

CITY OF CAPE CORAL UTILITIES DEPARTMENT

CONSTRUCTION PLANS

HANCOCK BRIDGE PARKWAY WATERMAIN RELOCATION

IN CONJUNCTION WITH LEE COUNTY DOT SIDEWALK IMPROVEMENT
SECTION 8, T 44 S, R 24 E, CITY OF CAPE CORAL, LEE COUNTY, FLORIDA

ABBREVIATIONS:

AC	ASBESTOS CONCRETE
AARV	AUTOMATIC AIR RELEASE VALVE
BFO	BURIED FIBER OPTIC
BOT.	BOTTOM
BT	BURIED TELEPHONE
B.V.	BUTTERFLY VALVE
CAS	FIBERGLASS PRESSURE PIPE
CONC.	CONCRETE
CONST.	CONSTRUCT
D.I.P.	DUCTILE IRON PIPE
DR.	DRAINAGE
EL.	ELEVATION
E.X	EXISTING
FH	FIRE HYDRANT ASSEMBLY
FM	FORCEMAIN
FOC	FIBER OPTIC CABLE
G.V.	GATE VALVE
HDD	HORIZONTAL DIRECTIONAL DRILL
HDPE	HIGH DENSITY POLYETHYLENE PIPE
I.C.	INVERT ELEVATION
LF	LINEAR FEET
MES	MITERED END SECTION
EX.	MINIMUM
MJ	MECHANICAL JOINT
N.G.	NATURAL GROUND
OHW	OVERHEAD WIRE
PVC	POLYVINYL CHLORIDE
PVMT.	PAVEMENT
R/W	RIGHT OF WAY LINE
RCP	REINFORCED CONCRETE PIPE
RED.	REDUCER
S.U.P.	SUBSURFACE UTILITY ENGINEERING
TOB	TOP OF BANK
WM	WATERMAIN
WS	WATER SERVICE

NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO THE CITY OF CAPE CORAL UTILITY DEPARTMENT PROCEDURES, STANDARDS, SPECIFICATIONS, MATERIALS AND DETAILS.
2. HORIZONTAL DIRECTIONAL DRILL WATERMAIN CONSTRUCTION SHALL USE HDPE DR11 BLUE IDENTIFIED PIPE FOR CASING AND CARRIER.
3. WATERMANS SHALL BE BLUE IDENTIFIED C-900 OR C-905 CL150 DR18 PVC PIPE OR CEMENT LINED PRESSURE RATING 250 DUCTILE IRON PIPE WITH DUCTILE IRON MECHANICAL JOINT RESTRAINED FITTINGS.
4. THE WORK AREA CONTAINS MANY UNDERGROUND/OVERHEAD UTILITIES INCLUDING TELEPHONE AND FIBER OPTIC CABLES, ELECTRIC, GAS, COMMUNICATION, WATER AND SANITARY GRAVITY SEWER, RE-USE MAINS, ETC.
5. NEW REPLACEMENT WATER SERVICES AND METER BOXES WITH INSTALLATION/TRANSFER OF CITY PROVIDED METERS ALONG WITH THE HOUSE WATER LINE CONNECTION ARE REQUIRED.
6. COORDINATION AND PHASING IS REQUIRED WITH OTHER ONGOING CONSTRUCTION OCCURING AT THE WORK SITE. SERVICE INTERRUPTION/IMPACTS SHALL BE MINIMIZED AND/OR AVOIDED.
7. ALL HEALTH DEPARTMENT RULES, REQUIREMENTS AND REGULATIONS SHALL BE FOLLOWED.

SHEET INDEX

NO.	DESCRIPTION
1	COVER
2	MASTER PLAN
3-7	PLAN SHEETS
8	WATERMAIN EXTENSION
9-16	CONNECTION DETAILS
17-20	UTILITY DETAILS
21-22	GENERAL NOTES

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION

ELEVATIONS DEPICTED HEREIN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE CONVERSION FACTOR FROM THE NAVD TO NGVD IS +1.26'

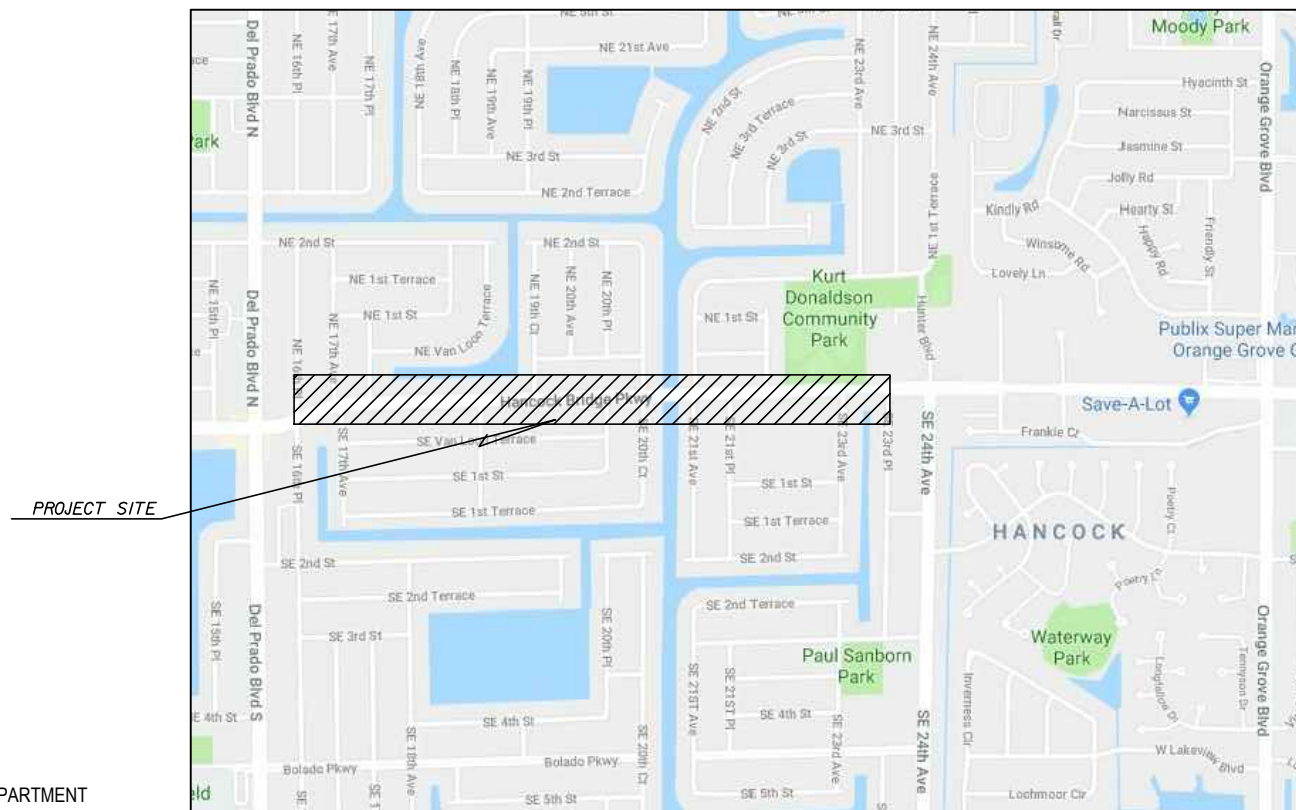
ENGINEER OF RECORD:

RONALD KERFOOT, P.E.
P.E. NO.: 20768

CITY OF CAPE CORAL:

JEFF PEARSON MS, PMP, PWE - UTILITIES DIRECTOR

WILLIAM (BILL) SPERRY, PE - UTILITIES PRINCIPAL ENGINEER



LOCATION MAP

PREPARED FOR:
CITY OF CAPE CORAL UTILITIES

P.O. BOX 150027
CAPE CORAL,
FLORIDA 33915

PREPARED BY:

AIM ENGINEERING & SURVEYING, INC.

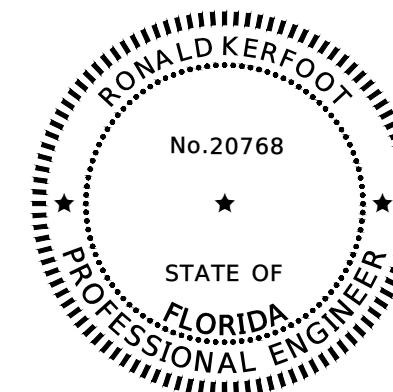


2161 FOWLER STREET
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PHONE (239) 332-4569

CERTIFICATE OF AUTHORIZATION NO. 3114

FINAL PLANS



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

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RONALD KERFOOT, P.E. NO. 20768

REVISED AUGUST 2019
SHEET 01
JULY 2019



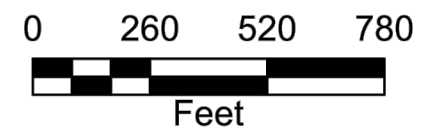
Exempt from public disclosure pursuant to Section 119.071(3)(b), Florida Statutes.



Date: 8/21/2017

Map and GIS Data Disclaimer:
 GIS data produced by the City of Cape Coral, Utility Department is for the sole purpose of aiding regional decisions and is not warranted for any other use. We are not warranted for small area studies or determinations.

Utilities Administration Department
 City of Cape Coral
 P.O. Box 150027
 Cape Coral, Florida 33915-0027
 Ph: (239) 573-3039 Fax: (239) 574-0731



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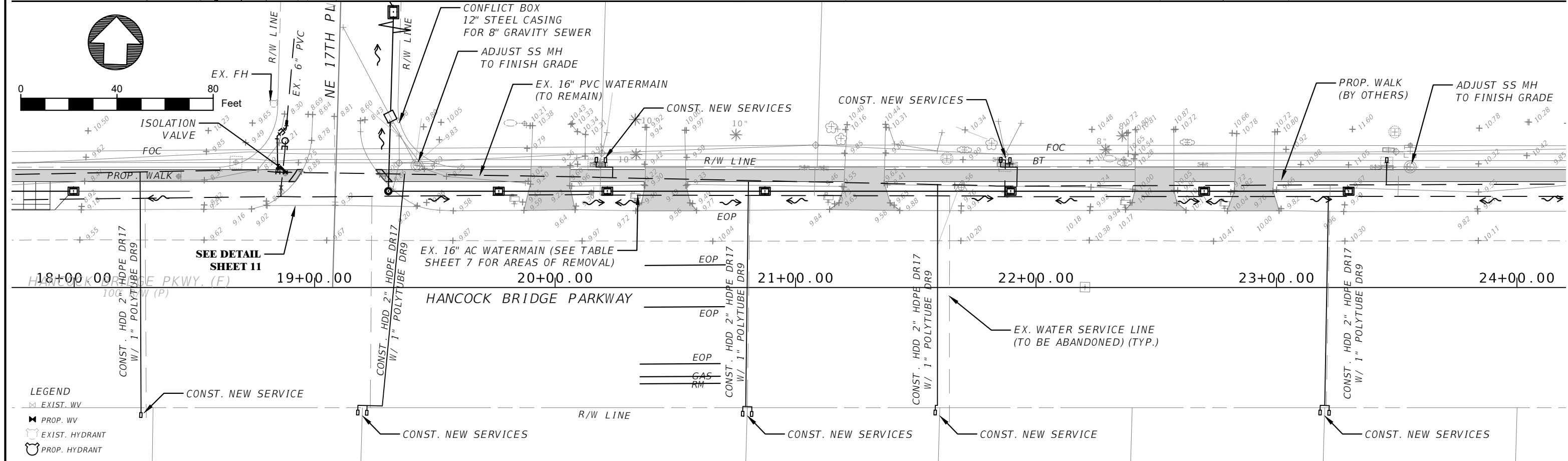
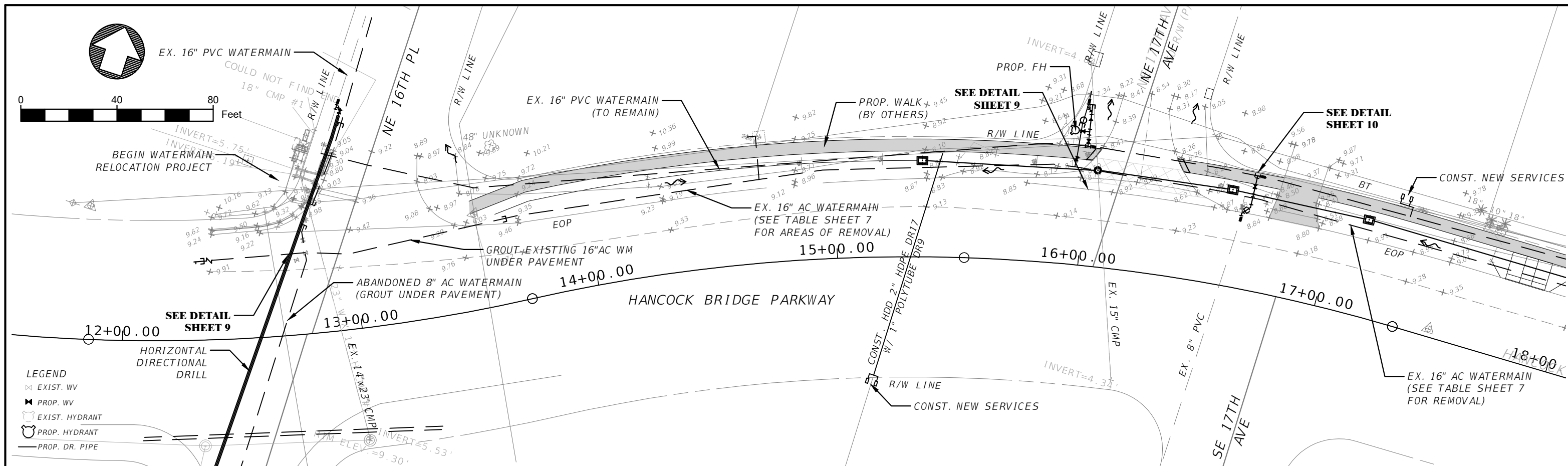
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UTILITIES DEPARTMENT

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	RONALD KERFOOT PROFESSIONAL ENGINEER P.E. No. 20768

HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
MASTER PLAN

PROJECT NO.:	18-0735
SHEET NO.:	2



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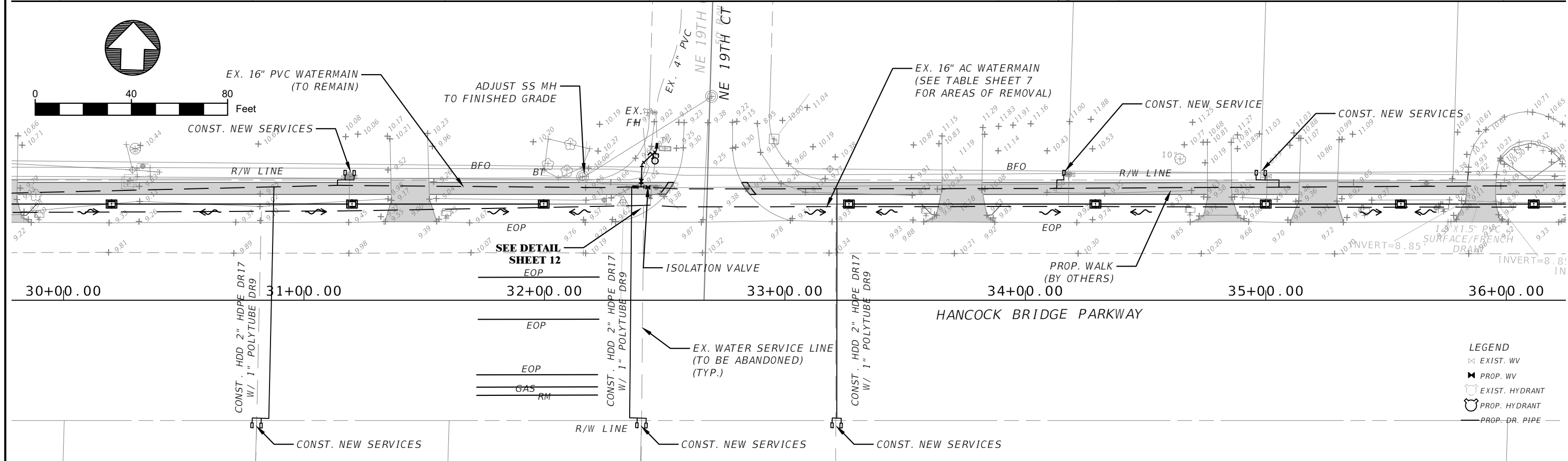
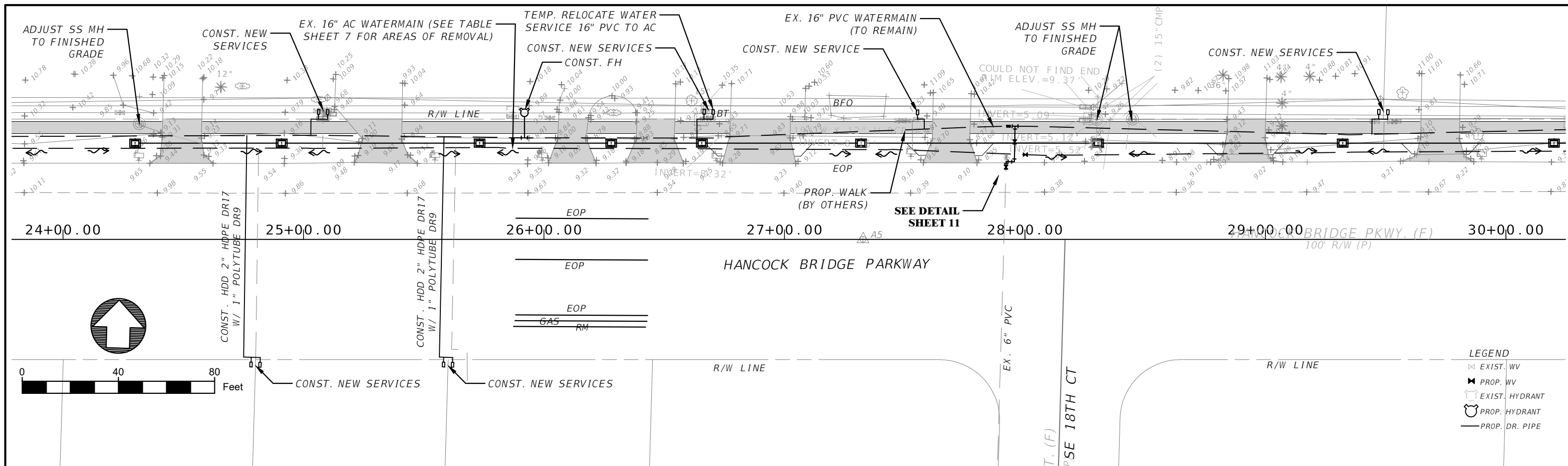
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
PLAN SHEET: 12+70 TO 24+00

