GENERAL NOTES:

1. EXISTING BASEMAP INFORMATION AND LOCATIONS OF EXISTING UTILITIES ARE BASED ON A FIELD SURVEY PERFORMED BY DUFRESNE GROUP IN MARCH 2024 AND ON INFORMATION PROVIDED BY THE CITY OF BARRE.
2. RIGHT-OF-WAY INFORMATION IS SHOWN BASED ON THE CITY OF BARRE TAX MAPS.
3. SOIL BORINGS WERE PERFORMED BY MIKE'S BORING AND CORING IN **DATE**. SOIL BORING LOCATIONS ARE SHOWN ON THE PLANS AND PROFILES. REFER TO THE SPECIFICATIONS FOR BORING LOGS.
4. ALL CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO LANDS OWNED BY CITY OF BARRE, IN PUBLIC RIGHT-OF-WAY OR IN EASEMENT AREAS AVAILABLE TO THE TOWN OR CONTRACTOR.
5. GENERALLY HEAVY OR DARK LINE WORK OR NOTES REFER TO PROPOSED IMPROVEMENTS. LIGHT LINE WORK OR SCREENED GENERALLY REFERS TO EXISTING FEATURES.
6. ALL EXISTING UNDERGROUND UTILITIES WERE LOCATED USING THE BEST AVAILABLE INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR USING MATERIALS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
7. EXPLORATORY EXCAVATION IS REQUIRED TO LOCATE UNDERGROUND UTILITIES. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE WITH DIG SAFE (1-888-DIG SAFE) A MINIMUM OF 48 HOURS (VT) OR 72 HOURS (NH) PRIOR TO EXCAVATION.
8. CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC, CABLE AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL POWER UTILITY AND TELEPHONE UTILITY REGARDING ANY NECESSARY SUPPORT OF ANY UTILITY POLES DURING CONSTRUCTION. LOCAL ELECTRIC UTILITY IS GREEN MOUNTAIN POWER. LOCAL PHONE UTILITY IS CONSOLIDATED COMMUNICATIONS.
9. CONTRACTOR SHALL MAKE EVERY EFFORT NECESSARY TO ALLOW UNRESTRICTED ACCESS TO AND FROM DRIVEWAYS AND SIDE STREETS LOCATED ALONG THE PROJECT SITE.
10. TECHNICAL SPECIFICATIONS PROVIDE NECESSARY INFORMATION AND ARE PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT.
11. ALL DISTURBED GRASSED AREAS SHALL BE RESTORED TO CLASS A RESTORATION UNLESS OTHERWISE SHOWN. CONTRACTOR IS RESPONSIBLE FOR REMOVAL, CARE & REPLANTING OF ALL PLANTINGS AND SHRUBS DISTURBED DURING CONSTRUCTION.
12. MINIMUM VERTICAL CLEARANCE BETWEEN NEW SEWER MAINS AND ALL EXISTING UTILITIES, EXCEPT WATER AND STORM DRAINS TO BE SIX (6) INCHES AT CROSSING LOCATIONS. FOR WATER AND STORM DRAINS SEE DETAIL ON SHEET C6.
13. SEWER MAINS TO HAVE 5.5 FEET MINIMUM COVER UNLESS OTHERWISE STATED OR SHOWN ON THE PROFILES. WHEN 5.5 FEET OF COVER CANNOT BE MAINTAINED 4" RIGID BOARD INSULATION SHALL BE USED. CONTRACTOR SHALL NOT INSTALL ANY PIPE WITH LESS THAN 5.5 FEET OF COVER WITHOUT APPROVAL FROM THE ENGINEER. DEPTH COVER SHALL NOT BE LESS THAN 4 FEET EVEN WITH INSULATION.
14. IN ALL LOCATIONS WHERE THE SEWER MAIN IS WITHIN 5.5 FEET OF A CATCH BASIN, INSULATION SHALL BE INSTALLED VERTICALLY BETWEEN THE CATCH BASIN AND THE WATER MAIN.
15. PAVEMENT RESTORATION SHALL BE PERMANENT TRENCH PAVEMENT. REFER TO THE SPECIFICATIONS FOR PAVEMENT RESTORATION DETAILS.
16. ANY PAVEMENT MARKINGS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED UNLESS OTHERWISE NOTED.
17. ALL TRAFFIC CONTROL AND SIGNAGE SHALL BE IN ACCORDANCE WITH MUTCD.

ABBREVIATION LIST

ABB	DESCRIPTION
BLD	BUILDING
CB	CATCH BASIN
CI	CAST IRON
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
CU	COPPER
DI	DUCTILE IRON
DIA	DIAMETER
DR	DRIVE
EL	ELEVATION
EOG	EDGE OF GRAVEL
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
GV	GATE VALVE
INV	INVERT
IP	IRON PIPE
IPF	IRON PIPE FOUND
IPS	IRON PIPE SET
IRF	IRON ROD FOUND
IRS	IRON ROD SET
MB	MAIL BOX
MH	MANHOLE
MJ	MECHANICAL JOINT
OHU	OVERHEAD UTILITY
RCP	REINFORCED CONCRETE PIPE
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
TBM	TEMPORARY BENCH MARK
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TYP	TYPICAL
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UP	UTILITY POLE
WSO	WATER SHUTOFF

LEGEND

EXISTING		PROPOSED	
981	MINOR CONTOUR	S S	SEWER MAIN
985	MAJOR CONTOUR	SS	SEWER SERVICE
	PAVED ROAD/DRIVE	FM	FORCE MAIN
	GRAVEL ROAD/DRIVE		SEWER VALVE
	ROAD CENTERLINE		SEWER MANHOLE
	RIGHT OF WAY		
W W	WATER MAIN		
S	SEWER MAIN		
D D	STORM DRAIN		
OHW	OVERHEAD POWER		
uge	UNDERGROUND ELECTRIC		
t t	UNDERGROUND TELEPHONE		
	BUILDING/STRUCTURE OUTLINE		
	STONE WALL		
	GUARDRAIL		
	DRAIN LINE DITCH		
	TREE LINE		
	FIRE HYDRANT		
	WATER VALVE		
	PIPE FITTINGS		
	PIPE CAP		
	SEWER MANHOLE		
	STORM MANHOLE		
	CATCH BASIN		
	SIGNS		
	LIGHTS		
	UTILITY POLE/GUY WIRE		
MB	MAILBOX		
	DECIDUOUS TREE		
	CONIFEROUS TREE		
	SHRUB/BUSH		
1	TRAVERSE		
B-1	BORING		

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REVISIONS

BY	DATE	COMMENTS

TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

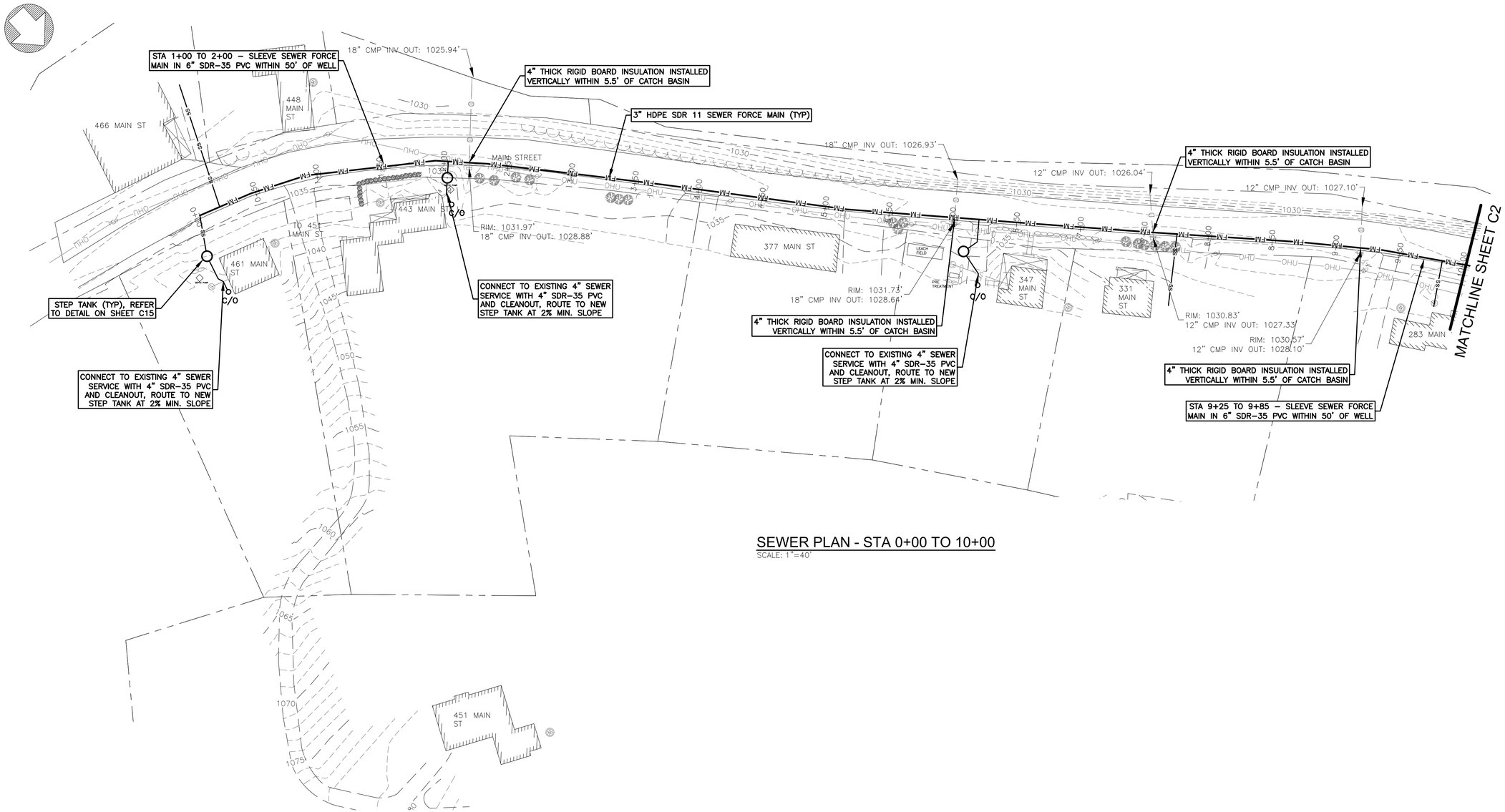
LEGEND, ABBREVIATIONS, AND GENERAL NOTES

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	N.R. JOHNSON
Drawn by	M.C.BISSELL
Reviewed by	R.N. GOODWIN
Approved by	N.R. JOHNSON
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

G1

SHEET 1 OF 16



SEWER PLAN - STA 0+00 TO 10+00

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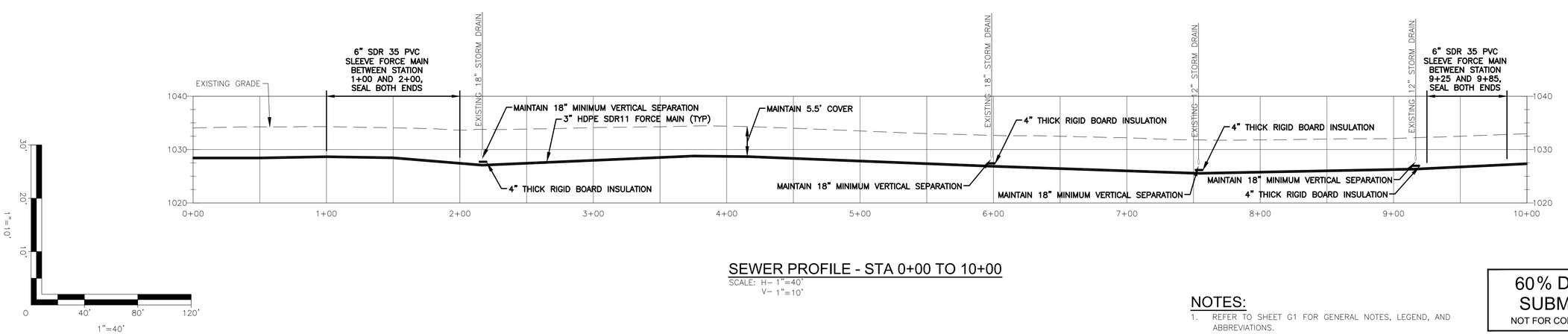

SEWER PROFILE - STA 0+00 TO 10+00

SCALE: H- 1"=40'
V- 1"=10'

NOTES:

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TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE STA 0+00 TO 10+00

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
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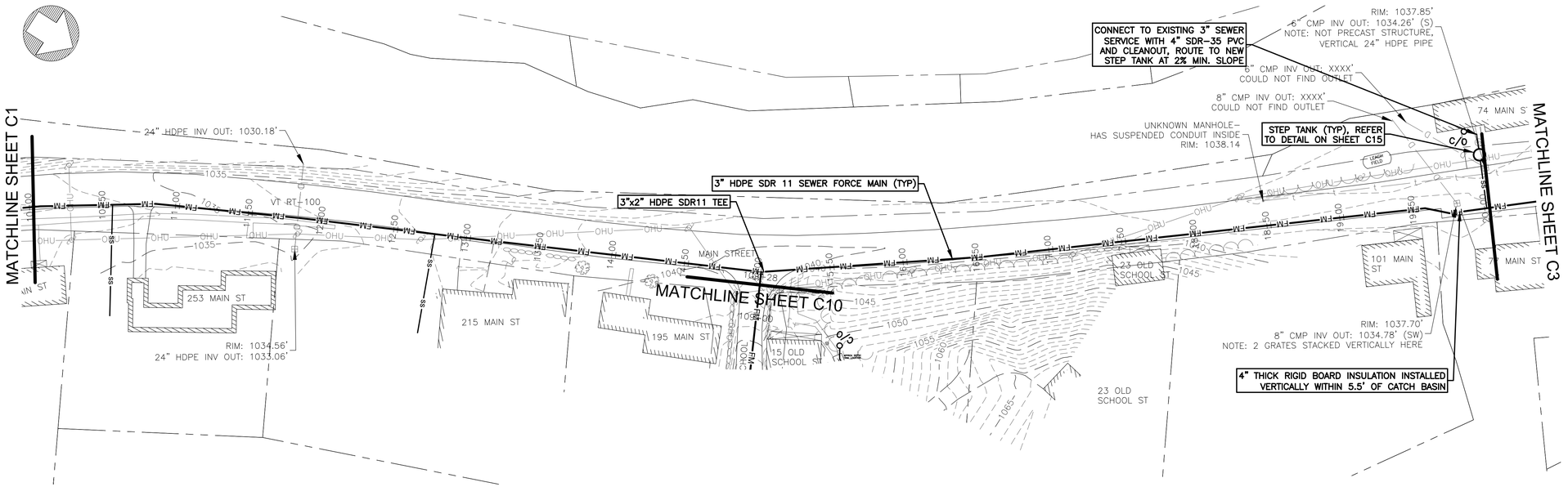
Drawn by	M.C.BISSELL
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C1



SEWER PLAN - STA 10+00 TO 20+00

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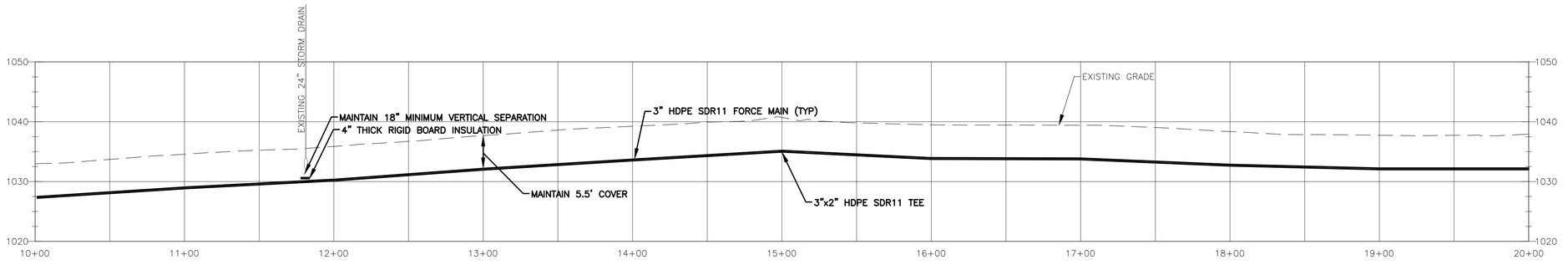
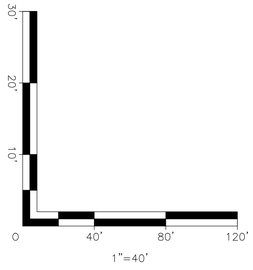


