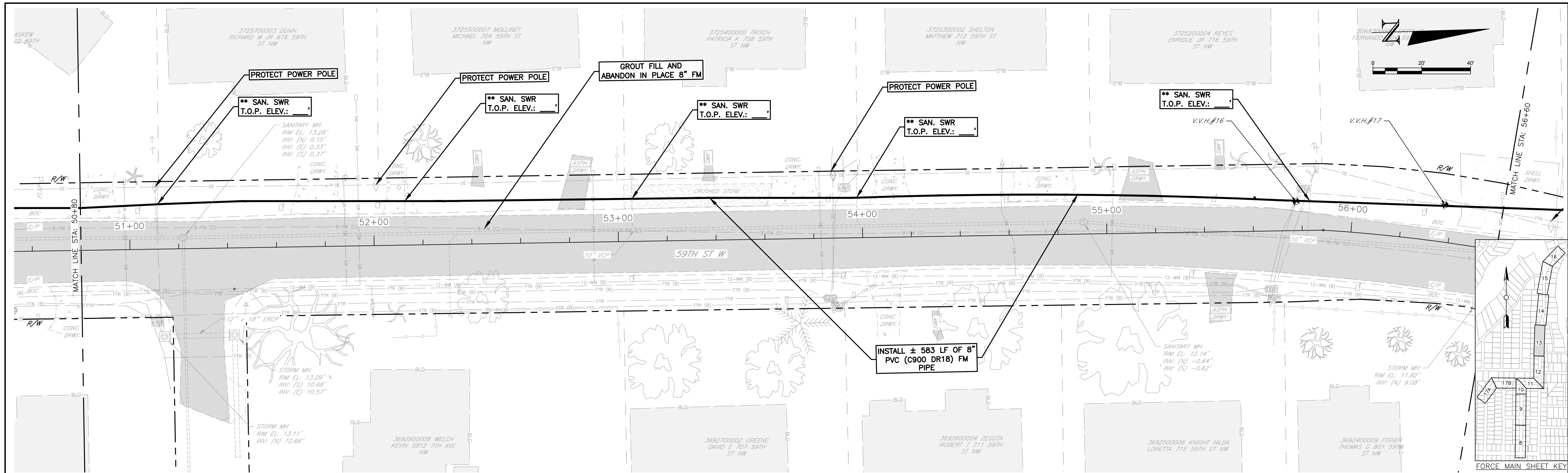
J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

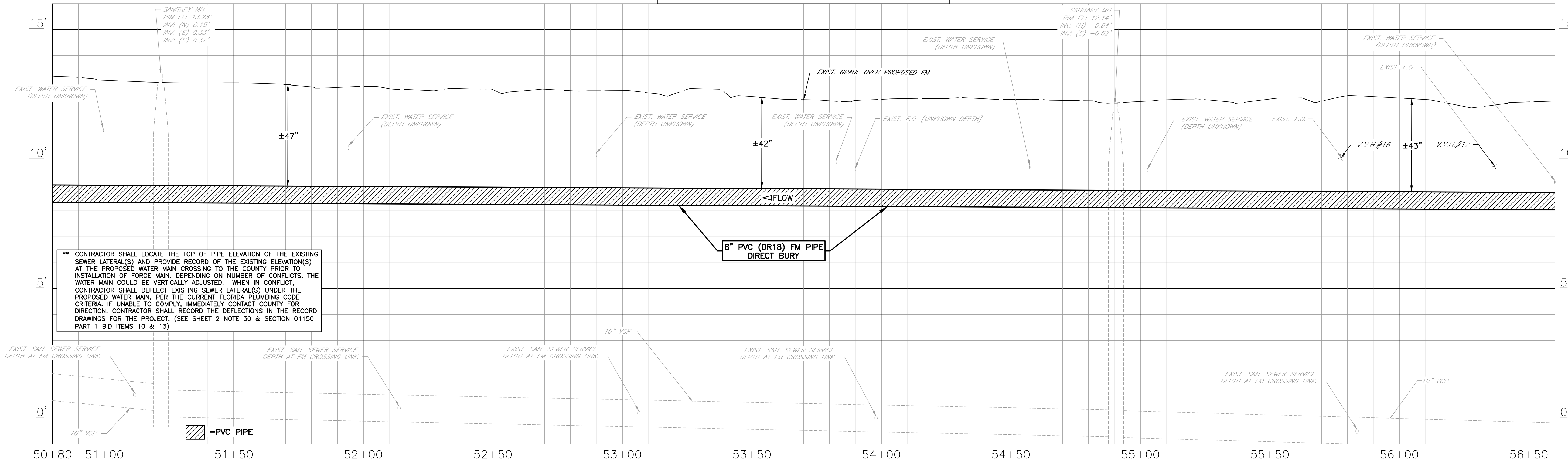
**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
59TH ST W [FM 7-D, RTU 230]**

SHEET
NO.
12 of 28

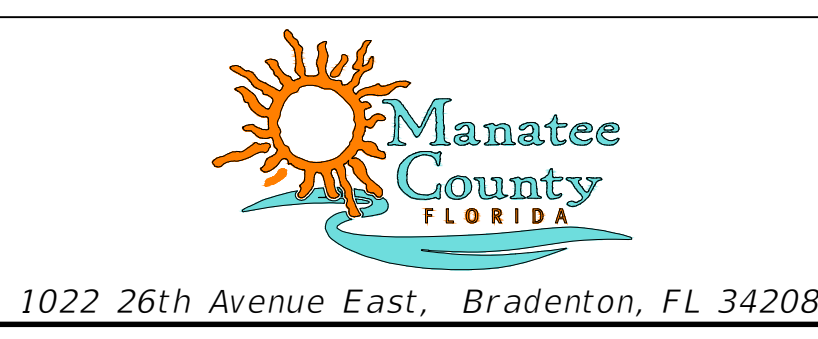
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



59TH ST W STA: 50+80 to 56+60



REVISIONS	
DATE	DESCRIPTION



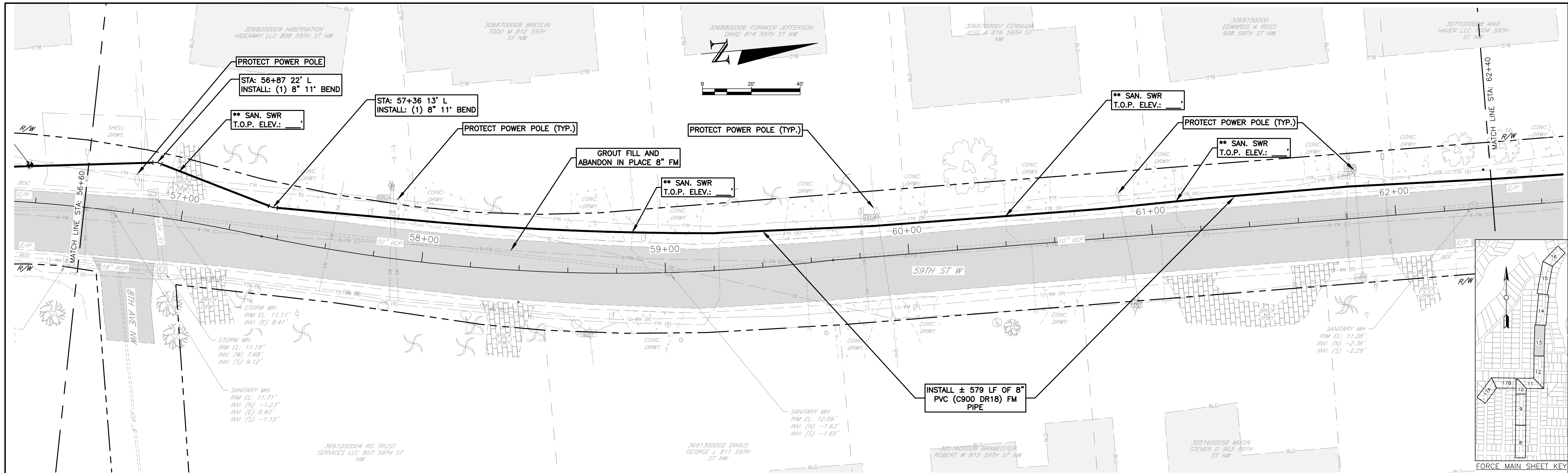
J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

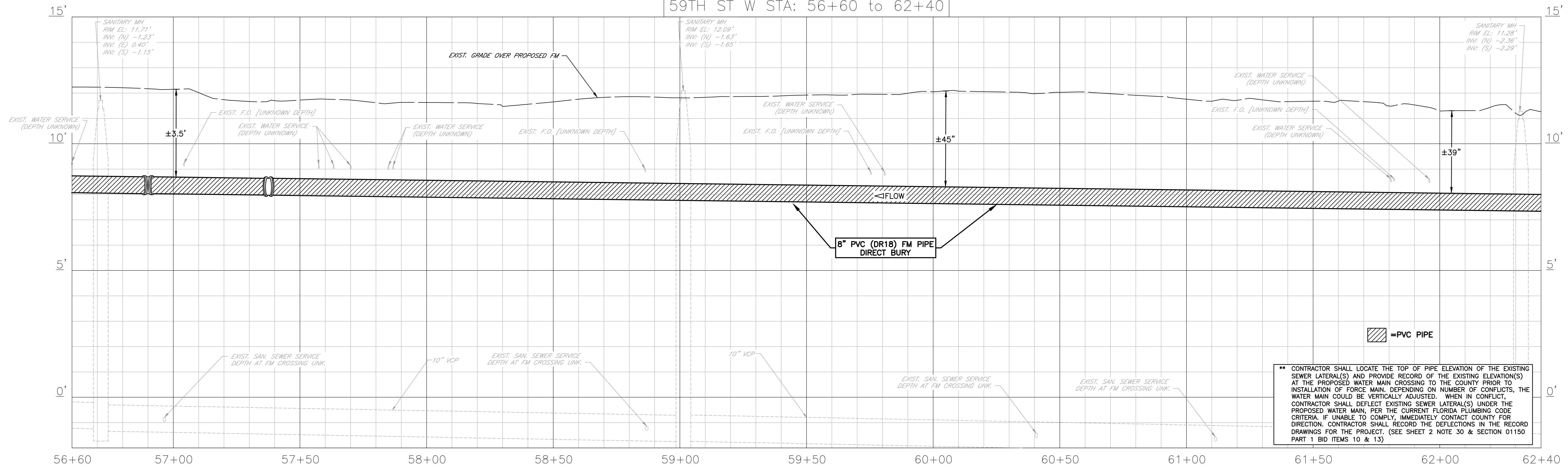
**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
59TH ST W [FM 7-D, RTU 230]**

SHEET
NO.
13 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

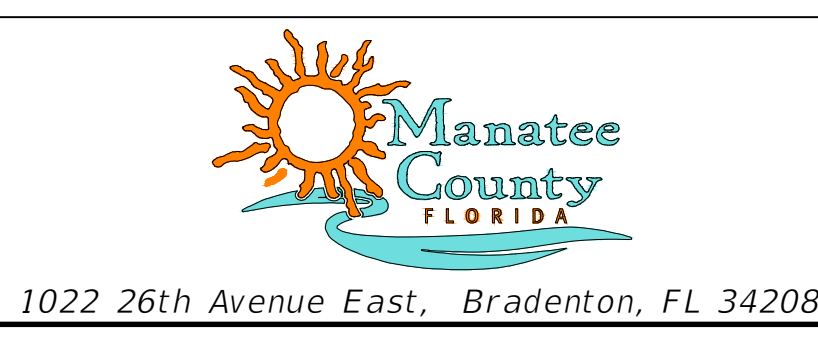


59TH ST W STA: 56+60 to 62+40



**** CONTRACTOR SHALL LOCATE THE TOP OF PIPE ELEVATION OF THE EXISTING SEWER LATERAL(S) AND PROVIDE RECORD OF THE EXISTING ELEVATION(S) AT THE PROPOSED WATER MAIN CROSSING TO THE COUNTY PRIOR TO INSTALLATION OF FORCE MAIN, DEPENDING ON NUMBER OF CONFLICTS, THE WATER MAIN COULD BE VERTICALLY ADJUSTED. WHEN IN CONFLICT, CONTRACTOR SHALL DEFLECT EXISTING SEWER LATERAL(S) UNDER THE PROPOSED WATER MAIN, PER THE CURRENT FLORIDA PLUMBING CODE CRITERIA. IF UNABLE TO COMPLY, IMMEDIATELY CONTACT COUNTY FOR DIRECTION. CONTRACTOR SHALL RECORD THE DEFLECTIONS IN THE RECORD DRAWINGS FOR THE PROJECT. (SEE SHEET 2 NOTE 30 & SECTION 01150 PART 1 BID ITEMS 10 & 13)**

REVISIONS	
DATE	DESCRIPTION



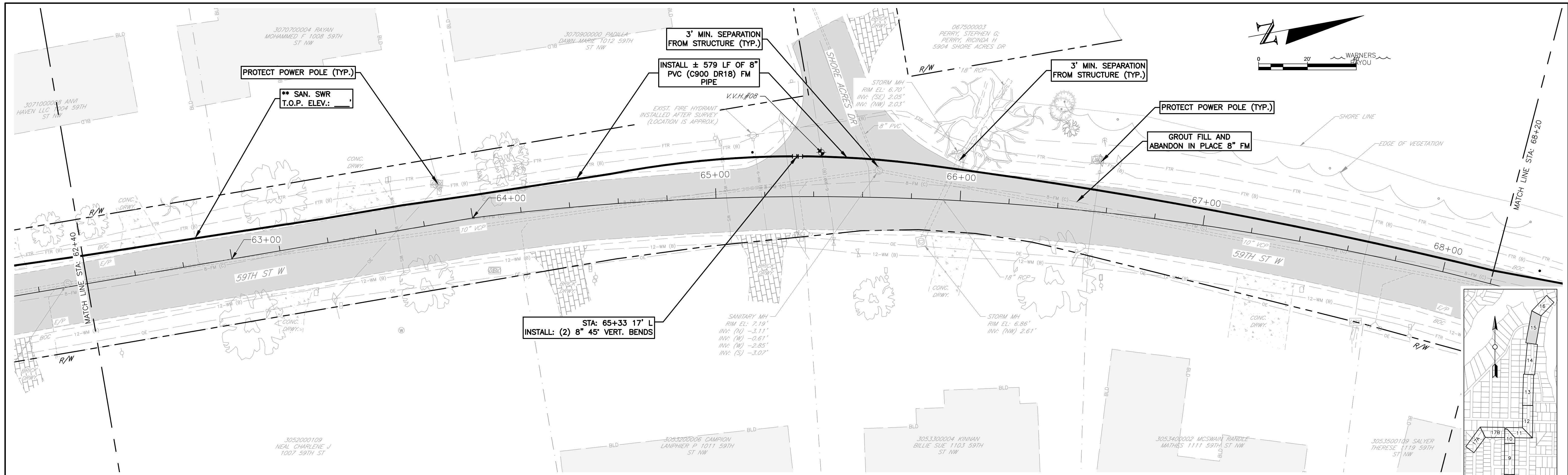
J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	20&29/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

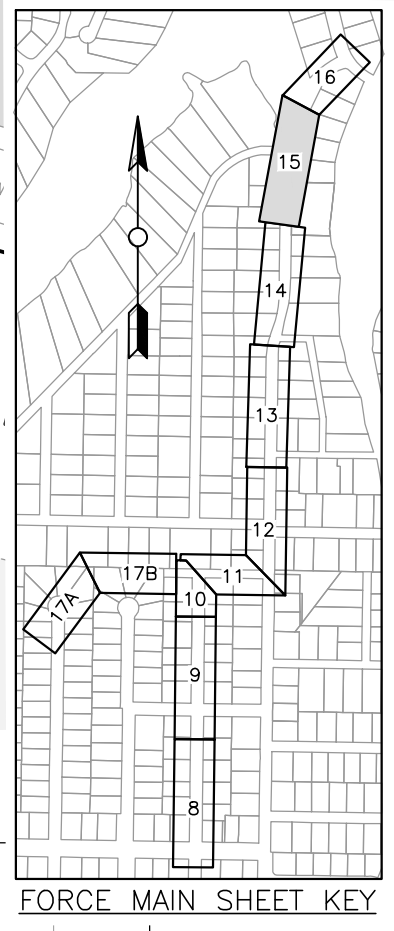
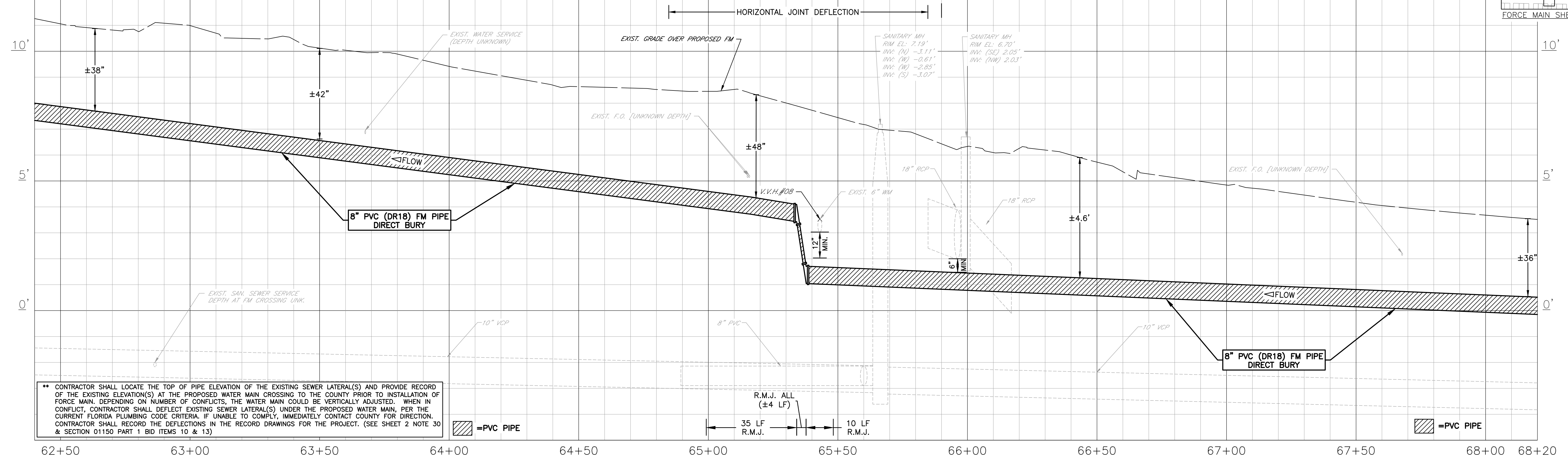
**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
59TH ST W [FM 7-D, RTU 230]**

SHEET NO.
14 of 28

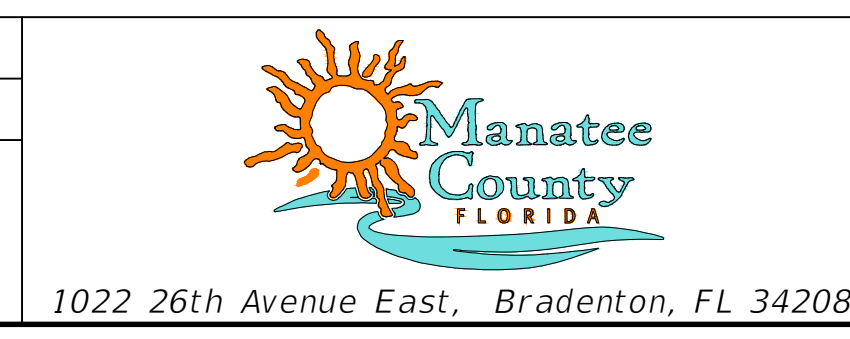
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



59TH ST W STA: 62+40 to 68+20



REVISIONS	
DATE	DESCRIPTION



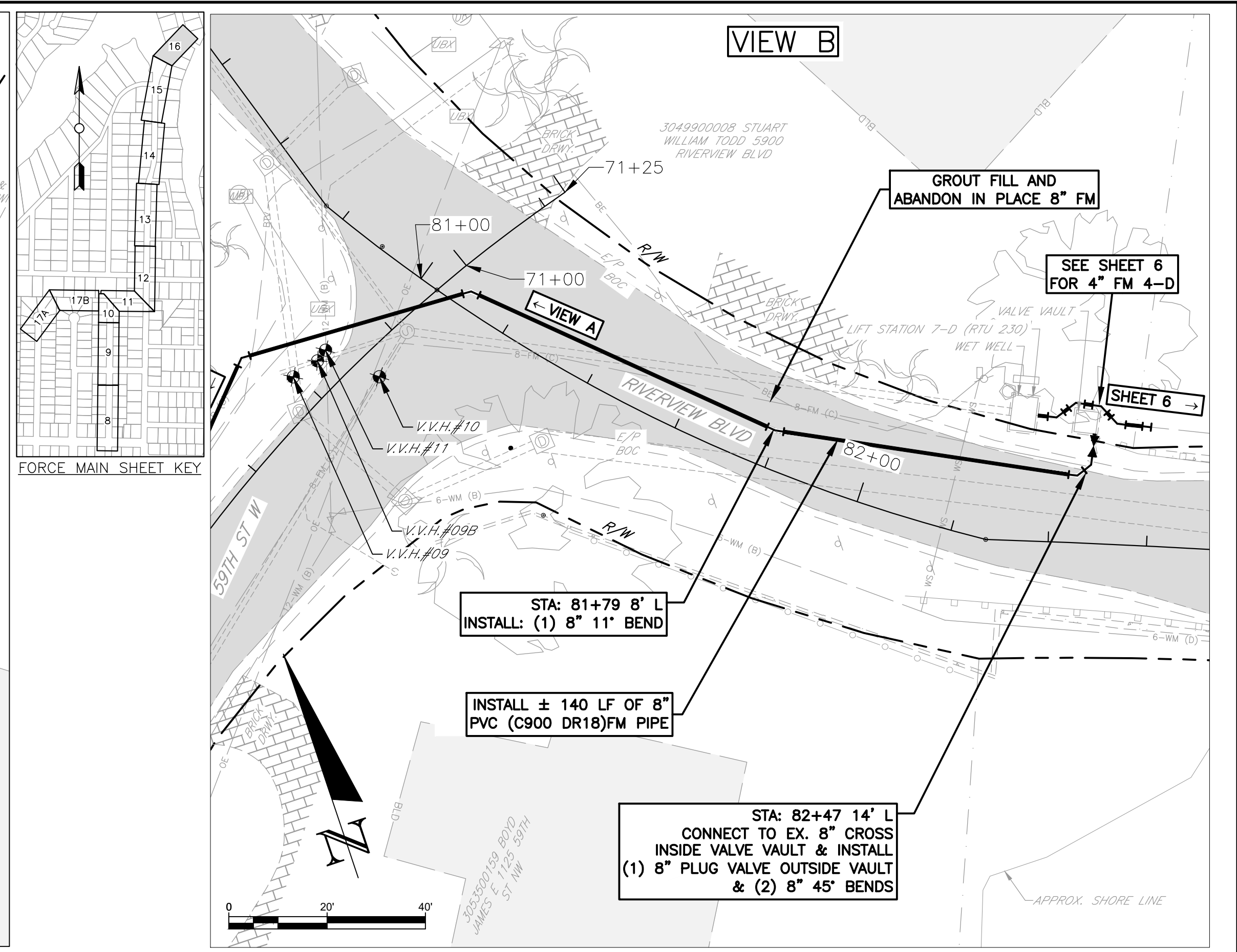
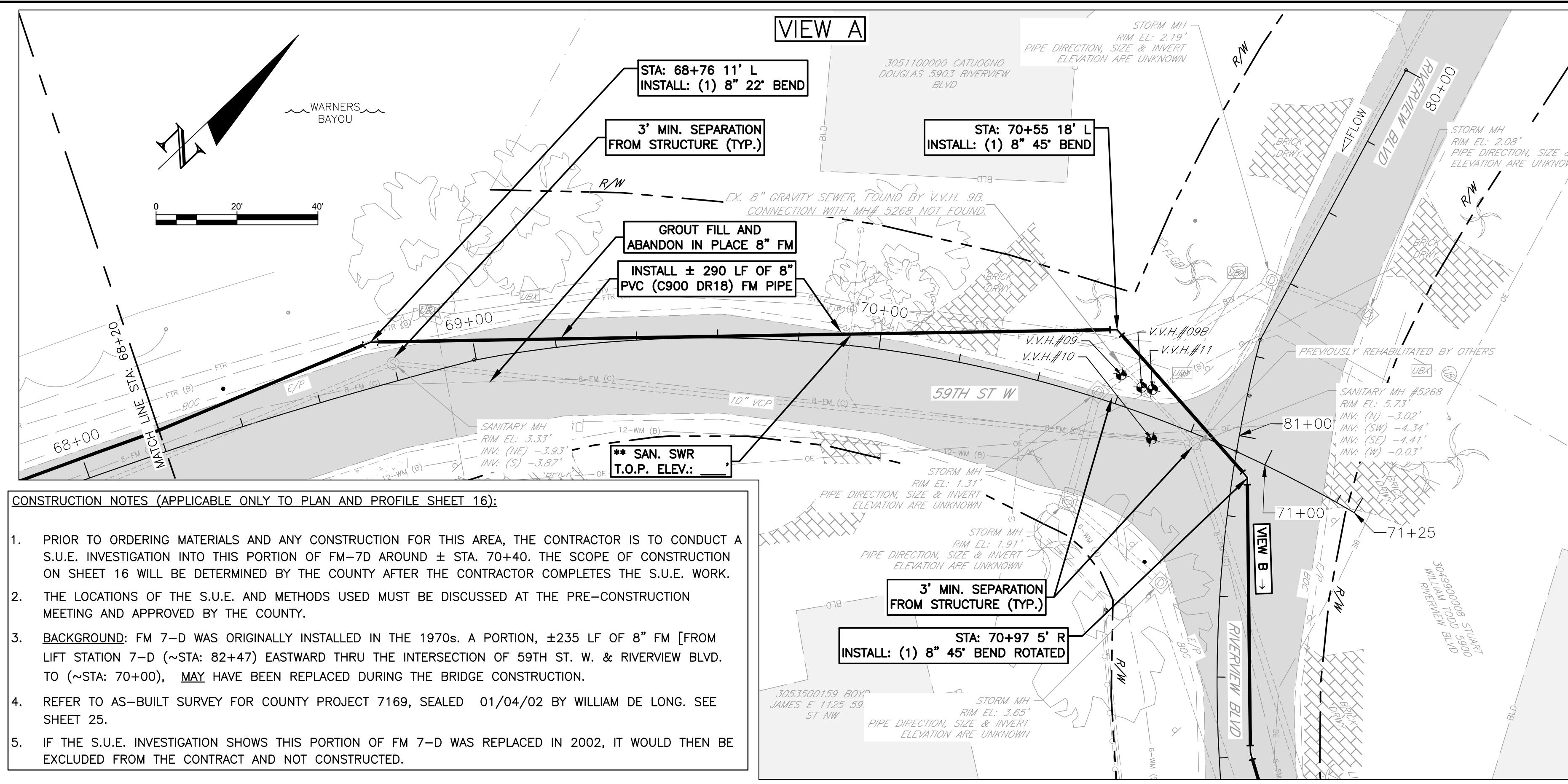
J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	20/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

