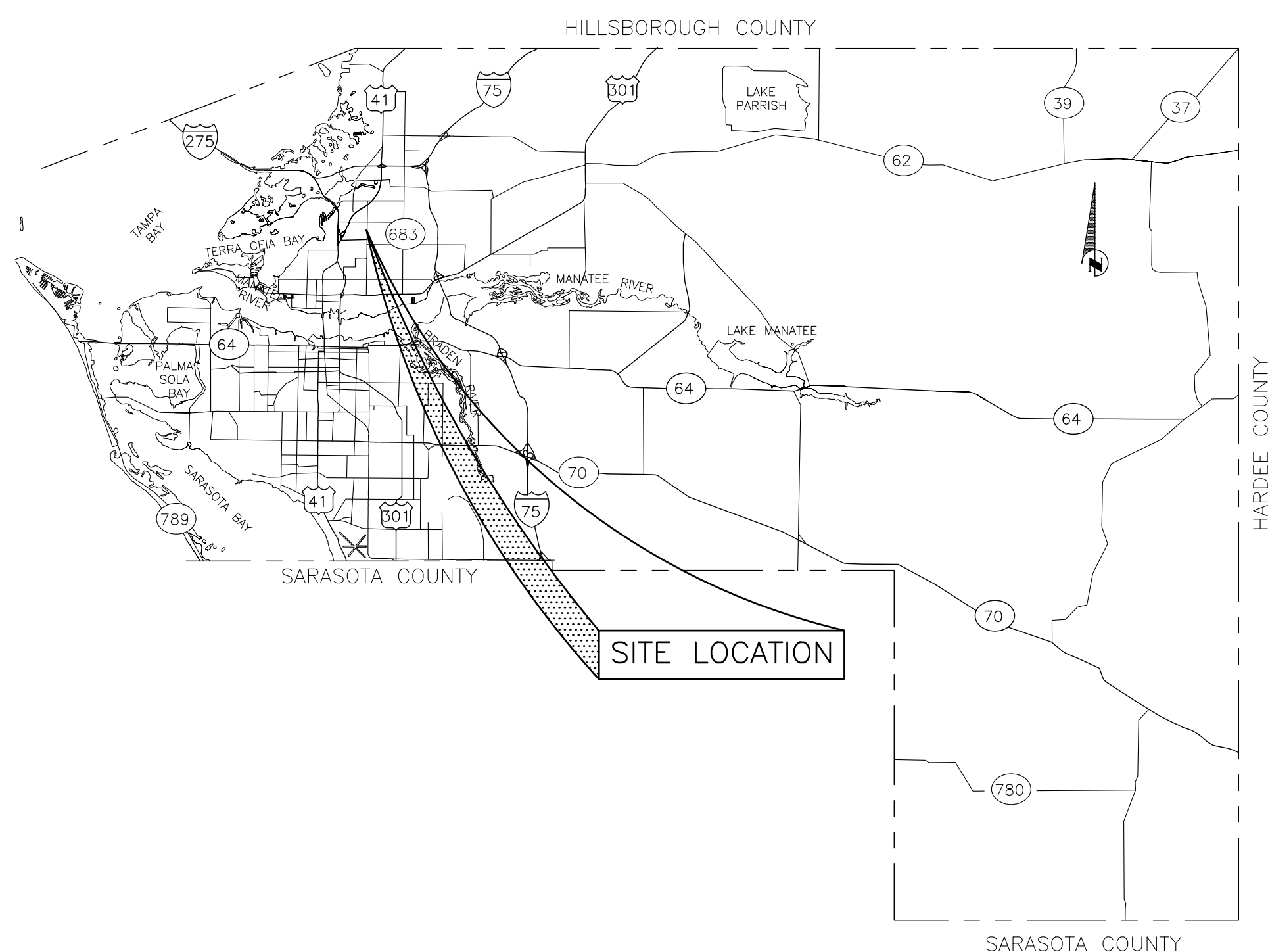
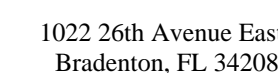


January 2016



NO.	INDEX OF SHEETS
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	KEY SHEET
4-18	PLAN & PROFILE
19-21	DETAILS
22	EROSION CONTROL

THE PROJECT INVOLVES THE REPLACEMENT AND ABANDONMENT OF AN EXISTING 16-INCH PVC WATER MAIN WITH A NEW 16-INCH DIP WATER MAIN ON CANAL ROAD BETWEEN MENDOZA ROAD AND U.S. 41. THE WORK WILL TAKE PLACE WITHIN MANATEE COUNTY AND FDOT RIGHT-OF-WAY. THE EXISTING WATER MAIN SHALL BE GROUTED AND ABANDONED IN PLACE.



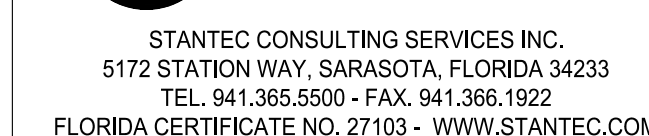
CANAL ROAD WATER MAIN REPLACEMENT COVER SHEET

REVISION DESCRIPTION		BY	DATE
NO.			
PROJECT #		177310570	
SURVEY #		000	
SEC./TWN./RGE		36/33S/17E	
SCALE		1"=XX'	
	BY	DATE	
SURVEYED	GFY	03/06/00	
DESIGNED	SCM	00/00/00	
DRAWN	KG	00/00/00	
CHECKED	RJH	00/00/00	

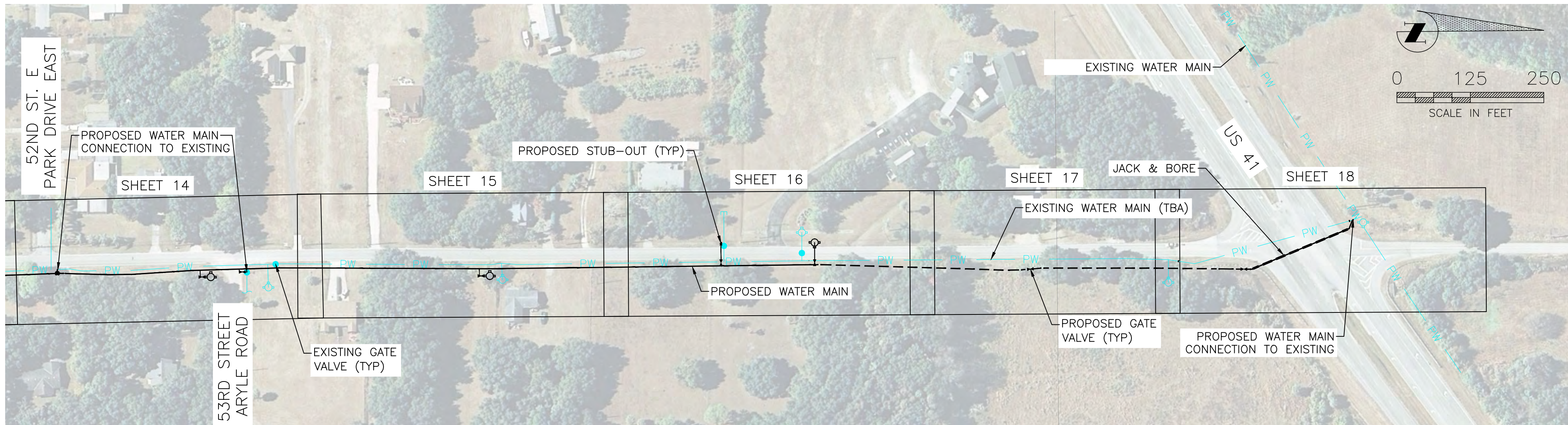
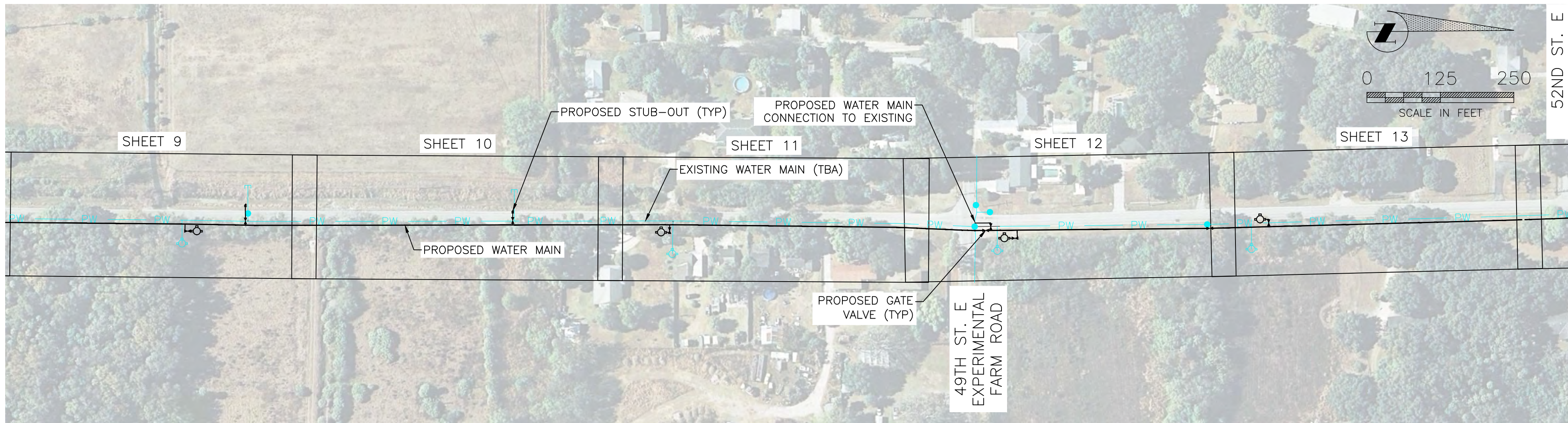
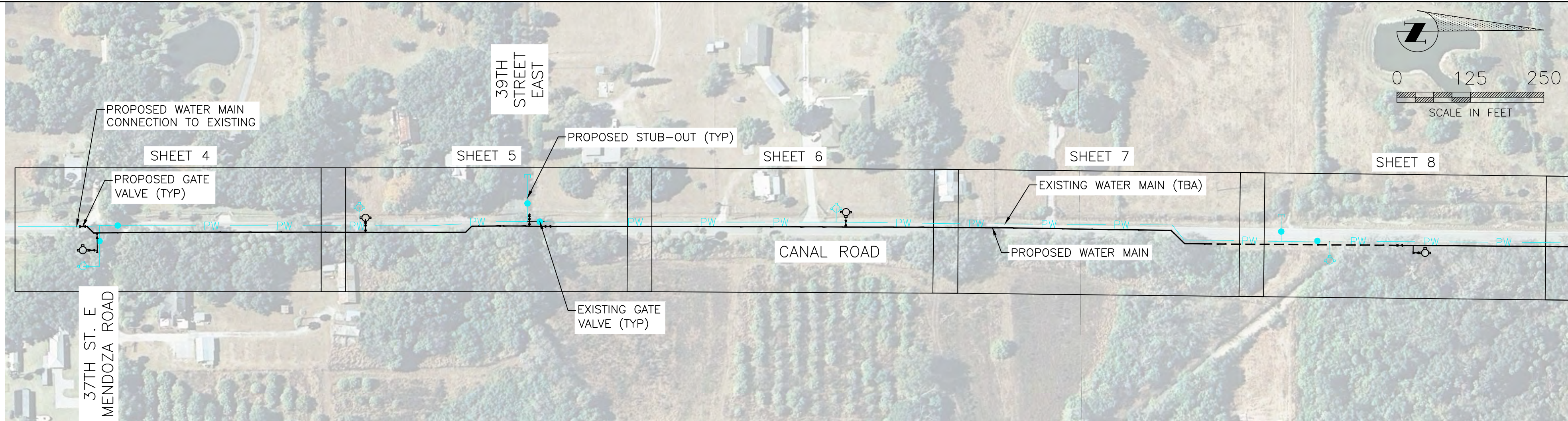
STEPHEN C. MACEACHER
FLORIDA P.E. # 76020

Signature & Date

SHEET 1



U:\1773\Active\1773\05\20\Design\Sheet\1773\05-003.dwg Layout 1 1/11/2016 10:41 AM Galbreath, km, 13.5, AECI Full bleed D (36.00 x 24.00 inches)



CONTROL							
POINT	STATION	OFFSET	NORTHING	EASTING	ELEV	DESCRIPTION	
GPS1	N/A	N/A	1167928.38	478477.79	18.13'	SET IRC 1/2" GFY	
GPS2	1+48.10	14.78' RT	1168429.24	478514.31	18.96'	SET IRC 1/2" GFY	
GPS3	36+22.66	14.95' LT	1171903.68	478539.69	17.16'	SET IRC 1/2" GFY	
GPS4	40+32.19	13.35' RT	1172312.73	478574.23	19.21'	SET IRC 1/2" GFY	
GPS5	72+65.99	31.00' RT	1175546.43	478579.81	13.48'	SET IRC 1/2" GFY	
GPS6	N/A	N/A	1175862.22	478532.57	12.85'	SET IRC 1/2" GFY	
A3	5+21.28	14.17' LT	1168802.67	478488.90	19.38'	SET IRC 1/2" GFY	
A4	11+41.57	12.68' RT	1169422.69	478521.40	19.54'	SET IRC 1/2" GFY	
A5	14+97.22	13.18' RT	1169778.12	478527.81	18.70'	SET IRC 1/2" GFY	
A6	18+81.94	16.62' LT	1170163.38	478506.00	14.87'	SET IRC 1/2" GFY	
A7	22+96.07	14.86' RT	1170576.77	478546.06	14.67'	SET IRC 1/2" GFY	
A8	27+75.00	22.77' LT	1171056.37	478518.37	17.85'	SET IRC 1/2" GFY	
B1	44+70.58	19.12' RT	1172751.56	478574.97	16.35'	SET IRC 1/2" GFY	
B2	50+34.90	18.71' LT	1173315.24	478528.65	18.42'	SET IRC 1/2" GFY	
B3	55+16.82	14.67' LT	1173797.47	478527.03	16.87'	SET IRC 1/2" GFY	
B4	59+39.36	18.26' RT	1174219.86	478561.68	16.75'	SET IRC 1/2" GFY	
B5	64+19.14	17.93' LT	1174699.79	478527.44	16.97'	SET IRC 1/2" GFY	
B6	69+30.89	22.50' LT	1175211.56	478524.95	14.38'	SET IRC 1/2" GFY	
SEMINOLE	1+52.84	29.91' RT	1168433.83	478529.48	18.77'	FOUND CONCRETE MONUMENT w/ DISK	
SUMTER	40+48.97	39.72' RT	1172329.10	478600.85	18.99'	FOUND CONCRETE MONUMENT w/ DISK	

Subsurface Utility Locations											
Name	Station	Offset	Northing	Easting	Surface	Depth	TOP	Surface	Comment	Owner	
VVH101	1+54.08	9.79' LT	1168435.45	478489.79	19.31'	2.44'	16.87'	SOIL	4" PVC TELEPHONE	VERIZON	
VVH102	1+52.87	11.33' LT	1168434.25	478488.24	19.61'	2.61'	17.00'	SOIL	1" + 2" DIRECT BURIED + 4" PVC TELEPHONE	VERIZON	
EDO104	1+05.90	9.85' LT	1168387.27	478489.28	19.02'	5.3'	13.7'	ASPHALT	ELECTRONIC DEPTH ONLY - WATER MAIN	MANATEE CO.	
VVH105	7+32.98	13.13' LT	1169014.35	478491.95	19.31'	4.40'	14.91'	SOIL	16" PVC WATER MAIN	MANATEE CO.	
VVH106	8+70.40	12.28' LT	1169151.75	478494.05	18.85'	4.66'	14.19'	SOIL	16" PVC WATER MAIN	MANATEE CO.	
VVH107	53+07.53	13.53' RT	1173588.33	478556.78	16.88'	3.66'	13.22'	SOIL	16" PVC WATER MAIN	MANATEE CO.	
VVH108	68+35.59	11.31' RT	1175116.12	478558.38	15.12'	3.40'	11.72'	SOIL	16" PVC WATER MAIN	MANATEE CO.	
EDO109	72+34.60	9.05' LT	1175515.21	478539.64	13.65'	7.8'	5.9'	ASPHALT	ELECTRONIC DEPTH ONLY - UNKNOWN	UNKNOWN	
VVH110	38+13.89	11.80' RT	1172094.48	478569.35	17.88'	1.15'	16.73'	SOIL	0.5" DIRECT BURIED TELEPHONE -	VERIZON	
VVH111	40+95.37	28.55' RT	1172376.54	478590.04	19.21'	2.95'	16.26'	ASPHALT	8" PVC WATER MAIN	MANATEE CO.	
VVH112	54+11.27	18.44' RT	1173692.13	478560.12	16.30'	2.35'	13.95'	SOIL	1" DIRECT BURIED TELEPHONE	VERIZON	
VVH113	54+12.88	17.10' RT	1173693.72	478558.77	16.44'	2.45'	13.99'	SOIL	1" DIRECT BURIED TELEPHONE	VERIZON	
VVH114	70+01.44	19.19' RT	1175281.93	478566.93	15.14'	3.27'	11.87'	SOIL	4" PVC TELEPHONE	VERIZON	
VVH115	70+26.26	21.48' RT	1175306.74	478569.32	15.34'	3.57'	11.77'	SOIL	6" STEEL TELEPHONE	VERIZON	
VVH116	70+37.45	21.80' RT	1175317.93	478569.69	15.59'	7.83'	7.76'	SOIL	FIBER OPTIC (SIZE/MATERIAL NFV)	VERIZON	
VVH117	1+45.36	6.46' LT	1168426.69	478493.04	19.20'	3.85'	15.35'	ASPHALT	WATER MAIN (SIZE/MATERIAL NFV)	MANATEE CO.	
VVH118	0+98.31	5.34' LT	1168379.63	478493.72	18.97'	3.93'	14.04'	ASPHALT	WATER MAIN (SIZE/MATERIAL NFV)	MANATEE CO.	

WATER MAIN CONSTRUCTION SEQUENCE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND SUBMITTING A SCHEDULE OF CONSTRUCTION OF THE NEW WATER MAIN FOR REVIEW BY MANATEE COUNTY. THE GENERAL SEQUENCING LISTED BELOW SHOULD BE TAKEN IN TO CONSIDERATION BY THE CONTRACTOR IN THE PREPARATION OF THE PROPOSED SEQUENCING OF THE WATER MAIN.

