

VILLAGE OF MAEYSTOWN WASTEWATER TREATMENT FACILITY IMPROVEMENTS MONROE COUNTY, ILLINOIS

VILLAGE BOARD

GREG BACKES - VILLAGE PRESIDENT
JANICE SCHEPERS - VILLAGE CLERK
KRISTEN MATTHEWS - TREASURER

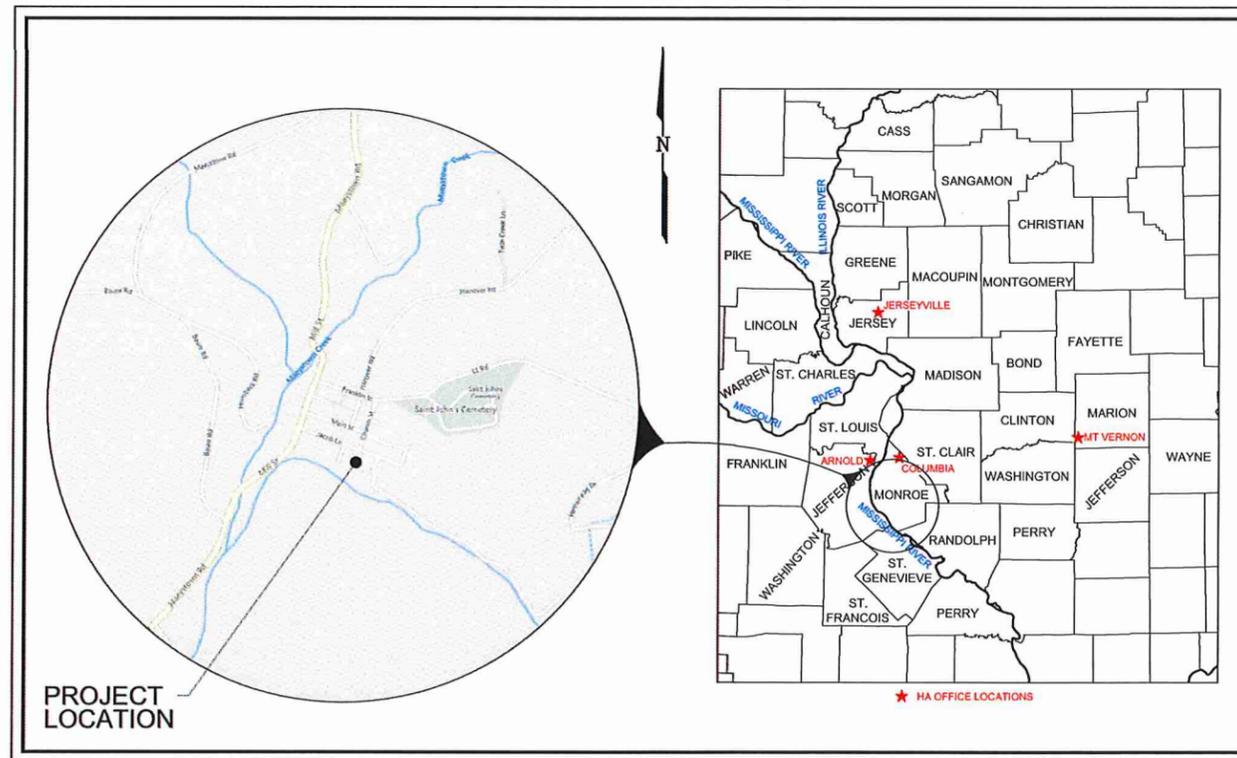
DAVID BRASWELL
ADAM ECKART
AARON ESKER
JIM KIRKWOOD
CARMEN LEWIS
SANDY TUTKA

CHAD RHUTASEL - OPERATOR

FACILITY NUMBER: _____
IEPA PERMIT NUMBER: _____
DCEO/CDBG GRANT NUMBER: _____

DATE: December 24, 2025

Sheet List Table	
Sheet Number	Sheet Title
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2	LEGEND
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LOCATION MAP



Contractor to contact J.U.L.I.E. prior to any excavation or demolition for the location of any pipes, cables, lines, mains, etc. The contractor shall also coordinate any disconnection required with the various utility companies and/or governmental agencies serving the site.

811 or 800-892-0123

Underground facilities, structures and utilities have been plotted from available surveys and records. Their locations must be considered to be approximate only. It is possible there may be others, the existence of which is not presently known or shown. It is the contractor's responsibility to determine their existence and exact location and to avoid damage thereto.

DIG LOG# _____



Seth W. Elliott
SETH W. ELLIOTT
REG. ILLINOIS P.E. #62788
EXP. NOVEMBER 30, 2027



HENEGHAN ASSOCIATES
ENGINEERING-SURVEYING
www.haengr.com

DESIGN FIRM NUMBERS: IL: 184-002692, EXPIRES APRIL 30, 2027
MO: 001310, EXPIRES DECEMBER 31, 2027

1004 STATE HWY. 16
JERSEYVILLE, ILLINOIS 62052
PHONE NO. (618) 498-6418
FAX NO. (618) 498-6410

800 BROADWAY, SUITE 3
MOUNT VERNON, ILLINOIS 62864
PHONE NO. (618) 533-6525
FAX NO. (618) 533-6652

310A VISION DRIVE
COLUMBIA, ILLINOIS 62236
PHONE NO. (618) 281-8133
FAX NO. (618) 281-8290

1929 RICHARDSON ROAD
ARNOLD, MISSOURI 63010
PHONE NO. (636) 464-3610
FAX NO. (636) 464-2059

2140 VADALABENE DRIVE
MARYVILLE, ILLINOIS 62062
PHONE NO. (618) 498-6418
FAX NO. (618) 498-6410

NO.	DATE	REVISIONS

NO.	DATE	REVISIONS

LEGEND

WASTEWATER TREATMENT FACILITY IMPROVEMENTS

VILLAGE OF MAEYSTOWN
 MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
 CHECKED BY: EYF
 APPROVED BY: SWE

HORIZONTAL SCALE:
 N/A

VERTICAL SCALE:
 N/A

PROJECT NO.
40038-500

DATE:
12/24/25

SHEET NO.
2

2 OF 15 SHEETS

LINETYPES

PROPOSED	EXISTING

HATCHING

EXISTING	PROPOSED

SYMBOLS

PROPOSED	EXISTING

SYMBOLS

PROPOSED	EXISTING

ABBREVIATIONS

RCA	REINFORCED CONCRETE ELLIPTICAL ARCH PIPE
RCE	REINFORCED CONCRETE ELLIPTICAL PIPE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SAN	SANITARY
SF	SQUARE FEET
SY	SQUARE YARDS
STA	STATION
SWPP	STORM WATER POLLUTION PREVENTION
TBM	TEMPORARY BENCHMARK
TF	TOP OF FOUNDATION
TYP	TYPICAL
TOC	TOP OF CURB
TOA	TOP OF ASPHALT
TBA	TO BE ABANDONED
TBA&F	TO BE ABANDONED AND FILLED
TBR	TO BE REMOVED
TBR&R	TO BE REMOVED AND REPLACED
UIP	USE IN PLACE
VCP	VITREOUS CLAY PIPE

SYMBOLS

PROPOSED	EXISTING

ABBREVIATIONS

FB	FLAT BOTTOM
FL	FLOWLINE
GI	GRADED INLET
GRVL	GRAVEL
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
HMA	HOT-MIX ASPHALT
IN	INCHES
INF	INFLOW
INV	INVERT
LA	LANE
LF	LINEAL FOOT
MAX	MAXIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
MIN	MINIMUM
N/F	NOW AND FORMER
NO	NUMBER
O/C	OIL AND CHIP
OE	OVERHEAD ELECTRIC LINE
PG	PAGE
PVMT	PAVEMENT
POC	POINT OF COMMENCEMENT
POB	POINT OF BEGINNING
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PROP./PR.	PROPOSED
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE
PE	PRIVATE ENTRANCE
PL	PROPERTY LINE
RR	RAILROAD

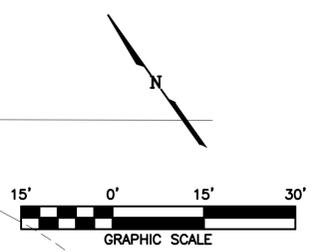
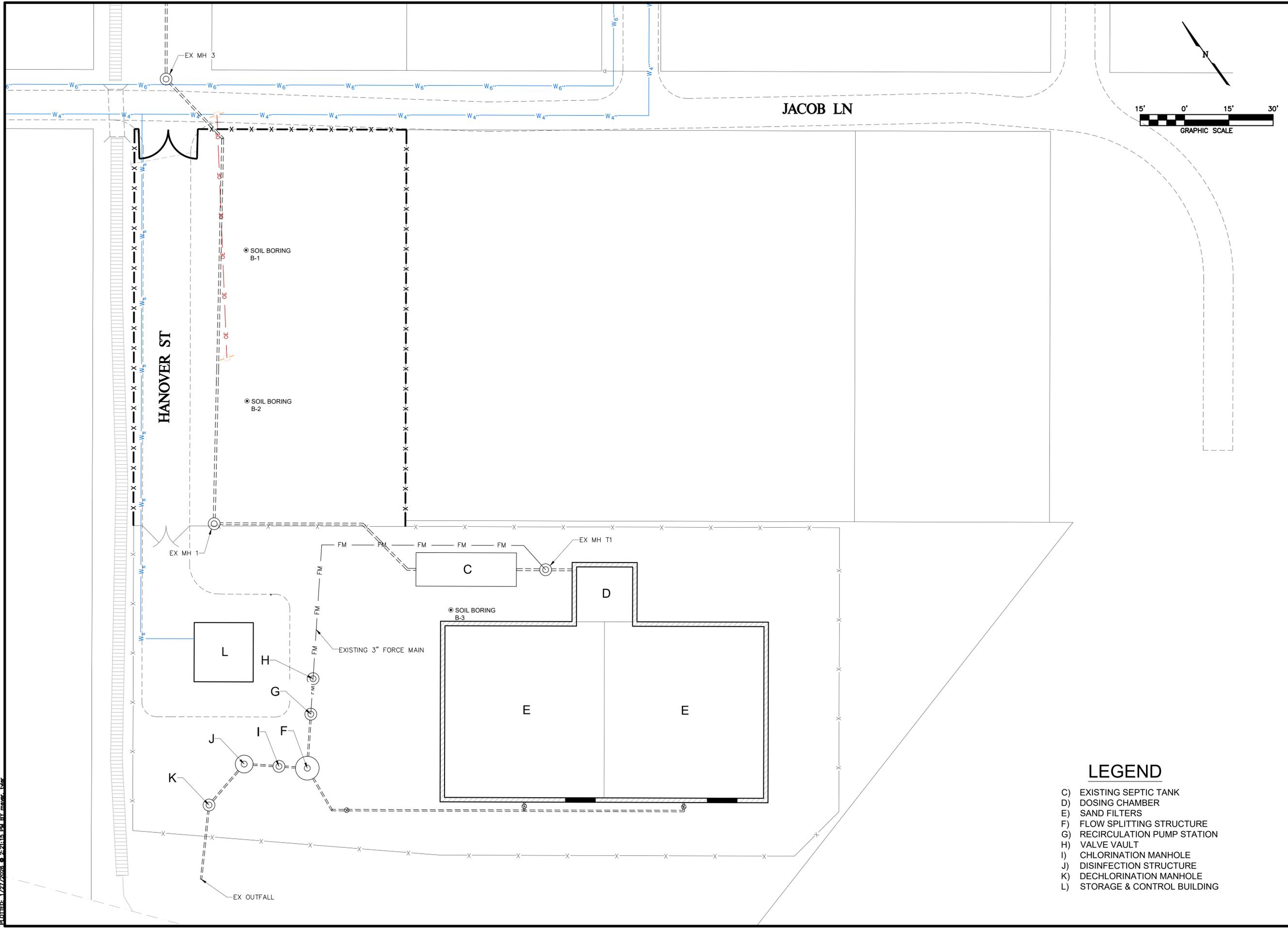
SYMBOLS