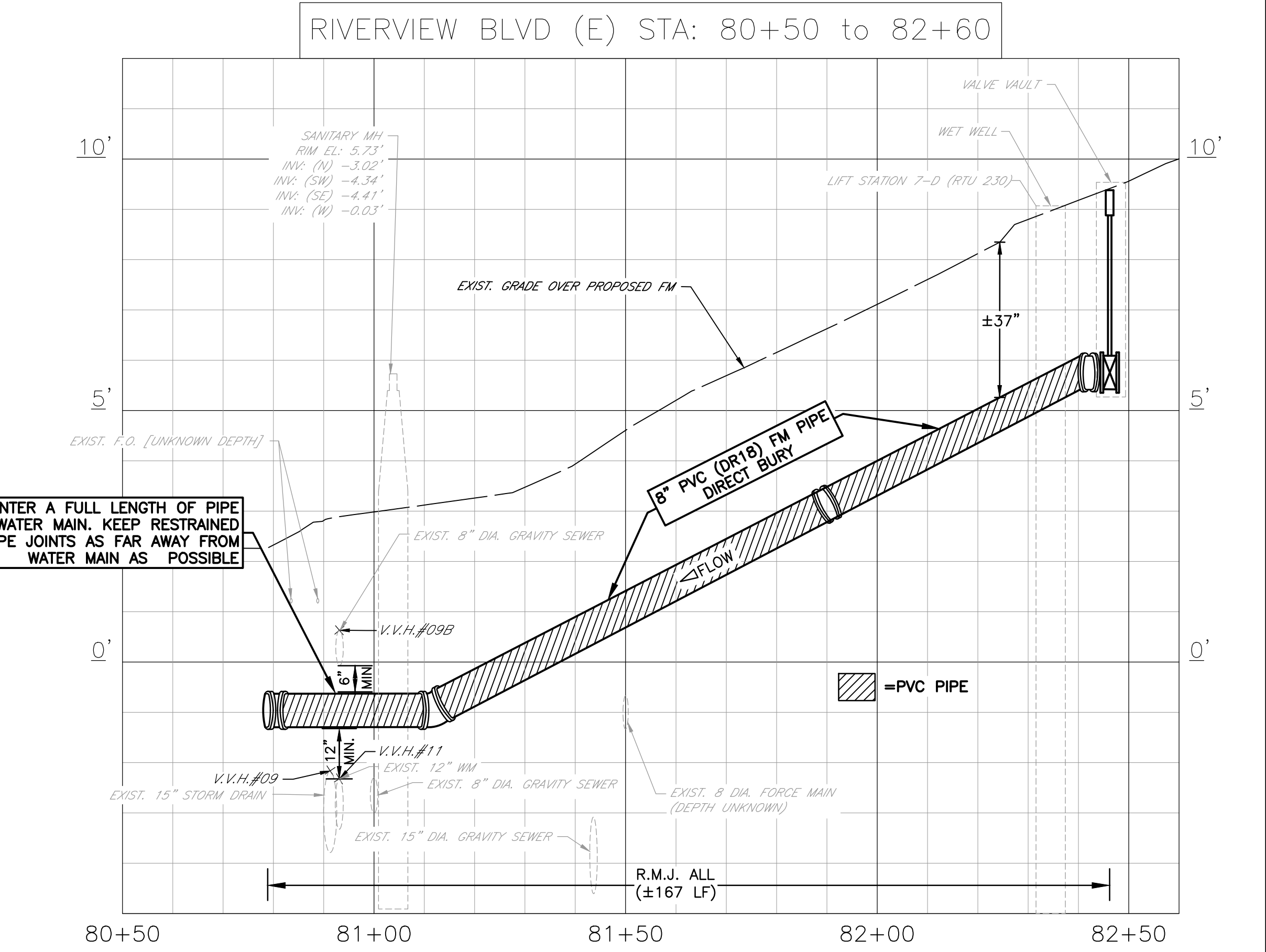
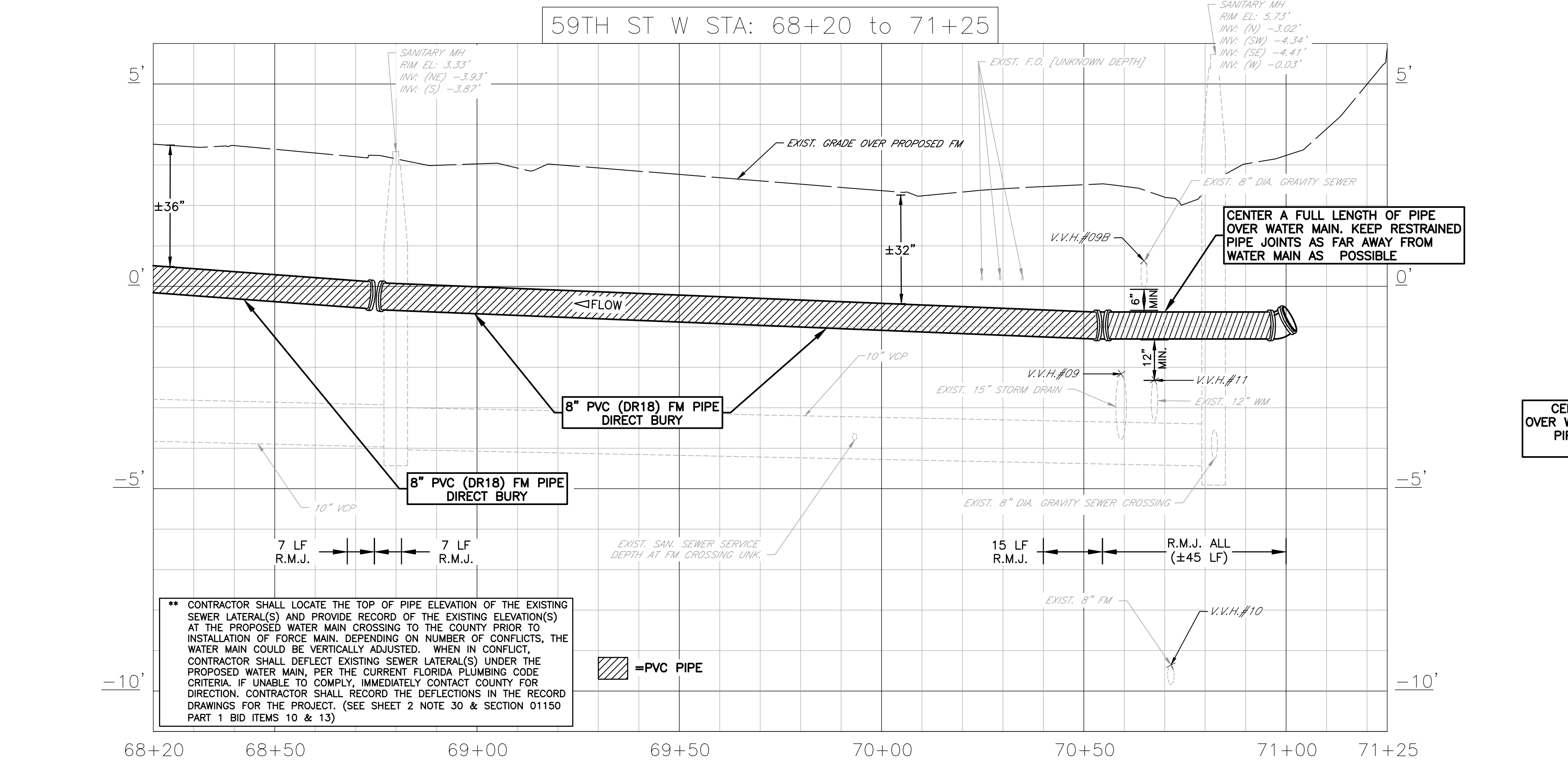
**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
59TH ST W [FM 7-D, RTU 230]**

SHEET NO.
15 of 28

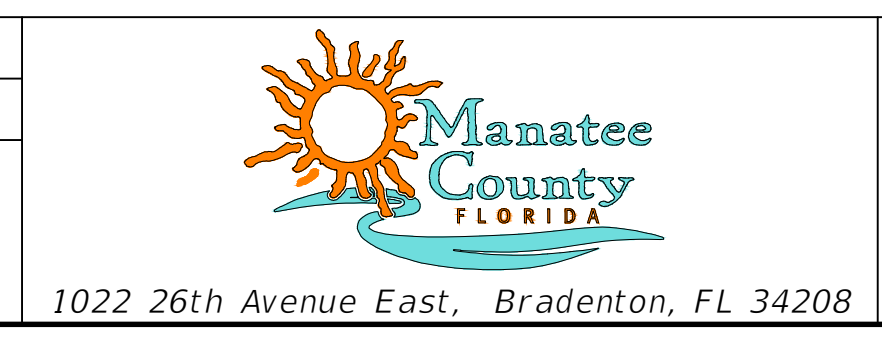
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C. SOUTHWEST SERVICE AREA D



- CONSTRUCTION NOTES (APPLICABLE ONLY TO PLAN AND PROFILE SHEET 16):**
1. PRIOR TO ORDERING MATERIALS AND ANY CONSTRUCTION FOR THIS AREA, THE CONTRACTOR IS TO CONDUCT A S.U.E. INVESTIGATION INTO THIS PORTION OF FM-7D AROUND ± STA. 70+40. THE SCOPE OF CONSTRUCTION ON SHEET 16 WILL BE DETERMINED BY THE COUNTY AFTER THE CONTRACTOR COMPLETES THE S.U.E. WORK.
 2. THE LOCATIONS OF THE S.U.E. AND METHODS USED MUST BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING AND APPROVED BY THE COUNTY.
 3. **BACKGROUND:** FM 7-D WAS ORIGINALLY INSTALLED IN THE 1970s. A PORTION, ±235 LF OF 8" FM [FROM LIFT STATION 7-D (~STA: 82+47) EASTWARD THRU THE INTERSECTION OF 59TH ST. W. & RIVERVIEW BLVD. TO (~STA: 70+00), MAY HAVE BEEN REPLACED DURING THE BRIDGE CONSTRUCTION.
 4. REFER TO AS-BUILT SURVEY FOR COUNTY PROJECT 7169, SEALED 01/04/02 BY WILLIAM DE LONG. SEE SHEET 25.
 5. IF THE S.U.E. INVESTIGATION SHOWS THIS PORTION OF FM 7-D WAS REPLACED IN 2002, IT WOULD THEN BE EXCLUDED FROM THE CONTRACT AND NOT CONSTRUCTED.



REVISIONS	
DATE	DESCRIPTION

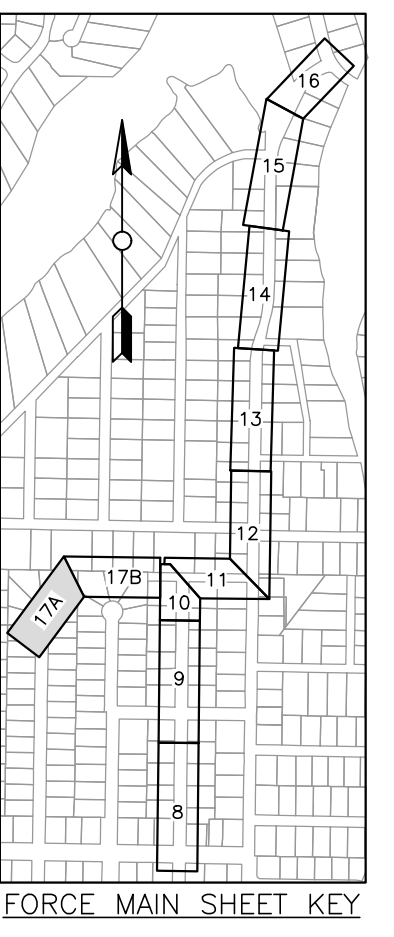
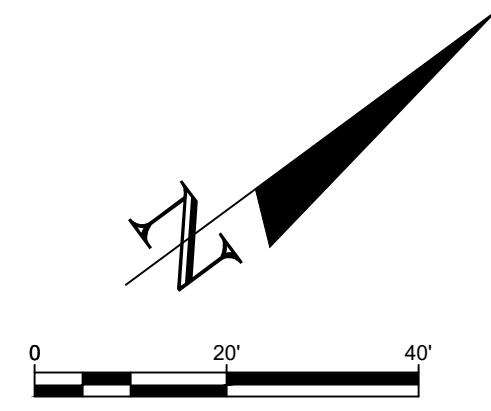
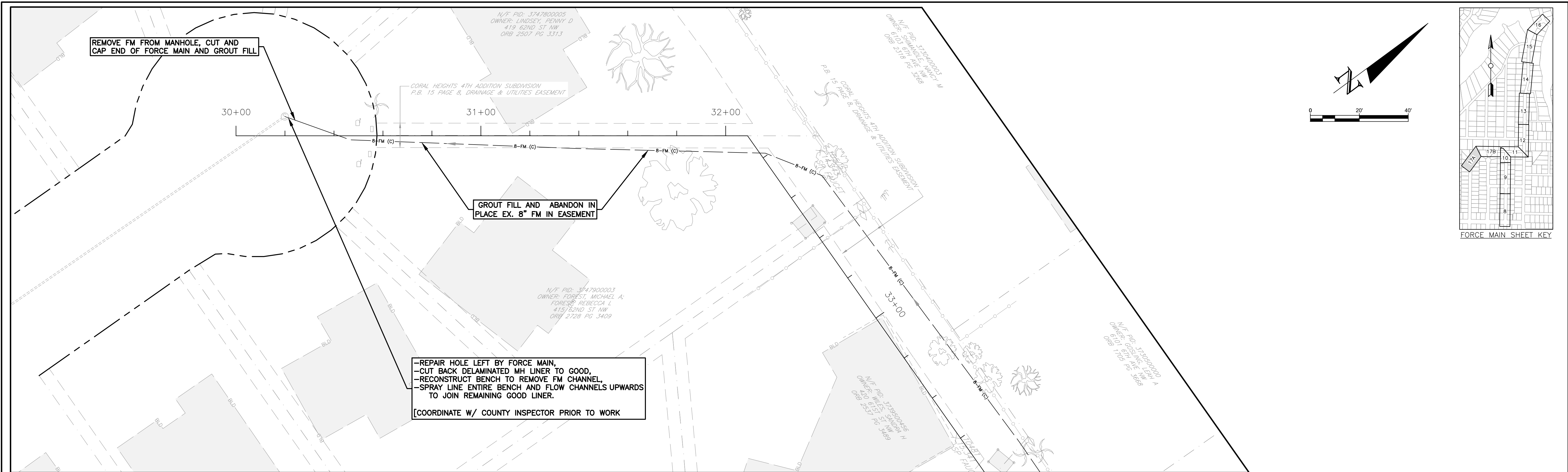


J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

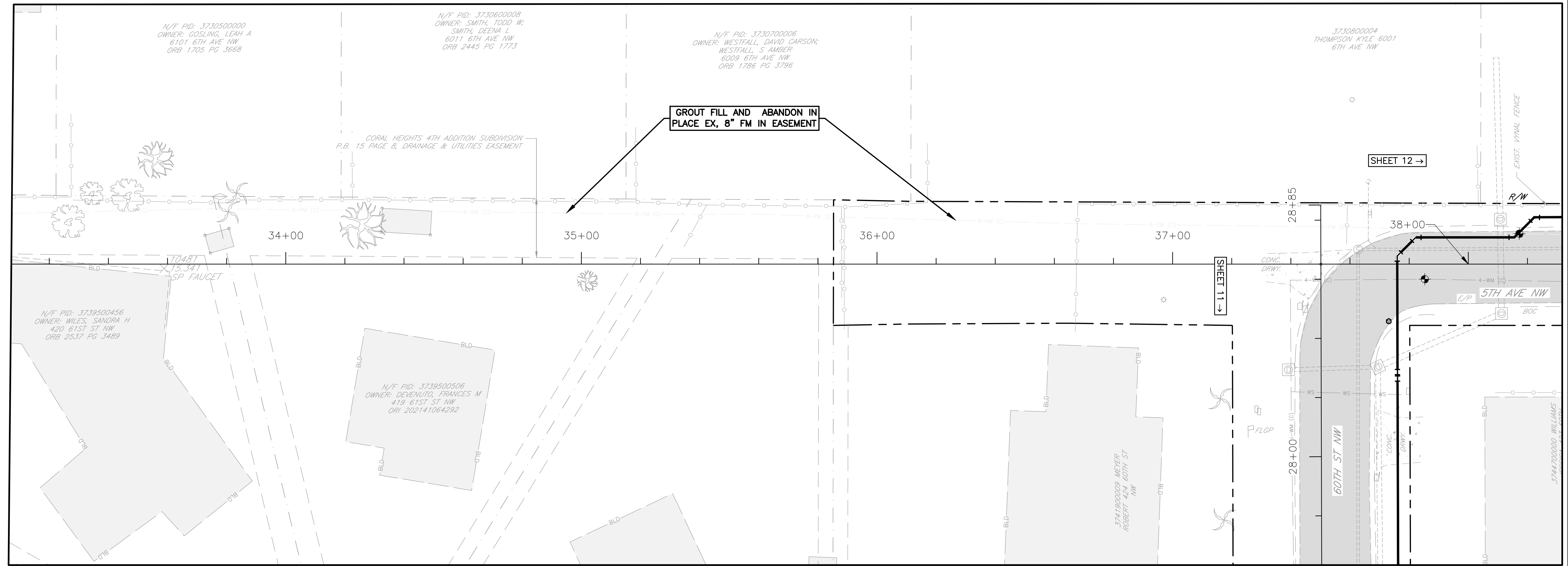
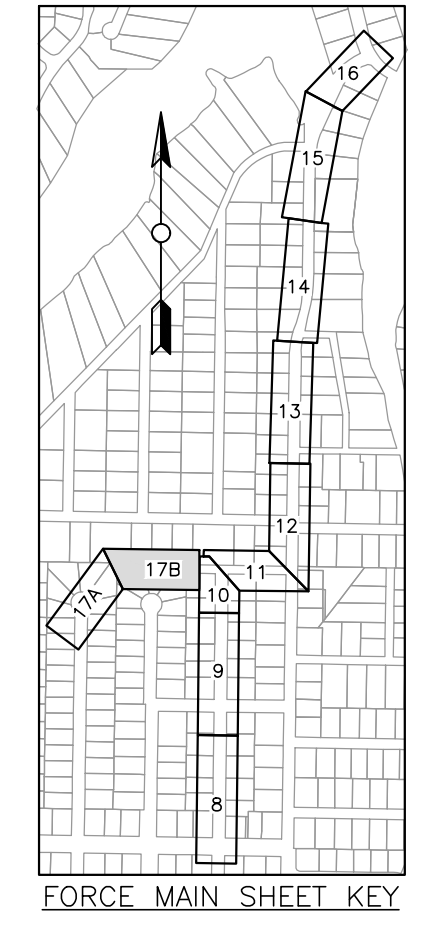
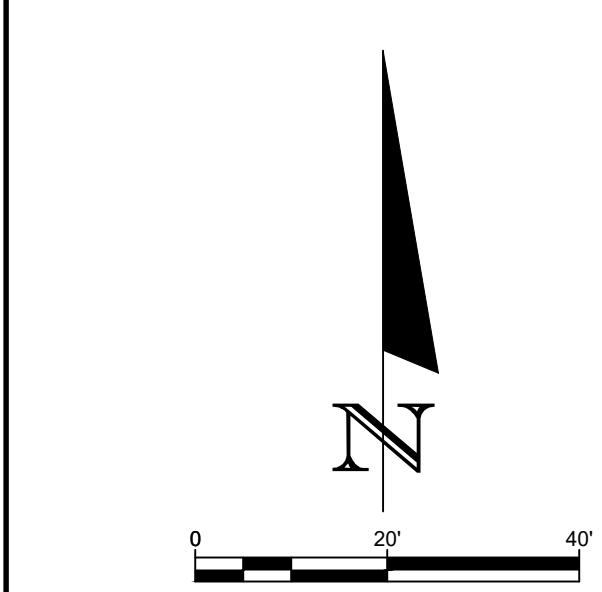
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	20/34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
59TH ST W [FM 7-D, RTU 230]**

SHEET NO. 16 of 28



-REPAIR HOLE LEFT BY FORCE MAIN,
 -CUT BACK DELAMINATED MH LINER TO GOOD,
 -RECONSTRUCT BENCH TO REMOVE FM CHANNEL,
 -SPRAY LINE ENTIRE BENCH AND FLOW CHANNELS UPWARDS
 TO JOIN REMAINING GOOD LINER.
 [COORDINATE W/ COUNTY INSPECTOR PRIOR TO WORK]



GROUT FILL AND ABANDON IN
 PLACE EX. 8" FM IN EASEMENT

SHEET 12 →

REVISIONS	
DATE	DESCRIPTION

1022 26th Avenue East, Bradenton, FL 34208

J. SHEA SHOUN, STATE OF FLORIDA,
 PROFESSIONAL ENGINEER, LICENSE NO. 60923.
 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
 J. SHEA SHOUN ON THE DATE INDICATED HERE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT
 CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
 MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19,20,29./34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

