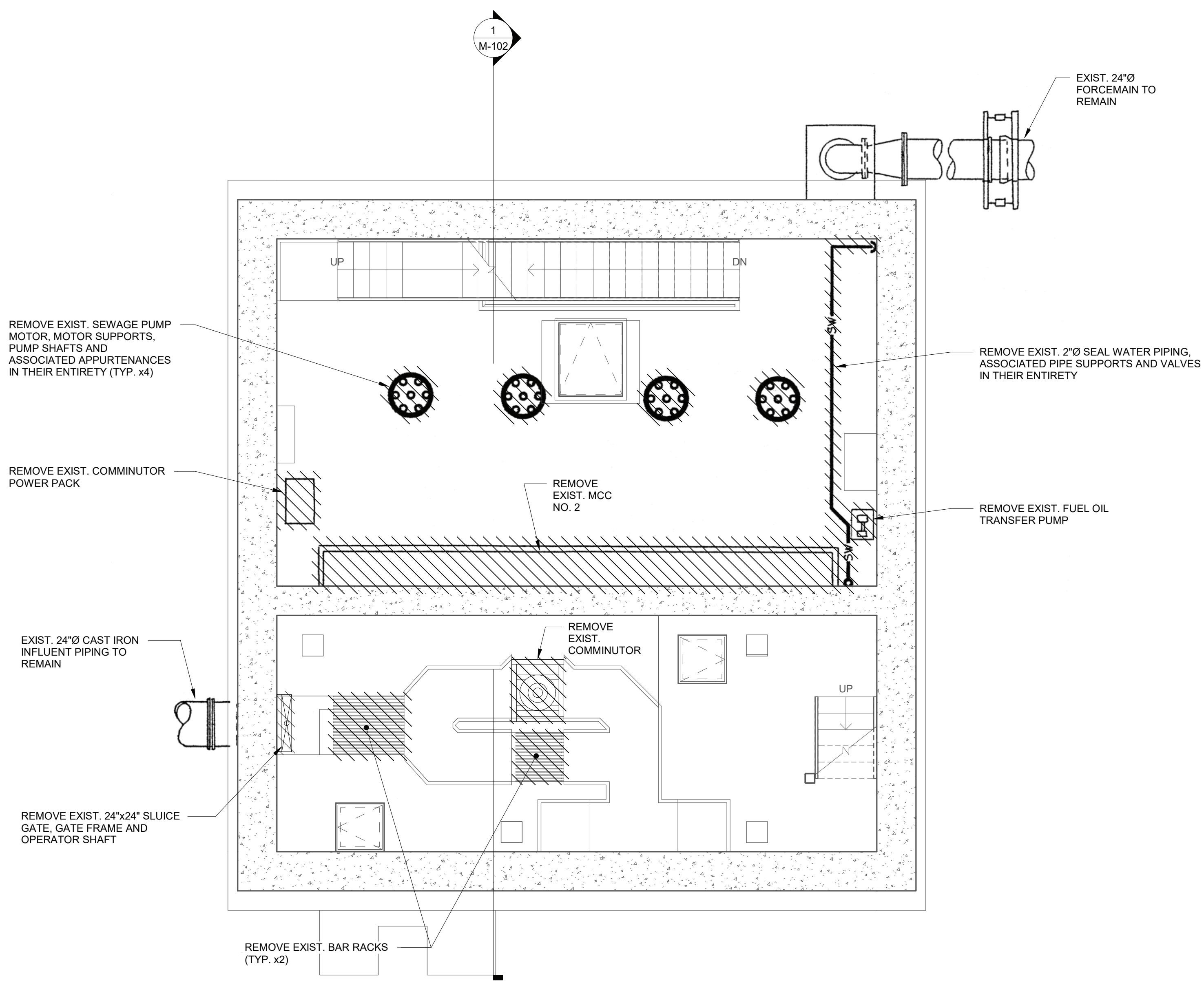
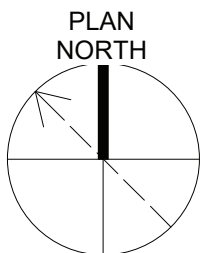
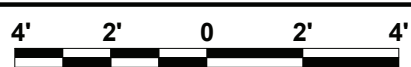


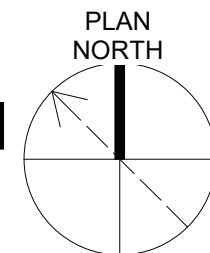
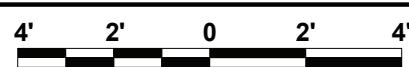
LOWER LEVEL DEMOLITON PLAN

1/4" = 1'-0"



MIDDLE LEVEL DEMOLITION PLAN

1/4" = 1'-0"



NOTES:

- EXISTING DIMENSIONS, ELEVATIONS AND SIZES HAVE BEEN TAKEN FROM THE FOLLOWING DRAWINGS: "CROTONVILLE PUMP STATION REHABILITATION PROGRAM, PLANS AND SECTIONS, FOR WESTCHESTER COUNTY DEPARTMENT OF PUBLIC WORKS, DIVISION OF ENGINEERING, WESTCHESTER COUNTY, N.Y. BY LYNCH ENGINEERING, PC, PLEASANTVILLE, N.Y. DATED APRIL 26, 1996". ALL SITE MEASUREMENTS, DIMENSIONS, ELEVATIONS AND SIZES ARE TO BE CONSIDERED APPROXIMATE AND FIELD VERIFIED BY THE CONTRACTOR.
- REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, HVAC AND PLUMBING DRAWINGS FOR RELATED DEMOLITIONS TO BE PERFORMED UNDER THIS PROJECT.
- ALL WALL, FLOOR AND ROOF OPENINGS RESULTING FROM DEMOLITION WORK SHALL BE SEALED AS SPECIFIED. BELOW GRADE AND WET WELL AREA PENETRATIONS SHALL BE SEALED WATERTIGHT.
- UNLESS OTHERWISE NOTED OR SPECIFIED IN THE CONTRACT DOCUMENTS, ALL MATERIALS REMOVED OR DEMOLISHED UNDER THIS PROJECT SHALL BE PROPERLY DISPOSED OF OFF-SITE BY THE CONTRACTOR, AT A LOCATION PROPERLY LICENSED FOR SUCH DISPOSAL.
- UNLESS OTHERWISE NOTED OR SPECIFIED IN THE CONTRACT DOCUMENTS, EXISTING ITEMS SHALL REMAIN. CONTRACTOR SHALL PROTECT EXISTING ITEMS FROM DAMAGE AND DUST DURING WORK. ANY DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- REMOVE EXISTING PIPE SUPPORTS. PATCH ANY HOLES TO MATCH EXISTING SURFACES.



DocuSign

IN ACCORDANCE WITH TITLE VIII, ARTICLE 145, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW, IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER TO ALTER THIS DOCUMENT.

IN CHARGE OF R. GELL
CHECKED BY D. ROONEY
MADE BY T. LARAMAY



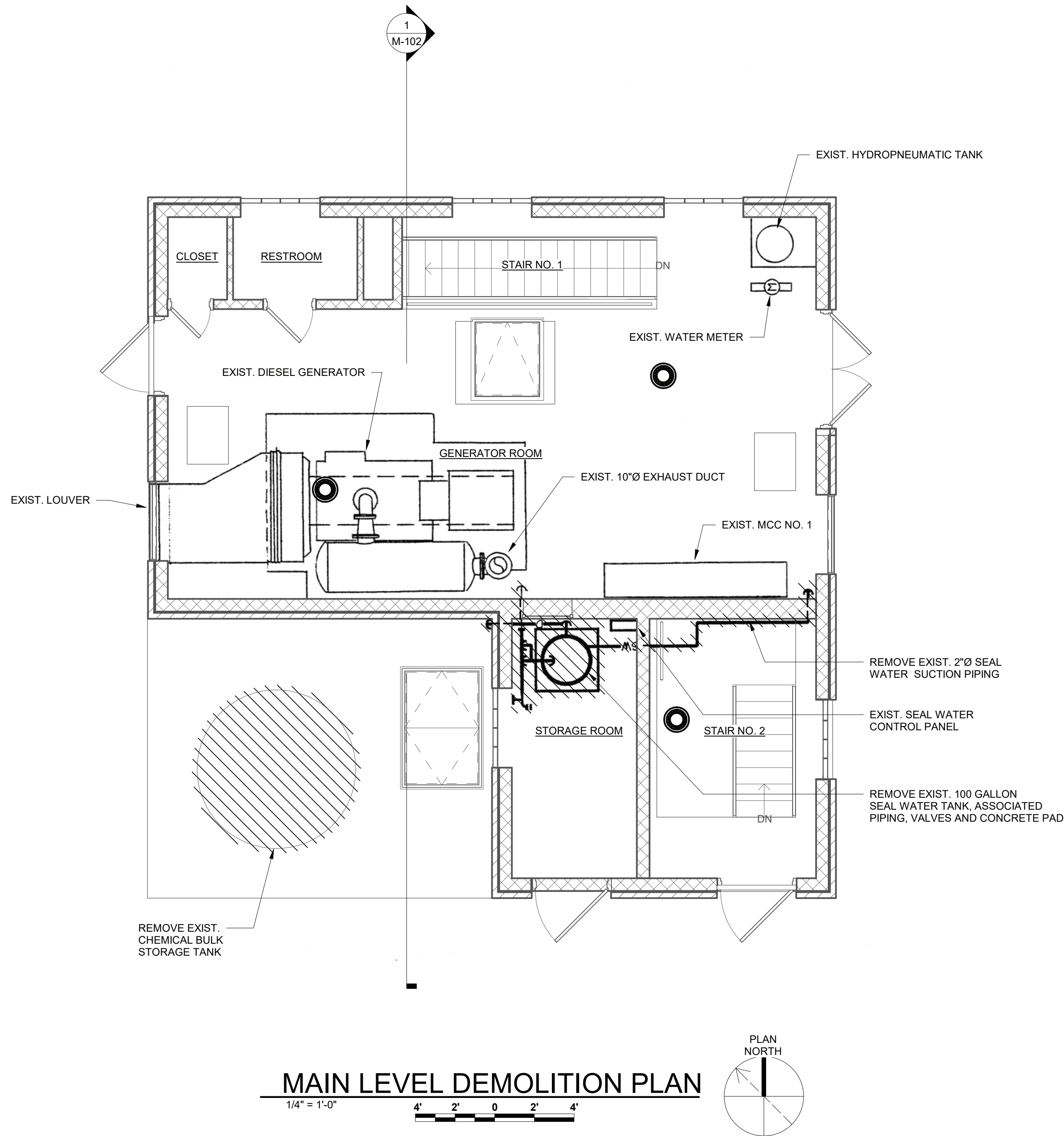
O'BRIEN & GERE ENGINEERS, INC.
50 MAIN ST., 10TH FLOOR SUITE 1000,
WHITE PLAINS, NEW YORK 10606

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT - CHANGES AS NOTED
☐ AS BUILT - NO CHANGES

CONTRACTOR		PROJECT COORDINATOR	
NAME		NAME	
SIGNATURE		SIGNATURE	
TITLE		TITLE	
DATE		DATE	
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING		CONTRACT NUMBER 17-529	SHEET NUMBER M-101
CROTONVILLE PUMPING STATION REHABILITATION OSSINING SEWER DISTRICT OSSINING, NEW YORK LOWER & MIDDLE LEVEL DEMOLITION PLANS		SHEET NO. 25 OF 60 SCALE: 1/4"=1'-0" DATE: 12/21/2018 DPW FILE NO. 208-03-M-49-0	REV. NO. 0