- INSTALL SEGMENT OF NEW WATER MAIN BETWEEN TWO OR MORE CONNECTION POINTS TO THE EXISTING WATER MAIN (EITHER PERMANENT OR TEMPORARY CONNECTIONS).
- SELECT SEGMENTS WHICH WILL MINIMIZE DISRUPTIONS TO THE PUBLIC AND KEEP THE WATER SYSTEM LOOPED IF POSSIBLE.
- WITH THE USE OF A JUMPER; CLEAN, PIG, AND FLUSH THE NEW WATER MAIN.
- PRESSURE TEST, BAC-T, AND PARTIALLY CERTIFY THE MAIN.
- MAKE CONNECTION TO EXISTING MAIN AND CHANGE OVER WATER SERVICES. THE EXISTING MAIN TO REMAIN IN SERVICE UNTIL THE NEW WATER SERVICE CONNECTIONS ARE MADE TO THE NEW MAIN.
- EXISTING MAIN TO BE ABANDONED IN PLACE, GROUTED WITH FLOWABLE FILL, AND CAPPED AT ENDS. EXISTING VALVES THAT ARE ABANDONED IN PLACE SHALL BE CLOSED AND THE OPERATING ASSEMBLY REMOVED.
- EXISTING MAINS PLACED OUT OF SERVICE WHICH ARE IN CONFLICT WITH THE NEW SYSTEM IMPROVEMENTS OR MAINS EASILY ACCESSIBLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

THE CONTRACTOR SHALL REVIEW WITH THE LOCAL FIRE DEPARTMENT IF IT MAY BE NECESSARY TO TAKE AN EXISTING FIRE HYDRANT OUT OF SERVICE BEFORE THE NEW ADJACENT FIRE HYDRANT CAN BE PLACED IN OPERATION.

ROAD AND DRIVEWAY RESTORATION

IN AREAS WHERE THE NEW WATER MAIN IS INSTALLED PARALLEL TO AND UNDER THE ROADWAY, THE FULL WIDTH OF THE ROAD SHALL BE MILLED AND RESURFACED PER MANATEE COUNTY REQUIREMENTS. ANY CROSS CUTS OF ROADWAYS SHALL BE MILLED AND RESURFACED TO THE WIDTH REQUIRED BY MANATEE COUNTY.

ROADWAYS DAMAGED BY WATER MAIN INSTALLATION OUTSIDE OF THE ROAD SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE COUNTY.

REPAIR/REPLACEMENT OF PRIVATE DRIVEWAYS IMPACTED BY THE INSTALLATION OF THE WATER MAIN OR OTHER CONSTRUCTION RELATED ACTIVITIES IS CONSIDERED TO BE INCLUDED IN THE UNIT COST PRICE OF THE WATER MAIN. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR. THE PRIVATE DRIVEWAYS SHALL BE RESTORED BACK TO THEIR ORIGINAL CONDITION OF BETTER.

MANATEE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN
REPLACEMENT
KEY SHEET

NO.	REVISION	DESCRIPTION	BY	DATE

PROJECT #	177310570
SURVEY #	000
SEC./TWN./RGE	36/33S/17E
SCALE	1"=125'

	BY	DATE
SURVEYED	GFY	03/06/15
DESIGNED	SCM	00/00/00
DRAWN	KG	00/00/00
CHECKED	RJH	00/00/00

STEPHEN C. MACEACHERN
FLORIDA P.E. # 76020

BID SET

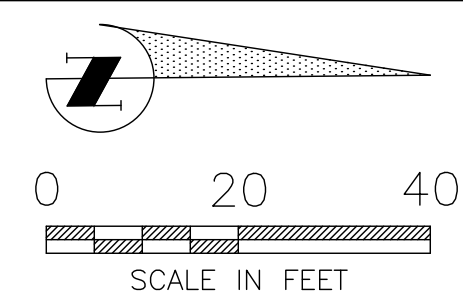
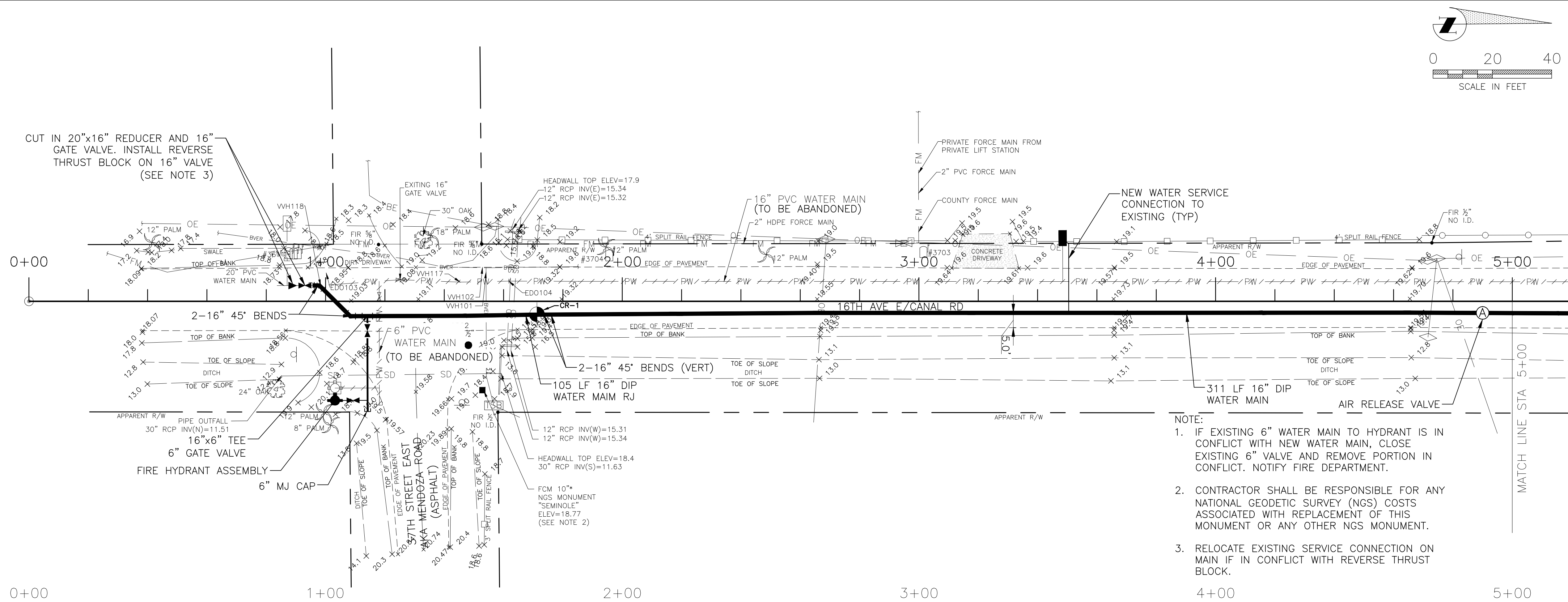


STANTEC CONSULTING SERVICES INC.
5172 STATION WAY, SARASOTA, FLORIDA 34233
TEL. 941.365.5500 • FAX. 941.366.1922
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Signature & Date

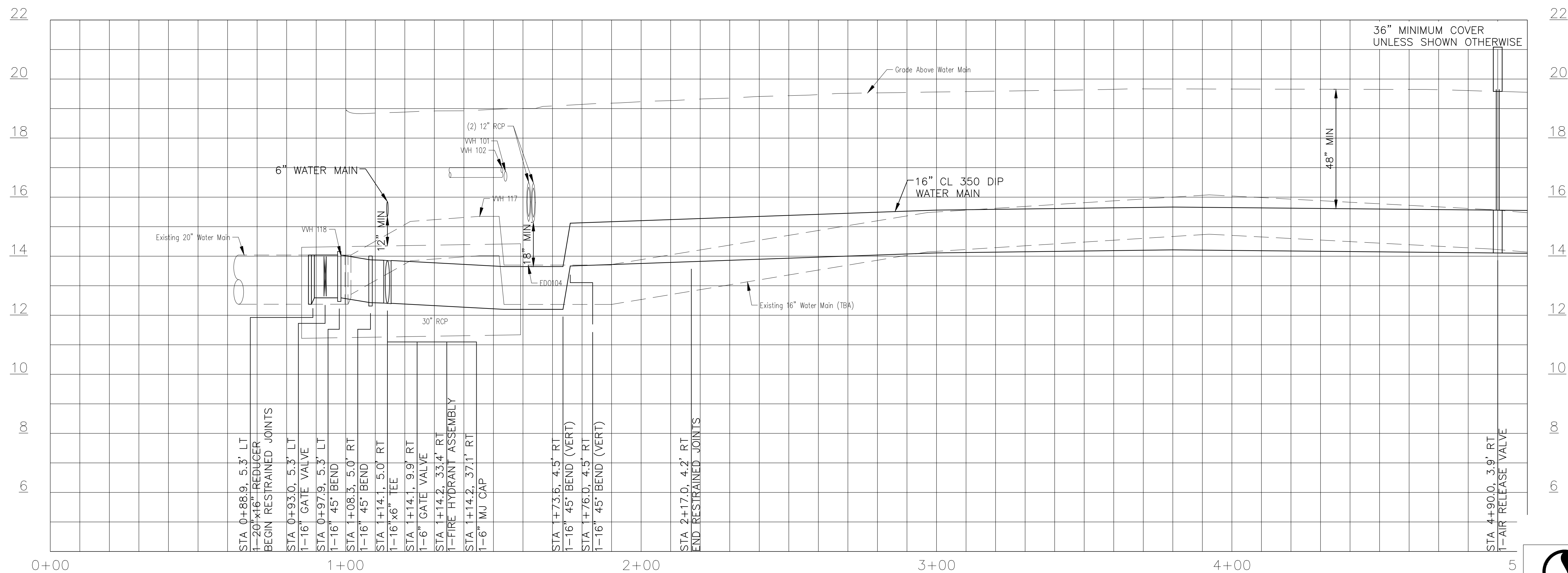
SHEET 3

\\V:\1735\active\17350570\design\sheet\17350570-004.dwg Layout 1 1/17/2016 10:42 AM Galbreath, Ken, 13.5, AECI full breed D (36.00 x 24.00 inches)



1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN REPLACEMENT PLAN & PROFILE STA. 0+00 TO 5+00



BID SET



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SHEET 4

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	177310570		
SURVEY #	000		
SEC./TWN./RGE	36/33S/17E		
SCALE	1"=20'		
	BY	DATE	
SURVEYED	GFY	03/06/15	
DESIGNED	SCM	00/00/00	
DRAWN	KG	00/00/00	
CHECKED	RJH	00/00/00	
STEPHEN C. MACEACHERN			
FLORIDA P.E. # 76020			

**CANAL ROAD WATER MAIN
REPLACEMENT
PLAN & PROFILE STA. 5+00 TO 10+00**

REVISION DESCRIPTION		BY	DATE
NO.			
PROJECT #		177310570	
SURVEY #		000	
SEC./TWN./RGE		36/33S/17E	
SCALE		1"=20'	
	BY	DATE	
SURVEYED	GFY	03/06	
DESIGNED	SCM	00/00	
DRAWN	KG	00/00	
CHECKED	RJH	00/00	
STEPHEN C. MACEACHERN			
FLORIDA P.E. # 76020			

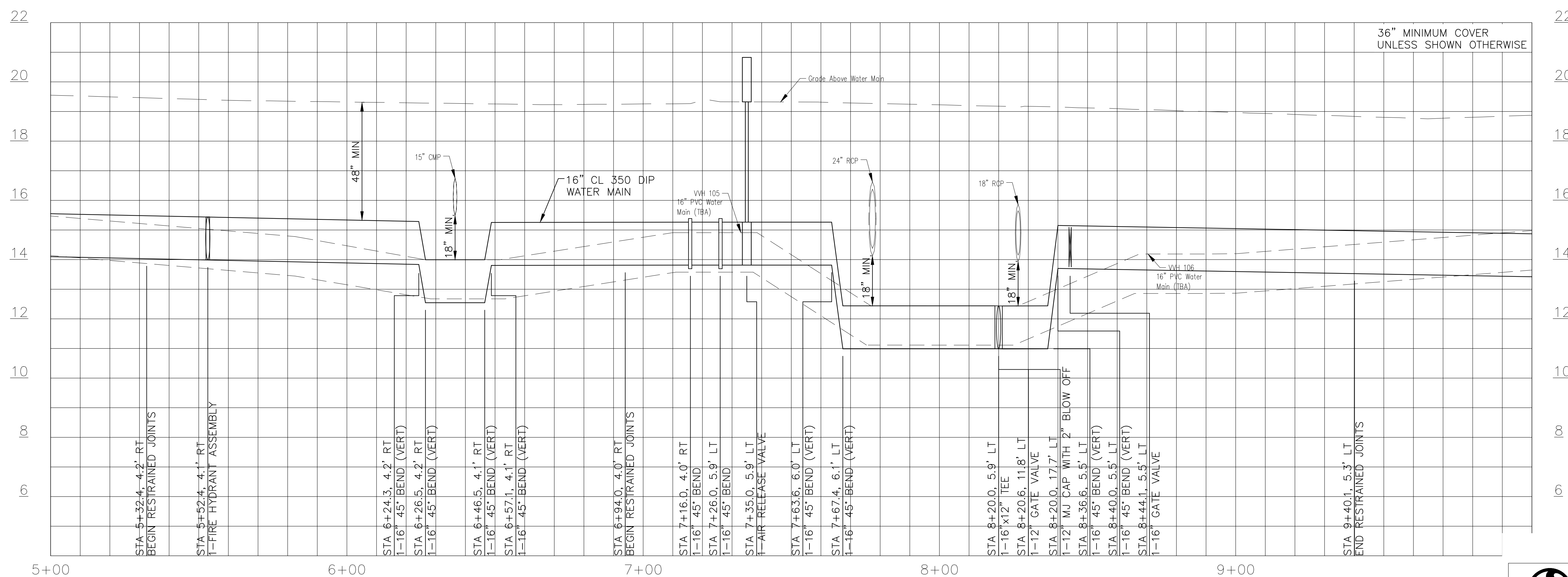
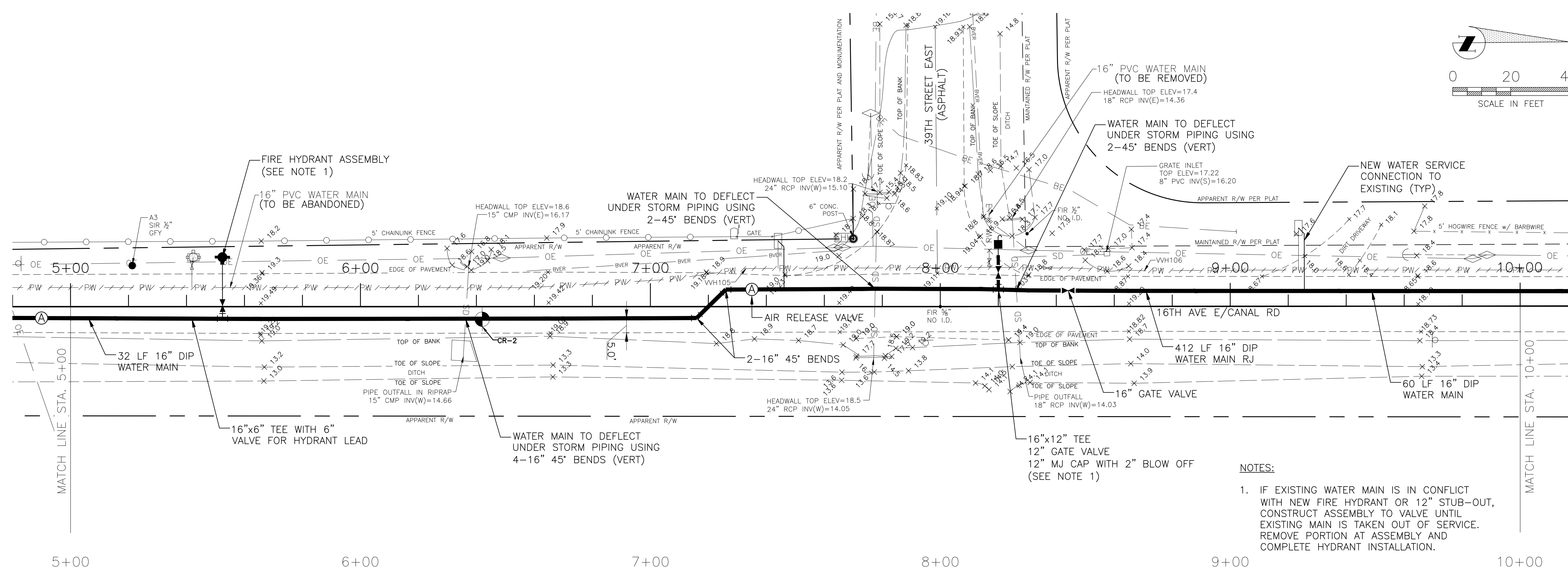
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STANTEC CONSULTING SERVICES INC.
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TEL. 941.365.5500 - FAX. 941.366.1922
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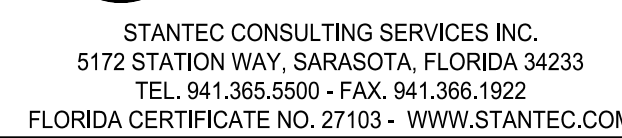
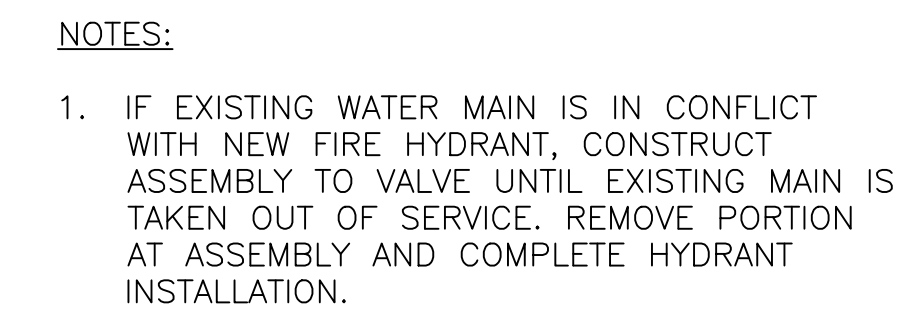
Signature & Date