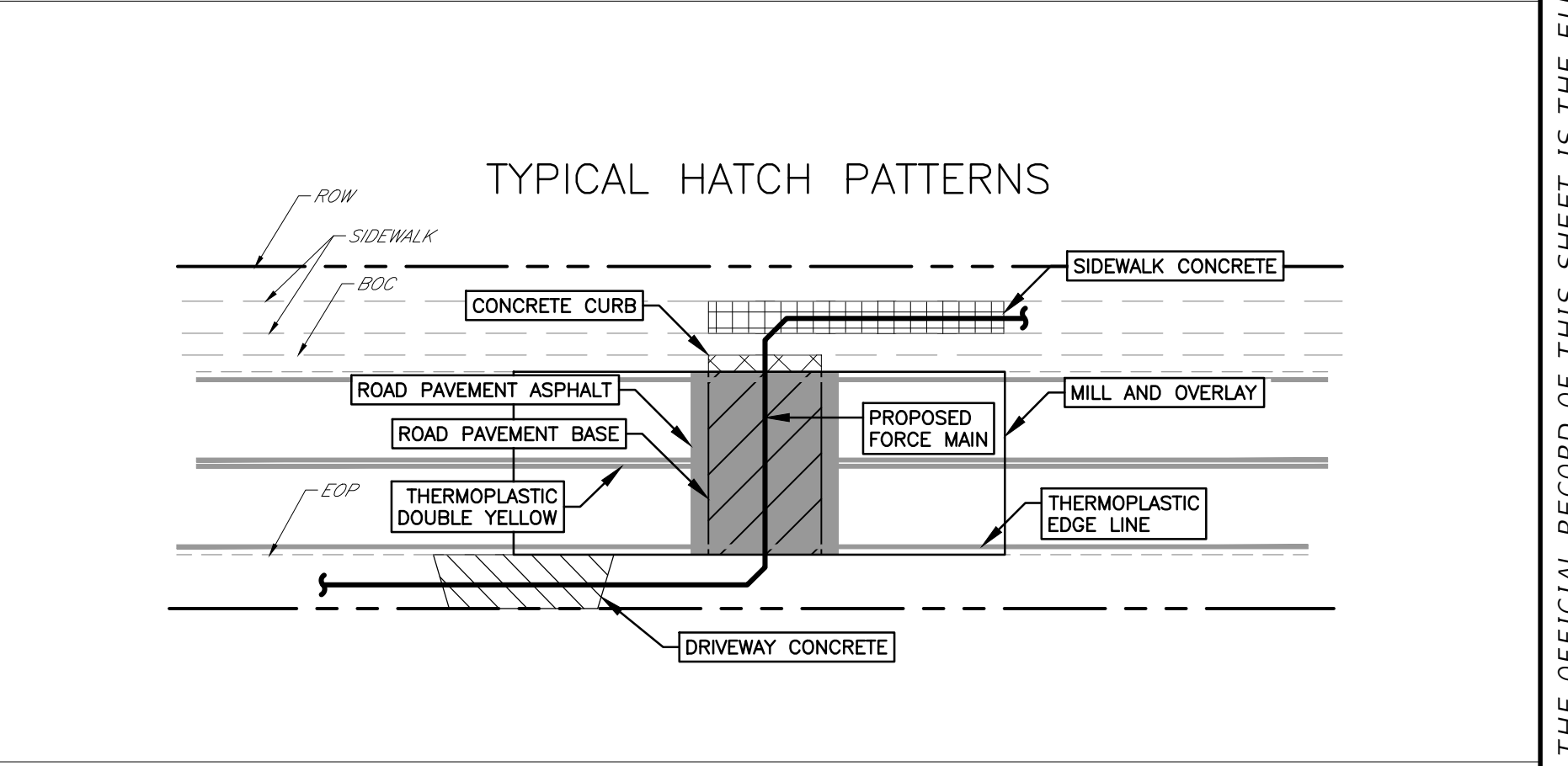
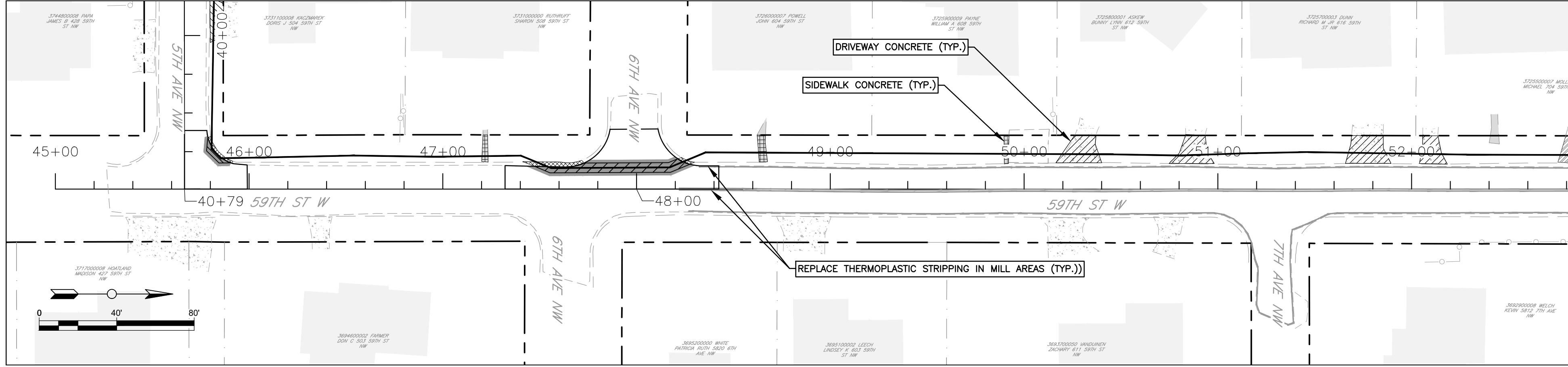
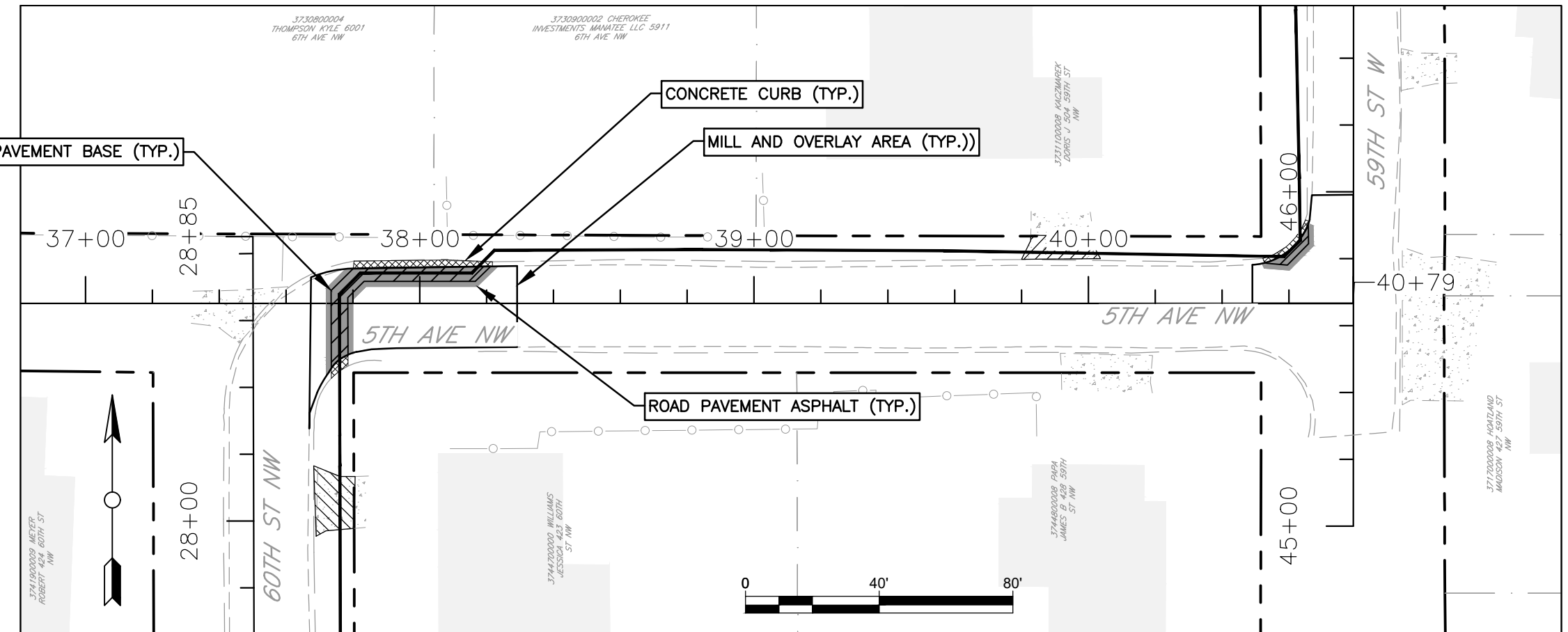
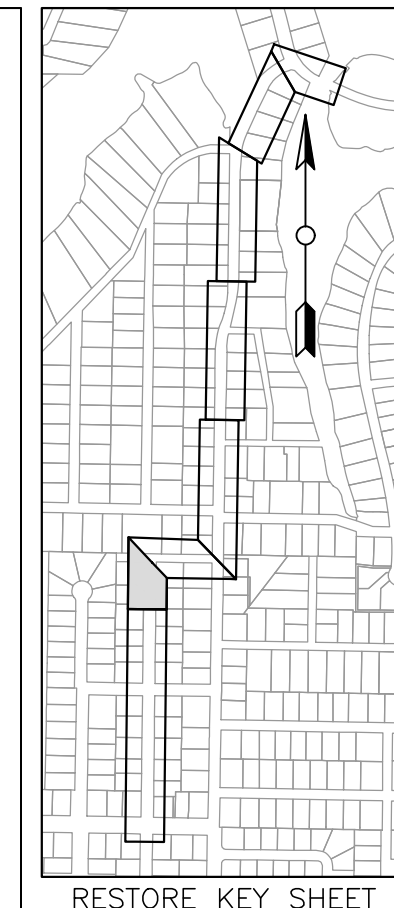
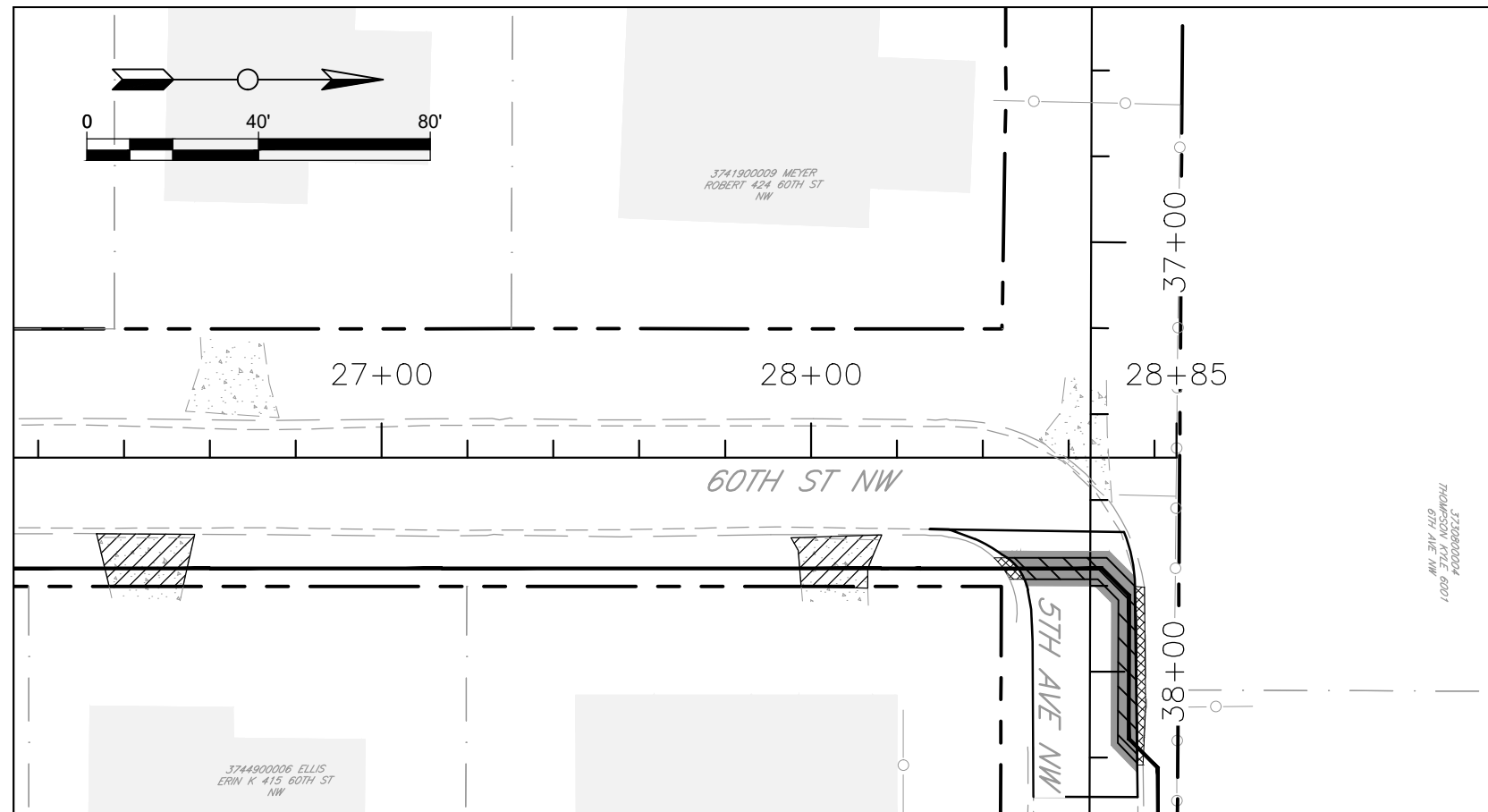
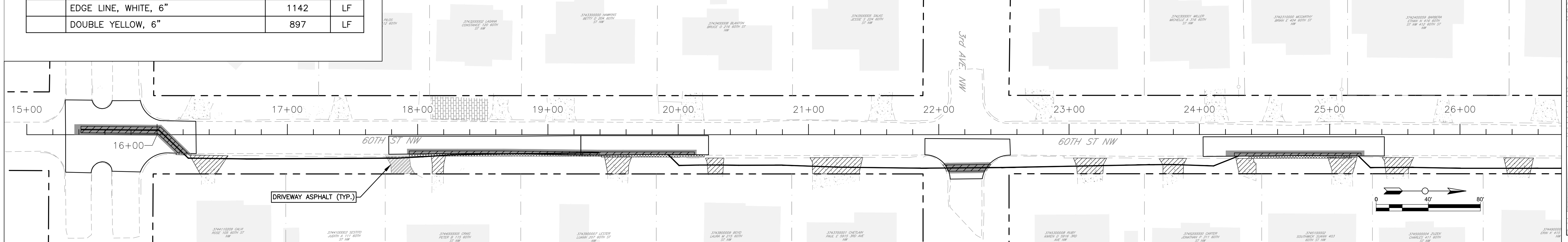
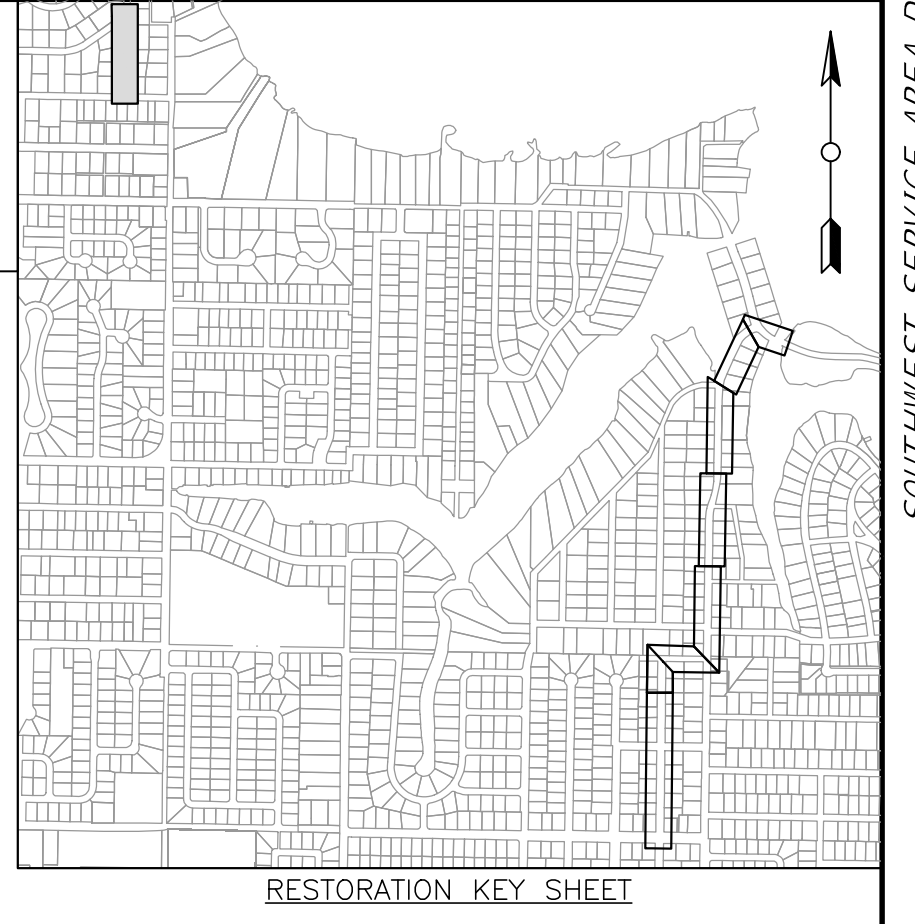
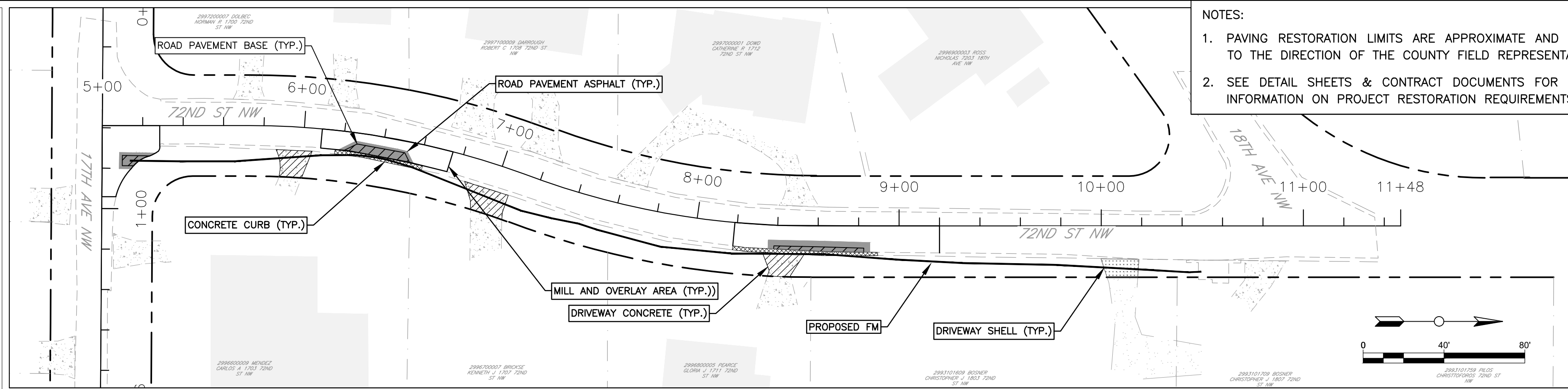
SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
GROUT FILL FM 7-D, IN
EASEMENT

SHEET
 NO.
 17 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C. SOUTHWEST SERVICE AREA D

QUANTITIES			
AREA	RESTORATION	QTYS.	UNITS
	CONCRETE CURB	826	LF
	ROAD PAVEMENT BASE	703	SY
	ROAD PAVEMENT ASPHALT	1,142	SY
	MILL & OVERLAY	4,191	SY
	SIDEWALK CONCRETE	15	SY
	DRIVEWAY CONCRETE	1,080	SY
	DRIVEWAY ASPHALT	62	SY
	DRIVEWAY BRICK	65	SY
	DRIVEWAY SHELL	175	SY
	SOD	2,009	SY
THERMOPLASTIC STRIPING RESTORATION			
	STOP BAR, WHITE, 24"	36	LF
	EDGE LINE, WHITE, 6"	1142	LF
	DOUBLE YELLOW, 6"	897	LF

- NOTES:
- PAVING RESTORATION LIMITS ARE APPROXIMATE AND SUBJECT TO THE DIRECTION OF THE COUNTY FIELD REPRESENTATIVE.
 - SEE DETAIL SHEETS & CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON PROJECT RESTORATION REQUIREMENTS.



REVISIONS	
DATE	DESCRIPTION



J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19,20,29./34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

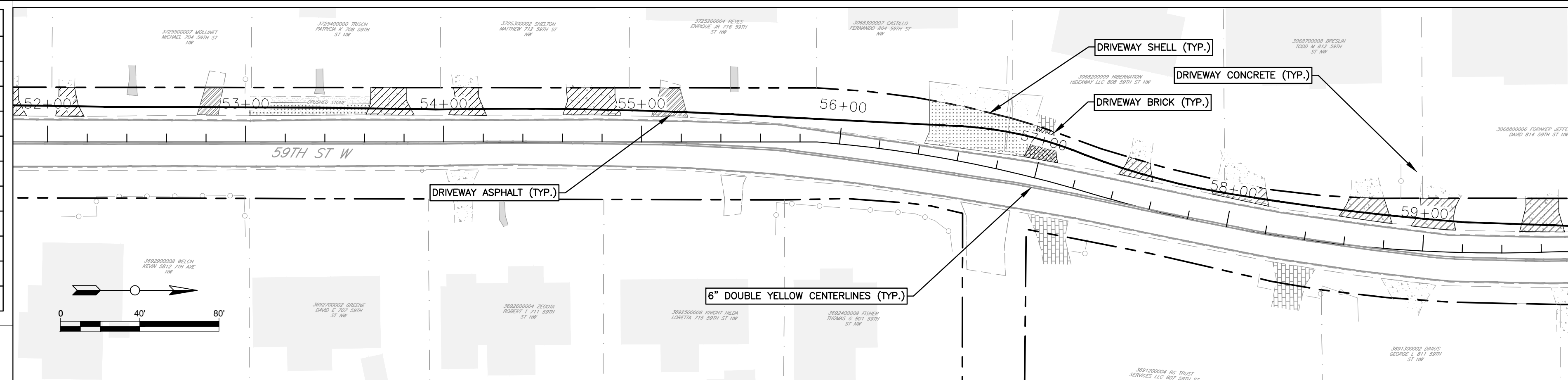
**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
RESTORATION 1 OF 3**

SHEET NO.
18 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C. SOUTHWEST SERVICE AREA D

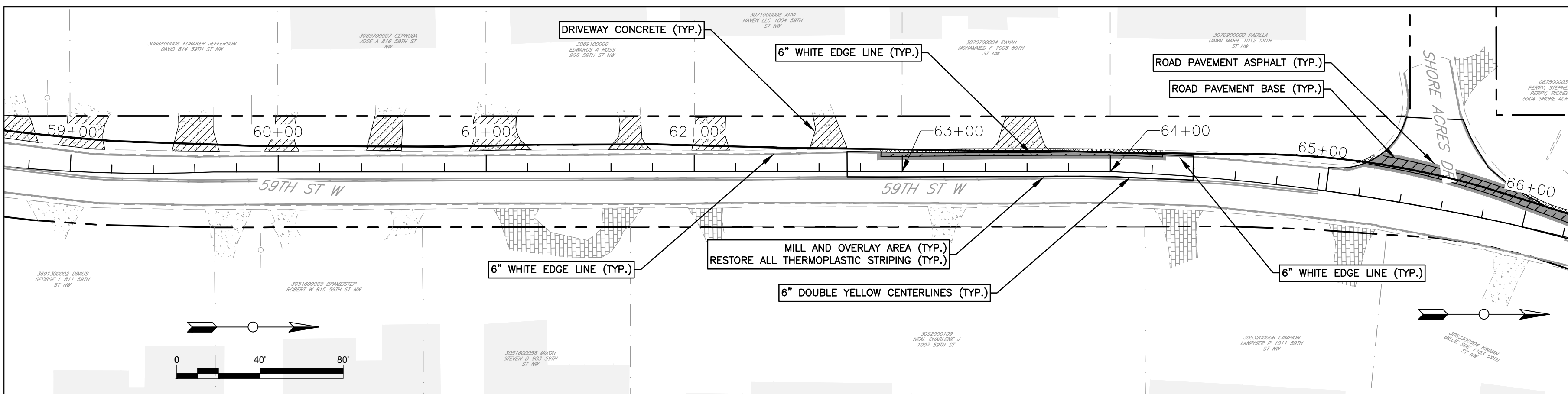
QUANTITIES

AREA	RESTORATION
	CONCRETE CURB
	ROAD PAVEMENT BASE
	ROAD PAVEMENT ASPHALT
	MILL & OVERLAY
	SIDEWALK CONCRETE
	DRIVEWAY CONCRETE
	DRIVEWAY ASPHALT
	DRIVEWAY BRICK
	DRIVEWAY SHELL
	SOD

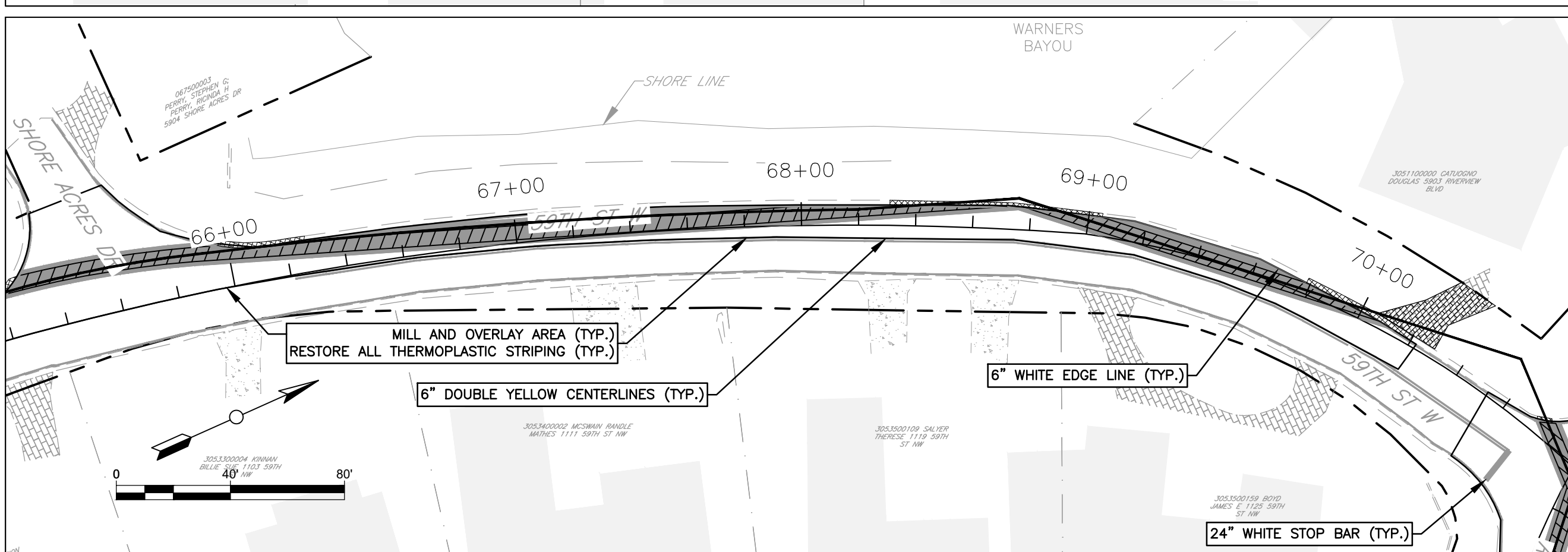


RESTORE KEY SHEET

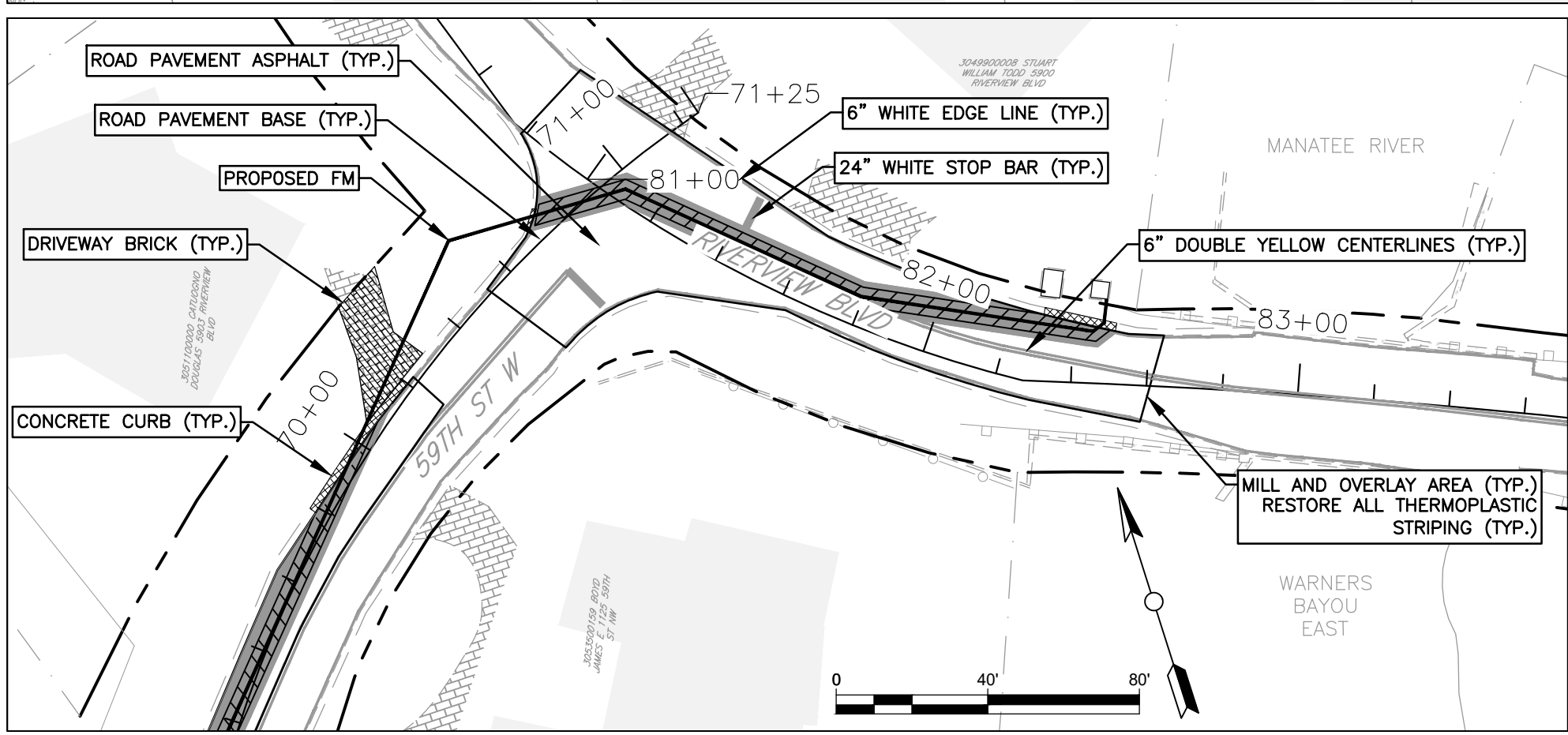
- NOTES:**
- PAVING RESTORATION LIMITS ARE APPROXIMATE AND SUBJECT TO THE DIRECTION OF THE COUNTY FIELD REPRESENTATIVE.
 - SEE DETAIL SHEETS & CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON PROJECT RESTORATION REQUIREMENTS.



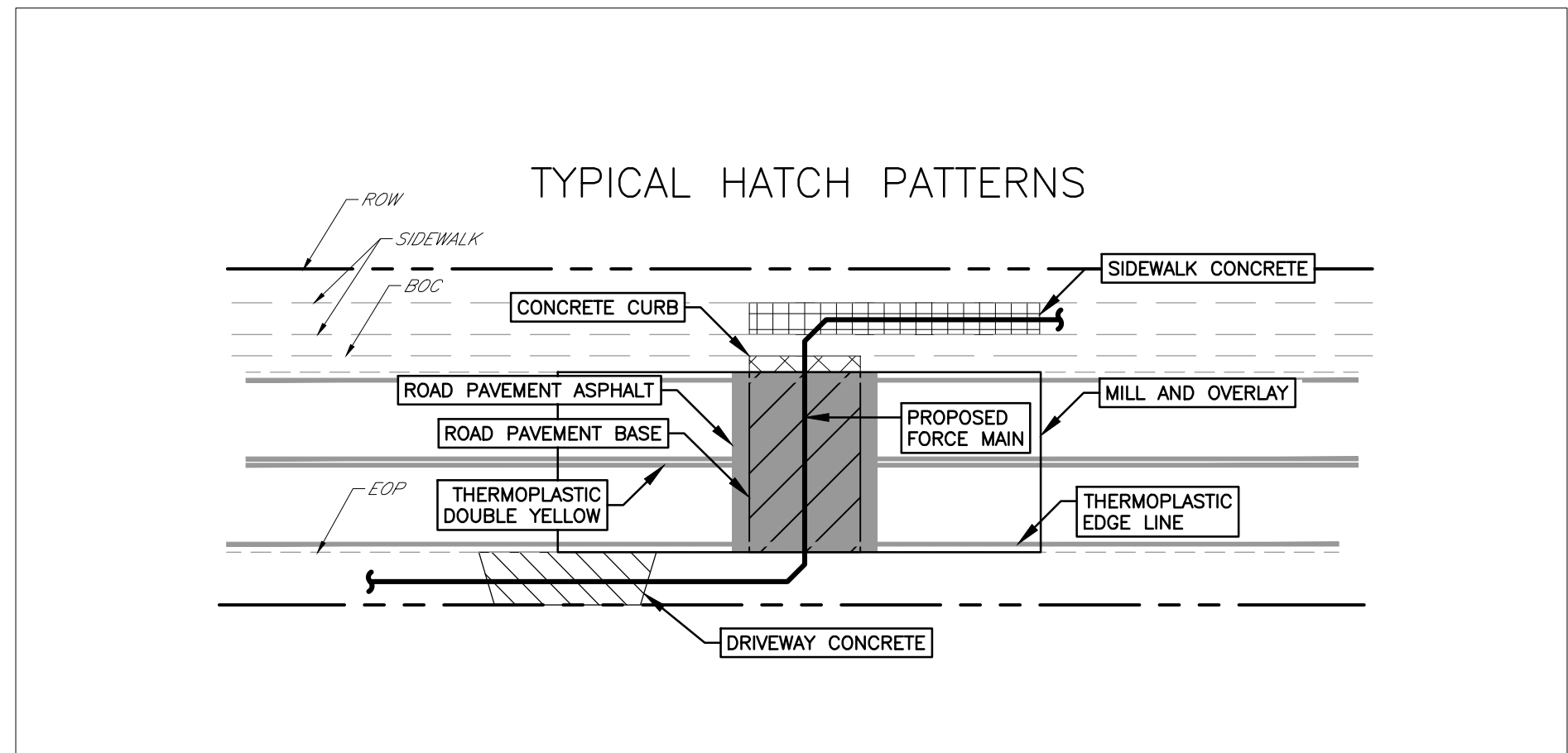
RESTORE KEY SHEET



RESTORE KEY SHEET

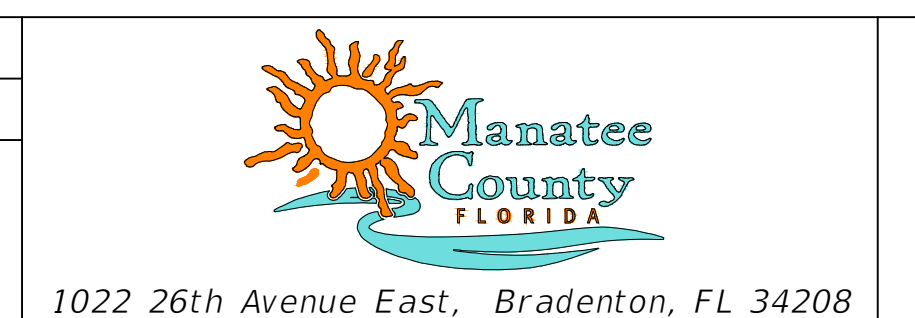


RESTORE KEY SHEET



REVISIONS

DATE	DESCRIPTION



J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

**MANATEE COUNTY
PUBLIC WORKS DEPARTMENT**

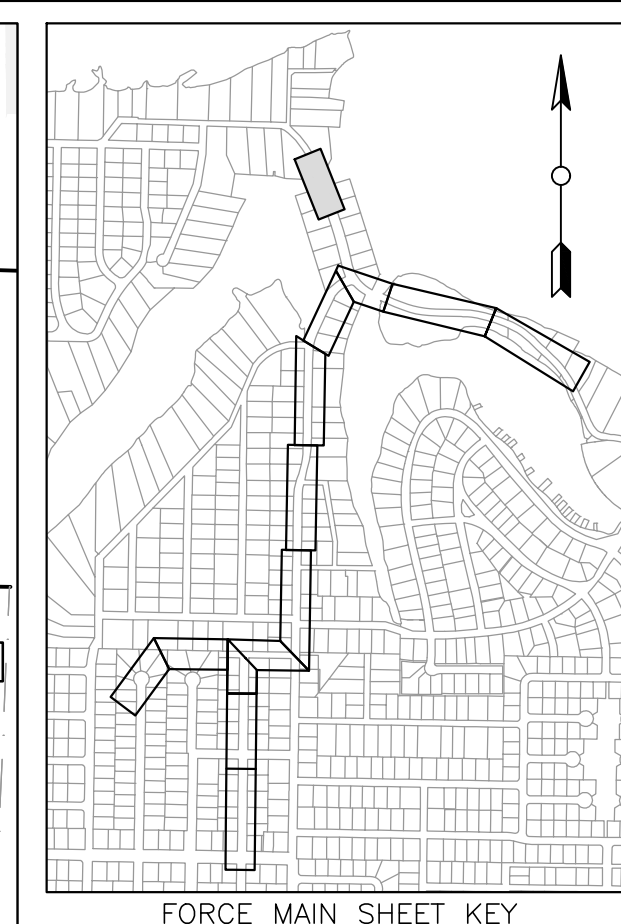
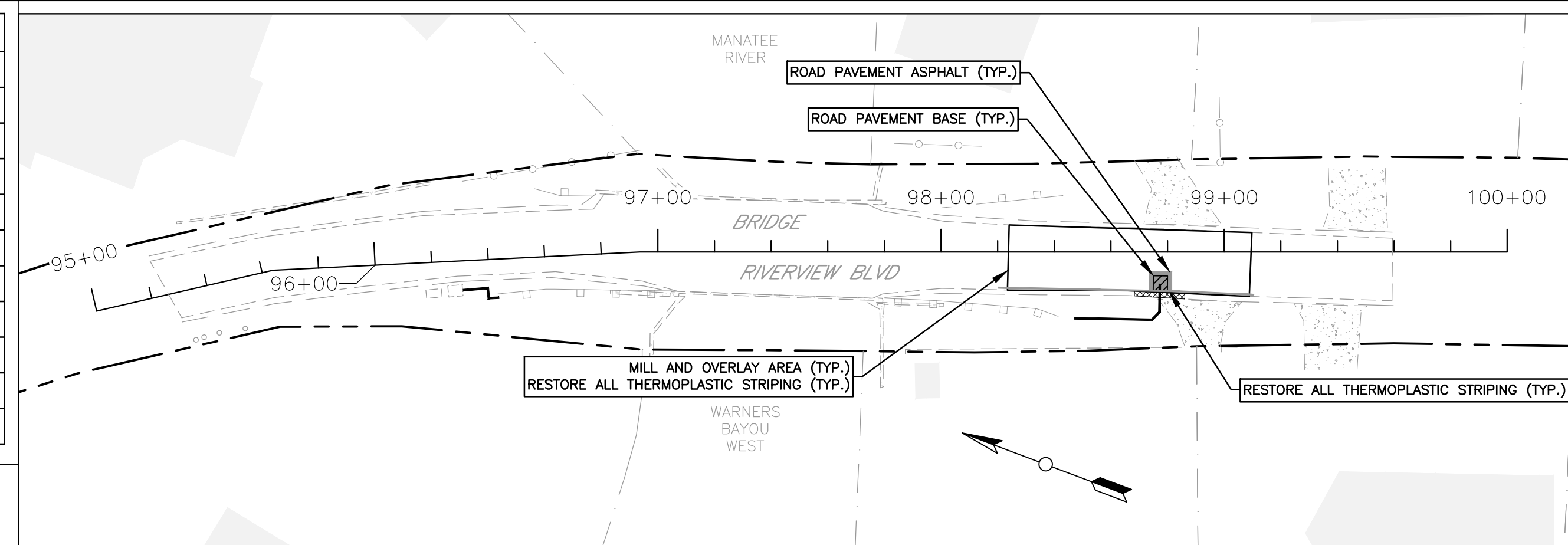
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19,20,29,34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
RESTORATION 2 OF 3**