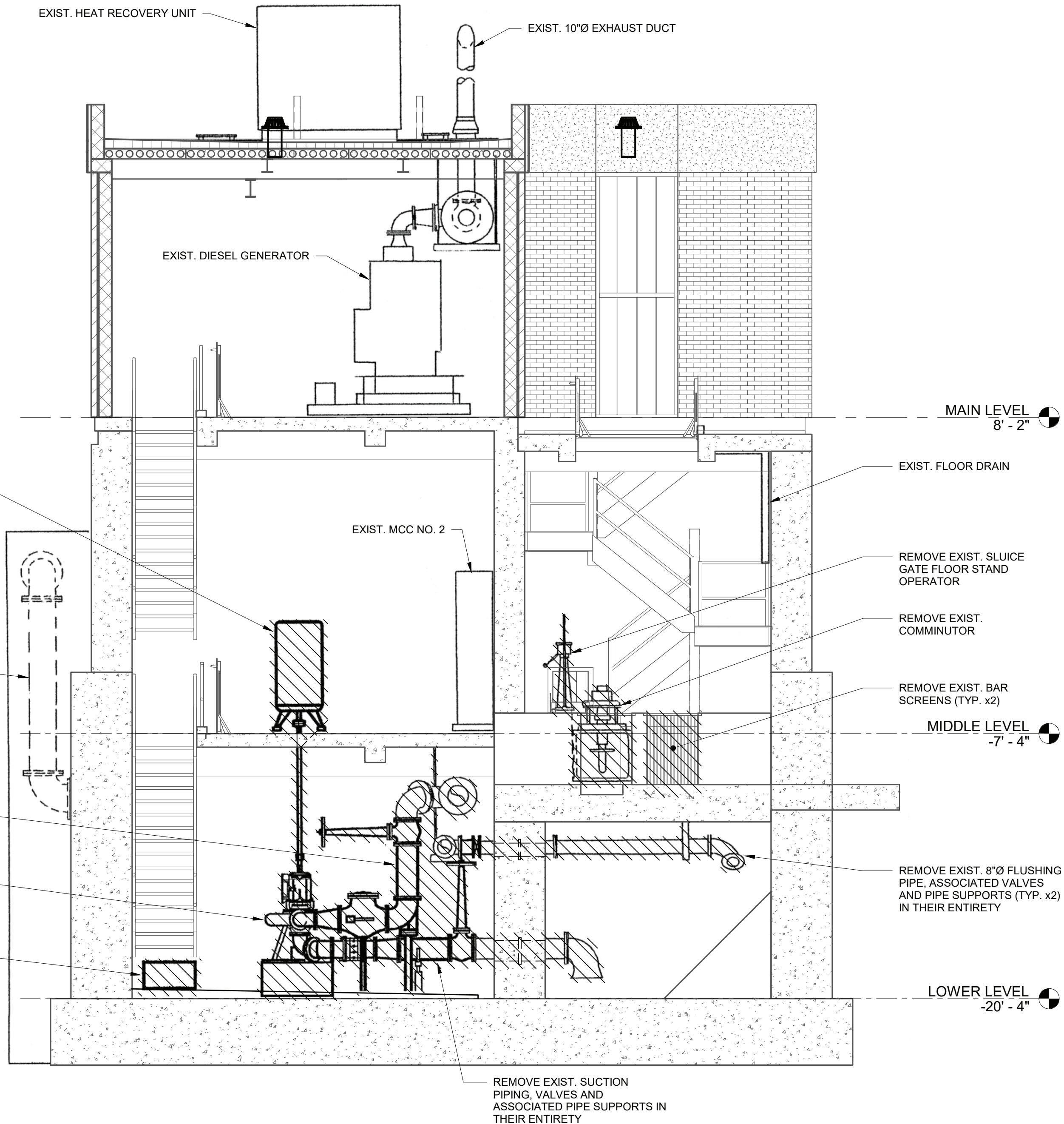
REMOVE EXIST. SEWAGE PUMP MOTOR, MOTOR SUPPORTS, PUMP SHAFTS AND ASSOCIATED APPURTENANCES IN THEIR ENTIRETY (TYP. x4)

EXIST. 16"Ø DISCHARGE PIPE TO REMAIN

REMOVE EXIST. DISCHARGE PIPING, VALVES AND ASSOCIATED PIPE SUPPORTS (TYP. x4) IN THEIR ENTIRETY

REMOVE EXIST. SEWAGE PUMP AND CONCRETE BASE (TYP. x4), ASSOCIATED PIPING AND VALVES IN THEIR ENTIRETY

REMOVE EXIST. SEAL WATER PUMPS (TYP. x3), ASSOCIATED PIPING AND VALVES IN THEIR ENTIRETY



1 DEMOLITION SECTION

1/4" = 1'-0"

4' 2' 0' 2' 4'

NOTES:

1. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, HVAC AND PLUMBING DRAWINGS FOR RELATED DEMOLITIONS TO BE PERFORMED UNDER THIS PROJECT.



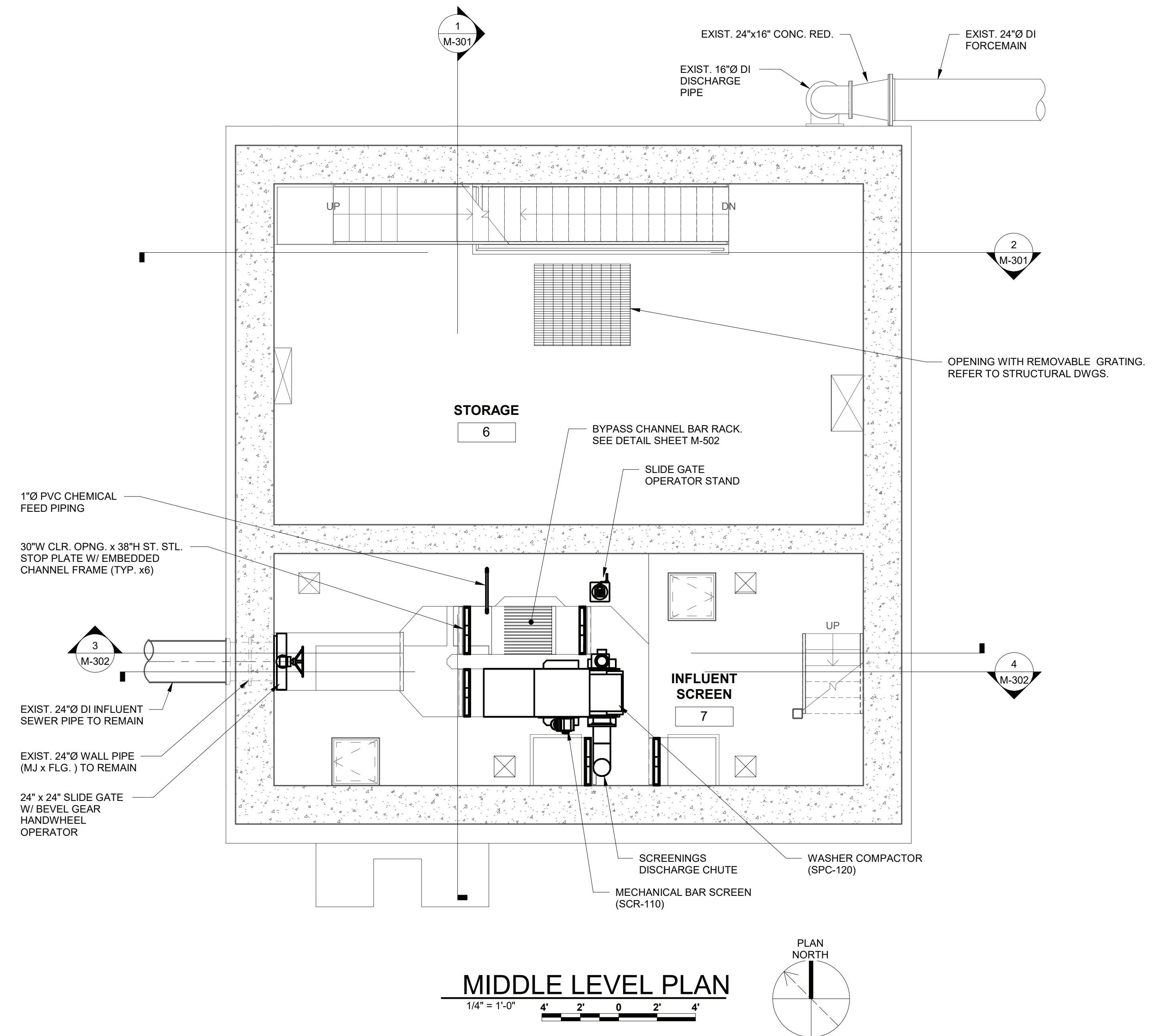
IN ACCORDANCE WITH TITLE VIII, ARTICLE 145, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW, IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER TO ALTER THIS DOCUMENT.

IN CHARGE OF R. GELL
CHECKED BY D. ROONEY
MADE BY T. LARAMAY



O'BRIEN & GERE ENGINEERS, INC.
50 MAIN ST., 10TH FLOOR SUITE 1000,
WHITE PLAINS, NEW YORK 10606

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION
RECORD DRAWING CERTIFICATION				
<input type="checkbox"/> AS BUILT - CHANGES AS NOTED <input type="checkbox"/> AS BUILT - NO CHANGES				
CONTRACTOR		PROJECT COORDINATOR		
NAME	SIGNATURE	NAME	SIGNATURE	DATE
TITLE		TITLE		
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING				
CONTRACT NUMBER 17-529		SHEET NUMBER M-102		SHEET NO. 26 OF 60
CROTONVILLE PUMPING STATION REHABILITATION OSSINING SEWER DISTRICT OSSINING, NEW YORK MAIN LEVEL DEMOLITION PLAN & SECTION		SCALE: 1/4"=1'-0" DATE: 12/21/2018 DPW FILE NO. 208-03-M-50-0		REV. NO. 0