PROJECT NO.: 18-0735
 SHEET NO.: 3

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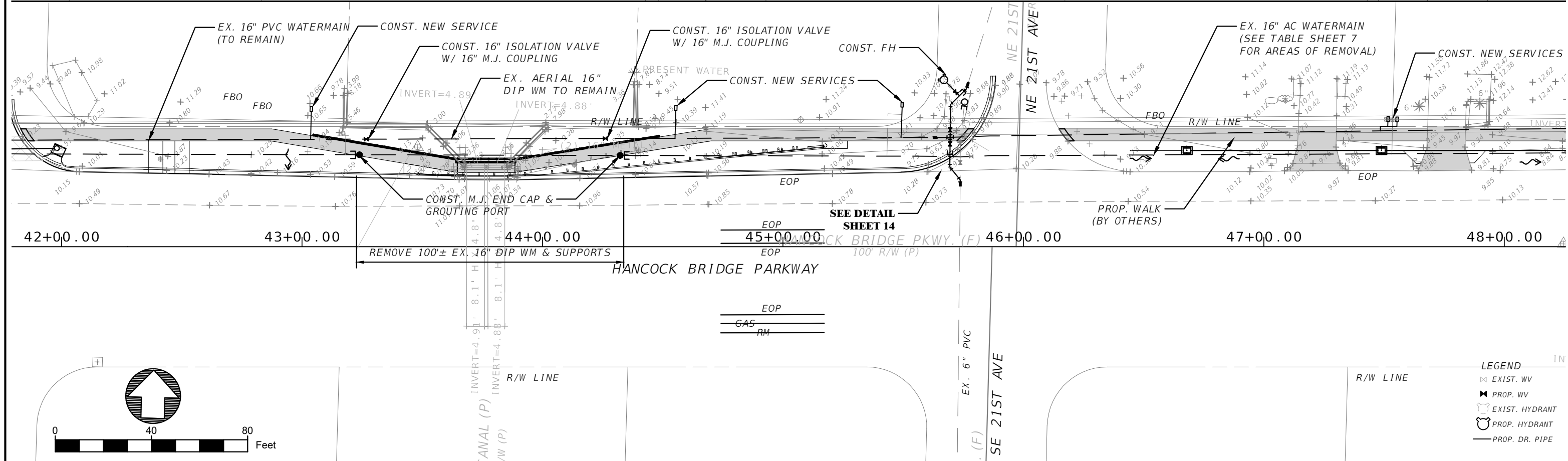
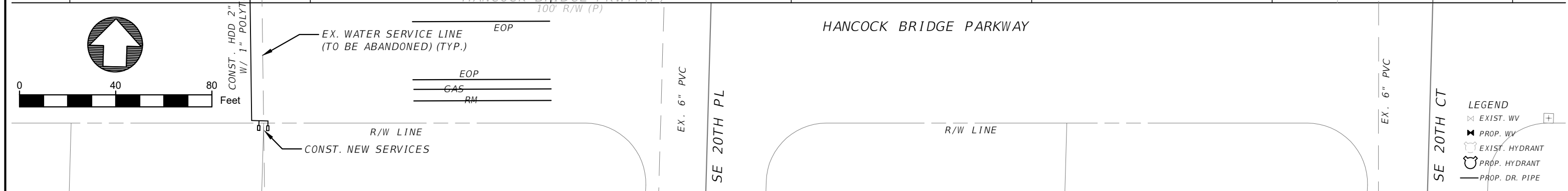
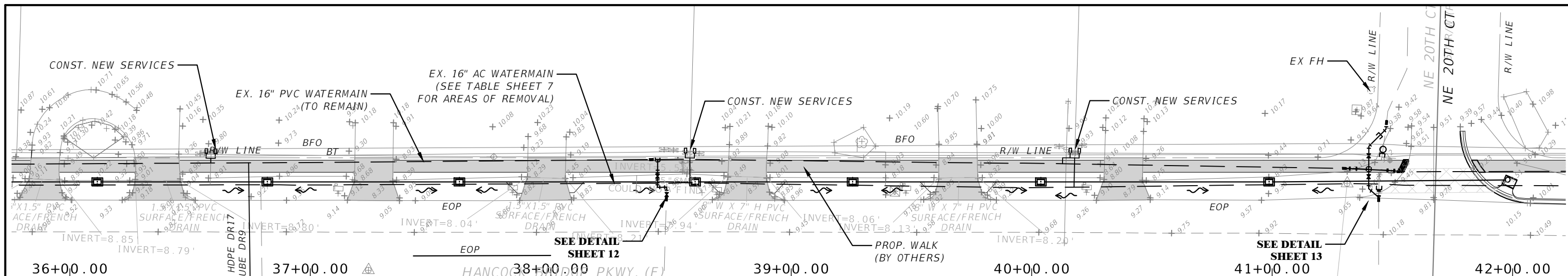
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
 PLAN SHEET: 24+00 TO 36+00

PROJECT NO.:	18-0735
SHEET NO.:	4

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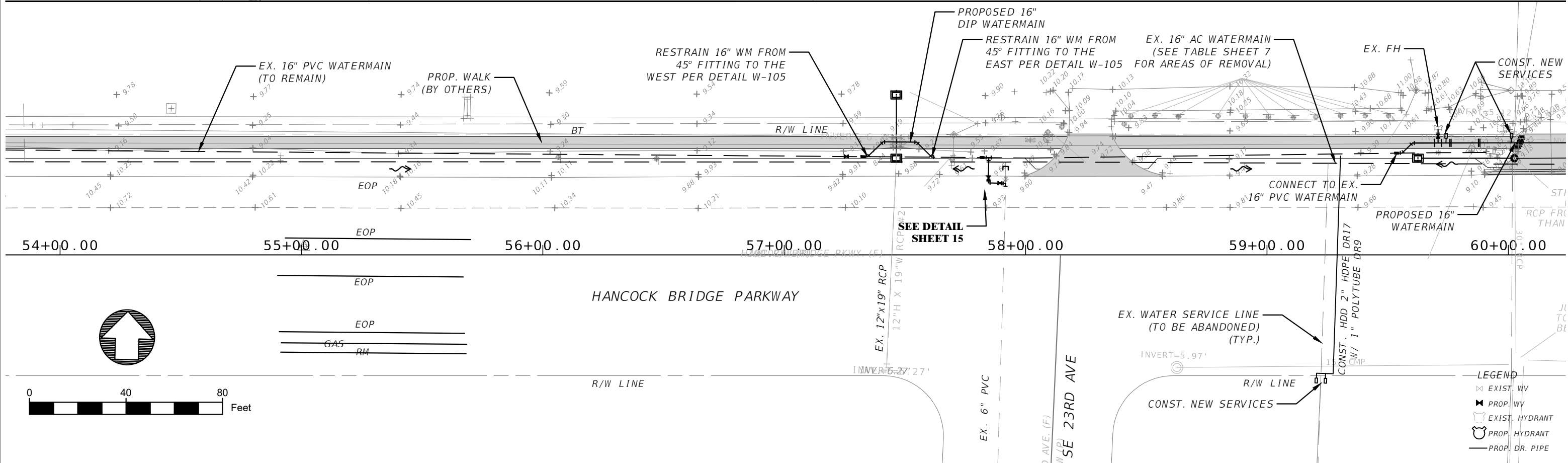
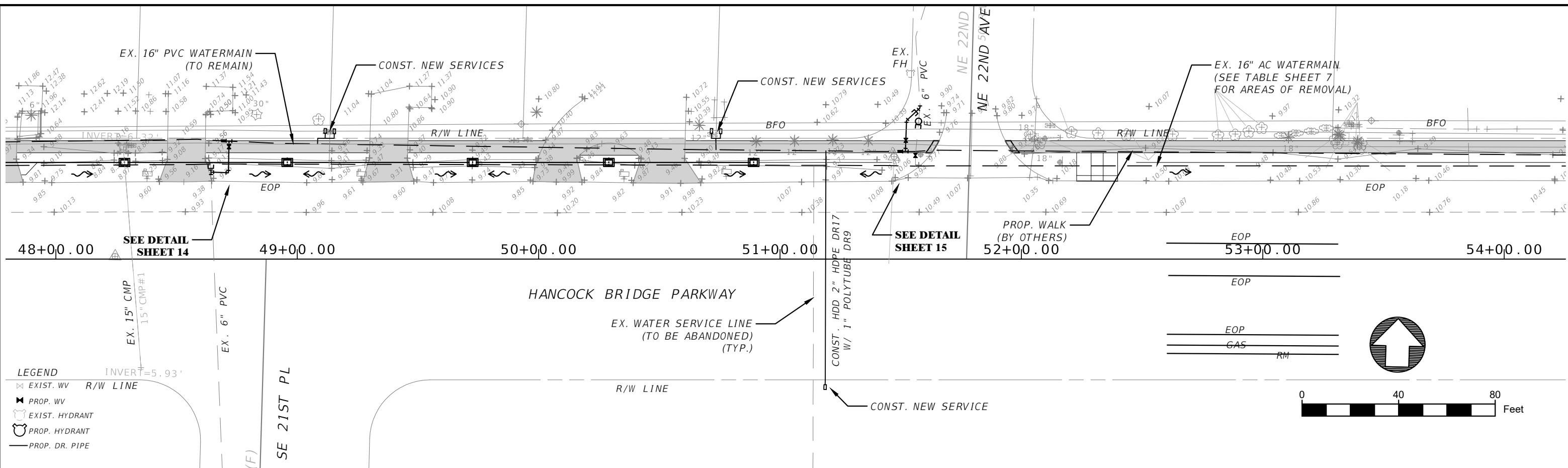
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
PLAN SHEET: 36+00 TO 48+00

PROJECT NO.: 18-0735
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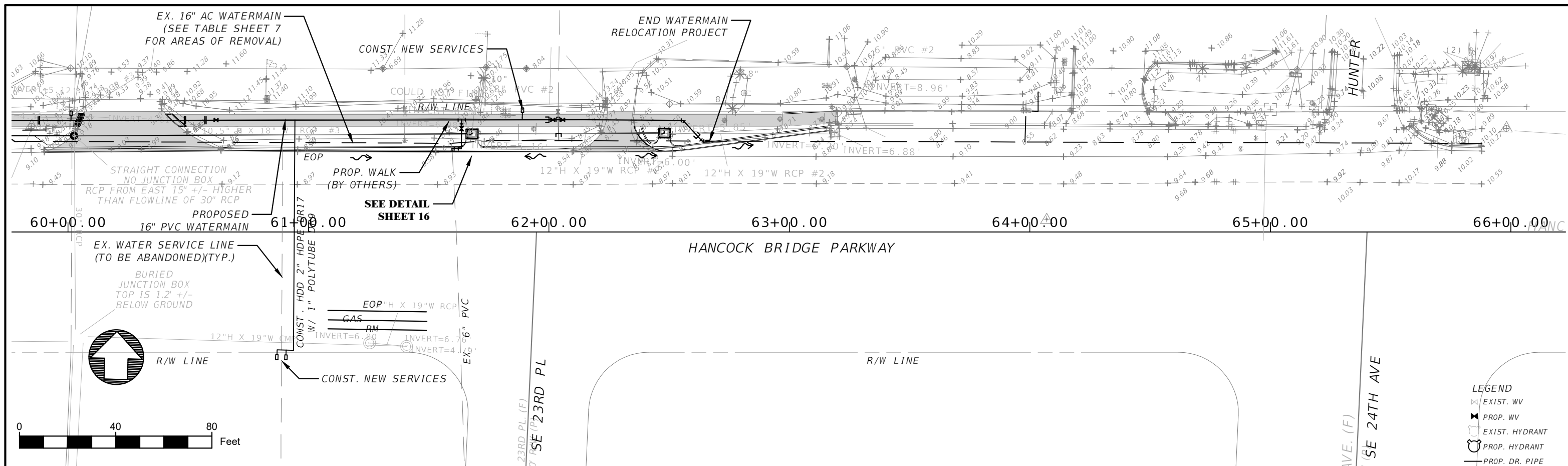
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
PLAN SHEET: 48+00 TO 60+00

PROJECT NO.: 18-0735
 SHEET NO.: 6

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APPROXIMATE REMOVAL/GROUTING LOCATIONS

<u>8" AC WATERMAIN AREAS OF GROUTING</u>			<u>ALTERNATE 16" AC WM GROUT OR REMOVAL</u>			<u>16" AC WATERMAIN REMOVAL</u>			<u>UNDER PAVEMENT</u>		
BEGIN STA.	END STA.	LENGTH	BEGIN STA.	END STA.	LENGTH	BEGIN STA.	END STA.	LENGTH	BEGIN STA.	END STA.	LENGTH
12+65	13+05	90'L	13+70	15+24	154'	15+24	17+22	198'	9+00	12+80	380'
			17+22	17+89	67'	17+89	18+09	20'			
			18+09	18+80	71'	19+20	23+40	420'			
			23+40	24+20	80'	24+20	27+63	343'			
			27+63	28+20	57'	28+20	28+40	20'			
			28+40	29+22	82'	29+22	29+42	20'			
			29+42	30+08	66'	30+08	30+32	24'			
			30+32	30+89	57'	30+89	32+09	120'			
			42+06	43+27	121'	33+16	42+06	890'			
			44+27	45+60	133'	46+45	51+00	455'			
			51+00	51+47	47'	57+36	57+56	20'			
			52+11	57+36	525'	59+53	60+64	111'			
			57+56	59+53	197'	61+58	62+70	112'			
			60+64	61+58	94'						
					TOTAL 1,751'			TOTAL 2,753'			

<u>16" AC WATERMAIN AREAS OF GROUTING</u>			<u>AERIAL CROSSING</u>		
BEGIN STA.	END STA.	LENGTH	BEGIN STA.	END STA.	LENGTH
12+80	13+70	90'	43+27	44+27	100'
18+80	19+20	40'			
32+09	33+16	107'			
45+60	46+45	85'			
51+47	52+11	64'			
		TOTAL 386'			

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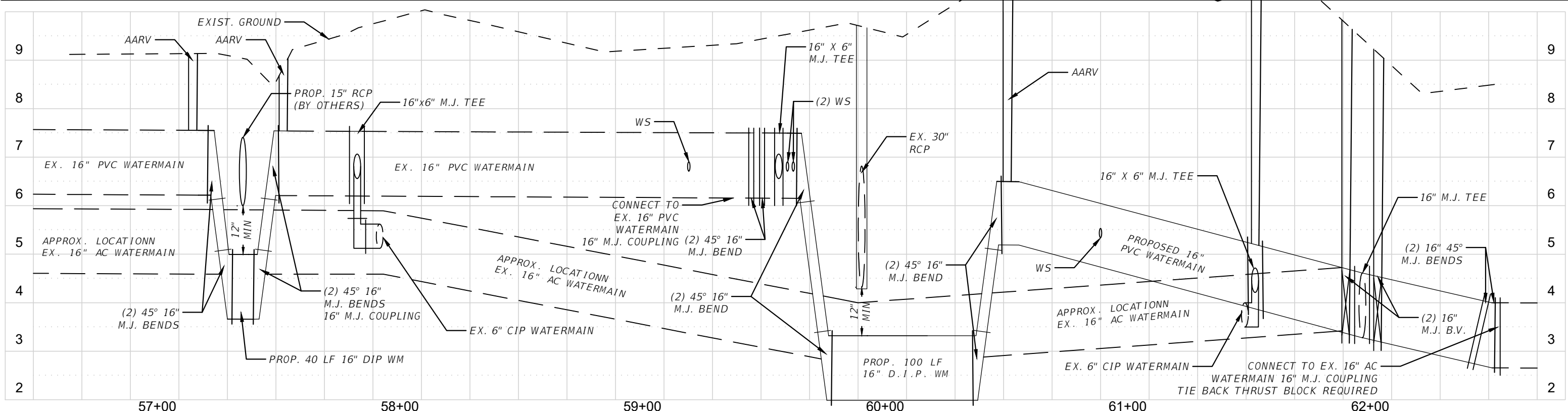
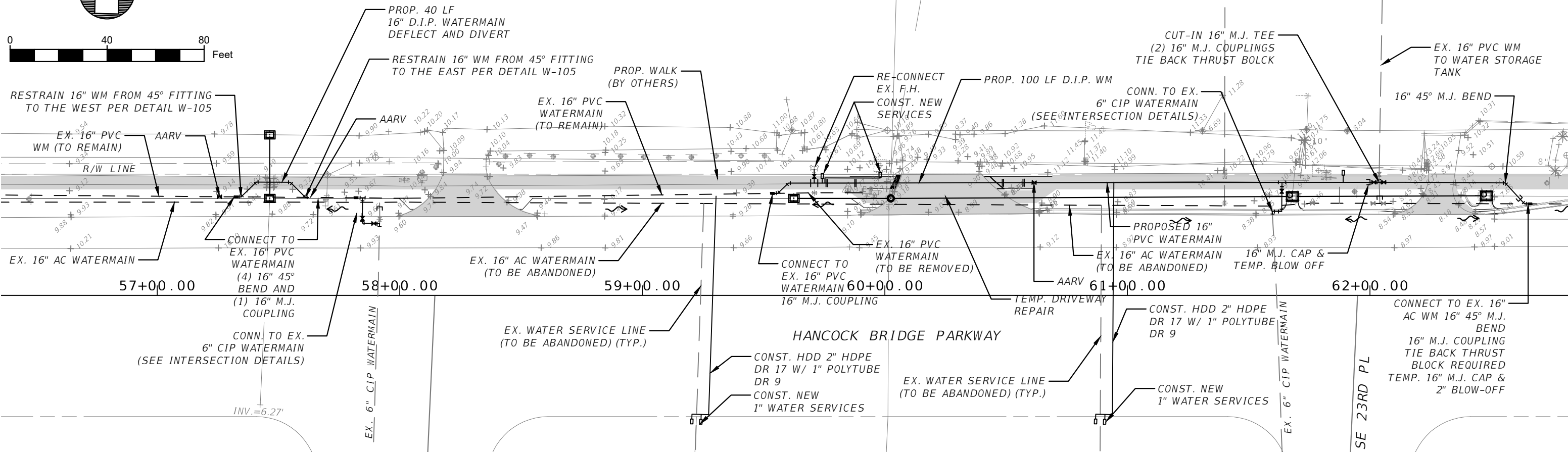
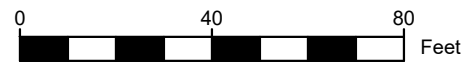
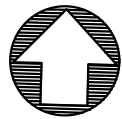
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION

PLAN SHEET: 60+00 TO 62+20

PROJECT NO.:	18-0735
SHEET NO.:	7

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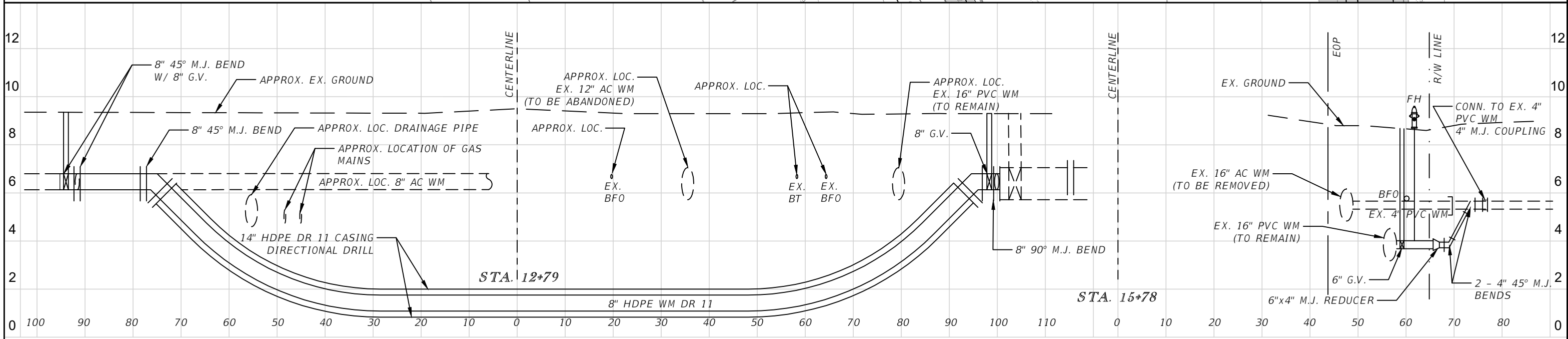
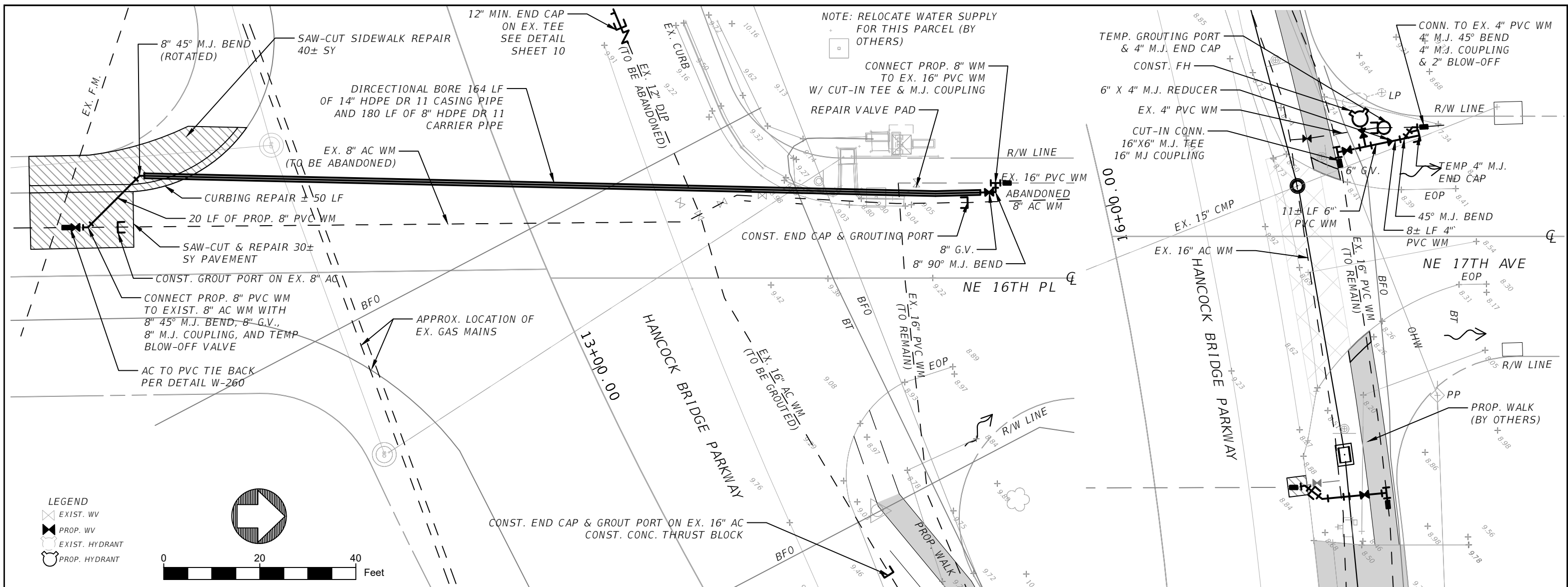
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
WATERMAIN EXTENSION

