CITY OF MARION, OHIO **ROCK SWALE COMBINED SEWER** IMPROVEMENTS PHASE I MARION COUNTY, OHIO

SHEET LIST TABLE SHEET SHEET NAME SHEET TITLE NUMBER **GENERAL - 00 SERIES** COVER SHEET 00G-01 1 2 LINETYPES & SYMBOLOGY 00G-02 3 00G-03 SYMBOL LEGEND 00G-04 4 **GENERAL NOTES** 00G-05 5 **GENERAL NOTES** 6 OVERALL PLAN 00G-06 MAINTENANCE OF TRAFFIC 00G-07 7 8 **CONSTRUCTION DETAILS - 01** 00G-08 **CONSTRUCTION DETAILS - 02** 00G-09 9 10 **CONSTRUCTION DETAILS - 03** 00G-10 **CONSTRUCTION DETAILS - 04** 11 00G-11 CIVIL - 10 SERIES STA 0+00 - 5+00 10C-01 12 13 10C-02 STA 5+00 - 10+00 14 STA 10+00 - 15+00 10C-03 15 STA 15+00 - 20+00 10C-04 16 10C-05 STA 20+00 - 25+00 17 STA 25+00 - 30+00 10C-06 18 STA 30+00 - 35+00 10C-07 19 STA 35+00 - 40+00 10C-08 20 STA 40+00 - 45+00 10C-09 21 STA 45+00 - 50+00 10C-10 22 STA 50+00 - 55+00 10C-11 23 STA 55+00 - 60+00 10C-12 24 STA 60+00 - 65+00 10C-13 25 STA 65+00 - 70+00 10C-14 26 STA 70+00 - 72+50 10C-15 27 IMPROVEMENT SCHEDULE 10C-16 **EROSION CONTROL - 20 SERIES** 28 EROSION CONTROL DETAILS 20EC-01



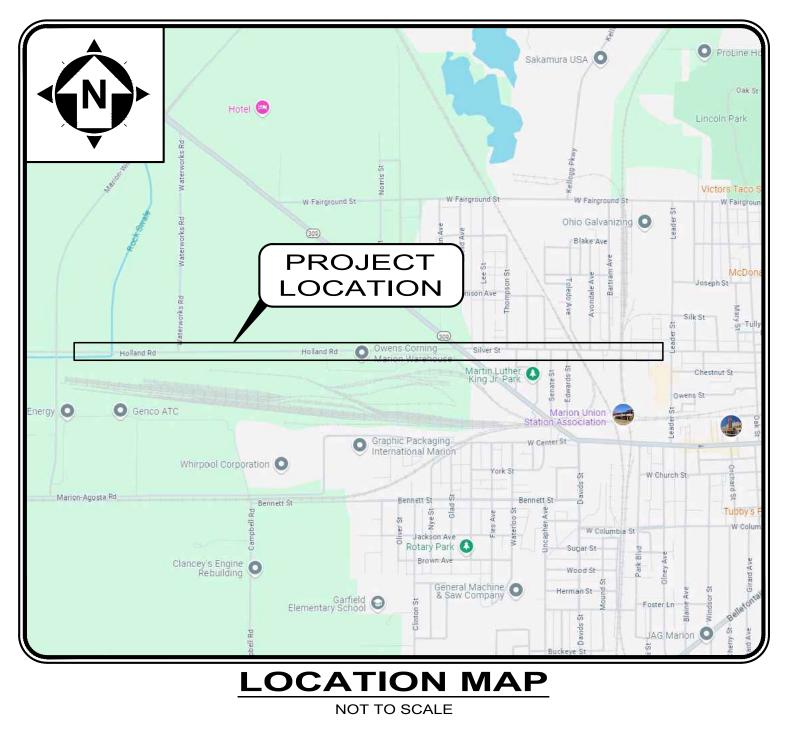
TICKET ID NUMBERS

B427001316-01B, B427001342-00B, B427001349-00B, B427001354-00B, B427001357-00B, B427001363-00B, B427001494-00B, B427001495-00B UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE

- FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS. 2. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.
- H:\2024\242139\DWG\SHEETS\G 242139 COVER SHEET.DWG 1 COVER SHEET 10/23/2024 10:10:21 AM CORY SCOT

City of Marion, Ohio

OCTOBER 2024





MARION OFFICERS

BILL COLLINS TOM ROBBINS **MIKE BODINE II** TOMMY REESE JAY MCDONALD CHUCK DEEM MARK RUSSELL JEFF SHETLER, PE SCOTT BISHOP

MARION CITY COUNCIL

MARY STONEBURNER SHAWN BARR AYERS RATLIFF JASON SCHABER TWILA LAING THADDAEUS SMITH RONALD PRATER MIKE NEFF AARON ROLLINS RALPH SMITH MATTHEW K. POLLOCK

CITY OF MARION Jeff Shot

JEFF SHETLER, PE - CITY ENGINEER

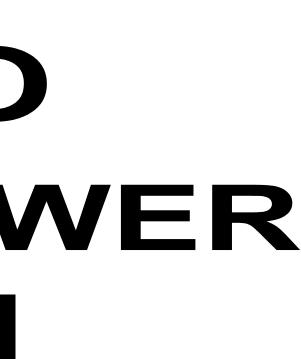
ENGINEER:

CT CONSULTANTS, INC 8150 STERLING COURT MENTOR, OH 44060 (440) 951-9000 PHONE (440) 951-7487 FAX

4. mZAhi

TIMOTHY MCLAUGHLIN

ENGINEER'S PROJECT No. 242139



MAYOR

DIRECTOR OF PUBLIC SAFETY DIRECTOR OF PUBLIC SERVICE TREASURER POLICE CHIEF FIRE CHIEF LAW DIRECTOR **CITY ENGINEER** ASSISTANT CITY ENGINEER

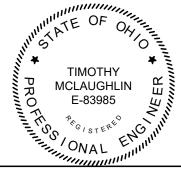
PRESIDENT OF COUNCIL **COUNCILPERSON WARD 1 COUNCILPERSON WARD 2 COUNCILPERSON WARD 3 COUNCILPERSON WARD 4 COUNCILPERSON WARD 5 COUNCILPERSON WARD 6** COUNCIL-AT-LARGE COUNCIL-AT-LARGE COUNCIL-AT-LARGE **CLERK OF COUNCIL**



10/24/2 DATE

10/23/2024

DATE



P.E. No. E-83985

	T consultar	engineers • architects • planners	A Vardantae Company	
DATE				
REVISION				
0 Z				
AS NOTED	10/1/2024			MLT
SCALE: AS	DATE: 1	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	SEWFR IMPROVEMENTS PHASE I	OHIO	GENERAL - 00 SERIES	COVER SHEET
)JEC 21	т NO: 39	
			-01	E
SF	_{іеет} 1		_	•F 8

TE OF

TIMOTHY

MCLAUGHLIN E-83985

BOUNDARIES

PROPOSED:

- PR. R/W	
— R/W-LA ———	
R/W-TEMP	
LEASE	

· /· /· /· /· /	· /· /· /· /·	• • • • • •	· · · · · ·
$\cdot \mathbf{X} \cdot \mathbf{X} \cdot \mathbf{X} \cdot$	$X \cdot X \cdot X \cdot$	$\mathbf{X} \cdot \mathbf{X} \cdot \mathbf{X} \cdot \mathbf{X}$	$X \cdot X \cdot X \cdot X \cdot$

EXISTING:

EX	K. R/W
R	/W-LA
EX.	P/L =
I	LEASE
ANI	VX
COF	RP
CN1	ΓΥ
FAR	RM
FLC	00D
SEC	ст ———— — — — — —
STA	TE
<i>TOV</i>	VN
WSF	HED
WTI	

BOUNDARY LINE SUBDIVISION LINE **RIGHT-OF-WAY - CENTERLINE RIGHT-OF-WAY RIGHT-OF-WAY RIGHT-OF-WAY - LIMITED ACCESS RIGHT-OF-WAY - TEMPORARY** PROPERTY LINE PROPERTY LINE PROPERTY SPLIT PROPERTY LEASE EASEMENT LINE **EASEMENT LINE - TEMPORARY** SETBACK LINE PHASE LINE WORK LIMITS **DEMOLITION - HASH** DEMOLITION - "X"

BOUNDARY LINE SUBDIVISION LINE RIGHT-OF-WAY - CENTERLINE RIGHT-OF-WAY RIGHT-OF-WAY - LIMITED ACCESS PROPERTY LINE PROPERTY LINE PROPERTY LEASE ANNEXATION LINE CORPORATION LINE COUNTY LINE FARM LOT LINE FLOOD ZONE LINE SECTION LINE STATE LINE TOWNSHIP LINE EASEMENT LINE SETBACK LINE WATERSHED LIMIT WETLAND LIMIT

OTHER:

VERT

ABBREVIATIONS

PIF	<u>PE MATERIAL ID:</u>
BR	= BRASS
BS	= BLACK STEEL
ΒZ	= BRONZE
CI	= GRAY CAST IRON
CU	= COPPER
CS	= CAST IRON
СТ	= CARBON STEEL TUBING
DIP	= DUCTILE IRON PIPE
DR	= DIAMETER RATIO
FRP	= FIBERGLASS REINFORCED PLASTIC
GS	= GALVANIZED STEEL
HDPE	E = HIGH-DENSITY POLYETHYLENE PIP
PVC	= POLYVINYL CHLORIDE PIPE
66	- STAINI ESS STEEL

SS = STAINLESS STEEL

- STL = STEEL PIPE
- SDR = STANDARD DIAMETER RATIO SCH = SCHEDULE

SERIES INFORMATION:

GENERAL - 00 SERIES

EROSION CONTROL - 20 SERIES

CIVIL - 10 SERIES

ADD'L	= ADDITIONAL	EX
AGG	= AGGREGATE	
ALUM.	= ALUMINUM	
BTWN	= BETWEEN	
C/L	= CWNTERLINE	
CLR	= CLEAR	
CONC	= CONCRETE	
CONT	= CONTINUOUS	
DWL	= DOWEL(S)	
EF	= EACH FACE	
EL.	= ELEVATION	
EMBED	= EMBEDMENT	
EW	= EACH WAY	PF
FF	= FINISH FLOOR	
FG	= FINISH GRADE	C
FND	= FOUNDATION	.,
HORIZ	= HORIZONTAL	
HP	= HIGH POINT	EX
LP	= LOW POINT	
MAX	= MAXIMUM	./
MFR	= MANUFACTURER	. (
MIN	= MINIMUM	\sim
REF	= REFERENCE	1 8
REINF	= REINFORCING	
STRC	= STRUCTURE	
Τ/	= TOP OF	
TYP	= TYPICAL	
UNO	= UNLESS NOTED OTHER	WISE

= VERTICAL

IDENTIFIER:

DISCIPLINE INFORMATION:

DISCIPLINE:

GENERAL

PROCESS

ELECTRICAL

STRUCTURAL

ARCHITECTURAL

INSTRUMENTATION

MECHANICAL (PLUMBING & HVAC)

CIVIL

EROSION & SEDIMENT CONTROL

PROPOSED:	
SF	SF
——— FS ——	—— FS ———
SW	SW
CF	CF

- CONSTRUCTION LIMIT - SOIL DISTURBANCE LIMIT SILT FENCE — FILTER SOCK STRAW WATTLE CONSTRUCTION FENCE TREE PRESERVATION AREA

FEATURES

xxx
xxxxxx
o o o o o
_ o
XEXE
o o o o o
xxx
_ o o o o o o o o
<u>0 0 0 0 0 0 0 0 0</u> .
-0

FENCE - GENERAL
FENCE - BARB WIRE
FENCE - CHAIN LINK
FENCE - DECORATIVE
FENCE - ELECTRIC
FENCE - VINYL
FENCE - WOOD
FENCE - WOVEN WIRE
FENCE - WROUGHT IRON
GUARDRAIL
GUARDRAIL - CABLE
HANDRAIL

EXISTING:

PROPOSED:

X -	X ·		- X -		Х	— X —	
—X——X-	X	X	—X—	—X—	X	—X——	-X
— o —	o		- 0 -		- 0 —	o	
_ 0 0 .	o			0			
	—X	—E—		X	—— E-		
				-0		0	
			- 🗆 -			0	
X	X		—X—		—X—	X-	
_ 0 0 .	0						o —
0 0	0 0	0		0	0 0	0	
-00	-0	0	-0	-0	-0	-0)
oo_					oo	O	

FENCE - GENERAL FENCE - BARB WIRE FENCE - CHAIN LINK FENCE - DECORATIVE FENCE - ELECTRIC FENCE - VINYL FENCE - WOOD FENCE - WOVEN WIRE FENCE - WROUGHT IRON GUARDRAIL GUARDRAIL - CABLE HANDRAIL WALL - RETAINING WALL - SCREENING

GROUND

EXISTING:	
650650	CONTOUR - MA
649649	CONTOUR - MIN
	WATER EDGE

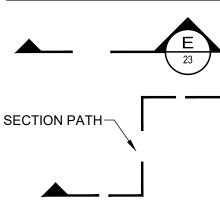
VEGETATION

PROPOSED: BUSH LINE

EXISTING: BRUSH LINE

BUSH LINE TREE DRIP LINE

MAJOR SECTION CUT CONVENTIONS:



REFERENCE DIMENSION:

12'-4" (REF.)

ONLY. THEY ARE CALCULATED DIMENSIONS NOT AND ARE USEFUL IN SHOWING INTENDED DESIGN.

H:\2024\242139\DWG\SHEETS\G_242139 - SYMBOLOGY AND ABBREVIATIONS.DWG - 2 LINETYPES & SYMBOLOGY - 10/23/2024 8:03:05 AM - CORY SCOTT

UTILITES - SANITARY

SANITARY SEWER

SANITARY FORCE MAIN

SANITARY LEACH FIELD

SANITARY LEACH FIELD

SANITARY SEWER - DOUBLE LINE

ABANDONED SANITARY SEWER

SANITARY SERVICE

SANITARY SEWER

SANITARY FORCE MAIN

SANITARY LEACH FIELD

SANITARY SERVICE

STORM SEWER

ABANDONED STORM SEWER

STORM SEWER - DOUBLE LINE

STORM ROOF DRAIN

STORM UNDERDRAIN

SANITARY SEWER - DOUBLE LINE

PROPOSED:

	FM	
	— LCH ———	LCH
EXISTING:		
		— SAN —
	— SAN-ABAN ——	SAN-ABAN

	0, 0, 1, 1, 1, 2, 0, 1	0,000,000	
		SAN-FM	
— — ss —	— — ss —	— — ss — —	– ss —
	LCH	LCH	

UTILITES - STORM

EXISTING:

-		STM	
_	 — STM-ABAN —	— — STM-ABAN	
-	 		
-	 — RD — — –	- RD F	RD
_	 IID	U/) ———
	00	01	-

UTILITES - WATER

EXISTING:

	WAT	
WAT-ABAN		
WS	— WS — — WS — —	
IRR —	— IRR — — IRR — —	

WATER MAIN
WATER MAIN - DOUBLE LINE
ABANDONED WATER MAIN
WATER SERVICE
IRRIGATION LINE

UTILITES - GAS

PROPOSED:

GAS		
GAS		
—— GS —— GS —	— GS — — GS — —	
—— GS —— GS —		

EXISTING:

GAS	S-ABAN ——	— GAS-ABAN	
		– GAS ———	
	– GS ———	GS	

GAS LINE

GAS LINE

UTILITES - FIBER OPTIC CABLE

EXISTING:		
		- FOC-OH
		- FOC-UG
	— FOC-OH —	— — FOC-OH ———
	— FOC-UG —	— — FOC-UG — — —

GAS LINE DIRECTIONAL BORE
GAS SERVICE
GAS SERVICE DIRECTIONAL BORE

GAS SERVICE

 FOC LINE - OH
 FOC LINE - UG
 FOC SERVICE - O
 FOC SERVICE - U
 FOC DUCT

-SECTION IDENTIFICATION

LETTER OR NUMBER

UTILITES - COMMUNICATION

EXISTING:	
COMN	л-он —
COMN	Л-UG ———
COMM-ABAN	- COMM-ABAN
СОММ-ОН	— СОММ-ОН —
COMM-UG	— COMM-UG ———

— COMMUNICATION LINE - OH — COMMUNICATION LINE - UG ABANDONED COMMUNICATION LINE - UG COMMUNICATION SERVICE - OH COMMUNICATION SERVICE - UG COMMUNICATION DUCT

UTILITES - CABLE TV:

EXISTING:

CATV-OH	CAT
CATV-UG	CAT
CATV-ABAN CATV-ABAN	ABA
CATV-OH CATV-OH	CAT
CATV-UG CATV-UG	CAT
	CAT

TV LINE - OH ATV LINE - UG BANDONED CATV LINE - UG ATV SERVICE - OH TV SERVICE - UG TV DUCT

UTILITES - TELEPHONE

EXISTING:

 TELEPHONE LINE - OH
 TELEPHONE LINE - UG
 ABANDONED TELEPHONE LINE - UG
 TELEPHONE SERVICE - OH
 TELEPHONE SERVICE - UG
 TELEPHONE DUCT

UTILITES - ELECTRIC

EXISTING:

	– ELEC-OH ————
	– ELEC-UG –
<i>ELEC-ABAN</i> —	— — ELEC-ABAN —
ELEC-OH	ELEC-OH
ELEC-UG	ELEC-UG
——— LIGHT-OH —	— — LIGHT-OH —
LIGHT-UG —	LIGHT-UG

ELECTRIC LINE - OH ELECTRIC LINE - UG ABANDONED ELECTRIC LINE - UG ELECTRIC SERVICE - OH ELECTRIC SERVICE - UG ELECTRIC LIGHTING - OH ELECTRIC LIGHTING - UG ELECTRIC DUCT

GENERAL SYMBOLOGY NOTES:

- 1. THIS IS A STANDARD SHEET SHOWING COMMONLY USED SYMBOLOGY.
- 2. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT.
- 3. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE NEW IMPROVEMENTS SO AS TO HIGHLIGHT SPECIFIC TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.
- 4. SYMBOLOGY OR DIAGRAMMATICAL LEGENDS MAY BE SHOWN ON INDIVIDUAL SHEETS FOR SCHEDULES, DIAGRAMS, DETAILS, SCHEMATICS OR EQUIPMENT.

DRAWING CODED NOTE TYPES:

1. CT CONTRACTUAL NOTES ARE DEPICTED WITH A HEXAGON, SQUARE, CIRCLE OR TRIANGLE. ALL OTHER EXISTING WRITTEN CALLOUTS SHOWN ON THE REUSED SCANNED PLANS, SECTIONS & DETAILS ARE FOR EXISTING CONDITIONS AND REFERENCE ONLY. MANY OF THOSE NOTES FROM THE SCANNED DRAWINGS PERTAIN TO PREVIOUS WORK DONE.

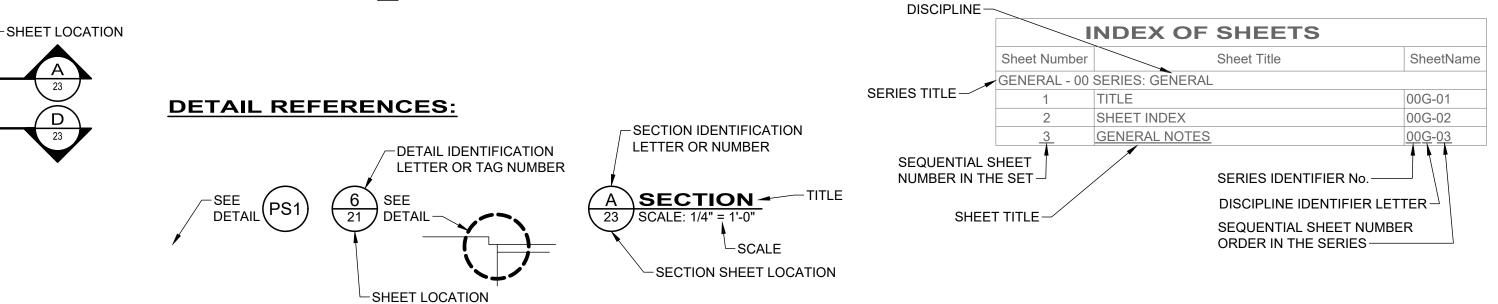
PLAN REVISIONS:

- A REVISION DESCRIPTION
- /B REVISION DESCRIPTION

DEMOLITION CODED NOTES:

DEMOLITION DESCRIPTION

2 DEMOLITION DESCRIPTION



REFERENCE DIMENSIONS ARE GIVEN FOR INFORMATION INTENDED TO BE USED WITHOUT FIELD VERIFICATION

UTILITES - TRAFFIC

PROPOSED:

• TRAF-OH 🕳 rraf-Ug 🛥 _____ TRAF-SP TRAF-SP

EXISTING:

	— TRAF-OH ————
	- TRAF-UG
TRAF-ABAN	TRAF-ABAN
TRAF-SP	

TRAFFIC LINE - OH TRAFFIC LINE - UG TRAFFIC LOOP TRAFFIC SPAN

TRAFFIC LINE - OH TRAFFIC LINE - UG ABANDONED TRAFFIC LINE - UG TRAFFIC LOOP TRAFFIC SPAN TRAFFIC DUCT

UTILITES - MISCELLANEOUS

EXISTING:

		UTIL-OH ——	
		UTIL-UG ——	
U	IS-0H ——	– —— US-OH	
U	IS-UG ——	– —— US-UG	

UNKNOWN UTILITY LINE - OH UNKNOWN UTILITY LINE - UG UNKNOWN UTILITY SERVICE - OH UNKNOWN UTILITY SERVICE - UG UNKNOWN UTILITY DUCT UTILITY CENTERLINE UTILITY CROSSING

UTILITES - STEAM

EXISTING:
STEA

STEAM LINE ABANDONED STEAM LINE STEAM SERVICE

UTILITES - COMBINATION SEWER

PROPOS	ED:		
EXISTING:			
		COMB	
	COMBARAN		

COMBINED SEWER COMBINED SEWER - DOUBLE LINE ABANDONED COMBINED SEWER

COMBINED SEWER - DOUBLE LINE

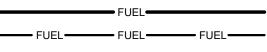
HATCHES - COMBINATION SEWER

PROPOSED:

 BRACING EXTENTS CONSTRUCTION PITS MANHOLE REHAB

UTILITES - FUEL

PROPOSED:



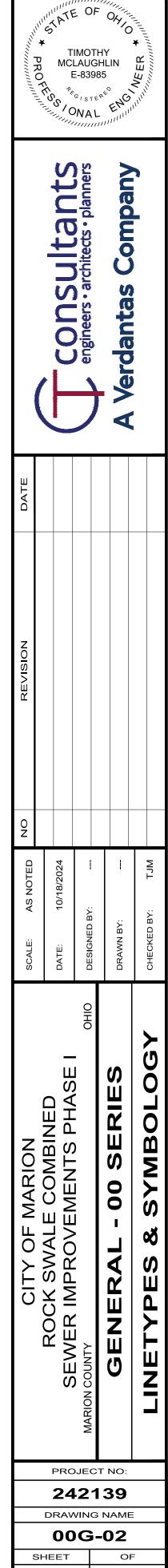
FUEL LINE - FUEL SERVICE

EXISTING:

— FUEL-ABAN — FUEL-ABAN — _____ FUEL _____

ABANDONED FUEL LINE FUEL LINE

INDEX EXPLAINATION:



28

EXISTING SYMB SANITARY MANHOLE SANITARY CLEANOUT	
	OLS
SANITARY CLEANOUT	Ś
SANTART CLEANOUT	0
SANITARY LINE CAP	I
SANITARY LINE PAINT MARKING	SAN
SANITARY STRUCTURE NUMBER	(00)
SANITARY VENT PIPE	
STORM MANHOLE (SOLID LID)	(D)
STORM MANHOLE (OPEN GRATE)	Ð
CURB INLET	<u> </u>
CURB INLET (DOUBLE)	
CATCH BASIN	ĒĒ
CATCH BASIN (ROUND LID)	ÊÌ
CATCH BASIN (DOME)	ÊÌ
CATCH BASIN (SIDE INLET)	
DRAIN	
DOWNSPOUT	
STORM CLEANOUT	0
STORM LINE CAP	
STORM ENDWALL	
STORM HEADWALL	
STORM LINE PAINT MARKING	STM
STORM STRUCTURE NUMBER	(00)
ROCK CHANNEL PROTECTION	
SURFACE DRAINAGE FLOW	
STORM FLOOD ROUTING ARROW	
FIRE HYDRANT	Q
WATER SIAMESE CONNECTION	୍
WATER VALVE	ß
WATER VALVE BOX	®
WATER METER	E E E E E E E E E E E E E E E E E E E
WATER METER PIT	
WATER LINE REDUCER	
WATER LINE CAP	
WATER LINE PLUG	D
WATER WELL	
WATER LINE PAINT MARKING	WAT
WATER LINE MARKER	
POST INDICATOR VALVE	(PV)
WATER MANHOLE	(Ŵ)
WATER CORPORATION STOP	
WATER FLUSHING ASSEMBLY	00
WATER FIXTURE	WE
WATER FITTING (TEE)	H
WATER FITTING (CROSS)	田
WATER FITTING (45° WYE)	ζ¥,
WATER FITTING (11.25%)	,
	4
WATER FITTING (22.50°)	
WATER FITTING (45°)	↓
WATER FITTING (90°)	Ч
IRRIGATION SPRINKLER HEAD	
IRRIGATION CONTROL BOX	
IRRIGATION BOX	
STEAM MANHOLE	(SM)
STEAM VENT	
COMBINED SEWER MANHOLE	ĆM L
GAS LIGHT POST (YARD)	
GAS MANHOLE	(Ĝ)
GAS VALVE	8
GAS VALVE BOX	ß
	GV Ø
GAS	1
GAS GAS METER	GM
GAS METER GAS REGULATOR	GR
GAS METER GAS REGULATOR GAS VENT PIPE	
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER	GR Ø
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING	
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER	GR Ø
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING	
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE	
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS	Image: Control of the second secon
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD)	
GAS METER GAS NETER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE	
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX	Image: Bit state Ima
GAS METER GAS NETER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC JUNCTION BOX	・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX	Image: select
GAS METER GAS NETER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC JUNCTION BOX	・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・
GAS METER GAS NETER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC PULL BOX ELECTRIC VAULT BOX	Image: select
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC VAULT BOX ELECTRIC VAULT BOX	Image: Section of the section of
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC VAUL BOX ELECTRIC VAUL T BOX ELECTRIC VAUL T BOX	Image: Sector
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC CONTROL BOX ELECTRIC VAULT BOX ELECTRIC VAULT BOX ELECTRIC METER ELECTRIC METER ELECTRIC PEDESTAL ELECTRIC RISER BOX ELECTRIC RISER BOX	Image: Sector secto
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC CONTROL BOX ELECTRIC VAUL T BOX ELECTRIC VAUL T BOX ELECTRIC METER ELECTRIC PEDESTAL ELECTRIC RISER BOX ELECTRIC TRANSFORMER ELECTRIC HVAC UNIT	Image: Constraint of the sector of the se
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC VAUL T BOX ELECTRIC VAUL T BOX ELECTRIC METER ELECTRIC PEDESTAL ELECTRIC RISER BOX ELECTRIC TRANSFORMER ELECTRIC TRANSFORMER ELECTRIC HVAC UNIT ELECTRIC GROUND LIGHT	・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC CONTROL BOX ELECTRIC VAUL T BOX ELECTRIC VAUL T BOX ELECTRIC PEDESTAL ELECTRIC RESER BOX ELECTRIC RESER BOX ELECTRIC TRANSFORMER ELECTRIC HVAC UNIT	Image: Constraint of the sector of the se
GAS METER GAS REGULATOR GAS VENT PIPE GAS VENT PIPE GAS LINE MARKER GAS LINE FAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC VAUL T BOX ELECTRIC VAUL T BOX ELECTRIC METER ELECTRIC PEDESTAL ELECTRIC RISER BOX ELECTRIC TRANSFORMER ELECTRIC TRANSFORMER ELECTRIC HVAC UNIT ELECTRIC GROUND LIGHT	回日
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC CONTROL BOX ELECTRIC JUNCTION BOX ELECTRIC VAULT BOX ELECTRIC PEDESTAL ELECTRIC RISER BOX ELECTRIC RISER BOX ELECTRIC TRANSFORMER ELECTRIC GROUND LIGHT ELECTRIC LINE PAINT MARKING	Image: Constraint of the sector of the se
GAS METER GAS REGULATOR GAS VENT PIPE GAS LINE MARKER GAS LINE PAINT MARKING GAS LINE FIXTURE GAS ELECTRIC LIGHT POST (YARD) ELECTRIC MANHOLE ELECTRIC PULL BOX ELECTRIC CONTROL BOX ELECTRIC JUNCTION BOX ELECTRIC VAUL T BOX ELECTRIC VAUL T BOX ELECTRIC PEDESTAL ELECTRIC PEDESTAL ELECTRIC RISER BOX ELECTRIC RISER BOX ELECTRIC TRANSFORMER ELECTRIC HVAC UNIT ELECTRIC GROUND LIGHT ELECTRIC GROUND LIGHT	Image: Constraint of the sector of the se

