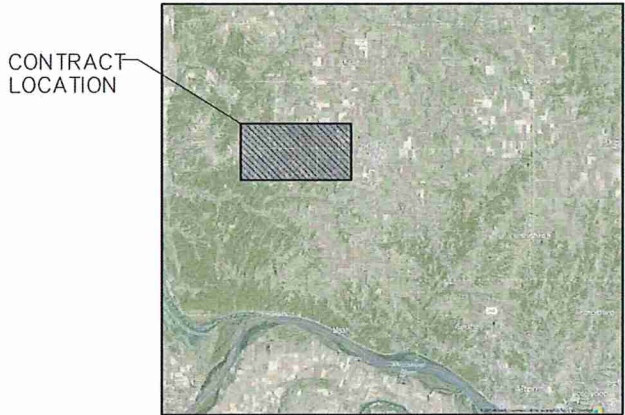


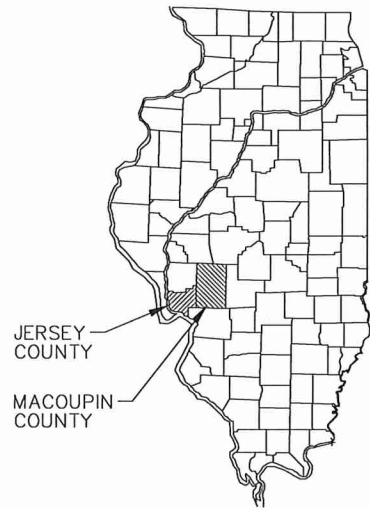
CONSTRUCTION PLANS FOR
CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS
2026
SET NO. _____



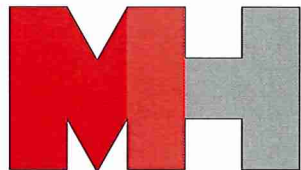
CONTRACT
LOCATION



VICINITY MAP



STATE OF ILLINOIS



MECO-HENEGHAN
ENGINEERS, LLC

www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010 EXPIRES: APRIL 30, 2027
035.003949
MO: 2018004041 EXPIRES: DECEMBER 31, 2026

900 S. Highway Dr., Suite 202
Fenton, MO 63026
P: (636) 395-7055



ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS
WERE PREPARED BY ME OR UNDER MY
DIRECT SUPERVISION AND THAT I AM
A DULY REGISTERED PROFESSIONAL
ENGINEER EXISTING UNDER THE LAWS
OF THE STATE OF ILLINOIS.

Seth W. Elliott
SETH W. ELLIOTT, P.E. #62788

PROJECT CONTACT INFORMATION

SETH ELLIOTT
OFFICE PHONE: (618) 498-6418
EMAIL: swelliott@heneghanassoc.com

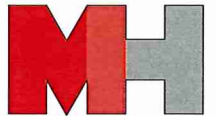
UTILITY PROVIDER INFORMATION

JERSEY COUNTY RURAL WATER COMPANY
MJM ELECTRIC CO-OPERATIVE

IARWC BOARD MEMBERS

JERSEY COUNTY RURAL WATER: ALLEN DAVENPORT
BUNKER HILL: JOHN CHAPMAN
DORCHESTER: SUE CAMPBELL
CARLINVILLE: SCOTT REICHMANN
FIELDON: JULIA DIXON
CENTRAL MACOUPIN COUNTY
RURAL WATER DISTRICT: RANDY DARR
FOSTERBURG WATER DISTRICT: STEVE RUPPERT

MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
COVER SHEET / LOCATION MAP
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
N/A

VERTICAL SCALE:
N/A

PROJECT NO.
71000-412

DATE:
9/4/2026

SHEET NO.
G1

1 OF 23 SHEETS

P:\Users\seth.w.elliott\Documents\Illinois Alluvial\71000-412 - stage 1b\cad\contract f - dwg\cover sheet.dwg
PLOTED: 9/4/2026 @ 1:52:43 PM BY: seth.w.elliott

MECO-HENEGHAN
PROJECT NO. 71000-412

PATH=\\v:\clients\illinois\71000-412 - stage\1b\cod\contract f - dwgs\index--sum quant.dwg
PLOTTED: 9/7/2026 @ 11:58:20 PM BY esth.elliott



Know what's below
Call before you dig

SURVEY ABBREVIATIONS	
P.I.	POINT OF INTERSECTION
P.O.T.	POINT ON TANGENT
T.P.	TURNING POINT
I.P.	IRON PIPE
B.M.	BENCH MARK
T.B.M.	TEMPORARY BENCH MARK
ELEV.	ELEVATION
INV. ELEV.	INVERT ELEVATION
FL	FLOW LINE
M.D.	MEASURE DOWN
P.T.	POINT OF TANGENT
P.C.	POINT OF CURVE
V.C.	VERTICAL CURVE
M.O.	MID ORDINATE
STA.	STATION
X-ING	CROSSING
LT. AH.	LEFT AHEAD
LT.	LEFT
RT. AH.	RIGHT AHEAD
RT.	RIGHT
C.M.P.	CORRUGATED METAL PIPE
V.C.P.	VITRIFIED CLAY PIPE
R.C.P.	REINFORCED CONCRETE PIPE
C.I.P.	CAST IRON PIPE
M.J.	MECHANICAL JOINT
D	DEGREE OF CURVE
T	TANGENT
L	LENGTH
R	RADIUS
E	EXTERNAL
S.J.	SUPER ELEVATION

LEGEND	
	EXISTING FENCE LINE
	EXISTING ASPHALT
	EXISTING GRAVEL
	EXISTING FLOWLINE
	EXISTING GAS
	EXISTING SEWER
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND TELEPHONE
	EXISTING UNDERGROUND FIBRE-OPTIC
	EXISTING 4" WATERLINE
	EXISTING 6" WATERLINE
	EXISTING WATER GATE VALVE
	EXISTING WATER SERVICE METER
	EXISTING FLUSH HYDRANT
	TELEPHONE PEDESTAL
	POWER POLE
	GUY WIRE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	RIGHT-OF-WAY MARKER
	TEST HOLE LOCATION
	IRON PIN (FOUND)
	STONE
	FENCE CORNER POST
	SURVEY LINE
	GUARD RAIL
	LEEVE, EARTH DAM, SLOPE
	BUILDING
	TREE
	TREE LINE
	PERMANENT UTILITY EASEMENT
	PROPOSED RAW WATERLINE
	PROPOSED TEE
	PROPOSED 90° BEND
	PROPOSED 45° BEND
	PROPOSED 22.5° BEND
	PROPOSED GATE VALVE
	PROPOSED REDUCER
	PROPOSED FLUSH HYDRANT
	FULL DEPTH GRANULAR BACKFILL

BENCH MARK INFORMATION	
BM#1	- CHISELED "+" ON TOP OF CONCRETE SLAB OF OLD WELL, 40'± SOUTH FROM THE SW CORNER OF THE OLD BARN ALONG THE WEST SIDE STATE RTE. 100 (SURVEY PT. #2023) ELEVATION - 437.48 N - 887176.7316 E - 2184709.965
BM#2	- 5/8" REBAR (SET) NEAR THE SE PROPERTY CORNER OF WILLIAM PHILIPP PROPERTY (SURVEY PT. #6067) ELEVATION - 690.85 N - 889556.8029 E - 2192697.452

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET DESCRIPTION
G1	COVER SHEET / LOCATION MAP
G2	INDEX OF DRAWINGS / SUMMARY OF QUANTITIES / GENERAL NOTES / AND LEGENDS
G3	OVERALL MAP / SAMPLE PLAN MAP
C1	WATERLINE AERIAL PLAN AND PROFILE
C2	WATERLINE AERIAL PLAN AND PROFILE
C3	WATERLINE AERIAL PLAN AND PROFILE
C4	WATERLINE AERIAL PLAN AND PROFILE
C5	WATERLINE AERIAL PLAN AND PROFILE
C6	WATERLINE AERIAL PLAN AND PROFILE
C7	WATERLINE AERIAL PLAN AND PROFILE
C8	WATERLINE AERIAL PLAN AND PROFILE
C9	WATERLINE AERIAL PLAN AND PROFILE
C10	WATERLINE AERIAL PLAN AND PROFILE
C11	WATERLINE AERIAL PLAN AND PROFILE
C12	WATERLINE AERIAL PLAN AND PROFILE
C13	WATERLINE AERIAL PLAN AND PROFILE
CP1	ROAD CROSSING PROFILES
CP2	ROAD CROSSING PROFILES
CD1	DETAIL SHEET
CD2	DETAIL SHEET
CD3	DETAIL SHEET
CD4	DETAIL SHEET
CD5	DETAIL SHEET

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE GENERAL CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE DOES NOT INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTIONS SITE.

UNDERGROUND UTILITY NOTE

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS THE EXISTENCE OF WHICH IS AT PRESENT NOT KNOWN. VERIFICATION OF THE LOCATIONS OF UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, WILL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR.

EXISTING STRUCTURE NOTE

DO NOT SCALE DIMENSIONS FROM DRAWINGS FOR CONSTRUCTION PROPOSES. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS.

EROSION CONTROL NOTE

APPROPRIATE EROSION AND SILTATION CONTROLS MUST BE USED AND ALL EXPOSED SOIL AND OTHER FILLS MUST BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICAL DATE. ANY TYPE OF LAND DISTURBANCE PERMIT THAT MAY BE REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES. ALL CONTROLS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF NATURAL RESOURCES AND/OR LOCAL GOVERNING AUTHORITY.

SUMMARY OF QUANTITIES

PROPOSED QUANTITIES			
ITEM #	QUANTITY	UNIT	ITEM DESCRIPTION
1	30,131	LF	36" HDPE PIPE, CLASS 200
2	2	EA	DUCTILE IRON CLASS 250 OR HDPE CLASS 200, 6" - 90 DEGREE BEND
3	2	EA	DUCTILE IRON CLASS 250 OR HDPE CLASS 200, 36" CAP
4	8	EA	FIRE HYDRANT WITH GATE VALVE AND VALVE BOX
5	40	LF	ST MARYS ROAD CROSSING - JACK AND BORE 48" STEEL OUTER CASING INCLUDES CARRIER PIPE
6	60	LF	BETHANY CHURCH ROAD CROSSING - JACK AND BORE 48" STEEL OUTER CASING INCLUDES CARRIER PIPE
7	60	LF	CENTRAL ROAD CROSSING - JACK AND BORE 48" STEEL OUTER CASING INCLUDES CARRIER PIPE
8	40	LF	COSTELLO ROAD CROSSING - JACK AND BORE 48" STEEL OUTER CASING INCLUDES CARRIER PIPE
9	60	LF	STATE HIGHWAY 16 CROSSING - JACK AND BORE 48" STEEL OUTER CASING INCLUDES CARRIER PIPE
10	65	LF	OTTERVILLE ROAD CROSSING - JACK AND BORE 48" STEEL OUTER CASING INCLUDES CARRIER PIPE
11	40	LF	DIRECTIONAL BORE ST MARYS ROAD CROSSING - 1-1/4" HDPE SDR 11 FIBER OPTIC CONDUIT
12	60	LF	DIRECTIONAL BORE BETHANY CHURCH ROAD CROSSING - 1-1/4" HDPE SDR 11 FIBER OPTIC CONDUIT
13	60	LF	DIRECTIONAL BORE CENTRAL ROAD CROSSING - 1-1/4" HDPE SDR 11 FIBER OPTIC CONDUIT
14	40	LF	DIRECTIONAL BORE COSTELLO ROAD CROSSING - 1-1/4" HDPE SDR 11 FIBER OPTIC CONDUIT
15	60	LF	DIRECTIONAL BORE STATE HIGHWAY 16 CROSSING - 1-1/4" HDPE SDR 11 FIBER OPTIC CONDUIT
16	65	LF	DIRECTIONAL BORE OTTERVILLE ROAD CROSSING - 1-1/4" HDPE SDR 11 FIBER OPTIC CONDUIT
17	1	LS	EROSION CONTROL
18	1	LS	SEEDING, FERTILIZING, MULCHING, SOIL TESTING, RIPPING
19	40	LF	FENCE REPAIR
20	30	EA	DRAIN TILE REPAIR
21	29,380	LF	BACKFILL TYPICAL
22	426	LF	BACKFILL TYPE 5 FULL DEPTH
23	14	EA	6" AIR RELEASE VALVE, 72" DIAMTER VAULT AND 6" PIPE
24	29,806	LF	1-1/4" HDPE CONDUIT, SDR 11
25	14	EA	24"X36"X36" HDPE FIBER OPTIC HANDHOLD
26	25	EA	12"X12"X12" HDPE FIBER OPTIC HANDHOLD - BURIED
27	30,131	LF	24 STRAND SINGLE MODE FIBER WITH ARMORED SHIELD
28	10	EA	EXPLORATORY DIG (UTILITIES)
29	500	CY	ROCK EXCAVATION

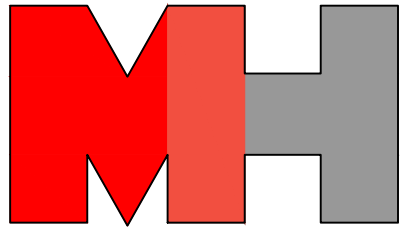
GENERAL NOTES

- HIGHWAY/STREET RIGHT OF WAY AND PROPERTY LINES HAVE BEEN PLOTTED FROM IRON PINS FOUND AND TAX MAP INFORMATION. THEIR LOCATIONS SHOULD BE CONSIDERED APPROX. AND ARE NOT INTENDED TO BE USED AS SURVEYED LINES.
- THE ENGINEER/SURVEYOR HAS SET SURVEY CONTROL POINTS WITH COORDINATES FOR CONSTRUCTION CONTROL. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO LEAVE THESE MARKERS UNDISTURBED.
- ALL ROCK EXCAVATION SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND THERE SHALL BE NO DIRECT PAYMENT FOR THIS WORK.
- ANY AND ALL EASEMENT RESTRICTIONS SHOWN ON PLANS TO BE CLOSELY FOLLOWED.
- ANY AND ALL GRAVEL ROADWAYS AND DRIVES (OPEN-CUT) TO BE BACKFILLED WITH FULL DEPTH GRANULAR BACKFILL MATERIAL AND MAINTAINED THRU ENTIRE PROJECT.
- UNLESS SPECIFICALLY SHOWN ON THESE PLANS, ALL WORK WILL BE COMPLETED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
- ALL WATER MAINS SHALL BE SEPARATED FROM SEPTIC TANKS, DISPOSAL FIELDS, AND SEEPAGE BEDS BY A MINIMUM OF 25 FEET.
- ALL WATER MAINS SHALL BE SATISFACTORILY DISINFECTED PRIOR TO USE, AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM THE END OF THE NEW WATER MAIN AND AT LEAST ONE SET FROM EACH BRANCH. SATISFACTORY DISINFECTION SHALL BE DEMONSTRATED IN ACCORDANCE WITH THE REQUIREMENTS OF 35 ILL. ADM. CODE 652.203.

HAZARDOUS SUBSTANCE NOTES

- SUBSTANCES REGULATED BY FEDERAL LAW UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) WHICH ARE TRANSPORTED, STORED OR USED FOR MAINTENANCE, CLEANING OR REPAIRS SHALL BE MANAGED ACCORDING TO THE PROVISIONS OF RCRA AND CERCLA.
- ALL PAINTS, SOLVENTS, PETROLEUM PRODUCTS AND PETROLEUM WASTE PRODUCTS (EXCEPT FUELS) AND STORAGE CONTAINERS (SUCH AS DRUMS, CANS OR CARTONS) SHALL BE STORED SUCH THAT THESE MATERIALS ARE NOT EXPOSED TO STORM WATER. SUFFICIENT PRACTICES OF SPILL PREVENTION, CONTROL AND/OR MANAGEMENT SHALL BE PROVIDED TO PREVENT ANY SPILLS OF THESE POLLUTANTS FROM ENTERING A WATER OF THE STATE. ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THIS REQUIREMENT SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCES CONTAINED AND SHALL ALSO PREVENT THE CONTAMINATION OF GROUNDWATER.

MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003649
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

☐ 900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN - INDEX OF DRAWINGS /
SUMMARY OF QUANTITIES /
GENERAL NOTES / AND LEGENDS
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE
HORIZONTAL SCALE:

VERTICAL SCALE:

PROJECT NO.
71000-412

DATE:
9/7/2026

SHEET NO.
G2

2 OF 23 SHEETS

NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
OVERALL MAP / SAMPLE PLAN MAP

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE
HORIZONTAL SCALE:
1"=1000'

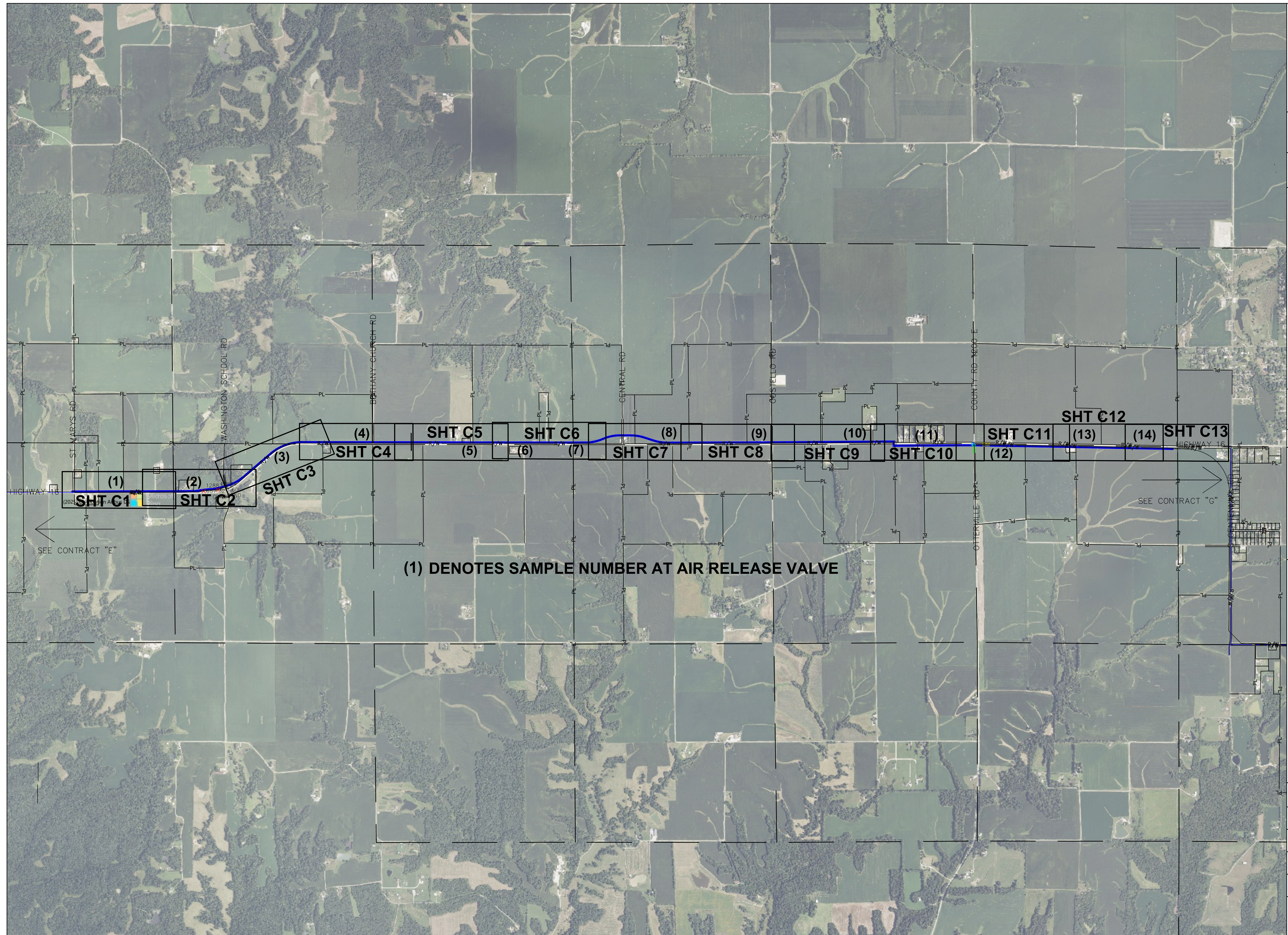
VERTICAL SCALE:

