

NOTE:  
 CONTRACTOR SHALL PLACE WATER  
 METER BOX IN NON-TRAFFIC AREA  
 AT LOCATION SPECIFIED BY NORTH  
 BRUNSWICK SANITARY DISTRICT.

### 3/4" WATER SERVICE

NTS SD 1-04

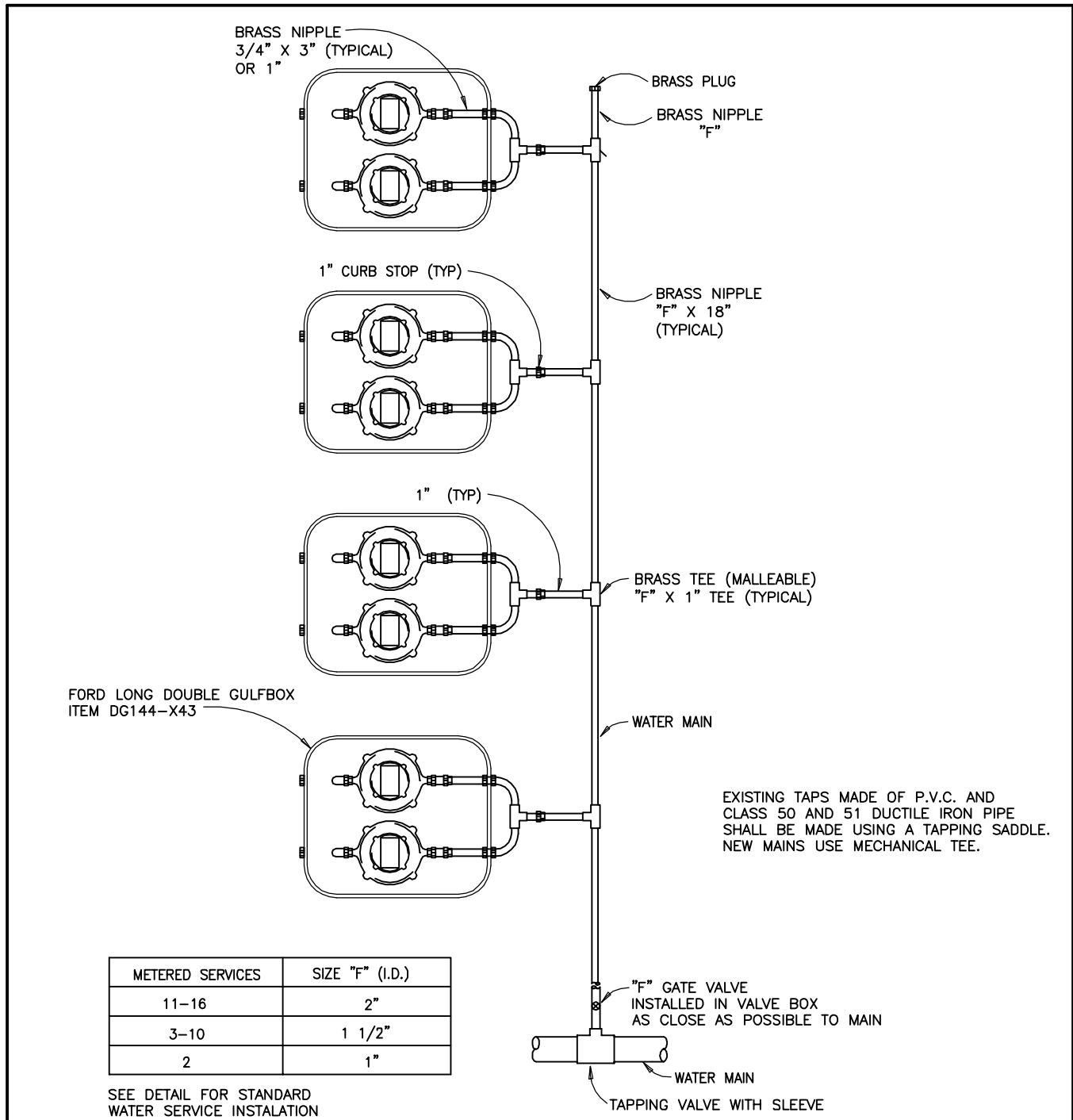
**NORTH BRUNSWICK  
 SANITARY DISTRICT**

**STANDARD DETAIL: SD 1-04  
 Not To Scale**

**DATE: 01/01/08  
 ...**

**P.O. BOX 2230  
 516 VILLAGE ROAD NE  
 LELAND, N.C. 28451-2230  
 TEL (910) 371-9949  
 FAX (910) 371-6441**

### 3/4" WATER SERVICE



METERED SERVICES	SIZE "F" (I.D.)
11-16	2"
3-10	1 1/2"
2	1"

SEE DETAIL FOR STANDARD  
WATER SERVICE INSTALATION

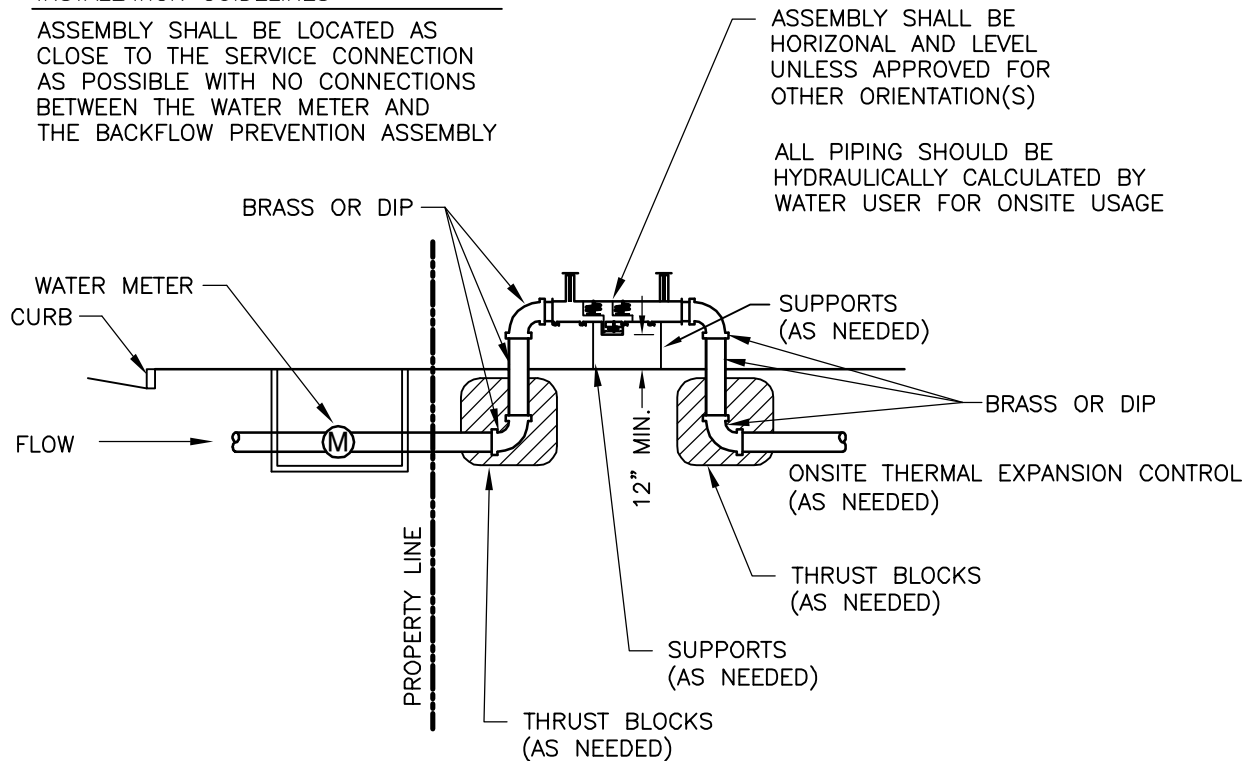
## GANG METER ASSEMBLY

NTS                      SD 1-06

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-06</b> <b>Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>		<h1 style="margin: 0;"><b>GANG METER ASSEMBLY</b></h1>

**SERVICE CONNECTION  
INSTALLATION GUIDELINES**

ASSEMBLY SHALL BE LOCATED AS CLOSE TO THE SERVICE CONNECTION AS POSSIBLE WITH NO CONNECTIONS BETWEEN THE WATER METER AND THE BACKFLOW PREVENTION ASSEMBLY



ALL BACKFLOW DEVICES TO COMPLY WITH USC STANDARDS

BACKFLOW PREVENTION ASSEMBLIES ARE TO BE USED WITHIN THEIR RATED OPERATING CONDITIONS.

**PRESSURE:** BACKFLOW PREVENTION ASSEMBLIES TYPICALLY HAVE MAXIMUM WORKING WATER PRESSURES (MWWP) OF 150 PSI (1034 KPa) OR 175 PSI (1206 KPa). ASSEMBLIES ARE DESIGNED TO OPERATE CONTINUOUSLY AT THIS PRESSURE, WHICH IS IDENTIFIED ON THE ASSEMBLY.

**TEMPERATURE:** BACKFLOW PREVENTION ASSEMBLIES ARE DESIGNED TO OPERATE CONTINUOUSLY AT THEIR MAXIMUM WORKING WATER TEMPERATURE (MWWT), WHICH IS IDENTIFIED ON THE ASSEMBLY.

**RATE OF FLOW:** BACKFLOW PREVENTION ASSEMBLIES ARE DESIGNED TO OPERATE CONTINUOUSLY UP TO THEIR RATED FLOW (i.e. GALLONS PER MINUTE – GPM; OR LITERS PER SECOND –L/S).

A FIBERGLASS HOT BOX ENCLOSURE ON A CONCRETE PAD IS REQUIRED.

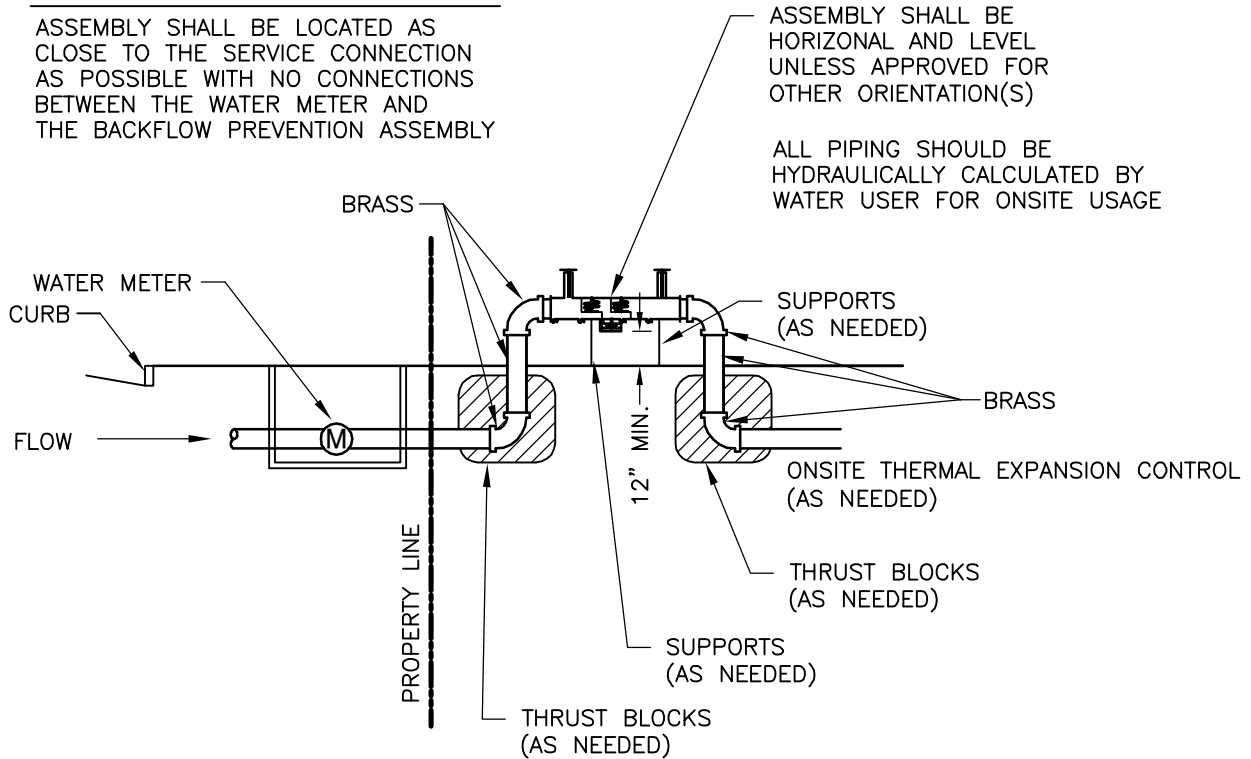
**RPZ - 2" & UP**

NTS SD 1-08

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-08 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>RPZ - 2"</b></p>	

**SERVICE CONNECTION  
INSTALLATION GUIDELINES**

ASSEMBLY SHALL BE LOCATED AS CLOSE TO THE SERVICE CONNECTION AS POSSIBLE WITH NO CONNECTIONS BETWEEN THE WATER METER AND THE BACKFLOW PREVENTION ASSEMBLY



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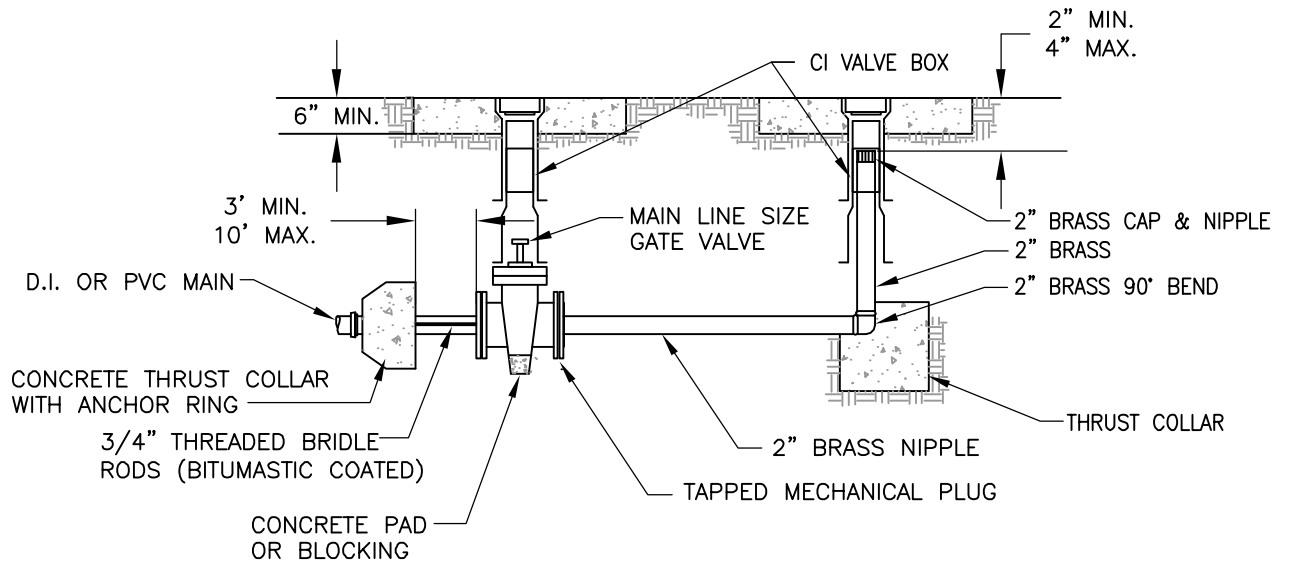
**RATE OF FLOW:** BACKFLOW PREVENTION ASSEMBLIES ARE DESIGNED TO OPERATE CONTINUOUSLY UP TO THEIR RATED FLOW (i.e. GALLONS PER MINUTE – GPM; OR LITERS PER SECOND –L/S).

A FIBERGLASS HOT BOX IS REQUIRED(CONCRETE PAD IS OPTIONAL).

**RPZ - 3/4" OR 1"**

NTS SD 1-10

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-10 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p style="text-align: center;"><b>RPZ - 3/4" OR 1"</b></p>	

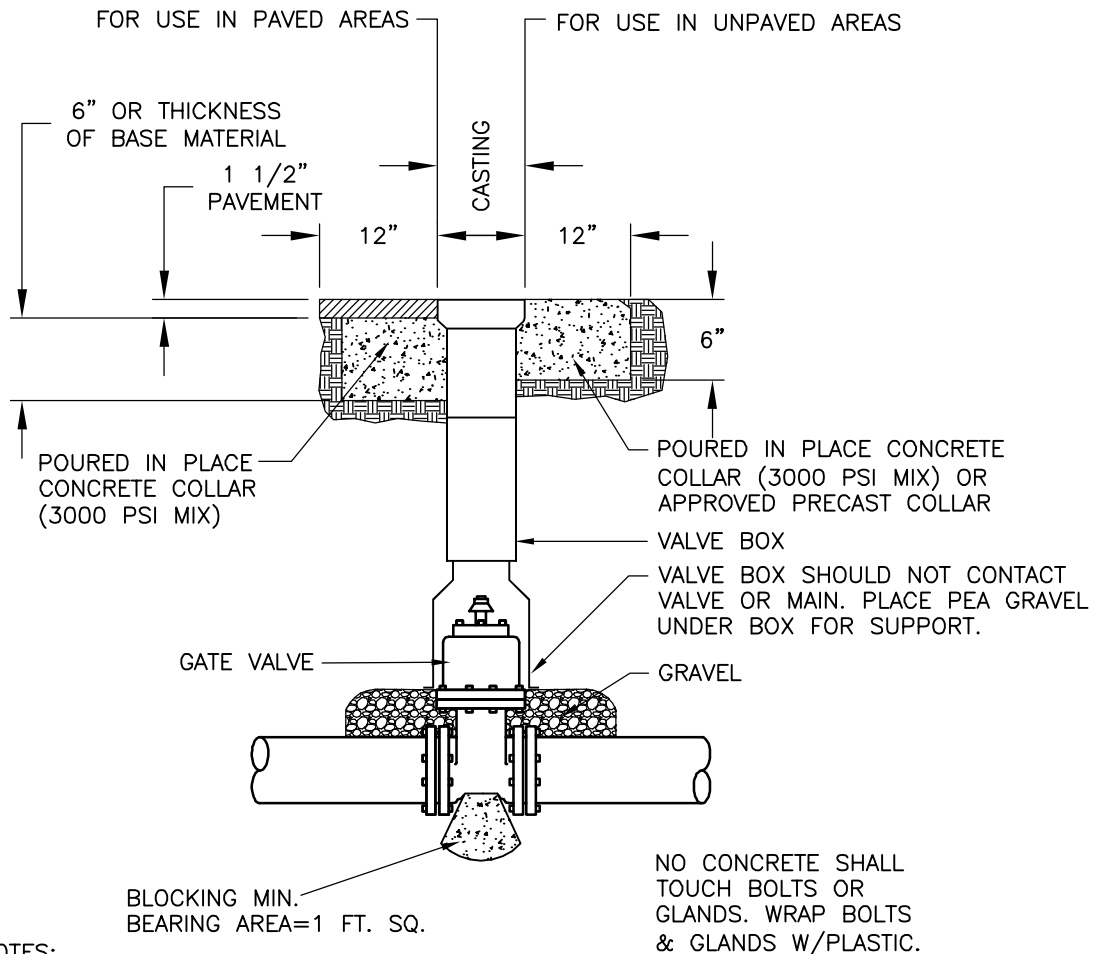


NOTE:  
 SEE SPECIFICATIONS FOR SUPPORT  
 OF VALVE & VALVE BOX IN SOILS  
 OTHER THAN LOOSE DRY SAND

**2" BLOWOFF ASSEMBLY**

NTS SD 1-12

<p><b>NORTH BRUNSWICK          SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-12          Not To Scale</b></p>	<p><b>DATE: 01/01/08          ...</b></p>
<p><b>P.O. BOX 2230          516 VILLAGE ROAD NE          LELAND, N.C. 28451-2230          TEL (910) 371-9949          FAX (910) 371-6441</b></p>	<p><b>2" BLOWOFF ASSEMBLY</b></p>	