PROPOSED	EXISTING

ABBREVIATIONS

ADD	ADDITION
ATG	ADJUST TO GRADE
AI	AREA INLET
ASPH	ASPHALT
AVE	AVENUE
BC	BACK OF CURB
BF	BASEMENT FLOOR
BM	BENCHMARK
BK	BOOK
BLVD	BOULEVARD
BLDG	BUILDING
CL	CENTERLINE
CJ	CONSTRUCTION JOINT
CONC.	CONCRETE
CMP	CORRUGATED METAL PIPE
CF	CUBIC FEET
CY	CUBIC YARDS
CI	CURB INLET
DCI	DOUBLE CURB INLET
DR	DRIVE
DI	DUCTILE IRON
ESMT	EASEMENT
EOA	EDGE ASPHALT
EOC	EDGE OF CONCRETE
ELEV./EL.	ELEVATION
EXIST./EX.	EXISTING
EJ	EXPANSION JOINT
FO	FIBEROPTIC LINE
FT	FEET
F&L	FRAME AND LID
FES	FLARED END SECTION

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ENGINEERING-SURVEYING
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 (888) 291-7615

- DESIGN FIRM NUMBERS:
- IL: 184-002692
 - MO: 001310
 - 1004 STATE HWY. 16
JERSEYVILLE, IL 62052
P: (618) 498-6418
 - 800 BROADWAY, SUITE 3
MOUNT VERNON, IL 62864
P: (618) 533-6525
 - 310A VISION DRIVE
COLUMBIA, IL 62236
P: (618) 281-8133
 - 1929 RICHARDSON ROAD
ARNOLD, MO 63010
P: (636) 464-3610
 - 2140 VADALABENE DRIVE
MARYVILLE, IL 62062
P: (888) 291-7615

NO.	DATE	REVISIONS

EXISTING SITE PLAN
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS
 VILLAGE OF MAEYSTOWN
 MONROE COUNTY, ILLINOIS

DRAWN BY:	CBK
CHECKED BY:	EYF
APPROVED BY:	SWE
HORIZONTAL SCALE:	
1"=15'	
VERTICAL SCALE:	
N/A	
PROJECT NO.	
40038-500	
DATE:	
12/24/2025	
SHEET NO.	
3	
3 OF 15 SHEETS	

- LEGEND**
- C) EXISTING SEPTIC TANK
 - D) DOSING CHAMBER
 - E) SAND FILTERS
 - F) FLOW SPLITTING STRUCTURE
 - G) RECIRCULATION PUMP STATION
 - H) VALVE VAULT
 - I) CHLORINATION MANHOLE
 - J) DISINFECTION STRUCTURE
 - K) DECHLORINATION MANHOLE
 - L) STORAGE & CONTROL BUILDING



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MARYVILLE, IL 62062
P: (888) 291-7615