PROJECT NO.
71000-412

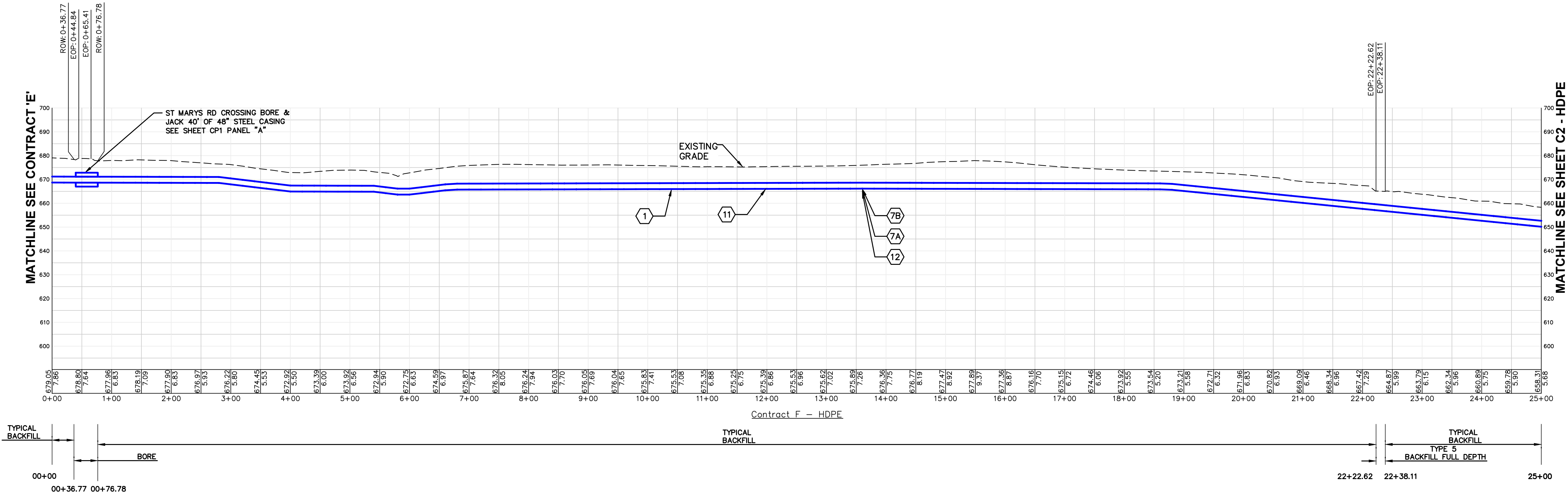
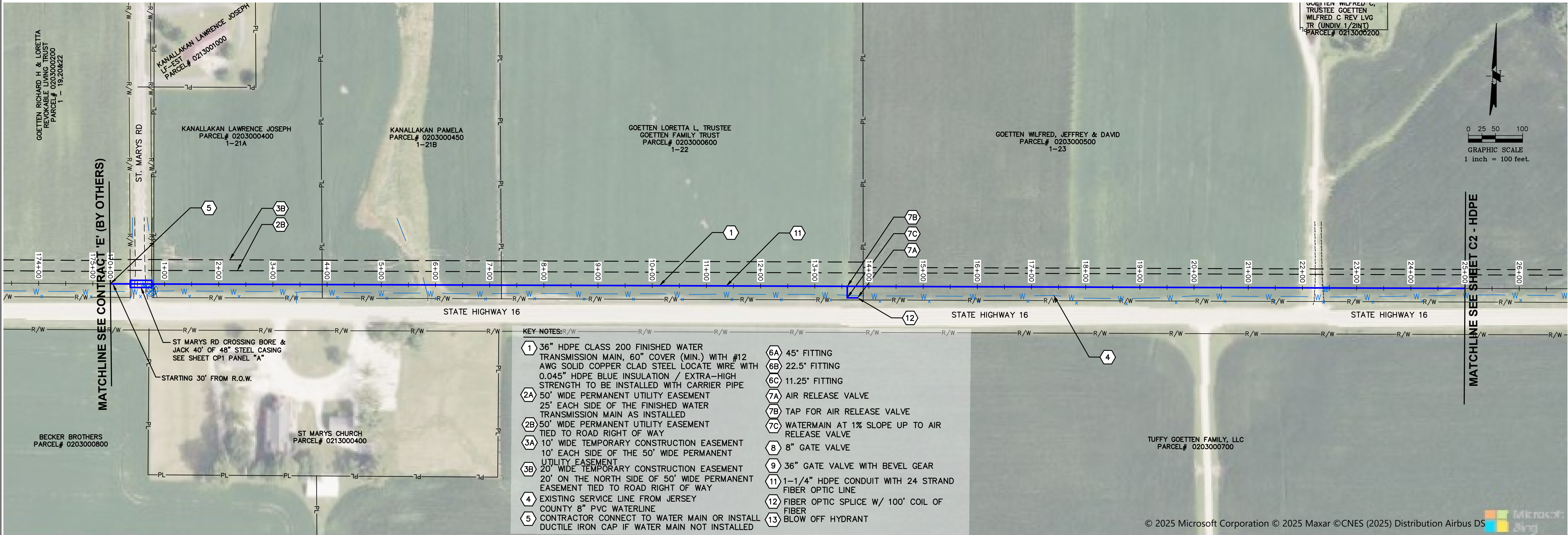
DATE: 9/7/2026

SHEET NO. **G3**

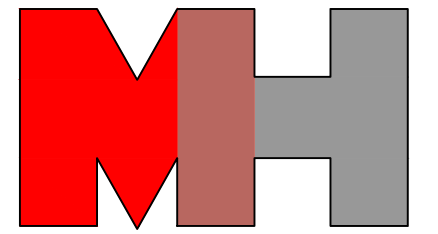
3 OF 23 SHEETS



P:\Tees\shored-pm\mha\clients\Illinois alluvia\1000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTED: 3/7/2026 @ 8:42:10 AM BY: sash.silbert



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN AERIAL
PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

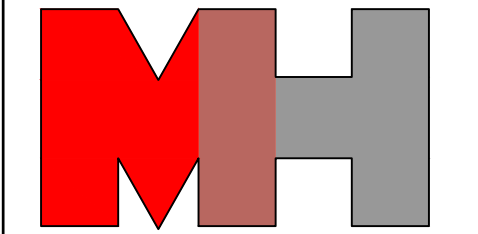
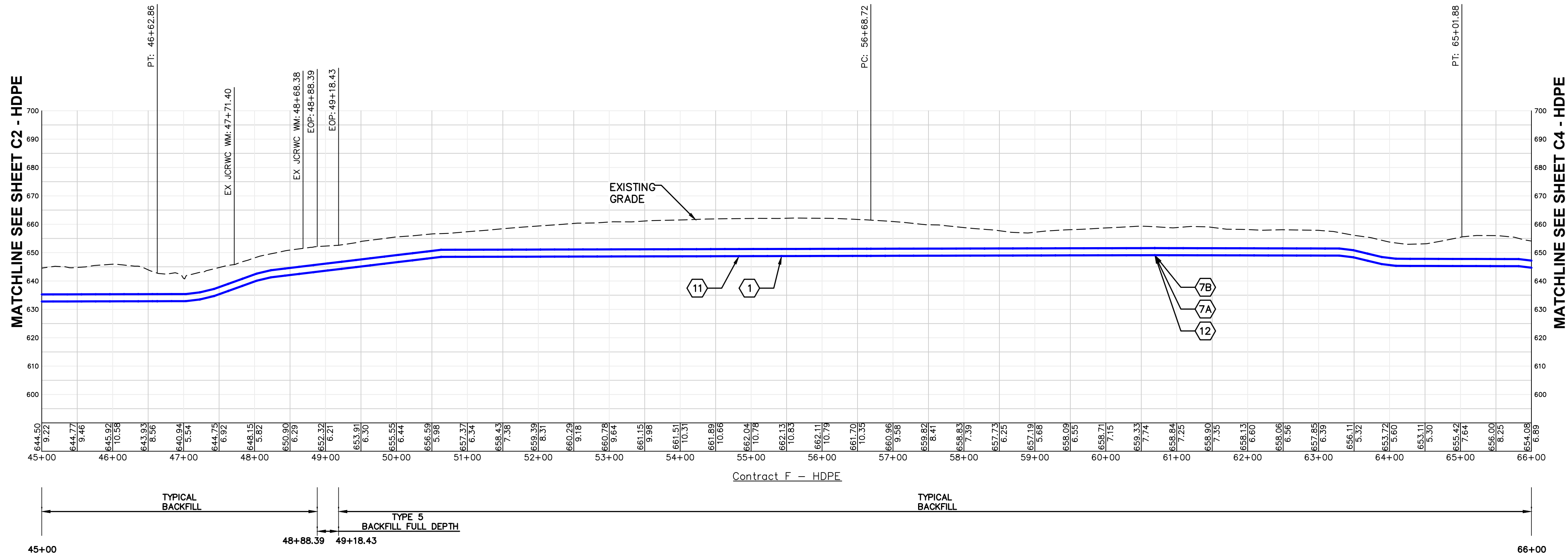
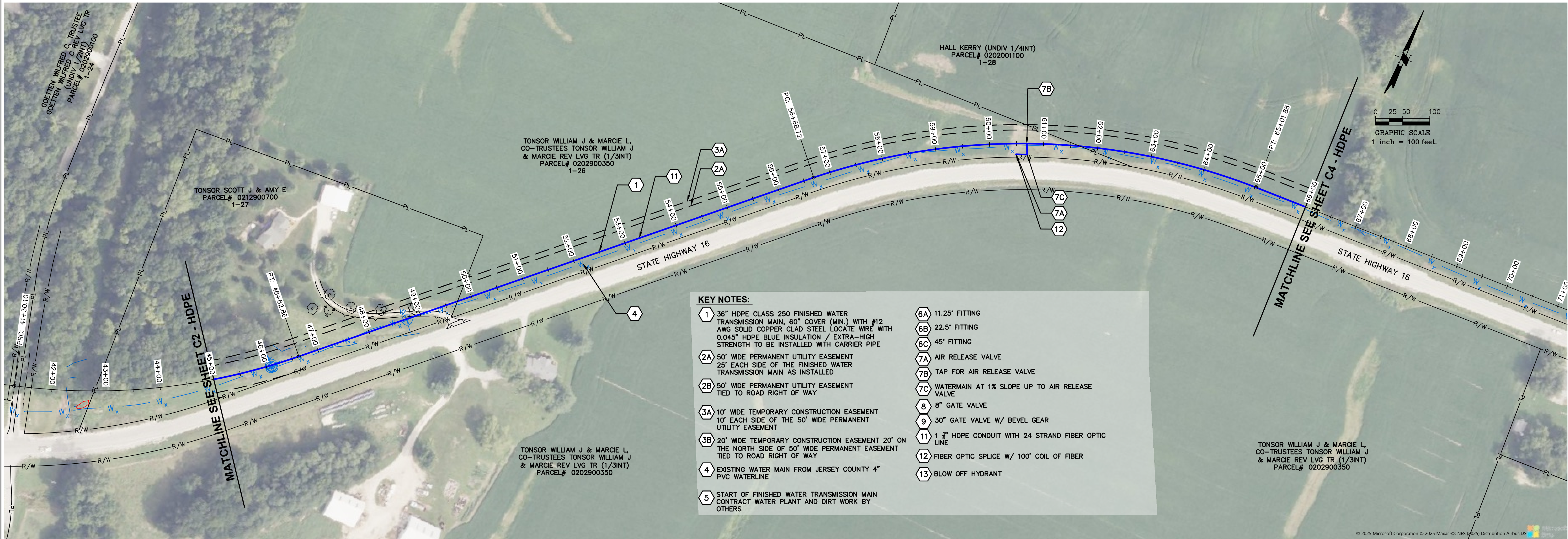
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

DATE:
9/7/2026

SHEET NO.
C1-HDPE
4 OF 23 SHEETS

PATH=s:\shared-pim\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - di recover.dwg
PLOTTED: 9/7/2026 @ 8:42:21 AM BY seth elliot



NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY:	MNM
CHECKED BY:	TAM
APPROVED BY:	SWE

HORIZONTAL SCALE:
1"=100'

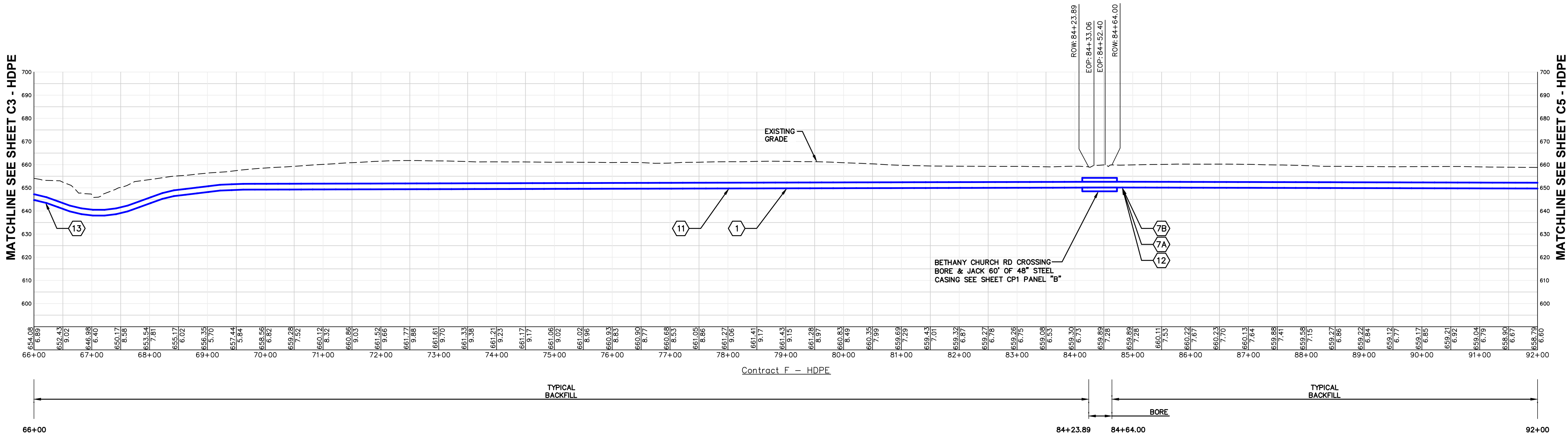
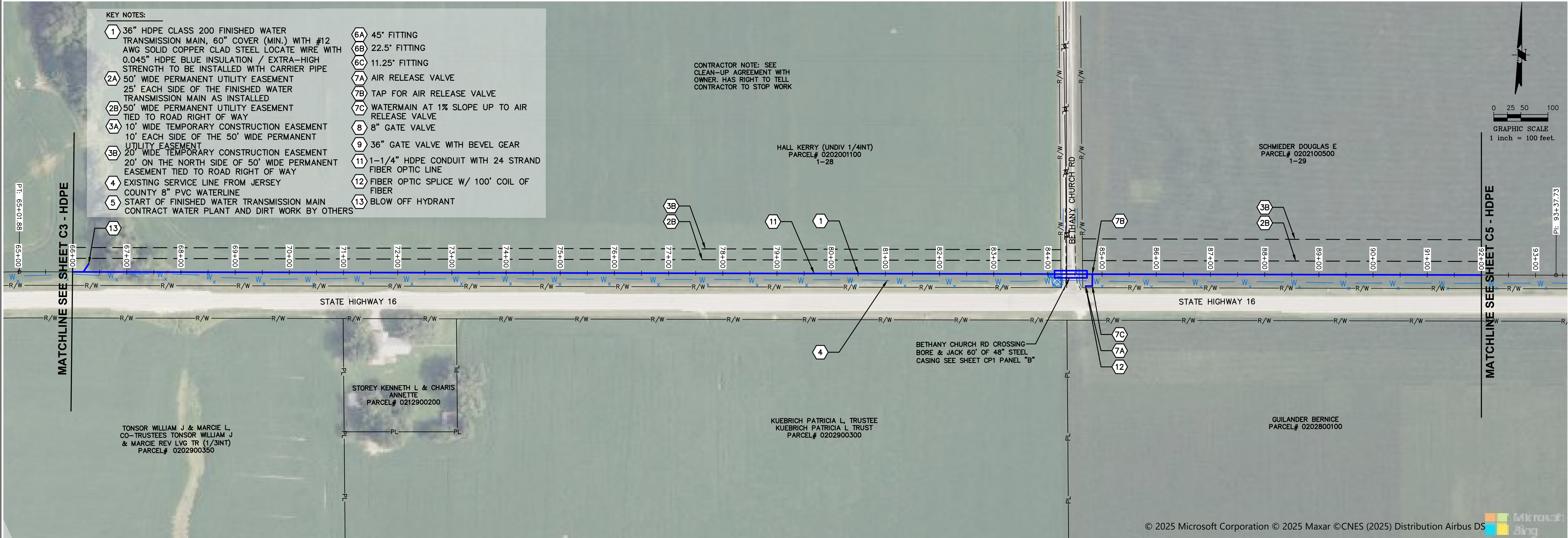
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

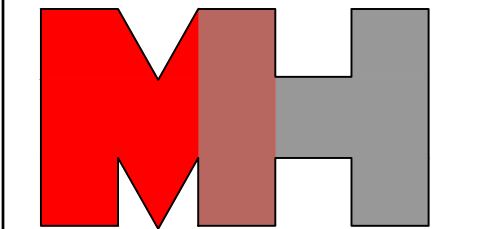
DATE:
9/7/2026

SHEET NO.
C3-HDPE
6 OF 23 SHEETS

PATH=s:\shared-pin\mhe\clients\illinois alluvial\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTTED: 9/7/2026 @ 8:42:21 AM BY seth elliot



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2019004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

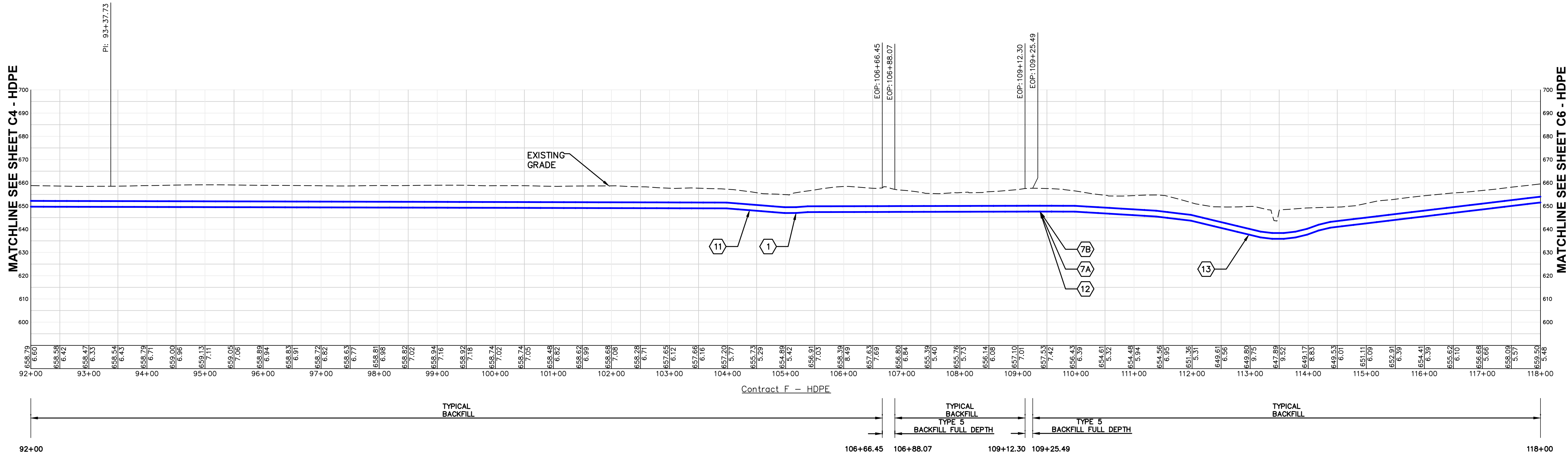
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

DATE:
9/7/2026

SHEET NO.
C4-HDPE
7 OF 23 SHEETS

PATH=s:\shared-pim\mh\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTTED: 9/7/2026 @ 8:42:32 AM BY seth elliot



MATCHLINE SEE SHEET C4 - HDPE

PL: 93+37.73

GUILANDER BERNICE
PARCEL# 0202800100

SCHMIEDER DOUGLAS E
PARCEL# 0202100500
1-29

CONTRACTOR NOTE:
TWO STUMPS IN FRONT YARD
TO BE REMOVED AND ANY DAMAGED
PAMPAS GRASS IS TO BE REPLACED
IF TREE DIES HAS TO BE REPLACE
HAS RIGHT TO STOP WORK IF TOO WET

KOVARIK ROBERT E & BOLLING
ELIZABETH K, TRUSTEES KOVARIK
EUGENE J IRREVOCABLE TRUST
PARCEL# 0202800200

PL: 106+66.45

PL: 106+88.07

PL: 109+12.30

PL: 109+25.49

SCHLEPER FARMS INC
PARCEL# 0202100800
1-31

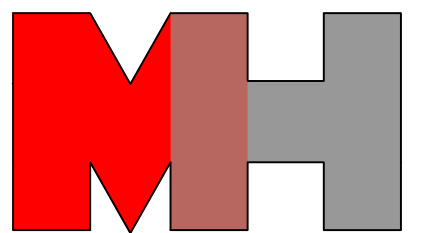
0 25 50 100
GRAPHIC SCALE
1 inch = 100 feet.