**NOTES:**

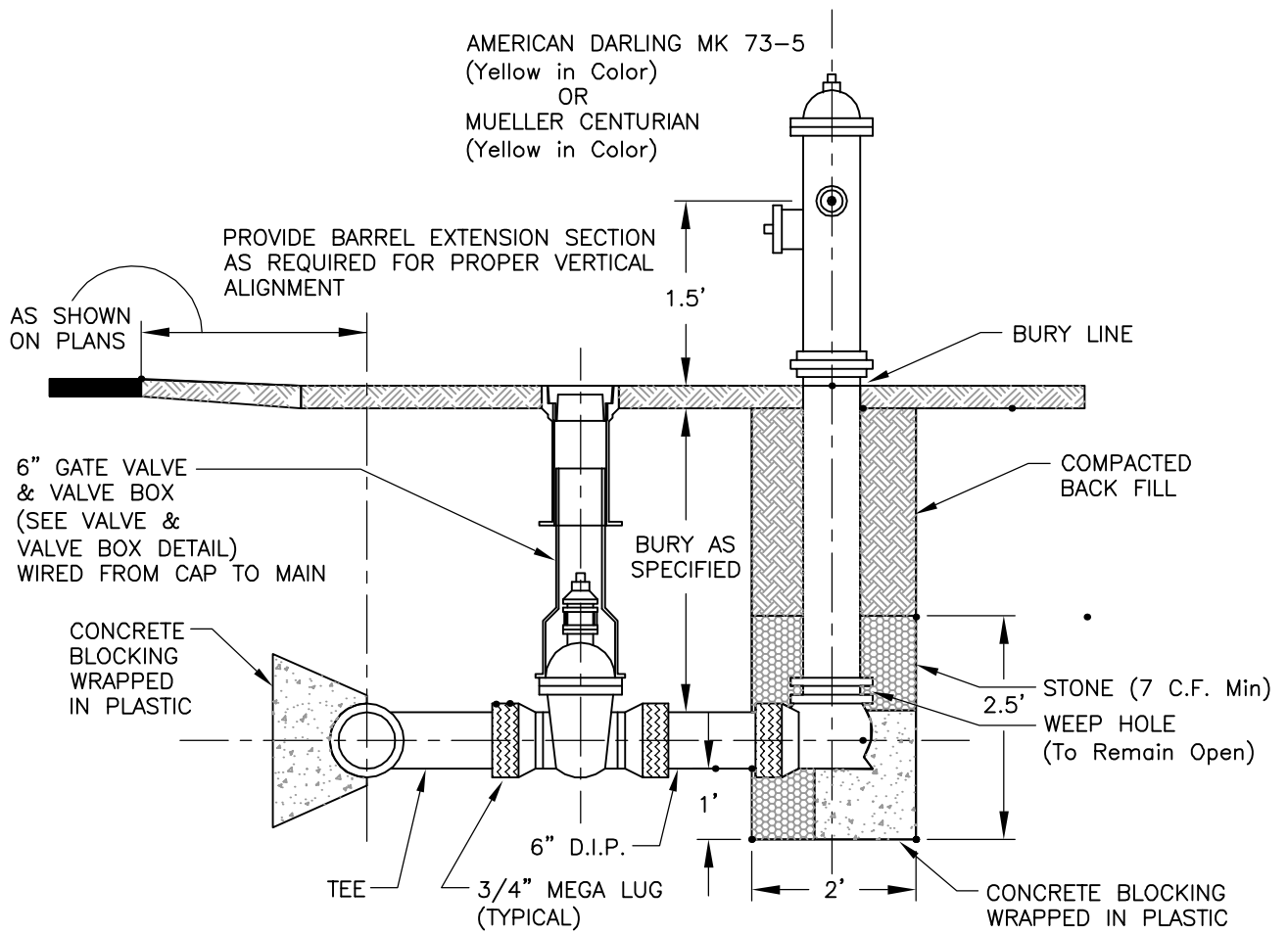
1. 2" GATE VALVES SHALL F.I.P. THREADS. CONNECTION TO THE PIPE SHALL BE MADE WITH BRASS NIPPLE AND SCH. 40 PVC F.I.P.T. X SLIP ADAPTERS.
2. GATE VALVES GREATER THAN 2" SHALL BE MECHANICAL JOINT.
3. WIRE FROM MAIN INTO VALVE BOX AND UP.

**M.J. VALVE AND VALVE BOX**

NTS

SD 1-14

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-14 Not To Scale</b></p>	<p><b>DATE: 01/01/08 ...</b></p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>M.J. VALVE AND VALVE BOX</b></p>	



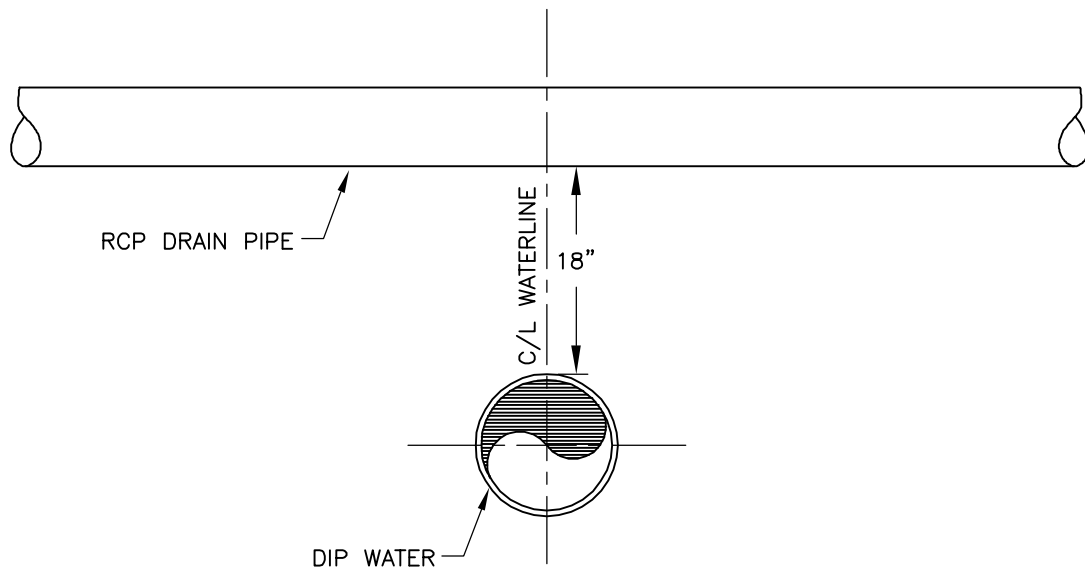
## FIRE HYDRANT ASSEMBLY

NTS

SD 1-16

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-16</b> <b>Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>FIRE HYDRANT ASSEMBLY</b></p>	



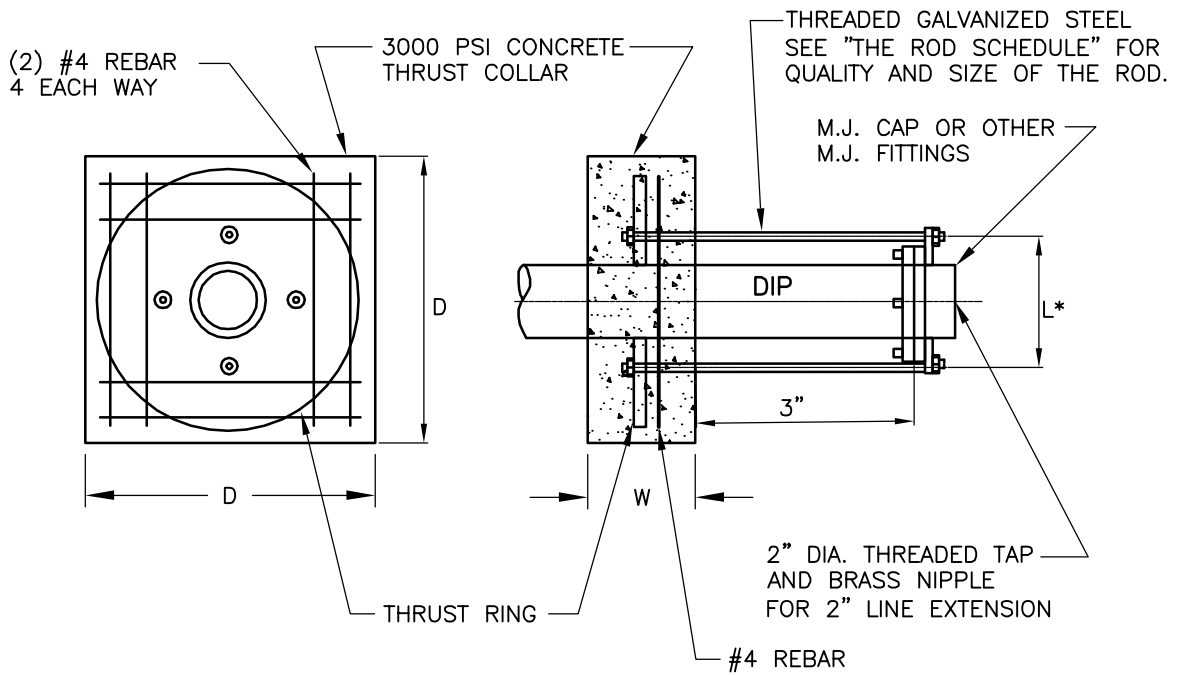


WATER & STORM DRAIN INTERSECTION

NTS

SD 1-20

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-20 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>WATER &amp; STORM DRAIN INTERSECTION</b></p>	



THRUST COLLAR SHALL BE FORMED USING 1/2" EXTERIOR PLYWOOD AS PER COLLAR DIMENSIONS SHOWN.

TIE ROD SCHEDULE

COLLAR DIMENSIONS

PIPE DIAM.	TIE ROD		LINE SIZE	MIN. W	MIN. D	PLATE DIAM.
	QUAN.	SIZE				
4"	2	5/8"	4"	6"	L+8"	L+2"
6"	2	3/4"	6"	9"	L+9"	L+3"
8"	2	3/4"	8"	12"	L+9"	L+3"
12"	4	3/4"	12"	18"	L+9"	L+3"
16"	4	7/8"	16"	18"	L+9"	L+3"
20"	4	1"	20"	20"?	L+9"	L+3"
24"	4	1 1/4"	24"	24"?	L+10"	L+4"
30"	4	1 1/2"	30"	24"?	L+11"	L+5"

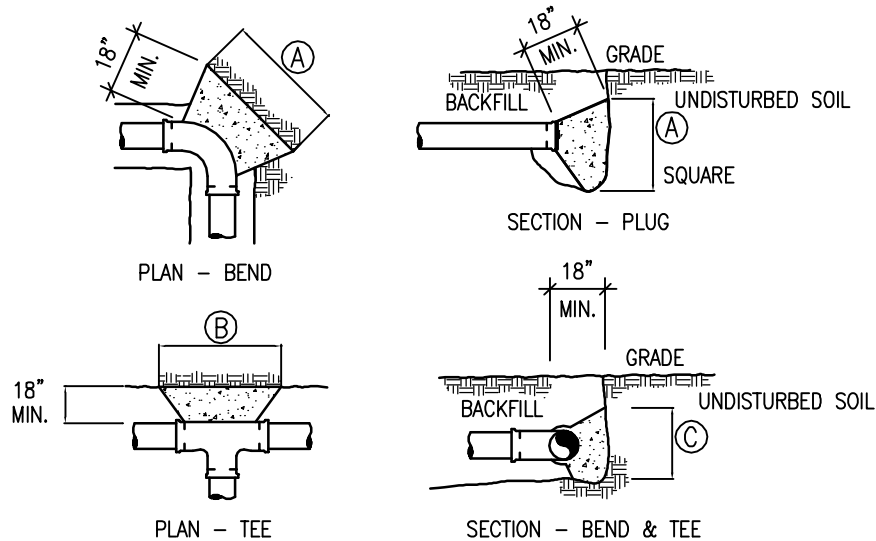
\* CONTRACTOR VERIFY DISTANCE W/COLLAR SUPPLIERS.

THRUST COLLAR

NTS SD 1-22

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-22 Not To Scale</b></p>	<p><b>DATE: 01/01/08 ...</b></p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>THRUST COLLAR</b></p>	

BLOCKING	DIMENSIONS		
PIPE SIZE	(A)	(B)	(C)
UP TO 10"	4'-0"	2'-6"	3'-0"
12" TO 18"	6'-0"	4'-0"	5'-0"
18" TO 24"	8'-0"	6'-0"	6'-0"

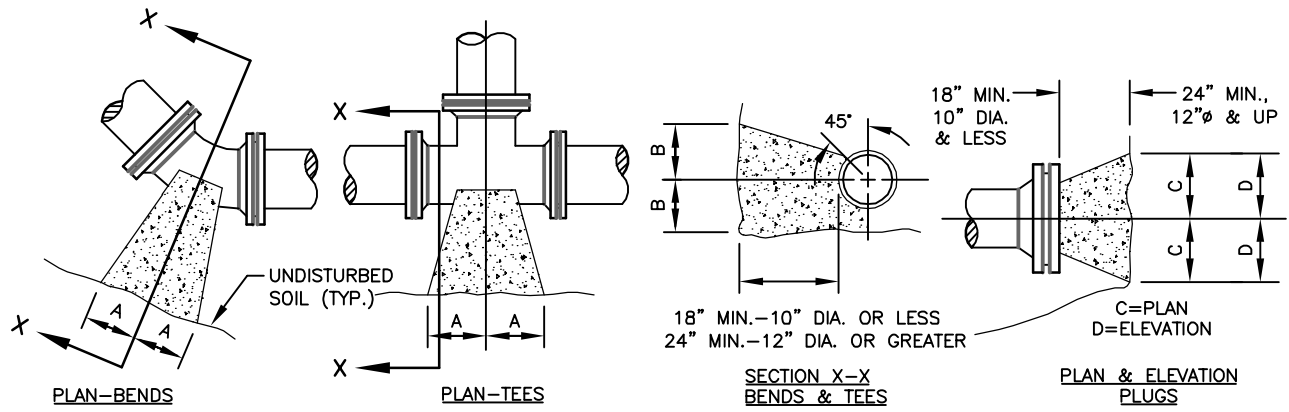


### CONCRETE BLOCKING DETAILS

NTS

SD 1-24

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-24 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>CONCRETE BLOCKING DETAILS</b></p>	



PIPE SIZE	90° BEND		45° BEND		22-1/2° BEND		11-1/4° BEND		TEE		PLUG	
	A	B	A	B	A	B	A	B	A	B	C	D
4"	18"	12"	10"	13"	7"	10"	7"	10"	12"	14"	13"	6"
6"	18"	12"	10"	13"	7"	10"	7"	10"	12"	14"	19"	9"
8"	24"	18"	13"	18"	10"	12"	10"	12"	16"	18"	25"	11"
10"	28"	22"	15"	22"	12"	15"	12"	15"	20"	22"	31"	14"
12"	32"	28"	19"	28"	14"	18"	14"	18"	22"	28"	37"	17"
16"	54"	38"	30"	36"	18"	36"	18"	36"	36"	42"	54"	24"

2000 PSF SOIL (SAND & GRAVEL WITH CLAY)

NOTES:

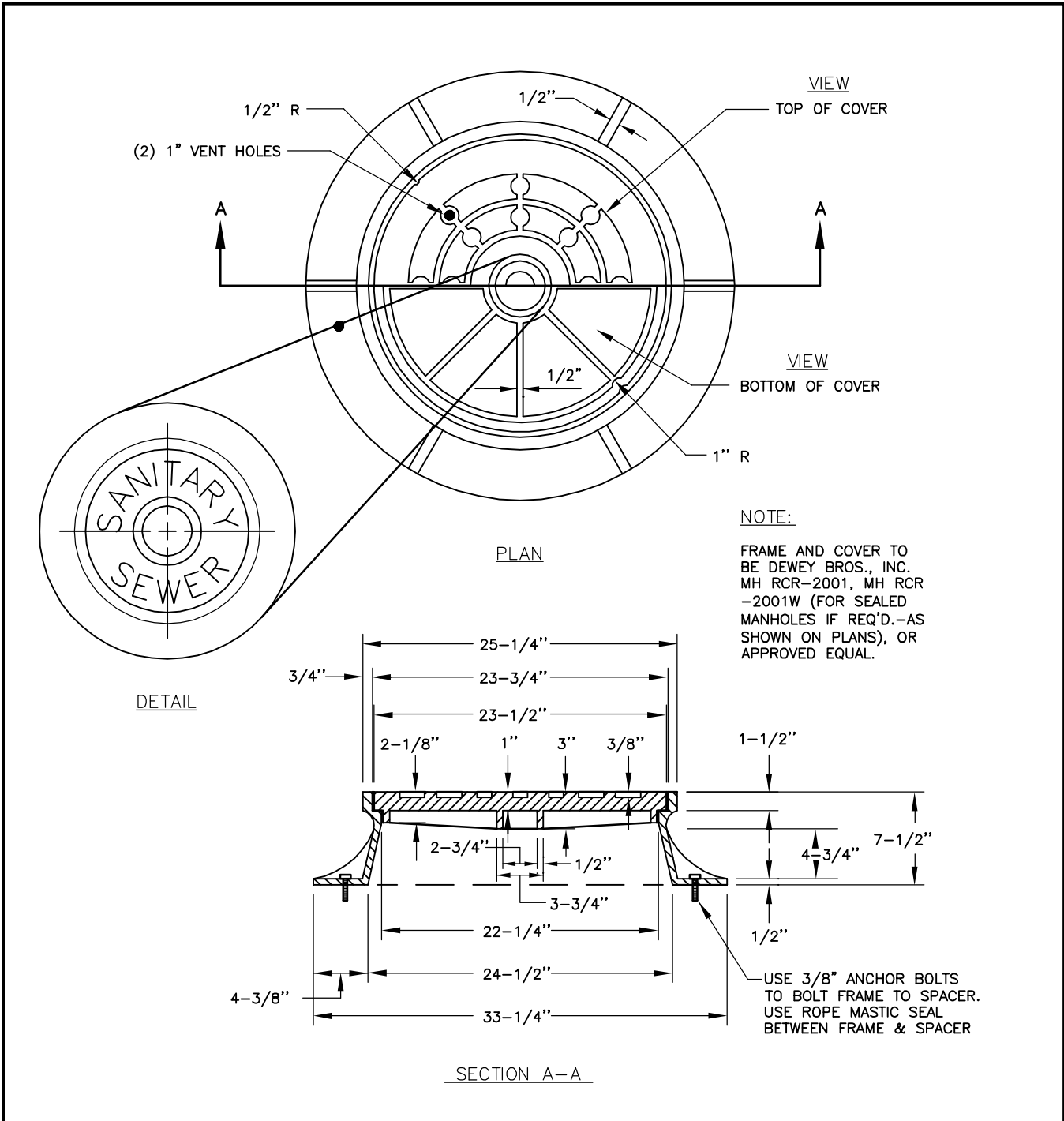
1. BASED ON 200 PSI STATIC PRESSURE PLUS AWWA WATER HAMMER ALLOWANCE.
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
3. THRUST BLOCKS TO BE USED AT ALL LINES OPERATING UNDER PRESSURE.
4. KEEP ALL PIPING JOINTS CLEAR OF CONCRETE THRUST BLOCKS.
5. WRAP ALL FITTINGS IN PLASTIC.