TELEPHONE MANHOLE TELEPHONE PULL BOX	
TELEPHONE PEDESTAL	TP I
TELEPHONE RISER BOX	TB
TELEPHONE LINE PAINT MARKING	EX
FIBER OPTIC CABLE MANHOLE	EO EX
FIBER OPTIC CABLE MARKER	
TRAFFIC CONTROL MANHOLE	(TR)
TRAFFIC CONTROL BOX	<u></u> <u> </u>
TRAFFIC CONTROL PAINT MARKING	Ř
	EB
TRAFFIC SIGNAL PEDESTAL	re Fe
UNKNOWN, CLEANOUT	0
UNKNOWN, MANHOLE	(Ú)
UNKNOWN, VALVE	Ś
UNKNOWN, PEDESTAL	
MONITORING WELL TEST WELL	 (TW)
WATER WELL	
SOIL BORING	•
SWAMP	¥
POLE, ELECTRIC	P.C.
POLE, TELEPHONE	¢.
POLE, LIGHT	¢.
POLE, LIGHT, DECORATIVE	
POLE, LIGHT-OVERHEAD	<u>0</u>]==⊂⊃
POLE, CABLE TV	C
POLE, UTILITY	, W
POLE, GENERAL	
	P. R
POLE, TRAFFIC CONTROL	φ G
POLE, GUY	
POLE, BRACE	ф ′р
POLE, ELECTRIC/TELEPHONE	\$
POLE, ELECTRIC W/LIGHT	¢.
POLE, ELECTRIC/CABLE TV	¢.
POLE, ELECTRIC/TELEPHONE/LIGHT	D 62-
POLE, ELECTRIC/TELEPHONE/CABLE TV	₽¢.
POLE, ELEC./TELE./LIGHT/CABLE TV	(C) C) C) C) C) C) C) C) C) C) C) C) C) C
POLE, TELEPHONE/LIGHT	¢.
POLE, TELEPHONE/CABLE TV	PC-
POLE, TELEPHONE/LIGHT/CABLE TV	, HE
POLE, CABLE TV W/LIGHT	L.G.G.
POLE, GUY WIRE	(
SIGN	<u> </u>
SIGN, DOUBLE SIDED	_0_
SIGN, DUAL POST SIGN, RAILROAD	
POST	0
BOLLARD	0
DELINEATOR POST	٥
PARKING BUMPER BLOCK	<u>۔ </u>
HANDICAP PARKING SYMBOL	Ċ.
HANDICAP DETECTABLE WARNING	
MAILBOX	[MB]
PAPERBOX	PB
PARKING METER	¢Þ O
	RIP
EX. BARBEQUE GRILL	BBQ
FUEL PUMP	FUEL
FLAG POLE	17
RAISED PAVEMENT MARKER	÷
GUARDRAIL, CENTER POST	0
GUARDRAIL, TERMINAL POST GUARDRAIL, BOTTOM POST	\odot
GUARDRAIL, BOTTOM POST GUARDRAIL, TOP POST	0
FENCE POST	•
PICNIC TABLE	
BENCH	
DECIDUOUS TREE	
EVERGREEN TREE	<u></u>
BUSH	8

EXISTING SYMBC	DLS
PVMT. MARKING, LANE ARROW	
PVMT. MARKING, LANE ARROW	6
PVMT. MARKING, LANE ARROW	A
PVMT. MARKING, LANE ARROW	(
PVMT. MARKING, LANE ARROW	
PVMT. MARKING, LANE ARROW	
PVMT. MARKING, LANE ARROW	A
PVMT. MARKING, LANE ARROW	J F
PVMT. MARKING, BICYCLE LANE	600
PVMT. MARKING, SYMBOL	
PVMT. MARKING WORD, BICYCLE	
PVMT. MARKING WORD, LANE	
PVMT. MARKING WORD, ONLY	
PVMT. MARKING WORD, RAILROAD	
PVMT. MARKING WORD, SCHOOL	SCHOOL
IRON PIN FOUND	0
SOLID IRON PIN FOUND	0
IRON PIPE FOUND	\odot
DRILL HOLE FOUND	×
CHISELED "X" FOUND	X
MONUMENT BOX FOUND	M
MONUMENT CONCRETE FOUND	$\langle \odot \rangle$
MONUMENT RIGHT-OF-WAY FOUND	RW
PK NAIL FOUND	ø
MAG NAIL FOUND	ø
SPIKE FOUND	\bigtriangleup
HUB FOUND	
AXLE FOUND	0
WOOD POST FOUND	•
CORNER STONE FOUND	CS
AERIAL TARGET FOUND	() AER
GPS CONTROL FOUND	GPS
BENCHMARK FOUND	•

H:\2024\242139\DWG\SHEETS\G_242139 - SYMBOLOGY AND ABBREVIATIONS.DWG - 3 SYMBOL LEGEND - 10/23/2024 8:03:05 AM - CORY SCOTT

PROPOSED SYMB	-
SANITARY MANHOLE	
SANITARY CLEANOUT	0
SANITARY LINE CAP	I
SANITARY STRUCTURE NUMBER	00
	 ●
STORM MANHOLE (SOLID GRATE) STORM MANHOLE (OPEN GRATE)	
STORM MANHOLE, ADJUST	
CURB INLET	
CURB INLET (DOUBLE)	
CURB INLET, ADJUST	jır.
CURB INLET (DOUBLE), ADJUST	
CATCH BASIN CATCH BASIN (SOLID)	
CATCH BASIN, ADJUST	
CATCH BASIN (SIDE INLET)	
DRAIN	
DOWNSPOUT	
	0
STORM LINE CAP STORM HEADWALL	
STORM STRUCTURE NUMBER	(00)
ROCK CHANNEL PROTECTION	
SURFACE DRAINAGE FLOW	
SURFACE DRAINAGE FLOW	~~~
STORM FLOOD ROUTING ARROW	
FIRE HYDRANT FIRE HYDRANT, ADJUST	<u>କ୍</u>
WATER SIAMESE CONNECTION	<u> </u>
WATER VALVE	
WATER VALVE BOX	⊠
WATER METER	WM
WATER LINE REDUCER	
WATER LINE CAP WATER LINE PLUG	
WATER LINE PLOG	•
WATER LINE MARKER	
POST INDICATOR VALVE	PIV
WATER MANHOLE	\bigotimes
WATER CORPORATION STOP	•
	•• B
WATER FITTING (TEE) WATER FITTING (CROSS)	
WATER FITTING (45° WYE)	4
WATER FITTING (11.25°)	н
WATER FITTING (22.50°)	H
WATER FITTING (45°)	4
WATER FITTING (90°) IRRIGATION SPRINKLER HEAD	₽
IRRIGATION CONTROL BOX	IRR
WATER METER	WM
GAS LIGHT POST (YARD)	-j¤-
GAS MANHOLE	G
GAS MANHOLE	
GAS VALVE GAS METER	
GAS REGULATOR	GR
GAS VENT PIPE	 ⊘
ELECTRIC LIGHT (GROUND)	- ` .
ELECTRIC LIGHT POST (YARD)	-២-
	Ē
ELECTRIC MANHOLE, ADJUST ELECTRIC PULL BOX	
ELECTRIC FOLL BOX	РВ
ELECTRIC JUNCTION BOX	ТЭЦ
ELECTRIC VAULT BOX	VLT
ELECTRIC METER	EM
	EP
ELECTRIC TRANSFORMER	TR AC
POLE, ELECTRIC	•
POLE, TELEPHONE	↓
POLE, LIGHT	,
POLE, LIGHT POLE, LIGHT, DECORATIVE	<u> </u>
POLE, LIGHT, DECORATIVE	
POLE, CABLE TV	
POLE, UTILITY	
POLE, GENERAL	Γ

PROPOSED SYMB	
	$\frac{CLS}{R}$
POLE, TRAFFIC CONTROL	- P G
POLE, GUY	P
POLE, BRACE	₩ ₩
POLE, ELECTRIC/TELEPHONE	P
POLE, ELECTRIC W/LIGHT	P
POLE, ELECTRIC/CABLE TV	<u> </u>
POLE, ELEC./TELE./LIGHT	\mathcal{P}
POLE, ELEC./TELE./CABLE TV	<u> </u>
POLE, ELEC./TELE./LIGHT/CABLE	
POLE, TELEPHONE/LIGHT	
POLE, TELEPHONE/CABLE TV	
	- F
POLE, TELE./LIGHT/CABLE TV	<u> </u>
POLE, CABLE TV W/LIGHT	
POLE, FLAG	• •
POST, SIGN (SINGLE SIDED)	`
POST, SIGN (DOUBLE SIDED)	- -
POST, SIGN (DUAL POST)	
POST (GENERAL)	•
BOLLARD	•
DELINEATOR POST	0 0
FENCE POST	
PARKING COUNT	— (00)
PARKING BUMPER BLOCK	
HANDICAP PARKING SYMBOL	<u>é</u> é
HANDICAP DETECTABLE WARNING	
MAILBOX	
PAPERBOX	PB
PARKING METER	- P
STREET SIGN	_ _
TELEPHONE MANHOLE	Ū
TELEPHONE MANHOLE (ADJ)	Ŏ
TELEPHONE PEDESTAL	TP
CABLE MANHOLE	Ô
CABLE MANHOLE (ADJUSTED)	
CABLE PEDESTAL	CP
CABLE SATELLITE	<i>b</i>
	B
TRAFFIC CONT. MANHOLE (ADJ)	
TRAFFIC CONTROL BOX	TRAF
TRAFFIC PULL BOX	РВ
TRAFFIC SIGNAL PEDESTAL	TP
STRAW BALE CHECK DAM	

	523
PVMT. MARKING, LANE ARROW	4
PVMT. MARKING, LANE ARROW	
PVMT. MARKING, LANE ARROW	
PVMT. MARKING, LANE ARROW	X
PVMT. MARKING, LANE ARROW	¥
PVMT. MARKING, LANE ARROW	¥ ▲
PVMT. MARKING, LANE ARROW	
PVMT. MARKING, LANE ARROW	プ 🎸
PVMT. MARKING, BICYCLE	
PVMT. MARKING, CHEVRON	ONE WAY
PVMT. MARKING, ONE WAY	DO NOT ENTER
PVMT. MARKING WORD, LANE	ALL V
PVMT. MARKING WORD, ONLY	ŇĽ
PVMT. MARKING WORD, ONLY PVMT. MARKING WORD, RAILROAD PVMT. MARKING WORD, SCHOOL	

ABANDONED	ONS
	ABAN.
ADJUST	ADJ.
AGGREGATE	AGG.
	ASB.
ASPHALT	ASPH.
	B/B
	BFE
BETWEEN	BTW.
	BC
BOTTOM OF FOOTING ELEVATION	FTG.
BOTTOM OF WALL ELEVATION	BWE
BUILDING BULKHEAD	BLDG. BHD.
CABLE TELEVISION	CATV
CAST IRON PIPE	CIP
CATCH BASIN	СВ
CENTERLINE	C/L
CENTER TO CENTER	C/C
CHAIN LINK FENCE	CLF
CHEMICAL STABILIZATION	CHEM. STABL
CONCENTRIC	CON.
CONCRETE	CONC.
CONNECTION	CONN.
CONTROL JOINT	CJ
COPPER PIPE	COP.
CORRUGATED METAL PIPE	CMP
DEMOLITION	DEMO.
DEPRESSED	DEP.
DOWNSPOUT	DS
DROP MANHOLE	DMH
DUCTILE IRON PIPE	DIP
DUMPSTER	DUMP.
ECCENTRIC	ECC.
EDGE OF PAVEMENT ELEVATION	EP
ELECTRIC	ELEC.
ENCLOSURE	ENCL.
EXISTING	EX.
FACE TO FACE	F/F
FINISHED FLOOR ELEVATION	FFE
FIRE HYDRANT	FH
FOUNDATION	FNDN.
FULL DEPTH RECLAMATION	FDR
FUTURE	FUT.
GAS	G
GALVANIZED PIPE	GP GB
GRAVEL	GVL.
GROUND ELEVATION	GVL. GND.
GUTTER ELEVATION	GUT.
HANDICAP (E.G. ACCESSIBLE)	HC
HIGH-DENSITY POLYETHYLENE PIPE	HDPE
HIGH POINT ELEVATION	HP
HORIZONTAL	HOR.
INSTALL	INSTL.
IRRIGATION	
	IRR.
JOINT	JT
JOINT	JT
JOINT JOINT FILLER	JT JF
JOINT JOINT FILLER JUNCTION	JT JF JCT.
JOINT JOINT FILLER JUNCTION KNOCKOUT	JT JF JCT. KO
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL	JT JF JCT. KO LAT.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION	JT JF JCT. KO LAT. LP
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN	JT JF JCT. KO LAT. LP MAINT.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL	JT JF JCT. KO LAT. LP MAINT. MATL.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED	JT JF JCT. KO LAT. LP MAINT. MATL. MTD.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S. ORN.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S. ORN. O/O
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S. ORN. O/O OH
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S. ORN. O/O OH OH
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OXYGEN LINE PARKING	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MSC. N.T.S. ORN. O/O OH Q PKG.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OXYGEN LINE PARKING PAVEMENT	JT JF JCT. KO LAT. P MAINT. MATL. MTD. MISC. ORN. O/O OH O PKG. PVMT.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S. O/O OH O/ PKG. PVMT. PED.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL PERFORATE	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MSC. N.T.S. ORN. O/O OH Q PKG. PVMT. PED. PERF.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL PERFORATE PIPE INVERT ELEVATION	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MISC. N.T.S. ORN. O/O OH O PKG. PVMT. PED. PERF. INV.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL PEDESTAL PERFORATE PIPE INVERT ELEVATION POLYVINYL CHLORIDE PIPE PREFORMED JOINT FILLER PROPOSED	JT JF JCT. KO LAT. LP MAINT. MATL. MATL. MTD. MKC. N.T.S. ORN. O/O PKG. PVMT. PED. PERF. INV. PJF PR.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OVYGEN LINE PARKING PAVEMENT PEDESTAL PEDESTAL PERFORATE PIPE INVERT ELEVATION POLYVINYL CHLORIDE PIPE PREFORMED JOINT FILLER PROPOSED PULL BOX	JT JF JCT. KO LAT. LP MAINT. MATL. MTD. MSC. N.T.S. O/O O/O PKG. PVMT. PED. PERF. INV. PJF PR. PB
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OVERHEAD OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL PEDESTAL PERFORATE PIPE INVERT ELEVATION POLYVINYL CHLORIDE PIPE PREFORMED JOINT FILLER PROPOSED PULL BOX RAILROAD	JT JF JCT. KO LAT. LP MAINT. MAINT. MATL. MTD. MSC. N.T.S. ORN. O/O PVMT. PVMT. PED. PERF. INV. PVC PJF PR. PB RR<
JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL PEDESTAL PERFORATE PIPE INVERT ELEVATION POLYVINYL CHLORIDE PIPE PREFORMED JOINT FILLER PROPOSED PULL BOX RAILROAD	JT JF JCT. KO LAT. LP MAINT. MATL. MATL. MATL. MATL. MYD. ORN. O/O PKG. PVMT. PED. PERF. INV. PYF RR REINF.
JOINT JOINT FILLER JUNCTION KNOCKOUT LATERAL LOW POINT ELEVATION MAINTAIN MATERIAL MOUNTED MISCELLANEOUS NOT TO SCALE ORNAMENTAL OUT TO OUT OVERHEAD OVERHEAD OVERHEAD OXYGEN LINE PARKING PAVEMENT PEDESTAL PEDESTAL PERFORATE PIPE INVERT ELEVATION POLYVINYL CHLORIDE PIPE PREFORMED JOINT FILLER PROPOSED PULL BOX RAILROAD	JT JF JCT. KO LAT. LP MAINT. MAINT. MATL. MTD. MSC. N.T.S. ORN. O/O PVMT. PVMT. PED. PERF. INV. PVC PJF PR. PB RR<

ABBREVIAT	IONS
ROOF LEADER	RL
SALVAGE	SALV.
SANITARY SEWER	SAN.
SERVICE	SERV.
SLEEVE	SLV.
STABILIZATION	STABL.
STEAM PIPE	STEA.
STEEL PIPE	STL.
STORM SEWER	STM.
SUMP PUMP	SP
TELEPHONE	TEL.
TEMPORARY	TEMP.
THICKENED	THK.
TOP OF CURB ELEVATION	TC
TOP OF HEADWALL ELEVATION	THW
TOP OF STRUCTURE ELEVATION	RIM
TOP OF WALL ELEVATION	TW
TRENCH DRAIN	TD
TYPICAL	TYP.
UNDERDRAIN	UD
UNDERGROUND	UG
VERTICAL	VERT.
VITRIFIED CLAY PIPE	VCP
WATER MAIN	W.
WINDOW ELEVATION	WIN.
WIRE MESH	WM
WOOD	WD.
YARD HYDRANT	YH

					۲۲۲) F TH GH 985 TE ^R (L		
				engineers • architects • planners		A Verdantas Company	
-	DATE						
	REVISION						
	0 Z						
	AS NOTED		10/18/2024			ł	MLT
	SCALE:		DATE:	DESIGNED BV.		DRAWN BY:	CHECKED BY:
	CITY OF MARION	ROCK SWALE COMBINED	SEWFR IMPROVEMENTS PHASE I			GENERAL - 00 SERIES	SYMBOL LEGEND
		4	24	2	1:	NO: 39	
ŀ			00			03	
ŀ	-	21.1	ET.			O	=

GENERAL PROJECT CONDITIONS

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF MARION (OWNER) CODIFIED ORDINANCES & CONSTRUCTION STANDARDS AND THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS UNLESS NOTED OTHERWISE HERIN. WHEN IN CONFLICT THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
- 2. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW AND BOTH WORKMANSHIP AND MATERIALS SHALL BE OF PREMIUM QUALITY, PROPER AND SUFFICIENT FOR THE PURPOSE CONTEMPLATED. THE CONTRACTOR SHALL FURNISH, IF SO REQUIRED, SATISFACTORY EVIDENCE AS TO TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP.
- 3. ALL ITEMS OF EQUIPMENT AND/OR MATERIAL PROPOSED BY THE CONTRACTOR FOR SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER IN WRITING AND SHALL BE EQUAL OR SUPERIOR TO THE ITEMS SPECIFIED IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION PROPOSED BY THE CONTRACTOR FOR A SPECIFIED ITEM REQUIRES ENGINEERING REVISIONS, THE TOTAL EXPENSE OF SAID REVISIONS SHALL BE PAID BY THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL CHARGES AND FEES AS MAY BE NECESSARY AND REQUIRED BY THE CITY OR STATE.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THEIR WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FEATURE, (I.E. EXISTING INLETS, CONDUITS, ETC.) WHICH IS NOT MARKED FOR REPLACEMENT OR REMOVAL. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE OPERATIONS OF THE CONTRACTOR, THEY SHALL REPLACE THE DAMAGED PORTION AT THEIR EXPENSE.
- 6. THE CONTRACTOR SHALL EXERCISE DUE CARE DURING CONSTRUCTION SO AS NOT TO DESTROY ANY TREES, PLANTS, SHRUBS OR STRUCTURES OUTSIDE OF THE INDICATED WORK LIMITS AND THOSE NOT SPECIFICALLY MARKED FOR REMOVAL OR RELOCATION WITHIN THE WORK LIMITS.
- 7. IN SOME INSTANCES, THE CONTRACTOR MAY BE REQUIRED TO EXCAVATE UNDER AND AROUND THE EXISTING UTILITIES.
- 8. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE OWNER DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS AND THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO CONFIRM THE PRESENCE AND LOCATION OF ANY AND ALL EXISTING UTILITIES.

OHIO EDISON

937-327-1283

<u>SPECTRUM</u>

FRONTIER

CHRIS AVERY

740-383-0551

CHRISTOPHER HARPER

SPRINGFIELD, OH 45505

harperc@firstenergycorp.com

3760 INTERCHANGE DRIVE

Jeffrey.Mariano@charter.com

1300 COLUMBUS SANDUSKY RD.

COLUMBUS, OHIO 43204

614-255-6305 – DESK

614-381-8499 - MOBILE

NETWORK ENGINEER

MARION OH 43302

ira.avery@ftr.com

CONSTRUCTION COORDINATOR I

420 YORK STREET

JEFFREY MARIANO

COLUMBIA GAS

1021 N. MAIN ST. MANSFIELD, OHIO 44903

BENJAMIN CRUM benjamincrum@nisource.com 419-340-2932

ANDREW MILBURN amilburn@nisource.com 419-619-8029

BEN CUTLER bcutler@nisource.com 216-215-4103

<u>AQUA OHIO</u>

VINNY LUPICA CONSTRUCTION COORDINATOR III 5481 BUENOS AIRES BLVD. WESTERVILLE, OHIO 43081 614-882-6586 EX. 50546 VRLupica@aquaamerica.com

WATER POLLUTION CONTROL

MATT ICE 1810 MARION AGOSTA ROAD MARION, OHIO 43302 740-383-6051

SANITATION, STREETS, RECYCLING & CENTRAL GARAGE

SCOTT KURZ 981 W. CENTER ST MARION, OHIO 43302 740-382-1479

- 9. WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE THEIR WORK EFFORTS WITH THOSE OF THE UTILITY COMPANIES SUCH THAT THEIR EXISTING FACILITIES CAN BE MAINTAINED AND PROTECTED DURING THE TIME WORK IS GOING ON ADJACENT TO THE POLE. THE COST FOR ANY REQUIRED PROTECTION OR RELOCATION OF EXISTING POWER OR TELEPHONE POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NOT BE THE RESPONSIBILITY OF THE OF THE OWNER.
- 10. DELAYS TO THE CONTRACTOR AS A RESULT OF TIMING OF POLE RELOCATION OR PROTECTION SHALL NOT BE CONSIDERED COMPENSABLE DELAYS, AS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK WITH THE UTILITY COMPANY'S SCHEDULE.
- 11. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL THE EXISTING GAS, WATER, ELECTRIC, CABLE, TELEPHONE, OR OTHER UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF ANY PROPOSED IMPROVEMENT INDICATED ON THE PLANS. SHOULD A CONFLICT EXIST AT A UTILITY CROSSING, THE PROJECT ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 12. 48 HOURS PRIOR TO ANY EXCAVATION NOTIFY OHIO ONE CALL @ 811.
- 13. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): IT SHALL BE THE FULL AND COMPLETE RESPONSIBILITY OF THE CONTRACTOR TO MEET AND COMPLY WITH SAFETY REQUIREMENTS AND REGULATIONS AS ESTABLISHED BY OSHA OR ANY OTHER REGULATORY BODY.
- 14. ALL MATERIALS TO BE REMOVED FROM THE SITE SHALL BE DISPOSED AT A LICENSED FACILITY PER ALL APPLICABLE STATE, FEDERAL AND LOCAL REGULATIONS.

- UNIT PRICE BID FOR OTHER VARIOUS ITEMS.
- 16. PROPERTY PINS AND MONUMENTS NEAR THE IMPROVEMENT. WHICH MAY BE PINS AND MONUMENTS AS DIRECTED BY THE ENGINEERS.
- ENGINEER.
- REGISTERED SURVEYOR AND COPIES PROVIDED TO THE OWNER.
- PROPERTY LINE SURVEYS OR OTHER PURPOSES

PROHIBITED CONSTRUCTION ACTIVITIES

- 1. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- 2. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER;
- LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS; 4. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS;
- 5. PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS DIRECTLY INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM SEWERS; ALL SUCH WATER WILL BE PROPERLY FILTERED OR SETTLED TO REMOVE SILT PRIOR TO RELEASE;
- 6. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENTS, OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO:
- PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF ANY STREAM;
- 8. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA;
- 9. DISPOSAL OF TREES, BRUSH, AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS;
- OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT;
- 11. DISCHARGING INJURIOUS SILICA DUST CONCENTRATIONS INTO THE ATMOSPHERE RESULTING FROM BREAKING, CUTTING, CHIPPING, RILLING, BUFFING, GRINDING, POLISHING, SHAPING OR SURFACING CLOSER THAN 200 FEET TO PLACES OF RESIDENCES OR COMMERCIAL, PROFESSIONAL, QUASI-PUBLIC OR PUBLIC PLACES OF HUMAN OCCUPATION;
- 12. STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED ON THE PLANS BY THE ENGINEER FOR SUCH PURPOSES;
- 13. RUNNING WELL POINT OR PUMP DISCHARGE LINES THROUGH PRIVATE PROPERTY OR PUBLIC PROPERTY AND RIGHTS-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER AND THE CONSENT OF THE ENGINEER;
- 14. OPERATIONS ENTAILING THE USE OF VIBRATORY HAMMERS OR COMPACTORS OUTSIDE THE HOURS OR 8:00 AM AND 5:00 P.M. OR OUTSIDE THE HOURS ALLOWED FOR CONSTRUCTION BY LOCAL ORDINANCES OR REGULATIONS; AND
- 15. CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE OR BOULEVARD WITHOUT THE PRIOR CONSENT OF MUNICIPAL OFFICIALS AND THE ENGINEER, AND CLOSING CLEAR ACCESS:
- 16. BY FIRE PROTECTION EQUIPMENT AND EMERGENCY VEHICLES;
- BY THE PUBLIC TO ANY COMMERCIAL OR PROFESSIONAL PLACE OF BUSINESS, QUASI-PUBLIC OR PUBLIC ESTABLISHMENT, OR PLACE OF RESIDENCE; OR

OF BUILDING INGRESS AND EGRESS.

EROSION/SEDIMENT CONTROL:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH ODOT ITEM 207 AND AS REQUIRED BY THE MARION COUNTY SOIL AND WATER CONSERVATION DISTRICT.
- 2. SITE CLEARING AND GRUBBING SHALL NOT COMMENCE UNTIL SUCH TIME THAT THE CONTRACTOR IS PREPARED TO START CONSTRUCTION. REMOVE ONLY THOSE TREES, SHRUBS, AND GRASSES THAT MUST BE REMOVED FOR CONSTRUCTION OF ACTUAL FACILITIES; PROTECT THE REST TO PRESERVE THEIR AESTHETIC, HABITAT, AND EROSION CONTROL VALUES.
- 3. IMMEDIATELY FOLLOWING SITE AND ACCESS CLEARING, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED. THEY WILL BE MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION UNTIL FINAL SEEDING AND SITE RESTORATION OCCURS.

15. THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY, SUCH AS CALCIUM CHLORIDE, WATER OR A MOTORIZED DUST-FREE STREET SWEEPING DEVICE, AS DIRECTED BY THE ENGINEER, TO MAINTAIN ALL ROADWAYS BEING USED ALONG THE CONSTRUCTION SITE. PAYMENT FOR ALL SOIL EROSION, SEDIMENT AND DUST CONTROL MEASURES SHALL BE INCLUDED IN THE

DISTURBED BY THE CONTRACTOR, SHALL BE REFERENCED BY A PROFESSIONAL SURVEYOR, SO THEY CAN BE REPLACED IN THE EVENT THAT THEY ARE DISTURBED DURING CONSTRUCTION. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT ALL PINS, MONUMENTS AND REFERENCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF LOCATING AND REFERENCING AND REPLACING THE PROPERTY

17. THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM THEIR OPERATION AND RESTORE ALL SURFACES, STRUCTURES, DITCHES AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER. ANY DITCHES DISTURBED DURING CONSTRUCTION SHALL BE REGRADED BY THE END OF THE SAME WORK DAY. THE COST FOR THIS WORK SHALL BE COVERED UNDER THE COST OF OTHER BID ITEMS. ALL EXISTING STORM AND SANITARY SEWER FACILITIES, INCLUDING TILE, DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED OR RECONNECTED TO THE EXISTING OR PROPOSED SYSTEM AS DIRECTED BY THE

18. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL BENCH MARKS, PROPERTY LINE REFERENCES (E.G., PINS, PIPES, MONUMENTS), REFERENCE POINTS, STAKES AND ANY OTHER SURVEY REFERENCE. IN CASE OF DISTURBANCE, THE CONTRACTOR SHALL ENGAGE A REGISTERED SURVEYOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE AND SHALL BE RESPONSIBLE FOR ANY ERRORS THAT MAY BE CAUSED BY THEIR LOSS OR DISTURBANCE. ALL NOTES AND CALCULATIONS USED IN RESETTING OR REPLACEMENT OF PROPERTY PINS, MONUMENTS, REFERENCE POINTS, AND ANY OTHER SURVEY REFERENCE SHALL BE STAMPED, SIGNED AND DATED BY THE

19. SURVEY AND STREET ALIGNMENTS SHOWN ON THESE PLANS WERE OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR

- BY VEHICLES TO DRIVEWAYS WITHOUT THE PROVISION OF ALTERNATIVE MEANS

- 4. EXISTING TOPSOIL WILL BE STOCKPILED AND REPLACED UPON FINAL GRADING OF THE CONSTRUCTION SITE.
- 5. EXTENSIVE AREAS OF STOCKPILED TOPSOIL AT THE CONSTRUCTION SITE ARE TO BE PROTECTED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING OR COVERING SUCH AS WITH ANCHORED STRAW MULCH. SILT BARRIERS WILL BE INSTALLED DOWN GRADIENT OF THESE AREAS ON CONTOUR AND WITH THEIR ENDS UP SLOPE OF THE CONTOUR TO PREVENT SILT LADEN RUNOFF FROM ENTERING WATERWAYS OR STORM SEWERS. WITHIN 15 DAYS OF COMPLETION OF CONSTRUCTION, ANY REMAINING SOIL MUST EITHER BE REMOVED OR PERMANENTLY STABILIZED.
- 6. SILT FENCES SHOULD BE TRENCHED SIX TO TWELVE INCHES DEEP, THE FABRIC LAID IN THE TRENCH, AND THE SOIL PROPERLY BACKFILLED INTO THE TRENCH TO PREVENT UNDERCUTTING.
- 7. WHERE TRENCH EXCAVATION OCCURS PARALLEL TO ANY WATERWAY, A VEGETATED BARRIER SHOULD BE MAINTAINED BETWEEN THE STREAM AND THE CONSTRUCTION SITE. ALL TRENCH SPOILS WILL BE STOCKPILED ON THE SIDE OF THE TRENCH AWAY FROM THE WATERWAY, AND A LINE OF SILT BARRIERS WILL BE ESTABLISHED ALONG THE EDGE OF CONSTRUCTION ON THE CONTOUR BETWEEN THE TRENCH AND THE WATERWAY.
- 8. NO MORE THAN 200 FEET OF TRENCH SHALL BE OPEN AT ANY GIVEN TIME. TRENCH OPENING AND LAYING OF PIPE SHOULD OCCUR SO AS TO MINIMIZE THE AMOUNT OF DISTURBED AREA. ALL TRENCHES ARE TO BE BACKFILLED AND COMPACTED IMMEDIATELY AFTER PIPE INSTALLATION. IMMEDIATELY FOLLOWING THE BACKFILLING OF THE TRENCH, THE GROUND SURFACE WILL BE ROUGH GRADED TO THE EXISTING CONTOURS TO ALLOW FOR PROPER DRAINAGE, AND WILL BE SEEDED AND/OR MULCHED IN STAGES TO PREVENT EROSION.
- 9. ANY DISTURBED AREA THAT WILL NOT BE ACTIVELY UNDER CONSTRUCTION FOR A PERIOD OF 15 DAYS OR MORE WILL BE TEMPORARILY STABILIZED IMMEDIATELY BY SEEDING AND MULCHING OR BY ANCHORED STRAW MULCH.
- 10. AS CONSTRUCTION IS COMPLETED, PERMANENTLY STABILIZE EACH DISTURBED AREA IN STAGES WITH PERENNIAL VEGETATION INSTALLED ACCORDING TO OHIO EPA (OR EQUIVALENT) STANDARDS AND SPECIFICATIONS. AFTER FINAL SOIL SETTLING OVER THE SANITARY SEWER, OUTFALL SEWER, AND FORCE MAIN ALIGNMENTS, THE CONTRACTOR SHALL BRING THE TRENCH BACK TO GRADE IF NECESSARY, PLACE TOPSOIL, AND FINE GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY ACTIVITIES ASSOCIATED WITH THE CONSTRUCTION OF THAT SECTION OF PIPE. FINAL GRADING WILL BE CONSISTENT WITH PRE-CONSTRUCTION TOPOGRAPHY FOR DRAINAGE AND AESTHETIC REASONS.
- 11. EXCAVATION PITS (FOR SEWER LINER INSTALLATION) SHALL BE SURROUNDED WITH SILT BARRIERS TO PREVENT EROSION OF THE EXCAVATED PIT MATERIAL. STORM SEWER INLETS WILL BE SURROUNDED WITH SILT BARRIERS TO PREVENT SILTATION.
- 12. SLOPES EXCEEDING 15 PERCENT OR THAT TEND TO BE UNSTABLE REQUIRE SPECIAL TREATMENT SUCH AS WATER DIVERSION BERMS, SODDING, OR THE USE OF JUTE OR EXCELSIOR BLANKETS.
- 13. WHEN BORROW MATERIAL IS OBTAINED FROM OTHER THAN COMMERCIALLY OPERATED SOURCES, EROSION OF THE BORROW SITE WILL BE SO CONTROLLED BOTH DURING AND AFTER COMPLETION OF THE WORK THAT EROSION WILL BE MINIMIZED AND SEDIMENT WILL NOT ENTER STREAMS OR OTHER BODIES OF WATER. WASTE OR DISPOSAL AREAS AND CONSTRUCTION ROADS SHALL BE LOCATED AND CONSTRUCTED IN A MANNER THAT WILL KEEP SEDIMENT FROM ENTERING STREAMS. TEMPORARY EROSION CONTROL BARRIERS AND LIMITED SITE CLEARING WILL BE USED AS NEEDED.
- 14. IF WORK IS SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL MAINTAIN THE SOIL EROSION AND SEDIMENTATION CONTROLS IN GOOD OPERATING CONDITION DURING THE SUSPENSION OF THE WORK. ALSO, WHEN SEASONAL CONDITIONS PERMIT AND THE SUSPENSION OF WORK IS EXPECTED TO EXCEED A PERIOD OF ONE MONTH, THE CONTRACTOR SHALL SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS LEFT EXPOSED WHEN THE WORK IS STOPPED.
- 15. INSTALL THE ABOVE EROSION AND SEDIMENT CONTROL MEASURES, AS APPROPRIATE, REFERRING TO OHIO EPA, STORM WATER TECHNICAL ASSISTANCE, RAINWATER AND LAND DEVELOPMENT MANUAL STANDARDS AND SPECIFICATIONS (FORMERLY ODNR) OR EQUIVALENT FOR PARTICULAR TECHNIQUES. THESE MEASURES ARE TO BE MAINTAINED IN EFFECTIVE WORKING CONDITION DURING CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. LINK:

http://epa.ohio.gov/portals/35/storm/technicalassistance/rld11-6-14all.pdf

TRAFFIC CONTROL

- 16. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN COMPLIANCE WITH THE LATEST OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ACCESS MUST BE MAINTAINED FOR EMERGENCY VEHICLES AT ALL TIMES.
- 17. NO TRENCH WILL BE LEFT OPEN AT THE END OF A WORK DAY, WHERE PRACTICAL; ANY OPEN TRENCH WILL BE PROPERLY IDENTIFIED AND BARRICADED FOR SAFETY PURPOSES. THE SAME APPLIES FOR ACCESS PIT LOCATIONS.
- 18. ANY CONSTRUCTION EQUIPMENT OR EXCAVATIONS NEAR ROADS MUST BE MARKED WITH LIGHTS, REFLECTORS, OIL LANTERNS, OR SMUDGE POTS.
- 19. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRICADES, WARNING SIGNS, DANGER SIGNALS, FLAG PERSON(S), WATCHERS, AND ALL OTHER APPROPRIATE PRECAUTIONS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR SAFETY.
- 20. PRIOR TO CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE, OR BOULEVARD, THE CONTRACTOR MUST HAVE CONSENT FROM LOCAL OFFICIALS AND THE ENGINEER.

AIR POLLUTION / NOISE CONTROL:

- 21. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO 7AM TO 7PM UNLESS AUTHORIZED TO PERFORM OUTSIDE THOSE TIME LIMITS BY THE OWNER.
- 22. CONSTRUCTION EQUIPMENT WILL BE PROVIDED WITH INTAKE SILENCERS AND MUFFLERS, AS REQUIRED BY SAFETY STANDARDS.
- 23. ALL CONSTRUCTION VEHICLES SHOULD BE EQUIPPED WITH PROPER EMISSIONS CONTROL EQUIPMENT.
- 24. PERIODICALLY CHECK EQUIPMENT AND MACHINERY FOR PROPER TUNING TO MINIMIZE EXHAUST EMISSIONS AND NOISE.
- 25. UNPAVED AREAS WILL BE WET DOWN (AS NECESSARY) DURING CONSTRUCTION TO MINIMIZE DUST GENERATION.

- MARCH 31.

- WHERE POSSIBLE.
- OF TREES.

- MATERIALS.

ENVIRONMENTAL PROTECTION:

DEWATERING:

- SEWERS.

TREE / VEGETATION PROTECTION:

26. TREE REMOVAL WILL BE LIMITED TO THE TIME PERIOD BETWEEN OCTOBER 1 AND

27. TREE REMOVAL WILL BE LIMITED TO THAT NECESSARY FOR CONSTRUCTION AND WILL BE LIMITED FURTHER TO THE PERMANENT EASEMENT WHEREVER POSSIBLE.

28. NO TREE REMOVAL WILL BE PERMITTED OUTSIDE THE TEMPORARY EASEMENT WITHOUT PERMISSION OF THE ENGINEER.

29. TREES WHICH ARE NOT REMOVED WILL BE PROTECTED BY ENSURING THAT TREES TO BE REMOVED ARE FELLED SO AS NOT TO INJURE THE REMAINING TREES.

30. PRIOR TO CLEARING. THE CONTRACTOR AND ENGINEER. SHALL WALK THE ACQUIRED EASEMENTS IN AN EFFORT TO DESIGNATE THE TREES THAT ARE TO BE SAVED. TREES TO BE SAVED WILL BE CLEARLY MARKED BY PAINT WITH THE LETTER "S". TREES TO BE PROTECTED BY AN APPROPRIATE BARRIER SHALL BE MARKED WITH AN "S" ENCLOSED IN A CIRCLE. TREES MARKED FOR REMOVAL IN THE PLANS WILL BE INSPECTED BY THE CITY & THE ENGINEER BEFORE REMOVAL & WILL BE SAVED

31. SOIL AND OTHER MATERIAL WILL NOT BE STORED NEXT TO OR WITHIN THE DRIP-LINE

32. PRESERVATION OF LANDSCAPING SHOULD TAKE PRECEDENCE OVER REMOVAL. IF REMOVAL OR DAMAGE IS UNAVOIDABLE, EXISTING VEGETATION SHOULD BE REPAIRED OR REPLACED "IN-KIND" UNLESS THE HOMEOWNER SPECIFIES OTHERWISE.

33. IF TREES/SHRUBS CANNOT BE REPLACED IN THE SAME LOCATION DUE TO INSTALLATION OF THE SEWER SYSTEM, RELOCATION SHOULD BE CONSIDERED.

34. THE CONTRACTOR'S ARBORIST SHALL REPAIR ALL INJURIES TO BARK, TRUNKS, LIMBS, AND ROOTS OF REMAINING VEGETATION BY PROPERLY DRESSING, CUTTING, BRACING AND PAINTING, USING ONLY APPROVED TREE SURGERY METHODS, TOOLS, AND

35. SELECTIVE PRUNING OF TREE LIMBS PRIOR TO INITIATION OF CONSTRUCTION SHOULD ONLY BE USED WITHIN ESTABLISHED EASEMENTS WHERE REMOVAL IS NECESSARY FOR OPERATION OF EQUIPMENT.

36. LIMIT THE USE OF RIP-RAP TO AREAS WHERE STREAM FLOW CONDITIONS PREEMPT VEGETATIVE STABILIZATION.

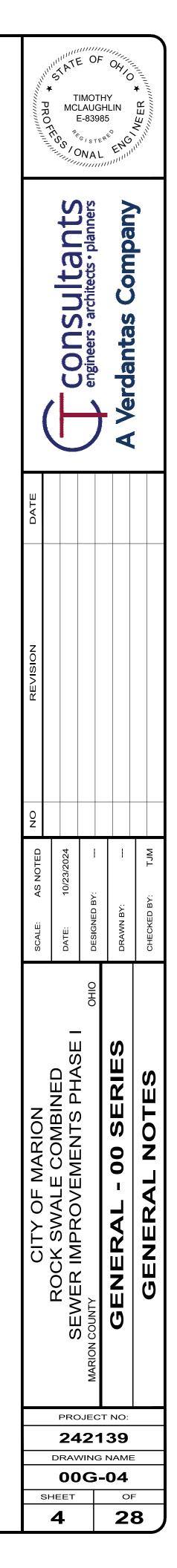
37. ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AT A SITE APPROVED BY THE ENGINEER. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOODPLAIN, SURFACE WATER, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED. GIVING EXCAVATED SOIL AWAY DOES NOT RELIEVE THE CONTRACTOR OR ENGINEER OF THIS RESPONSIBILITY.

38. TREE REMOVAL WILL BE LIMITED TO THAT NECESSARY FOR CONSTRUCTION AND WILL BE LIMITED FURTHER TO THE PERMANENT EASEMENT WHENEVER POSSIBLE. IF THE PROJECT IS LOCATED WITHIN THE RANGE OF THE FEDERALLY-ENDANGERED INDIANA BAT (MYOTIS SODALIS) AND TREES MUST BE CUT, THIS MUST OCCUR BETWEEN SEPTEMBER 30 AND APRIL 1. INDIANA BATS ARE HIGHLY-DEPENDENT UPON TREES INCLUDING DEAD AND DYING TREES OF SPECIES WITH EXFOLIATING BARK, CREVICES, OR CAVITIES IN UPLAND AREAS OR RIPARIAN CORRIDORS AND LIVING TREES OF THE SPECIES LISTED ABOVE WITH EXFOLIATING BARK, CAVITIES, OR HOLLOW AREAS FORMED FROM BROKEN BRANCHES OR TOPS. IF SUITABLE TREES MUST BE CUT DURING THE PROHIBITED TIME PERIOD, A NET SURVEY MUST BE CONDUCTED TO DETERMINE THE PRESENCE OR ABSENCE OF INDIANA BATS PRIOR TO CUTTING.

39. ALL DEWATERING FLOWS ARE TO BE SETTLED INSTILLATION BASINS OR DIRECTED THROUGH FILTERING DEVICES BEFORE DISCHARGE TO STABILIZED SITES, SUCH AS STREAMS OR STORM SEWERS; NOT ONTO EXPOSED SOILS, STREAM BANKS, OR ANY OTHER SITE WHERE THE FLOW COULD CAUSE EROSION.

40. SILT FROM CONSTRUCTION OPERATIONS SHALL NOT BE PERMITTED TO ENTER THE STORM SEWER SYSTEM. WHEN CONSTRUCTION OCCURS NEAR STORM SEWER INLETS, EROSION CONTROL MEASURES SUCH AS INLET FILTERS OR OTHER APPROVED BMP SHALL BE USED TO PREVENT SILT FROM ENTERING THE STORM

41. CONVEY WATER FROM THE CONSTRUCTION SITE IN A CLOSED CONDUIT. DO NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.



CIPP AND SLIP LINING NOTES

- 1. ALL CLOSE FIT LINING SYSTEMS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT VERSION OF ASCE MOP 145, SPECIFICATION 330130.72 AND 330130.75.
- 2. ALL LINING SYSTEMS SHALL BE IN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND GUIDELINES.
- 3. THE CONTRACTOR SHALL SUBMIT A LINER THICKNESS CALCULATION FOR EACH SECTION IN ACCORDANCE WITH ALL SPECIFICATIONS. LINER THICKNESS CALCULATIONS SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER IN CURRENTLY LICENSED IN THE STATE OF OHIO.
- 4. SUBMITTALS FOR LINING SYSTEMS SHALL INCLUDE A MANNING'S FRICTION FACTOR THAT IS CERTIFIED BY THE MANUFACTURER
- 5. ALL LINING SYSTEMS SHALL NOT EXCEED A MAXIMUM THICKNESS THAT WILL COMPROMISE THE ORIGINAL DESIGN CAPACITY OF EACH SEWER SECTION. A MAXIMUM ALLOWABLE THICKNESS IS INCLUDED WITHIN THE SPECIFICATION SECTIONS FOR CIPP AND SLIP LINING IDENTIFYING MAXIMUM ALLOWABLE THICKNESS FOR EACH APPROVED LINING SYSTEM.
- 6. SEWER FLOWS FLOWS SHALL BE MAINTAINED IN ACCORDANCE WITH SPECIFICATION 330130.03. ALL BYPASS PLANS MUST BE APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- 7. CONTRACTOR SHALL VERIFY ALL VISIBLE CONNECTIONS PRIOR TO INSTALLATION OF ANY LINING SYSTEM. THIS WILL INCLUDE AT THE ENGINEER'S DISCRETION, DYE TESTING AND/OR LATERAL LAUNCHING TO CONFIRM THE SOURCE OF THE CONNECTION.
- 8. ALL ACTIVE CONNECTIONS SHALL BE REINSTATED IMMEDIATELY AFTER THE INSTALLATION AND CURING OF LINING.
- 9. LOCATOR TAPE SHALL BE BE INSTALLED ON ANY NEW CONNECTION INTO THE MAINLINE SEWER.

SEWER AND MANHOLE STRUCTURE INSTALLATION NOTES

- 1. ALL SEWER PIPE MATERIALS AND INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATION 333100.
- 2. ALL SEWER PIPE SHALL HAVE WATERTIGHT GASKETED JOINTS IN ACCORDANCE WITH ASTM D3212.
- 3. SEWER PIPE CONNECTION INTO A NEW PRE CAST CONCRETE STRUCTURES SHALL UTILIZE A-LOK X-CEL PREMIUM STORM CONNECTORS OR APPROVED EQUIVALENT AT THE STRUCTURE CONNECTION.
- 4. DEFLECTION TESTING SHALL BE PERFORMED ON ALL FLEXIBLE PIPE IN ACCORDANCE WITH THE TEN STATES STANDARDS, SECTION 33.85 AND ASTM D-2412. NO PIPE SHALL EXCEED THE MAXIMUM ALLOWABLE DEFLECTION OF 5 PERCENT.
- 5. AIR TESTING SHALL BE PERFORMED ON ALL SANITARY PIPE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY AND THE TEN STATES STANDARDS, SECTION 33.94 AND ASTM F-1417. VACUUM TESTING MUST CONFORM TO ASTM C-1244
- 6. ALL SEWER MAINS AND LATERALS SHALL BE TELEVISED AND REVIEWED BY THE ENGINEER PRIOR TO ACCEPTANCE.
- 7. ALL CONCRETE SANITARY SEWER STRUCTURES SHALL BE PRECAST USING A CONCRETE ADMIXTURE SUCH AS XYPEX CRYSTALLINE ADMIXTURE OR AN APPROVED EQUAL WHICH WILL ACT AS A WATERPROOF AGENT AND HYDROGEN SULFIDE INHIBITOR. THOROSEAL INSIDE OF SANITARY STRUCTURES ONLY, FULL DEPTH. (ANY COLOR BUT GRAY). ALL JOINT AND CONNECTIONS TO BE WATER PLUGGED.
- 8. BEARING AREAS SHALL BE FINISHED SMOOTH AND FITTED SO AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE COVER IN THE FRAME. EACH COVER SHALL SEAT IN THE FRAME WITHOUT ROCKING AND SHALL BE MARKED AS A MATCHED FRAME AND COVER BEFORE DELIVERY TO THE PROJECT. THE BASE OF THE FRAME SHALL BE SET ON A DOUBLE ROW OF BUTYL RUBBER SEALANT AND ADJUSTED TO CONFORM TO THE FINISHED PAVEMENT OR SHOULDER ELEVATION AND SLOPE. CASTINGS WHICH SHALL MEET ITEMS 711.12, 711.13, OR 711.14 REQUIREMENTS AND BE DESIGNED ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THOSE SHOWN HEREIN SHALL BE PROVIDED.
- 9. ALL STEPS SHALL HAVE A DEPRESSED TREAD OF 1/2". MIN. CLEAT HEIGHT AT THE ENDS. STEPS INSTALLED IN FRESH CONCRETE SHALL BE EMBEDDED TO MINIMUM DEPTH OF 4". STEPS INSTALLED IN MORTAR JOINTS SHALL BE EMBEDDED TO A MINIMUM DEPTH OF 7". FRICTION-FIT STEPS MEETING TO REQUIREMENTS OF 711.31 WITH A 1/2" DIAMETER REBAR MAY BE USED IN PRECAST STRUCTURES. THE RECEIVING HOLES FOR FRICTION-FIT STEPS SHALL NOT PENETRATE THE STRUCTURE WALL. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO TEST LOAD MAXIMUM OF ONE STEP PER STRUCTURE TO A PROOF LOAD OF 400 LBS. IN DIRECT PULL. THE EQUIPMENT AND METHOD USED SHALL MEET THE APPROVAL OF THE ENGINEER. IF THE SELECTED STEP FAILS THE PULLOUT TEST, THE REMAINING STEPS IN THAT STRUCTURE SHALL ALSO BE TESTED. ALL STEPS NOT PASSING THE PULLOUT TEST SHALL BE REMOVED AND A NEW STEP INSTALLED AND TESTED TO THE SATISFACTION OF THE ENGINEER. COST OF TESTING SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE STRUCTURE.
- 10. BOLT-DOWN COVERS SHALL NOT BE USED UNLESS SPECIFIED IN THE PLANS.
- 11. ALL STRUCTURE SECTIONS SHALL BE VISUALLY EXAMINED FOR CRACKS OR DAMAGE THAT WOULD COMPROMISE THE WATER TIGHTNESS OF THAT SECTION. ANY DAMAGED SECTION SHOULD BE RETURNED TO THE MANUFACTURER. TESTING SHALL CONFORM TO 10 STATES STANDARDS SECTION 34.7 AND ASTM C-1244. SEE SPECIFICATION SECTION(S) FOR FURTHER DETAIL.
- 12. REFER TO SPECIFICATION SECTION 333100 FOR PRECAST CONCRETE MANHOLES
- 13. WHEN EMPTY DURING CONSTRUCTION, THE STRUCTURES MAY BECOME BUOYANT. IN THE EVENT THAT THE EXCAVATIONS BECOME FLOODED, THE STRUCTURES MUST BE FILLED WITH WATER TO PREVENT FLOTATION OR THE EXCAVATION IS TO BE KEPT DEWATERED.

MANHOLE REHABILITATION

- 1. MANHOLE REHABILITATION SHALL BE IN ACCORDANCE WITH THE SCHEDULE OF IMPROVEMENTS INCLUDED IN THE PLANS AND SPECIFICATION SECTION 330130.81 AS APPLICABLE.
- 2. THE CONTRACTOR SHALL REMOVE ALL DEBRIS, SEDIMENT, ROOTS, OR OTHER OBSTRUCTIONS PRIOR TO APPLICATION OF ANY SPRAY OR TROWEL ON LINING SYSTEMS FOR MANHOLES.

TO DETERMINE COURSE OF ACTION.

EXCAVATION PITS, TRENCHING, AND DEWATERING

- 1. DIMENSIONS ON THE PLANS ARE GENERAL LIMITS OF DISTURBANCE THE OHIO.

- THE FLOW COULD CAUSE EROSION.
- USED TO PREVENT SILT FROM ENTERING THE STORM SEWERS.
- TRENCH EXCAVATIONS TEMPORARY DRAINAGE DITCHES.

MATERIAL DISPOSAL AND TEMPORARY SURFACES

- 1. THE REMOVAL AND DISPOSAL OF ALL SURPLUS EXCAVATED MATERIAL AND
- 2. THE COST OF HEREIN DESCRIBED WORK, INCLUDING SEEDING AND MULCHING PAY ITEMS. NO SEPARATE PAYMENT SHALL BE MADE.
- TO THE OWNER.
- BE A SEPARATE PAY ITEM.

3. ALL IMPROVEMENTS SHALL BE MADE AS TO NOT CAUSE FURTHER DAMAGE TO STRUCTURE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PERFORM ALL PREPARATION AND REPAIRS IN SUCH MANNER THAT NO ADDITIONAL DAMAGE OCCURS THAT REQUIRES ADDITIONAL REPAIRS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS. IF THE CONTRACTOR DETERMINES THE STRUCTURE IS NOT STABLE ENOUGH FOR APPLYING NOTED IMPROVEMENTS, THE ENGINEER SHALL BE NOTIFIED

CONTRACTOR MAY UTILIZE FOR IMPLEMENTING CONSTRUCTION PITS FOR THE INSTALLATION OF LINER SYSTEMS AND/OR NEW MANHOLE STRUCTURES. THE CONTRACTOR SHALL PROVIDE A ENGINEERED DETAIL THAT INCLUDES SHORING METHODS AND MATERIALS, DEWATERING MEASURES (AS NECESSARY), EROSION CONTROL MEASURES, AND ASSOCIATED MAINTENANCE OF TRAFFIC PLANS REQUIRED TO IMPLEMENT ANY CONSTRICTION PIT. ALL ITEMS NOTED SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER CURRENTLY LICENSED IN THE STATE OF

2. THE CONTRACTOR IS RESPONSIBLE TO BRACE AND SECURE EXISTING PIPE UP TO 20'-0" IN EITHER DIRECTION FROM THE END OF THE LIMITS OF EXCAVATION WHEN REPLACING PORTIONS OF PIPE, NEW MANHOLES, OR INSTALLING EXCAVATION PITS FOR LINER SYSTEM INSTALLATION. THE SYSTEM SHALL BE ABLE TO BE REMOVED WITHOUT CAUSING DAMAGE TO THE PIPE TO ALLOW THE INSTALLATION OF THE LINER SYSTEMS WHERE APPLICABLE OR MAY BE LEFT IN PLACE IF IT DOES NOT AFFECT THE INSTALLATION, CURING, OR INTEGRITY OF THE PROPOSED LINER SYSTEMS.

3. TRENCHING, HAUNCHING, BEDDING, AND ALL EARTHWORK SHALL BE IN ACCORDANCE WITH DETAILS WITHIN THE PLANS AND SPECIFICATION SECTIONS 310000 AND 333100.

4. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING A DEWATERING SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 312000. CONTRACTOR SHALL DEVELOP A SYSTEM THAT WILL ENSURE WELL WATER SERVICE IS MAINTAINED FOR ALL PROPERTIES WITHIN THE PROJECT LIMITS FOR THE DURATION OF CONSTRUCTION

5. ALL DEWATERING FLOWS ARE TO BE SETTLED IN SILTATION BASINS OR DIRECTED THROUGH FILTERINGE DISCHARGE TO STABILIZED SITES, SUCH AS STREAMS OR STORM SEWERS; NOT ONTO EXPOSED STREAM BANKS, OR ANY OTHER SITE WHERE

6. SILT FROM CONSTRUCTION OPERATIONS SHALL NOT BE PERMITTED TO ENTER THE STORM SEWER SYSTEM. WHEN CONSTRUCTION OCCURS NEAR STORM SEWER INLETS, EROSION CONTROL MEASURES SUCH AS FILTERS AND HAY BALES SHALL BE

7. CONVEY WATER FROM THE CONSTRUCTION SITE IN A CLOSED CONDUIT. DO NOT USE

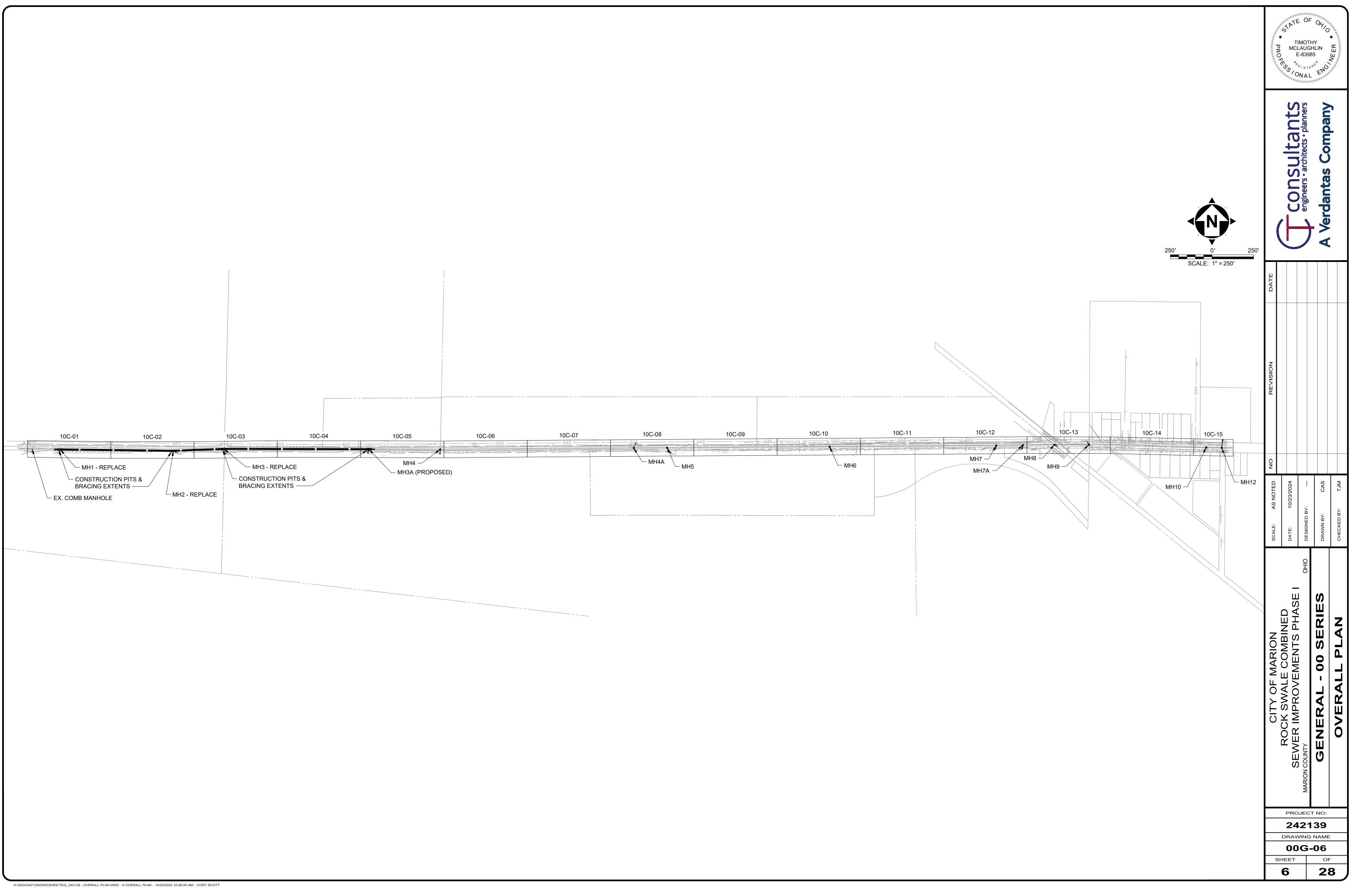
CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR ULTIMATE DISPOSAL. THE DISPOSAL OF ALL CONSTRUCTION DEBRIS SHALL BE AT AN APPROVED LOCATION BY THE OWNER AND THE ENGINEER. THE DISPOSAL OF ALL "CLEAN" MATERIAL SHALL BE AT APPROVED LANDFILLS, AND/OR OTHER SITES APPROVED BY THE OWNER AND THE DISPOSAL OF EXISTING PIPELINE AND WASTEWATER SLUDGE SHALL BE AT APPROVED LOCATION. THE CONTRACTOR SHALL OBTAIN ALL APPROVALS, PERMITS, LICENSES, ETC. STATE AND FEDERAL AGENCIES AND OR PRIVATE LANDOWNERS. THE CONTRACTOR SHALL FURNISH ENGINEER A COPY OF ALL APPROVALS OR WRITTEN PERMISSION PRIOR TO DISPOSING OF ANY WASTE SITE.