SEWER PROFILE - STA 10+00 TO 20+00

SCALE: H- 1"=40'
V- 1"=10'



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SEWER MAIN PLAN AND PROFILE STA 10+00 TO 20+00

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
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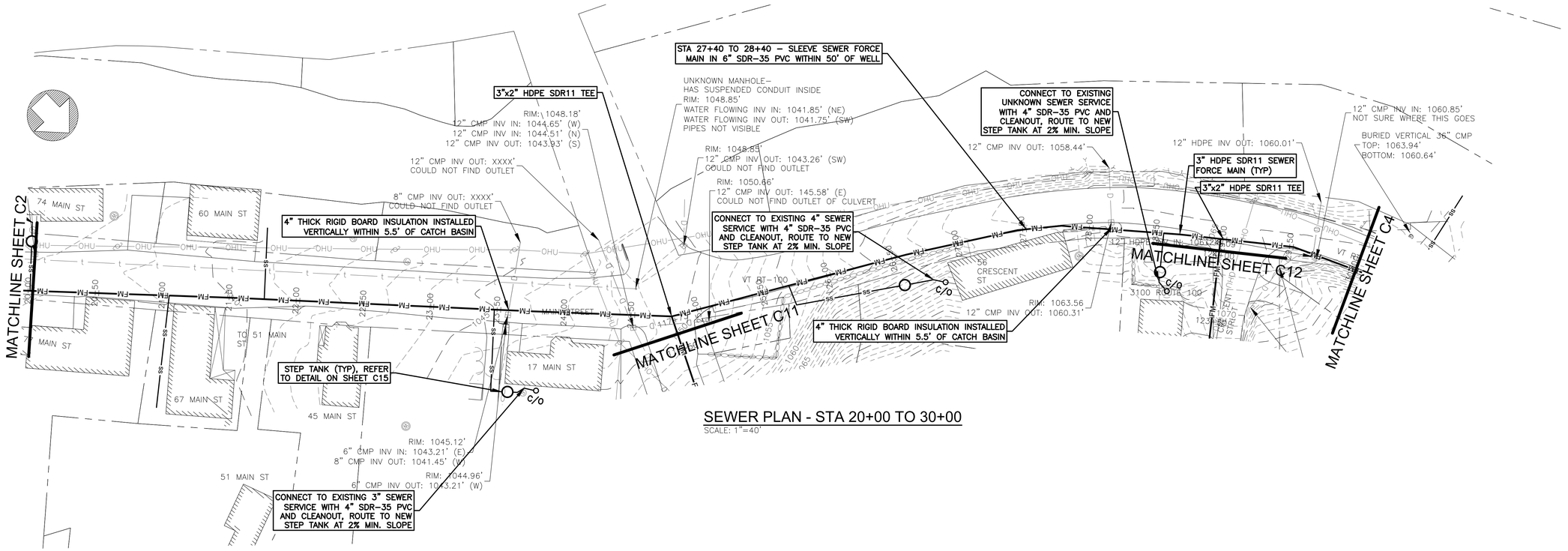
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C2

SHEET 3 OF 15



SEWER PLAN - STA 20+00 TO 30+00

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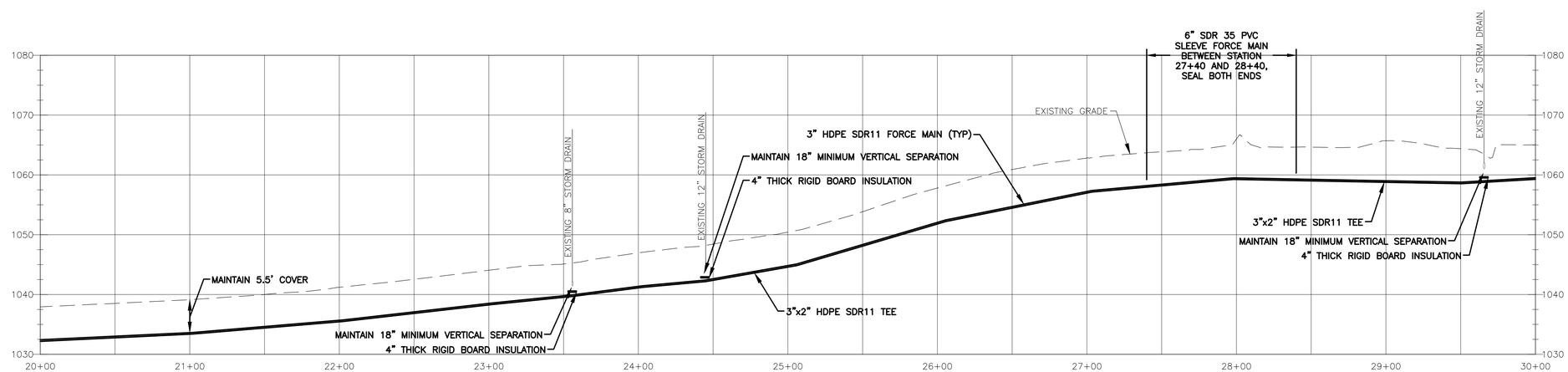

SEWER PROFILE - STA 20+00 TO 30+00

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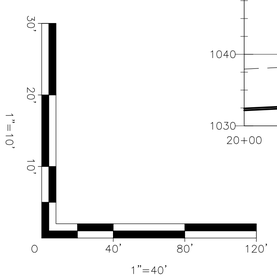

NOTES:

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2. SEWER SERVICES THAT CROSS A STATE HIGHWAY (VT RT-100) TO BE INSTALLED IN HDPE SLEEVE VIA HORIZONTAL DIRECTIONAL DRILL

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TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE STA 20+00 TO 30+00

LONDONDERRY, VERMONT

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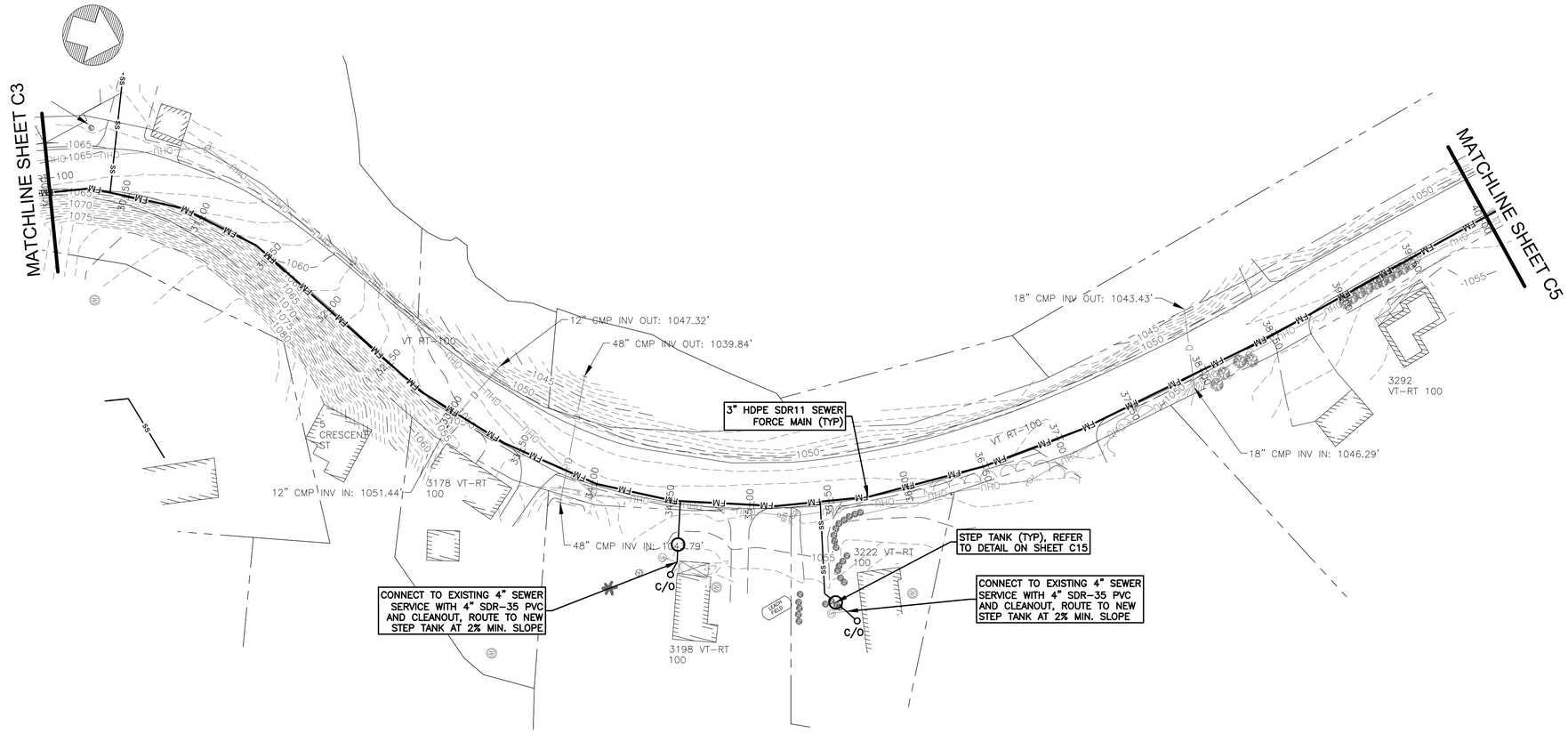
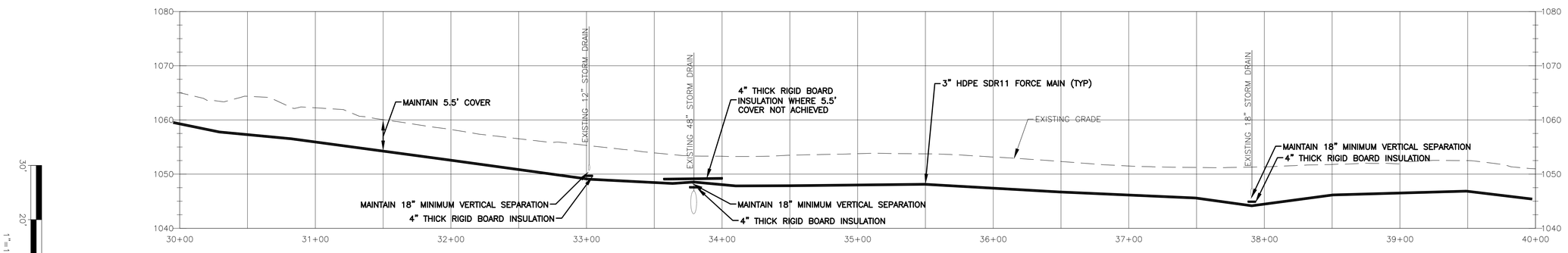
C3



SEWER PLAN - STA 30+00 TO 40+00

SCALE: 1"=40'



SEWER PROFILE - STA 30+00 TO 40+00

SCALE: H- 1"=40'
V- 1"=10'

NOTES:

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SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE
STA 30+00 TO 40+00

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
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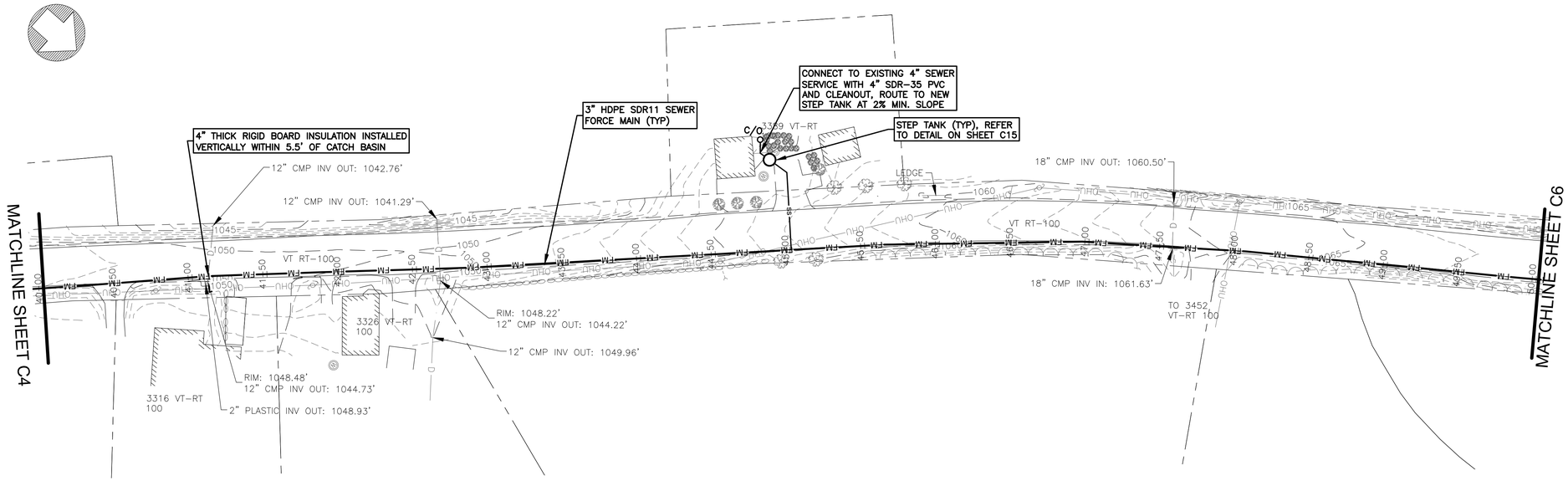
Scale	AS SHOWN

C4



SEWER PLAN - STA 40+00 TO 50+00

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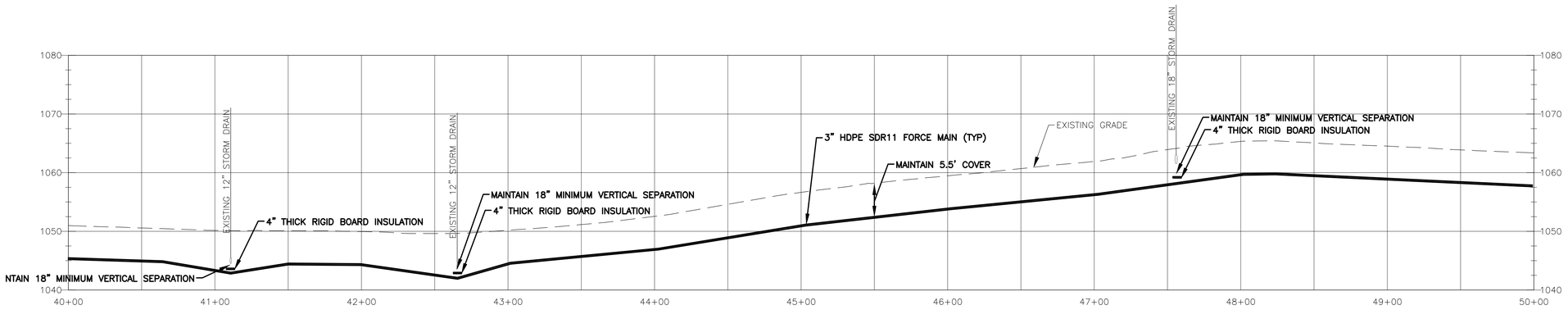

SEWER PROFILE - STA 40+00 TO 50+00

SCALE: H- 1"=40'
V- 1"=10'

1"=40'

NOTES:

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SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE STA 40+00 TO 50+00