THRUST BLOCKING DETAILS

NTS

SD 1-26

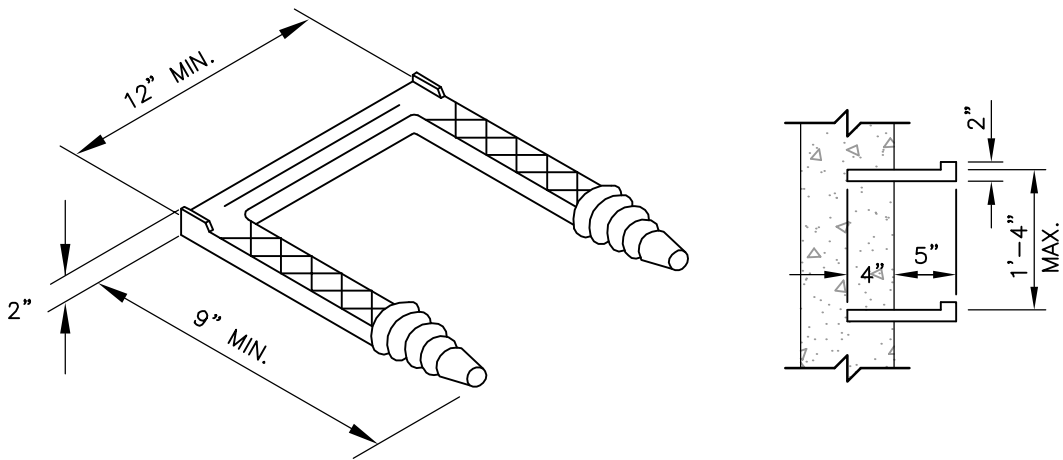
<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 1-26 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>THRUST BLOCKING DETAILS</b></p>	



**MANHOLE FRAME & COVER**

NTS SD 2-02

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-02 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p align="center"><b>MANHOLE COVER &amp; FRAME</b></p>	



**PLASTIC MANHOLE STEP**

NTS

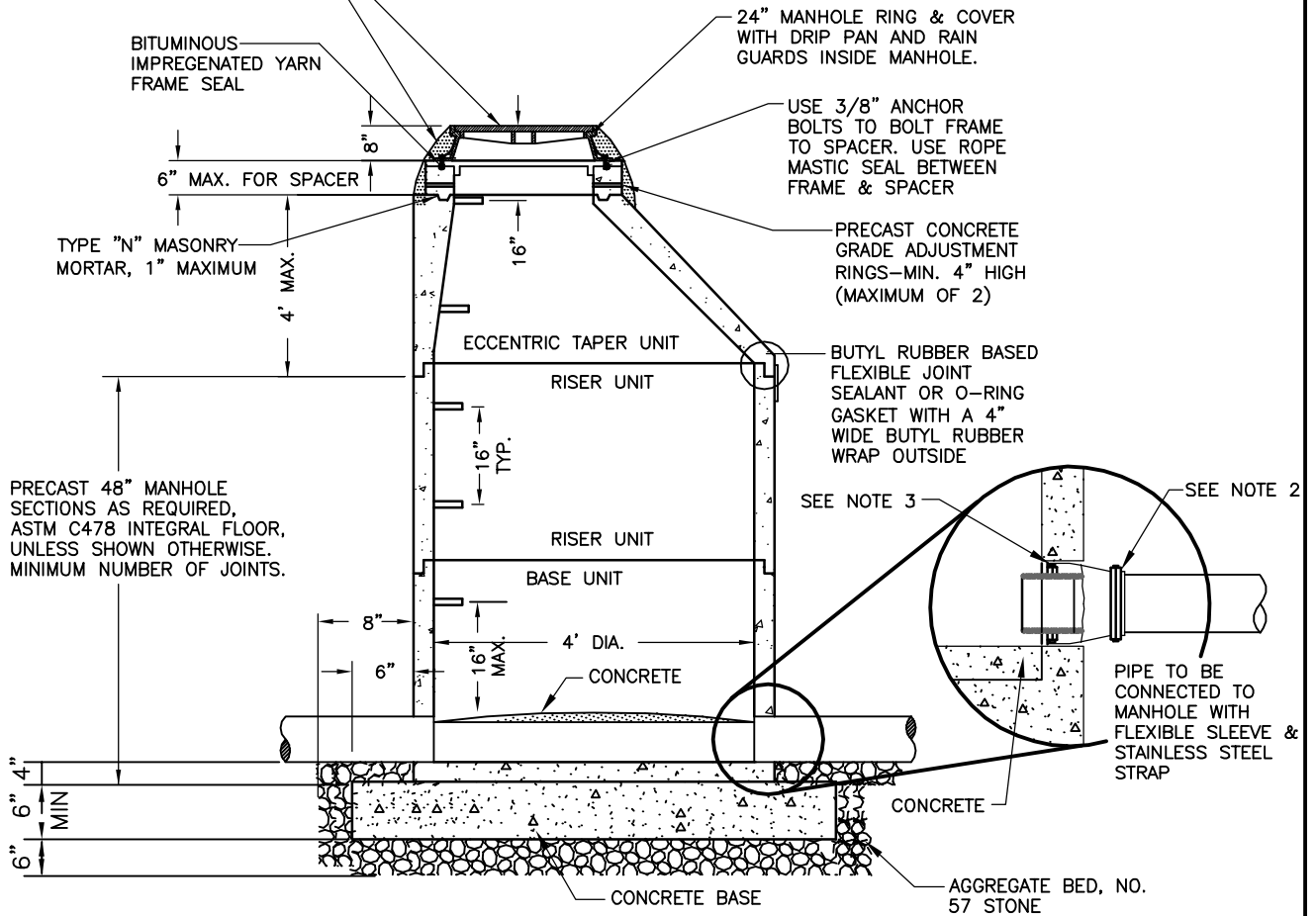
SD 2-06

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-06 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>PLASTIC MANHOLE STEP</b></p>	

NOTES:

1. NEOPRENE BOOT, KOR-N-SEAL OR EQUAL, TO BE USED ON ALL PRECAST MANHOLES WITH ALL TYPES OF PIPES.
2. PIPE CLAMP (300-SERIES NON-MAGNETIC CORROSION-RESISTANT STEEL).
3. EXPANSION BAND (KORBAND 6061-T6 ALUMINUM ALLOY WITH A BLACK ANODIZED SURFACE)
4. USE STAINLESS STEEL DRIP PANS ON ALL MANHOLES IN PAVEMENT; VINYL OUTSIDE PAVEMENT.
5. COAT INTERIOR WITH TWO COATS OF COAL TAR EPOXY FOR A FINAL THICKNESS OF 21 MILS. WRAP OUTSIDE OF MANHOLE WITH WIDE WRAP MASTIC.
6. ALL MANHOLES WITHIN NCDOT ROW SHALL BE CONSTRUCTED PER NCDOT STANDARDS.

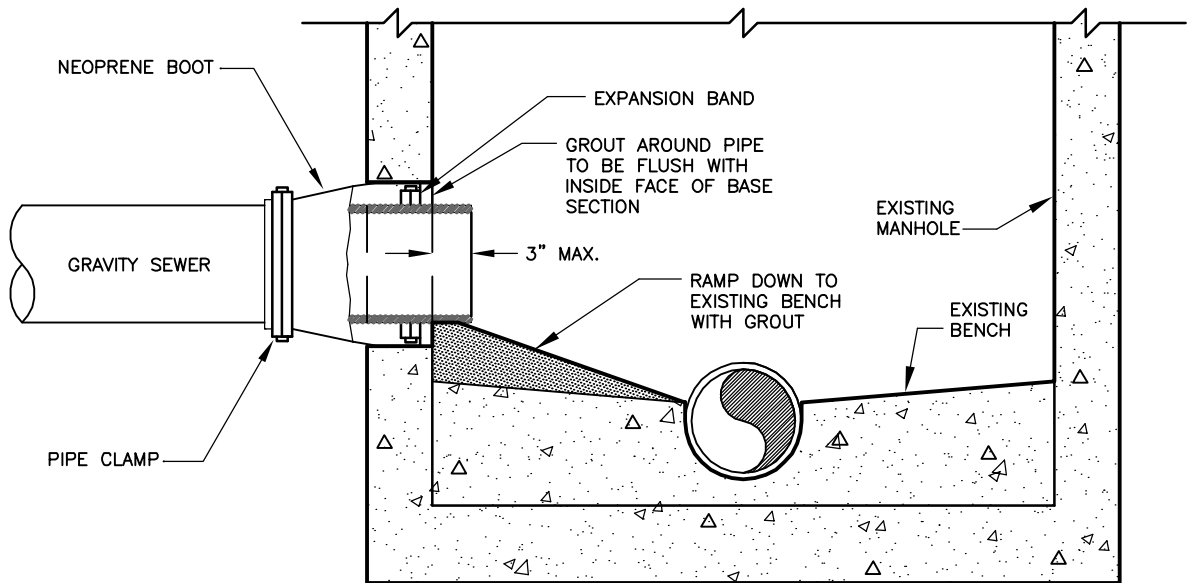
FRAME & COVER (SEE DETAIL), BOLTED AND MORTARED, ROUNDED AS SHOWN



**PRECAST S.S. MANHOLE**

NTS SD 2-10

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-10 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>PRECAST S.S. MANHOLE</b></p>	



NOTES:

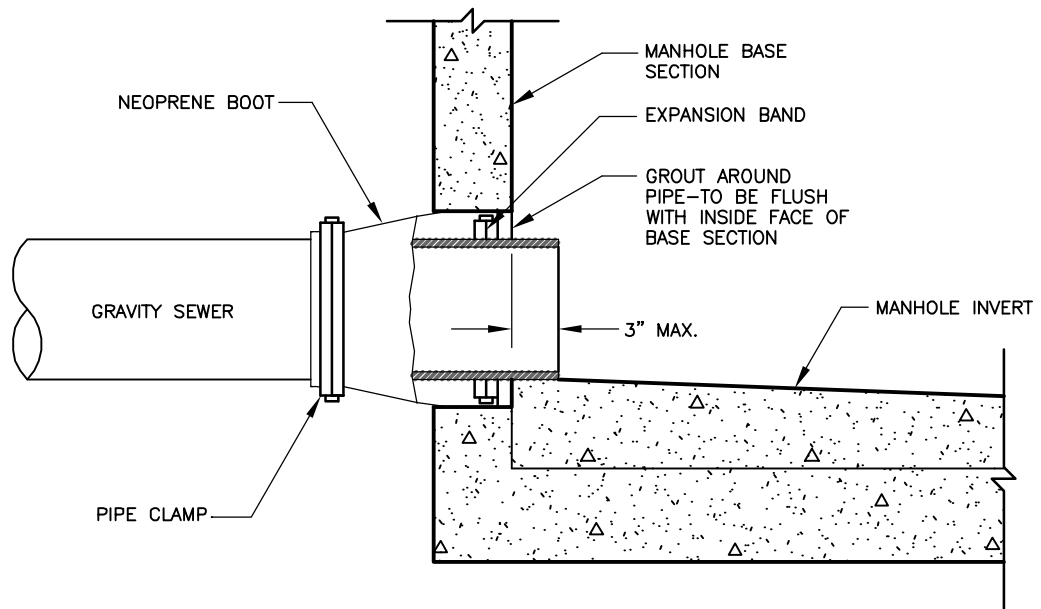
1. MATERIAL SPECIFICATIONS: NEOPRENE BOOT – ASTM C-923; PIPE CLAMP & EXPANSION CLAMP – STAINLESS STEEL, ASTM C-923.
2. TWO PIPE CLAMPS REQUIRED FOR PIPE O.D.'S 15" AND LARGER.

SEWER LINE CONNECTION TO EXISTING MANHOLE

NTS

SD 2-12

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-12 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>SEWER LINE CONNECTION TO EXISTING MANHOLE</b></p>	



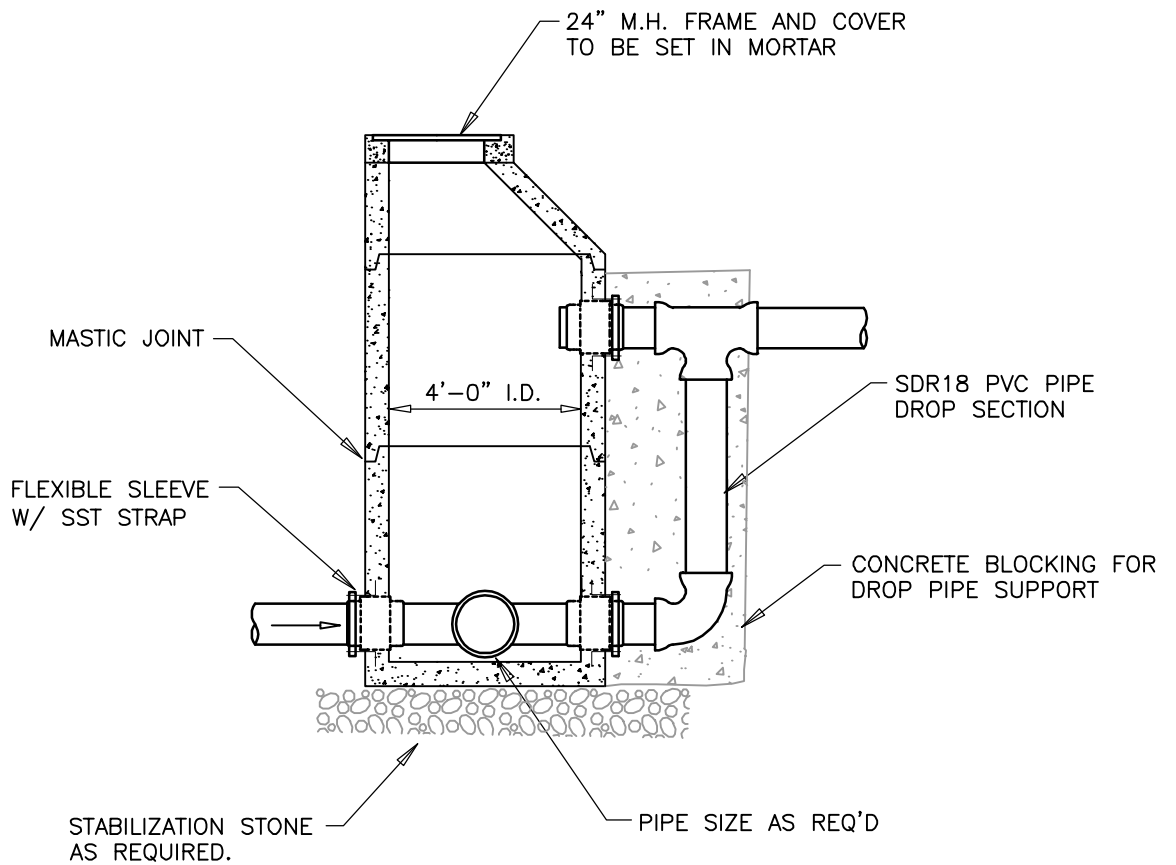
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2. TWO PIPE CLAMPS REQUIRED FOR PIPE O.D.'S 15" AND LARGER.
3. PIPE CLAMP (300-SERIES NON-MAGNETIC CORROSION-RESISTANT STEEL)

MANHOLE BOOT

NTS SD 2-14

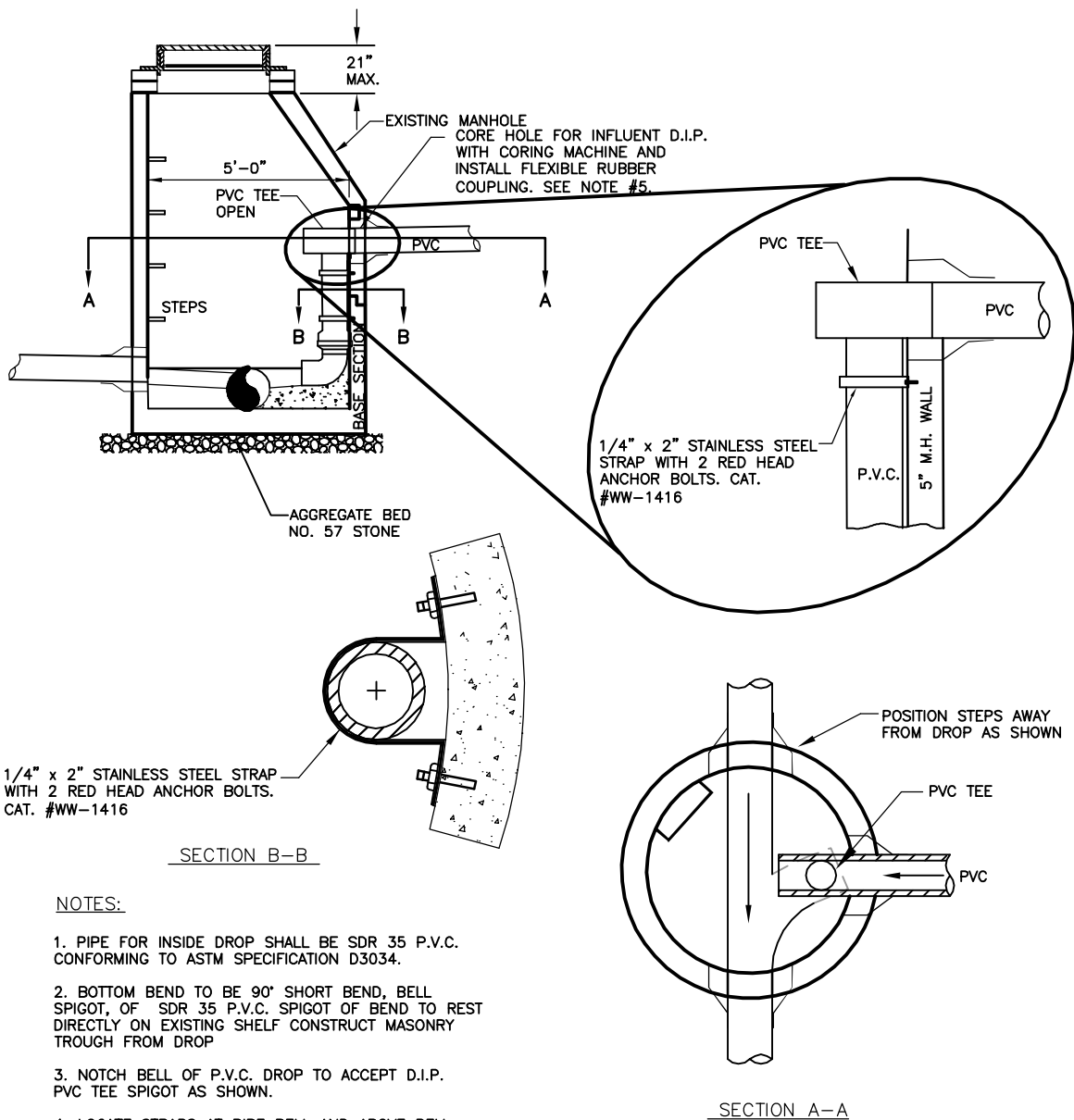
<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-14 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
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**PRECAST S.S. DROP MANHOLE**

