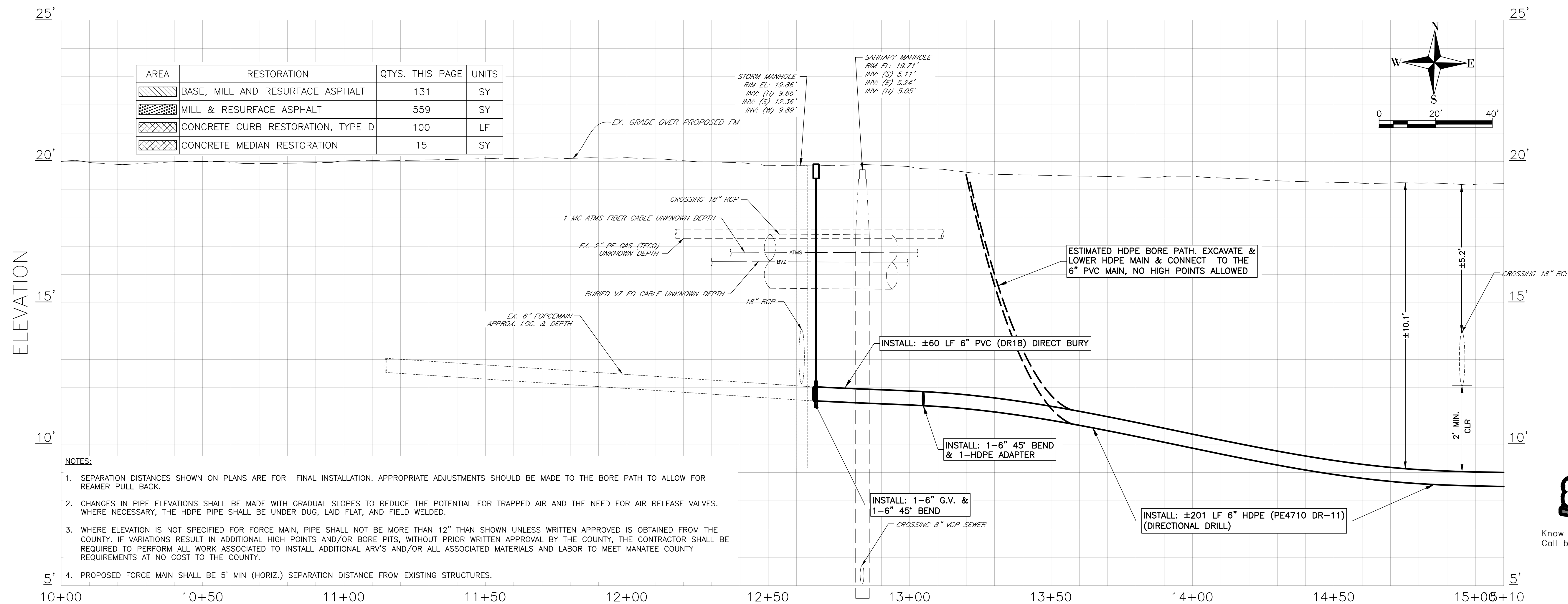
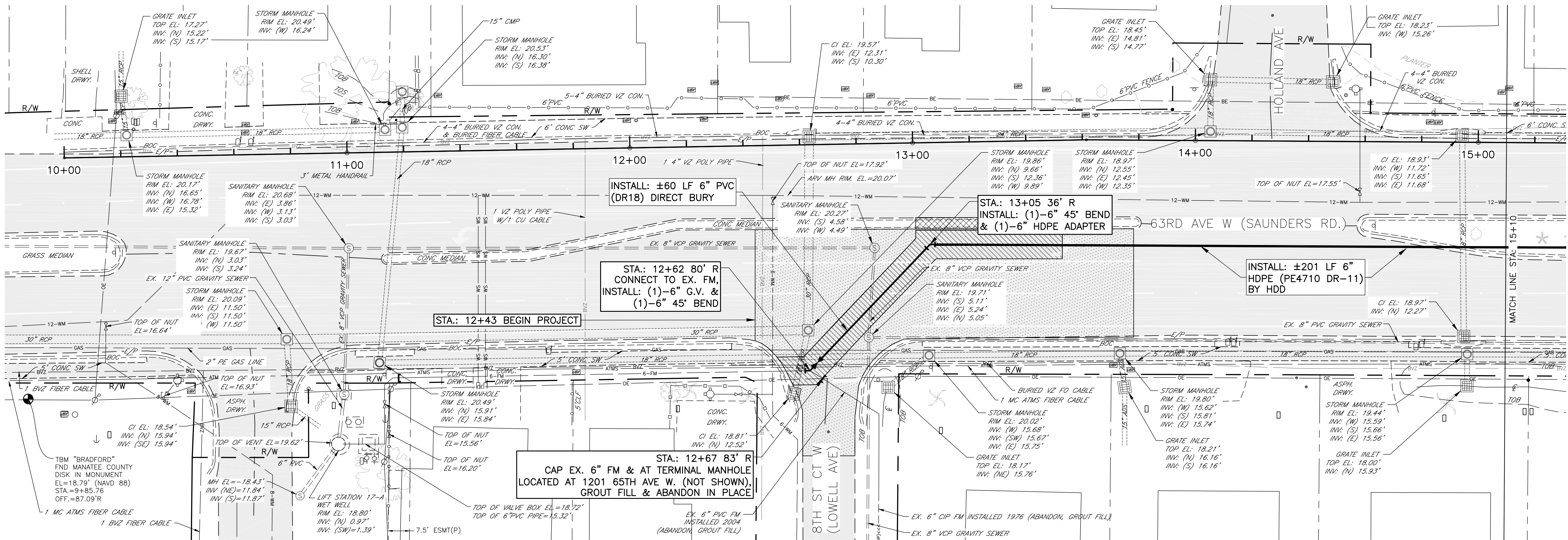