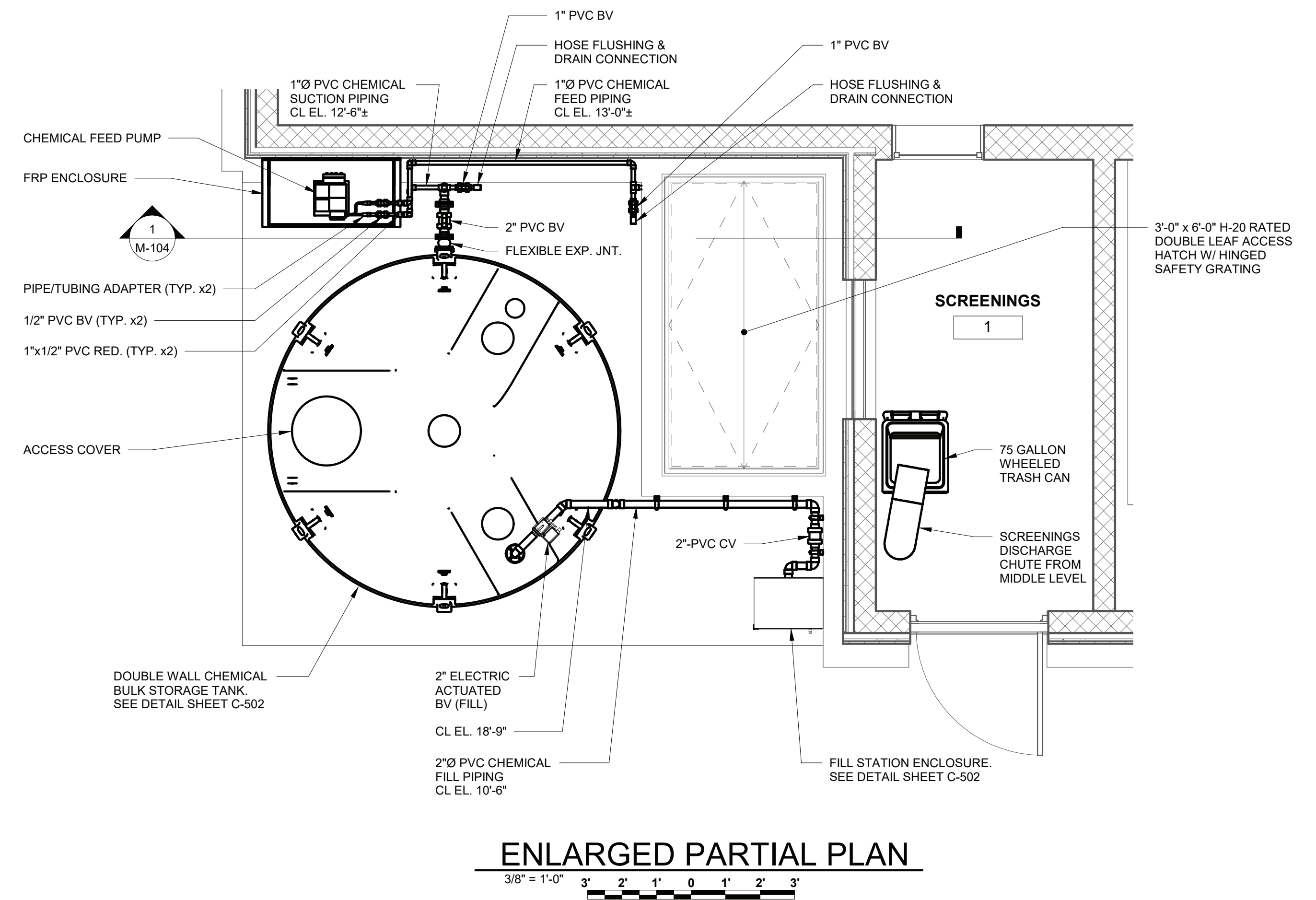


EQUIPMENT SCHEDULE								
EQUIPMENT NAME	TAG NUMBER	LOCATION	BASIS OF DESIGN MANUFACTURER	MODEL	DESIGN CAPACITY	TDH	HORSE POWER	CLEAR BAR SPACING
PUMP NO. 1, NO. 2, NO. 3	PU-131, PU-132, PU-133	PUMP ROOM	ABS (SULZER)	XFP-250M-CH2	3,000 GPM	200 FEET	250 HP	NA
MECHANICAL BAR SCREEN	SCR-110	INFLUENT SCREEN ROOM	DUPERON	FLEX-RAKE	6.5 MGD	NA	NA	1 INCH
WASHER COMPACTOR	SPC-120	INFLUENT SCREEN ROOM	DUPERON	DUAL AUGER	3,000 GPM	NA	NA	NA

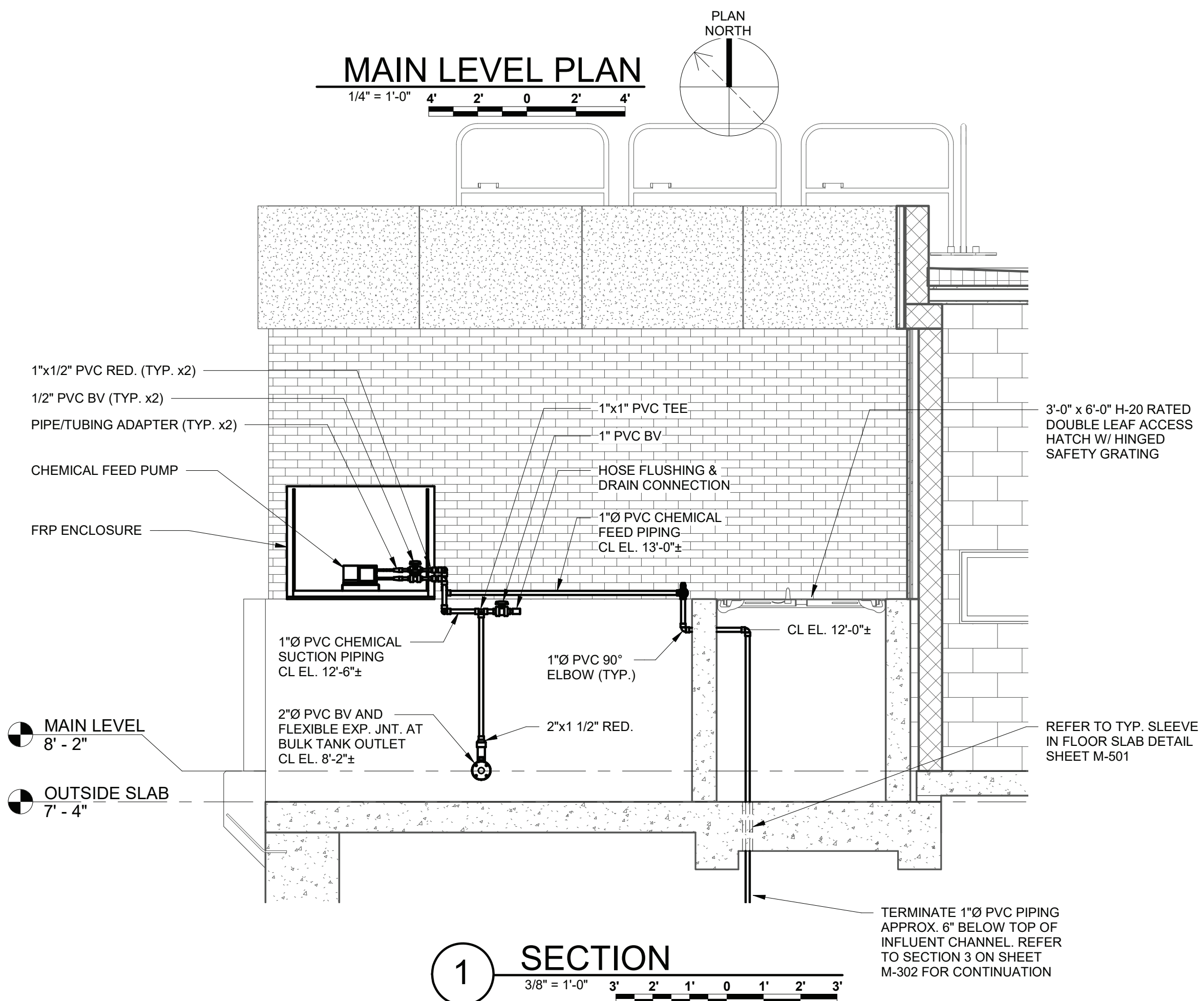
DRAWING NOTES:



1. PUMPS TO BE TESTED IN THE FACTORY FOR HYDROSTATIC PRESSURE AND PERFORMANCE BY THE MANUFACTURER.
2. PUMP OPERATION CYCLING IS PUMP NO. 1-2-3, 2-3-1, AND 3-1-2, 1-2-3, ETC. PUMPS CYCLE AFTER EACH START.
3. PIPING TO BE TESTED IN ACCORDANCE WITH AWWA C600.

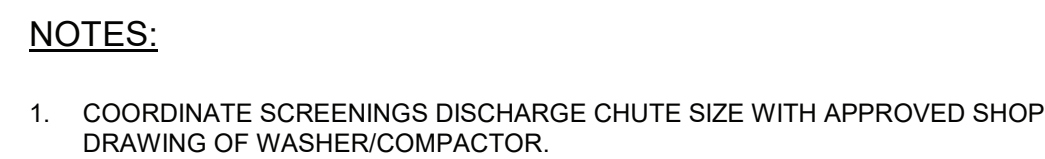
[illegible]



1. FABRICATE CHEMICAL FILL STATION ENCLOSURE IN SHOP OF 1/2" THICK GRAY PVC SHEET WITH SOLVENT WELDED JOINTS. SLOPE BOTTOM OF ENCLOSURE FOUR WAYS TO DRAIN CONNECTION. PROVIDE LATCHING DOOR WITH POLYPROPYLENE PIANO HINGE AND STAINLESS STEEL FASTENERS AND HARDWARE. SUBMIT SHOP DRAWING FOR REVIEW PRIOR TO FABRICATION. ATTACH TO SUPPORTS WITH STAINLESS STEEL HARDWARE.





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<p>IN CHARGE OF <u>R. GELL</u></p> <p>CHECKED BY <u>D. ROONEY</u></p> <p>MADE BY <u>T. LARAMAY</u></p>		<p>O'BRIEN & GERE ENGINEERS, INC.</p> <p>50 MAIN ST., 10TH FLOOR SUITE 1000, WHITE PLAINS, NEW YORK 10606</p>				
REVISION NUMBER	DATE	MADE BY APP'D BY REVISION				
<p>RECORD DRAWING CERTIFICATION</p>						
<p><input type="checkbox"/> AS BUILT - CHANGES AS NOTED</p> <p><input type="checkbox"/> AS BUILT - NO CHANGES</p>						
<p style="text-align: center;">CONTRACTOR</p> <p>NAME _____</p> <p>SIGNATURE _____</p> <p>TITLE _____ DATE _____</p>		<p style="text-align: center;">PROJECT COORDINATOR</p> <p>NAME _____</p> <p>SIGNATURE _____</p> <p>TITLE _____ DATE _____</p>				
<p>WESTCHESTER COUNTY, NEW YORK</p> <p>DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION</p> <p>DIVISION OF ENGINEERING</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <p>CONTRACT NUMBER</p> <p style="text-align: center;">17-529</p> </td> <td style="width: 50%; padding: 5px;"> <p>SHEET NUMBER</p> <p style="text-align: center;">M-104</p> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <p>SHEET NO. 28 OF 60</p> </td> </tr> </table>	<p>CONTRACT NUMBER</p> <p style="text-align: center;">17-529</p>	<p>SHEET NUMBER</p> <p style="text-align: center;">M-104</p>	<p>SHEET NO. 28 OF 60</p>	
<p>CONTRACT NUMBER</p> <p style="text-align: center;">17-529</p>	<p>SHEET NUMBER</p> <p style="text-align: center;">M-104</p>					
<p>SHEET NO. 28 OF 60</p>						
<p style="text-align: center;">CROTONVILLE PUMPING STATION REHABILITATION</p> <p style="text-align: center;">OSSINING SEWER DISTRICT</p> <p style="text-align: center;">OSSINING, NEW YORK</p> <p style="text-align: center;">MAIN LEVEL PLAN, ENLARGED PARTIAL PLAN & SECTION</p>		<p>SCALE: 1/4"=1'-0"</p> <p>DATE: 12/21/2018</p> <p>DPW FILE NO.</p> <p style="text-align: center;">208-03-M-52-0</p>				
		<p>REV. NO.</p> <p style="font-size: 24px;">0</p>				