MATCHLINE SEE SHEET C6 - HDPE

KEY NOTES:

- 36" HDPE CLASS 200 FINISHED WATER TRANSMISSION MAIN, 60" COVER (MIN.) WITH #12 AWG SOLID COPPER CLAD STEEL LOCATE WIRE WITH 0.045" HDPE BLUE INSULATION / EXTRA-HIGH STRENGTH TO BE INSTALLED WITH CARRIER PIPE
- 50' WIDE PERMANENT UTILITY EASEMENT 25' EACH SIDE OF THE FINISHED WATER TRANSMISSION MAIN AS INSTALLED
- 50' WIDE PERMANENT UTILITY EASEMENT TIED TO ROAD RIGHT OF WAY
- 10' WIDE TEMPORARY CONSTRUCTION EASEMENT 10' EACH SIDE OF THE 50' WIDE PERMANENT UTILITY EASEMENT
- 20' WIDE TEMPORARY CONSTRUCTION EASEMENT 20' ON THE NORTH SIDE OF 50' WIDE PERMANENT EASEMENT TIED TO ROAD RIGHT OF WAY
- EXISTING SERVICE LINE FROM JERSEY COUNTY 8" PVC WATERLINE
- START OF FINISHED WATER TRANSMISSION MAIN CONTRACT WATER PLANT AND DIRT WORK BY OTHERS
- 40' WIDE TEMPORARY CONSTRUCTION EASEMENT 20' ON THE NORTH SIDE OF 50' WIDE PERMANENT EASEMENT TIED TO ROAD RIGHT OF WAY
- 11.25' FITTING
- AIR RELEASE VALVE
- TAP FOR AIR RELEASE VALVE
- WATERMAIN AT 1% SLOPE UP TO AIR RELEASE VALVE
- 8" GATE VALVE
- 36" GATE VALVE WITH BEVEL GEAR
- 1-1/4" HDPE CONDUIT WITH 24 STRAND FIBER OPTIC LINE
- FIBER OPTIC SPLICE W/ 100' COIL OF FIBER
- BLOW OFF HYDRANT

MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

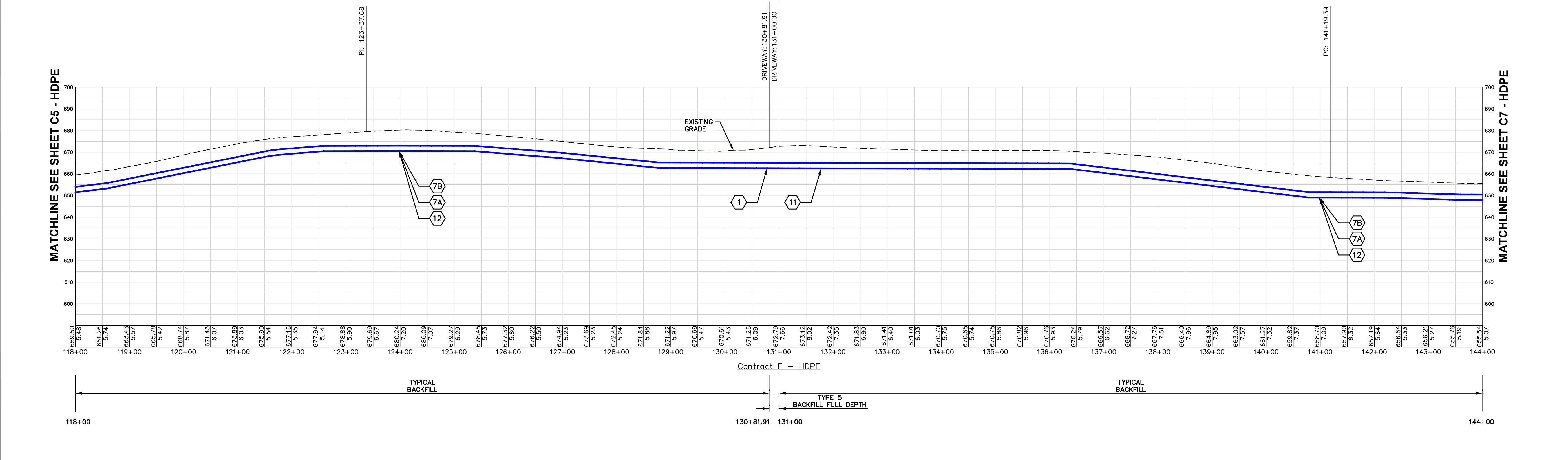
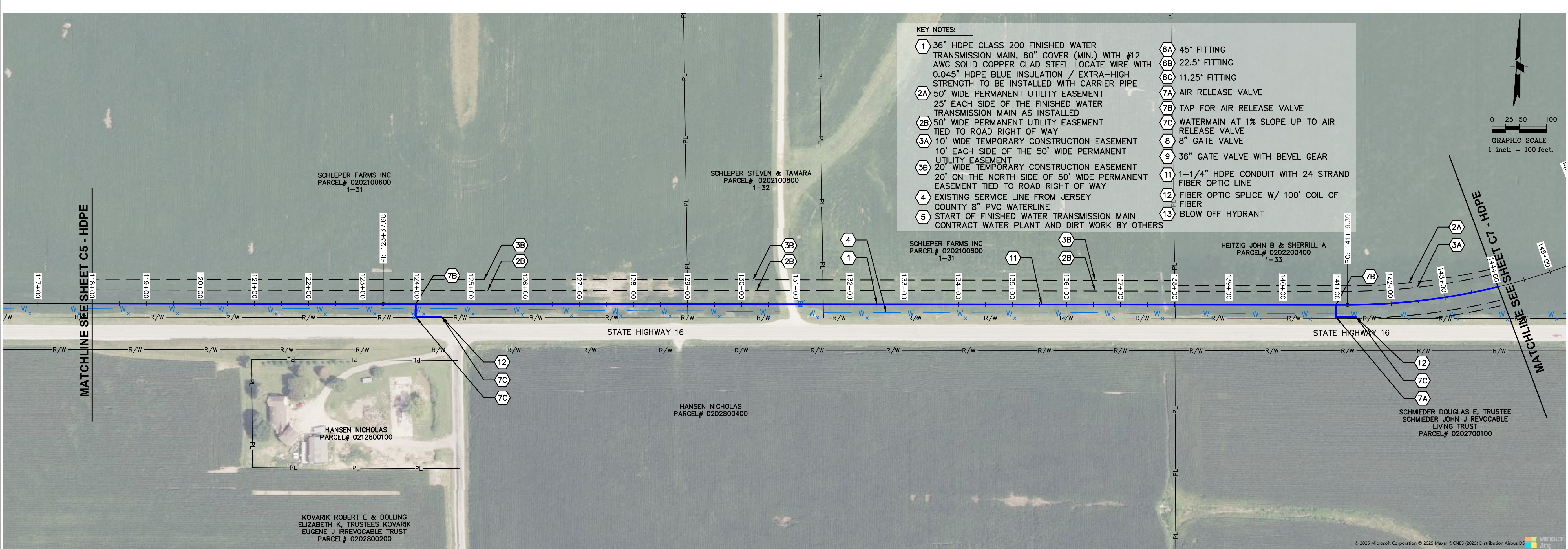
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

DATE:
9/7/2026

SHEET NO.
C5-HDPE
8 OF 23 SHEETS

PATH=s:\shared-pim\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTTED: 9/7/2026 @ 8:42:37 AM BY seth elliot



MECO-HENEGHAN
ENGINEERS, LLC

M

H

www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

☐ 900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

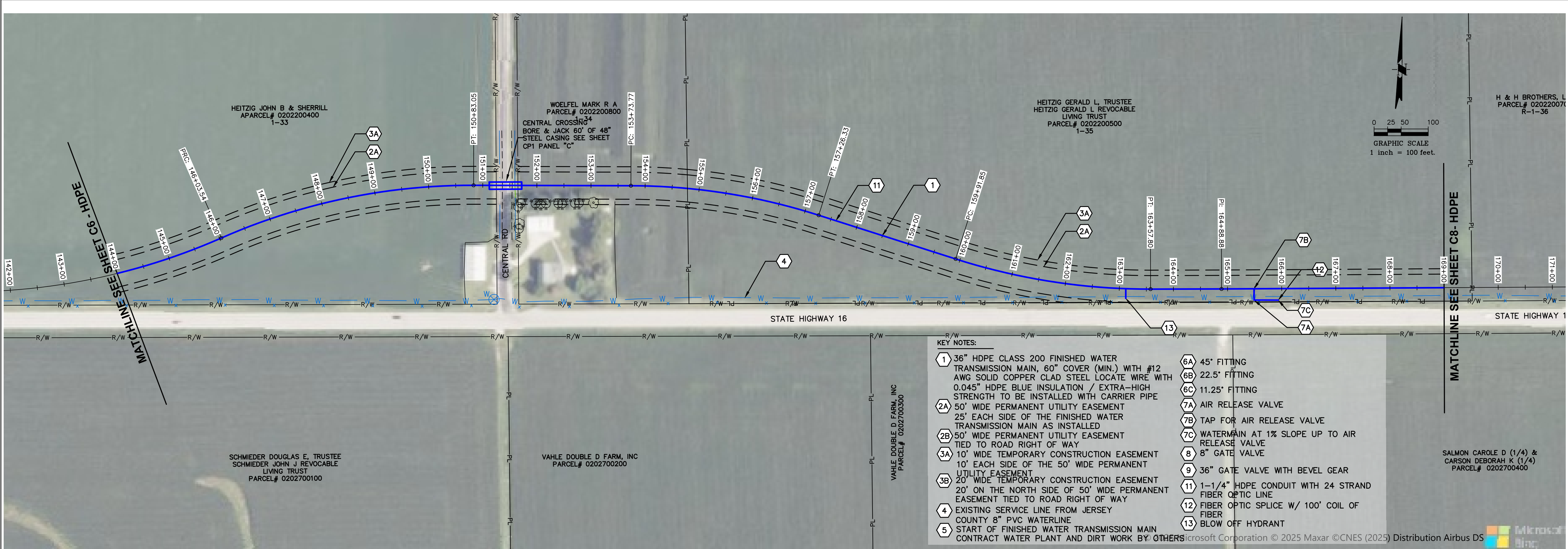
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

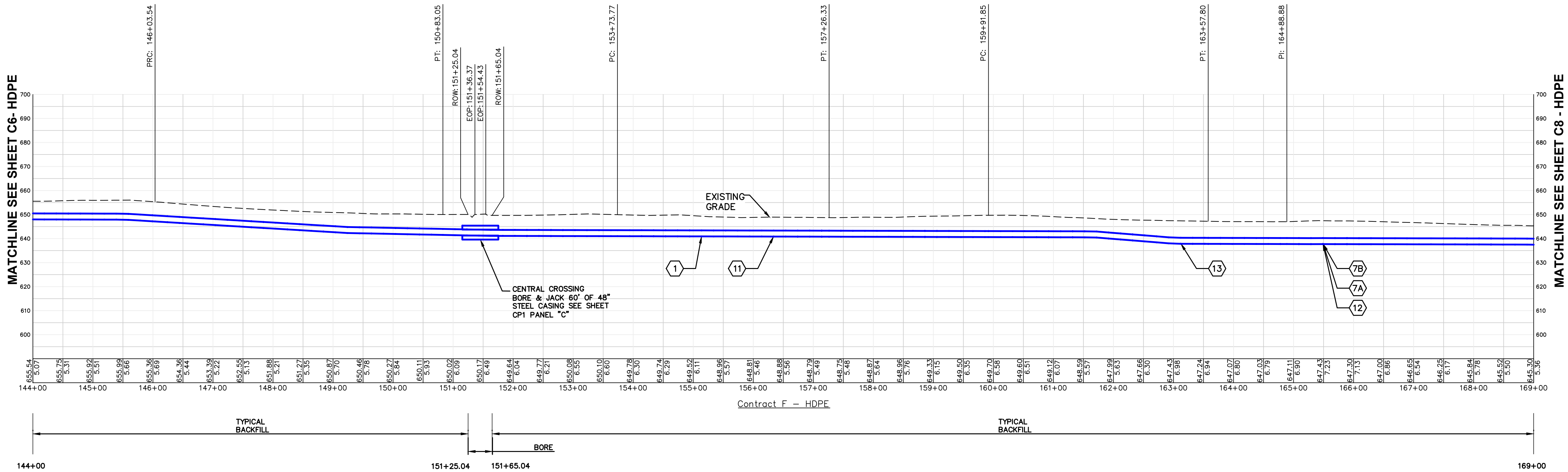
DATE:
9/7/2026

SHEET NO.
C6-HDPE
9 OF 23 SHEETS

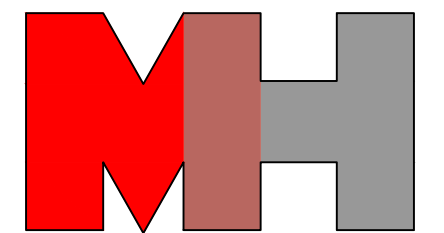
PATH=s:\valored-pim\mh\clients\illinois alluvia\71000-412 - stage 1b\cod\contract f - dwgs\1 - finished sheets - dl recover.dwg
PLOTTED: 9/7/2026 @ 8:42:43 AM BY seth elliot



- KEY NOTES:
- 1 36" HDPE CLASS 200 FINISHED WATER TRANSMISSION MAIN, 60" COVER (MIN.) WITH #12 AWG SOLID COPPER CLAD STEEL LOCATE WIRE WITH 0.045" HDPE BLUE INSULATION / EXTRA-HIGH STRENGTH TO BE INSTALLED WITH CARRIER PIPE
 - 2A 50' WIDE PERMANENT UTILITY EASEMENT 25' EACH SIDE OF THE FINISHED WATER TRANSMISSION MAIN AS INSTALLED
 - 2B 50' WIDE PERMANENT UTILITY EASEMENT TIED TO ROAD RIGHT OF WAY
 - 3A 10' WIDE TEMPORARY CONSTRUCTION EASEMENT 10' EACH SIDE OF THE 50' WIDE PERMANENT UTILITY EASEMENT
 - 3B 20' WIDE TEMPORARY CONSTRUCTION EASEMENT 20' ON THE NORTH SIDE OF 50' WIDE PERMANENT EASEMENT TIED TO ROAD RIGHT OF WAY
 - 4 EXISTING SERVICE LINE FROM JERSEY COUNTY 8" PVC WATERLINE
 - 5 START OF FINISHED WATER TRANSMISSION MAIN CONTRACT WATER PLANT AND DIRT WORK BY OTHERS
 - 6A 45" FITTING
 - 6B 22.5" FITTING
 - 6C 11.25" FITTING
 - 7A AIR RELEASE VALVE
 - 7B TAP FOR AIR RELEASE VALVE
 - 7C WATERMAIN AT 1% SLOPE UP TO AIR RELEASE VALVE
 - 8 8" GATE VALVE
 - 9 36" GATE VALVE WITH BEVEL GEAR
 - 11 1-1/4" HDPE CONDUIT WITH 24 STRAND FIBER OPTIC LINE
 - 12 FIBER OPTIC SPLICE W/ 100' COIL OF FIBER
 - 13 BLOW OFF HYDRANT



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

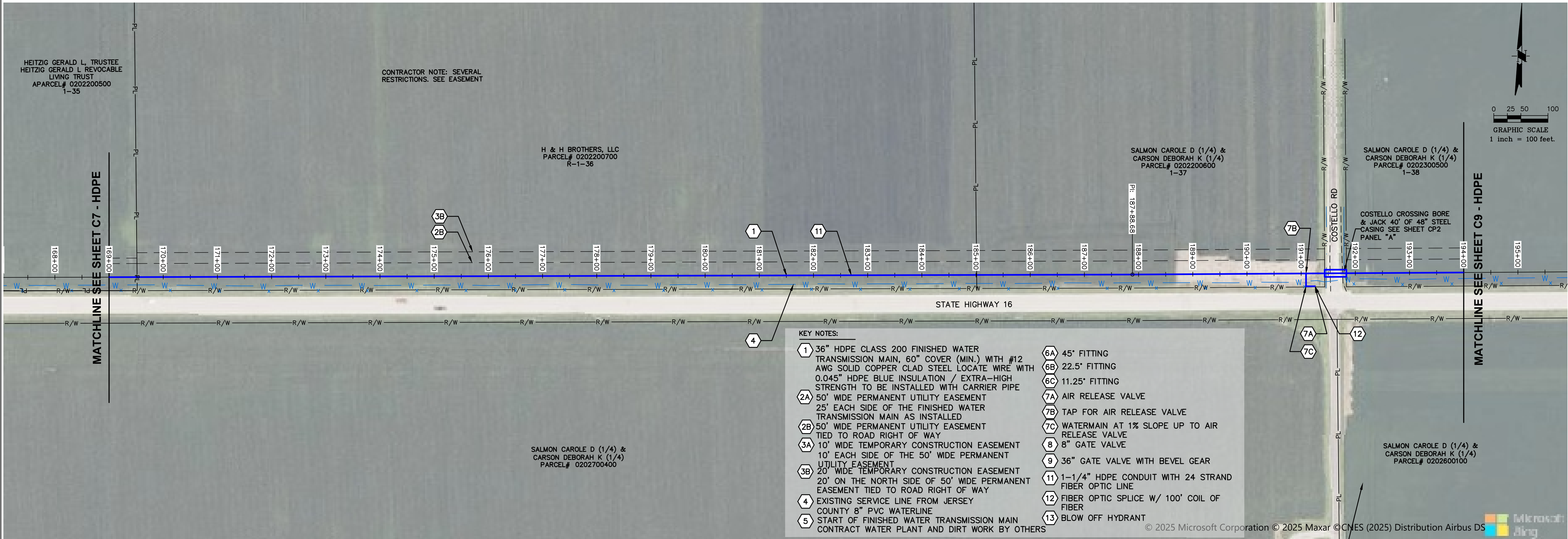
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

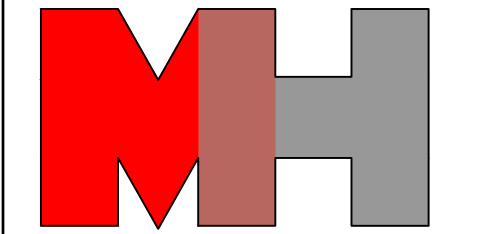
DATE:
9/7/2026

SHEET NO.
C7-HDPE
10 OF 23 SHEETS

PATH=s:\ahored-pim\mha\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTTED: 9/7/2026 @ 8:42:49 AM BY seth elliot



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

NO.	DATE	REVISIONS

--

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

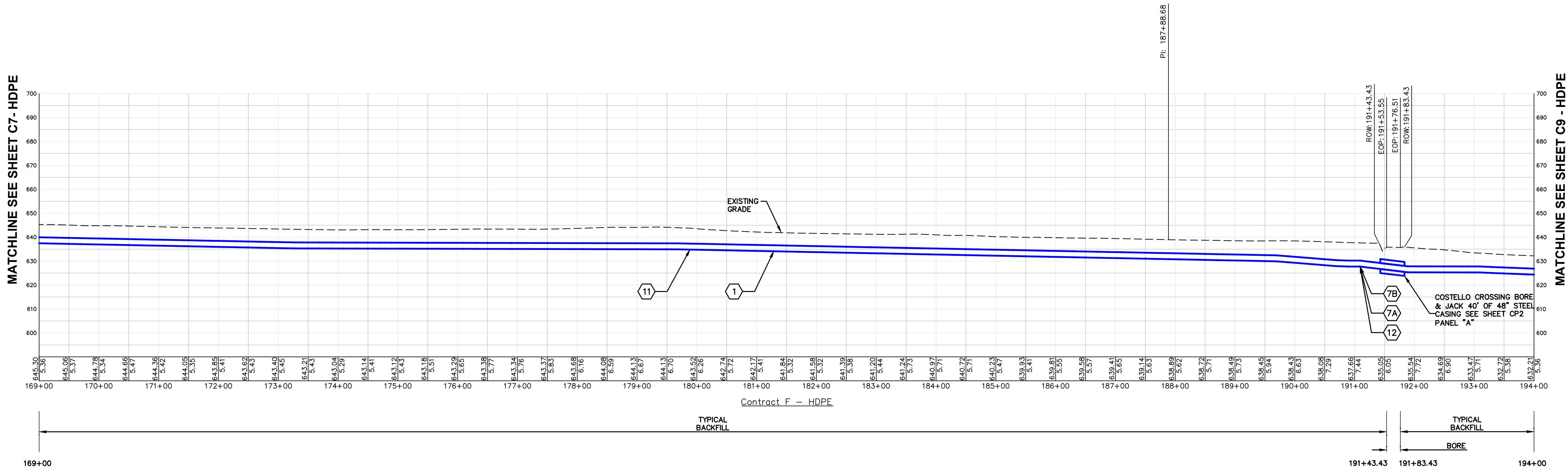
HORIZONTAL SCALE:
1"=100'