PROJECT NO.: 18-0735
 SHEET NO.: 8

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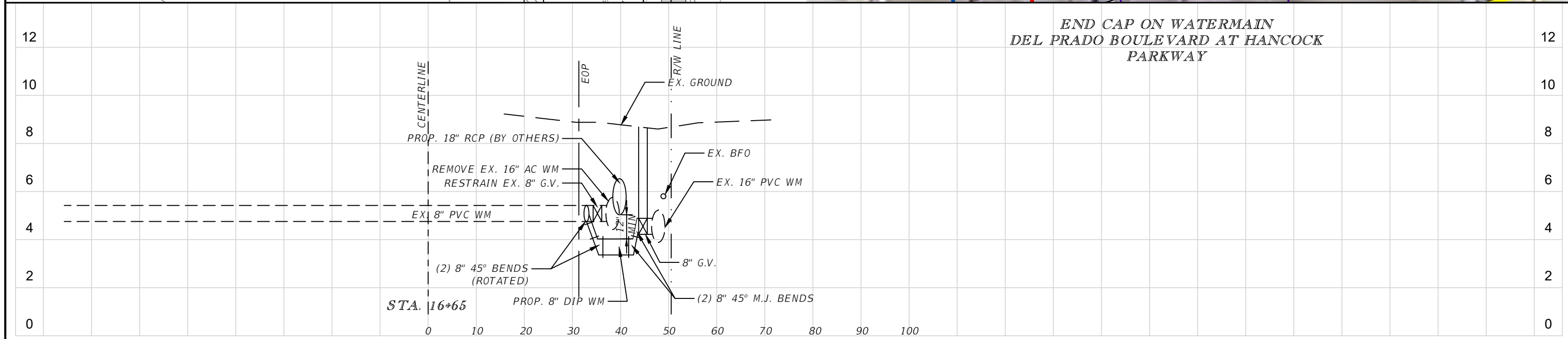
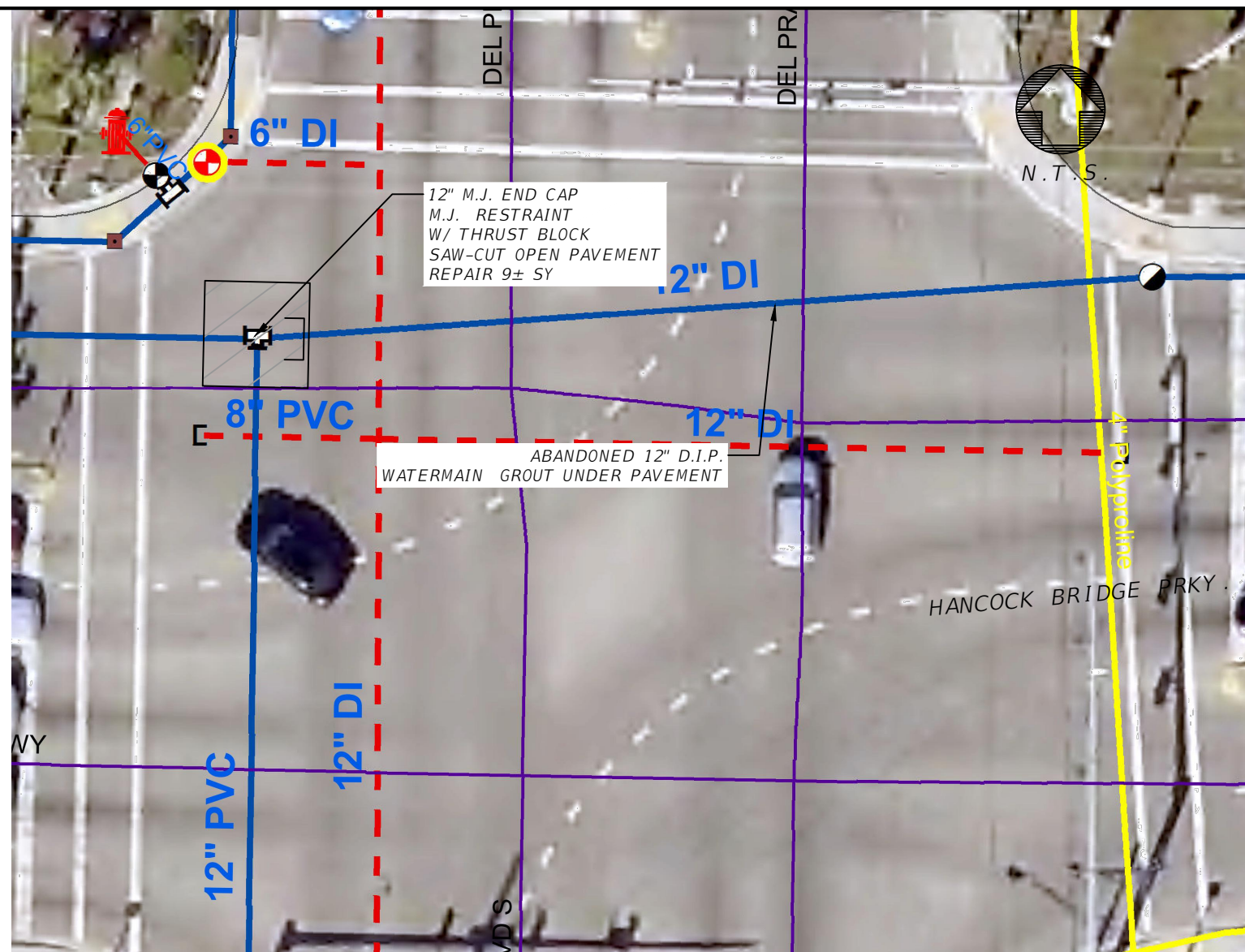
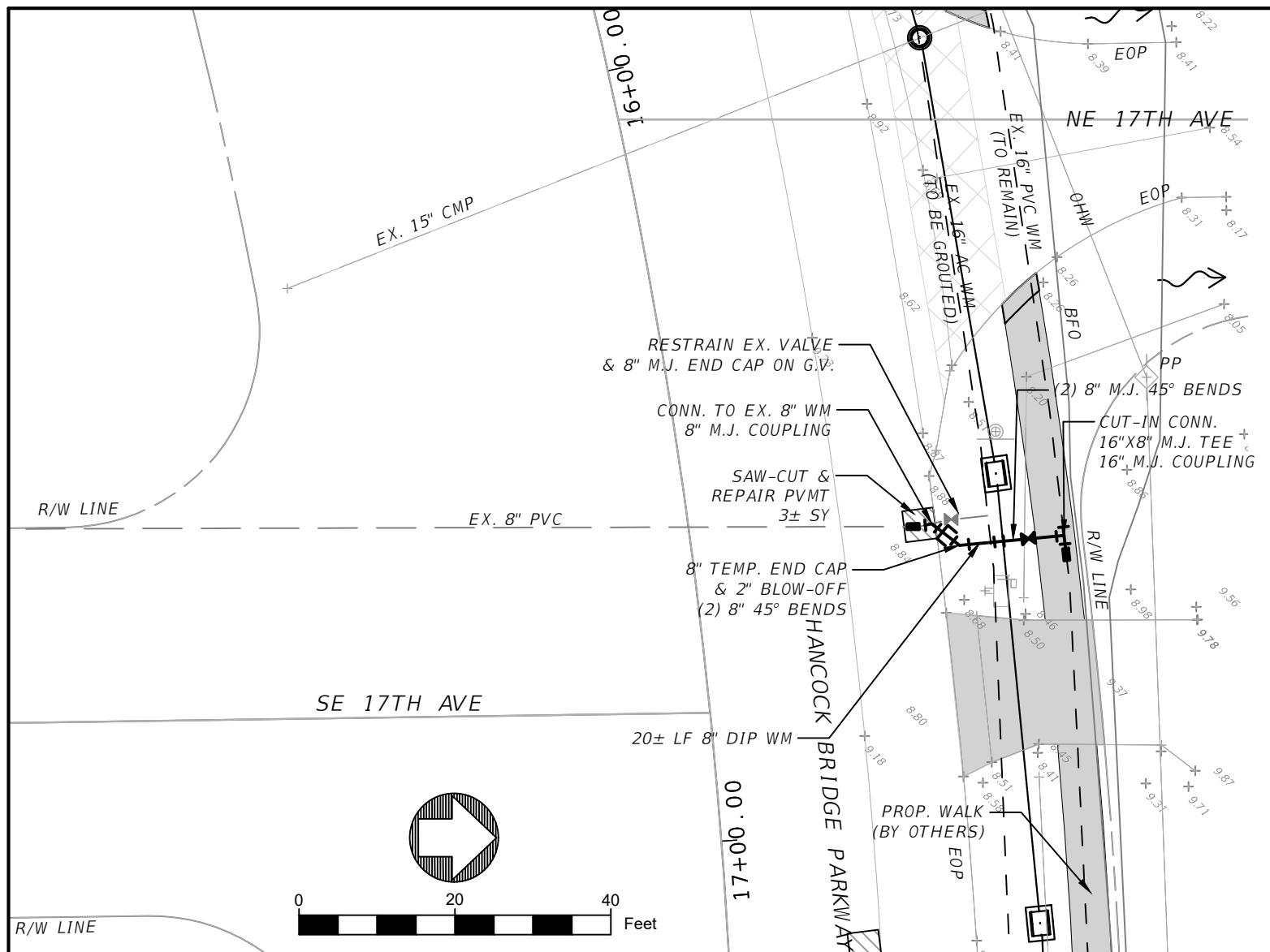
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.: 18-0735
 SHEET NO.: 9

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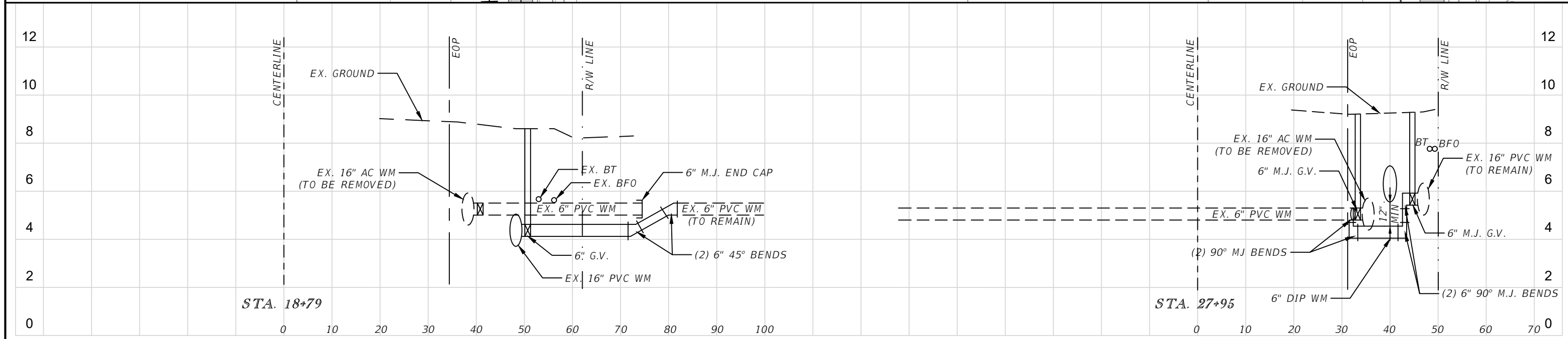
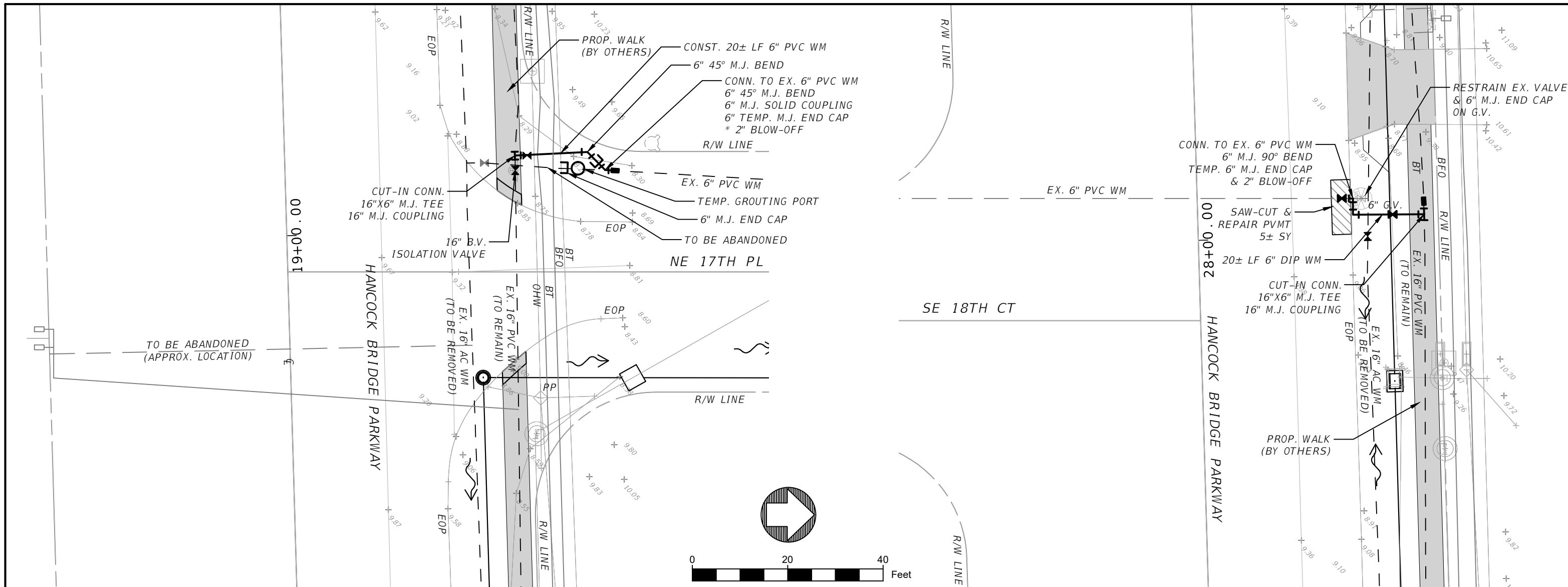
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.: 18-0735
 SHEET NO.: 10



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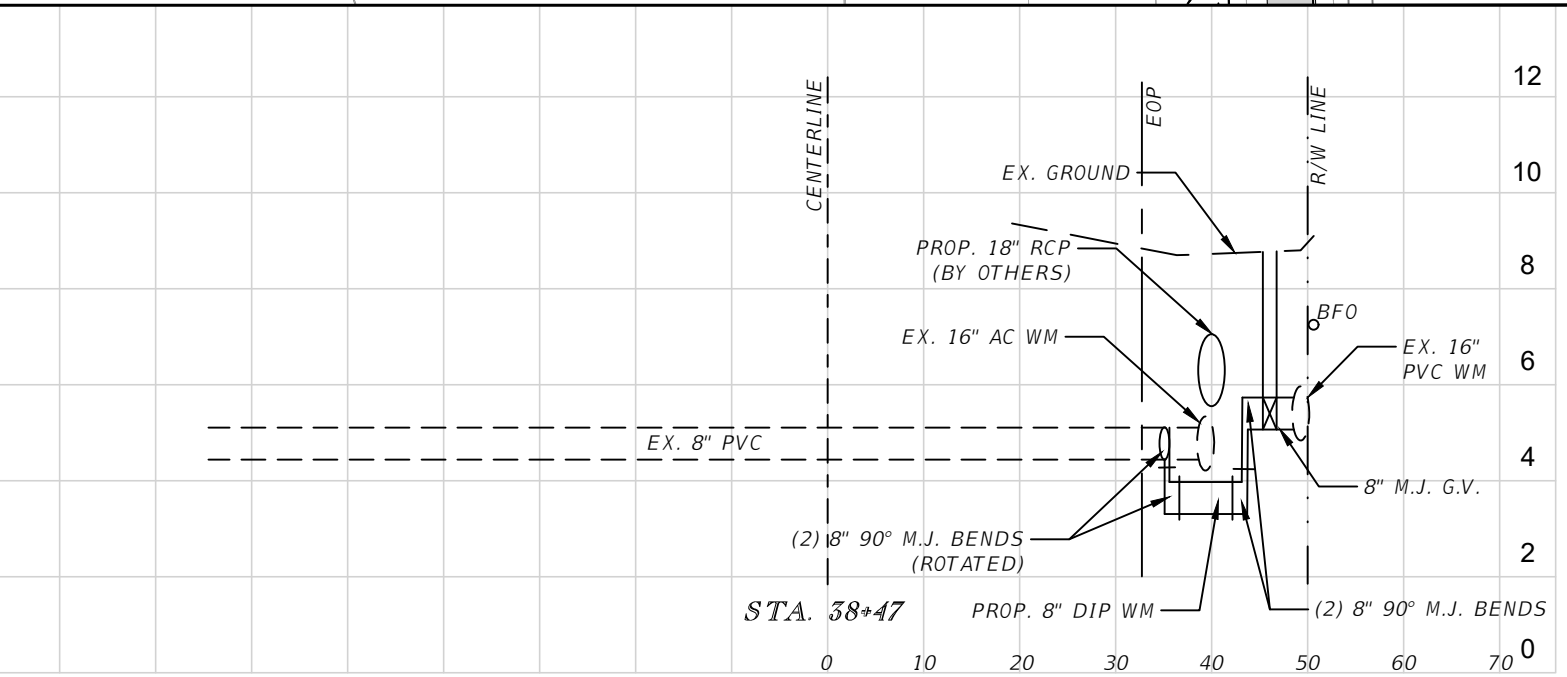
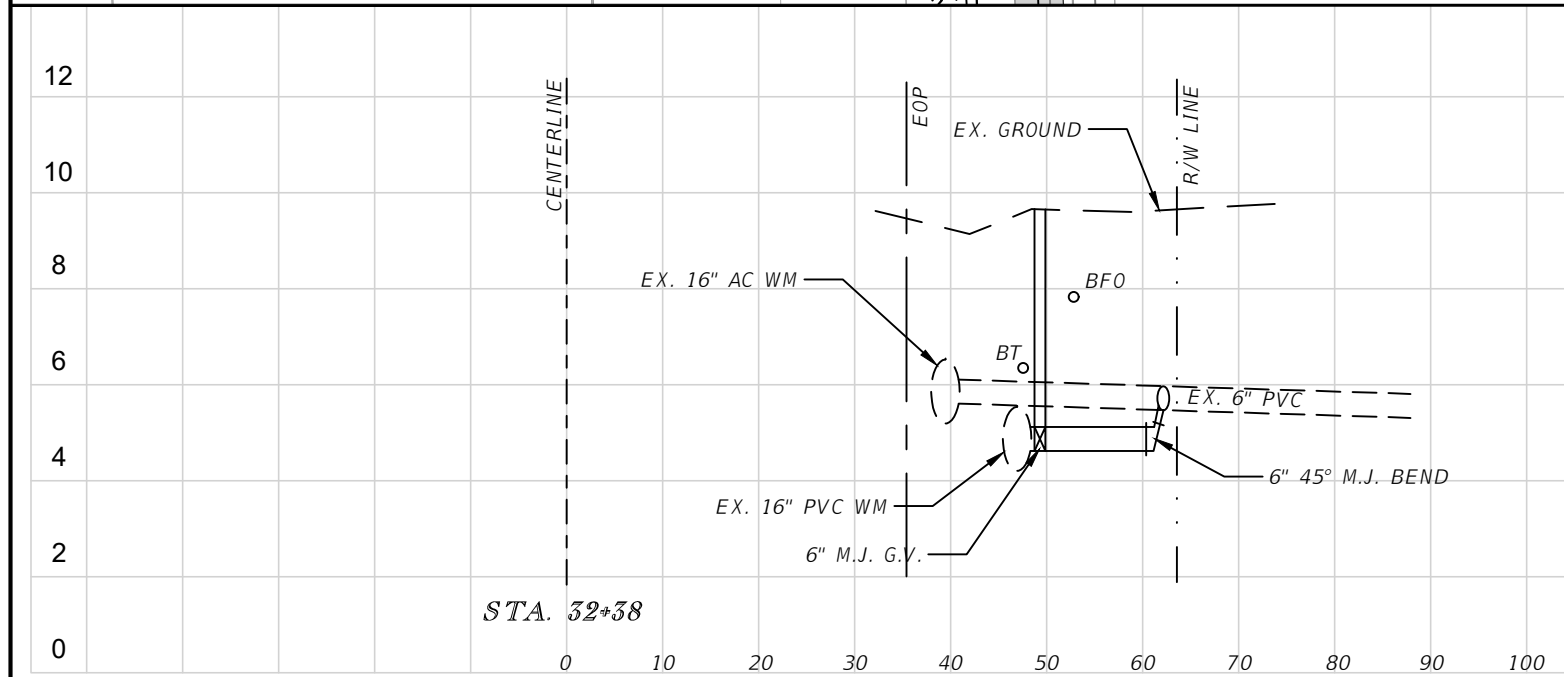
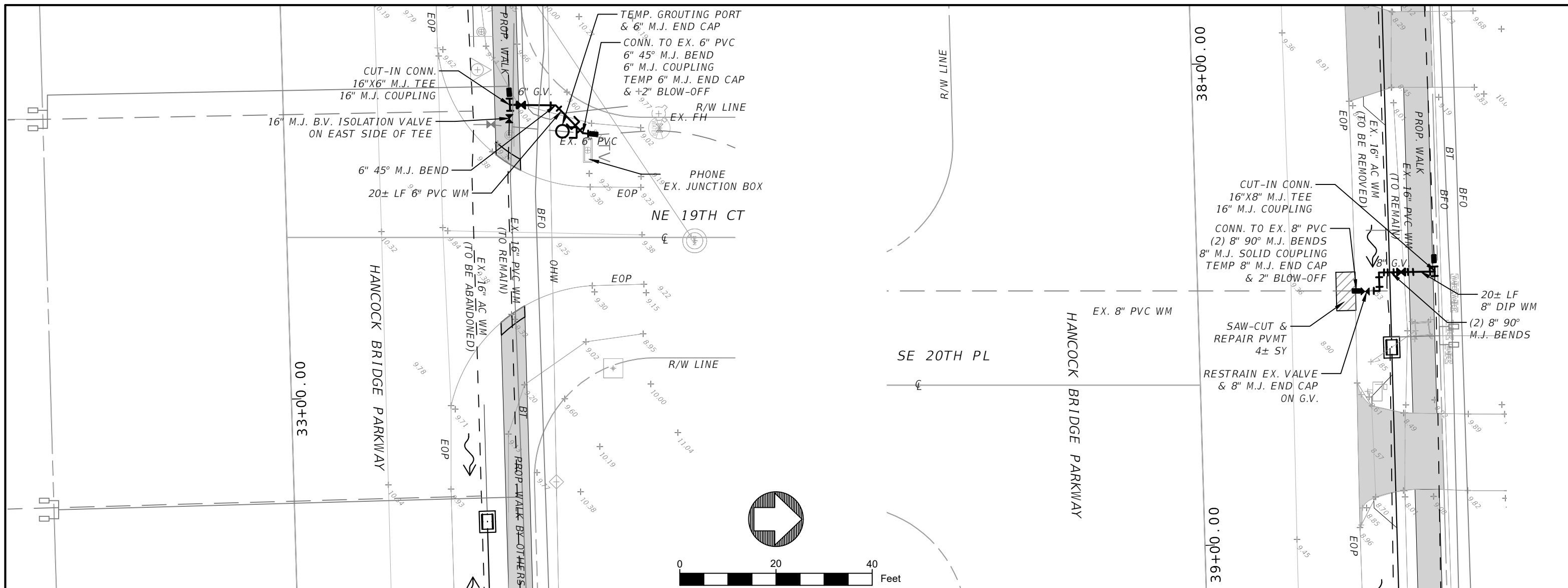
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.: 18-0735
 SHEET NO.: 11