LONDONDERRY, VERMONT

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Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C5

SHEET 6 OF 16

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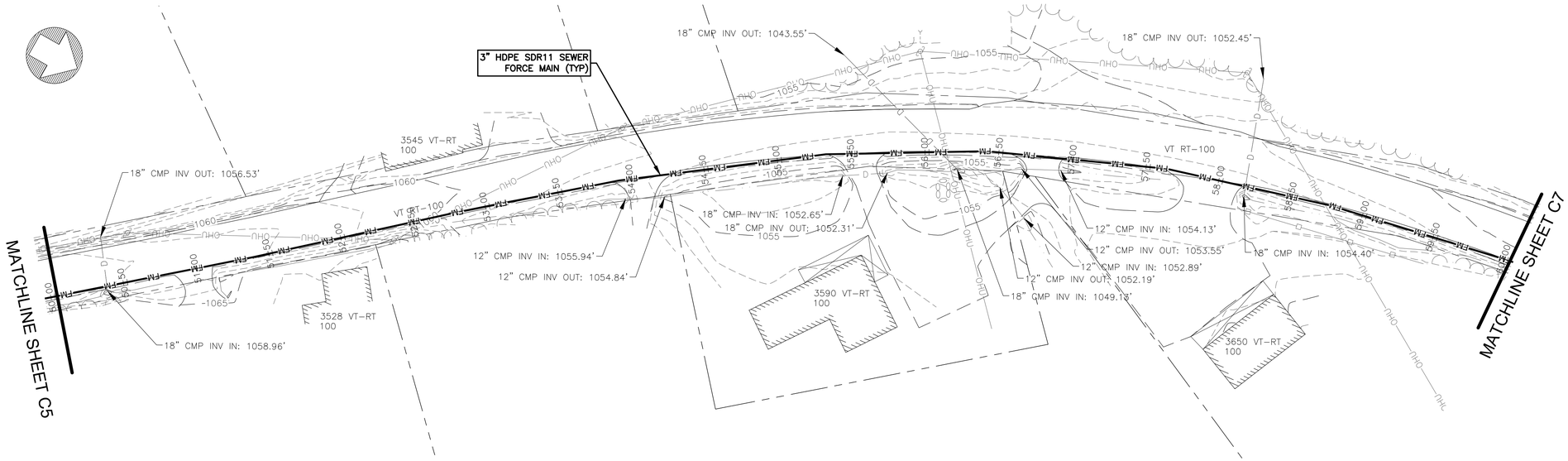

SEWER PLAN - STA 50+00 TO 60+00

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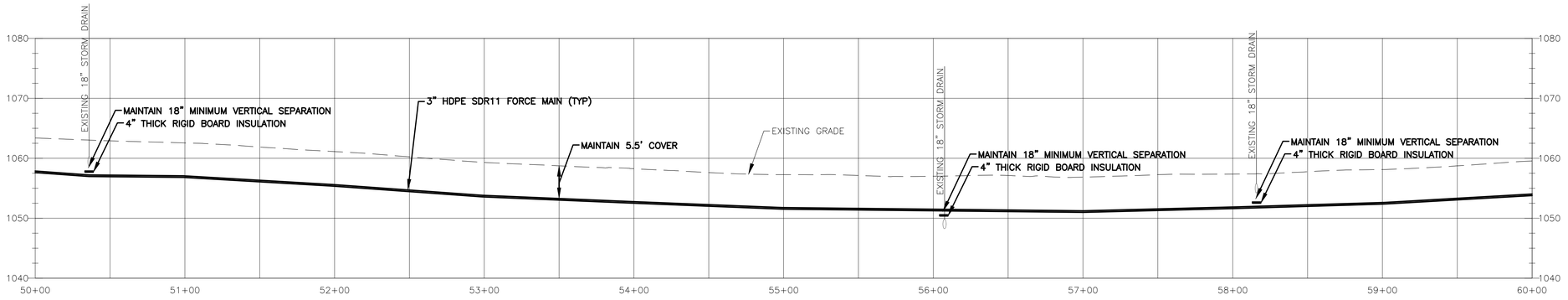

SEWER PROFILE - STA 50+00 TO 60+00

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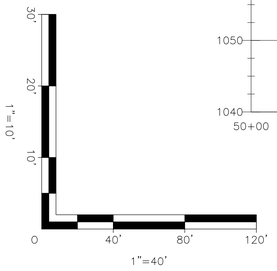

NOTES:

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REVISIONS

BY	COMMENTS	DATE

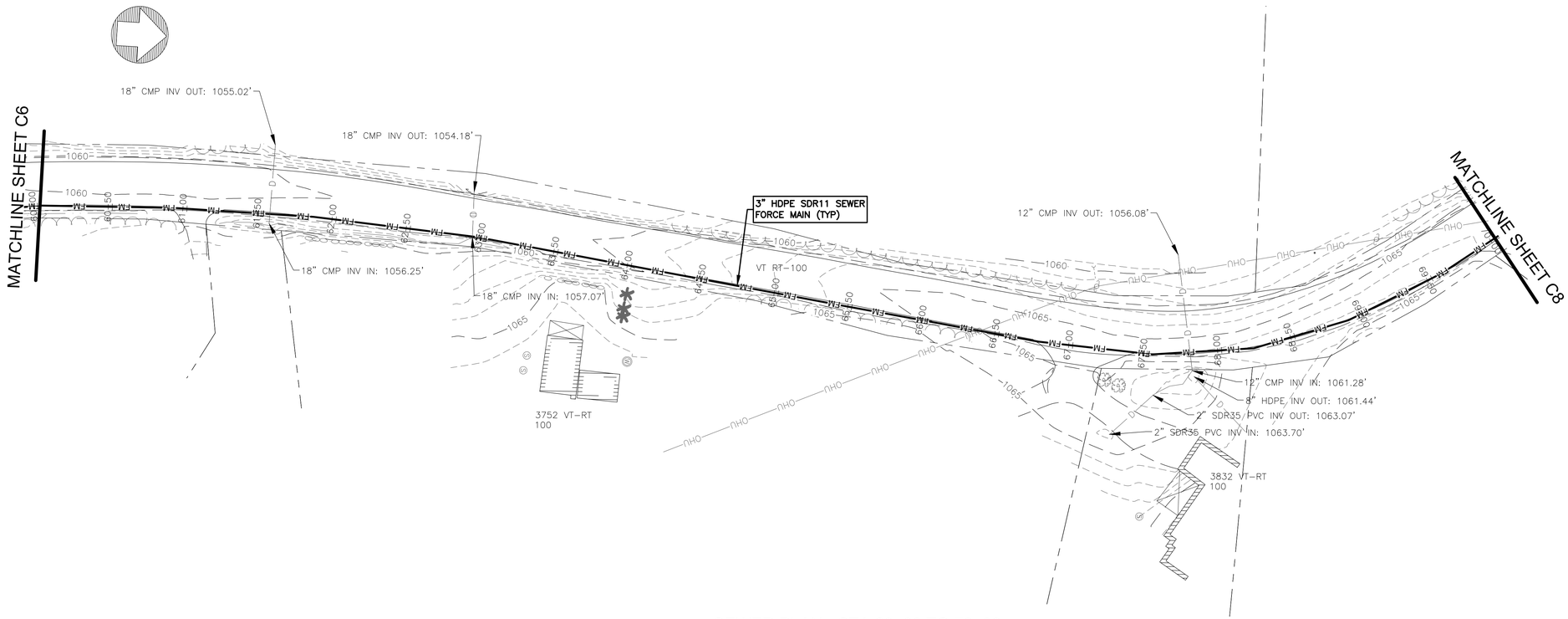
TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE
STA 50+00 TO 60+00

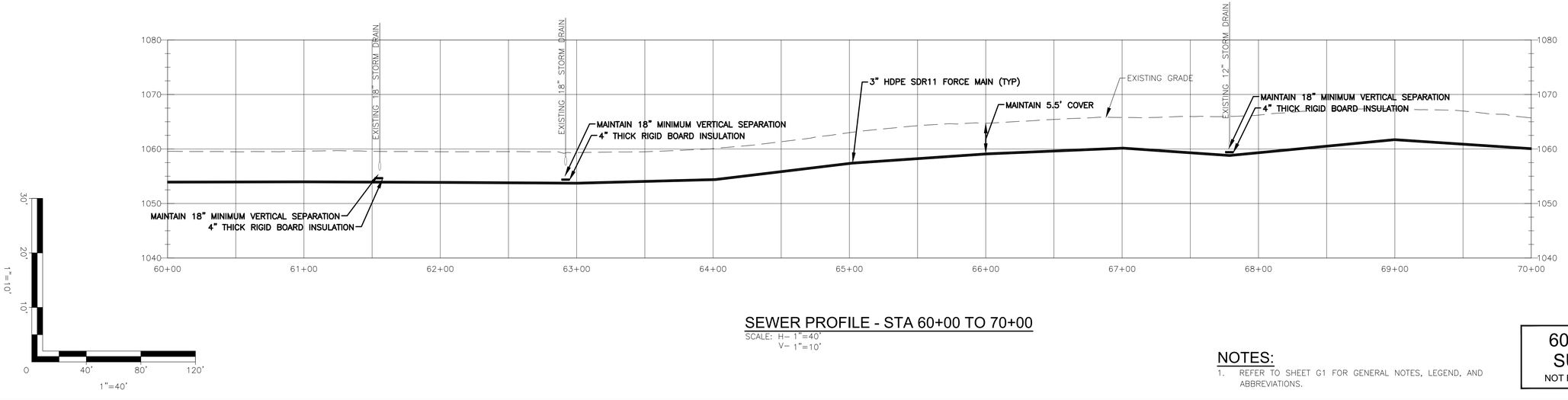
LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C6



SEWER PLAN - STA 60+00 TO 70+00
SCALE: 1"=40'



SEWER PROFILE - STA 60+00 TO 70+00
SCALE: H- 1"=40'
V- 1"=10'

NOTES:
1. REFER TO SHEET G1 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

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DATE	COMMENTS	BY

TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE STA 60+00 TO 70+00

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
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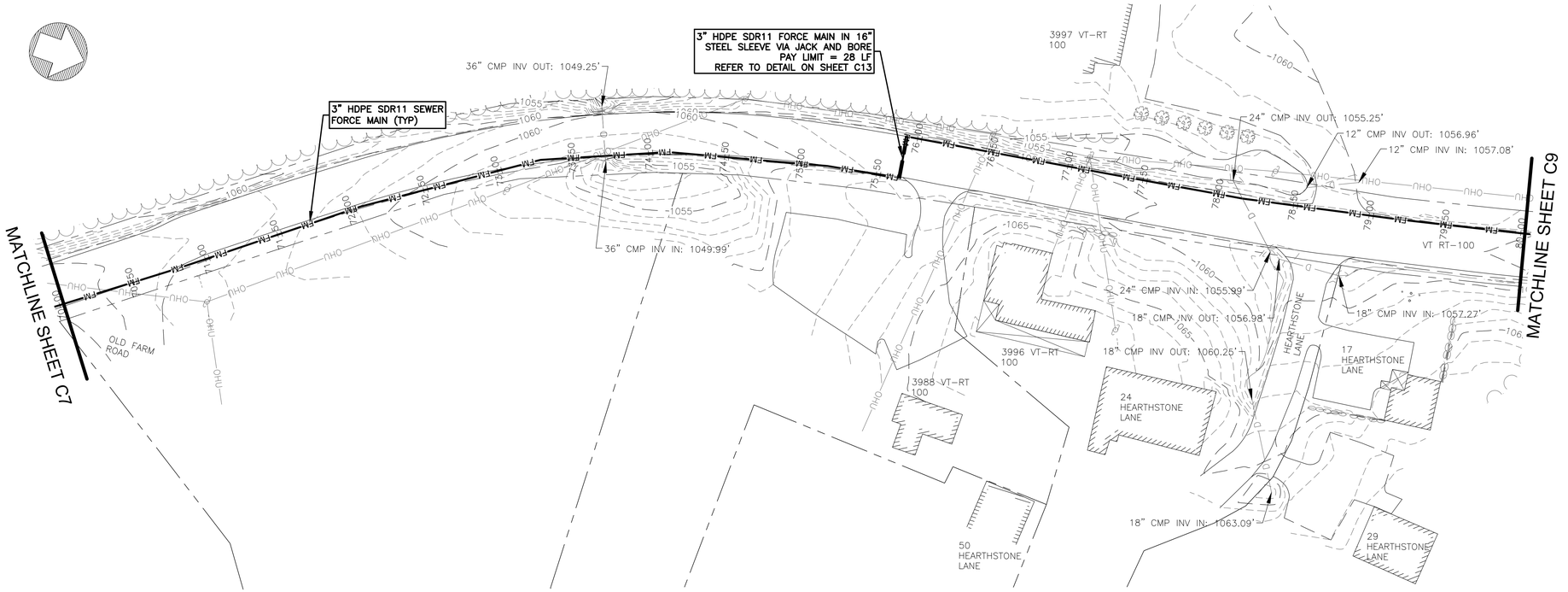
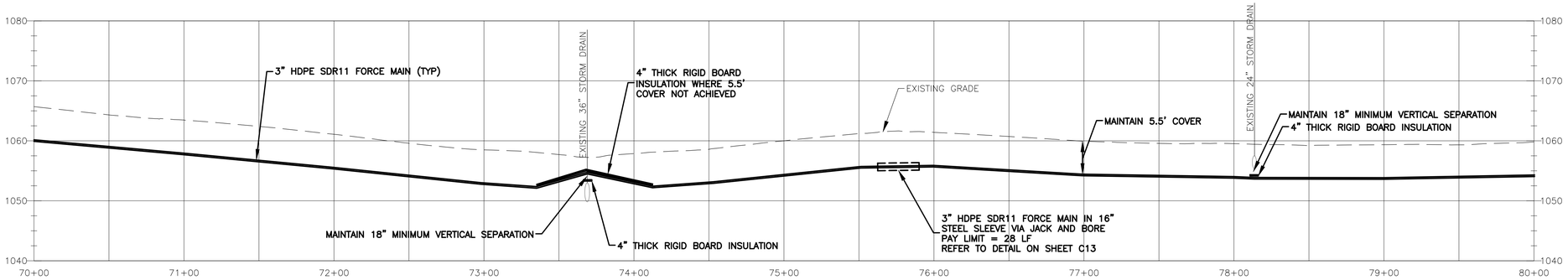
C7



SEWER PLAN - STA 70+00 TO 80+00

SCALE: 1"=40'



SEWER PROFILE - STA 70+00 TO 80+00

SCALE: H- 1"=40'
V- 1"=10'

1"=10'
30'
20'
10'

0 40' 80' 120'
1"=40'

NOTES:

1. REFER TO SHEET G1 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

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REVISIONS

BY	COMMENTS	DATE

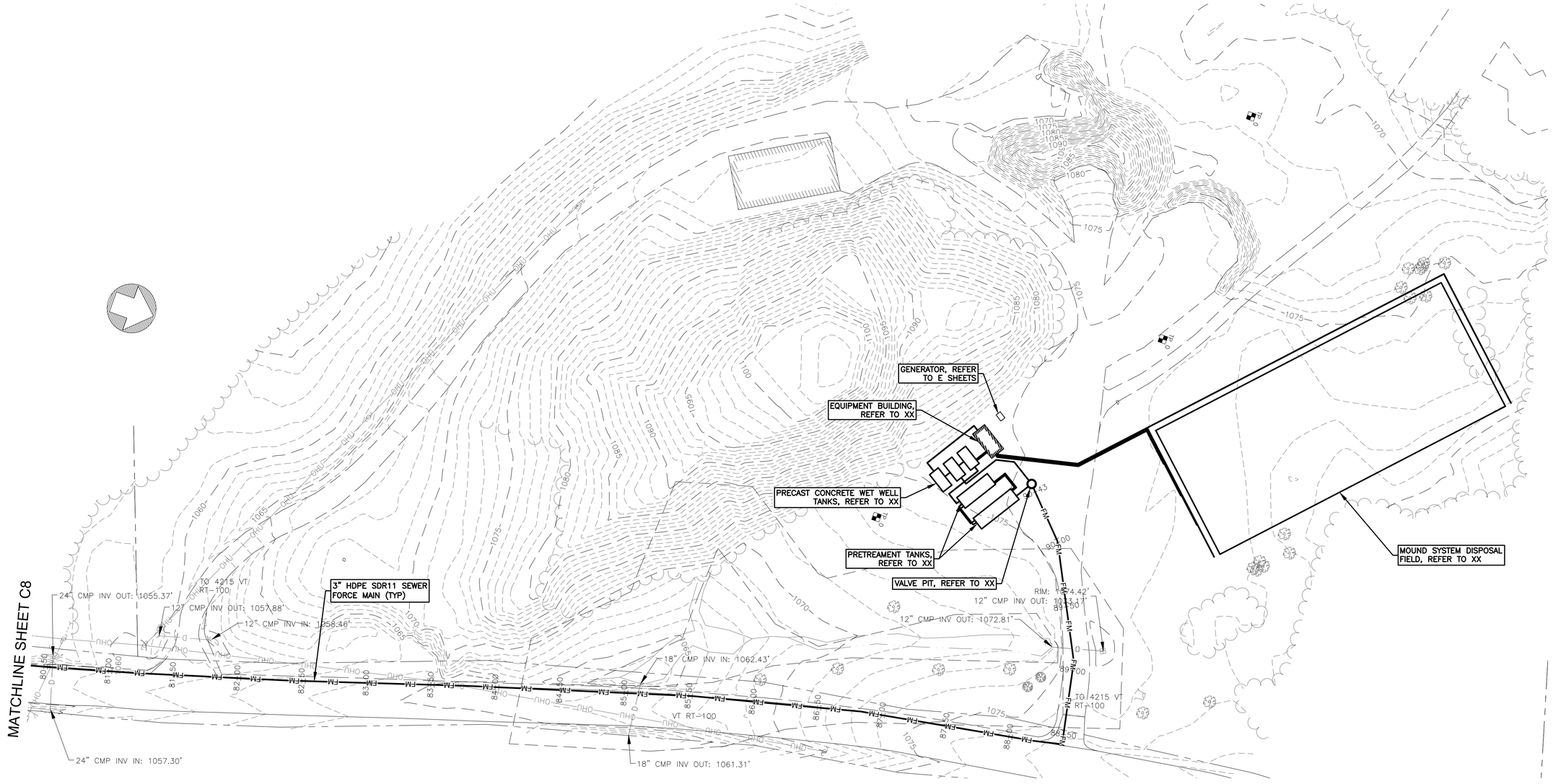
TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE STA 70+00 TO 80+00

LONDONDERRY, VERMONT

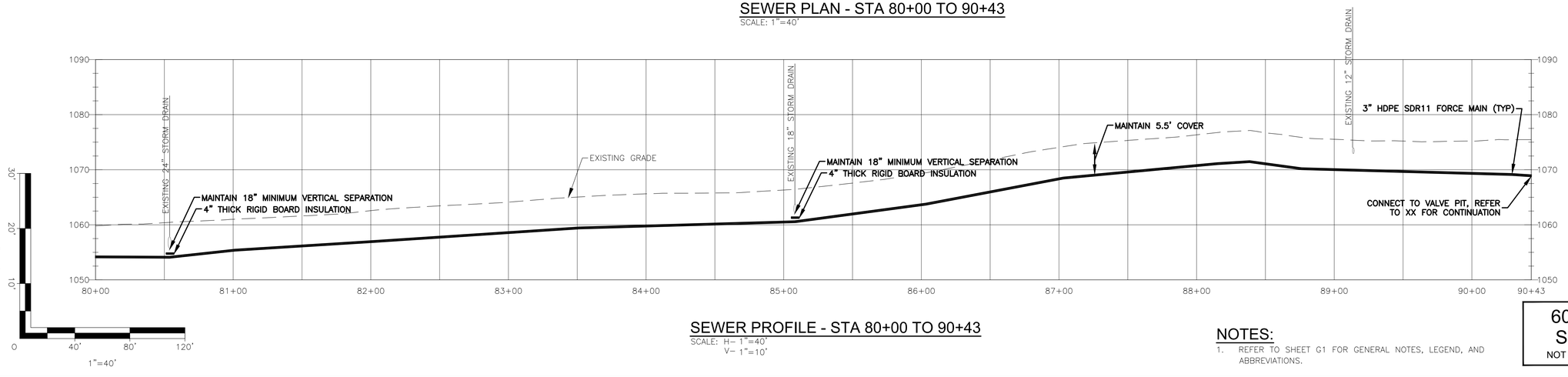
Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C8



SEWER PLAN - STA 80+00 TO 90+43

SCALE: 1"=40'



SEWER PROFILE - STA 80+00 TO 90+43

SCALE: H- 1"=40'
V- 1"=10'

NOTES:

1. REFER TO SHEET G1 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

60% DESIGN SUBMITTAL
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DATE	COMMENTS	BY

TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

SEWER MAIN PLAN AND PROFILE STA 80+00 TO 90+43

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
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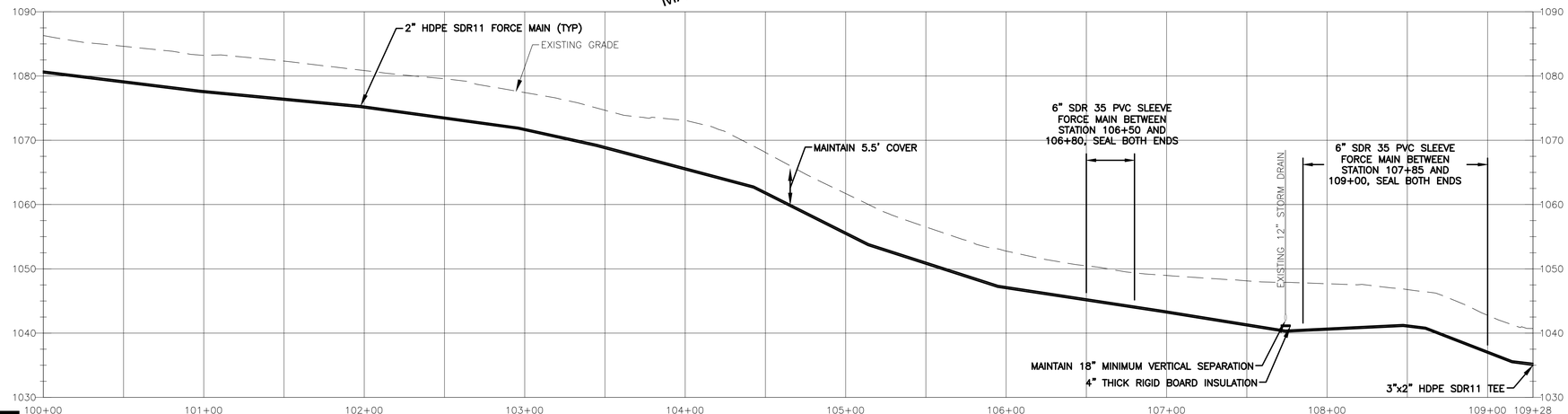
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C9

SEWER PLAN - STA 100+00 TO 109+28

SCALE: 1"=40'



SEWER PROFILE - STA 100+00 TO 109+28

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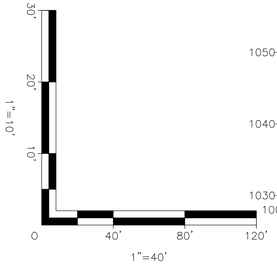
V- 1"=10'



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SOUTH VILLAGE WASTEWATER

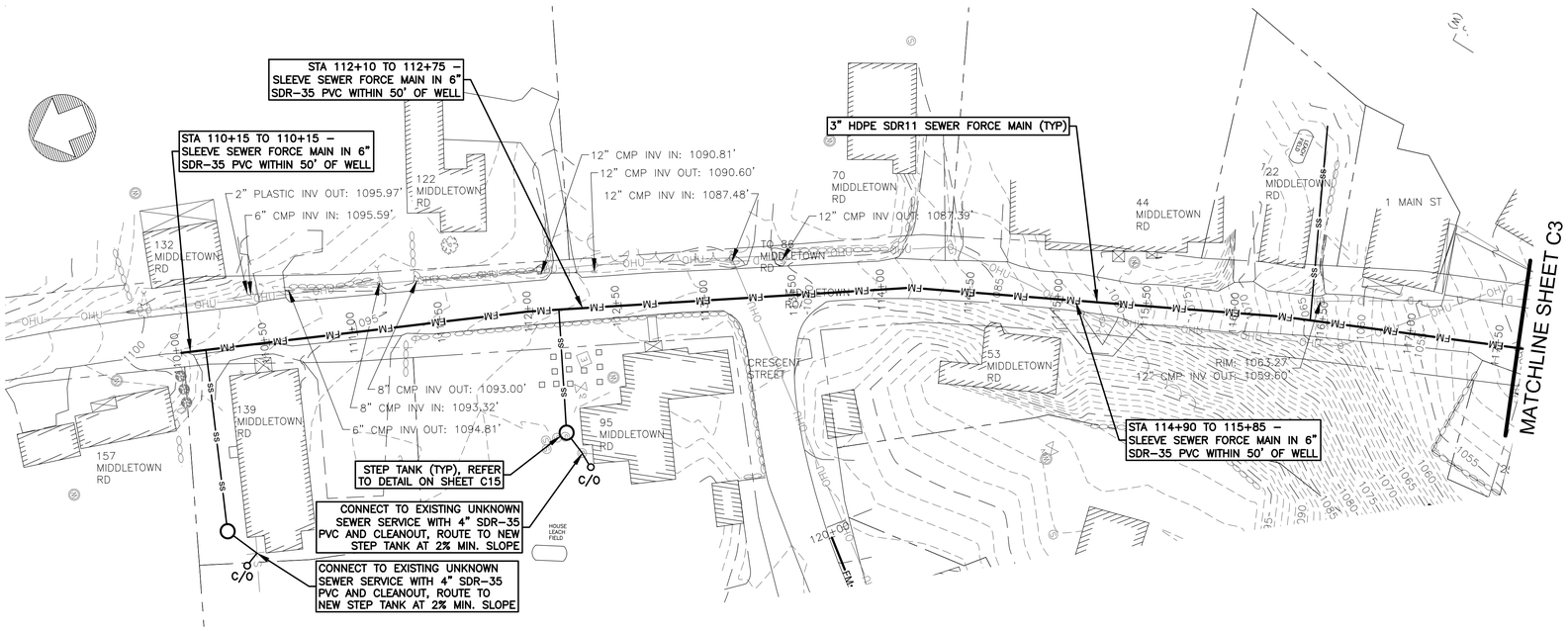
SEWER MAIN PLAN AND PROFILE STA 100+00 TO 109+28

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C10

SHEET 11 OF 16



SEWER PLAN - STA 110+00 TO 117+73

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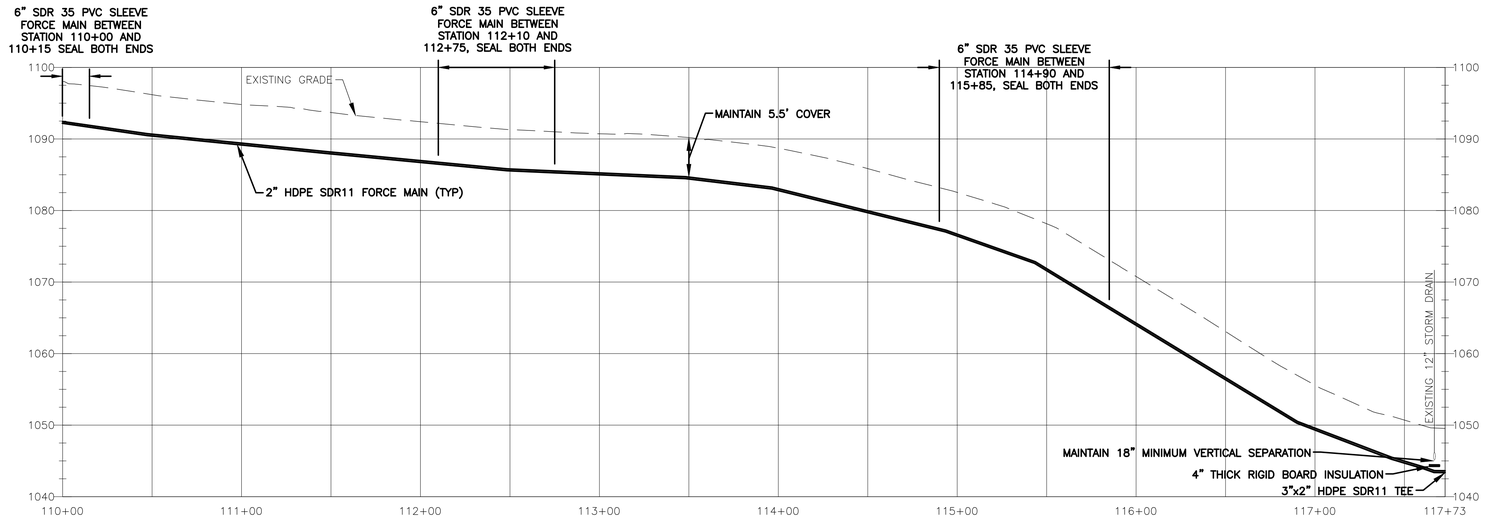
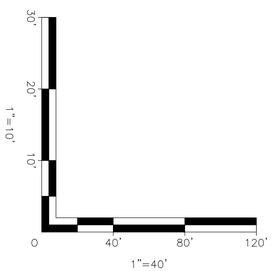


SEWER PROFILE - STA 110+00 TO 117+73

SCALE: H– 1"=40'
V– 1"=10'



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TOWN OF LONDONDERRY
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SEWER MAIN PLAN AND PROFILE STA 110+00 TO 117+73

LONDONDERRY, VERMONT

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Date	SEPTEMBER 13, 2024
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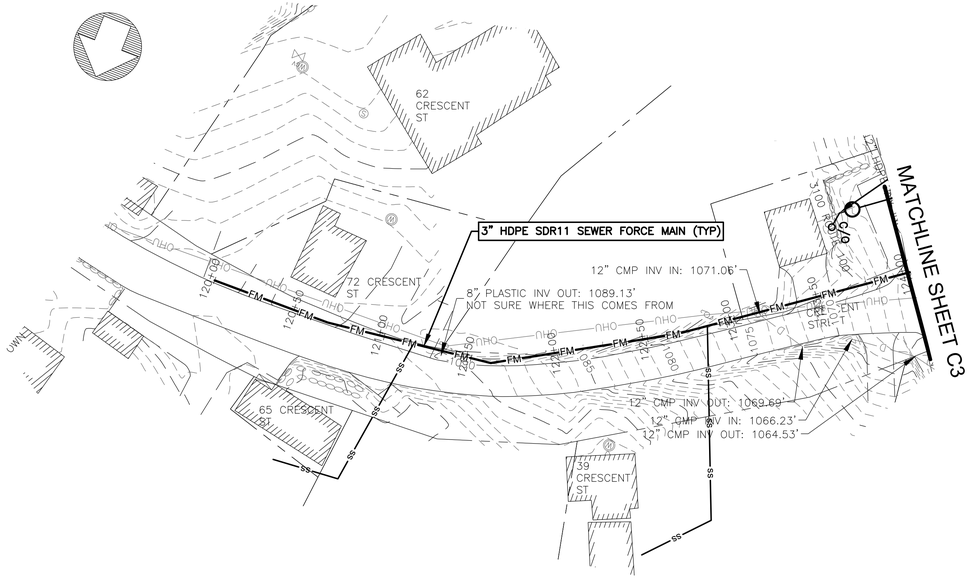
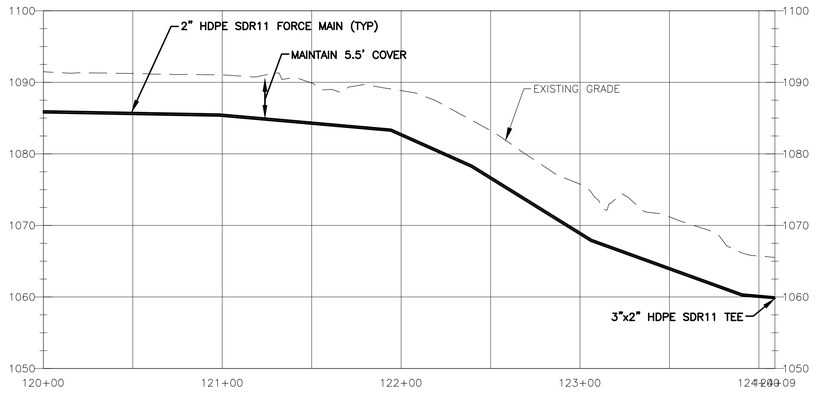
C11