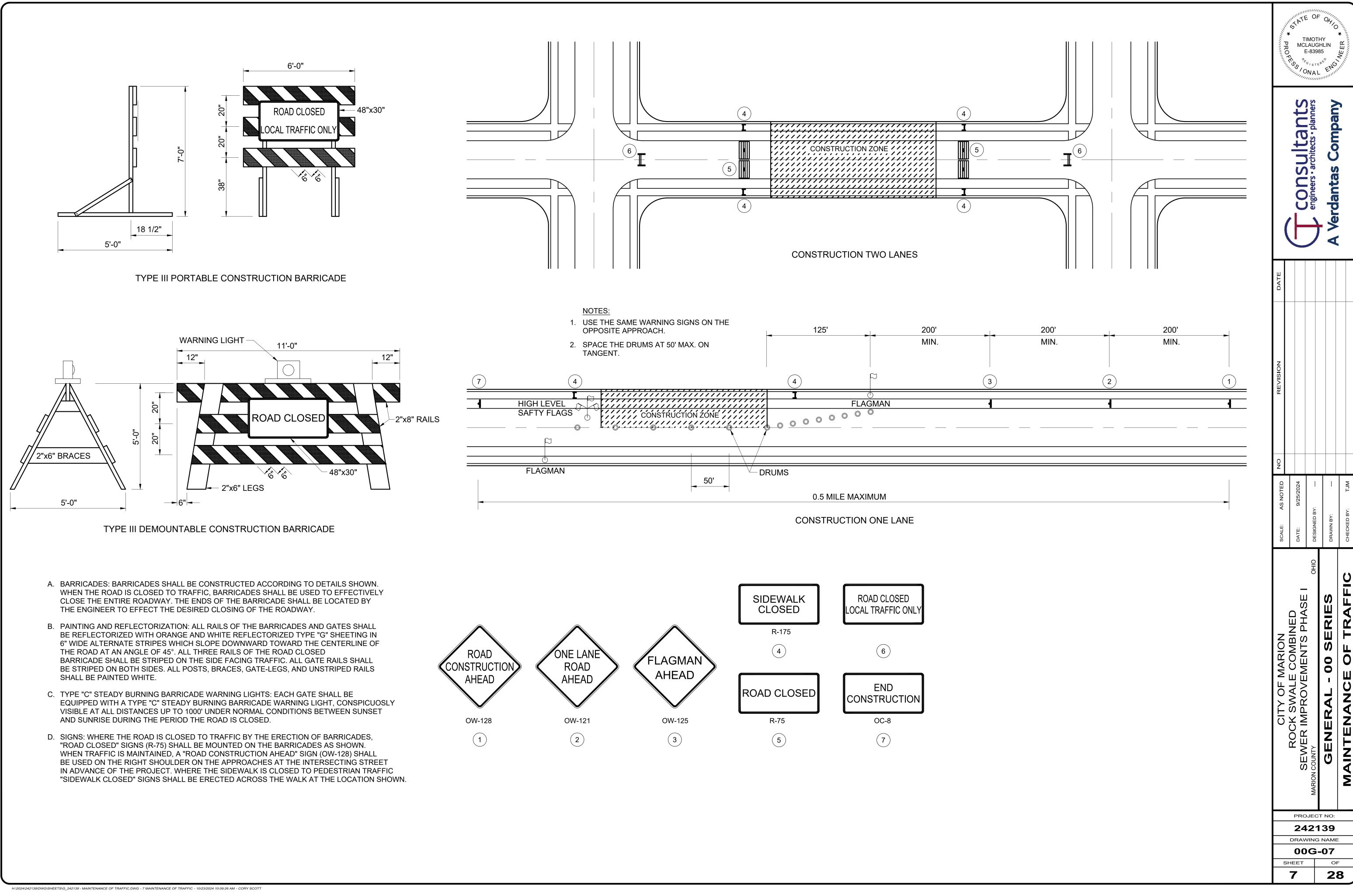
NECESSARY TO SECURE RESULTS, SHALL BE CONSIDERED INCIDENTAL TO THE OTHER VARIOUS ITEMS OF WORK IN THIS CONTRACT INCLUDED IN THE RESPECTIVE

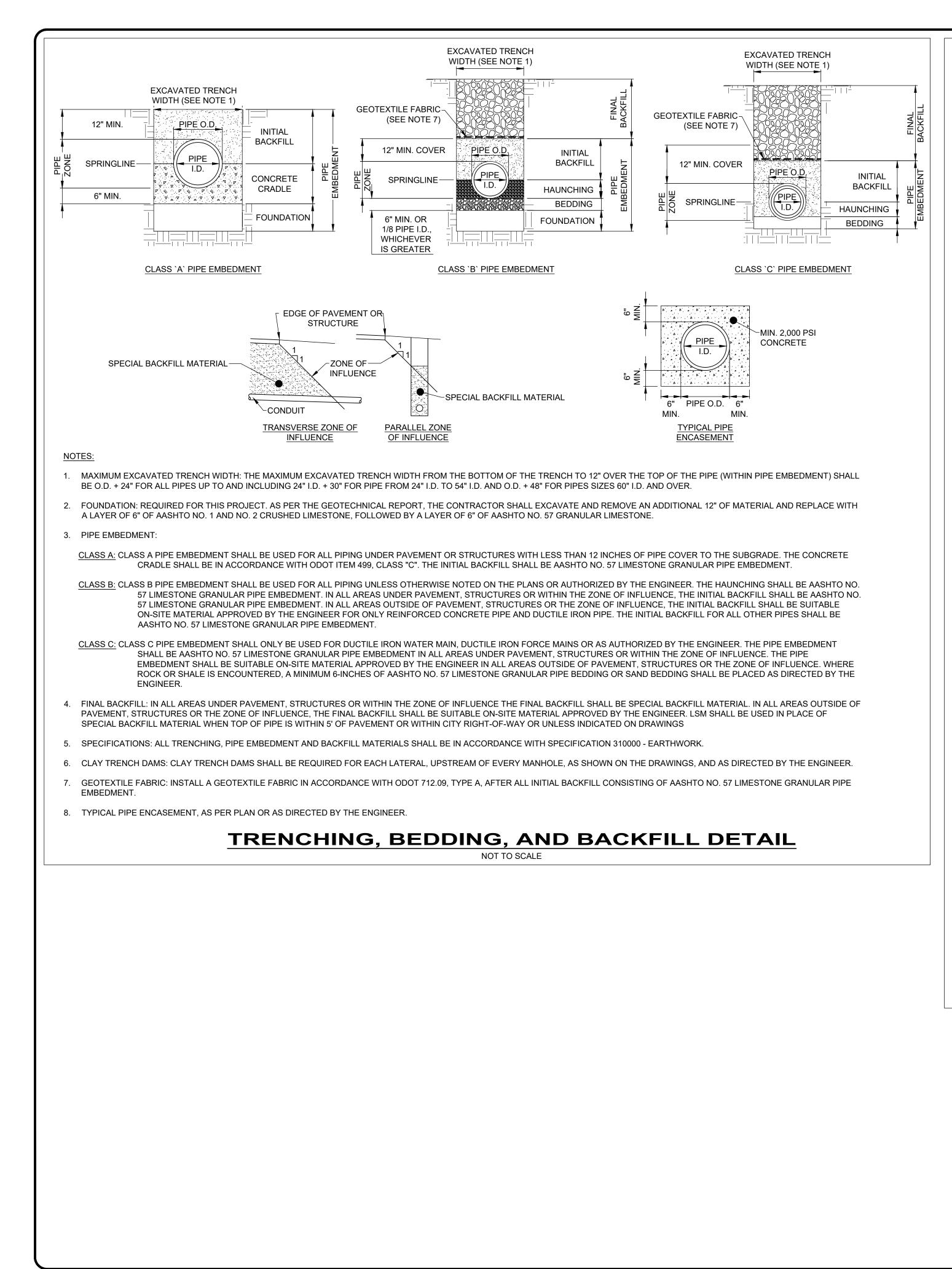
3. TEMPORARY SURFACES WHERE EXCAVATION ARE LOCATED IN STREETS, DRIVES AND PARKING AREAS FURNISHED AND PLACED BY THE CONTRACTOR AND SHALL BE FULLY MAINTAINED TO MINIMIZE INCONVENIENCE TO THE PUBLIC AT NO ADDITIONAL COST

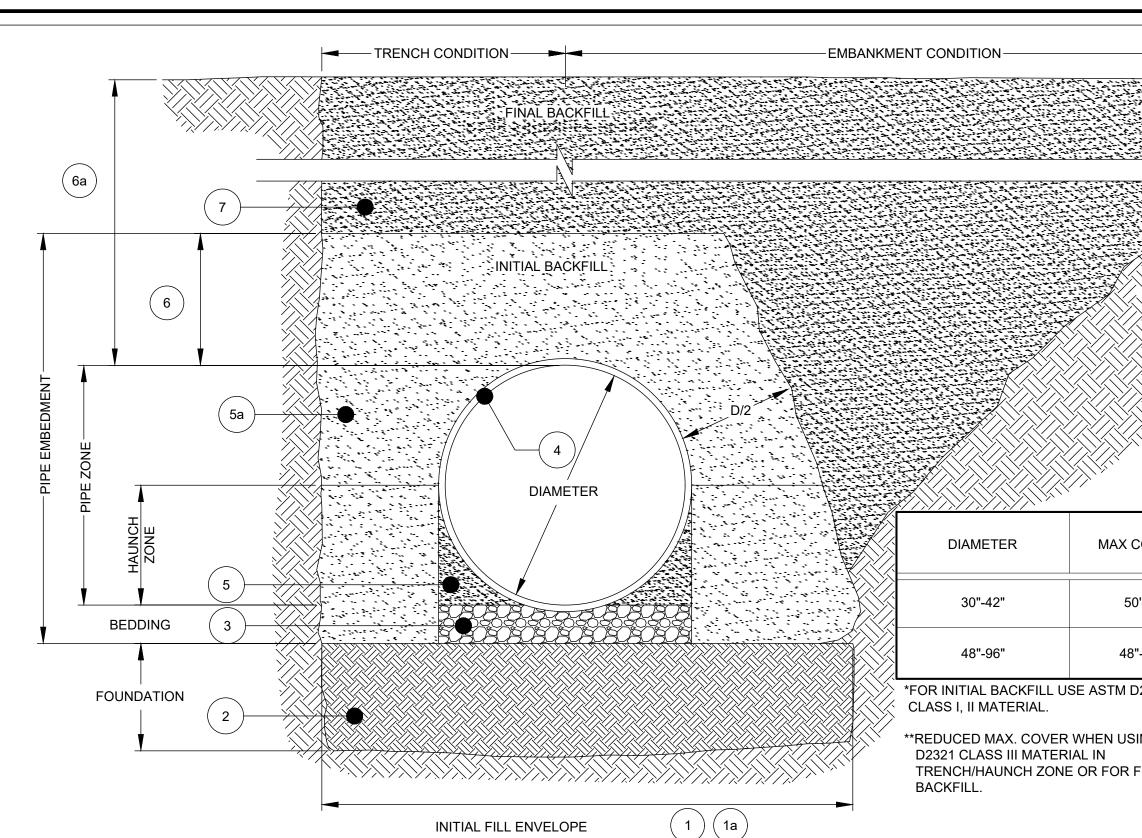
4. THE ABOVE DESCRIBED WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF ALL WORK INCLUDED IN THE RESPECTIVE PAY ITEMS AND SHALL NOT

	-	імотн		~ ~
	F consultants	engineers • architects • planners	A Verdantas Company	
DATE				
REVISION				
0 N				
AS NOTED	10/23/2024	0 BY:	 ;;	BY: TJM
SCALE:	DATE:	DESIGNED BY:	DRAWN BY:	CHECKED BY
NON	E COMBINED		GENERAL - 00 SERIES	GENERAL NOTES
CITY OF MARION	SEWFR IMPROVEMENTS PHASE		GENERAL	GENER
	PRC 24	NOINAM	- NO: 39	
	PRC 24 DRAV	MARION	- NO: 39 NAME	=









- 1. MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER PIPE. MIN. WIDTH = (1.25 x DIAMETER) + 12" (FOLLOW ASTM D2321)
- 1a. MINIMUM EMBANKMENT WIDTH IS 3 PIPE DIAMETERS BUT NO LESS THAN 2' OUTSIDE OF SPRINGLINE.
- 2. FOUNDATION: ONLY REQUIRED AS PER THE GEOTECHNICAL REPORT IF REQUIRED THE CONTRACTOR SHALL EXCAVATE AND REMOVE AN ADDITIONAL 12" OF MATERIAL AND REPLACE WITH A LAYER OF 6" OF AASHTO NO. 1 AND NO. 2 CRUSHED LIMESTONE, FOLLOWED BY A LAYER OF 6" OF AASHTO NO. 57 GRANULAR LIMESTONE.
- 3. ENGINEER TO DETERMINE IF BEDDING IS REQUIRED. BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, 6" MINIMUM DEPTH.
- 4. DUROMAXX STEEL REINFORCED (SRPE) PIPE, OR APPROVED EQUIVILANT
- 5. HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION.
- 5a. INITIAL BACKFILL FOR PIPE EMBEDMENT MATERIAL TO MEET ASTM D2321 CLASS I, II, III OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (NATIVE MATERIAL CAN BE UTILIZED THAT MEETS ASTM D2321 OR APPROVED EQUAL).
- ALL LIFTS PLACED IN CONTROLLED MANNER. TO PREVENT UNEVEN LOADING, IT IS RECOMMENDED THAT LIFTS NOT EXCEED 8" UNCOMPACTED LIFT HEIGHTS. 6. INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL AND RIGID PAVEMENT (IF APPLICABLE), MINIMUM COVER STILL APPLIES, OTHERWISE:
- 6" MINIMUM FOR PIPE DIAMETERS 30" 60" 12" MINIMUM FOR PIPE DIAMETERS 66" - 96"
- 6a. HEIGHT OF COMPACTED COVER PER DIAMETER FOR CONVENTIONAL HIGHWAY LOADS (DISTANCE MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT): 12" MINIMUM FOR PIPE DIAMETERS 30" - 60" 18" MINIMUM FOR PIPE DIAMETER 66" - 78" 24" MINIMUM FOR PIPE DIAMETERS 84" - 96"
- FINAL BACKFILL: IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE THE FINAL BACKFILL SHALL BE SPECIAL BACKFILL MATERIAL. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER. SPECIAL BACKFILL MATERIAL SHALL BE USED WHEN TOP OF PIPE IS WITHIN 5' OF PAVEMENT OR WITHIN CITY RIGHT-OF-WAY OR UNLESS INDICATED ON DRAWINGS.

NOTES:

- ENGINEER TO DETERMINE IF GEOTEXTILE SHOULD BE USED TO PREVENT SOIL MIGRATION.
- YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING.
- BACKFILL REQUIREMENTS SHALL FOLLOW ASTM D2321. IN THE EVENT OF DISCREPANCIES, ASTM D2321 SHALL SUPERCEDE THIS DETAIL. • SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATION 310000 - EARTHWORK.



NOT TO SCALE

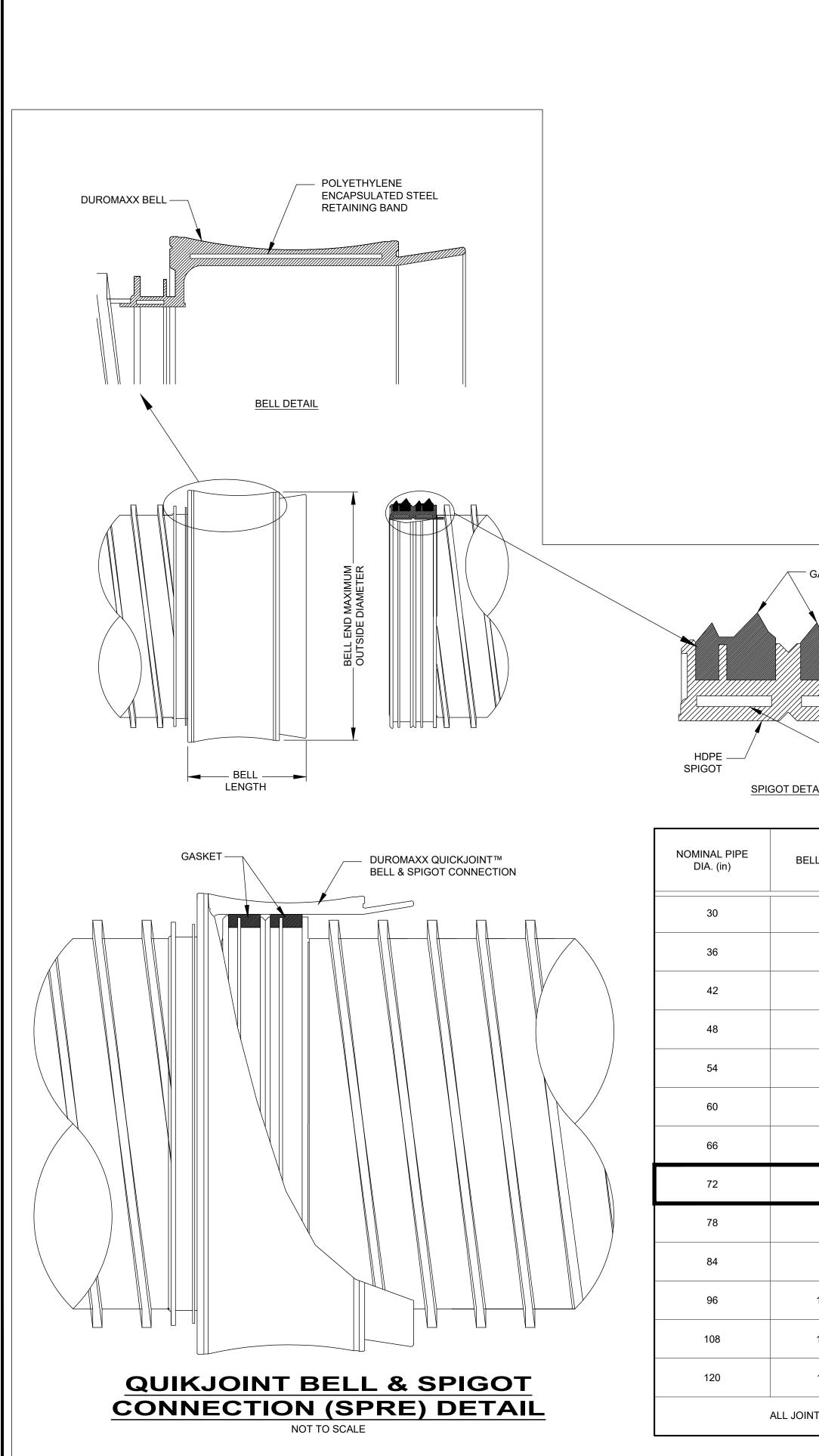
-EMBANKMENT CONDITION-IN SITU 75% MAX 1.1 DIAMETER MAX COVER* COVER** 30"-42" 50'-0" 37'-6" 48"-96" 48"-96" 22'-6"

*FOR INITIAL BACKFILL USE ASTM D2321, CLASS I, II MATERIAL.

**REDUCED MAX. COVER WHEN USING ASTM D2321 CLASS III MATERIAL IN TRENCH/HAUNCH ZONE OR FOR FIRST BACKFILL.

• FOR MULTIPLE BARREL INSTALLATION THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE = PIPE DIA./2 OR 3' FOR PIPE DIAMETERS 72" AND LARGER. CONTACT

5		CITY OF MARION	SCALE: AS NOTED	ON	REVISION	DATE		
зне 8	D	BOR						PROFES
	RAV		DATE: 10/23/2024				(T consultants	
	VIN	MARION					engineers • architects • planners	
	G١	CT						TH' GH 985 TE ^{R^S}
٥ 2	39 NAME 08	GENERAL - 00 SERIES	DRAWN BY: JAP				A Verdantas Company	
_	<u>=</u>	CONSTRUCTION DETAILS - 01	снескер ву: ТЈМ	1				¥



			(
	BOTTOM OF TROUGH SLOPE-/				\searrow		SANITARY	
	TROUGH		× <i>×</i> ///////////////////////////////////				SEWER PIPE	
	CLASS B CONCRETE TO FLOW LINE					ANITARY S	SEAL/SLEEVE CA TRUCTURE WALL -LOK) (Z-LOK SHC	
	CONTRACTOR S SPECIFIC REQUI	STR HALL REFEI	R TO MAN	ICITLY NOTE	DETAILS	TO TAI	BASE NEW L ECIFICATIONS I	
	INSTALLING NEV							JRE.
			7					
GASKETS								
<u>T DETAIL</u>	POLYETHYLENE ENCAPSULATED STEEL RETAINING BAND							
BELL O.D. (in)	BELL LENGTH (in)-MAX							
33.9	10.74							
39.8	10.74							
45.7	10.74							
52.3	10.74							
58.2	10.74							
64.1	10.74							
70.9	10.74							
76.8	10.74							
82.7	10.74							
88.6	10.74							1 1. AS
100.4	10.74							0
114.0	10.74							
124.1	10.74							1. E
L JOINTS ARE 10.8 ps	si							