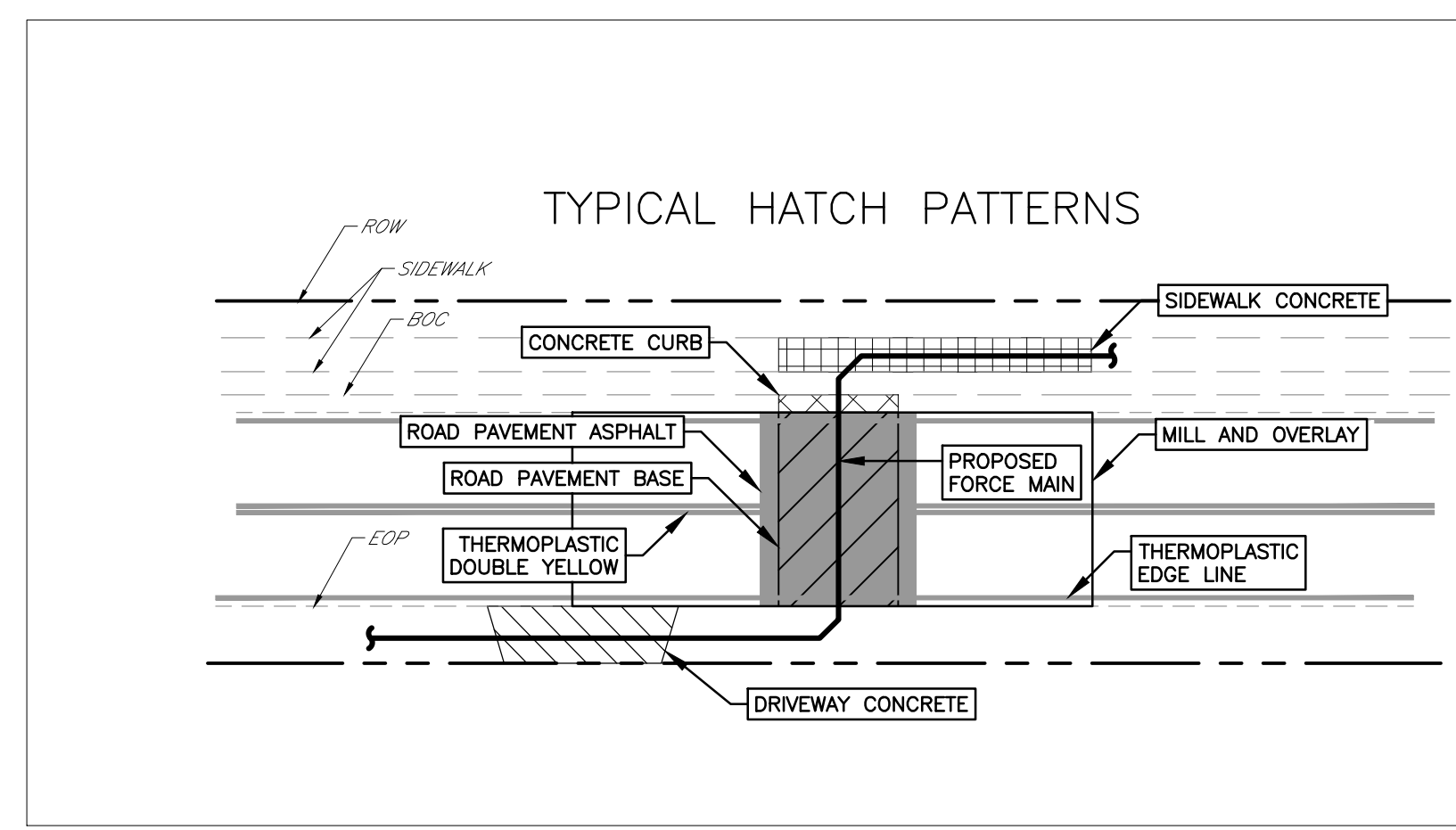
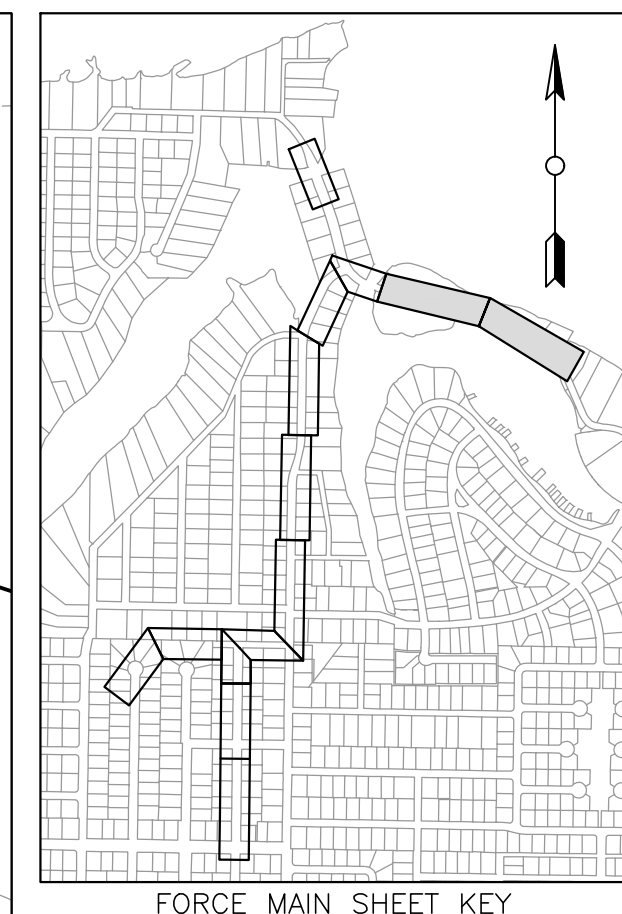
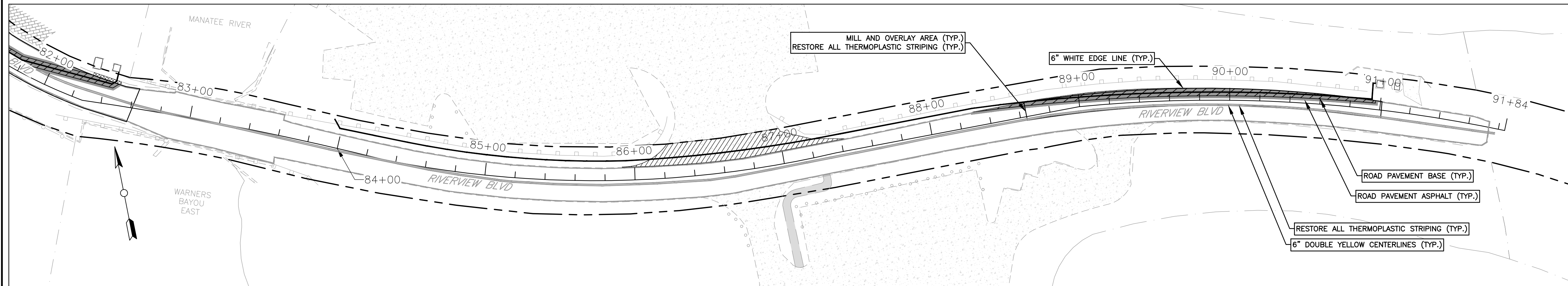
SHEET NO.
19 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

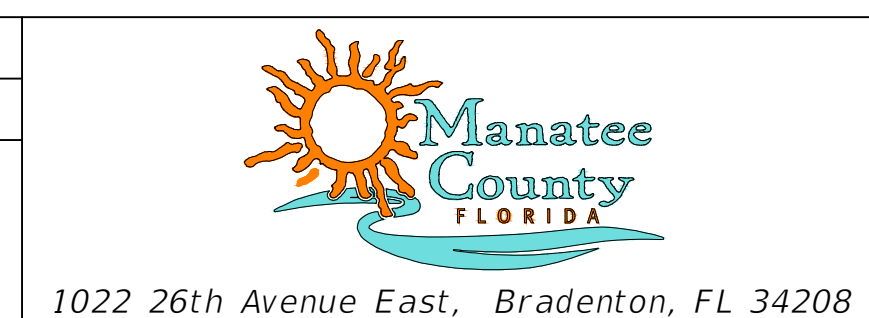
QUANTITIES	
AREA	RESTORATION
	CONCRETE CURB
	ROAD PAVEMENT BASE
	ROAD PAVEMENT ASPHALT
	MILL & OVERLAY
	SIDEWALK CONCRETE
	DRIVEWAY CONCRETE
	DRIVEWAY ASPHALT
	DRIVEWAY BRICK
	DRIVEWAY SHELL
	SOD



NOTES:
 1. PAVING RESTORATION LIMITS ARE APPROXIMATE AND SUBJECT TO THE DIRECTION OF THE COUNTY FIELD REPRESENTATIVE.
 2. SEE DETAIL SHEETS & CONTRACT DOCUMENTS FOR FURTHER INFORMATION ON PROJECT RESTORATION REQUIREMENTS.



REVISIONS	
DATE	DESCRIPTION



J. SHEA SHOUN, STATE OF FLORIDA,
 PROFESSIONAL ENGINEER, LICENSE NO. 60923.
 THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
 J. SHEA SHOUN ON THE DATE INDICATED HERE.
 PRINTED COPIES OF THIS DOCUMENT ARE NOT
 CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
 MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19,20,29./34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
 FORCE MAIN REPLACEMENT
 RESTORATION 3 OF 3**

SHEET
 NO.
 20 of 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

BASELINE HORIZONTAL CONTROL TABLES

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Rows include segments L1 through L3 for 72nd St NW.

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Row includes segment L4 for 17th Ave NW.

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Rows include segments L7, L6, and L5 for Riverview Blvd (W).

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Rows include segments L8, C5, C6, C7, L9, and C8 for Riverview Blvd (E).

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Rows include segments L10, C9, C10, L11, C11, and C12 for 59th St WEST.

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Rows include segments L12 and L13 for 5th Ave NW.

Table with 12 columns: SEGMENT, LENGTH, RADIUS, DELTA ANGLE, LINE/CHORD, CHORD LENGTH, START STATION, START NORTHING, START EASTING, END STATION, END NORTHING, END EASTING. Rows include segments L14, L15, and L16 for 60th St NW.

THE INFORMATION BELOW IS EXTRACTED FROM GEORGE F YOUNG SURVEYORS REPORT FOR THE PURPOSE OF CONSTRUCTION. THE FULL SURVEYORS REPORT AND CAD DELIVERABLES ARE AVAILABLE UPON REQUEST, FROM THE MANATEE COUNTY, PUBLIC WORKS DEPARTMENT, CIP DESIGN & REVIEW DIVISION, UTILITY ENGINEERING SECTION.

- 1. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. THIS IS NOT A BOUNDARY SURVEY.
2. THIS SURVEY WAS PREPARED WITH THE BENEFIT OF THE RECORD DOCUMENTS AS SHOWN AND STATED HEREON, ALL OF THE PUBLIC RECORDS OF MANATEE COUNTY, FLORIDA.
3. THE OWNERS AND RECORDING INFORMATION FOR ADJACENT PROPERTIES ARE PER THE MANATEE COUNTY PROPERTY APPRAISER'S WEBSITE ON 8/16/2021. PROPERTY LINES, RIGHT OF WAY LINES AND EASEMENTS SHOWN HEREIN SHOULD BE CONSIDERED APPROXIMATE.
4. THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 40' OR SMALLER.
5. RIGHT-OF-WAY LINES SHOWN ARE TO BE CONSIDERED APPROXIMATE BASED ON LAST DEED OF RECORD OR PLAT RECORD(S) OF ADJOINING PROPERTIES. THE PURPOSE OF THIS SURVEY WAS NOT INTENDED TO BE CONSTRUED AS DETERMINATION OF THE RIGHT-OF-WAY.
6. BEARINGS AND COORDINATES (IN U.S. SURVEY FEET) ARE BASED ON NATIONAL GEODETIC SURVEY (NGS), FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83) 2011 ADJUSTMENT.
7. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988. ELEVATIONS ARE RELATIVE TO MANATEE COUNTY SURVEY DEPARTMENT BENCHMARK "DESOTO" HAVING AN ELEVATION OF 18.77 FEET.
8. GEORGE F. YOUNG, INC. AND THE UNDERSIGNED MAKE NO REPRESENTATIONS OR GUARANTEES PERTAINING TO EASEMENTS, RIGHTS-OF-WAY, SET BACK LINES, RESERVATIONS AND/OR AGREEMENTS.
9. THE SURVEY BASELINES SHOWN HEREIN ARE MONUMENTED EVERY 100 FOOT STATION WITH A NAIL AND DISK LABELED "GFY BASELINE". THE BEGINNING, END AND CHANGE IN DIRECTIONS OF THE BASELINE ARE MONUMENT WITH REFERENCES. THESE REFERENCES CAN BE FOUND ON SHEET 6.
10. THE PRINTED DIMENSIONS SHOWN ON THIS SURVEY SUPERSEDE ANY SCALED DIMENSIONS; THERE MAY BE ITEMS DRAWN OUT OF SCALE TO GRAPHICALLY SHOW THEIR LOCATION.
11. THIS SURVEY HAS BEEN EXCLUSIVELY PREPARED FOR THE NAMED ENTITIES SHOWN HEREON AND IS NOT TRANSFERABLE. NO OTHER PERSON OR ENTITY IS ENTITLED TO RELY UPON AND/OR RE-USE THIS SURVEY FOR ANY PURPOSE WITHOUT THE EXPRESSED, WRITTEN CONSENT OF GEORGE F. YOUNG, INC. AND THE UNDERSIGNED PROFESSIONAL SURVEYOR AND MAPPER.
12. UNAUTHORIZED COPIES AND/OR REPRODUCTIONS VIA ANY MEDIUM OF THIS SURVEY OR ANY PORTIONS THEREOF ARE EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF GEORGE F. YOUNG, INC. AND THE UNDERSIGNED PROFESSIONAL SURVEYOR AND MAPPER.
13. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
14. THIS SURVEY IS VALID AS TO THE LAST DATE OF FIELD SURVEY AND NOT THE SIGNATURE DATE (IF ANY).
15. THERE MAY BE ADDITIONAL EASEMENTS, RESERVATIONS, RESTRICTIONS AND/OR OTHER MATTERS OF RECORD AFFECTING THIS PROPERTY THAT ARE NOT SHOWN HEREON THAT MAY (OR MAY NOT) BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. THE UNDERSIGNED HAS NOT PERFORMED AN INDEPENDENT SEARCH FOR ADDITIONAL RECORDS.
16. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL SEAL OF A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.

SUE / VH TABLE

Organization: GFY
Project Name: 22YO4102LS
Project Date: 12/12/2023
Book: 259

Table with 13 columns: V.V.H #, Description, Diameter (in), Material, Utility Type, XY Source, Easting (ft), Northing (ft), Ex. Ground Elevation (ft), T.O.P. Elevation (ft), Measure Down (ft), Utility Owner, SHEET, GFY's #. Rows include various utility lines like Force Main, Water Main, Storm Water, Sanitary Sewer, and Cable.

REVISIONS table with columns DATE and DESCRIPTION. Includes Manatee County Florida logo and address: 1022 26th Avenue East, Bradenton, FL 34208.