AREA	RESTORATION	QTY. THIS PAGE	UNITS
	BASE, MILL AND RESURFACE ASPHALT	131	SY
	MILL & RESURFACE ASPHALT	559	SY
	CONCRETE CURB RESTORATION, TYPE D	100	LF
	CONCRETE MEDIAN RESTORATION	15	SY

NOTES:

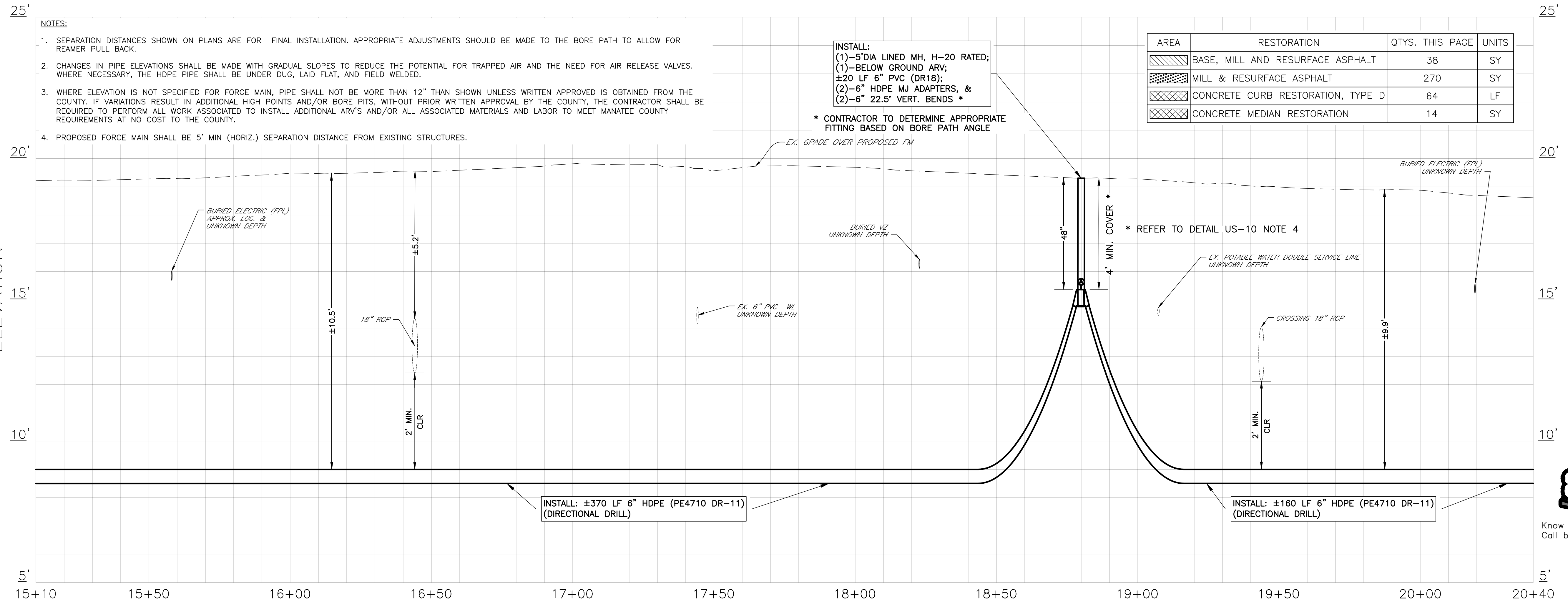
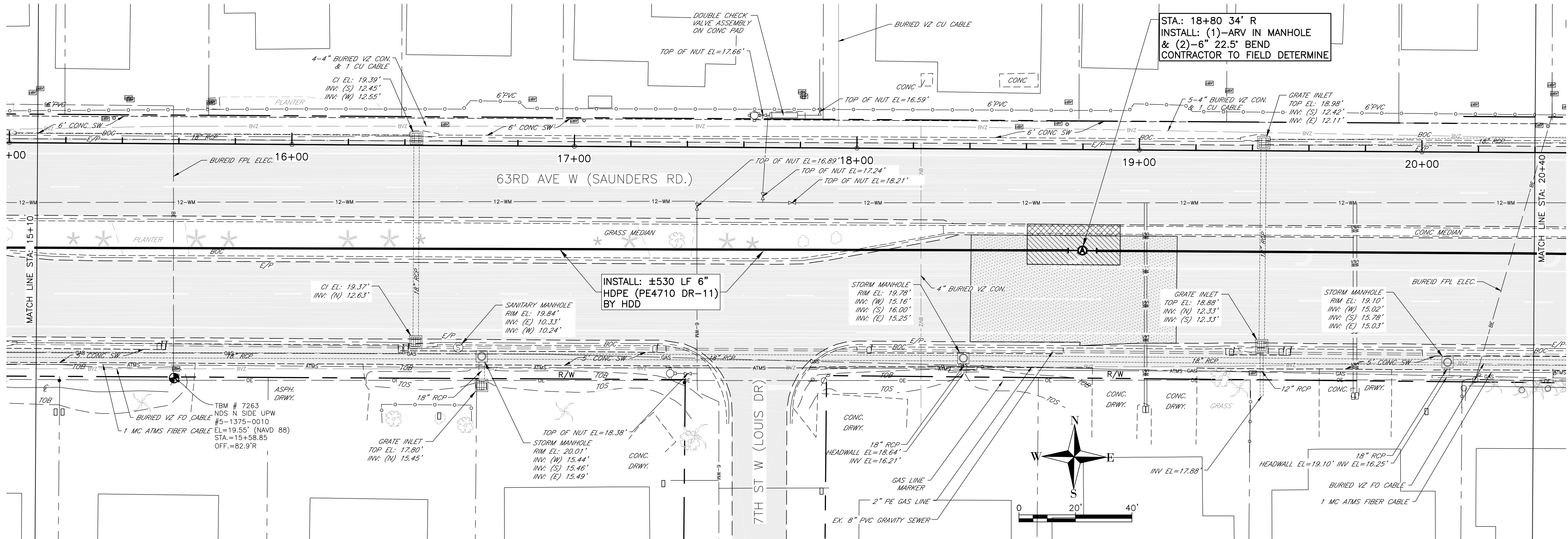
- SEPARATION DISTANCES SHOWN ON PLANS ARE FOR FINAL INSTALLATION. APPROPRIATE ADJUSTMENTS SHOULD BE MADE TO THE BORE PATH TO ALLOW FOR REAMER PULL BACK.
- CHANGES IN PIPE ELEVATIONS SHALL BE MADE WITH GRADUAL SLOPES TO REDUCE THE POTENTIAL FOR TRAPPED AIR AND THE NEED FOR AIR RELEASE VALVES. WHERE NECESSARY, THE HDPE PIPE SHALL BE UNDER DUG, LAID FLAT, AND FIELD WELDED.
- WHERE ELEVATION IS NOT SPECIFIED FOR FORCE MAIN, PIPE SHALL NOT BE MORE THAN 12" THAN SHOWN UNLESS WRITTEN APPROVED IS OBTAINED FROM THE COUNTY. IF VARIATIONS RESULT IN ADDITIONAL HIGH POINTS AND/OR BORE PITS, WITHOUT PRIOR WRITTEN APPROVAL BY THE COUNTY, THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL WORK ASSOCIATED TO INSTALL ADDITIONAL ARV'S AND/OR ALL ASSOCIATED MATERIALS AND LABOR TO MEET MANATEE COUNTY REQUIREMENTS AT NO COST TO THE COUNTY.
- PROPOSED FORCE MAIN SHALL BE 5' MIN (HORIZ.) SEPARATION DISTANCE FROM EXISTING STRUCTURES.