NO.	DATE	REVISIONS

HYDRAULIC PROFILE
WASTEWATER TREATMENT FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

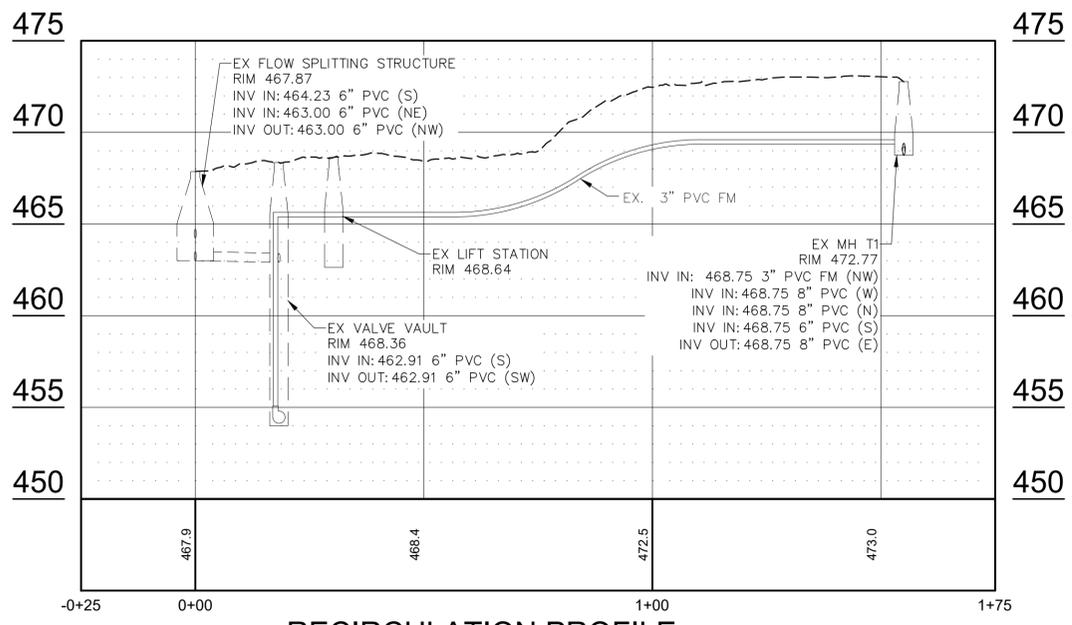
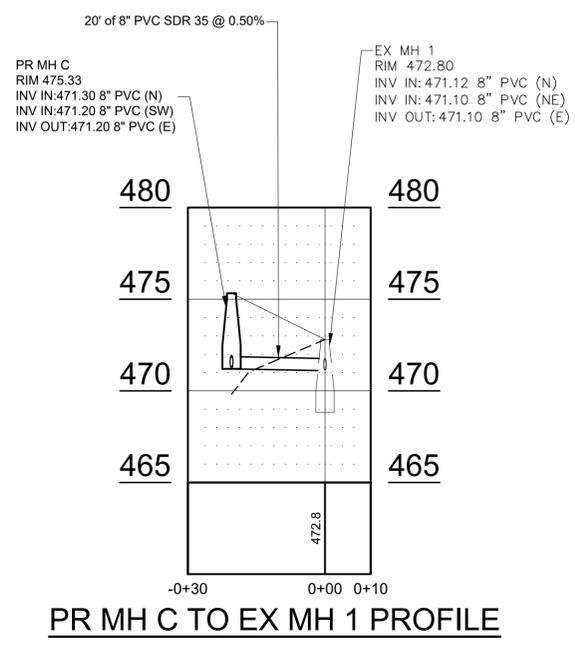
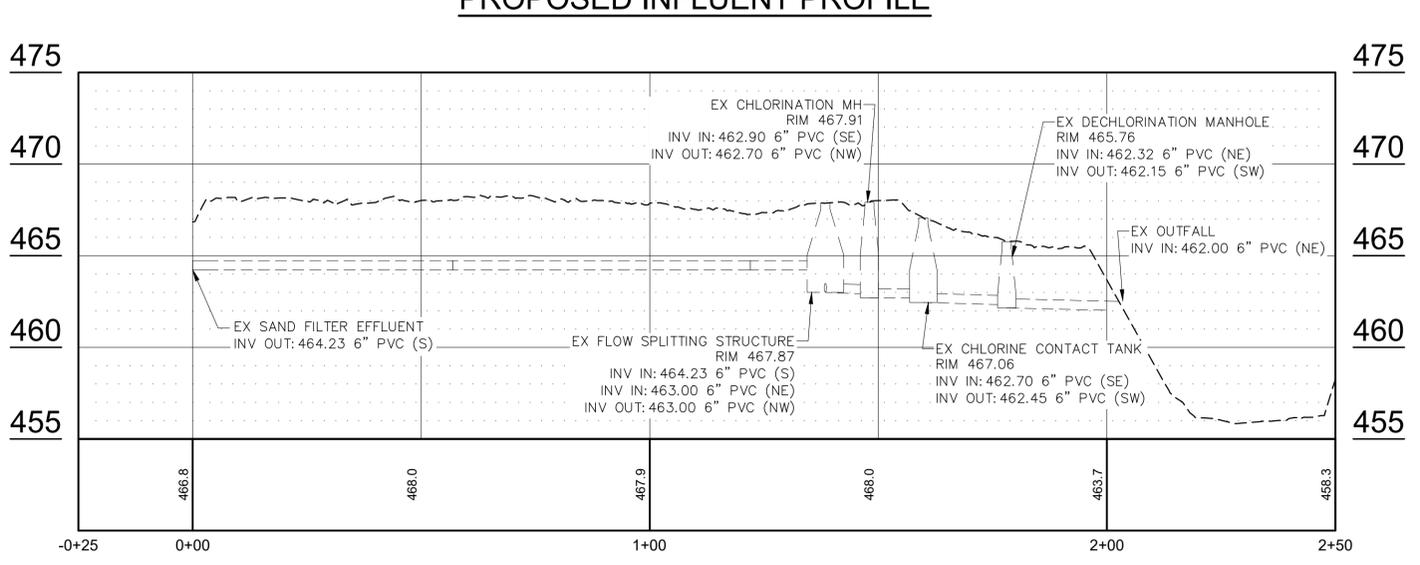
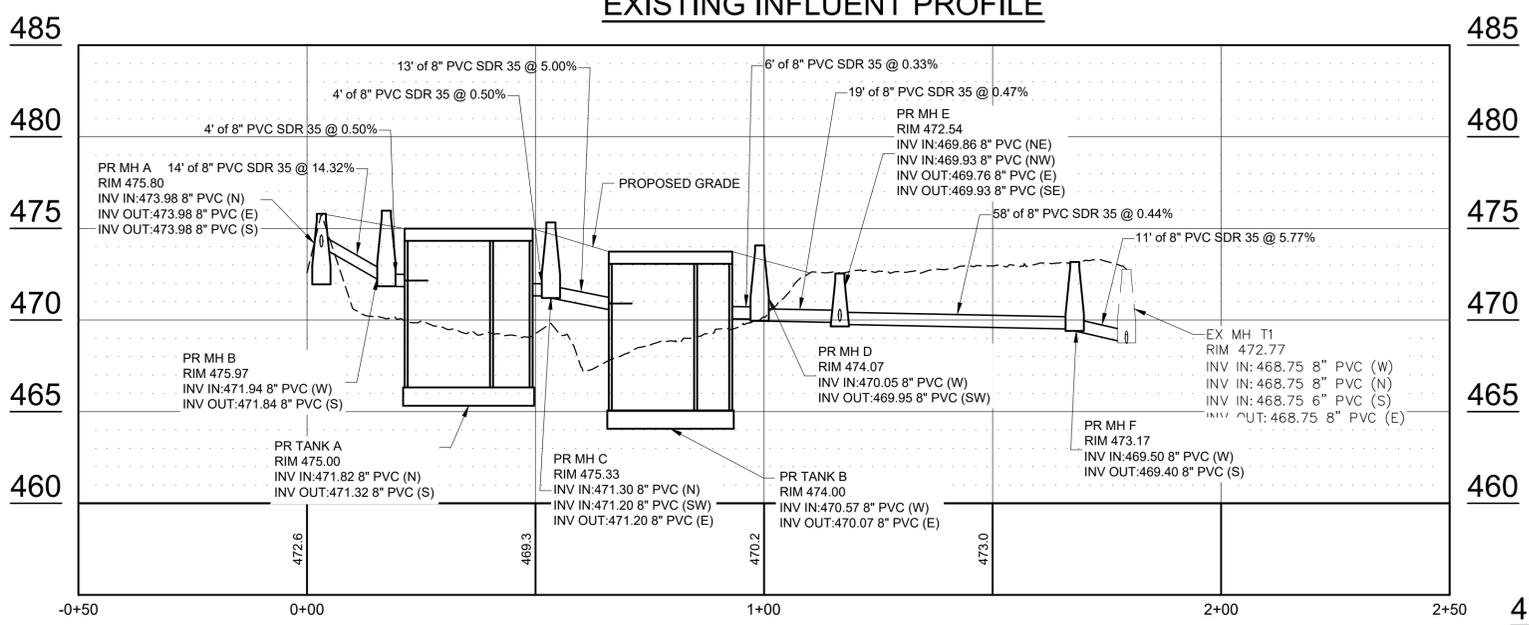
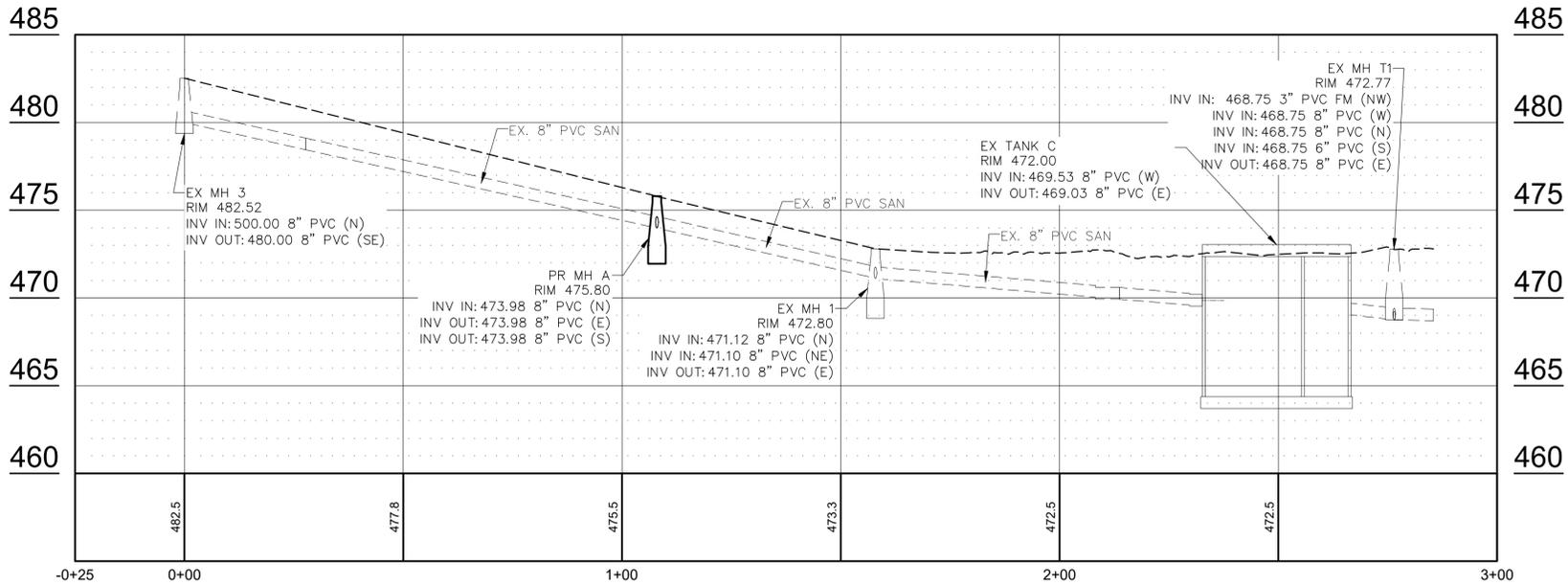
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VERTICAL SCALE:
N/A

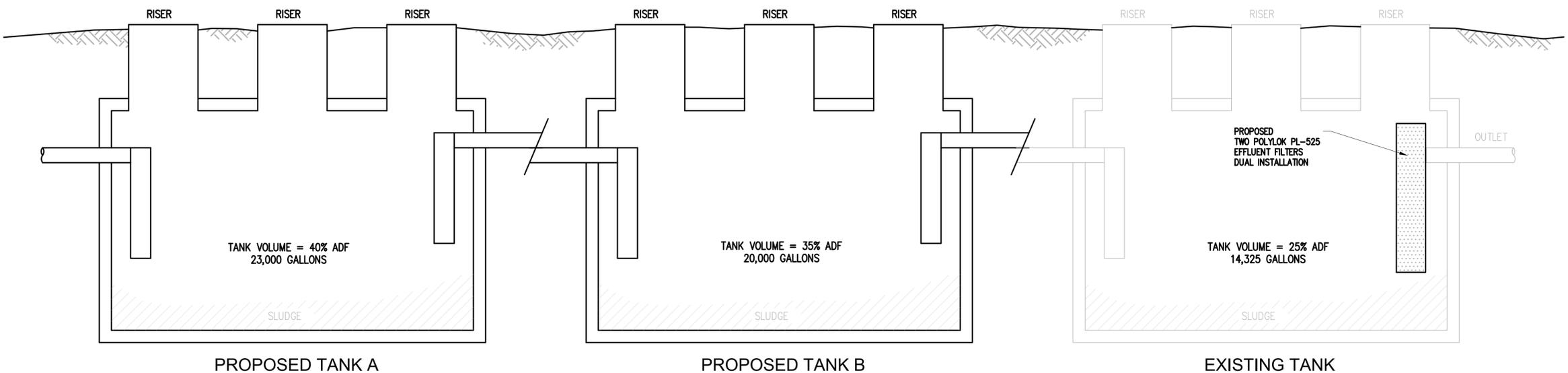
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40038-500

DATE:
12/24/25

SHEET NO.
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PROPOSED TANK A

PROPOSED TANK B

EXISTING TANK

COMMUNITY SEPTIC TANK DETAIL

SCALE: NONE

NO.	DATE	REVISIONS

COMMUNITY SEPTIC SYSTEM
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

HORIZONTAL SCALE:
AS NOTED

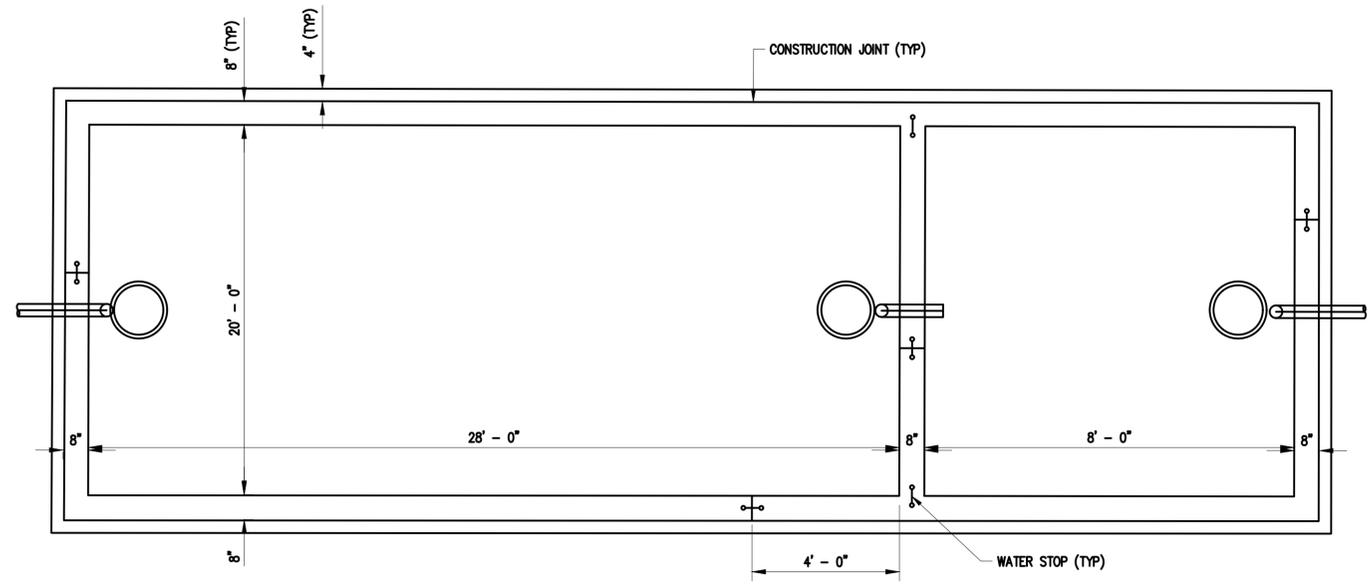
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PROJECT NO.
40038-500