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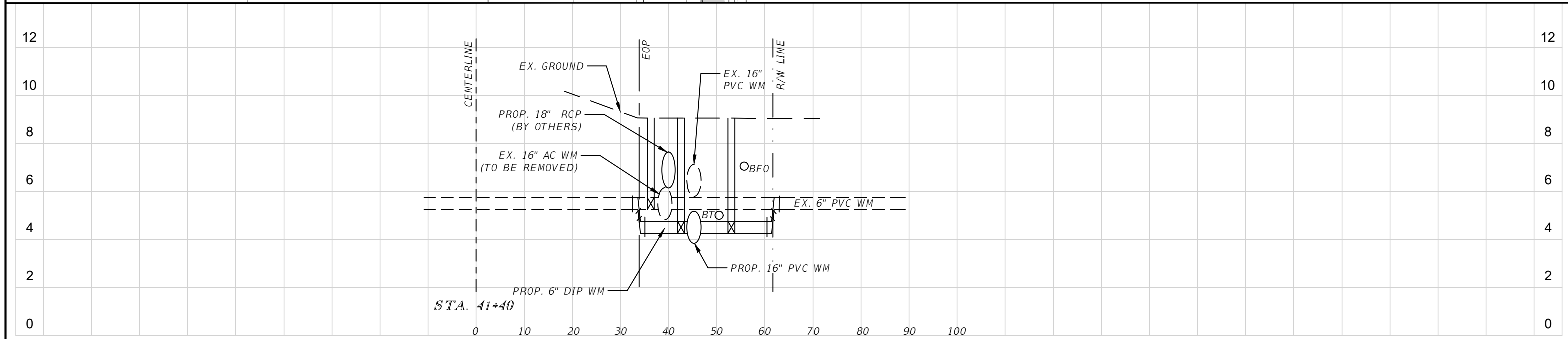
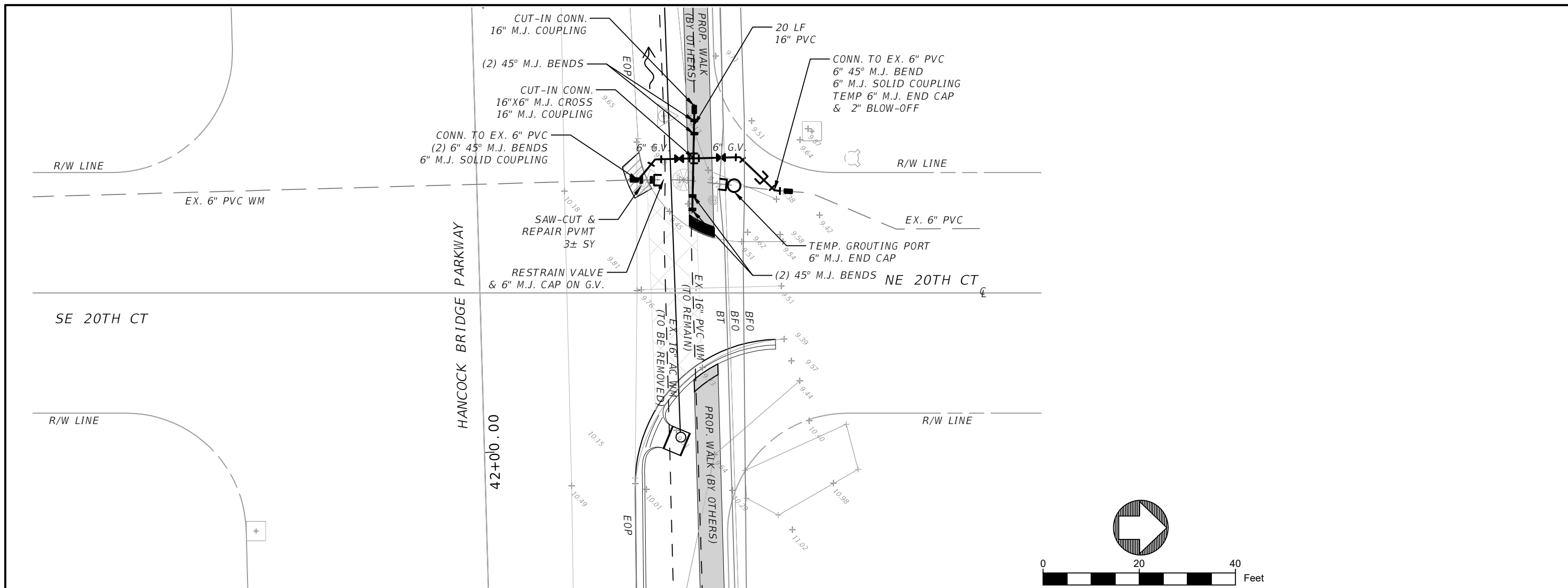
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HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.:	18-0735
SHEET NO.:	12

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 * PROJECT MANAGEMENT * CONSTRUCTION ENGINEERING & MANAGEMENT
 2161 FOWLER ST. STE. 100 FORT MYERS, FL. 33901 * PHONE: 239-332-4569
 E-MAIL: ENGINEERING@AIMENGR.COM * CERTIFICATION OF AUTHORIZATION No. 3114

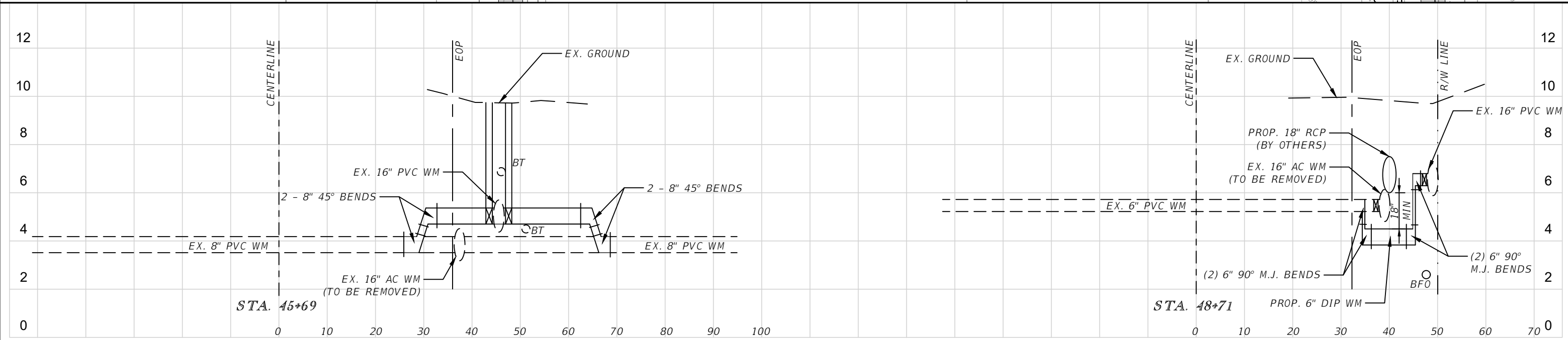
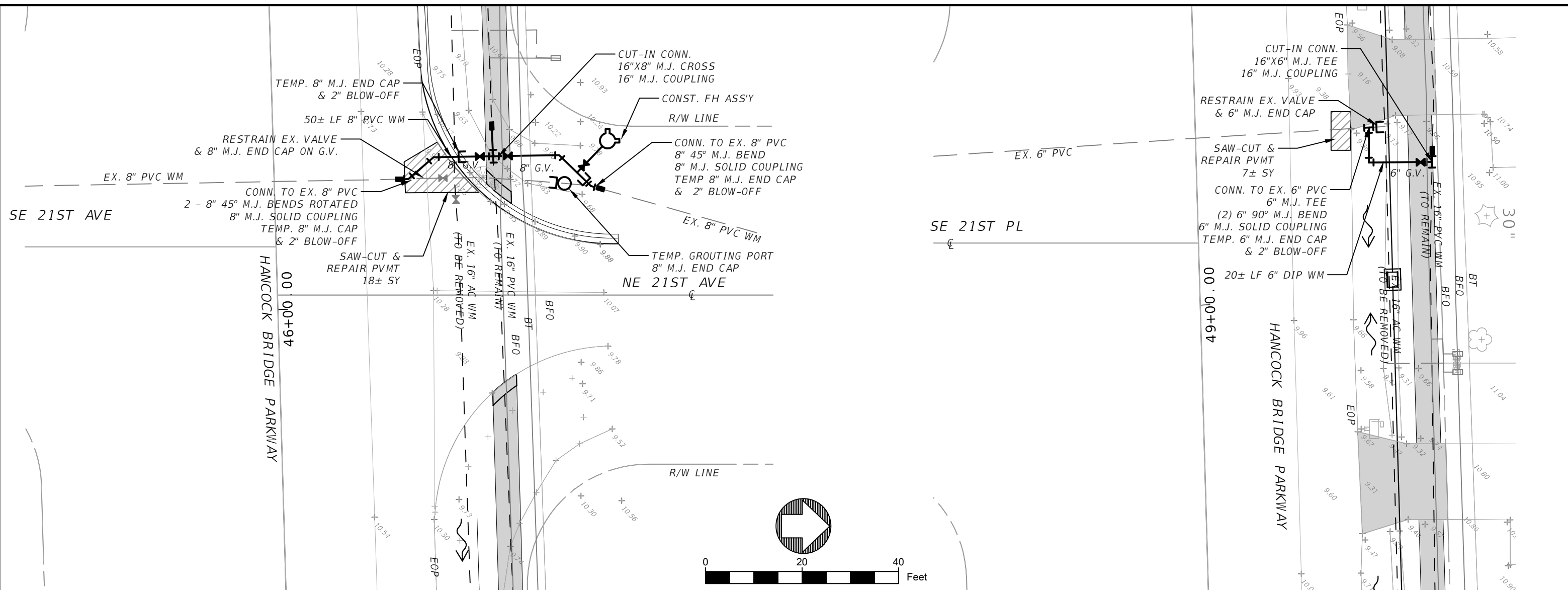
PREPARED FOR:
CITY OF CAPE CORAL
UTILITIES DEPARTMENT

DATE:	SEPT 2018
DRAWN BY:	JS
CHECKED BY:	BB
	RONALD KERFOOT PROFESSION ENGINEER P.E. No. 20768

HANCOCK BRIDGE PARKWAY
WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.:	18-0735
SHEET NO.:	13

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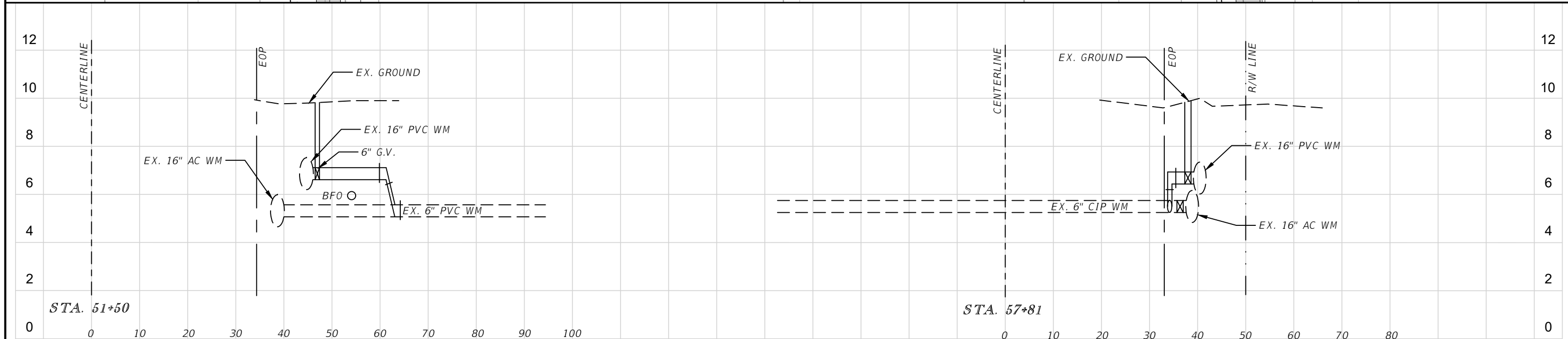
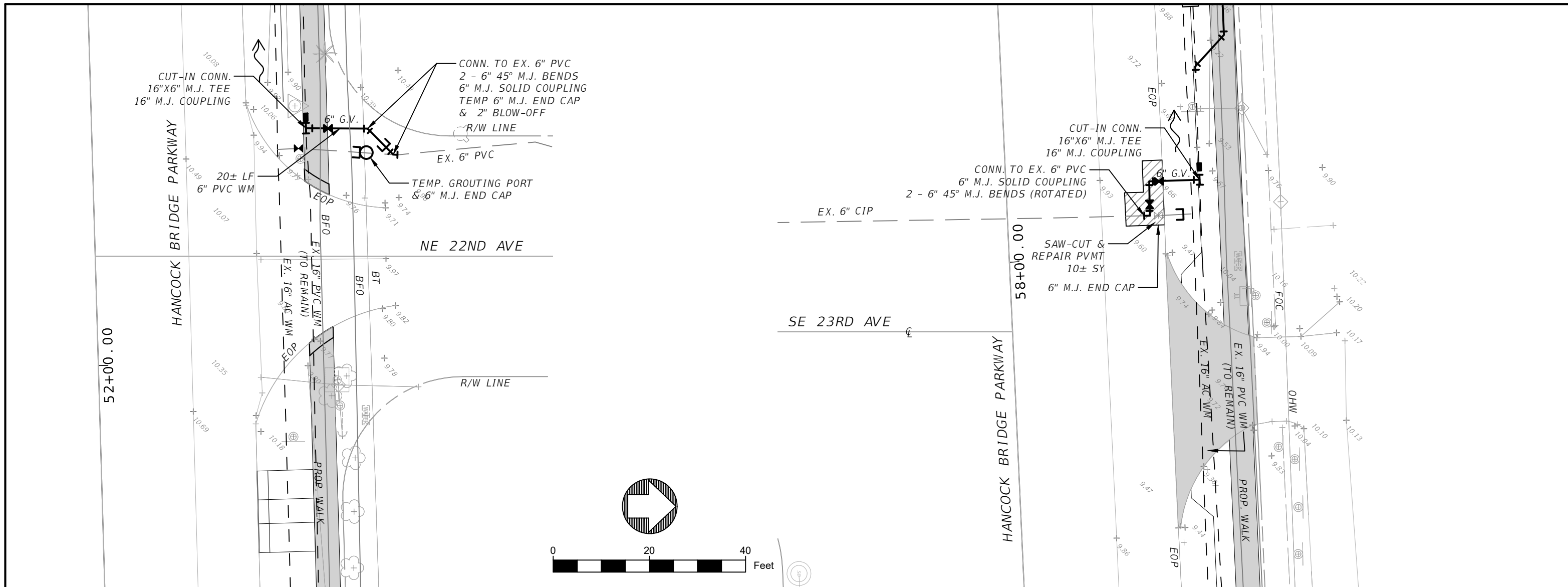
PREPARED FOR:
CITY OF CAPE CORAL
 UTILITIES DEPARTMENT