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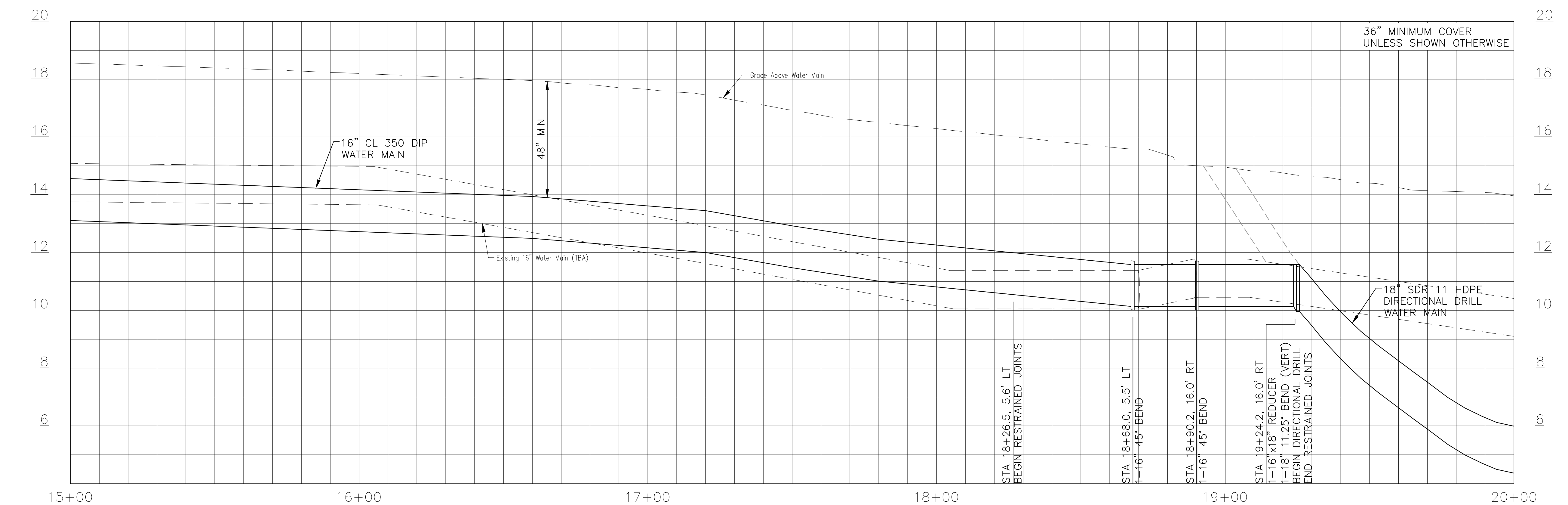
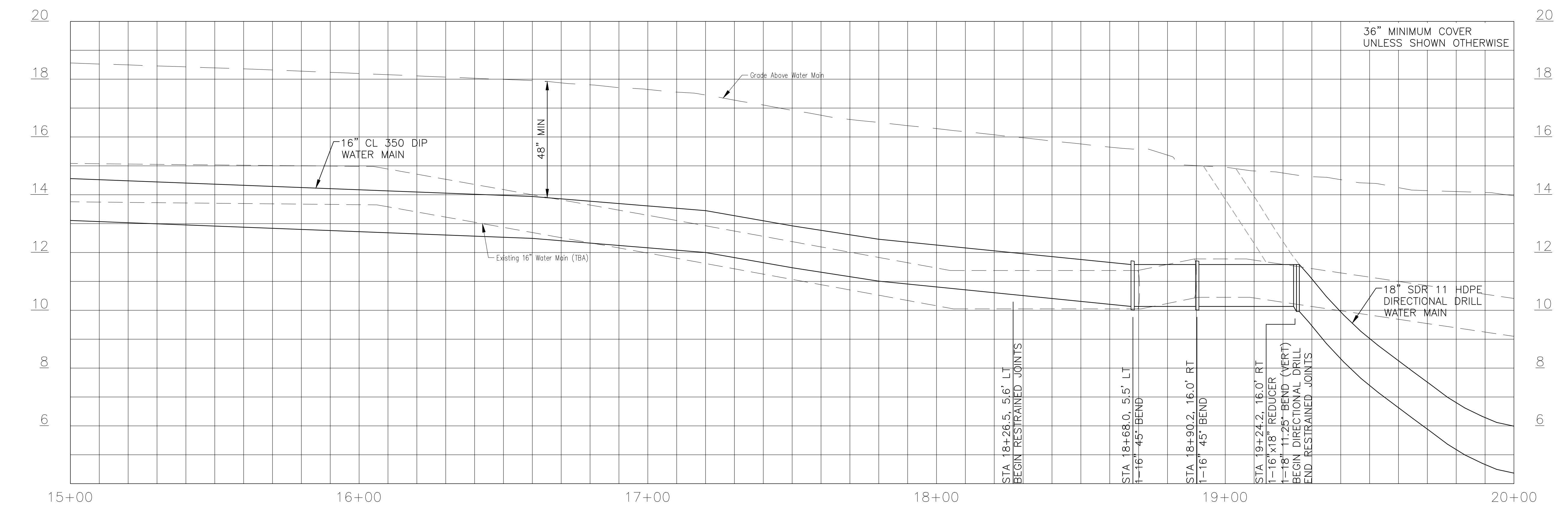




CANAL ROAD WATER MAIN REPLACEMENT PLAN & PROFILE STA. 10+00 TO 15+00




SHEET 6



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CANAL ROAD WATER MAIN REPLACEMENT PLAN & PROFILE STA. 15+00 TO 20+00

NO.		REVISION DESCRIPTION		BY	DATE
PROJECT #		177310570			
SURVEY #		000			
SEC./TWN./RGE		36/33S/17E			
SCALE		1"=20'			
	BY	DATE			
SURVEYED	GFY	03/06/15			
DESIGNED	SCM	00/00/00			
DRAWN	KG	00/00/00			
CHECKED	RJH	00/00/00			
STEPHEN C. MACEACHERN					
FLORIDA P.E. # 76020					

Signature & Date

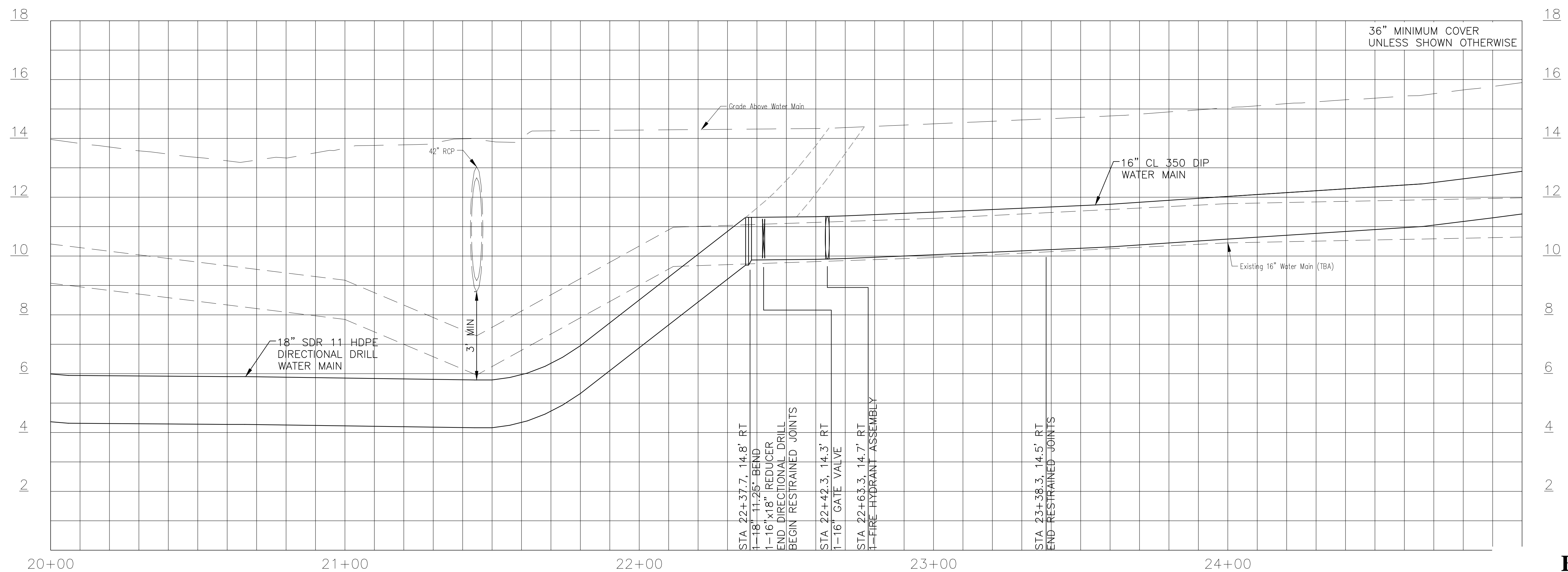
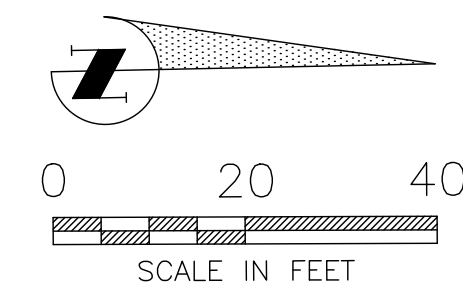
SHEET 7

FLORIDA P.E. # 76020

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SHEET 8



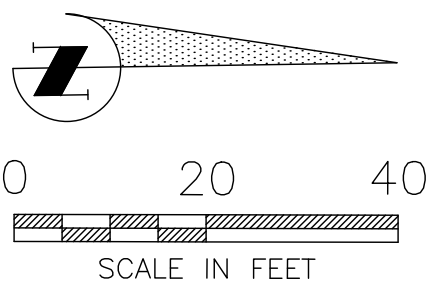
\\1773\Active\177310570\design\set0\active\water\sheet\10570cu-008.dwg Layout 1 1/11/2016 10:45 AM Galbreth, Ken. 1:0.5 ARCH full bleed D (36.00 x 24.00 inches)



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SHEET 9

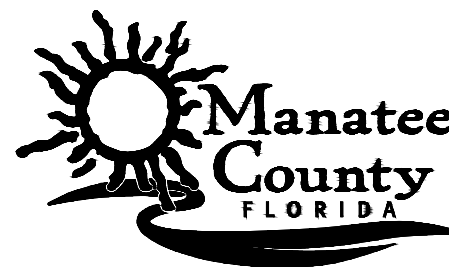


1. NEW VALVE TO BE INSTALLED AND REMAIN CLOSED. ONCE EXISTING MAIN IS TAKEN OUT OF SERVICE, REMOVE PORTION AT VALVE AND EXTEND NEW MAIN ACROSS THE STREET TO 8" CAP.



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MANATEE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



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CANAL ROAD WATER MAIN REPLACEMENT PLAN & PROFILE STA. 30+00 TO 35+00

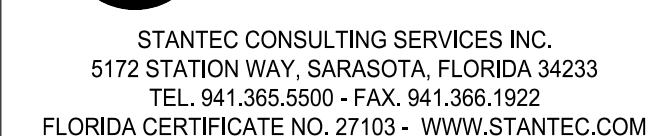
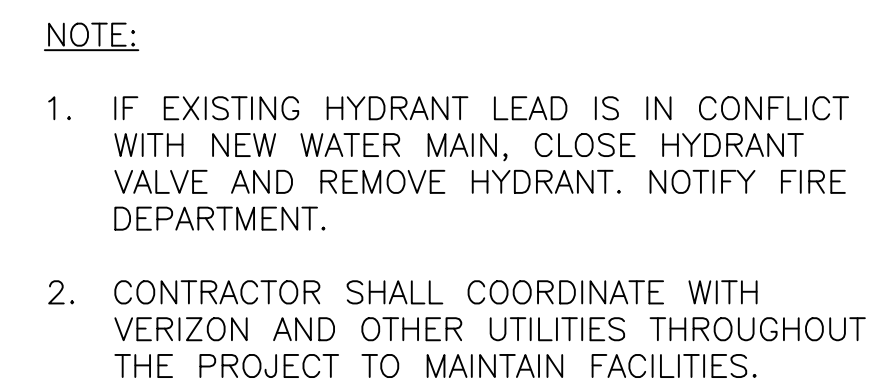
NO.	REVISION	DESCRIPTION	BY	DATE
PROJECT #		177310570		
SURVEY #		000		
SEC./TWN./RGE		36/33S/17E		
SCALE		1"=20'		
	BY	DATE		
SURVEYED	GFY	03/06/15		
DESIGNED	SCM	00/00/00		
DRAWN	KG	00/00/00		
CHECKED	RJH	00/00/00		

STEPHEN C. MACEACHERN

FLORIDA P.E. # 76020

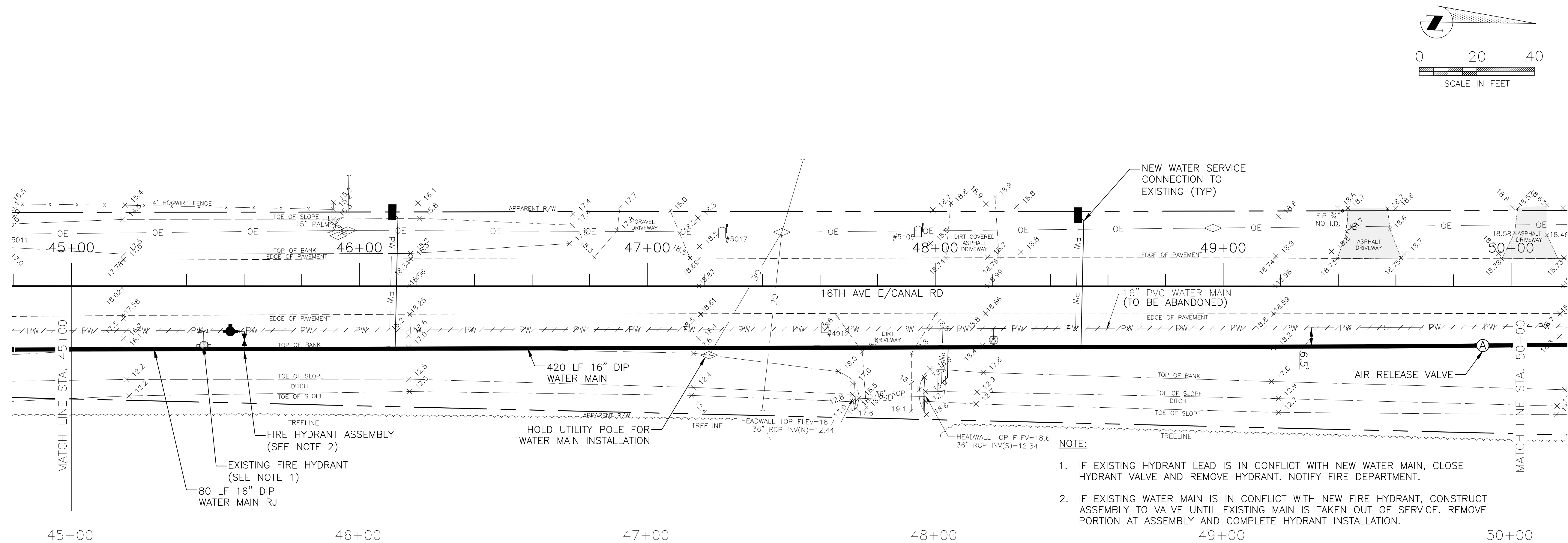
Signature & Date

SHEET 10

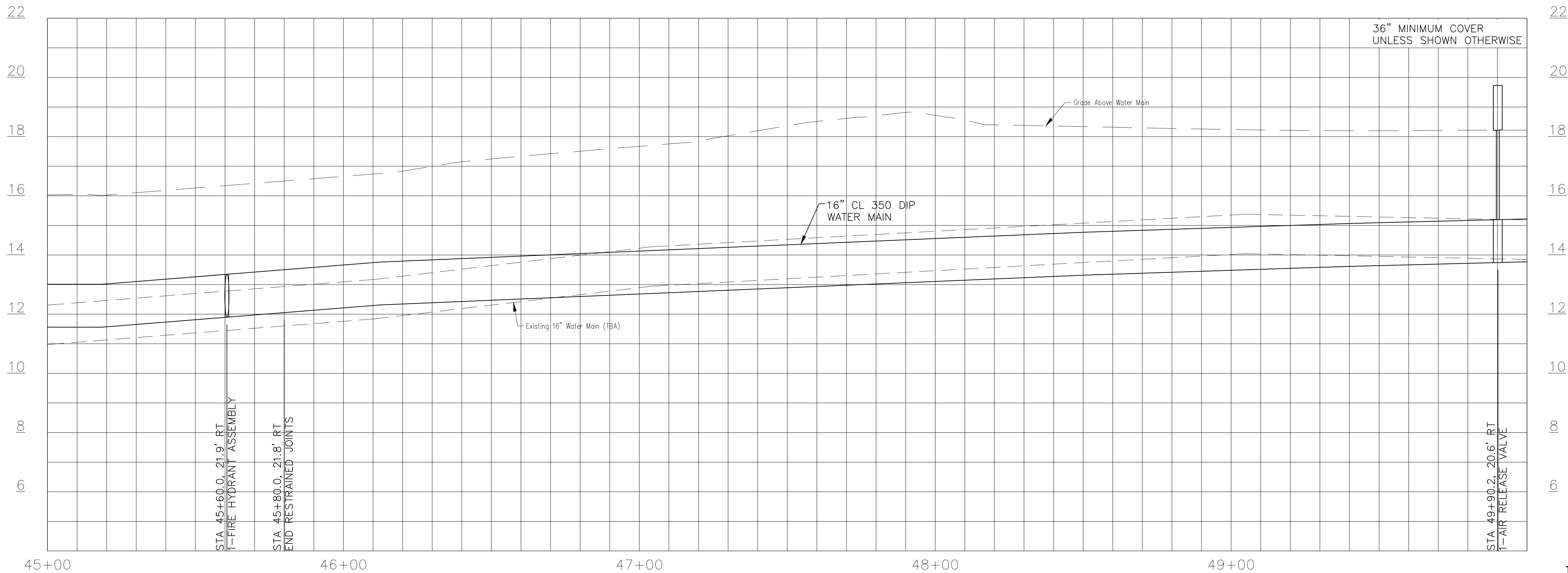


SHEET 12

U:\1733\Active\173310570\Design\Sheet\173310570-013.dwg Layout 1 1/11/2016 10:49 AM Galbreath, Ken 13.5, AECII Full bleed D (36.00 x 24.00 inches)



- NOTE:
1. IF EXISTING HYDRANT LEAD IS IN CONFLICT WITH NEW WATER MAIN, CLOSE HYDRANT VALVE AND REMOVE HYDRANT. NOTIFY FIRE DEPARTMENT.
 2. IF EXISTING WATER MAIN IS IN CONFLICT WITH NEW FIRE HYDRANT, CONSTRUCT ASSEMBLY TO VALVE UNTIL EXISTING MAIN IS TAKEN OUT OF SERVICE. REMOVE PORTION AT ASSEMBLY AND COMPLETE HYDRANT INSTALLATION.