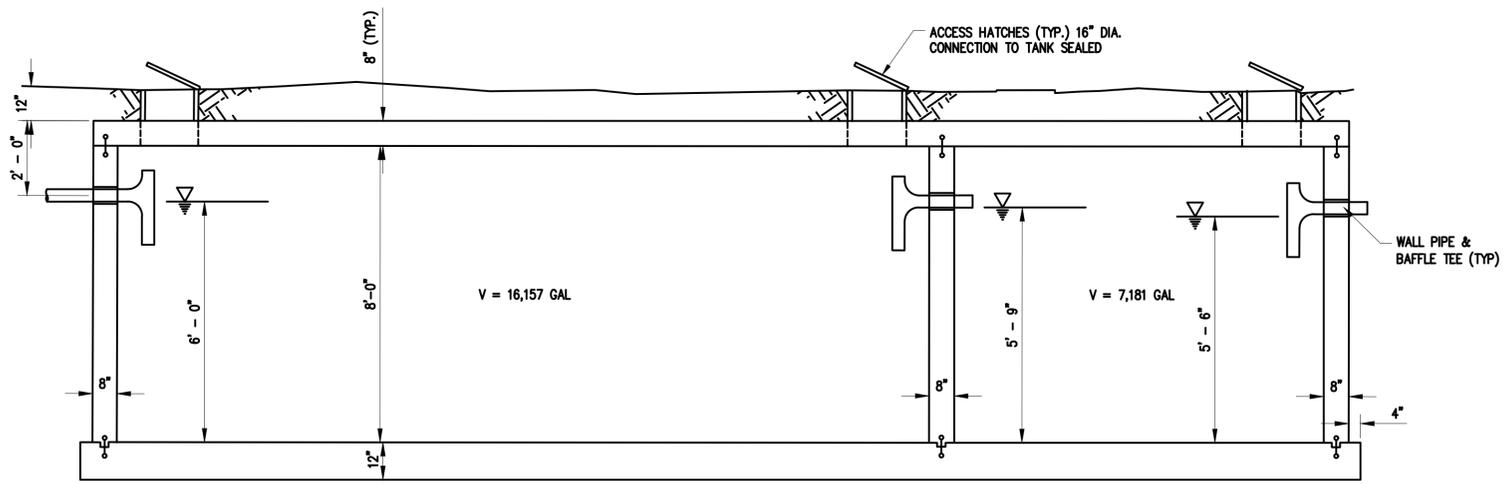
DATE:
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SHEET NO.
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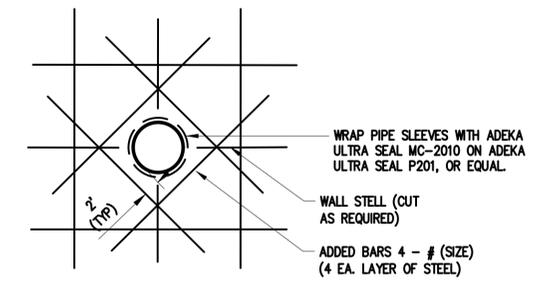


SEPTIC TANK A - PLAN
SCALE: NONE



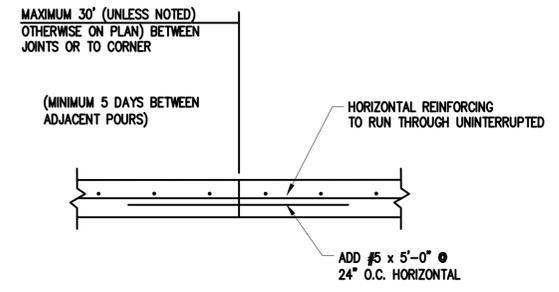
SEPTIC TANK A - SECTION
SCALE: NONE

NOTE: INLET BAFFLE TEES SHALL EXTEND AT LEAST 6 INCHES BELOW THE SURFACE OF THE LIQUID AND OUTLET BAFFLE TEES SHALL EXTEND TO A DEPTH OF 40% OF THE LIQUID DEPTH.

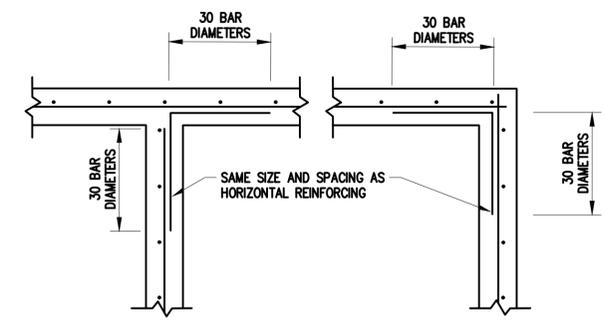


PIPE SIZE	BAR SIZE	BAR LENGTH
4" - 8" Ø	#4	2' - 6"
8" - 12" Ø	#5	4' - 6"
12" - 18" Ø	#5	6' - 6"

OPENING IN CONCRETE WALL (SLAB)
SCALE: NONE



WALL CONSTRUCTION JOINT
SCALE: NONE



WALL REINFORCING DETAIL
SCALE: NONE

NO.	DATE	REVISIONS

SEPTIC TANK A
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

HORIZONTAL SCALE:
AS NOTED

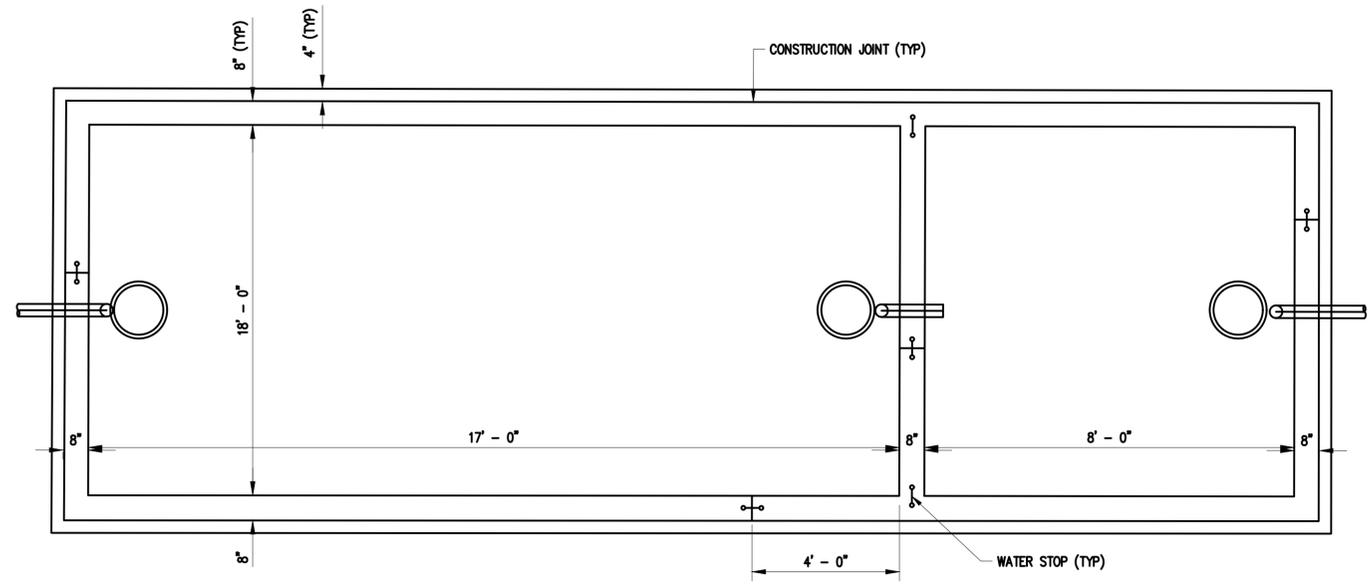
VERTICAL SCALE:
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PROJECT NO.
40038-500