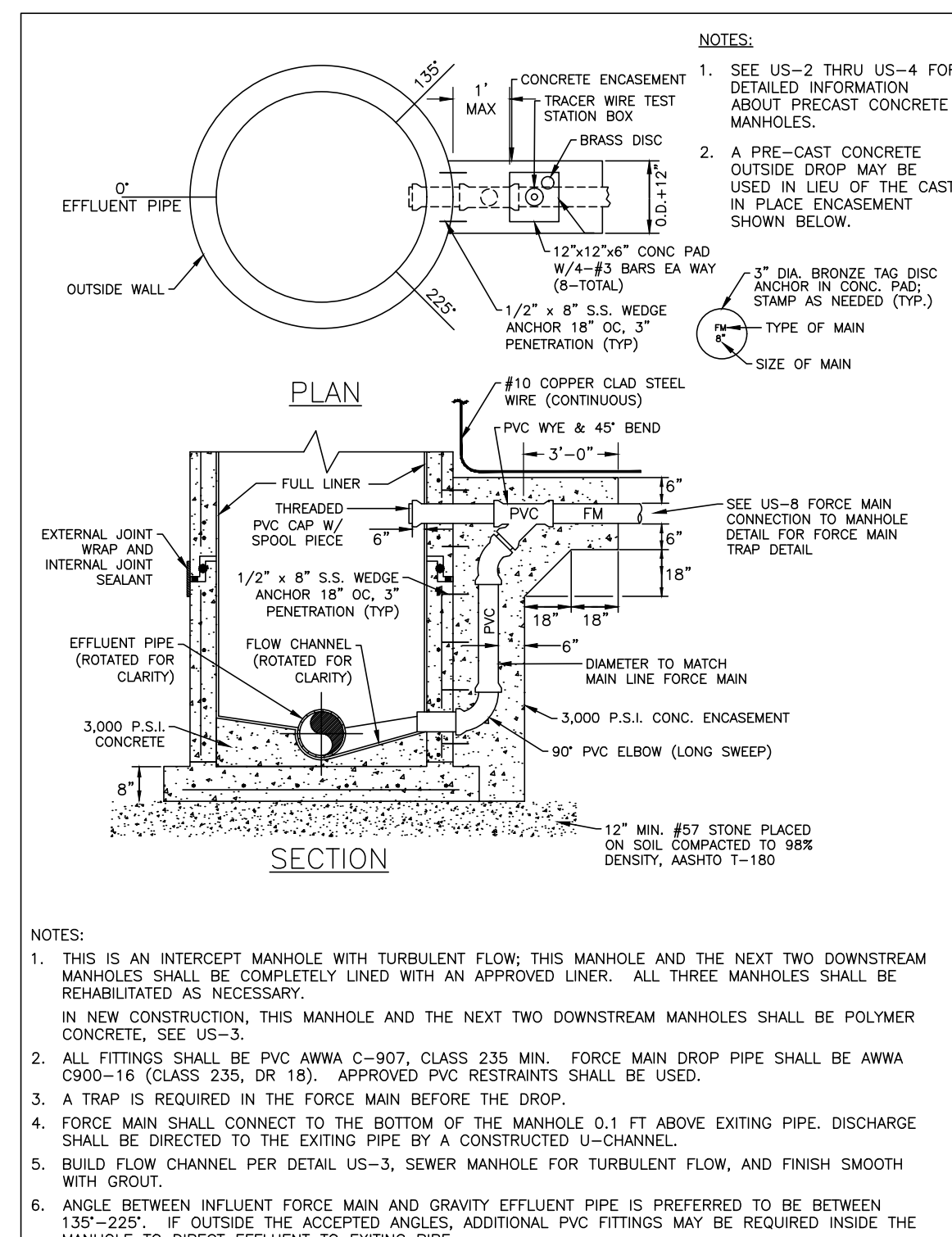
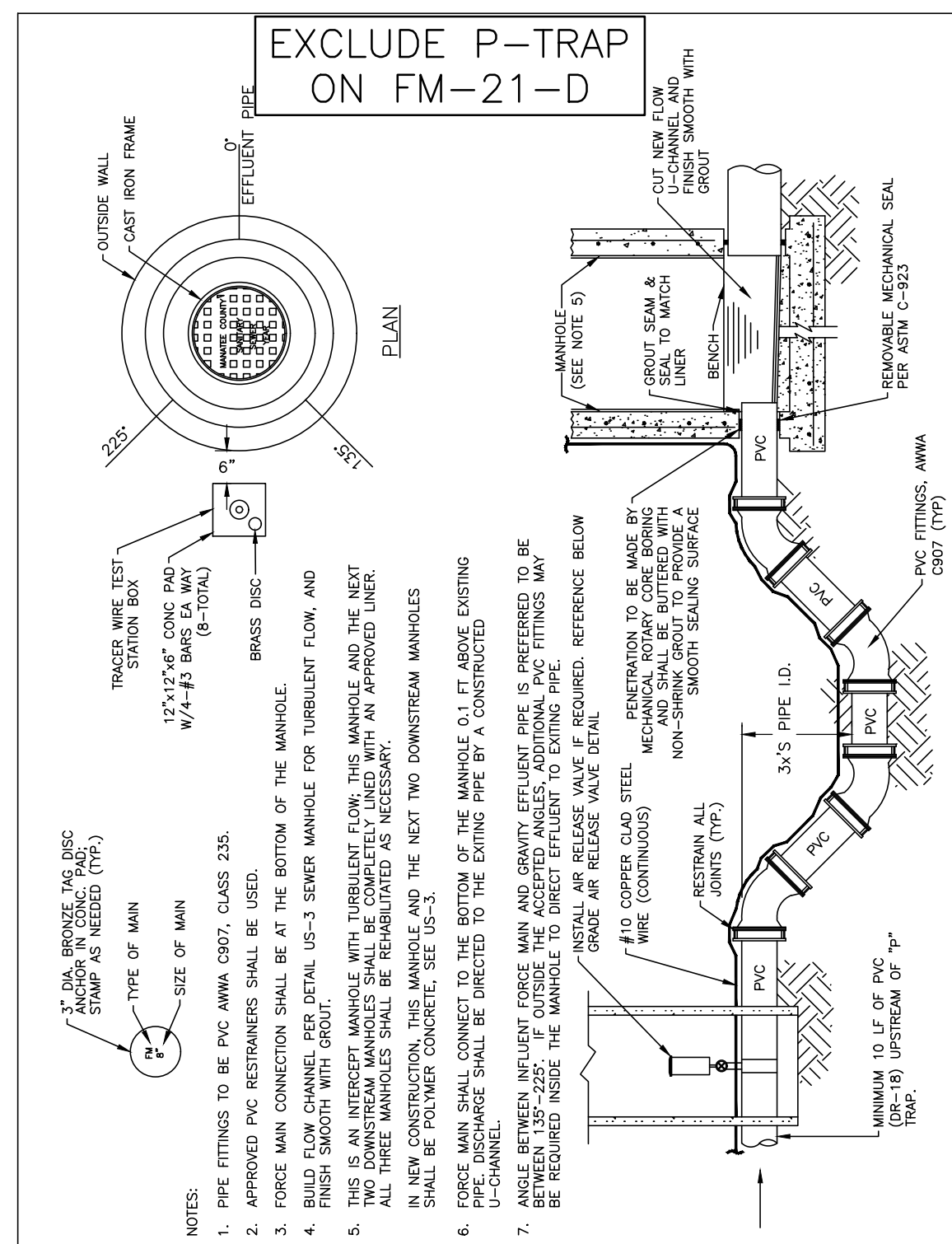
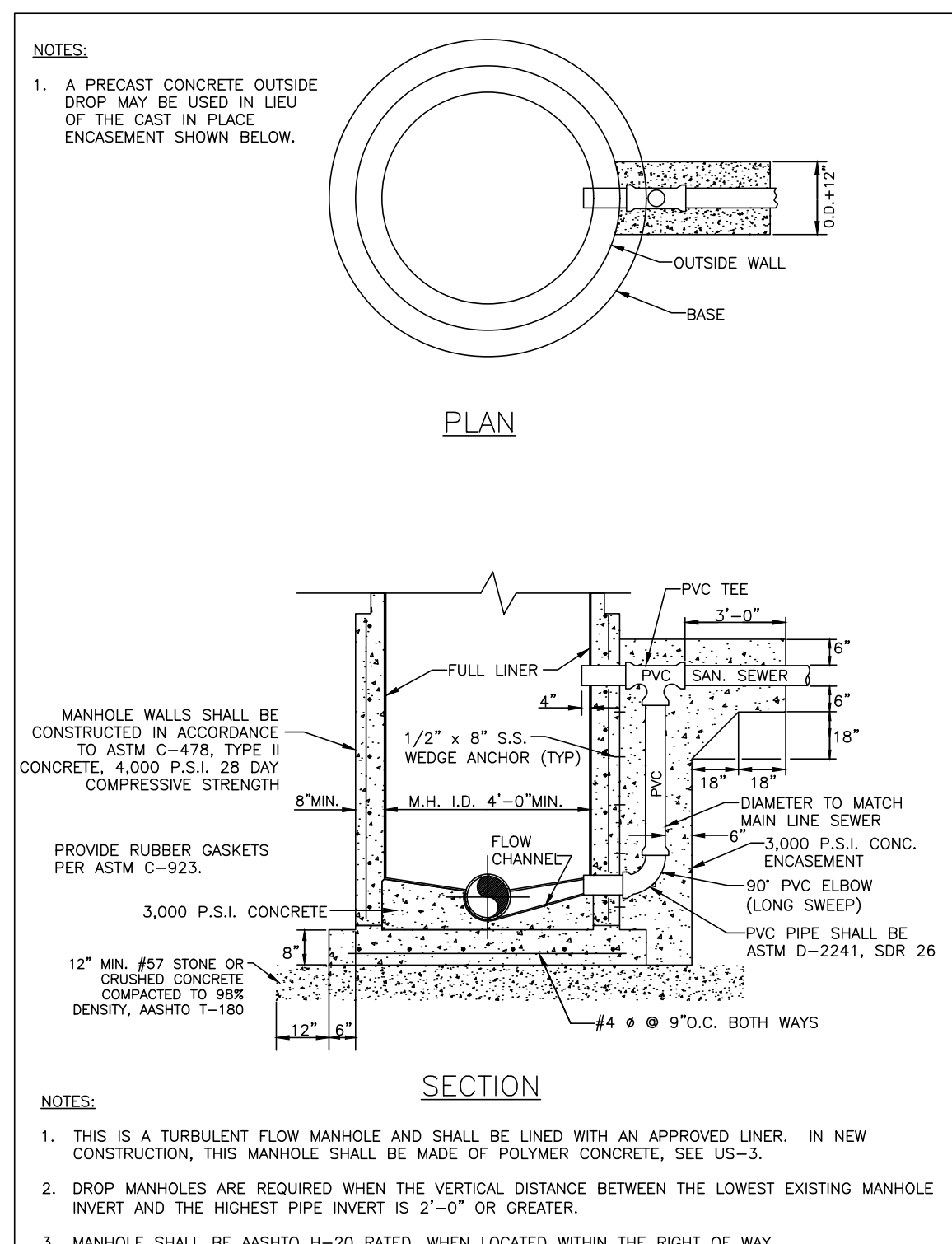
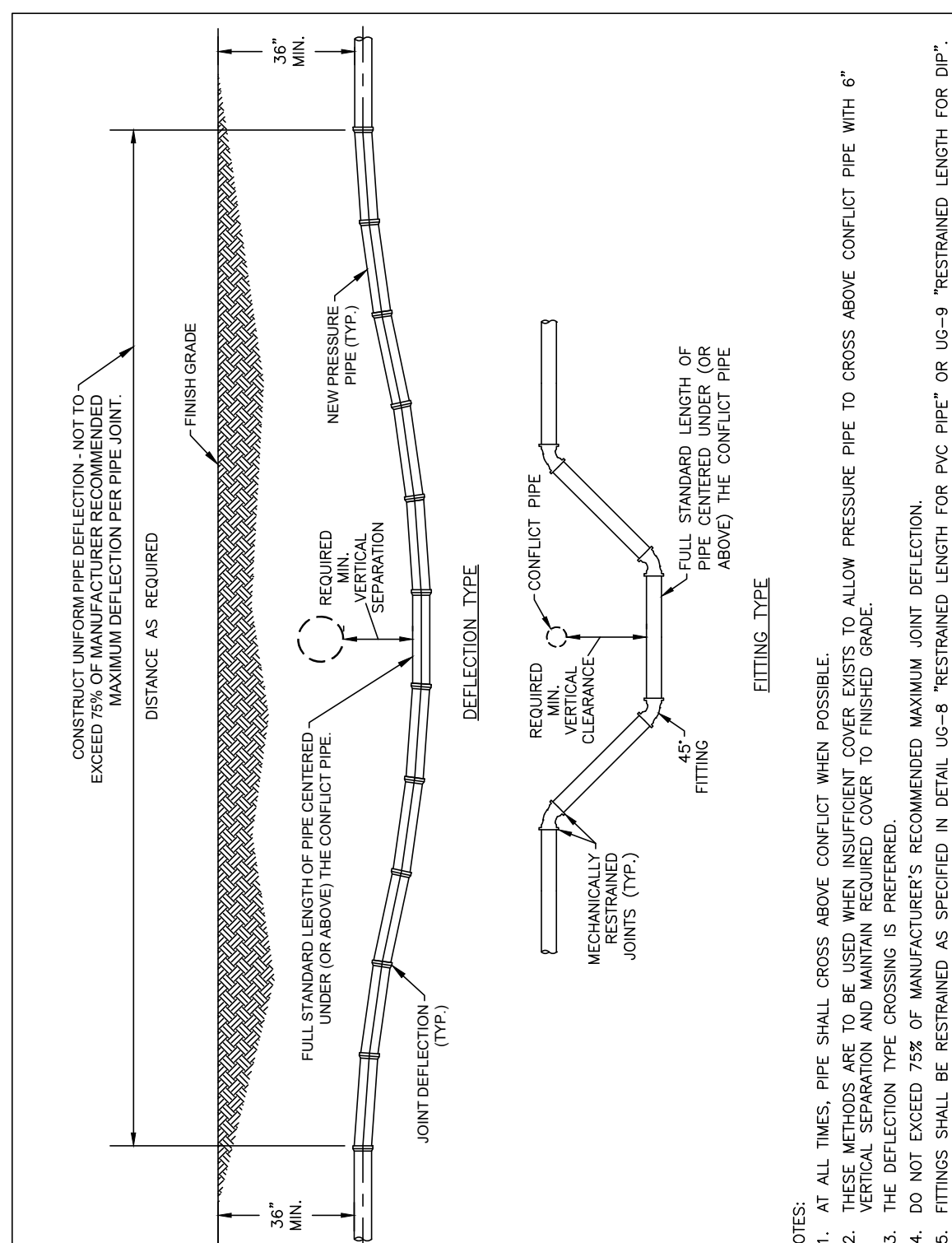
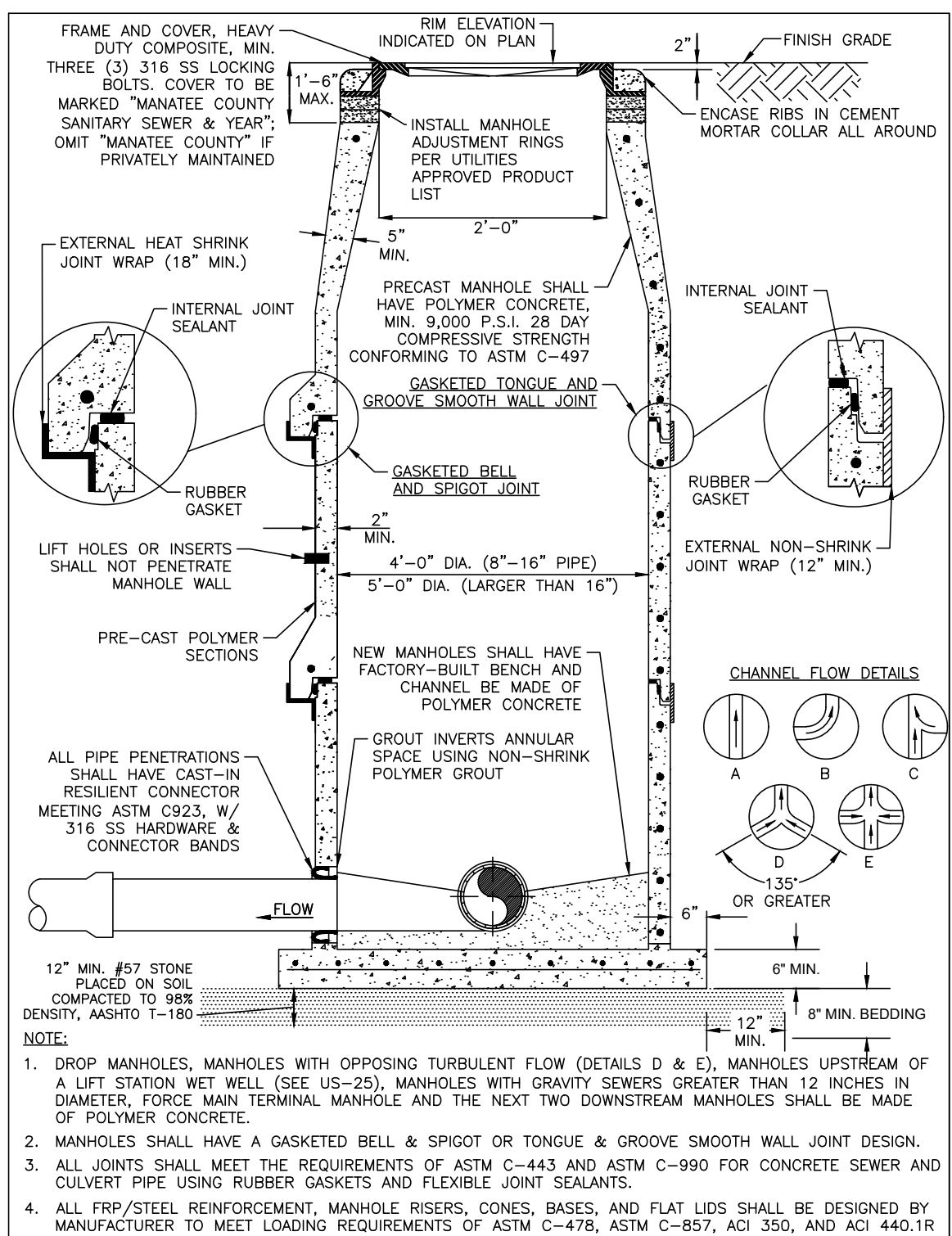
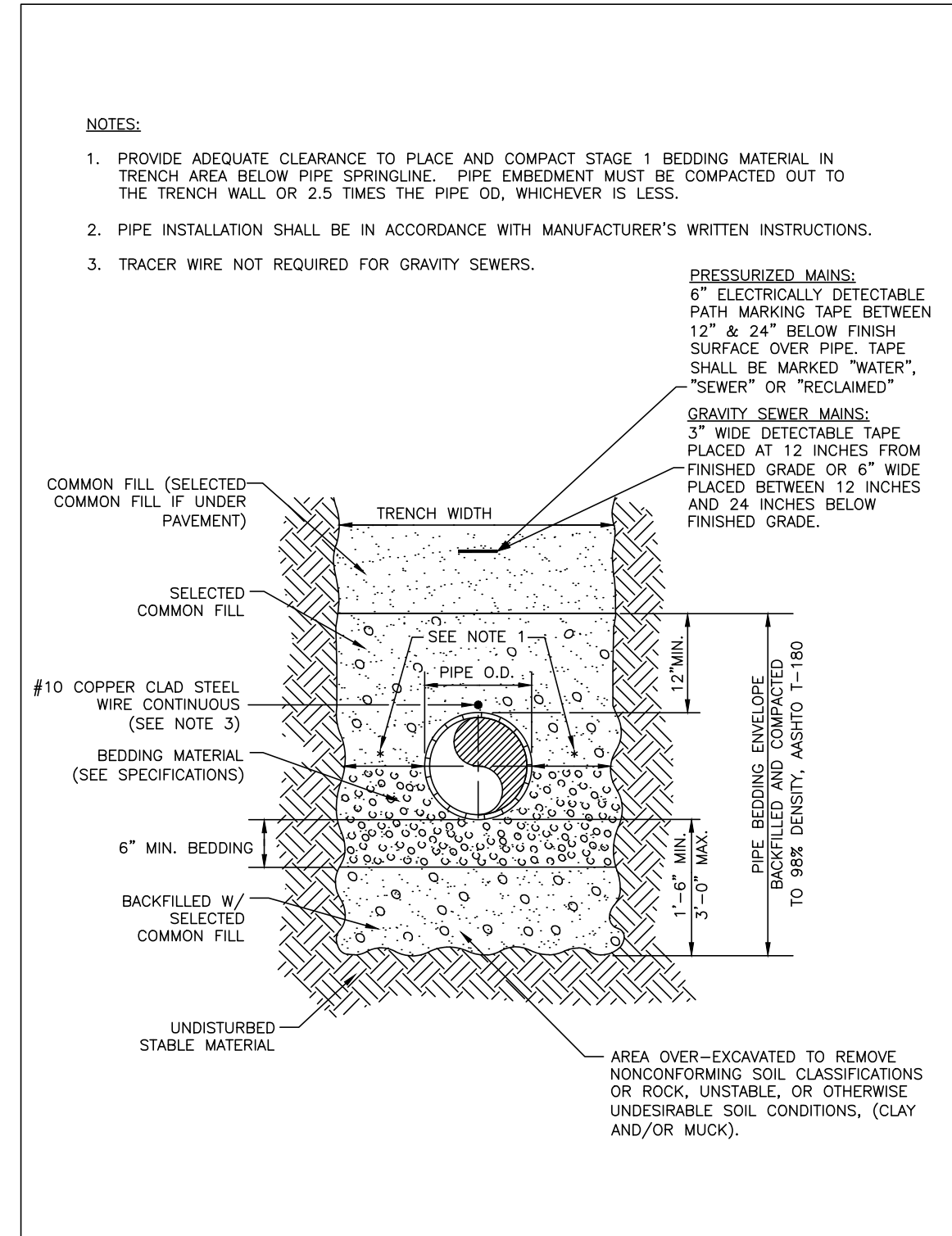
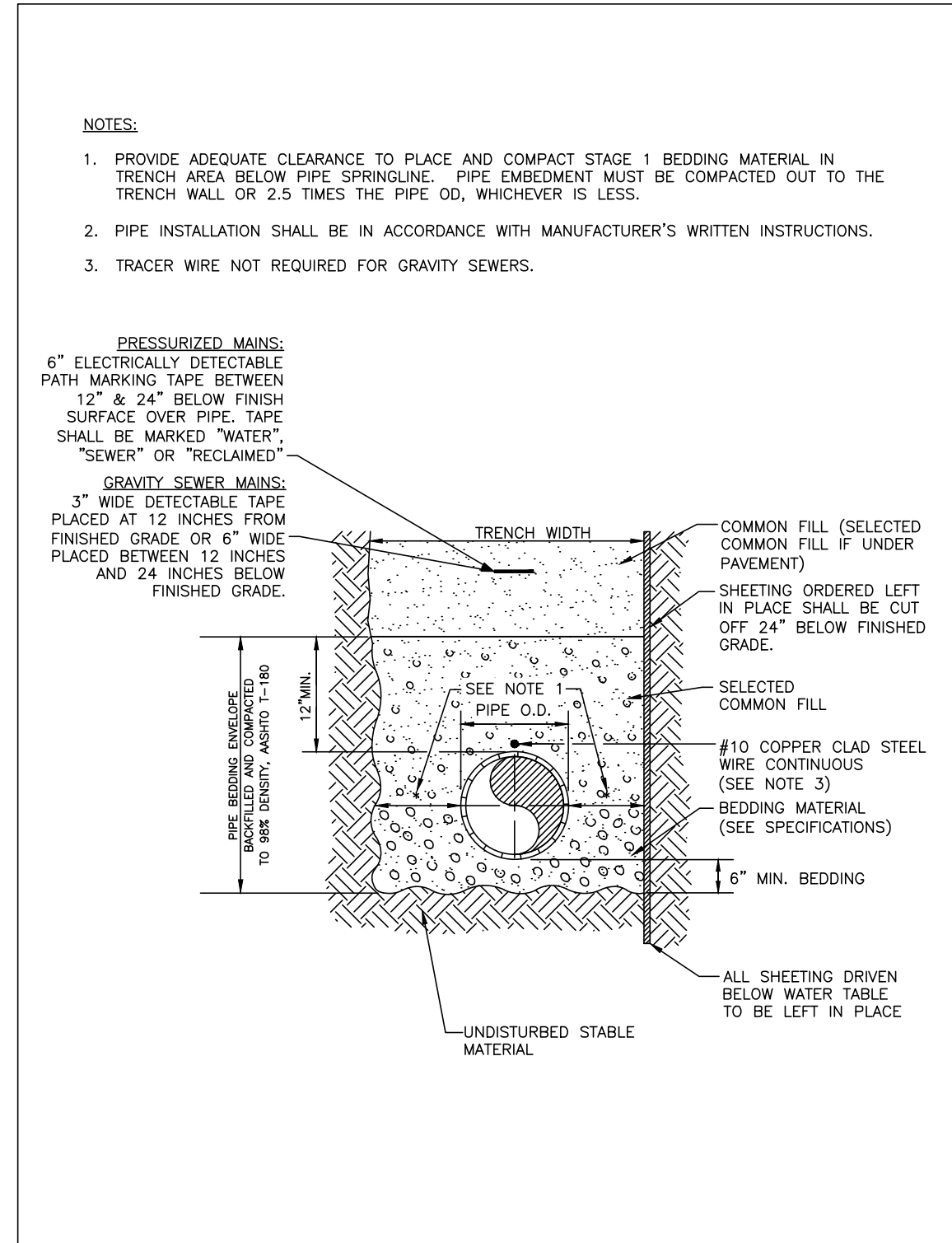
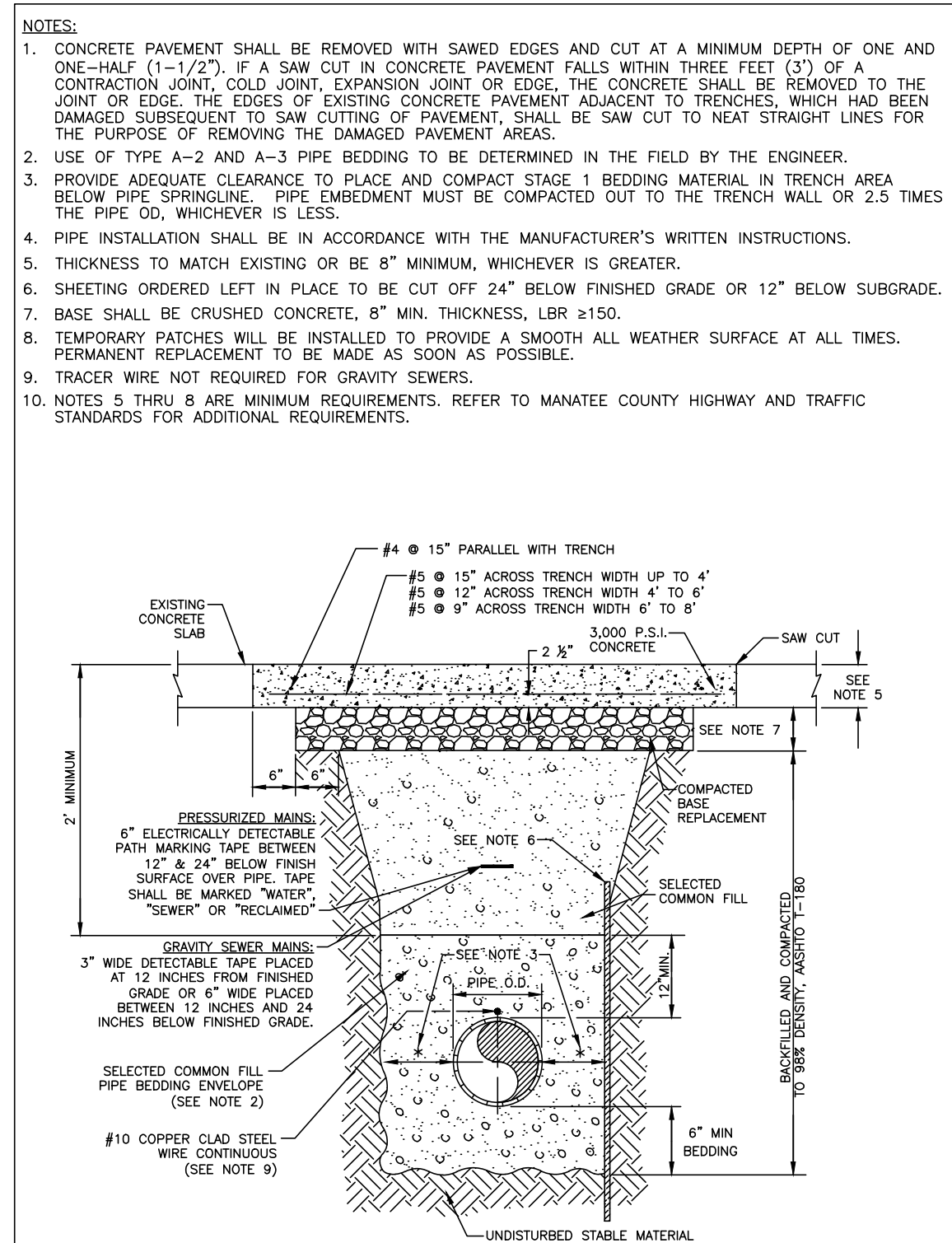
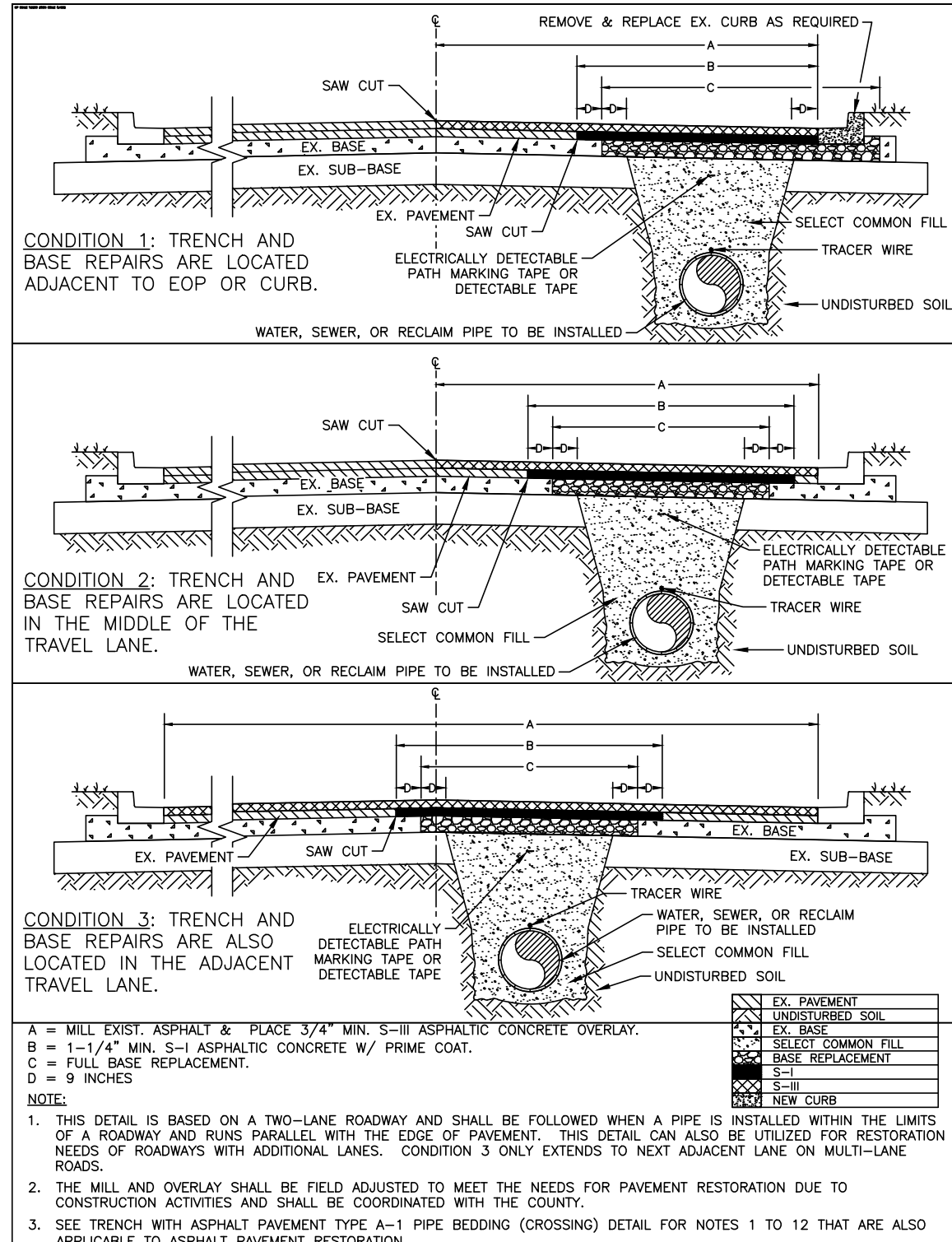
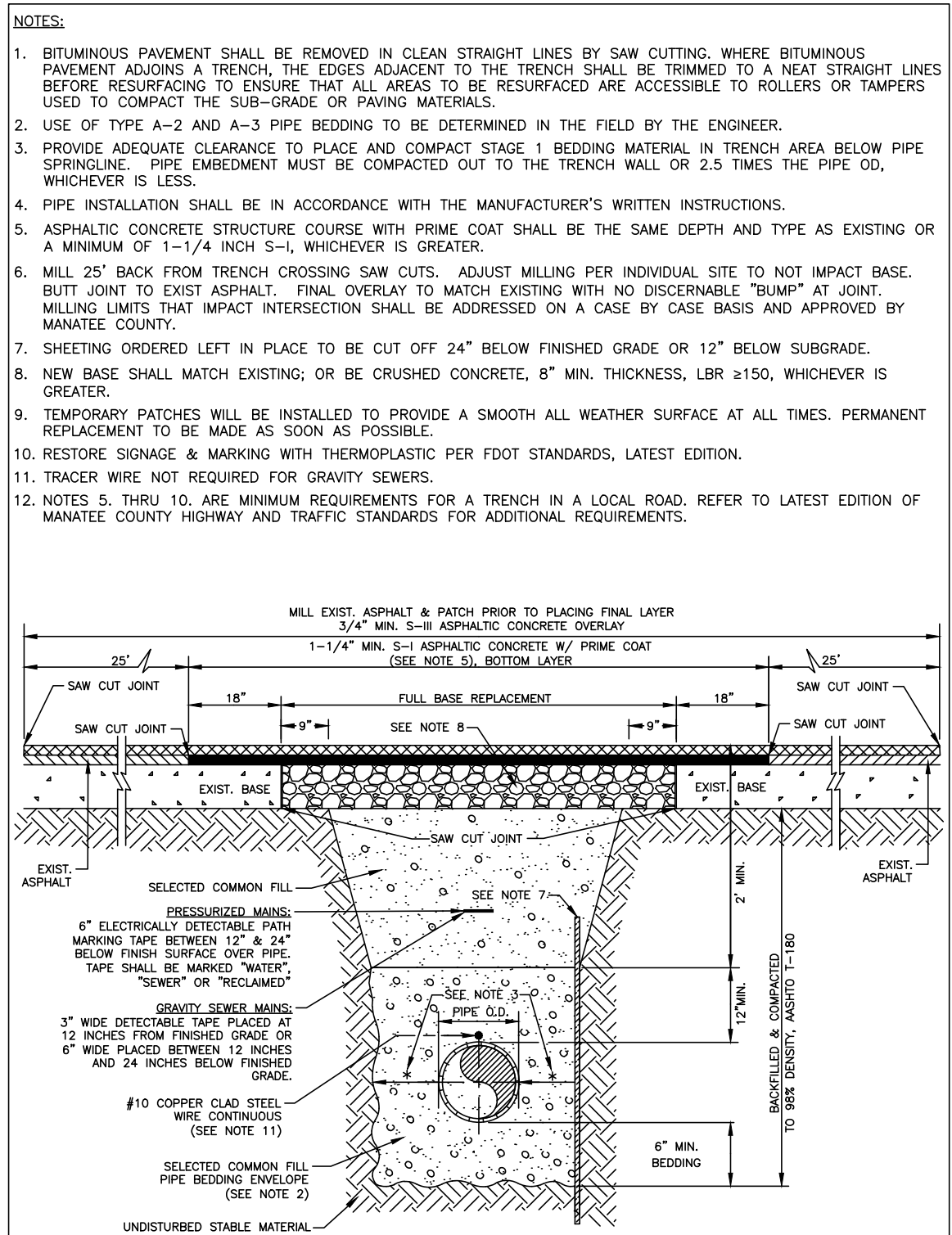
J. SHEA SHOUN, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 60923. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY J. SHEA SHOUN ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT table with columns PROJECT #, SURVEYED, SEC./TWN./RGE, DESIGNED, SCALE, DRAWN. Includes project details like 404-6089781, 03/2023, 19,20,29,34/17, JSS/BLR, SEE PLANS, BLR/JSS.