PRECAST CONCRETE

CONCRETE FILLET-

TOP OF TROUGH-

SANITARY STRUCTURE WALL

· • V · •

/●\

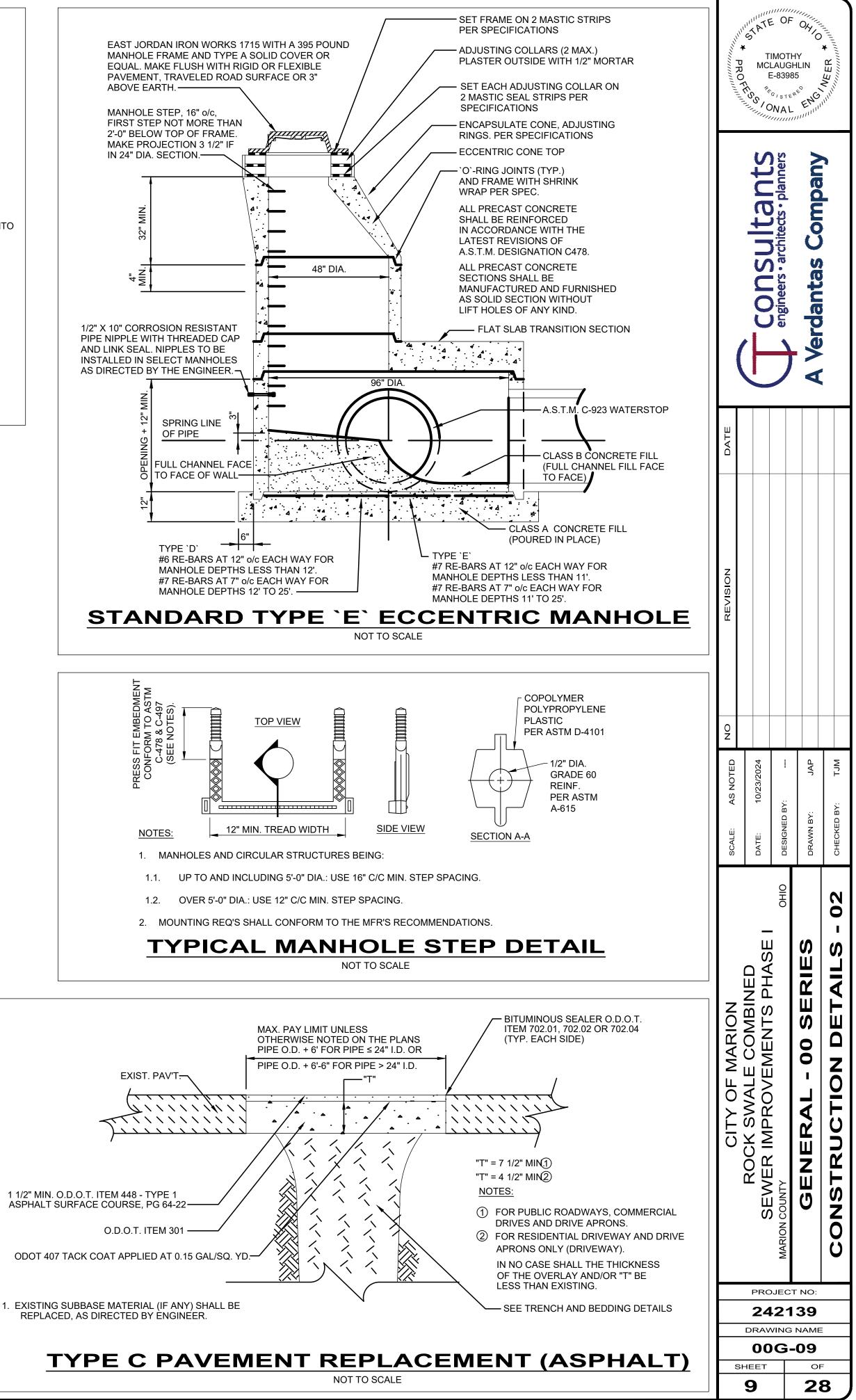
OF

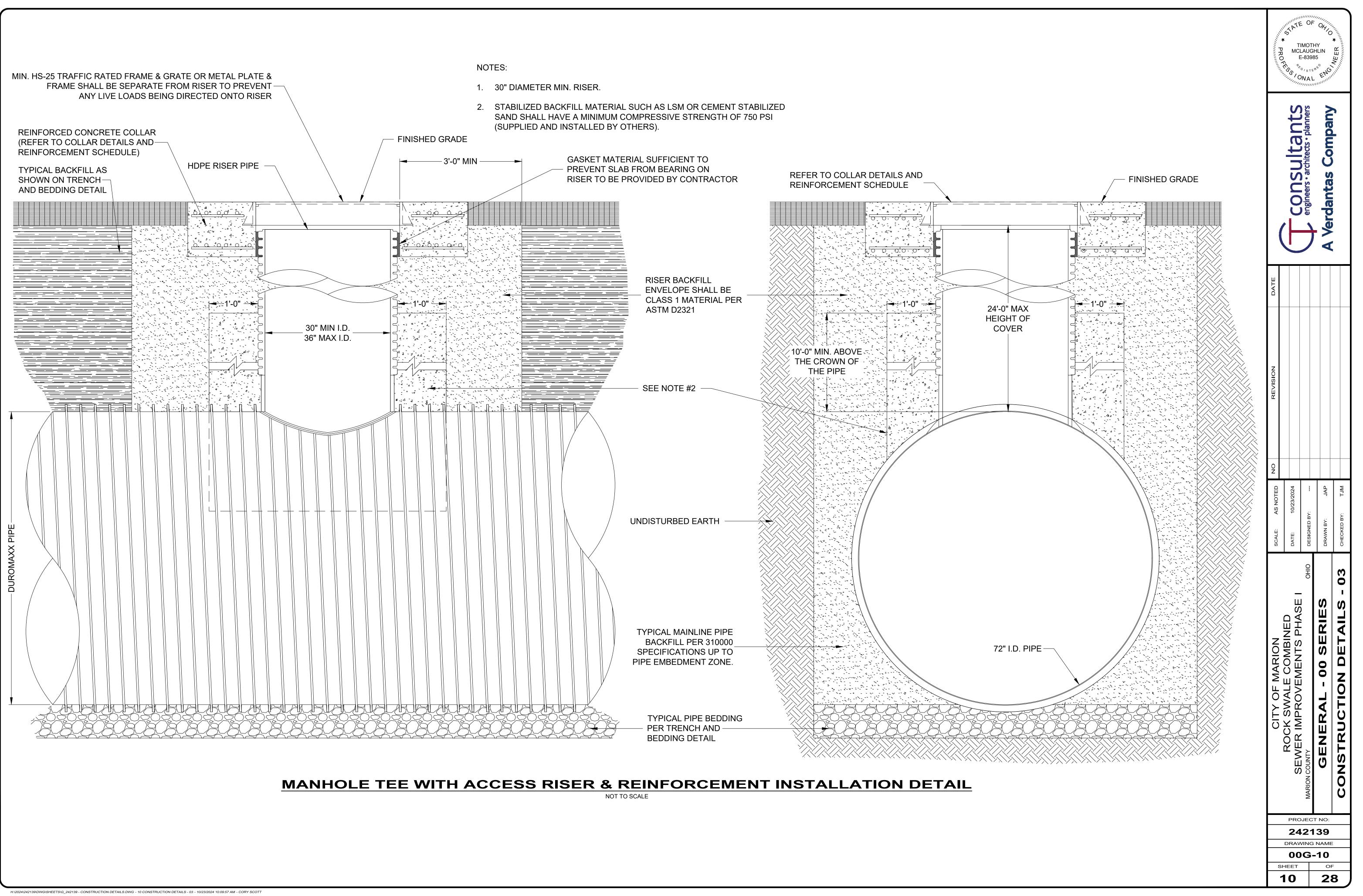
-PIPE BEDDING

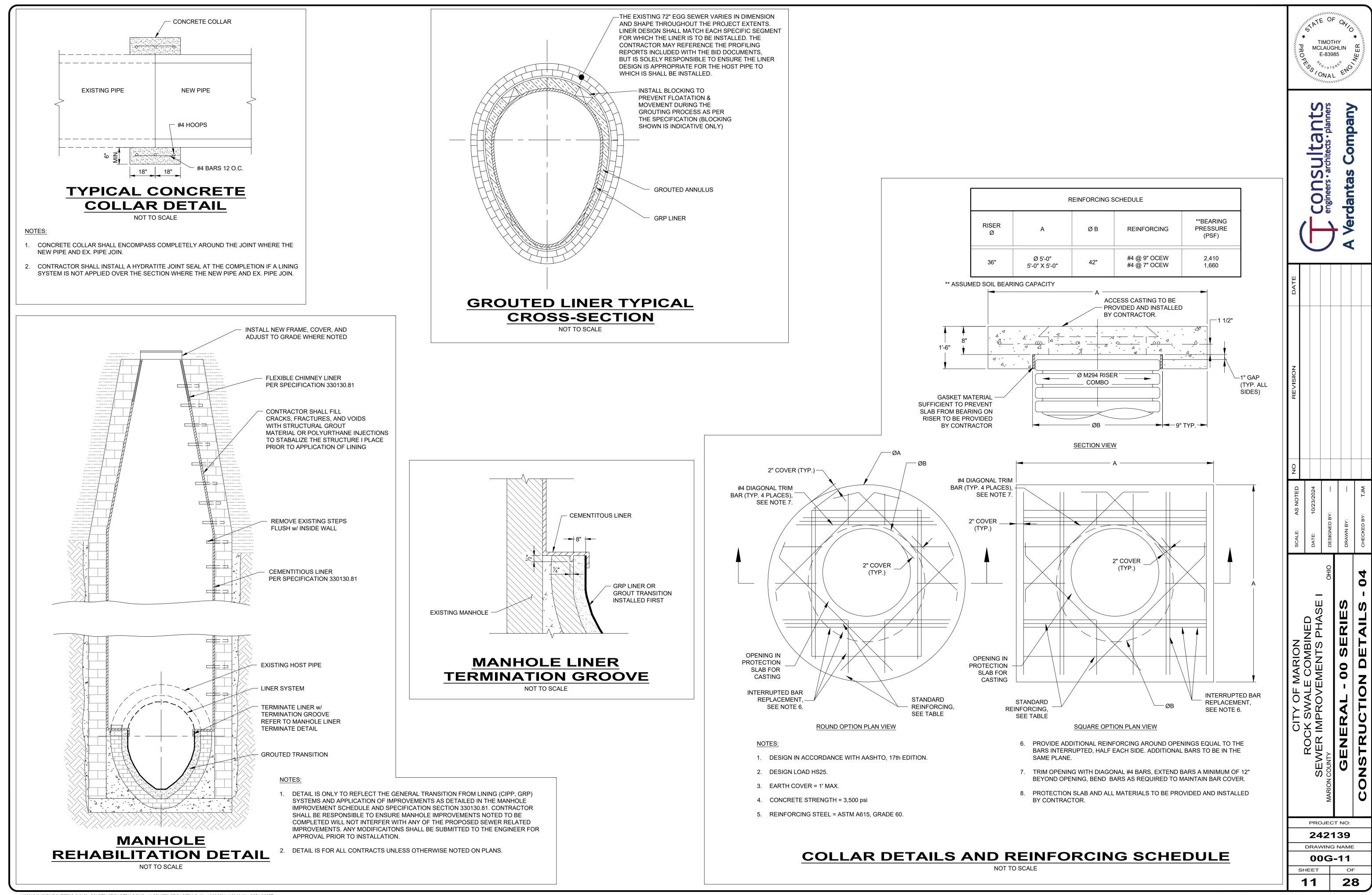
AEXTERNAL S.S.

^CFERNCO BAND

CLAMP







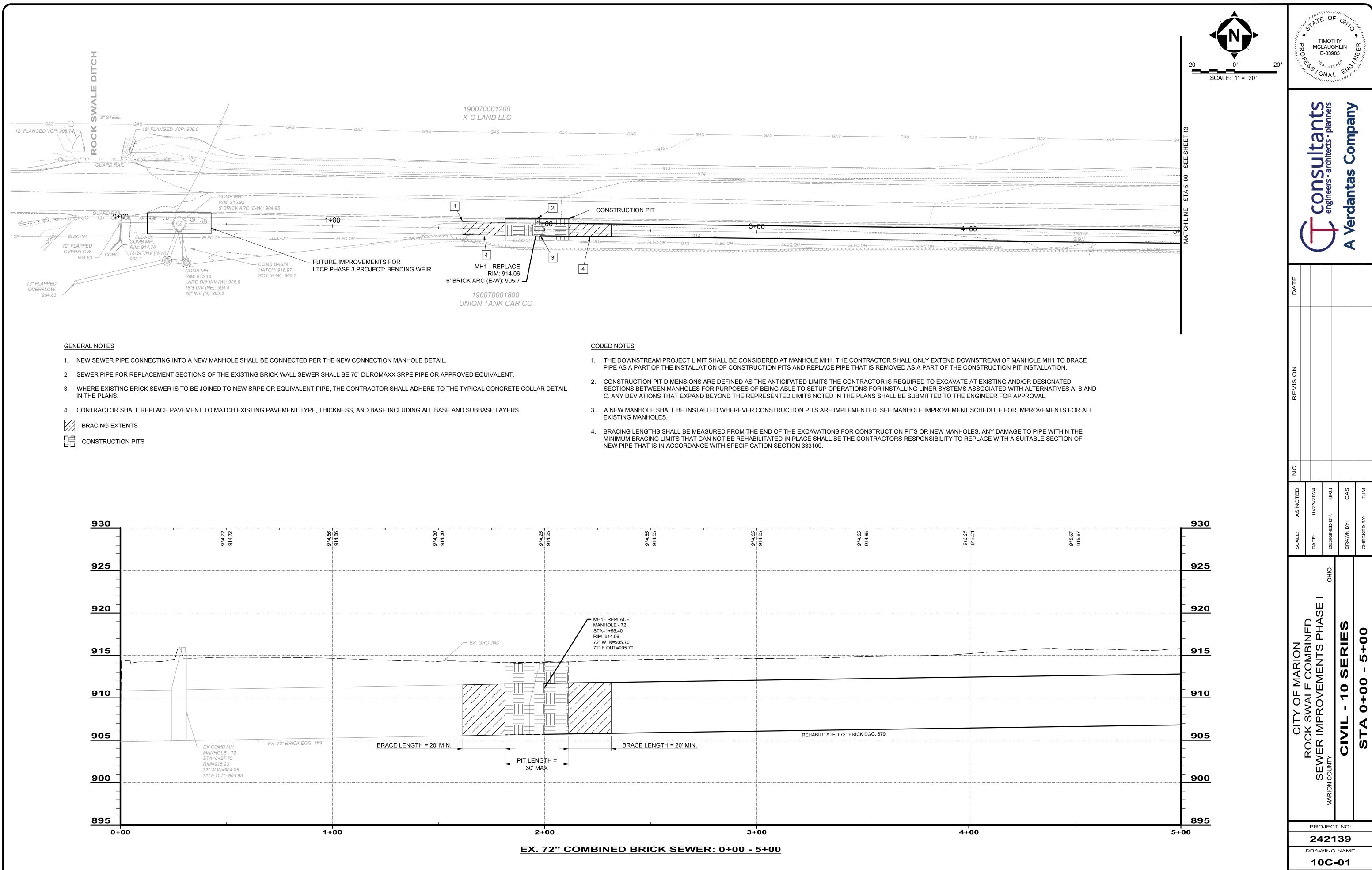
0

U

ĸ

0

U

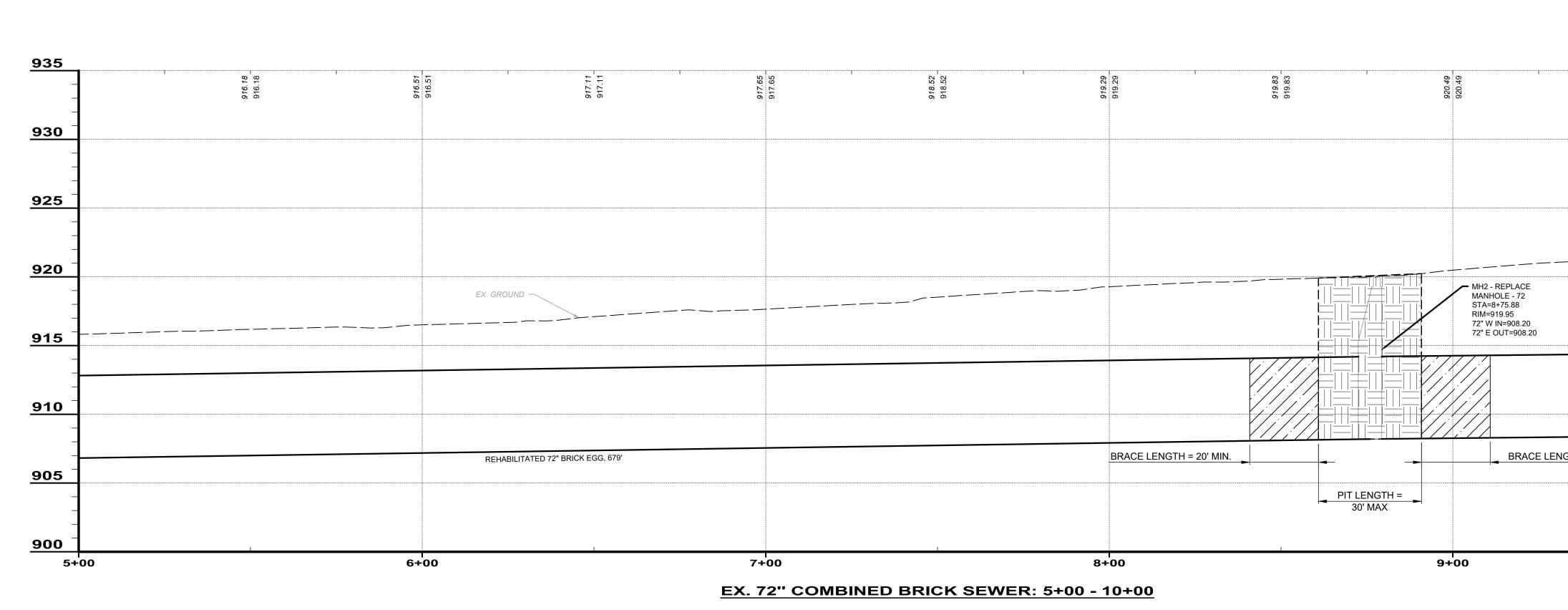


SHEET

12

OF





GENERAL NOTES

IN THE PLANS.

- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.

1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.

2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.

3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL

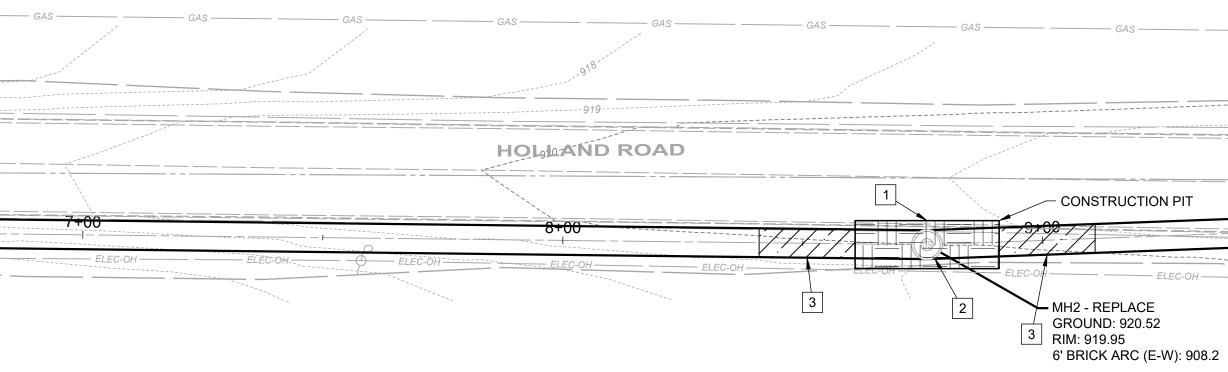
ELEC-OH ______ ELEC-OH ______ ELEC-OH ______ ELEC-OH ______ ELEC-OH ______ ELEC-OH

---916-

---917---

-- 917 -

- BRACING EXTENTS



CODED NOTES

- 1. CONSTRUCTION PIT DIMENSIONS ARE DEFINED AS THE ANTICIPATED LIMITS THE CONTRACTOR IS REQUIRED TO EXCAVATE AT EXISTING AND/OR DESIGNATED SECTIONS BETWEEN MANHOLES FOR PURPOSES OF BEING ABLE TO SETUP OPERATIONS FOR INSTALLING LINER SYSTEMS ASSOCIATED WITH ALTERNATIVES A, B AND C. ANY DEVIATIONS THAT EXPAND BEYOND THE REPRESENTED LIMITS NOTED IN THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 2. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.
- 3. BRACING LENGTHS SHALL BE MEASURED FROM THE END OF THE EXCAVATIONS FOR CONSTRUCTION PITS OR NEW MANHOLES. ANY DAMAGE TO PIPE WITHIN THE MINIMUM BRACING LIMITS THAT CAN NOT BE REHABILITATED IN PLACE SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPLACE WITH A SUITABLE SECTION OF NEW PIPE THAT IS IN ACCORDANCE WITH SPECIFICATION SECTION 333100.

	4
GAS GAS GAS	
	SEE SHEET 14
	10+0
	STA
	MATCH LINE STA 10+00
	TCH
ELEC-OH ELEC-OH ELEC-OH	Ψ

	935
921.32	-
	930
	_
	925
	- -
	920
	_
	<u>915</u>
	-
	<u>910</u>
REHABILITATED 72" BRICK EGG, 303' GTH = 20' MIN.	
	905
	_ _ 900
10-	+00

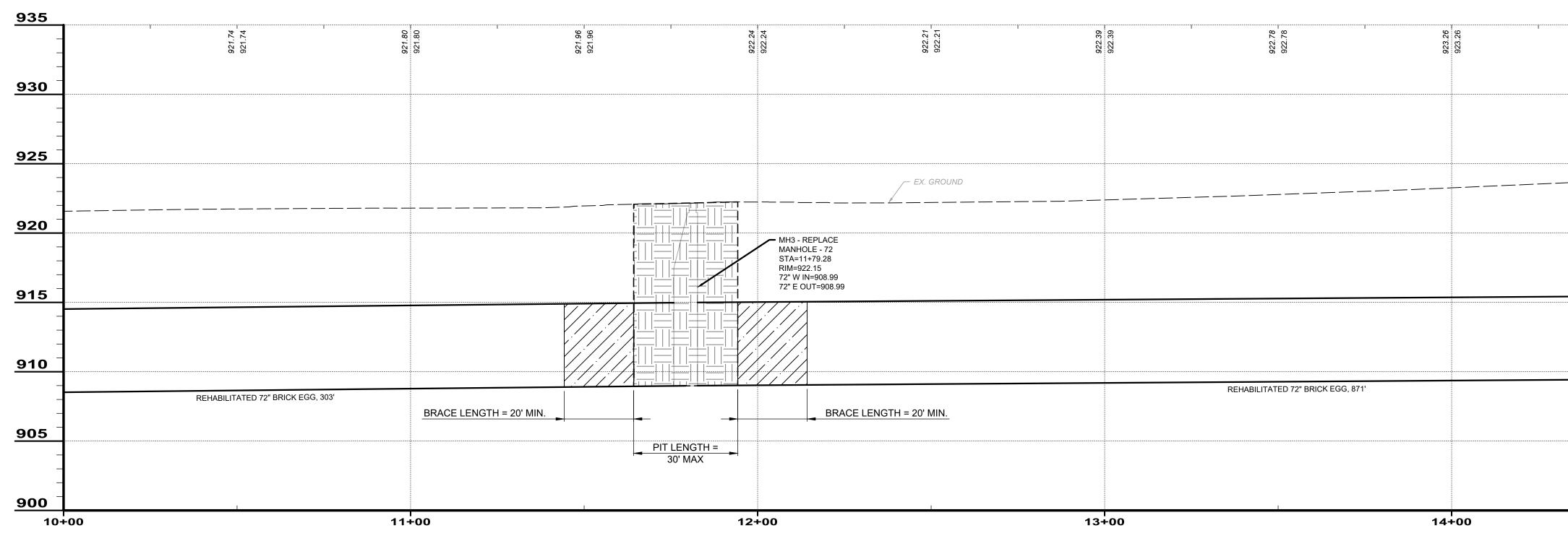
0' CALE: 1" = 20'	20'	

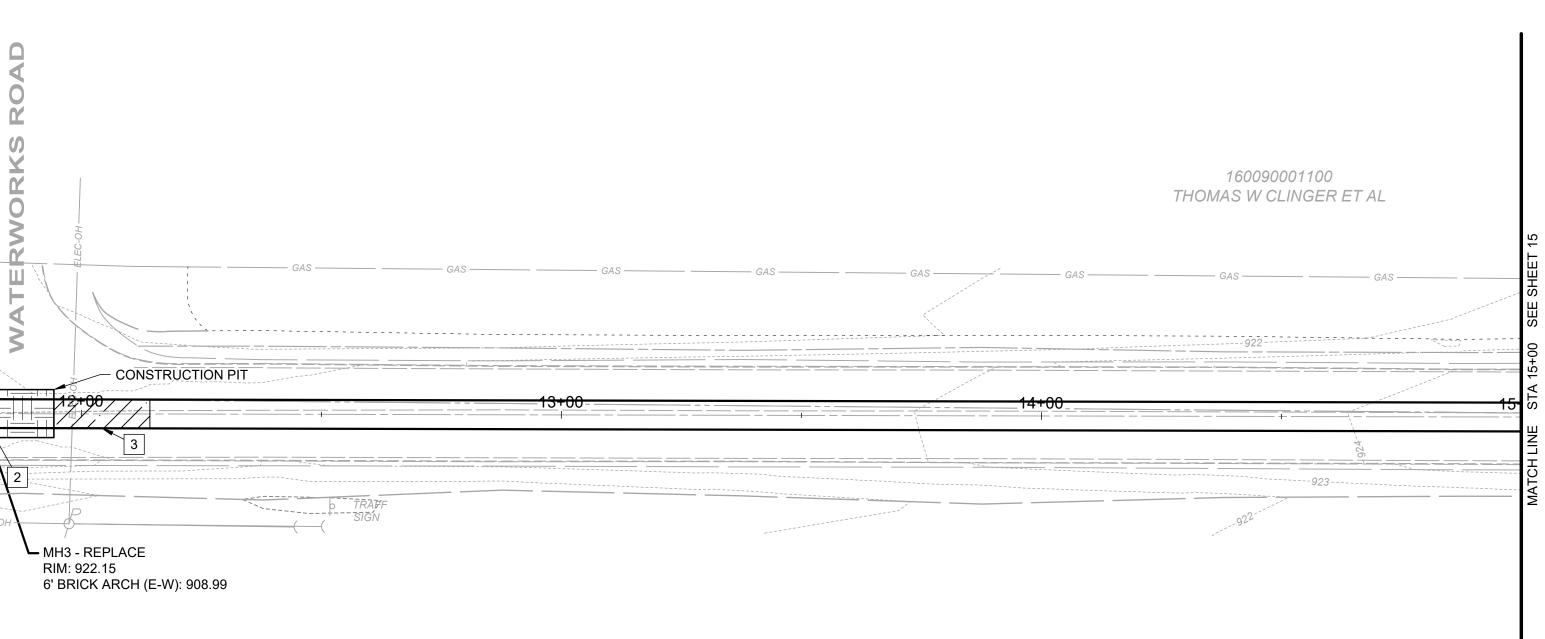
Community W	PROFESIN		IMOT LAUG E-839	H` 6H 85 		
lin.		(T consultants	engineers • architects • planners		A Verdantas Company	
DATE						
REVISION						
0 N						
AS NOTED		10/23/2024	י≺: BKU		CAS	MLT :Y
SCALE:		DATE:	DESIGNED BY:		DRAWN BY:	CHECKED BY:
CITY OF MARION	ROCK SWALE COMBINED	SEWFR IMPROVEMENTS PHASE I			CIVIL - 10 SERIES	STA 5+00 - 10+00
)JEC 21			
		10				
	-	==⊤ 3			2	_

) SEE SHEET 13	———— GAS -		GAS	GAS	GAS 920	GAS GAS MKR	TRAFF SIGN SV9
STA 10+00					11+00		
MATCH LINE	00	ELEC-OH			920		3 JRAFE SIGNQO
			——— ELEC-OH ——— -	———— ELEC-OH ——	ELĘĆ-OI	H — ELEC-OH — APPROX LOCATION OF MH COULD NOT LOCATE	ELEC-

GENERAL NOTES

- 1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.
- BRACING EXTENTS
- CONSTRUCTION PITS





CODED NOTES

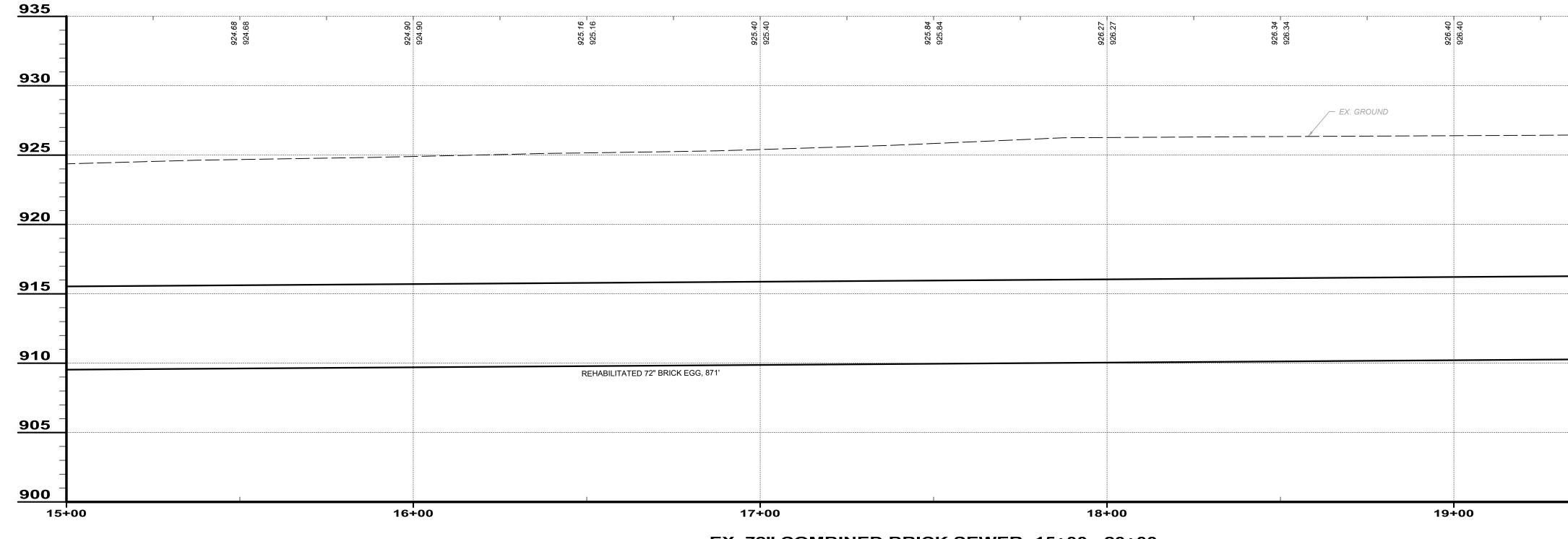
- 1. CONSTRUCTION PIT DIMENSIONS ARE DEFINED AS THE ANTICIPATED LIMITS THE CONTRACTOR IS REQUIRED TO EXCAVATE AT EXISTING AND/OR DESIGNATED SECTIONS BETWEEN MANHOLES FOR PURPOSES OF BEING ABLE TO SETUP OPERATIONS FOR INSTALLING LINER SYSTEMS ASSOCIATED WITH ALTERNATIVES A, B AND C. ANY DEVIATIONS THAT EXPAND BEYOND THE REPRESENTED LIMITS NOTED IN THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

- 2. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.
- 3. BRACING LENGTHS SHALL BE MEASURED FROM THE END OF THE EXCAVATIONS FOR CONSTRUCTION PITS OR NEW MANHOLES. ANY DAMAGE TO PIPE WITHIN THE MINIMUM BRACING LIMITS THAT CAN NOT BE REHABILITATED IN PLACE SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPLACE WITH A SUITABLE SECTION OF NEW PIPE THAT IS IN ACCORDANCE WITH SPECIFICATION SECTION 333100.