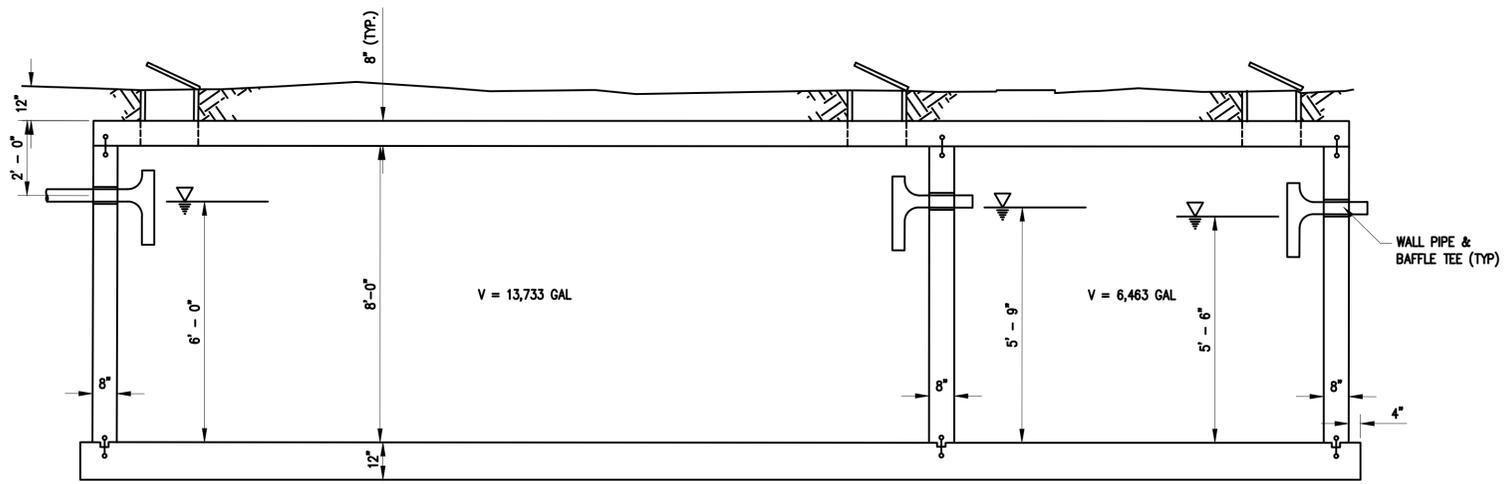
DATE:
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SHEET NO.
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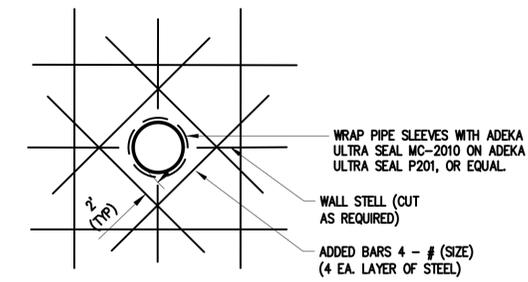


SEPTIC TANK B - PLAN
SCALE: NONE



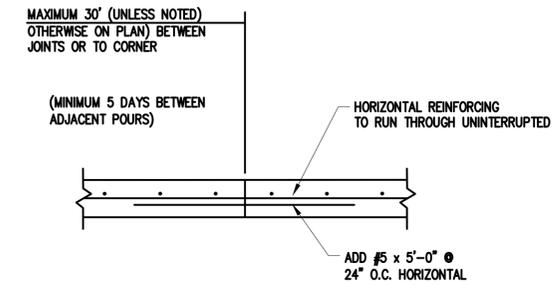
NOTE: INLET BAFFLE TEES SHALL EXTEND AT LEAST 6 INCHES BELOW THE SURFACE OF THE LIQUID AND OUTLET BAFFLE TEES SHALL EXTEND TO A DEPTH OF 40% OF THE LIQUID DEPTH.

SEPTIC TANK B - SECTION
SCALE: NONE

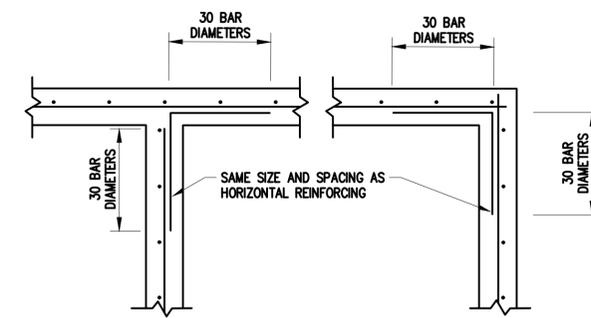


PIPE SIZE	BAR SIZE	BAR LENGTH
4" - 8" Ø	#4	2' - 6"
8" - 12" Ø	#5	4' - 6"
12" - 18" Ø	#5	6' - 6"

OPENING IN CONCRETE WALL (SLAB)
SCALE: NONE



WALL CONSTRUCTION JOINT
SCALE: NONE



WALL REINFORCING DETAIL
SCALE: NONE

NOTE:
EFFLUENT FILTER WILL BE INSTALLED ON EXISTING SEPTIC TANK C BEFORE DISCHARGING INTO THE DOSING CHAMBER

REVISIONS	DATE	NO.

SEPTIC TANK B
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

HORIZONTAL SCALE:
AS NOTED

VERTICAL SCALE:
N/A

PROJECT NO.
40038-500

DATE:
12/24/25

SHEET NO.
8

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NO.	DATE	REVISIONS

SAND FILTER DETAILS
WASTEWATER TREATMENT FACILITY IMPROVEMENTS
 VILLAGE OF MAEYSTOWN
 MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

HORIZONTAL SCALE:
AS NOTED

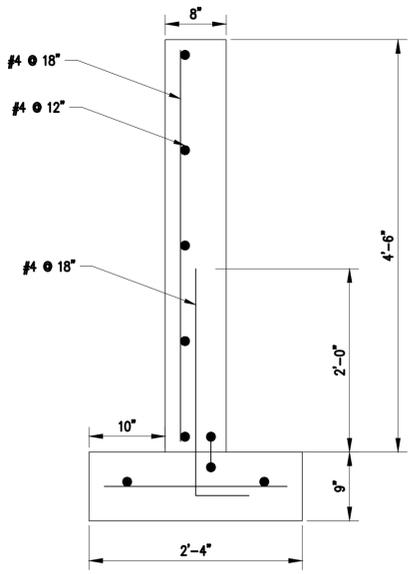
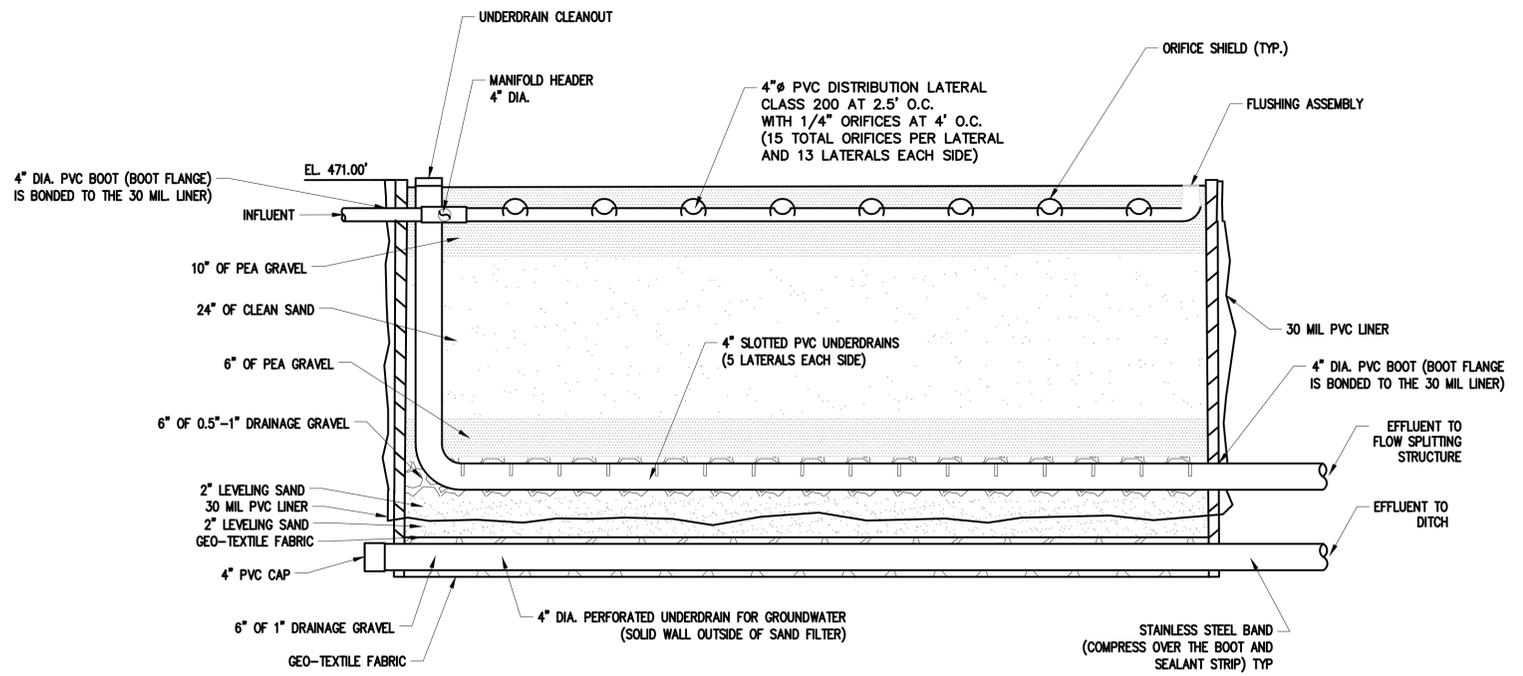
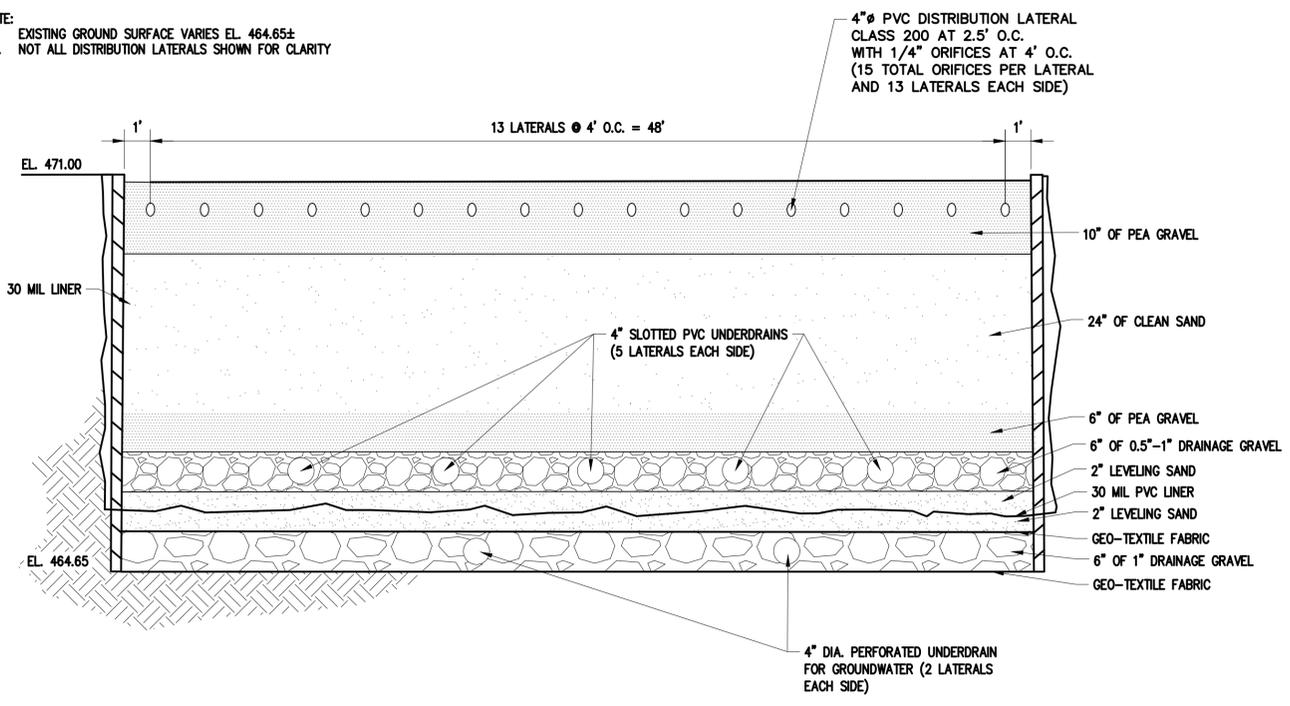
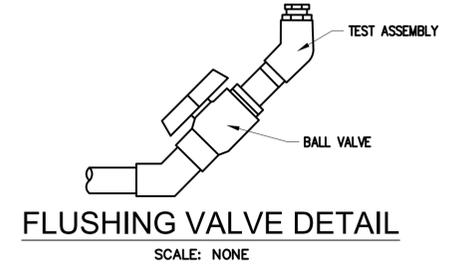
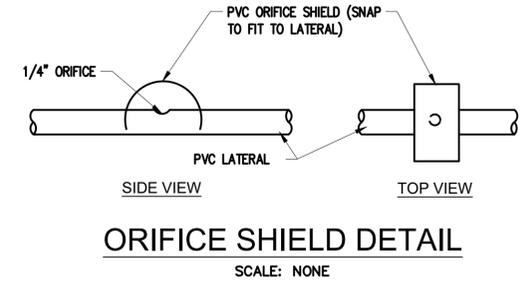
VERTICAL SCALE:
N/A