FORCE MAIN 17A REPLACEMENT
63rd AVENUE WEST
PLAN & PROFILE STA. 10+00 TO 15+10

NO.	REVISION DESCRIPTION	BY	DATE
1	CHANGE PIPE ALIGN. & TERMINAL LOC.	JSS	04/2016
2	REV. HDD PIPE CALL-OUT	JSS	09/2016

PROJECT #	404-6028385
SURVEY #	577-0017
SEC./TWN./RGE	23 & 24/35/17
VERT. SCALE	1"=2'
HORZ. SCALE	1"=20'
VERTICAL DATUM	NAVD 1988
SURVEYED	FDC 577-0017
DESIGNED	JSS 05/2015
DRAWN	BLR 05/2015

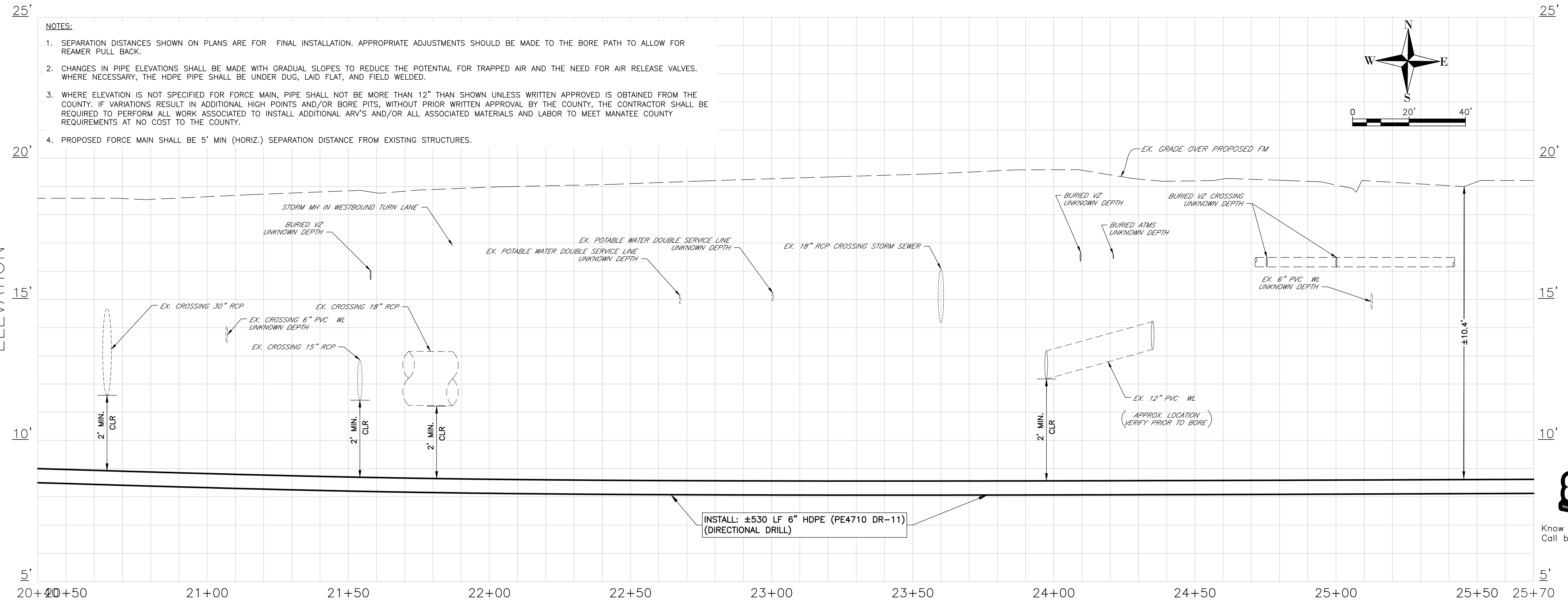
JOHN S. SHAW, P.E.
FLORIDA PROFESSIONAL ENGINEER
No. 60923
9/19/16
STATE OF FLORIDA
Professional Engineer
Signature