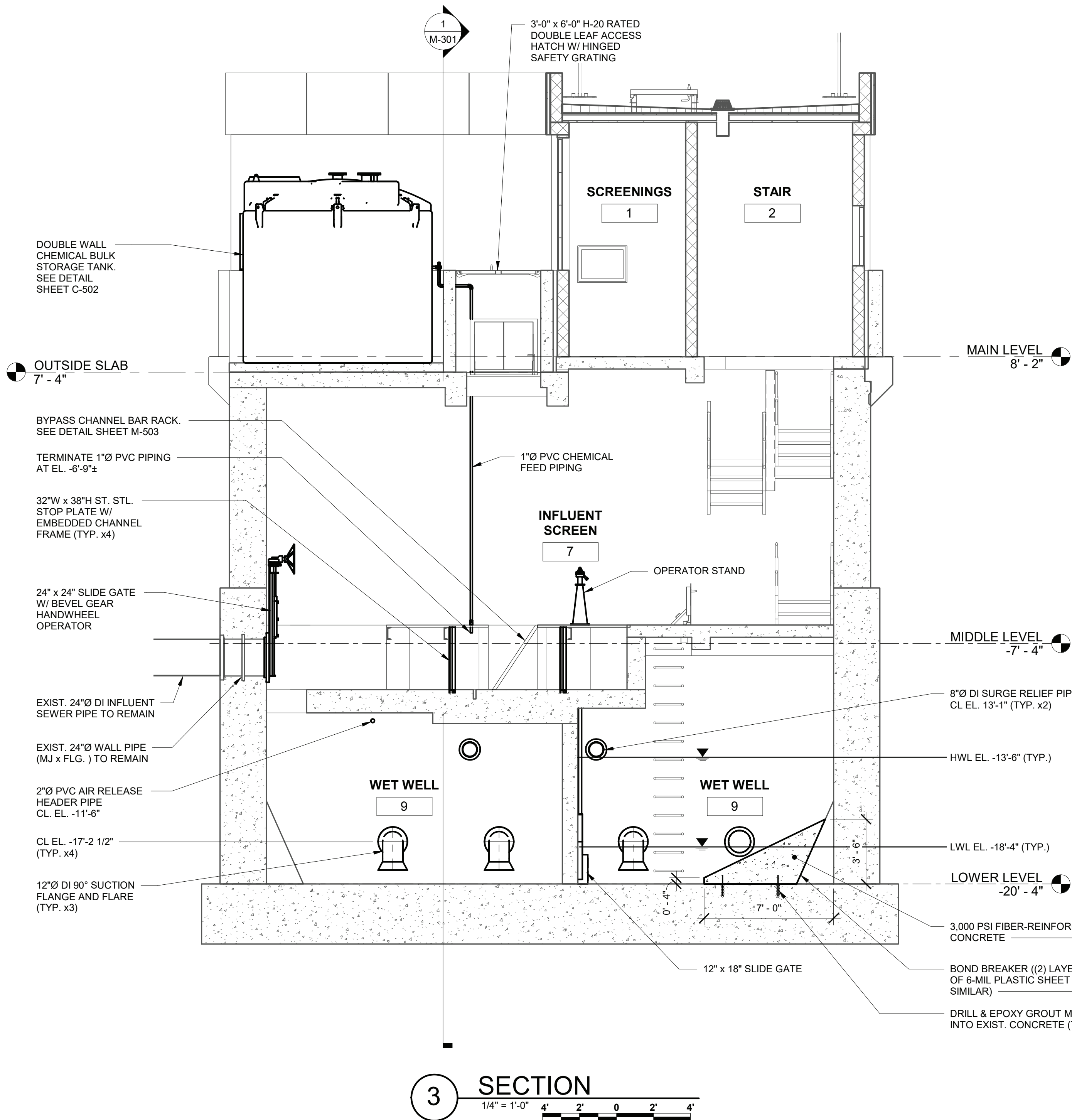


DESCRIPTION	ACTUAL ELEVATION	ELEVATION ABOVE LOWER LEVEL
HIGH WATER LEVEL ALARM	-13'-6"	6'-8"
LAG PUMP NO. 2 ON	-13'-10"	6'-4"
LAG PUMP NO. 1 ON	-14'-4"	5'-6"
LEAD PUMP ON	-15'-0"	4'-6"
LAG PUMP NO. 2 OFF	-17'-0"	3'-0"
LAG PUMP NO. 1 OFF	-17'-8"	3'-0"
LEAD PUMP OFF	-18'-0"	3'-0"
LOW WATER LEVEL ALARM	-18'-4"	2'-0"
LOW WATER LEVEL	-20'-4"	0'-0"

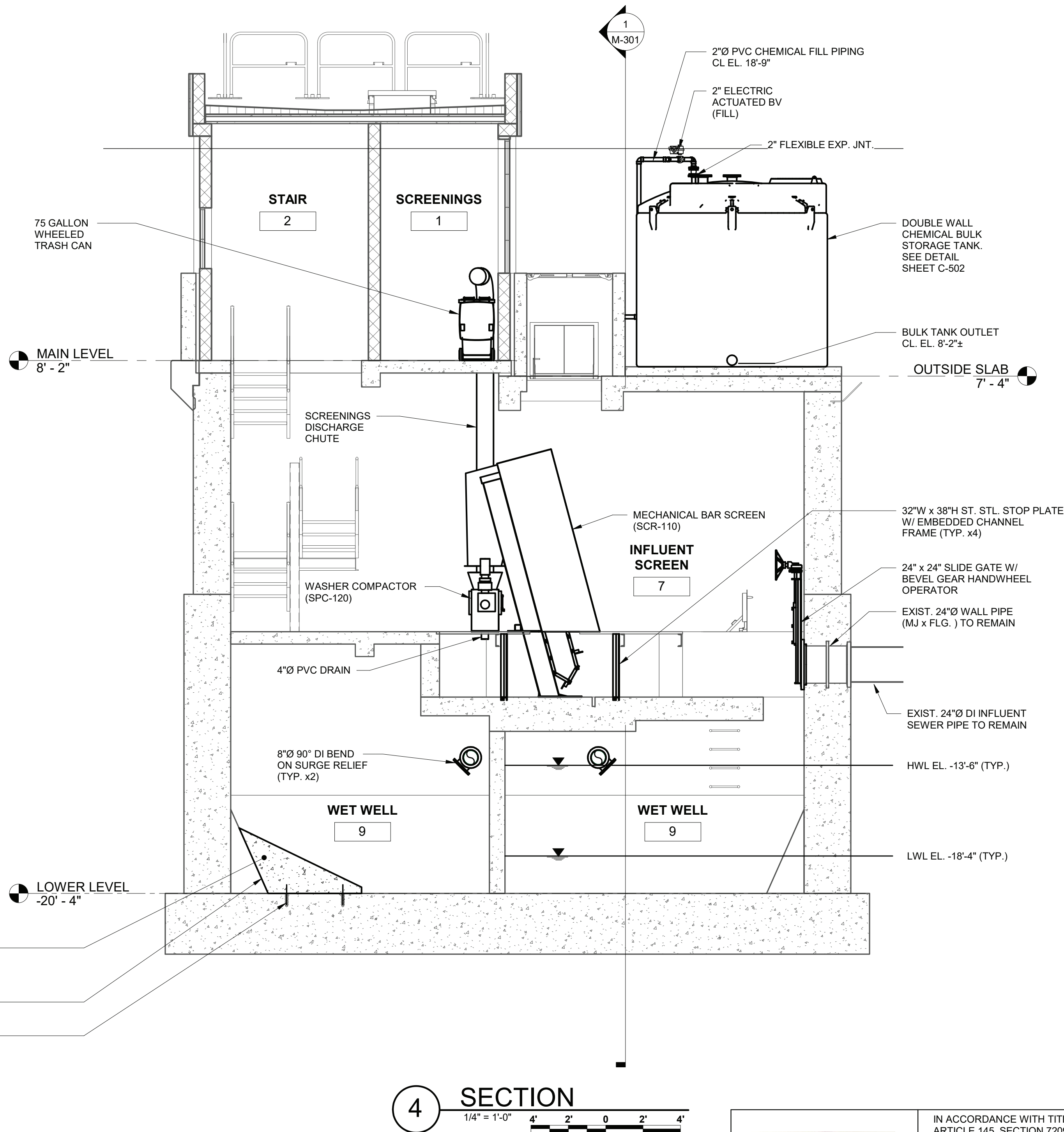
EQUIPMENT TABLE								
EQUIPMENT NAME	TAG NUMBER	LOCATION	BASIS OF DESIGN MANUFACTURER	MODEL	DESIGN CAPACITY	TDH	HORSEPOWER	CLEAR BAR SPACING
CHEMICAL FEED PUMP	NA	OUTDOORS	WATSON MARLOW	530	12 GPH	30 PSI	NA	NA
MANUAL BAR SCREEN	BR-111	INFLUENT SCREEN ROOM	NA	NA	6.5 MGD	NA	NA	1.5"
MAGNETIC FLOW METER	FE-160	PUMP ROOM	ENDRESS + HAUSER	PROMAG 400	10 MGD	NA	NA	NA
MAGNESIUM HYDROXIDE STORAGE TANK	NA	OUTDOORS	POLYPROCESSING COMPANY	DOUBLE WALL	4,400 GALLONS	NA	NA	NA



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DocuSign	IN CHARGE OF <u>R. GELL</u> CHECKED BY <u>D. ROONEY</u> MADE BY <u>T. LARAMAY</u>	O'BRIEN & GERE ENGINEERS, INC. 50 MAIN ST., 10TH FLOOR SUITE 1000, WHITE PLAINS, NEW YORK 10606								
REVISION NUMBER	DATE	MADE BY								
APPD BY	REVISION									
RECORD DRAWING CERTIFICATION										
<input type="checkbox"/> AS BUILT - CHANGES AS NOTED <input type="checkbox"/> AS BUILT - NO CHANGES										
NAME _____ SIGNATURE _____ TITLE _____ DATE _____	PROJECT COORDINATOR NAME _____ SIGNATURE _____ TITLE _____ DATE _____									
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING										
CROTONVILLE PUMPING STATION REHABILITATION OSSINING SEWER DISTRICT OSSINING, NEW YORK SECTIONS		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> CONTRACT NUMBER 17-529 </td> <td style="width: 50%; text-align: center;"> SHEET NUMBER M-301 </td> </tr> <tr> <td colspan="2" style="text-align: center;"> SHEET NO. 29 OF 60 </td> </tr> <tr> <td colspan="2" style="text-align: center;"> SCALE: 1/4"=1'-0" DATE: 12/21/2018 </td> </tr> <tr> <td style="text-align: center;"> DPW FILE NO. 208-03-M-53-0 </td> <td style="text-align: center;"> REV. NO. 0 </td> </tr> </table>	CONTRACT NUMBER 17-529	SHEET NUMBER M-301	SHEET NO. 29 OF 60		SCALE: 1/4"=1'-0" DATE: 12/21/2018		DPW FILE NO. 208-03-M-53-0	REV. NO. 0
CONTRACT NUMBER 17-529	SHEET NUMBER M-301									
SHEET NO. 29 OF 60										
SCALE: 1/4"=1'-0" DATE: 12/21/2018										
DPW FILE NO. 208-03-M-53-0	REV. NO. 0									