DATE: SEPT 2018
 DRAWN BY: JS
 CHECKED BY: BB
 RONALD KERFOOT
 PROFESSION ENGINEER
 P.E. No. 20768

HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.: 18-0735
 SHEET NO.: 14

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 * PROJECT MANAGEMENT * CONSTRUCTION ENGINEERING & MANAGEMENT
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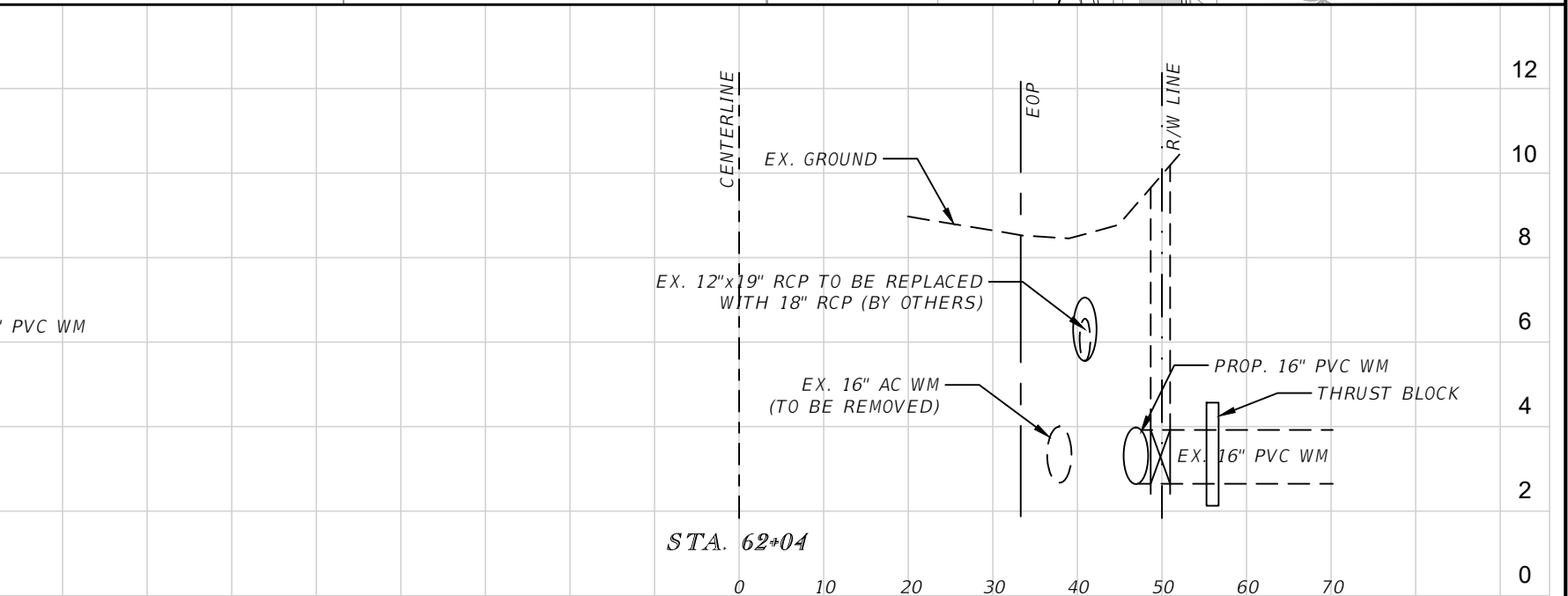
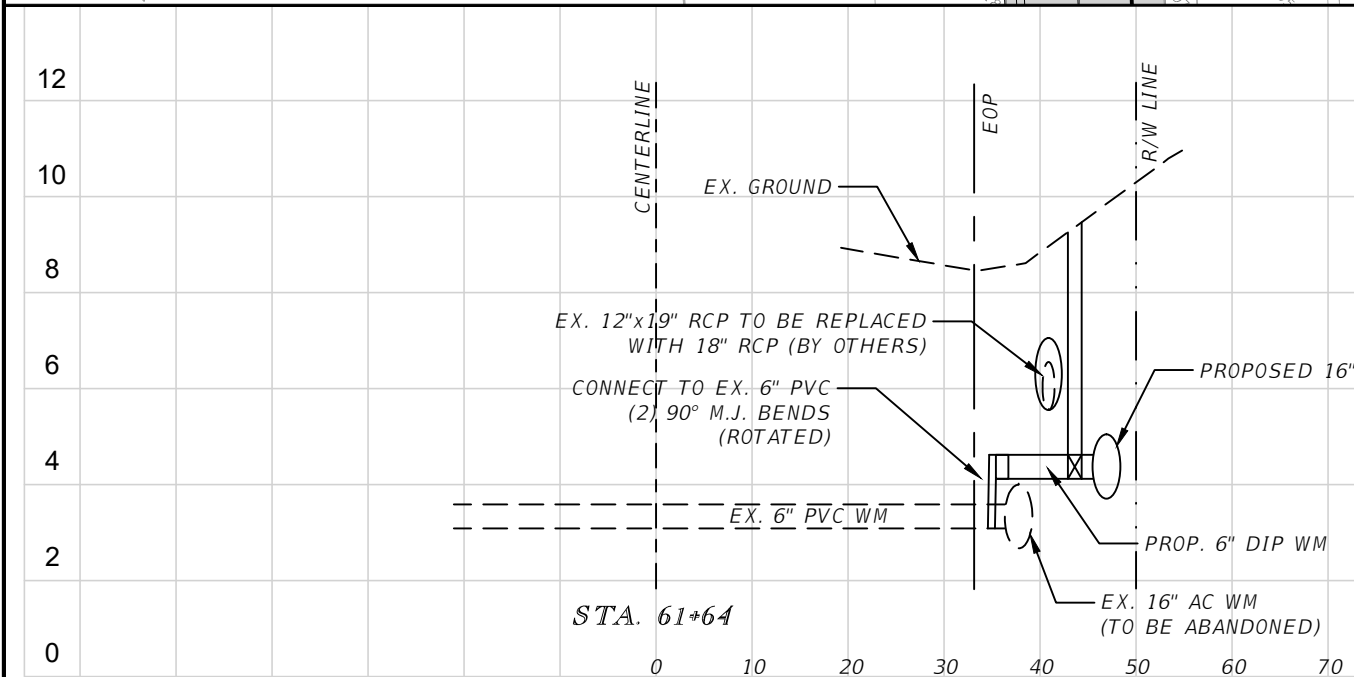
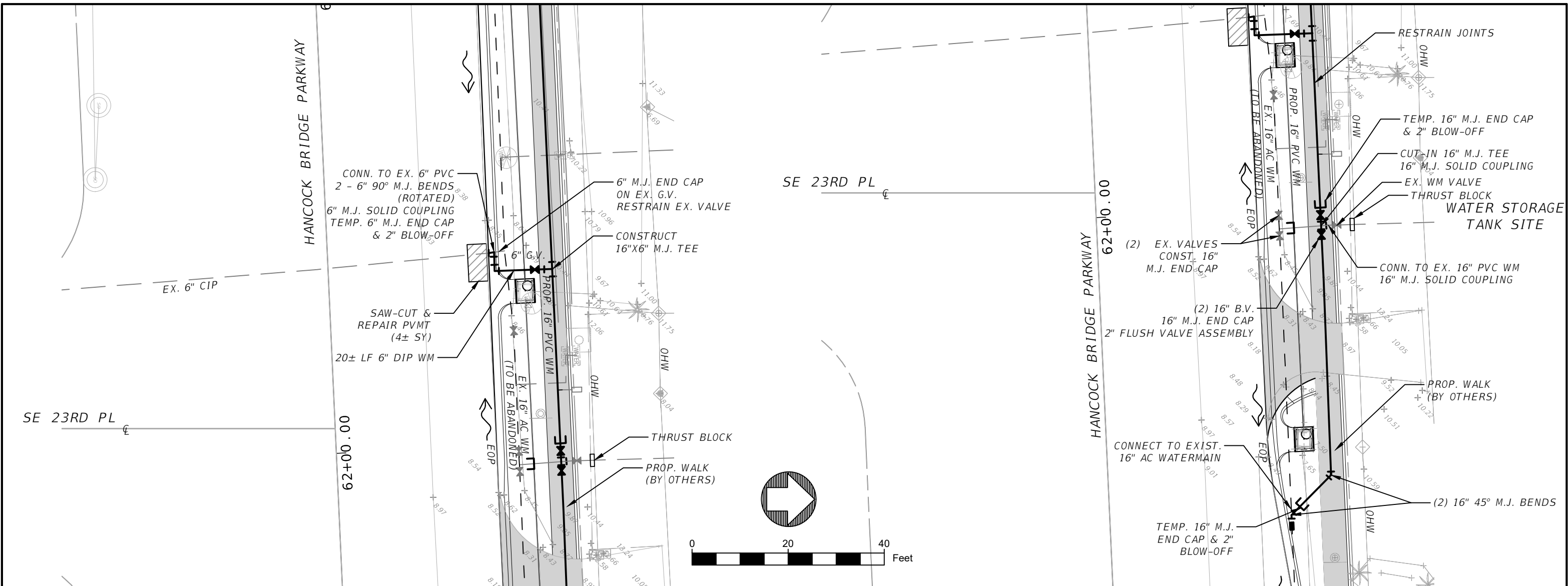
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CITY OF CAPE CORAL
UTILITIES DEPARTMENT

DATE:	SEPT 2018
DRAWN BY:	JS
CHECKED BY:	BB
	RONALD KERFOOT PROFESSIONAL ENGINEER P.E. No. 20768

HANCOCK BRIDGE PARKWAY
WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.:	18-0735
SHEET NO.:	15

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CITY OF CAPE CORAL
UTILITIES DEPARTMENT

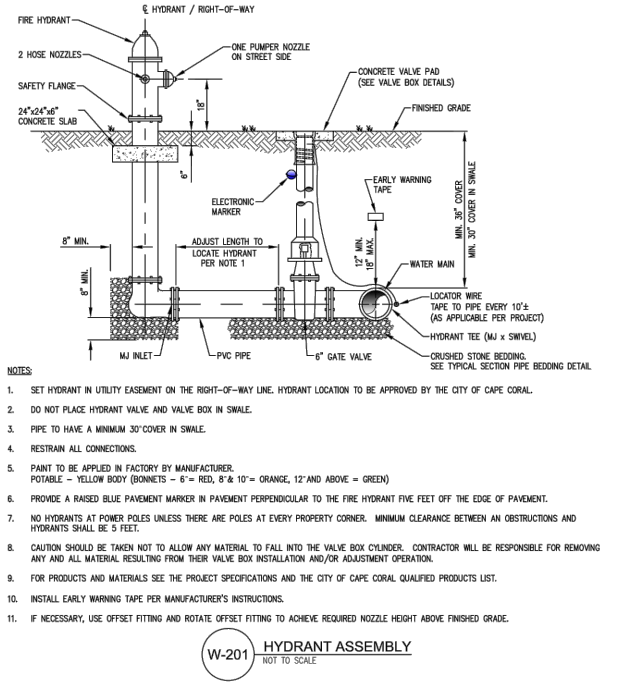
DATE: SEPT 2018
 DRAWN BY: JS
 CHECKED BY: BB
 RONALD KERFOOT
 PROFESSIONAL ENGINEER
 P.E. No. 20768

HANCOCK BRIDGE PARKWAY
 WATERMAIN RELOCATION
CONNECTION DETAILS

PROJECT NO.: 18-0735
 SHEET NO.: 16

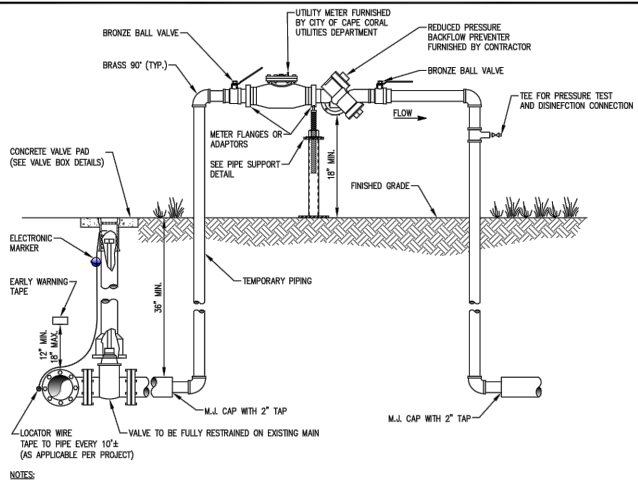
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SAFETY PAINT		
COLOR	PANT COLOR NAME - NUMBER	APPLICATION
RED	CANDY APPLE RED - RSB 186, 42, 26	POTABLE WATER HYDRANT BONNET (6")
ORANGE	TANGIER ORANGE - RSB 217, 110, 25	POTABLE WATER HYDRANT (6" AND 10")
GREEN	SPERMINT GREEN - RSB 46, 142, 84	POTABLE WATER HYDRANT BONNET (12" AND GREATER)
YELLOW	LEMON YELLOW - RSB 224, 201, 62	POTABLE WATER HYDRANT BODY



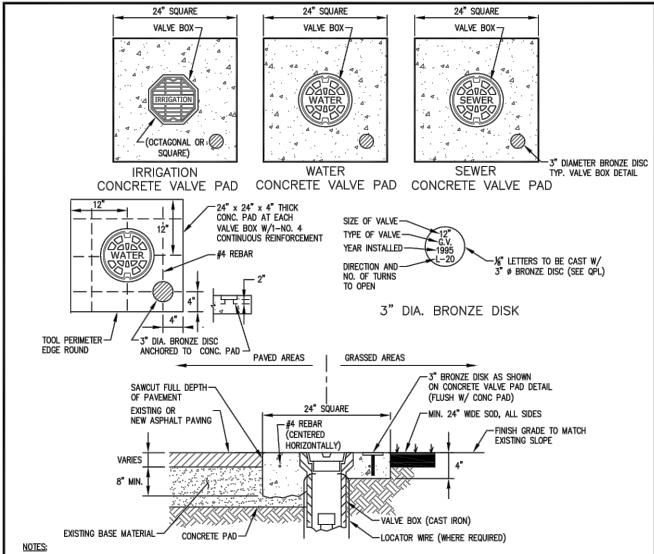
W-201 HYDRANT ASSEMBLY
NOT TO SCALE

REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME HYDRANT ASSEMBLY	DETAIL NO. W-201
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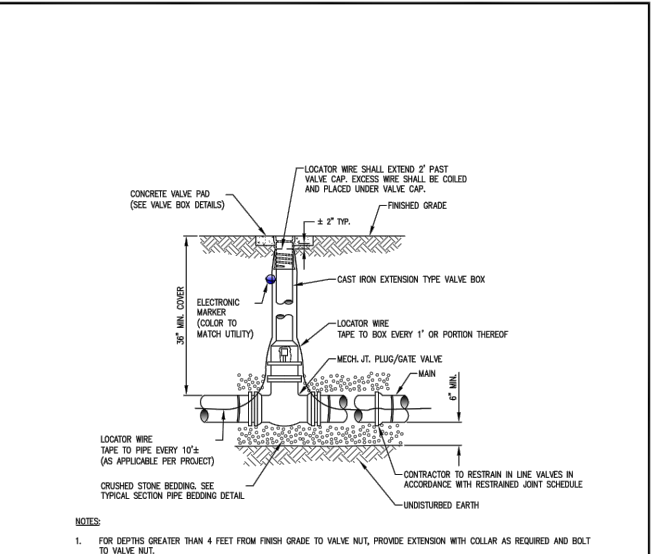
W-209 2\"/>

REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME 2\"/>	DETAIL NO. W-209
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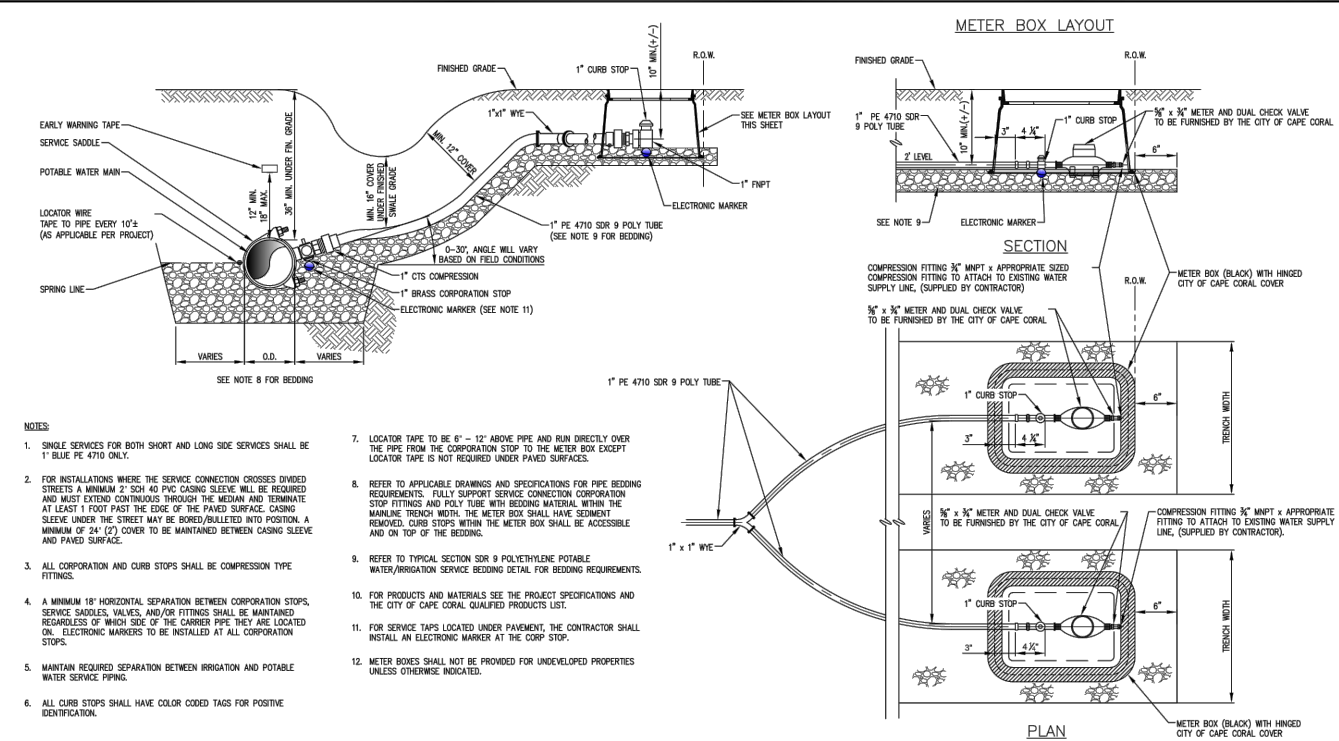
W-210 VALVE BOX (PAVED AREAS/GRASSED AREAS)
NOT TO SCALE

REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME VALVE BOX (PAVED AREAS/GRASSED AREAS)	DETAIL NO. W-210
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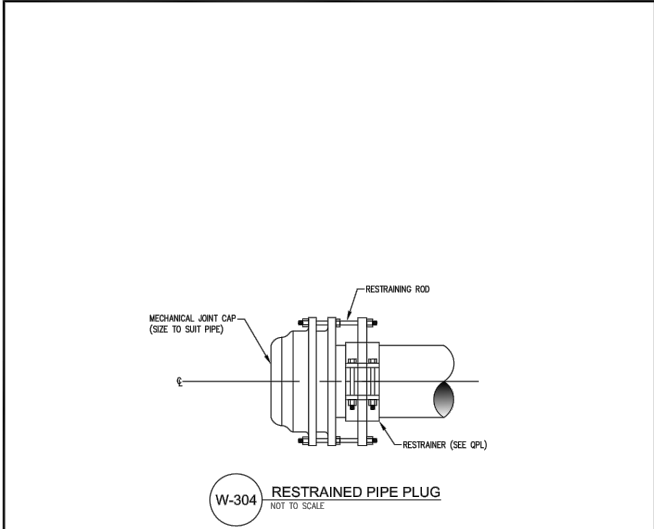
W-212 GATE VALVE
NOT TO SCALE

REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME GATE VALVE	DETAIL NO. W-212
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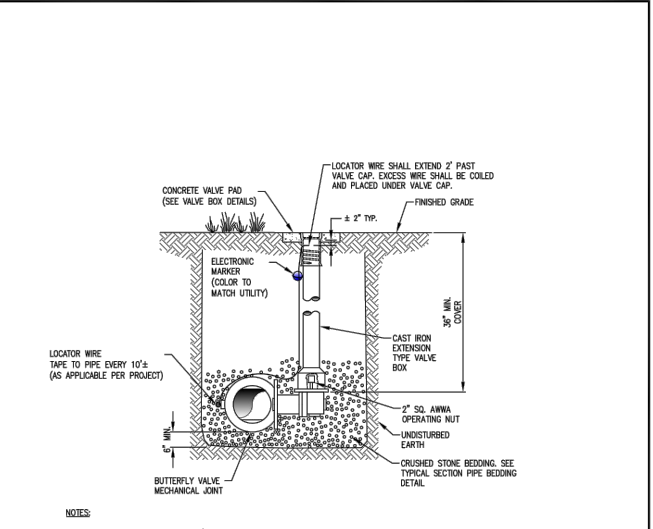
W-253 1\"/>

REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME 1\"/>	DETAIL NO. W-253
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W-304 RESTRAINED PIPE PLUG
NOT TO SCALE

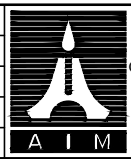
REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME RESTRAINED PIPE PLUG	DETAIL NO. W-304
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W-213 BUTTERFLY VALVE
NOT TO SCALE

REVISION DATE 07-21-2017 ADOPTION DATE 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME BUTTERFLY VALVE	DETAIL NO. W-213
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1	1/24/18	REV PER CCU REVIEW
NO	DATE	DESCRIPTION



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2161 FOWLER ST. STE. 100 FORT MYERS, FL. 33901 * PHONE: 239-332-4569
E-MAIL: ENGINEERING@AIMENGR.COM * CERTIFICATION OF AUTHORIZATION No. 3114

PREPARED FOR:
CITY OF CAPE CORAL
UTILITIES DEPARTMENT

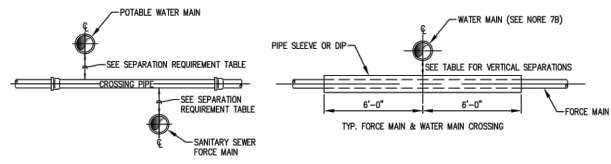
DATE: SEPT 2018	RONALD KERFOOT PROFESSIONAL ENGINEER P.E. No. 20768
DRAWN BY: JS	
CHECKED BY: BB	