SOUTHWEST SERVICE AREA D FORCE MAIN REPLACEMENT SURVEY CONTROL, SUE & VVH TABLES

SHEET NO. 21 of 28

SOUTHWEST SERVICE AREA D THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS	
DATE	DESCRIPTION

J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

1022 26th Avenue East, Bradenton, FL 34208

MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	SURVEYED	GFY	DATE	
404-6089781	GFY	03/2023		
SEC./TWN./RGE 19.20.29./34/17	DESIGNED	JSS/BLR	08/2023	
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

MANATEE COUNTY PUBLIC WORKS DEPARTMENT

PROJECT # 404-6089781 SURVEYED GFY 03/2023

SEC./TWN./RGE 19.20.29./34/17 DESIGNED JSS/BLR 08/2023

SCALE SEE PLANS DRAWN BLR/JSS 08/2023

Originally plotted by Bruce Robertson at 1:1 scale on 7/11/2024 at 12:41:44 PM on ANSI full bleed D (34.00 x 22.00 Inches) paper using CIP-2023.STB. File Name: FM-AREA D COVER & NOTES.DWG

SOUTHWEST SERVICE AREA D

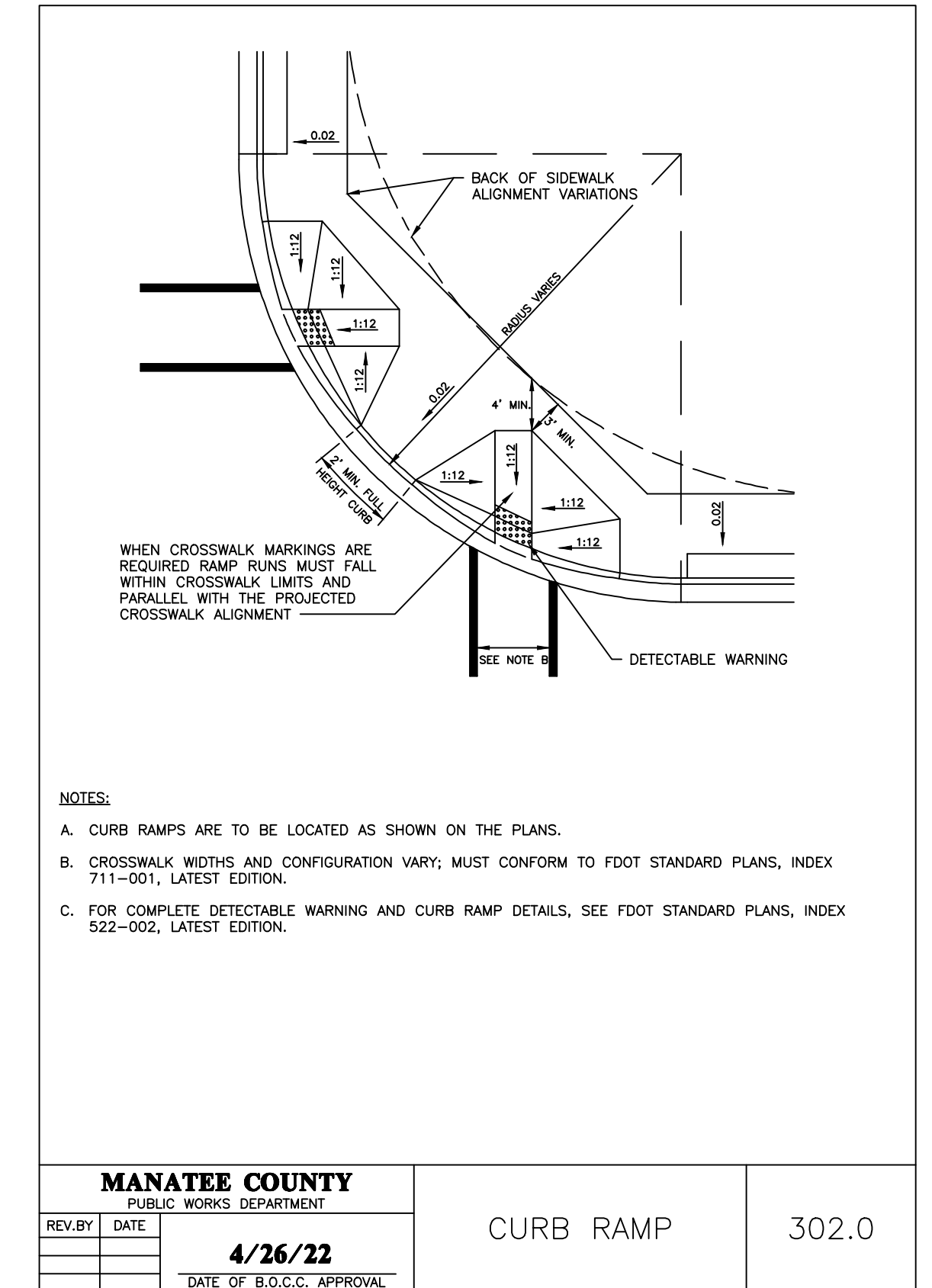
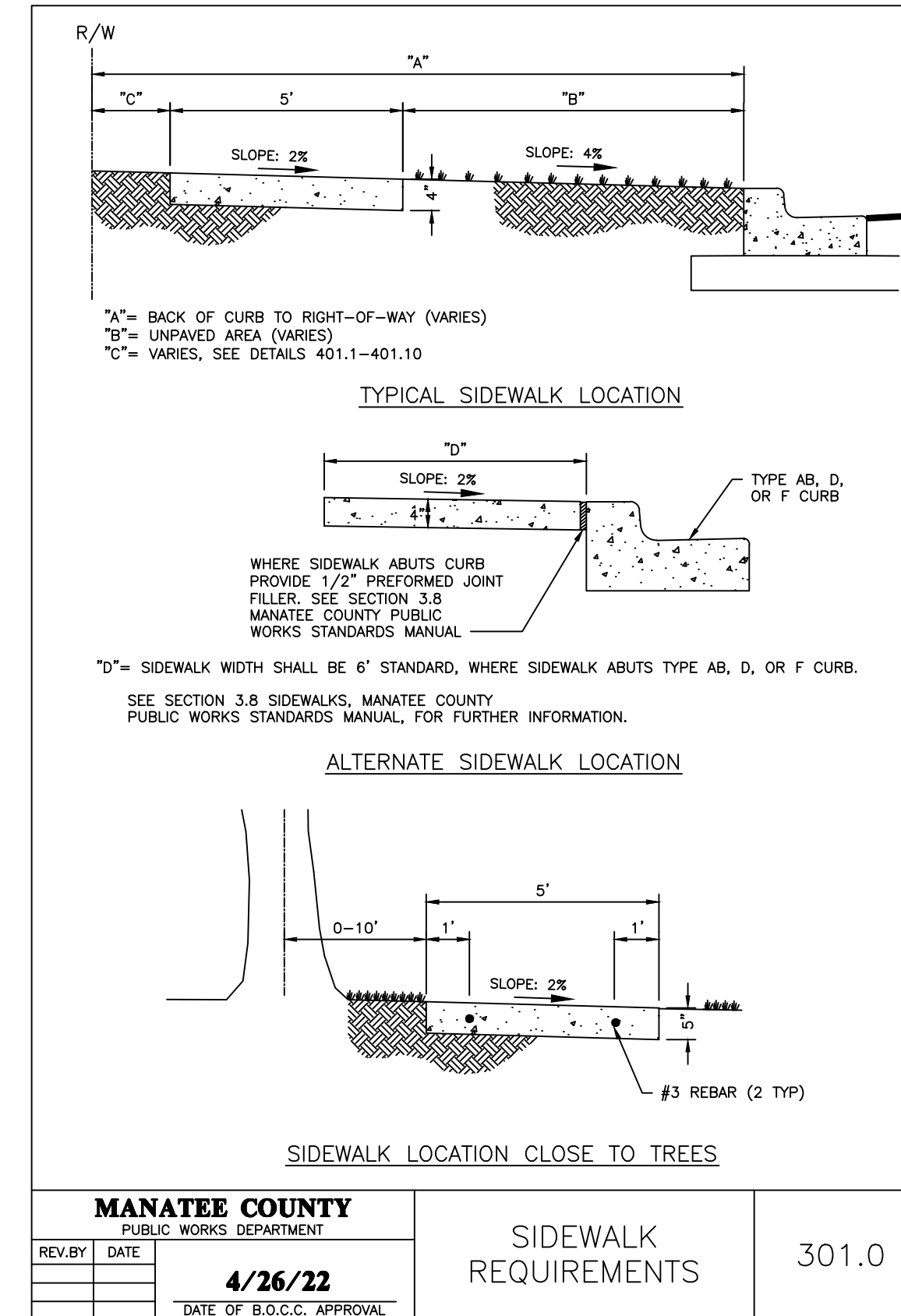
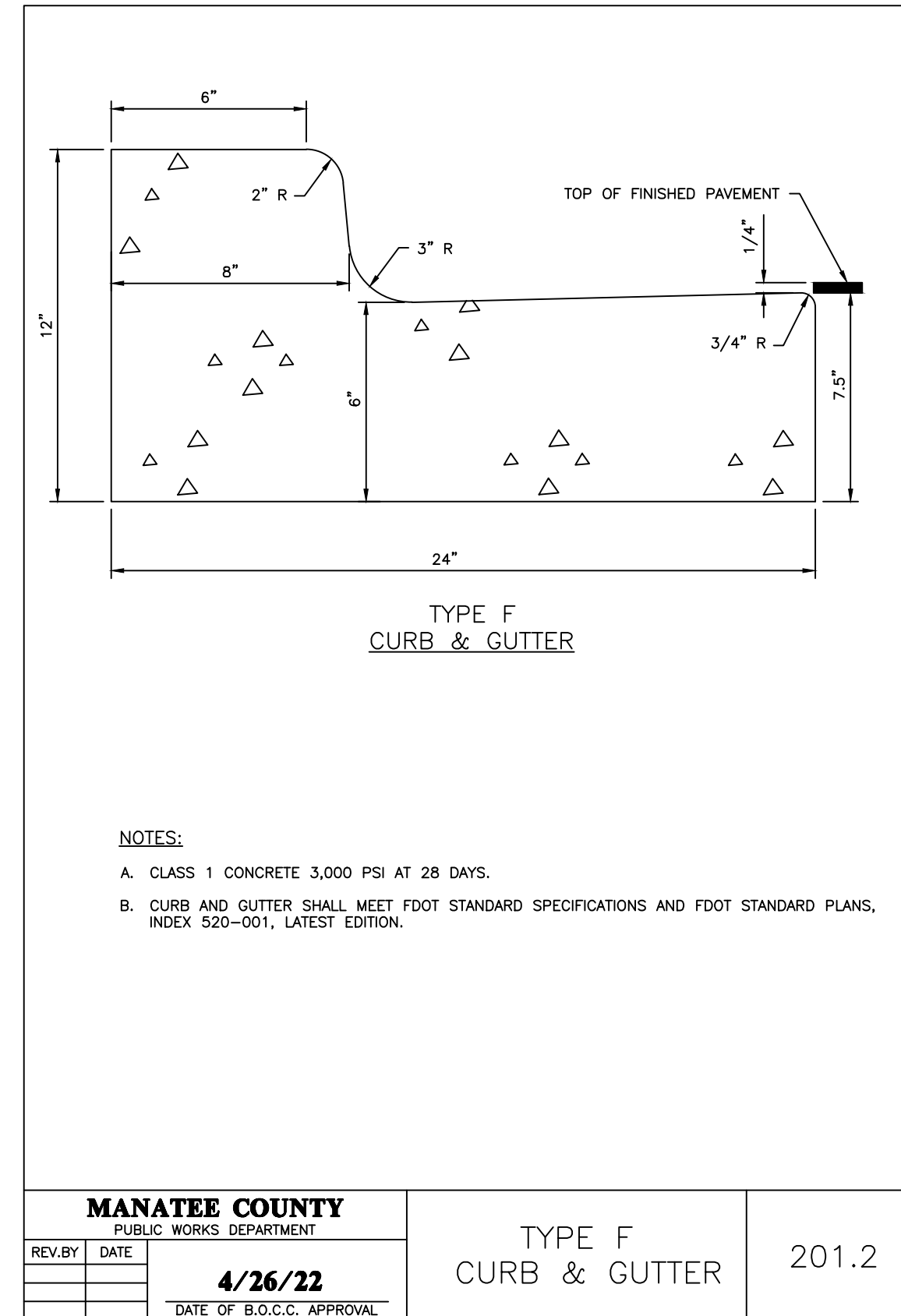
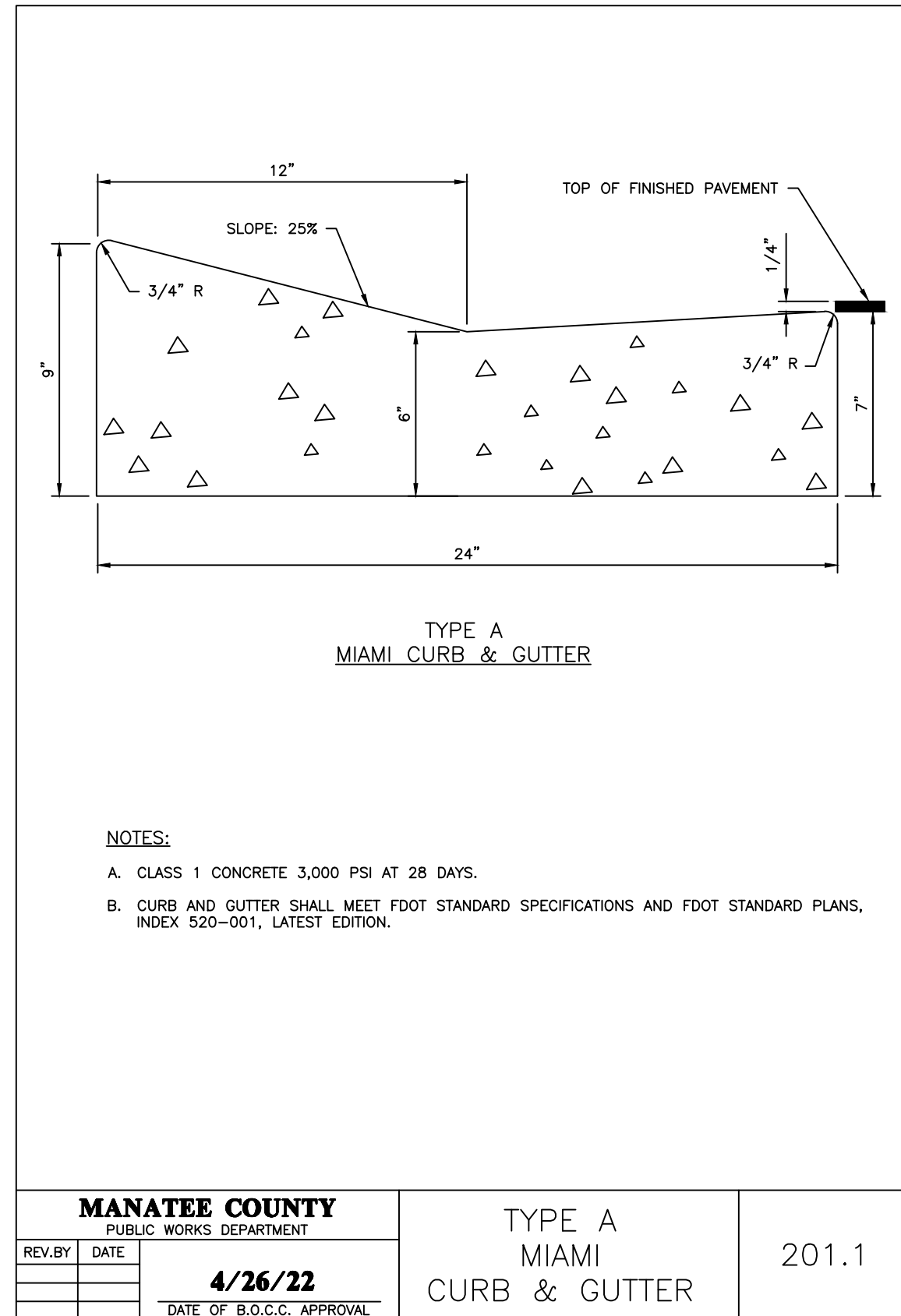
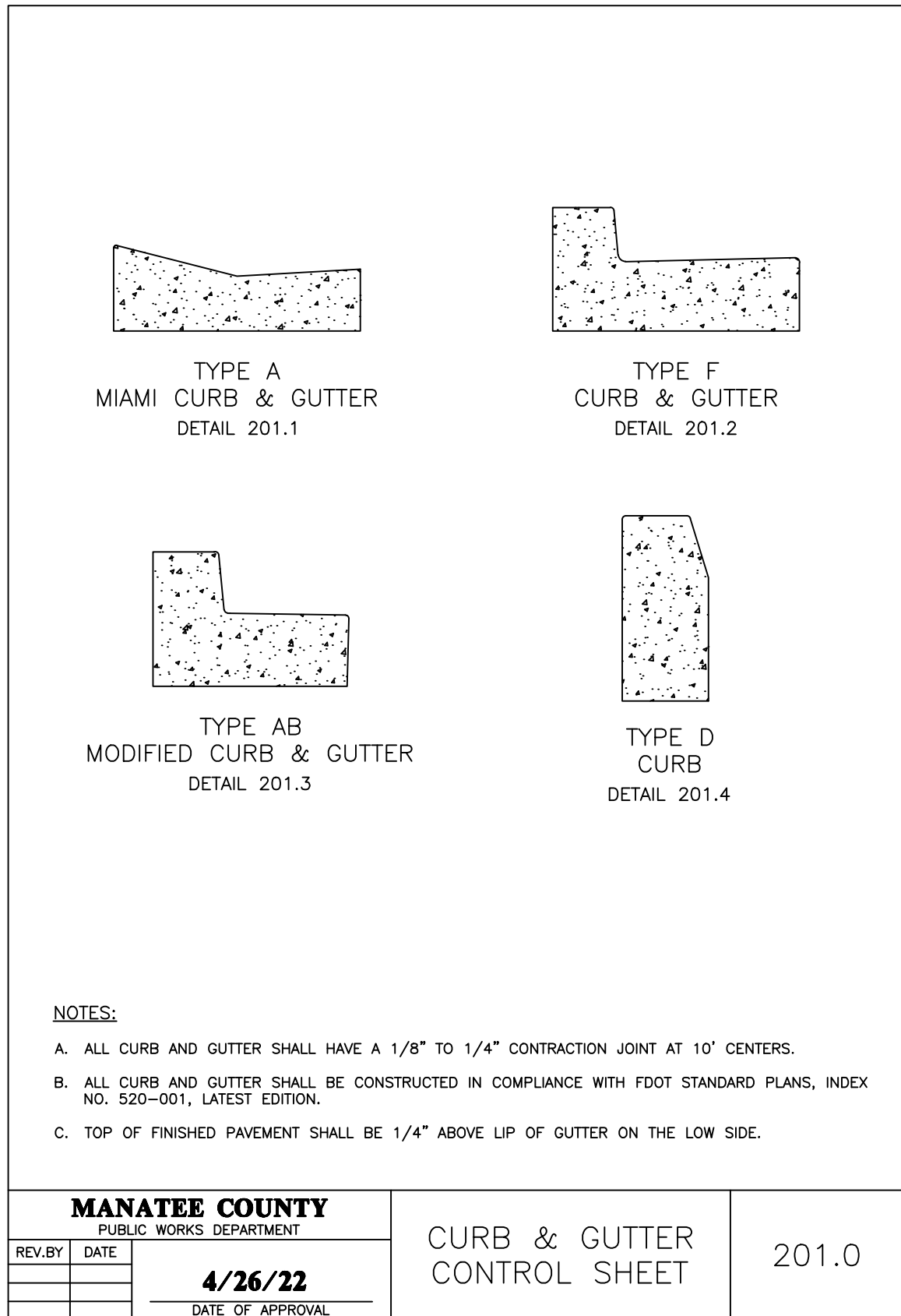
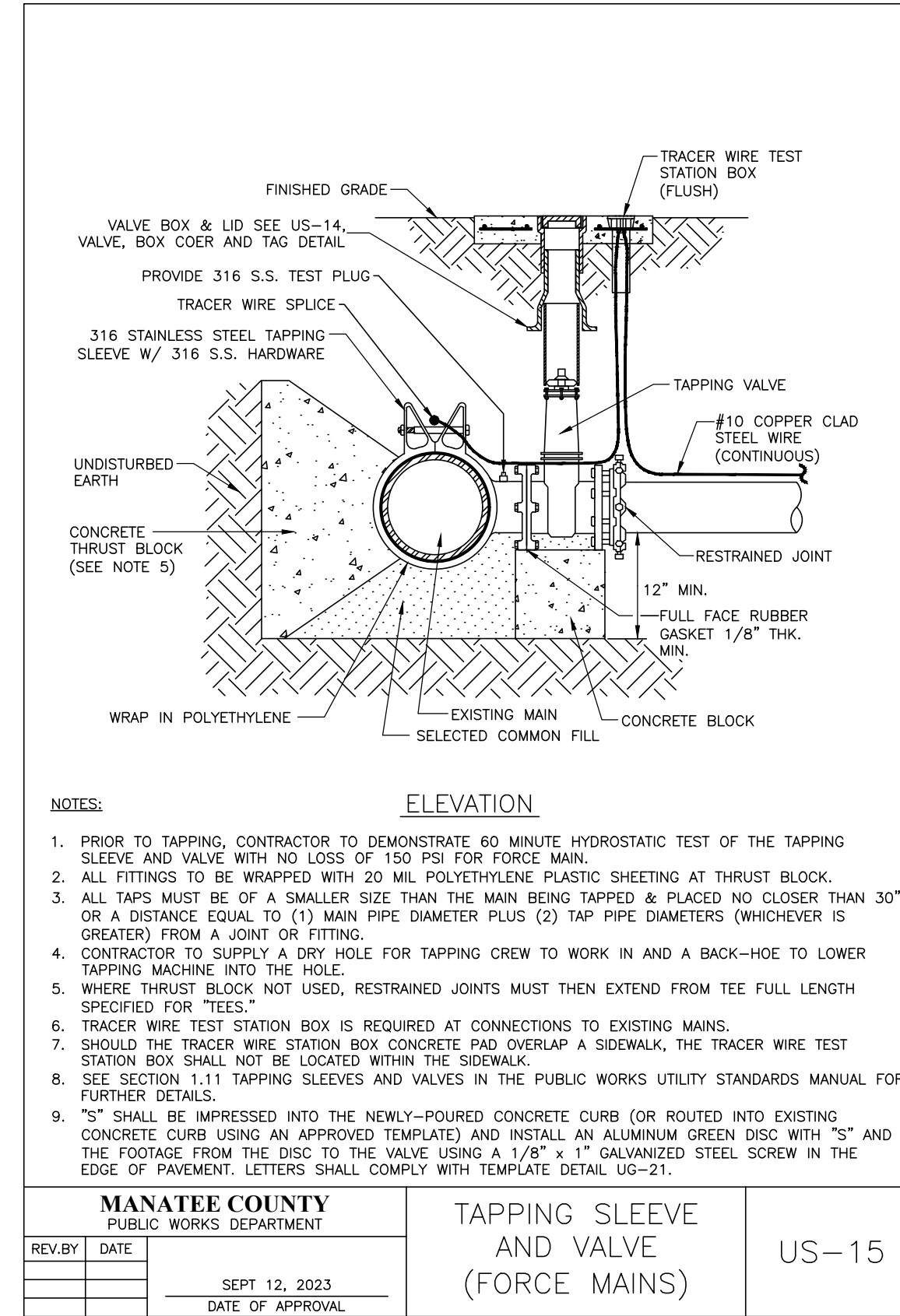
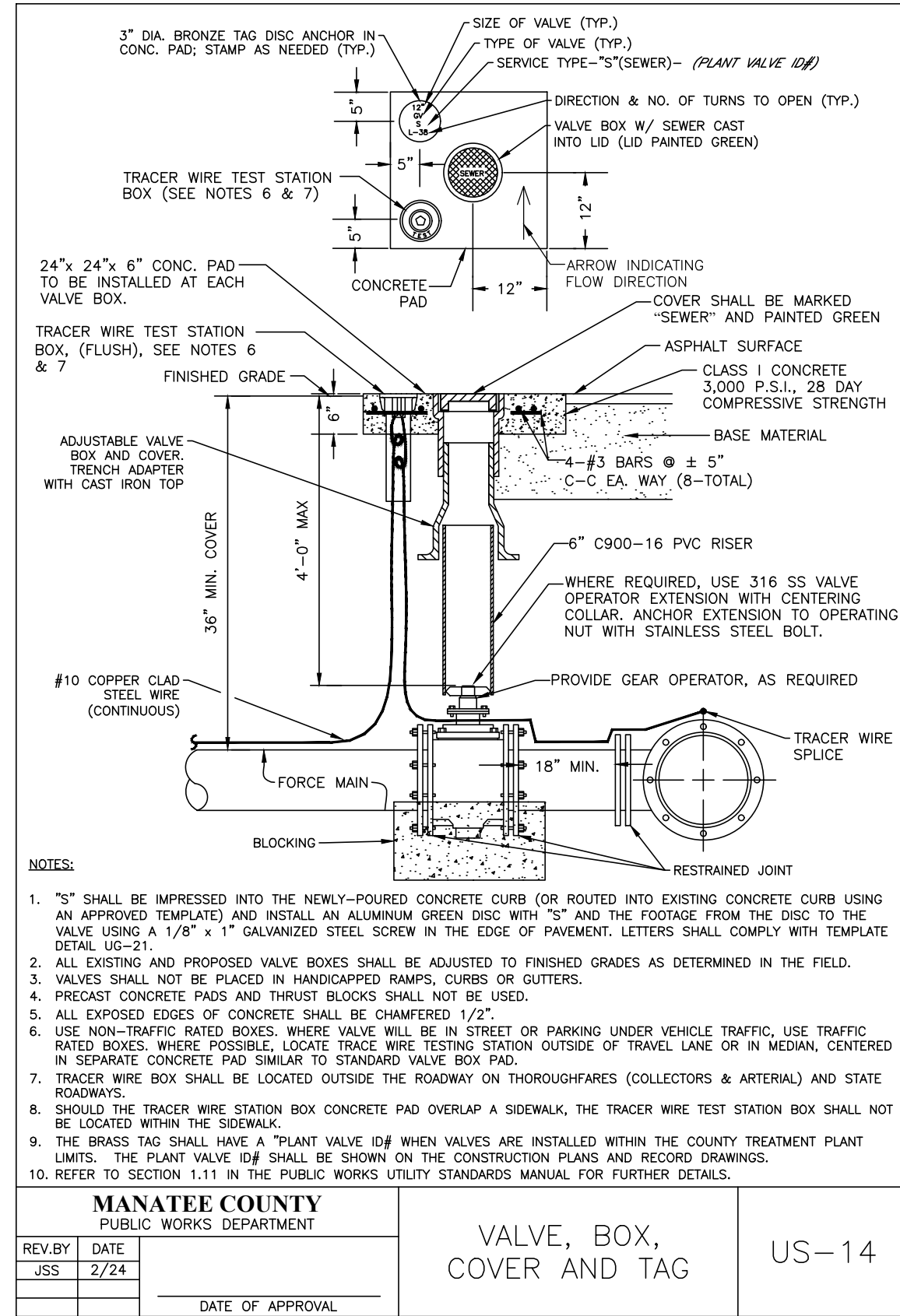
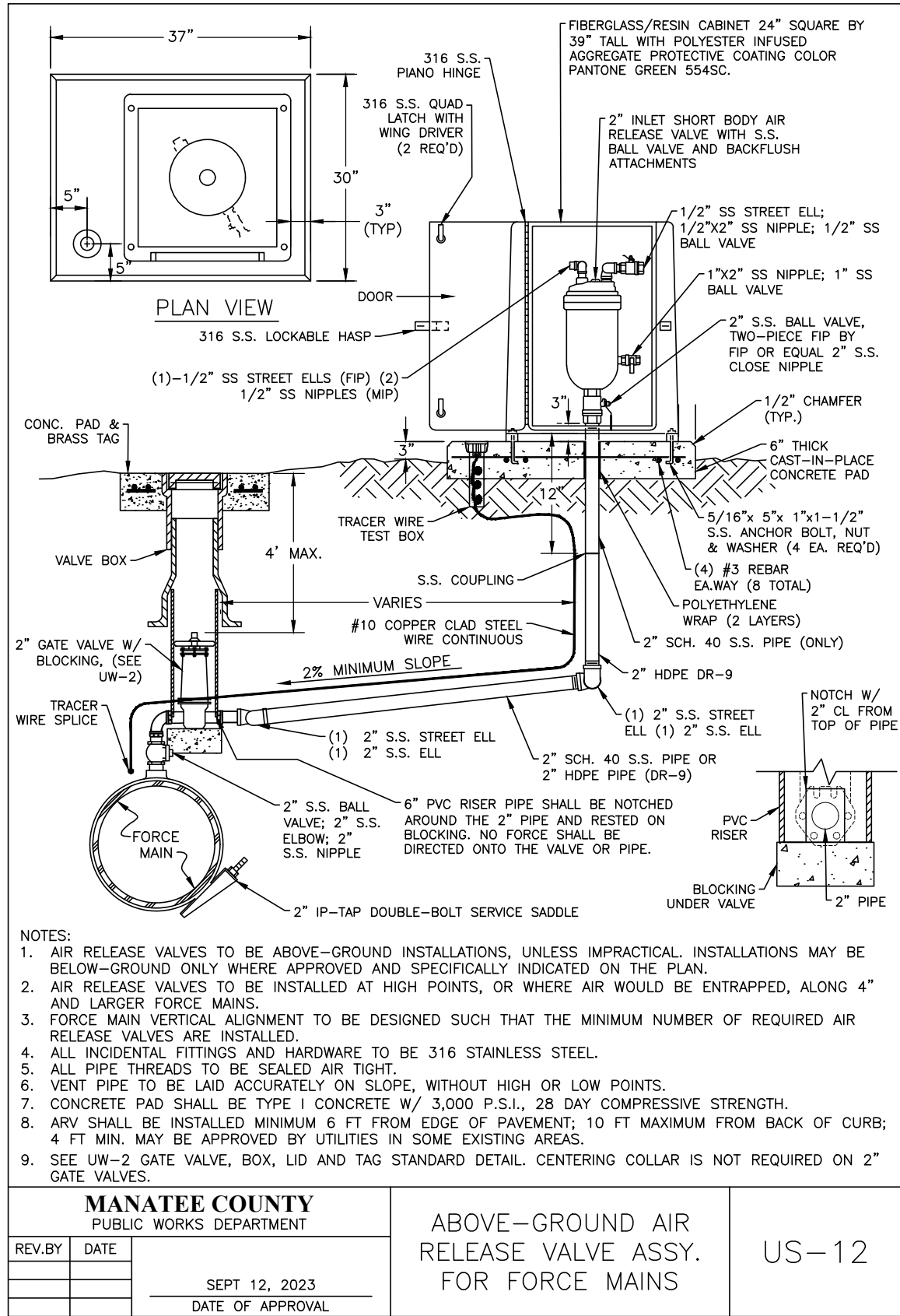
FORCE MAIN REPLACEMENT

