ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

SOUTH RIVER ROAD WATERLINE EXTENSION PHASE 2

HARPERSFIELD TOWNSHIP

AUGUST 2025

OHIO 811 DESIGN SERIAL NUMBER & UTILITY LIST:

XX - STATE ROUTE 534

OHIO UTILITY PROTECTION SERVICE:
106 WEST RYEN, ROOM 427
YOUNGSTOWN, 44051
(800) 362-2764

CLEVELAND ELECTRIC ILLUMINATING CO:
2210 SOUTH RIDGE ROAD
ASHTABULA, OHIO 44004

THE EAST OHIO GAS COMPANY:
1010 WEST 30TH STREET
ASHTABULA, OHIO 44004
(440) 992-5100

ALL-TEL:
360 HIGHLAND ROAD
MACEDONIA, OHIO 44067
(800) 782-6206

SPRINT:
PO BOX 3555
MANSFIELD, OHIO 44907
(800) 786-6272

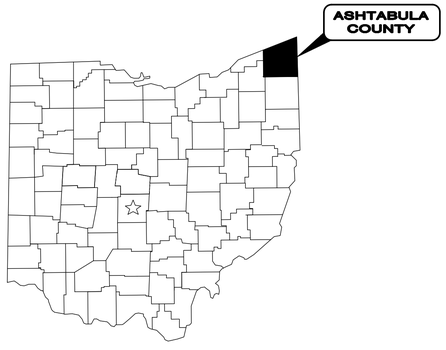
ENVIRONMENTAL SERVICES:
36 W. WALNUT STREET
JEFFERSON, OHIO 44047
(440) 576-3722 PHONE
(440) 576-3781 FAX

TCI:
2904 STATE ROAD
ASHTABULA, OHIO 44004
(440) 998-2148

OHIO811.org Before You Dig

1. 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.

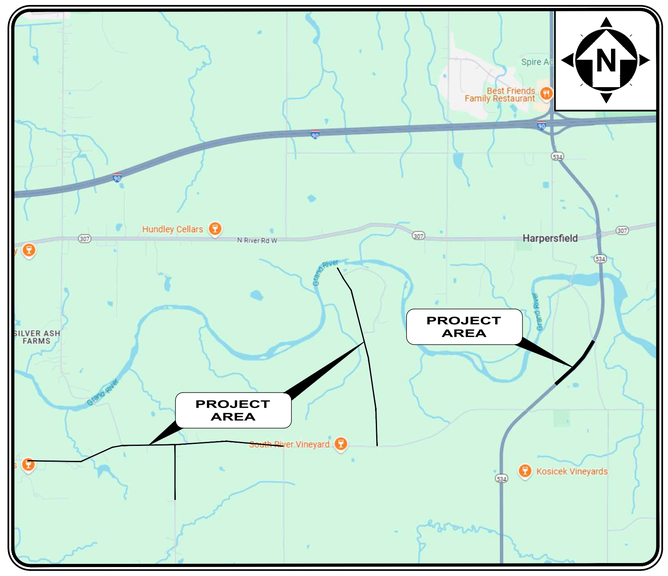
2. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.



OHIO Utilities Protection SERVICE
Call Before You Dig
1-800-362-2764
CALL TWO WORKING DAYS BEFORE YOU DIG
(NON MEMBERS MUST BE CALLED DIRECTLY)

NOTE:

THE SURVEY SHOWN ON THESE PLANS WAS OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR ANY OTHER PURPOSE.



LOCATION MAP
NOT TO SCALE

verdantas

ENGINEER'S PROJECT No. 241222

ASHTABULA COUNTY APPROVALS:

COUNTY COMMISIONER	KATHRYN L. WHITTINGTON	DATE
COUNTY COMMISIONER	CASEY R. KOZLOWSKI	6-11-24 DATE
COUNTY COMMISIONER	J.P. DUCRO IV	6-11-24 DATE
DIRECTOR ACES	DOUG STARKEY	6-10-2024 DATE

ENGINEER/ARCHITECT:

VERDANTAS
8150 STERLING COURT
MENTOR, OH 44060

(440) 951-9000 PHONE
(440) 951-7487 FAX

GEORGIA CONWAY — P.E. No. E-85401 — 6/3/2024 DATE

STATE OF OHIO · GEORGIA CONWAY · E-85401 · REGISTERED PROFESSIONAL ENGINEER

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

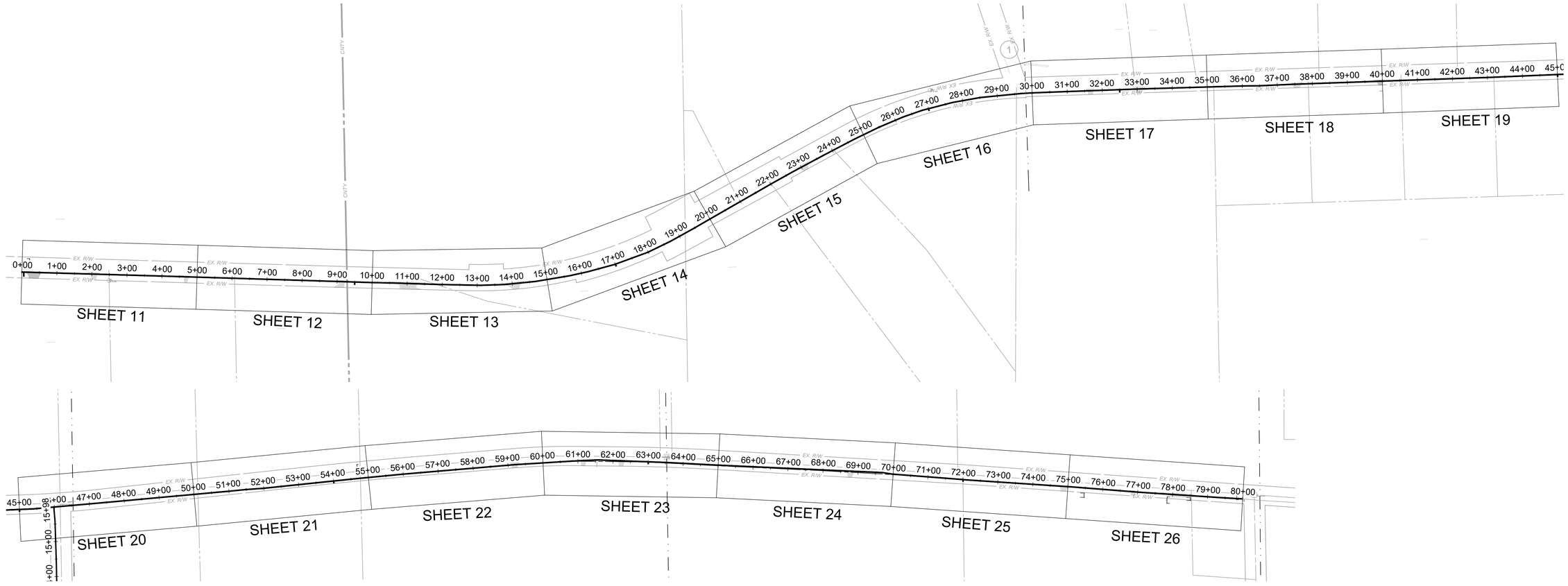
NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY — HARPERSFILED, OHIO
GENERAL - 00 SERIES
COVER SHEET

PROJECT NO. 241222
DISCIPLINE: CIVIL
SHEET NAME: 00G-01
SHEET 1 OF 43

H:\2024\241222\DWG\SHEETS_241222_COVER SHEET.DWG - 1 COVER SHEET - 6/3/2025 3:02:29 PM - CORY SCOTT



SOUTH RIVER ROAD SHEET INDEX

SHEET NUMBER	SHEET NAME	SHEET TITLE
11	PP-01	SOUTH RIVER ROAD STA. 0+00 TO STA. 5+00
12	PP-02	SOUTH RIVER ROAD STA. 5+00 TO STA. 10+00
13	PP-03	SOUTH RIVER ROAD STA. 10+00 TO STA. 15+00
14	PP-04	SOUTH RIVER ROAD STA. 15+00 TO STA. 20+00
15	PP-05	SOUTH RIVER ROAD STA. 20+00 TO STA. 25+00
16	PP-06	SOUTH RIVER ROAD STA. 25+00 TO STA. 30+00
17	PP-07	SOUTH RIVER ROAD STA. 30+00 TO STA. 35+00
18	PP-08	SOUTH RIVER ROAD STA. 35+00 TO STA. 40+00
19	PP-09	SOUTH RIVER ROAD STA. 40+00 TO STA. 45+25
20	PP-10	SOUTH RIVER ROAD STA. 45+00 TO STA. 50+00
21	PP-11	SOUTH RIVER ROAD STA. 50+00 TO STA. 55+00
22	PP-12	SOUTH RIVER ROAD STA. 55+00 TO STA. 60+00
23	PP-13	SOUTH RIVER ROAD STA. 60+00 TO STA. 65+00
24	PP-14	SOUTH RIVER ROAD STA. 65+00 TO STA. 70+00
25	PP-15	SOUTH RIVER ROAD STA. 70+00 TO STA. 75+00
26	PP-16	SOUTH RIVER ROAD STA. 75+00 TO END

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

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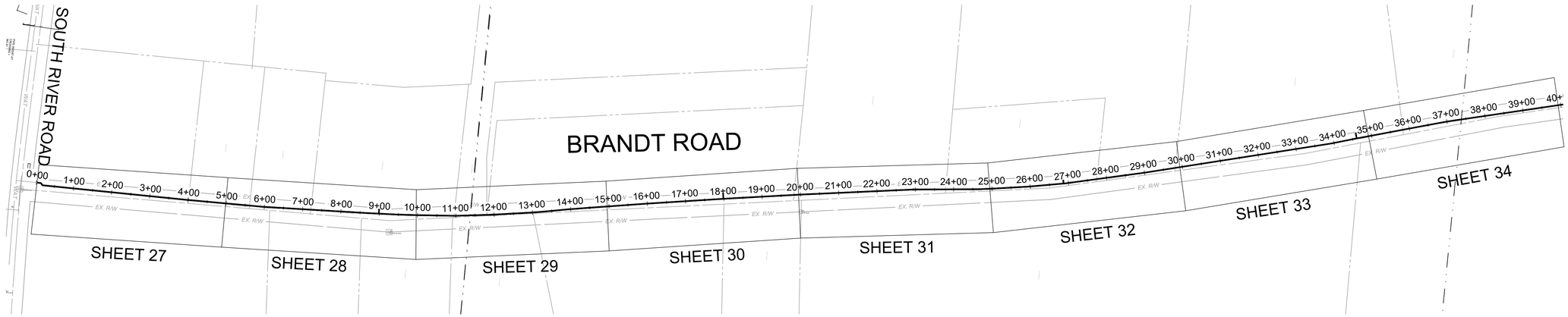
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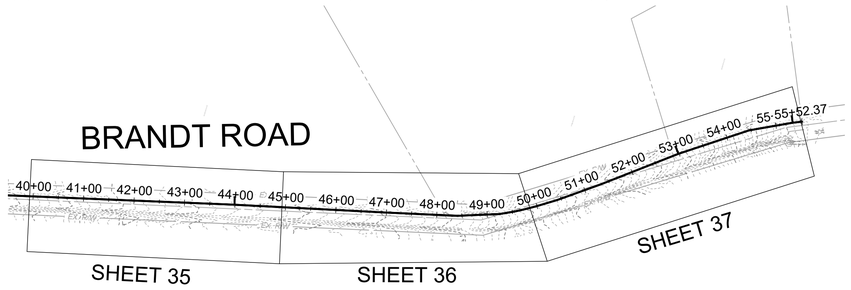
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

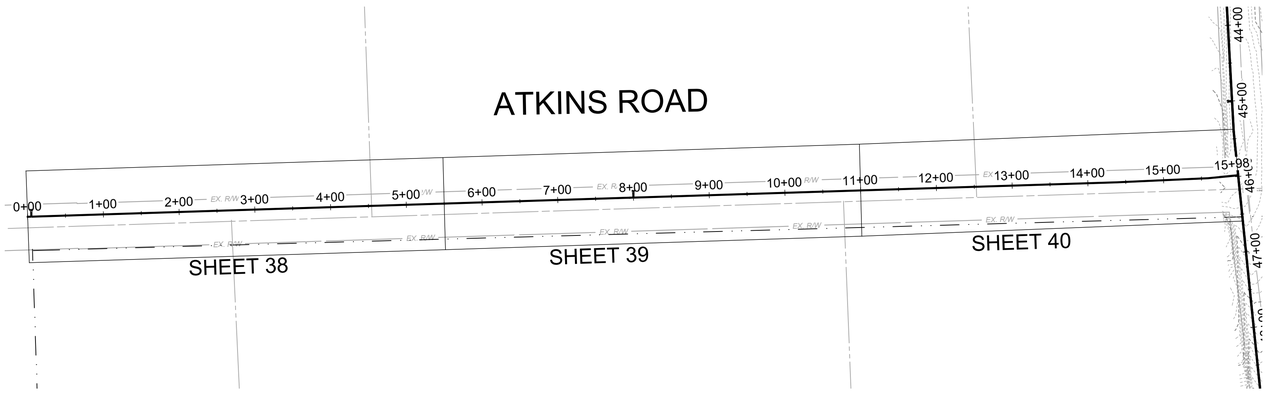
GENERAL - 00 SERIES

SOUTH RIVER ROAD SHEET INDEX

PROJECT NO. 241222
DISCIPLINE: CIVIL
SHEET NAME: 00G-02
SHEET 2 OF 43







BRANDT ROAD AND ATKINS ROAD SHEET INDEX

SHEET NUMBER	SHEET NAME	SHEET TITLE
27	PP-17	BRANDT ROAD STA. 0+00 TO STA. 5+00
28	PP-18	BRANDT ROAD STA 5+00 TO STA. 10+00
29	PP-19	BRANDT ROAD STA. 10+00 TO STA. 15+00
30	PP-20	BRANDT ROAD STA. 15+00 TO STA. 20+00
31	PP-21	BRANDT ROAD STA. 20+00 TO STA. 25+00
32	PP-22	BRANDT ROAD STA. 25+00 TO STA. 30+00
33	PP-23	BRANDT ROAD STA. 30+00 TO STA. 35+00
34	PP-24	BRANDT ROAD STA. 35+00 TO STA. 40+00
35	PP-25	BRANDT ROAD STA. 40+00 TO STA. 45+00
36	PP-26	BRANDT ROAD STA. 45+00 TO STA. 50+00
37	PP-27	BRANT ROAD STA. 50+00 TO END
38	PP-28	ATKINS ROAD STA. 0+00 TO STA. 5+50
39	PP-29	ATKINS ROAD STA. 5+50 TO STA. 11+00
40	PP-30	ATKINS ROAD STA. 11+00 TO END

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

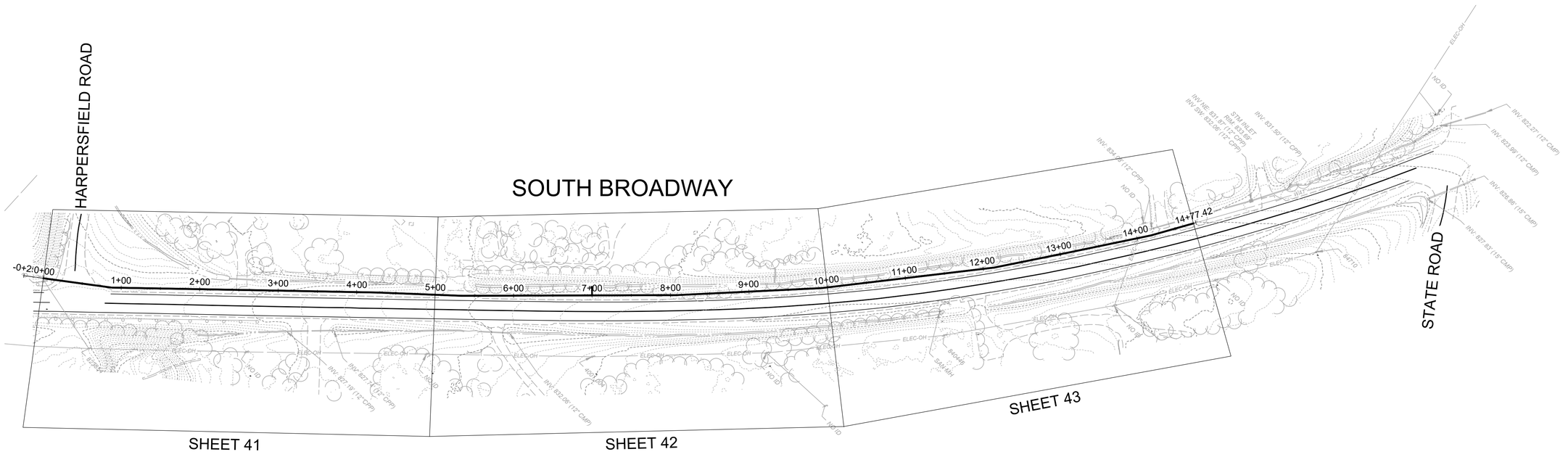
verdantas
8150 STERLING COURT
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ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
GENERAL - 00 SERIES
BRANDT ROAD AND ATKINS ROAD SHEET INDEX

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
00G-03
SHEET 3 OF 43



SOUTH BROADWAY SHEET INDEX		
SHEET NUMBER	SHEET NAME	SHEET TITLE
41	PP-31	SOUTH BROADWAY STA. 0+00 TO STA. 5+00
42	PP-32	SOUTH BROADWAY STA. 5+00 TO STA. 10+00
43	PP-33	SOUTH BROADWAY STA. 10+00 TO END

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

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ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY **HARPERSFILED, OHIO**

GENERAL - 00 SERIES

SOUTH BROADWAY SHEET INDEX

PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
00G-04

SHEET 4 OF 43

EXISTING LINETYPES

FENCE, GENERAL	X X X X X
FENCE, BARBED WIRE	X X X X X X X
FENCE, CHAIN LINK	O O O O O
FENCE, DECORATIVE	
FENCE, ELECTRIC	X E X E
FENCE, VINYL	
FENCE, WOOD	
FENCE, WOVEN WIRE	X X X X
CABLE RAIL	
GUARDRAIL	
HANDRAIL	
CABLE T.V., ABANDONED	CATV-ABAN CATV-ABAN
CABLE T.V.	CATV
CABLE T.V., OH	CATV-OH
CABLE T.V., UG	CATV-UG
CABLE T.V., SERVICE	CATV CATV
CABLE T.V., SERVICE OH	CATV-OH CATV-OH
CABLE T.V., SERVICE UG	CATV-UG CATV-UG
COMMUNICATION, ABANDONED	COMB-ABAN COMB-ABAN
COMMUNICATION	COMM
COMMUNICATION, OH	COMM-OH
COMMUNICATION, UG	COMM-UG
COMMUNICATION, SERVICE	COMM COMM
COMMUNICATION, SERVICE OH	COMM-OH COMM-OH
COMMUNICATION, SERVICE, UG	COMM-UG COMM-UG
ELECTRIC, ABANDONED	ELEC-ABAN ELEC-ABAN
ELECTRIC, DUCT BANK	
ELECTRIC	ELEC
ELECTRIC, OH	ELEC-OH
ELECTRIC, UG	ELEC-UG
ELECTRIC, SERVICE	ELEC ELEC
ELECTRIC, SERVICE OH	ELEC-OH ELEC-OH
ELECTRIC, SERVICE, UG	ELEC-UG ELEC-UG
FIBER OPTIC, ABANDONED	FOC-ABAN FOC-ABAN
FIBER OPTIC, DUCT BANK	
FIBER OPTIC	FOC
FIBER OPTIC, OH	FOC-OH
FIBER OPTIC, UG	FOC-UG
FIBER OPTIC, SERVICE	FOC FOC
FIBER OPTIC, SERVICE OH	FOC-OH FOC-OH
FIBER OPTIC, SERVICE, UG	FOC-UG FOC-UG
GAS, ABANDONED	GAS-ABAN GAS-ABAN
GAS	GAS
GAS, SERVICE	GS GS GS
SANITARY, ABANDONED	SAN-ABAN SAN-ABAN
SANITARY FORCE MAIN	SAN
SANITARY SEWER	SAN
SANITARY LEACH LINE	LCH
SANITARY SEWER, DOUBLE	
SANITARY SEWER, SERVICE	SS SS
STORM SEWER, ABANDONED	STM-ABAN STM-ABAN
STORM CULVERT	
STORM SEWER	STM
STORM SEWER, DOUBLE	
STORM, ROOF DRAIN	RD RD RD
STORM, UNDERDRAIN	UD UD UD
TELEPHONE, ABANDONED	TEL-ABAN TEL-ABAN
TELEPHONE	TEL
TELEPHONE, OH	TEL-OH
TELEPHONE, UG	TEL-UG
TELEPHONE, SERVICE	TEL TEL
TELEPHONE, SERVICE OH	TEL-OH TEL-OH
TELEPHONE, SERVICE, UG	TEL-UG TEL-UG
TRAFFIC, ABANDONED	TRA-ABAN TRA-ABAN
TRAFFIC LINE	TRA TRA
TRAFFIC LINE, OH	TRA-OH
TRAFFIC LINE, UG	TRA-UG
TRAFFIC, LOOP WIRE	
TRAFFIC, SPAN WIRE	TRA-SP TRA-SP TRA-SP
WATER LINE, ABANDONED	WAT-ABAN WAT-ABAN
WATER LINE	WAT
WATER LINE, DOUBLE	
WATER LINE, SERVICE	WS WS WS

EXISTING LINETYPES

BRUSH LINE	
BUSH LINE	
TREE LINE	
MAJOR CONTOUR	1005
MINOR CONTOUR	1001
WATER EDGE	
COUNTY LINE	CNTY CNTY
CORPORATION LINE	CORP CORP
ANNEXATION AREA	ANNX ANNX
SECTION LINE	SECT SECT
TOWNSHIP LINE	TOWN TOWN
FLOOD PLAIN LIMIT	FLOOD
WETLAND LIMIT	WTLND
FARM LINE	FARM
BOUNDARY LINE	
PROPERTY LINE	EX. P/L
LEASE LINE	
RIGHT-OF-WAY LINE	EX. R/W
RIGHT-OF-WAY C/L	
SURVEY STATIONING	1+00 2+00

PROPOSED LINETYPES

FENCE, GENERAL	X X X X X
FENCE, BARBED WIRE	X X X X X X X
FENCE, CHAIN LINK	O O O O O
FENCE, DECORATIVE	
FENCE, ELECTRIC	X E X E
FENCE, VINYL	
FENCE, WOOD	
FENCE, WOVEN WIRE	X X X X
CABLE RAIL	
GUARDRAIL	
HANDRAIL	
ELECTRIC, DUCT BANK	
ELECTRIC, OH	ELEC-OH
ELECTRIC, UG	ELEC-UG
ELECTRIC, SERVICE OH	
ELECTRIC, SERVICE, UG	
GAS	GAS
GAS, SERVICE	GS GS GS
SANITARY FORCE MAIN	FM
SANITARY SEWER	SAN
SANITARY LEACH LINE	
SANITARY SEWER, DOUBLE	
SANITARY SEWER, SERVICE	SS SS
STORM SEWER	STM
STORM SEWER, DOUBLE	
STORM, ROOF DRAIN	
STORM, UNDERDRAIN	UD UD UD
WATER LINE	WAT
WATER LINE, DOUBLE	
WATER LINE, SERVICE	WS WS WS
BUSH LINE	
TREE LINE	
MAJOR CONTOUR	1005
MINOR CONTOUR	1001
WATER EDGE	
BOUNDARY LINE	
PROPERTY LINE	
EASEMENT LINE	
LEASE LINE	
RIGHT-OF-WAY LINE	
RIGHT-OF-WAY C/L	
PHASE LINE	
TEMPORARY RIGHT-OF-WAY	
WORK LIMIT	
SETBACK	
SURVEY STATIONING	1+00 2+00
CONSTRUCTION FENCE	CF CF
SILT FENCE	SF SF
FILTER FENCE	FF FF
FILTER SOCK	FS FS

EXISTING SYMBOLS

SANITARY MANHOLE	S
SANITARY CLEANOUT	
SANITARY LINE CAP	
SANITARY LINE PAINT MARKING	
SANITARY STRUCTURE NUMBER	00
SANITARY VENT PIPE	V
STORM MANHOLE (SOLID LID)	D
STORM MANHOLE (OPEN GRATE)	
CURB INLET	
CURB INLET (DOUBLE)	
CATCH BASIN	
CATCH BASIN (ROUND LID)	
CATCH BASIN (DOME)	
CATCH BASIN (SIDE INLET)	
DRAIN	
DOWNSPOUT	
STORM CLEANOUT	
STORM LINE CAP	
STORM ENDWALL	
STORM HEADWALL	
STORM LINE PAINT MARKING	
STORM STRUCTURE NUMBER	00
ROCK CHANNEL PROTECTION	
SURFACE DRAINAGE FLOW	
STORM FLOOD ROUTING ARROW	
FIRE HYDRANT	
WATER SIAMESE CONNECTION	
WATER VALVE	
WATER VALVE BOX	
WATER METER	WM
WATER METER PIT	WMP
WATER LINE REDUCER	
WATER LINE CAP	
WATER LINE PLUG	
WATER LINE PAINT MARKING	
POST INDICATOR VALVE	PIV
WATER MANHOLE	W
WATER FLUSHING ASSEMBLY	
WATER FIXTURE	
WATER FITTING (TEE)	
WATER FITTING (CROSS)	
WATER FITTING (45° WYE)	
WATER FITTING (11.25°)	
WATER FITTING (22.50°)	
WATER FITTING (45°)	
WATER FITTING (90°)	
IRRIGATION SPRINKLER HEAD	
IRRIGATION CONTROL BOX	
IRRIGATION BOX	
STEAM MANHOLE	SM
STEAM VENT	V
COMBINED SEWER MANHOLE	CM
GAS LIGHT POST (YARD)	
GAS MANHOLE	G
GAS VALVE	
GAS VALVE BOX	
GAS	
GAS METER	GM
GAS REGULATOR	GR
GAS VENT PIPE	V
GAS LINE PAINT MARKING	
GAS LINE FIXTURE	
GAS	
ELECTRIC LIGHT POST (YARD)	
ELECTRIC MANHOLE	E
ELECTRIC PULL BOX	PB
ELECTRIC CONTROL BOX	ETL
ELECTRIC JUNCTION BOX	JCT
ELECTRIC VAULT BOX	VLT
ELECTRIC METER	EM
ELECTRIC PEDESTAL	EP
ELECTRIC RISER BOX	
ELECTRIC TRANSFORMER	TR
ELECTRIC HVAC UNIT	AC
ELECTRIC GROUND LIGHT	
ELECTRIC LINE PAINT MARKING	
CABLE TV MANHOLE	C
CABLE TV PEDESTAL	CP
CABLE TV PAINT MARKING	
TELEPHONE MANHOLE	T
TELEPHONE PULL BOX	
TELEPHONE PEDESTAL	TP
TELEPHONE RISER BOX	
TELEPHONE LINE PAINT MARKING	

EXISTING SYMBOLS

TELEPHONE PAY PHONE	
FIBER OPTIC CABLE MANHOLE	
FIBER OPTIC CABLE PAINT MARKING	
TRAFFIC CONTROL MANHOLE	
TRAFFIC CONTROL BOX	TC
TRAFFIC CONTROL PAINT MARKING	
TRAFFIC PULL BOX	
TRAFFIC SIGNAL PEDESTAL	
UNKNOWN, PULL BOX	
UNKNOWN, CLEANOUT	
UNKNOWN, MANHOLE	U
UNKNOWN, VALVE	
MONITORING WELL	MW
TEST WELL	TW
WATER WELL	WW
SOIL BORING	
SWAMP	
POLE, ELECTRIC	P
POLE, TELEPHONE	T
POLE, LIGHT	L
POLE, LIGHT, DECORATIVE	
POLE, LIGHT-OVERHEAD	
POLE, CABLE TV	C
POLE, UTILITY	U
POLE, GENERAL	
POLE, GUY	G
POLE, BRACE	B
POLE, ELECTRIC/TELEPHONE	P T
POLE, ELECTRIC W/LIGHT	P L
POLE, ELECTRIC/CABLE TV	P C
POLE, ELECTRIC/TELEPHONE/LIGHT	P T L
POLE, ELECTRIC/TELEPHONE/CABLE TV	P T C
POLE, ELEC./TELE./LIGHT/CABLE TV	P T L C
POLE, TELEPHONE/LIGHT	T L
POLE, TELEPHONE/CABLE TV	T C
POLE, TELEPHONE/LIGHT/CABLE TV	T L C
POLE, CABLE TV W/LIGHT	C L
POLE, GUY WIRE	
SIGN	
SIGN, DOUBLE SIDED	
SIGN, DUAL POST	
SIGN, RAILROAD	
POST	
BOLLARD	
DELINEATOR POST	
PARKING BUMPER BLOCK	
HANDICAP PARKING SYMBOL	
HANDICAP PARKING SYMBOL	
HANDICAP DETECTABLE WARNING	
MAILBOX	MB
PAPERBOX	PB
PARKING METER	P
GRAVE HEADSTONE	
EX. BARBEQUE GRILL	BBQ
FUEL PUMP	FUEL
FLAG POLE	
RAISED PAVEMENT MARKER	
GUARDRAIL, CENTER POST	
GUARDRAIL, TERMINAL POST	
GUARDRAIL, BOTTOM POST	
GUARDRAIL, TOP POST	
FENCE POST	
PICNIC TABLE	
BENCH	
DECIDUOUS TREE	
EVERGREEN TREE	
STUMP	
BUSH	
IRON PIN FOUND	
SOLID IRON PIN FOUND	
IRON PIPE FOUND	
DRILL HOLE FOUND	
CHISELED "X" FOUND	
MONUMENT BOX FOUND	M
MONUMENT CONCRETE FOUND	
MONUMENT RIGHT-OF-WAY FOUND	RW
PK NAIL FOUND	
MAG NAIL FOUND	

EXISTING SYMBOLS

SPIKE FOUND	
HUB FOUND	
AXLE FOUND	
WOOD POST FOUND	
CORNER STONE FOUND	
AERIAL TARGET FOUND	AER
GPS CONTROL FOUND	GPS
BENCHMARK FOUND	

PROPOSED SYMBOLS

SANITARY MANHOLE	S
SANITARY MANHOLE, ADJUST	
SANITARY CLEANOUT	
SANITARY LINE CAP	
SANITARY STRUCTURE NUMBER	00
SANITARY VENT PIPE	V
STORM MANHOLE (SOLID GRATE)	D
STORM MANHOLE (OPEN GRATE)	
STORM MANHOLE, ADJUST	
CURB INLET	
CURB INLET (DOUBLE)	
CURB INLET, ADJUST	
CURB INLET (DOUBLE), ADJUST	
CATCH BASIN	
CATCH BASIN (SOLID)	
CATCH BASIN, ADJUST	
CATCH BASIN (SIDE INLET)	
DRAIN	
DOWNSPOUT	
STORM CLEANOUT	
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	
WATER SIAMESE CONNECTION	
WATER VALVE	
WATER VALVE BOX	
WATER METER	WM
WATER LINE REDUCER	
WATER LINE CAP	
WATER LINE PLUG	
POST INDICATOR VALVE	PIV
WATER MANHOLE	W
WATER CORPORATION STOP	
WATER FLUSHING ASSEMBLY	
WATER METER	WM
GAS LIGHT POST (YARD)	
GAS MANHOLE	G
GAS MANHOLE	
GAS VALVE	
GAS METER	GM
GAS REGULATOR	GR
GAS VENT PIPE	V
ELECTRIC LIGHT (GROUND)	
ELECTRIC LIGHT POST (YARD)	
ELECTRIC MANHOLE	E
ELECTRIC MANHOLE, ADJUST	
ELECTRIC PULL BOX	PB
ELECTRIC CONTROL BOX	ETL
ELECTRIC JUNCTION BOX	JCT
ELECTRIC VAULT BOX	VLT
ELECTRIC METER	EM
ELECTRIC PEDESTAL	EP
ELECTRIC TRANSFORMER	TR
ELECTRIC AIR CONDITION UNIT	AC
POLE, ELECTRIC	P
POLE, TELEPHONE	T
POLE, LIGHT	L
POLE, LIGHT, DECORATIVE	
POLE, LIGHT-OVERHEAD	
POLE, CABLE TV	C
POLE, UTILITY	U
POLE, GENERAL	

PROPOSED SYMBOLS

POLE, TRAFFIC CONTROL	TC
POLE, GUY	G
POLE, BRACE	B
POLE, ELECTRIC/TELEPHONE	P T
POLE, ELECTRIC W/LIGHT	P L
POLE, ELECTRIC/CABLE TV	P C
POLE, ELEC./TELE./LIGHT	P T L
POLE, ELEC./TELE./CABLE TV	P T C
POLE, ELEC./TELE./LIGHT/CABLE	P T L C
POLE, TELEPHONE/LIGHT	T L
POLE, TELEPHONE/CABLE TV	T C
POLE, TELE./LIGHT/CABLE TV	T L C
POLE, CABLE TV W/LIGHT	C L
POLE, FLAG	
GUY WIRE	
POST, SIGN (SINGLE SIDED)	
POST, SIGN (DOUBLE SIDED)	
POST, SIGN (DUAL POST)	
POST (GENERAL)	
BOLLARD	
DELINEATOR POST	
FENCE POST	
PARKING COUNT	00
PARKING BUMPER BLOCK	
HANDICAP PARKING SYMBOL	
HANDICAP DETECTABLE WARNING	
MAILBOX	MB
PAPERBOX	PB
PARKING METER	P
STREET SIGN	
TRAFFIC CONTROL MANHOLE	TR
TRAFFIC CONT. MANHOLE (ADJ)	
TRAFFIC CONTROL BOX	TRAF
TRAFFIC PULL BOX	PB
TRAFFIC SIGNAL PEDESTAL	TP
INLET PROTECTION	
STRAW BALE CHECK DAM	
TREE (DECIDUOUS)	
TREE (EVERGREEN)	
BUSH	

ABBREVIATIONS

ABANDONED	ABAN.
ADJUST	ADJ.
AGGREGATE	AGG.
ASBESTOS PIPE	ASB.
ASPHALT	ASPH.
BETWEEN	BTW.
BOTTOM OF CURB ELEVATION	BC
BOTTOM OF FOOTING ELEVATION	FTG.
BOTTOM OF WALL ELEVATION	BWE
BUILDING	BLDG.
BULKHEAD	BHD.
CABLE TELEVISION	CATV
CAST IRON PIPE	CIP
CATCH BASIN	CB
CENTERLINE	C/L
CENTER TO CENTER	C/C
CHAIN LINK FENCE	CLF
CONCENTRIC	CON.
CONCRETE	CONC.
CONNECTION	CONN.
CONTROL JOINT	CJ
CORRUGATED METAL PIPE	CMP
DEMOLITION	DEMO.
DOWNSPOUT	DS
DROP MANHOLE	DMH
DUCTILE IRON PIPE	DIP
ECCENTRIC	ECC.