VERTICAL SCALE:
1"=25'

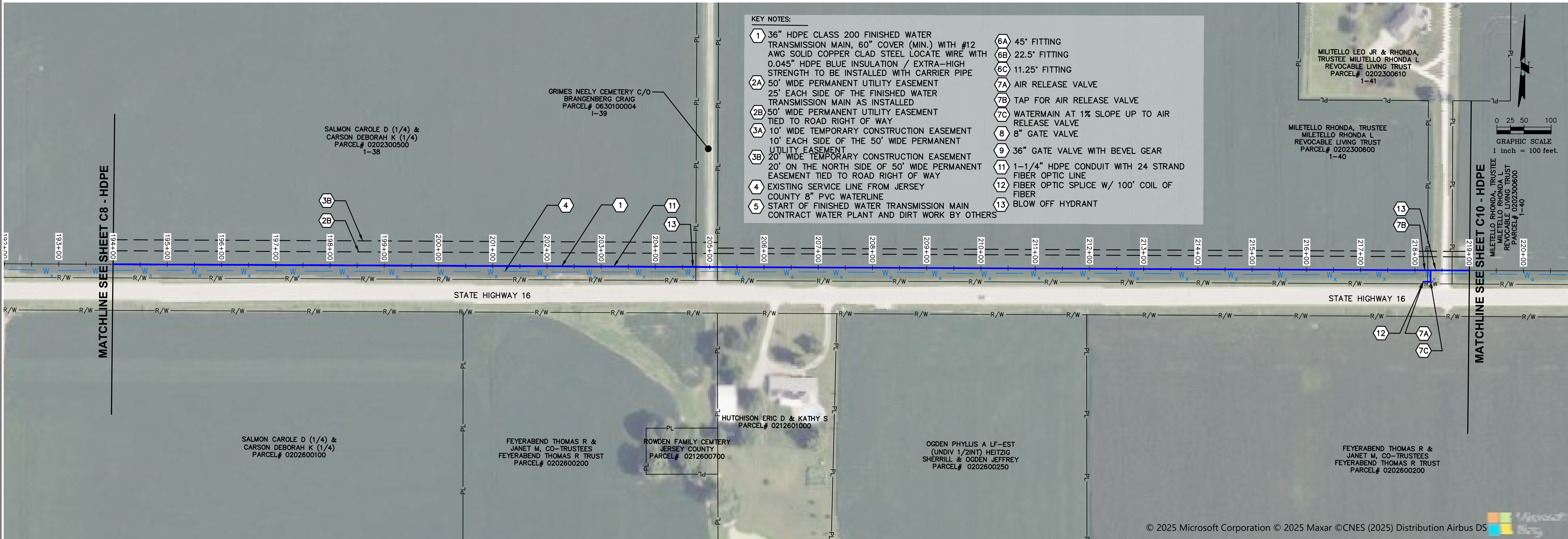
PROJECT NO.
71000-412

DATE:
9/7/2026

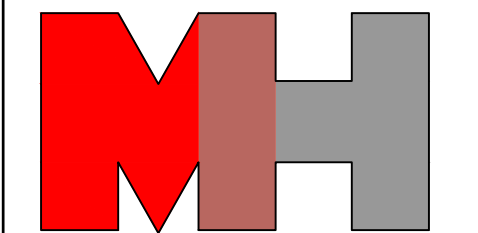
SHEET NO.
C8-HDPE
11 OF 23 SHEETS



PATH=s:\shared-pim\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - di recover.dwg
PLOTTED: 9/7/2026 @ 8:42:54 AM BY seth elliott



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

☐ 900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

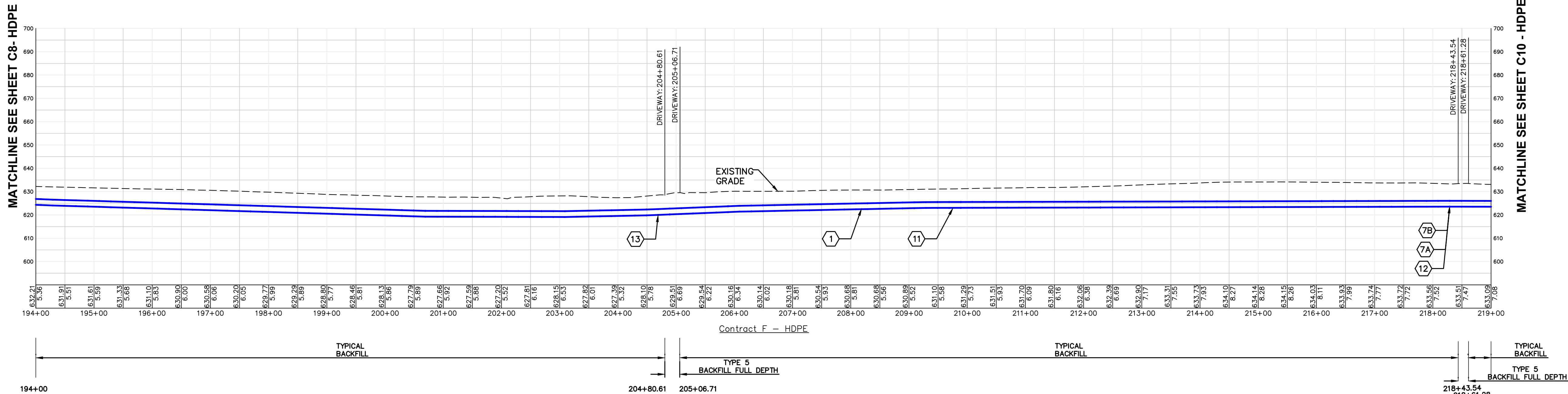
HORIZONTAL SCALE:
1"=100'

VERTICAL SCALE:
1"=25'

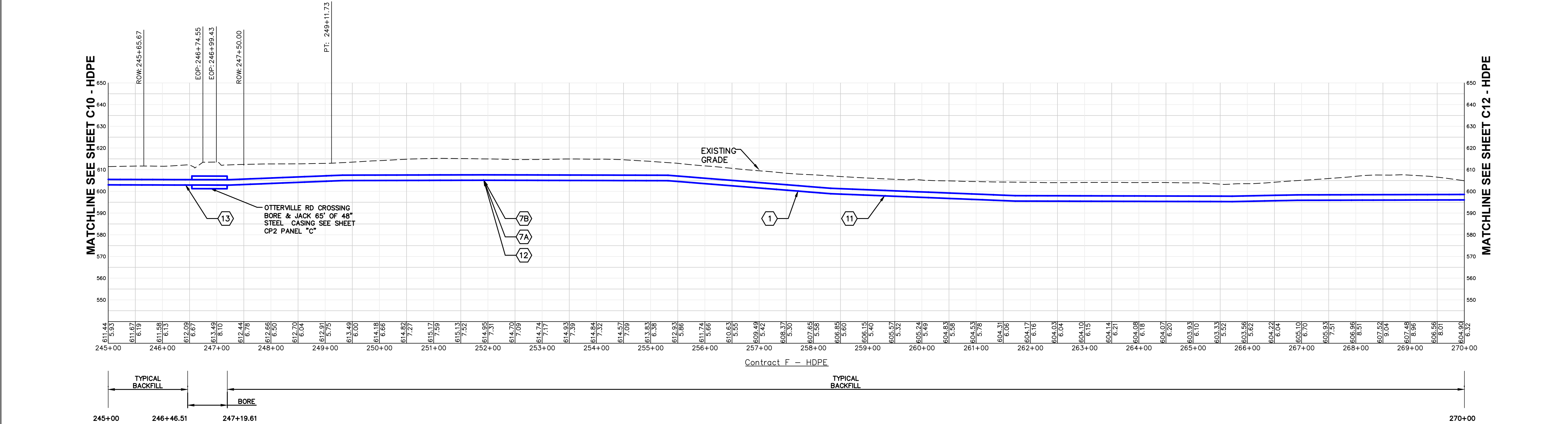
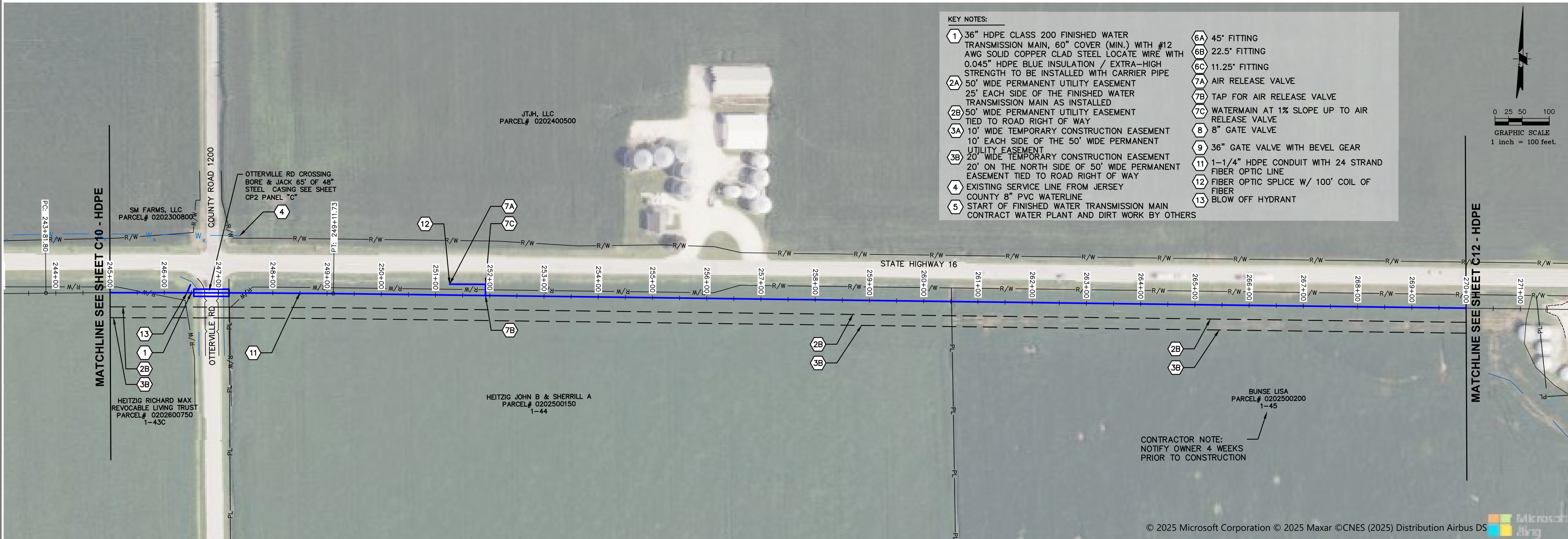
PROJECT NO.
71000-412

DATE:
9/7/2026

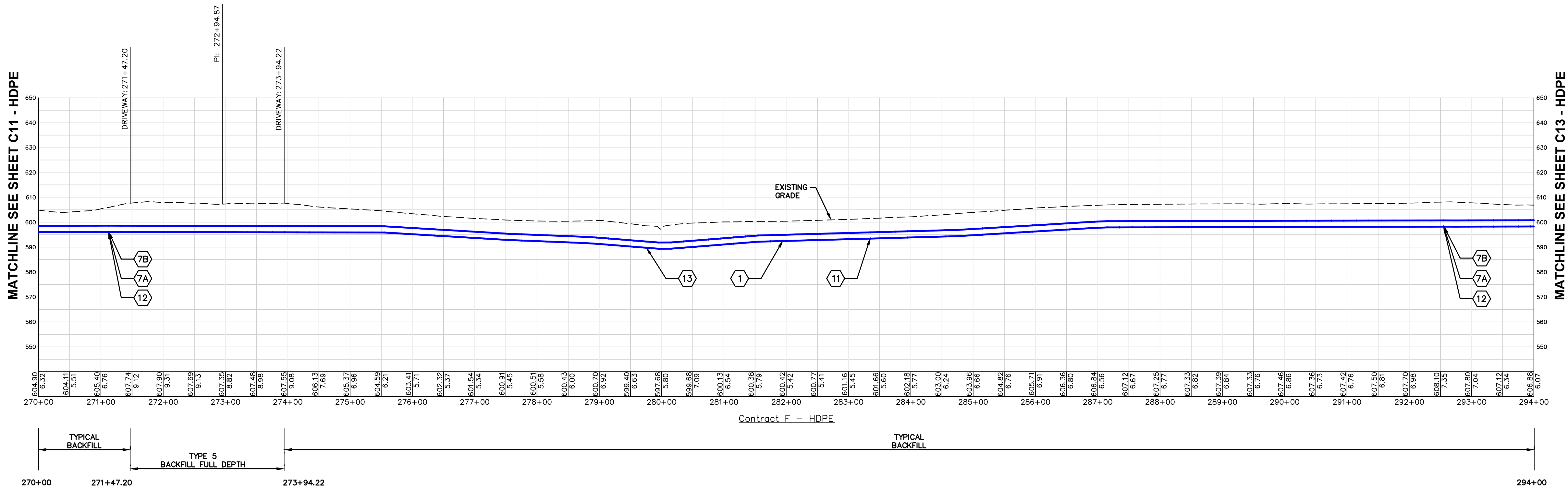
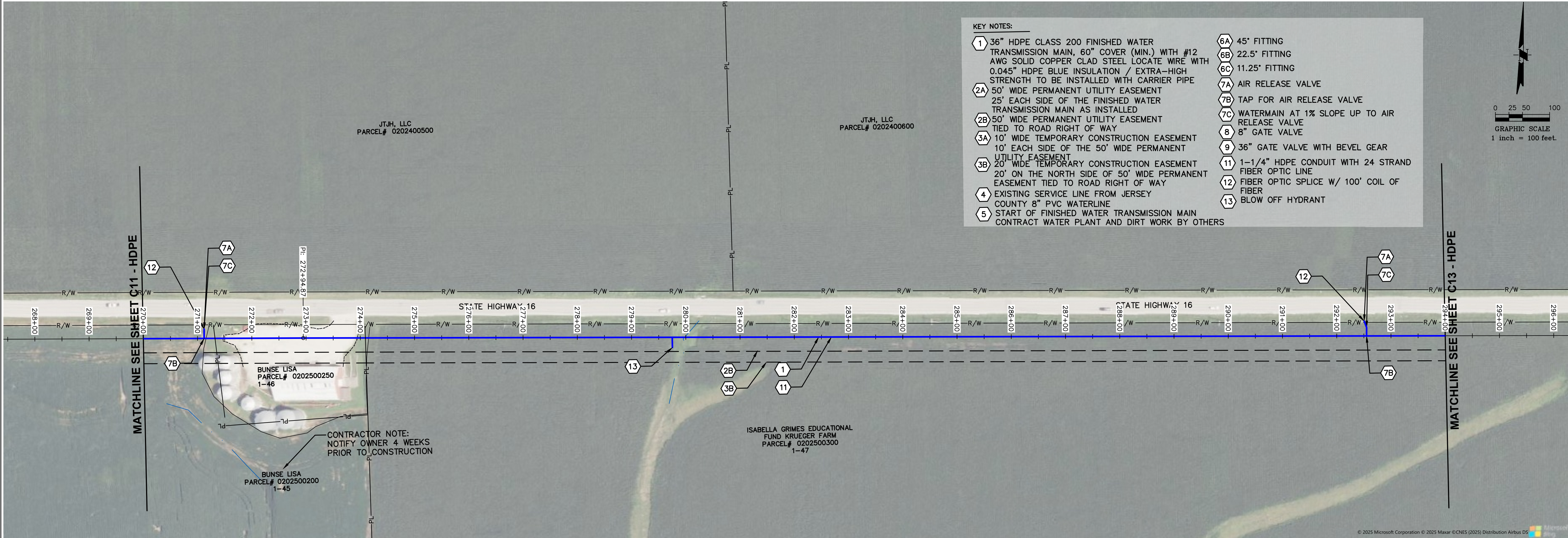
SHEET NO.
C9-HDPE
12 OF 23 SHEETS



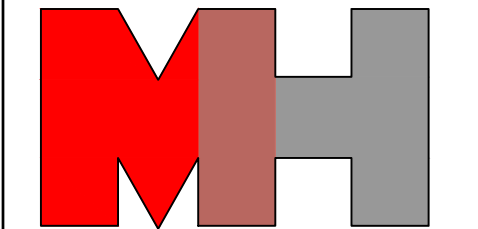
PATH=s:\valored-pim\mhe\Illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
 PLOTTED: 9/7/2026 @ 8:43:06 AM BY seth elliot



PATH=s:\valored-pim\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTTED: 9/7/2026 @ 8:43:11 AM BY seth Elliott