PROJECT NO.
40038-500

DATE:
12/24/25

SHEET NO.
9

NOTE:
1. EXISTING GROUND SURFACE VARIES EL. 464.65±
2. NOT ALL DISTRIBUTION LATERALS SHOWN FOR CLARITY



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NO.	DATE	REVISIONS

SAND FILTER PLAN
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

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

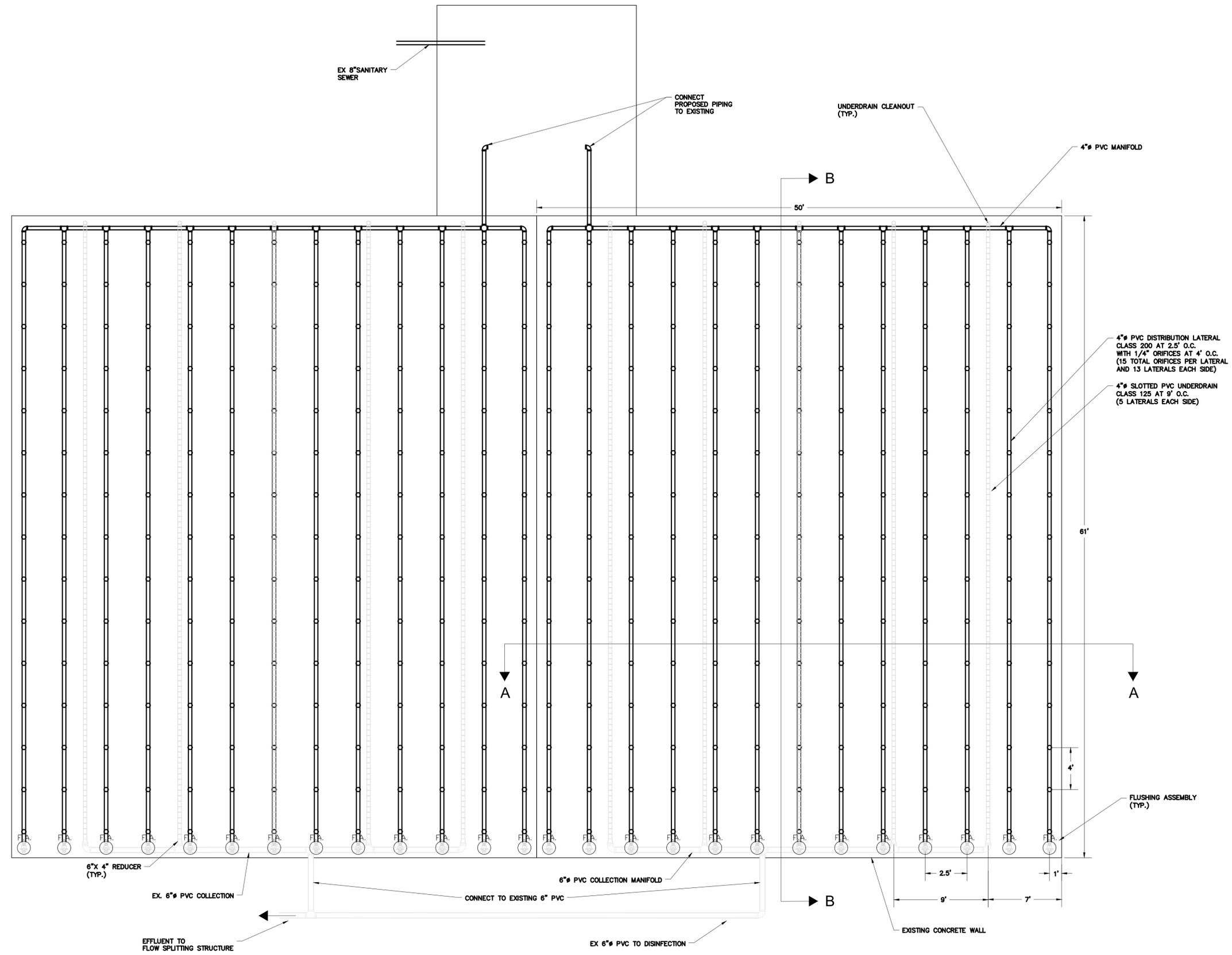
HORIZONTAL SCALE:
1"=5'

VERTICAL SCALE:
N/A

PROJECT NO.
40038-500

DATE:
12/24/25

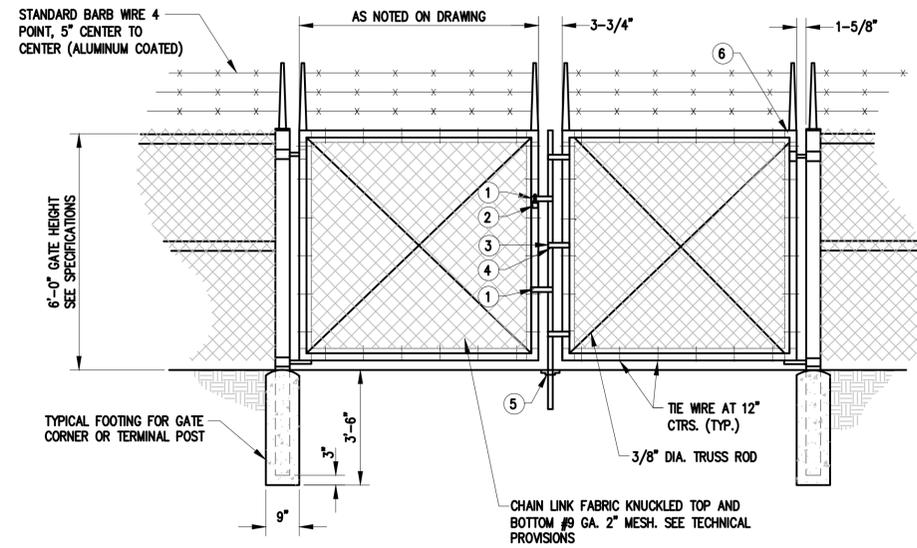
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10



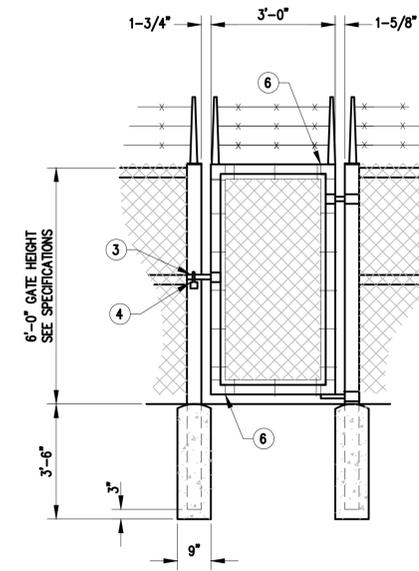
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NOTE: 4" UNDERDRAIN FOR GROUNDWATER NOT SHOWN FOR CLARITY.