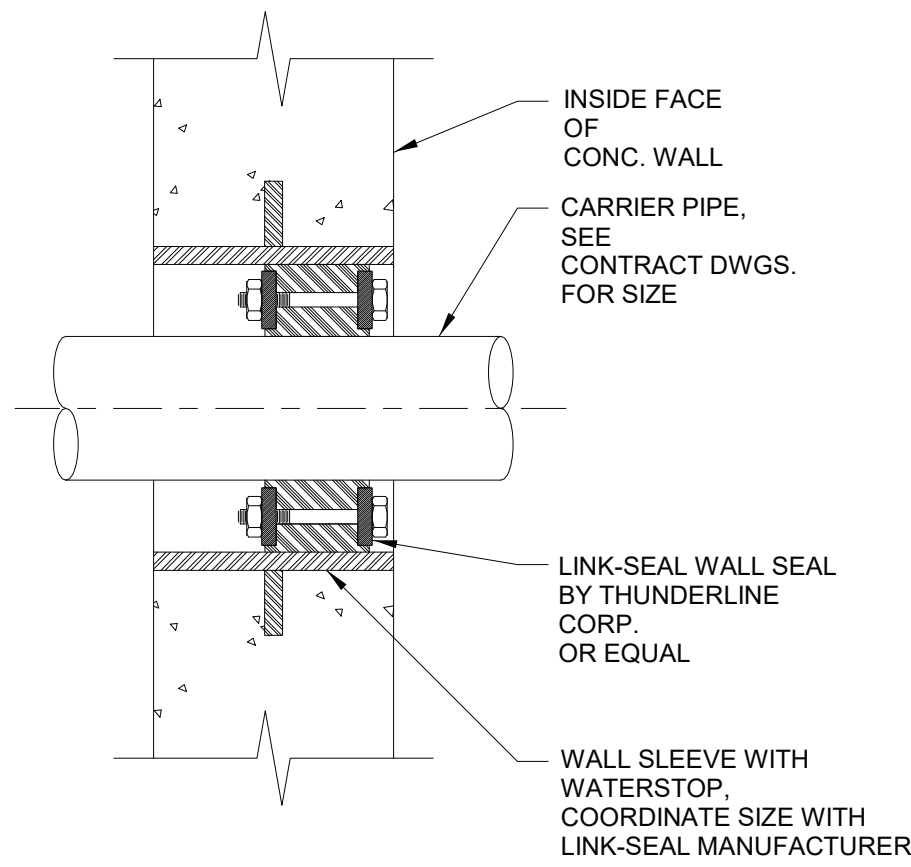


MECHANICAL SCREEN SCHEDULE	
ITEM	REQUIREMENT
BASIS OF DESIGN MANUFACTURER	DUPERON
MODEL	FLEX-RAKE
PEAK DESIGN CAPACITY (TOTAL)	6.5 MGD
NO. OF UNITS	1
CLEAR BAR SPACING	1 - INCH
TYPE	FLEXIBLE RAKE, FULL PENETRATION
CHANNEL WIDTH	2'-6"
CHANNEL DEPTH	3'-6"
ANGLE OF INCLINE	30 DEGREES FROM VERTICAL
OPERATING FLOOR HEIGHT ABOVE CHANNEL INVERT	3'-6"
DISCHARGE HEIGHT ABOVE OPERATING FLOOR	3'-6"
MAXIMUM HEADLOSS AT PEAK FLOW (CLEAN)	1.5 - INCHES ±
MAXIMUM HEADLOSS AT PEAK FLOW (25% BLINDED)	2.5 - INCHES ±
MATERIALS OF CONSTRUCTION	TYPE 316 STAINLESS STEEL



WASHER COMPACTOR SCHEDULE	
ITEM	REQUIREMENT
BASIS OF DESIGN MANUFACTURER	DUPERON
MODEL	DUAL AUGER
NO. OF UNITS	1
PEAK CAPACITY (INTERMITTENT OPERATION)	10 cf / HOUR
AVERAGE CAPACITY (CONTINUOUS OPERATION)	6 cf / HOUR
HOPPER HEIGHT ABOVE OPERATING FLOOR	38 - INCHES
HOPPER LENGTH	43 - INCHES
DISCHARGE HEIGHT ABOVE OPERATING FLOOR	20'-0"
VOLUME REDUCTION (MIN.)	70%
WASH WATER USAGE	3 - 10 GAL./MIN.
WASH WATER PRESSURE (MIN.)	40 - 60 PSI
MATERIALS OF CONSTRUCTION	TYPE 316 STAINLESS STEEL

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	IN CHARGE OF R. GELL		O'BRIEN & GERE ENGINEERS, INC. 50 MAIN ST., 10TH FLOOR SUITE 1000, WHITE PLAINS, NEW YORK 10606	
	CHECKED BY D. ROONEY MADE BY T. LARAMAY			
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SIGNATURE _____	SIGNATURE _____			
TITLE _____	DATE _____	DATE _____		
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING		CONTRACT NUMBER 17-529	SHEET NUMBER M-302	
CROTONVILLE PUMPING STATION REHABILITATION OSSINGING SEWER DISTRICT OSSINGING, NEW YORK SECTIONS		SCALE: 1/4"=1'-0" DATE: 12/21/2018 DPW FILE NO. 208-03-M-54-0		REV. NO. 0

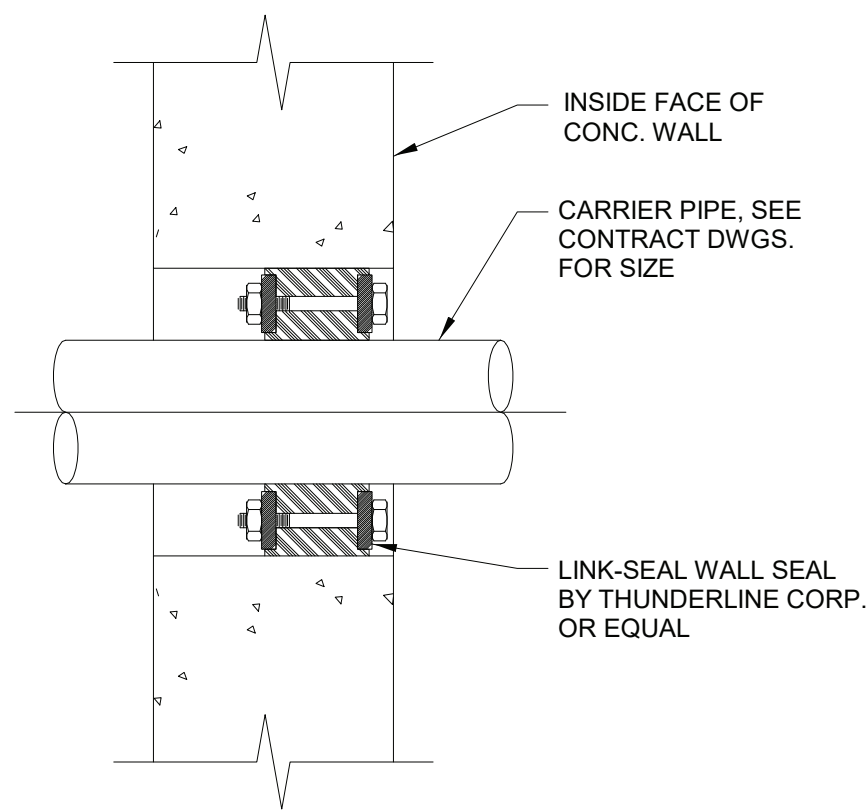


DETAIL NOTES:

1. LINK SEALS ARE REQUIRED ON BOTH FACES FOR ALL EXTERIOR PENETRATIONS.
2. PROVIDE STAINLESS STEEL HARDWARE.

MODULAR LINK SEAL WITH WALL SLEEVE DETAIL

NOT TO SCALE

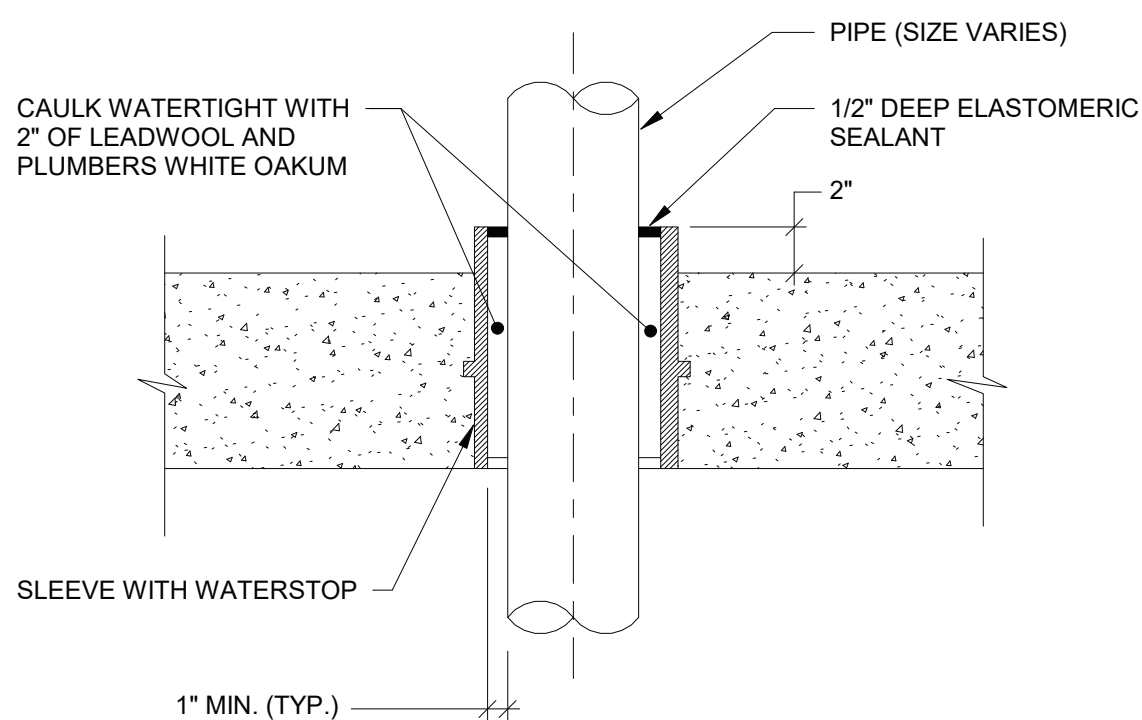


DETAIL NOTES:

1. LINK SEALS ARE REQUIRED ON BOTH FACES FOR ALL EXTERIOR PENETRATIONS, AND WALL DIVIDING WET WELL & DRY WELL.
2. COORDINATE CORE SIZE REQUIRED FOR PIPE PENETRATION WITH LINK SEAL MANUFACTURER.
3. PROVIDE STAINLESS STEEL HARDWARE.