FORCE MAIN 17A REPLACEMENT
63rd AVENUE WEST
PLAN & PROFILE STA. 15+10 TO 20+40

NO.	REVISION DESCRIPTION	BY	DATE
1	CHANGE PIPE ALIGN. & TERMINAL LOC.	JSS	04/2016
2	REV. HDD PIPE CALL-OUT	JSS	09/2016
PROJECT # 404-6028385			
SURVEY # 577-0017			
SEC./TWN./RGE 23 & 24/35/17			
VERT. SCALE 1"=2'			
HORZ. SCALE 1"=20'			
VERTICAL DATUM NAVD 1988			
SURVEYED FDC 577-0017		BY DATE	
DESIGNED JSS 05/2015		DATE	
DRAWN BLR 05/2015		DATE	

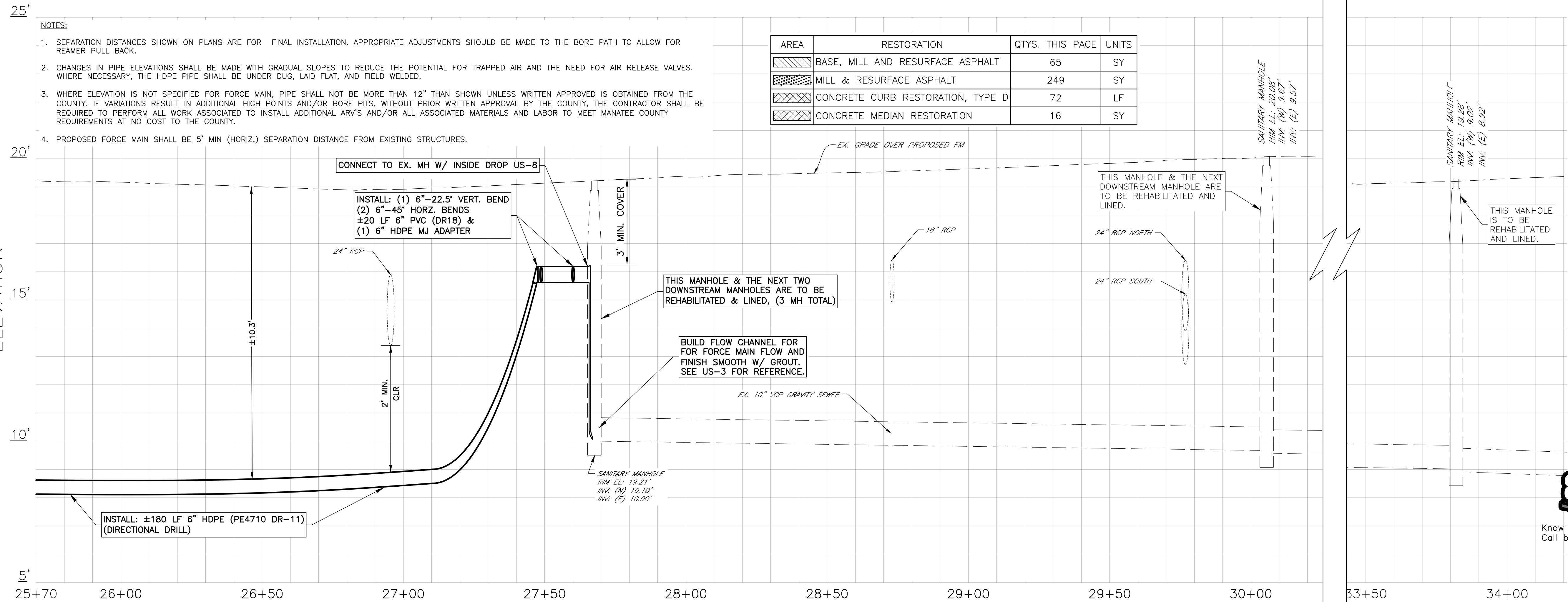
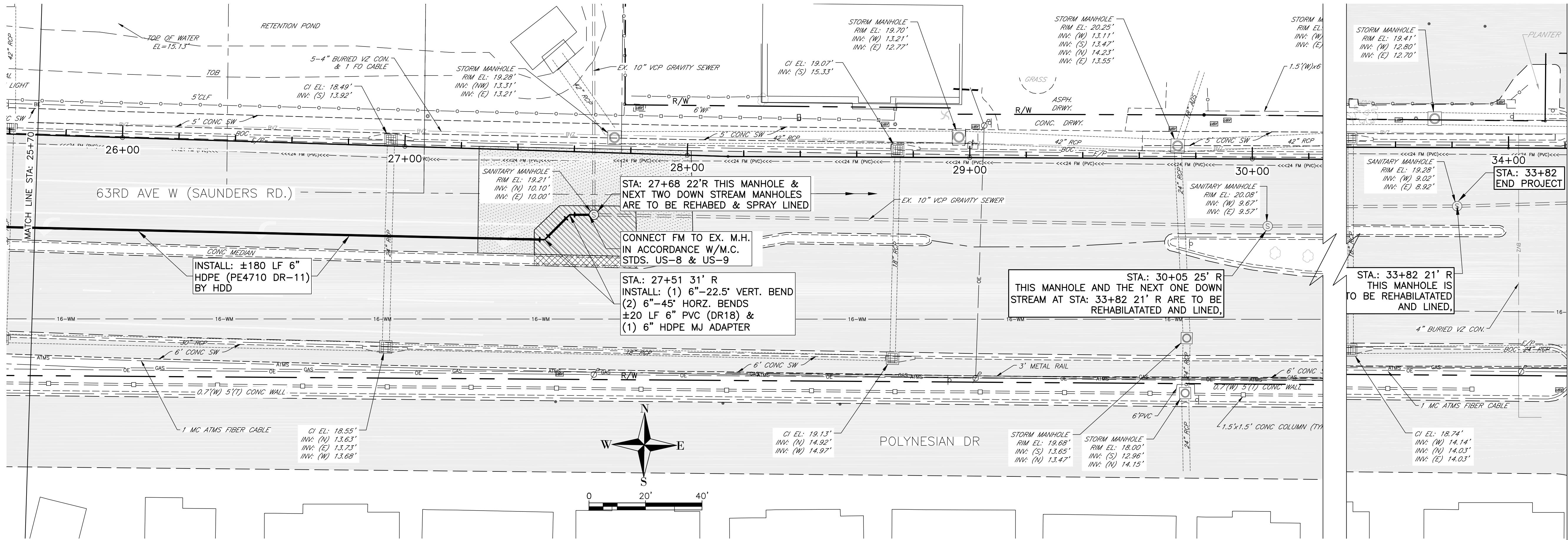
JOHN S. SHOWN, P.E.
FLORIDA PROFESSIONAL ENGINEER
No. 60923
4/19/16
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Signature