ABBREVIATIONS

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
GRADE BREAK ELEVATION	GB
GRAVEL	GVL.
GROUND ELEVATION	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 FILLER	JF
JUNCTION	JCT.
KNOCKOUT	KO
LATERAL	LAT.
LOW POINT ELEVATION	LP
MAINTAIN	MAINT.
MATERIAL	MATL.
MOUNTED	MTD.
MISCELLANEOUS	MISC.
NOT TO SCALE	N.T.S.
ORNAMENTAL	ORN.
OUT TO OUT	O/O
OVERHEAD	OH
OXYGEN LINE	O
PARKING	PKG.
PAVEMENT	PVMT.
PEDESTAL	PED.
PERFORATE	PERF.
PIPE INVERT ELEVATION	INV.
POLYVINYL CHLORIDE PIPE	PVC
PREFORMED JOINT FILLER	PJF
PROPOSED	PR.
PULL BOX	PB
RAILROAD	RR
REINFORCED	REINF.
REINFORCED CONCRETE PIPE	RCP
REMOVE	RMV.
RETAINING WALL	RET.WALL
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

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

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MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

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ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFIELD, OHIO

ASHTABULA COUNTY
GENERAL - 00 SERIES
SITE SYMBOLS AND LINEWORK LEGEND

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
00G-05
SHEET 5 OF 43

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GENERAL:

1. THE CONTRACTOR SHALL PERFORM ALL OF THE WORK AND FURNISH ALL OF THE LABOR AND MATERIALS NECESSARY FOR THE FINAL COMPLETION OF THIS CONTRACT IN THE MANNER AND UNDER THE CONDITIONS HEREIN SPECIFIED AND PROVIDED AND IN ACCORDANCE WITH THE CONTRACT DRAWINGS.

2. THE CONTRACTOR SHALL NOTIFY ASHTABULA COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE A PRE-CONSTRUCTION MEETING. NO WORK SHALL BEGIN UNTIL A PRE-CONSTRUCTION MEETING HAS BEEN HELD.

3. A PRE-CONSTRUCTION VIDEO TAPE OF THE PROJECT AREA WILL BE REQUIRED AND SUBMITTED TO THE ENGINEER BEFORE CONSTRUCTION BEGINS.

4. ACCESS TO ALL DRIVEWAYS WILL BE MAINTAINED AT ALL TIMES EXCEPT THE TIME WHEN UTILITY INSTALLATION AND PAVEMENT REPLACEMENT WILL NOT PERMIT.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING A SITE FOR DISPOSAL OF ALL EXCAVATED MATERIAL THAT IS UNSUITABLE FOR USE AS BACKFILL AND ALL OTHER EXCESS EXCAVATED MATERIALS. THE CONTRACTOR SHALL PROVIDE THE COUNTY WITH THE LOCATION OF THE DISPOSAL SITE AND WRITTEN PERMISSION FOR USE OF THE SITE FROM THE PROPERTY OWNER.

6. ALL OVER-THE-ROAD VEHICLES USED ON THE PROJECT BY ALL CONTRACTORS AND SUBCONTRACTORS WILL BE CLEARLY MARKED SHOWING ITS COMPANY SYMBOL.

7. BEFORE THE COUNTY WILL APPROVE AND ACCEPT THE WORK AND RELEASE THE GUARANTY RETAINER, THE CONTRACTOR WILL FURNISH CONCORD TOWNSHIP A WRITTEN REPORT INDICATING THE RESOLUTION OF ANY AND ALL PROPERTY DAMAGE CLAIMS FILED WITH THE CONTRACTOR BY ANY PARTY DURING THE CONSTRUCTION PERIOD. THE INFORMATION TO BE SUPPLIED SHALL INCLUDE, BUT NOT BE LIMITED TO, NAME OF CLAIMANT, DATE FILED WITH CONTRACTOR, NAME OF INSURANCE COMPANY AND/OR ADJUSTOR HANDLING CLAIM, HOW CLAIM WAS RESOLVED AND IF CLAIM WAS NOT RESOLVED FOR THE THE FULL AMOUNT, A STATEMENT INDICATING THE REASON FOR SUCH ACTION.

8. MATERIALS FOR "AS-DIRECTED" ITEMS SHALL NOT BE ORDERED OR DELIVERED TO THE PROJECT SITE OR WORK PERFORMED UNTIL AUTHORIZED BY THE ENGINEER.

9. ALL SHOP DRAWINGS WILL BE SUBMITTED TO THE ENGINEER FOR CHECKING.

10. THE CONTRACTOR SHALL PERFORM WORK AS TO NOT DISTURB, DAMAGE OR DESTROY ANY MAILBOX, PAPERBOX, TELEPHONE OR POWER POLES, SIGNS, LANDSCAPING ITEMS, ETC.. ANY ITEM DAMAGED OR DESTROYED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE. PRIOR ENGINEER APPROVAL IS REQUIRED BEFORE ANY OF THE ABOVE ITEMS ARE PERFORMED.

11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY, WHEN ORDERED BY THE OWNER, WATER OR CALCIUM CHLORIDE FOR THE ALLEVIATION OR PREVENTION OF DUST NUISANCE ORIGINATING FROM HIS CONSTRUCTION ACTIVITIES. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE STORED ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST CONTROL.

13. ALL SOIL AREAS DISTURBED SHALL BE TOPSOILED (4" THICK), SEEDED AND MULCHED.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT.

15. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE INSTALLING ANY PROPOSED CONDUIT. ANY ADJUSTMENTS NEEDED SHALL BE APPROVED BY THE ENGINEER.

TEMPORARY PAVEMENT AND MAINTENANCE OF TRAFFIC:

1. THE CONTRACTOR SHALL REMOVE ALL PAVEMENTS AND ROAD SURFACES WITHIN THE LINES OF EXCAVATION IN ACCORDANCE WITH THE PLANS AND DETAILS. AFTER THE PAVEMENT HAS BEEN REMOVED AND THE PIPE HAS BEEN LAID, ALL APPURTENANT WORK CONSTRUCTED AND BACKFILL COMPLETED, THE CONTRACTOR SHALL FURNISH, PLACE AND MAINTAIN WHEREVER THE PLACEMENT OF ROAD AND SURFACE HAS BEEN REMOVED OR DAMAGED, A TEMPORARY PAVEMENT IN THE PAVED PORTION OF STREETS AND DRIVEWAYS SO AS TO PROVIDE A SAFE AND PASSABLE ROADWAY UNTIL SUCH TIME AS THE FINAL PAVEMENT IS COMPLETED. ACCESS TO ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES EXCEPT BRIEFLY DURING WORKING HOURS WHEN CONSTRUCTION ACTIVITIES PROHIBIT.

PROTECTION AGAINST VANDALISM:

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SUFFICIENT SITE SECURITY MEASURES AND / OR PERSONNEL TO PROTECT ALL NEW CONCRETE WORK FROM VANDALISM UNTIL THE CONCRETE IS SUFFICIENTLY CURED AT NO ADDITIONAL COST.

RESTORATION:

1. THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM HIS 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 WORKDAY.

2. 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 ENGINEER AT NO COST TO THE OWNER.

SANITARY, STORM, AND WATER SERVICE CONNECTIONS:

1. THE FOLLOWING NOTES APPLY TO SANITARY, STORM, AND WATER CONNECTIONS

   a. LOCATIONS OF EXISTING SERVICE CONNECTIONS ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING CONNECTIONS AT NO ADDITIONAL COST TO THE COUNTY. THE CONTRACTOR SHALL RECORD ACTUAL LOCATION INFORMATION ON HIS RECORD DRAWINGS AS CONSTRUCTION OCCURS.

   b. THERE SHALL BE NO ADDITIONAL PAYMENT MADE FOR SAW CUTTING, EXCAVATION OR BACKFILL, INCLUDING MATERIALS AND LABOR FOR, PIPING, CAPS, BULKHEADS AND APPURTENANCES PLACED FOR LATERALS WHICH ARE DETERMINED TO BE INACTIVE AND THUS ARE TO BE ABANDONED.

   c. NO INACTIVE LATERALS SHALL BE RECONNECTED TO THE SEWER.

2. THE CONTRACTOR SHALL BE REQUIRED TO BYPASS AND MAINTAIN THE FLOW FROM ALL HOUSE UTILITY CONNECTIONS DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL SUPPLY ALL PIPE AND ADAPTERS TO CONNECT TO EXISTING PIPING. THE ADAPTERS MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

4. EXISTING SEWER AND WATER SERVICE CONNECTIONS SHALL BE PROTECTED AND MAINTAINED IN SERVICE. ANY EXISTING WATERLINE, SANITARY SEWER, AND GAS LINE, IN OR OUTSIDE OF THE CONSTRUCTION LIMITS, DAMAGED DURING CONSTRUCTION OF THE PROPOSED PROJECT, WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ROADWAY EXCAVATION AND PAVEMENT:

1. ALL PAVEMENT REMOVAL AND REPLACEMENT, NEW PAVEMENT AND ASSOCIATED ROADWAY WORK WILL BE IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, STANDARD CONSTRUCTION DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS, CURRENT ISSUE, WITH THE MODIFICATIONS AS SET FORTH IN THESE SPECIFICATIONS.

METER BOXES, VALVES BOXES, STRUCTURES ADJUSTED TO GRADE:

1. ALL EXISTING MANHOLES, CATCH BASINS, MONUMENT BOXES, WATER METER BOXES, WATER VALVE BOXES, GAS VALVE BOXES OR OTHER EXISTING UTILITY APPURTENANCES WITHIN THE WORK LIMITS SHALL BE ADJUSTED TO THE PROPOSED GRADE AND FLUSH WITH THE NEW SURFACE. ANY METER OR VALVE BOX ENCOUNTERED WITHIN THE WORK SITE SHALL BE EXPOSED. CONTRACTOR TO SUPPLY 1" RISER FOR ALL VALVE BOXES ADJUSTED TO GRADE.

EXCESS EXCAVATION:

1. ALL EXCESS EXCAVATION SHALL BE DISPOSED OF IN A LOCATION TO BE SELECTED BY THE CONTRACTOR. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE COUNTY IF THE MATERIAL IS TO BE DISPOSED OF WITHIN THE COUNTY LIMITS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL CONSTRUCTION MATERIALS/DEBRIS.

PRESERVATION OF PROPERTY CORNERS AND SURVEY MARKERS:

1. THE CONTRACTOR WILL CAREFULLY PRESERVE BENCH MARKS, PROPERTY CORNERS, REFERENCE POINTS, AND STAKES AND IN CASE OF DISTURBANCE, HE SHALL ENGAGE A REGISTERED SURVEYOR TO REPLACE THEM AT HIS EXPENSE AND SHALL BE RESPONSIBLE FOR ANY MISTAKES THAT MAY BE CAUSED BY THEIR LOSS OR DISTURBANCE.

SUBSURFACE CONDITIONS:

1. IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS BID.

STATIONING AND LOCATIONS:

1. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD AS APPROVED BY THE ENGINEER.

NOISE CONTROL:

1. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO WEEKDAY DAYTIME HOURS UNLESS APPROVED 48 HOURS IN ADVANCE BY THE COUNTY.

LANDSCAPING BEDS, PLANTINGS AND TREE PROTECTION/ REMOVAL:

1. ANY LANDSCAPING BEDS, PLANTINGS AND TREES DISTURBED BY CONSTRUCTION ACTIVITIES BEYOND THE RIGHT-OF-WAY SHALL BE RESTORED TO ITS ORIGINAL CONDITION OR REPLACED AS DIRECTED BY THE COUNTY.

2. ALL TREES WITHIN THE RIGHT-OF-WAY THAT ARE IN CONFLICT WITH CONSTRUCTION ARE TO BE REMOVED BY THE CONTRACTOR AND ARE TO BE INCLUDED IN THE COST FOR CLEARING AND GRUBBING.

MAILBOXES, FENCES, NEWSPAPER BOXES OR STREET SIGNS AND SUPPORTS:

1. WHEN MAILBOXES, FENCES, NEWSPAPER BOXES OR STREET SIGNS AND SUPPORTS INTERFERE WITH CONSTRUCTION, THE CONTRACTOR SHALL REMOVE AND ERECT THEM IN A TEMPORARY LOCATION DURING THE CONSTRUCTION (EXCEPT FENCES). AFTER COMPLETION OF THE CONSTRUCTION AND BEFORE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL ERECT THE MAILBOXES, FENCES, NEWSPAPER BOXES OR STREET SIGNS AND SUPPORTS ALL IN A PERMANENT LOCATION IN ACCORDANCE WITH THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE WORK SHALL BE INCLUDED IN THE UNIT PRICES BID FOR OTHER ITEMS.

SALVAGED ITEMS:

1. THE COUNTY SHALL RECEIVE ALL SALVAGED ITEMS SUCH AS MANHOLE CASTINGS, FIRE HYDRANTS, VALVE CAPS, ETC. THE COUNTY HAS THE RIGHT OF FIRST REFUSAL FOR ALL STEEL REMOVED FROM THE PROJECT.

EXISTING UTILITIES:

1. EACH CONTRACTOR SHALL VISIT THE SITE PERSONALLY TO ASCERTAIN THE NATURE OF THE WORK AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE SITE PRIOR TO BID SUBMISSION.

2. THE DATA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR. THE EXISTENCE OF FACILITIES ABOVE OR BELOW GROUND, WHICH MAY NOT BE SHOWN, MAY NOT BE A BASIS FOR A CLAIM FOR EXTRA WORK.

3. THE LOCATIONS OF THE UNDERGROUND UTILITIES ARE PLOTTED ACCORDING TO THE INFORMATION FURNISHED BY THE UTILITIES CONCERNED AND THE COUNTY DOES NOT GUARANTEE THE ACCURACY THEREOF. CONTRACTOR ALSO TO COORDINATE HIS WORK WITH THE THE COUNTY. THE ILLUMINATING CO., DOMINION EAST OHIO GAS COMPANY AND CHARTER COMMUNICATIONS FOR GAS LINE AND/OR POLE RELOCATION.

4. WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE HIS 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 THAT OF THE COUNTY.

5. 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 IN CONFORMANCE TO THE UTILITY COMPANY'S SCHEDULE.

6. BEFORE ANY WORK IS STARTED THAT WILL INTERFERE WITH THE EXISTING UTILITIES, THE CONTRACTOR SHALL CALL THE "OHIO UTILITIES PROTECTION SERVICE" AT 1-800-362-2764, FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS, AT NO ADDITIONAL EXPENSE TO THE COUNTY, TO AVOID DAMAGE TO EXISTING UNDERGROUND AND OVERHEAD UTILITY LINES DURING THE ENTIRE PROJECT. IN THE EVENT OF DAMAGE TO EXISTING PUBLIC AND/OR PRIVATE UTILITIES, THE AGENCY CONCERNED SHALL BE NOTIFIED IMMEDIATELY AND ALL REPAIR WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE AGENCY AT NO ADDITIONAL EXPENSE TO THE COUNTY, INCLUDING ANY INSPECTION FEES OR MAINTENANCE CREWS. THE UTILITY OWNERSHIPS ARE LISTED BELOW.

7. WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

8. IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

9. IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

ENDANGERED SPECIES

1. THIS PROJECT IS WITHIN THE RANGE OF SEVERAL STATE AND FEDERALLY THREATENED AND ENDANGERED BAT SPECIES (INDIANA BAT, NORTHERN LONG-EARED BAT, LITTLE BROWN BAT, TRICOLORED BAT) AND MAY IMPACT SUMMER ROOSTING HABITAT FOR THESE SPECIES. THESE SPECIES DEPEND UPON TREES WITH PEELING BARK, CAVITIES, CREVICES, AND DEAD AND DYING TREES. PER U.S. FISH AND WILDLIFE SERVICE RECOMMENDATION, THE REMOVAL OF TREES GREATER THAN OR EQUAL TO 3-INCHES DIAMETER AT BREAST HEIGHT SHOULD ONLY OCCUR BETWEEN OCTOBER 1ST AND MARCH 31ST. IF THIS TIME FRAME CANNOT BE FOLLOWED, THE U.S. FISH AND WILDLIFE SERVICE (614-416-8993) AND OHIO DEPARTMENT OF NATURAL RESOURCES (CONTACT EILEEN WYZA, EILEEN.WYZA@DNR.OHIO.GOV) MUST BE CONTACTED PRIOR TO CUTTING FOR GUIDANCE ON NECESSARY STEPS TO DOCUMENT THE ABSENCE OR PRESENCE OF THESE SPECIES.

ARCHAEOLOGICAL AND HISTORICAL RESOURCES

1. CONTRACTORS AN SUBCONTRACTORS ARE REQUIRED UNDER OHIO REVISED CODE SECTION 149.53 TO NOTIFY THE OHIO HISTORICAL SOCIETY AND THE OHIO HISTORIC SITE PRESERVATION BOARD OF ARCHAEOLOGICAL DISCOVERIES LOCATED IN THE PROJECT AREA AND TO COOPERATE WITH THOSE ENTITIES IN ARCHAEOLOGICAL AND HISTORIC SURVEYS AND SALVAGE EFFORTS IF SUCH DISCOVERIES ARE UNCOVERED WITHIN THE PROJECT AREA. CONTACT: STATE HISTORIC PRESERVATION OFFICE: 614-298-2000

SPILL PREVENTION:

1. CONTRACTORS AND SUBCONTRACTORS SHOULD IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES FOR THE PREVENTION OF DISCHARGE OF HAZARDOUS MATERIALS TO SURFACE AND GROUND WATERS AND THE ENVIRONMENT. ALL SPILLS MUST BE REPORTED TO THE OHIO SPILL LINE (1-800-282-9378 OR1-614-224-0946) IN ACCORDANCE WITH OAC 3750.06.

LIMITS OF WORK:

1. THE CONTRACTORS CONSTRUCTION OPERATIONS ARE CONFINED TO THE AREA WITHIN THE ROAD RIGHT-OF-WAY OR EASEMENT AREA. THE CONTRACTOR SHALL USE THE APPROPRIATE CONSTRUCTION METHODS TO PREVENT DISTURBING ANY AREA OUTSIDE THE ROAD RIGHT-OF-WAY OR EASEMENT AREA.

MATERIAL STORAGE:

1. ALL EXCAVATED MATERIAL AND ALL MATERIAL USED IN CONSTRUCTION OF THE WORK SHALL BE STORED IN A MANNER THAT WILL NOT ENDANGER THE WORK AND THAT WILL LEAVE DRIVEWAYS, HYDRANTS UNDER PRESSURE, VALVE PIT COVERS, VALVE BOXES, CURB STOP BOXES OR OTHER UTILITY CONTROLS UNOBSTRUCTED AND ACCESSIBLE WHILE THE WORK IS BEING COMPLETED. GUTTERS SHALL BE KEPT CLEAR AND MAINTAINED AT ALL TIMES OR OTHER SATISFACTORY PROVISIONS SHALL BE MADE FOR STREET DRAINAGE. NATURAL DRAINAGE COURSES SHALL NOT OBSTRUCTED DURING THE PROCESS OF WORK. ALL MATERIALS SHALL BE KEPT TRIMMED UP AND MAINTAINED IN A NEAT MANNER.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL TREES, STUMPS, BROKEN PAVEMENT AND ALL CONSTRUCTION DEBRIS OF WHATEVER NATURE OUTSIDE THE WORK LIMITS OF THE PROJECT. NO EXTRA PAYMENT WILL BE MADE BY THE OWNER FOR THE REMOVAL AND DISPOSAL OF DEBRIS.

STATE OF OHIO
GEORGIA CONWAY
E-85401
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ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

GENERAL - 00 SERIES

GENERAL NOTES

PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
00G-06

SHEET 6 OF 43

ENVIRONMENTAL PROTECTION - PROHIBITED CONSTRUCTION ACTIVITIES:

1. LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS.
2. INDISCRIMINATE, ARBITRARY OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, WETLANDS, SURFACE WATERS OR OUTSIDE THE EASEMENT LIMITS.
3. PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS DIRECTLY INTO ANY SURFACE WATERS, STREAM CORRIDORS, WETLANDS OR STORM SEWERS; ALL SUCH WATER WILL BE PROPERLY FILTERED OR SETTLED TO REMOVE SILT PRIOR TO RELEASE.
4. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, WETLANDS, SURFACE WATERS, IMPOUNDMENTS OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
5. PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF ANY STREAM.
6. DAMAGING ANY VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.
7. DISPOSAL OF TREES, BRUSH, AND OTHER DEBRIS IN ANY STREAM CORRIDORS, WETLANDS, SURFACE WATERS OR AT UNSPECIFIED LOCATIONS.
8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
9. 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.
10. RUNNING WELL POINT OR PUMP DISCHARGE LINES THROUGH PRIVATE PROPERTY OR PUBLIC PROPERTY AND RIGHTS-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE OWNER AND THE CONSENT OF THE ENGINEER.
11. OPERATIONS ENTAILING THE USE OF VIBRATORY HAMMERS OR COMPACTORS OUTSIDE THE HOURS OF 8:00 A.M. AND 4:30 P.M. OR OUTSIDE THE HOURS ALLOWED FOR CONSTRUCTION BY LOCAL ORDINANCES OR REGULATIONS.
12. CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE OR BOULEVARD WITHOUT THE PRIOR CONSENT OF MUNICIPAL OFFICIALS, STATE OF OHIO, THE ENGINEER, AND CLOSING CLEAR ACCESS:
    - 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.
    - BY VEHICLES TO DRIVEWAYS WITHOUT THE PROVISION OF ALTERNATIVE MEANS OF BUILDING INGRESS AND EGRESS.

MAINTENANCE OF TRAFFIC:

1. A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT AND ITEM 614 - TEMPORARY PAVEMENT MARKINGS. ACCESS TO ALL DRIVEWAYS SHALL ALSO BE MAINTAINED AT ALL TIMES EXCEPTING THE TIME WHEN CONCRETE CURB OR DRIVE APRONS ARE CURING.
2. PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT TO THE COUNTY A PROPOSED PROJECT CONSTRUCTION SCHEDULE AND A DETAILED MAINTENANCE OF TRAFFIC PLAN. BOTH THE SCHEDULE AND MAINTENANCE OF TRAFFIC PLAN SHALL BE APPROVED BY THE COUNTY AND ODOT PRIOR TO THE START OF CONSTRUCTION.
3. MAINTAINING TRAFFIC SHALL BE IN ACCORDANCE WITH ODOT CONSTRUCTION & MATERIALS SPECIFICATIONS (CMS) ITEM 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE AND SATISFACTORY LOCAL ACCESS, VEHICULAR AND PEDESTRIAN, TO ALL ABUTTING PROPERTIES WITHIN THE PROJECT. THE CONTRACTOR SHALL FURNISH, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, BARRIERS, TEMPORARY PAVEMENT, LIGHTING, FLAGMEN, CONSTRUCTION SIGNING AND OTHER TRAFFIC CONTROLS SO AS TO AVOID DAMAGE AND/OR INJURY TO AND ENSURE THE SAFETY OF VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION BOTH WITHIN AND OUTSIDE OF THE PROJECT LIMITS.
5. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ON THE ODOT STANDARD MAINTENANCE OF TRAFFIC DRAWINGS.

OHIO DEPARTMENT OF NATURAL RESOURCES:

1. ONCE THE SITE IS CLEARED AND GRUBBED, A TEMPORARY SEDIMENT AND EROSION CONTROL SHOULD BE IMPLEMENTED AND MAINTAINED UNTIL FINAL SITE STABILIZATION IS ACHIEVED. ALL TEMPORARY SEDIMENT AND EROSION CONTROLS SHOULD BE REMOVED UPON COMPLETION OF SITE STABILIZATION. ANY AREA WHERE THE UTILITY LINE HAS BEEN COMPLETELY INSTALLED, STABILIZATION SHOULD OCCUR WITHINT 7 DAYS. FOR THE DISTURBED AREAS WITHIN 120 FEET OF THE STREAM, TEMPORARY AND/OR PERMANENT EROSION CONTROL COVER SHOULD BE REQUIRED WITHIN 2 DAYS FOLLOWING THE INSTALLATION OF THE UTILITY LINE. TEMPORARY SEEDING AND MULCHING SHOULD BE NO MORE THAN 500 FEET BEHIND THE POINT OF INSTALLATION AT ANY GIVEN TIME.
2. NO MORE THAN 500 FEET OF TRENCH SHOULD BE OPEN AT ANY GIVEN TIME WITHIN1000 FEET OF THE GRAND RIVER WILD AND SCENIC RIVER. TRENCH OPENING, INSTALLATION OF PIPE AND BACKFILLING SHOULD OCCUR TO MINIMIZE THE AMOUNT OF AREA DISTURBED. ALL OPEN TRENCHES SHOULD IMMEDIATELY BE BACKFILLED AND SEEDED AND MULCHED WITHIN SEVEN DAYS OF COMPLETION OF PIPE INSTALLATION.
3. NO WASTEWATER OF ANY KIND SHALL BE DIRECTLY DISCHARGED INTO THE SCENIC RIVER, ANY TRIBUTARY WATERCOURSE OR STORM WATER SYSTEM. ANY WATER PUMPED FROM OPEN TRENCHES SHOULD BE PASSED THROUGH A SEDIMENT IMPOUNDMENT STRUCTURE THAT PROVIDES FOR COMPLETE SETTLING OF ALL SUSPENDED SOLIDS OR PUMPED INTO A VEGETATED AREA A SUFFICIENT DISTANCE FROM THE STREAM TO PROVIDE FOR COMPLETE INFILTRATION OR THE USE OF DEWATERING BAG. ADEQUATE OUTLET PROTECTION MUST BE PROVIDED FOR EACH IMPOUNDMENT. THERE SHALL BE NO DISCHARGE OF TURBID WATER TO THE SCENIC RIVER OR ITS TRIBUTARIES. IF CHEMICALS AVE BEEN ADDED TO ANY OF THE WATER USED FOR THE DIRECTIONAL DRILLING PROCESS, THE RESULTING SLURRY SHALL BE PUMPED INTO A CONTAINER AND HAULED TO AN APPROVED DISPOSAL SITE.
4. JEFFRY HAYES, NORTHEAST OHIO REGIONAL SCENIC RIVERS MANAGER (614-546-8067 OR JEFFRY.HAYES@DNR.OHIO.GOV) SHOULD BE NOTIFIED OF THE PROJECT START DATE ONE WEEK PRIOR TO THE COMMENCEMENT OF WORK.

WATER MAIN SPECIFICATIONS & NOTES:

1. WATER MAINS (4" THROUGH 24") SHALL BE PVC AWWA C909.
2. ALL FITTINGS, BENDS, TEES, PLUGS, ETC. SHALL BE TIED TO THE WATER MAIN WITH EITHER M.J. TYPE CONNECTIONS, TIE RODS OR MEGA-LUGS. TIE RODS SHALL BE 3/4" DIAMETER STAINLESS STEEL. FOR 8" DIAMETER PIPE USE FOUR RODS.
3. TAPPING SLEEVES SHALL HAVE A STAINLESS STEEL BODY WITH A DUCTILE IRON FLANGED OUTLET WHICH COMPLIES WITH ANSI B16.1, CLASS 125 AND WITH MSS SP-60. THE GASKET SHALL COMPLETELY SURROUND THE INSIDE OF THE STAINLESS STEEL BODY. THE SLEEVE SHALL COME EQUIPPED WITH A ¾" NPT BRASS TEST PLUG. MAXIMUM WORKING PRESSURE FOR 4" - 12" SIZES (250 psig) AND FOR 14" - 24" SIZES (200 psig).
4. WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA C600. ALL TEST RESULTS MUST BE APPROVED BY THE COUNTY BEFORE INSTALLATION OF WATER SERVICES. COST SHALL BE SUBSIDIARY TO THE INSTALLATION OF WATER MAIN. TEST PRESSURE SHALL BE 250 PSI.
5. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651. COST SHALL BE SUBSIDIARY TO THE INSTALLATION OF WATER MAIN.
6. THE PROPOSED WATER SYSTEM SHALL MAINTAIN A MINIMUM STATIC PRESSURE OF 35psi DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
7. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
8. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 10 FOOT HORIZONTAL SEPARATION AND 18 INCH VERTICAL SEPARATION BETWEEN THE PROPOSED WATER MAIN AND EXISTING STORM SEWERS AS MEASURED FROM OUTSIDE EDGE TO OUTSIDE EDGE UNLESS NOTED ON THE PLAN AND PROFILE SHEETS.
9. THE CONTRACTOR SHALL NOT OPERATE OR TURN ANY EXISTING WATER VALVE, UNLESS OTHERWISE SPECIFIED. IF VALVES NEED TO BE OPENED OR CLOSED HE SHALL NOTIFY THE COUNTY.
10. ALL ROUGH GRADING TO WITHIN SIX (6) INCHES OF FINISH GRADE SHALL BE COMPLETED OVER THE PROPOSED WATER MAIN PRIOR TO IT'S INSTALLATION.
11. THE LOCATION OF EXISTING WATER UTILITIES AS SHOWN ON THESE PLANS WERE DETERMINED FROM AVAILABLE DATA AT THE TIME OF FIELD SURVEYING IN ACCORDANCE WITH SECTION 153.63 OF THE OHIO REVISED CODE.
12. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS, PAYING ALL FEES, AND FOLLOWING ALL REQUIREMENTS ASSOCIATED WITH THE PERMITS. THE COUNTY ASSUMES NO LIABILITY FOR NOT FOLLOWING THE ABOVE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OHIO UTILITY PROTECTION SERVICE (OUPS) AS REQUIRED BY LAW.
14. NO WATERLINE TIE-INS SHALL BE DONE ON FRIDAYS OR THE DAY BEFORE A COUNTY HOLIDAY.
15. DEFLECT WATER MAIN AS REQUIRED TO MAINTAIN ALIGNMENT AS SHOWN ON PLANS. MAXIMUM DEFLECTION IS 3 DEGREES PER JOINT.
16. TEMPORARY BLOW-OFF AND FLUSHING ASSEMBLY:
17. PIPE SHALL BE TYPE K COPPER WITH COMPRESSION FITTINGS.
18. CORPORATION STOPS SHALL BE GROUND KEY DESIGN, CAST FROM A BRASS ALLOY AND CONFORM TO AWWA C800. INLET END SHALL HAVE AWWA TAPER THREADS. OUTLET END SHALL HAVE COPPER COMPRESSION QUARTER BEND CONNECTION. ALL TAPS SHALL BE MADE ON TOP OF THE WATER MAIN. CORPORATION STOPS AND QUARTER BENDS SHALL BE BLOCKED.
19. CURB VALVES (STOPS) SHALL BE ONE PIECE DESIGN, CAST FROM A BRASS ALLOY, CONFORM TO AWWA C800, HAVE A MAXIMUM WORKING PRESSURE OF 175 PSIG AND HAVE A QUARTER TURN CHECK. BOTH ENDS SHALL HAVE COPPER COMPRESSION FITTINGS.
20. LOCATIONS SHALL BE AS SHOWN ON THE DRAWINGS, AT A MINIMUM. CONTRACTOR SHALL INSTALL ADDITIONAL ASSEMBLIES AS NEEDED TO EXHAUST AIR AND TO COMPLY WITH REGULATIONS REGARDING PRESSURE TESTING, BACTERIA SAMPLING AND FLUSHING.
21. AT COMPLETION OF TESTING, CLOSE CORPORATION STOP, REMOVE COPPER PIPING AND INSERT PLUG ON CORPORATION STOP.
22. NO SEPARATE PAYMENT SHALL BE MADE FOR TEMPORARY BLOW-OFFS AND FLUSHING ASSEMBLIES.