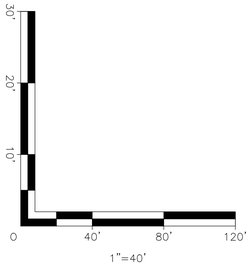
SEWER PLAN - STA 120+00 TO 124+09

SCALE: 1"=40'



SEWER PROFILE - STA 120+00 TO 124+09

SCALE: H- 1"=40'
V- 1"=10'



NOTES:

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TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

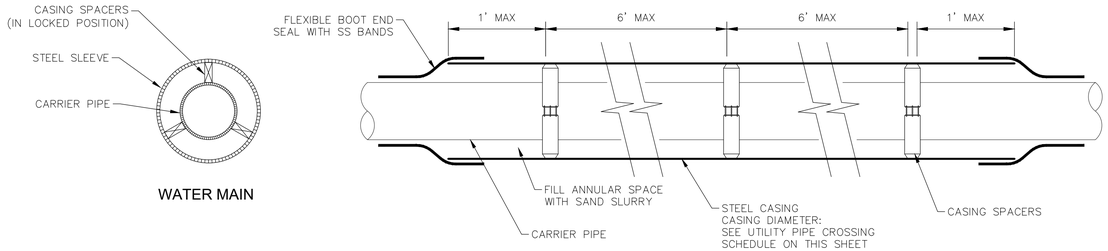
SEWER MAIN PLAN AND PROFILE STA 120+00 TO 124+09

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	C.M.HASKINS
Drawn by	M.C.BISSELL
Reviewed by	C.M.HASKINS
Approved by	C.M.HASKINS
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C12

SHEET 13 OF 16



CASING AND SPACER DETAIL

NOT TO SCALE

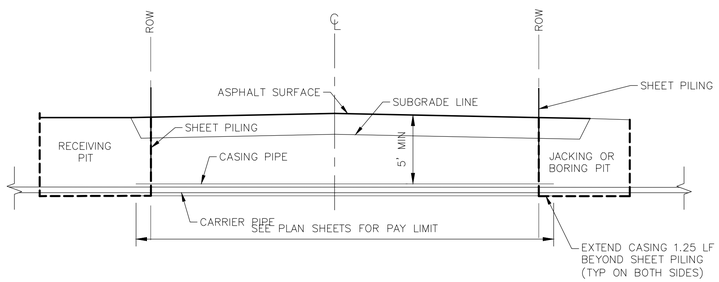
NOTES

1. THE HIGHWAY CROSSING SLEEVE DETAILS ON THIS SHEET REFER TO VERMONT AGENCY OF TRANSPORTATION (VAOT) STANDARD D-20.
2. SHEET PILING MAY BE DRIVEN VERTICALLY AS SHOWN IN THE JACK AND BORE DETAIL.
3. REFER TO PLAN SHEETS FOR DETERMINING SLEEVE LENGTH.
4. IN THE EVENT THAT PERMISSION IS GRANTED BY VAOT TO CUT AN EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, ALL CUTS SHALL BE MADE WITH A SAW TO FULL DEPTH.
5. BACKFILL OF PITS SHALL BE IN ACCORDANCE WITH THE TRENCH DETAIL ON SHEET C6 AND THE SPECIFICATIONS. REFER TO THE SPECIFICATIONS FOR PAVEMENT RESTORATION REQUIREMENTS.

CARRIER PIPE				CASING PIPE			
NOMINAL DIAMETER (IN.)	INTENDED USE	MATERIAL	JOINT TYPE	MATERIAL	JOINT TYPE	WALL THICKNESS (IN IN. MIN.)	MINIMUM ID (IN.)
3"	SEWER FORCE MAIN	HDPE SDR11	FUSED	SCH 40 ASTM STEEL	WELDED	0.500"	16"

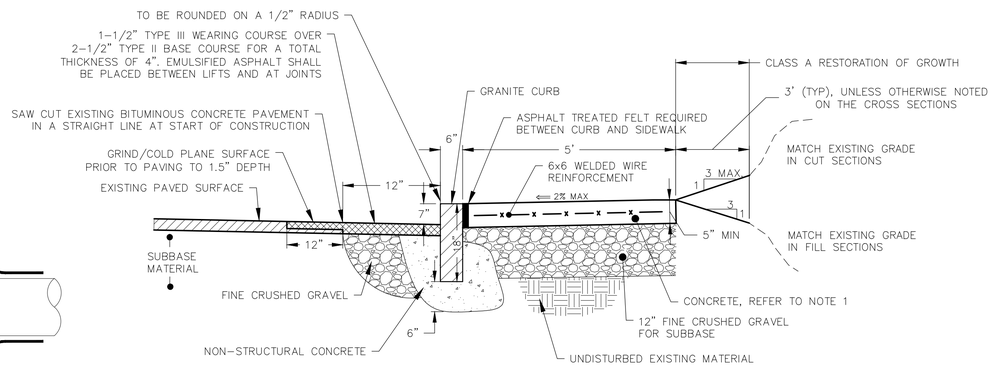
HIGHWAY CROSSING SLEEVE TABLE

NOT TO SCALE

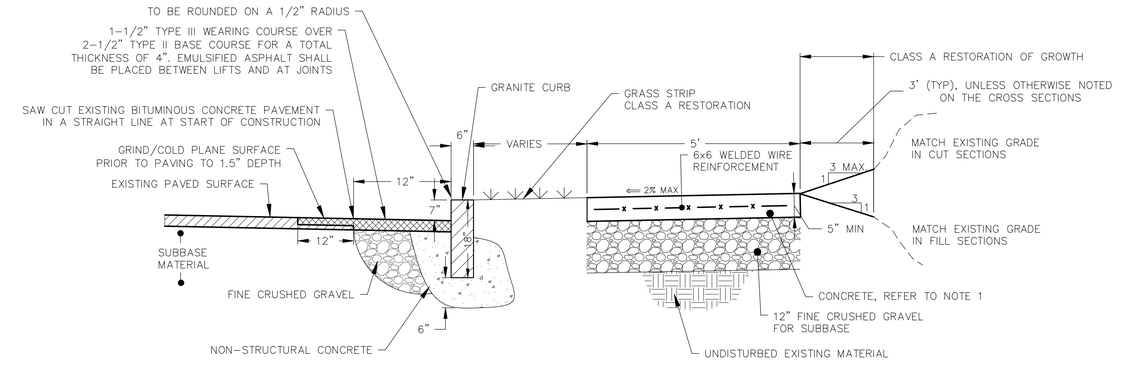


TYPICAL JACK AND BORE DETAIL

SCALE 1"= 6'



WITHOUT GREEN SPACE



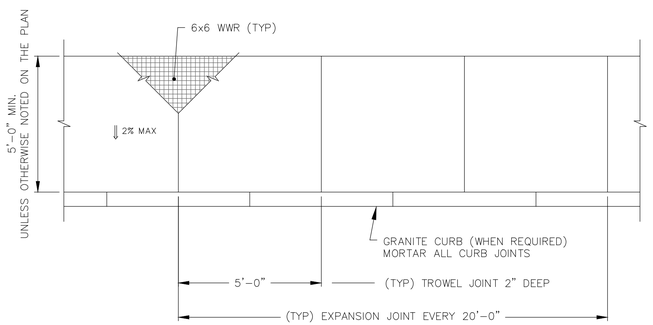
WITH GREEN SPACE

PORTLAND CEMENT CONCRETE SIDEWALK DETAIL

NOT TO SCALE

NOTES:

1. TWO SECTIONS OF FINE CRUSHED GRAVEL ARE ACCEPTABLE FOR INITIAL CURB INSTALLATION AND LEVELING PRIOR TO THE CONCRETE PROVIDED THE TWO SECTIONS OF GRAVEL DO NOT EXCEED 10% OF THE CURB LENGTH.
2. RESTORE ALL DISTURBED GRASS AREAS TO CLASS A RESTORATION.
3. CLEAN SURFACES AND TACK COAT EDGES OF EXISTING PAVEMENT PRIOR TO PLACING NEW PAVEMENT.
4. ALL CONCRETE SIDEWALK SHALL BE 5 FEET WIDE, UNLESS OTHERWISE NOTED ON THE PLANS.
5. REFER TO CROSS SECTIONS FOR PROPOSED SIDEWALK ELEVATION INFORMATION.
6. IN ALL AREAS WHERE NEW CONCRETE SIDEWALK ABUTS EXISTING SIDEWALK, THE NEW SIDEWALK SHALL BE PINNED TO THE EXISTING SIDEWALK. REFER TO JOINT DETAIL A ON THIS SHEET.
7. DRIVEWAY PAVEMENT RESTORATION (3" THICK) SHALL BE DONE IN 2 LIFTS OF 1.5" TYPE III WEARING COURSE. DRIVEWAY PAVEMENT RESTORATION SHALL MATCH EXISTING DRIVEWAY EDGES AS SHOWN ON PLANS. DRIVEWAY PAVEMENT RESTORATION SHALL BE 3 FEET FROM BACK OF SIDEWALK ON GRAVEL DRIVES AND 1 FOOT FROM BACK OF SIDEWALK ON PAVED DRIVES UNLESS OTHERWISE NOTED ON THE PLANS OR SECTIONS. IN AREAS WITH GRASS STRIPS, DRIVEWAY APRONS SHALL BE PAVED FROM SIDEWALK TO ROAD, REGARDLESS OF EXISTING DRIVEWAY MATERIAL.



TYPICAL CONCRETE WALK PLAN DETAIL

NOT TO SCALE

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REVISIONS

DATE	COMMENTS	BY

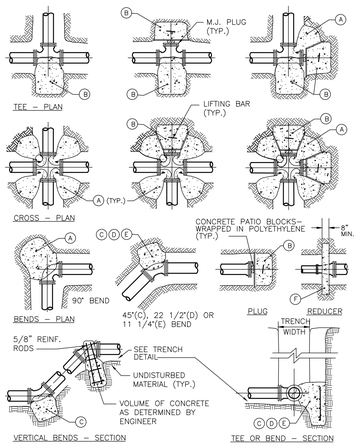
TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

JACK AND BORE AND SITE DETAILS

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	N.R. JOHNSON
Drawn by	M.C.BISSELL
Reviewed by	R.N. GOODWIN
Approved by	N.R. JOHNSON
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C13



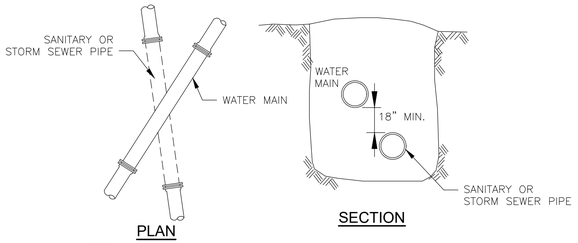
THRUST BLOCK SCHEDULE SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL											
REACTION TYPE		PIPE SIZE									
		4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
TEST PRESSURE = 200 PSIG	Ⓐ	5	11	19	28	39	52	67	85	104	148
	Ⓑ	4	8	13	20	28	37	48	60	74	105
	Ⓒ	3	6	10	15	21	29	37	46	57	81
	Ⓓ	2	3	6	8	11	15	19	24	29	41
	Ⓔ	1	2	3	4	6	8	10	12	15	21
	Ⓕ	–	4	10	16	24	30	41	47	54	77

NOTES:
1. THRUST RESTRAINT IS REQUIRED FOR ALL TEES, BENDS, REDUCERS, CAPS, PLUGS, OR CROSSES.
2. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
3. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
4. PLACE CONCRETE PATIO BLOCKS IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.
5. PRE–FORMED AND PRE–POURED THRUST BLOCKS ARE NORMALLY NOT ACCEPTABLE AND SHALL ONLY BE USED WHEN SPECIFICALLY APPROVED BY THE OWNER.
6. THE USE OF A MECHANICAL JOINT RESTRAINT SYSTEM DOES NOT REDUCE THE REQUIREMENTS SHOWN IN THIS DETAIL.
7. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE OR BUILDING PAPER PRIOR TO INSTALLATION OF CONCRETE RESTRAINT.
8. IF THREADED ROD IS USED, IT SHALL BE ANSI A242 FY50 PIPE RESTRAINT NUTS TO MATCH AWWA C111.
9. SIZES FOR REDUCERS SHOWN ARE BASED ON THE SMALLEST AVAILABLE RUN SIZE FOR A GIVEN PIPE SIZE.
10. INSTALL LIFT HOOKS INTO THRUST BLOCKS AT END CAPS AND PLUGS.
11. TEST PRESSURE TO BE 200 PSI MIN. AT LOW END OF THE TEST SECTION. SQUARE FEET OF CONCRETE THRUST BLOCKING FOR OTHER TEST PRESSURES IS DIRECTLY PROPORTIONAL TO THE ABOVE TABLE. FOR INSTANCE, AT 300 PSI TEST PRESSURE, THE NUMBERS SHOWN IN THE ABOVE TABLE ARE MULTIPLIED BY 1.5. SEE BELOW FOR EXAMPLE CALCULATION.
12. THRUST BLOCK AREA IS BASED ON A SOIL BEARING STRENGTH OF 1500 LBS/SF AND A SAFETY FACTOR OF 1.5. MULTIPLY THE BEARING AREA FROM ABOVE (WITH CONSIDERATION OF TEST PRESSURE) AND MULTIPLY BY THE FOLLOWING FACTORS TO DETERMINE BEARING AREA REQUIRED FOR VARIOUS SOIL CONDITIONS:

SOIL TYPE	BEARING CAPACITY (LB/SF)	FACTOR
SOFT CLAY	1,000	1.50
SILT	1,500	1.00
SANDY SILT	3,000	0.50
SAND	4,000	0.38
SANDY GRAVEL	5,000	0.30
SANDY CLAY	6,000	0.25
GRAVEL W/ ROCK	7,000	0.21
HARD CLAY	9,000	0.17

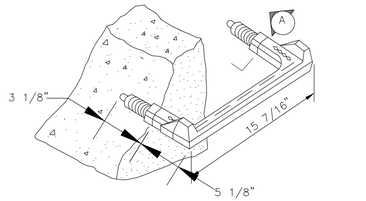
EXAMPLE: AN 8–INCH 90° BEND IN SANDY GRAVEL SOILS, TEST PRESSURE OF 200 PSI:
AREA REQUIRED = 19 SF x 1 x 0.30 = 5.7 SF

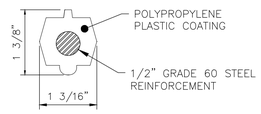
THRUST BLOCK DETAILS AND NOTES
NOT TO SCALE



NOTES:
1. PARALLEL INSTALLATION: WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED MANHOLE OR SANITARY SEWER. THIS DISTANCE CAN BE REDUCED TO 5 FEET FOR STORM SEWERS. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
2. CROSSINGS: WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SANITARY OR STORM SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF THE SEWER MAIN IS OVER THE WATER MAIN, THE FIRST SEWER PIPE JOINTS ON EACH SIDE OF THE WATER MAIN MUST BE CONCRETE ENCASED. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED. WATER MAINS SHALL NOT PASS THROUGH SEWER MANHOLES OR BE SUBMERGED IN BASINS CONTAINING SEWAGE OR OTHER GROSSLY CONTAMINATED OR HAZARDOUS MATERIAL.
3. EXCEPTION: THE ENGINEER MUST SPECIFICALLY APPROVE ANY VARIANCE FROM THESE REQUIREMENTS WHEN IT IS IMPOSSIBLE TO OBTAIN THE SPECIFIED SEPARATION DISTANCES.
4. BELL JOINT CLAMPS ON THE PUSH–ON JOINTS OF DUCTILE IRON WATER MAIN SHALL BE UTILIZED IN LOCATIONS WHERE THE MINIMUM SEPARATION REQUIREMENTS CANNOT BE MET. ENGINEER MUST BE NOTIFIED AND APPROVE OF EACH INDIVIDUAL USE PRIOR TO INSTALLATION.