NTS SD 2-16

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-16 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p align="center"><b>PRECAST S.S. DROP MANHOLE</b></p>	

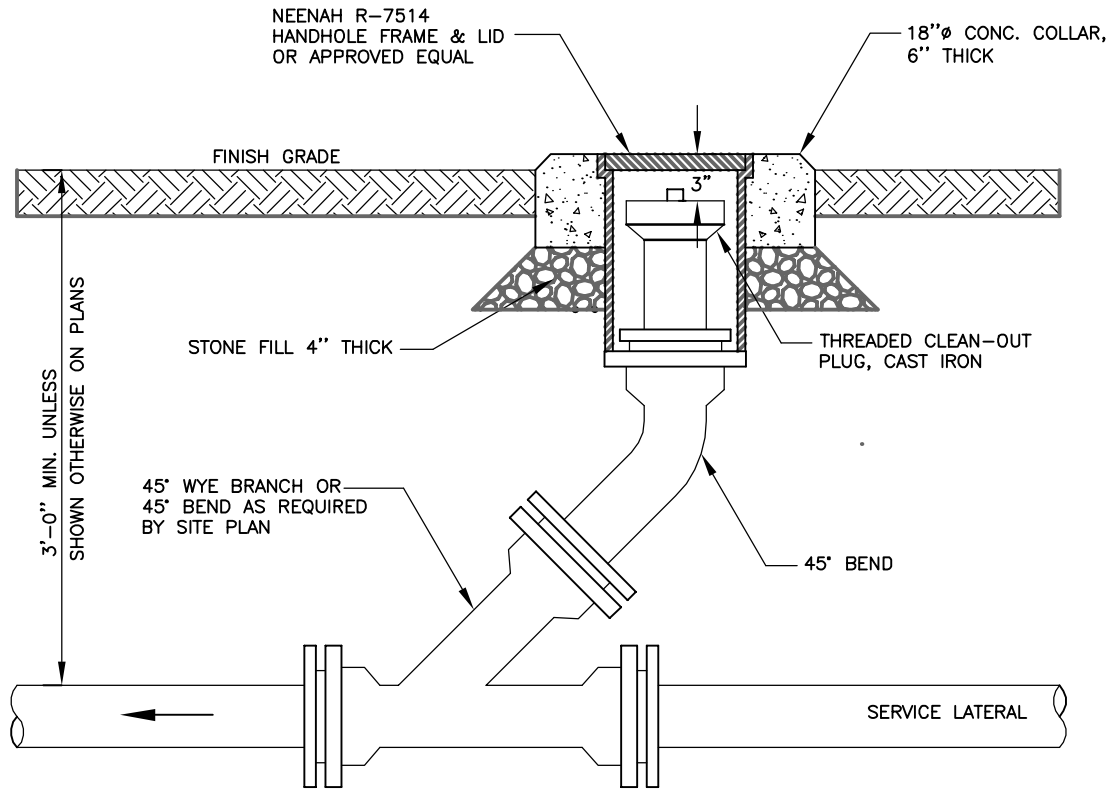


## 5' DIA. INSIDE DROP MANHOLE CONNECTION

NTS

SD 2-18

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-18</b> <b>Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>5' DIAMETER INSIDE DROP MANHOLE CONNECTION</b></p>	



NOTES:

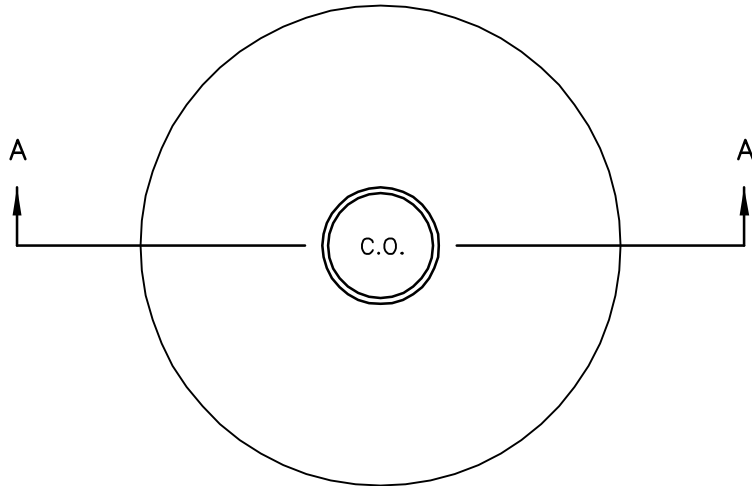
1. CLEAN-OUT PIPE AND FITTINGS SHALL BE THE SAME DIAMETER AND MATERIAL AS THE SERVICE LATERAL.
2. PROVIDE CLEAN-OUTS WHERE INDICATED ON THE PLANS.
3. D.I.P. CLEAN-OUTS SHALL HAVE BRONZE-THREADED CLEAN-OUT PLUG.
4. WHERE CLEAN-OUTS ARE INSTALLED ON PIPING UNDER PRESSURE, ALL JOINTS SHALL HAVE RETAINER GLANDS OR OTHER APPROVED METHOD OF RESTRAINT. ALL RISER PIPE, FITTINGS AND CLEAN-OUT PLUG SHALL BE WATERTIGHT AND RATED FOR THE PRESSURES PRESENT AT THE PARTICULAR POINT OF INSTALLATION.

**SANITARY SEWER SERVICE LATERAL CLEANOUT**

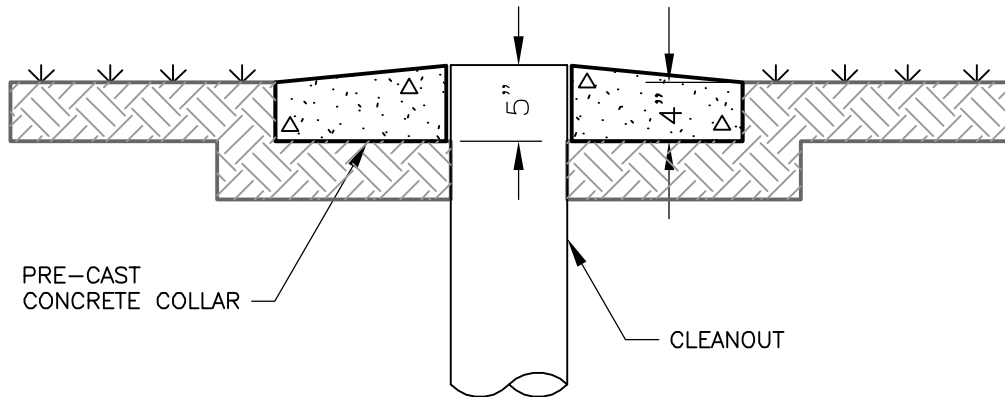
NTS

SD 2-20

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-20 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p style="text-align: center;"><b>SANITARY SEWER SERVICE LATERAL CLEANOUT</b></p>	



PLAN



SECTION A-A

**CLEANOUT PAD**

NTS SD 2-22

**NORTH BRUNSWICK  
SANITARY DISTRICT**

**STANDARD DETAIL: SD 2-22  
Not To Scale**

**DATE: 01/01/08  
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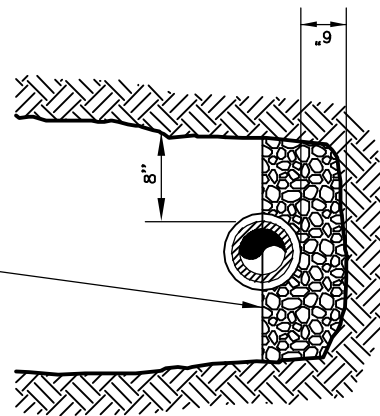
**P.O. BOX 2230  
516 VILLAGE ROAD NE  
LELAND, N.C. 28451-2230  
TEL (910) 371-9949  
FAX (910) 371-6441**

**CLEANOUT PAD**

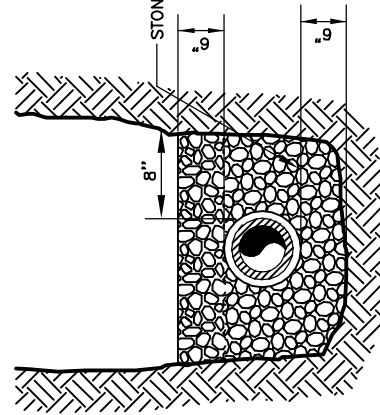


NOTE:  
START LAYING PIPE AT LOW END;  
BUILD AGAINST DIRECTION OF FLOW

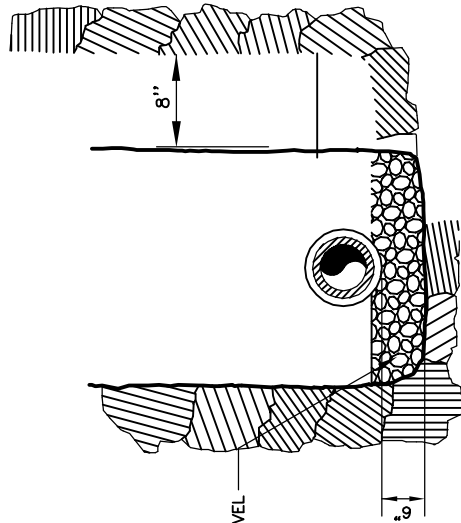
BRING STONE TO SPRINGLINE  
(MIDDLE OF PVC)



P.V.C. PIPE—  
NORMAL CONDITIONS



P.V.C. PIPE—  
WET CONDITIONS



D.I.P. IN ROCK  
& WET CONDITIONS

# SEWER LINE TRENCHING DETAILS

SD 2-24

NTS

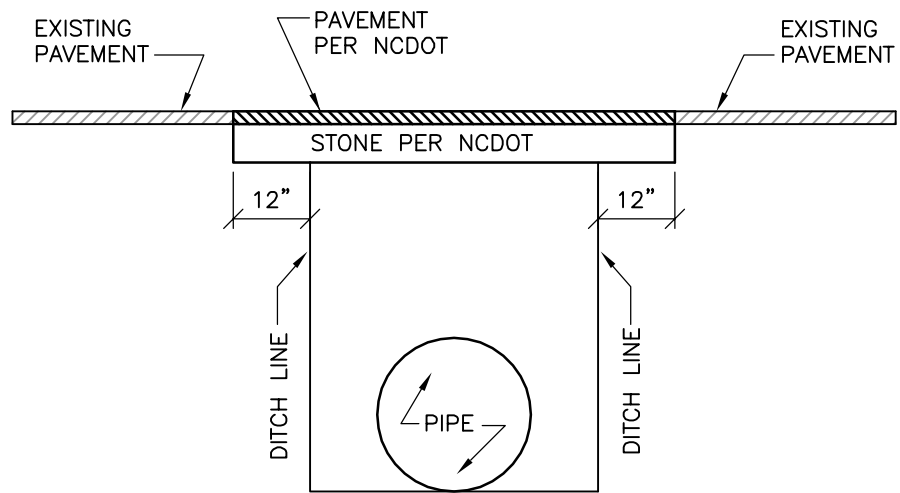
**NORTH BRUNSWICK  
SANITARY DISTRICT**

**STANDARD DETAIL: SD 2-24  
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**DATE: 01/01/08  
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**P.O. BOX 2230  
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LELAND, N.C. 28451-2230  
TEL (910) 371-9949  
FAX (910) 371-6441**

## SEWER LINE TRENCHING DETAILS



NOTES:

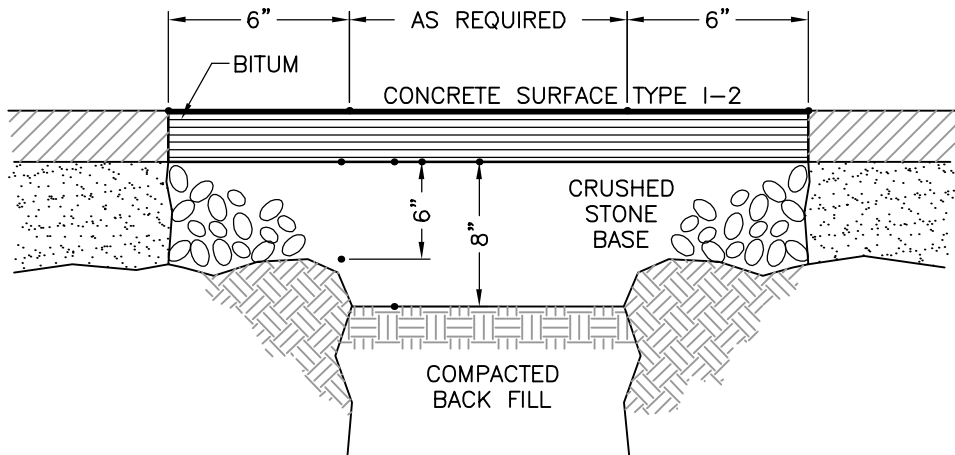
1. REFERENCE SPECIFICATIONS FOR BACKFILLING AND COMPACTION REQUIREMENTS.
2. CUT-BACK TO BE PERFORMED AFTER TRENCH BACK-FILLING AND COMPACTION.
3. NEW PAVEMENT TO MEET ALL NCDOT REQUIREMENTS.

**PIPE INSTALLATION - PAVEMENT REPAIR**

NTS

SD 2-30

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-30 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p align="center"><b>PIPE INSTALLATION - PAVEMENT REPAIR</b></p>	



USE MATERIALS PER NCDOT REQUIREMENTS  
ON NCDOT DRIVEWAYS AND ROADWAYS.

## PAVEMENT REPAIR

NTS

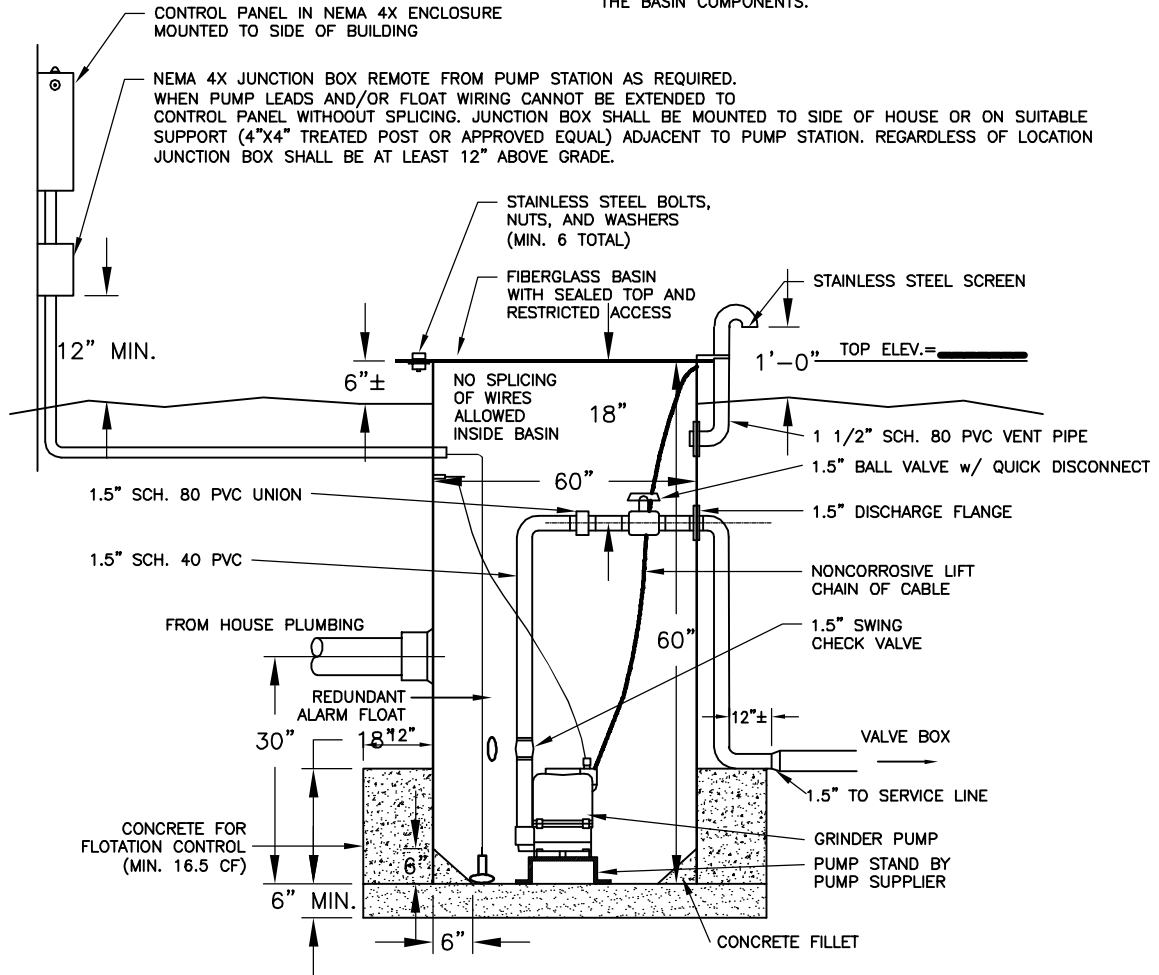
SD 2-34

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-34 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p style="text-align: center;"><b>PAVEMENT REPAIR</b></p>	

PUMP CONTROL PANEL MUST BE LABELED WITH THE NAME AND NUMBER OF A 24-HR. EMERGENCY CONTACT.

NOTE:

1. THE UNIT SHALL BE READILY ACCESSIBLE TO THE OWNER OR OWNERS AGENT FOR EMERGENCY PURPOSES.
2. PUMP OFF LEVEL IS 12 INCHES FROM BOTTOM OF BASIN, PUMP ON LEVEL IS 20 INCHES FROM BOTTOM OF BASIN.
3. ALARM LEVEL IS 24' FROM THE BOTTOM OF THE BASIN.
4. A REDUNDANT ALARM FLOAT SHALL BE INCORPORATED INTO THE BASIN COMPONENTS.