EXCAVATION, BACKFILL, AND COMPACTION:

1. ALL UTILITY LINES (i.e. STORM SEWERS, STORM LATERALS, SANITARY LATERALS, WATER MAINS, WATER SERVICE CONNECTIONS, GAS MAINS, GAS SERVICE CONNECTIONS, UNDERGROUND OBT CONDUITS, CABLE T.V. LINES) CROSSING THE PROPOSED IMPROVEMENTS, WHETHER SHOWN OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AND SUPPORTED WITH HARDWOOD PLANKS OR REMOVED AND REPLACED, RECONNECTED AND SUPPORTED ACROSS THE ENTIRE WIDTH OF THE TRENCH. NO ADDITIONAL COMPENSATION WILL BE PAID FOR THE ABOVE WORK. IF ANY OF THESE LINES ARE DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPLACED.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER FORTY-EIGHT (48) HOURS IN ADVANCE OF BEGINNING WORK WHICH REQUIRES COMPACTION TESTING AND/OR PRE-POUR INSPECTION PRIOR TO PLACEMENT OF PAVEMENT. WORK WILL NOT BEGIN UNTIL TESTING AND/OR INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE ENGINEER.

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

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MENTOR, OHIO 44060
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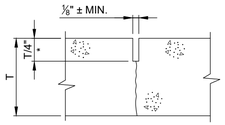
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ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFILED, OHIO

ASHTABULA COUNTY
GENERAL - 00 SERIES
GENERAL NOTES

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
00G-07
SHEET 7 OF 43

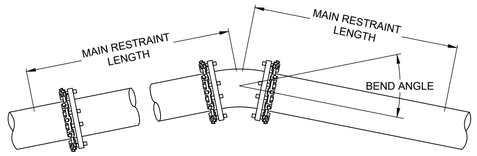


NOTES:

1. CONTROL JOINTS ARE THAT ARE TOOL CUT SHALL BE FILLED WITH JOINT SEALANT.
2. CONTROL JOINT SPACING SHALL EQUAL NEW SIDEWALK WIDTH, ADD ADDITIONAL DIAGONAL JOINTS AS NECESSARY TO CONTROL CRACKING AT ANGLES, BUILDS OR OR STRUCTURES.

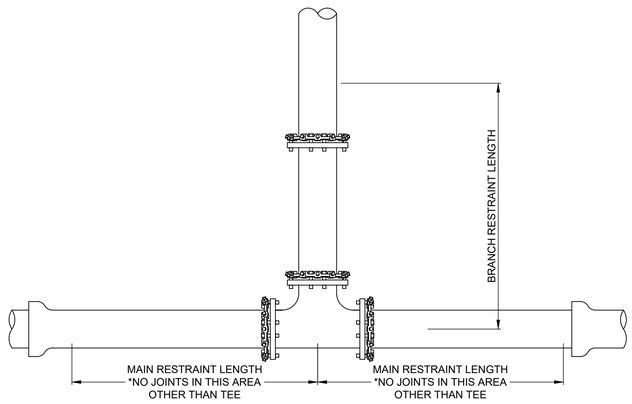
CONTROL JOINT TYPE "C.J."

NOT TO SCALE



TYPICAL HORIZONTAL RESTRAINT

NOT TO SCALE

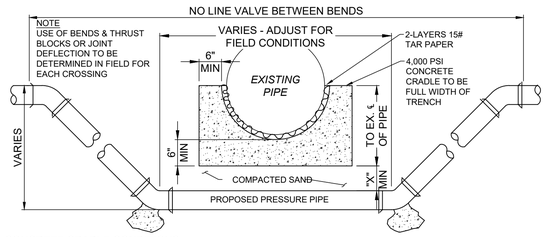


TYPICAL HORIZONTAL TEE RESTRAINT

NOT TO SCALE

THRUST RESTRAIN TABLE FOR STANDARD FITTINGS			
FITTING	SIZE	MINUMUM MAIN RESTRAINT LENGTH	BRANCH RESTRAINT LENGTH*
HORIZONTAL FITTINGS			
DEAD END	8"	60'	---
DEAD END	4"	32'	---
45° BEND	6"	22'	---
REDUCER	8" X 6"	25'	---
REDUCER	6" X 4"	24'	---
TEE**	8" X 4"	---	1'

*ALL JOINTS WITHIN THE CALCAULTED LENGTH MUST BE RESTRAINED.
**A MINIMUM ATTACHED LENGTH OF PIPE OF 20FT TO EXTEND IN EACH DIRECTION ALING THE RUN OF THE TEE WAS ASSUMED TO CALCUALTE THE RESTRAINED LENGTH ALONG THE BRANCH. THE LENGTH OF PIPE ALONG THE RUN MUST BE PF SOLID PIPE WITHOUT JOINTS, FITTINGS, ETC.



CONCRETE CRADLE CONDITIONS

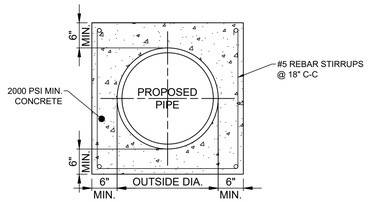
1. IF SANITARY OR STORM SEWER PIPE JOINT IS WITHIN PROPOSED IMPROVEMENT TRENCH LIMIT
2. IF CROSSING A WATERLINE AT ANY POINT
3. IF CROSSING SPACE IS LESS THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS "X" DIMENSION THEN OMIT SAND FILL AND USE CONCRETE

"X" DIMENSION REQUIREMENTS

1. 6" FOR WATERLINE CROSSING (ALSO FOR GAS & O.B.T. LINES W/ NO CRADLE NEEDED)
2. 18" FOR SANITARY OR STORM SEWER PIPE
3. IF CROSSING SPACE IS MORE THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS AFOREMENTIONED "X" DIMENSION THEN EXTEND "X" DIMENSION TO MAKE UP DIFFERENCE

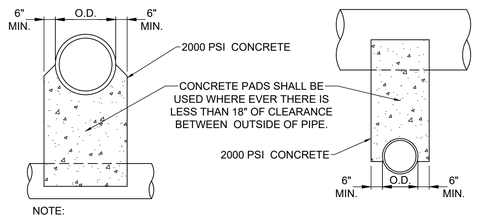
PIPE LOWERING DETAIL

NOT TO SCALE



TYPICAL PIPE ENCASEMENT

NOT TO SCALE

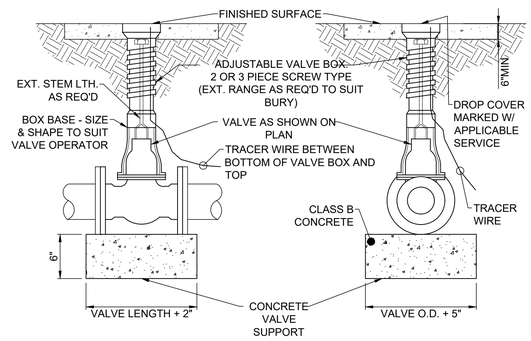


NOTE:

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, WHERE TWO PIPES (SEWER & WATER) CROSS EACH OTHER, A CONCRETE PAD AND CRADLE SEPARATOR SHALL BE PLACED BETWEEN THEM AS INDICATED ABOVE. WHERE PERMISSION IS GRANTED TO OMIT THE CONCRETE PADS, GRANULAR BACKFILL SHALL BE TAMPED IN 6" LAYERS AROUND BOTH PIPES. SUCH TAMPED BACKFILL SHALL BE CONTINUOUS FROM THE CRADLE OF THE LOWER PIPE TO THE TOP OF THE UPPER PIPE AND AT THE BOTTOM SHALL EXTEND IN BOTH DIRECTIONS, FOR THE FULL WIDTH OF THE TRENCH.

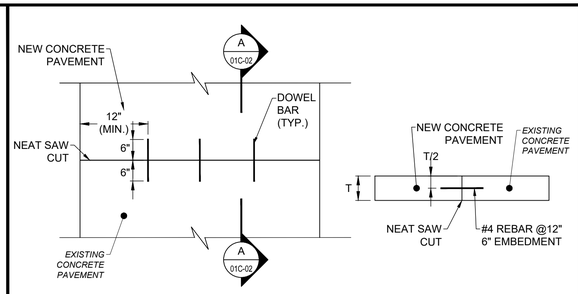
PIPE CROSSING DETAIL

NOT TO SCALE



TYPICAL VALVE AND VALVE BOX SETTING

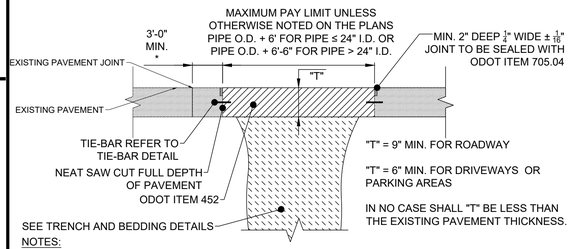
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PLAN VIEW SECTION A-A

TIE BAR DETAIL

NOT TO SCALE



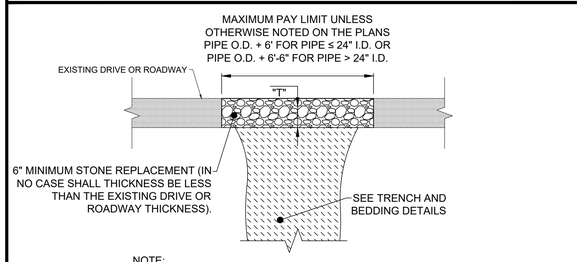
NOTES:

1. EXISTING SUBBASE MATERIAL (IF ANY) SHALL BE REPLACED, AS DIRECTED BY ENGINEER.
2. REPLACEMENT SHALL BE REINFORCED AS PER O.D.O.T. ITEM 709.10 OR 709.12 IF EXISTING PAVEMENT IS REINFORCED.
3. 5/8"Ø HOOKBOLT @ 30" O.C. MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

* WHERE WIDTH IS LESS THAN 3'-0" OR EXISTING PAVEMENT IS DETERIORATED, THE CONTRACTOR SHALL REPLACE ADDITIONAL PAVEMENT AS DIRECTED BY THE ENGINEER. PAYMENT FOR ADDITIONAL PAVEMENT REPLACEMENT AS DIRECTED BY THE ENGINEER SHALL BE AT THE SAME UNIT PRICE BID.

TYPE A PAVEMENT REPLACEMENT

NOT TO SCALE

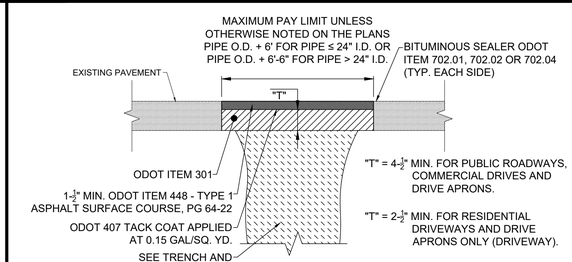


NOTE:

1. REPLACEMENT MATERIAL SHALL BE THE SAME TYPE AND SIZE AS EXISTING.

TYPE F PAVEMENT REPLACEMENT

NOT TO SCALE



NOTE:

1. EXISTING SUBBASE MATERIAL (IF ANY) SHALL BE REPLACED, AS DIRECTED BY ENGINEER.

TYPE C PAVEMENT REPLACEMENT

NOT TO SCALE

STATE OF OHIO
GEORGIA CONWAY
E-85401
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verdantas
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(440) 951-9000

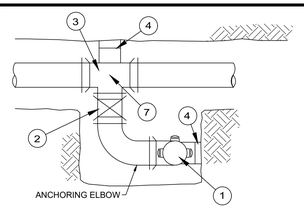
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CHECKED BY:	GBC

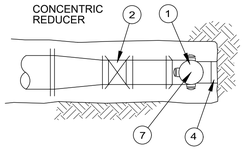
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFIELD, OHIO

ASHTABULA COUNTY
STANDARD DETAILS - SD SERIES
CONSTRUCTION DETAILS

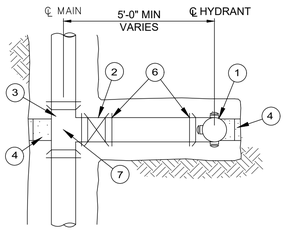
PROJECT NO.	
241222	
DISCIPLINE	
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SHEET NAME	
SD-01	
SHEET	OF
8	43



TYPE "A" HYDRANT ASSEMBLY

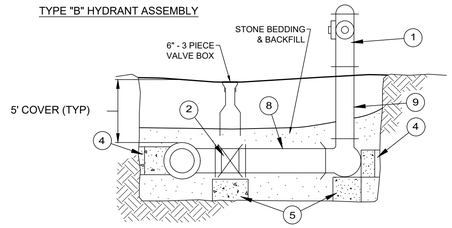


TYPE "C" HYDRANT ASSEMBLY



TYPE "B" HYDRANT ASSEMBLY

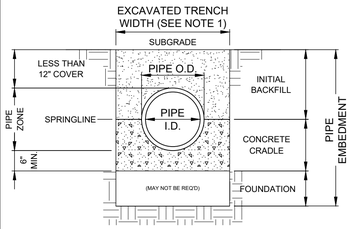
1. HYDRANT, PER SPECIFICATIONS
2. 6" GATE VALVE
3. ANCHORING TEE
4. CONCRETE BLOCKING WITH OAK WEDGES AGAINST UNDISTURBED EARTH
5. CONCRETE SUPPORT BLOCKING
6. RETAINER GLANDS
7. PLAN STATION & OFFSET
8. ANCHORING SPOOL
9. RISER



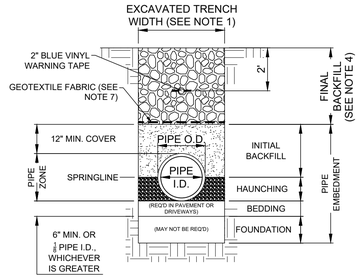
TYPICAL HYDRANT ASSEMBLY ELEVATION

TYPICAL HYDRANT DETAIL

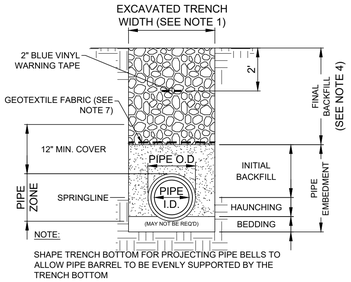
NOT TO SCALE



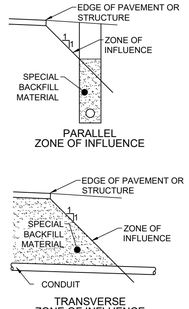
CLASS `A` PIPE EMBEDMENT



CLASS `B` PIPE EMBEDMENT



CLASS `C` PIPE EMBEDMENT



PARALLEL
ZONE OF INFLUENCE

TRANSVERSE
ZONE OF INFLUENCE

NOTES:

1. MAXIMUM EXCAVATED TRENCH WIDTH: THE MAXIMUM EXCAVATED TRENCH WIDTH FROM THE BOTTOM OF THE TRENCH TO 12" OVER THE TOP OF THE PIPE (WITHIN PIPE EMBEDMENT) SHALL BE O.D. + 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D. + 30" FOR PIPE FROM 24" I.D. TO 54" I.D. AND O.D. + 48" FOR PIPES SIZES 60" I.D. AND OVER.
2. FOUNDATION: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH MATERIAL AS DIRECTED BY THE ENGINEER.
3. PIPE EMBEDMENT:

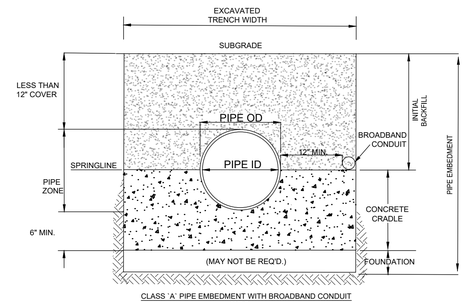
   CLASS A: CLASS A PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12 INCHES OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE IN ACCORDANCE WITH ODOT ITEM 499, CLASS "C". THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

   CLASS B: CLASS B PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. THE BEDDING AND HAUNCHING SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER FOR ONLY REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE. THE INITIAL BACKFILL FOR ALL OTHER PIPES SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.

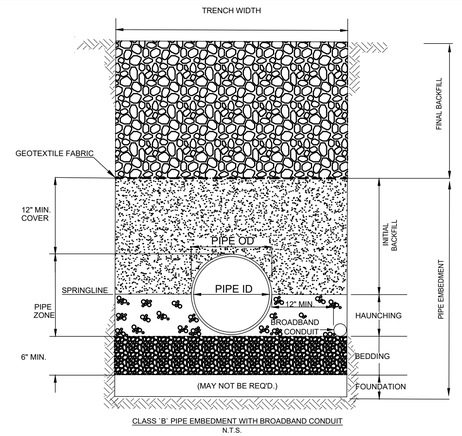
   CLASS C: CLASS C PIPE EMBEDMENT SHALL ONLY BE USED FOR DUCTILE IRON WATER MAIN, DUCTILE IRON FORCE MAINS OR AS AUTHORIZED BY THE ENGINEER. THE PIPE EMBEDMENT SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE. THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE. WHERE ROCK OR SHALE IS ENCOUNTERED, A MINIMUM 6-INCHES OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE BEDDING OR SAND BEDDING SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
4. 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.
5. SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATION 02300CT - EARTHWORK.
6. GEOTEXTILE FABRIC: INSTALL A GEOTEXTILE FABRIC IN ACCORDANCE WITH ODOT 712.09, TYPE A, AFTER ALL INITIAL BACKFILL CONSISTING OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.
7. DETECTOR TAPE: IF REQUIRED IN THE SPECIFICATIONS, INSTALL DETECTABLE WARNING TAPE ABOVE UTILITIES, 24" BELOW FINISHED GRADE, EXCEPT 6 INCHES BELOW SUBGRADE UNDER PAVEMENT AND SLABS.

TRENCHING, EMBEDMENT, AND BACKFILL DETAIL

NOT TO SCALE



CLASS 'A' PIPE EMBEDMENT WITH BROADBAND CONDUIT
N.T.S.



CLASS 'B' PIPE EMBEDMENT WITH BROADBAND CONDUIT
N.T.S.

CONDUIT SPECIFICATIONS:

1. MATERIAL: STANDARD SMOOTHWALL HDPE.
2. MANUFACTURER: DURALINE OR APPROVED EQUIVALENT.
3. DIAMETER: 2"
4. INSTALLATION: THE CONDUIT SHALL BE OFFSET FROM THE WATERLINE AS SHOWN ON THE DETAILS, ON OPPOSITE SIDE OF THE ROAD, TO REDUCE THE RISK ON CONDUIT BEING DAMAGED BY A WATER MAIN BREAK. A PULL TAPE SHALL BE INSTALLED I THE CONDUIT TO FACILITATE FUTURE CABLE INSTALLATION. AFTER CONDUIT HAS BEEN INSTALLED, THE CONTRACTOR SHALL ENSURE THE PULL TAPE CAN MOVE FREELY INDICATING NO OBSTRUCTIONS IN THE CONDUIT.
5. IDENTIFICATION: INCLUDE BURIED WARNING TAPE ABOVE THE CONDUIT IN ACCORDANCE WITH SPECIFICATION 310000.

HANDHOLE / PULL CHAMBER SPECIFICATIONS:

1. HANDHOLES ARE UNDERGROUND ENCLOSURES FOR PULLING OF CABLES, INSPECTIONS, AND REPAIRS.
2. CONDUIT SHALL ENTER VAULTS FROM THE SIDEWALL THROUGH OPENINGS CREATED PER MANUFACTURER INSTRUCTIONS.
3. CONDUIT SHALL PROTRUDE BEYOND EXTERIOR WALL OF THE VAULT BETWEEN 1 AND 3 INCHES.
4. MAKE AND MANUFACTURER: HUBBEL 24" X 36" X 24" POLYMER CONCRETE BOX OR APPROVED EQUIVALENT.
5. PULL CHAMBERS SHALL BE PLACED AT ROAD INTERSECTIONS AND INTERVALS NO EXCEEDING 600FT.

BROADBAND CONDUIT DETAIL

NOT TO SCALE

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFILED, OHIO

ASHTABULA COUNTY
STANDARD DETAILS - SD SERIES
CONSTRUCTION DETAILS

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
SD-02
SHEET 9 OF 43

CONTRACTOR'S RESPONSIBILITIES:

1. CONTRACTORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW.

2. CLEAN FILL: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSIBLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE) REFER TO STANDARD DETAILS AND PROJECT MANUAL FOR SPECIFIC PROJECT REQUIREMENTS.

3. ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTIC TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL.

4. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.

SITE RESTORATION:

1. ALL DISTURBED PROPERTY SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION, AS NEAR AS POSSIBLE WITHIN 20 DAYS.

2. ONCE AN AREA IS GRADED TO ITS FINAL GRADE IT MUST BE STABILIZED WITH THE PERMANENT SEED MIX SPECIFICATION ACCORDING TO ITS SLOPE.

INSPECTION AND MAINTENANCE:

1. ALL EROSION AND SEDIMENTATION CONTROL FACILITIES SHALL BE INSPECTED WEEKLY AND AFTER EACH

2. FABRIC FENCES: REPAIR DAMAGE TO FENCES. BACKFILL UNDERCUTTING. OVERTOPPED AREAS SHALL BE REPLACED WITH AN OUTLET ROCK FILTER. IF SEDIMENT REACHES ONE HALF THE FENCE HEIGHT, IT SHALL BE REMOVED AND PLACED IN THE TOPSOIL AND FILL STOCKPILE AREA. REPLACEMENT FENCE AND STAKES SHALL BE KEPT ON SITE.

3. CONSTRUCTION ENTRANCE: WHEN UTILIZED, INSPECTED DAILY. EXCESS SEDIMENT SHALL BE REMOVED AND STORED IN THE TOPSOIL AND FILL STOCKPILE AREA AND USED AS FILL OR ROAD SUBBASE. A STOCKPILE OF REPLACEMENT ROCK SHALL BE KEPT ON SITE.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF SEDIMENTATION AND EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AS OUTLINED HEREIN. AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE COUNTY SOIL CONSERVATION DISTRICT AND THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

2. ALL EROSION CONTROL MEASURES SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN ARE TO BE INSTALLED PRIOR TO BEGINNING ANY OTHER EARTH DISTURBING ACTIVITY.

3. EROSION AND SEDIMENT BMPs (BEST MANAGEMENT PRACTICES) MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTRIBUTION BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING INSPECTIONS OF ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL STORMS THAT PRODUCE MORE THAN ¾" TOTAL RAINFALL. ANY NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY.

5. THE CONTRACTOR SHALL DOCUMENT ALL INSPECTIONS AND REPAIRS THAT ARE DONE TO MAINTAIN EFFICIENCY. COPIES OF EROSION CONTROL INSPECTION REPORTS SHALL BE SUBMITTED TO THE COUNTY SOIL CONSERVATION DISTRICT. CONTRACTOR SHALL USE DEP FORM 3150-FM-BWEW0083, VISUAL SITE INSPECTION REPORT.

6. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.

7. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

RECYCLING/DISPOSAL OF WASTE REQUIREMENTS:

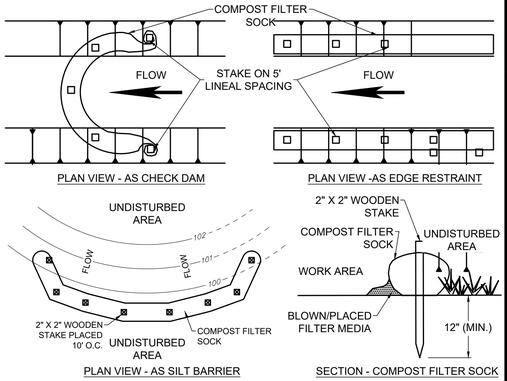
1. ALL CONSTRUCTION/DEMOLITION WASTE MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE DEPARTMENTS SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET. SEQ., 287.1 ET. SEQ. THIS INCLUDES SOLID WASTE RESULTING FROM THE CONSTRUCTION OR DEMOLITION OF BUILDINGS OR OTHER STRUCTURES, INCLUDING BUT NOT LIMITED TO: WOOD, PLASTER, METALS, ASPHALTIC SUBSTANCES, BRICKS, BLOCK AND UNSEGREGATED CONCRETE. THIS DOES NOT INCLUDE: UNCONTAMINATED SOIL, ROCK, STONE, GRAVEL, BRICK, BLOCK, CONCRETE, USED ASPHALT, WASTE FROM LAND CLEARING, GRUBBING AND EXCAVATION, INCLUDING TREES, BRUSH, STUMPS AND VEGETATIVE MATERIAL IF THEY ARE SEPARATE FROM OTHER WASTE AND ARE USED AS CLEAN FILL.

2. CONSTRUCTION WASTES (INCLUDING BUT NOT LIMITED TO EXCESS SOIL, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC.) ARE TO BE DISPOSED OF OR RECYCLED AT APPROPRIATE, PERMITTED FACILITIES.

3. THE CONTRACTOR MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT (IF ANY) QUALIFIES AS CLEAN FILL MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR SECURING ANY REQUIRED PERMITS.

4. DISPOSAL OF WASTE MATERIALS MUST COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

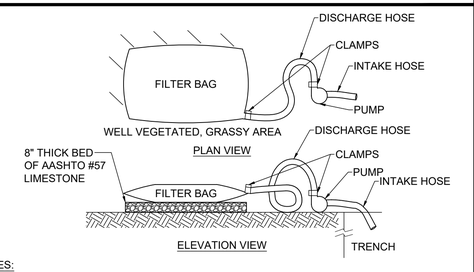
5. ANTICIPATED CONSTRUCTION WASTE:
   A. FILL MATERIAL FROM EXCAVATION - LANDFILL
   B. CONSTRUCTION DEMOLITION FROM BUILDINGS, TANKS, ETC. - LANDFILL OR RECYCLE IF FEASIBLE
   C. CONCRETE WASHOUT - USE WASHOUT FACILITY



NOTES:

1. THIS PROJECT REQUIRES THE USE OF 8" DIA. COMPOST FILTER SOCK.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8' UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN IN THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCK.
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED IN THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
5. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
6. SOCK FABRIC AND COMPOST SHALL MEET THE STANDARDS OF THE LATEST VERSION OF THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL.
7. BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
8. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
9. SACKS MAY BE LEFT IN PLACE OR REMOVED. IN THE FORMER CASE, THE SOCK MATERIAL SHALL BE CUT OPEN AND THEN MULCH SPREAD AS A SOIL SUPPLEMENT.

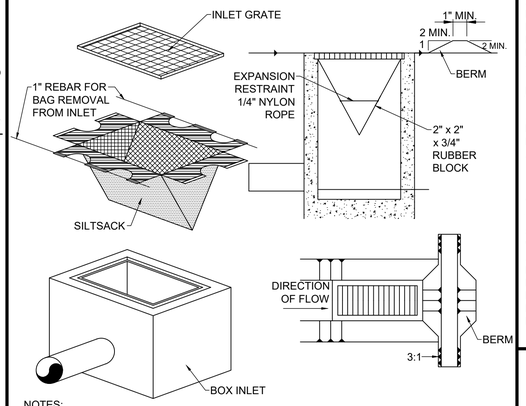
COMPOST FILTER SOCK
NOT TO SCALE



NOTES:

1. USE FILTER BAGS MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS, CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. REPLACE FILTER BAGS WHEN THEY BECOME 1/2 FULL. KEEP SPARE BAGS AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. PLACE BAGS IN WELL-VEGETATED (GRASSY) AREAS, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, PROVIDE A GEOTEXTILE FLOW PATH. DO NOT PLACE BAGS ON SLOPES GREATER THAN 5%.
4. INSERT PUMP DISCHARGE HOSE INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
5. THE PUMPING RATE SHOULD BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.
6. INSPECT FILTER BAGS DAILY. IF ANY PROBLEM IS DETECTED, CEASE PUMPING IMMEDIATELY AND DO NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

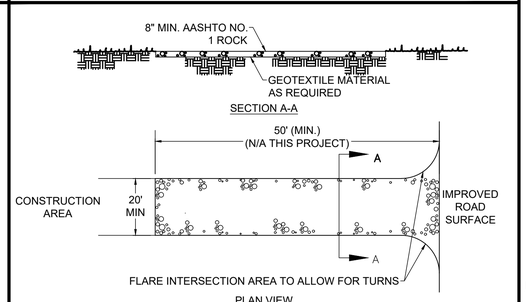
PUMPED WATER FILTER BAG DETAIL
NOT TO SCALE



NOTES:

1. MAXIMUM DRAINAGE AREA =1/2 ACRE.
2. INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP.
3. BERMS REQUIRED FOR ALL INSTALLATIONS.
   3.1. EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED.
   3.2. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED.
   3.3. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

SILT SACK DETAIL
NOT TO SCALE



NOTES

1. ROCK CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS AND CONSTRUCTED TO THE MINIMUM WIDTH, LENGTH AND THICKNESS DIMENSIONS SHOWN.
2. ROCK SHALL BE AASHTO NO.1 AS SPECIFIED IN SECTION 703.2 OF THE PENNDOT PUBLICATION 408.
3. FOR INSTALLATION ON CLAYEY OR POORLY DRAINED SOILS, A GEOTEXTILE FABRIC UNDERLAYMENT, OF A TYPE RECOMMENDED FOR SUCH APPLICATIONS BY THE MANUFACTURER, SHALL BE USED.
4. MAINTENANCE: THE ROCK CONSTRUCTION ENTRANCE SHALL BE REDRESSED WHEN VOIDS BECOME CHOKED WITH SEDIMENT. THE STRUCTURES THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY CLEANING OR ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON DRIVEWAYS AND PUBLIC ROADWAYS, SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE DRIVEWAYS OR ROADWAYS WITH WATER IS NOT PERMITTED.