BID SET



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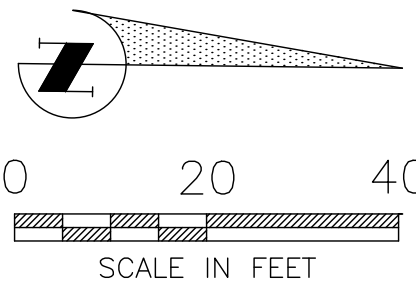
1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN
REPLACEMENT
PLAN & PROFILE STA. 45+00 TO 50+00

NO.	REVISION	DESCRIPTION	BY	DATE
PROJECT #	177310570			
SURVEY #	000			
SEC./TWN./RGE	36/33S/17E			
SCALE	1"=20'			
SURVEYED	GFY	03/06/15	BY	DATE
DESIGNED	SCM	00/00/00		
DRAWN	KG	00/00/00		
CHECKED	RJH	00/00/00		
STEPHEN C. MACEACHERN				
FLORIDA P.E. # 76020				

Signature & Date

SHEET 13



**Manatee
County**
FLORIDA

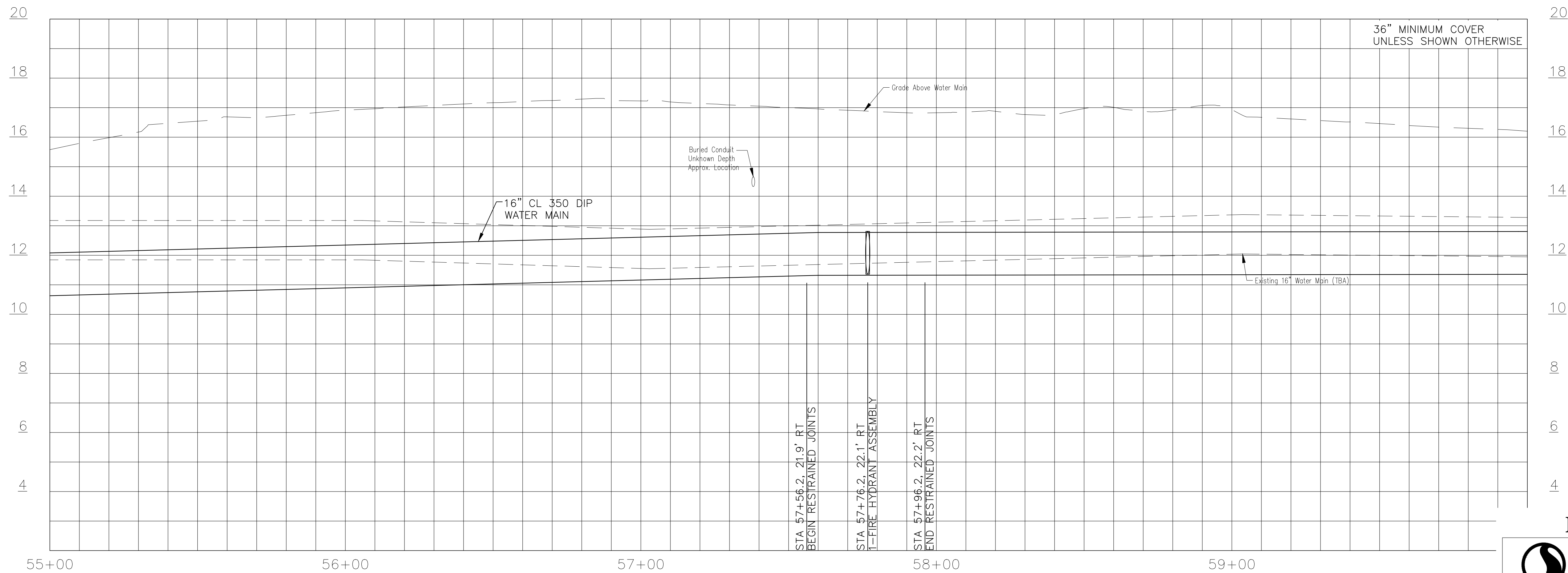
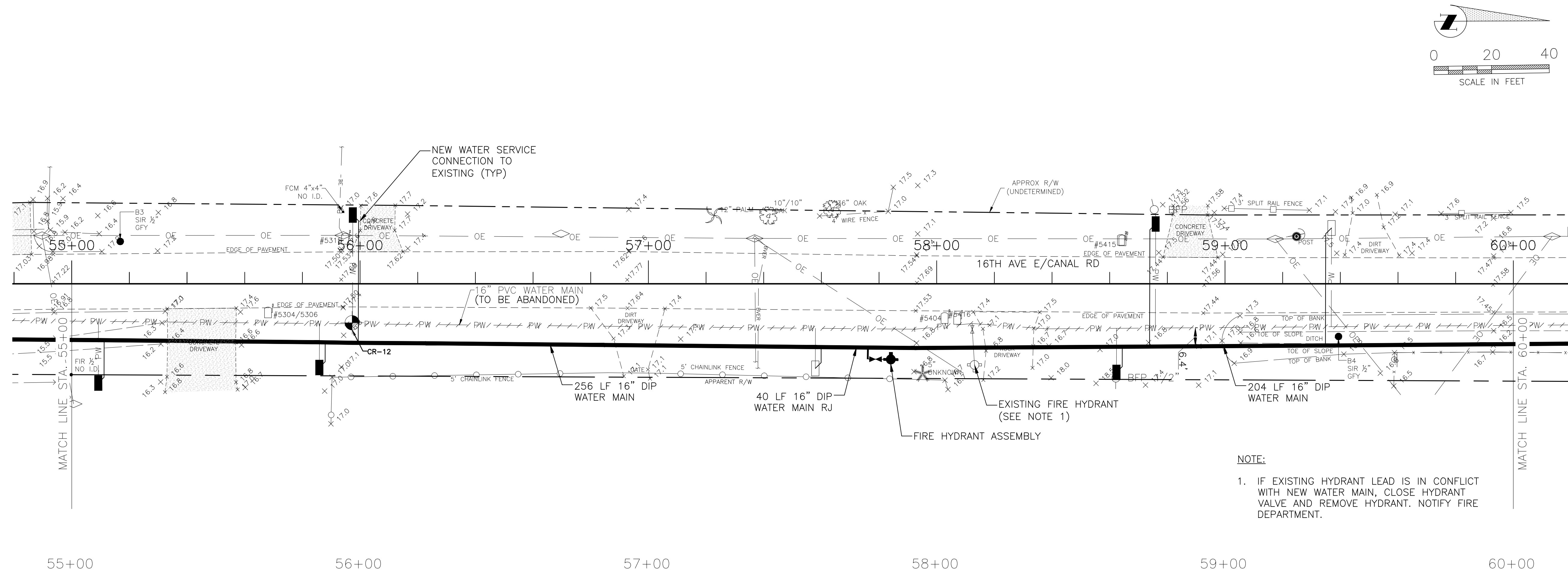
**CANAL ROAD WATER MAIN
REPLACEMENT
PLAN & PROFILE STA. 50+00 TO 55+00**

[illegible]

STANTEC CONSULTING SERVICES INC.
5172 STATION WAY, SARASOTA, FLORIDA 34233
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FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

SHEET 14

U:\1773\Active\177310570\Design\Drawings\177310570-015.dwg Layout 1 1/11/2016 10:51 AM Galbreath, Ken 13.5, AECB Full breed D (36.00 x 24.00 inches)



MANATEE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN REPLACEMENT PLAN & PROFILE STA. 55+00 TO 60+00

NO.		REVISION DESCRIPTION		BY	DATE
PROJECT #		177310570			
SURVEY #		000			
SEC./TWN./RGE		36/33S/17E			
SCALE		1"=20'			
		BY	DATE		
SURVEYED		GFY	03/06/15		
DESIGNED		SCM	00/00/00		
DRAWN		KG	00/00/00		
CHECKED		RJH	00/00/00		
STEPHEN C. MACEACHERN					
FLORIDA P.E. # 76020					

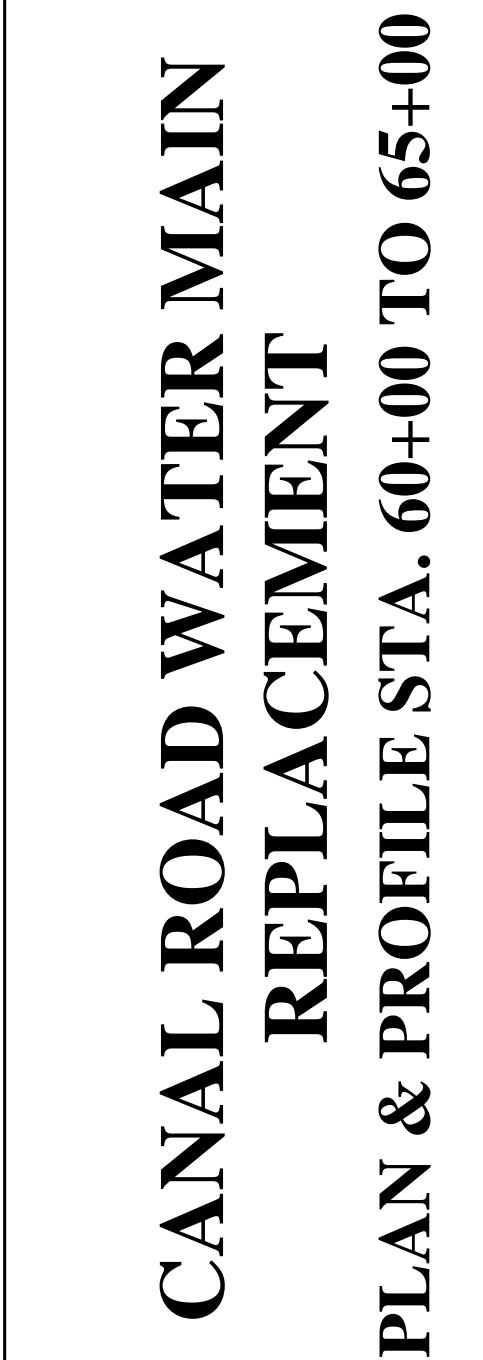
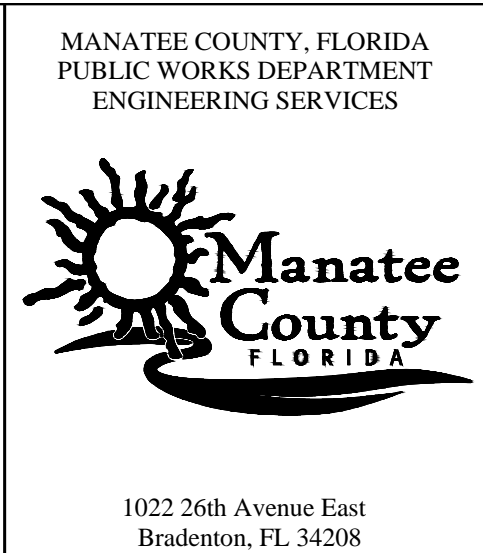
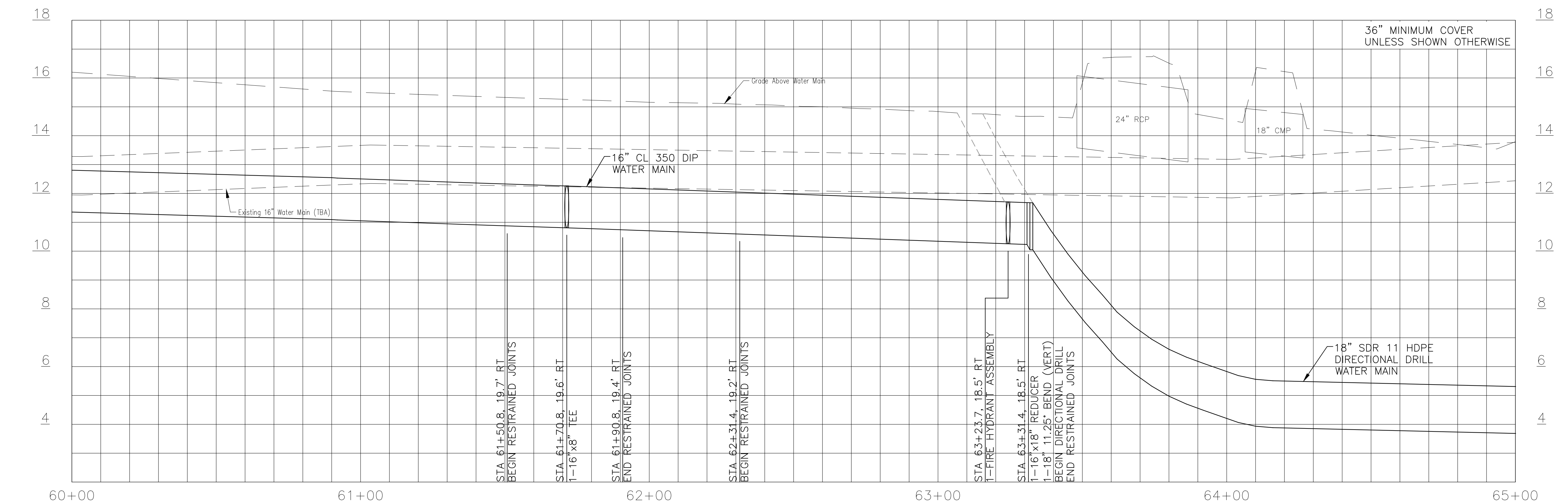
BID SET



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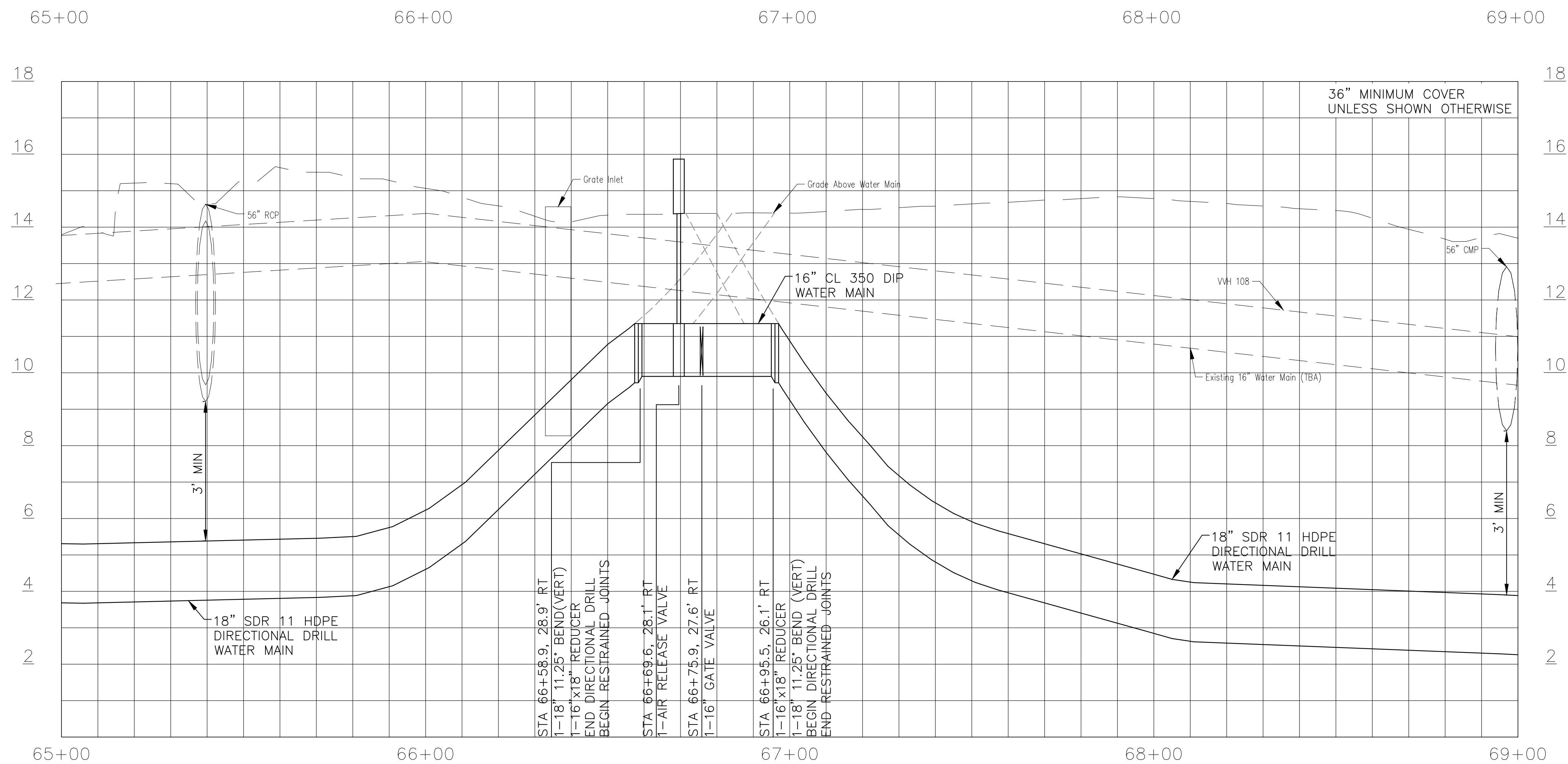
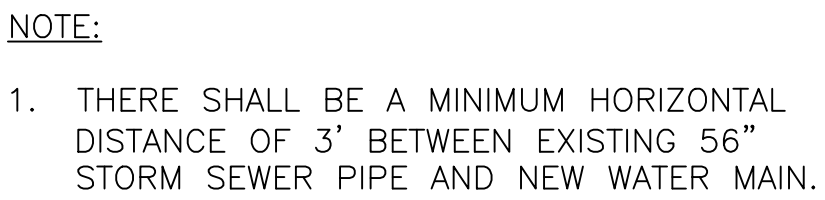
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**CANAL ROAD WATER MAIN
REPLACEMENT
PLAN & PROFILE STA. 65+00 TO 69+00**

NO.		REVISION DESCRIPTION		BY	DATE
PROJECT #		177310570			
SURVEY #		000			
SEC./TWN./RGE		36/33S/17E			
SCALE		1"=20'			
	BY	DATE			
SURVEYED	GFY	03/06/15			
DESIGNED	SCM	00/00/00			
DRAWN	KG	00/00/00			
CHECKED	RJH	00/00/00			
STEPHEN C. MACEACHERN					
FLORIDA P.E. # 76020					

Signature & Date

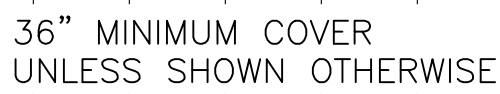
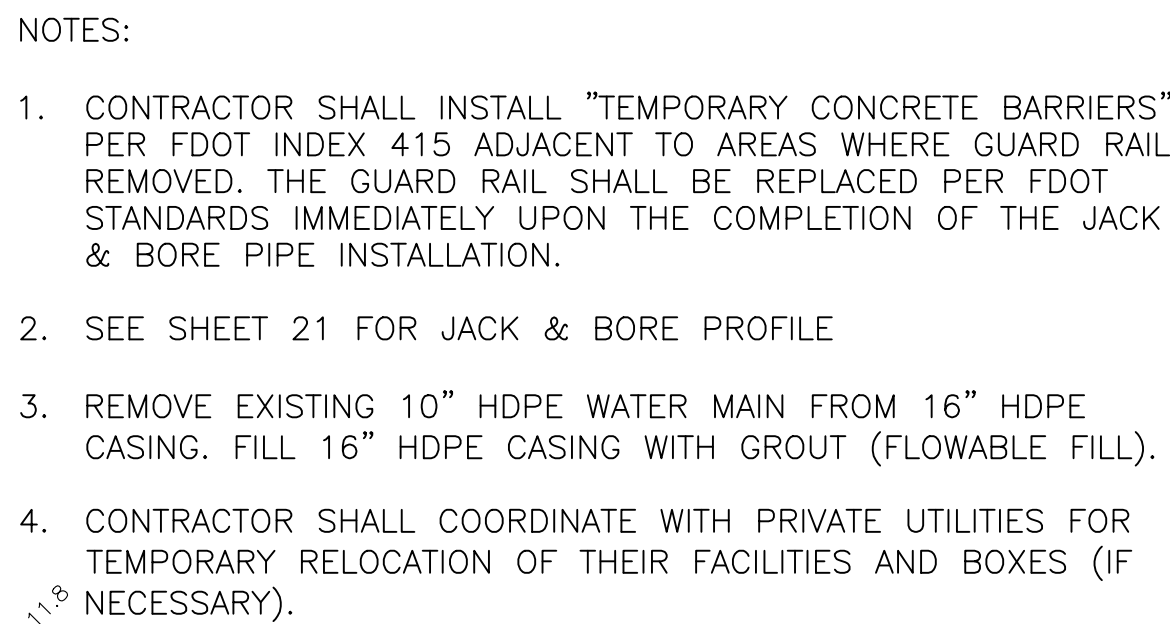
SHEET 17