EX. 72" COMBINED BRICK SEWER: 10+00 - 15+00

	935
923.83 923.83	-
	930
	_ _ _
	925
	_ _ _
	- 920
	_
	<u>915</u>
	_
	<u>910</u>
	_
	905
15-	900 -00

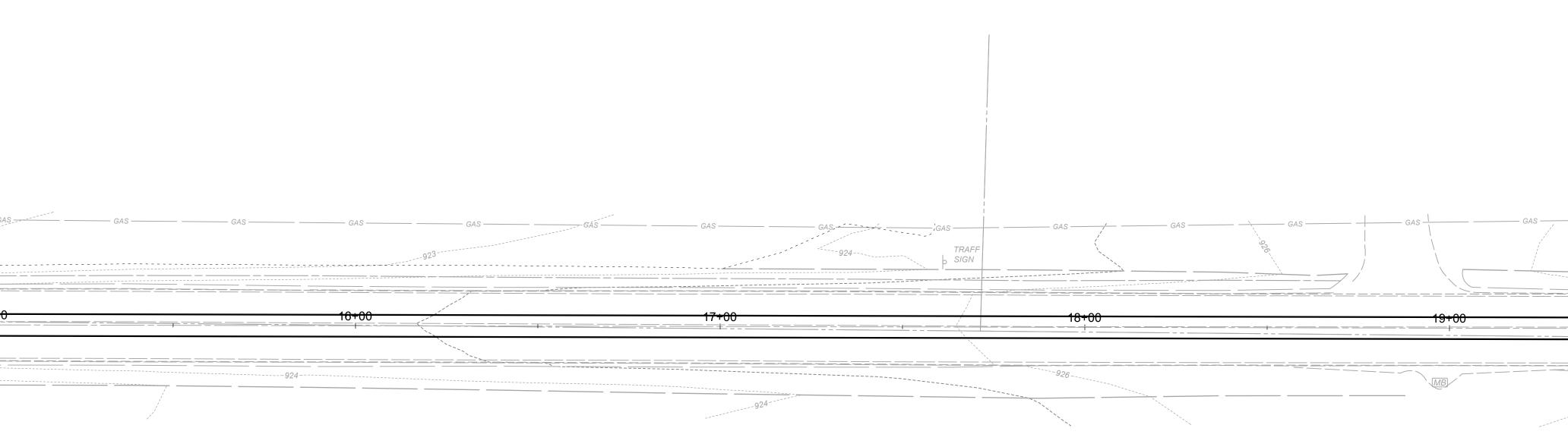
REVISION TIMOTHY MCLAUGHLIN E-83985 ONAL ONAL CONSTRACT CONST CONSTRA	
NOISI	
REV	
Q	
AS NOTED 10/23/2024 *: BKU CAS	
SCALE: AS DATE: 10 DESIGNED BY: DRAWN BY: CHECKED BY:	
OHO	
CITY OF MARION ROCK SWALE COMBINED ROCK SWALE COMBINED SEWER IMPROVEMENTS PHASE I MARION COUNTY MARION COUNTY ARION COUNTY ARION COUNTY ARION COUNTY ARION COUNTY ARION COUNTY ARION COUNTY ARION COUNTY ARION COUNTY CIVIL 10 SERIES	
PROJECT NO: 242139	
DRAWING NAME	
SHEET OF 14 28	



- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.
- IN THE PLANS.
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT. 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL

16+00

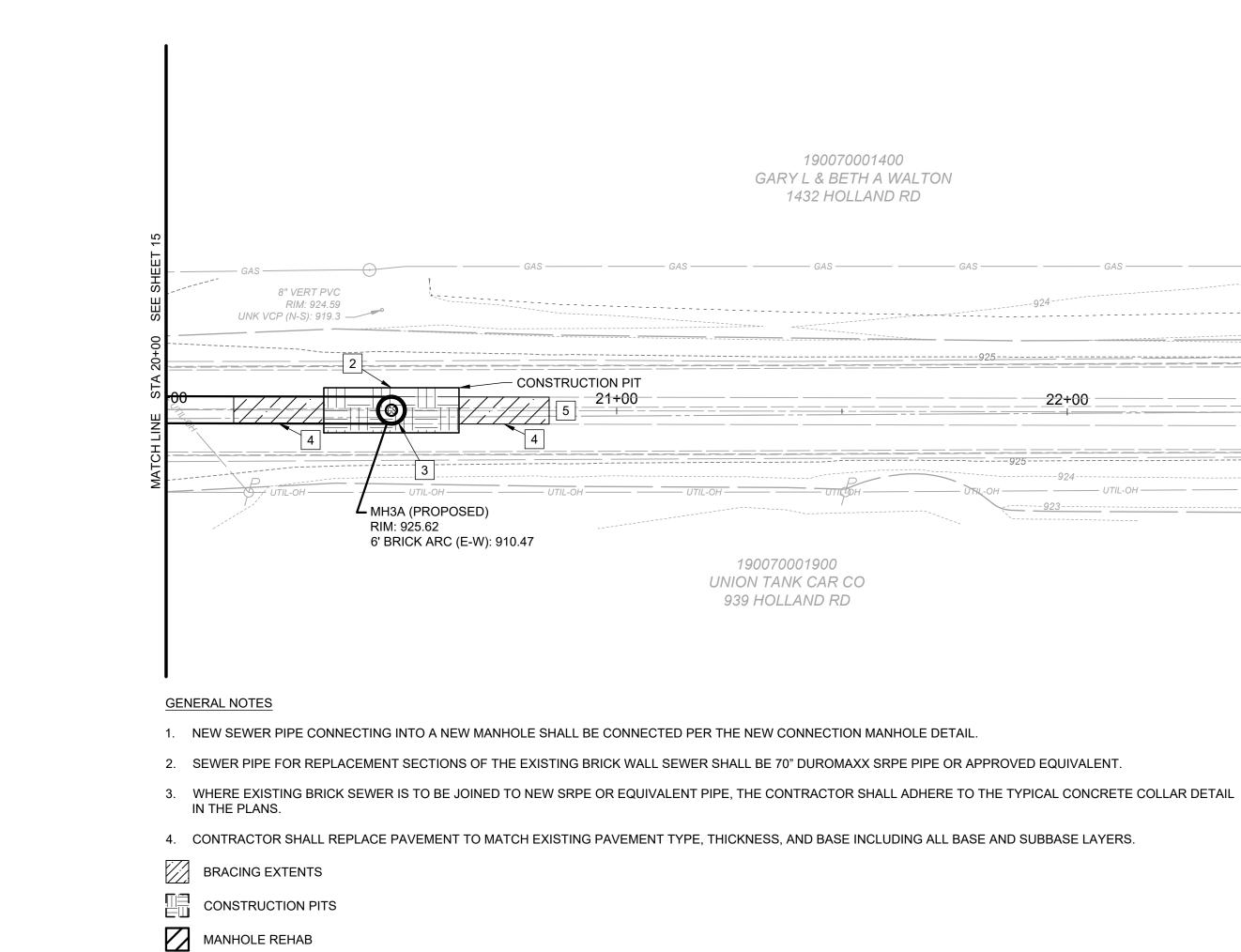
- 1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.
- GENERAL NOTES

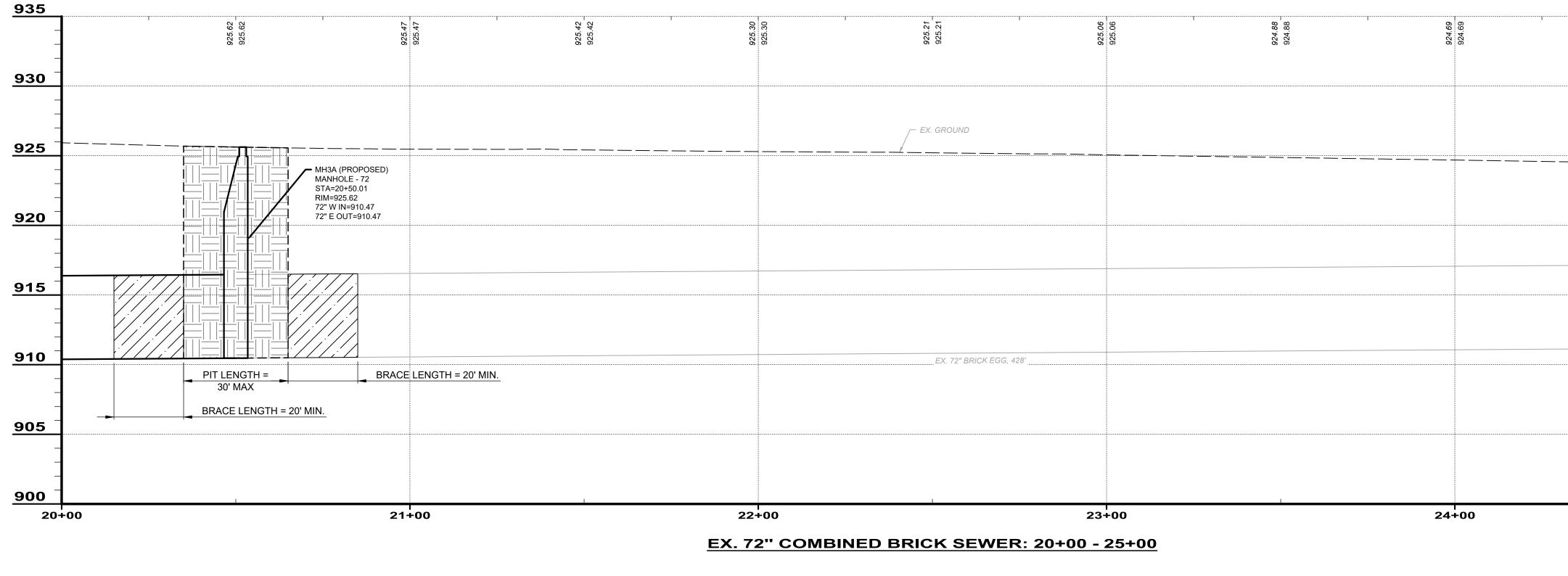


EX. 72" COMBINED BRICK SEWER: 15+00 - 20+00

20' 0' 20' SCALE: 1" = 20'	TIMO TIMO PRO E-83 * CIAU * TIMO MCLAU E-83 * CIAU		
GAS	CONSUITANTS engineers • architects • planners	A Verdantas Company	
	DATE		
	REVISION		
	O Z		
935 36 926 926 926	SCALE: AS NOTED DATE: 10/23/2024		CHECKED BY: TJM
- - - -	S CIHO		0
925 	TY OF MARION SWALE COMBINED PROVEMENTS PHASE I	SERIES	- 20+00
915	ŪΧΣ	CIVIL - 10 S	STA 15+00
- - - - - - - -	ROC SEWER		S
900 20+00	PROJEC 242 DRAWIN	139 g name	
	10C	- 04	-

15



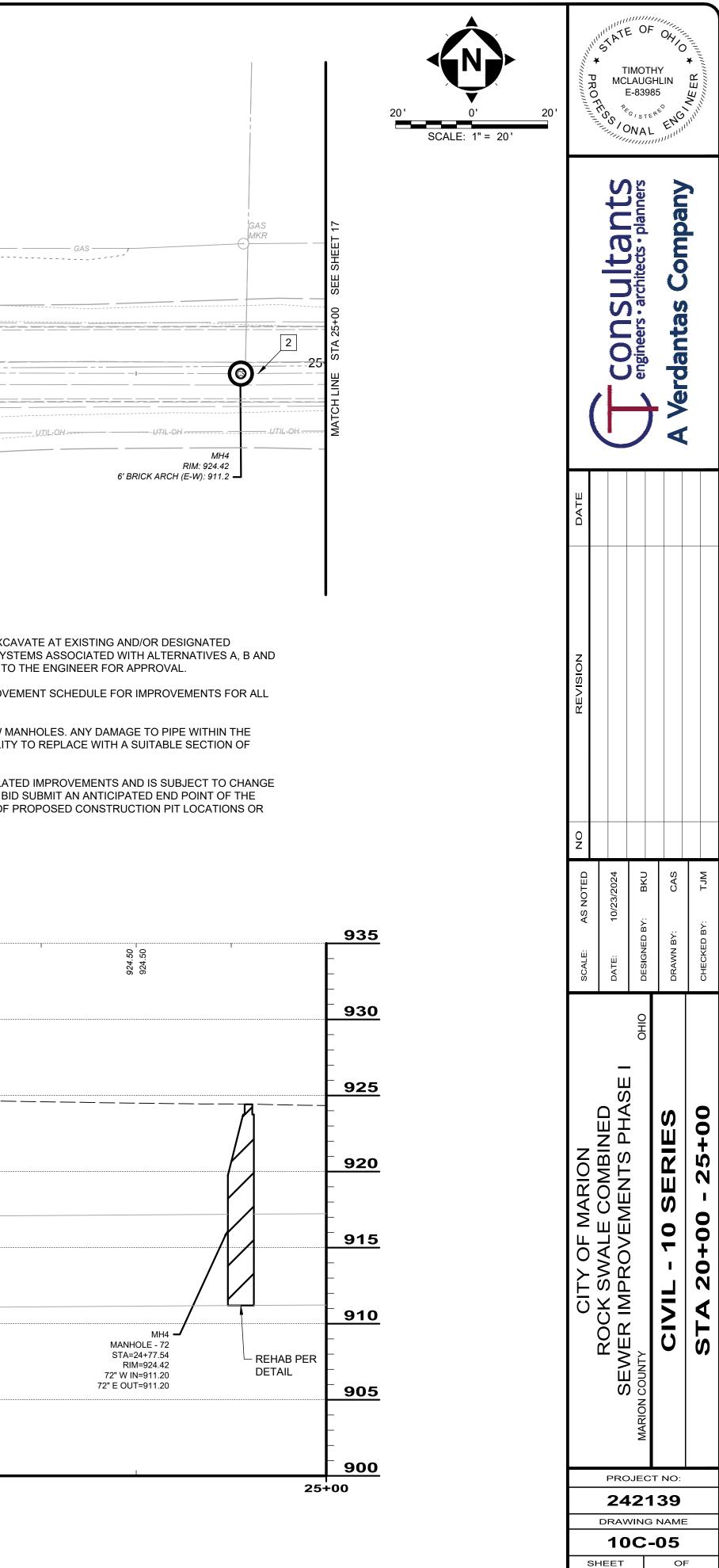


GAS		GAS	— ——— GAS ————	GAS	3" PLASTIC GAS	— — — GAS — — — — — — — — — — — — — — — — — — —	
924							
					924		
			HOLLANDR			04.00	
			23+00			24+00	
925925924924							
H UTIL-OH	UTIL-OH	UTIL-OH	UTIL-OH	UTIL-OH	UTIL-OH923923	UTIL-OH Ф 	UTJL=OH =

CODED NOTES

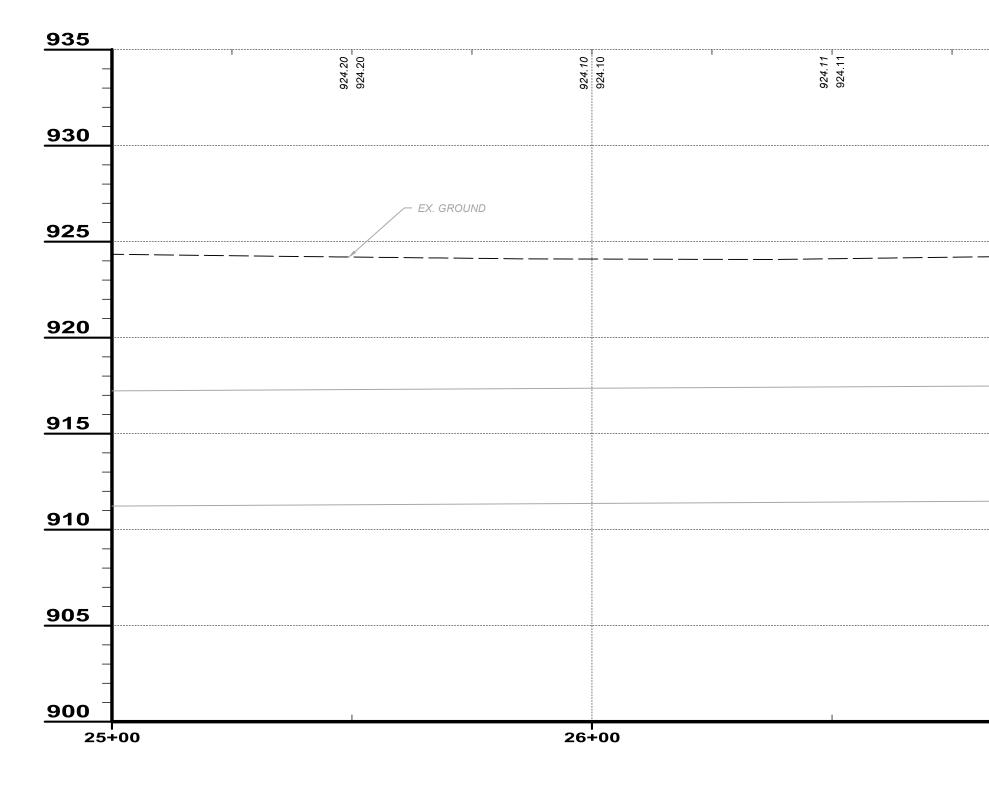
- 1. CONSTRUCTION PIT DIMENSIONS ARE DEFINED AS THE ANTICIPATED LIMITS THE CONTRACTOR IS REQUIRED TO EXCAVATE AT EXISTING AND/OR DESIGNATED SECTIONS BETWEEN MANHOLES FOR PURPOSES OF BEING ABLE TO SETUP OPERATIONS FOR INSTALLING LINER SYSTEMS ASSOCIATED WITH ALTERNATIVES A, B AND C. ANY DEVIATIONS THAT EXPAND BEYOND THE REPRESENTED LIMITS NOTED IN THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

- 2. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.
- 3. BRACING LENGTHS SHALL BE MEASURED FROM THE END OF THE EXCAVATIONS FOR CONSTRUCTION PITS OR NEW MANHOLES. ANY DAMAGE TO PIPE WITHIN THE MINIMUM BRACING LIMITS THAT CAN NOT BE REHABILITATED IN PLACE SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPLACE WITH A SUITABLE SECTION OF NEW PIPE THAT IS IN ACCORDANCE WITH SPECIFICATION SECTION 333100.
- 4. PROPOSED CONSTRUCTION PIT AND MANHOLE AT STATION 20+50 IS THE ANTICIPATED END POINT FOR SEWER RELATED IMPROVEMENTS AND IS SUBJECT TO CHANGE BASED ON SUBMITTED UNIT PRICING FOR ALTERNATIVES 1, 2, OR 3. THE CONTRACTOR SHALL AS A PART OF THEIR BID SUBMIT AN ANTICIPATED END POINT OF THE SEWER RELATED IMPROVEMENTS FOR EACH ALTERNATIVE THEY CHOOSE TO SUBMIT ON WITH NOTED CHANGES OF PROPOSED CONSTRUCTION PIT LOCATIONS OR WHERE ADDITIONAL LOCATIONS WILL BE REQUIRED.



16

GENERAL NOTES



- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.
- IN THE PLANS.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL

1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.

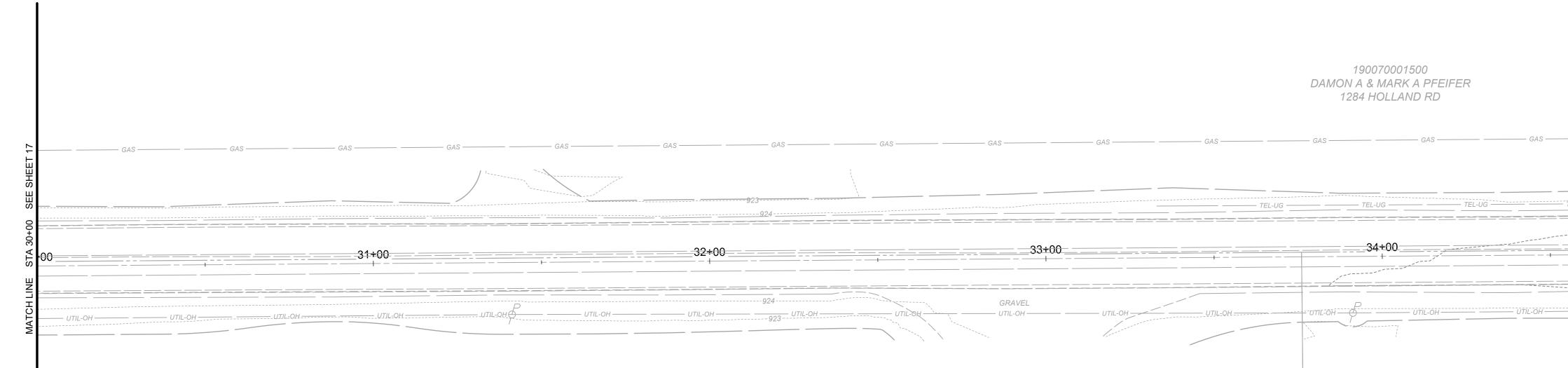
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.

EX. 72" COMBINED BRICK SEWER: 25+00 - 30+00

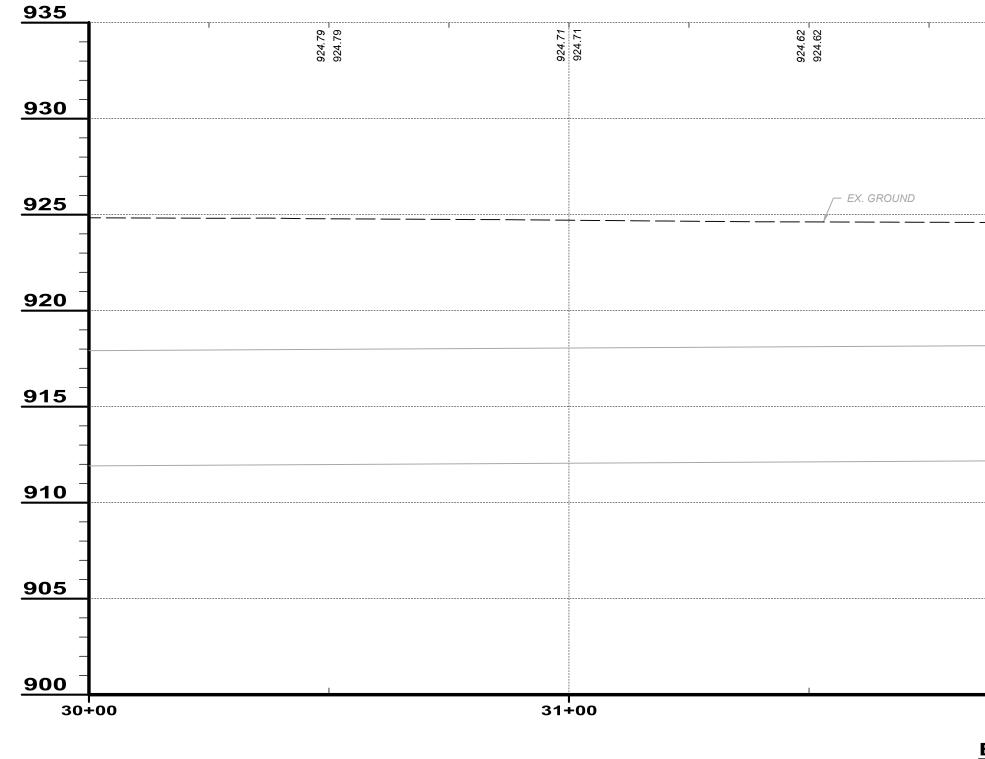
	EX. 72" BRICK EGG, 1162'				
					<u></u>
924.25	924.25 924.30 924.30	924.34	924.62	924.79	924.85 924.85
25	33 39 39	5 8	68.8	6 2 2	85

GAS _____ GAS _____ GAS _____ O So MULBERRY _____

20' 0' 2 SCALE: 1" = 20'			IMOTI LAUG E-8398 ^{© /} ste) NA L		
GAS -		(T consultants	engineers • architects • planners	A Verdantas Company	
	DATE				
	REVISION				
	0 Z				
935	SCALE: AS NOTED	DATE: 10/23/2024	DESIGNED BY: BKU	DRAWN BY: CAS	CHECKED BY: TJM
930 925 925 920 915 915 910	CITY OF MARION	ROCK SWALE COMBINED SEWER IMPROVEMENTS PHASE I	MARION COUNTY OHIO	CIVIL - 10 SERIES	STA 25+00 - 30+00
<u>900</u> 30+00		24	21	T NO: 39 NAME	<u> </u>
	s	1U HEET		-06 OF 28	







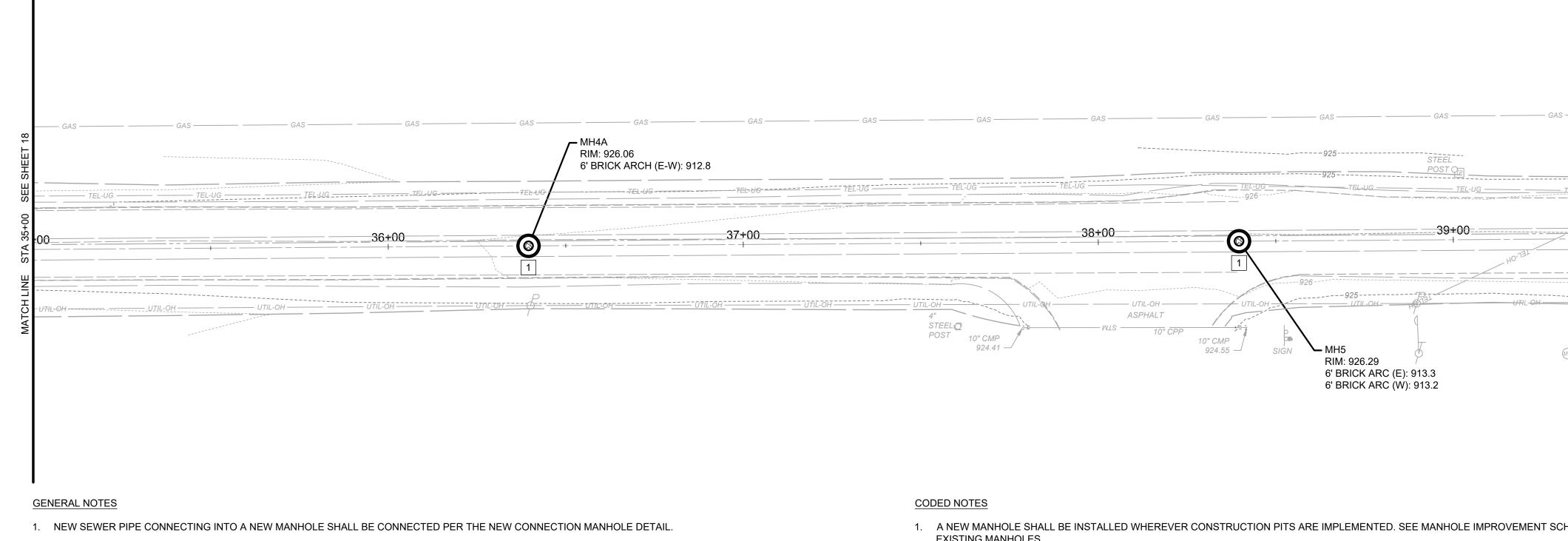
190070001500 DAMON A & MARK A PFEIFER 1284 HOLLAND RD

<u>9</u> 23	 		TEL-UG	TEL-UG		
32+00	33+00			34+00 		
924 JTIL-OH923UTIL-OH	GRAVEL – UTIL-OH ––––––	UTIL-OH UTIL-OH	UT	игон — В	-OH	UTIL-OH

924.60	924.60 924.64 924.64	924.75 924.75	924.86	924.97 924.97 925.09 925.09
	EX. 72" BRICK EGG, 1162'			
32-	-00	33+00		
327		33700	34	+++00

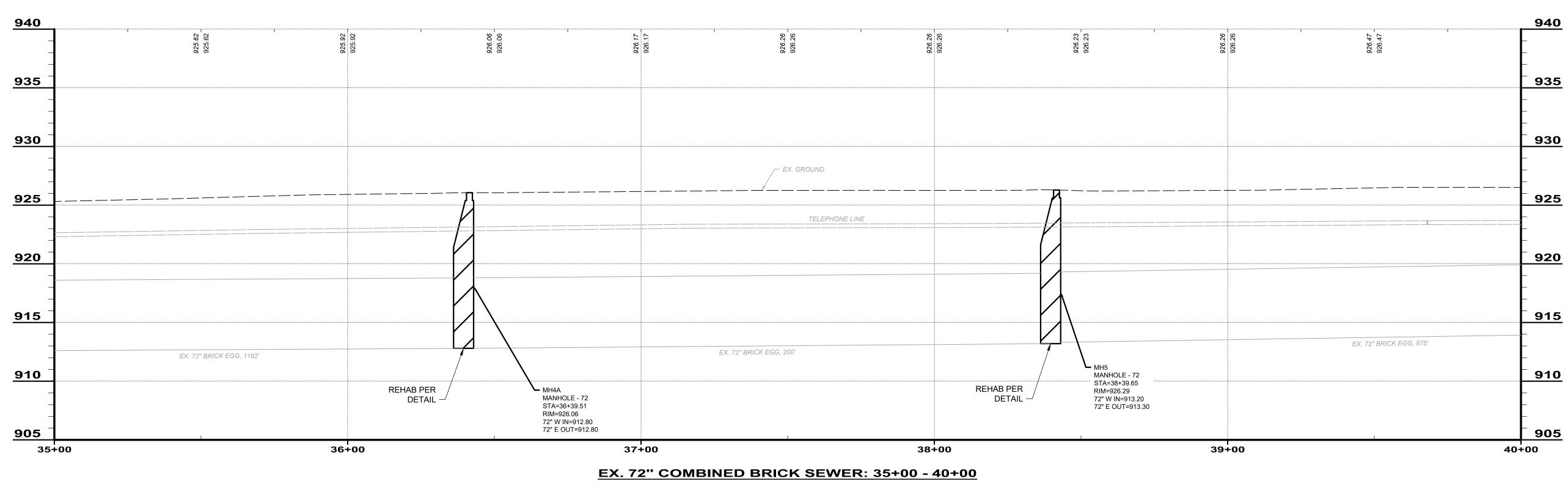
EX. 72" COMBINED BRICK SEWER: 30+00 - 35+00

20' 0' 20' SCALE: 1" = 20'	TIM TATE TATE TIM TATE TIM TATE ACLI ACL			
GASGASGAS 	T consultants	A Verdantas Company		
	DATE			
	REVISION			
	D Z O Z	ے اور		
935 60 52 60 60 60 60 60 60 60 60 60 60 60 60 60	SCALE: AS NOTED DATE: 10/23/2024	DESIGNED BY: BKU DRAWN BY: CAS	CHECKED BY: TJM	
		OHO		
	CITY OF MARION SK SWALE COMBINED IMPROVEMENTS PHASE	0 SERIES	+00 - 35+00	
915 	CITY OF ROCK SWAL SEWER IMPROVI		STA 30+(
900		MARION JECT NO:		
35+00	242 DRAW	2139 ING NAME		
	SHEET			
	18	28	8	



H:\2024\242139\DWG\SHEETS\C_242139 - PLAN & PROFILE.DWG - 19 STA 35+00 - 40+00 - 10/23/2024 10:37:28 AM - CORY SCOTT

- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS. MANHOLE REHAB



1. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.