ROCK CONSTRUCTION ENTRANCE
NOT TO SCALE

PERMANENT SEED MIX:

TYPE	GERMINATION RATE	APPLICATION RATE
PERMANENT SEED MIXTURE FOR SLOPES 3:1 AND LESS		
50% KENTUCKY BLUEGRASS	85%	1 LBS. PER
20% PERENNIAL RYEGRASS	90%	1250 SF
30% CREEPING RED FESCUE	88%	
98% PURE LIVE SEED		
PERMANENT SEED MIXTURE FOR SLOPES GREATER THAN 3:1		
30% ANNUAL RYEGRASS	90%	1 LBS. PER
25% KENTUCKY BLUEGRASS	90%	1000 SF
31% TALL FESCUE	90%	
15% BIRDSFOOT TREFOIL	90%	
15% WHITE CLOVER	90%	
10% CLIMAX TIMOTHY	90%	
5% REDTOP	90%	
98% PURE LIVE SEED		

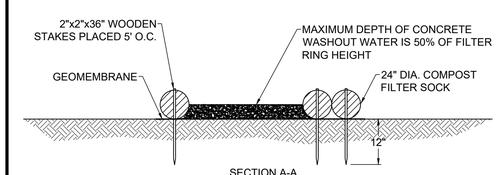
APPLICATION RATE: 100 LB/ACRE
FERTILIZER 10-20-20, APPLICATION RATE: 680 LB/ACRE
LIMING RATE: 2.0 TON/ACRE
MULCH: STRAW - MULCHING RATE: 3.0 TON/ACRE
PROTECT SEED WITH: NAG 575 OR APPROVED SUBSTITUTE
SEEDING SEASONS: MARCH 15 - JUNE 1 & AUG 1 - OCT 15

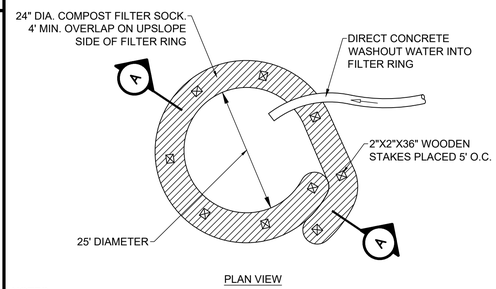
BIODEGRADABLE EROSION CONTROL MATTING/BLANKET

A TEMPORARY DEGRADABLE ROLLED EROSION CONTROL PRODUCT COMPOSED OF PROCESSED NATURAL FIBERS MECHANICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX. AREAS WITH SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH NORTH AMERICAN GREEN S75BN EROSION CONTROL BLANKET (ECB) OR APPROVED SUBSTITUTE.

TEMPORARY SEED MIX:

SPECIES: ANNUAL RYE
% PURE LIVE SEED: 98%
APPLICATION RATE: 50 LB/ACRE
FERTILIZER: 10-20-20
FERTILIZER APPLICATION RATE: 680 LB/ACRE
LIMING RATE: 2.0 TON/ACRE
MULCH: STRAW
MULCHING RATE: 3.0 TON/ACRE





NOTES:

1. PROVIDE PROPER SIGNAGE FOR CONCRETE DELIVERY VEHICLE DRIVERS SO THAT THEY ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES.
2. WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50' OF STORM DRAINS, OPEN DITCHES, OR SURFACE WATERS. UNDER NO CIRCUMSTANCES SHOULD WASH WATER BE ALLOWED TO ENTER ANY SURFACE WATERS.
3. WHEREVER POSSIBLE, CONCRETE WASHOUTS SHOULD BE LOCATED ON SLOPES NOT EXCEEDING A 2% GRADE.
4. A SUITABLE IMPERVIOUS GEOMEMBRANE SHOULD BE PLACED AT THE LOCATION OF THE WASHOUT. COMPOST SOCKS SHOULD BE STAKED IN THE MANNER RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE GEOMEMBRANE SO AS TO FORM A RING WITHIN THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER. CARE MUST BE TAKEN TO ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE GEOMEMBRANE AT ALL LOCATIONS. WHERE NECESSARY, 18" SOCKS MAY BE STACKED ONTO 24" SOCKS AND STAKED SO AS TO FORM A TRIANGULAR CROSS SECTION.

TYPICAL COMPOST SOCK WASHOUT INSTALLATION DETAIL
NOT TO SCALE

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

STATE OF OHIO — GEORGIA CONWAY — E-85401 — REGISTERED PROFESSIONAL ENGINEER

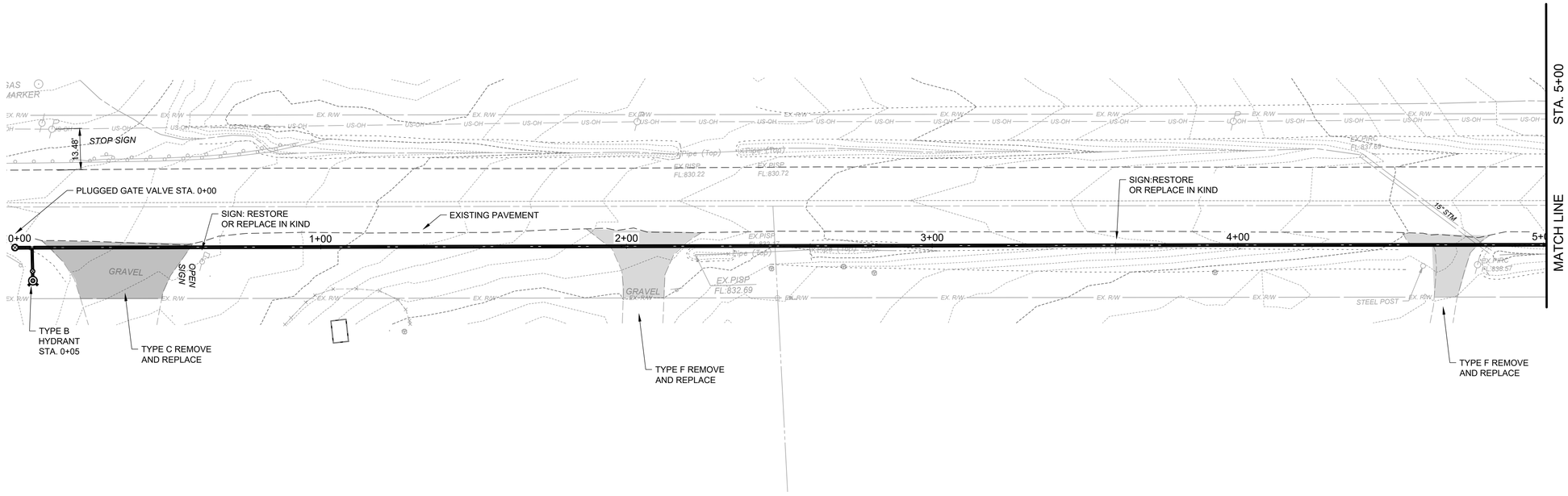
NO	REVISION	DATE

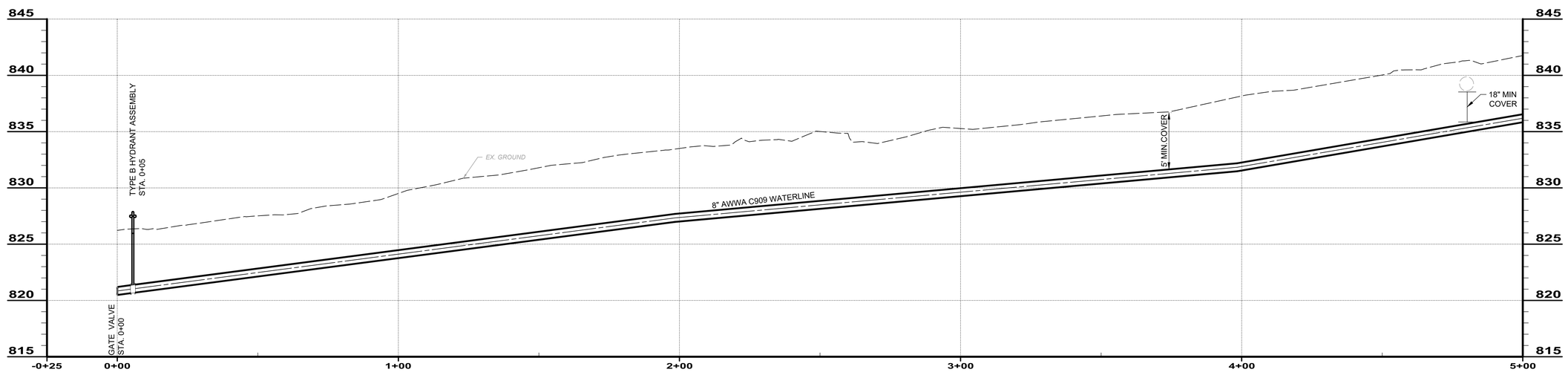
ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
STANDARD DETAILS - SD SERIES
CONSTRUCTION DETAILS

PROJECT NO.: 241222
DISCIPLINE: CIVIL
SHEET NAME: SD-03
SHEET: 10 OF: 43

CONTRACT B, PART B1 BEGINS





SOUTH RIVER ROAD 0+00 TO 5+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

PLAN AND PROFILE - 10 SERIES

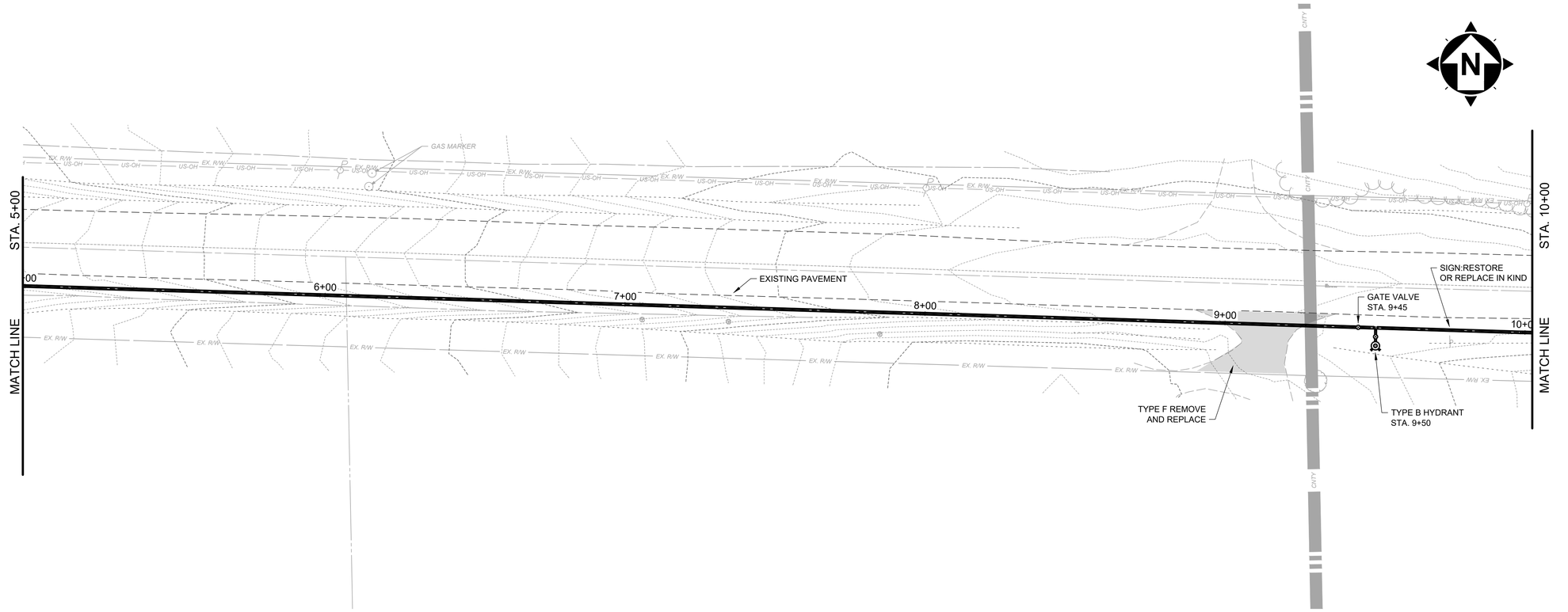
SOUTH RIVER ROAD STA. 0+00 TO STA. 5+00

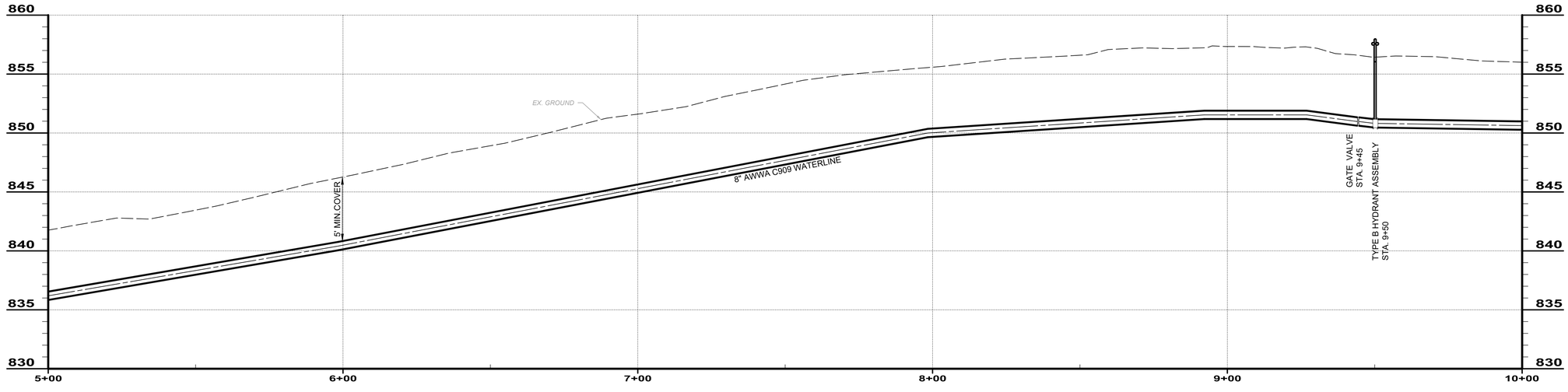
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-01

SHEET 11 OF 43





SOUTH RIVER ROAD 5+00 TO 10+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

H:\2024\241222\DWG\SHEETS_241222_PLANANDPROFILE.DWG - 12 SOUTH RIVER ROAD STA. 5+00 TO STA. 10+00 - 6/3/2025 2:27:25 PM - CORY SCOTT

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

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MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

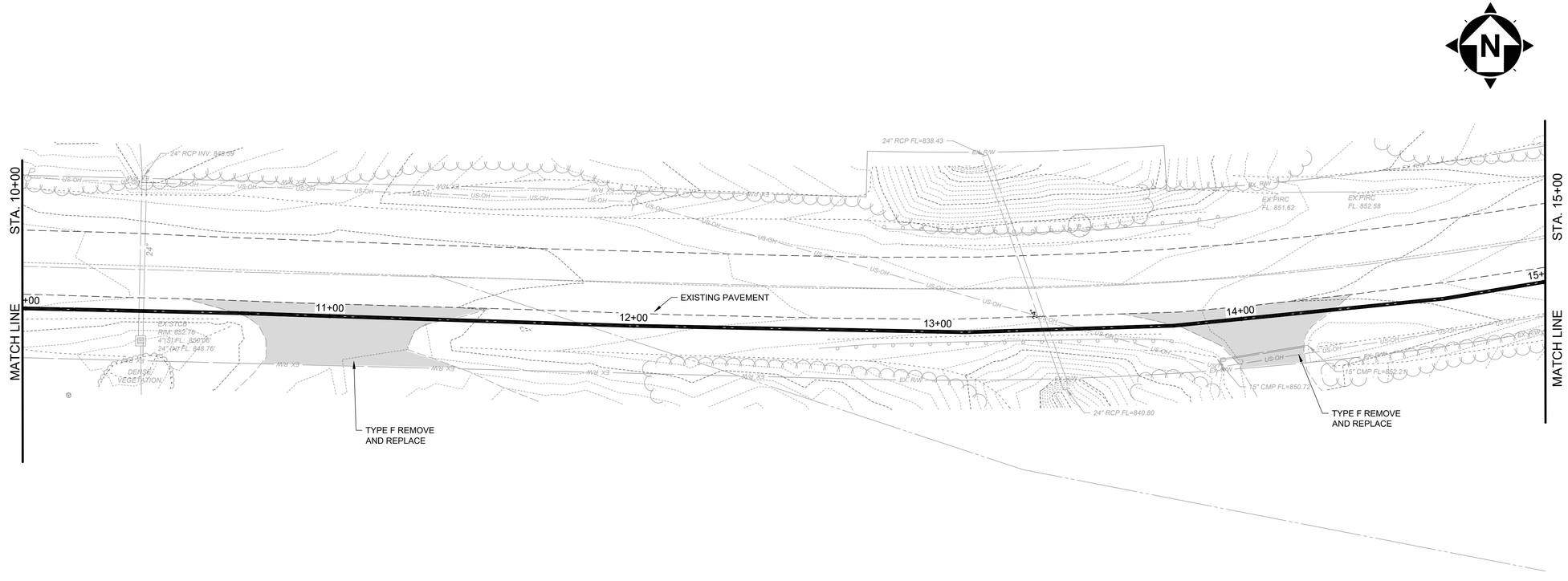
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ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

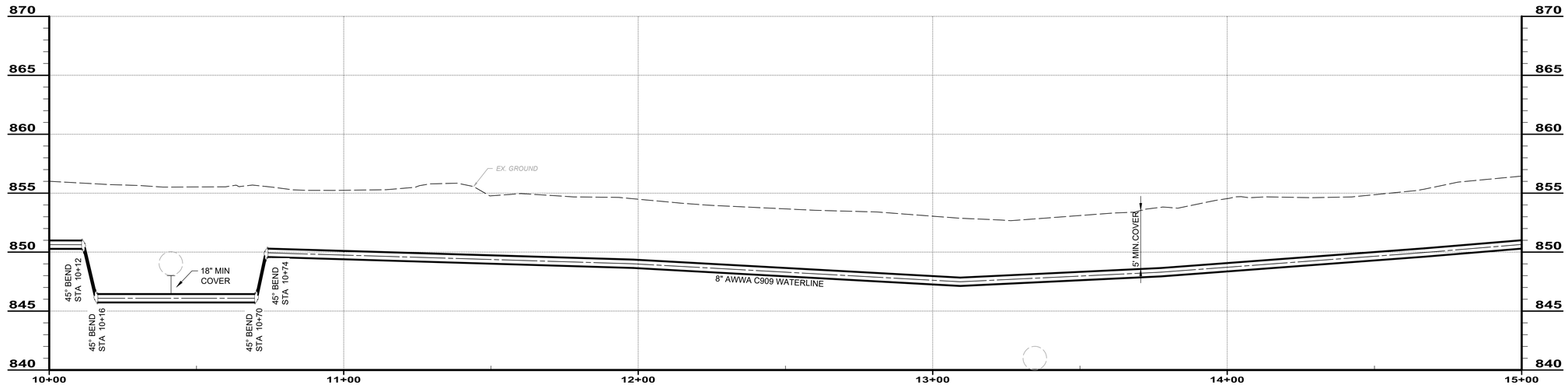
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO

PLAN AND PROFILE - 10 SERIES

SOUTH RIVER ROAD STA. 5+00 TO STA. 10+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-02
SHEET 12 OF 43





SOUTH RIVER ROAD 10+00 TO 15+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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MENTOR, OHIO 44060
(440) 951-9000

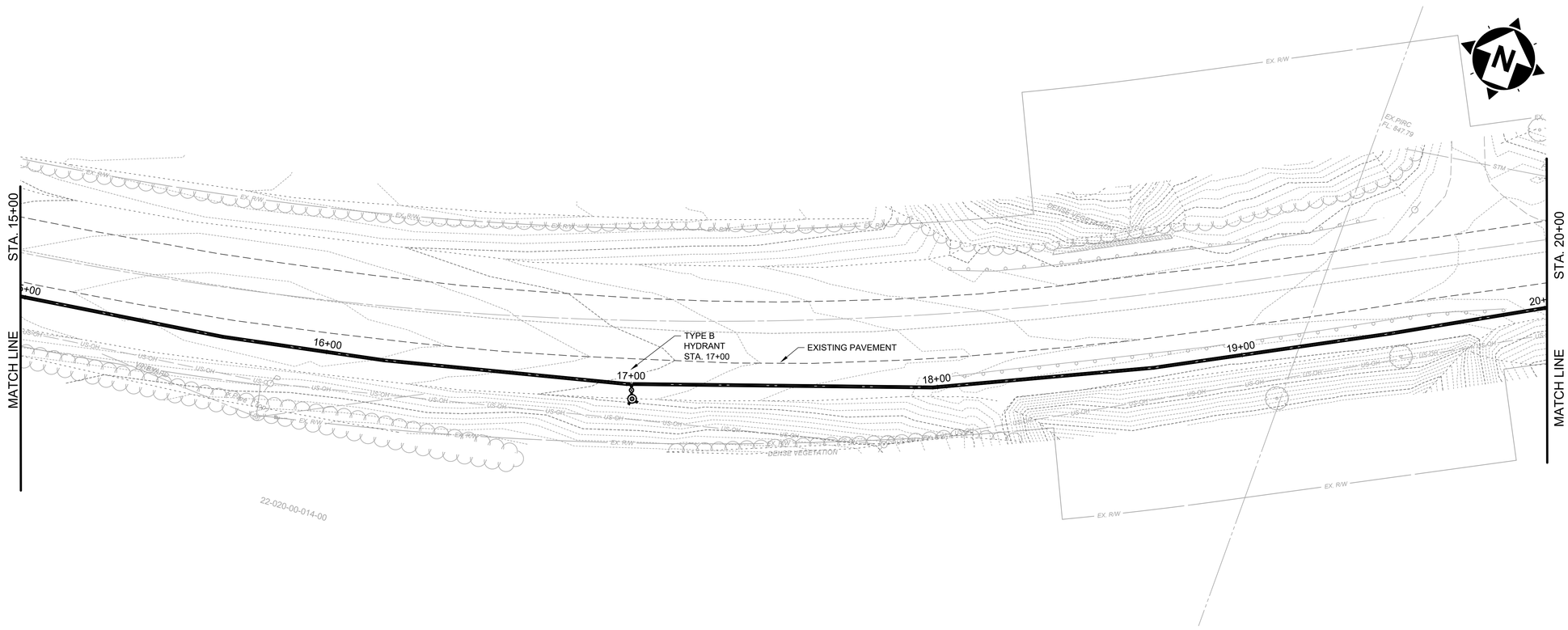
STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

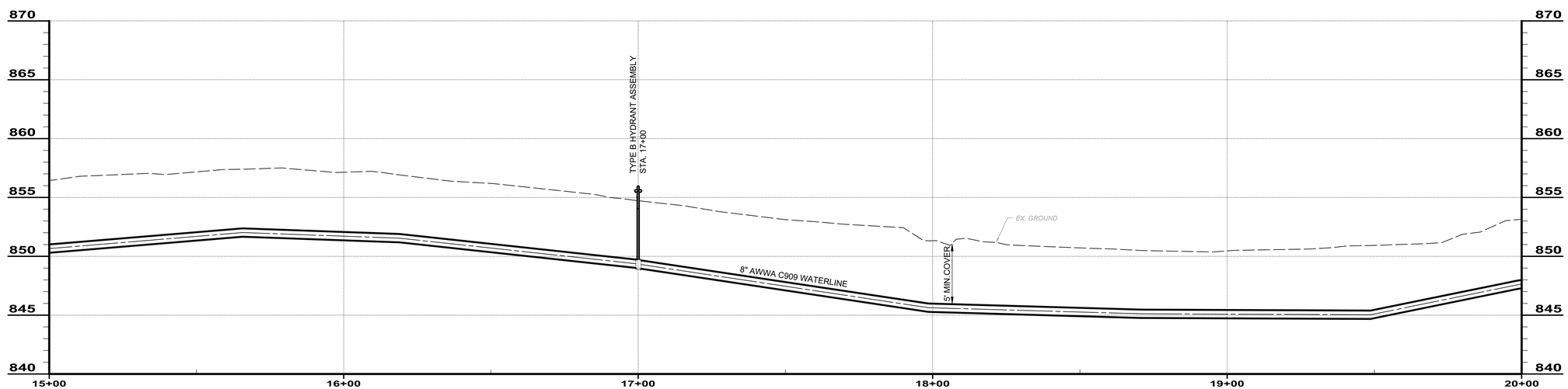
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 10+00 TO STA. 15+00

PROJECT NO. 241222
DISCIPLINE CIVIL
SHEET NAME PP-03
SHEET 13 OF 43





SOUTH RIVER ROAD 15+00 TO 20+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

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MENTOR, OHIO 44060
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NO	REVISION	DATE

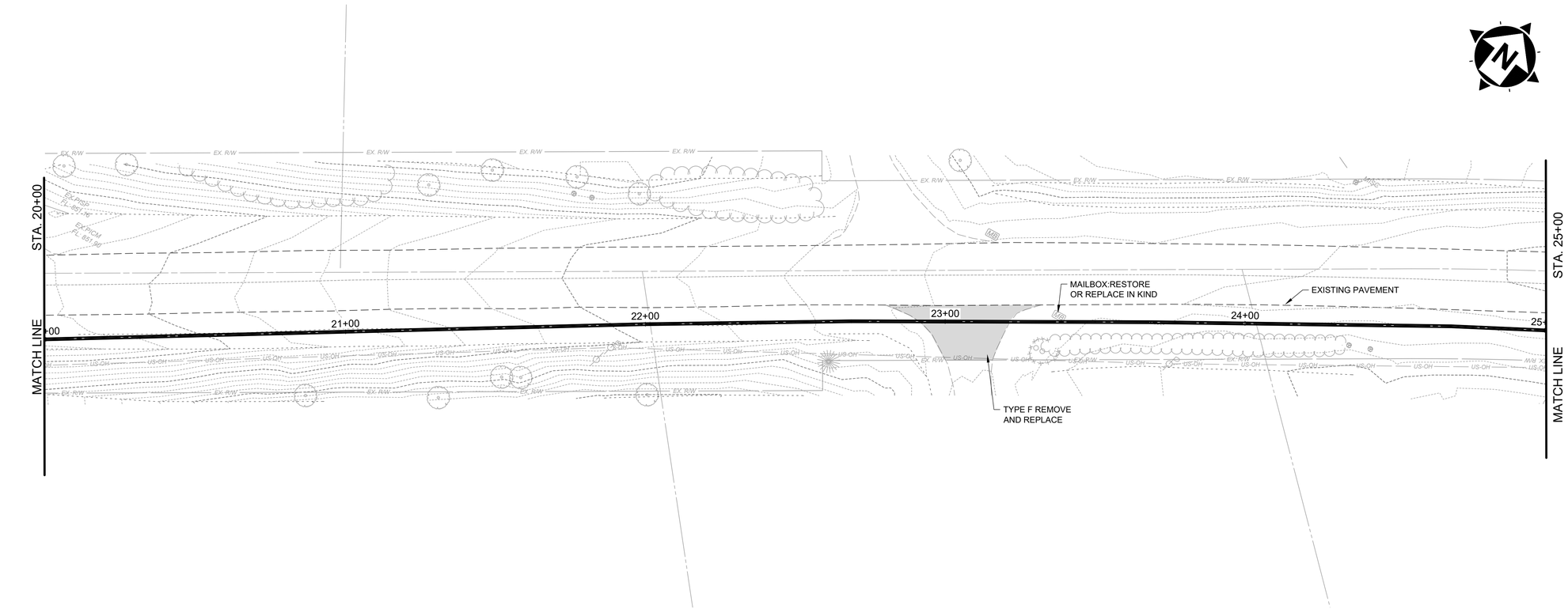
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ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

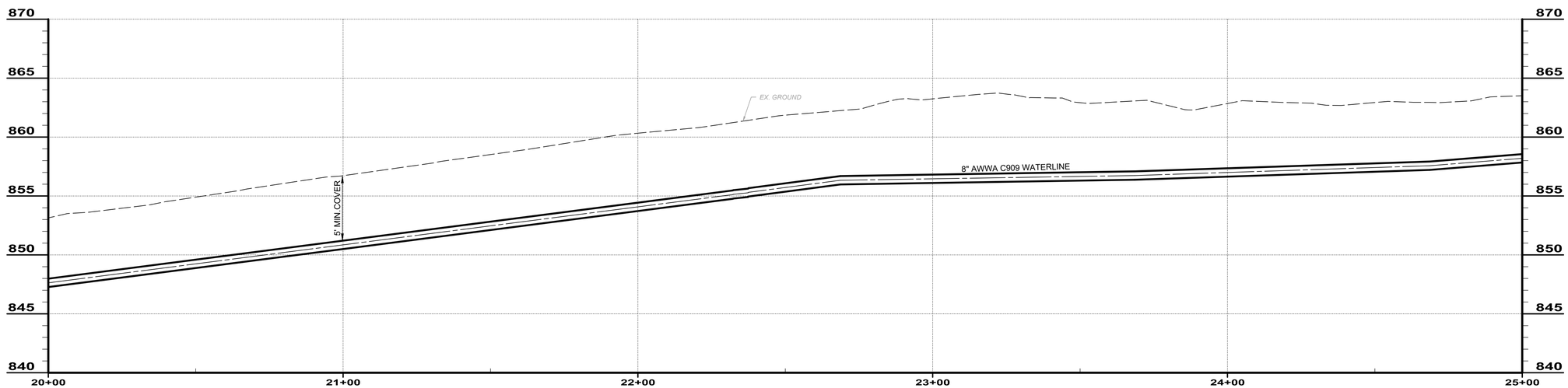
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFILED, OHIO

ASHTABULA COUNTY
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 15+00 TO STA. 20+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-04
SHEET 14 OF 43

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SOUTH RIVER ROAD 20+00 TO 25+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

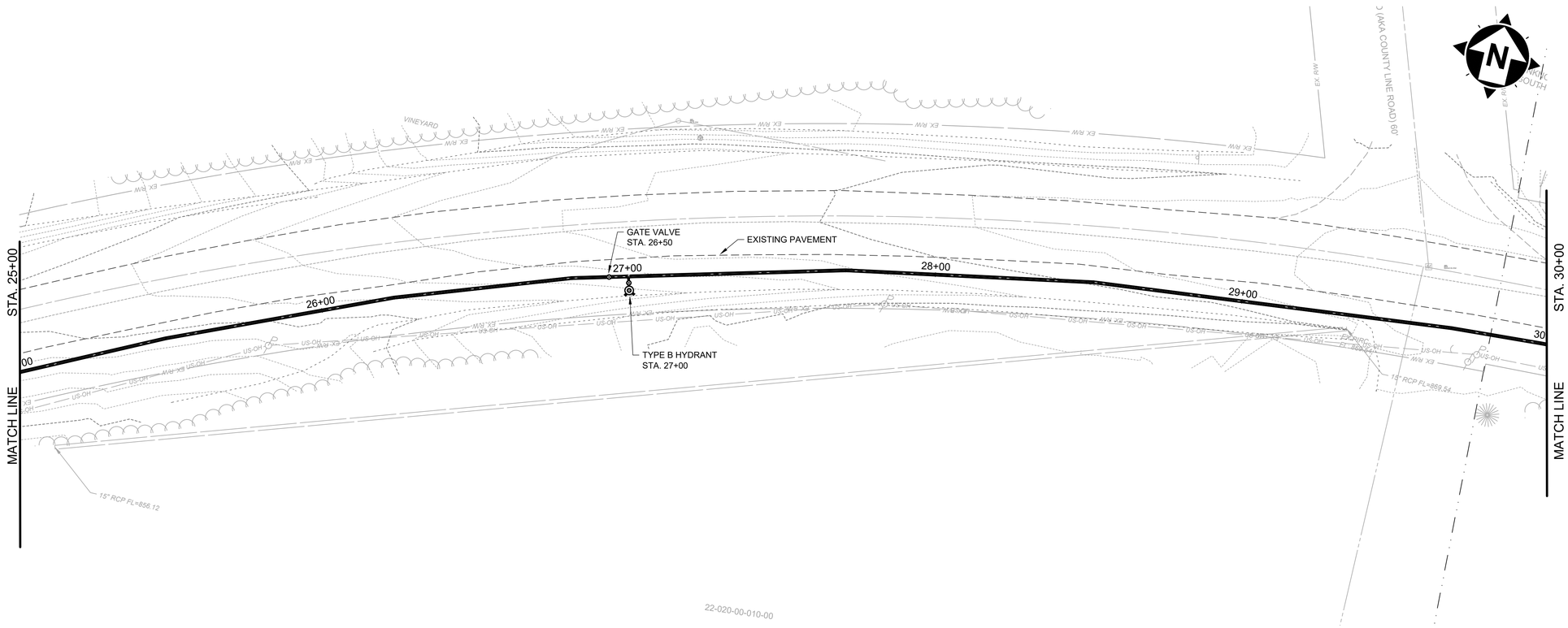
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