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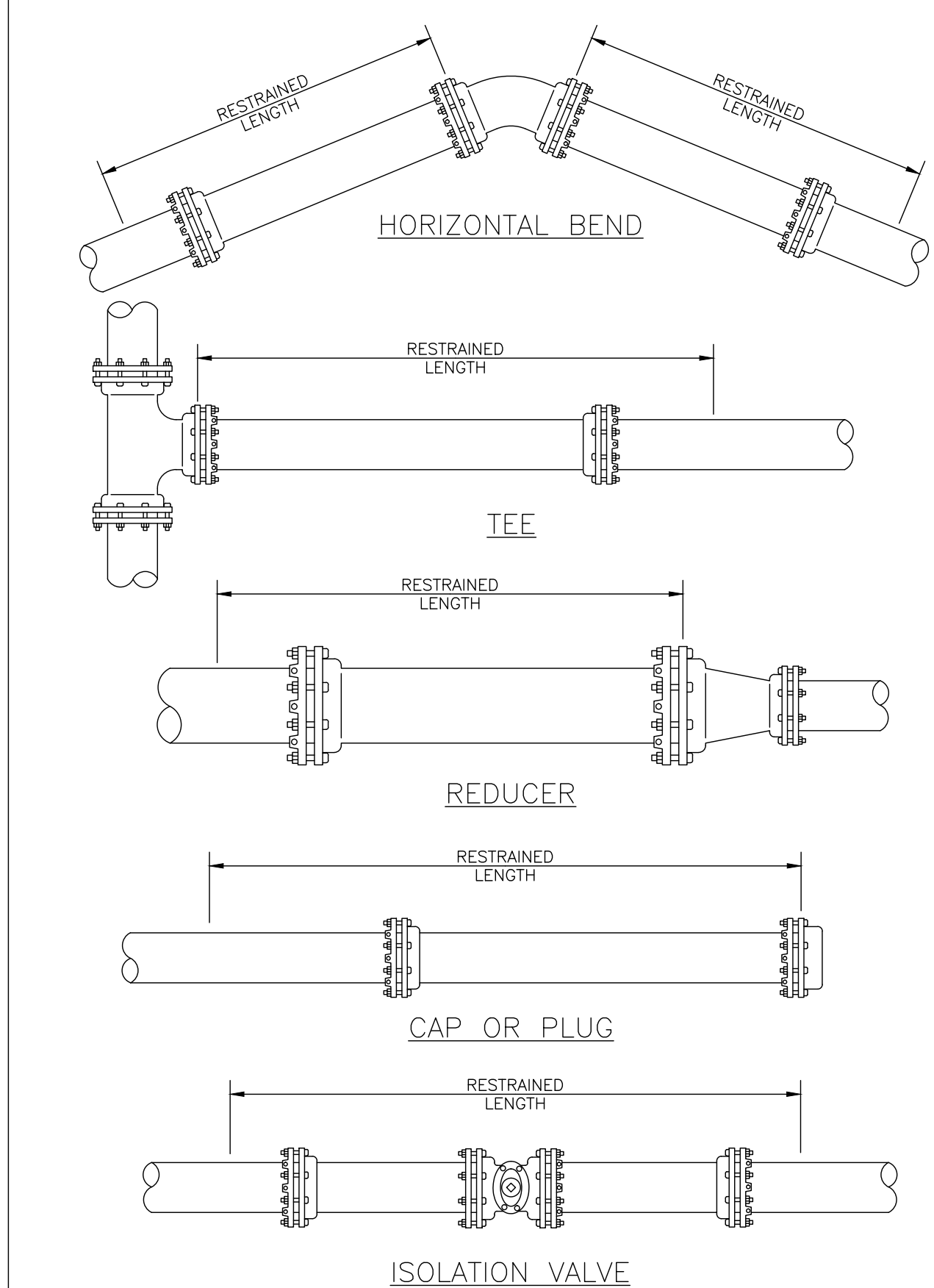


STANTEC CONSULTING SERVICES INC.
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TEL. 941.365.5500 - FAX. 941.366.1922
FLORIDA CERTIFICATE NO. 27103 - WWW.STANTEC.COM

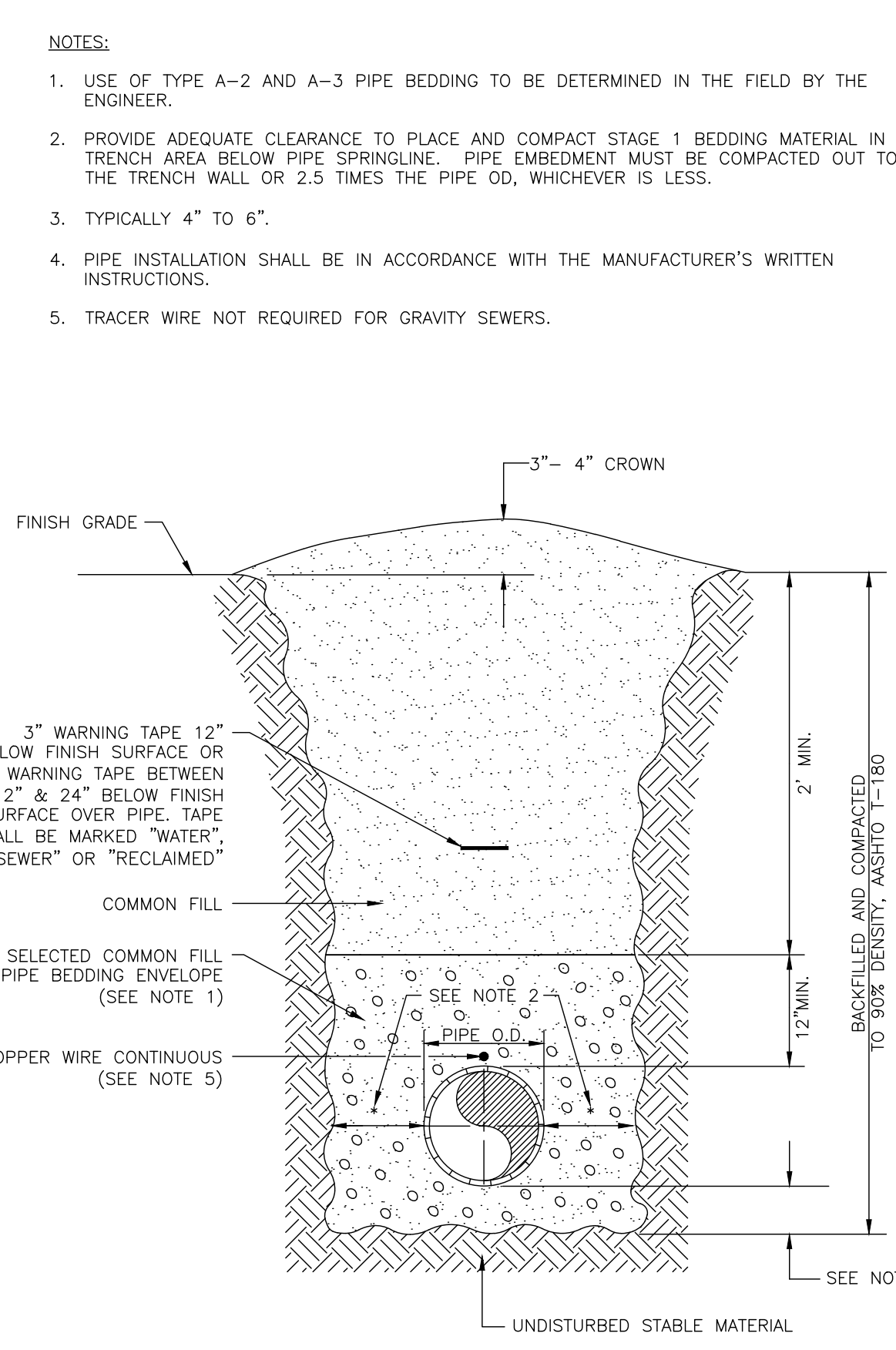
2226 26th Avenue East
Bradenton, FL 34208

NO.	REVISION DESCRIPTION	BY	DATE
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PROJECT #	177310570		
SURVEY #	000		
SEC./TWN./RGE	36/33S/17E		
SCALE	1"=20'		
	BY	DATE	
SURVEYED	GFY	03/06/15	
DESIGNED	SCM	00/00/00	
DRAWN	KG	00/00/00	
CHECKED	RJH	00/00/00	
STEPHEN C. MACEACHERN			
FLORIDA P.E. # 76020			
Signature & Date			
SHEET 18			

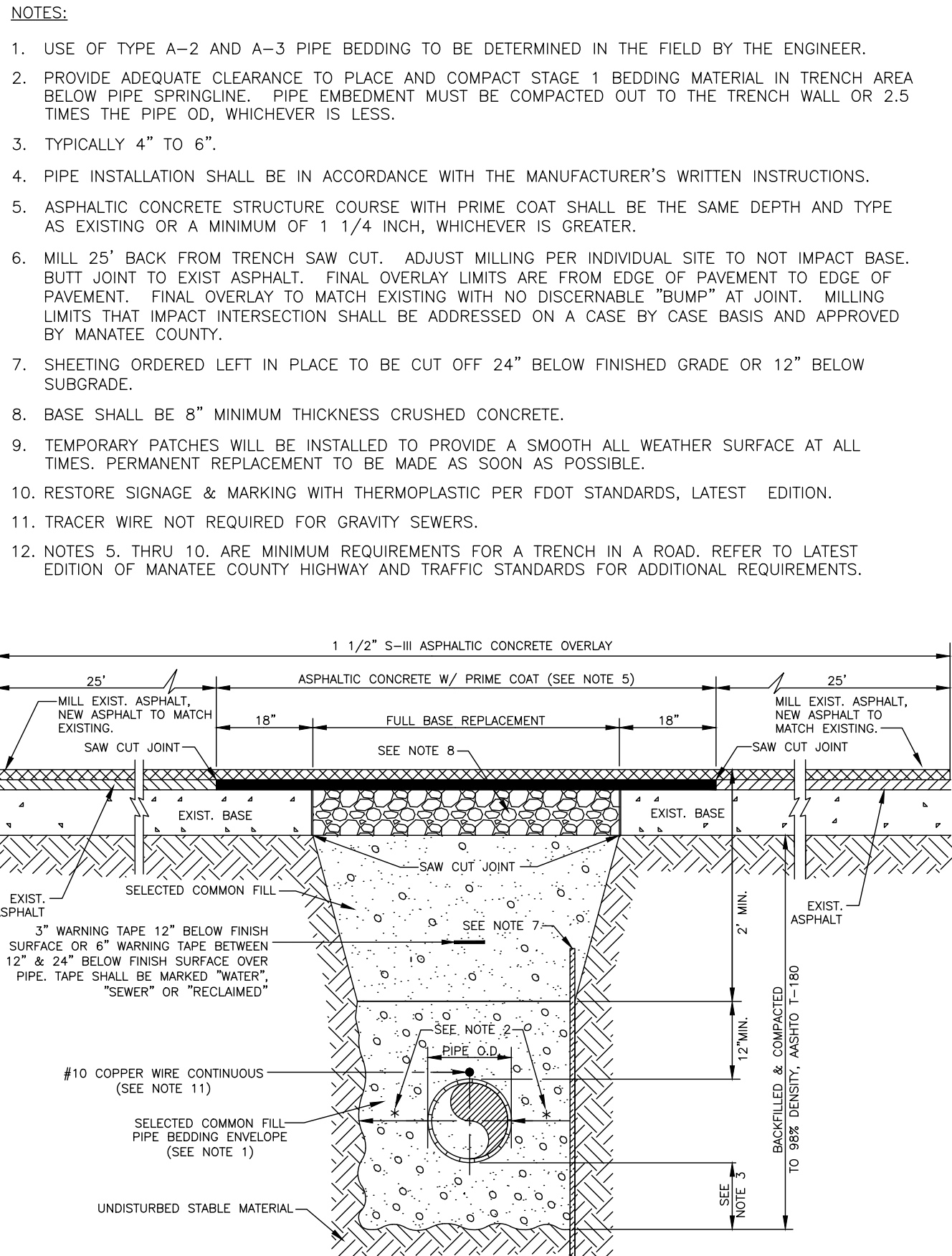
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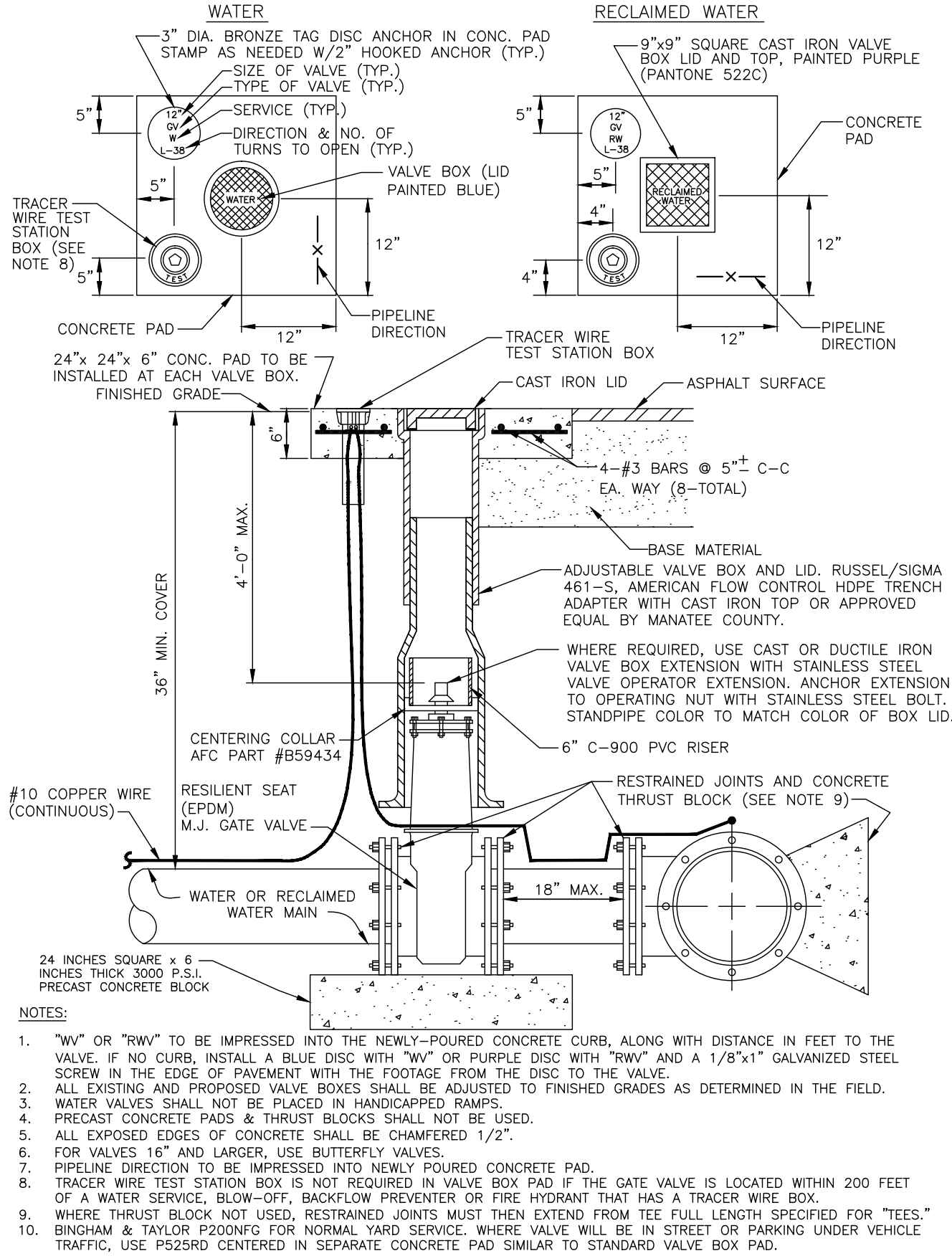
MANATEE COUNTY		RESTRAINED LENGTHS FOR PIPE	UG-10
REV. BY	DATE		
CLB/BR	11/10		
	MAY 10, 2011		
	DATE OF APPROVAL		
			PAGE 110



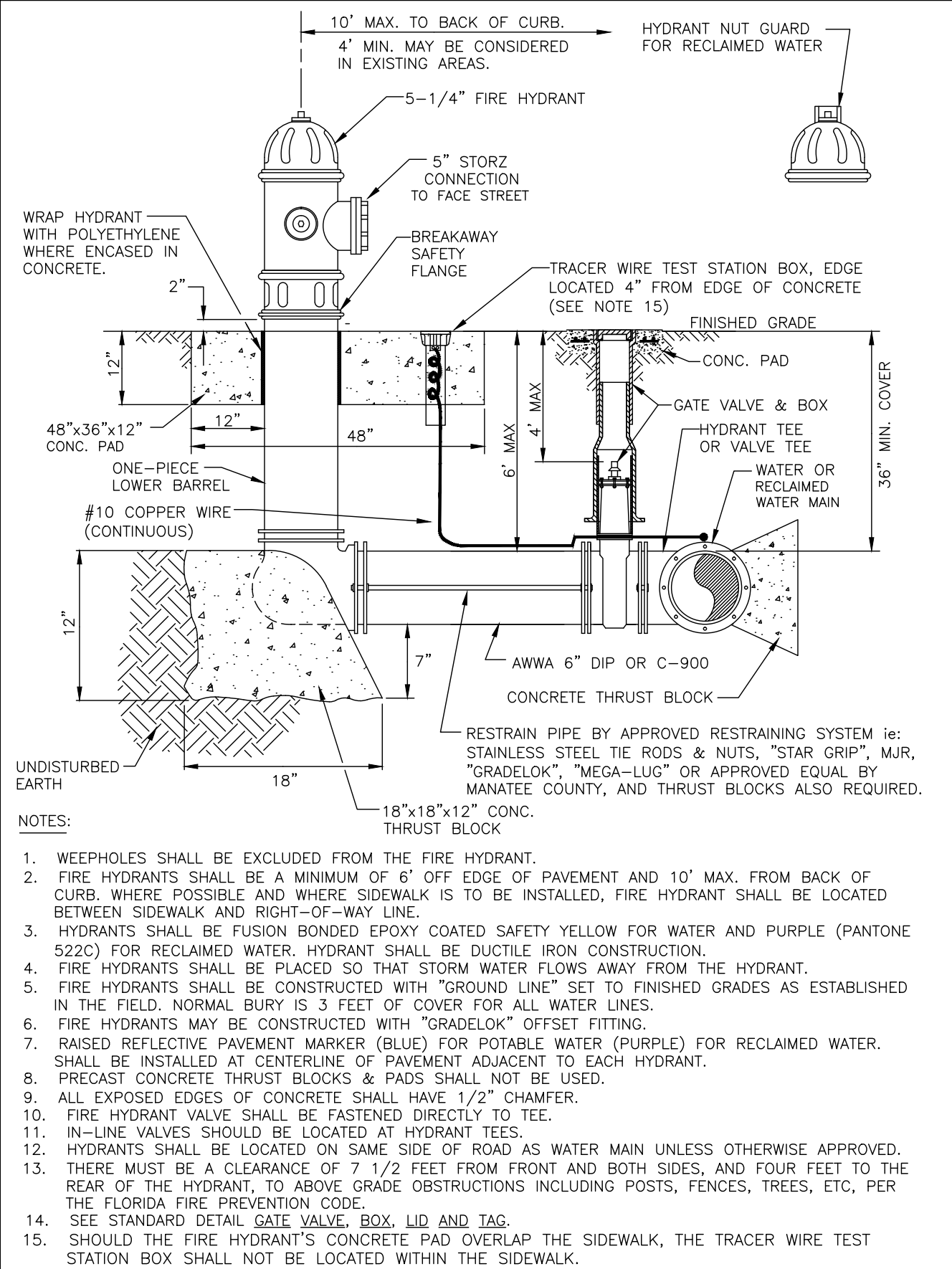
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REV. BY	DATE		
WRT/KE	03/11		
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	DATE OF APPROVAL		
			PAGE 111