HANCOCK PARKWAY
WATERMAIN RELOCATION

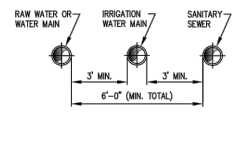
DETAILS

PROJECT NO.:	18-0735
SHEET NO.:	17

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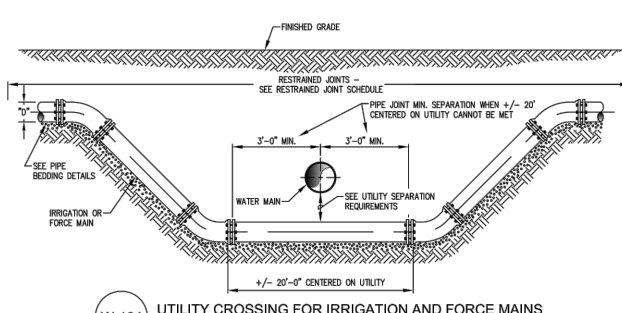
PROPOSED UTILITY	POTABLE WATER		IRRIGATION WATER		SANITARY SEWER (GRAVITY & F.W.)		STORM DRAIN		ACCEPTABLE VARIANCES
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	
POTABLE WATER	-	12"	3' 0/0	12"	6' 0/0	12"	3' 0/0	12"	SEE NOTE NO. 7
IRRIGATION WATER	3' 0/0	12"	12"	12"	3' 0/0	12"	3' 0/0	12"	
SANITARY SEWER (GRAVITY & F.W.)	3' 0/0	12"	3' 0/0	12"	3' 0/0	12"	3' 0/0	12"	
RAW WATER	3' 0/0	12"	3' 0/0	12"	6' 0/0	12"	3' 0/0	12"	



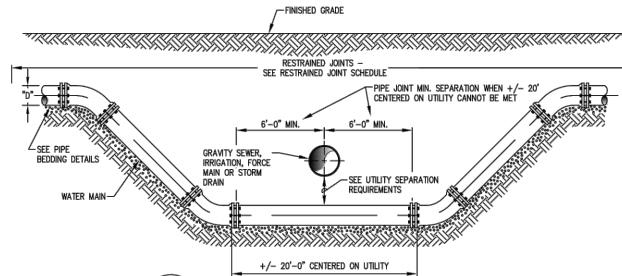
- NOTES:**
- THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.P. RULES OF THE FLORIDA ADMINISTRATIVE CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES. F.A.C. 62-550.314
 - FOR THE PURPOSE OF THIS TABLE IRRIGATION WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 62-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SERVICE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
 - ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATEST CLEARANCE SHALL BE USED.
 - MINIMUM DISTANCE BETWEEN PIPE AND ANY STRUCTURES TO BE 12" O/D.
 - FOR VERTICAL SEPARATIONS ON WATER MAINS, 12" IS REQUIRED, HOWEVER, 6" IS ACCEPTABLE IF THE WATER MAIN IS ABOVE THE GRAVITY SANITARY SEWER OR STORM DRAIN, UPON RECEIVING PRIOR APPROVAL FROM THE CITY OF CAPE CORAL.
 - FOR SEPARATIONS NOT INVOLVING WATER MAINS, 12" IS REQUIRED, HOWEVER, 6" IS ACCEPTABLE UPON RECEIVING PRIOR APPROVAL FROM CONSTRUCTION MANAGER.
 - ACCEPTABLE VARIANCES:
 - WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, DUCTILE IRON PIPE OR PVC ENCASUREMENT MUST BE USED UNLESS MINIMUM CLEARANCE IS MAINTAINED. THE PIPE JOINTS SHALL BE STAGGERED AS FOLLOWS: 1) 3' BETWEEN WM AND VACUUM SEWERS, STORM SEWERS, AND RECLAIMED WATER MAIN JOINTS, 2) 6' BETWEEN WM AND GRAVITY SANITARY SEWER, SANITARY FORCE MAINS, SANITARY SEWER AND NON-REGULATED RECLAIMED WATER MAINS.
 - FOR SANITARY SEWERS OR STORM DRAINS CROSSING UNDER MAINS WHERE 6" MINIMUM VERTICAL SEPARATION IS NOT ATTAINABLE; FOR IRRIGATION AND FORCE MAINS, USE ONE FULL LENGTH OF PVC ENCASED PIPE CENTERED AT THE POINT OF CROSSING, AND FOR THE WATER MAIN, USE ONE FULL LENGTH OF PIPE CENTERED AT THE POINT OF CROSSING WITH NO LESS THAN 6" BETWEEN ANY TWO JOINTS.
 - IF MINIMUM DEPTH OF COVER IS NOT MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL UPGRADE MAY BE REQUIRED PER CITY OF CAPE CORAL SPECIFICATIONS.
 - MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS & GRAVITY-TYPE SEWER MAY BE REDUCED TO 3' WHERE BOTTOM OF WATER MAIN IS 6" ABOVE TOP OF SEWER.
 - FOR SANITARY SEWERS CROSSING OVER WATER MAINS, A MINIMUM VERTICAL DISTANCE OF 12 INCHES AND THE CRITERIA FOR MINIMUM SEPARATION OF JOINTS IN 7(B) ABOVE MUST BE MAINTAINED.
 - NO WATER PIPE SHALL PASS THROUGH, OR COME IN CONTACT WITH, ANY PART OF A SANITARY MANHOLE OR STRUCTURE.
 - A MINIMUM VERTICAL SEPARATION OF 6" SHALL BE KEPT BETWEEN SANITARY SEWER SERVICES AND MAIN LINE PIPES.
 - UTILITY LINES SHALL HAVE A MINIMUM 3" VERTICAL AND HORIZONTAL SEPARATION FROM ELECTRICAL AND FIBER OPTIC LINES. WHEN FACILITY/UTILITY LINES WILL CROSS ELECTRICAL OR FIBER OPTIC LINES, HAND DIGGING SHALL BE REQUIRED TO LOCATE THESE LINES.

W-102 UTILITY SEPERATION REQUIREMENTS
NOT TO SCALE

REVISION DATE: 07-21-2017 ADDITION DATE: 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME: UTILITY SEPERATION REQUIREMENTS	DETAIL NO.: W-102
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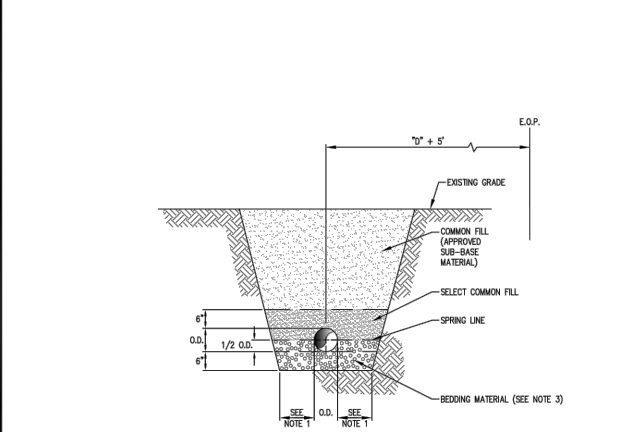
W-104 UTILITY CROSSING FOR IRRIGATION AND FORCE MAINS
NOT TO SCALE



W-104 UTILITY CROSSING FOR WATER MAINS
NOT TO SCALE

- NOTES:**
- ELECTRICITY MARKERS SHALL BE PLACED AT ALL CHANGES OF DIRECTION, START AND END OF VERTICAL DEFLECTIONS, AND SERVICES AT THE CORPORATION STOP OR SEWER SERVICE WYE. MARKERS SHALL BE LOCATED AT A MAXIMUM DEPTH OF 4 FEET. THE MARKERS SHALL NOT BE PLACED IN CONTACT WITH DIP FITTINGS. THE MARKERS SHALL BE:
 - POTABLE WATER ----- COLOR BLUE
 - SANITARY SEWER ----- COLOR GREEN
 - SANITARY SEWER FORCE MAIN ----- COLOR GREEN
 - IRRIGATION/REUSE WATER ----- COLOR LAVENDER
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
 - ALL DIVERSIONS SHALL BE CONSTRUCTED USING DUCTILE IRON PIPE.

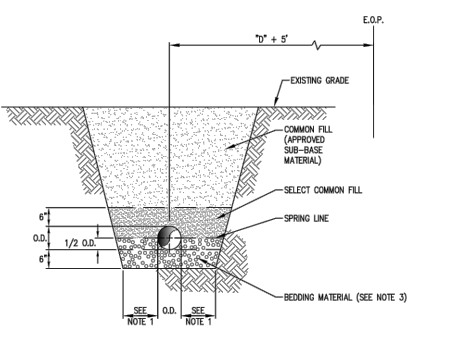
REVISION DATE: 07-21-2017 ADDITION DATE: 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME: UTILITY CROSSING FOR IRRIGATION AND FORCE MAINS	DETAIL NO.: W-104
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W-232 TYPICAL SECTION: DUCTILE IRON PIPE BEDDING
NOT TO SCALE

- NOTES:**
- DIMENSION VARIES WITH PIPE DIAMETER:
 - 10" MAX. FOR NOMINAL PIPE DIAMETER OF 24" OR LESS.
 - 12" MAX. FOR NOMINAL PIPE DIAMETER OF MORE THAN 24" AND LESS THAN 42".
 - 24" MAX. FOR NOMINAL PIPE DIAMETER OF 42" OR MORE.
 - COMMON FILL (APPROVED SUB-BASE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-180). WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF 10' + 5' FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY, COMMON FILL (APPROVED SUB-BASE MATERIAL) (LBR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 98% MAXIMUM DENSITY (AASHTO T-180).
 - BEDDING MATERIAL SHALL BE FOOT #57 STONE IF IN OR BELOW THE GROUNDWATER TABLE, OR FOOT #89 STONE IF ABOVE THE GROUNDWATER TABLE.
 - BEDDING FOR GRAVITY SEWER SHALL BE #57 STONE.

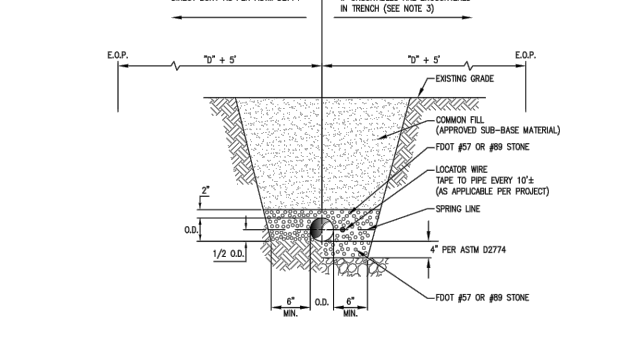
REVISION DATE: 07-21-2017 ADDITION DATE: 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME: TYPICAL SECTION DUCTILE IRON TRENCH BEDDING	DETAIL NO.: W-232
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W-233 TYPICAL SECTION: PVC BEDDING
NOT TO SCALE

- NOTES:**
- DIMENSION VARIES WITH PIPE DIAMETER:
 - 10" MAX. FOR NOMINAL PIPE DIAMETER OF 24" OR LESS.
 - 12" MAX. FOR NOMINAL PIPE DIAMETER OF MORE THAN 24" AND LESS THAN 42".
 - 24" MAX. FOR NOMINAL PIPE DIAMETER OF 42" OR MORE.
 - COMMON FILL (APPROVED SUB-BASE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-180). WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF 10' + 5' FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY, COMMON FILL (APPROVED SUB-BASE MATERIAL) (LBR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 98% MAXIMUM DENSITY (AASHTO T-180).
 - BEDDING MATERIAL SHALL BE FOOT #57 STONE IF IN OR BELOW THE GROUNDWATER TABLE, OR FOOT #89 STONE IF ABOVE THE GROUNDWATER TABLE.
 - BEDDING FOR GRAVITY SEWER SHALL BE #57 STONE.

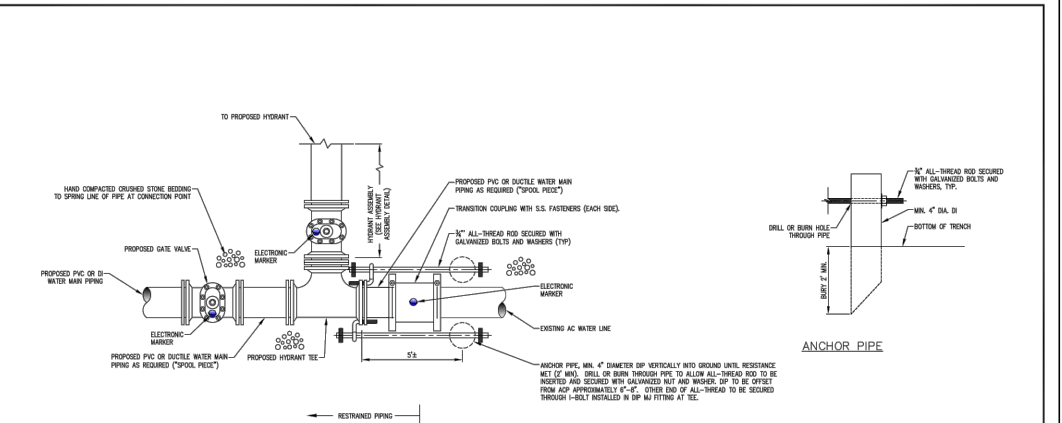
REVISION DATE: 07-21-2017 ADDITION DATE: 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME: TYPICAL SECTION PVC BEDDING	DETAIL NO.: W-233
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W-235 TYPICAL SECTION: SDR 9 POLYETHYLENE POTABLE WATER SERVICE BEDDING
NOT TO SCALE

- NOTES:**
- COMMON FILL (APPROVED SUB-BASE MATERIAL) SHALL BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY (AASHTO T-180). WHEN THE CENTERLINE OF THE TRENCH IS WITHIN A DISTANCE OF 10' + 5' FROM THE EDGE OF A PAVED ROAD OR DRIVEWAY, COMMON FILL (APPROVED SUB-BASE MATERIAL) (LBR 40) MINIMUM SHALL BE USED AND COMPACTED TO AT LEAST 98% MAXIMUM DENSITY (AASHTO T-180).
 - SELECT COMMON FILL SHALL BE PER SECTION 02200 OF TECHNICAL SPECIFICATIONS.
 - BEDDING MATERIAL SHALL BE FOOT #57 STONE IF IN OR BELOW THE GROUNDWATER TABLE, OR FOOT #89 STONE IF ABOVE THE GROUNDWATER TABLE.
 - BEDDING FOR GRAVITY SEWER SHALL BE #57 STONE.
 - 24 INCHES MINIMUM COVER UNDER PAVEMENT/PAVED SURFACES.
 - MINIMUM 2 INCH SLEEVE FOR 1 INCH PE 4710 SDR 9 POLYETHYLENE WATER/IRRIGATION SERVICE TUBING OR A MINIMUM 3 INCH SLEEVE FOR 2 INCH PE 4710 SDR 9 POLYETHYLENE WATER/IRRIGATION SERVICE TUBING UNDER PAVEMENT/PAVED SURFACES. EXTEND SLEEVES A MINIMUM OF 1 FOOT PAST EDGE OF PAVEMENT.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.

REVISION DATE: 07-21-2017 ADDITION DATE: 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME: TYPICAL SECTION SDR 9 POLYETHYLENE POTABLE WATER SERVICE BEDDING	DETAIL NO.: W-235
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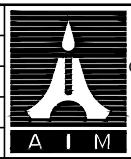


W-260 A.C. WATERMAIN CONNECTION
NOT TO SCALE

- NOTES:**
- CONNECTION TO EXISTING AC WATER LINE SHALL BE ACCOMPLISHED WITH DUCTILE IRON (DI) FITTING, OR-18 PIPING (W/POD FITTING) AND TRANSITION COUPLERS WITH STAINLESS STEEL FASTENERS (PPRG MUST BE RESTRAINED IN ALL DIRECTIONS). ALL OUTLET OF AC PPGP SHALL BE ACCOMPLISHED WITH NET DRAINING.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
 - CONTRACTOR SHALL INSTALL AN ELECTRONIC MARKER AT THE TRANSITION COUPLING AND VALVES.

REVISION DATE: 07-21-2017 ADDITION DATE: 08-01-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 50027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME: A.C. WATERMAIN CONNECTION	DETAIL NO.: W-260
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NO	DATE	DESCRIPTION



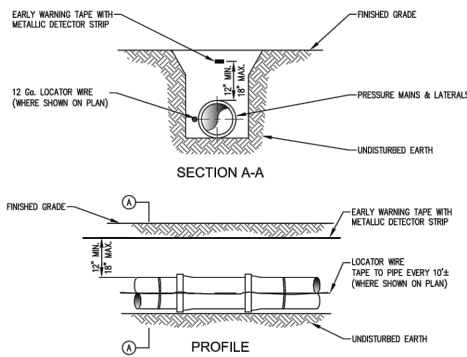
AIM Engineering & Surveying, Inc.
CIVIL ENGINEERING * LAND SURVEYING * S.U.E. * TRANSPORTATION * UTILITIES
* PROJECT MANAGEMENT * CONSTRUCTION ENGINEERING & MANAGEMENT
2161 FOWLER ST. STE. 100 FORT MYERS, FL. 33901 * PHONE: 239-332-4569
E-MAIL: ENGINEERING@AIMENGR.COM * CERTIFICATION OF AUTHORIZATION No. 3114

PREPARED FOR:
CITY OF CAPE CORAL
UTILITIES DEPARTMENT

DATE: SEPT 2018
DRAWN BY: JS
CHECKED BY: BB

HANCOCK PARKWAY WATERMAIN RELOCATION	PROJECT NO.: 18-0735
RONALD KERFOOT PROFESSION ENGINEER P.E. No. 20768	SHEET NO.: 18

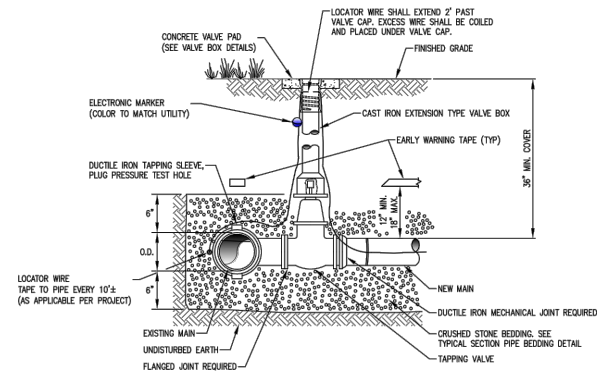
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- NOTES:**
- ALL MAINS SHALL HAVE AN EARLY WARNING PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ALIGNMENT. THE PROTECTION TAPE SHALL BE AS REQUIRED BY THE SPECIFICATIONS. TAPE SHALL BE INSTALLED DURING BACKFILLING 12" - 18" DIRECTLY ABOVE THE PIPE AND BE CONTINUOUSLY MARKED FOR THE TYPE OF PIPE (EXAMPLE: "CAUTION WATER MAIN BURIED BELOW"). THE TAPE SHALL HAVE A METALLIC DETECTABLE STRIP INCLUDED AND COLOR CODED AS FOLLOWS:
 BLUE ----- POTABLE WATER
 GREEN ----- GRANTY SEWER
 GREEN ----- SANITARY SEWER FORCE MAIN
 LAVENDER ----- IRRIGATION/REUSE WATER
 - PVC MAINS SHALL BE A SOLID COLOR AND PERMANENTLY MARKED WITH THE MANUFACTURER'S NAME, PIPE SIZE AND/OR PRESSURE RATING.
 - ELECTRONIC MARKERS SHALL BE PLACED AT ALL CHANGES OF DIRECTION, START AND END OF VERTICAL DEFLECTIONS, AND SERVICES AT THE CORPORATION STOP OR SEWER SERVICE WIE. DO NOT INSTALL ELECTRONIC MARKER FOR CORPORATION STOPS UNLESS LOCATED UNDER PAVEMENT. MARKERS SHALL BE LOCATED AT A MAXIMUM DEPTH OF 4 FEET. THE MARKERS SHALL NOT BE PLACED IN CONTACT WITH DIP FITTINGS. THE MARKERS SHALL BE:
 POTABLE WATER ----- COLOR BLUE
 SANITARY SEWER ----- COLOR GREEN
 SANITARY SEWER FORCE MAIN ----- COLOR GREEN
 IRRIGATION/REUSE WATER ----- COLOR LAVENDER
 - PLACE ONLY POTABLE WATER MARKER AT POTABLE & IRRIGATION SERVICES WHEN TOGETHER. PLACE IRRIGATION MARKER AT LONE IRRIGATION SERVICE WHEN THERE ARE SERVICES IN THE VICINITY.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
 - RECORD DRAWINGS SHALL INCLUDE STATE PLANE COORDINATES AND ELEVATION FOR EACH ELECTRONIC MARKER.