DETAILS

SHEET NO. 23 of 28

SOUTHWEST SERVICE AREA D

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS	
DATE	DESCRIPTION



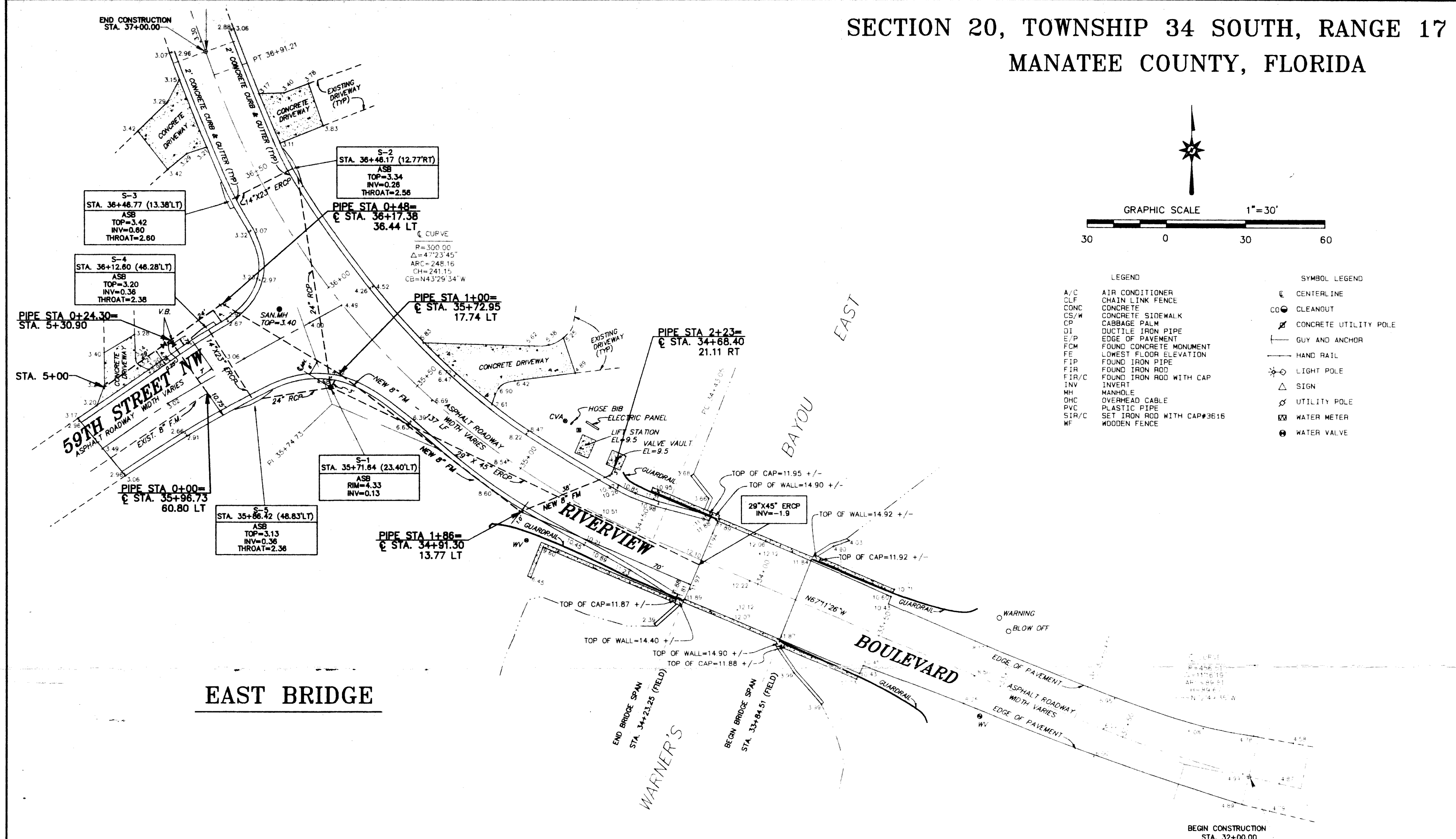
J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT					
PROJECT #	404-6089781	SURVEYED	GFY	03/2023	
SEC./TWN./RGE	19,20,29,34/17	DESIGNED	JSS/BLR	08/2023	
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023	

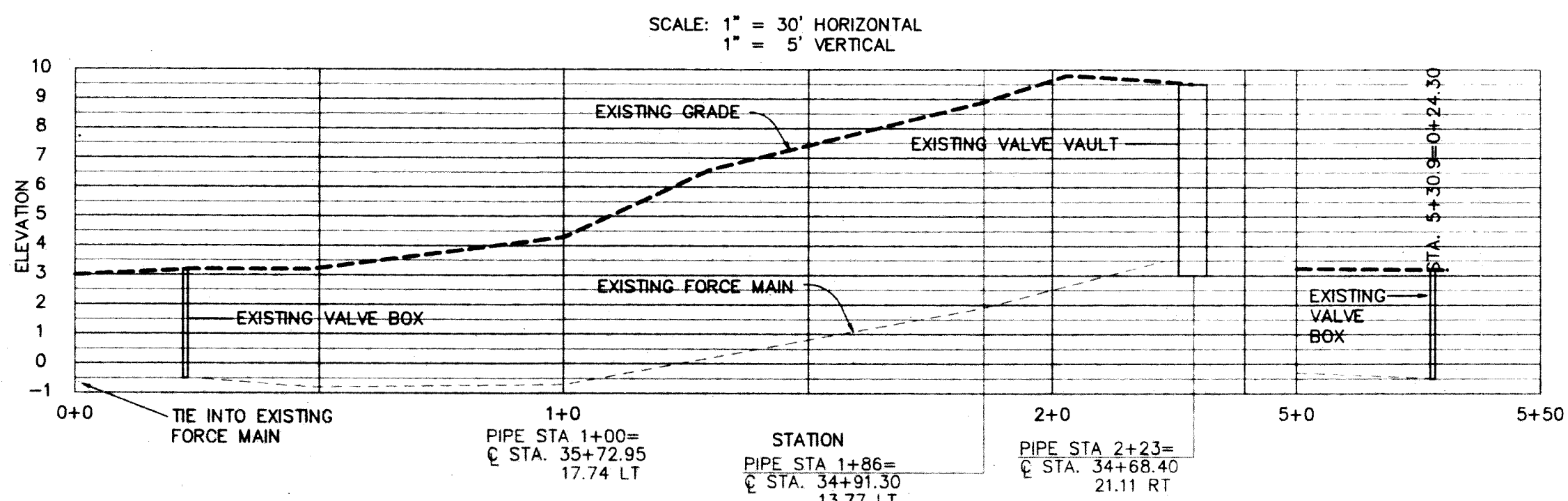
SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
DETAILS

SHEET
NO.
24 of 28

SECTION 20, TOWNSHIP 34 SOUTH, RANGE 17 EAST
MANATEE COUNTY, FLORIDA



EAST BRIDGE



- NOTES:
- SITE BENCHMARK PROVIDED BY CONTRACTOR.
 - REFERENCE BENCH MARK: 16d NAIL SET IN UTILITY POLE # 5919 AT RIVERVIEW BOULEVARD ELEVATION = 5.179
 - ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. MEAN SEA LEVEL - 0.00 FEET.
 - FIELD WORK COMPLETED 08/09/01.
 - THIS SURVEY MADE WITHOUT THE BENEFIT OF AN OWNERSHIP AND ENCUMBRANCE REPORT, TITLE BINDER OR OTHER SIMILAR INSTRUMENTS. CAMPBELL CONSULTANTS, INC., THEREFORE MAKES NO REPRESENTATIONS OR GUARANTEES PERTAINING TO EASEMENTS, RIGHTS OF WAY, SET BACK LINES, RESERVATIONS, AGREEMENTS OR OTHER SIMILAR MATTERS.
 - PIPE SIZES SHOWN HEREON ARE FROM PLANS, NOT FIELD VERIFIED.
 - SOME OF THE INFORMATION SHOWN HEREON WAS PROVIDED BY CONTRACTOR.

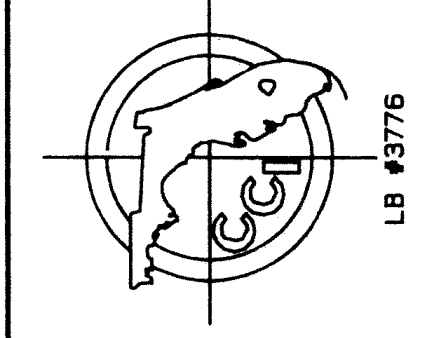
I HEREBY CERTIFY THAT THIS SURVEY WAS PERFORMED UNDER MY DIRECTION AND THAT IT MEETS THE APPLICABLE PORTIONS OF THOSE TECHNICAL STANDARDS FOR SURVEYS AS SET FORTH BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS, PURSUANT TO CHAPTER 61G17-6, OF THE FLORIDA ADMINISTRATIVE CODE.

DATE 01-04-02 *William R. De Long*
 WILLIAM R. DE LONG, P.S. & M.
 FLORIDA SURVEYORS REG. NO. 3616
 NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA SURVEYOR AND MAPPER.

REV	DATE	DESCRIPTION
4	01/02/02	ADD FORCE MAIN PROFILE
3	10/08/01	ADD DIMS FOR FORCE MAIN (BY CONTRACTOR)
2	08/28/01	ADD PIPE SIZES, FORCE MAIN INFO, NOTES
1	08/23/01	ADD CENTERLINE STA'S & OFFSETS

AS - BUILT
SURVEY

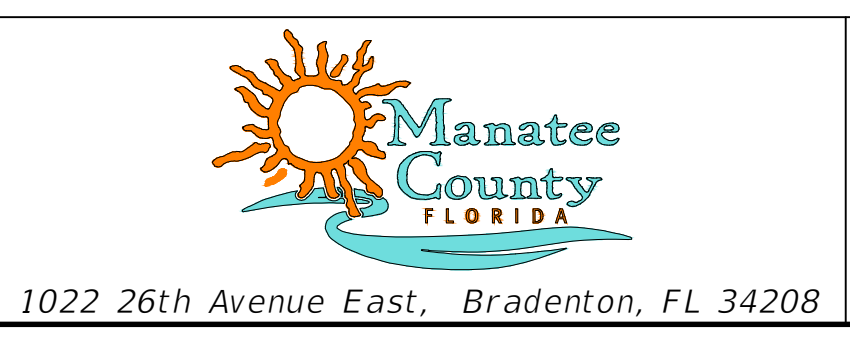
CAMPBELL CONSULTANTS, INC.
LAND SURVEYORS
5022 73RD AVENUE NORTH
PINELLAS PARK, FLORIDA 33781
PHONE (727) 548-0584 ~ FAX (727) 548-0545



CERTIFIED TO:
MANATEE COUNTY, FLORIDA
EAST AND WEST WARNER'S
BAYOU BRIDGES REPLACEMENT
COUNTY PROJECT NO. 7169

DWG DATE:	08/16/01
DRAWN BY:	DJD
CHECKED BY:	WRD
SCALE:	1" = 30'
JOB NUMBER:	2000-71-9B

REVISIONS	
DATE	DESCRIPTION



J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.
PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

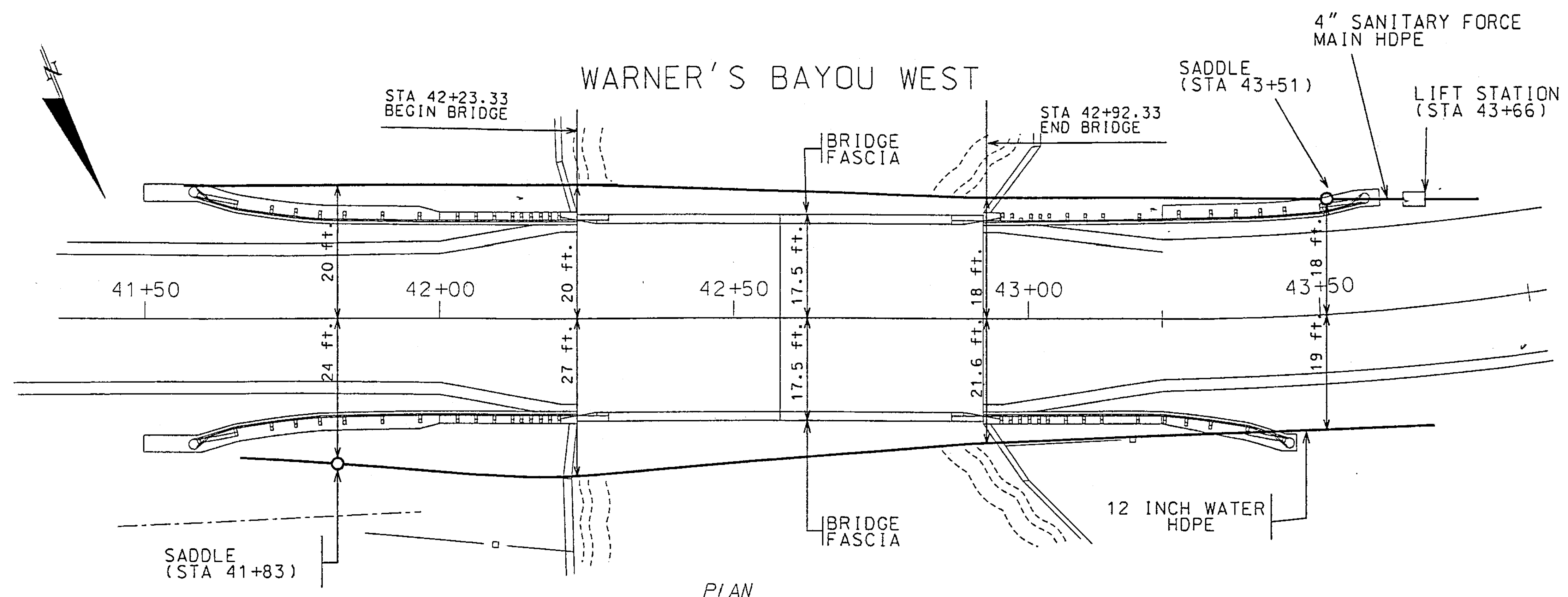
MANATEE COUNTY PUBLIC WORKS DEPARTMENT				
PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19.20.29./34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
RIVERVIEW & 59TH ST W
ROADWAY ASBUILT

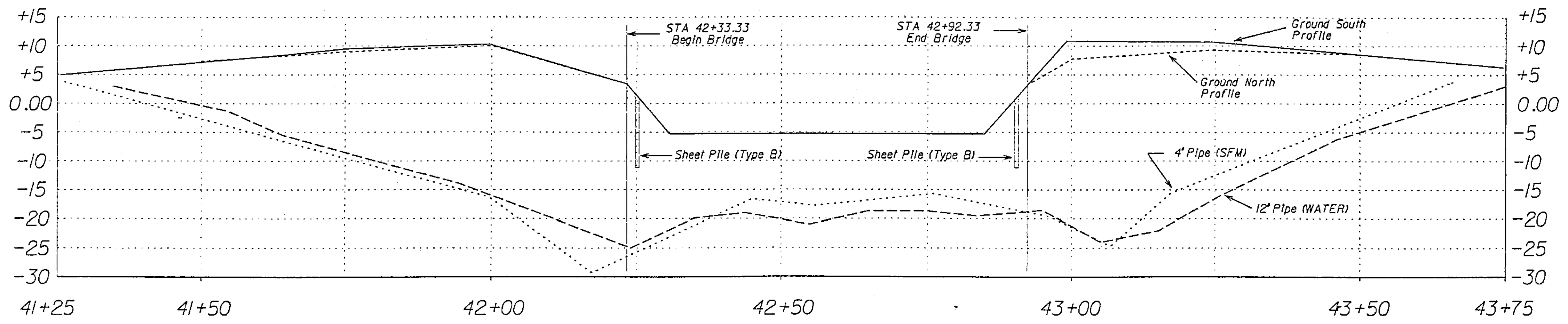
SHEET NO.
25 of 28

SOUTHWEST SERVICE AREA D THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

SOUTHWEST SERVICE AREA D
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



PLAN



CROSS SECTION

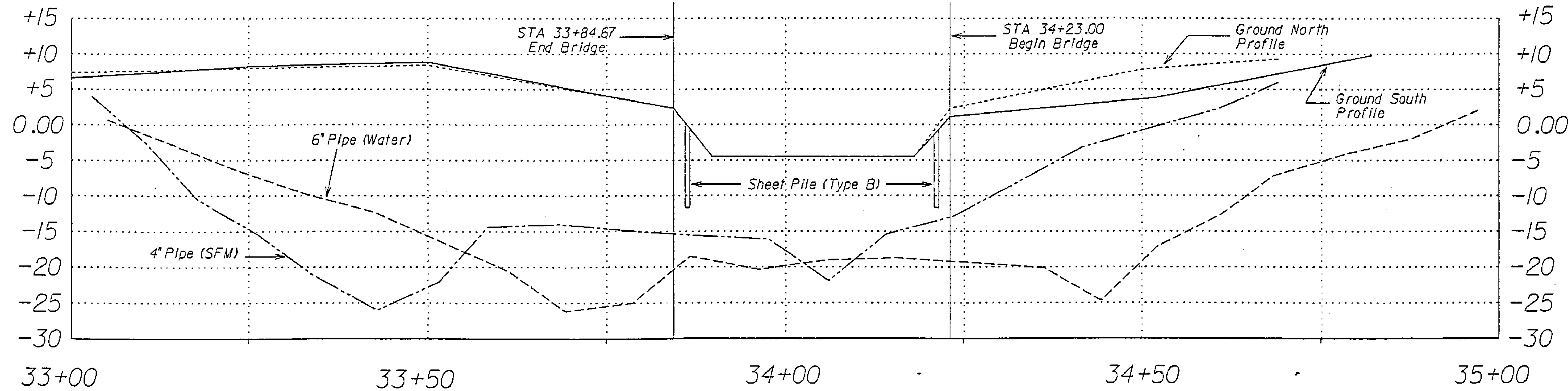
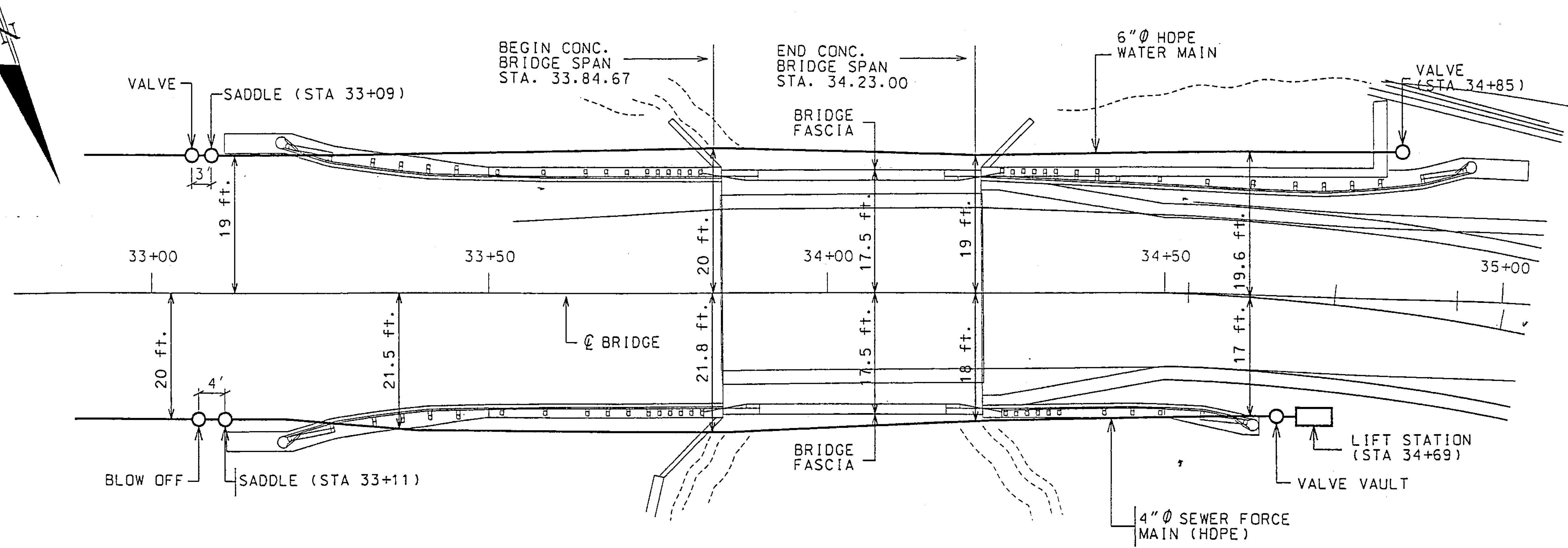
G-14

REVISIONS Date Rev Description		PUBLIC WORKS DEPARTMENT 	Drawn by: KS 6-13-01 Checked by: JRV 6-13-01 Designed by: JRV 6-13-01 Checked by: TN 6-13-01 Approved by: TIMOTHY J. NOLES	ENGINEER OF RECORD: HARDESTY & HANOVER, LLP CONSULTING ENGINEERS MIAMI LAKES, FLORIDA	LOGO: 	SEAL: 	RIVERVIEW BOULEVARD OVER WARNER'S BAYOU WEST BRIDGE NO. 134013 MANATEE COUNTY, FLORIDA	UTILITY LOCATIONS	Drawing No: U-1 Index No:
--	--	------------------------------------	---	--	------------------	------------------	---	--------------------------	-------------------------------------

...UTILITIES\UTILITIES-W.dgn 07/06/2001 10:25:34 AM

REVISIONS DATE DESCRIPTION			J. SHEA SHOUN, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 60923. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY J. SHEA SHOUN ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.	MANATEE COUNTY PUBLIC WORKS DEPARTMENT				SOUTHWEST SERVICE AREA D FORCE MAIN REPLACEMENT WARNERS BAYOU WEST BRIDGE UTILITY ASBUILT	SHEET NO.
				PROJECT # 404-6089781 SURVEYED GFY 03/2023 SEC./TWN./RGE 19.20.29./34/17 DESIGNED JSS/BLR 08/2023 SCALE SEE PLANS DRAWN BLR/JSS 08/2023					26 of 28

WARNER'S BAYOU EAST



CROSS SECTION

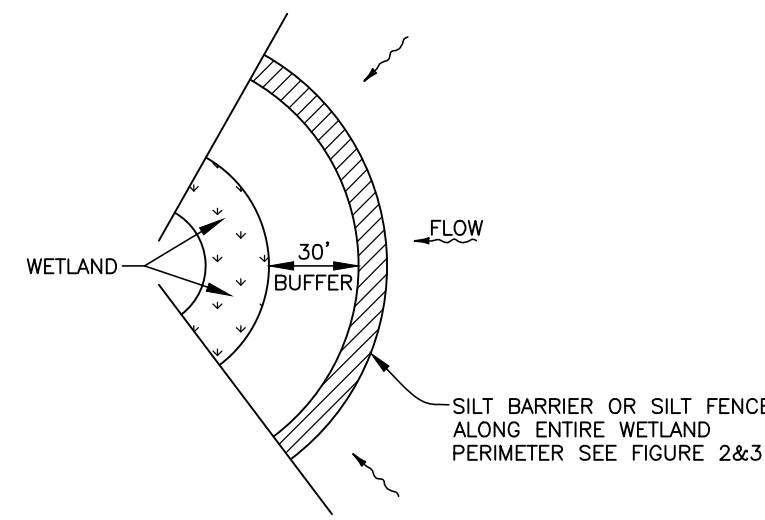
REVISIONS	PUBLIC WORKS DEPARTMENT 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Names</th><th>Dates</th></tr> <tr><td>Drawn by <i>KS</i></td><td>6-13-01</td></tr> <tr><td>Checked by <i>JRV</i></td><td>6-13-01</td></tr> <tr><td>Designed by <i>JRV</i></td><td>6-13-01</td></tr> <tr><td>Checked by <i>TN</i></td><td>6-13-01</td></tr> <tr><td>Approved by <i>TIMOTHY J. NOLES</i></td><td></td></tr> </table>	Names	Dates	Drawn by <i>KS</i>	6-13-01	Checked by <i>JRV</i>	6-13-01	Designed by <i>JRV</i>	6-13-01	Checked by <i>TN</i>	6-13-01	Approved by <i>TIMOTHY J. NOLES</i>		ENGINEER OF RECORD: HARDESTY & HANOVER, LLP CONSULTING ENGINEERS MIAMI LAKES, FLORIDA	LOGO: 	SEAL: <i>TJ Noles</i> 7-6-01	RIVERVIEW BOULEVARD OVER WARNER'S BAYOU EAST BRIDGE NO. 134014 MANATEE COUNTY, FLORIDA	UTILITY LOCATIONS	Drawing No. U-1 Index No.
Names	Dates																			
Drawn by <i>KS</i>	6-13-01																			
Checked by <i>JRV</i>	6-13-01																			
Designed by <i>JRV</i>	6-13-01																			
Checked by <i>TN</i>	6-13-01																			
Approved by <i>TIMOTHY J. NOLES</i>																				

REVISIONS		J. SHEA SHOUN, STATE OF FLORIDA, PROFESSIONAL ENGINEER, LICENSE NO. 60923. THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY J. SHEA SHOUN ON THE DATE INDICATED HERE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.	MANATEE COUNTY PUBLIC WORKS DEPARTMENT	SOUTHWEST SERVICE AREA D FORCE MAIN REPLACEMENT WARNERS BAYOU EAST BRIDGE UTILITY ASBUILT	SHEET NO. 27 of 28		
DATE	DESCRIPTION		PROJECT #	404-6089781	SURVEYED	GFY	03/2023
			SEC./TWN./RGE	19,20,29,34/17	DESIGNED	JSS/BLR	08/2023
			SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

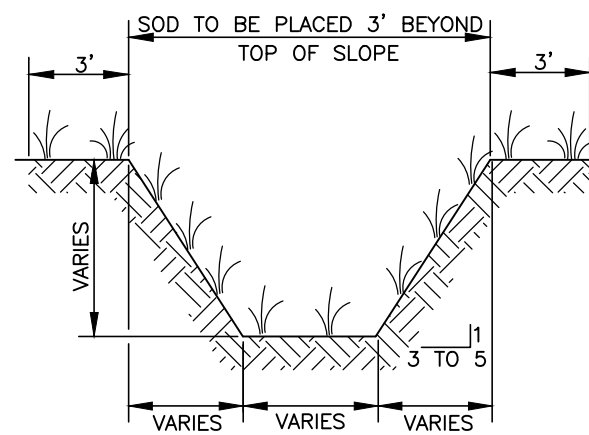
Originally plotted by Bruce Robertson at 1:1 scale on 7/11/2024 at 12:42:24 PM on ANSI full bleed D (34.00 x 22.00 Inches) paper using CIP-2023.STB. File Name: FM-AREA D COVER & NOTES.DWG