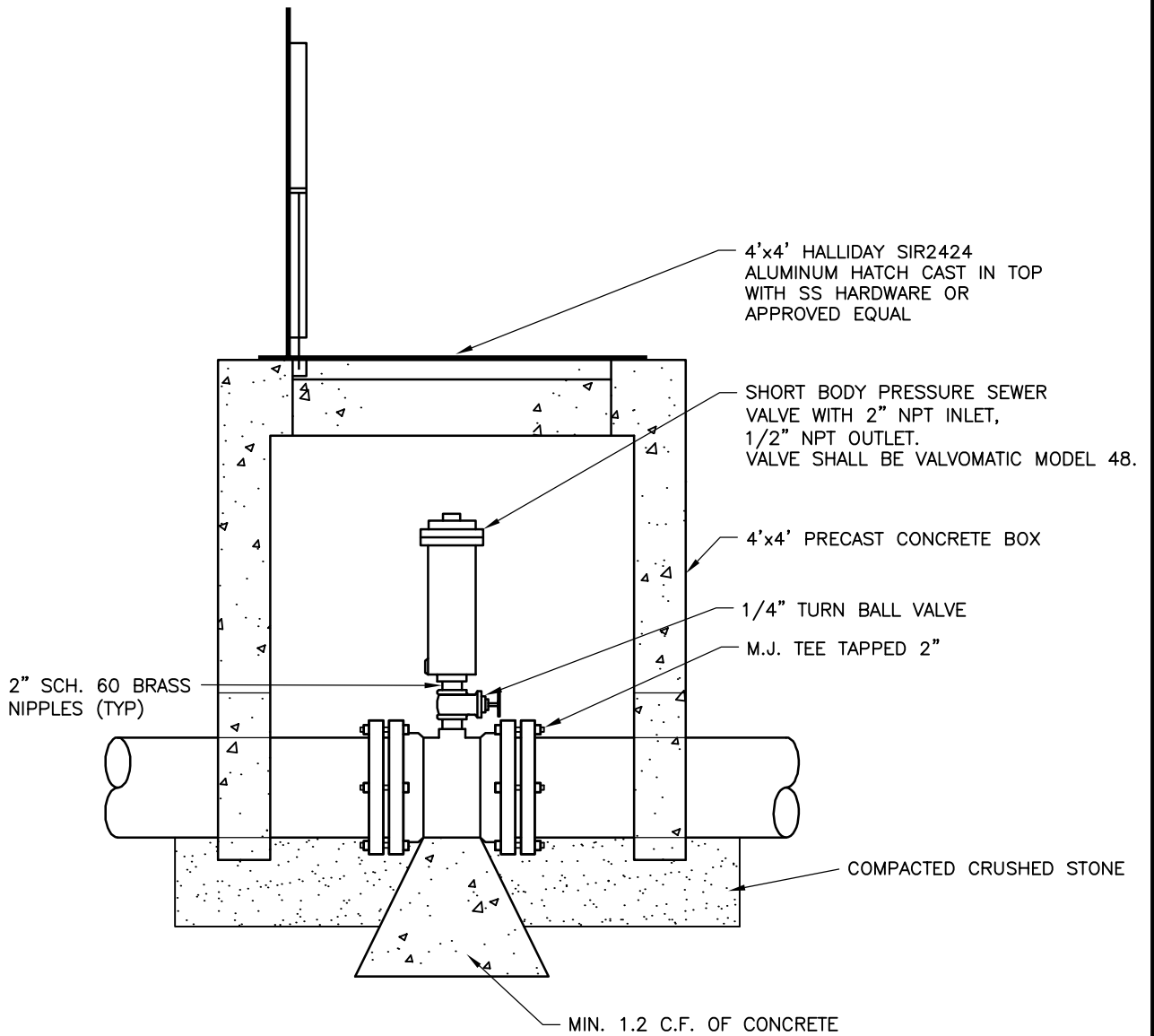
**GRINDER PUMP STATIONS FOR SINGLE FAMILY HOMES:**

GRINDER PUMP STATION SYSTEMS SHALL INCLUDE A SINGLE-PHASE ZOELLER "SHARK 840" GRINDER PUMP. PUMP SHALL BE 2 HP, 208/230V, W/5.5" IMPELLER. OIL COOLED INDUCTION WITH CAPACITOR START MOTOR, 3450 RPM, 60 HZ, TYPE L NEMA DESIGN, CLASS B INSULATION, 1 1/4" NPT DISCHARGE WITH WATER RESISTANT 600 V, 60° C, CSA/UL APPROVED POWER CORD. NO SPLICES WILL BE ALLOWED IN THE POWER CORD BETWEEN THE PUMP AND CONTROL PANEL. CONTROLS AND APPURTENANCES SHALL BE SIMPLEX SINGLE-PHASE, 200/230V, 60HZ CONTROL PANEL IN NEMA 4X WEATHER-TIGHT, NON-CORROSIVE FIBERGLASS ENCLOSURE WITH HOA OPERATION ALARM LIGHT (VISIBLE ALARM) AND BELL (AUDIBLE ALARM). THE ALARM SHALL BE PROVIDED ON A SEPERATE CIRCUIT FROM THE PUMP. PANEL SHALL BE AS MANUFACTURED BY ZOELLER OR AS SPECIFICALLY APPROVED BY THE ENGINEER.

**HOUSE PUMPING UNIT**

NTS SD 2-38

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-38 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p style="text-align: center;"><b>HOUSE PUMPING UNIT</b></p>	



## AIR RELEASE VALVE

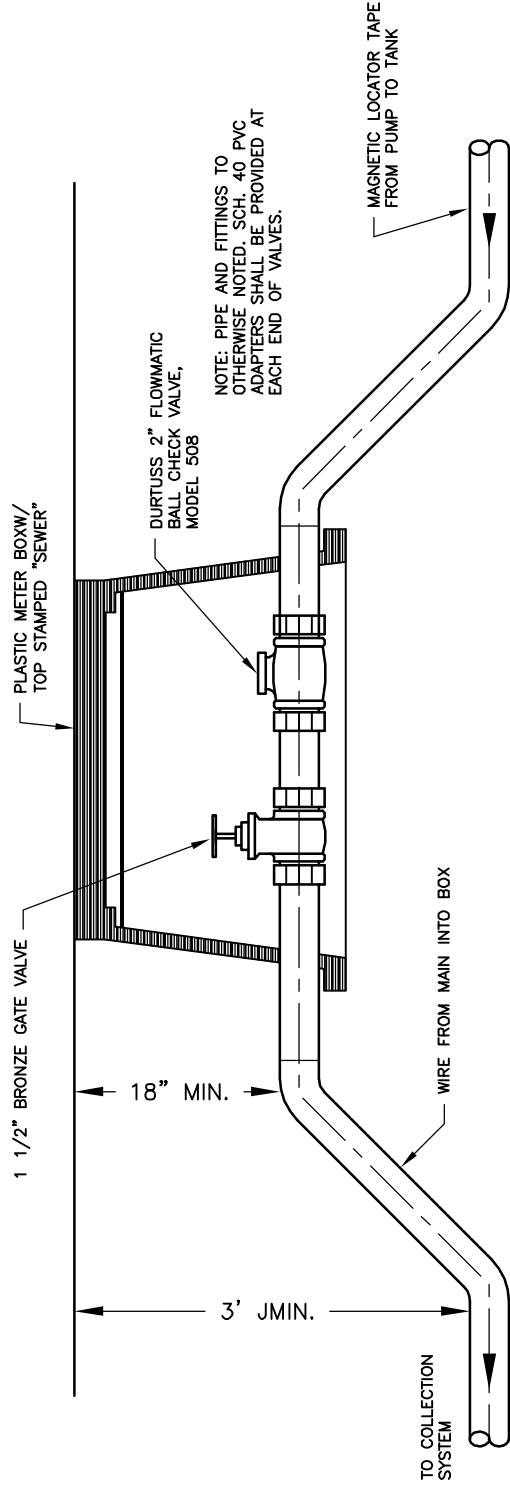
NTS                      SD 2-40

<b>NORTH BRUNSWICK SANITARY DISTRICT</b>	<b>STANDARD DETAIL: SD 2-40 Not To Scale</b>	<b>DATE: 01/01/08</b> ...
<b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b>	<h1 style="margin: 0;">AIR RELEASE VALVE</h1>	

**PRESSURE SEWER SERVICE NOTES:**  
 WET TAPPING: SERVICE SADDLES FOR WET TAPPING OF PRESSURE SEWER LINES SHALL BE FORD SERIES FS202, OR APPROVED EQUAL SADDLE WITH STAINLESS STEEL BAND. OUTLET THREADS SHALL BE IRON PIPE SIZE. VALVING MECHANISM SHALL BE FORD CORPORATION STOP SERIES FB500, OR APPROVED EQUAL CORPORATION STOP WITH INLET AND OUTLET BEING MALE IRON PIPE THREADS. CONNECTION BETWEEN THE CORPORATION STOP AND SCH-40 PVC SERVICE LINE SHALL BE ACCOMPLISHED BY CUTTING INTO THE LINE AND INSERTING A 2" SCH. 40 TEE IF SAID CONNECTION CAN BE MADE WHILE TAKING THE LINE OUT OF SERVICE FOR NO MORE THAN 15 MINUTES.

**PROXIMITY TO WATER SUPPLY LINES:**  
 WHERE SEWER SERVICES CROSS WATER SUPPLY LINES, THE SEWER SHALL BE INSTALLED A MINIMUM OF 18" BELOW THE WATER LINE. (CONVERSELY, WHERE WATER SERVICE LINES CROSS SEWER MAINS, THE WATER LINE SHALL BE INSTALLED A MINIMUM OF 18" ABOVE THE SEWER MAIN AS NOTED ON THE "WATER DISTRIBUTION SYSTEM" DETAIL SHEET.)

**SPECIAL NOTE:**  
 THE SERVICE FOR ANY PLATTED LOT SHALL BE INSTALLED AT THE TIME PRESSURE SEWER MAIN SERVING THE LOT IS CONSTRUCTED. WET TAPPING FOR SERVICES SHALL BE ALLOWED ONLY FOR AREAS WHERE LOTS WERE NOT PLATTED AT THE TIME ADJACENT SEWER MAINS WERE CONSTRUCTED. WHEN ANY SERVICE TAP IS MADE, THE VALVE BOX, GATE VALVE, AND METER BOX SHALL BE INSTALLED, AND THE SERVICE LINE SHALL BE CONTINUED AT LEAST TO THE RIGHT-OF-WAY LINE.



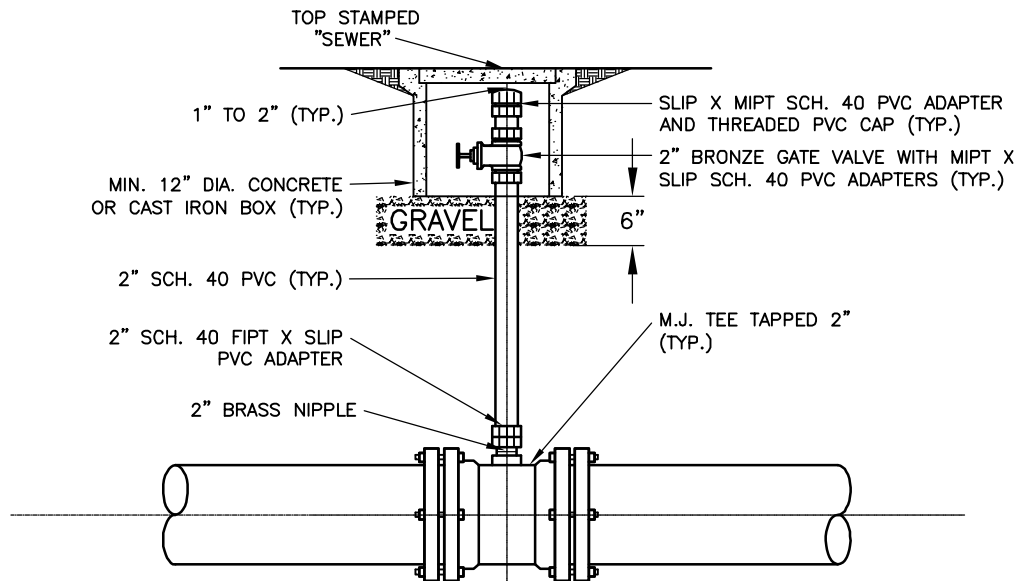
**SERVICE LINE VALVE BOX**  
 NTS SD 2-42

**NORTH BRUNSWICK  
 SANITARY DISTRICT**

**P.O. BOX 2230  
 516 VILLAGE ROAD NE  
 LELAND, N.C. 28451-2230  
 TEL (910) 371-9949  
 FAX (910) 371-6441**

**STANDARD DETAIL: SD 2-42**  
**Not To Scale**  
**DATE: 01/01/08**  
 ..

**SERVICE LINE VALVE BOX**



**NOTES:**

1. SLOPE FINISH GRADE TO DRAIN AWAY FROM BOX.
2. WHERE PRESSURE SEWER IS 3" OR LARGER TEE SHALL BE M.J. WITH 2" TAP. 2" SCH. 40 PVC TEE MAY BE USED FOR 2" PRESSURE SEWER.
3. IN LINE CLEANOUT SHALL BE LOCATED APPROXIMATELY 2' FROM ADJACENT GATE VALVE.

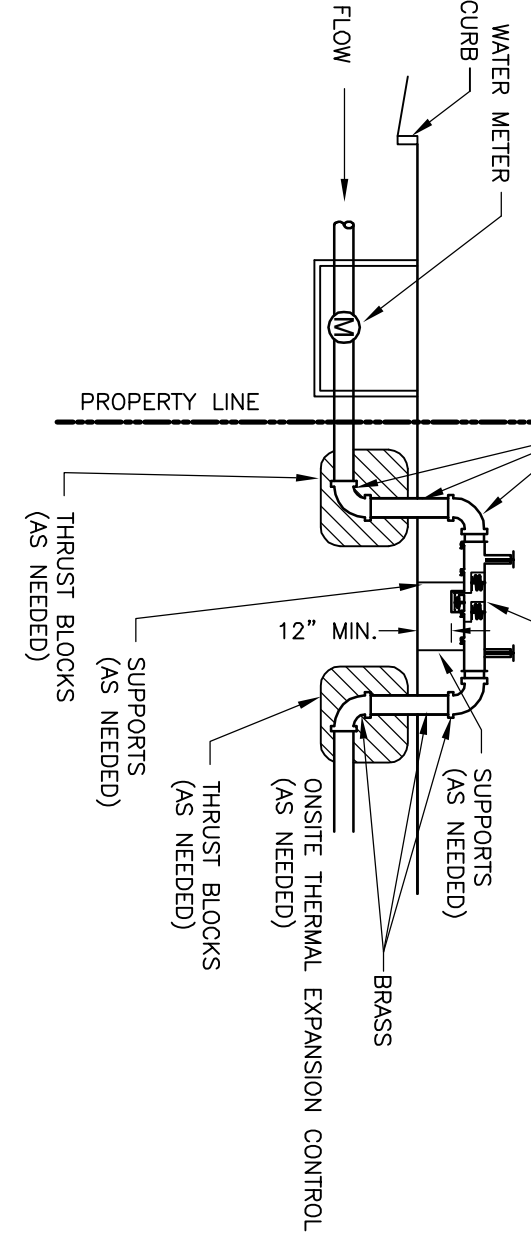
**IN-LINE PRESSURE SEWER CLEANOUT**

NTS

SD 2-44

<p><b>NORTH BRUNSWICK SANITARY DISTRICT</b></p>	<p><b>STANDARD DETAIL: SD 2-44 Not To Scale</b></p>	<p><b>DATE: 01/01/08</b> ...</p>
<p><b>P.O. BOX 2230 516 VILLAGE ROAD NE LELAND, N.C. 28451-2230 TEL (910) 371-9949 FAX (910) 371-6441</b></p>	<p><b>IN-LINE PRESSURE SEWER CLEANOUT</b></p>	

SERVICE CONNECTION  
 INSTALLATION CONDITIONS  
 ASSEMBLY SHALL BE LOCATED AS CLOSE TO THE SERVICE CONNECTIONS AS POSSIBLE WITH NO CONNECTIONS BETWEEN THE WATER METER AND THE BACKFLOW PREVENTION ASSEMBLY

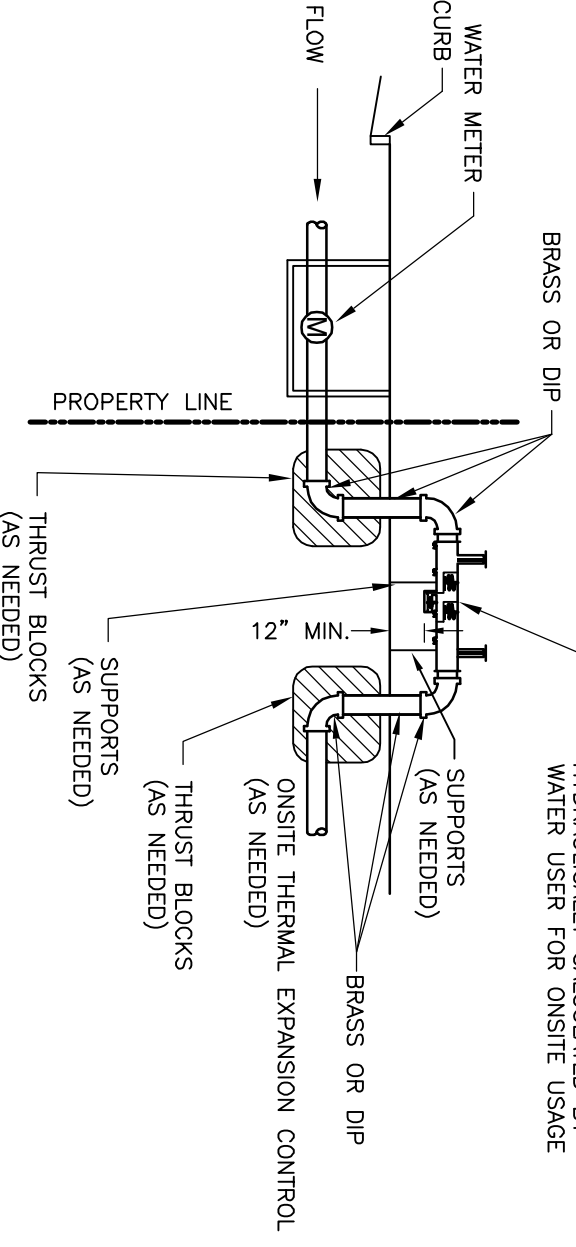


ASSEMBLY SHALL BE HORIZONTAL AND LEVEL UNLESS OTHERWISE NOTED OR OTHER OPERATIONS(S) ALL PIPING SHOULD BE WATER USER FOR ONSITE USAGE

ALL BACKFLOW DEVICES TO COMPLY WITH USC STANDARDS  
 BACKFLOW PREVENTION ASSEMBLY ARE TO BE USED WITHIN THEIR RATED OPERATING CONDITIONS.  
 PRESSURE: BACKFLOW PREVENTION ASSEMBLY TYPICALLY HAVE MAXIMUM WORKING WATER PRESSURES (MWWP) OF 150 PSI (1034 KPa) OR 175 PSI (1208 KPa). ASSEMBLY ARE DESIGNED TO OPERATE CONTINUOUSLY AT THIS PRESSURE, WHICH IS IDENTIFIED ON THE ASSEMBLY.  
 TEMPERATURE: BACKFLOW PREVENTION ASSEMBLY ARE DESIGNED TO OPERATE CONTINUOUSLY AT THEIR MAXIMUM WORKING WATER TEMPERATURE (MWWT), WHICH IS IDENTIFIED ON THE ASSEMBLY.  
 RATE OF FLOW: BACKFLOW PREVENTION ASSEMBLY ARE DESIGNED TO OPERATE CONTINUOUSLY UP TO THEIR RATED FLOW (i.e. GALLONS PER MINUTE - GPM; OR LITERS PER SECOND - L/S).  
 A FIBERGLASS HOT BOX IS REQUIRED (CONCRETE PAD IS OPTIONAL).