W-103 PIPE LOCATION TAPE, STRIPING AND MARKERS
NOT TO SCALE

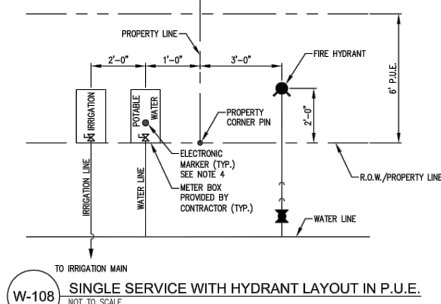
REVISION DATE 07-21-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 180027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
ADOPTION DATE 08-01-2017		PIPE LOCATION TAPE, STRIPING AND MARKERS	W-103



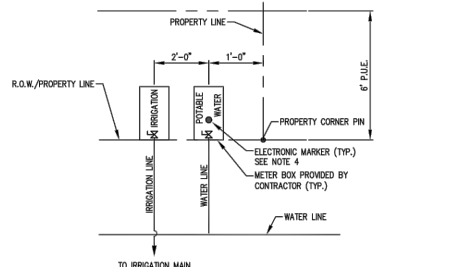
- NOTES:**
- CAUTION SHOULD BE TAKEN NOT TO ALLOW ANY MATERIAL TO FALL INTO THE VALVE BOX CYLINDER. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING ANY AND ALL MATERIAL RESULTING FROM THEIR VALVE BOX INSTALLATION AND/OR ADJUSTMENT OPERATION.
 - ELECTRONIC MARKERS SHALL BE REQUIRED AT ALL VALVES 2" OR LARGER.
 - NO REVERSE TAPS, UNLESS APPROVED BY THE CITY.
 - NO TAPS CLOSER THAN 18" FROM OTHER TAPS, BELLS, OR MJ FITTINGS.
 - NO SIZE ON SIZE TAPS.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
 - INSTALL EARLY WARNING TAPE PER MANUFACTURER'S INSTRUCTIONS.

W-211 MECHANICAL JOINT TAPPING SLEEVE AND VALVE
NOT TO SCALE

REVISION DATE 07-21-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 180027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
ADOPTION DATE 08-01-2017		MECHANICAL JOINT TAPPING SLEEVE AND VALVE	W-211

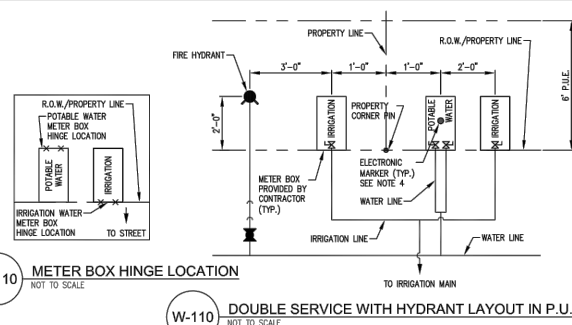


- NOTES:**
- MIRRORED INSTALLATION (DOUBLE POTABLE WATER LOCATED LEFT OF PROPERTY LINE) CAN BE PROVIDED AT CONTRACTOR'S OPTION.
 - IF A POWER POLE IS LOCATED AT A PROPERTY CORNER WITH A DOUBLE POTABLE WATER SERVICE, LOCATE THE DOUBLE POTABLE WATER SERVICE ON THE SIDE THAT WILL MAXIMIZE THE SEPARATION BETWEEN THE SERVICE AND THE POWER POLE.
 - IF DOUBLE POTABLE WATER SERVICES SUPPLY DEVELOPED AND UNDEVELOPED PROPERTIES, POTABLE WATER METERS BOXES SHALL BE LOCATED ON DEVELOPED SIDE OF PROPERTY LINE.
 - PROVIDE ELECTRONIC MARKERS FOR ALL POTABLE WATER METER BOX LOCATIONS PER SPECIFICATIONS AND APPLICABLE SERVICE CONNECTION DETAILS.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.

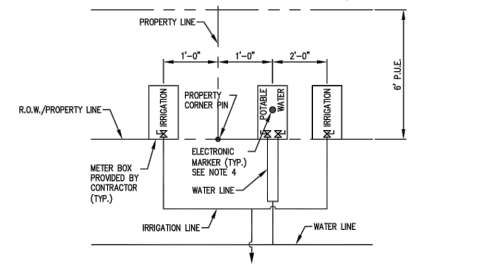


W-108 SINGLE SERVICE WITHOUT HYDRANT LAYOUT IN P.U.E.
NOT TO SCALE

REVISION DATE 07-21-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 180027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
ADOPTION DATE 08-01-2017		SINGLE SERVICE WITH HYDRANT SINGLE SERVICE WITHOUT HYDRANT (IN PUBLIC UTILITY EASEMENT)	W-108

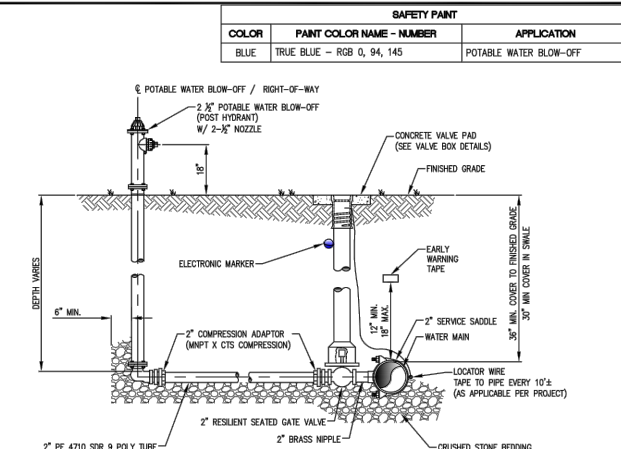


- NOTES:**
- MIRRORED INSTALLATION (DOUBLE POTABLE WATER LOCATED LEFT OF PROPERTY LINE) CAN BE PROVIDED AT CONTRACTOR'S OPTION.
 - IF A POWER POLE IS LOCATED AT A PROPERTY CORNER WITH A DOUBLE POTABLE WATER SERVICE, LOCATE THE DOUBLE POTABLE WATER SERVICE ON THE SIDE THAT WILL MAXIMIZE THE SEPARATION BETWEEN THE SERVICE AND THE POWER POLE.
 - IF DOUBLE POTABLE WATER SERVICES SUPPLY DEVELOPED AND UNDEVELOPED PROPERTIES, POTABLE WATER METERS BOXES SHALL BE LOCATED ON DEVELOPED SIDE OF PROPERTY LINE.
 - PROVIDE ELECTRONIC MARKERS FOR ALL POTABLE WATER METER BOX LOCATIONS PER SPECIFICATIONS AND APPLICABLE SERVICE CONNECTION DETAILS.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.



W-110 DOUBLE SERVICE WITHOUT HYDRANT LAYOUT IN P.U.E.
NOT TO SCALE

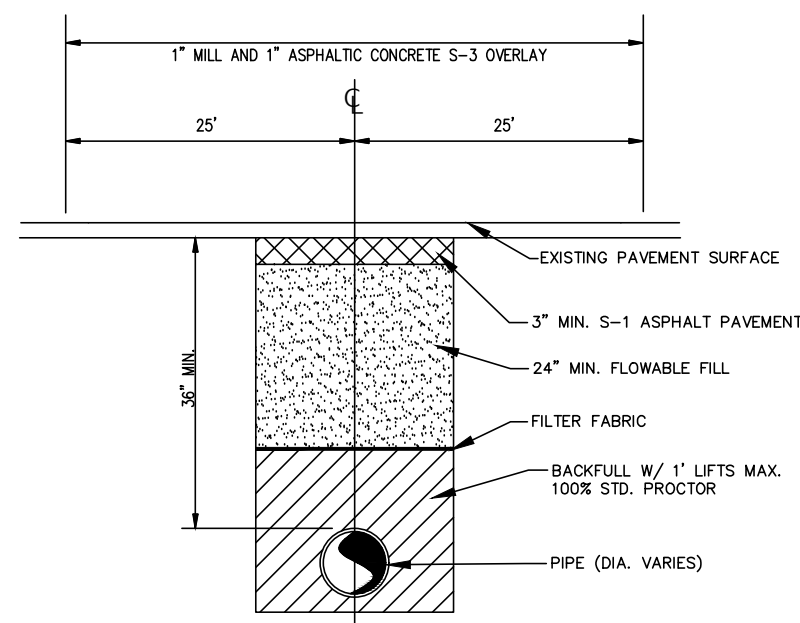
REVISION DATE 07-21-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 180027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
ADOPTION DATE 08-01-2017		DOUBLE SERVICE WITH HYDRANT DOUBLE SERVICE WITHOUT HYDRANT (IN PUBLIC UTILITY EASEMENT)	W-110



- NOTES:**
- SET POTABLE WATER BLOW-OFF ASSEMBLY IN UTILITY EASEMENT ON THE RIGHT-OF-WAY LINE. BLOW-OFF LOCATION TO BE APPROVED BY THE CITY OF CAPE CORAL.
 - DO NOT PLACE BLOW-OFF VALVE AND VALVE BOX IN SWALE.
 - PIPE TO HAVE A MINIMUM 30" COVER IN SWALE.
 - RESTRAIN ALL CONNECTIONS.
 - PAINT SHALL BE APPLIED IN FACTORY BY MANUFACTURER
POTABLE WATER BLOW-OFF - BLUE BODY AND BLUE BONNET
 - NO POTABLE WATER BLOW-OFFS AT POWER POLES UNLESS THERE ARE POLES AT EVERY PROPERTY CORNER. MINIMUM CLEARANCE BETWEEN AN OBSTRUCTIONS AND POTABLE WATER BLOW-OFFS SHALL BE 5 FEET.
 - CAUTION SHOULD BE TAKEN NOT TO ALLOW ANY MATERIAL TO FALL INTO THE VALVE BOX CYLINDER. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING ANY AND ALL MATERIAL RESULTING FROM THEIR VALVE BOX INSTALLATION AND/OR ADJUSTMENT OPERATION.
 - FOR PRODUCTS AND MATERIALS SEE THE PROJECT SPECIFICATIONS AND THE CITY OF CAPE CORAL QUALIFIED PRODUCTS LIST.
 - INSTALL EARLY WARNING TAPE PER MANUFACTURER'S INSTRUCTIONS.

W-202 2 1/2" POTABLE WATER BLOW-OFF
NOT TO SCALE

REVISION DATE 07-21-2017	CITY OF CAPE CORAL UTILITIES DEPARTMENT P.O. BOX 180027 CAPE CORAL, FLORIDA 33915-0027	DETAIL NAME	DETAIL NO.
ADOPTION DATE 08-01-2017		HYDRANT ASSEMBLY	W-202



PAVEMENT RESTORATION DETAIL FOR PUBLIC ROADS
N.T.S.

UTILITY / AGENCY OWNERS:

COMPANY	CONTACT	TELEPHONE
CITY OF CAPE CORAL	GINO NOTARIANNI	239-573-3039
COMCAST	WILLIS GILSON	239-336-2035
LCEC	MARK COOK	239-432-1805/415-4742
LCDOT TRAFFIC	TOM BAILEY	239-656-2414
LCDOT SIGNALS	MIKE PADGETT	239-533-9300
TECO	JAMES FENCIL	239-533-9500/707-4870
	MARILYN ALOI	239-690-5517/896-0812

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1	1/24/18	REV PER CCU REVIEW
NO	DATE	DESCRIPTION

AIM Engineering & Surveying, Inc.
 CIVIL ENGINEERING * LAND SURVEYING * S.U.E. * TRANSPORTATION * UTILITIES
 * PROJECT MANAGEMENT * CONSTRUCTION ENGINEERING & MANAGEMENT
 2161 FOWLER ST. STE. 100 FORT MYERS, FL. 33901 * PHONE: 239-332-4569
 E-MAIL: ENGINEERING@AIMENGR.COM * CERTIFICATION OF AUTHORIZATION No. 3114

PREPARED FOR:
CITY OF CAPE CORAL
UTILITIES DEPARTMENT

DATE: SEPT 2018	RONALD KERFOOT PROFESSIONAL ENGINEER P.E. No. 20768
DRAWN BY: JS	
CHECKED BY: BB	

HANCOCK PARKWAY WATERMAIN RELOCATION	PROJECT NO.: 18-0735
DETAILS	SHEET NO.: 19

Benjamin Bledsaw 8/12/2019 10:01 AM P:\JOBS\Active\18-0735\cadd\roadway\19 Detail.dwg

GENERAL NOTES, SPECIFICATIONS, AND CONDITIONS:

1. COMPENSATION FOR THE WORK AS SHOWN ON THE PLANS SHALL BE AT THE TERMS SPECIFIED IN THE CONTRACT DOCUMENTS. NO SEPARATE PAYMENT WILL BE MADE FOR INCIDENTAL TASKS INCLUDING SUCH ITEMS AS FIELD OFFICE, SANITARY FACILITIES, ROCK EXCAVATION, DEWATERING, MATERIALS DELIVERY AND STORAGE, EXCAVATED MATERIAL REMOVAL & DISPOSAL. TEMPORARY POWER, ETC., NECESSARY FOR THE COMPLETE EXECUTION OF THE WORK.
2. ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) OF 1988. CONVERSION BETWEEN N.A.V.D. AND N.G.V.D. IS N.A.V.D. = N.G.V.D. -1.26'.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED FEDERAL, STATE, COUNTY AND/OR LOCAL CONSTRUCTION PERMITS/APPROVALS PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES, WHICH INCLUDE A DEWATERING PERMIT IF NEEDED.
4. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL PROSPECTIVE CONTRACTORS ARE ENCOURAGED, PRIOR TO BIDDING, TO CONDUCT ANY SITE INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED, INCLUDING SUB-SURFACE CONDITIONS AND UPON WHICH THEIR BIDS SHALL BE BASED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL ACCESS TO THE WORK AREAS FOR THE DURATION OF THE PROJECT AND TO PROVIDE FOR SAFETY OF THE PUBLIC.
6. ALL MATERIALS, MEANS AND CONSTRUCTION METHODS SHALL CONFORM WITH CITY OF CAPE CORAL UTILITIES STANDARD MANUAL AND THE 2017 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ANY SUPPLEMENTAL SPECIFICATION THEREOF.
7. THE CONTRACTOR SHALL SECURE ANY TEMPORARY CONSTRUCTION EASEMENTS NECESSARY FOR CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL ELECTRIC COMPANY TO BRING ELECTRICITY TO THE PROJECT SITE, IF REQUIRED.
9. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS AND ALL PERMITS ON THE JOB SITE DURING ALL PHASES OF THE WORK. TWO (2) COMPLETE SETS OF "AS-BUILT" DRAWINGS MUST BE DELIVERED TO THE ENGINEER OF THE RECORD ALONG WITH ELECTRONIC FILES IN AUTOCAD FORMAT. CONTRACTOR SHALL OBTAIN THE SERVICES OF A REGISTERED LAND SURVEYOR TO PERFORM "AS-BUILT" VERIFICATION AS PART OF THIS PROJECT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTAINMENT AND DISPOSAL OF ALL MATERIAL REMOVED WITHIN THE PROJECTS BOUNDARIES.
11. ALL EXCAVATION, EMBANKMENT, AND IMPORTED FILL REQUIRED TO CONSTRUCT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND BE INCLUDED IN THEIR BID.
12. ANY IMPORTED FILL MATERIAL SHALL BE CLEAN, STRUCTURALLY SUITABLE, AND MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE APPLICABLE SECTIONS OF THE LATEST EDITION OF F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, REMOVAL, AND OFFSITE DISPOSAL OF ANY AND ALL MATERIAL (SOIL, ROCK, VEGETATION, ETC.) THAT IS NOT SUITABLE FOR USE IN THE PROJECT.
14. PRIOR TO BIDDING THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS AND THOSE POTENTIAL CONDITIONS THAT MAY EXIST DURING THE CONSTRUCTION PERIOD.
15. PROVISIONS FOR EXISTING DRAINAGE FLOWS AND PATTERNS SHALL BE PROVIDED DURING CONSTRUCTION AT NO ADDITIONAL PAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY DEWATERING PERMITS. THE CONTRACTOR SHALL OBTAIN, IF NECESSARY, A DEWATERING PERMIT FOR ANY DEWATERING OPERATION. SFWMD MAY GRANT A PERMIT BY RULE FOR 60 DAYS OR LESS. MORE INFORMATION ABOUT DEWATERING PERMITTING CAN BE FOUND AT WWW.SFWMD.GOV.
16. THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF FORTY-EIGHT (48) HOURS PRIOR TO ALL REQUIRED INSPECTIONS.

CONSTRUCTION SPECIFICATIONS:

17. PRIOR TO NOTICE TO PROCEED, THE CONTRACTOR WILL BE REQUIRED TO PRESENT A DETAILED SCHEDULE WITH SEQUENCE OF EVENTS TO THE COUNTY AND ENGINEER FOR REVIEW AND APPROVAL.
18. TEMPORARY ON-SITE STORAGE OR STAGING AREAS REQUIRE WRITTEN PERMISSION, REVIEW AND APPROVAL FROM CITY OF CAPE CORAL PRIOR TO USE BY THE CONTRACTOR.
19. THE CONTRACTOR SHALL MAINTAIN SUFFICIENT EROSION CONTROL MEASURE TO PREVENT TURBIDITY OUTSIDE OF THE IMMEDIATE WORK AREA SHOWN IN THE PLANS. FLOATING TURBIDITY CURTAINS PLACED IMMEDIATELY ADJACENT TO THE CONSTRUCTION AREA TO BE EXPECTED AT A MINIMUM. IF THE COUNTY DETERMINES THAT THE EROSION CONTROL METHODS ARE NOT WORKING SATISFACTORILY, THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO CORRECT THE PROBLEM TO THE COUNTY'S SATISFACTION.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES WITH WARNING SIGNS, BARRIERS AND DEVICES. REFER TO FDOT INDEX No. 600.