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

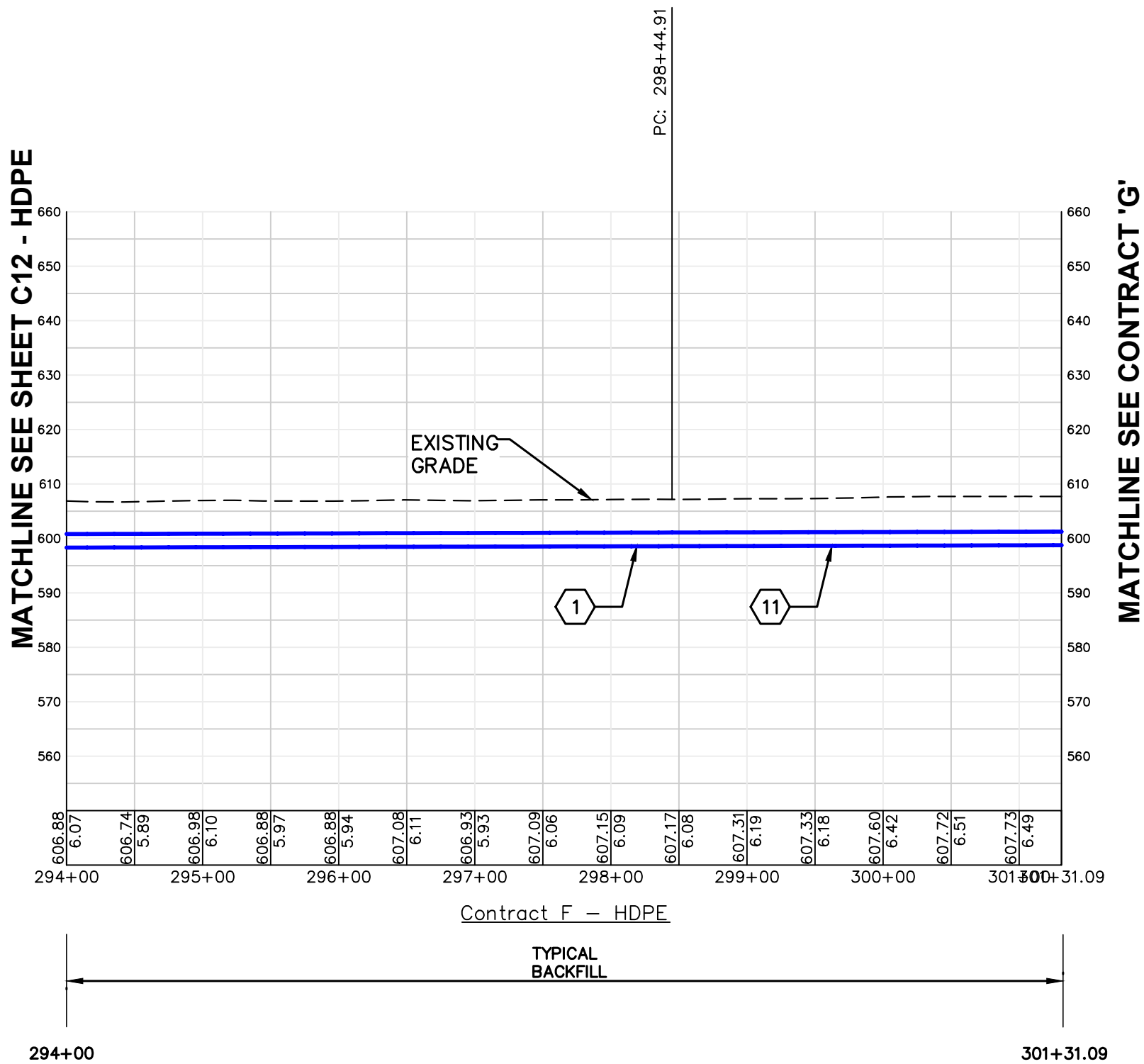
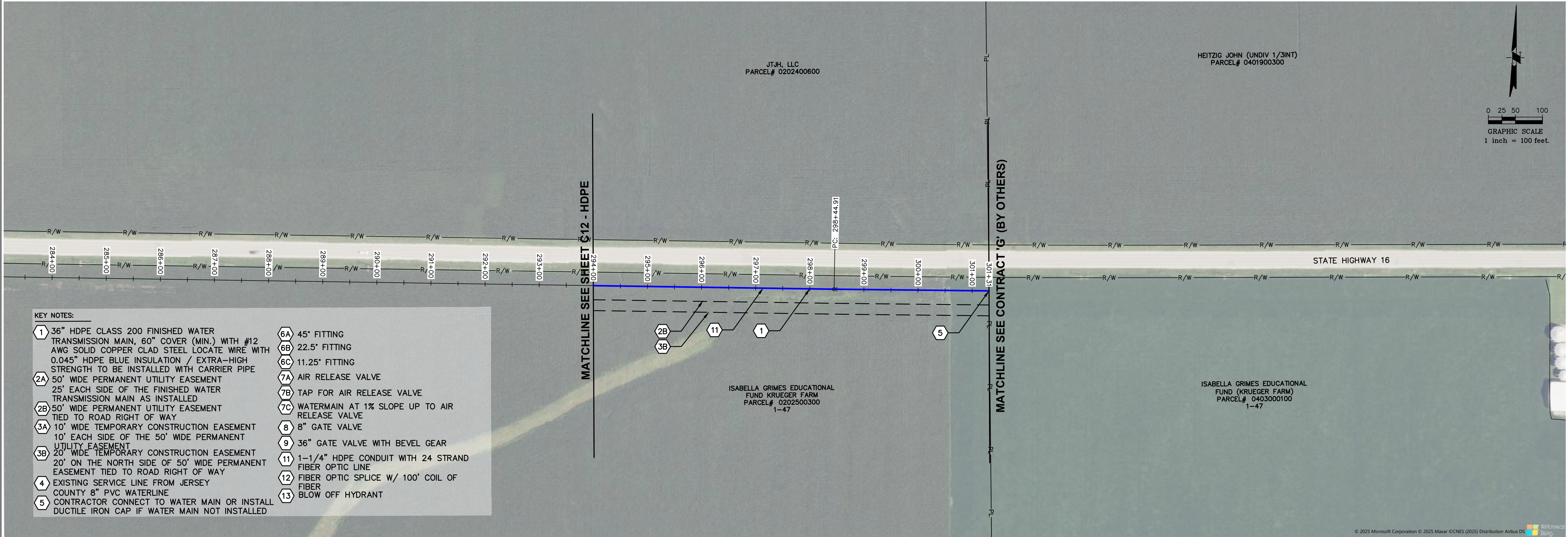
VERTICAL SCALE:
1"=25'

PROJECT NO.
71000-412

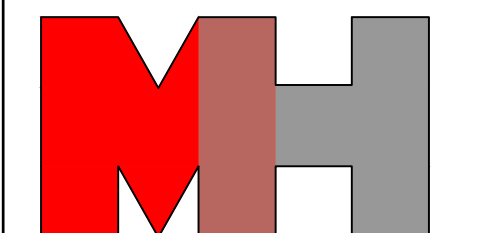
DATE:
9/7/2026

SHEET NO.
C12-HDPE
15 OF 23 SHEETS

PATH=s:\valored-pim\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - d1 recover.dwg
PLOTTED: 9/7/2026 @ 8:43:16 AM BY seth ellott



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

NO.	DATE	REVISIONS

--

CONTRACT "F" FINISHED WATER TRANSMISSION MAIN AERIAL PLAN AND PROFILE ILLINOIS ALLUVIAL REGIONAL WATER COMPANY JERSEY & MACOUPIN COUNTIES, ILLINOIS
--

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=100'

VERTICAL SCALE:
1"=25'

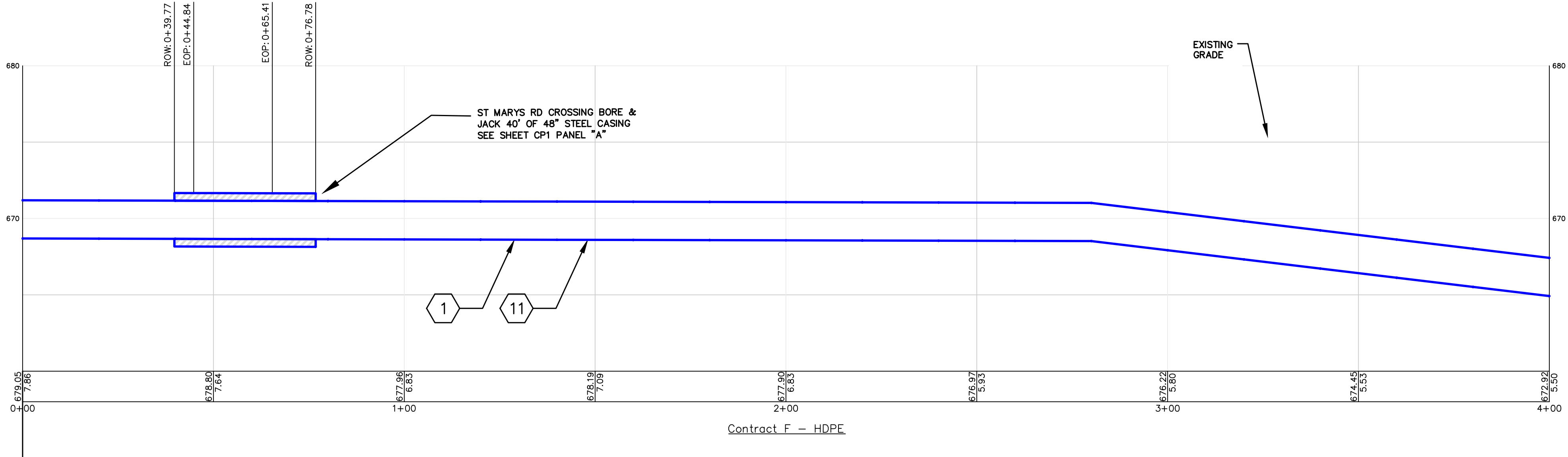
PROJECT NO.
71000-412

DATE:
9/7/2026

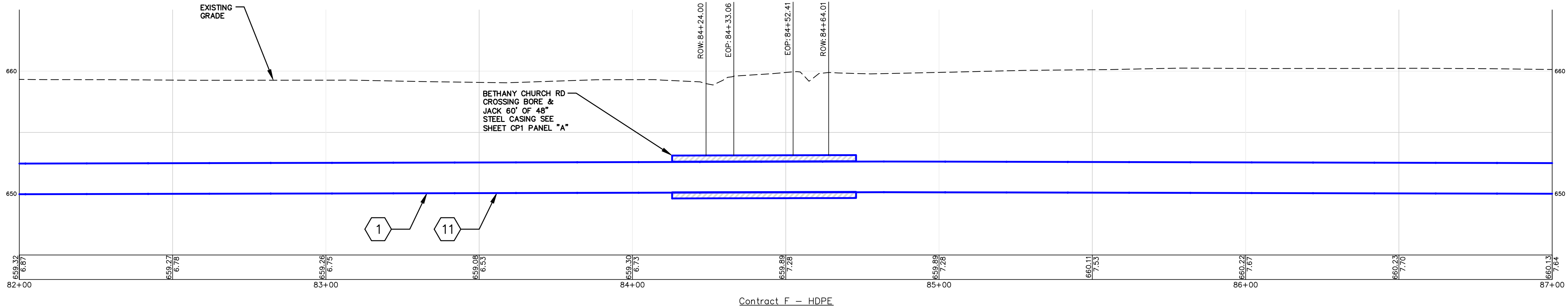
SHEET NO.
C13-HDPE
16 OF 23 SHEETS

PATH=s:\shared-pin\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - di recover.dwg
PLOTTED: 9/7/2026 @ 8:43:26 AM BY seth ellott

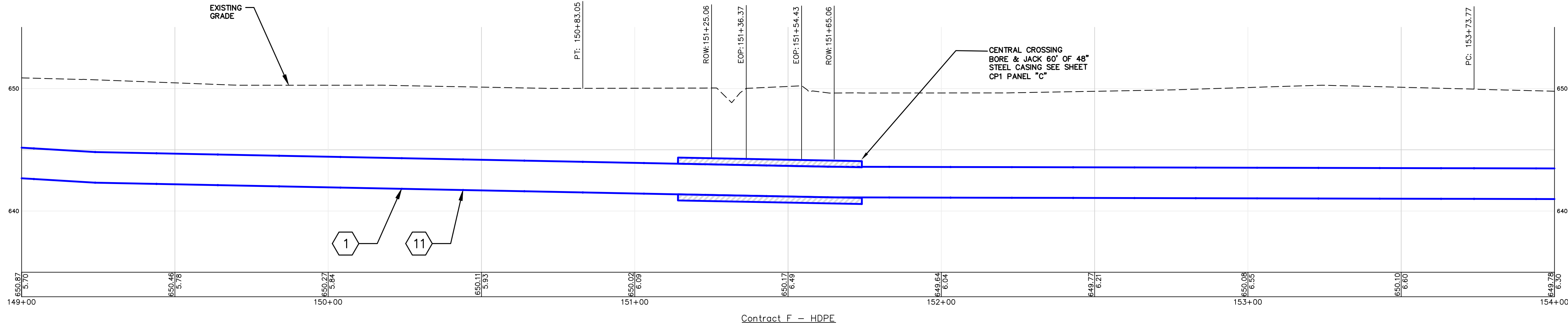
PANEL 'A'



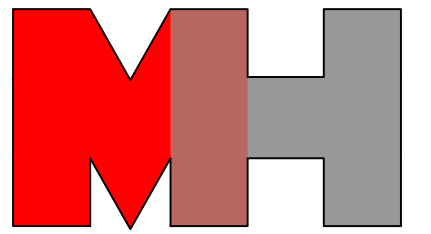
PANEL 'B'



PANEL 'C'



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
ROAD CROSSING PROFILES
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=20'

VERTICAL SCALE:
1"=5'

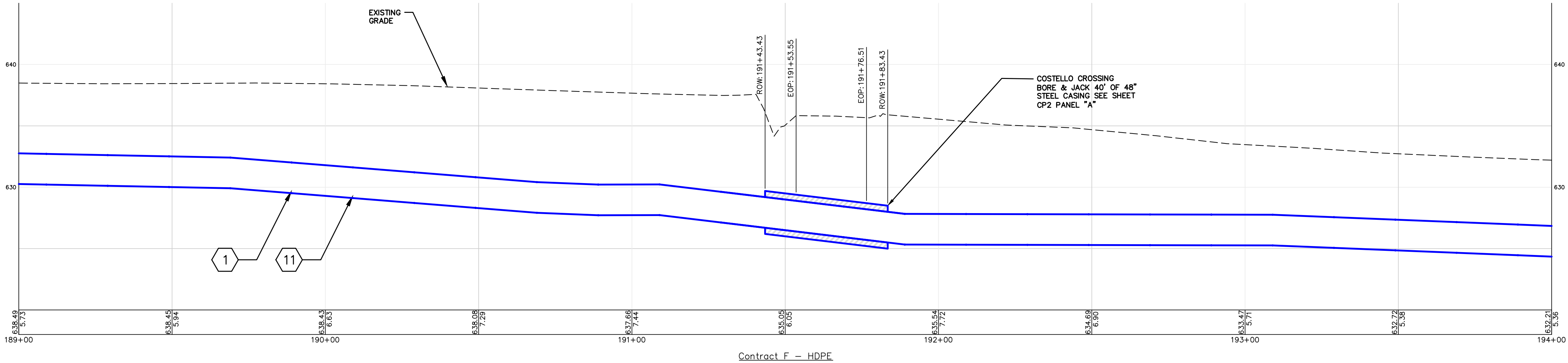
PROJECT NO.
71000-412

DATE:
9/7/2026

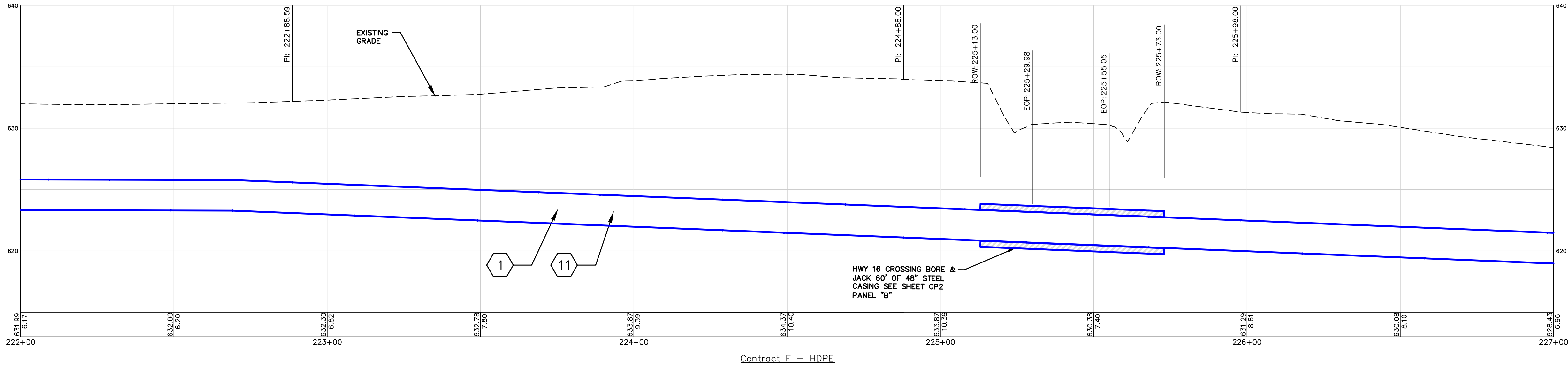
SHEET NO.
CP1-HDPE
17 OF 23 SHEETS

PATH=s:\shared-pin\mhe\clients\illinois alluvia\71000-412 - stage 1b\cad\contract f - dwgs\1 - finished sheets - di recover.dwg
PLOTTED: 9/7/2026 @ 8:43:36 AM BY seth ellott

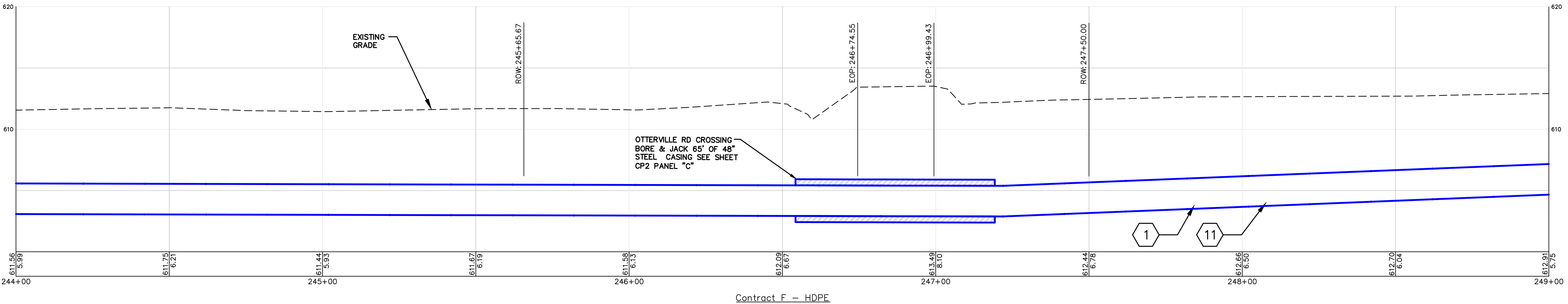
PANEL 'A'



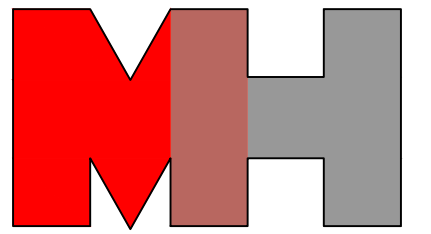
PANEL 'B'



PANEL 'C'



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
ROAD CROSSING PROFILES
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: TAM
APPROVED BY: SWE

HORIZONTAL SCALE:
1"=20'

VERTICAL SCALE:
1"=5'

PROJECT NO.
71000-412

DATE:
9/7/2026

SHEET NO.
CP2-HDPE
18 OF 23 SHEETS

NO.	DATE	REVISIONS

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: MNM
CHECKED BY: B. MARTIN
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