**RPZ DETAIL - 3/4" OR 1"**  
 NTS SD 1-10

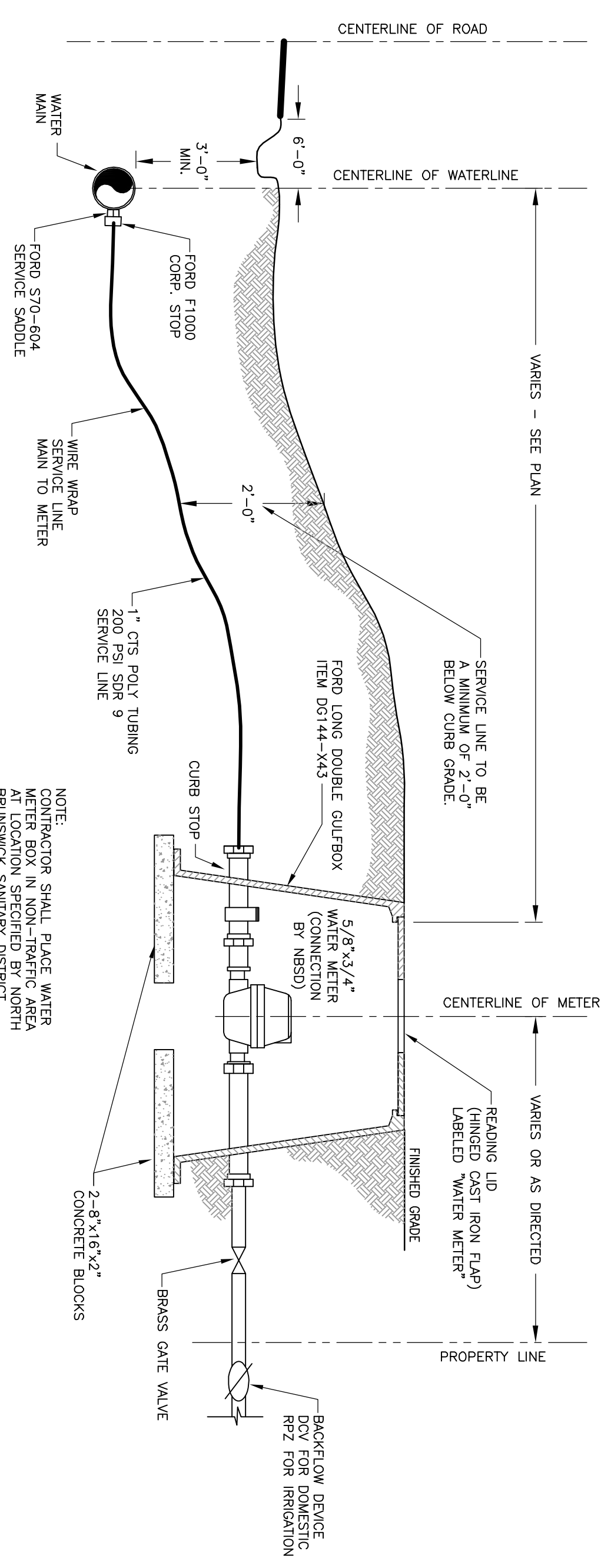
SERVICE CONNECTION  
 INSTALLATION CONDITIONS  
 ASSEMBLY SHALL BE LOCATED AS CLOSE TO THE SERVICE CONNECTIONS AS POSSIBLE WITH NO CONNECTIONS BETWEEN THE WATER METER AND THE BACKFLOW PREVENTION ASSEMBLY



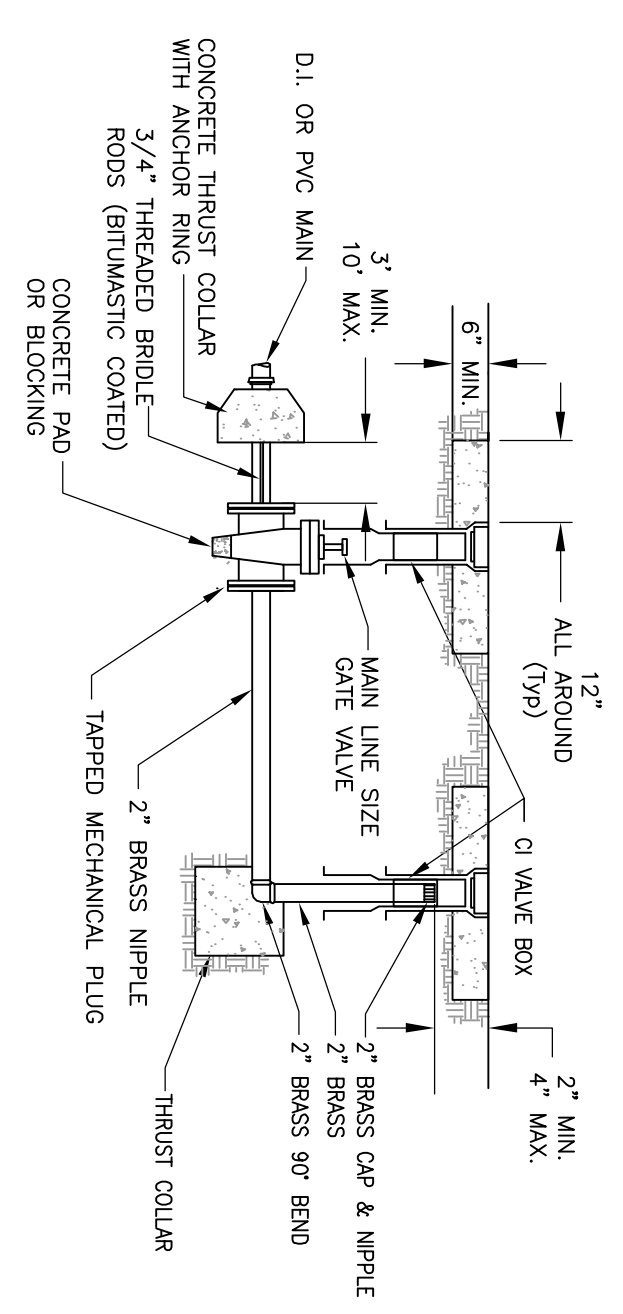
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 RATE OF FLOW: BACKFLOW PREVENTION ASSEMBLY ARE DESIGNED TO OPERATE CONTINUOUSLY UP TO THEIR RATED FLOW (i.e. GALLONS PER MINUTE - GPM; OR LITERS PER SECOND - L/S).  
 A FIBERGLASS HOT BOX ENCLOSE ON A CONCRETE PAD IS REQUIRED.

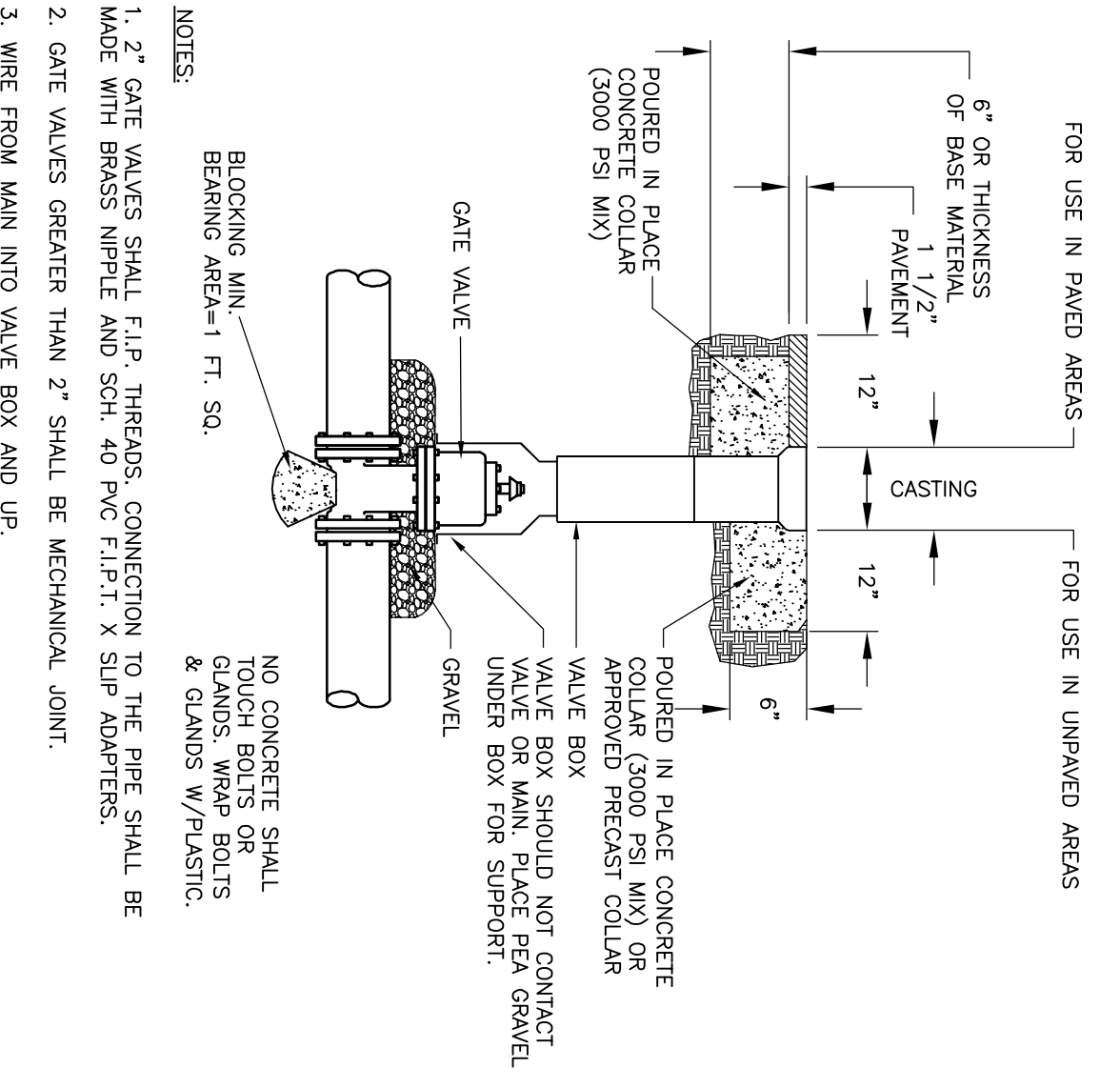
**RPZ DETAIL - 2" & UP**  
 NTS SD 1-08



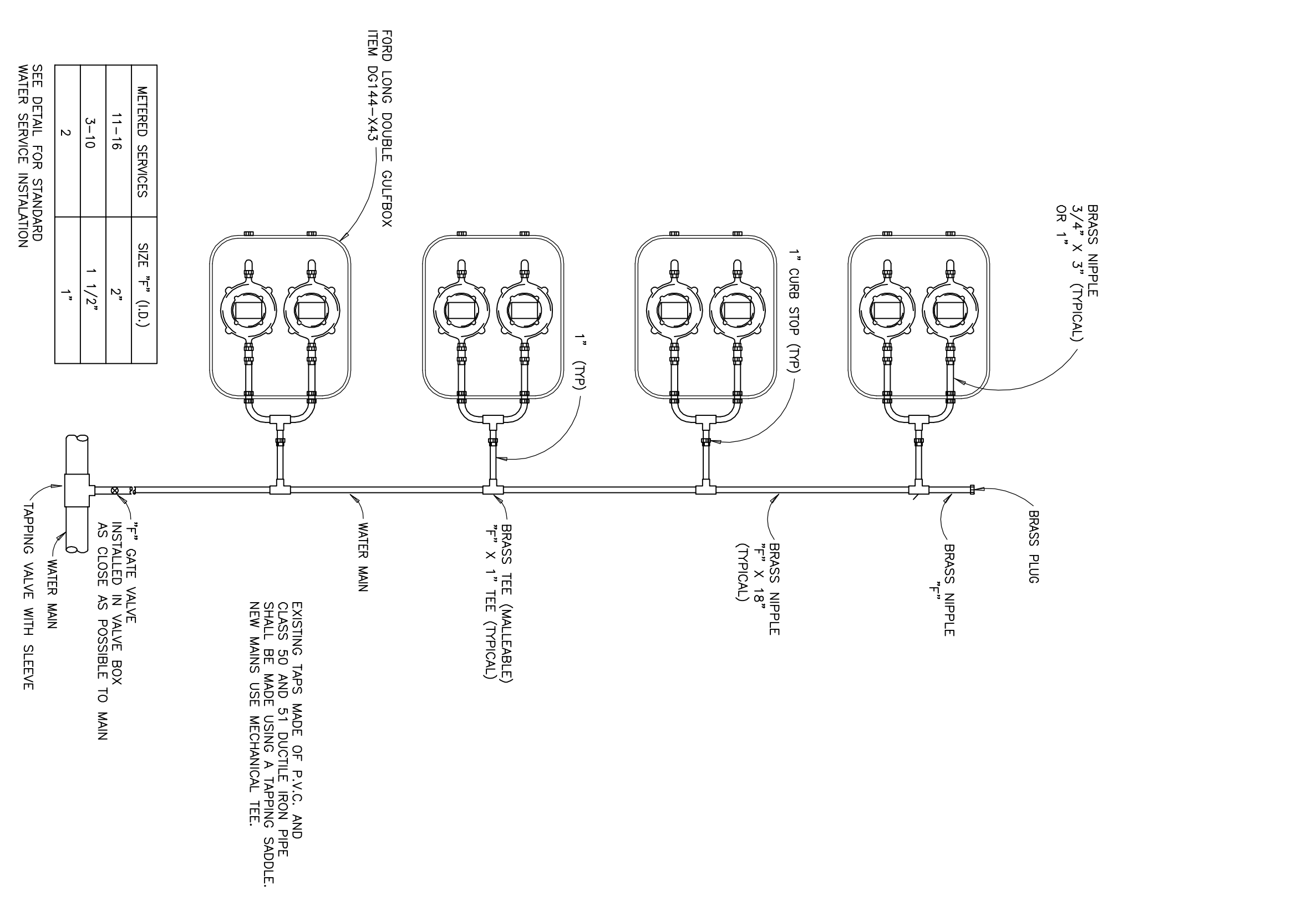
**3/4" WATER SERVICE**  
 NTS SD 1-04



**2" BLOWOFF ASSEMBLY**  
 NTS SD 1-12



**M.J. VALVE AND VALVE BOX**  
 NTS SD 1-14



**STANDARD GANG METER ASSEMBLY**  
 NTS SD 1-06

METERED SERVICES	SIZE (IN)
1-16	2"
3-10	1 1/2"
2	1"

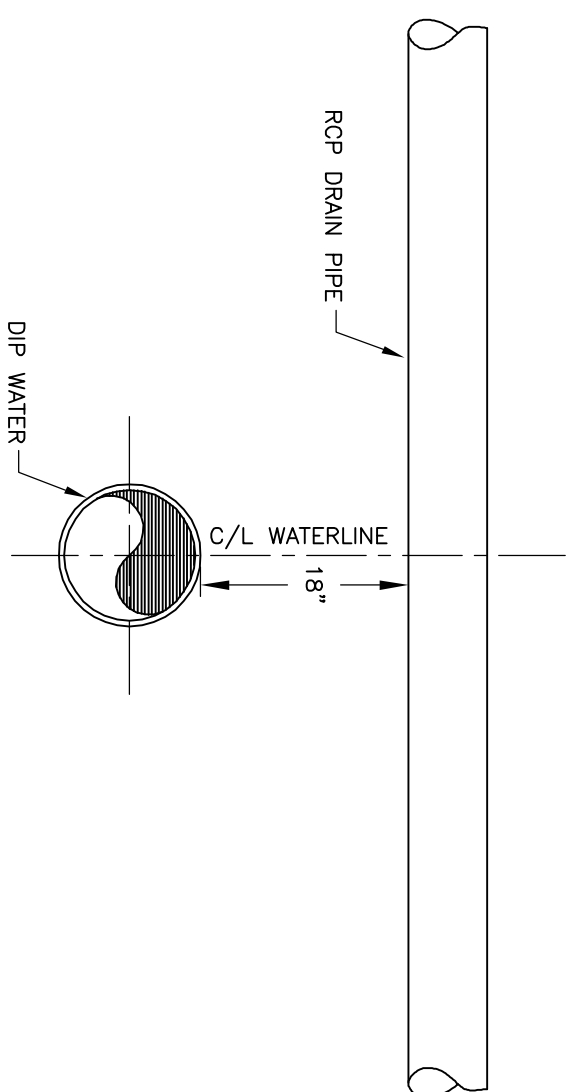
SEE DETAIL FOR STANDARD WATER SERVICE INSTALLATION

**UTILITY DETAILS**

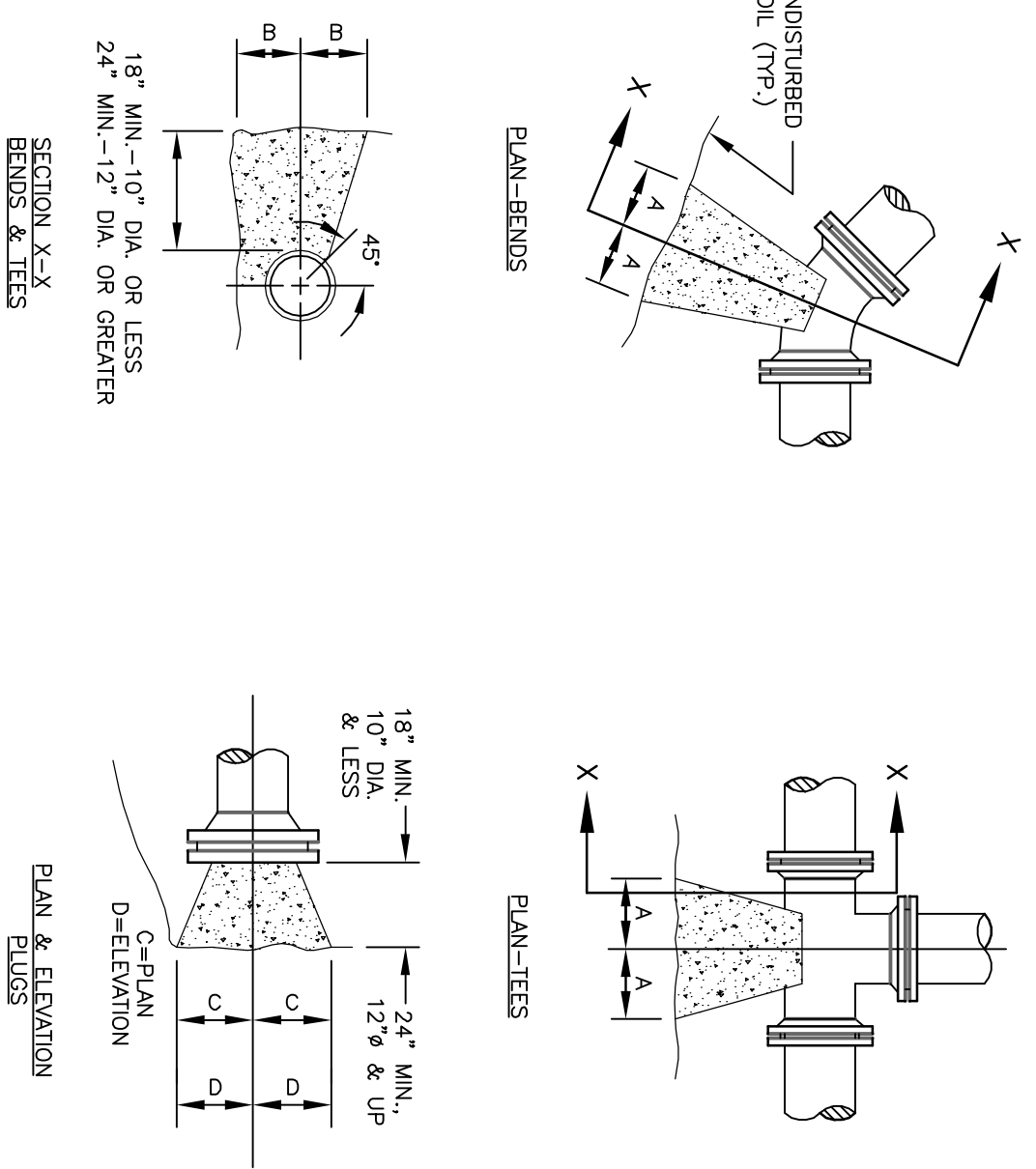
OWNER:  
 NORTH BRUNSWICK  
 SANITARY DISTRICT  
 P.O. BOX 2230  
 516 VILLAGE ROAD NE  
 LELAND, N.C. 28451-2230  
 TEL (910) 371-9949  
 FAX (910) 371-6441