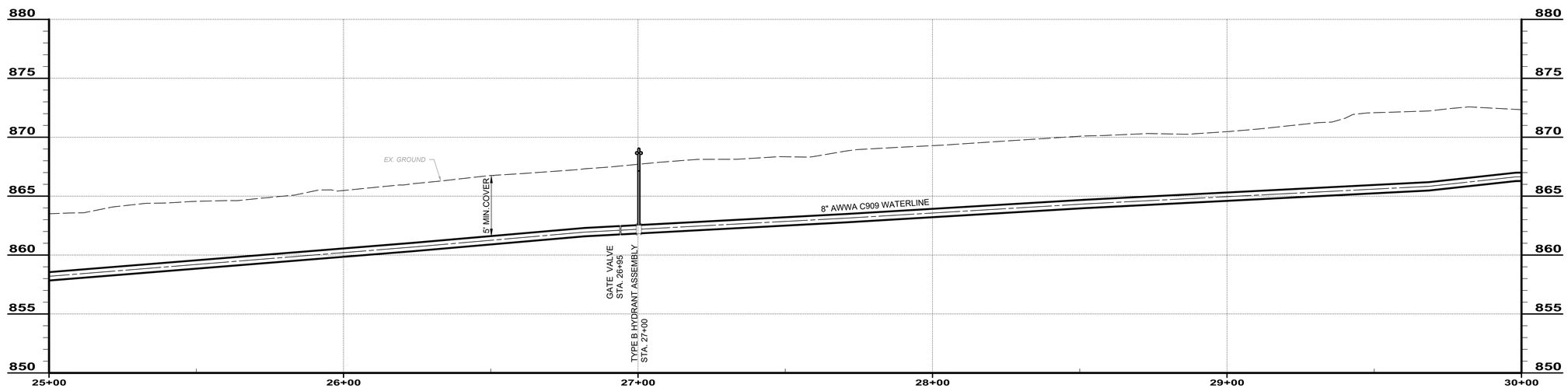
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 20+00 TO STA. 25+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-05
SHEET 15 OF 43





SOUTH RIVER ROAD 25+00 TO 30+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

H:\2024\241222\DWG\SHEETS_241222_PLANANDPROFILE.DWG - 16 SOUTH RIVER ROAD STA. 25+00 TO STA. 30+00 - 6/3/2025 2:27:25 PM - CORY SCOTT

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

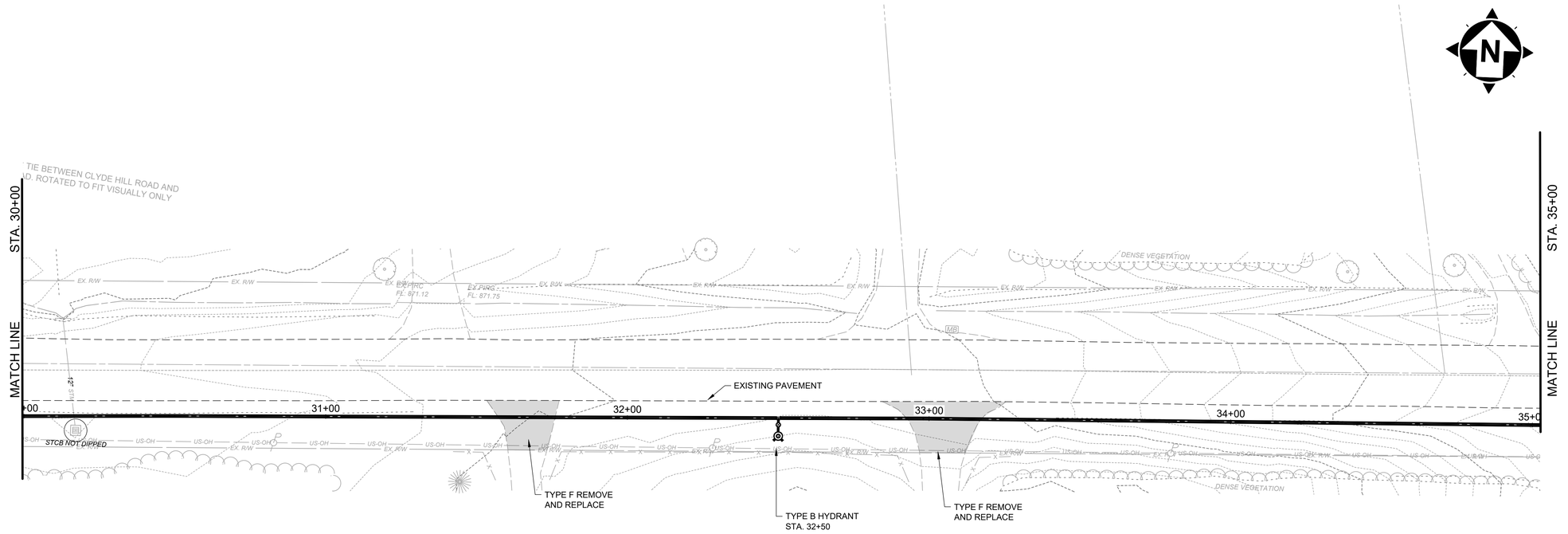
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

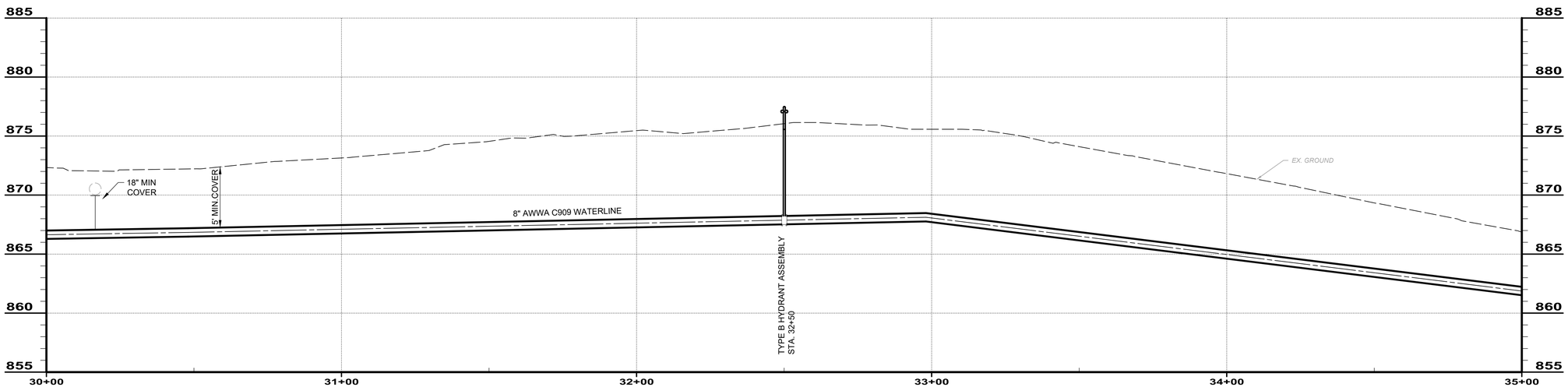
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFIELD, OHIO
ASHTABULA COUNTY
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 25+00 TO STA. 30+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-06
SHEET 16 OF 43





SOUTH RIVER ROAD 30+00 TO 35+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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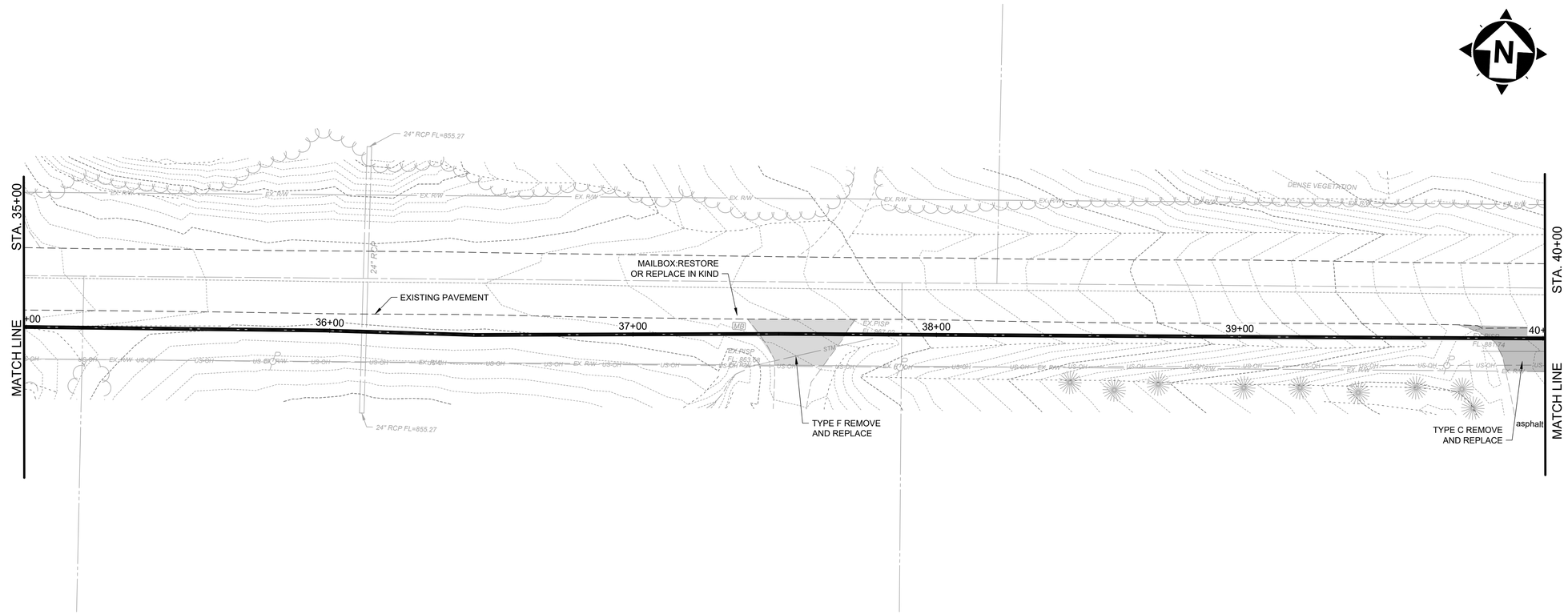
STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

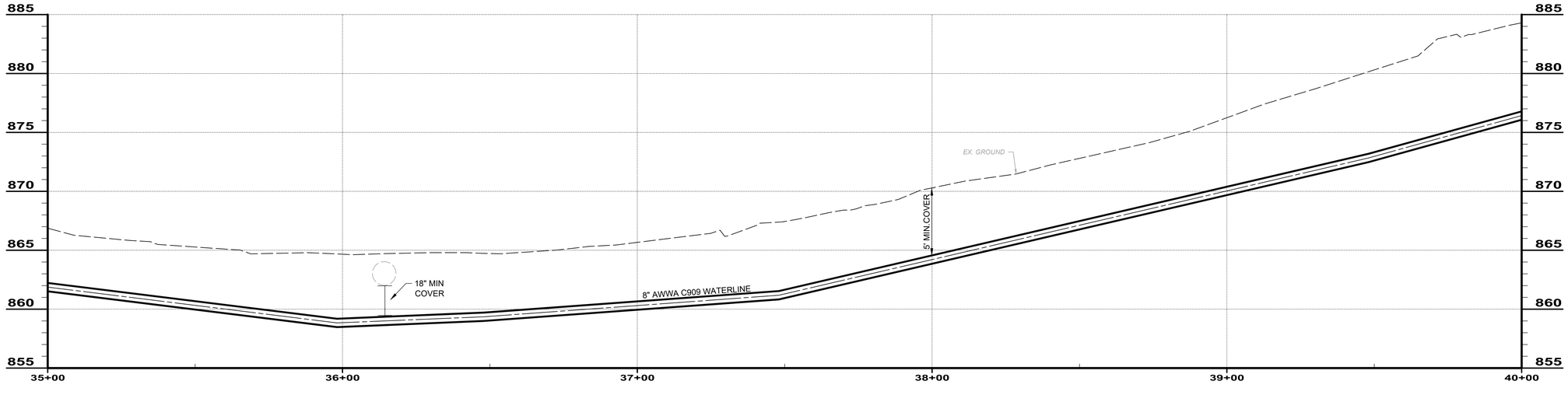
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ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 30+00 TO STA. 35+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-07
SHEET 17 OF 43





SOUTH RIVER ROAD 35+00 TO 40+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

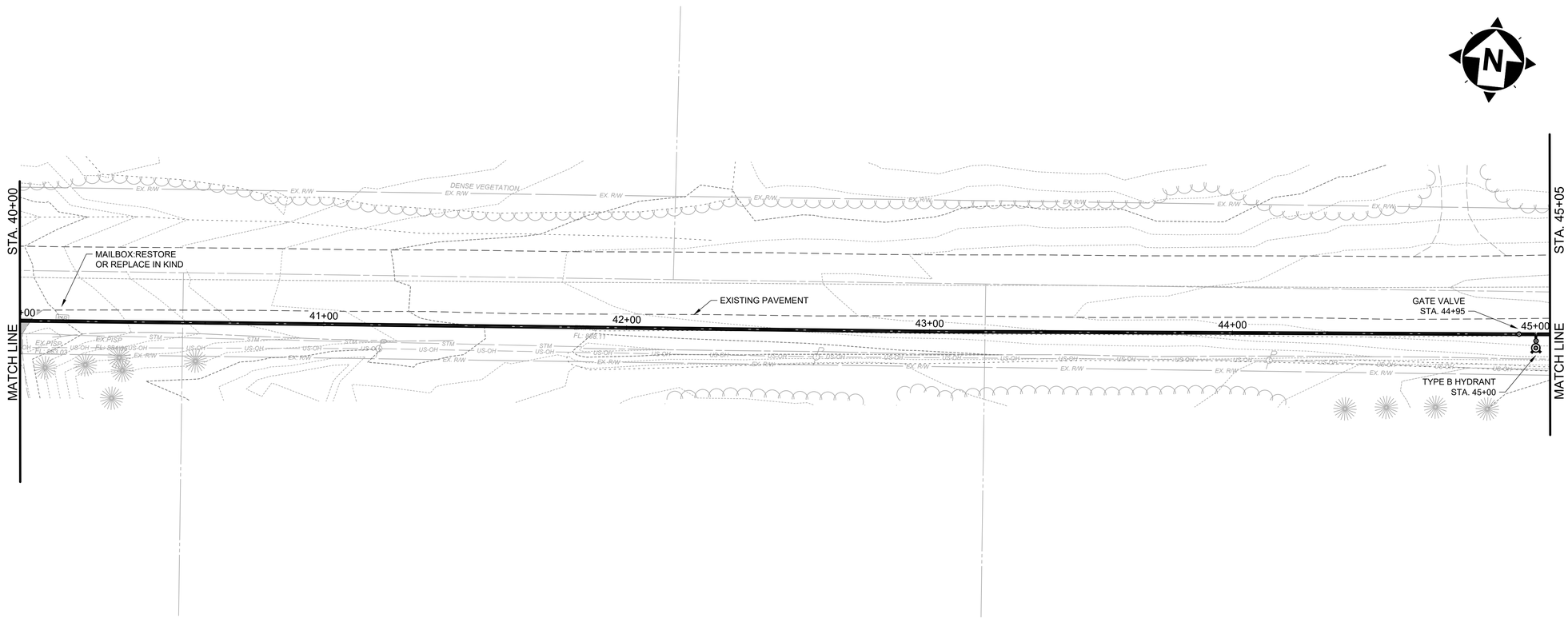
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 35+00 TO STA. 40+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-08
SHEET 18 OF 43



SOUTH RIVER ROAD 40+00 TO 45+25

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
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ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

PLAN AND PROFILE - 10 SERIES

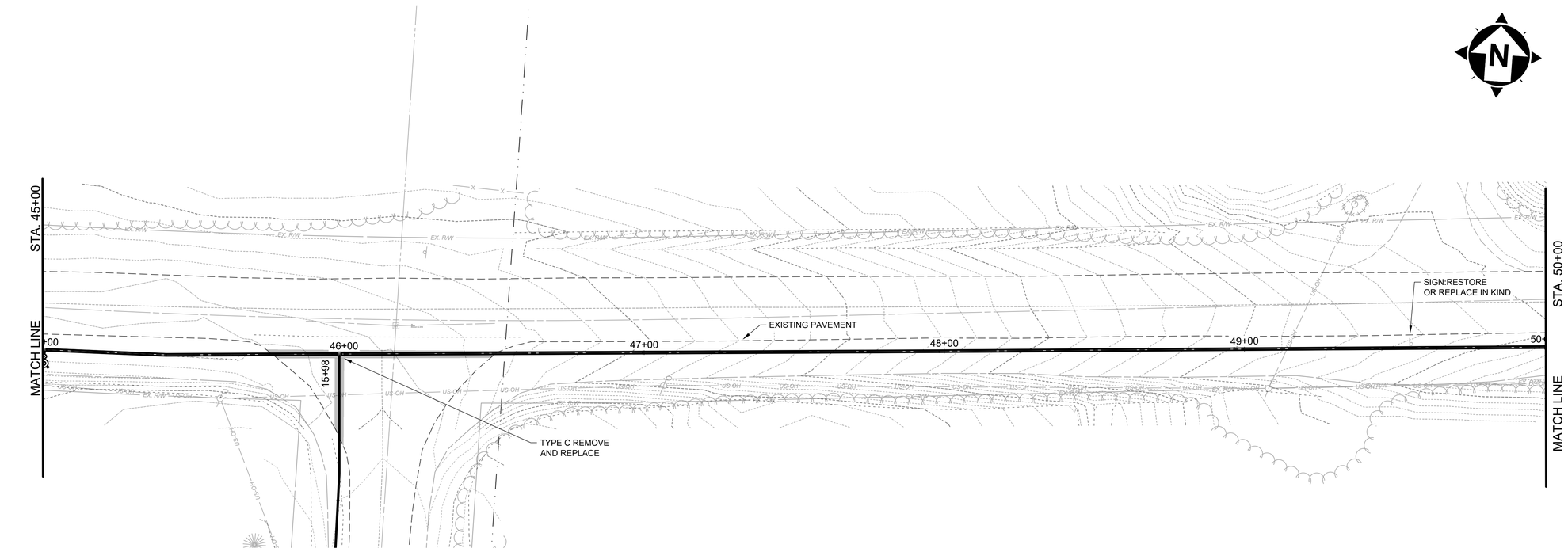
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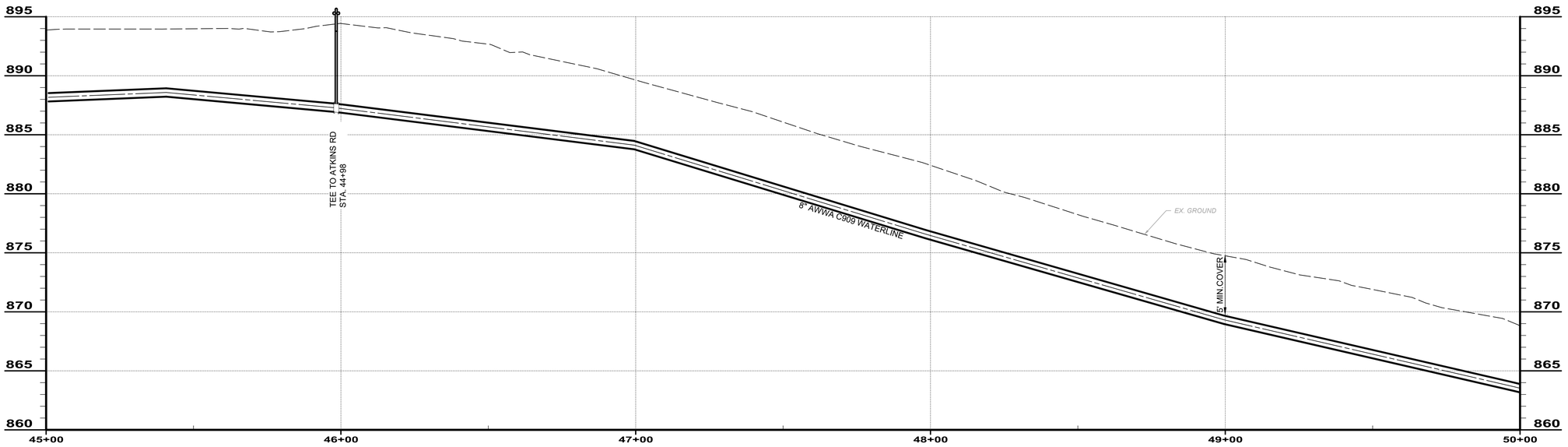
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-09

SHEET 19 OF 43





SOUTH RIVER ROAD 45+00 TO 50+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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GEORGIA CONWAY
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REGISTERED PROFESSIONAL ENGINEER

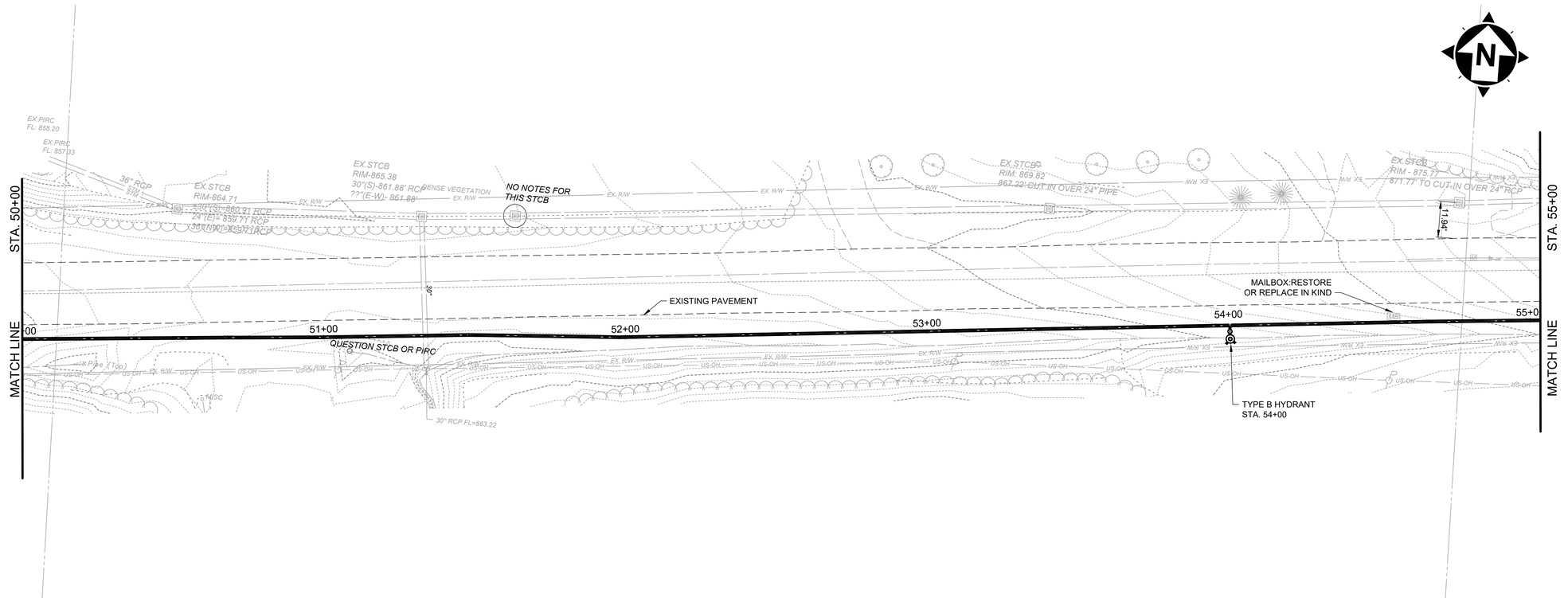
NO	REVISION	DATE

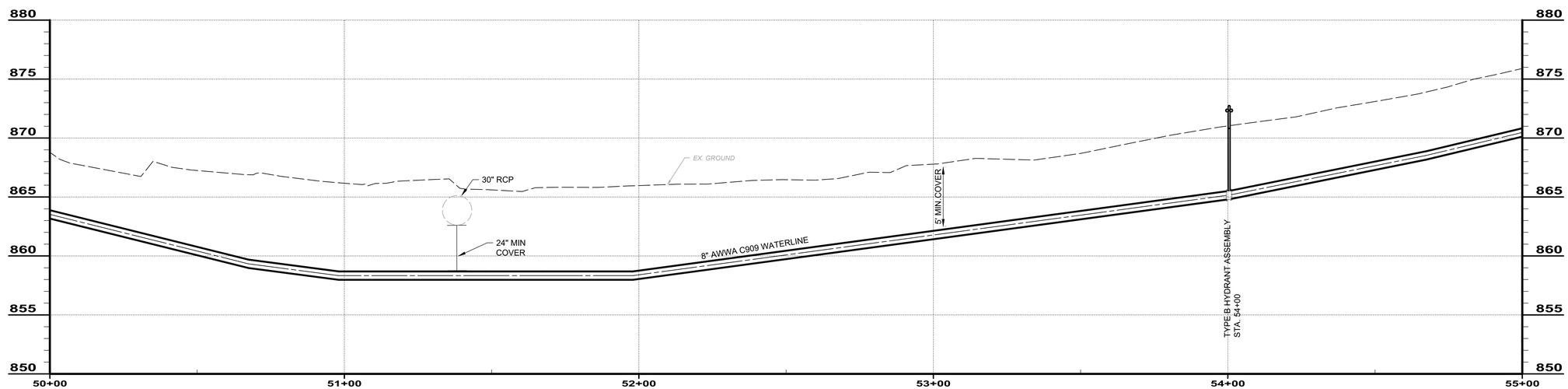
ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFILED, OHIO

ASHTABULA COUNTY
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 45+00 TO STA. 50+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-10
SHEET 20 OF 43





SOUTH RIVER ROAD 50+00 TO 55+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

H:\2024\241222\DWG\SHEETS_241222_PLANANDPROFILE 2.DWG - 21 SOUTH RIVER ROAD STA. 50+00 TO STA. 55+00 - 6/3/2025 2:26:44 PM - CORY SCOTT

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

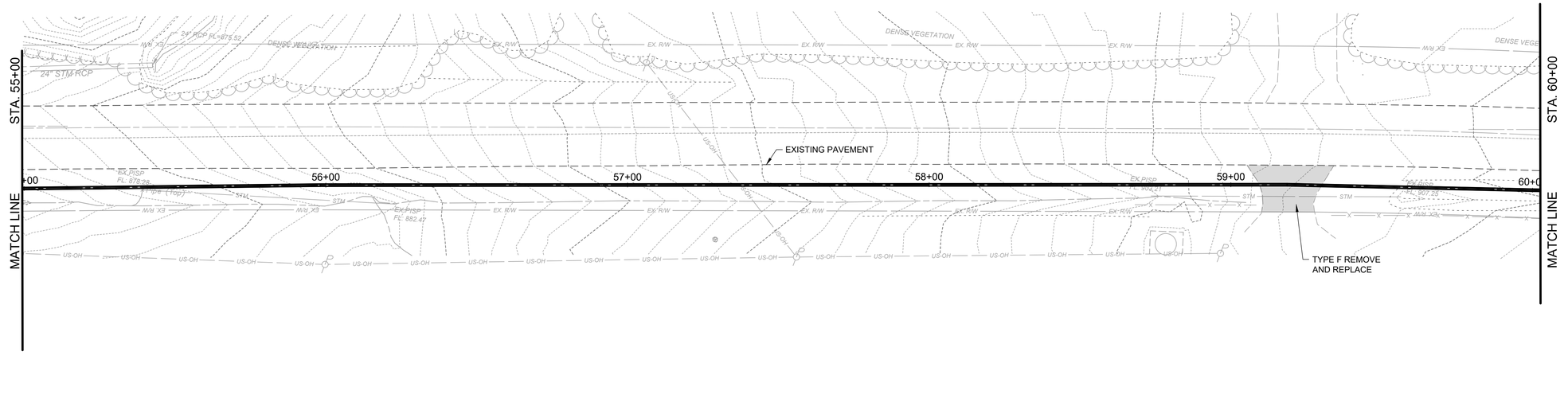
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

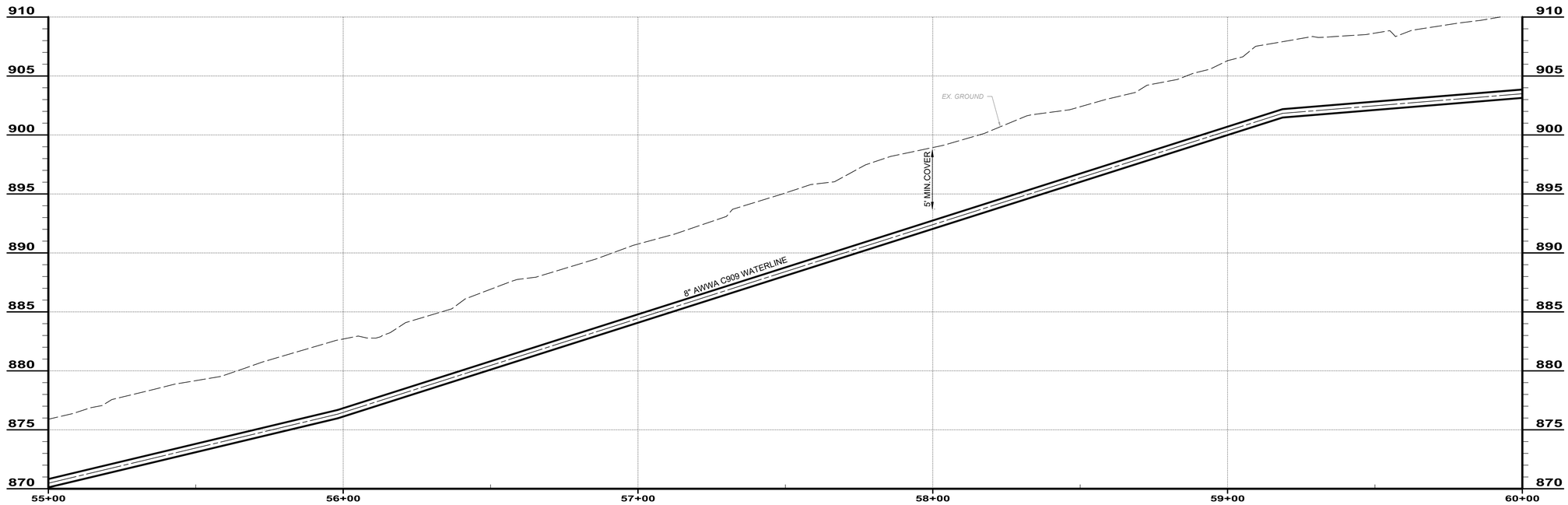
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 50+00 TO STA. 55+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-11
SHEET 21 OF 43





SOUTH RIVER ROAD 55+00 TO 60+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

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MENTOR, OHIO 44060
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ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