AS SHOWN

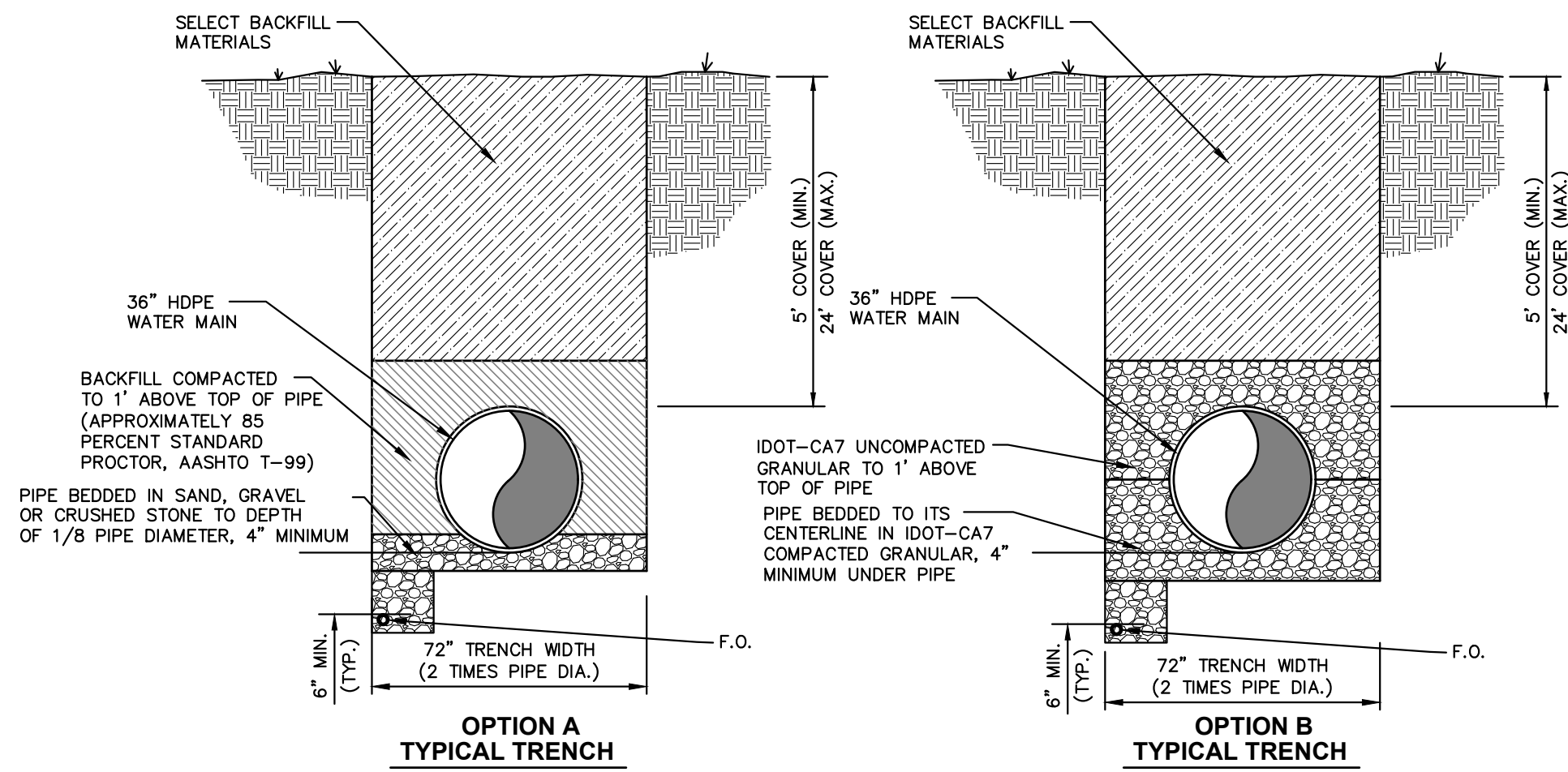
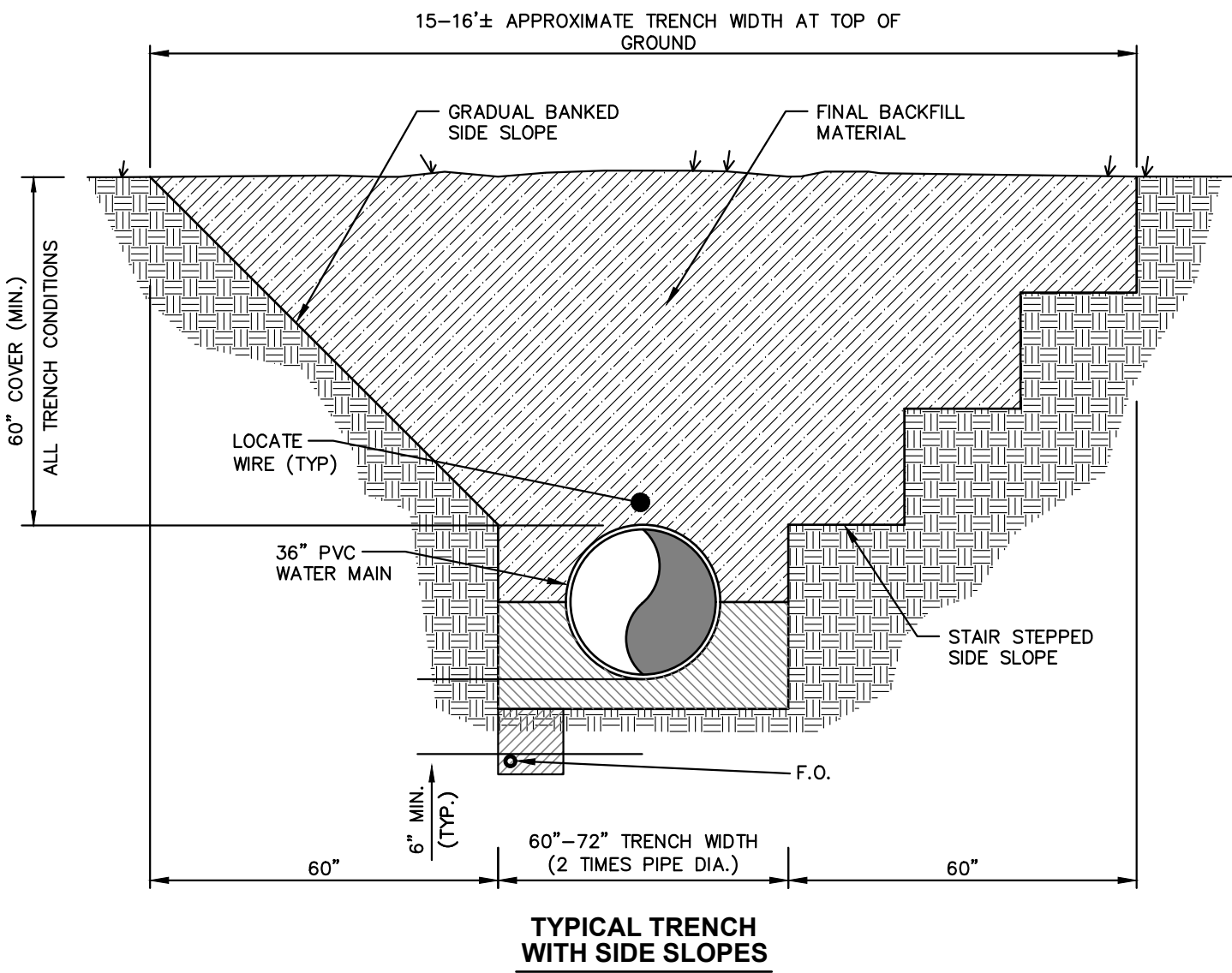
VERTICAL SCALE:

PROJECT NO.
71000-412

DATE: 9/7/2026

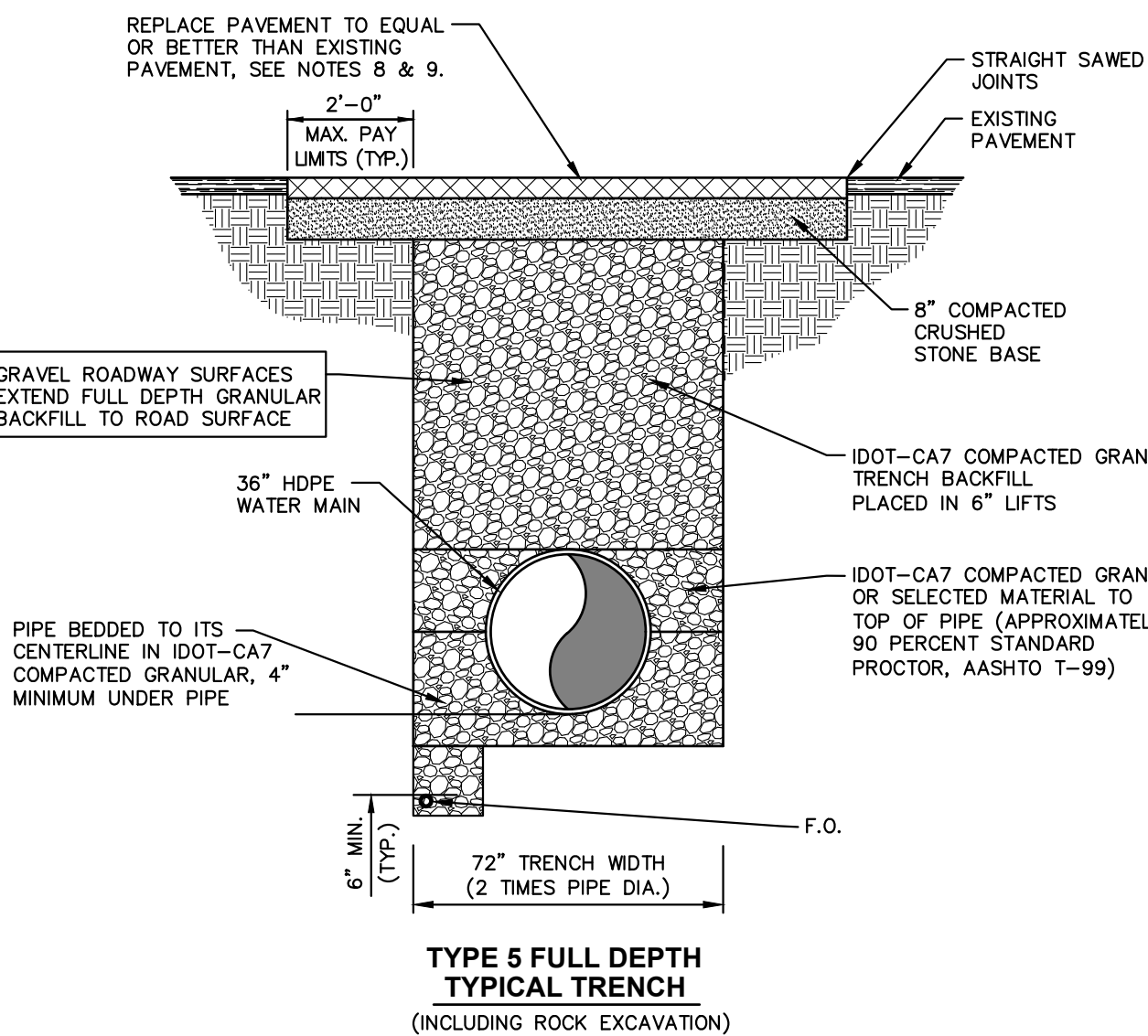
SHEET NO. **CD1**

19 OF 23 SHEETS



NOTE: USE OPTION A OR B TRENCH FOR ALL LOCATIONS WHERE TYPE 5 FULL DEPTH IS NOT REQUIRED.

3 HDPE PIPE TRENCH CONDITIONS
CD1 NO SCALE



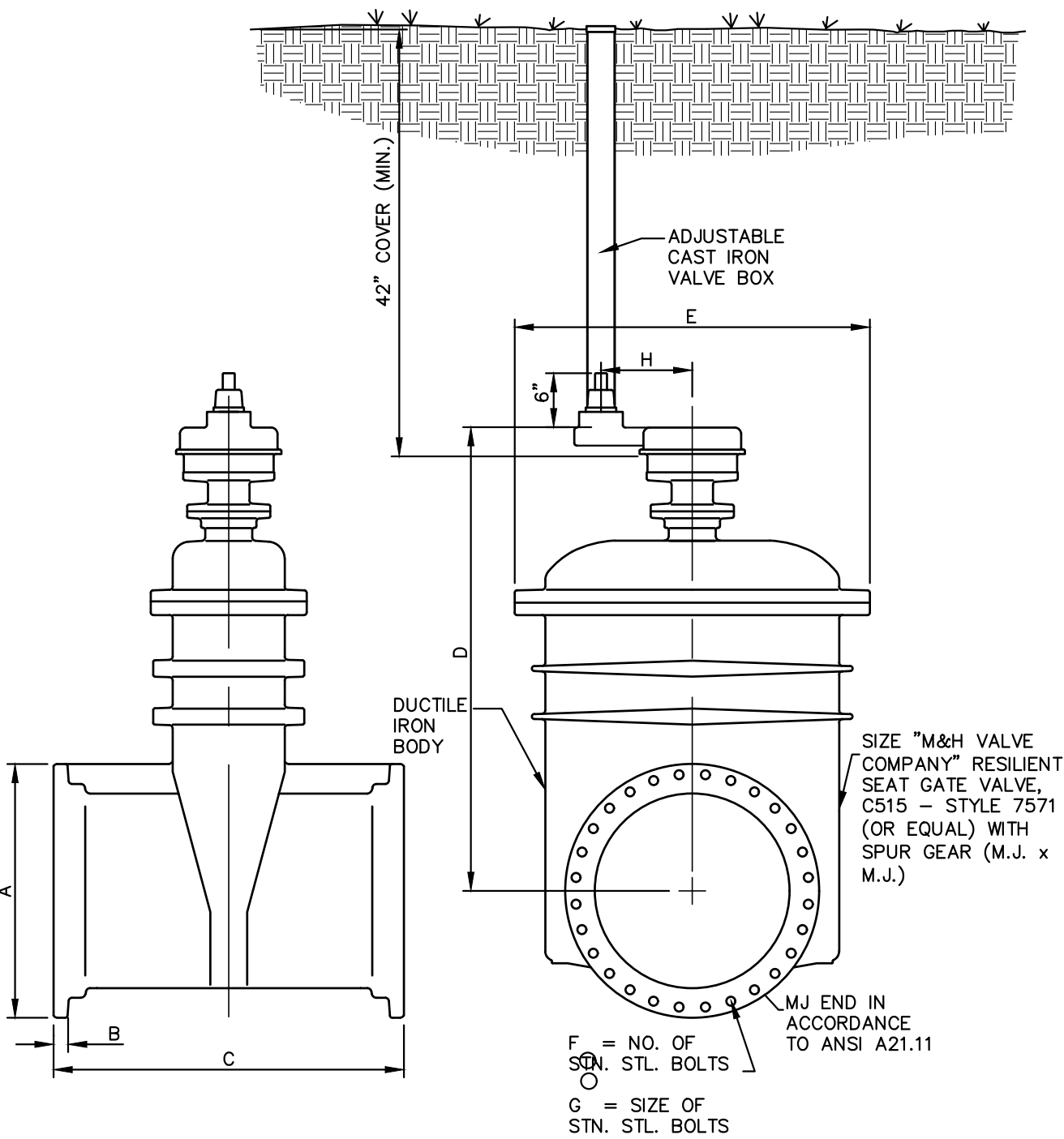
**TYPE 5 FULL DEPTH
TYPICAL TRENCH**
(INCLUDING ROCK EXCAVATION)

- | GENERAL NOTES: | | |
|---|--|--|
| 1. MINIMUM TRENCH WIDTH SHALL BE MAINTAINED FROM 6" BELOW PIPE TO 12" ABOVE THE TOP OF PIPE. | 4. FLOWABLE FILL MIX SHALL BE AS FOLLOWS UNLESS OTHERWISE APPROVED BY THE ENGINEER. | 8. PAVEMENT REPLACEMENT TO CONSIST OF THE FOLLOWING:
<u>ASPHALT</u>
MATERIAL: HOT MIX ASPHALT
THICKNESS: MATCH EXISTING, BUT NOT LESS THAN 4" COMPACTED IN PLACE |
| 2. PIPE BEDDING NOTE BELOW IS MINIMUM STANDARD. HOWEVER, ANY MORE STRINGENT REQUIREMENTS SET BY PIPE SUPPLIER SHALL SUPERSEDE THE REQUIREMENTS SHOWN. | MATERIAL
CEMENT
FLY ASH
FINE AGGREGATE
WATER | QUANTITY/CU YD
70 POUNDS
300 POUNDS
2600 POUNDS
50 GALLON |
| 3. GRANULAR BEDDING GRADUATION SHALL BE AS FOLLOWS UNLESS REQUIRED BY THE PIPE MANUFACTURER OR APPROVED BY THE ENGINEER. | 5. UNSUITABLE BACKFILL MATERIAL SHALL BE DISPOSED OF BY CONTRACTOR AT HIS EXPENSE AND SUITABLE REPLACEMENT MATERIAL PROVIDED AT NO ADDITIONAL COST TO OWNER. | <u>CONCRETE</u>
MATERIAL: PORTLAND CEMENT CONCRETE
4,000 PSI @ 28 DAY
DOWEL W/4"x24" @ 24" O.C.
THICKNESS: MATCH EXISTING (NOT LESS THAN 6")
NOTE: DELETE C.S. BASE FOR FLOWABLE FILL |
| <u>PIPE SIZE</u>
1/2"
3/4"
#4
#6 | <u>PERCENT PASSING</u>
100
80-100
5-80
0-5 | 6. ALL TRENCHES SHALL MEET O.S.H.A. REQUIREMENTS. |
| | 7. ROADWAY RESURFACING SHALL BE REPLACED AS SHOWN IN ACCORDANCE WITH PROJECT SPECIFICATIONS OR CURRENT REQUIREMENTS OF THE CONTROLLING AUTHORITY, WHICH EVER IS MORE STRINGENT AS DEFINED BY THE ENGINEER. | |

<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>
1/2"	100
3/8"	80-100
#4	5-80
#10	0-5

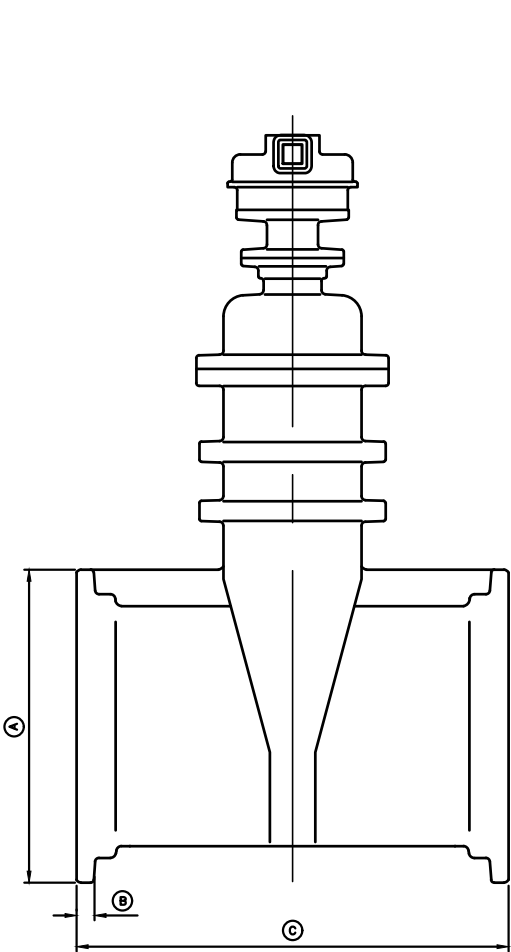
4 GENERAL TRENCH DETAILS

P:\THES\shored-pm\mh\clients\illinois alluvia\1000-412 - stage 1b\cad\contract f - dwgs\typical details.dwg
PLOTED: 3/7/2026 @ 8:45:31 AM BY: ashi.sillett



VALVE SIZE	A	B	C	D	E	F	G	H
30"	39-1/2"	1-11/16"	35-1/2"	74"	54-3/4"	20	1"	14"
36"	46-1/2"	2"	38-3/4"	83-11/16"	58-7/8"	24	1"	14"

1
CD2 **30" AND LARGER GATE VALVE WITH SPUR GEARING**
NO SCALE



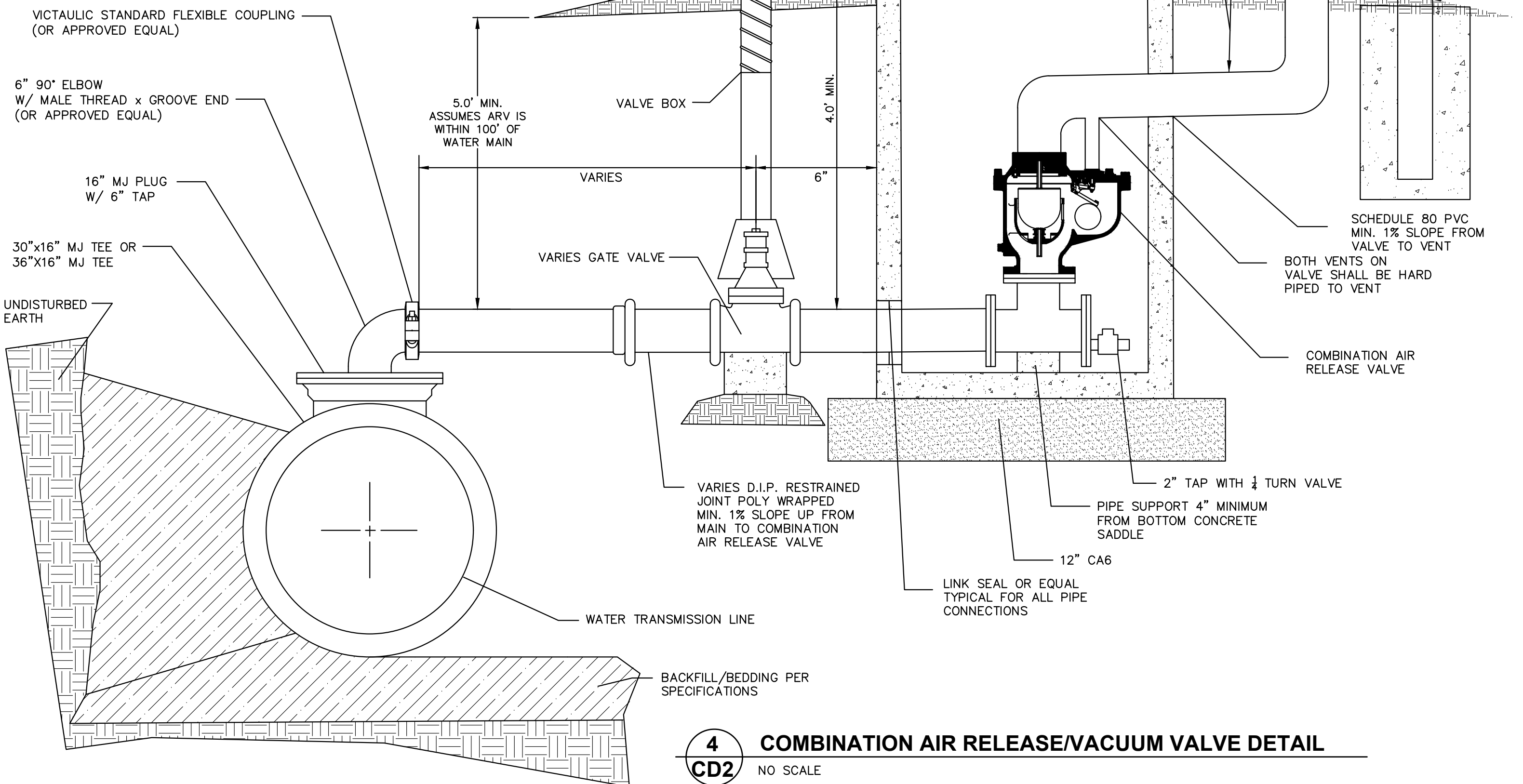
2
CD2 **BLOW-OFF HYDRANT DETAIL**
NO SCALE