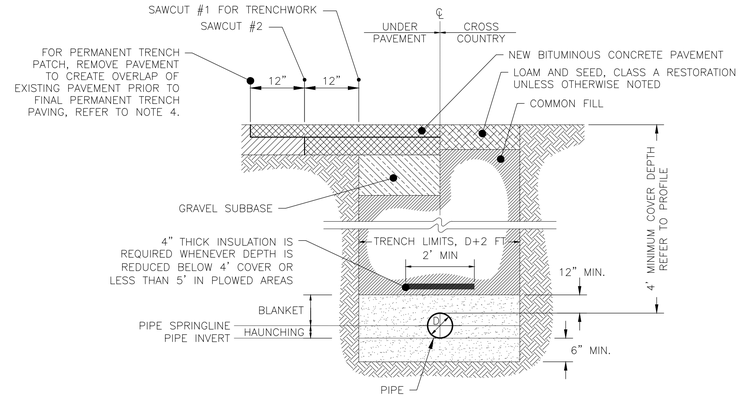
SANITARY AND/OR STORM SEWER PIPE AND WATER MAIN CROSSING DETAIL
NOT TO SCALE





SECTION Ⓐ
NOT TO SCALE

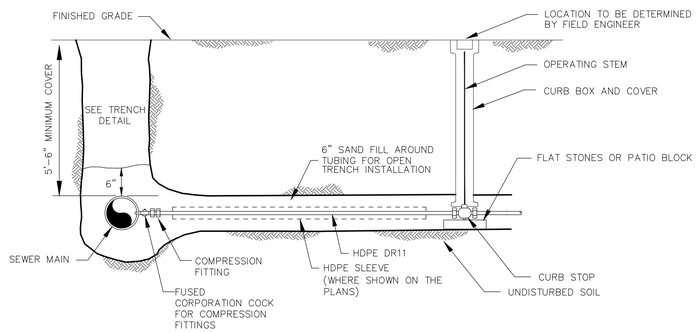
MANHOLE STEP DETAIL
NOT TO SCALE



SANITARY SEWER MAIN TYPICAL TRENCH DETAIL
NOT TO SCALE

NOTES:
1. TYPICAL TRENCH DETAILS SHOWN HEREIN ARE BASED ON THE USE OF PVC OR HDPE PIPE.
2. REFER TO SPECIFICATIONS FOR PAVEMENT THICKNESS REQUIREMENTS.
3. REFER TO THE SPECIFICATIONS FOR COMPACTION, PAY LIMITS, AND SPECIALTY MATERIALS FOR BLANKET, HAUNCHING, BEDDING, AND GRAVELS. HAND TAMP HAUNCHING TO REMOVE ALL VOIDS UNDER PIPE.
4. REMOVE EXISTING PAVEMENT TO A DEPTH EQUAL TO NEW WEARING COURSE PAVEMENT THICKNESS FOR A MINIMUM DISTANCE OF 12–INCHES FROM SAWCUT #2. CLEAN SURFACES AND TACK COAT ALL EDGES OF EXISTING PAVEMENT.
5. TRENCH WIDTH SHALL BE SUFFICIENT TO ALLOW PIPE TO BE LAID AND JOINED PROPERLY AND FOR PLACEMENT AND COMPACTION OF BEDDING. TRENCH SUPPORT SHALL BE ADEQUATE TO PERMIT SAFE ACCESS BY INSPECTOR FOR COMPACTION SAMPLES.
6. WHERE PIPE IS INSTALLED IN GRAVEL SHOULDER OR IN GRAVELED ROAD, GRAVEL SUBBASE MATERIAL AND COMPACTION SHALL BE AS SPECIFIED.
7. REFER TO THE NOTES ON SHEET G1 AND SECTION 02740 FOR PAVEMENT RESTORATION REQUIREMENTS.

BUILDING SERVICE CLEANOUT SECTION DETAIL
NOT TO SCALE

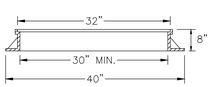


TYPICAL SERVICE CONNECTION DETAIL
NOT TO SCALE

NOTES:
1. SEWER SERVICE, FITTINGS, AND SLEEVE SHALL BE SIZED AS NOTED ON THE SEWER MAIN PLAN DRAWINGS.

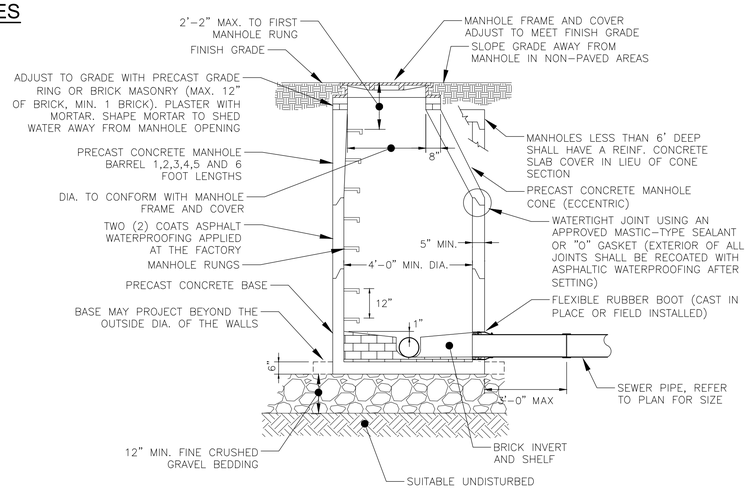
COVER PLATE
MIN. WEIGHT = 150 LBS.

COVER SECTION



FRAME SECTION
MIN. WEIGHT = 250 LBS.

MANHOLE FRAME AND COVER DETAIL
NOT TO SCALE



PRECAST CONCRETE MANHOLE DETAIL
NOT TO SCALE

60% DESIGN SUBMITTAL
NOT FOR CONSTRUCTION

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REVISIONS

DATE	COMMENTS	BY

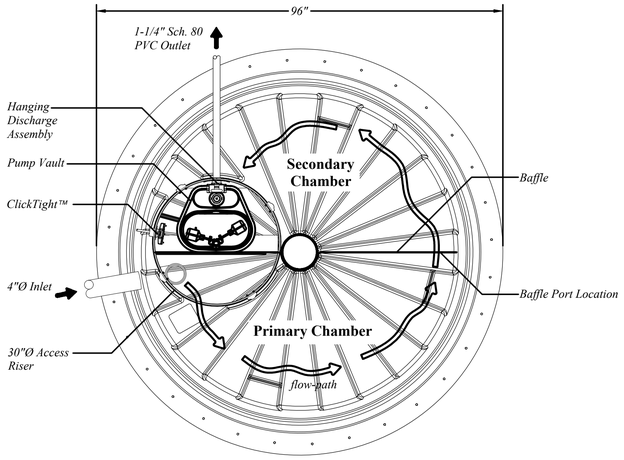
TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

TYPICAL SEWER DETAILS

LONDONDERRY, VERMONT

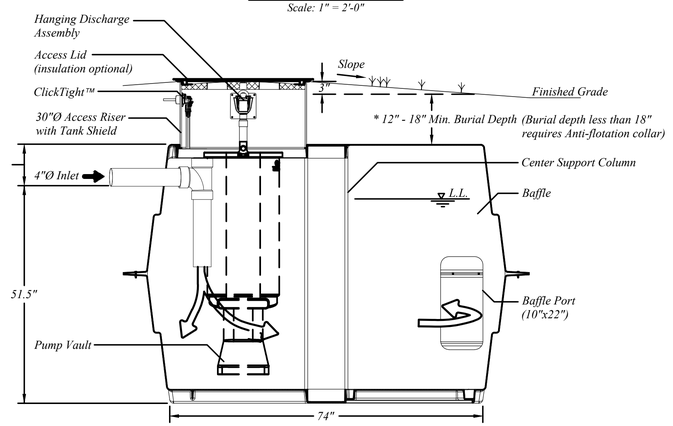
Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	N.R. JOHNSON
Drawn by	M.C.BISSELL
Reviewed by	R.N. GOODWIN
Approved by	N.R. JOHNSON
Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C14



M1000 Tank Top Detail

Scale: 1" = 2'-0"



M1000 Tank Side Detail

Scale: 1" = 2'-0"

General Notes:

Tank Volumes: *Total Volume: 1223 gal±*
Operating Volume: 1006 gal± @ 48"
Unit volume at typical Operating Depth : 20 gal./in.±

Loads: *Top = 500 psf minimum*
Lateral Load = 62.4 pcf, EFP
Concentrated Wheel Load = 2500 lb.
The septic tank shall be capable of withstanding long-term hydrostatic loading, in addition to the soil loading, due to a water table maintained at ground surface.
*Soil Bearing = 1000 psf (*re-evaluate support base if soil bearing is less or unequal*)*

Method of calcuations:
1. Tanks shall be analyzed using strength design methods and finite element analysis for buried structures.
2. Calculations shall address the following:
- *strength*
- *buckling*
- *deflection of 0.5 - 1% of the tank diameter, based on service load (including long-term deflection lag)*
- *buoyancy*

3. Performance testing shall include vacuum testing followed by a hydrostatic test.

Material: *Resin: polydicyclopentadiene*

The properties listed here along with the minimum thickness as shown in the details are considered design minimums that must be maintained during the manufacturing of the tanks. The primary strength properties are listed below:

Property	***DCPD***
Flexural modulus E_f	*274,000 psi*
Tensile strength F_t	*6,700 psi*
Flexural strength F_b	*10,500 psi*

Property	***DCPD***
Compressive strength F_c	*9,200 psi*
Shear In-Plane F_s	*7,180 psi*
Flexural Rigidity	*585 psi*

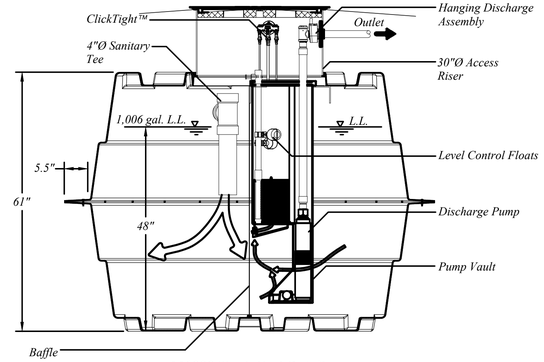
Poisson ratio = 0.400 (Any permanent metal part shall be 300 series stainless steel.)

Installation: *Installation, bedding, compaction, etc., shall be in "strict" compliance with the manufacturers standards and state or local rules and or guidelines. All tanks shall be set level on a minimum 4 inch thick compacted sand or approved granular bedding overlying a firm uniform base. The base shall be stable and uniform in order to ensure equal bearing across the tank bottom. Installations with 18 inches or less of ground cover may require additional buoyancy considerations as described in the manufacturers instructions. A minimum cover of 12 inches is required over the tank in areas subject to occasional light wheel loads. Refer to installation instructions Document NIM-LOS-1.*

Test: *Tanks shall be tested and certified watertight per manufacturers recommendations and or any prevailing rules or guidelines, whichever is more restrictive.*

Tank Markings: *Place marking on the upper most surface over the outlet.*
Nominal Liquid capacity: 1000 gal. ±
Max burial depth: 5ft.
Max traffic (wheel): 2500 lbs.
Date manufactured:
Permit no.:

Inside Height Inches	***Total Gallons***
60	1217
54	1124
48	1006
42	881
36	744
30	601
24	460
18	324
12	200
6	83
0	0



M1000 Tank End Detail

Scale: 1" = 2'-0"

60% DESIGN SUBMITTAL
NOT FOR CONSTRUCTION

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REVISIONS

BY	COMMENTS	DATE

TOWN OF LONDONDERRY
SOUTH VILLAGE WASTEWATER

TYPICAL SEWER DETAILS

LONDONDERRY, VERMONT

Project #	3190016
Project Mgr.	C.M.HASKINS
Design by	N.R. JOHNSON
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Date	SEPTEMBER 13, 2024
Scale	AS SHOWN

C15

SHEET 16 OF 16

FILE: P:\Londonderry VT\3124003 South Village WW\CAD\DETAILS.dwg Sep 12, 2024 - 11:23am

STATE PLANE

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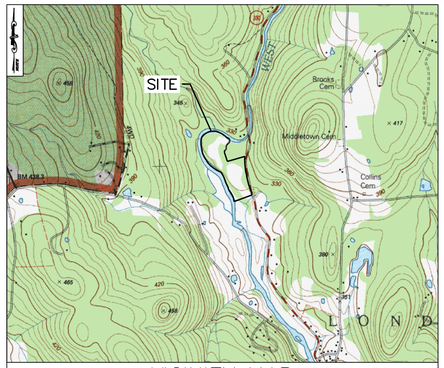
LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- GRAVEL
- PAVEMENT
- RIGHT-OF-WAY LINE
- BUILDINGS
- TREE LINE
- WATER VALVE / MANHOLE COVER
- 6W — 6" WATER LINE
- 8S — 8" MUNICIPAL SEWER LINE
- 6S — 6" MUNICIPAL SEWER LINE
- 4S — 4" SEWER LINE
- ST — STORM WATER LINE
- UTILITY POLE/IRON PIPE
- OHV — OVERHEAD POWER LINES

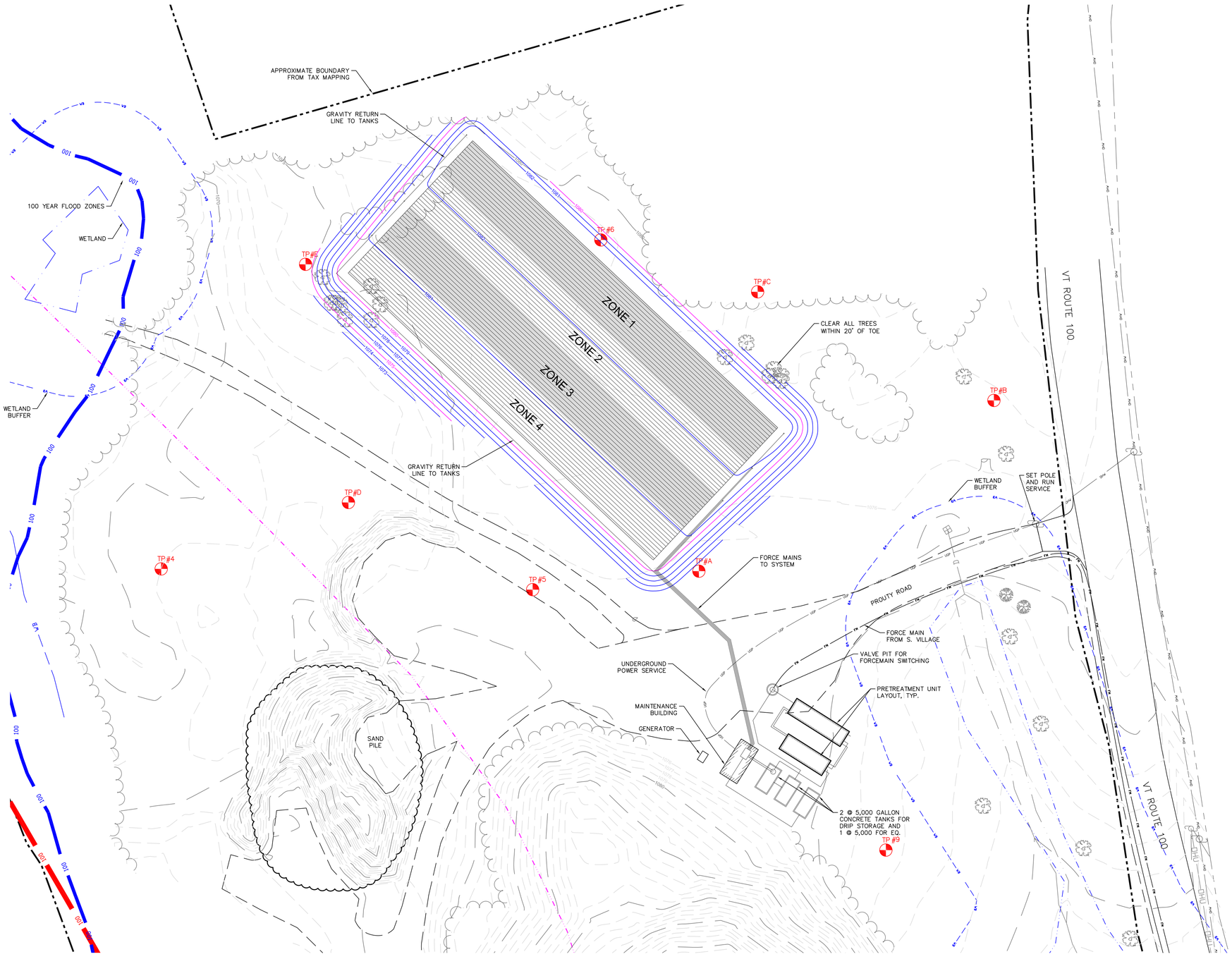
GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