PLAN AND PROFILE - 10 SERIES

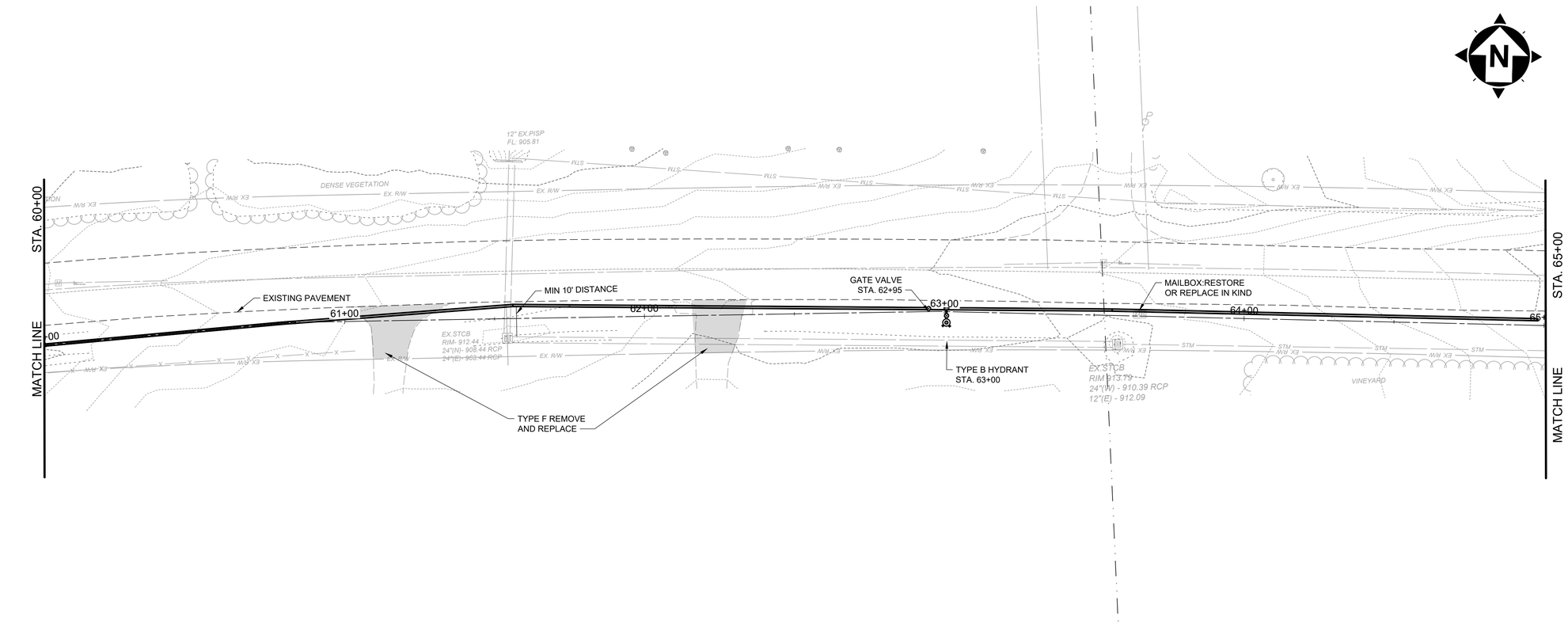
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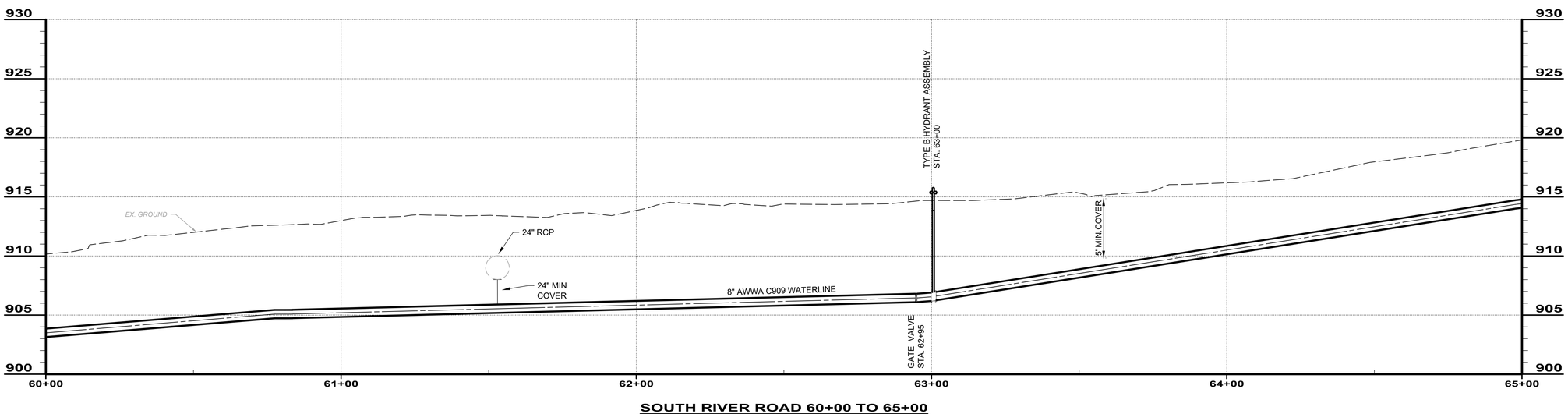
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-12

SHEET 22 OF 43





SOUTH RIVER ROAD 60+00 TO 65+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

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8150 STERLING COURT
MENTOR, OHIO 44060
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NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO

PLAN AND PROFILE - 10 SERIES

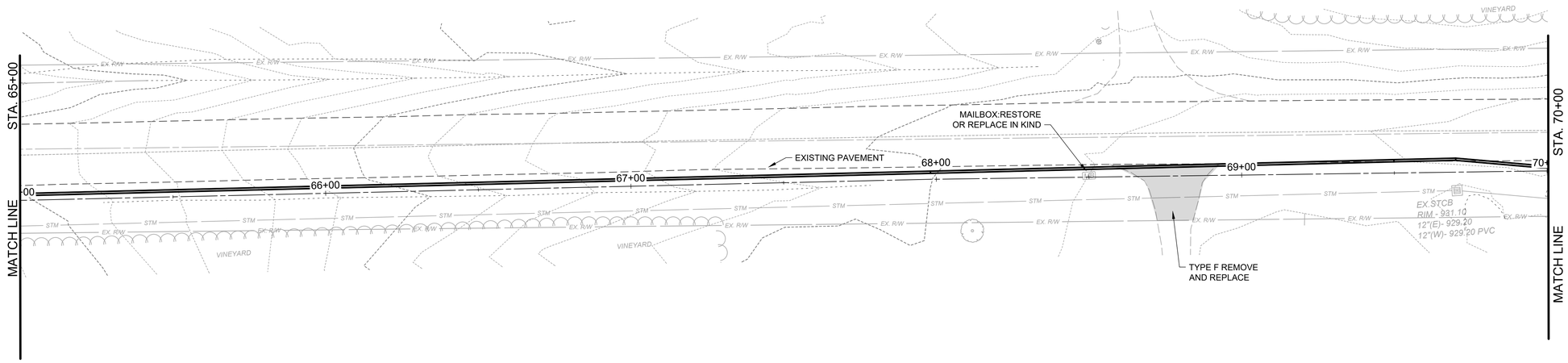
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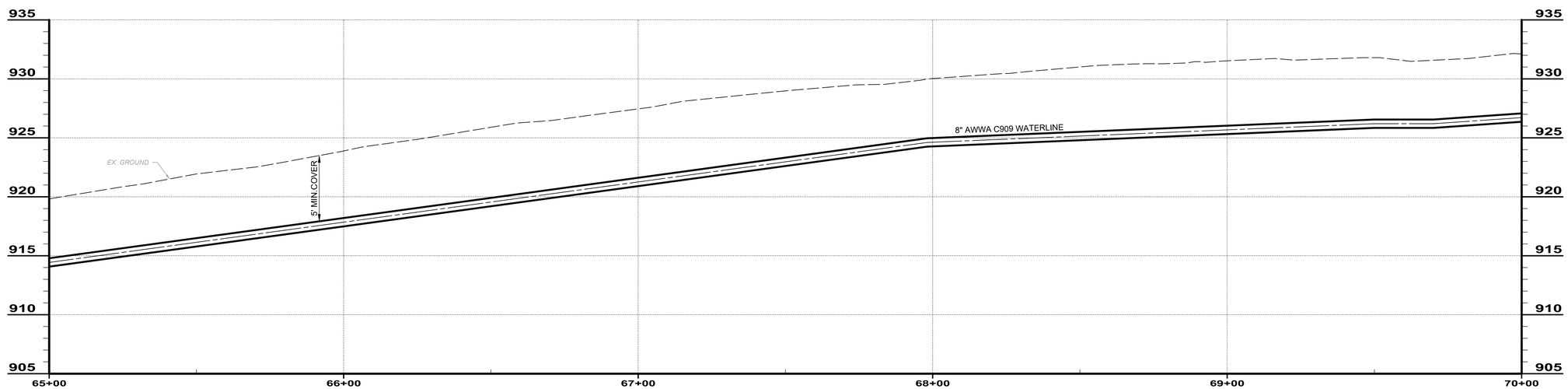
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-13

SHEET 23 OF 43





SOUTH RIVER ROAD 65+00 TO 70+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
STATE OF OHIO
REGISTERED
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ISSUE DATE:	6/3/2024
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DESIGNED BY:	MLB
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ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO

PLAN AND PROFILE - 10 SERIES

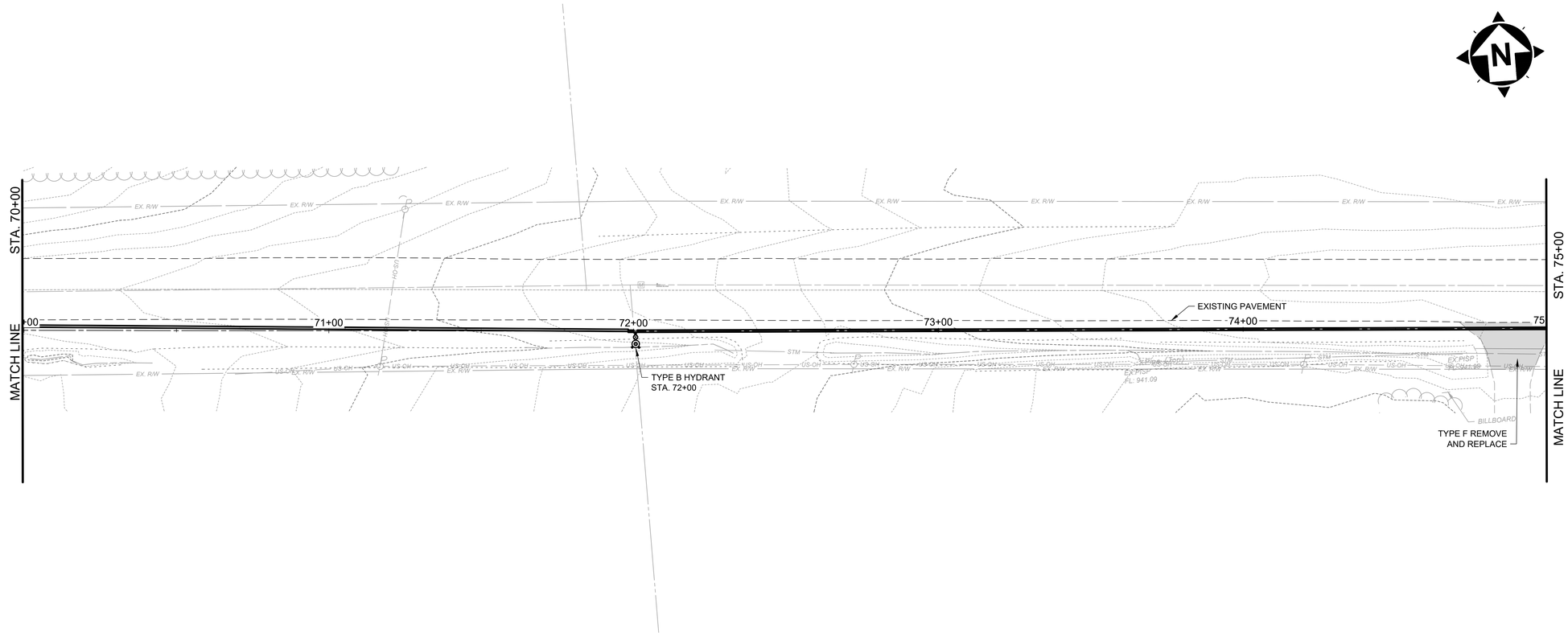
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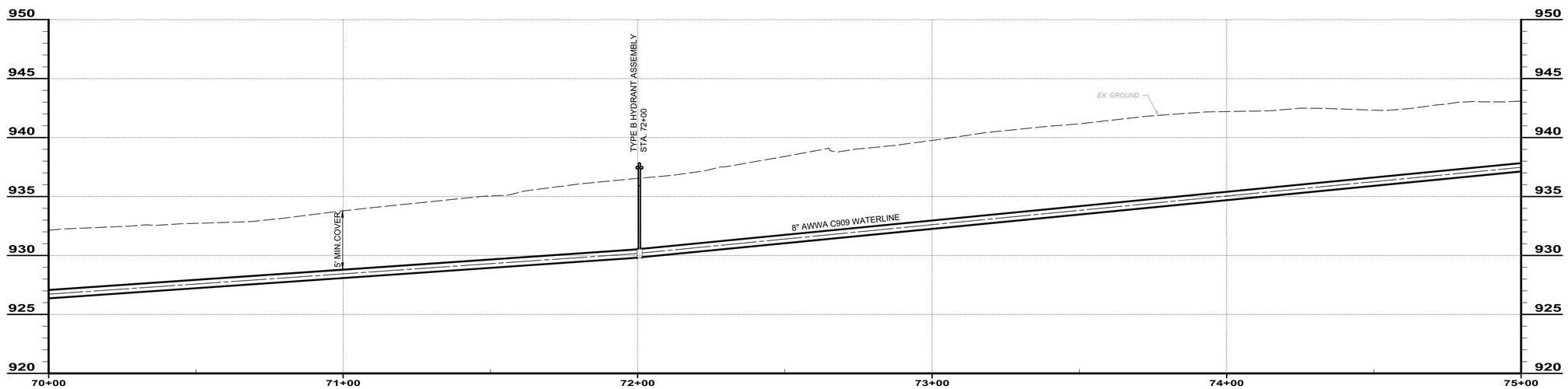
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-14

SHEET 24 OF 43





SOUTH RIVER ROAD 70+00 TO 75+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
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E-85401
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NO	REVISION	DATE

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SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
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ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO

PLAN AND PROFILE - 10 SERIES

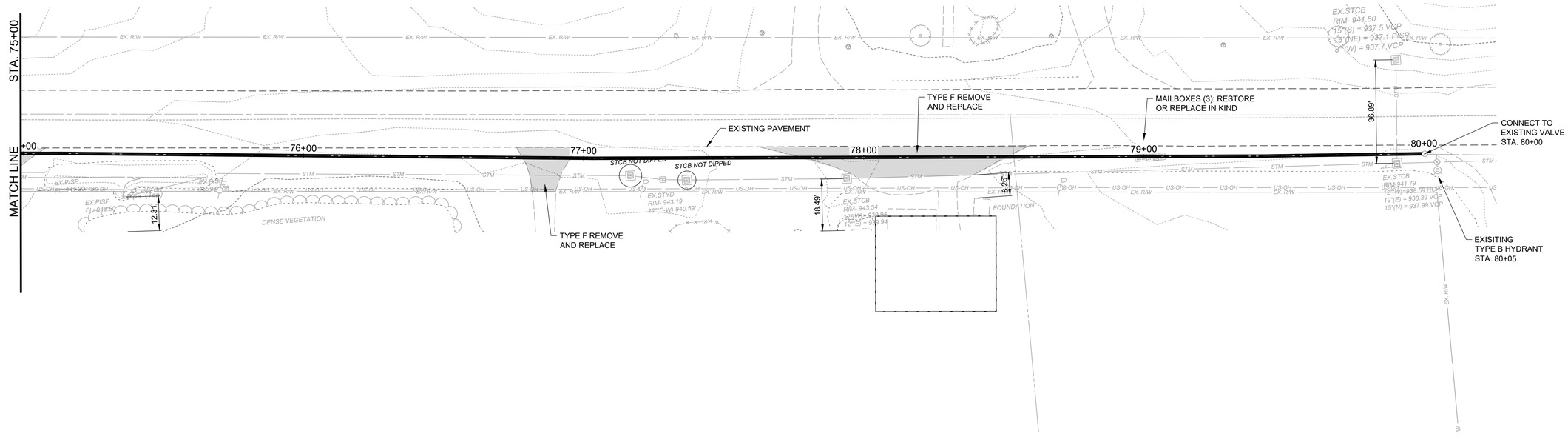
SOUTH RIVER ROAD STA. 70+00 TO STA. 75+00

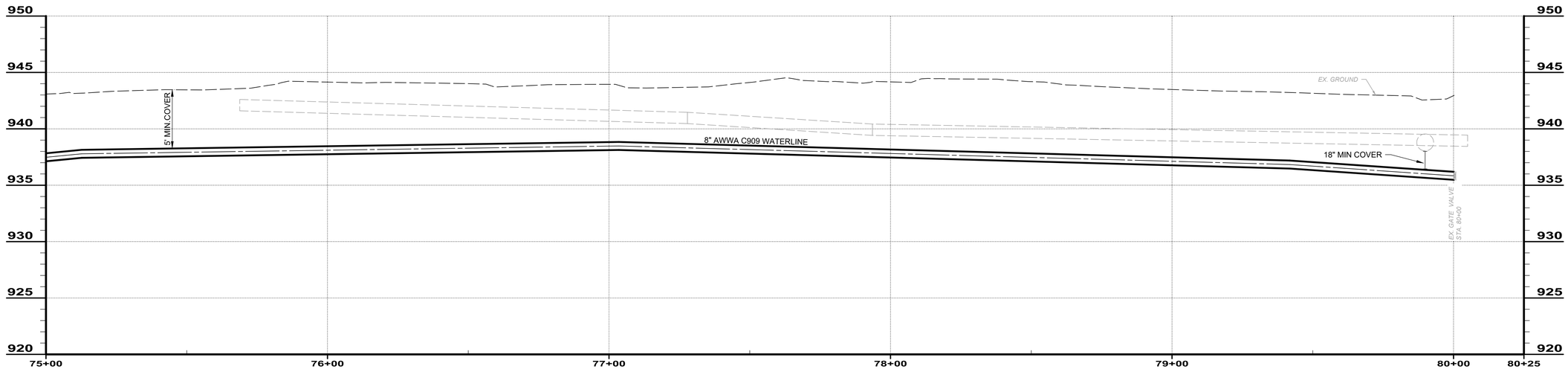
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-15

SHEET 25 OF 43





SOUTH RIVER ROAD 75+00 TO END

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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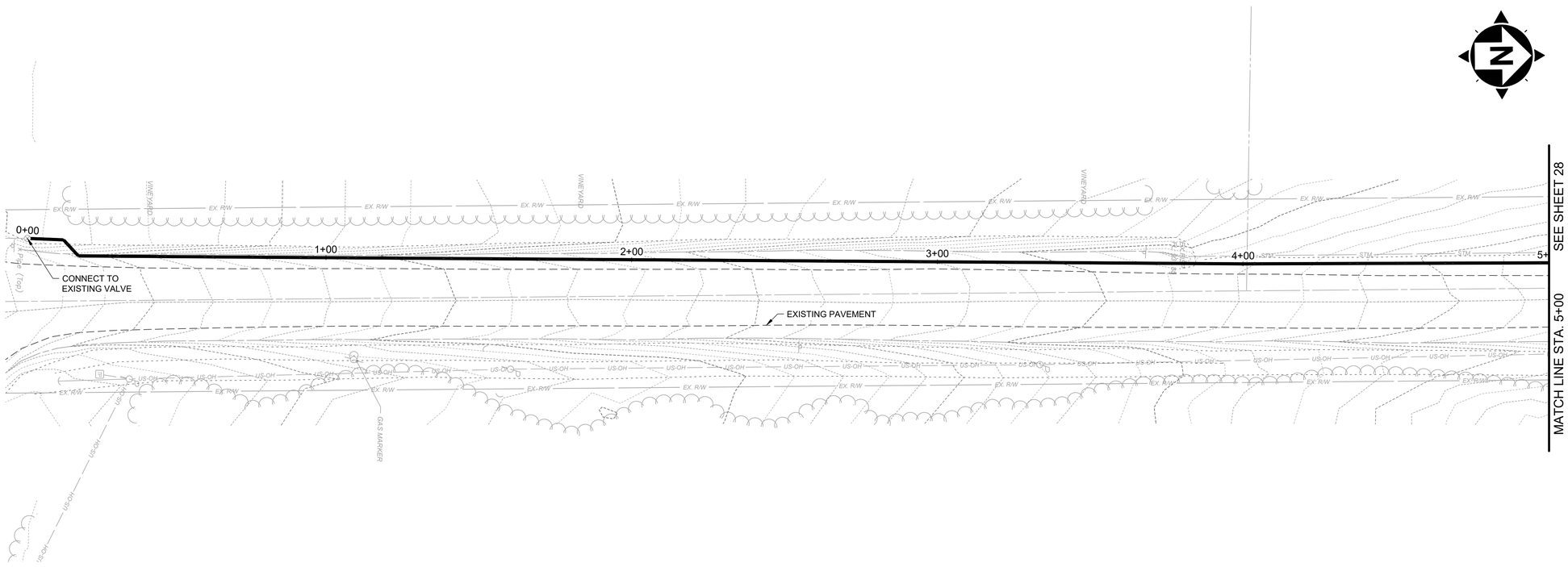
STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

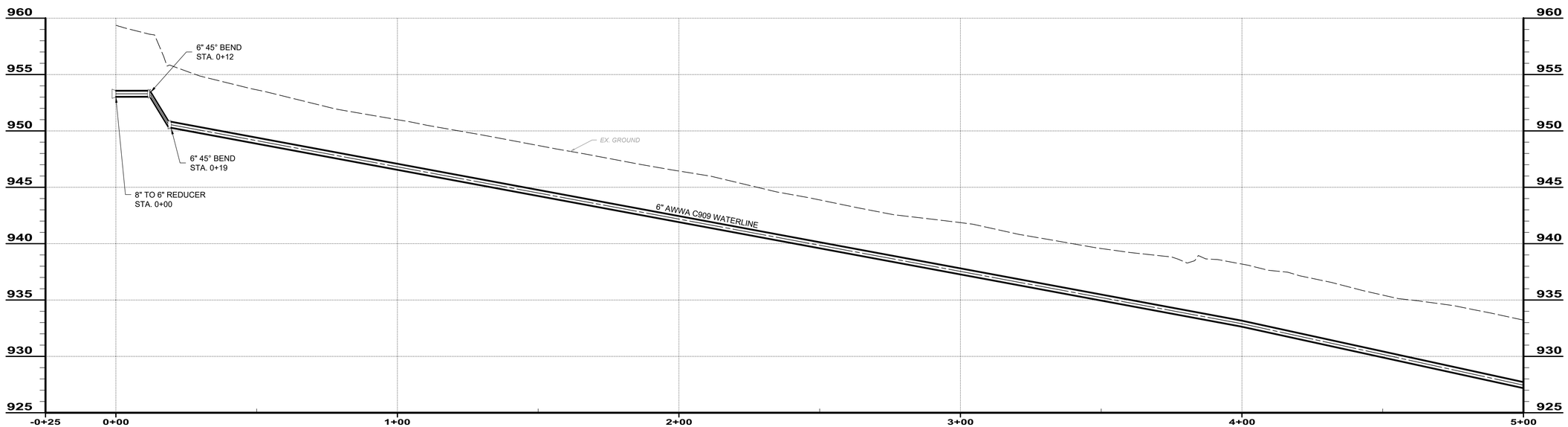
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH RIVER ROAD STA. 75+00 TO END

PROJECT NO. 241222
DISCIPLINE CIVIL
SHEET NAME PP-16
SHEET 26 OF 43





BRANDT ROAD 0+00 TO 5+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

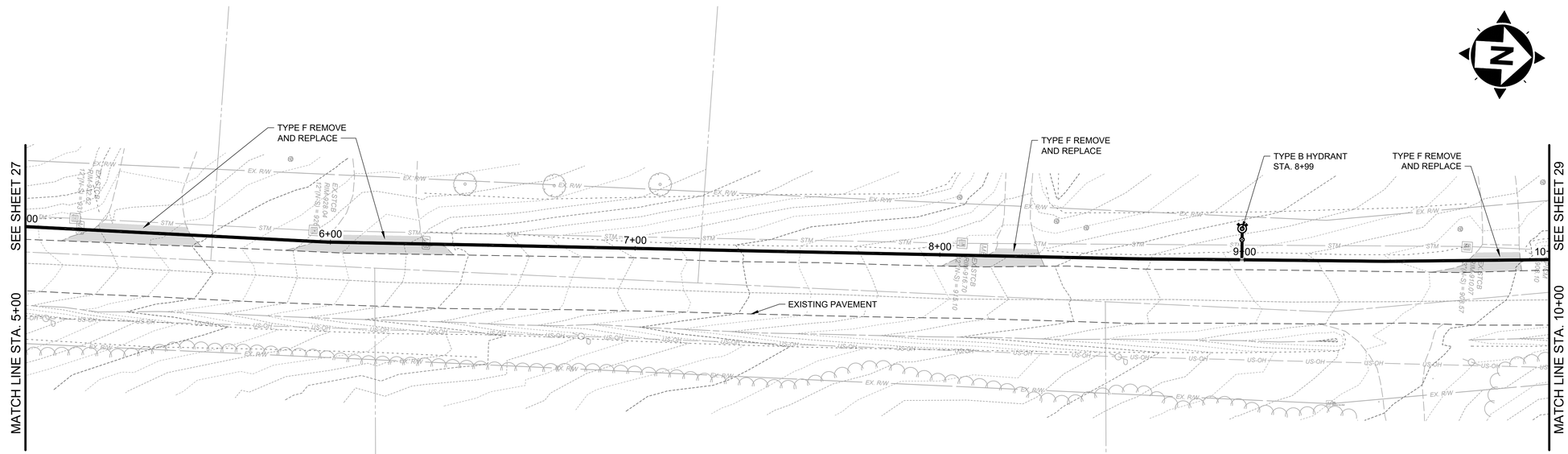
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 0+00 TO STA. 5+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-17
SHEET 27 OF 43



BRANDT ROAD 5+00 TO 10+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

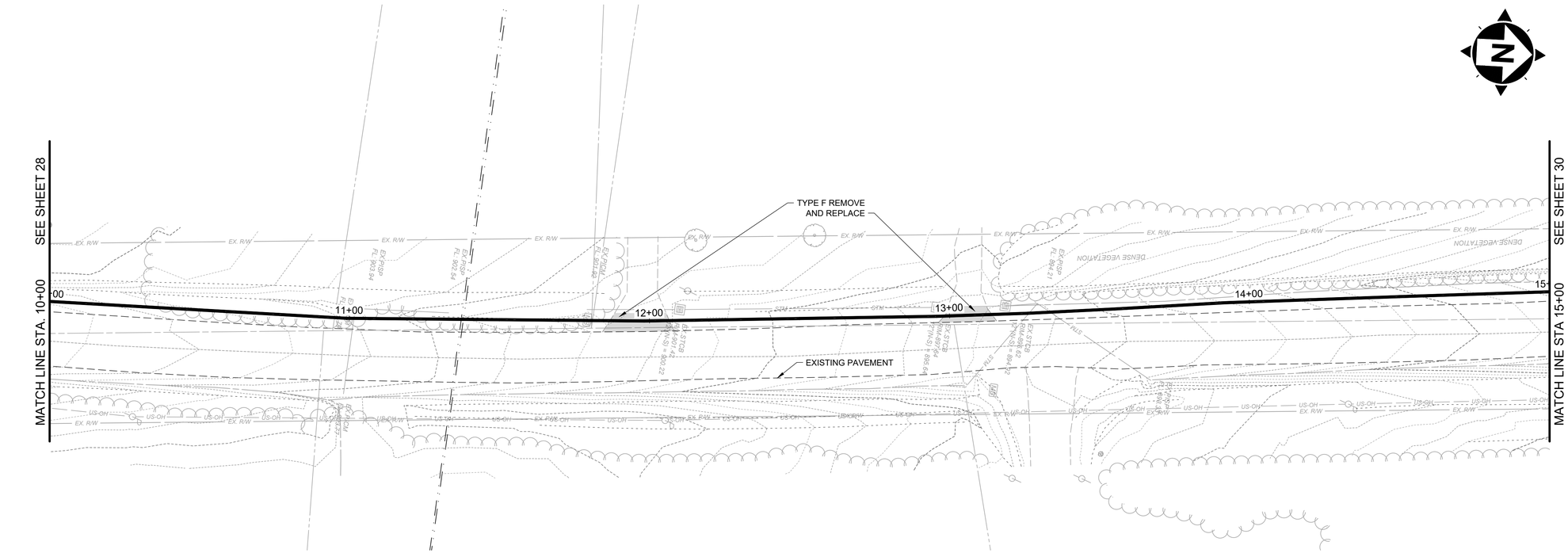
NO	REVISION	DATE

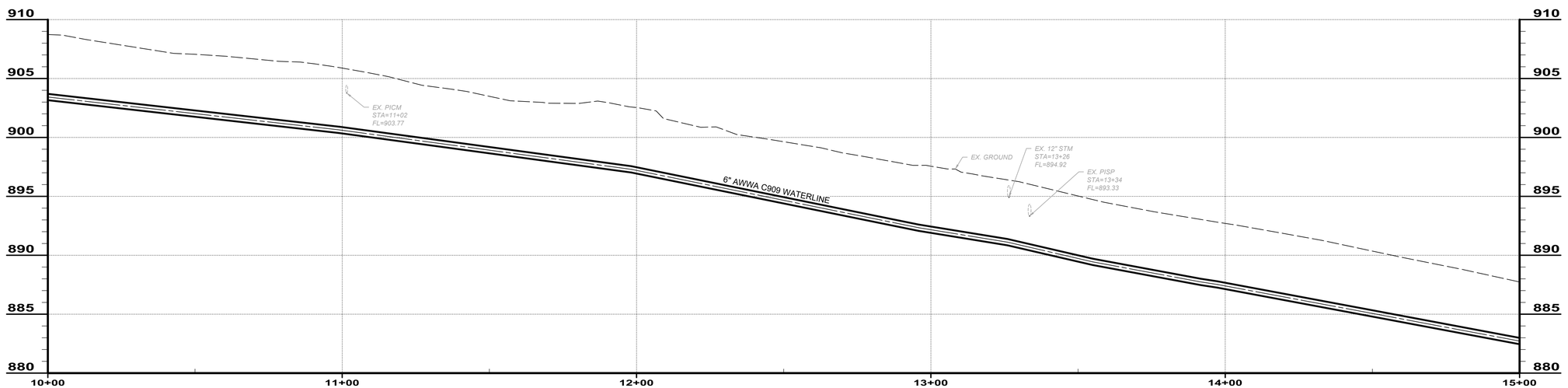
ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFIELD, OHIO

ASHTABULA COUNTY
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA 5+00 TO STA. 10+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-18
SHEET 28 OF 43





BRANDT ROAD 10+00 TO 15+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

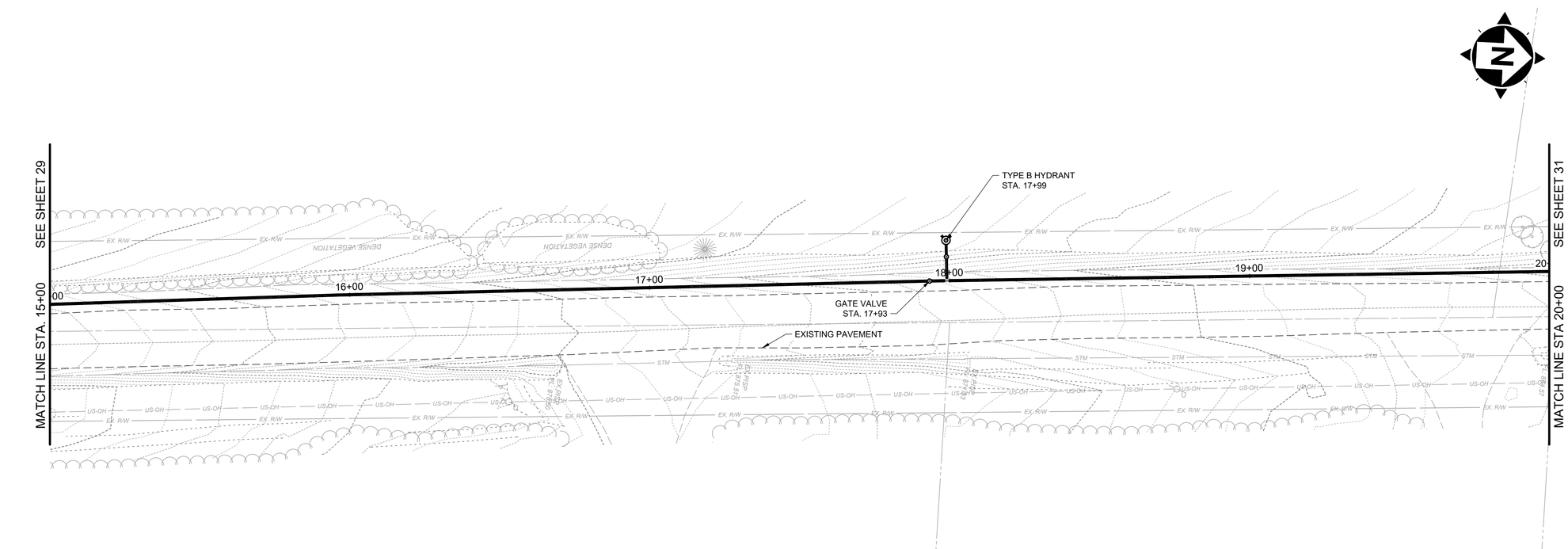
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 10+00 TO STA. 15+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-19
SHEET 29 OF 43