VALVE SIZE	A	B	C	D	E	F	G	H
30"	39-1/2"	1-11/16"	35-1/2"	71-3/8"	54-3/4"	20	1"	14-7/8"
36"	46-1/2"	2"	38-3/4"	81-1/16"	58-7/8"	24	1"	14-7/8"

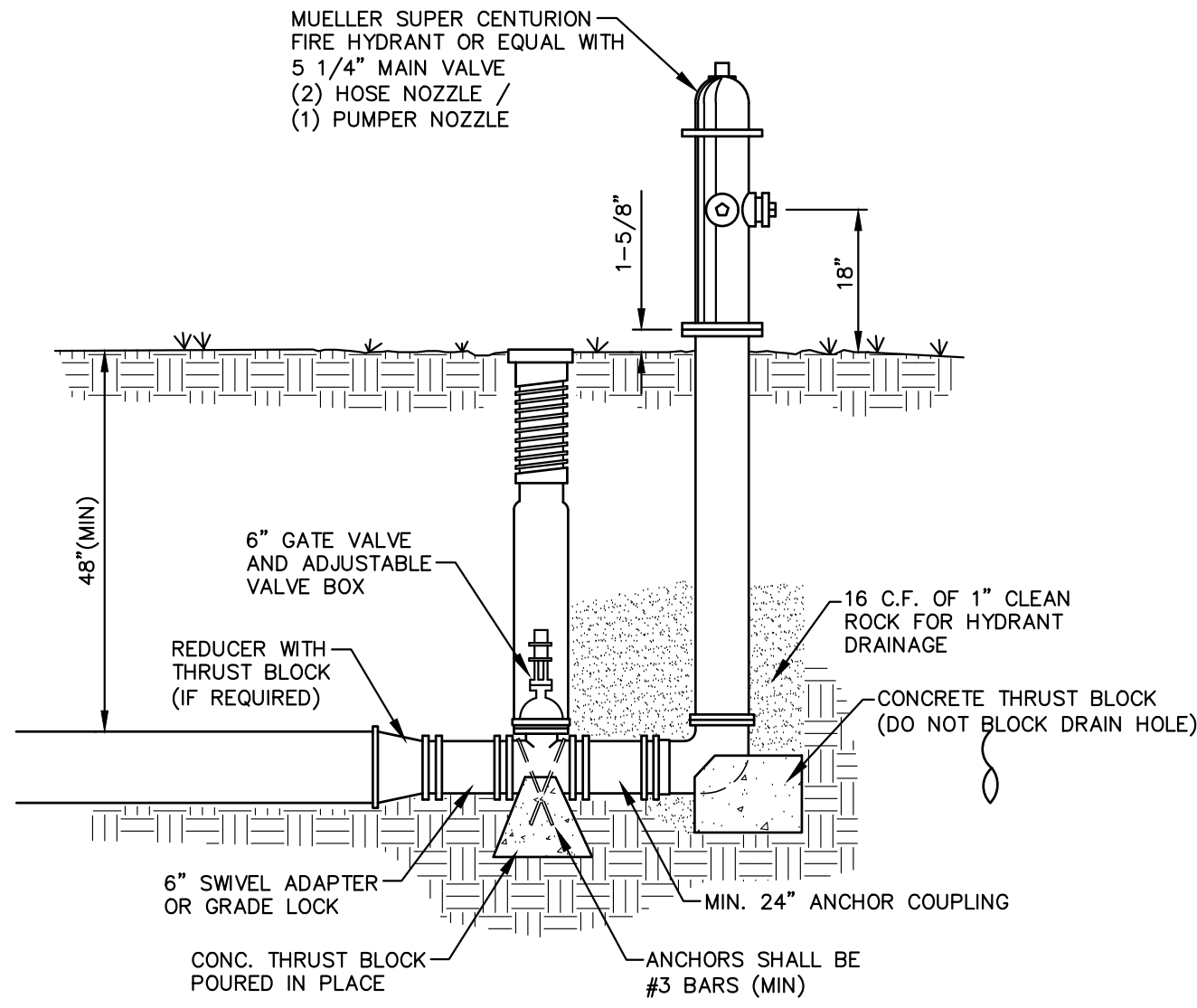
3
CD2 **30" AND LARGER GATE VALVE WITH BEVEL GEARING**
NO SCALE

AIR VALVE TABLE		
ARV SIZE	MANHOLE DIA.	BRANCH WM SIZE
6"	6"	6"

NOTES
1. INSTALL BOLLARD ON THE FIELD SIDE OF THE VENT RISER OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE
2. SLOPE GROUND AWAY FROM MANHOLE IN ALL DIRECTIONS TO CREATE POSITIVE DRAINAGE



4
CD2 **COMBINATION AIR RELEASE/VACUUM VALVE DETAIL**
NO SCALE



5
CD2 **FIRE HYDRANT ASSEMBLY**
NO SCALE

NOTES:

1. THE PUMPER CONNECTION SHALL FACE THE STREET.
2. SET THE HYDRANT GRADE LINE AT PROPOSED GRADE OR AS FIELD DIRECTED.
3. SETH THE VALVE BOX COVER FLUSH WITH THE EXISTING GRADE LEVEL.
4. ALL WORK AND MATERIAL FROM THE CENTER OF THE MAIN TO AND INCLUDING THE HYDRANT WILL BE PAID FOR BY UNIT PRICE BID ITEM FOR HYDRANTS.
5. ALL JOINTS SHALL BE RESTRAINED BY AN OWNER APPROVED METHOD; HDSS CONNECTOR OR ANCHOR COUPLING.
6. ALL TANGENTIAL PIPE CONNECTIONS SHALL BE FABRICATED BY THE MANUFACTURER.
7. 90 DEGREE HYDRANT TEES ARE APPROVED WHERE SPACE REQUIREMENTS ARE LIMITED.
8. EACH HYDRANT INSTALLATION SHALL BE OBSERVED BY THE RPR PRIOR TO BACKFILL.
9. CLEAN GRAVEL SHALL BE PLACED AROUND BASE PER MANUFACTURER'S RECOMMENDATION.

41-2.01B HORIZONTAL SEPARATION - WATER MAINS AND SEWERS

- 41-2.01C VERTICAL SEPARATION - WATER MAINS AND SEWERS

- [illegible]

CD3 NO SCALE

-
- SELECT EXCAVATED GLASS IV MATERIAL COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY
- EXISTING SEWER LINE
- 10' (MIN.)
- 10' (MIN.)
- 18' (MIN.)
- PROPOSED WATER MAIN
- ONE PIECE PVC OUTER CASING WITH RUBBER END SEALS AND STAINLESS STEEL STRAPS

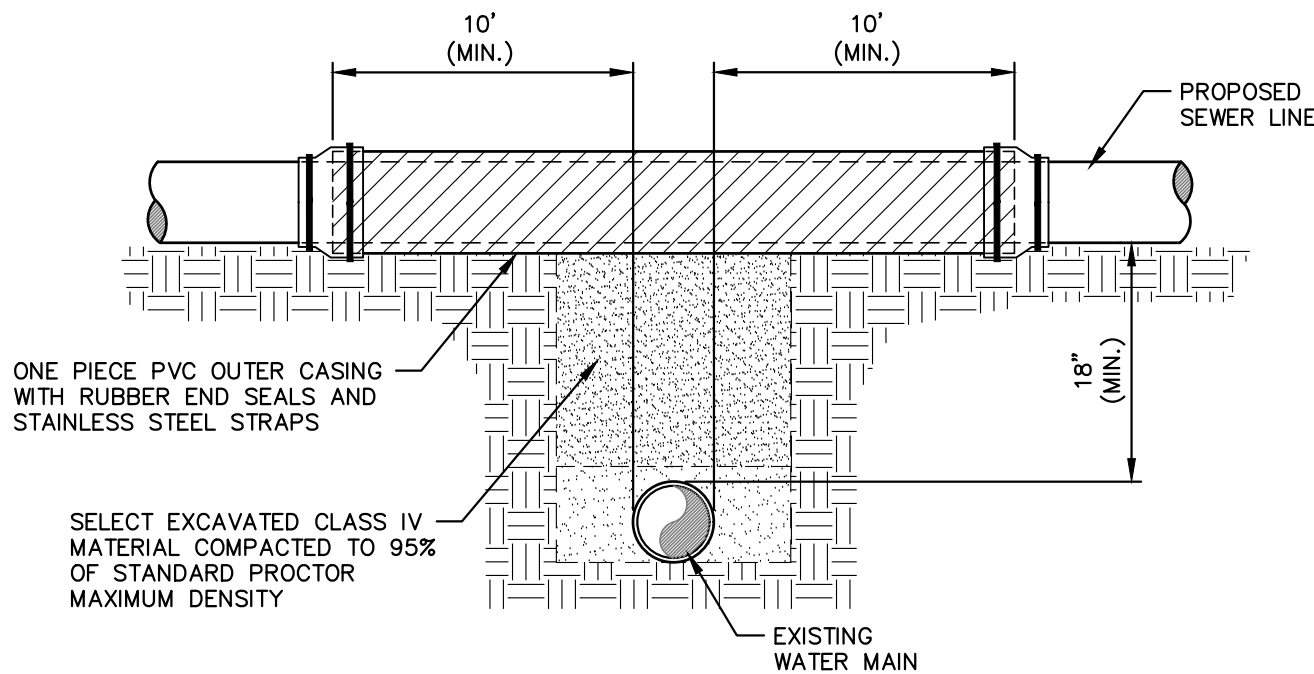
CD3 NO SCALE



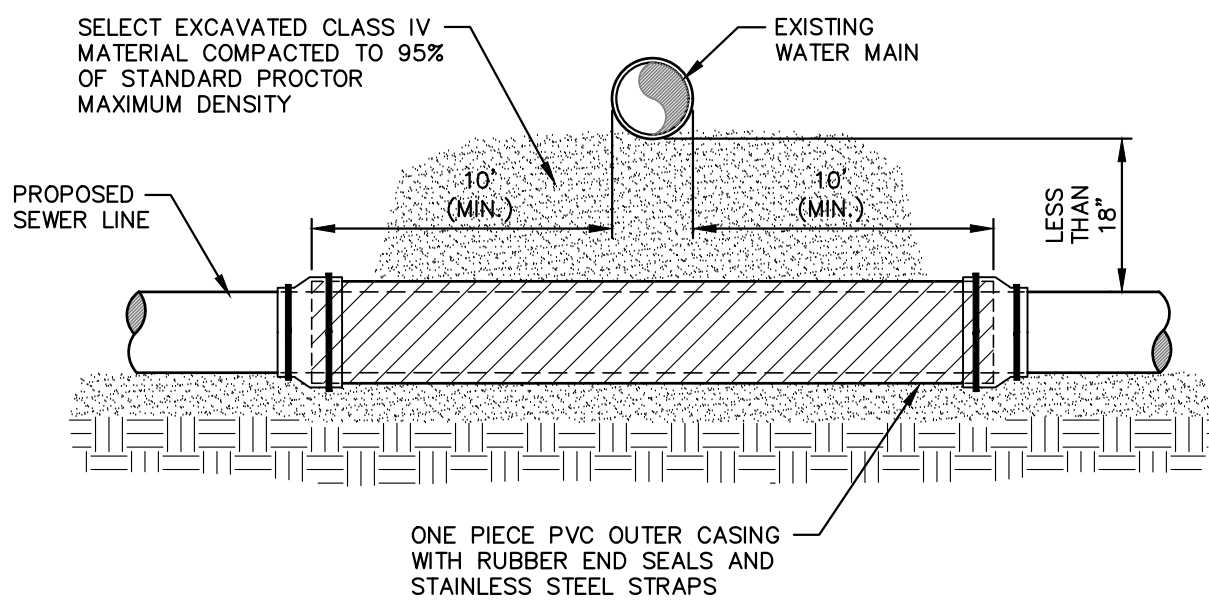
- NOTES:
1. CASING SPACERS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED MANUFACTURER'S SPECIFICATIONS OR 6' O.C. WHICHEVER IS LESS.
 2. DOUBLE SPACERS SHALL BE INSTALLED ONE FOOT FROM EACH END OF THE CASING.
 3. ONE CASING SPACER MUST BE WITHIN 2' OF EACH SIDE OF A PIPE JOINT.
 4. SPACERS SHALL HAVE A MINIMUM HEIGHT THAT EXCEEDS THE PIPE BELL HEIGHT.
 5. CASING SPACERS SHALL BE "RACI" L100 (OR EQUAL) POLYETHYLENE WITH STAINLESS STEEL BOLTS AND NUTS.



1 **SEPA**
CD3 NO SCALE



CD3 NO SCALE



CD3 NO SCALE

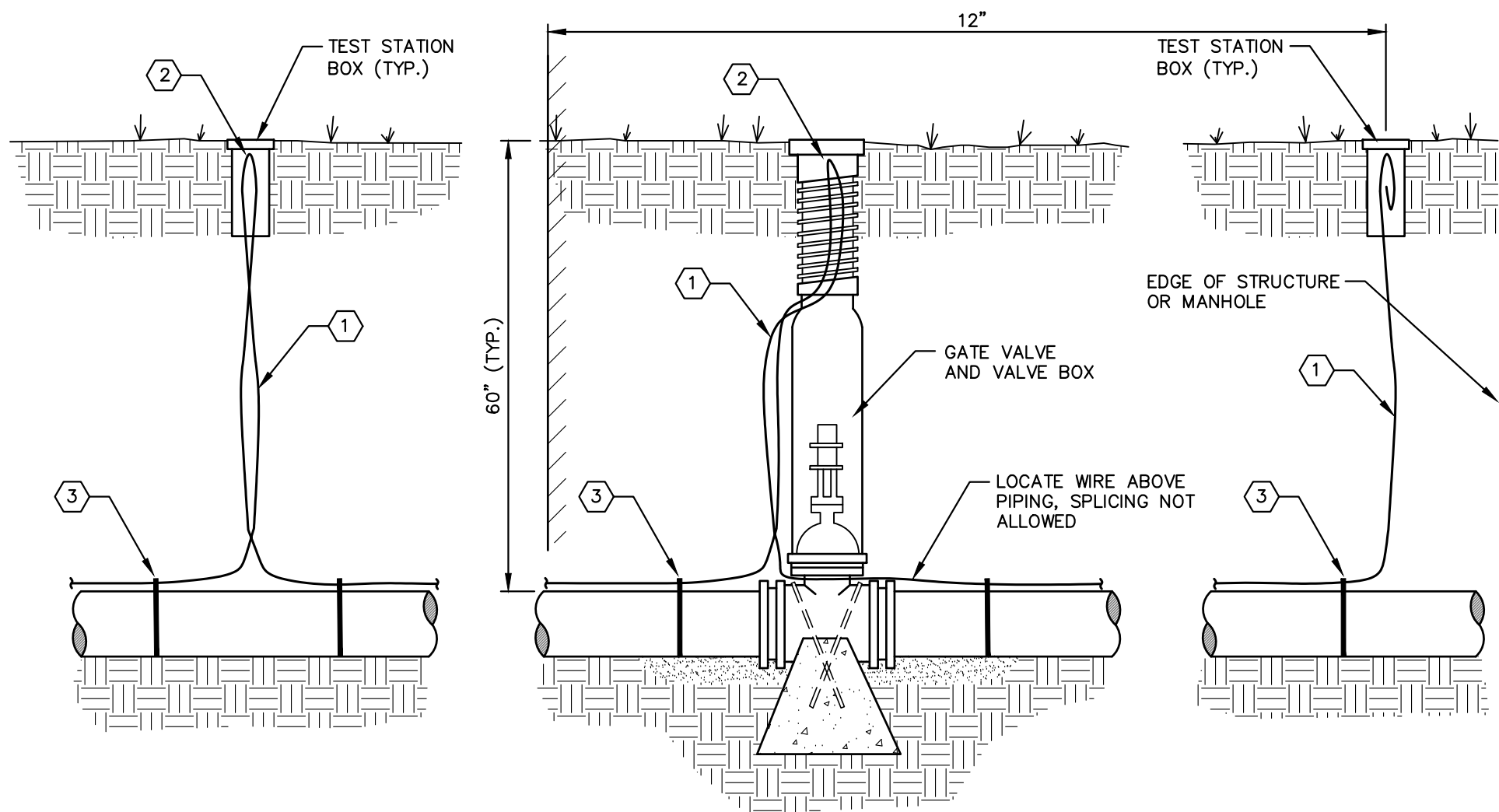
P:\THES\external\pin\enhs\clients\illinois\17000-412 - stage 1b\cad\contract f - dwgs\typical details.dwg
PLOTED: 3/7/2026 @ 8:45:31 AM BY: sash.silcott

KEY NOTES:

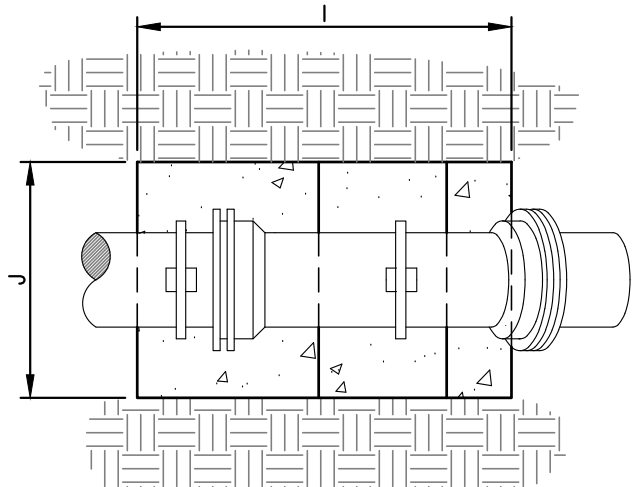
- ① #12 AWG SOLID COPPER CLAD STEEL LOCATE WIRE WITH 0.045" HDPE BLUE INSULATION / EXTRA-HIGH STRENGTH TO BE INSTALLED WITH CARRIER PIPE (TYPICAL)
- ② DO NOT CUT LOCATE WIRE IN TEST STATION OR VALVE BOX IF WIRE CAN BE RUN CONTINUOUS, LEAVE 24" (MIN.) SLACK LOOP
- ③ SECURE LOCATE WIRE TO TOP OF PIPE WITH TAPE OR PLASTIC TIE NEAR ALL VALVES AND FITTINGS AND BELOW TEST STATIONS

GENERAL NOTES:

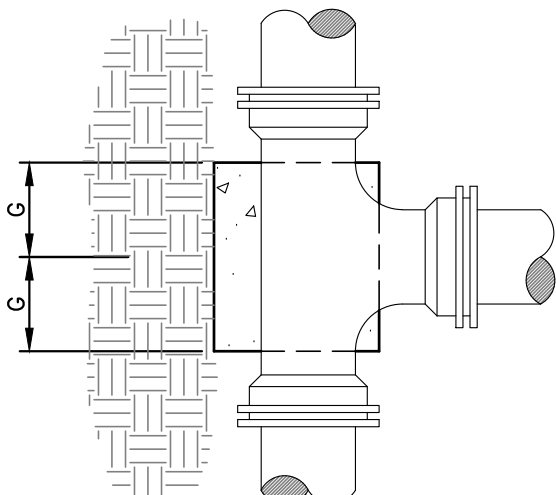
1. LOCATE WIRE SHALL BE COPPER-CLAD STEEL
2. LOCATE WIRE SHALL BE BROUGHT TO THE SURFACE AT ALL IN-LINE VALVE BOXES, BY FIRE HYDRANTS OR INSTALLED TEST STATIONS
3. LEAVE A 24" (MIN.) SLACK LOOP OF WIRE IN VALVE BOXES, TEST STATIONS OR WITHIN (2) FEET OF FIRE HYDRANTS
4. LOCATE WIRE SHALL BE INSTALLED OVER ALL WATERLINES, WATER SERVICE LINES AND SEWER FORCEMAINS
5. A CONDUCTIVITY TEST SHALL BE PERFORMED ON ALL LOCATE WIRES
6. TEST STATION BOX SHALL BE CAST IRON
7. LOCATE WIRE CONNECTION SHALL BE MADE WITH A DRYCONN DIRECT BURY LUG