G-14

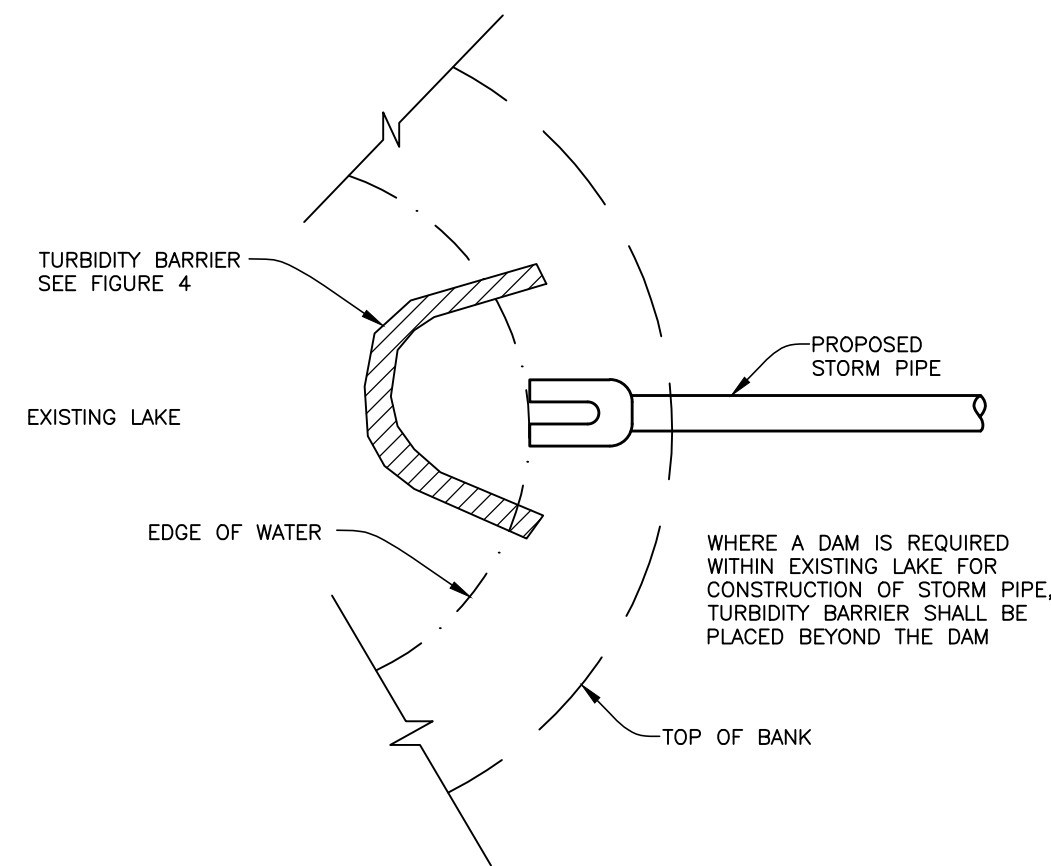
SOUTHWEST SERVICE AREA D
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



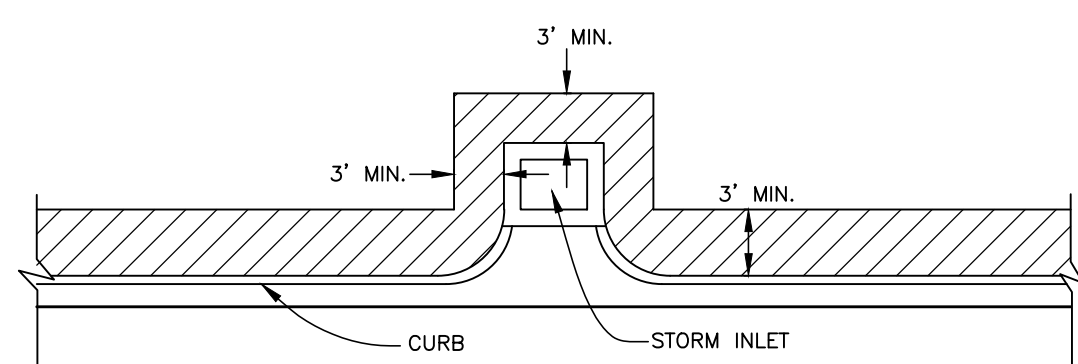
WETLAND BUFFER
FIGURE 1



TYPICAL SWALE SECTION
FIGURE 5

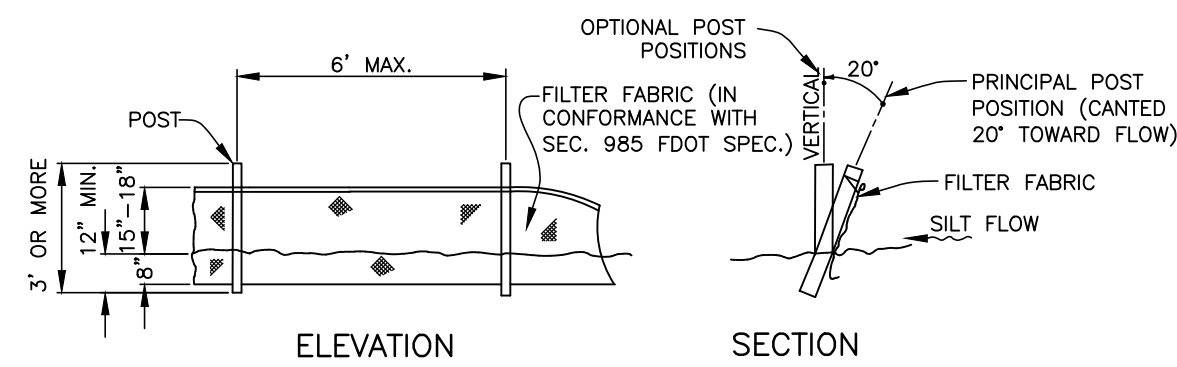


TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9



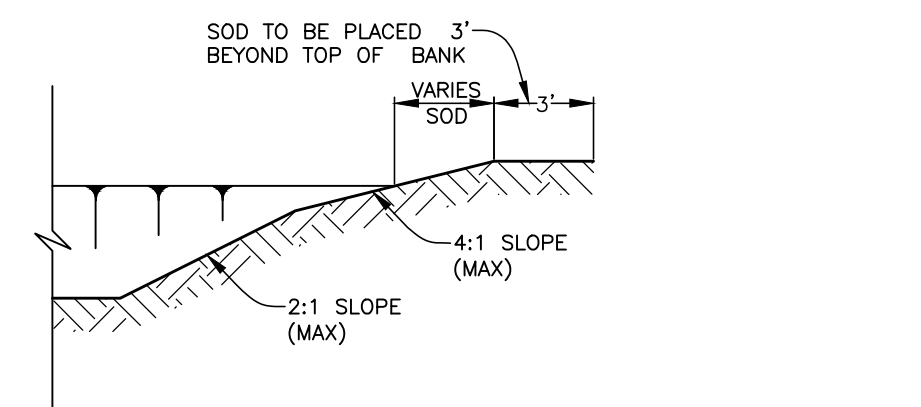
SOD ALONG CURB AND AROUND INLET
FIGURE 14

NOTE:
REFERENCE THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION, FOR ALL TEMPORARY EROSION CONTROL MEASURES

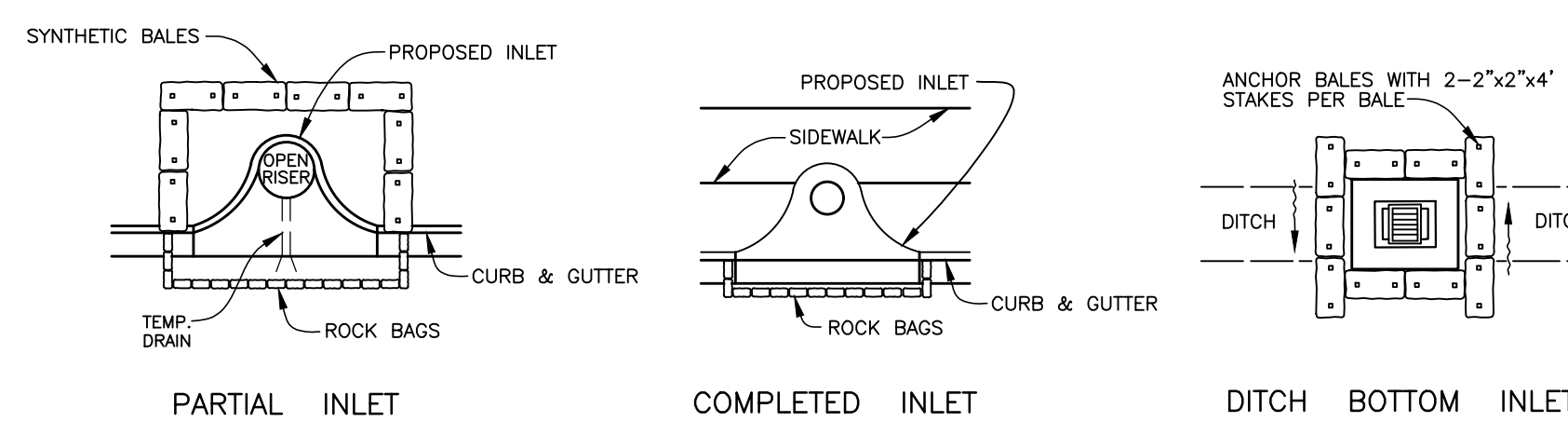


TYPICAL SILT FENCE
FIGURE 2

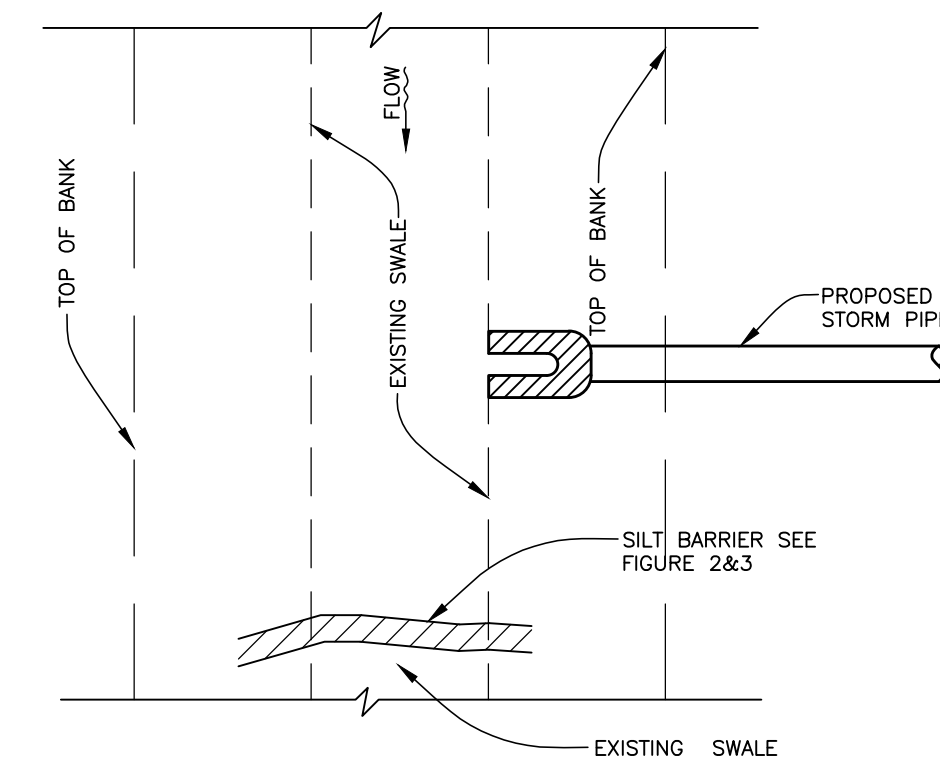
NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).



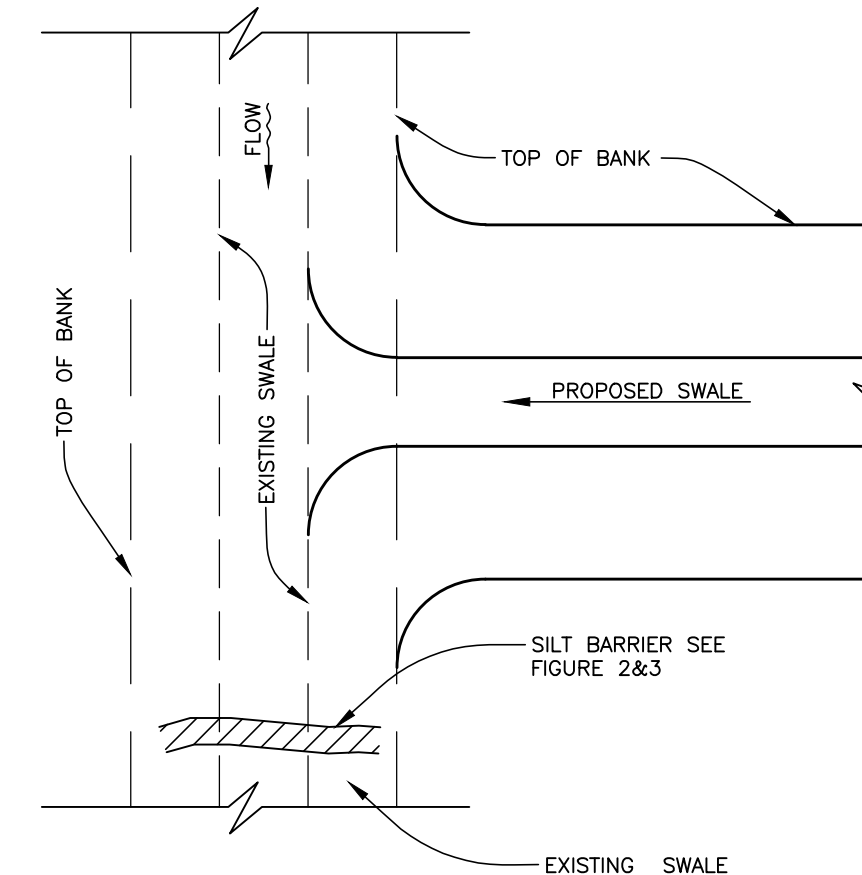
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



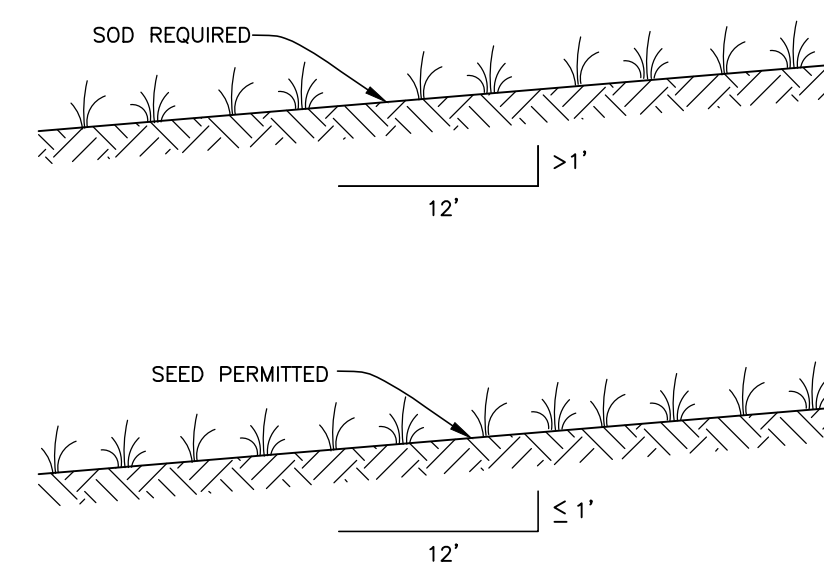
SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7



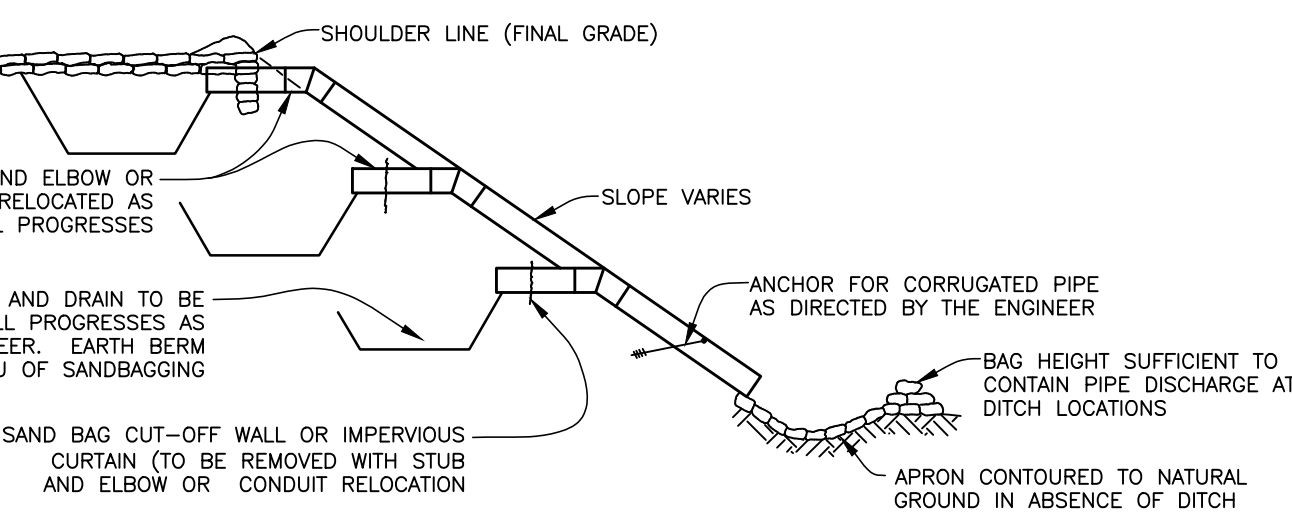
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



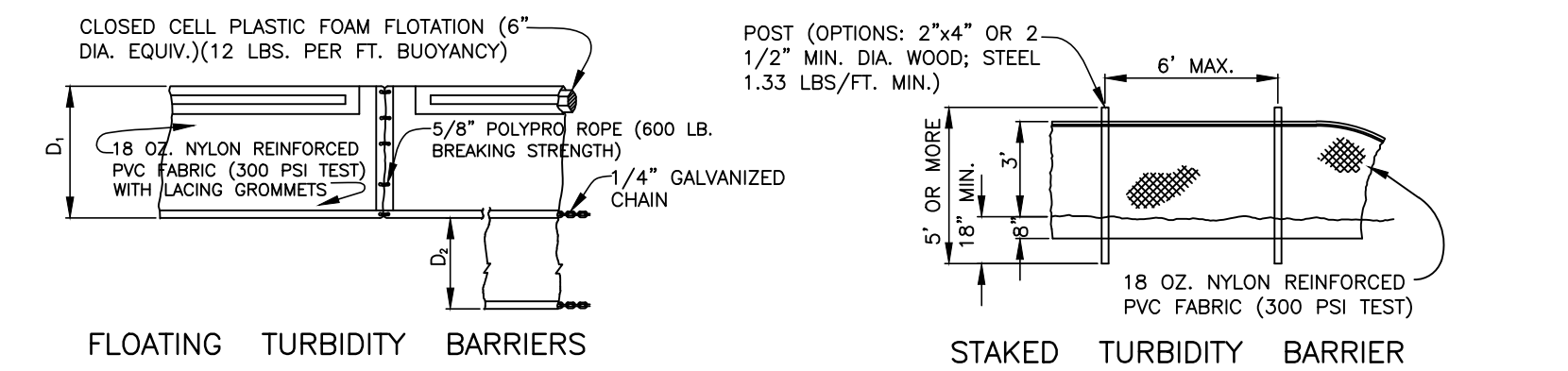
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15

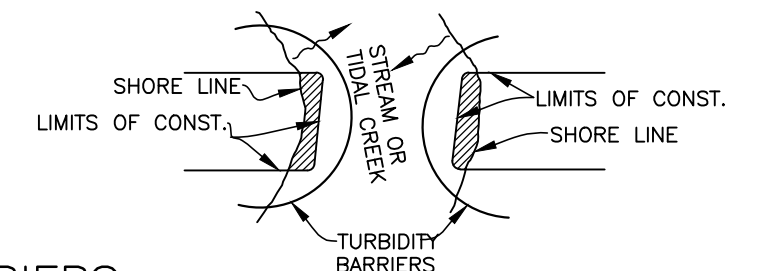


FLOATING TURBIDITY BARRIERS

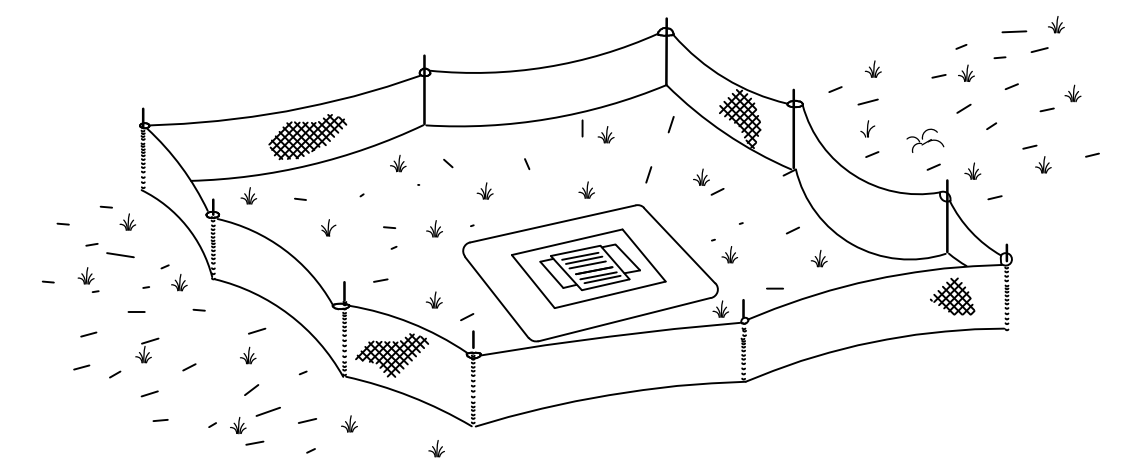
STAKED TURBIDITY BARRIER

D₁ = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS). D₂ = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

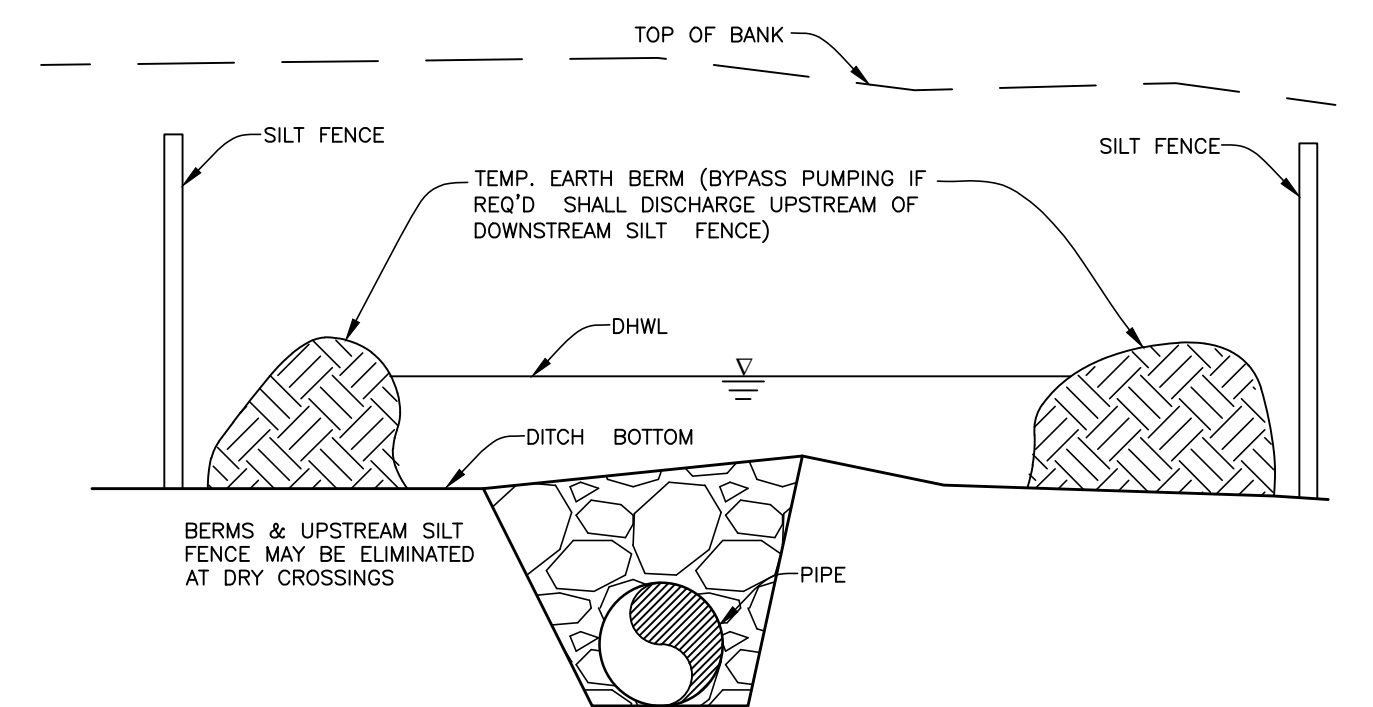
NOTE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



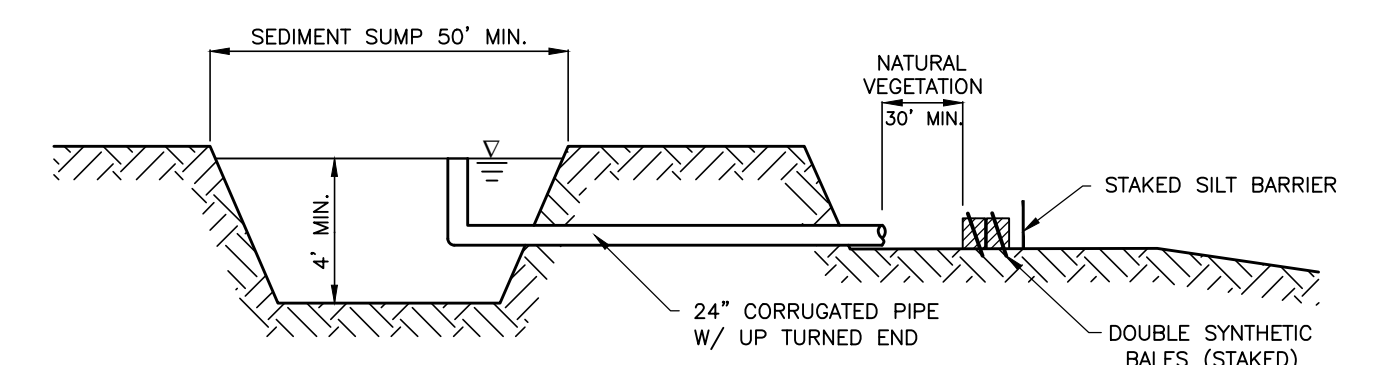
TURBIDITY BARRIERS
FIGURE 4



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



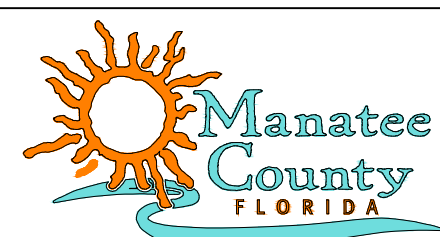
UNDERGROUND PIPE CROSSING
FIGURE 12



SEDIMENT SUMP SECTION
FIGURE 16

REVISIONS

DATE	DESCRIPTION



1022 26th Avenue East, Bradenton, FL 34208

J. SHEA SHOUN, STATE OF FLORIDA,
PROFESSIONAL ENGINEER, LICENSE NO. 60923.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY
J. SHEA SHOUN ON THE DATE INDICATED HERE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT
CONSIDERED SIGNED AND SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

**MANATEE COUNTY
PUBLIC WORKS DEPARTMENT**

PROJECT #	404-6089781	SURVEYED	GFY	03/2023
SEC./TWN./RGE	19,20,29./34/17	DESIGNED	JSS/BLR	08/2023
SCALE	SEE PLANS	DRAWN	BLR/JSS	08/2023

**SOUTHWEST SERVICE AREA D
FORCE MAIN REPLACEMENT
EROSION CONTROL**

SHEET
NO.

28 of 28