BRANDT ROAD 15+00 TO 20+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
STATE OF OHIO
REGISTERED
PROFESSIONAL ENGINEER

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8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

PLAN AND PROFILE - 10 SERIES

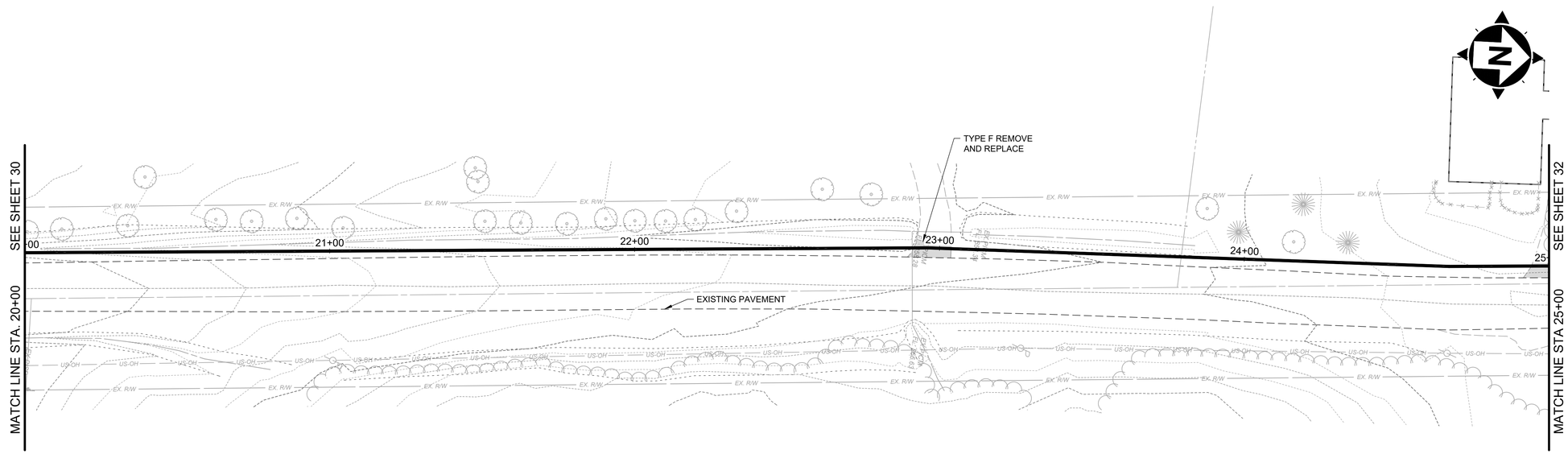
BRANDT ROAD STA. 15+00 TO STA. 20+00

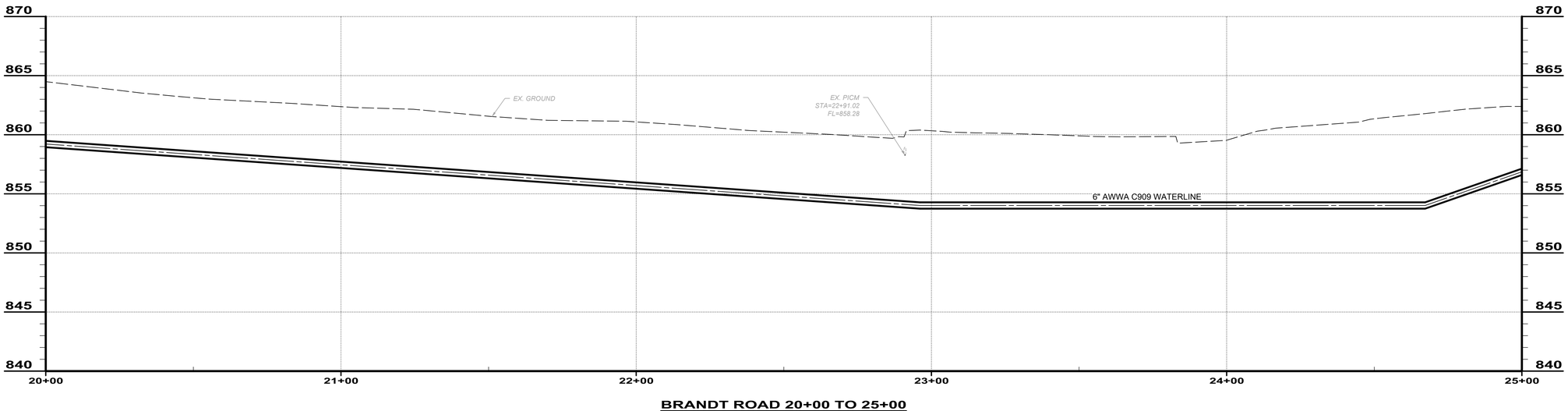
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-20

SHEET 30 OF 43





BRANDT ROAD 20+00 TO 25+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO

PLAN AND PROFILE - 10 SERIES

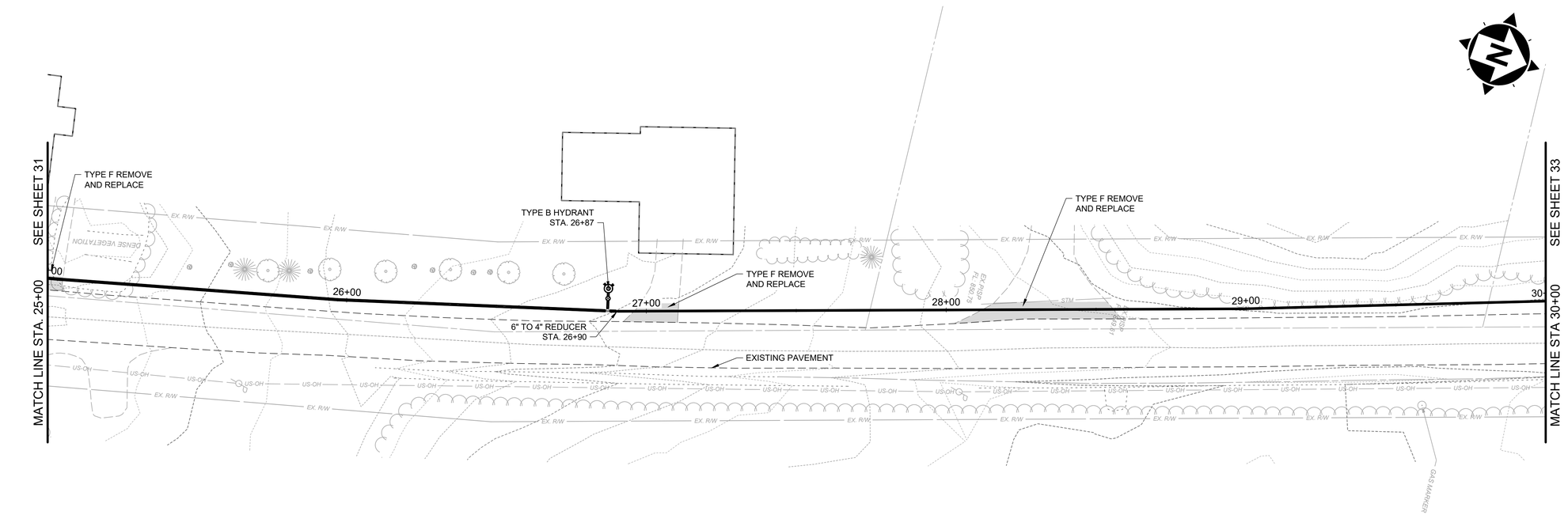
BRANDT ROAD STA. 20+00 TO STA. 25+00

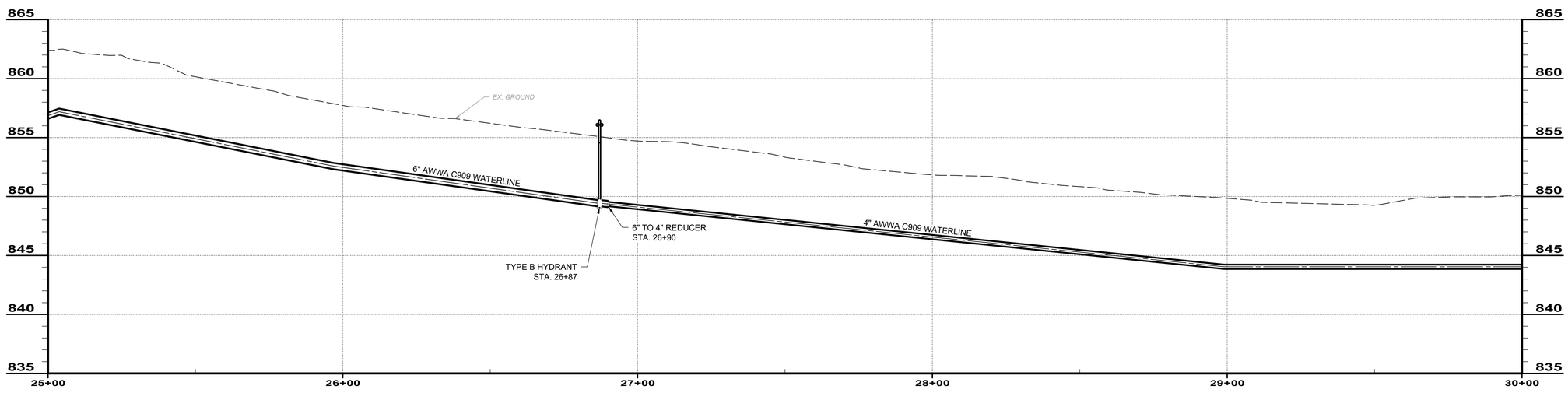
PROJECT NO.
241222

DISCIPLINE
CIVIL

SHEET NAME
PP-21

SHEET 31 OF 43





BRANDT ROAD 25+00 TO 30+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

H:\2024\241222\DWG\SHEETS_241222_PLANANDPROFILE BRANT.DWG - 32 BRANDT ROAD STA. 25+00 TO STA. 30+00 - 6/3/2025 2:29:49 PM - CORY SCOTT

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

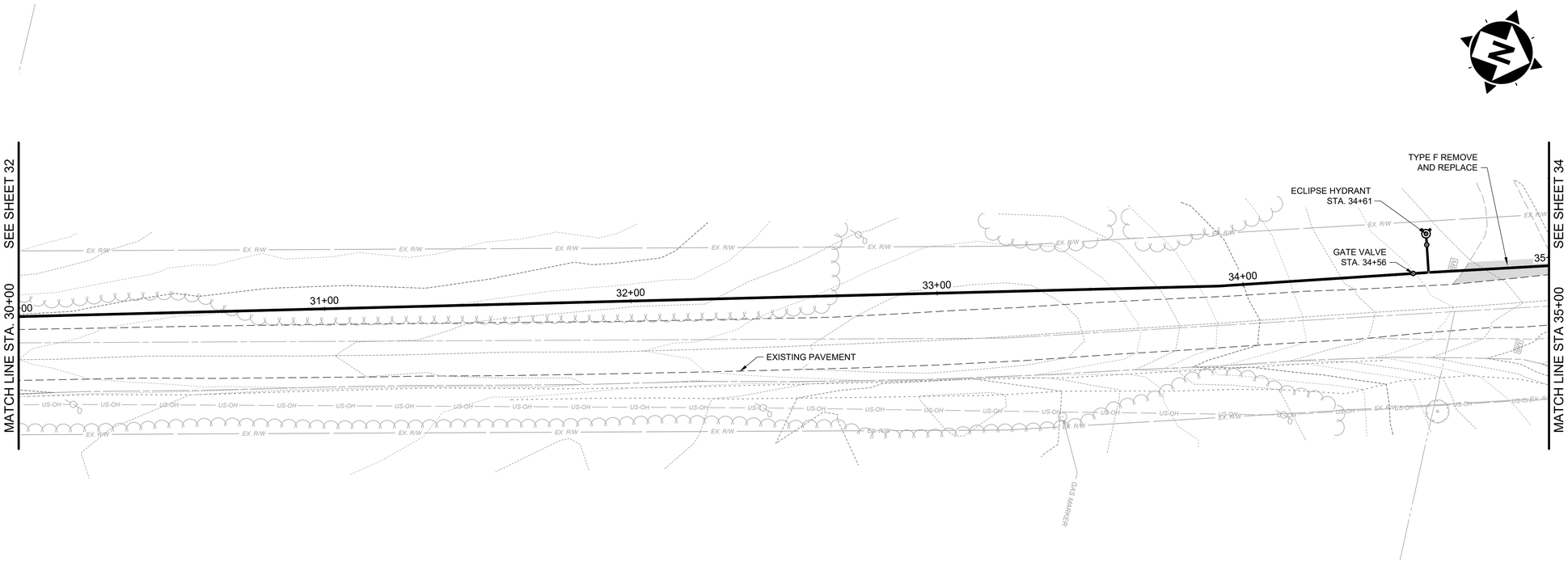
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

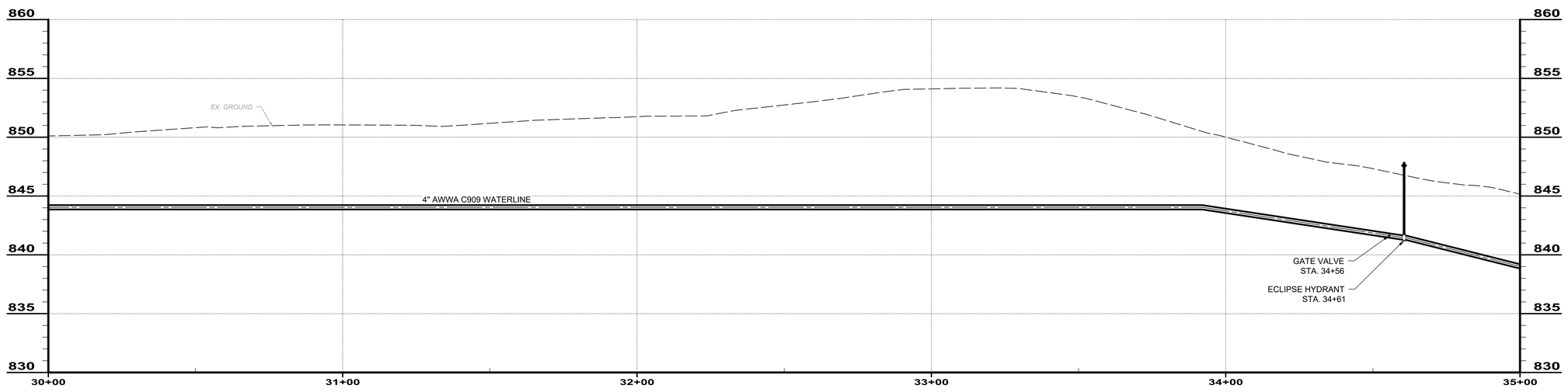
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 25+00 TO STA. 30+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-22
SHEET 32 OF 43





BRANDT ROAD 30+00 TO 35+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

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8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

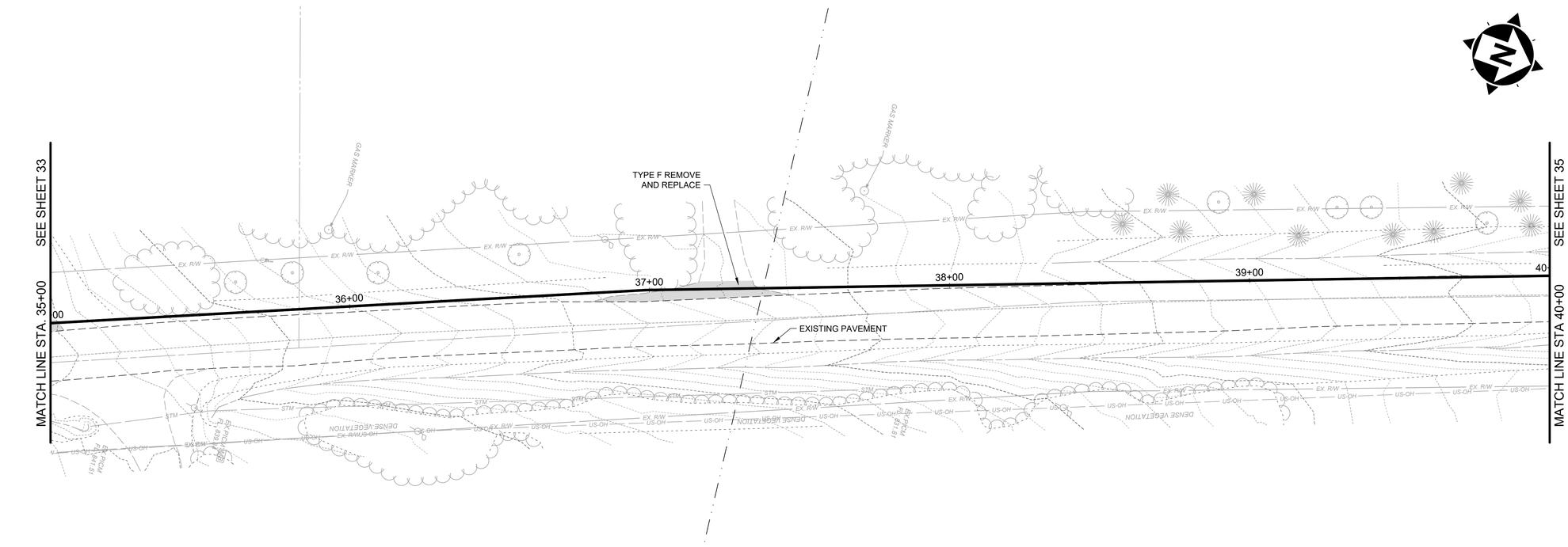
NO	REVISION	DATE

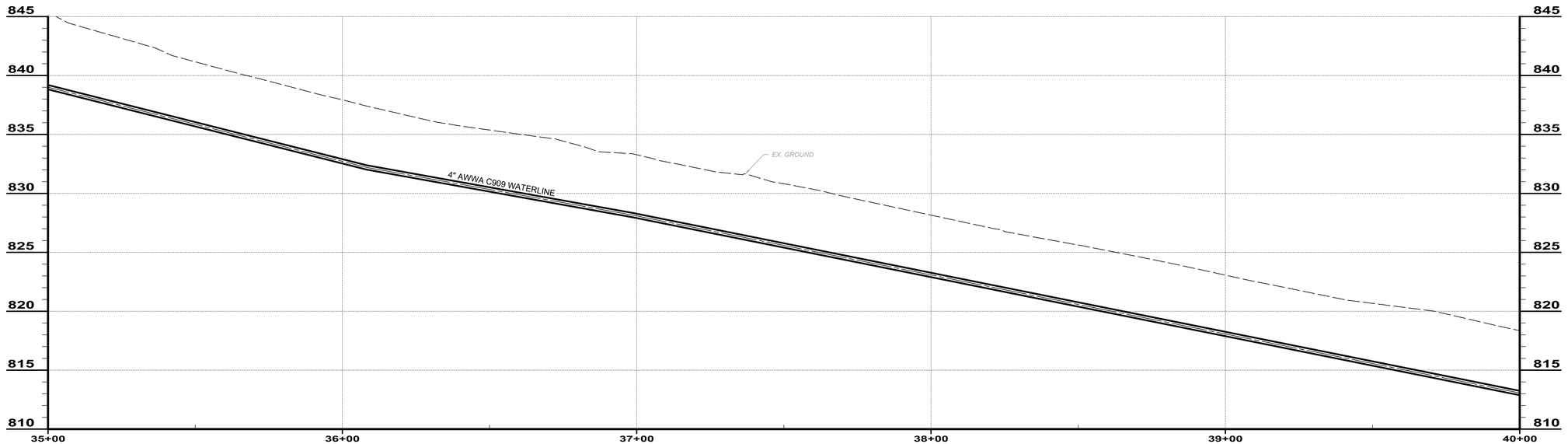
ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 30+00 TO STA. 35+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-23
SHEET 33 OF 43

H:\2024\241222\DWG\SHEETS_241222_PLANANDPROFILE BRANT.DWG - 33 BRANDT ROAD STA. 30+00 TO STA. 35+00 - 6/3/2025 2:29:49 PM - CORY SCOTT





BRANDT ROAD 35+00 TO 40+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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MENTOR, OHIO 44060
(440) 951-9000

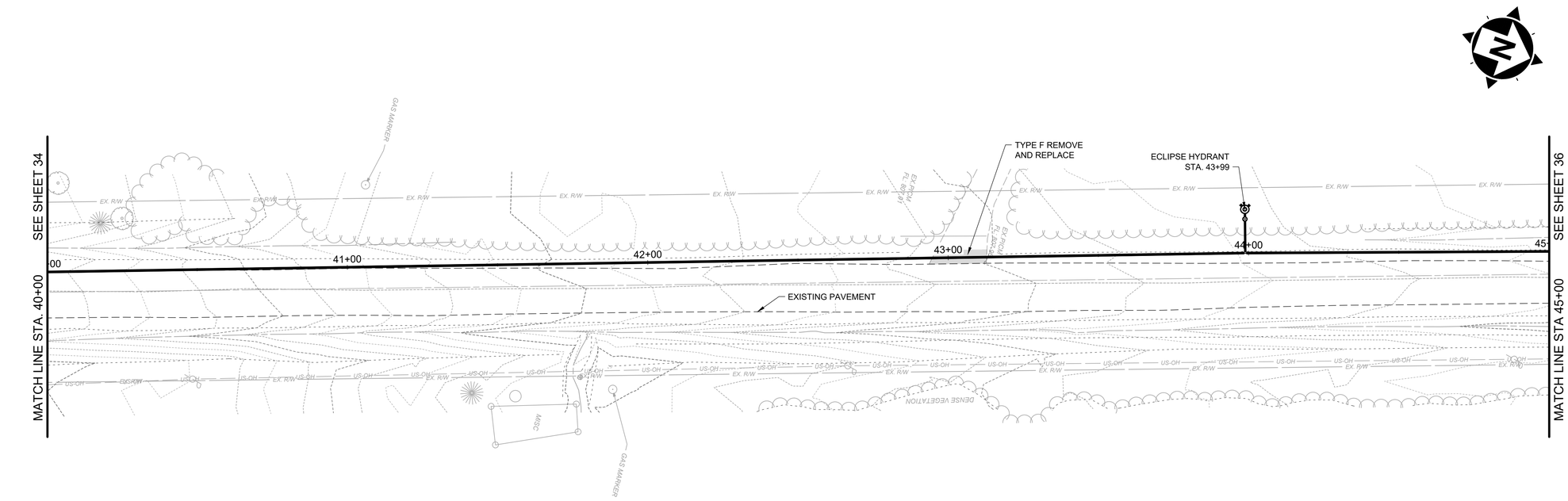
STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 35+00 TO STA. 40+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-24
SHEET 34 OF 43



BRANDT ROAD 40+00 TO 45+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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GEORGIA CONWAY
E-85401
STATE OF OHIO
REGISTERED
PROFESSIONAL ENGINEER

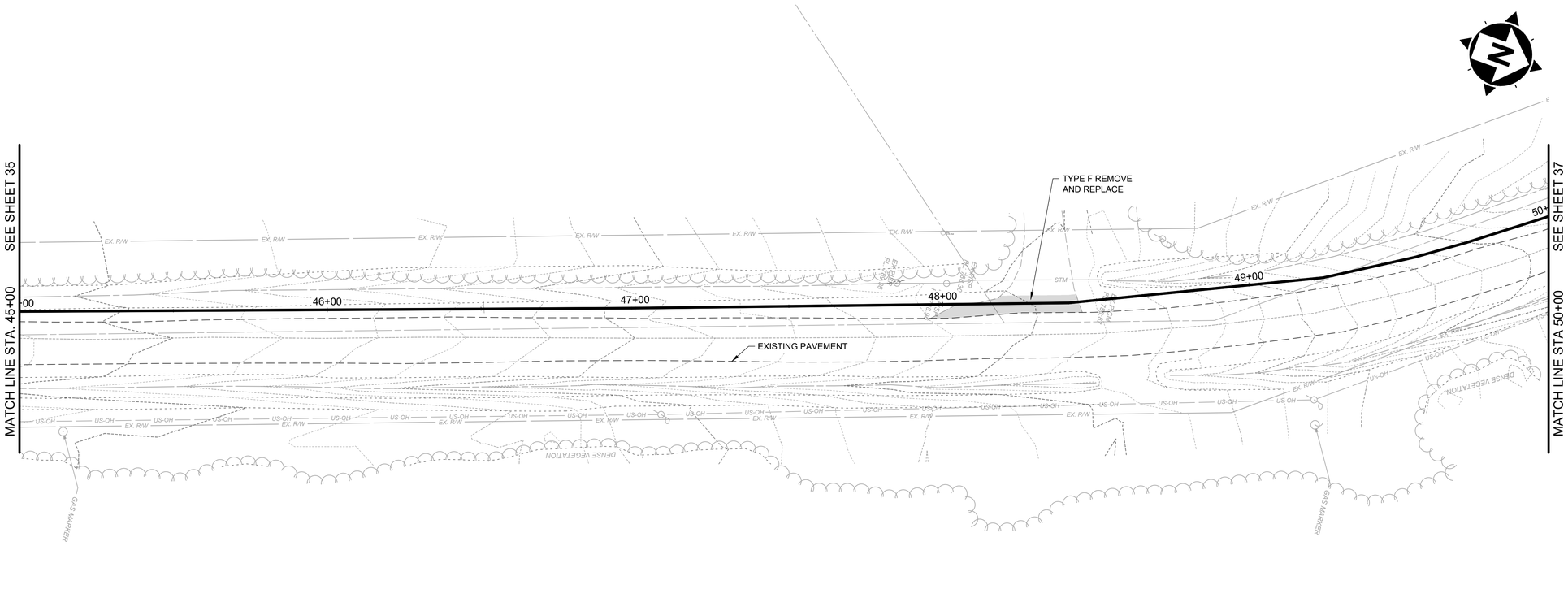
NO	REVISION	DATE

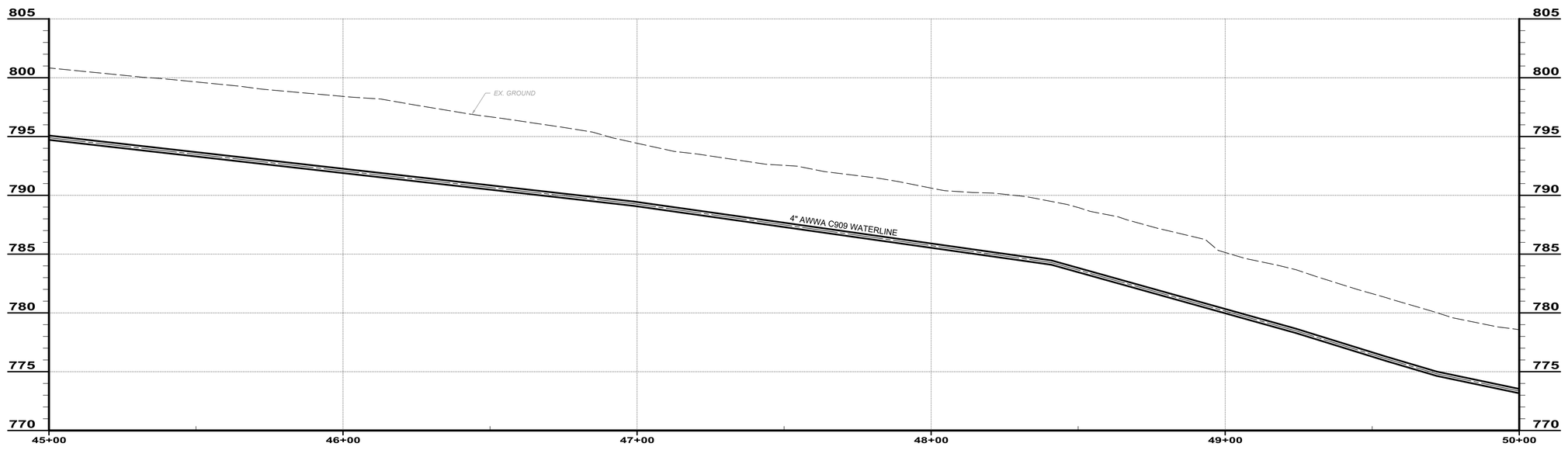
ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFIELD, OHIO

ASHTABULA COUNTY
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 40+00 TO STA. 45+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-25
SHEET 35 OF 43





BRANDT ROAD 45+00 TO 50+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

H:\2024\241222\DWG\SHEETS_241222_PLANANDPROFILE BRANT.DWG - 36 BRANDT ROAD STA. 45+00 TO STA. 50+00 - 6/3/2025 2:29:49 PM - CORY SCOTT

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

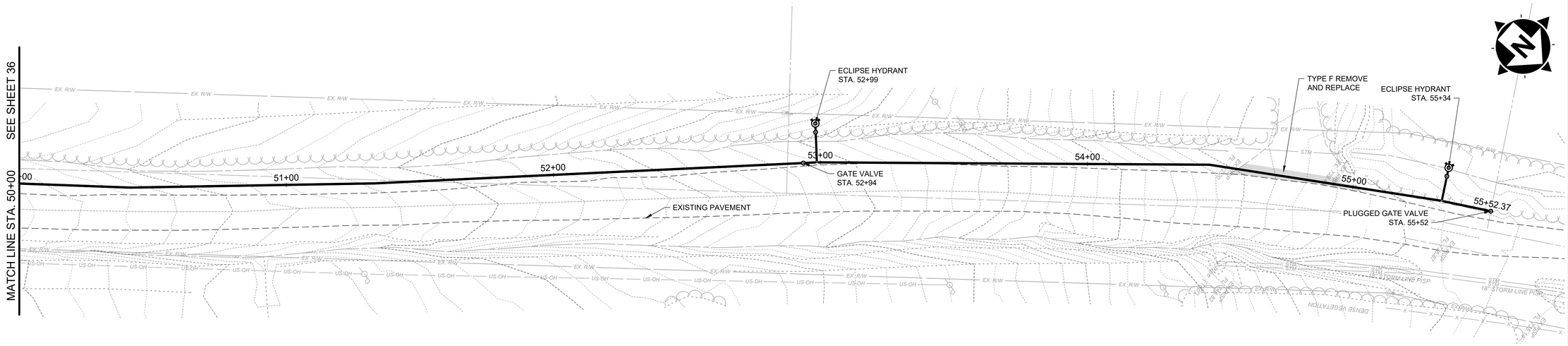
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