**NORTH BRUNSWICK  
 SANITARY DISTRICT**

DES.	-
COO.	-
DRN.	-
DATE	08/15/07



**WATER AND STORM DRAIN INTERSECTION**  
SD 1-20



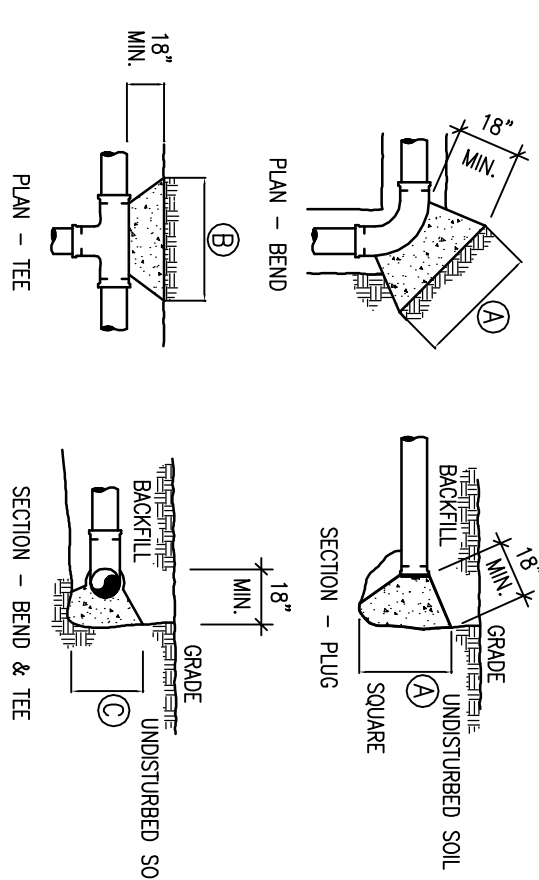
PIPE SIZE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	TEE	PLUG
A	B	A	B	A	B	A
4"	18"	12"	10"	13"	7"	10"
6"	18"	12"	10"	13"	7"	10"
8"	24"	18"	13"	18"	10"	12"
10"	28"	22"	15"	22"	12"	15"
12"	32"	28"	19"	28"	14"	18"
16"	54"	38"	30"	36"	18"	36"

2000 PSF SOIL (SAND & GRAVEL WITH CLAY)

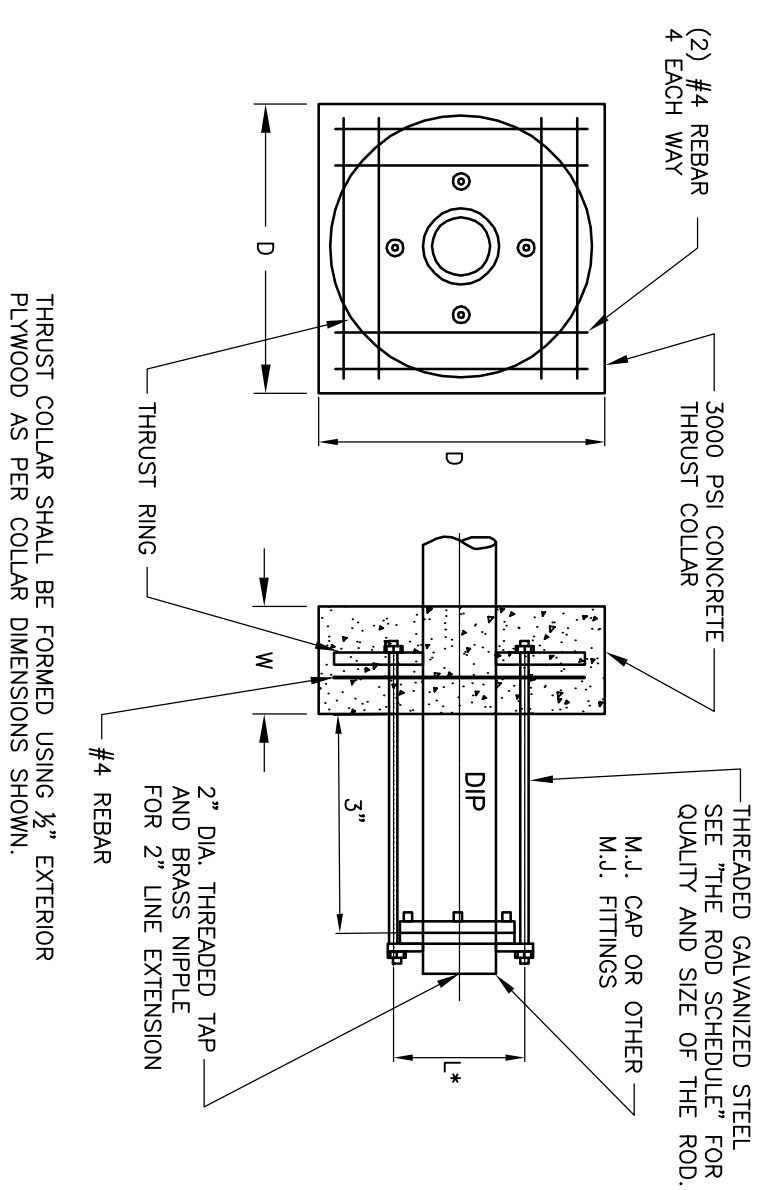
- NOTES:**
- BASED ON 200 PSI STATIC PRESSURE PLUS AWWA WATER HAMMER ALLOWANCE.
  - ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
  - THRUST BLOCKS TO BE USED AT ALL LINES OPERATING UNDER PRESSURE.
  - KEEP ALL PIPING JOINTS CLEAR OF CONCRETE THRUST BLOCKS.
  - WRAP ALL FITTINGS IN PLASTIC.

**THRUST BLOCKING DETAIL**  
SD 1-26

BLOCKING	DIMENSIONS
PIPE SIZE	(A) (B) (C)
UP TO 10"	4'-0" 2'-6" 3'-0"
12" TO 18"	6'-0" 4'-0" 5'-0"
18" TO 24"	8'-0" 6'-0" 6'-0"



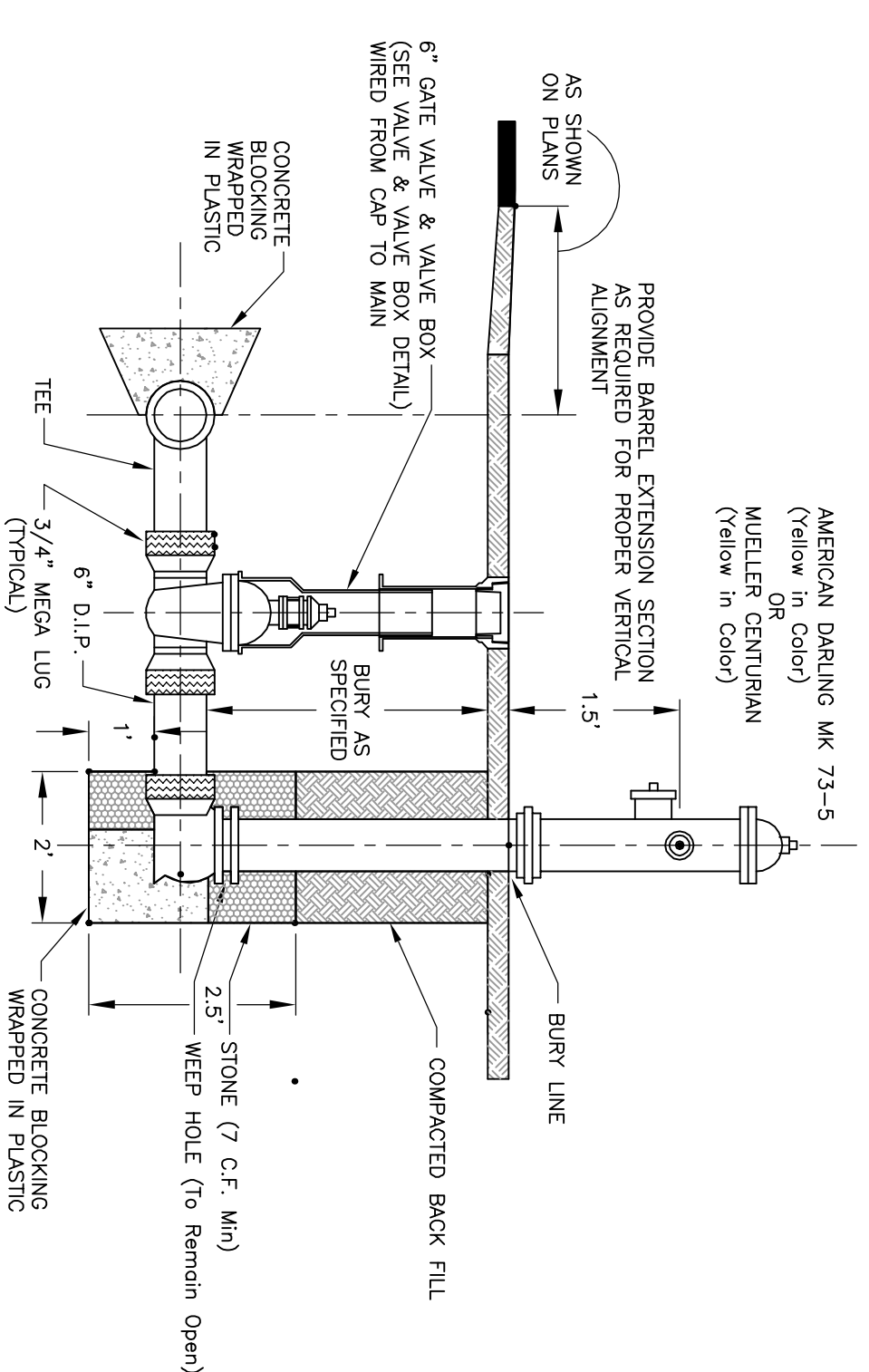
**CONCRETE BLOCKING DETAILS**  
SD 1-24



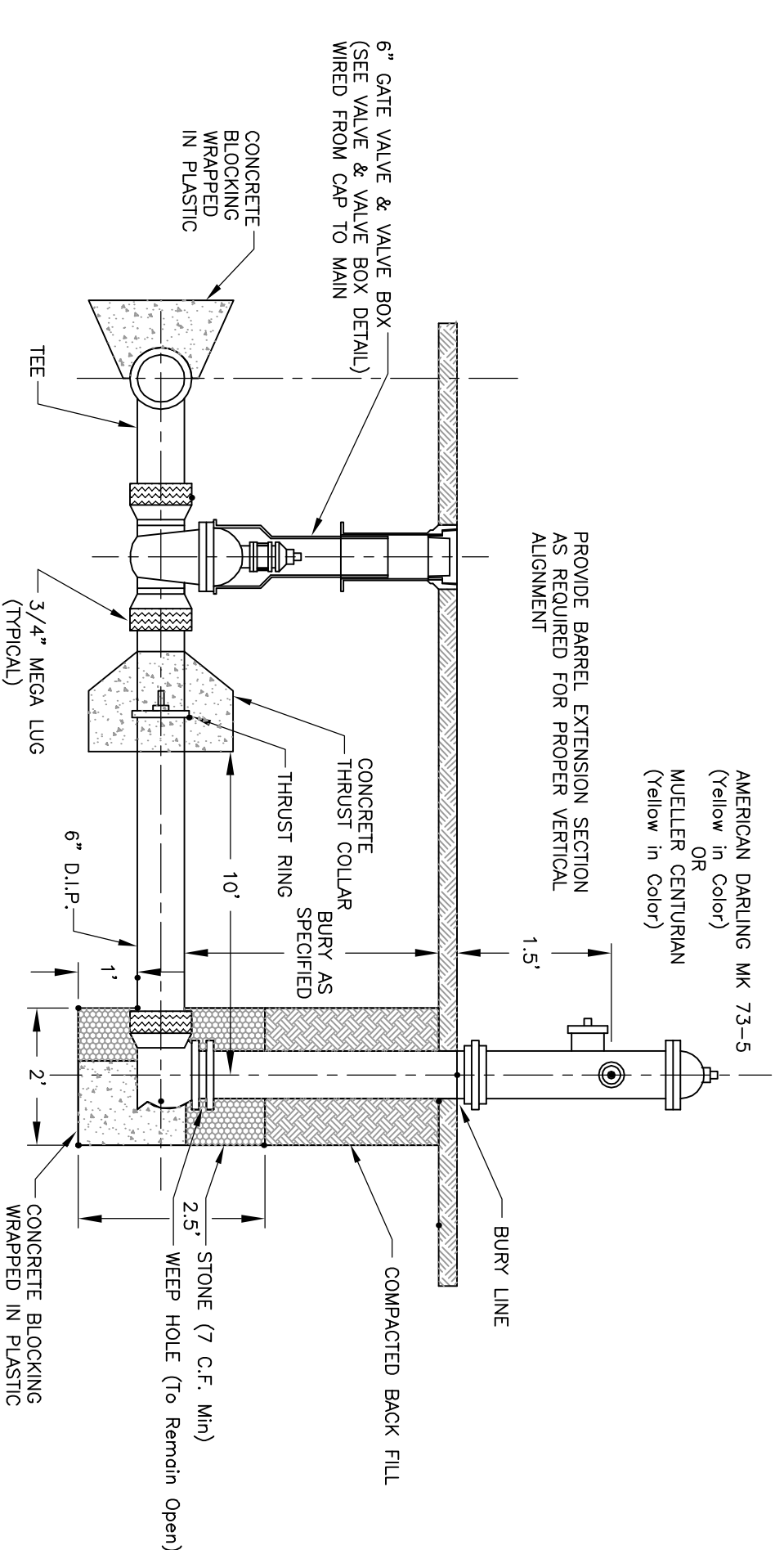
PIPE DWM.	QUAN.	THE ROD	LINE SIZE	MIN. W	MIN. D	ELATE DWM.
4"	2	5/8"	4"	6"	L+8"	L+2"
6"	2	3/4"	6"	9"	L+9"	L+3"
8"	2	3/4"	8"	12"	L+9"	L+3"
12"	4	3/4"	12"	18"	L+9"	L+3"
16"	4	7/8"	16"	18"	L+9"	L+3"
20"	4	1"	20"	20"	L+9"	L+3"
24"	4	1 1/4"	24"	24"	L+10"	L+4"
30"	4	1 1/2"	30"	24"	L+11"	L+5"

• CONTRACTOR VERIFY DISTANCE W/COLLAR SUPPLIERS.

**THRUST COLLAR**  
SD 1-22



**FIRE HYDRANT ASSEMBLY**  
SD 1-16



**FIRE HYDRANT ASSEMBLY**  
SD 1-18

UTILITY DETAILS

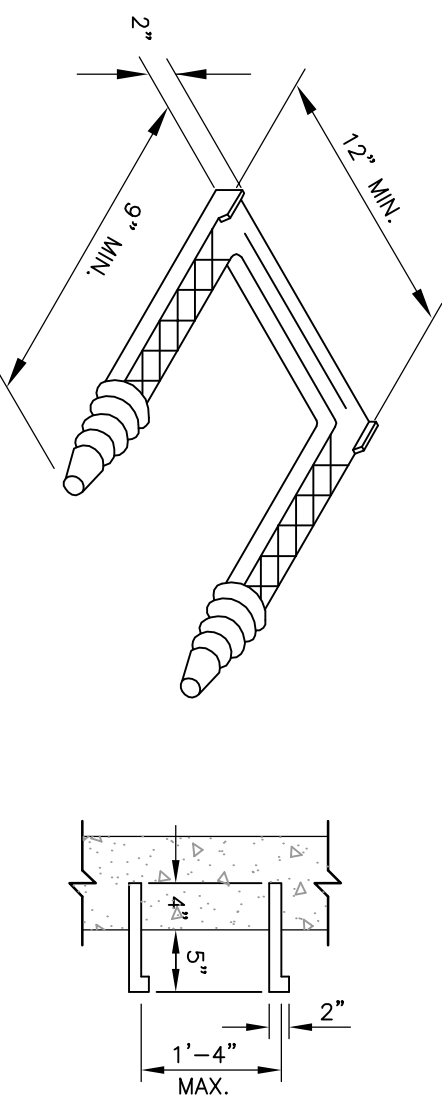
OWNER:  
NORTH BRUNSWICK  
SANITARY DISTRICT  
P.O. BOX 2230  
516 VILLAGE ROAD NE  
LELAND, N.C. 28451-2230  
TEL (910) 371-9949  
FAX (910) 371-6441

**NORTH BRUNSWICK  
SANITARY DISTRICT**

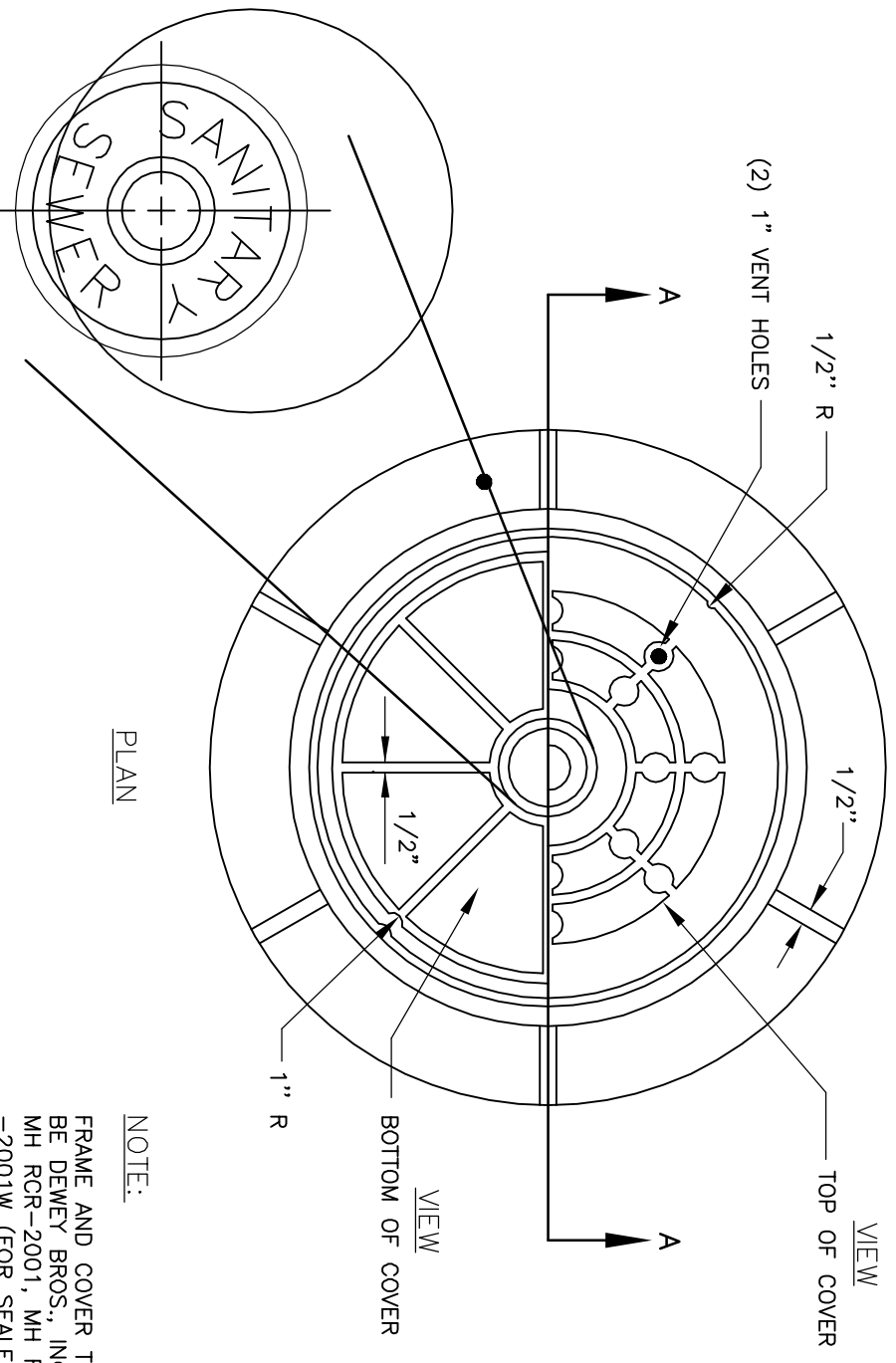
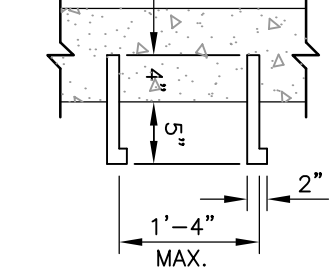
DES. —  
DWN. —  
DATE 08/15/07