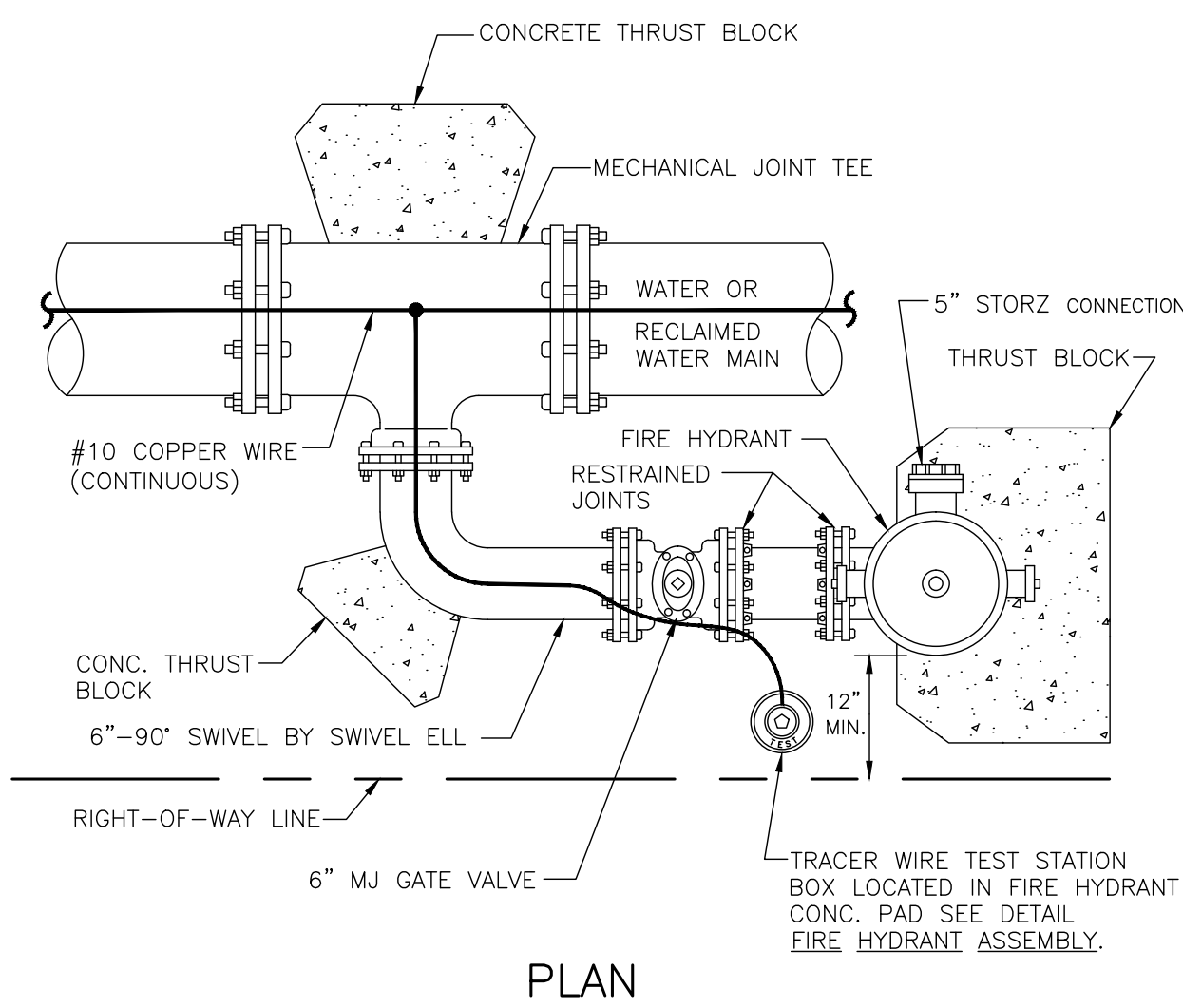
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REV. BY	DATE		
WRT/KE	03/11		
	MAY 10, 2011		
	DATE OF APPROVAL		
			PAGE 112



MANATEE COUNTY		GATE VALVE, BOX, LID AND TAG	UW-2
REV. BY	DATE		
CLB/KE	11/10		
	MAY 10, 2011		
	DATE OF APPROVAL		
			PAGE 120

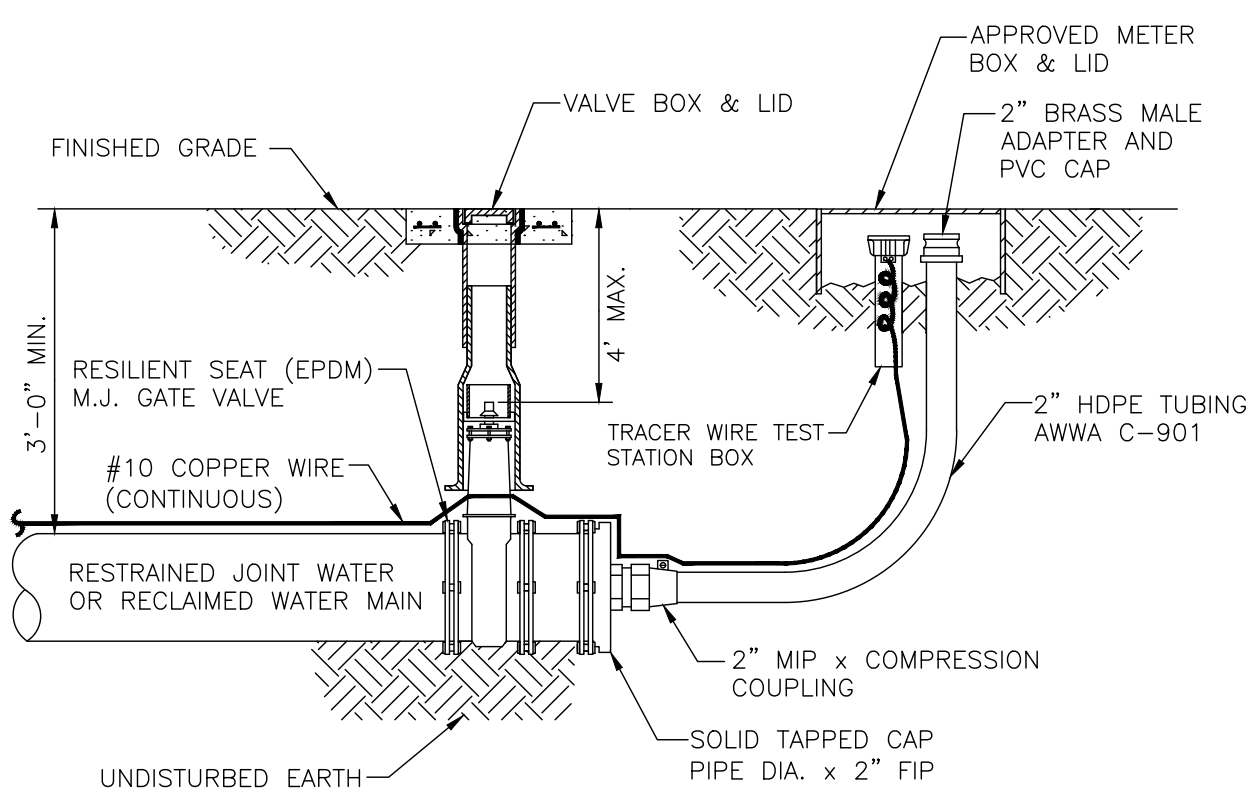


MANATEE COUNTY		FIRE HYDRANT ASSEMBLY	UW-5
REV. BY	DATE		
CLB/KE	11/10		
	MAY 10, 2011		
	DATE OF APPROVAL		
			PAGE 123



- NOTE:
1. THIS DETAIL FOR USE ONLY WHEN THE WATER MAIN IS LOCATED TOO CLOSE TO THE RIGHT-OF-WAY LINE TO USE THE FIRE HYDRANT ASSEMBLY DETAIL.
 2. SEE STANDARD DETAIL GATE VALVE, BOX, LID AND TAG.

MANATEE COUNTY		FIRE HYDRANT WITH LOCKED 90° BEND	UW-6
REV. BY	DATE		
CLB/KE	11/10		
	MAY 10, 2011		
	DATE OF APPROVAL		
			PAGE 124



- NOTE:
1. SEE STANDARD DETAIL GATE VALVE, BOX, LID AND TAG.

MANATEE COUNTY		2" BLOW-OFF ASSEMBLY FOR 10" MAINS AND SMALLER	UW-7
REV. BY	DATE		
CLB/KE	11/10		
	MAY 10, 2011		
	DATE OF APPROVAL		
			PAGE 125



1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN REPLACEMENT DETAILS

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	177310570
SURVEY #	000
SEC./TWN./RGE	36/33S/17E
SCALE	1"=20'
SURVEYED	GFY 03/06/15
DESIGNED	SCM 00/00/00
DRAWN	KG 00/00/00
CHECKED	RJH 00/00/00
STEPHEN C. MACEACHERN	
FLORIDA P.E. # 76020	

BID SET

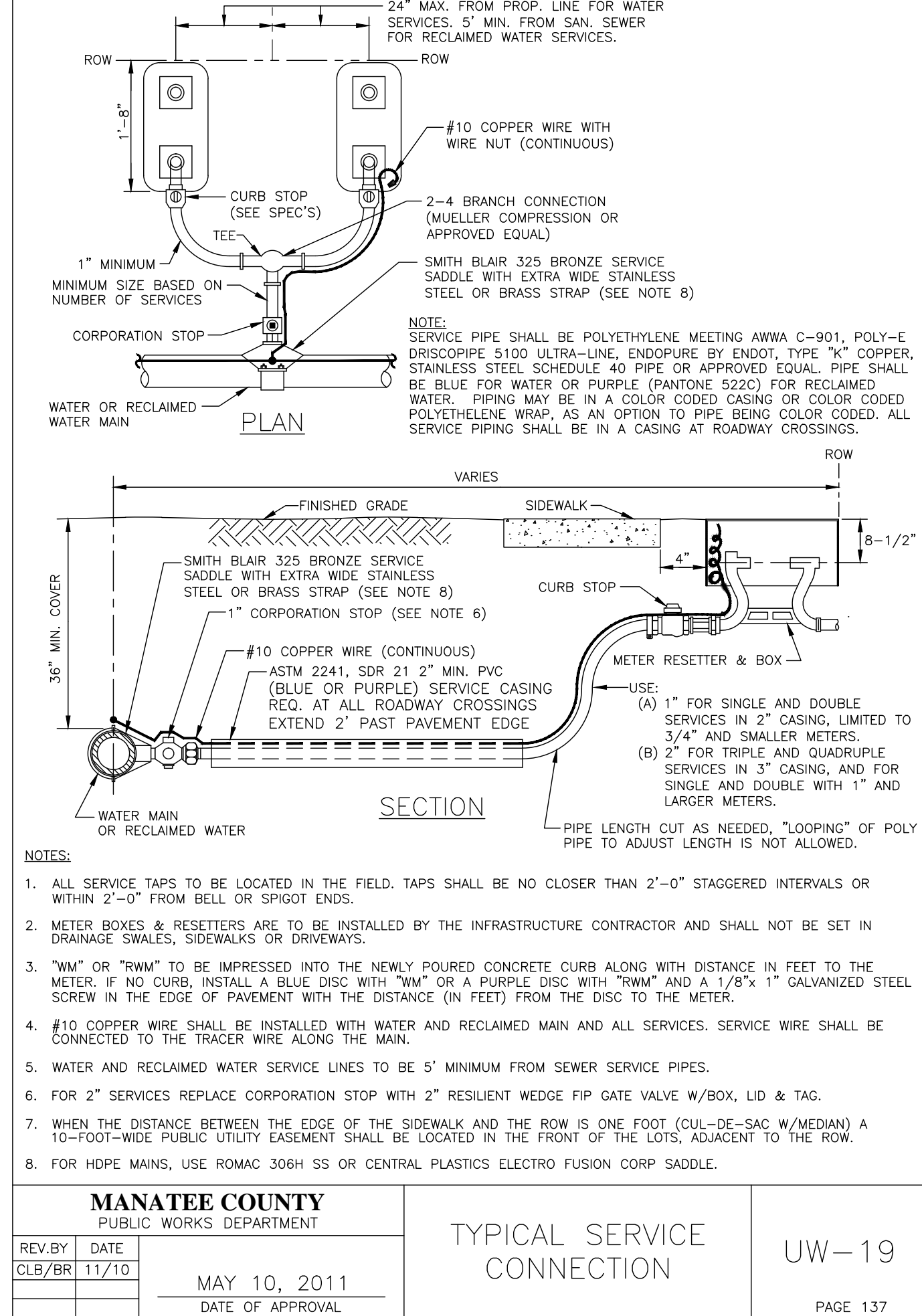
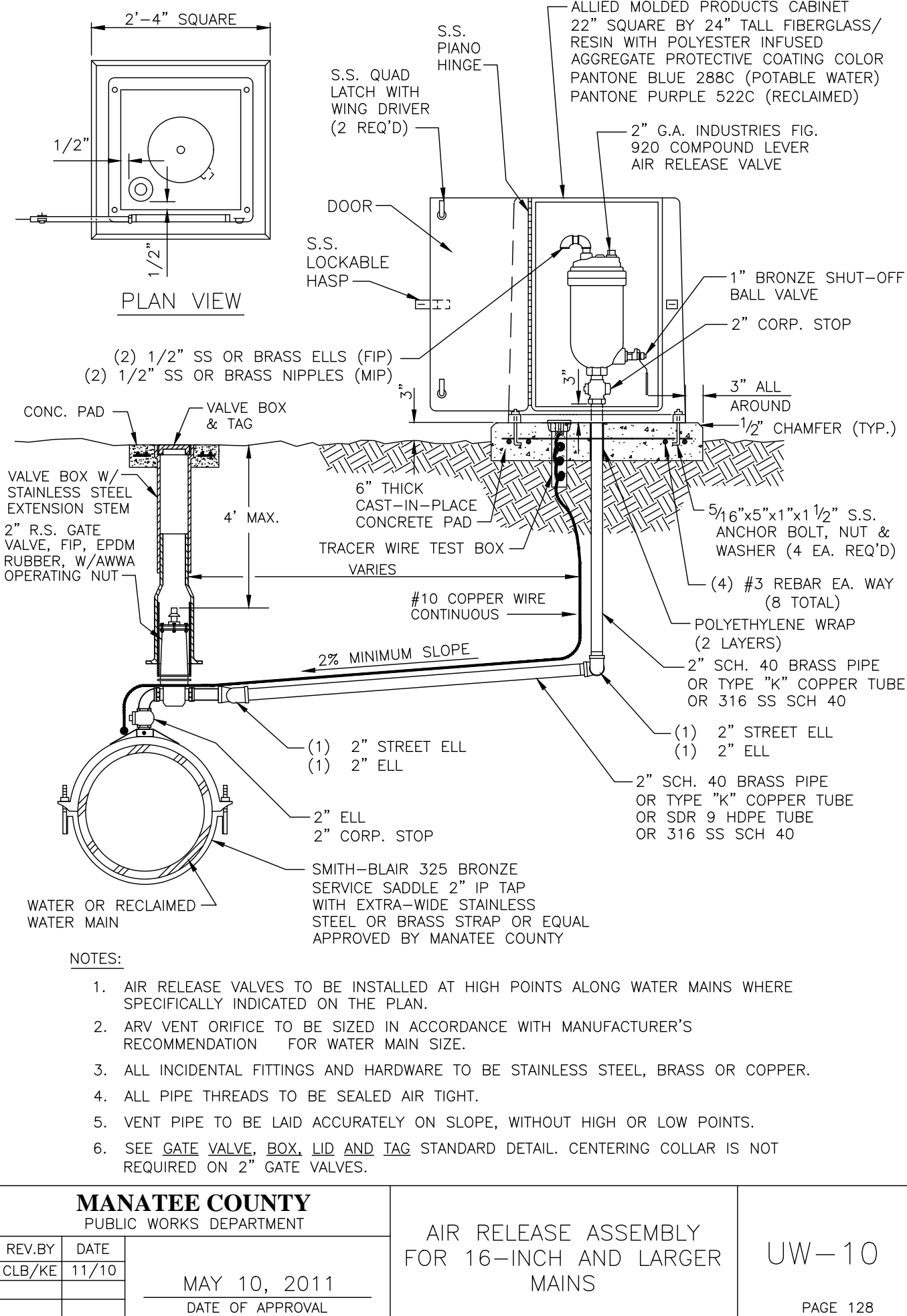
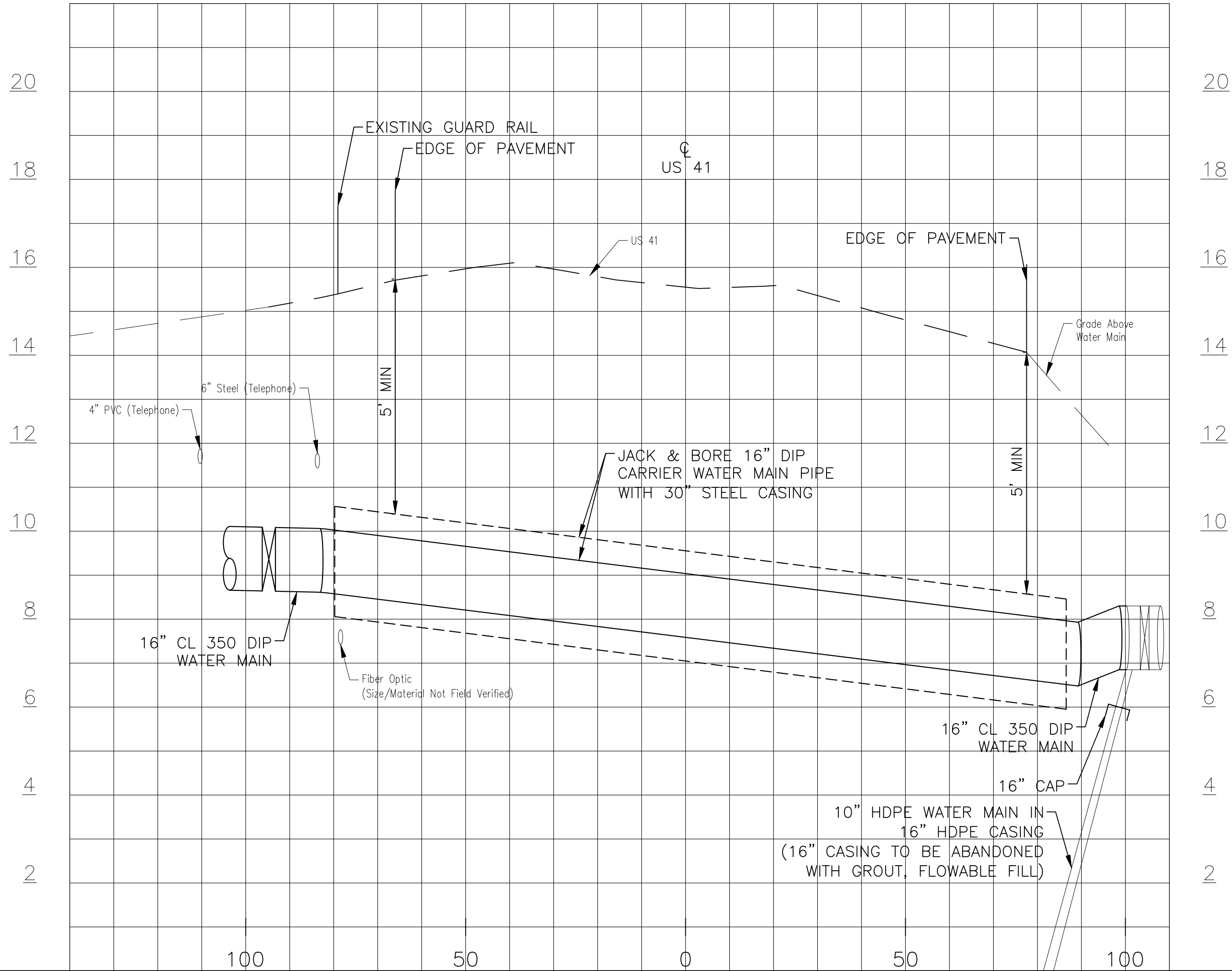
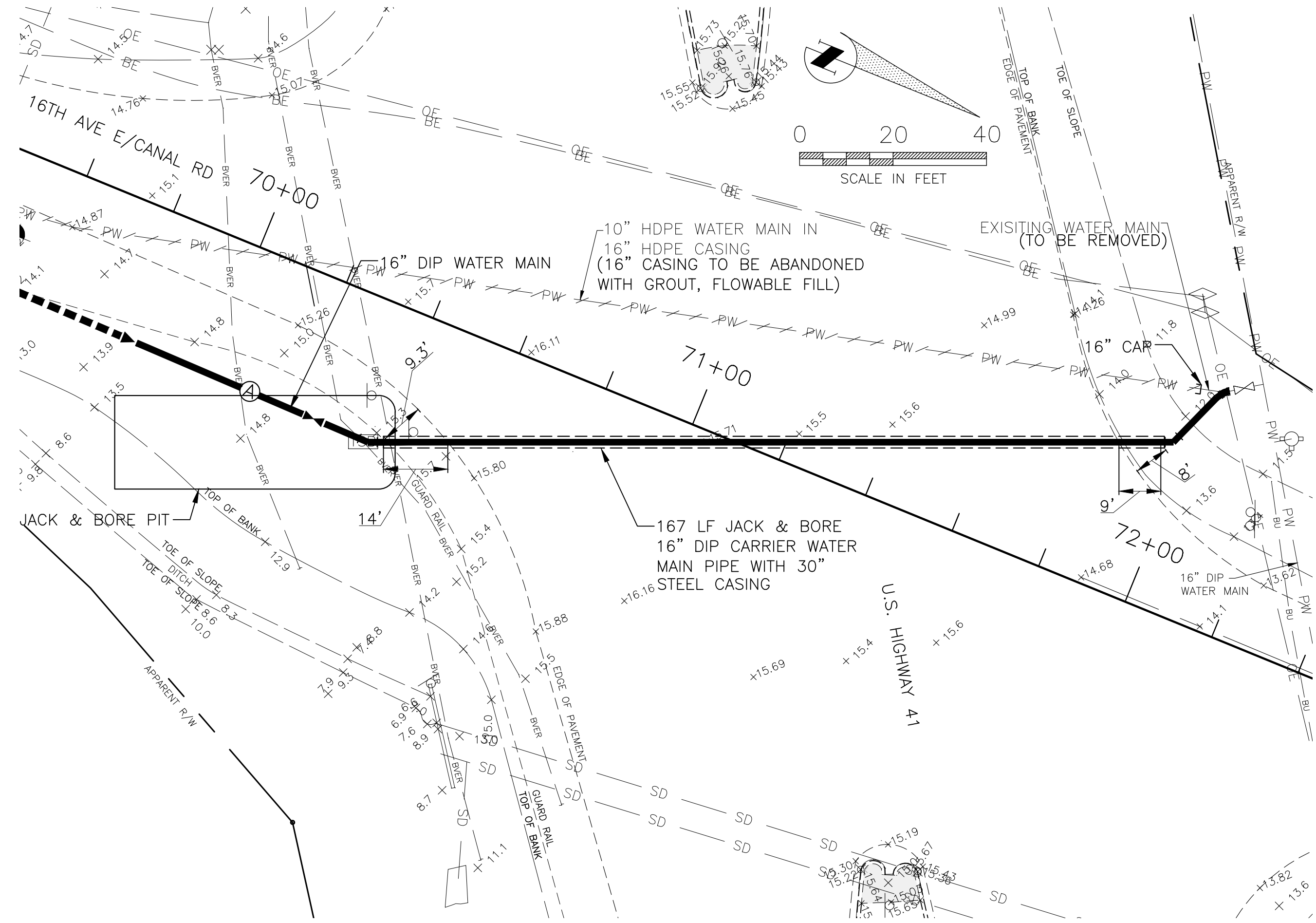