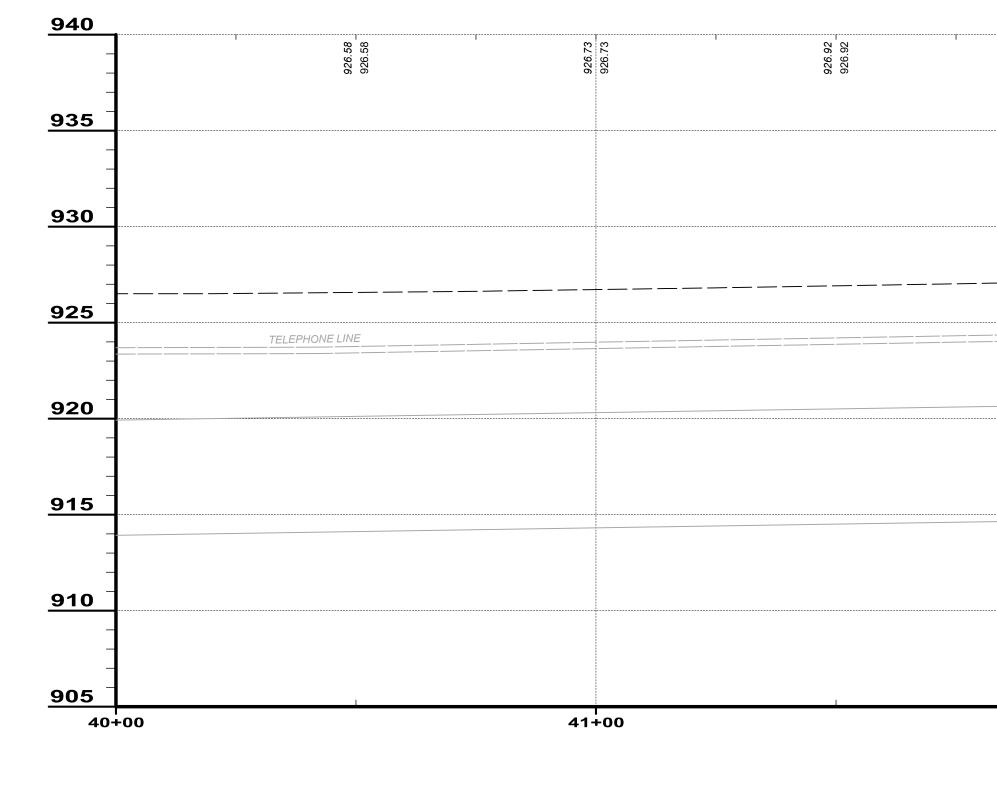
20'			T MC I S C	IMO LAU E-83 ONA			Territorium and the
			(Tronsultants			A Verdantas Company	
	DATE						
	REVISION						
	ON D		24	BKI)	CAS	W
	SCALE: AS NOTED		DATE: 10/23/2024	DESIGNED BY: BI		DRAWN BY: C.	CHECKED BY: TJM
	CITY OF MARION		Ц С	OHO		CIVIL - 10 SERIES	STA 35+00 - 40+00
		D	24 RAV 10		1 (NO: 39 NAME 08 OF	=

	- GAS		GAS —
			MATCH LINE STA 40+00 SEE SHEET 20
HO-TEL			STA 40+00
<u>UTIL-O</u> H		— UTIL-OH	MATCH LINE

SCALE: 1"

-		-
	H:\2024\242139\DWG\SHEETS\C_242139 - PLAN & PROFILE.DWG - 20 STA 40+00 - 45+00 - 10/23/2024 10:37:28 AM - CORY SCOTT	

GENERAL NOTES



3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.

1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.

- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.

	— GAS ——————————————————————————————————	5 GAS	GAS	GAS GAS	GAS	GAS GAS	GAS	GAS	GAS
2						L o o	- o o o <u>CHAINLINK</u> o o 927	- 0 0 0	000
					UG		927 TEL-UG		
.00		41+00		42+00		HOLLAND ROAD			ð
		UTIL-OH UT	 ПФН	UTIL-OH UTI	<u>іс-он</u> итіс-он	UTIL=OH	UTIL-OH	UTIL-C	UTIL=OH
			UNION TANK CAR COM	90070001600 PANY A DELAWARE CORPORA	TION				

1045 HOLLAND RD

928.13 928.13 927.90 927.90 928.16 928.16 927.16 927.16 927.49 927.49 🗩 EX. GROUND __/_____ EX. 72" BRICK EGG, 975' 42+00 43+00 44+00

EX. 72" COMBINED BRICK SEWER: 40+00 - 45+00

20'					۲۲۲ GH 985 ۲E ^R		
			(Tronsultants	engineers • architects • planners		A Verdantas Company	
	DATE						
	REVISION						
	0 N						
	AS NOTED		10/23/2024	BY. BKII		: CAS	BY: TJM
	SCALE:		DATE:	DESIGNED BY.		DRAWN BY:	CHECKED BY:
	CITY OF MARION	ROCK SWALE COMBINED	SEWER IMPROVEMENTS PHASE I			CIVIL - 10 SERIES	STA 40+00 - 45+00
						NO: 39	
			RAV	VIN	GI	NAME 09	Ξ
		ыне 2	ет О			ہ 2	

	— GAS				– GAS –	
0	- 0)		— 0 -	o ——	 _
			-UG	<u>TEL</u>		
 	UTIL-OH				UTIL-OH	

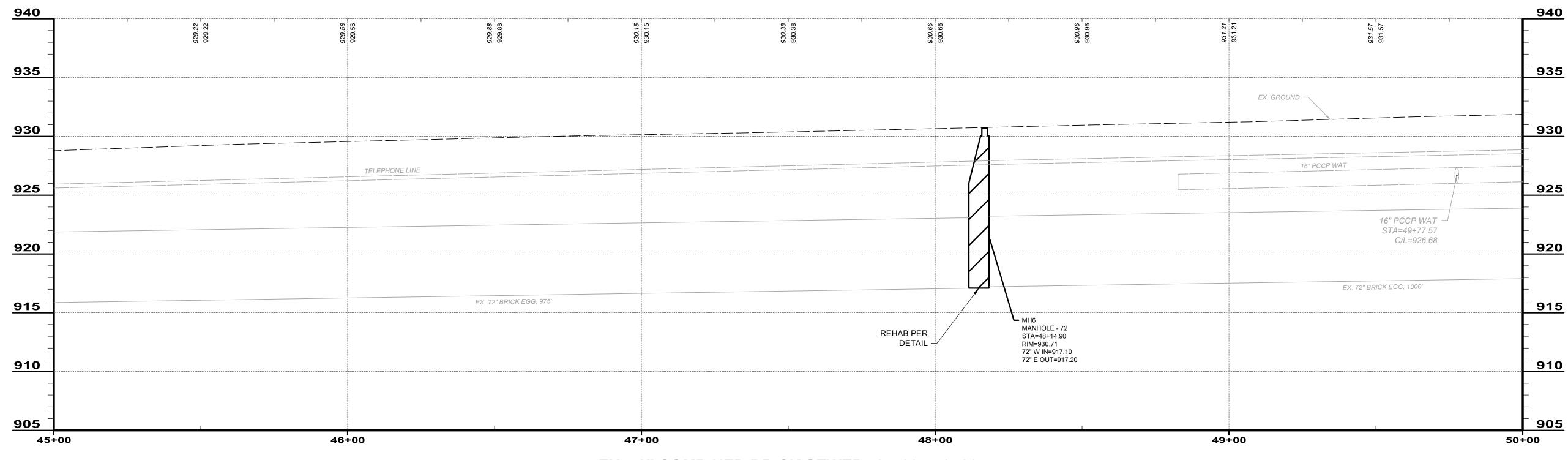
SCALE

	940
928.35	-
	<u>935</u>
	930
	<u>925</u>
	920
	915
	910
	905 45+00

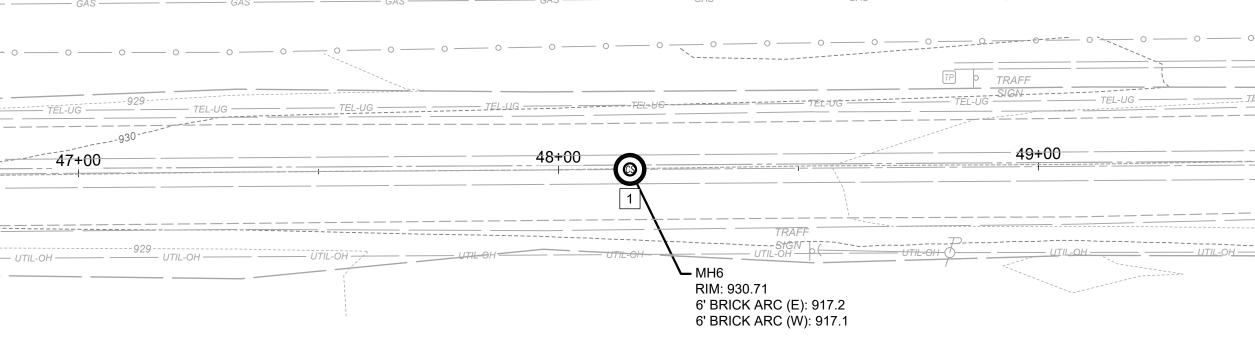
GAS	GAS	GAS	GAS	GAS	GAS
o o	o o o		o	_ o o 	_ o o o
					<i>TEL-UG</i>
00 			46+00 		
UTIL-OH	UTIL-OH	UTIL-OH	UTIL-OH — -		UTIL-OH
				I	

- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL

- IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.
- MANHOLE REHAB



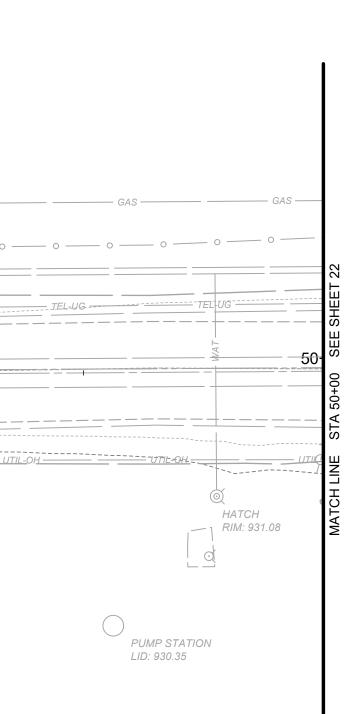
H:\2024\242139\DWG\SHEETS\C_242139 - PLAN & PROFILE.DWG - 21 STA 45+00 - 50+00 - 10/23/2024 10:37:28 AM - CORY SCOTT

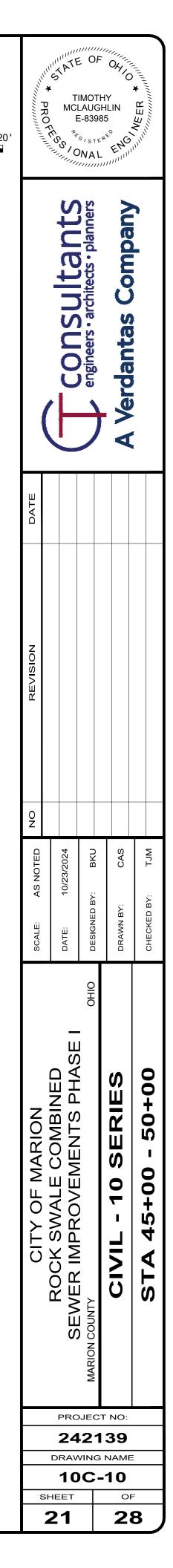


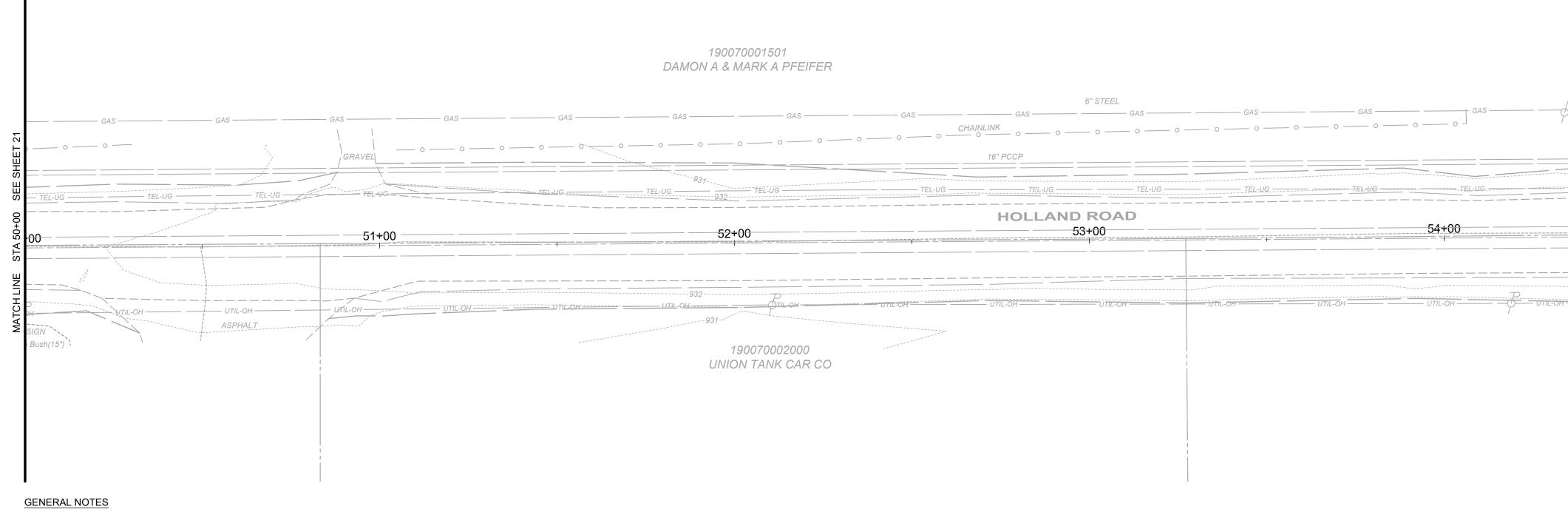
CODED NOTES

1. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.

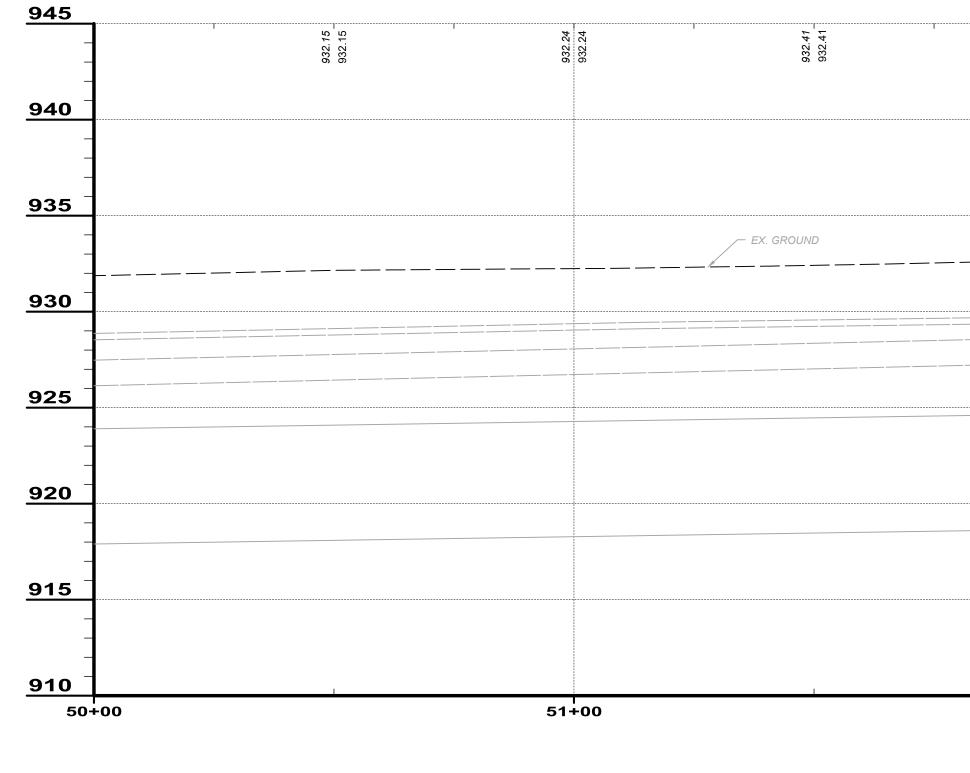
EX. 72" COMBINED BRICK SEWER: 45+00 - 50+00







- 1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.



EX. 72" COMBINED BRICK SEWER: 50+00 - 55+00

932.68	932.68 932.68 932.68 932.68	932.67 932.70 932.70	932.79 	32.79
6	ଚଁ ଚଁ ଚଁ ଚଁ	ର୍ଜ ଜିଁ ଜିଁ ଜିଁ	ର୍ଭ	ŏ
			TELEPHONE LINE	
	EX. 72" BRICK EGG, 1000'			
52+	-00 53-	-00	54-	+00
52.			54	

190070002000 UNION TANK CAR CO

TEL-UG -----

52+00

6" STEEL

UTIL-OH UTIL-OH UTIL-OH UTIL-OH UTIL-OH UTIL-OH UTIL-OH

54+00 +

190070001501 DAMON A & MARK A PFEIFER

16" PCCP

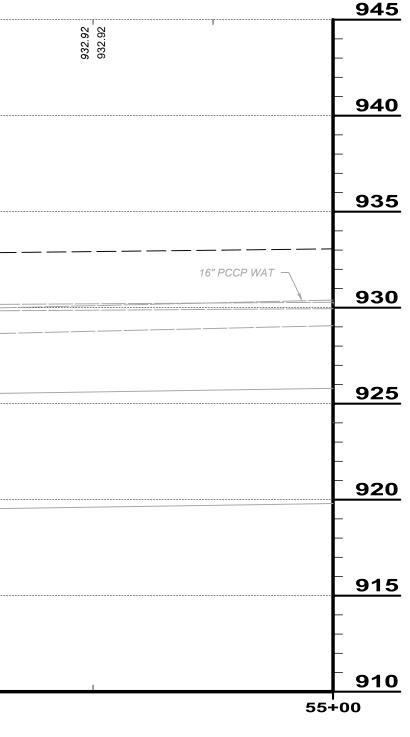
______53+00_____

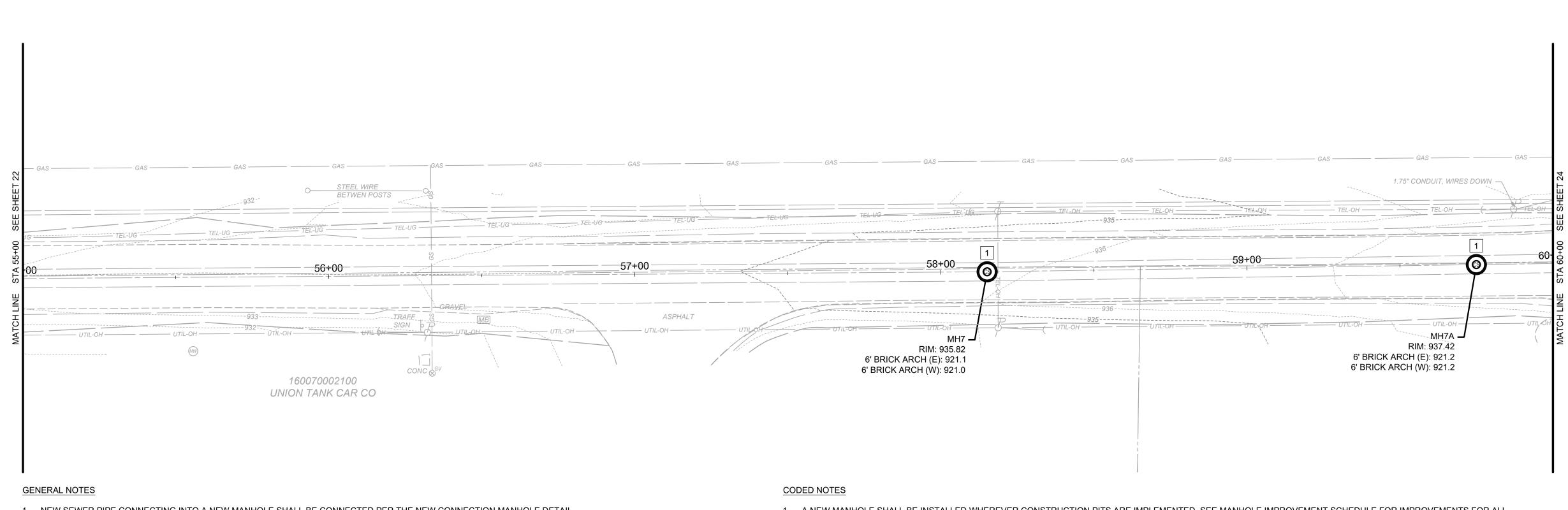
_____ TEL-UG _____

_____ HOLLAND ROAD

20' 0' 20' SCALE: 1" = 20'			IMOTH AUGH E-8398 [©] /ste ⁽) NAL	Oxy HY HLIN 55 ENG 11111111111111111111111111111111111	La WEER *	
	((T consultants		A Verdantas Company		
	DATE					
	REVISION					
	ON					
<u>5</u>	SCALE: AS NOTED	DATE: 10/23/2024	DESIGNED BY: BKU	DRAWN BY: CAS	CHECKED BY: TJM	
<u>o</u>			OHO			
<u>5</u> 0	ARION	COMBINED IFNTS PHASF I		SERIES	- 55+00	
<u>5</u> 0	CITY OF MARION	SEWER IMPROVEMENTS PHASE I	NTY	CIVIL - 10 SERIES	STA 50+00 - 55+00	
<u>5</u>		Ш С	MARION COUNTY			
<u>o</u>		24	21	г NO: 39 NAME		
		HEET	• ○ -	OF		
		22		28	в)

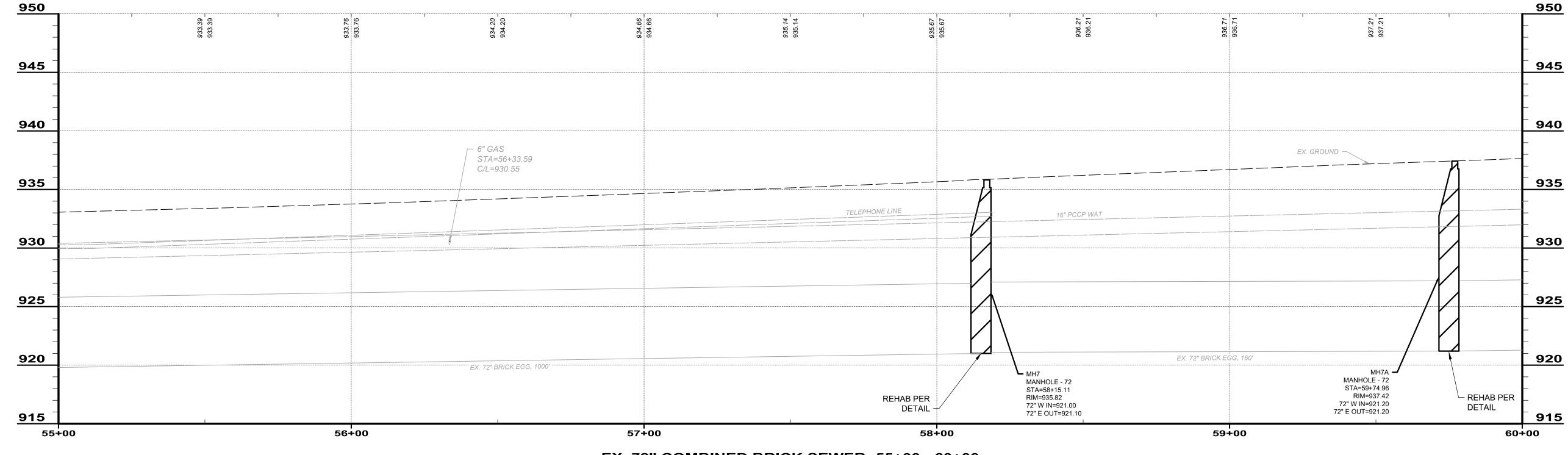
GAS	GAS	GAS		
UG	Y 			SEE SHEET 23
			55	STA 55+00
P			UTIL-OH	MATCH LINE





- 1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL
- IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.



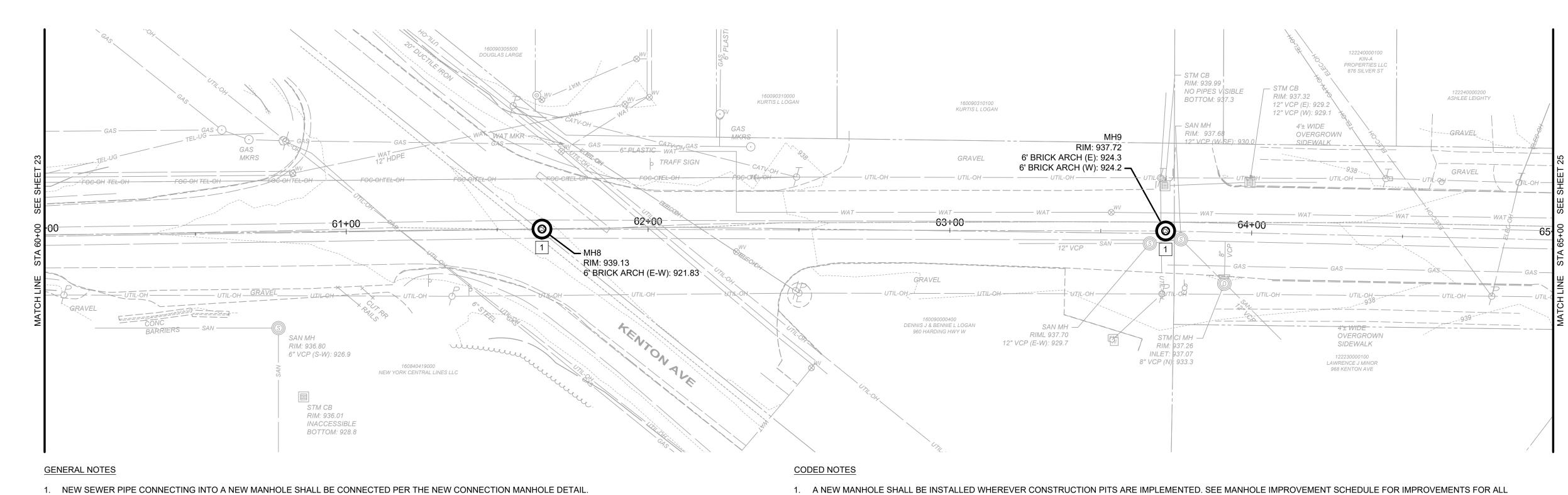


H:\2024\242139\DWG\SHEETS\C_242139 - PLAN & PROFILE.DWG - 23 STA 55+00 - 60+00 - 10/23/2024 10:37:28 AM - CORY SCOTT

1. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.

EX. 72" COMBINED BRICK SEWER: 55+00 - 60+00

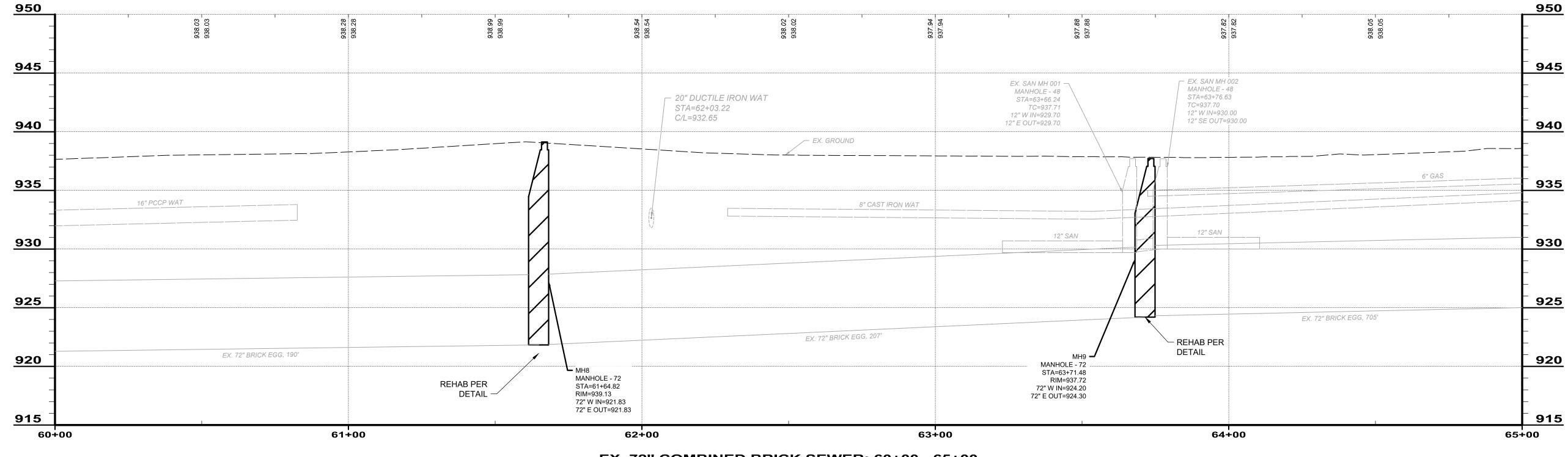
	PROFES	T MCI S S C)F TH GH 985 TE ^R (L	LIN 5	¥ 1
		(T consultants	engineers • architects • planners		A Verdantas Company	
DATE						
REVISION						
0 N						
AS NOTED		10/23/2024			CAS	BY: TJM
SCALE:		DATE:			DRAWN BY:	CHECKED E
CITY OF MARION	ROCK SWALE COMBINED	SEWER IMPROVEMENTS PHASE I			CIVIL - 10 SERIES	STA 55+00 - 60+00
		24	!2	1:	NO: 39 NAME	
	SHE	10			12 0F	
	2	3			2	8



EXISTING MANHOLES.