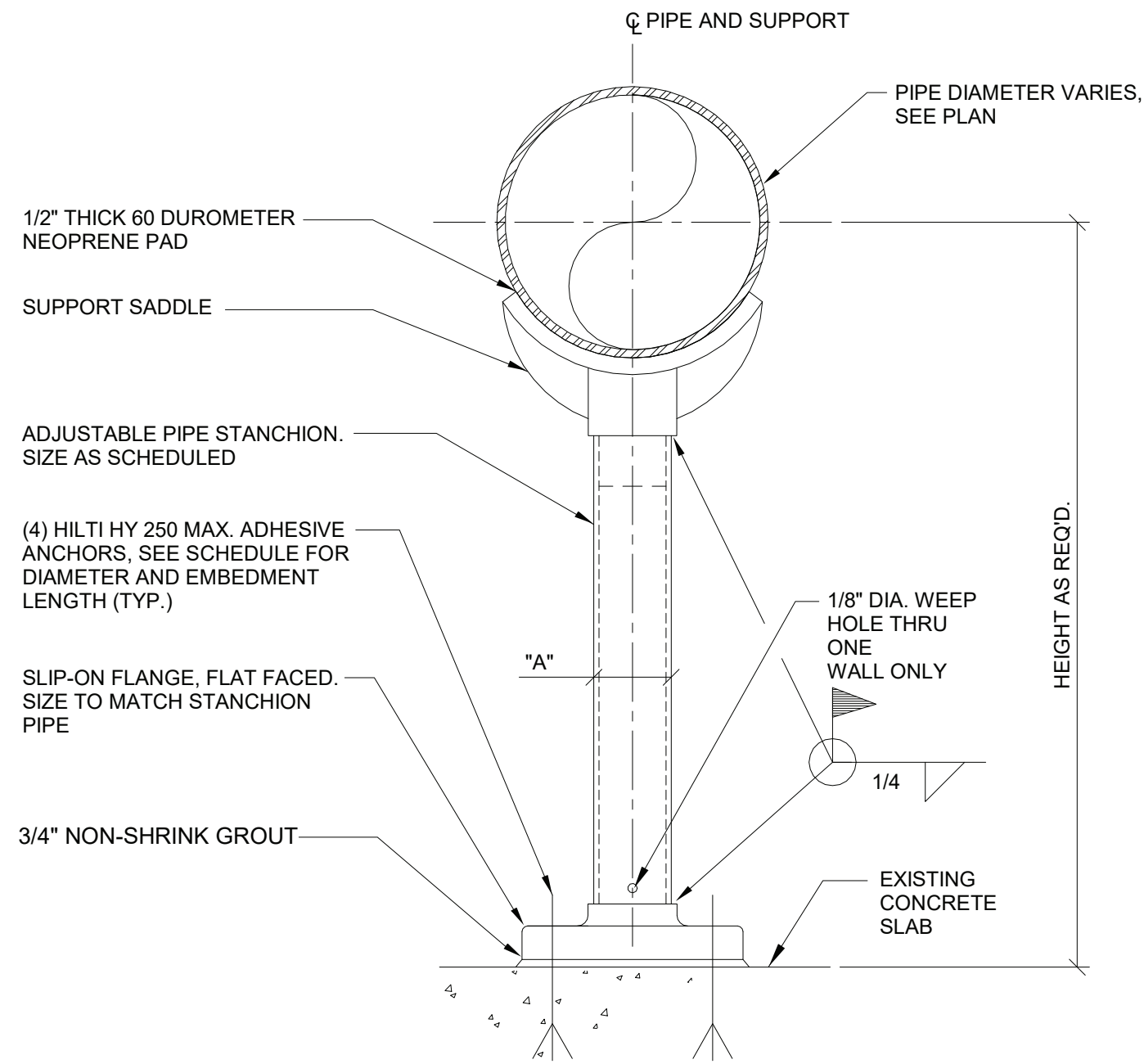
MODULAR LINK SEAL WITH CORED PENETRATION DETAIL

NOT TO SCALE



TYPICAL SLEEVE IN FLOOR SLAB DETAIL

NOT TO SCALE



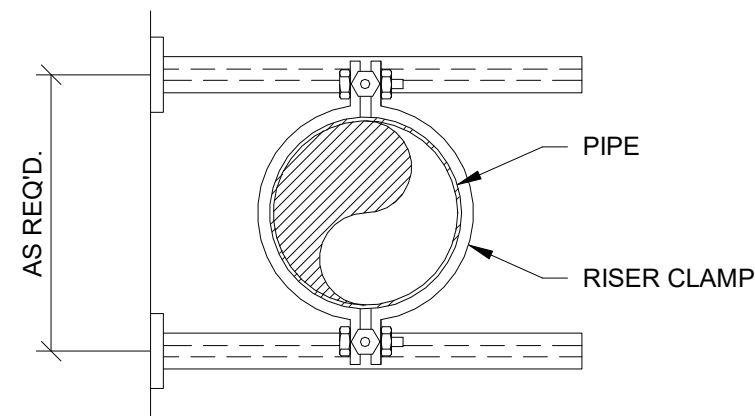
NOMINAL PIPE SIZE	'A'	ANCHOR SIZE	EMBEDMENT LENGTH
2.5 - 3.5	2.50	5/8"	5"
4 - 12	3.00	5/8"	5"

DETAIL NOTES:

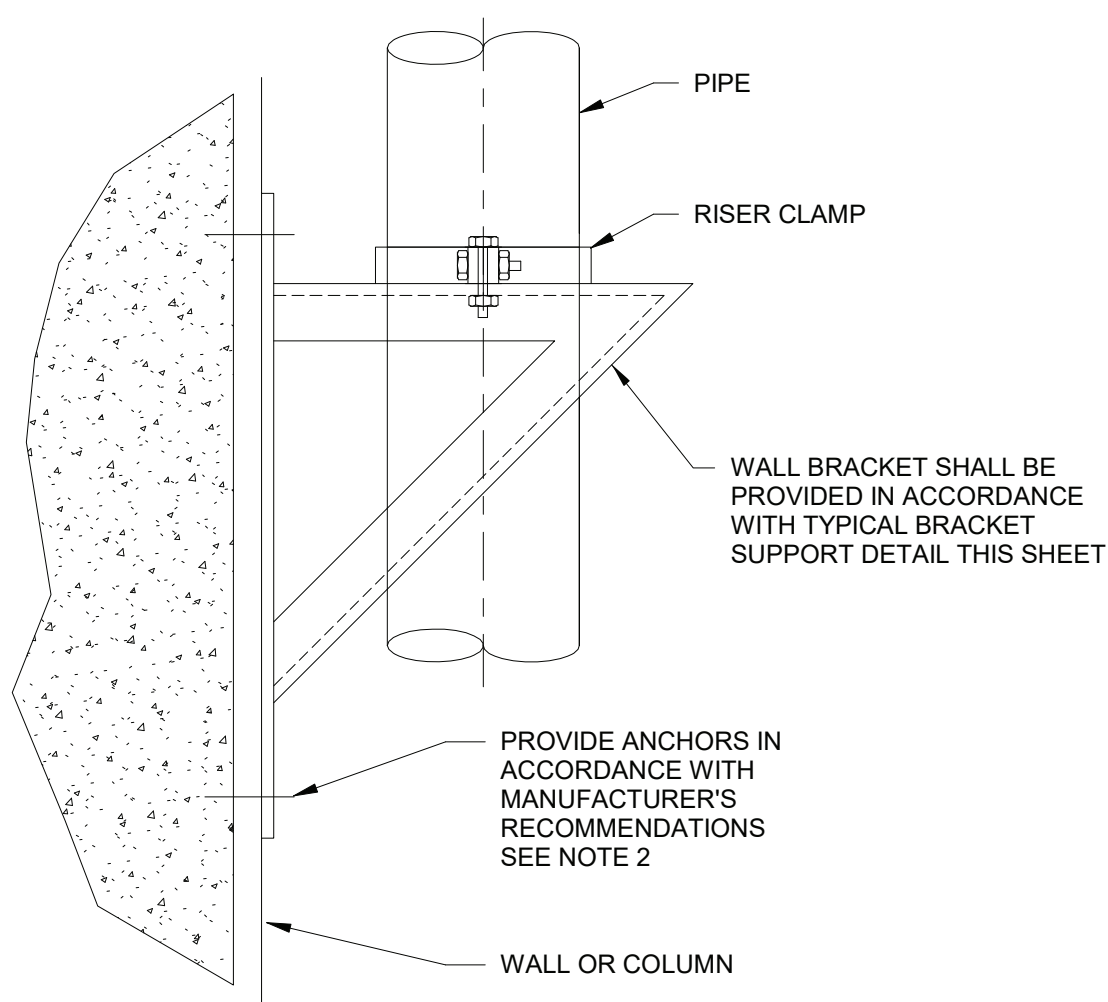
1. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS IN PARTICULAR LOCATIONS AND PIPE SUPPORT SPACING.

TYPICAL PIPE STANCHION DETAIL (2 1/2" - 12"Ø)

NOT TO SCALE



PLAN



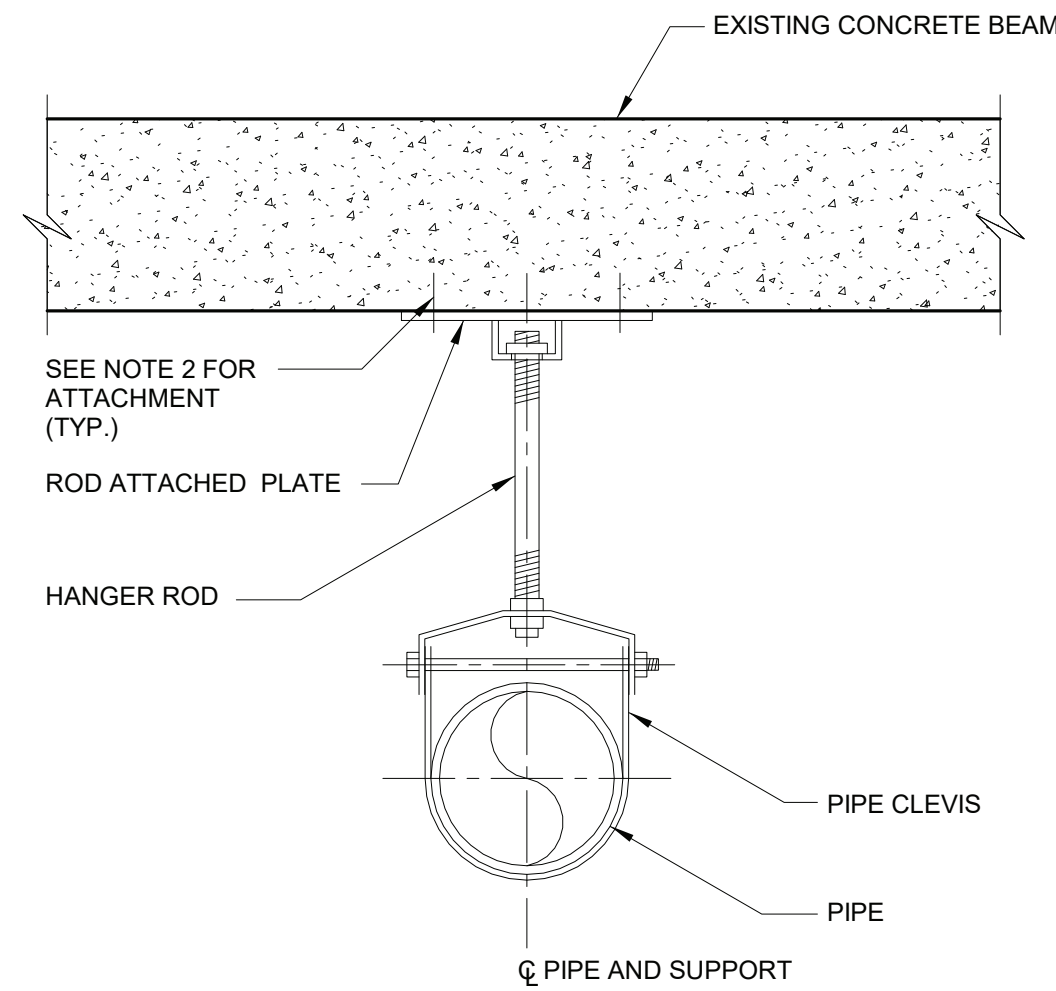
ELEVATION

DETAIL NOTES:

1. CONTRACTOR SHALL COORDINATE ATTACHMENT METHOD, INCLUDING ANCHOR SIZE, TYPE AND SPACING WITH BRACKET MANUFACTURER AND OBTAIN ENGINEER'S APPROVAL.