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Signature & Date

SHEET 20

U:\1773\Active\1773\0570\Design\Sheet\105\05-021.dwg P&P Dtl 1/11/2016 10:54 AM Gibratti, Km 10.5, ASCH full bleed D (35.00 x 24.00 inches)



MANATEE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN REPLACEMENT DETAILS

NO.	REVISION	DESCRIPTION	BY	DATE
1		REMOVE 10" FROM CASING.	KG	01/11/16

PROJECT #	177310570
SURVEY #	000
SEC./TWN./RGE	36/33S/17E
SCALE	1"=20'
	BY DATE
SURVEYED	GFY 03/06/15
DESIGNED	SCM 00/00/00
DRAWN	KG 00/00/00
CHECKED	RJH 00/00/00
STEPHEN C. MACEACHERN	
FLORIDA P.E. # 76020	

BID SET

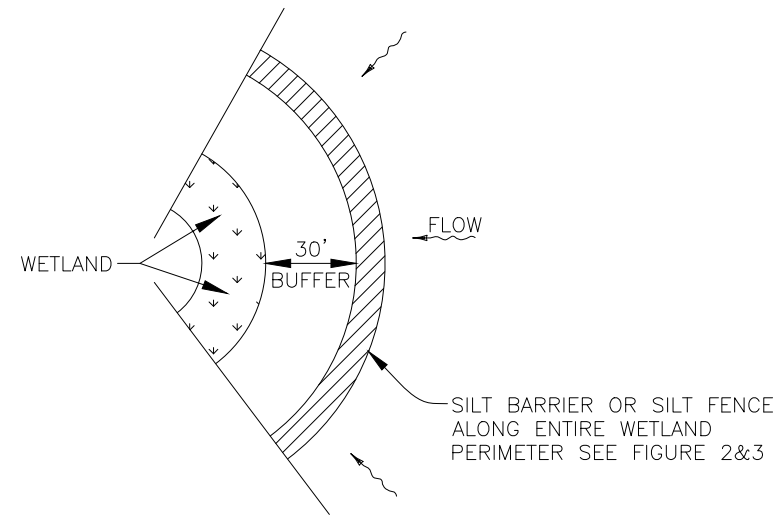


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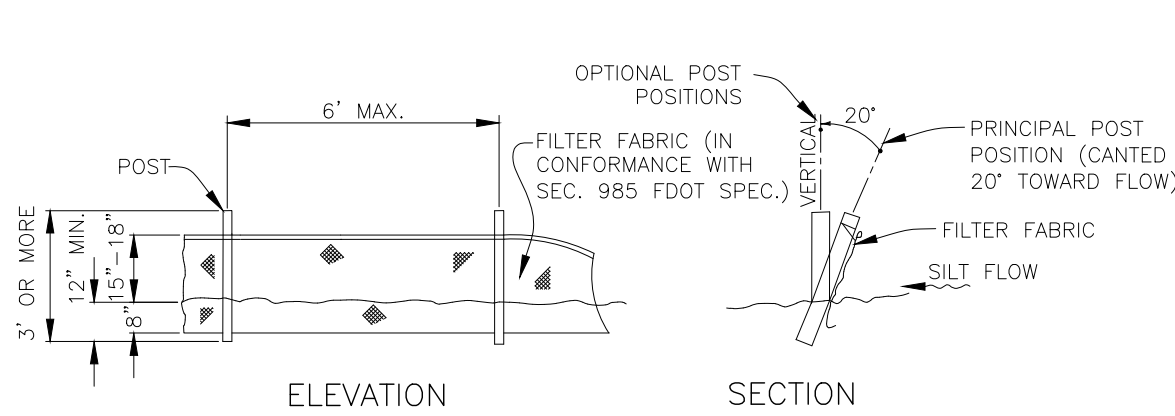
Signature & Date

SHEET 21

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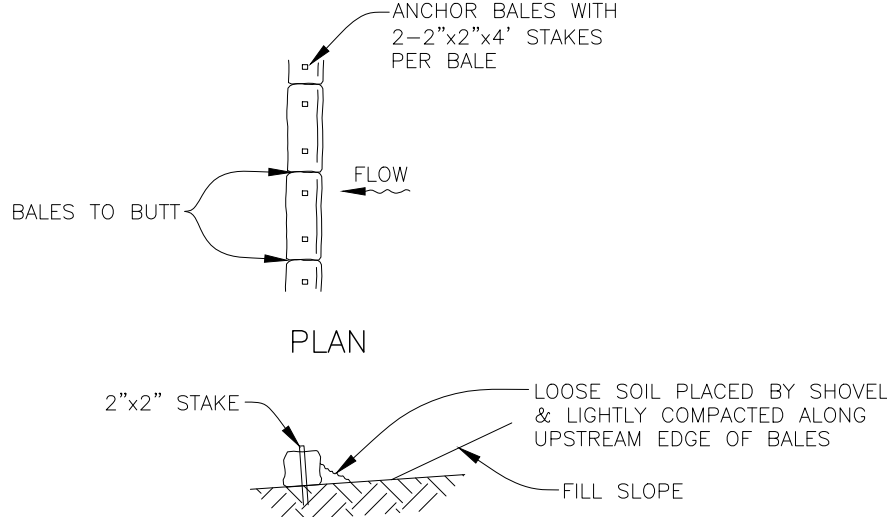