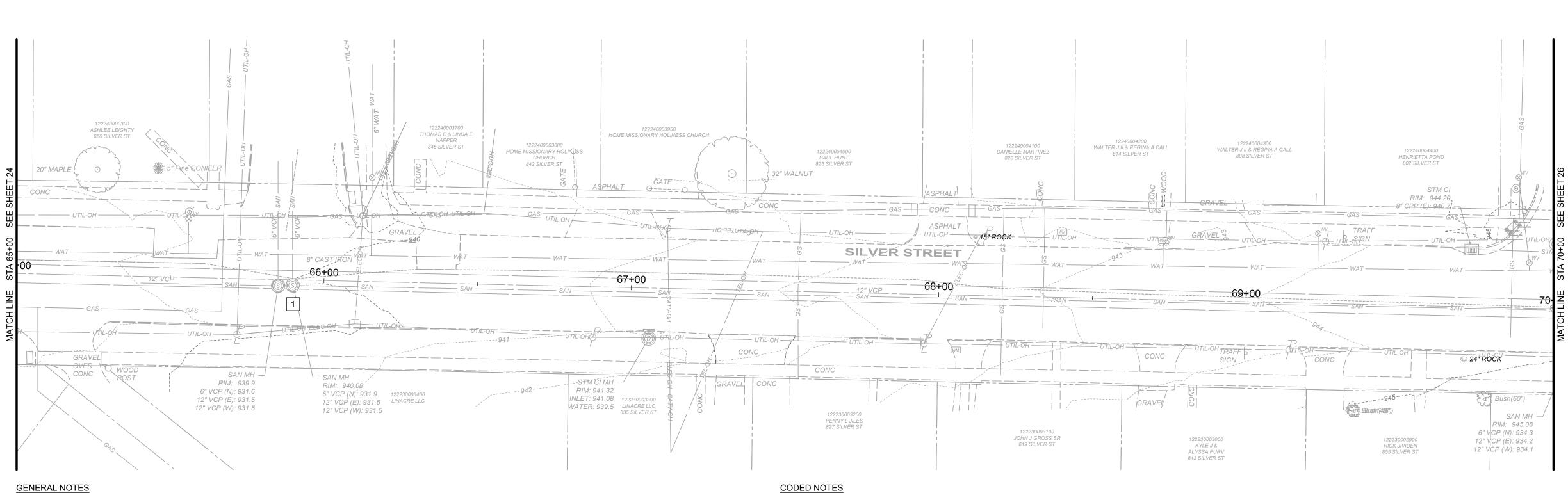
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.

MANHOLE REHAB

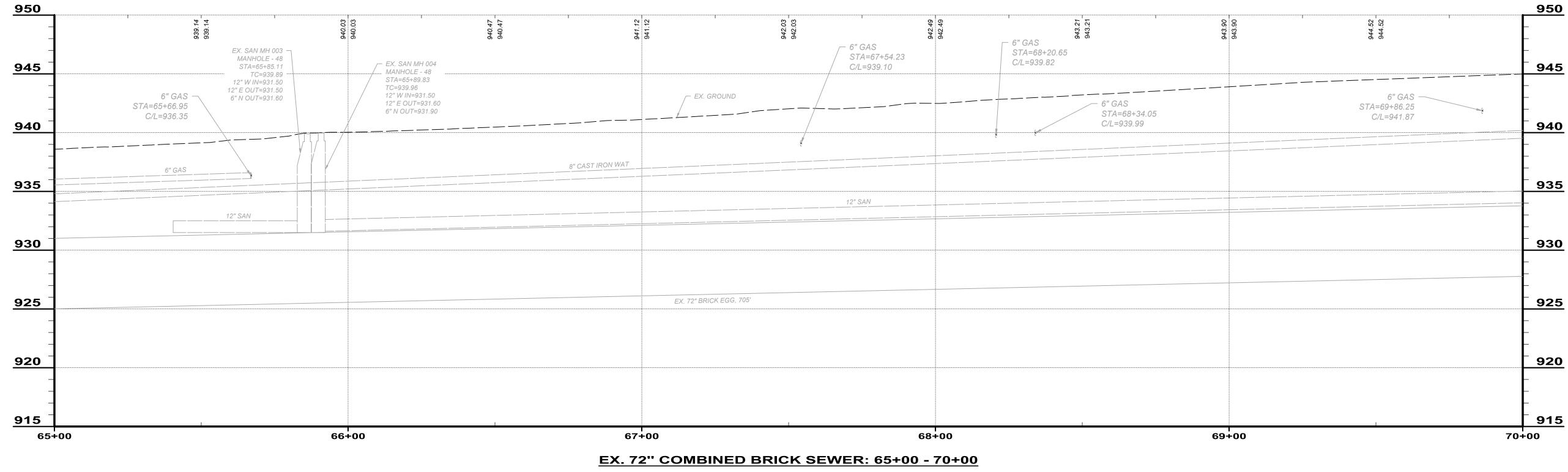


EX. 72" COMBINED BRICK SEWER: 60+00 - 65+00

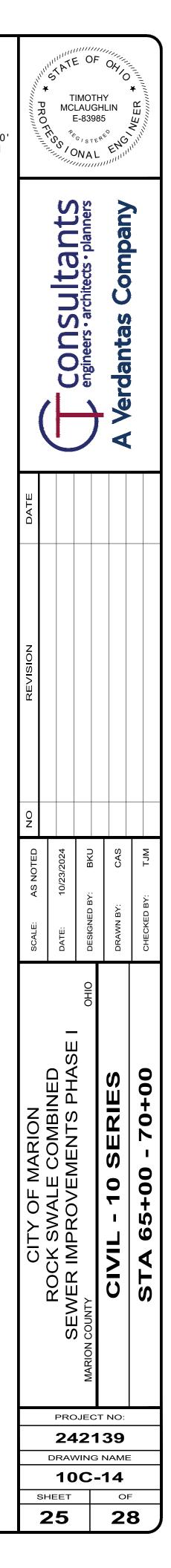
NO REVISION DATE DATE CONSULTATION REVISION		`HY کاللہ 85 وج ^و	E 0		PROFESIN				
REVISION	ů		ineers • architects • planners	(Tronsultants					
Q						DATE			
						REVISION			
						ON			
	Y: CAS		BY:	10/23/2024		AS NOTED			
SCALE: A DATE: 1 DESIGNED BY: DRAWN BY: CHECKED BY:	DRAWN B CHECKED		DESIGNED	DATE:		SCALE:			
CITY OF MARION CITY OF MARION ROCK SWALE COMBINED SEVER IMPROVEMENTS PHASE I MARION COUNTY MARION COUNTY MARION COUNTY MARION COUNTY SEVER IMPROVEMENTS PHASE I OHO CIVIL - 10 SERIES STA 60+00 - 65+00	CIVIL - 10 SERIES STA 60+00 - 65+00		CITY OF MARION ROCK SWALE COMBINED SEWER IMPROVEMENTS PHASE I NCOUNTY OHIO						
PROJECT NO: 242139 DRAWING NAME	39	13	2	24					
10C-13 SHEET OF 24 28	IAME								

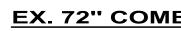


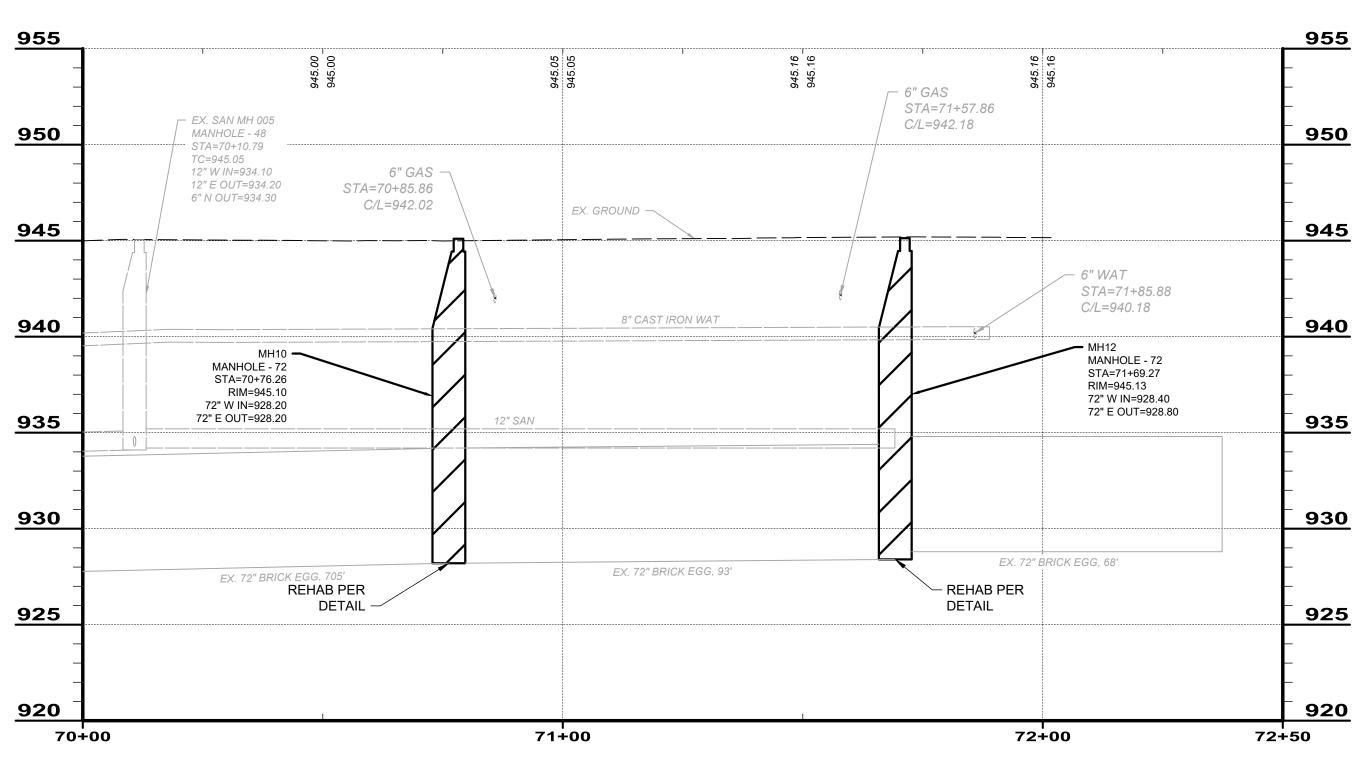
- 1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION MANHOLE DETAIL.
- 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.
- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.



1. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.

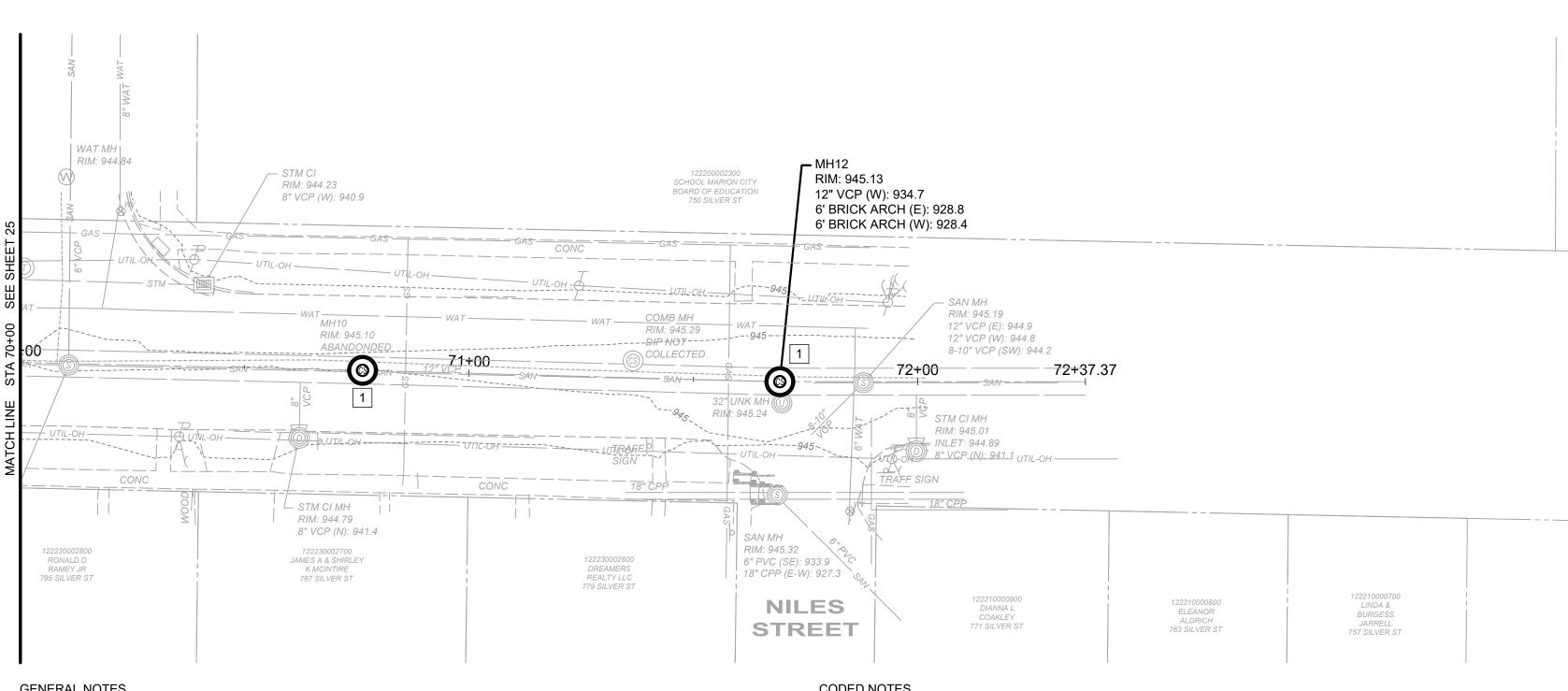






MANHOLE REHAB

- 4. CONTRACTOR SHALL REPLACE PAVEMENT TO MATCH EXISTING PAVEMENT TYPE, THICKNESS, AND BASE INCLUDING ALL BASE AND SUBBASE LAYERS.
- 3. WHERE EXISTING BRICK SEWER IS TO BE JOINED TO NEW SRPE OR EQUIVALENT PIPE, THE CONTRACTOR SHALL ADHERE TO THE TYPICAL CONCRETE COLLAR DETAIL IN THE PLANS.
- MANHOLE DETAIL. 2. SEWER PIPE FOR REPLACEMENT SECTIONS OF THE EXISTING BRICK WALL SEWER SHALL BE 70" DUROMAXX SRPE PIPE OR APPROVED EQUIVALENT.
- GENERAL NOTES 1. NEW SEWER PIPE CONNECTING INTO A NEW MANHOLE SHALL BE CONNECTED PER THE NEW CONNECTION



CODED NOTES

1. A NEW MANHOLE SHALL BE INSTALLED WHEREVER CONSTRUCTION PITS ARE IMPLEMENTED. SEE MANHOLE IMPROVEMENT SCHEDULE FOR IMPROVEMENTS FOR ALL EXISTING MANHOLES.

EX. 72" COMBINED BRICK SEWER: 70+00 - 72+50

	DBO MO	E OF	HY HLIN 85	
	f f consultants	engineers • architects • planners	A Verdantas Company	
DATE				
REVISION				
0 Z				
AS NOTED	10/23/2024	BKU	CAS	MLT
SCALE: /	DATE:	DESIGNED BY:	DRAWN BY:	снескер ву:
CITY OF MARION			CIVIL - 10 SERIES	STA 70+00 - 72+50
			t no: 39	I
	10	DC-		
	^{знеет}	+	2	

SCALE: 1" = 20'

				DEDTU		RISER/CONE	WALL	WALL MAX				REPAIR IMPR	OVEMENTS		
MANHOLE ID	STATION	RIM EL. (FT)	INVERT EL. (FT)	DEPTH (FT)	RISER/CONE MATERIAL	DIAMETER (IN)	MATERIAL	DIAMETER (IN)	IMPROVEMENT TYPE	CASTING FRAME	CONNECTIONS	STEPS	CHIMNEY	WALL	INVERT OR BENCH
MH1	1+96.40	914.06	905.70	8.36	Concrete	30	Brick	70	Replace	N/A	N/A	N/A	N/A	N/A	N/A
MH2	8+75.88	919.95	908.20	11.75	Concrete	30	Brick	70	Replace	N/A	N/A	N/A	N/A	N/A	N/A
MH3	11+79.28	922.15	908.99	13.16	Brick	30	Brick	70	Replace	N/A	N/A	N/A	N/A	N/A	N/A
MH3A (PROPOSED)	20+50	925.62	910.47	15.15	See Manhole Detail(s)	See Manhole Detail(s)	See Manhole Detail(s)	See Manhole Detail(s)	Proposed	N/A	N/A	N/A	N/A	N/A	N/A
MH4	24+77.54	924.42	911.20	13.22	Concrete	30	Brick	70	Repair	N/A	N/A	Remove	Chimney Seal per 330130.81	Polyurethane Wall Injection, Structural Lining per	Structural Lining per 330130.81
MH4A	36+39.51	926.06	912.80	13.26	Concrete	30	Brick	70	Repair	N/A	N/A	Remove	Chimney Seal per 330130.81	Polyurethane Wall Injection, Structural Lining per	Structural Lining per 330130.81
MH5	38+38.65	926.29	913.20	13.09	Concrete	30	Brick	70	Repair	N/A	N/A	Remove	Chimney Seal per 330130.81		Structural Lining per 330130.81
MH6	48+14.90	930.71	917.10	13.61	Brick	30	Brick	70	Replace	N/A	N/A	N/A	N/A	N/A	N/A
MH7	58+15.11	935.82	921.00	14.82	Brick	30	Brick	75	Repair	N/A	Grout around existing pipe (1) inlets prior to lining	Remove	Chimney Seal per 330130.81	Structural Lining per 330130.81	Structural Lining per 330130.81
MH7A	59+74.96	935.82	921.10	14.72	Concrete	30	Brick	75	Repair	Expose/Adjust to Grade	N/A	Remove	Chimney Seal per 330130.81	Structural Lining per 330130.81	Structural Lining per 330130.81
MH8	61+64.82	939.13	921.83	17.3	Brick	30	Brick	80	Repair	N/A	N/A	Remove	Chimney Seal per 330130.81	Structural Lining per 330130.81	Structural Lining per 330130.81
MH9	63+71.48	937.72	924.20	13.52	Brick	30	Brick	75	Repair	N/A	Grout around existing pipe (2) inlets prior to lining	Remove	Chimney Seal per 330130.81	Structural Lining per 330130.81	Structural Lining per 330130.81
MH10	70+79.26	945.10	928.20	16.90	Brick	30	Brick	75	Repair	N/A	Grout around existing pipe (1) inlets prior to lining	Remove	Chimney Seal per 330130.81	Structural Lining per 330130.81	Structural Lining per 330130.81
MH12	71+69.27	945.13	928.80	16.33	Concrete	30	Brick	75	Repair	N/A	N/A	Remove	Chimney Seal per 330130.81	Structural Lining per 330130.81	Structural Lining per 330130.81

GENERAL NOTES:

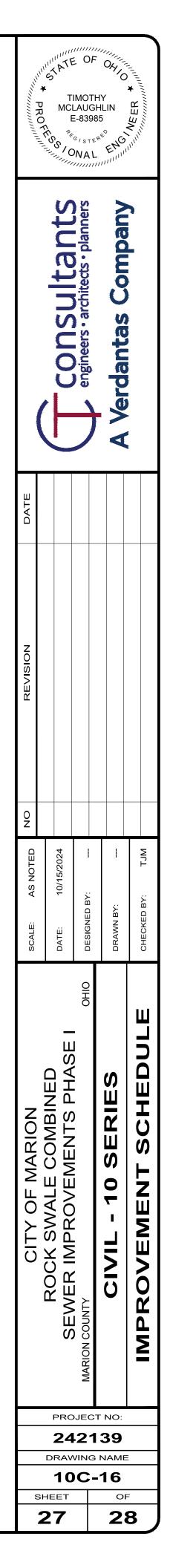
1. THE CONTRACTOR SHALL CONFIRM ALL DEPTHS, MANHOLE DIAMETERS, PIPE INLETS, EXISTING MANHOLE MATERIALS, AND GENERAL CONDITION OF EACH MANHOLE PRIOR TO INSTALLATION OF ANY REPAIRS OR REPLACEMENT OF ANY STRUCTURES. ANY DEVIATIONS OR CONDITIONS ENCOUNTERED DURING THE CONTRACTORS INSPECTION OF THE STRUCTURES THAT LIMITS THE ABILITY TO ADEQUATELY INSTALL THE NECESSARY IMPROVEMENTS SHALL REQUIRED NOTIFICATION TO THE ENGINEER IMMEDIATELY UPON DISCOVERY.

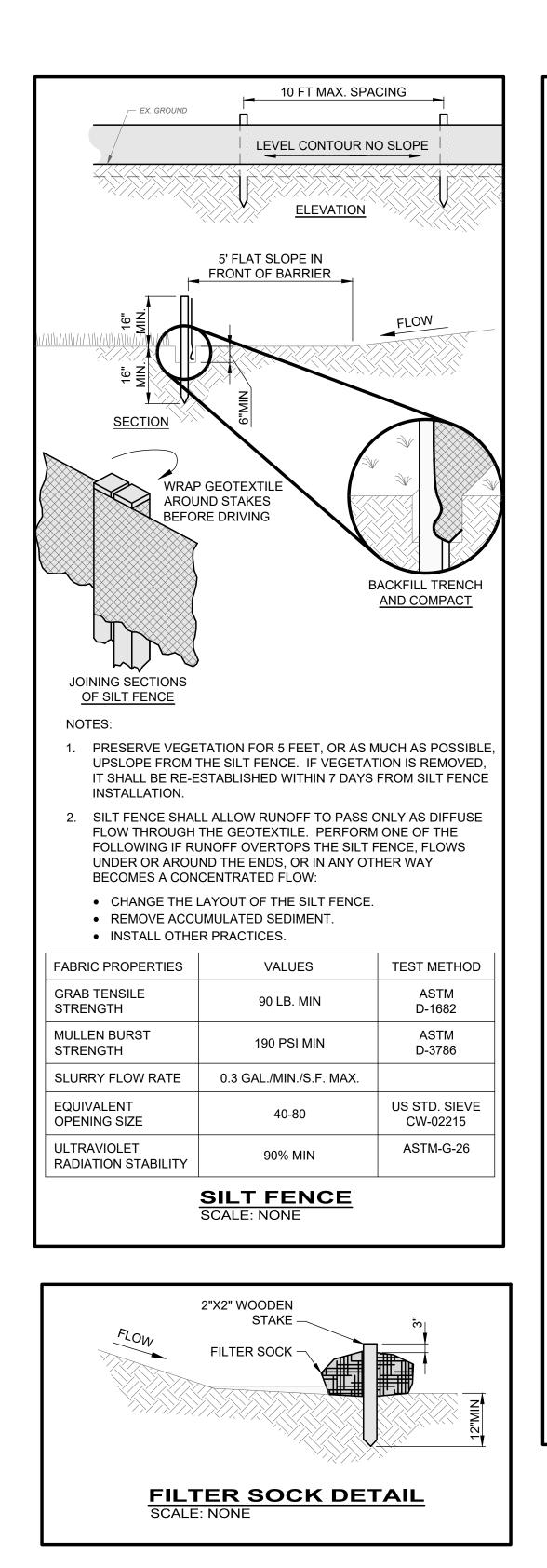
2. REPLACEMENT MANHOLES SHALL EITHER BE PRECAST CONCRETE STRUCTURES (SEE STANDARD TYPE "E" ECCENTRIC MANHOLE TEE WITH HDPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE TEE WITH ADPE PIPE RISER AND CONCRETE COLLAR THAT INCLUDED AN INTEGRATED GRATE AND FRAME (SEE MANHOLE

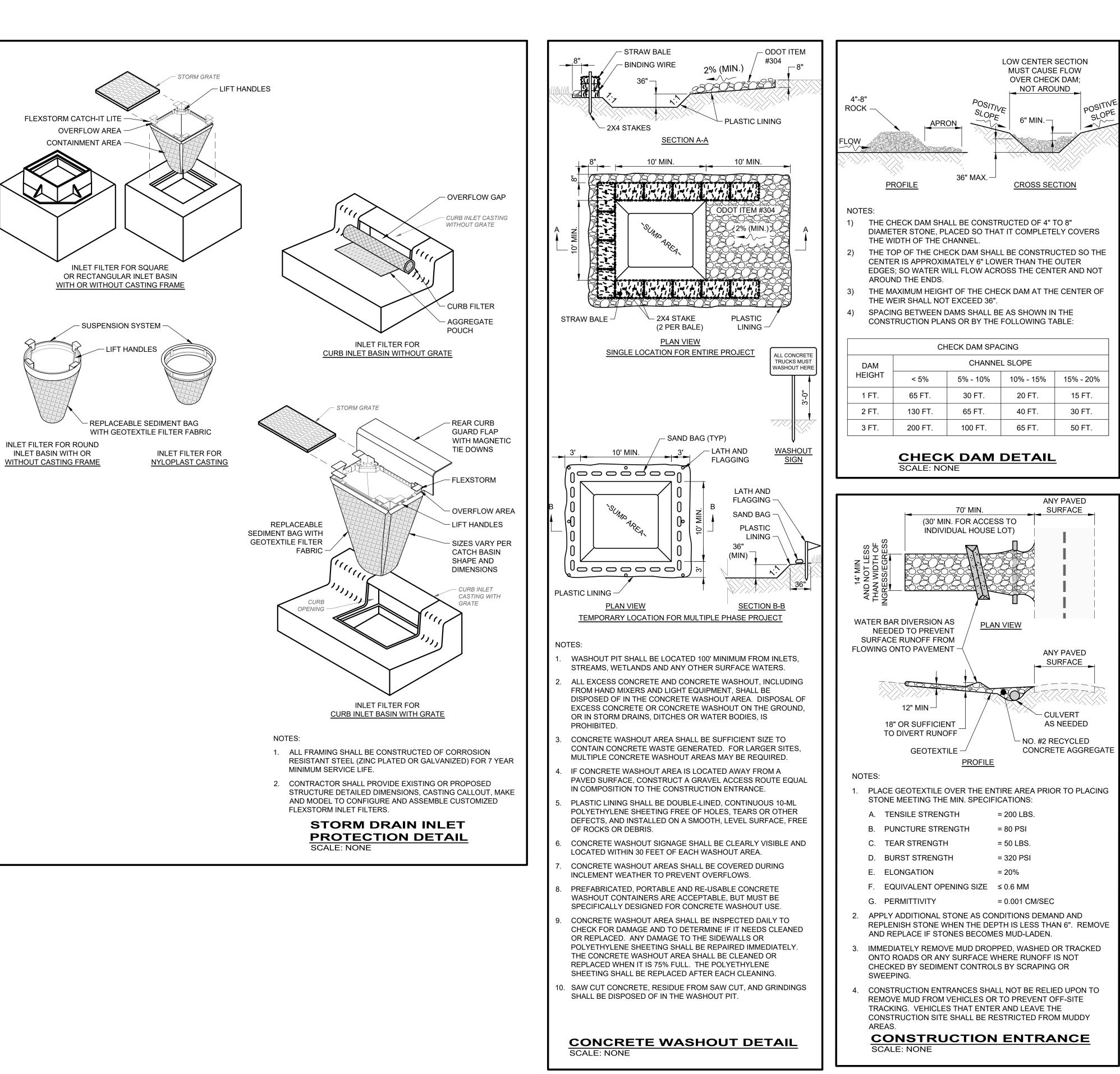
3. ANY MATERIALS OR APPLICATION METHODS NOT CALLED OUT IN PLAN AND PROFILE OR IN CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH APPLICABLE DIVISION 31 AND 33 SECTIONS AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

4. CONNECTIONS: ALL CONNECTIONS THAT ARE NOT INTEGRATED WITHIN THE 72" EGG SEWER SHALL BE CLEANED TO REMOVE LOSE BRICKS, MORTAR, DEBRIS, OR OTHER MATERIALS THAT MAY COMPROMISE SEALING THE CONNECTION. ONCE PROPERLY CLEANED, THE CONTRACTOR SHALL SEAL THE CONNECTIONS BY INSTALLING NEW BRICKS WITH MORTAR (IN AREAS WHERE MISSING) AND APPLYING PATCHING MIX FOR STRUCTURAL REHABILITATION AND SEALING IN ACCORDANCE WITH 330130.81.

5. STRUCTURAL INJECTION: WHERE NOTED UNDER REPAIR IMPROVEMENTS - WALL, THE CONTRACTOR SHALL CORE DRILL HOLES AROUND THE PERIMETER OF THE STRUCTURE TO INJECT A STRUCTURAL POLYURETHANE FOAM THAT WHEN CURED WITH STABILIZE THE AREA AROUND THE EXISTING STRUCTURE AND AREAS WHERE THERE ARE MISSING MORTAR BETWEEN BRICK WALLS. ALTERNATIVE MATERIALS MAY BE USED BUT SHALL BE MEET EQUAL OR GREATER STRUCTURAL AND MATERIAL PROPERTIES AS DETAILED IN SECTION 330130.63.







	DROFESTI	MCI E ^{\$} ^{\$} C	IMO ⁻ LAU(E-839 ^G /s1 NA	CH GH 985 ε ^{ρ(} L		NEER NEER	NUMMINI,
		CONSUITANTS	engineers • architects • planners		A Verdantas Company		
DATE							
REVISION							
ON							
AS NOTED		9/26/2024	ED BY:		ВΥ: —		ED BY: TJM
SCALE:		DATE:	DESIGNED BY:		DRAWN BY:		CHECKED BY:
CITY OF MARION	ROCK SWALE COMBINED	SEWER IMPROVEMENTS PHASE I			EROSION CONTROL - 20 SERIES		ERUSION CONTROL DETAILS
0	RC	SEV	MARION COUNTY		ERO		して
	F	•RC 24	MARION	ст 1:	NO: 39		
	F	PRC 24 RAV		ст 1: Э М	NO:	 ≡	

"ATE OF