WATER AND SEWER NOTES:

21. ALL WORK IN PUBLIC R/W'S REQUIRES A CITY OF CAPE CORAL R/W PERMIT AND A LEE COUNTY R/W PERMIT.

22. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WITH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY CITY OF CAPE CORAL.
23. ALL WORK SHALL CONFORM TO THE CITY OF CAPE CORAL UTILITIES STANDARDS AND SPECIFICATIONS.
24. ALL FRAMES, COVERS, VALVE BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION
25. CITY OF CAPE CORAL UTILITIES SHALL BE NOTIFIED 72 HOURS PRIOR TO STARTING OF WORK AND PRIOR TO TESTING.
26. ALL WORK AND MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS OR ANY WORK PREFORMED WITHOUT THE KNOWLEDGE OF CITY OF CAPE CORAL INSPECTORS OR REPRESENTATIVES IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
27. THE CONTRACTOR SHALL UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES BEFORE ANY OTHER CONSTRUCTION.
28. THE CONTRACTOR SHALL COMPLY WITH ALL FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), LEE COUNTY HEALTH DEPARTMENT (LCHD) PUBLIC HEALTH UNIT REQUIREMENTS.
29. WATER AND IRRIGATION, PIPE SMALLER THAN 2" SHALL BE POLYVINYL CHLORIDE, (PVC) AND SHALL CONFORM TO THE ASTM D-1785, CLASS 1120 OR 1220, SCHEDULE 80 PVC. WATER AND IRRIGATION PIPE 2" BUT LESS THAN 4" IN DIAMETER SHALL BE PVC CLASS 200, DR-21 CONFORMING TO ASTM 2241 WITH RING-TYPE JOINTS. WATER AND IRRIGATION PIPE 4" UP TO AND INCLUDING 12" IN DIAMETER SHALL BE AWWA C-900, CLASS 150, DR-18. AT THE CONTRACTOR'S OPTION, WATER AND IRRIGATION PIPE MAY BE CLASS 51 DUCTILE IRON PIPE, CONFORMING TO ANSI/AWWA A21.51/C151. ALL MAINS UP TO 12" IN DIAMETER SHALL HAVE A 36" MINIMUM COVER FROM FINISHED GRADE.
30. THE CONTRACTOR SHALL UTILIZE RESTRAINED JOINTS FOR THE INSTALLATION OF WATER AND IRRIGATION PIPING.
31. INSTALLATION OF WATER METER ASSEMBLIES, RPBP AND CONNECTIONS TO EXISTING CITY OF CAPE CORAL UTILITIES SHALL BE PERFORMED BY AND COORDINATED WITH THE CITY OF CAPE CORAL UTILITY DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THE LOCATION OF THE CONNECTION POINTS MAY REQUIRE FIELD ADJUSTMENT TO BE PREFORMED AT THE CONTRACTOR'S EXPENSE. IMPACT FEES SHALL BE PAID TO THE CITY.
32. WHERE WATER, IRRIGATION AND SEWER MAINS CROSS, THE MINIMUM VERTICAL SEPARATION SHALL BE 18 INCHES. WHERE THIS IS NOT POSSIBLE, THE WATER MAIN SHALL BE ENCASED IN A PVC SLEEVE OR THE JOINTS SHALL BE SEPARATED TEN (10) FEET EITHER SIDE OF THE POINT OF CROSSING. THE CONTRACTOR SHALL COMPLY WITH RULE 62-555.345 FAC.: INCLUDING THE COSTS FOR DEFLECTING PIPE, ROLL-DOWNS OR ENCASEMENT IN THE PRICE OF THE PIPE.
33. TESTING AND COMPACTION OF THE TRENCH BACKFILL, SUBGRADE AND BASE SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
34. ALL UTILITY PIPING , INCLUDING SERVICES, SHALL BE COLOR CODED AS FOLLOWS: POTABLE WATER - BLUE; SEWER - GREEN; IRRIGATION/FIRE - LAVENDER.
35. ALL WATER, SEWER, IRRIGATION, FORCE MAINS, SERVICES AND LATERALS SHALL HAVE DETECTABLE TAPE INSTALLED OVER THE PIPE WITH 12" MINIMUM TO 18" MAXIMUM COVER FROM PROPOSED GRADE.
36. WATER, FIRE AND IRRIGATION SERVICES MAY BE WHITE OR GRAY IN COLOR, BUT IN ADDITION, SHALL BE WRAPPED WITH THE CORRECT COLOR TAPE. NO GRAY PIPE SHALL BE PERMITTED FOR WATER, FIRE AND IRRIGATION MAINS.
37. WATER, FIRE AND IRRIGATION MAINS, INCLUDING SERVICES SHALL BE FLUSHED AND PRESSURE TESTED IN ACCORDANCE WITH AWWA C-600. THE UTILITY COMPANY AND ENGINEER SHALL BE PRESENT DURING PRESSURE TESTING.
38. WATER MAINS AND SERVICES SHALL BE DISINFECTED AND TESTED IN ACCORDANCE WITH AWWA C-651 AND RULE 62-555.345 FAC. INCLUDING PROVIDING SAMPLE POINTS AS REQUIRED BY THE CITY OF CAPE CORAL HEALTH DEPARTMENT.
39. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL AFFECTED UTILITIES IN THE AREA 72 HOURS PRIOR TO BEGINNING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL UTILITY COMPANIES AND THE ENGINEER TO RESOLVE CONFLICTS WITH EXISTING UTILITIES IN A TIMELY MANNER TO AVOID DELAYS IN COMPLETING THE PROJECT.
40. ACCEPTANCE OF THE COMPLETED UTILITY SYSTEMS WILL NOT BE GIVEN UNTIL RECORD DRAWINGS HAVE BEEN SUBMITTED AND ACCEPTED BY THE ENGINEER.
41. BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED CROSS CONNECTION CONTROL TECHNICIAN IN THE PRESENCE OF A CITY OF CAPE CORAL REPRESENTATIVE.
42. APPROPRIATE TURBIDITY CONTROL DIVES (E.G. SILT FENCES, HAY BALES) WILL BE UTILIZED DURING ALL PHASES OF INSTALLATION AND GRADING.
43. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, ETC., WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RESTORE ALL AREAS AFFECTED BY THE CONSTRUCTION TO ITS ORIGINAL CONDITION, OR BETTER. ALL DISTURBED AREAS SHALL BE SODDED IN ACCORDANCE WITH THE GENERAL RESTORATION SPECIFICATIONS.

WATER MAIN ABANDONMENT:

44. ASBESTOS CEMENT (AC) PIPE ABANDONED IN PLACE SHALL BE GROUT FILLED.
45. ASBESTOS CEMENT (AC) PIPE REMOVAL ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA SUB PART Z, 29 CFR 1926.1101 APP. F AND U.S. EPA STANDARDS AND SPECIFICATION.
46. ALL REQUIREMENTS AND PROCEDURES OF CITY OF CAPE CORAL SHALL BE OBSERVED.
47. ALL PERMIT REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SHALL BE FOLLOWED.

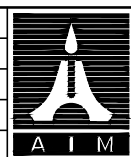
ORDER OF WORK

IN GENERAL, THE ORDER OF WORK SHALL BE AS FOLLOWS. ANY CHANGES IN THE ORDER OF WORK SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO INITIATION OF THE SPECIFIC WORK ACTIVITY.

1. MOBILIZATION, LOCATES, ETC.
2. ON EXISTING 16" PVC WATER MAIN, RELOCATE EXISTING SERVICES OFF OF MAIN AND BAG THE FIRE HYDRANTS.
3. TAKE EXISTING 16" PVC WATER MAIN OUT OF SERVICE.
4. EXTEND 16" PVC WATER MAIN TO NEAR WATER TANK CONNECTION. INITIAL CUT-IN OF THE FOLLWING CONNECTIONS: NE 17TH AVE., SE 17TH AVE., NE 17TH PL., SE 18TH CT., NE 14TH CT., NE 20TH CT., NE 21ST AVE., SE 21ST PL., NE 22ND AVE., SE 23RD AVE., SE 23RD PL. ADD SERVICE CONNECTIONS TO 16" PVC WATER MAIN AND EXTEND SERVICE LINES WITH METER BOXES. CUT IN ADDITIONAL 16" BUTTERFLY VALVES ON 16" PVC WATER MAIN.
5. PRESSURE TEST AND CHLORINATE 16" PVC WATER MAIN.
6. SUBMIT NOTICE AND RECEIVE LEE COUNTY HEALTH DEPARTMENT AUTHORIZATION TO PLACE 16" PVC WATER MAIN LINE IN SERVICE.
7. MAKE WATER MAIN CONNECTIONS AT WATER TANK AT WEST END OF PROJECT THEN ACTIVATE 16" PVC WATER MAIN.
8. MAKE OTHER CONNECTIONS AT STREETS LISTED IN WORK TASK NUMBER 4.
9. MAKE SERVICE CONNECTIONS TO HOMES.
10. ISOLATE 16" AC WATER MAIN WITH CONNECTIONS AT NE 16TH PL. AND AT WATER TANK WITH SPECIAL EFFORT FOR TRAFFIC CONTROL ON HANCOCK PARKWAY.
11. REMOVE 16" DIP AERIAL CROSSING AT STATION 44±00.
12. GROUT 16" AC WATER MAIN AND SIDE WATER MAIN STUB-OUTS.
13. SUBMIT PROJECT CLOSE-OUT DOCUMENTS AND RECORD SURVEY.
14. RESTORE AREA AND DEMOBILIZE.

NOTE: CONTRACTOR TO VERIFY THE EXISTING MAINS ARE RESTRAINED PER DETAIL W-105 AT ALL PROPOSED DIVERSIONS/DEFLECTIONS AND AT ALL PROPOSED SIDE STREET MAIN TIE IN POINTS.

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NO	DATE	DESCRIPTION



AIM Engineering & Surveying, Inc.
 CIVIL ENGINEERING * LAND SURVEYING * S.U.E. * TRANSPORTATION * UTILITIES
 * PROJECT MANAGEMENT * CONSTRUCTION ENGINEERING & MANAGEMENT
 2161 FOWLER ST. STE. 100 FORT MYERS, FL. 33901 * PHONE: 239-332-4569
 E-MAIL: ENGINEERING@AIMENGR.COM * CERTIFICATION OF AUTHORIZATION No. 3114

PREPARED FOR:
CITY OF CAPE CORAL
UTILITIES DEPARTMENT

DATE:	SEPT 2018
DRAWN BY:	JS
CHECKED BY:	BB

HANCOCK PARKWAY
 WATERMAIN RELOCATION
GENERAL NOTES
 RONALD KERFOOT
 PROFESSIONAL ENGINEER
 P.E. No. 20768

PROJECT NO.:
18-0735
 SHEET NO.:
21

GENERAL NOTES:

1. THE CONTRACTOR OR OWNERS REPRESENTATIVE WILL BE RESPONSIBLE FOR OBTAINING AN APPROPRIATE SIZED TEMPORARY JUMPER ASSEMBLY WITH METER FROM THE CITY OF CAPE CORALS UTILITY COLLECTION AND DISTRIBUTION DEPARTMENT AT 239-574-0860 PRIOR TO RECEIVING CITY WATER FOR CONSTRUCTION AND/OR TYING INTO ANY EXISTING POTABLE WATER MAIN LINES. A BILLING ACCOUNT MUST BE SET UP THROUGH THE CITY'S CUSTOMER BILLING DEPARTMENT PRIOR TO INSTALLATION. A REPRESENTATIVE FROM THE CITY OF CAPE CORAL'S SITE DEVELOPMENT AND REVIEW DIVISION AT 239-573-3167 OR 239- 573-3184 MUST BE NOTIFIED 48 HOURS IN ADVANCE OF INSTALLATION AND BE PRESENT TO WITNESS AND RECORD THE INSTALLATION PROCESS. ACCOUNT DOCUMENTATION MUST BE SUBMITTED TO THE SITE DEVELOPMENT AND REVIEW INSPECTOR AT THE TIME OF METER INSTALLATION. AFTER CONSTRUCTION IS COMPLETE AND BEFORE THE TEMPORARY JUMPER AND METER IS REMOVED ALL POTABLE WATER MAINS SHALL BE FLUSHED AND PRESSURE TESTED PER AWWA SECTION C600 AND DISINFECTED PER AWWA C-651.
2. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE CITY OF CAPE CORALS UTILITIES DEPARTMENT (239- 574-0852) A MINIMUM OF 48 HOURS PRIOR TO ANY SHUTDOWN, TIE-IN OR PRESSURE TEST ON THE WATER, IRRIGATION OR SEWER MAIN. FOR ALL FORCEMAIN SHUTDOWNS, DIVERSIONS, OR TIE-INS INCLUDING LIFT STATION SHUT DOWNS, CONTRACTOR SHALL CONTACT WATER RECLAMATION COLLECTIONS AT 239-574-0730 A MINIMUM OF 48 HOURS IN ADVANCE OF ANY AND ALL WORK. ALSO, THE CONTRACTOR WILL DISTRIBUTE ANY INTERRUPTION OF SERVICE NOTICES TO ALL AFFECTED PARTIES AND THE CITY WILL DISTRIBUTE ALL BOIL WATER NOTICES AND RESCISSION NOTICES.
3. THE CONTRACTOR IS PROHIBITED FROM TURNING OFF ANY EXISTING MAIN LINE VALVES. THESE WILL BE TURNED OFF BY A REPRESENTATIVE OF THE CITY OF CAPE CORAL'S UTILITIES DEPARTMENT AT THE CONTRACTORS ARRANGED TIME AND DATE.
4. BACKFLOW PREVENTION DEVICES SHALL BE TESTED BY A CERTIFIED CROSS CONNECTION CONTROL TECHNICIAN IN THE PRESENCE OF A CITY OF CAPE CORAL REPRESENTATIVE.
5. THE CONTRACTOR OR OWNER'S REPRESENTATIVE SHALL ORDER ANY PROTECTUS III METER(S) AND PRE PAY FOR THEM IN ADVANCE THROUGH THE CITY OF CAPE CORAL'S UTILITIES COLLECTIONS AND DISTRIBUTION DEPARTMENT AT 239-574-0860. A BILLING ACCOUNT MUST BE SET UP THROUGH THE CITY'S CUSTOMER BILLING DEPARTMENT PRIOR TO INSTALLATION. UPON INSTALLATION A REPRESENTATIVE FROM THE CITY OF CAPE CORAL SITE DEVELOPMENT AND REVIEW DIVISION AT 239-573-3167 OR 239-573-3184 MUST BE NOTIFIED 48 HOURS IN ADVANCE AND BE PRESENT TO WITNESS AND RECORD THE INSTALLATION PROCESS. ACCOUNT DOCUMENTATION MUST BE SUBMITTED TO THE SITE DEVELOPMENT AND REVIEW INSPECTOR AT THE TIME OF METER INSTALLATION. AFTER CONSTRUCTION IS COMPLETE AND BEFORE THE TEMPORARY JUMPER AND METER IS REMOVED ALL POTABLE WATER MAINS SHALL BE FLUSHED AND PRESSURE TESTED PER AWWA SECTION C600 AND DISINFECTED PER AWWA C-651.
6. THE EXISTING UTILITY SERVICE CONNECTIONS THAT WILL NOT BE UTILIZED FOR THIS PROJECT SHALL BE ABANDONED AT THE MAIN OR POINT AGREED UPON BY THE UTILITIES INSPECTOR, IN ACCORDANCE WITH CITY OF CAPE CORAL SPECIFICATIONS.
7. ANY WORK OR MATERIALS WHICH DO NOT CONFORM TO THE CITY OF CAPE CORAL'S SPECIFICATIONS OR ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE CITY OF CAPE CORAL UTILITIES INSPECTORS OR REPRESENTATIVES IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE STANDARD MINIMUM COVER FOR A WATER, IRRIGATION OR FORCE MAIN, WHICH IS NOT UNDER PAVEMENT, IS 30" BELOW FINISHED GRADE. THE MINIMUM COVER FOR MAINS PLACED UNDER PAVEMENT IS 36".
9. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO DEWATER TRENCH AND SECURE EXCAVATIONS. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS ASSOCIATED WITH THE CITY OF CAPE CORAL UTILITES DESIGN PROCEDURES MANUAL TECHNICAL SPECIFICATIONS SECTION 02140. ALL DEWATERING SHALL COMPLY WITH THE REGULATIONS OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AND ANY AGENCY WITH JURISDICTION.
10. ALL SERVICE LATERALS 2" SHALL REQUIRE THE INSTALLATION OF A RESILIENT-SEATED GATE VALVE AND CAST IRON VALVE BOX. PLEASE REFER TO THE CITY OF CAPE CORALS UTILITIES EXPANSION MANUAL TECHNICAL SPECIFICATIONS SECTIONS 2.1 AND 2.2 PAGES15001-1 AND 15001-2.
11. ALL POTABLE WATER AND IRRIGATION METERS FOR DOMESTIC AND FIRE PROTECTION SHALL BE ORDERED AND PAID FOR THROUGH THE CITY OF CAPE CORAL'S CUSTOMER BILLING DEPARTMENT AT 239-574-7722. PLEASE REFERENCE THE CITY OF CAPE CORAL'S CODE OF ORDNANCES SECTION 19-23 "ALL WATER METERS SHALL BE FURNISHED AND REMAIN PROPERTIES OF THE CITY AND SHALL BE ACCESSIBLE AND SUBJECT TO ITS CONTROL". METERS ARE TO BE NEPTUNE RADIO READ AND SHALL BE FURNISHED AND INSTALLED WHEN THE SUBJECT UTILITY MAIN(S) ARE PROPERLY PRESSURE TESTED, BACTERIOLOGICAL TESTED AND FORMALLY ACCEPTED BY AN AUTHORIZED REPRESENTATIVE OF THE CITY OF CAPE CORAL.
12. AFTER THE UTILITIES DEPARTMENT APPROVES THE SUBJECT PROJECT FOR SITE PLAN APPROVAL THE ENGINEER OF RECORD MAY SUBMIT THE REQUIRED HRS AND/OR DEP PERMIT APPLICATIONS TO THE UTILITIES DEPARTMENT FOR PROPER EXECUTION. PLEASE CONTACT AMY BURDIER IN THE REQUIREMENTS.
13. PLEASE CONTACT THE UTILITY DEPARTMENT AT 239-574-0710 FOR FURTHER INFORMATION AND OR ASSISTANCE. THE ENGINEER OF RECORD SHALL PROVIDE UTILITY TURN-OVER/PROJECT CLOSE OUT DOCUMENTATION TO THE CITY OF CAPE CORAL FOR ANY UTILITY AND/OR RIGHT-OF-WAY INFRASTRUCTURE CONSTRUCTED AND CONVEYED TO THE CITY OF CAPE CORAL FOR OWNERSHIP AND MAINTENANCE PRIOR TO C.O. THE FORMAL UTILITY/RIGHT-OF-WAY ACCEPTANCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING: (SIGNED AND SEALED AS-BUILT DRAWINGS (MINIMUM 4 COPIES), AN ENGINEER'S CERTIFICATION LETTER STATING THAT THE PROJECT WAS BUILT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, HRS AND/OR DEP PERMITS TO PLACE IN SERVICE, BACKFLOW CERTIFICATIONS, OPERATIONS AND MAINTENANCE MANUALS (LIFT STATIONS), LIST OF CONTRIBUTORY ASSETS ALL SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA, A RELEASE OF LIEN BY THE CONTRACTOR, ONE YEAR WARRANTY FOR MATERIALS AND LABOR AND BILL OF SALE, ALL UTILITY AGREEMENTS, AND OTHER ANY OTHER OWNERSHIP DOCUMENTS). ELECTRONIC COPIES OF THE (LIST OF CONTRIBUTORY ASSETS, RELEASE OF LIEN BY CONTRACTOR, ONE YEAR WARRANTY FOR MATERIALS AND LABOR AND BILL OF SALE) WHICH CAN BE OBTAINED BY CONTACTING SITE DEVELOPMENT AND REVIEW AT 239-573-3167. ONCE THE DOCUMENTATION HAS BEEN FINALIZED AND PROPERLY EXECUTED BY THE ENGINEER OF RECORD THE CITY OF CAPE CORAL REQUIRES 2 SETS OF FINAL CLOSE OUT DOCUMENTATION. ONE SET SHALL BE DISTRIBUTED TO CITY OF CAPE CORAL UTILITIES DEPARTMENT AT 239-574-0710; THE SECOND SET SHALL BE DISTRIBUTED TO THE SITE DEVELOPMENT AND REVIEW DIVISION AT 239-574-0583.
14. THE CITY REQUIRES A M.O.T PERMIT BE PULLED PRIOR TO DOING ANY WORK IN THE CITY R.O.W. THE CONTRACTOR HAS BEEN PROVIDED AN APPLICATION WITH THEIR APPROVED SET OF PLANS. THE APPLICATION SHOULD BE SUBMITTED WITH A MOT (MAINTENANCE OF TRAFFIC DESIGN/PLAN/DRAWING. THE MOT CAN BE FROM THE FDOT DESIGN STANDARDS INDEX 600 SERIES, WHICH IS AVAILABLE THRU WWW.MYFLORIDA.COM WWW.FDOT.COM OR THE CONTRACTOR CAN HAVE A LOCAL TRAFFIC CONTROL COMPANY SUPPLY THEM WITH THE MOT. IF YOU HAVE ANY QUESTIONS ON THE ROW/MOT PERMIT PLEASE CONTACT 239-242-3214.
15. FOR ALL METER CHANGES (I.E. IRRIGATION OR DOMESTIC) THE ENGINEER OF RECORD (NOT THE CONTRACTOR) MUST SUBMIT EITHER A MINOR REVISION TO THE APPROVED UTILITY PLAN AND/OR A REVISION LETTER DELINEATING THE SUBJECT CHANGE.
16. FOR ALL ITEMS INSTALLED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, VALVES, PUMPS, GENERATORS, ELECTRICAL PANELS, AIR VALVES, ANTENNAS, ETC. CONTRACTOR SHALL SUBMIT AT A MINIMUM ONE (1) COPY OF ALL MANUFACTURER'S DOCUMENTATION (EX. OPERATION AND MAINTENANCE MANUALS) TO THE CITY FOR EACH TYPE OF UNIT INSTALLED.
17. ALL THREADS ON ALL ON STAINLESS STEEL BOLTS SHALL BE PROTECTED WITH AN ANTISEIZE LUBRICANT SUITABLE FOR SUBMERGED STAINLESS STEEL BOLTS, TO MEET GOVERNMENT SPECIFICATION MIL-A-907E. FOR MORE SPECIFICATIONS ON LUBRICANTS FOR STAINLESS STEEL BOLTS, REFER TO SECTION 05500 OF THE CITY OF CAPE CORAL'S "TECHNICAL SPECIFICATIONS".

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NO	DATE	DESCRIPTION



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PREPARED FOR:
CITY OF CAPE CORAL
UTILITIES DEPARTMENT

DATE:	SEPT 2018
DRAWN BY:	JS
CHECKED BY:	BB
	RONALD KERFOOT PROFESSION ENGINEER P.E. No. 20768

HANCOCK PARKWAY WATERMAIN RELOCATION	PROJECT NO.: 18-0735
GENERAL NOTES	SHEET NO.: 22