WETLAND BUFFER
FIGURE 1

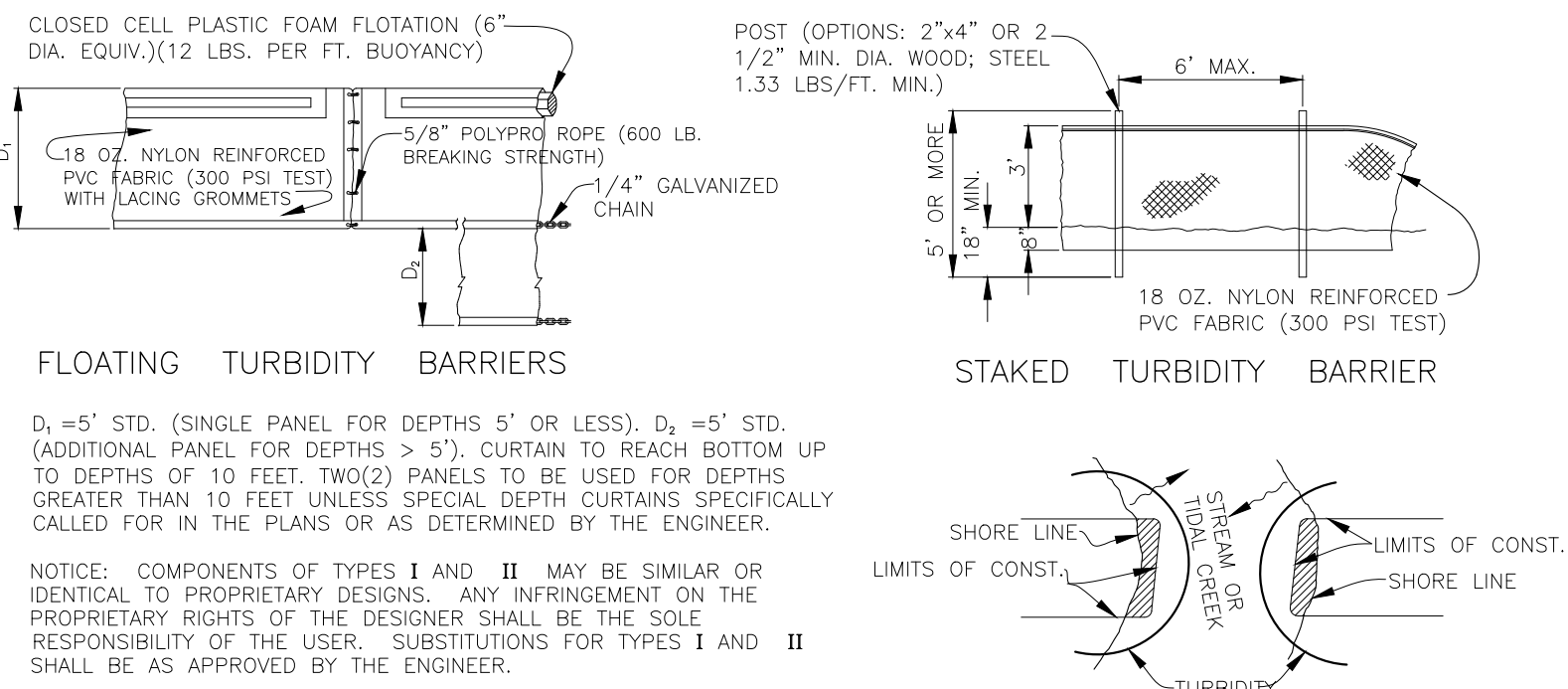


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

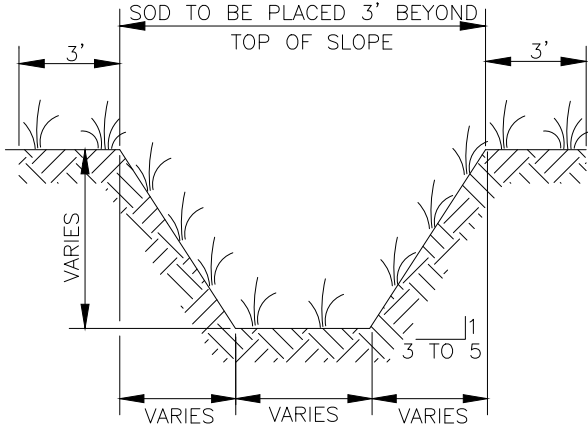
TYPICAL SILT FENCE
FIGURE 2



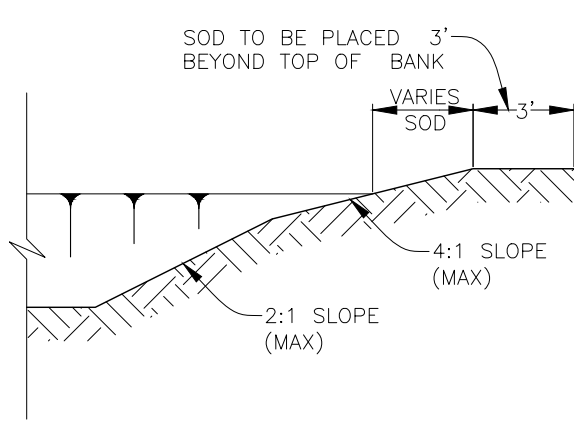
TYPICAL BALE SILT BARRIER
FIGURE 3



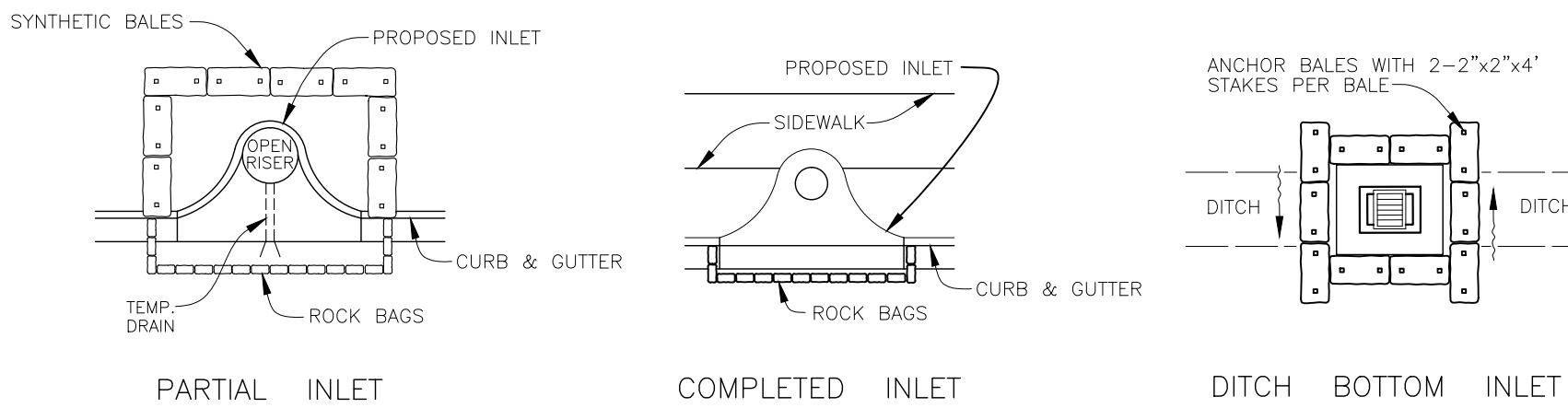
TURBIDITY BARRIERS
FIGURE 4



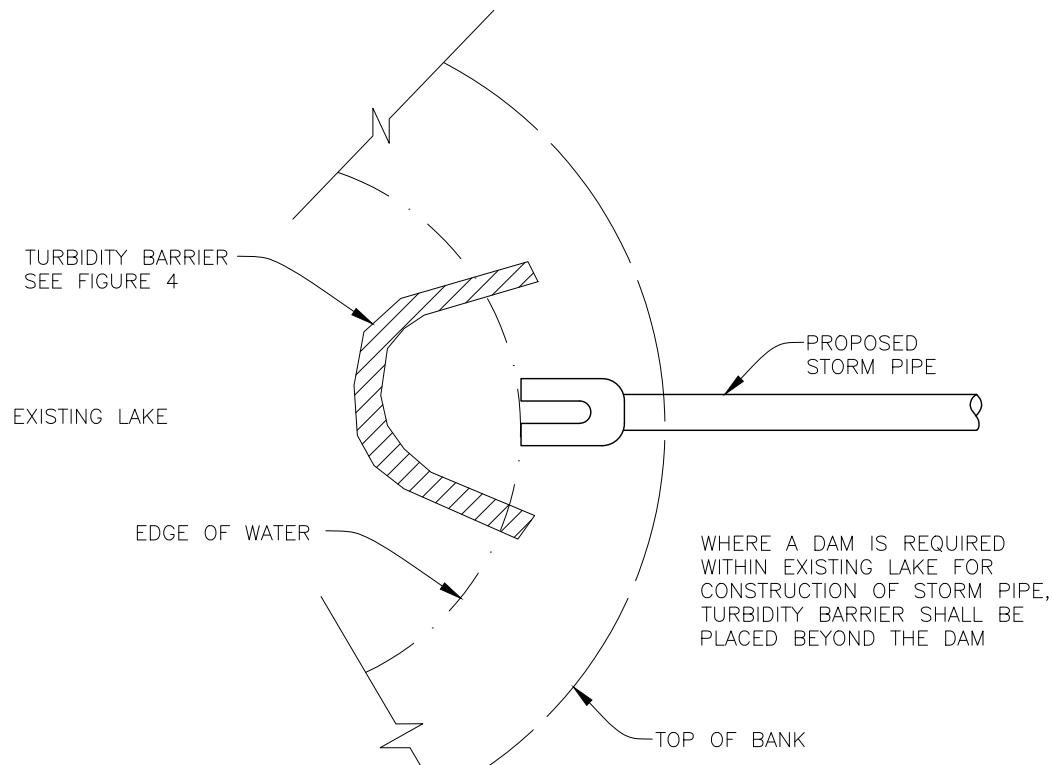
TYPICAL SWALE SECTION
FIGURE 5



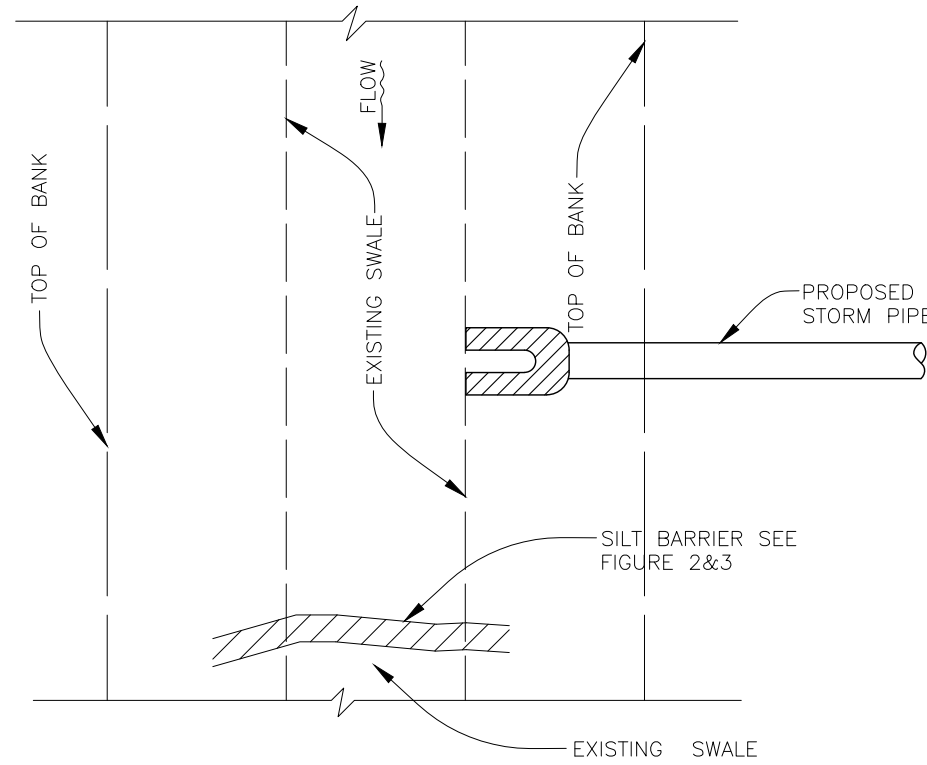
TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6



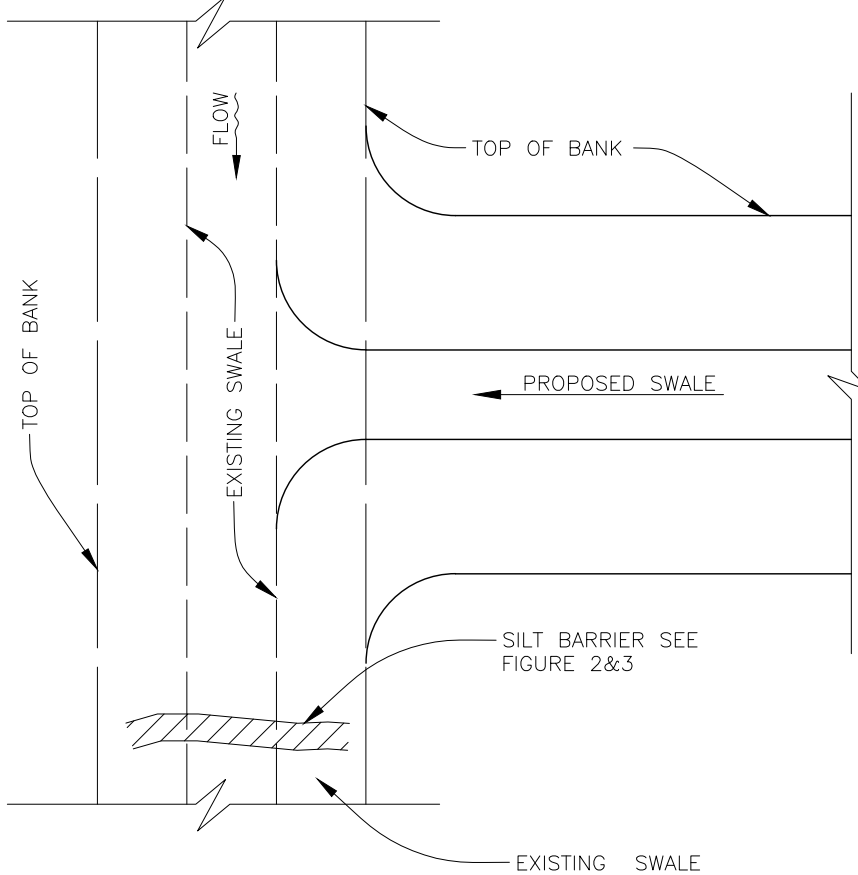
SYNTHETIC BALE PROTECTION AROUND
INLETS OR SIMILAR STRUCTURES
FIGURE 7



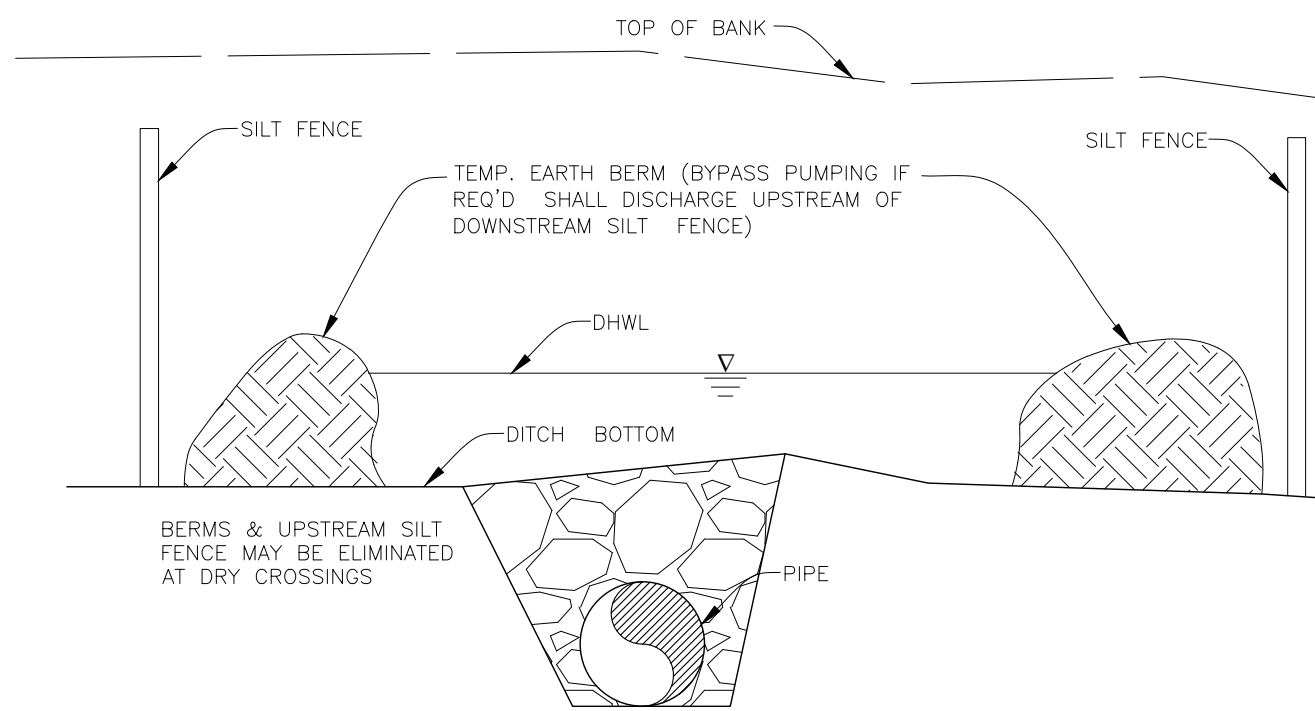
TURBIDITY BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING LAKE
FIGURE 9



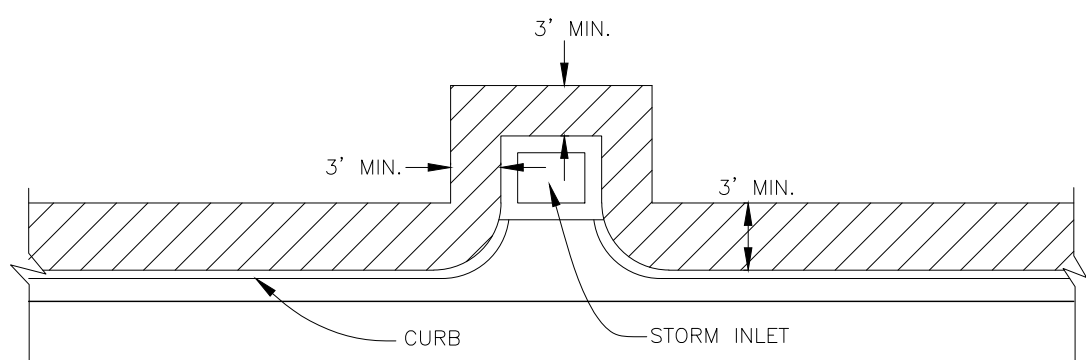
SILT BARRIER AT CONNECTION OF
STORM PIPE TO EXISTING SWALE
FIGURE 10



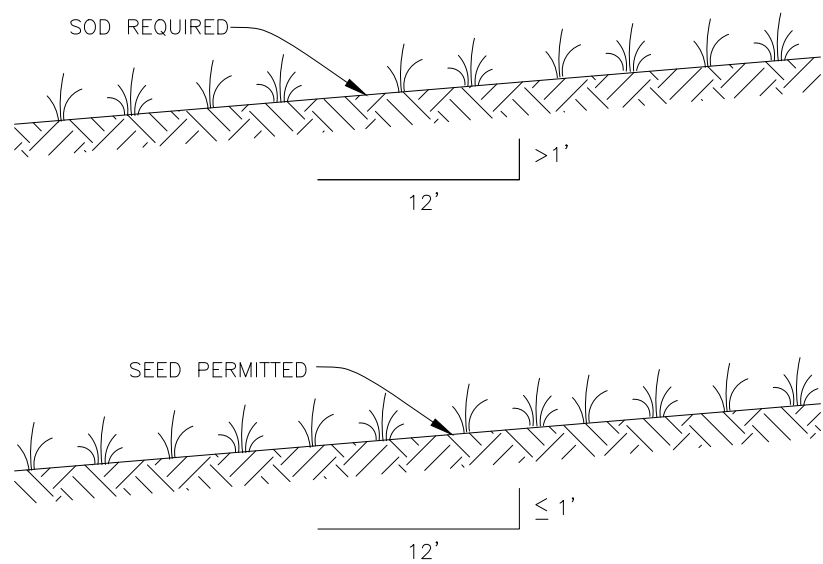
SILT BARRIER AT CONNECTION
OF SWALE TO EXISTING SWALE
FIGURE 11



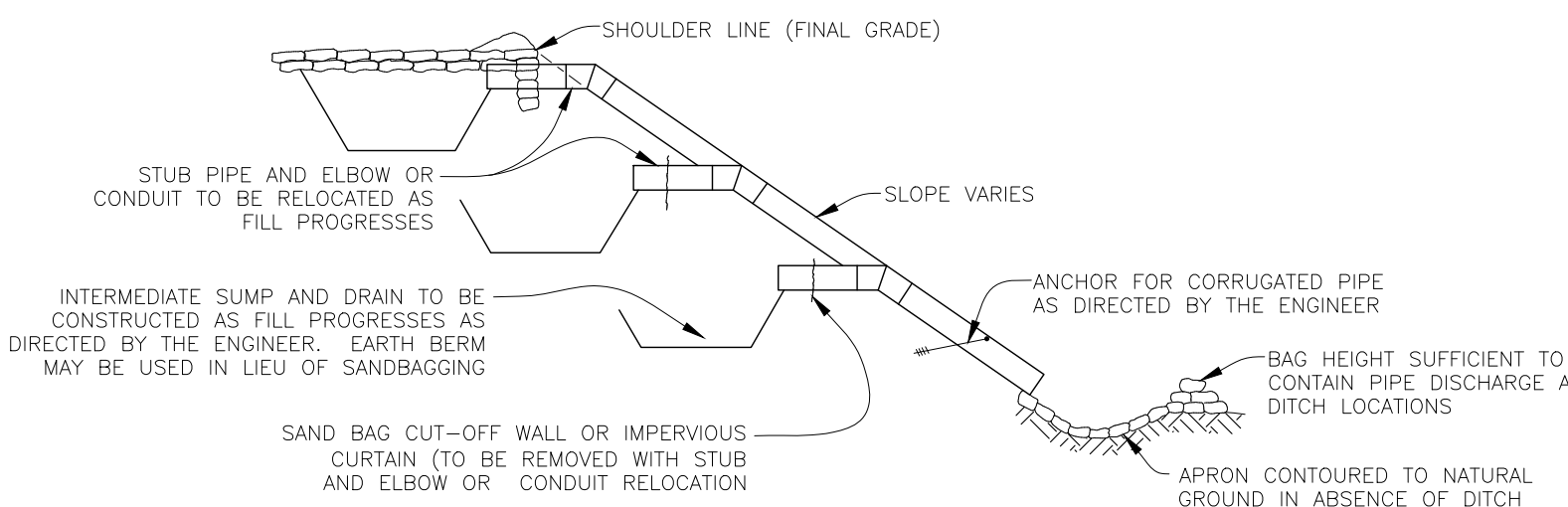
UNDERGROUND PIPE CROSSING
FIGURE 12



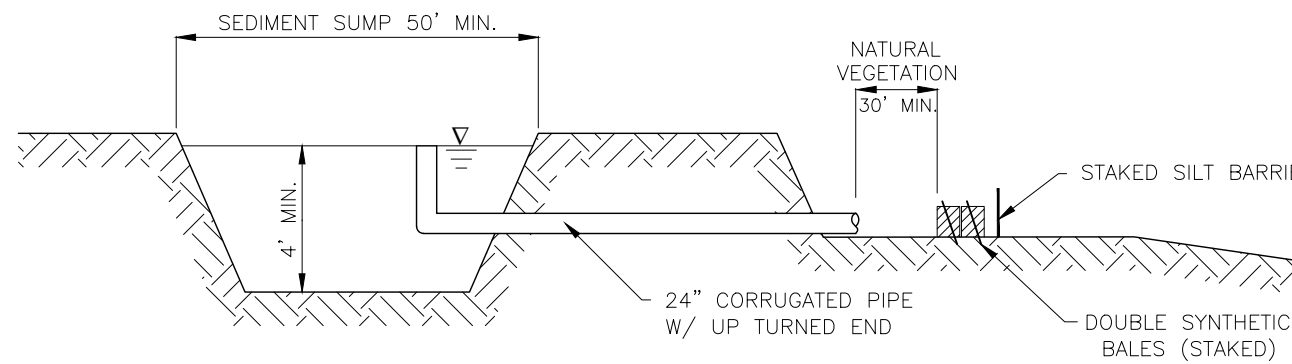
SOD ALONG CURB
AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



SECTION AA
TEMPORARY SLOPE DRAIN
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

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

MANATEE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES



1022 26th Avenue East
Bradenton, FL 34208

CANAL ROAD WATER MAIN
REPLACEMENT
EROSION CONTROL

NO.		REVISION		DESCRIPTION	BY	DATE
PROJECT #		177310570				
SURVEY #		000				
SEC./TWN./RGE		36/33S/17E				
SCALE		1"=20'				
		BY	DATE			
SURVEYED		-----	00/00/00			
DESIGNED		SCM	00/00/00			
DRAWN		KG	00/00/00			
CHECKED		RJH	00/00/00			
STEPHEN C. MACEACHERN						
FLORIDA P.E. # 76020						
Signature & Date						
SHEET 22						