VICINITY MAP
1"=2,000'



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BENNINGTON, VT 05201
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rev.	date	description

LANDS OF TOWN OF LONDONDERRY
4155 VT ROUTE 100

PROUTY LANDS
COMMUNITY SEPTIC 60% DESIGN

TOWN OF LONDONDERRY, WINDHAM COUNTY, VERMONT

drawn	checked
CMP	MCR
date	scale
9/17/24	1"=30'
project no.	
23-069VT	
sheet no.	
60%-1	

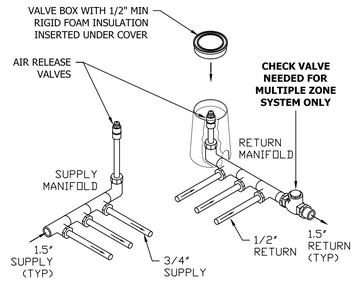
GENERAL CONSTRUCTION NOTES:

1. The system shall not be installed in wet or frozen soils.
2. Do not park, drive large equipment, or store materials on the dispersal area. No activity should occur on the dispersal area other than the minimum required to install the system.
3. All installation and construction techniques shall conform to the state and local codes pertaining to on-site wastewater systems and the permit for the site.
4. If site conditions are determined to require the installation of the system to deviate from the design plans, all work shall stop immediately and the designer and inspector shall be notified. Any ongoing work shall be the sole responsibility of the contractor.
5. Drip tubing may be installed with a vibratory plow, a static plow, a narrow trencher (< 6" wide), by hand trenching, or by scarifying the surface and bedding the drip tubing in clean sand meeting the requirements for fill material in the state code. For sand fill systems, cover consisting of 2" of the same sand and then topsoil meeting the approved depth requirement shall be provided.
6. All drip tubing is to be installed parallel to the contour.
7. Air release valves shall be placed below the ground surface in an insulated valve box but at an elevation above the highest drip line in that particular zone.
8. Vegetative cover must be replaced for installations where it is removed or buried during installation.
9. All cutting of rigid pvc pipe, flexible pvc, and drip tubing of size 2" or smaller shall be accomplished with pipe cutters. No sawing is allowed.
10. All rigid PVC pipe, flexible PVC pipe and drip tubing shall have the ends covered with duct tape after cutting to prevent construction debris from entering the pipe.
11. Prior to gluing, all joints shall be inspected for and cleared of any debris. All joints shall be cleaned and primed with pvc primer prior to being glued.
12. All PVC pipe and fittings shall be sch 40.
13. Whenever possible, all force mains shall be tested for leaks prior to being back- filled by pressurizing the system and observing for leakage.
14. The hydraulic unit shall be placed on top of the septic/treatment tank, pump chamber, or on a bed of 4" - 6" thick 3/4" gravel in a location within 30' of the pump.
15. If standing water is a problem in the vicinity of the hydraulic unit, a screened drain to daylight is required.
16. Electrician to provide separate circuits for the pump and controls/alarm, or as required by state and local codes.
17. All conduit entering the control panel shall be sealed at both ends to prevent condensation or gases inside the panel.

COLD CLIMATE NOTES:

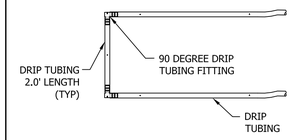
1. All attempts should be made to place the hydraulic unit in a location with an open southern exposure for warming purposes.
2. All pipes entering and leaving the hydraulic unit shall elbow vertically down 90 degrees to a depth below the frost line prior to extending away from the unit horizontally.
3. The supply and return lines shall be installed below the frost line. When this is not possible, rigid foam insulation (min 1" thick) shall be placed over those pipes that are above the frost line.
4. The vertical sections of pipe that travel through the frost zone and connect the supply and return lines to the manifolds shall be insulated sch 40 pvc pipe. Insulation shall consist of foam pipe wrap insulation and 1" rigid foam insulation strips made into a box. (see insulation detail)
5. Foil wrap insulation shall be placed over the supply/return manifolds and loop connectors so that at least 1' of insulation extends each direction beyond the fittings. (see insulation detail)
6. Air release valve enclosures shall be insulated with bagged Styrofoam peanuts, foil wrap insulation, and rigid foam insulation inside the lid. (see insulation detail)
7. All loops connecting drip runs shall be slightly elevated (minimum 1" - 2") so that they drain into the drip tubing after the pump shuts off. It is the contractor's responsibility to ensure that these loops stay elevated during and after the loops are backfilled.
8. Dense vegetative cover is to be established over the supply trench, return trench, manifolds, and drip tubing prior to the first exposure to freezing temperatures. If vegetation cannot be established then the entire drip dispersal field is to be covered with a thick layer (minimum 6") of mulch, straw/hay, or frost blanket until such turf cover is established.
9. Vegetation height over the drip dispersal area should be a minimum of 4" - 6" throughout the winter months.

NOTES:
1. ALL RIGID AND FLEXIBLE PVC ARE TO BE LOCATED ABOVE THE DRIP LINE TO ALLOW THE PIPES TO DRAIN.
2. THE AIR RELEASE VALVES SHALL BE PLACED AT THE HIGHEST POINT ON THE SUPPLY AND RETURN LINE FOR EACH ZONE.
3. EACH ZONE TO HAVE TWO AIR RELEASE VALVES.
4. RETURN LINES TO BE CONNECTED TO A COMMON RETURN LINE.

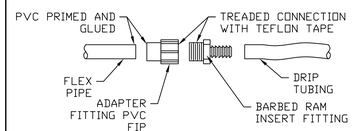


TYPICAL MANIFOLD CONNECTION
(NOT TO SCALE)

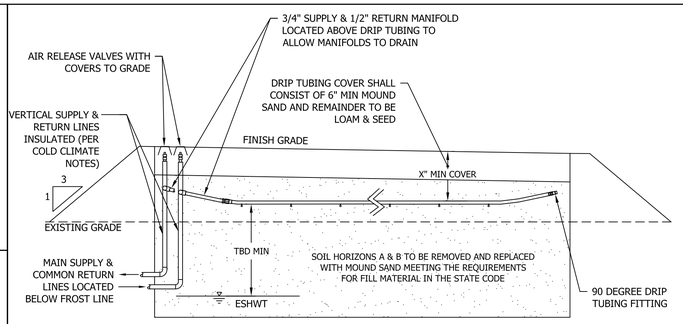
NOTE:
ALL DRIP LOOPS ARE TO BE LOCATED 2" ABOVE THE DRIP LINE TO ALLOW FOR THE LOOPS TO DRAIN.



TYPICAL DRIP LOOP CONNECTION
(NOT TO SCALE)



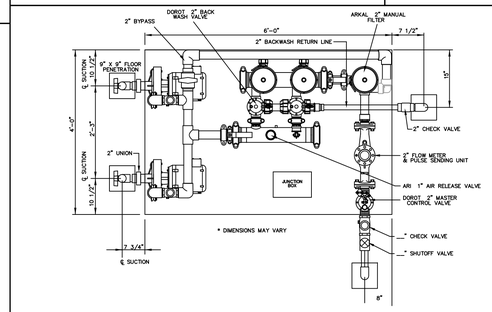
CONNECTIONING DRIP TUBING TO FLEXIBLE PVC PIPE

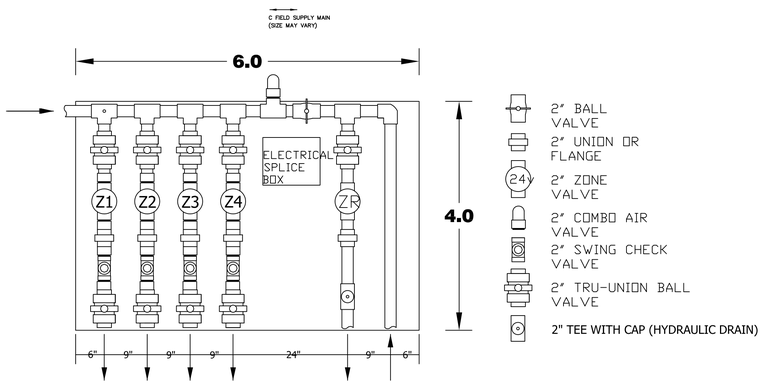


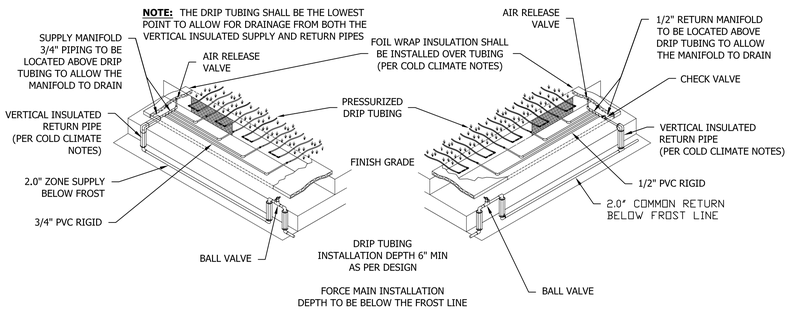
PERC-RITE FIELD (108' x 249')
(NOT TO SCALE)

Note: All Perc-Rite components shall be obtained from Advanced Onsite Services.

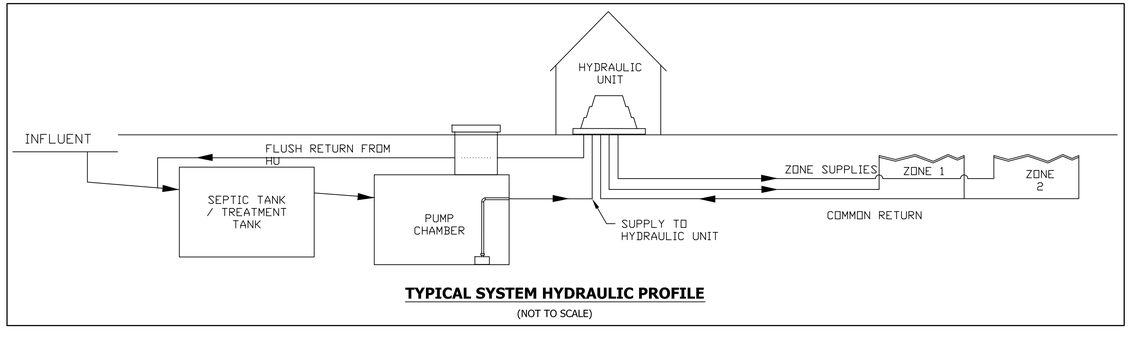
PERC-RITE DRIP TUBING Z4(14/13)1







STANDARD DRIP SYSTEM (TOP FEED MANIFOLD)
(NOT TO SCALE)



TYPICAL SYSTEM HYDRAULIC PROFILE
(NOT TO SCALE)

MOUND SYSTEM INSPECTION SCHEDULE

1. ALL INSPECTIONS ARE TO BE PERFORMED BY A CLASS A DESIGNER AND/OR ENGINEER.
2. THE SITE PREPARATIONS SHALL BE INSPECTED UPON COMPLETION OF THE PLOWING OF THE MOUND AREA IN ACCORDANCE WITH CHAPTER 1 RULE 1-913(e)(5)(f)(1) AND PRIOR TO THE PLACING OF THE FILL MATERIAL.
3. THE FORCE MAIN "PRESSURE" AND "LEAKAGE" TESTS WILL BE PERFORMED UPON COMPLETION OF THE FORCE MAIN PIPE INSTALLATION
4. THE DISTRIBUTION SYSTEM LATERALS SHALL BE TESTED FOR A MINIMUM PRESSURE OF 1 PSI OR 2.3' OF HEAD AND EVEN DISTRIBUTION IN ACCORDANCE WITH CHAPTER 1 RULE 1-913(E) PRIOR TO COVERING THE DISTRIBUTION SYSTEM.

60%

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LANDS OF TOWN OF LONDONDERRY
4155 VT ROUTE 100

PROUTY LANDS
COMMUNITY SEPTIC 60% DESIGN

TOWN OF LONDONDERRY, WINDHAM COUNTY, VERMONT

drawn	checked
CMP	MCR
date	scale
9/17/24	N.T.S.
project no.	
23-069VT	
sheet no.	
60%-2	

CONSTRUCTION NOTES

1) CONSTRUCTION OF THIS SYSTEM MUST CONFORM TO THE STANDARDS SET FORTH BY THE STATE OF VERMONT, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1 AND CHAPTER 21. SPECIFICALLY WELL DETAILS SHALL BE INCONFORMANCE WITH CHAPTER 21, APPENDIX A, PART 12.3.

2) LOCAL HEALTH PERMIT SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION.

3) PRIOR TO ANY CONSTRUCTION, THE LOCATIONS OF SEWAGE DISPOSAL SYSTEM COMPONENTS AND WATER WELL LOCATION SHALL BE STAKED IN THE FIELD BY AN ENGINEER.

4) SEPTIC TANKS, PUMP STATIONS, AND DISTRIBUTION BOXES SHALL BE WATER TIGHT, REINFORCED CONCRETE, AND SET LEVEL. CONTRACTOR SHALL INSTALL ALL ACCESS MANHOLES, BAFFLES AND PLUMBING COMPONENTS AS PER THE PLANS. ALL PENETRATIONS INTO TANKS SHALL BE MADE WATER TIGHT.

5) GRAVITY SEWER PIPING SHALL BE 4 INCH (4") DIAMETER MINIMUM AND MAINTAIN A MINIMUM SLOPE OF ONE QUARTER INCH PER FOOT (S=0.02') FOR PIPE CONTAINING RAW SEWAGE ONLY AND MAINTAIN A MINIMUM SLOPE OF 1/8 INCH PER FOOT (S=0.01') FOR PIPES CONTAINING EFFLUENT, UNLESS OTHERWISE NOTED. CLEAN OUTS SHALL BE INSTALLED EVERY 100 FEET (100') OF RUN AND UPSTREAM OF ANY CHANGE IN DIRECTION.

6) THE GROUND SURROUNDING ACCESS MANHOLES, SEPTIC TANKS, PUMP STATIONS, SEWAGE DISPOSAL FIELDS, AND WELLS SHALL BE GRADED TO DRAIN AWAY.

7) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING THE CONSTRUCTION INSPECTION AND SYSTEM TESTING OF THE SEWER AND WATER SYSTEM WITH AN ENGINEER PRIOR TO THE BACK FILLING OF THE SYSTEM.

8) DO NOT TRAVEL IN THE SEWAGE DISPOSAL SYSTEM WITH RUBBER TIRED MACHINERY.

9) THE CONTRACTOR SHALL RECORD ALL AS-BUILT DIMENSIONS, LOCATIONS, ELEVATIONS, AND MATERIAL SPECIFICATIONS AS REQUIRED TO LOCATE THE ENTIRE SYSTEM IN THE FUTURE, AND SUPPLY A WRITTEN COPY TO THE ENGINEER.

10) CONTRACTOR SHALL TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS UNTIL GROWTH IS ESTABLISHED.

11) INDIVIDUAL DRILLED WELL ISOLATION DISTANCES:
- 10 FEET FROM PROPERTY LINES
- 15 FEET FROM DRIVES SERVING LESS THAN THREE RESIDENCES
- 25 FEET FROM ROADWAY SHOULDER AND EDGE OF PARKING LOTS
- 50 FEET FROM BUILDING SEWER PIPE, SEPTIC TANK, PUMP STATION, AND FORCE MAINS
- 100 FEET FROM HERBICIDE APPLICATION AREA, AND DOWN GRADIENT SEWAGE DISPOSAL AREA
- 200 FEET FROM UP GRADIENT SEWAGE DISPOSAL AREA

12) ISOLATION DISTANCE WATER SERVICE LINE TO LEACH FIELD 25'

FORCE MAIN PRESSURE TEST

ALL NEWLY LAID PIPE OR VALVED SECTION THEREOF SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF AT LEAST 1.5 TIMES THE HIGHEST WORKING PRESSURE IN THE SECTION IN ACCORDANCE WITH CHAPTER 1, SECTION 1-1009(b)(1) AS LISTED IN THE FOLLOWING PROCEEDURE. SEE "SEWAGE DISPOSAL SPECIFICATIONS" FOR THE TEST PRESSURE FROM THE PUMP STATION END.

TEST PRESSURES SHALL:
1. NOT BE LESS THAN 50 PSI AT THE HIGHEST POINT ALONG THE TEST SECTION.
2. NOT EXCEED PIPE OR THRUST RESTRAINT DESIGN PRESSURES.
3. BE AT LEAST TWO HOUR DURATION.
4. NOT VARY BY MORE THAN +/- 5 PSI.
5. NOT EXCEED TWICE THE RATED PRESSURE OF THE VALVES WHEN THE PRESSURE BOUNDARY OF THE TEST SECTION INCLUDES CLOSED GATE VALVES.

TEST PRESSURE: GET TEST PRESSURE AT "PRESSURE & LEAKAGE TEST DATA" IN "SEWAGE DISPOSAL SPECIFICATIONS" FOR EACH SYSTEM

PRESSURIZATION: BEFORE APPLYING THE SPECIFIED TEST PRESSURE, EACH VALVED SECTION OF PIPE SHALL BE FILLED SLOWLY WITH WATER TO ALLOW AIR TO BE COMPLETELY EXPELLED FROM THE PIPE AND VALVES. THE TEST PRESSURE SHALL BE APPLIED BY MEANS OF A PUMP CONNECTED TO THE TEE WITH A PLUG IN THE PUMP STATION.

EXAMINATION: ALL EXPOSED PIPE, FITTINGS, VALVES, AND JOINTS SHALL BE EXAMINED CAREFULLY DURING THE TEST. ANY DAMAGED OR DEFECTIVE PIPE, FITTINGS, VALVES, THAT ARE DISCOVERED FOLLOWING THE PRESSURE TEST SHALL BE REPAIRED OR REPLACED WITH SOUND MATERIAL AND THE TEST SHALL BE REPEATED.

FORCE MAIN LEAKAGE TEST

A LEAKAGE TEST SHALL BE CONDUCTED CONCURRENTLY WITH THE PRESSURE TEST IN ACCORDANCE WITH CHAPTER 1, SECTION 1-1009(b)(2) AS LISTED IN THE FOLLOWING PROCEEDURE.

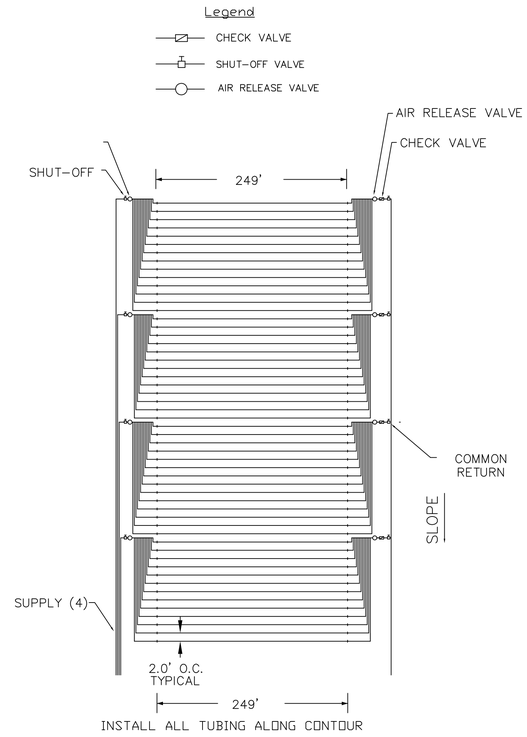
LEAKAGE DEFINED: LEAKAGE SHALL BE DETERMINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO THE NEWLY LAID PIPE, OR ANY VALVED SECTION THEREOF, TO MAINTAIN PRESSURE WITHIN 5 PSI OF THE SPECIFIED TEST PRESSURE AFTER THE AIR IN THE PIPELINE HAS BEEN EXPELLED AND THE PIPE HAS BEEN FILLED WITH WATER.

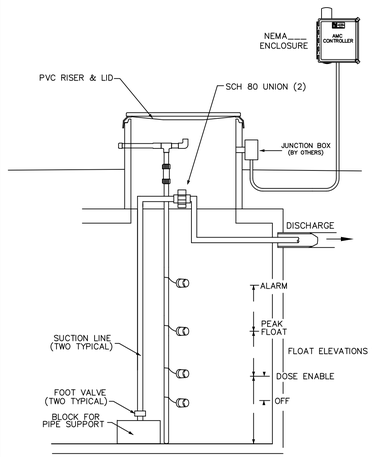
ALLOWABLE LEAKAGE: NO PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{NzDz\sqrt{P}}{7400}$$

L IS THE ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
N IS THE NUMBER OF JOINTS IN THE LENGTH OF THE PIPELINE TESTED
D IS THE NOMINAL DIAMETER OF THE PIPE, IN INCHES
P IS THE AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, PSI.

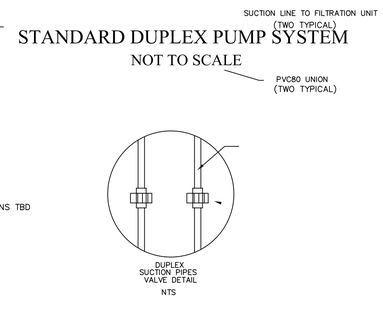
ALLOWABLE LEAKAGE: GET ALLOWABLE LEAKAGE AT "PRESSURE & LEAKAGE TEST DATA" IN "SEWAGE DISPOSAL SPECIFICATIONS" FOR EACH SYSTEM

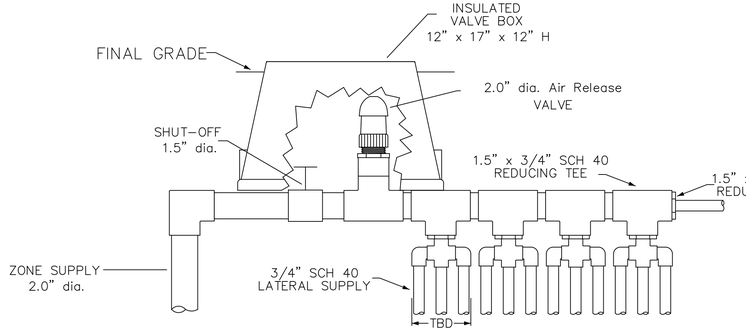




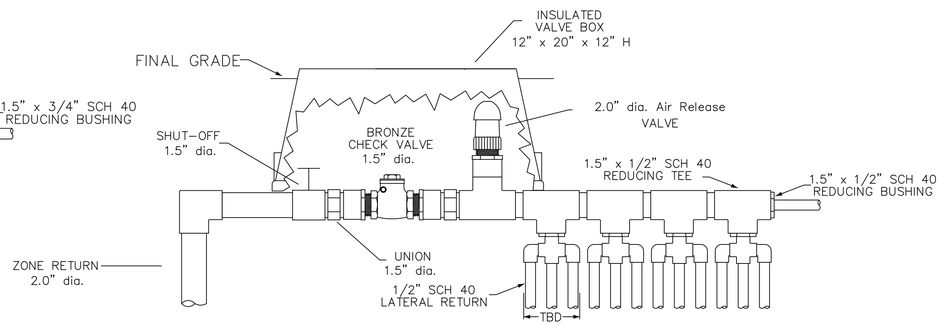
NOTE: TANK BY OTHERS

STANDARD DUPLEX PUMP SYSTEM
NOT TO SCALE





LATERAL SUPPLY
HEADER, 13 CONNECTIONS



LATERAL RETURN
HEADER, 13 CONNECTIONS

COMPLIANCE NOTES:

WATER SERVICE LINES AND WATER SERVICE PIPES SHALL BE PRESSURE TESTED AND LEAKAGE TESTED ACCORDING TO VT DEC CHAPTER 1 RULES, SECTION 1-1209 PROCEDURES PRIOR TO PLACING THE POTABLE WATER SERVICE SUPPLY INTO

A. VERMONT PLUMBING RULES;
B. THE AWWA; OR
C. BY PRESSURIZING THE LINES AND PIPES WITH WATER AT THE WORKING PRESSURE OF THE SYSTEM OR GREATER AND HOLD WITHOUT A DROP IN PRESSURE FOR A MINIMUM OF 16 MINUTES.

DISINFECTION OF WATER SERVICE LINES AND WATER SERVICE PIPES SHALL BE COMPLETED PURSUANT TO THE REQUIREMENTS OF THE VERMONT PLUMBING RULES OR VT ENVIORMENTAL PROTECTION RULES CHAPTER 1 APPENDIX 1210 WHICH STATES THE FOLLOWING:

A. FILL THE WATER SERVICE LINE OR WATER SERVICE PIPE WITH THE WATER/CHLORINE SOLUTION OF 100 MG/L; AND
B. ALLOW THE CHLORINATED WATER TO REST IN THE WATER LINE OR WATER SERVICE PIPE FOR A MINIMUM OF 24 HOURS BEFORE DISPOSING OF THE CHLORINATED WATER

PRIOR TO CERTIFICATION OF THE ANY WELL, IT SHALL BE REQUIRED TO COMPLETE BACTERIA AND OTHER WATER TESTING THAT IS ESTABLISHED ON TABLES 11.5 & 11.6 OF THE VT WATER SUPPLY AND WASTEWATER DISPOSAL RULES. THIS SHALL BE DONE BY THE CERTIFYING ENGINEER OR DESIGNER, ONCE ALL ABOVE CRITERIA HAVE BEEN COMPLETED.

60%

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rev.	date	description

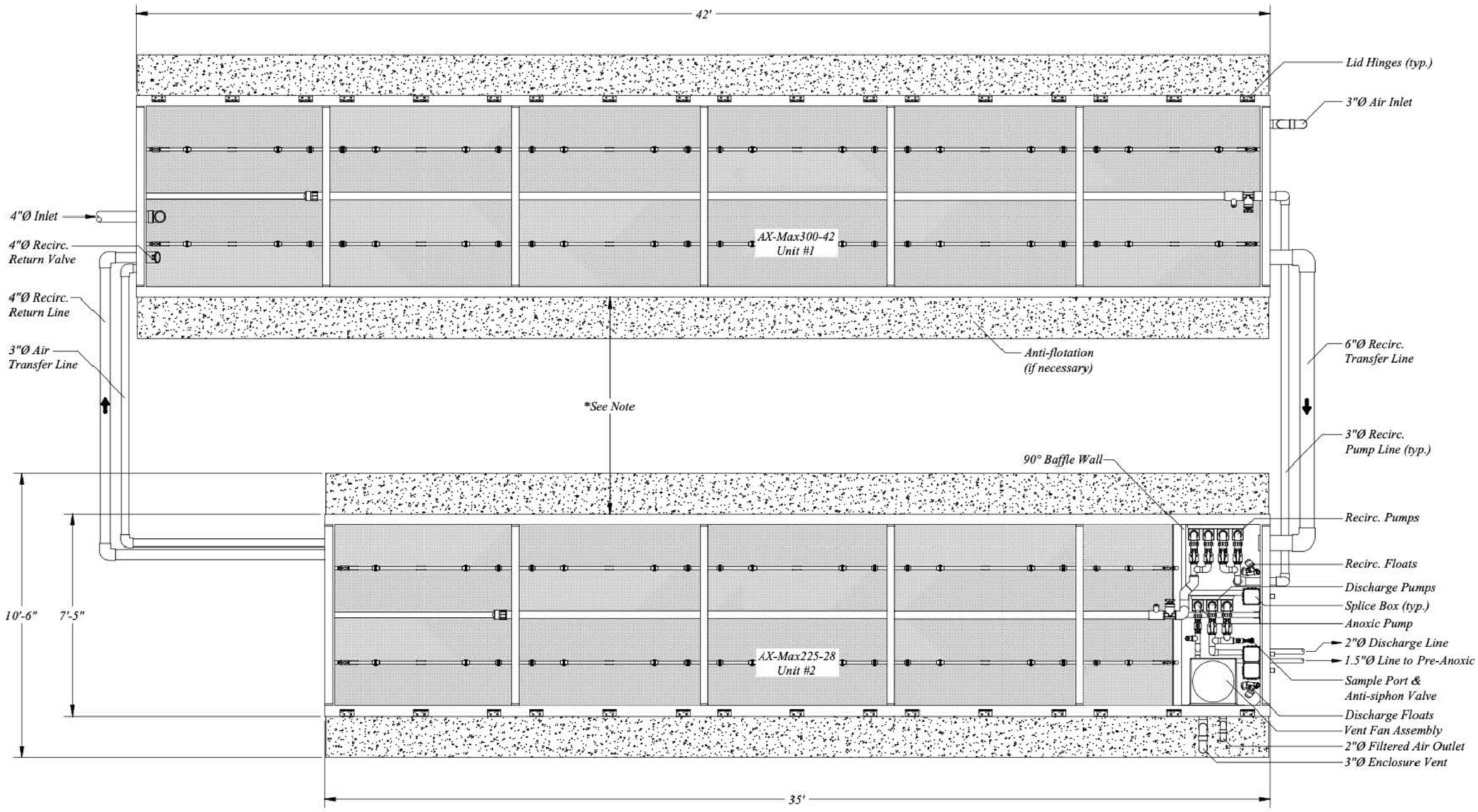
LANDS OF TOWN OF LONDONDERRY
4155 VT ROUTE 100

PROUTY LANDS
COMMUNITY SEPTIC 60% DESIGN

TOWN OF LONDONDERRY, WINDHAM COUNTY, VERMONT

drawn	checked
CMP	MCR
date	scale
9/17/24	N.T.S.
project no.	
23-069VT	
sheet no.	
60%-3	

Note: Spacing between AX-Max units is dependent on desired bury depth. Consult Orenco Engineering for details.



Orenco SYSTEMS

Disclaimer: This Proposed System Configuration Drawing is provided solely as a design aid and illustrates one possible configuration of a system that would comply with Orenco's design criteria for the requirements and/or specifications that have been communicated to Orenco (based on third-party standards testing protocols and performance reports, as applicable). Design decisions, including the actual layout and configuration of the system and its viability for the project, are at the sole discretion of the systems's designer.

AdvanTex AX-Max525 Pump Discharge

Plan View

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