NO.	DATE	REVISIONS



DOUBLE SWING GATES
SCALE: NONE

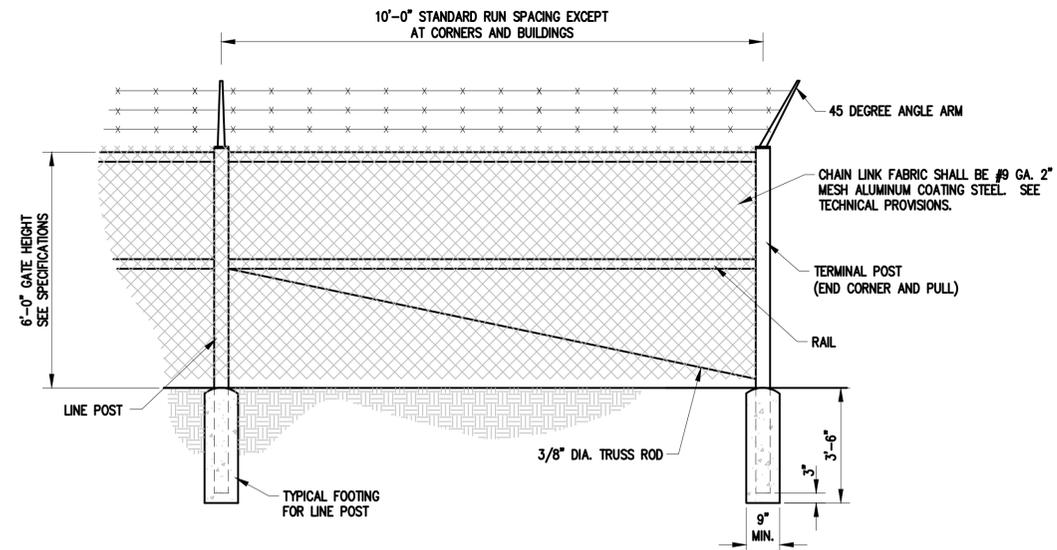


SINGLE SWING GATES
SCALE: NONE

TUBULAR RAIL AND POSTS

- TOP AND BRACE RAIL-----1 5/8" O.D., SCH 40
- INTERMEDIATE POSTS-----2 1/2" O.D., SCH 40
- TERAMINAL POST-----4" O.D., SCH 40

NOTE: ALL POSTS SHALL BE GALVANIZED OR ALUMINUM COATED STEEL.



STANDARD RUN FENCING DETAILS
SCALE: NONE

CHAIN LINK FENCE & GATE
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS

VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

HORIZONTAL SCALE:
AS NOTED

VERTICAL SCALE:
N/A

PROJECT NO.
40038-500

DATE:
12/24/25

SHEET NO.
11



NO.	DATE	REVISIONS

MANHOLE DETAILS
WASTEWATER TREATMENT FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
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APPROVED BY: SWE

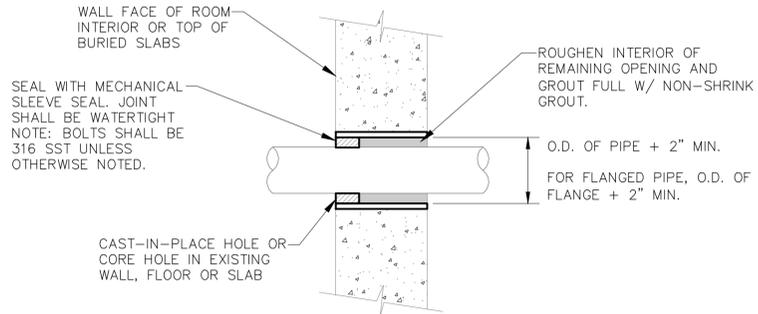
HORIZONTAL SCALE:
AS NOTED

VERTICAL SCALE:
N/A

PROJECT NO.
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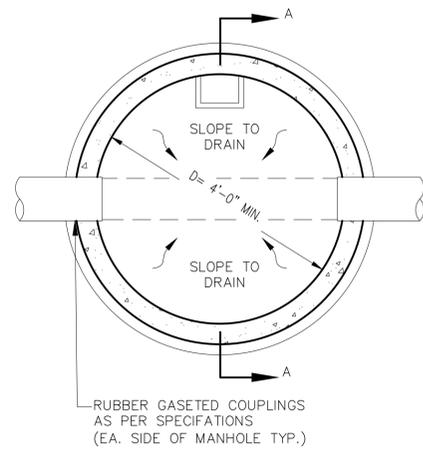
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12/24/25

SHEET NO.
12



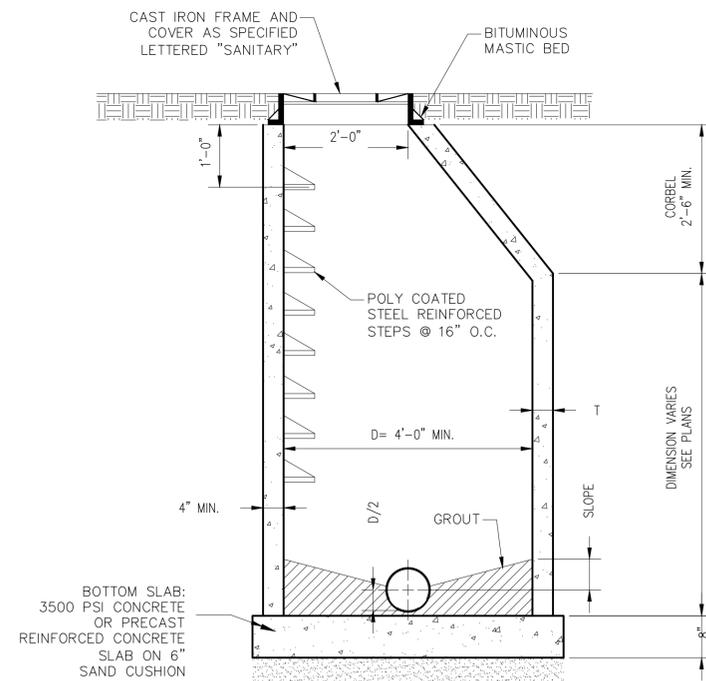
PIPE PENETRATION DETAIL

SCALE: NONE



TYPICAL MANHOLE PLAN

SCALE: NONE



TYPICAL MANHOLE

SCALE: NONE



NO.	DATE	REVISIONS

ALTERNATE HYDRAULIC PROFILES
WASTEWATER TREATMENT
FACILITY IMPROVEMENTS
VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