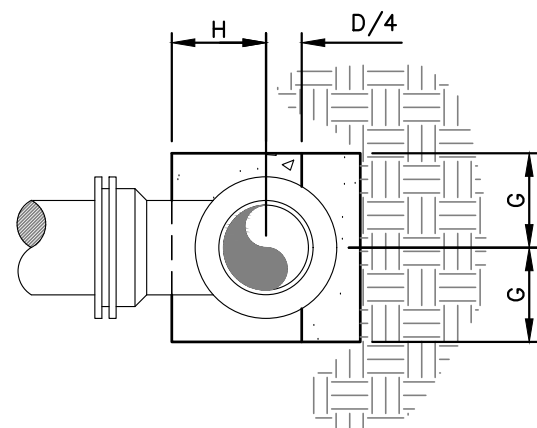
1
CD4
TYPICAL LOCATE WIRE DETAILS
NO SCALE



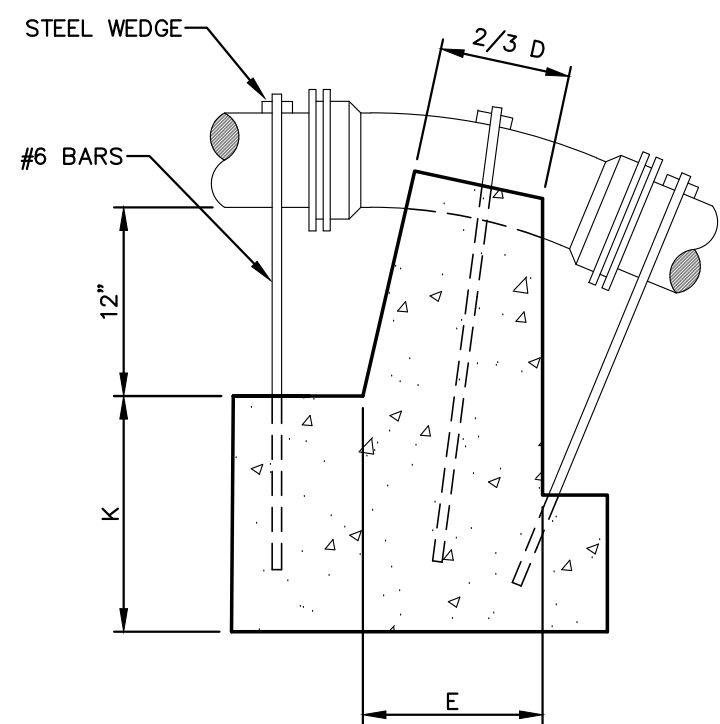
PLAN



PLAN

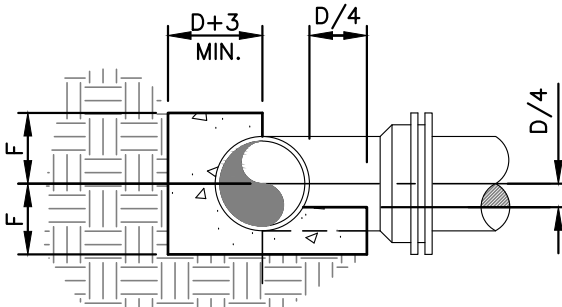


PLAN



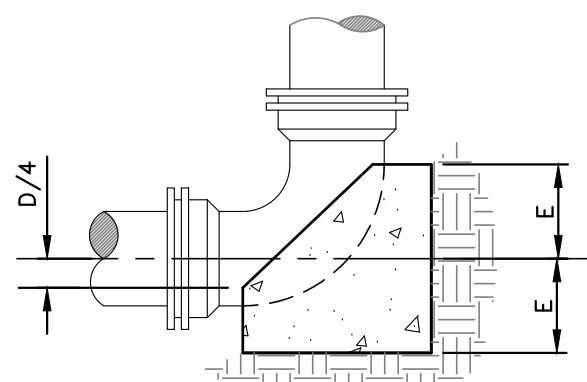
SECTION

THRUST BLOCKS FOR
1/16 AND 1/8 BENDS



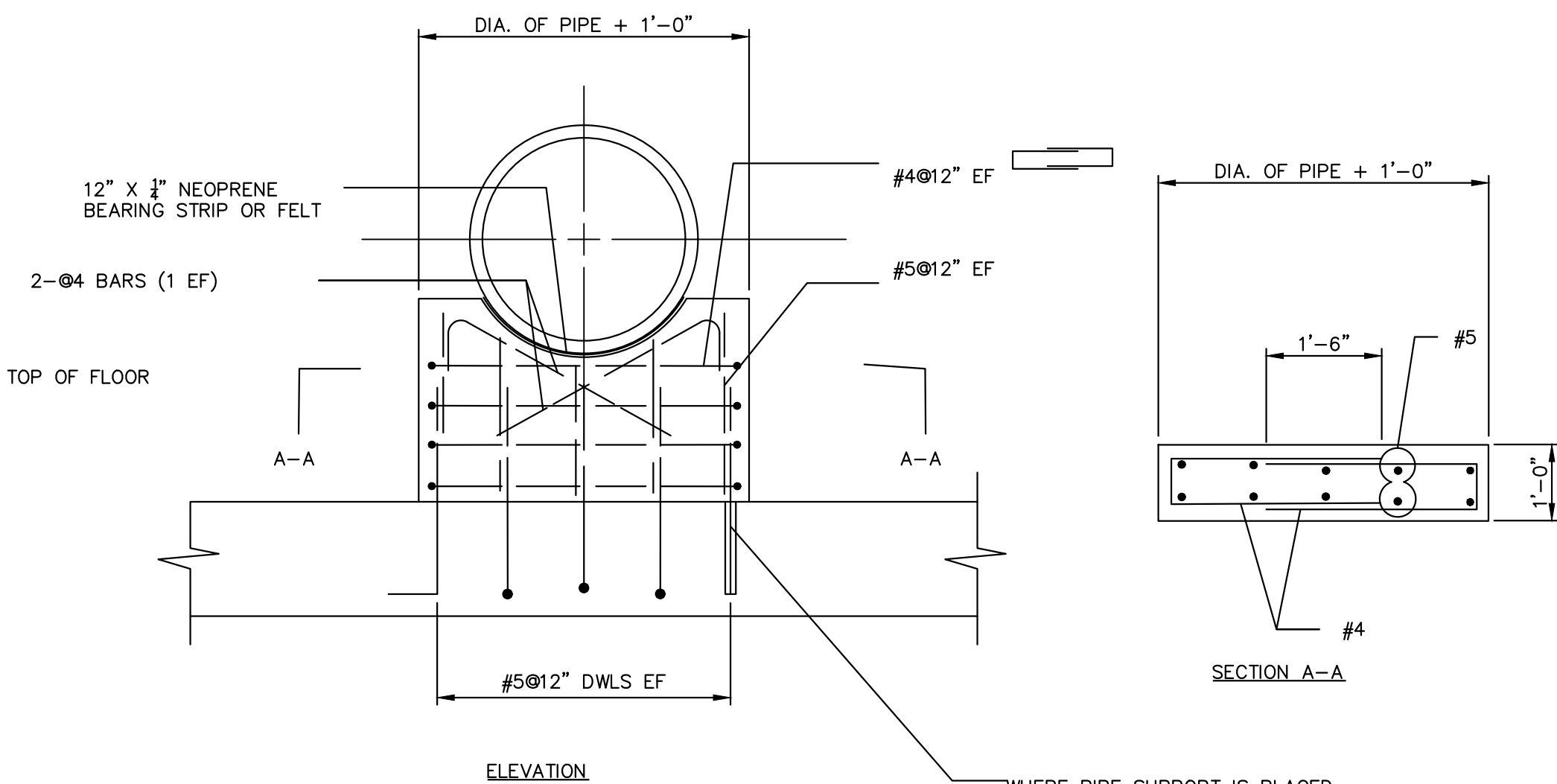
SECTION

THRUST BLOCK
FOR TEES



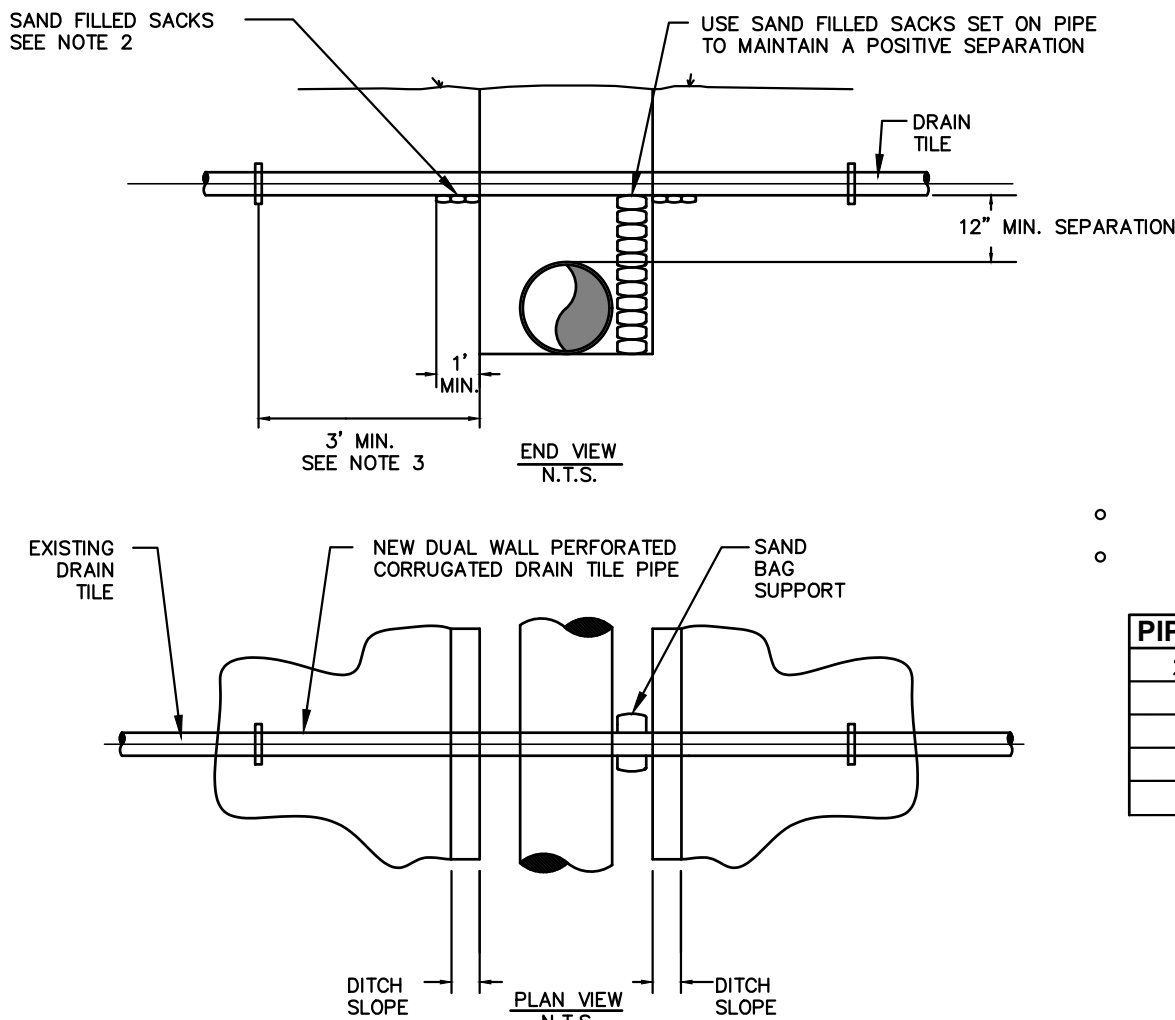
SECTION

THRUST BLOCK
FOR VERTICAL BENDS



2
CD4
CONCRETE SADDLE
NO SCALE

WHERE PIPE SUPPORT IS PLACED ON EXISTING CONCRETE FLOOR, DRILL AND GROUP #5@12" DOWELS IN 1" DIA. X 5" DEEP HOLES. CLEAN AND ROUGHEN EXISTING CONCRETE SURFACE AND APPLY A CEMENT SLURRY PRIOR TO PLACING NEW CONCRETE.



NOTE:

1. TILE REPAIR AND REPLACEMENT SHALL MAINTAIN ORIGINAL ALIGNMENT GRADIENT AND WATER FLOW TO THE GREATEST EXTENT POSSIBLE. IF THE TILE NEEDS TO BE RELOCATED, THE INSTALLATION ANGLE MAY VARY DUE TO SITE SPECIFIC CONDITIONS AND LANDOWNER RECOMMENDATIONS.
2. 1'-0" MINIMUM LENGTH OF CHANNEL OR RIGID PIPE (OPEN OR SLOTTED CORRUGATED GALVANIZED, PVC OR ALUMINUM CRADLE) SHALL BE SUPPORTED BY UNDISTURBED SOIL, OR IF CROSSING IS NOT AT RIGHT ANGLES TO PIPELINE, EQUIVALENT LENGTH PERPENDICULAR TO TRENCH. SHIM WITH SAND BAGS TO UNDISTURBED SOIL FOR SUPPORT AND DRAINAGE GRADIENT MAINTENANCE (TYPICAL BOTH SIDES).
3. DRAIN TILES WILL BE PERMANENTLY CONNECTED EXISTING DRAIN TILES A MINIMUM OF THREE FEET OUTSIDE OF EXCAVATED TRENCH LINE USING INDUSTRY STANDARDS TO ENSURE PROPER SEAL OF REPAIRED DRAIN TILES INCLUDING SLIP COUPLINGS.
4. DIAMETER OF RIGID PIPE SHALL BE OF ADEQUATE SIZE TO ALLOW FOR THE INSTALLATION OF THE TILE FOR THE FULL LENGTH OF THE RIGID PIPE.
5. OTHER METHODS OF SUPPORTING DRAIN TILE MAY BE USED IF ALTERNATE PROPOSED IS EQUIVALENT IN STRENGTH TO THE CHANNEL/PIPE SECTIONS SHOWN AND IF APPROVED BY COMPANY REPRESENTATIVES AND LANDOWNER IN ADVANCE. SITE SPECIFIC ALTERNATE SUPPORT SYSTEM TO BE DEVELOPED BY COMPANY REPRESENTATIVES AND FURNISHED TO CONTRACTOR FOR SPANS IN EXCESS OF 20', TILE GREATER THEN 10' DIAMETER, AND FOR "HEADER" SYSTEMS.
6. ALL MATERIAL TO BE FURNISHED BY CONTRACTOR.
7. PRIOR TO REPAIRING TILE, CONTRACTOR SHALL PROBE LATERALLY INTO THE EXISTING TILE TO FULL WIDTH OF THE RIGHTS OF WAY TO DETERMINE IF ADDITIONAL DAMAGE HAS OCCURRED. ALL DAMAGE/DISTURBED TILE SHALL BE REPAIRED AS NEAR AS PRACTICABLE TO ITS ORIGINAL OR BETTER CONDITIONS.

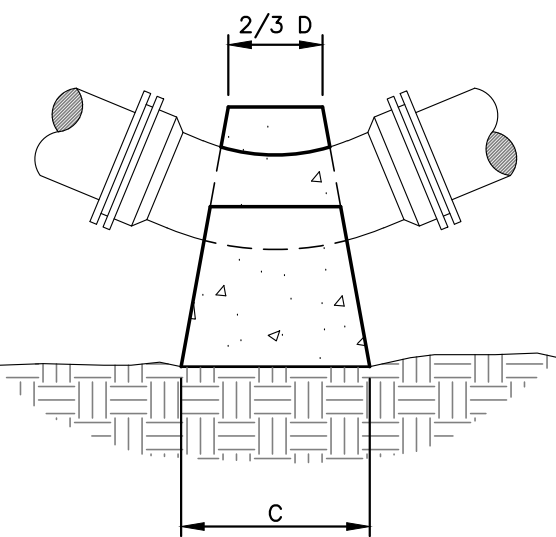
3
CD4
FIELD TILE CROSSING DETAIL
NO SCALE

THRUST BLOCK DIMENSIONS

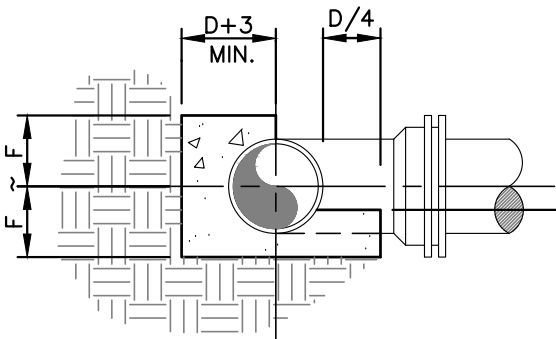
PIPE SIZE	B	C	D	E	F	G	H	I	J	K
2'-4"	15"	15"	2'-4"	8"	11"	11"	6 1/2"	36"	30"	30"
6"	17"	15"	6"	8"	12"	13"	8"	36"	30"	30"
8"	19"	20"	8"	8"	13"	14"	9"	48"	36"	33"
10"	22"	25"	10"	10"	16"	15"	11"	54"	48"	36"
12"	30"	50"	12"	15"	24"	15"	14"	—	—	—

MAXIMUM DESIGN PRESSURE = 250 PSI

4
CD4
THRUST BLOCKS
NO SCALE

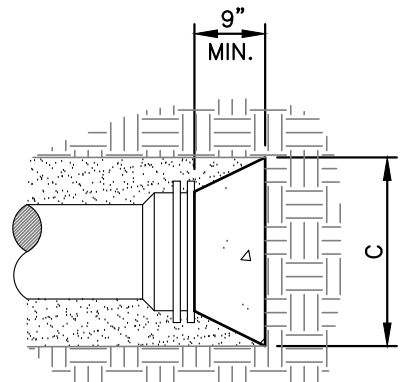


PLAN

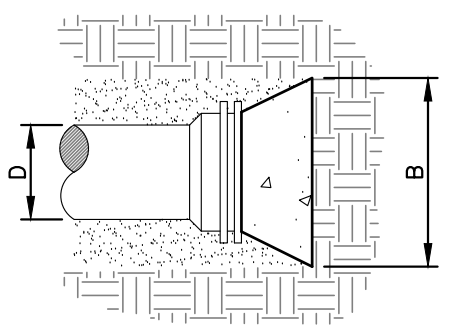


SECTION

THRUST BLOCK FOR
HORIZONTAL BENDS



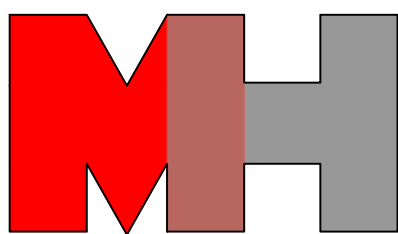
PLAN



SECTION

THRUST BLOCK
FOR CAPS

MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2026

900 S. HIGHWAY DR.
SUITE 202
FENTON, MO 63026
P: (636) 395-7055

REVISIONS

DATE

NO.

CONTRACT "F"
FINISHED WATER TRANSMISSION
MAIN
AERIAL PLAN AND PROFILE
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: B.FOHEY / R.HAYES
CHECKED BY: B. MARTIN
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

NO SCALE

VERTICAL SCALE:

PROJECT NO.
71000-412

DATE:
9/7/2026

SHEET NO.
CD4

22 OF 23 SHEETS



1. 5 STRANDS OF BARBED WIRE TO OUTSIDE OF POSTS. 8'-0" x 8" DIA. CORNER, END, PULL AND ANGLE POSTS (PRESSURE TREATED) AUGER AND TAMP. CORNER POST TO BE BRACED BOTH DIRECTIONS.
2. BARBED WIRE - 2 STRAND TWISTED, ZINC COATED, 12 1/2 GA., 4 POINT BARB @ 5" O.C.
3. PULL POST AT 500' INTERVALS OR MIDWAY WHEN DISTANCE IS GREATER THAN 500' BUT LESS THAN 1000'.

1 BARBED WIRE FENCE DETAIL
CD5 NO SCALE



- ### GENERAL NOTES

1. FIELD FENCE--ZINC COATED WOVEN WIRE,
TOP AND BOTTOM WIRE NO. 9 GA.
2. FILLER AND STAY WIRE NO. 11 GA.
3. BARBED WIRE--2 STRAND TWISTED ZINC COATED.
NO. 12.5 GA. 4 POINT BARB AT 5".
4. ATTACH FABRIC TO OUTSIDE OF POST.
5. 4" DIA. PRESSURE TREATED POST MAY BE USED
AS LINE POST WITH A MIN. OF 30" BURIED.