TYPICAL VERTICAL PIPE SUPPORT DETAIL

NOT TO SCALE

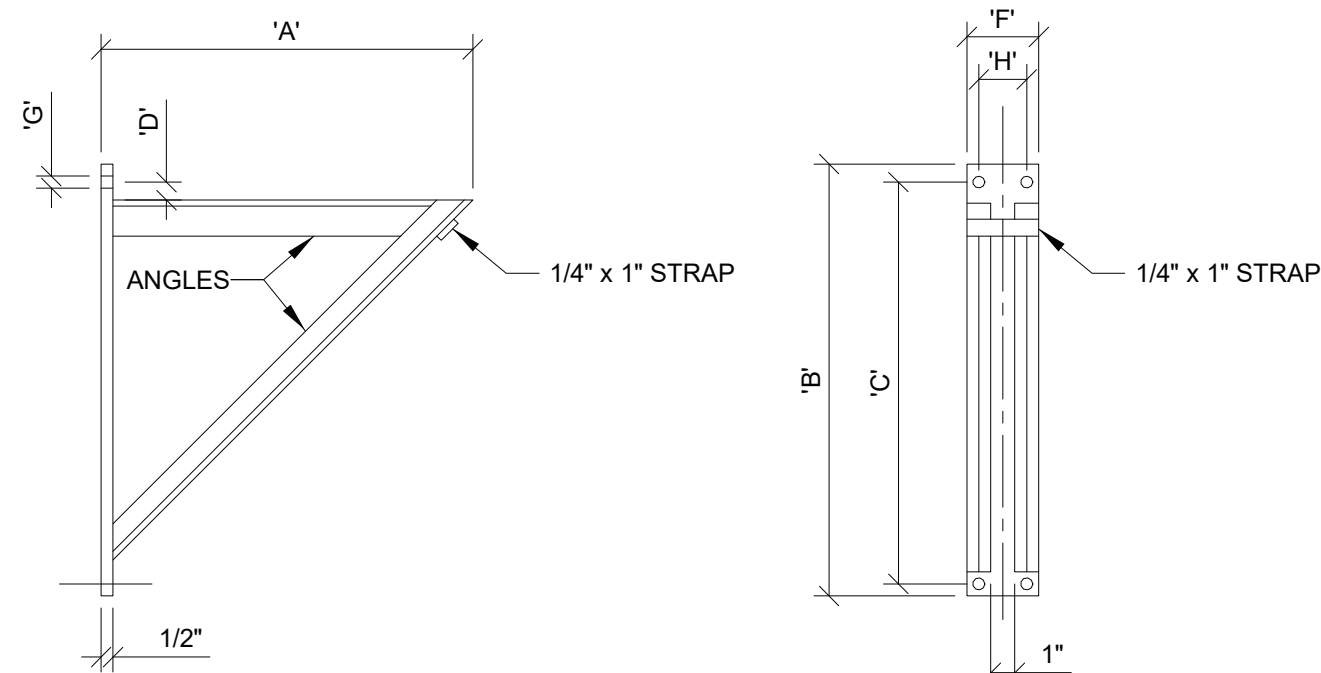


DETAIL NOTES:

1. SEE SPECIFICATIONS FOR HANGER ROD SIZING, PIPE SUPPORT SPACING AND MATERIAL REQUIREMENTS FOR SPECIFIC LOCATIONS.
2. ATTACH TO CONCRETE USING (4) HILTI HDI-P 3/8" DROP-IN ANCHORS. USE OF CONCRETE INSERTS OR CHANNEL SECTIONS IS ACCEPTABLE.

TYPICAL PIPE CLEVIS DETAIL

NOT TO SCALE



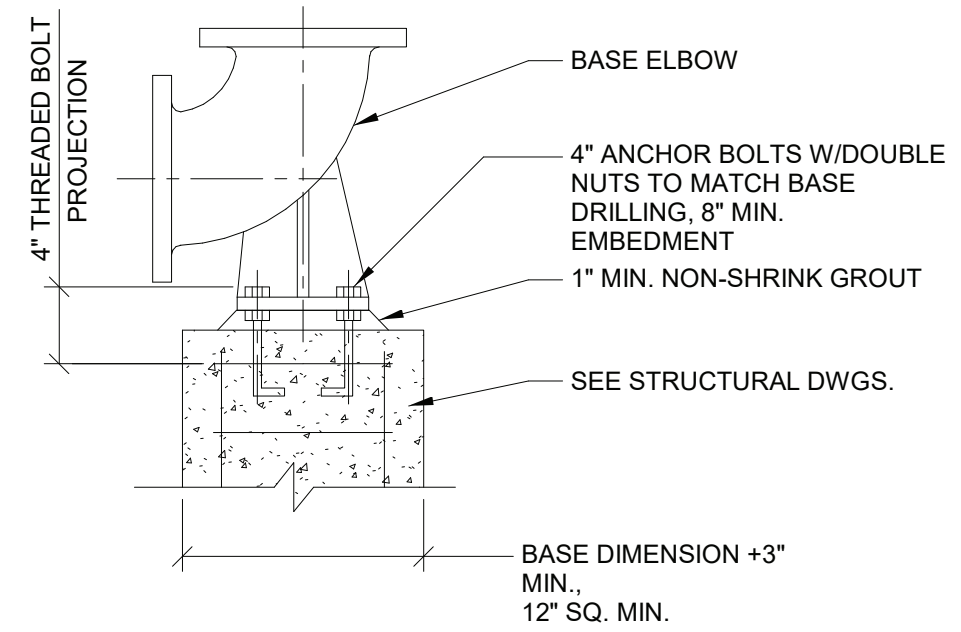
PIPE SIZE	'A'	'B'	'C'	'D'	'E'	'G'	'H'
8" AND SM.	*	18"	15 1/4"	1 1/4"	4"	13/16"	0"
10" TO 12"	*	30"	27 1/2"	1 1/2"	5"	1 1/16"	2 1/2"
14" TO 20"	*	36"	33 1/2"	1 1/2"	5"	1 1/16"	2 1/2"

DETAIL NOTES:

1. LOAD NOT TO EXCEED 3,000 LBS. ANGLE SIZE TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE CONSULTING ENGINEER.
2. * AS REQUIRED.
3. SEE SPECIFICATIONS FOR MATERIAL REQUIREMENTS IN PARTICULAR LOCATIONS.

TYPICAL BRACKET SUPPORT DETAIL

NOT TO SCALE

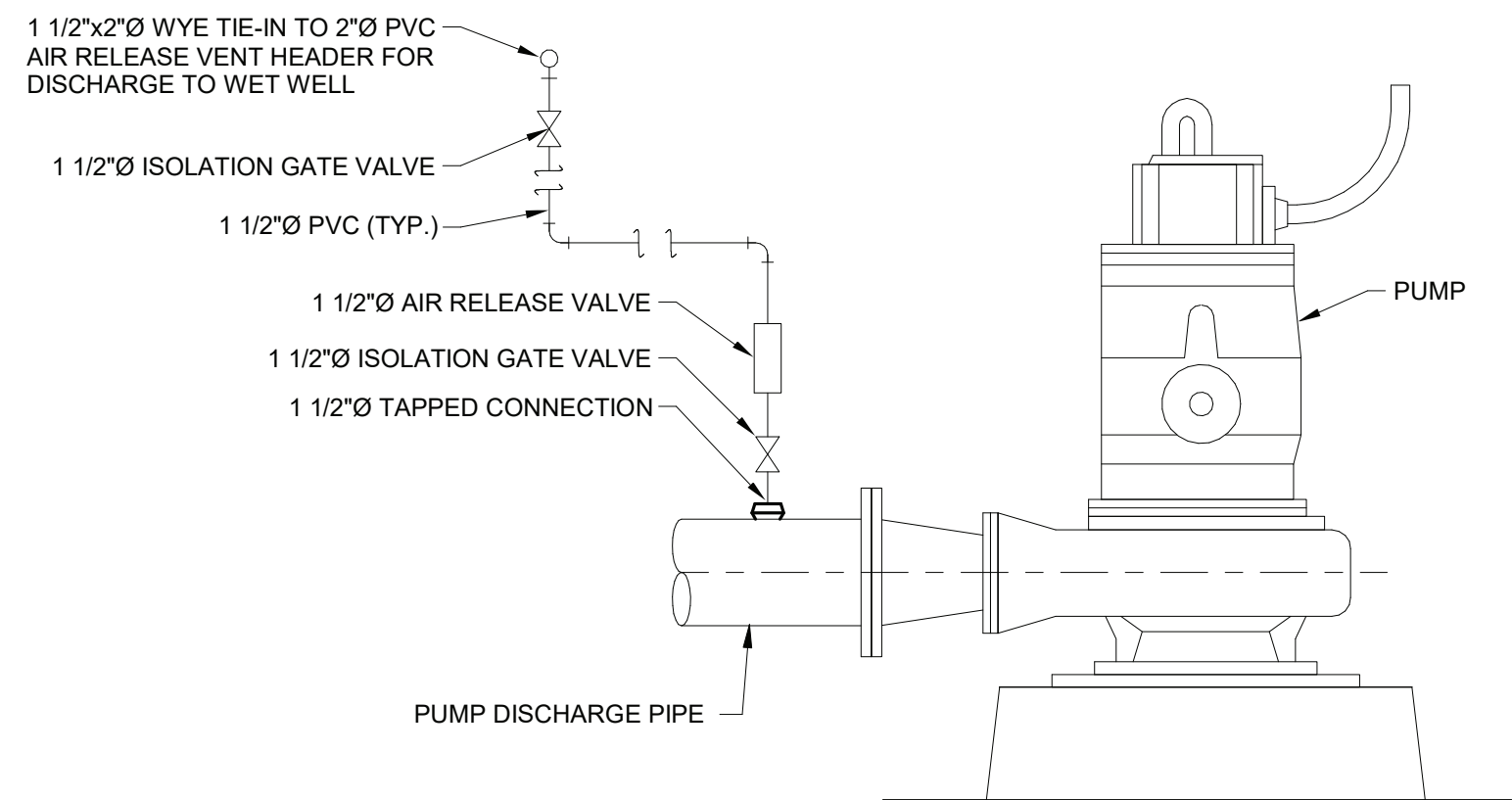


DETAIL NOTES:

1. DETAIL TO BE USED FOR SUPPORT OF VERTICAL TEE OR CROSS.

TYPICAL BASE ELBOW DETAIL

NOT TO SCALE



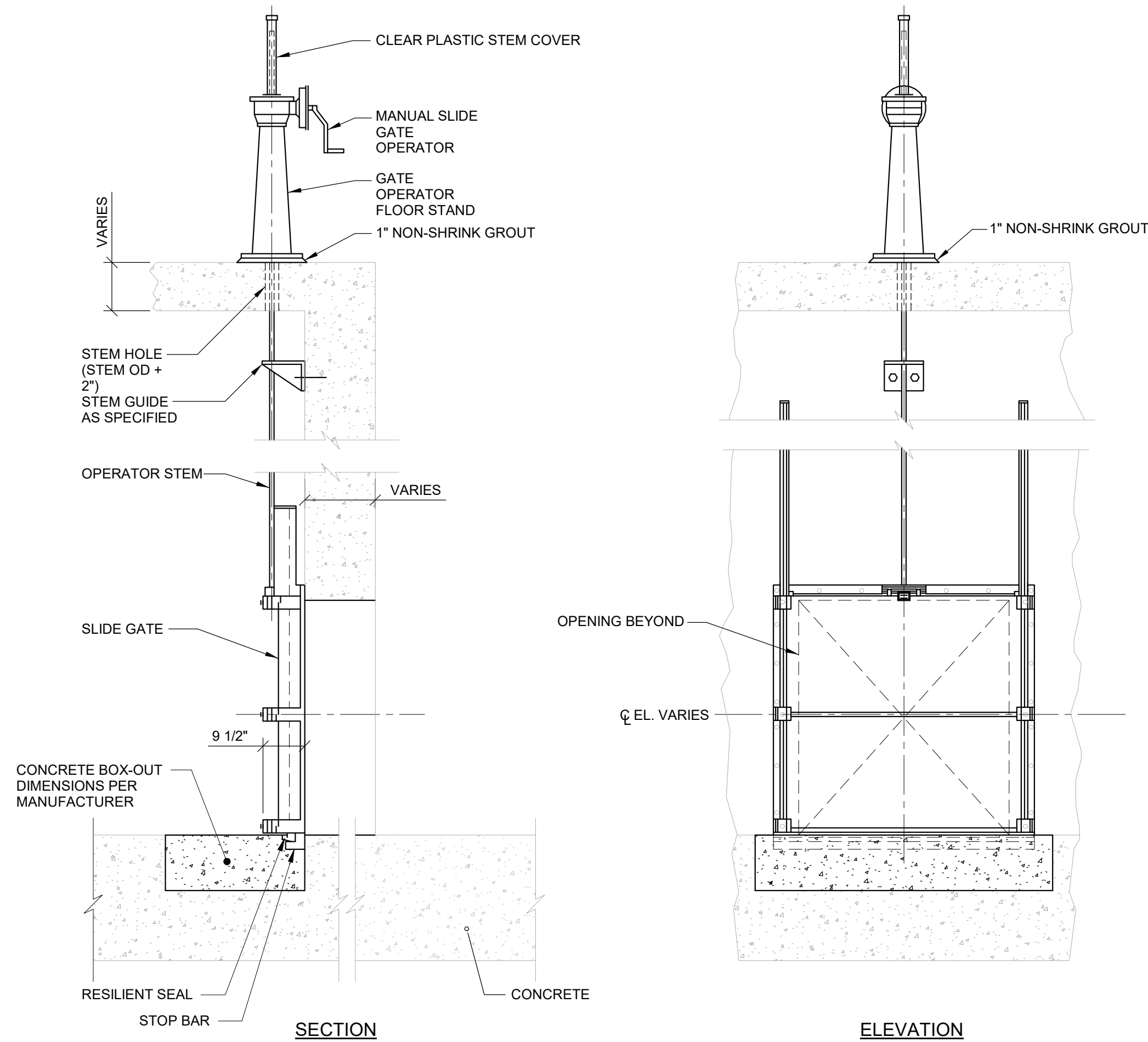
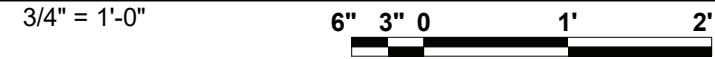
TYPICAL PUMP AIR RELEASE DETAIL

NOT TO SCALE

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REVISION					
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TITLE _____			TITLE _____		
DATE _____			DATE _____		
WESTCHESTER COUNTY, NEW YORK			CONTRACT NUMBER 17-529		
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION			SHEET NUMBER M-501		
DIVISION OF ENGINEERING			SHEET NO. 31 OF 60		
CROTONVILLE PUMPING STATION REHABILITATION			SCALE: AS NOTED		
OSSINING SEWER DISTRICT			DATE: 12/21/2018		
OSSINING, NEW YORK			DPW FILE NO. 208-03-M-55-0		
TYPICAL DETAILS			REV. NO. 0		

1. HARDWARE AND FRAMING SHALL BE TYPE 316 STAINLESS STEEL.
2. BAR RACKS SHALL BE FABRICATED TO SUIT EXIST. STRUCTURE.

BYPASS CHANNEL BAR RACK DETAIL

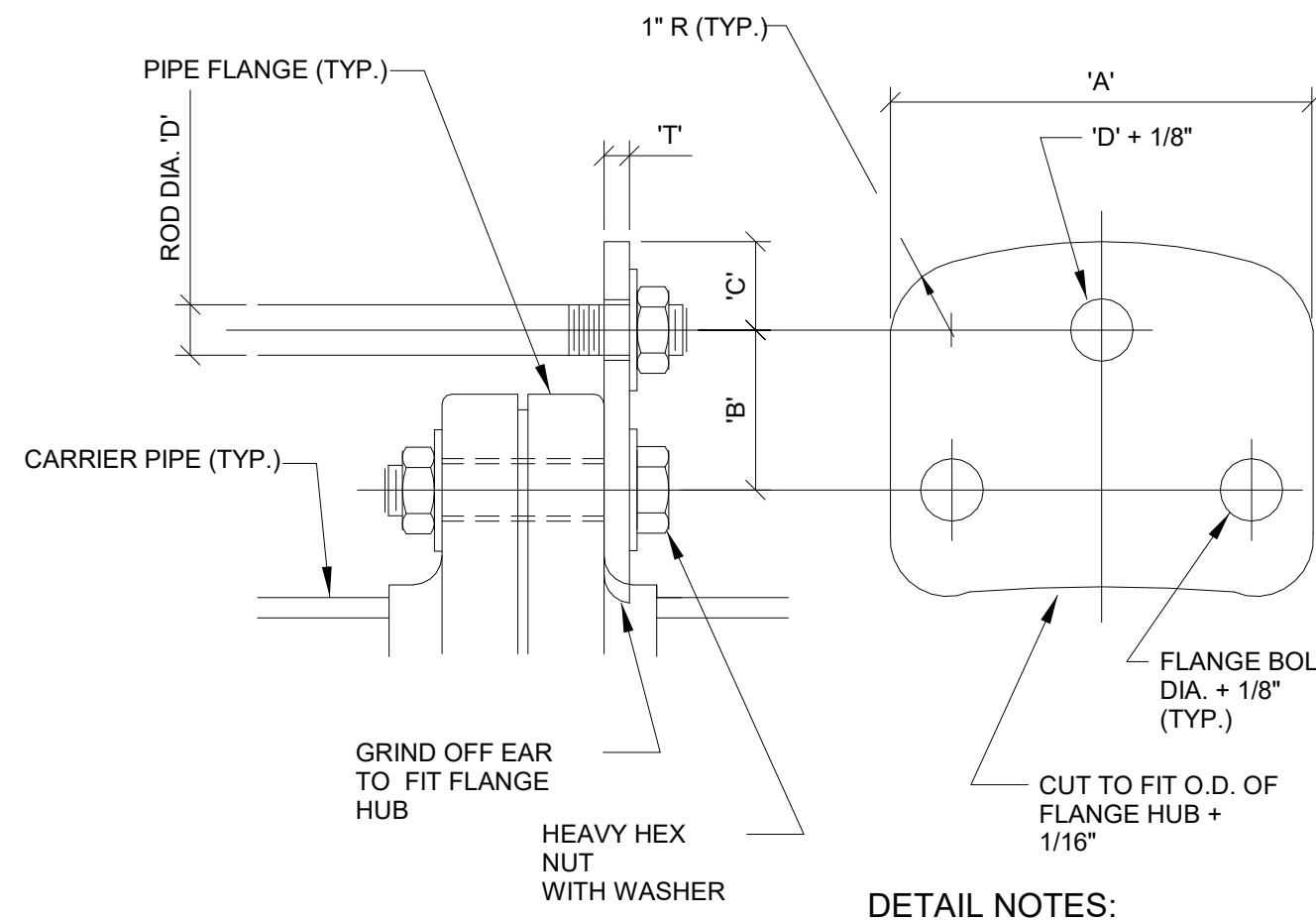


DETAIL NOTES:

1. COORDINATE GATE MOUNTING WITH MANUFACTURER'S RECOMMENDATIONS
2. OPERATOR SHOWN IS REPRESENTATIVE ONLY. REFER TO SECTION 40 05 59.

SLIDE GATE MOUNTING DETAIL

NOT TO SCALE



DETAIL NOTES:

1. ALL DIMENSIONS GIVEN IN HARNESS EAR SCHEDULE ARE IN INCHES.
2. HARNESS EAR MATERIAL SHALL CONFORM TO ASTM A36.
3. HARNESSING ROD SHALL CONFORM TO ASTM A449.

ROD DIA. 'D'	PIPE SIZES	'A'	'B'	'C'	'T'
5/8	4, 6	7	2 1/2	1 1/4	1
	8, 10, 12	7 1/2	2 1/2		
	16, 20	8	3		
	14, 18	8 1/2	3		
3/4	6	7	2 1/2	1 1/2	1 1/8
	8, 10, 12	7 1/2	2 1/2		
	16, 20	8	3		
	14, 18	8 1/2	3		
	24, 30	9	3		
1	10	7 1/2	2 1/2	1 1/2	1 1/2
	16, 20	8	3		
	14, 18	8 1/2	3		
	24, 30, 36	9	3		
	42, 48	9 1/2	3 1/2		

TYPICAL HARNESSING EAR DETAIL

NOT TO SCALE

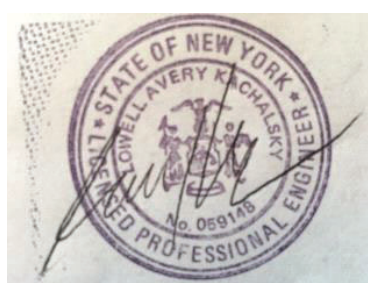

ALLOWABLE TEST PRESSURE (PSIG) FOR VARIOUS PIPE SIZES AND No./DIA. OF HARNESS RODS														
PIPE SIZE	NO. & DIA. OF RODS	(2) 5/8"	(2) 3/4"	(2) 1"	(2) 1 1/4"	(2) 1 1/2"	(4) 5/8"	(4) 3/4"	(4) 1"	(4) 1 1/4"	(4) 1 1/2"	(6) 1 1/2"	(8) 1 1/2"	(8) 2"
4"	0-250													
6"		0-250												
8"		0-250												
10"		0-250												
12"		0-232	0-250				162-250	233-250						
14"		0-170	0-250				119-237	171-250						
16"		0-131	0-232				92-181	132-250	233-250					
18"		0-103	0-183				73-143	104-206	184-250					
20"		0-84	0-149	0-203			59-116	85-167	150-250	204-250				
24"		0-58	0-103	0-141				59-116	104-206	142-250				
30"		0-37	0-66	0-90	0-130			38-74	67-132	91-180	131-250			
36"			0-46	0-63	0-90			47-92	64-125	91-180		181-250		
42"			0-36	0-46	0-66				35-67	47-92	67-133	134-199	200-250	
48"			0-34	0-26	0-51				27-52	36-70	52-102	103-152	153-203	
54"					0-40						41-80	81-120	121-160	
60"					0-32						33-65	66-97	98-130	131-180

NOTE:

1. HARNESSING ROD SHALL CONFORM TO ASTM A449.

TYPICAL HARNESS ROD SCHEDULE

NOT TO SCALE

	IN ACCORDANCE WITH TITLE VIII, ARTICLE 145, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW, IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER TO ALTER THIS DOCUMENT.										
IN CHARGE OF <u>R. GELL</u> CHECKED BY <u>D. ROONEY</u> MADE BY <u>T. LARAMAY</u>		O'BRIEN & GERE ENGINEERS, INC. 50 MAIN ST., 10TH FLOOR SUITE 1000, WHITE PLAINS, NEW YORK 10606									
<div style="text-align: center; color: blue; font-size: small;">DocuSign</div>											
RECORD DRAWING CERTIFICATION											
<input type="checkbox"/> AS BUILT - CHANGES AS NOTED <input type="checkbox"/> AS BUILT - NO CHANGES											
CONTRACTOR NAME _____ SIGNATURE _____ TITLE _____ DATE _____				PROJECT COORDINATOR NAME _____ SIGNATURE _____ TITLE _____ DATE _____							
WESTCHESTER COUNTY, NEW YORK DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF ENGINEERING				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> CONTRACT NUMBER 17-529 </td> <td style="width: 50%; text-align: center;"> SHEET NUMBER M-502 </td> </tr> <tr> <td colspan="2" style="text-align: center;"> SHEET NO. 32 OF 60 </td> </tr> </table>				CONTRACT NUMBER 17-529	SHEET NUMBER M-502	SHEET NO. 32 OF 60	
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