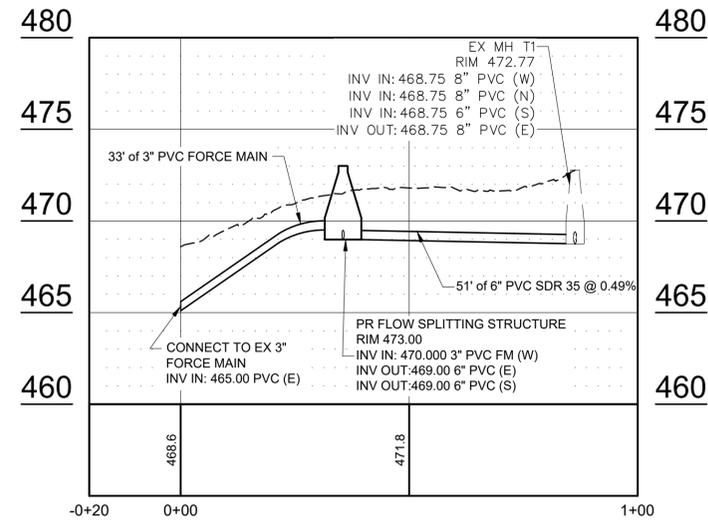
HORIZONTAL SCALE:
AS NOTED

VERTICAL SCALE:
N/A

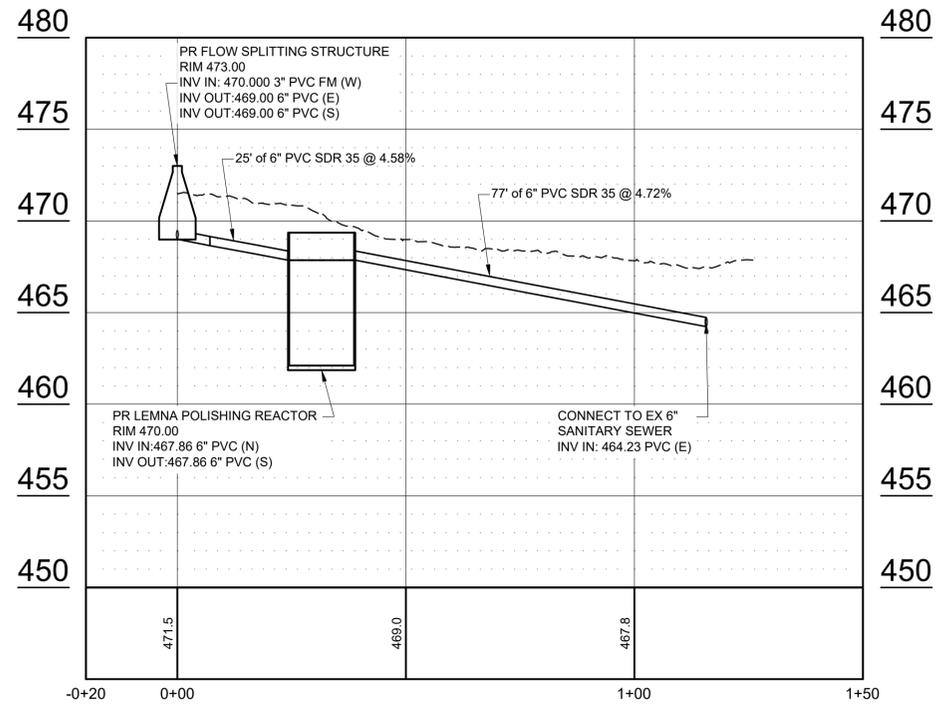
PROJECT NO.
40038-500

DATE:
12/24/25

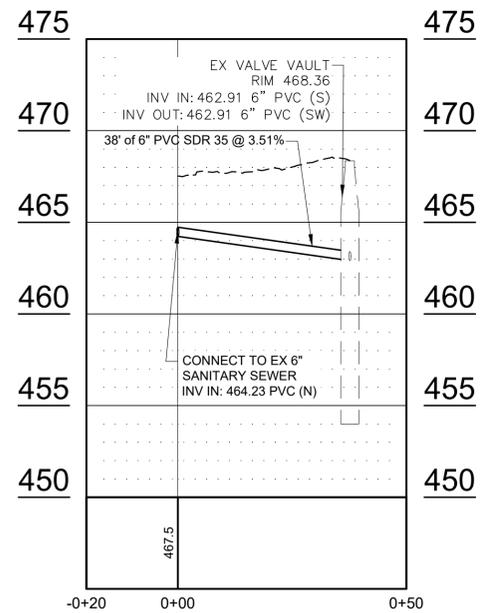
SHEET NO.
14



PROPOSED RECIRCULATION PROFILE



PROPOSED LEMNA POLISHING REACTOR PROFILE



PROPOSED SAND FILTER EFFLUENT RE-ROUTE PROFILE

NO.	DATE	REVISIONS

ALTERNATE DETAILS

WASTEWATER TREATMENT
FACILITY IMPROVEMENTS

VILLAGE OF MAEYSTOWN
MONROE COUNTY, ILLINOIS

DRAWN BY: CBK
CHECKED BY: EYF
APPROVED BY: SWE

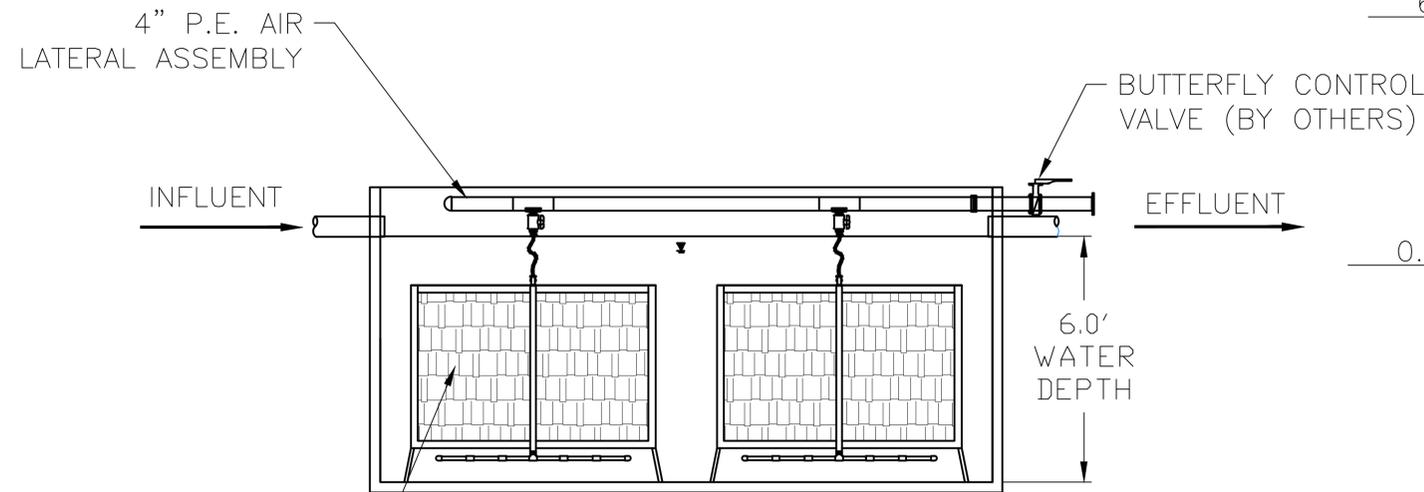
HORIZONTAL SCALE:
AS NOTED

VERTICAL SCALE:
N/A

PROJECT NO.
40038-500

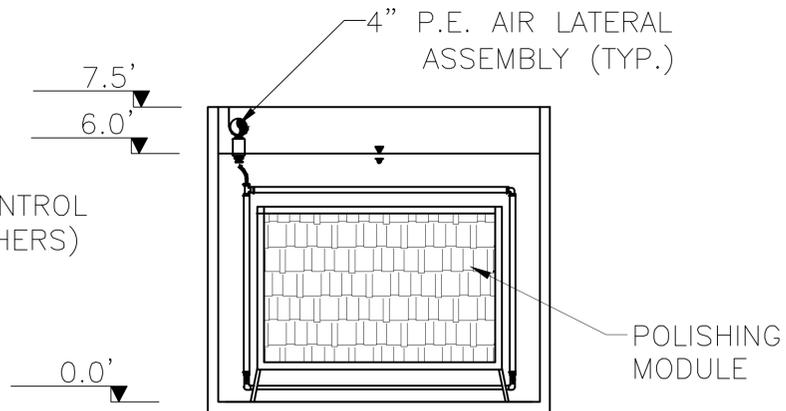
DATE:
12/23/25

SHEET NO.
15



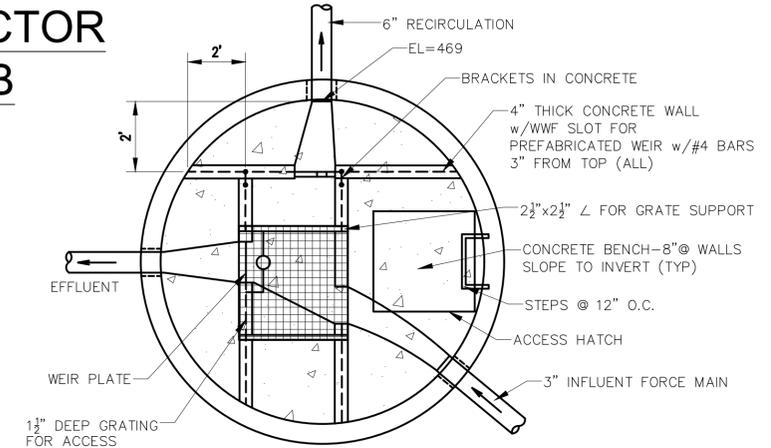
**POLISHING REACTOR
SECTION A-A**

SCALE: NONE



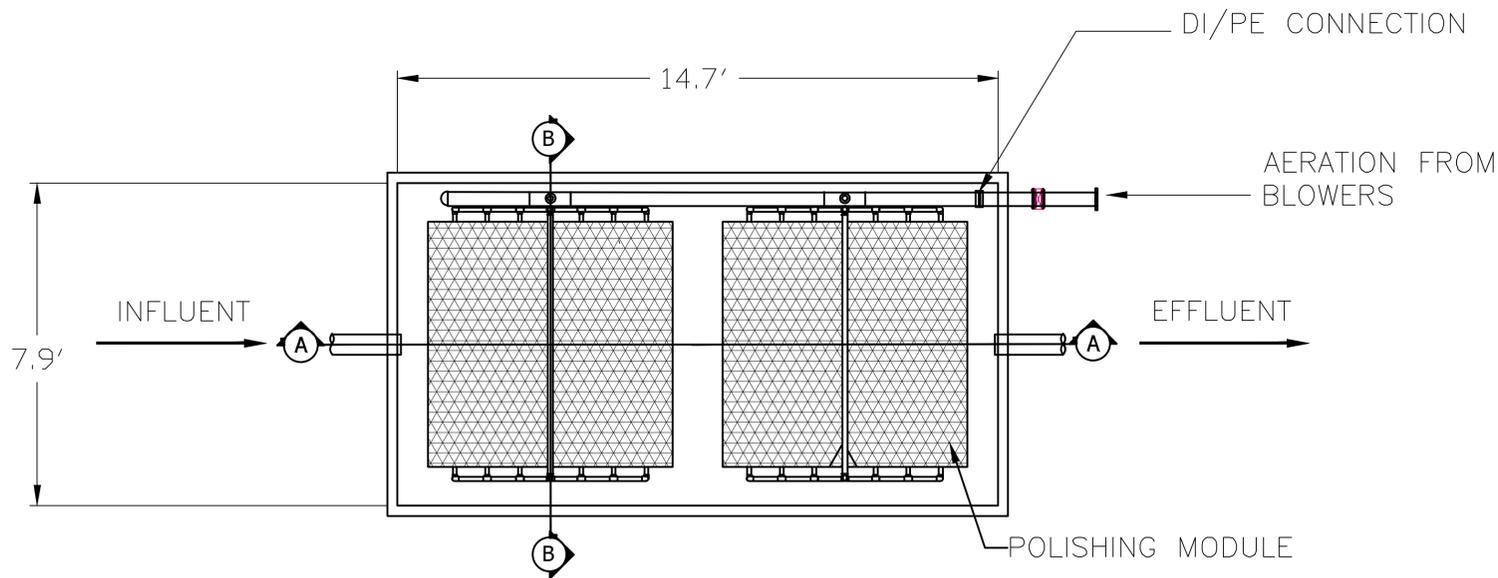
**POLISHING REACTOR
SECTION B-B**

SCALE: NONE



FLOW SPLITTING STRUCTURE - PLAN

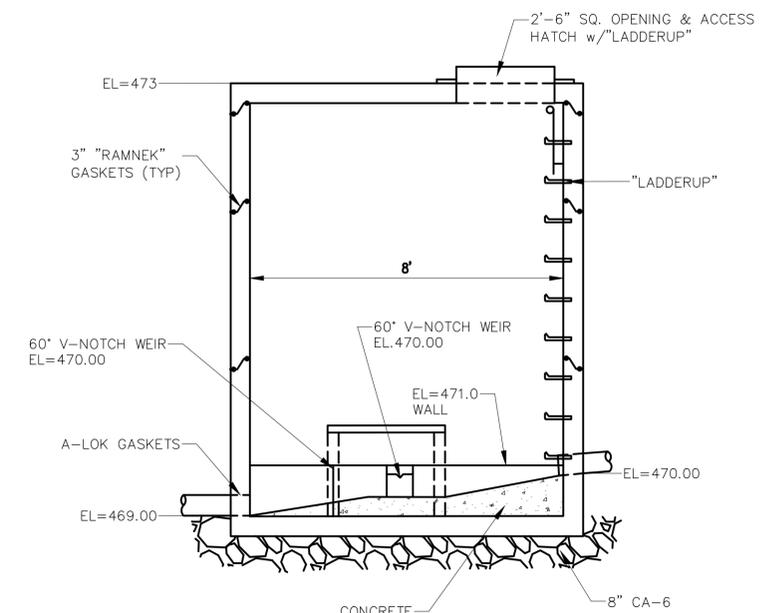
SCALE: NONE



**POLISHING REACTOR
PLAN VIEW**

SCALE: NONE

NOTE:
THIS DESIGN IS PROPRIETARY TO LEMNA ENVIRONMENTAL TECHNOLOGIES, INC. AND IS SOLELY INTENDED FOR APPLICATION AT MAEYSTOWN, IL BY LEMNA ENVIRONMENTAL TECHNOLOGIES, INC. THIS DESIGN CANNOT BE USED BY A THIRD PARTY NOR REPRODUCED, IN FULL OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF LEMNA TECHNOLOGIES INC.



FLOW SPLITTING STRUCTURE - SECTION

SCALE: NONE