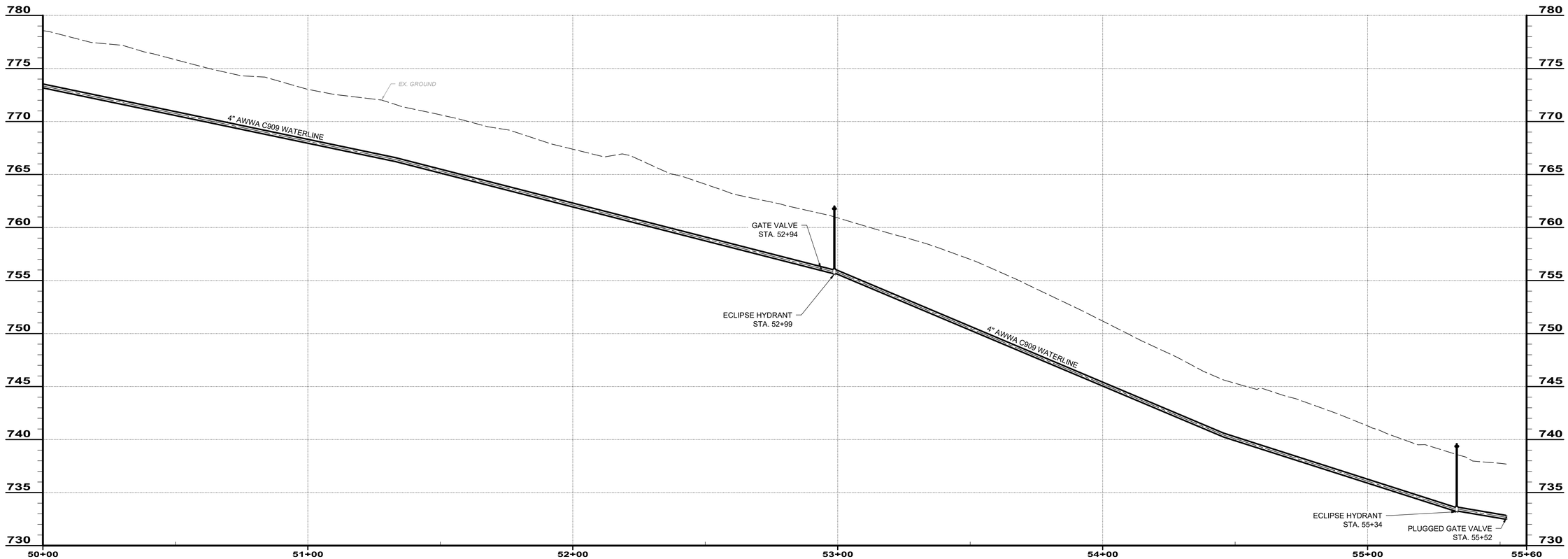
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
PLAN AND PROFILE - 10 SERIES
BRANDT ROAD STA. 45+00 TO STA. 50+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-26
SHEET 36 OF 43





BRANDT ROAD 50+00 TO END

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

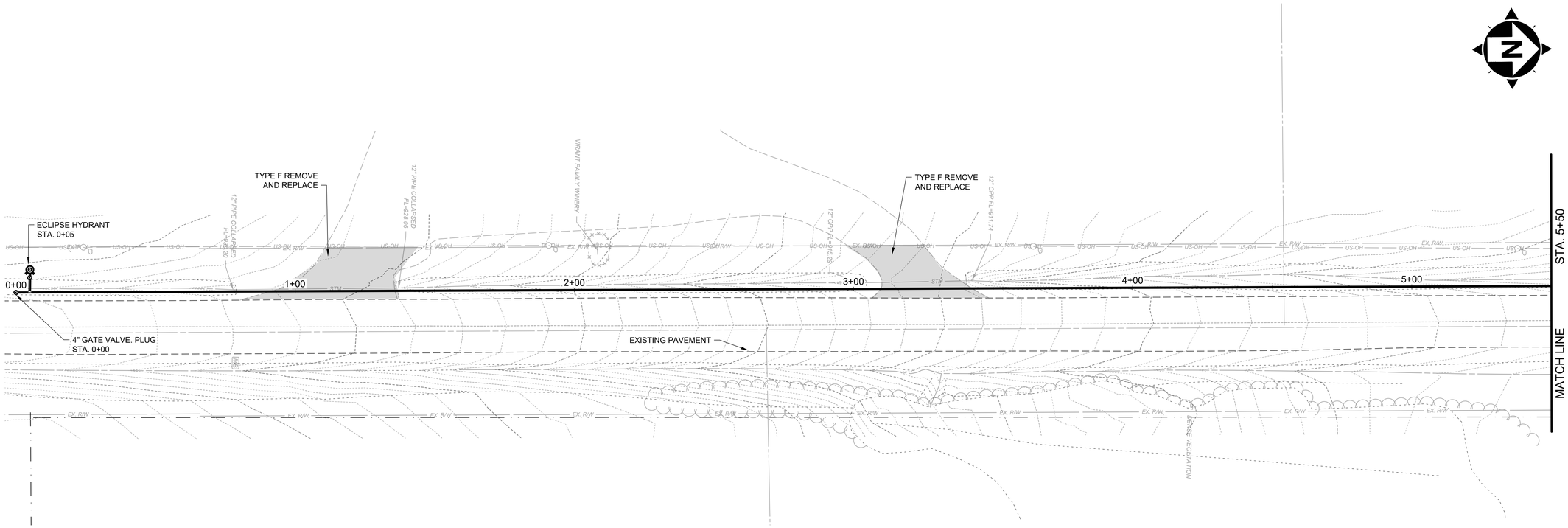
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

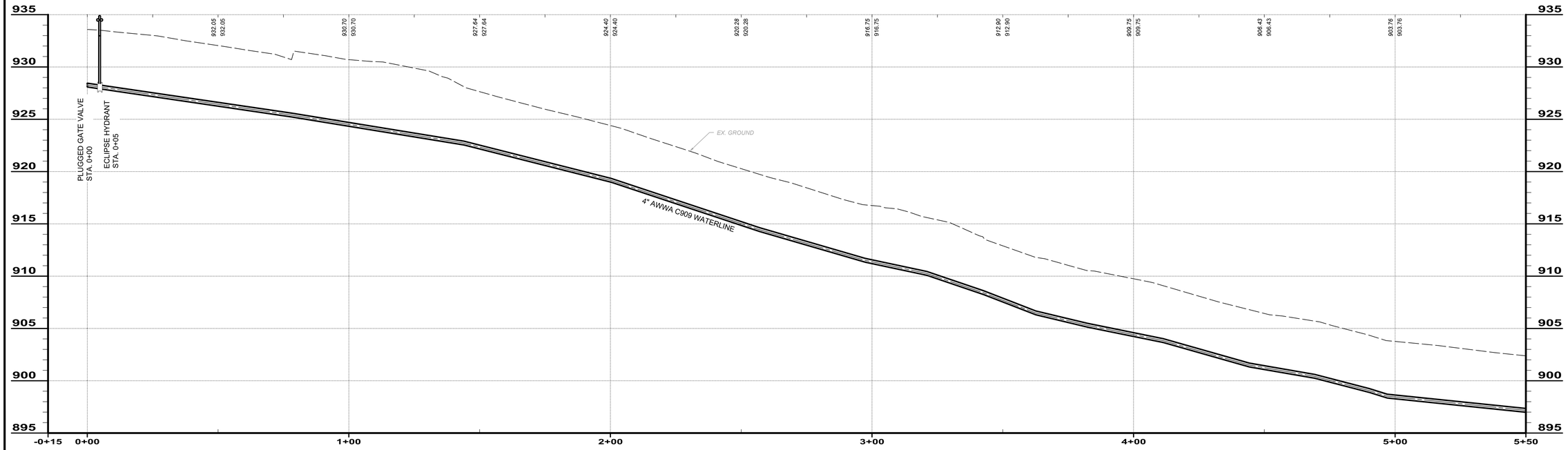
NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
PLAN AND PROFILE - 10 SERIES
BRANT ROAD STA. 50+00 TO END

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-27
SHEET 37 OF 43





ATKINS ROAD 0+00 TO 5+50

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

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8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

PLAN AND PROFILE - 10 SERIES

ATKINS ROAD STA. 0+00 TO STA. 5+50

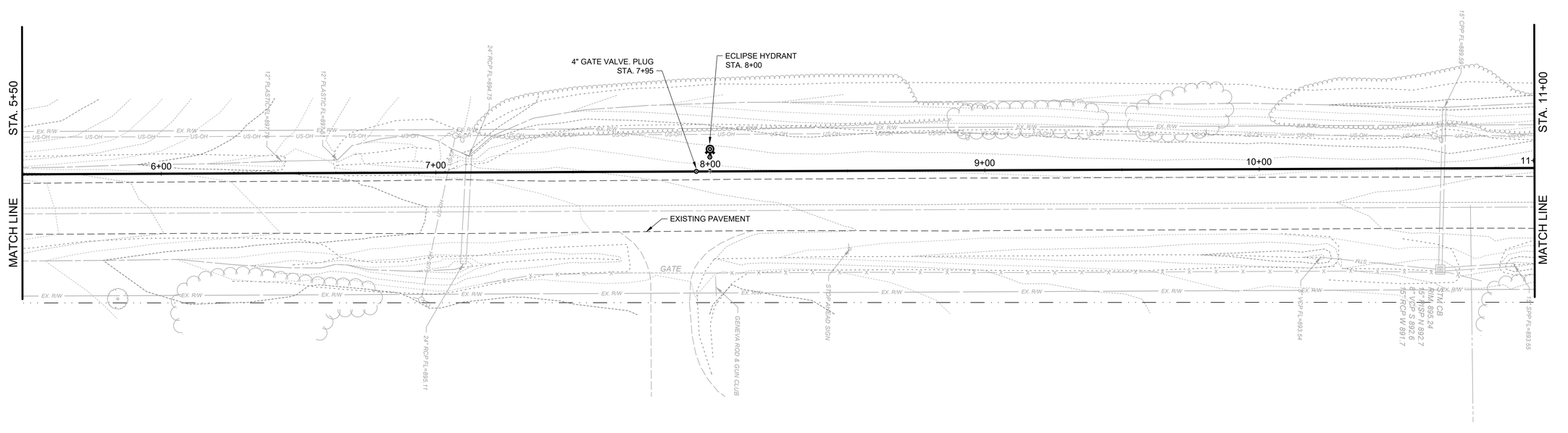
PROJECT NO.
241222

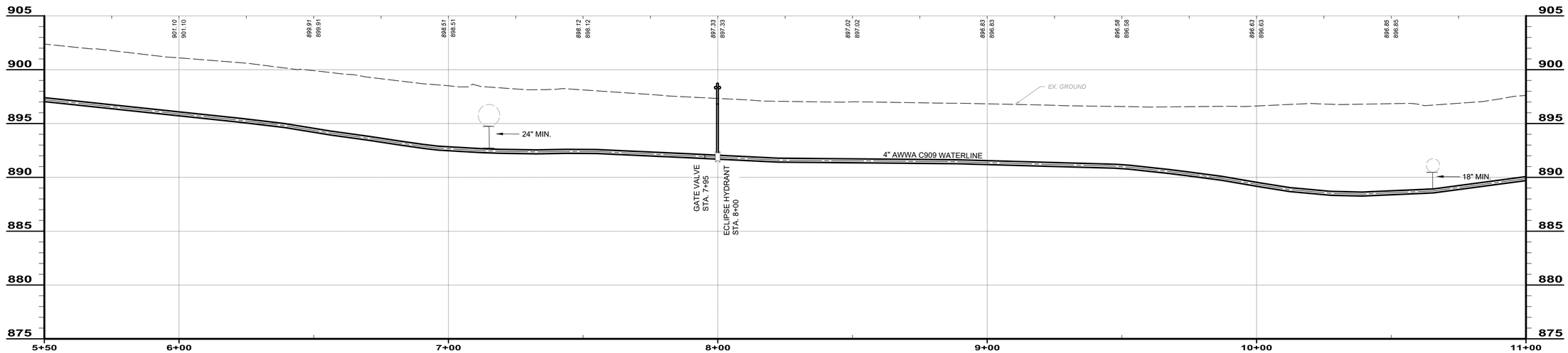
DISCIPLINE
CIVIL

SHEET NAME
PP-28

SHEET 38 OF 43

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ATKINS ROAD 5+50 TO 11+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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MENTOR, OHIO 44060
(440) 951-9000

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: MLB
CHECKED BY: GBC

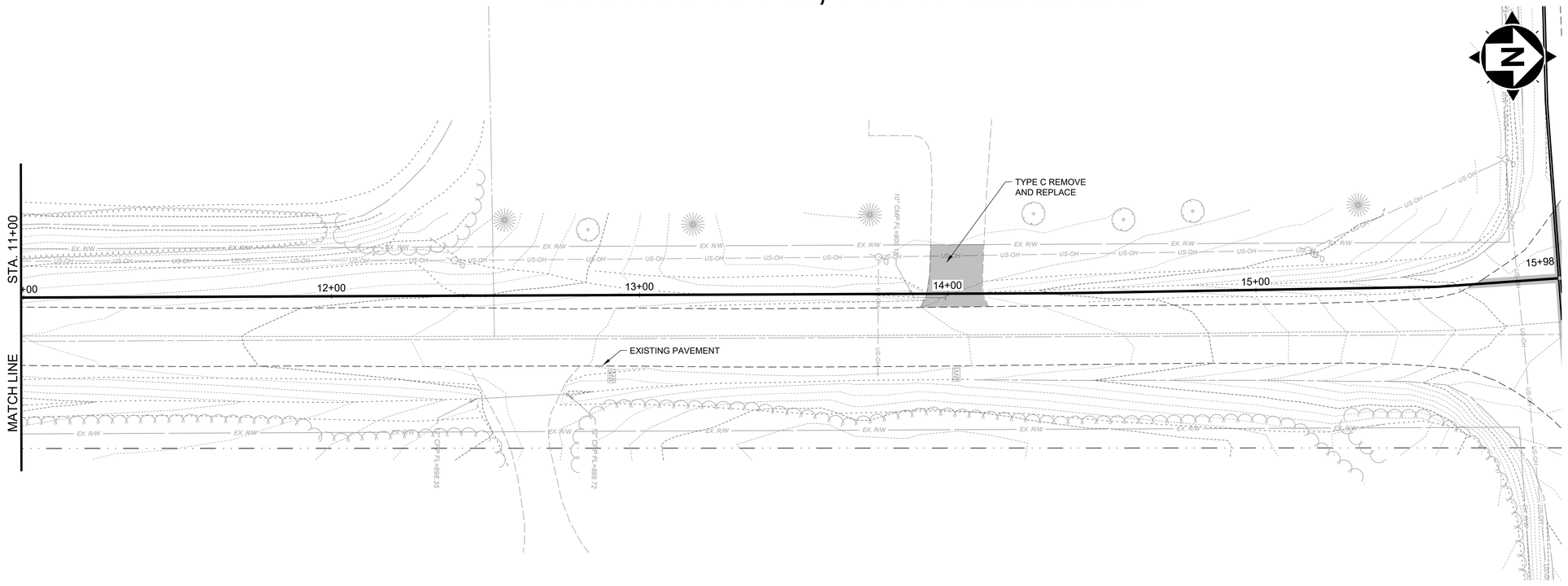
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO

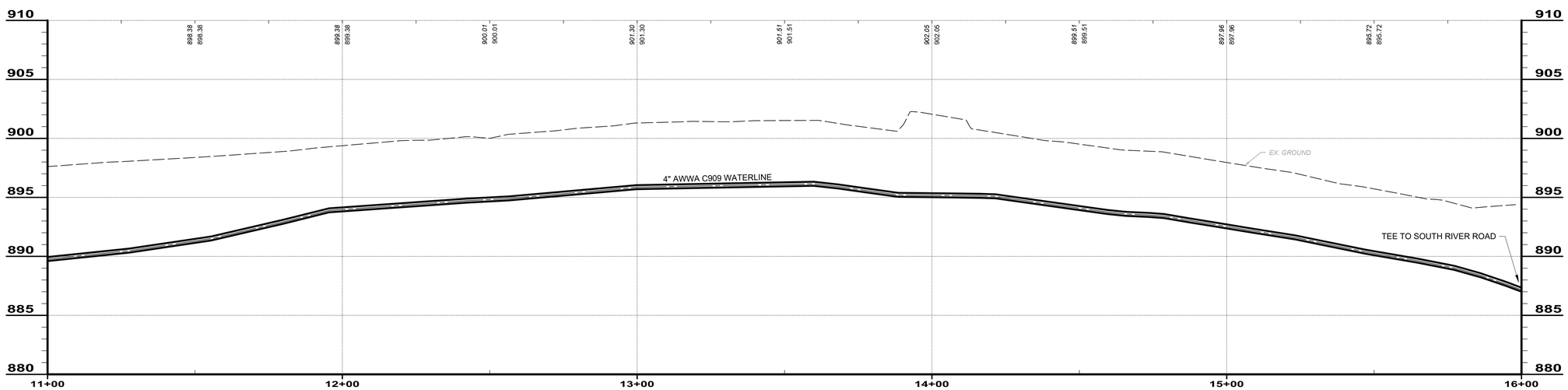
PLAN AND PROFILE - 10 SERIES
ATKINS ROAD STA. 5+50 TO STA. 11+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-29
SHEET 39 OF 43

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CONTRACT B, PART B1 ENDS





ATKINS ROAD 11+00 TO END

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	MLB
CHECKED BY:	GBC

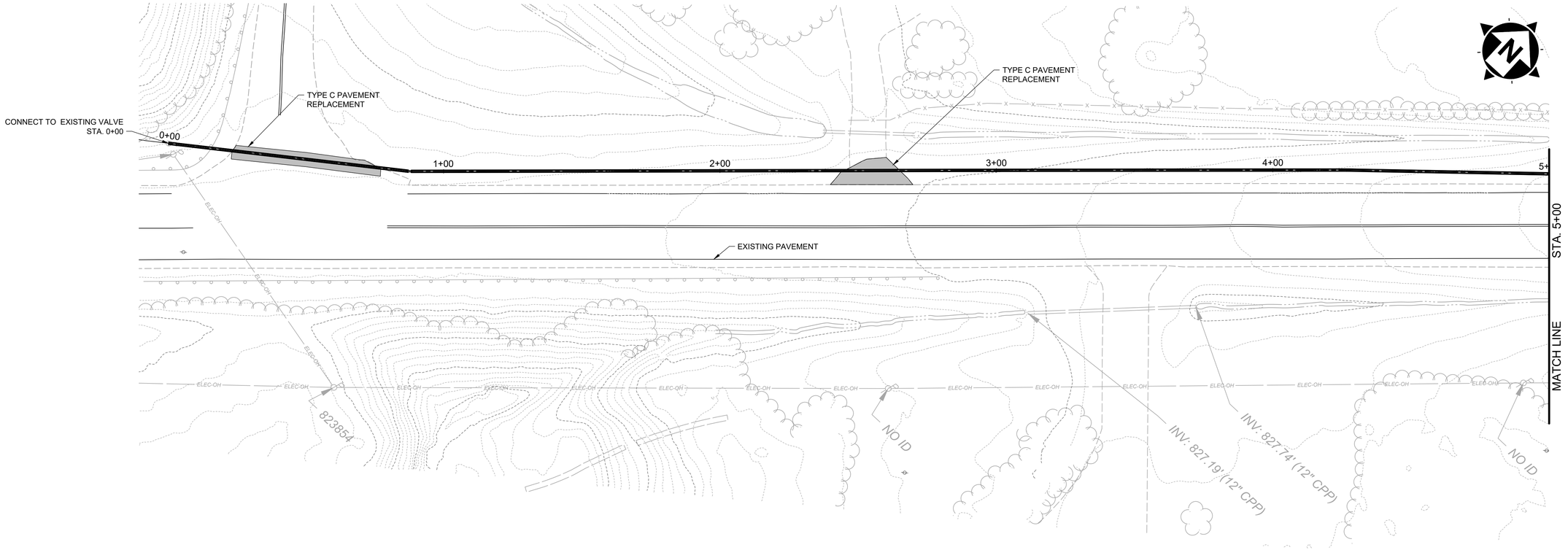
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO

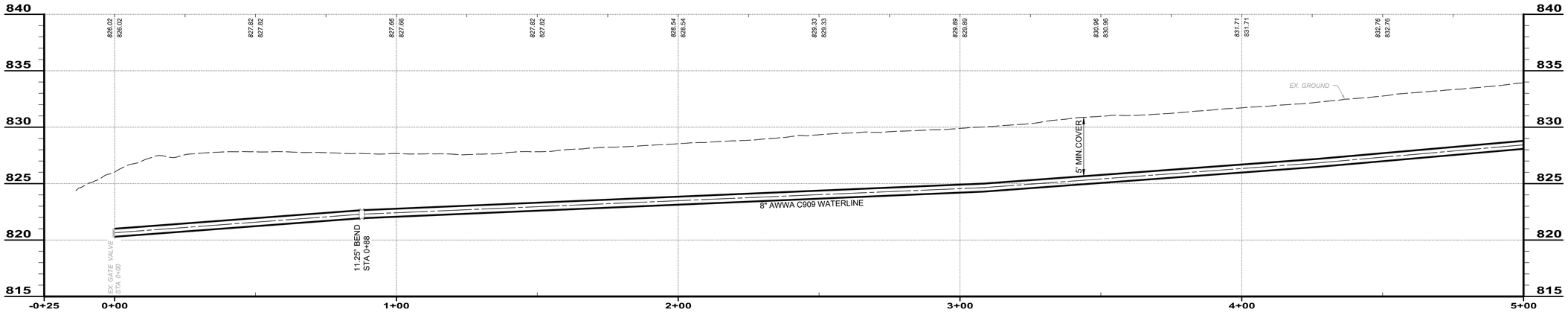
PLAN AND PROFILE - 10 SERIES
ATKINS ROAD STA. 11+00 TO END

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-30
SHEET 40 OF 43

H:\2024\241222\DWG\SHEETS\PLANANDPROFILEATKINS.DWG - 40 ATKINS ROAD STA. 11+00 TO END - 6/3/2025 2:30:58 PM - CORY SCOTT

CONTRACT B, PART B2 BEGINS





SOUTH BROADWAY 0+00 TO 5+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER
STATE OF OHIO

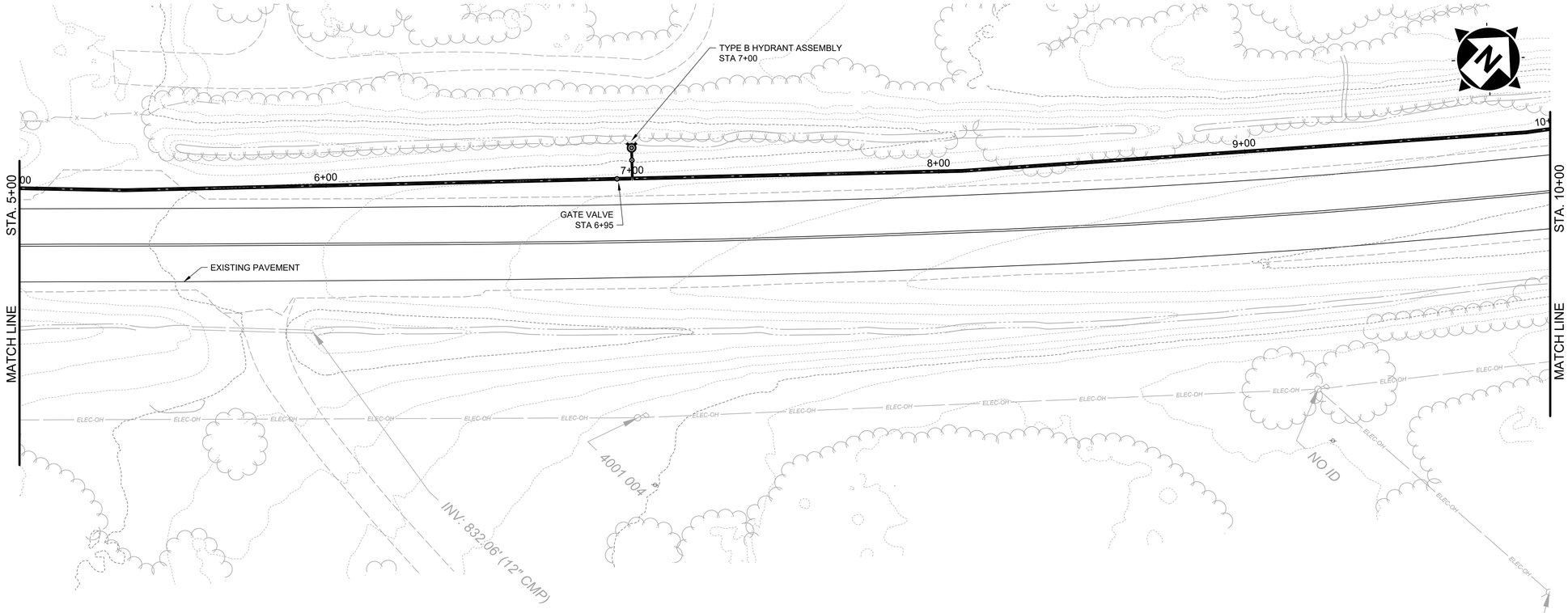
verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

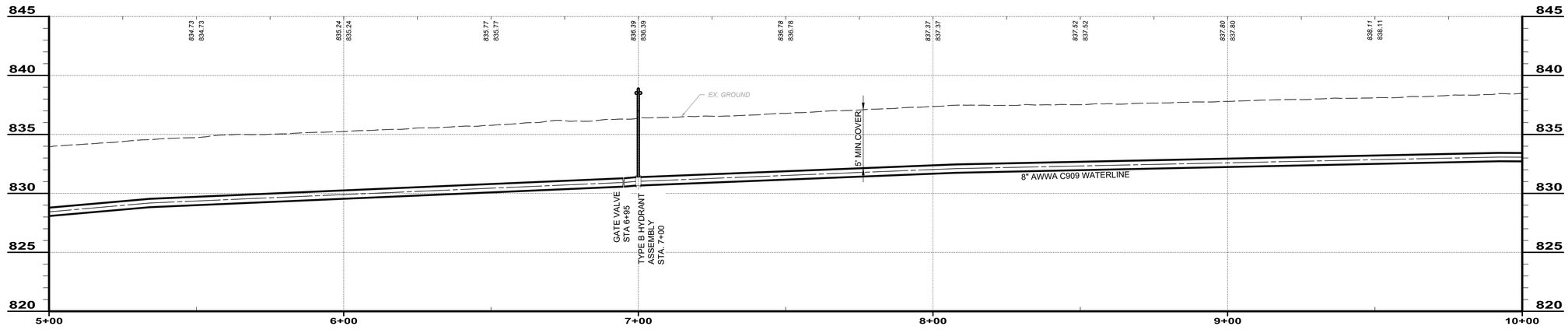
NO	REVISION	DATE

ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: CAS
CHECKED BY: GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFILED, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH BROADWAY STA. 0+00 TO STA. 5+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-31
SHEET 41 OF 43





SOUTH BROADWAY 5+00 TO 10+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

verdantas
8150 STERLING COURT
MENTOR, OHIO 44060
(440) 951-9000

NO	REVISION	DATE

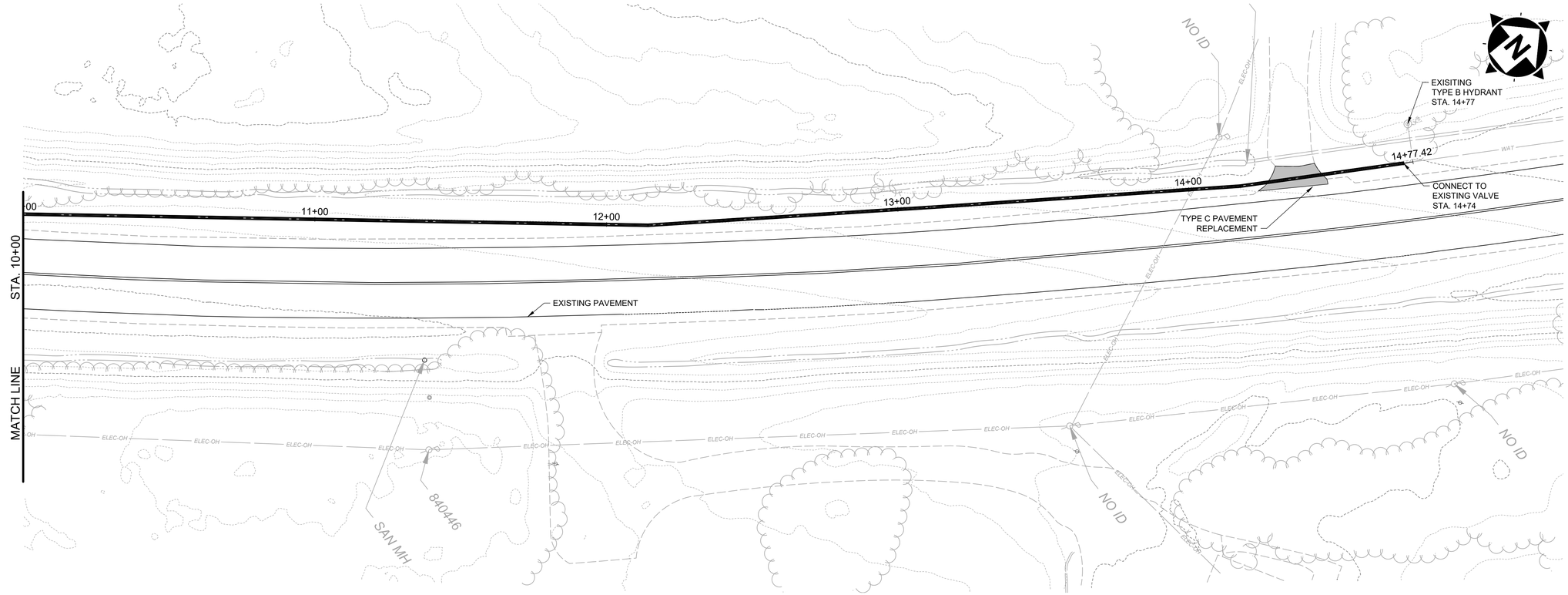
ISSUED FOR: REVIEW SET
ISSUE DATE: 6/3/2024
SCALE: AS NOTED
DESIGNED BY: MLB
DRAWN BY: CAS
CHECKED BY: GBC

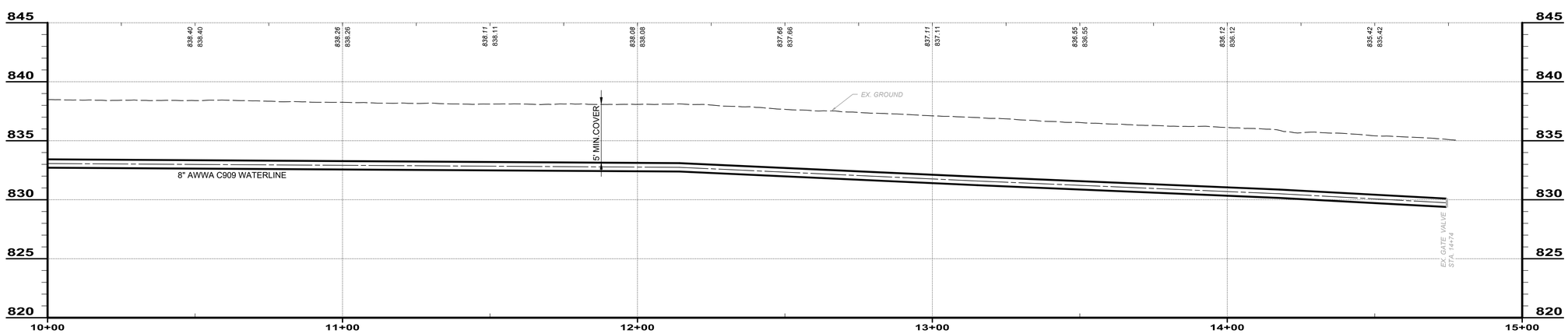
ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
HARPERSFIELD, OHIO

ASHTABULA COUNTY
PLAN AND PROFILE - 10 SERIES
SOUTH BROADWAY STA. 5+00 TO STA. 10+00

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-32
SHEET 42 OF 43

CONTRACT B, PART B2 ENDS





SOUTH BROADWAY 10+00 TO 15+00

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

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MENTOR, OHIO 44060
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STATE OF OHIO
GEORGIA CONWAY
E-85401
REGISTERED PROFESSIONAL ENGINEER

NO	REVISION	DATE

ISSUED FOR:	REVIEW SET
ISSUE DATE:	6/3/2024
SCALE:	AS NOTED
DESIGNED BY:	MLB
DRAWN BY:	CAS
CHECKED BY:	GBC

ASHTABULA COUNTY
SOUTH RIVER ROAD WATERLINE EXTENSION
ASHTABULA COUNTY HARPERSFIELD, OHIO
PLAN AND PROFILE - 10 SERIES
SOUTH BROADWAY STA. 10+00 TO END

PROJECT NO.
241222
DISCIPLINE
CIVIL
SHEET NAME
PP-33
SHEET 43 OF 43