**FORCE MAIN 17A REPLACEMENT
63rd AVENUE WEST
PLAN & PROFILE STA. 20+40 TO 25+70**

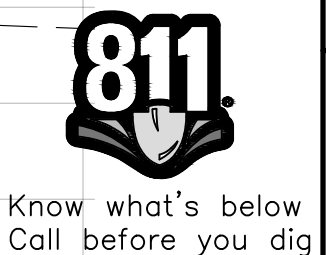
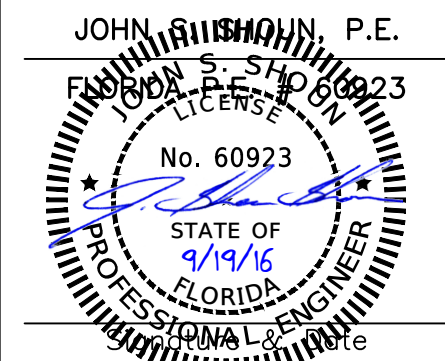
NO.	1	CHANGE PIPE ALIGN. & TERMINAL LOC.	JSS	04/2016
	2	REV. HDD PIPE CALL-OUT	JSS	09/2016
PROJECT #	404-6028385			
SURVEY #	577-0017			
SEC./TWN./RGE	23 & 24/35/17			
VERT. SCALE	1"=2'			
HORIZ. SCALE	1"=20'			
VERTICAL DATUM	NAVD 1988			
	BY	DATE		
SURVEYED	FDC	577-0017		
DESIGNED	JSS	05/2015		
DRAWN	BLR	05/2015		

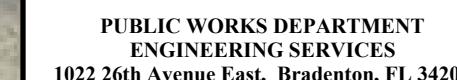
JOHN S. SHOHAN, P.E.
FLORIDA P.E. #060623
JOS SHOHAN
LICENSE
No. 60923
STATE OF
9/19/16
FLORIDA
PROFESSIONAL ENGINEER
S. JOHNSON & SONS



FORCE MAIN 17A REPLACEMENT
63rd AVENUE WEST
PLAN & PROFILE STA. 25+70 TO 31+00

NO.	REVISION DESCRIPTION	BY	DATE
1	CHANGE PIPE ALIGN. & TERMINAL LOC.	JSS	04/2016
2	REV. HDD PIPE CALL-OUT	JSS	08/2016
PROJECT # 404-6028385			
SURVEY # 577-0017			
SEC./TWN./RGE 23 & 24/35/17			
VERT. SCALE 1"=2'			
HORIZ. SCALE 1"=20'			
VERTICAL DATUM NAVD 1988			
SURVEYED FDC 577-0017		BY	DATE
DESIGNED JSS 05/2015			
DRAWN BLR 05/2015			





**FORCE MAIN 17A REPLACEMENT
63rd AVENUE WEST
EXISTING FORCE MAIN GROUT PLAN**

NO.		REVISION DESCRIPTION	BY	DATE
1		CHANGE ALIGNMENT & TERMINAL LOC.	JSS	04/2016
2		REV. EX. TERMINAL MH CALL-OUT	JSS	09/2016
PROJECT #		404-602838		
SURVEY #		577-0017		
SEC./TWN./RGE		23 & 24/35/		
SCALE		1"=100'		
VERTICAL DATUM		NAVD 1988		
		BY	DATE	
SURVEYED		FDC	02/04/	
DESIGNED		JSS	05/20	
DRAWN		BLR	05/20	

JOHN S. SHOON, P.E.
 JOHN S. SHOON
 FLOOR PLAN ENGINEER 60923
 LICENSE
 No. 60923
 STATE OF
 9/19/16
 FLORIDA
 PROFESSIONAL ENGINEER
 Signature Date

NOTES:

1. CONTRACTOR MUST REMOVE ALL ABOVE GROUND COMPONENTS OF ANY FORCE MAIN VALVES, INCLUDING VALVES, ARV'S, VALVE BOXES, PADS AND MARKERS ON THE ABANDONED PORTION OF EX. FORCE MAIN 17-A.

PROPOSED NEW 17-A FORCE MAIN 6" HDPE
PIPE (SEE PLAN AND PROFILE SHEETS)

CAP EXISTING FORCE MAIN TO THE SOUTH OF THIS POINT,
GROUT FILL AND ABANDON IN PLACE ±2,300 LF 6" CI PIPE,
TO THE TERMINAL MANHOLE ON 65TH AVE W.

EX. FORCE MAIN 17-A, (TO BE GROUT
FILLED AND ABANDONED IN PLACE)

CAP EXISTING FORCEMAIN, GROUT
FILL, ABANDON IN PLACE. FROM
THIS POINT TO 63RD AVE W

EX. FORCE MAIN TERMINAL MANHOLE; DISCONNECT
FORCE MAIN MANHOLE, MANHOLE TO BE REHABILITATED
WITHOUT LINER. PATCH ALL HOLES W/ NON-SHRINK
HYDRAULIC GROUT.