**D-2**

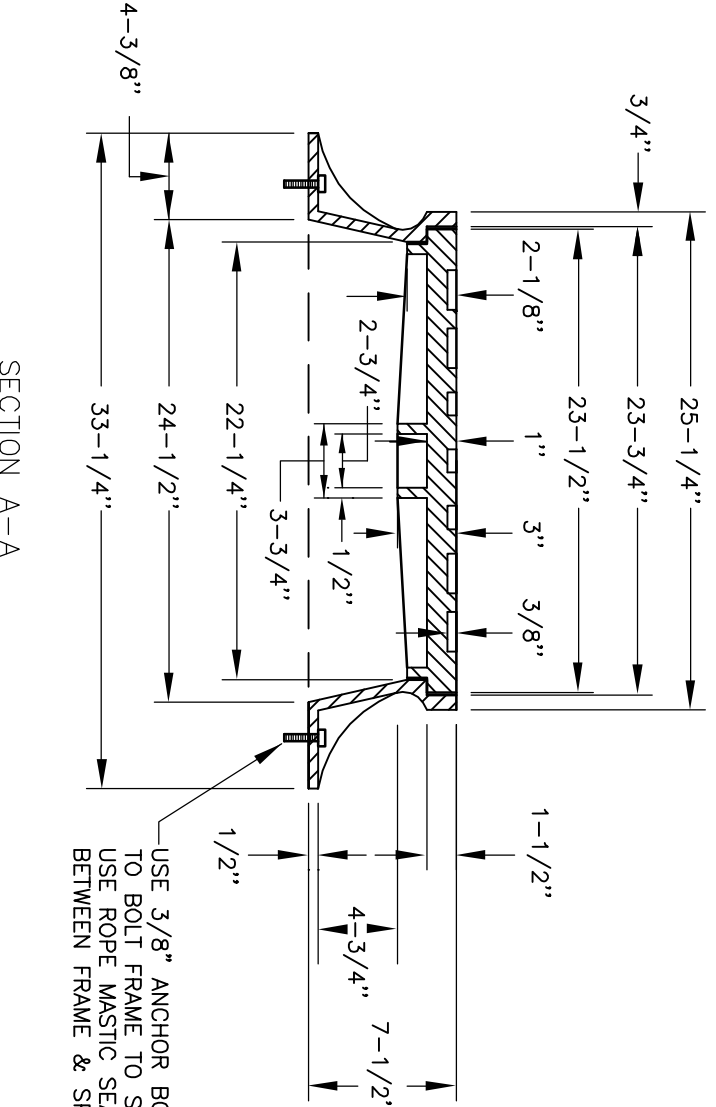
DES.	—
COI.	—
DRN.	—
DATE	08/15/07



**STANDARD PLASTIC MANHOLE STEP**  
SD 2-06

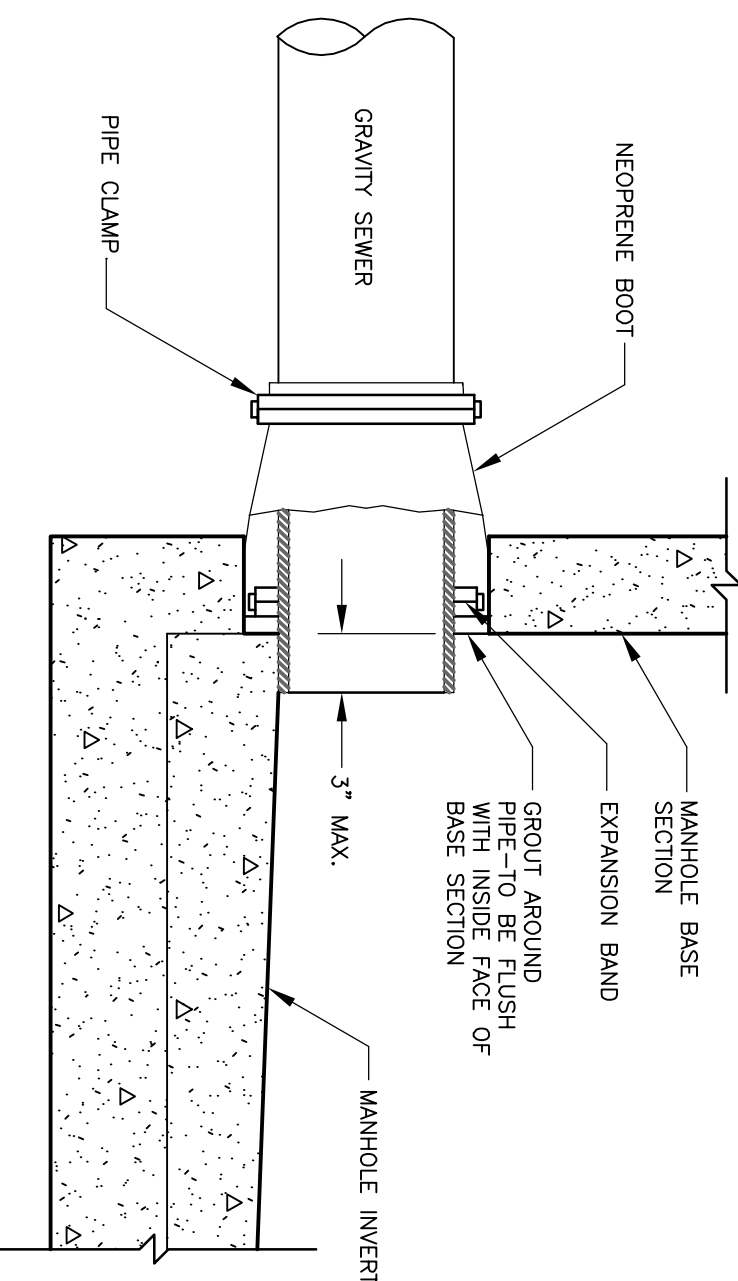


NOTE:  
FRAME AND COVER TO BE DENNY BROS., INC. MANHOLE FRAME AND COVER. MANHOLES FOR SANITARY MANHOLES IF RECORD AS SHOWN ON PLANS, OR APPROVED EQUAL.



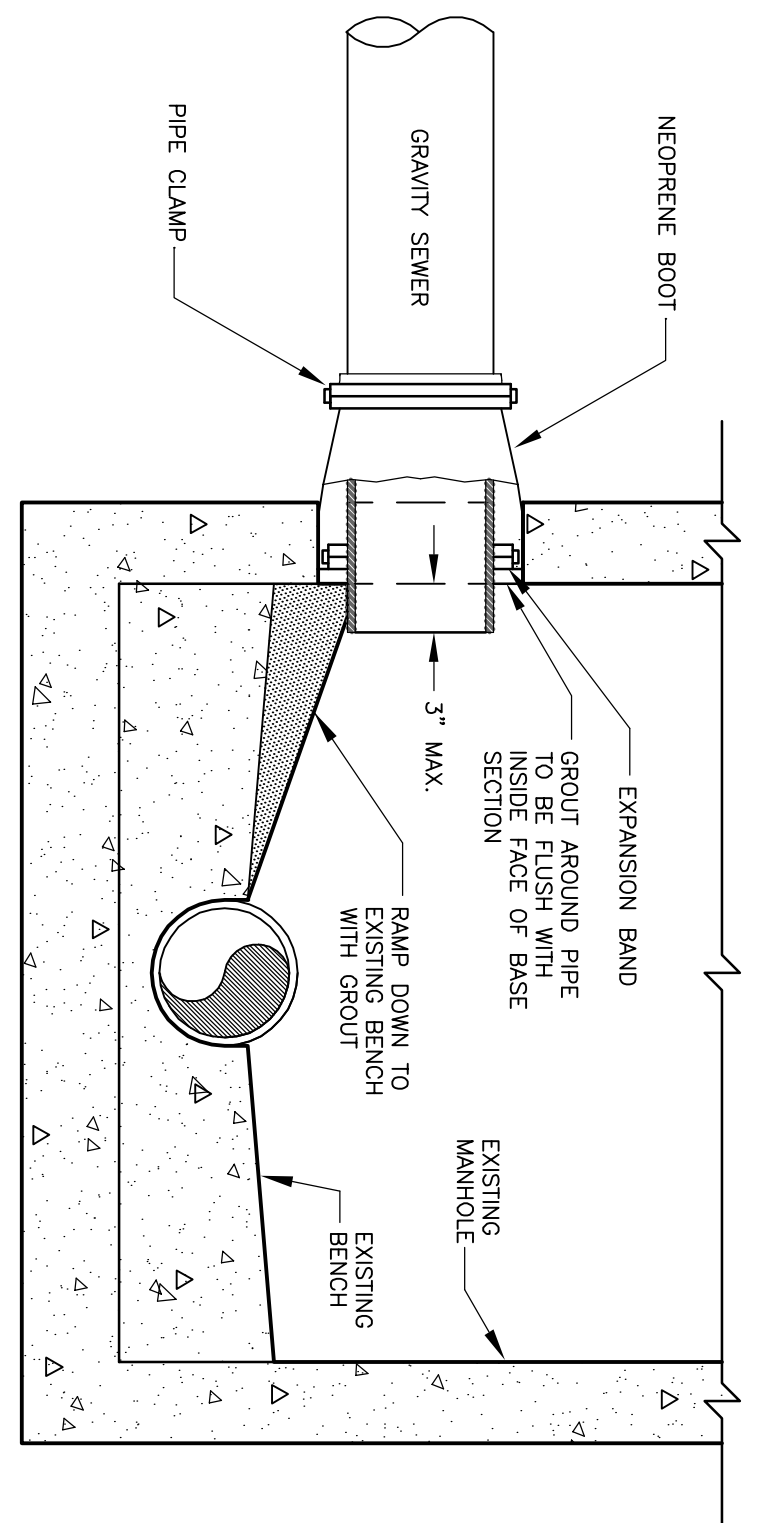
USE 3/8\"/>

**STANDARD MANHOLE FRAME & COVER**  
SD 2-02



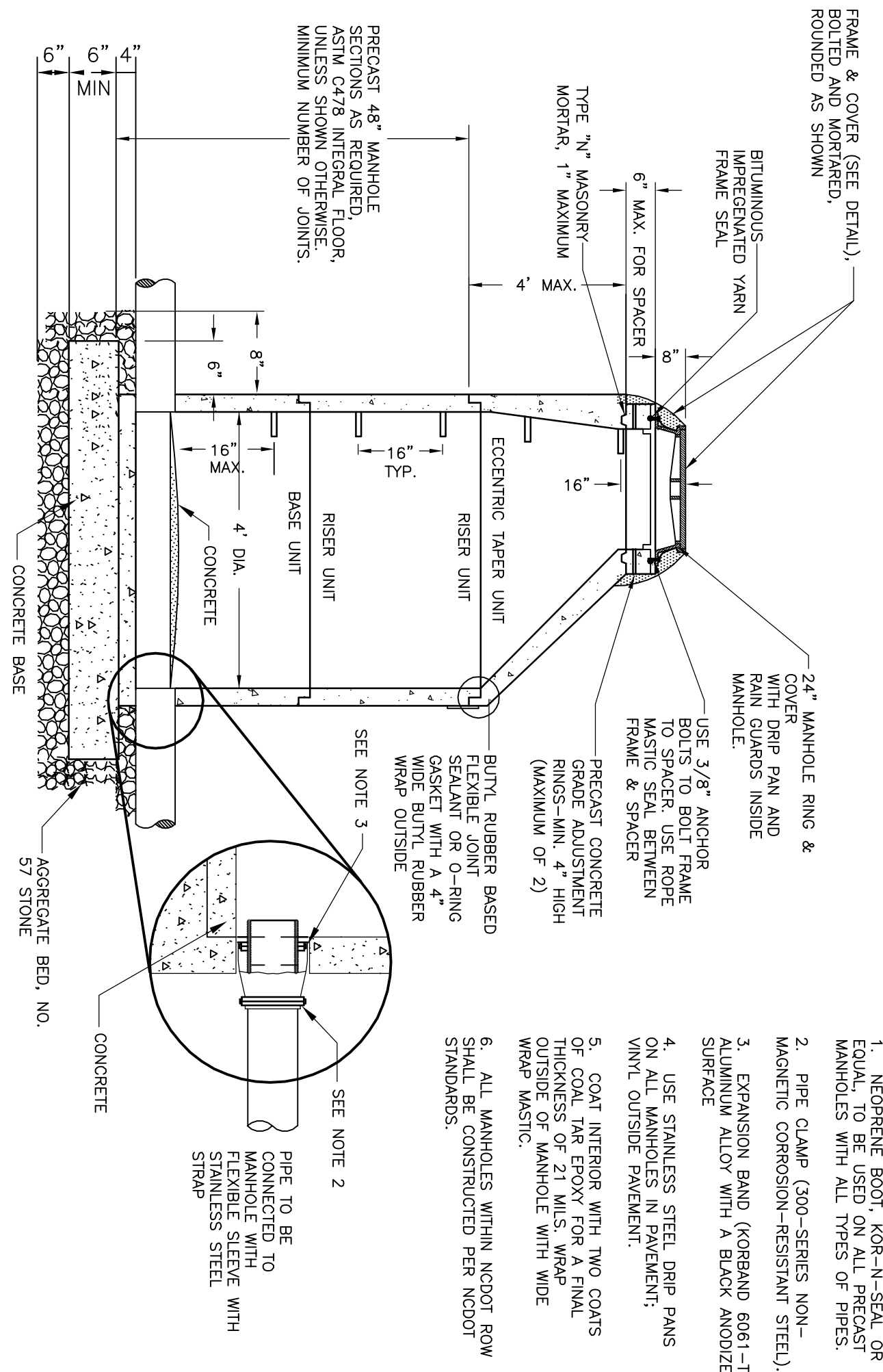
NOTES:  
1. MATERIAL SPECIFICATIONS, NEOPRENE BOOT - ASTM C-923, PIPE CLAMP - STAINLESS STEEL, ASTM C-923.  
2. TWO PIPE CLAMPS REQUIRED FOR PIPE O.D.'S 19\"/>

**STANDARD MANHOLE BOOT**  
SD 2-14



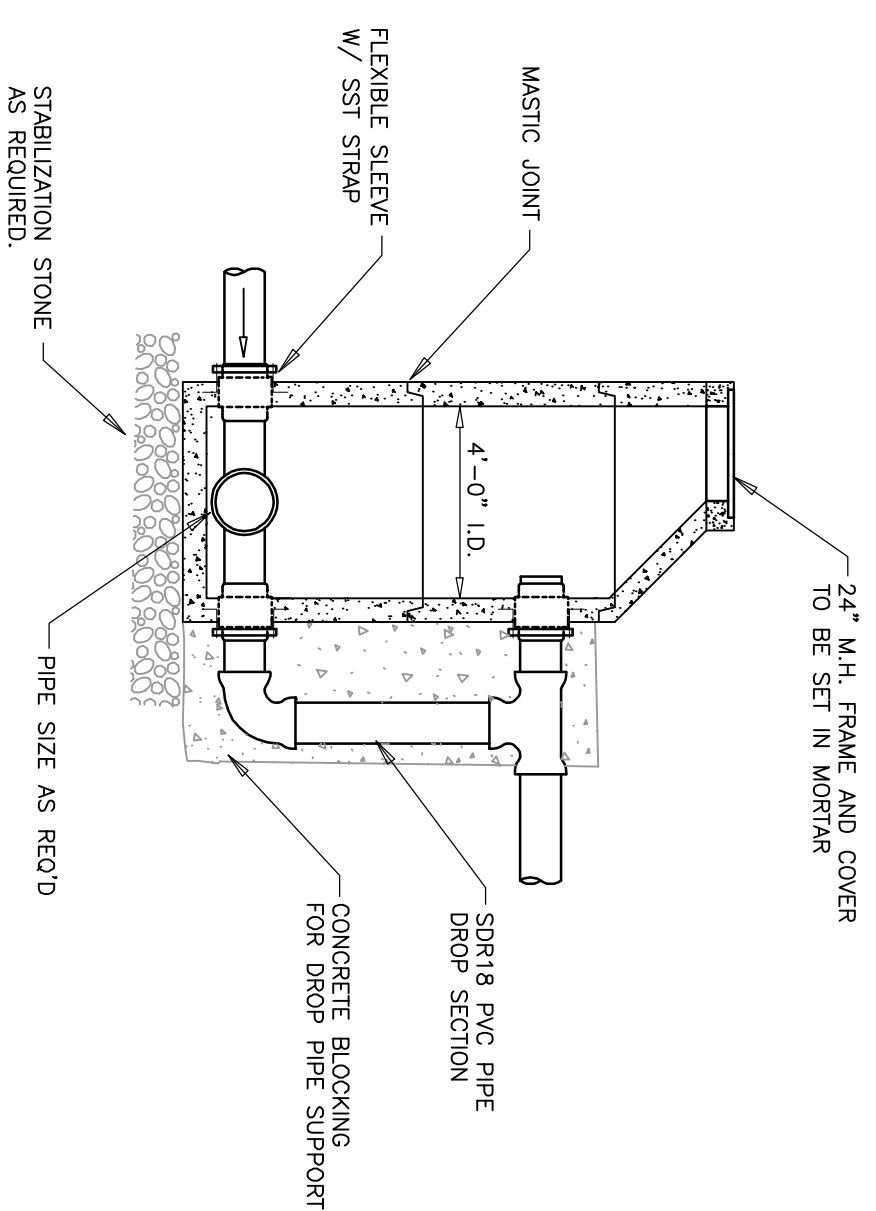
NOTES:  
1. MATERIAL SPECIFICATIONS, NEOPRENE BOOT - ASTM C-923, PIPE CLAMP & EXPANSION CLAMP - STAINLESS STEEL, ASTM C-923.  
2. TWO PIPE CLAMPS REQUIRED FOR PIPE O.D.'S 19\"/>

**STANDARD SEWER LINE CONNECTION TO EXISTING MANHOLE**  
SD 2-12

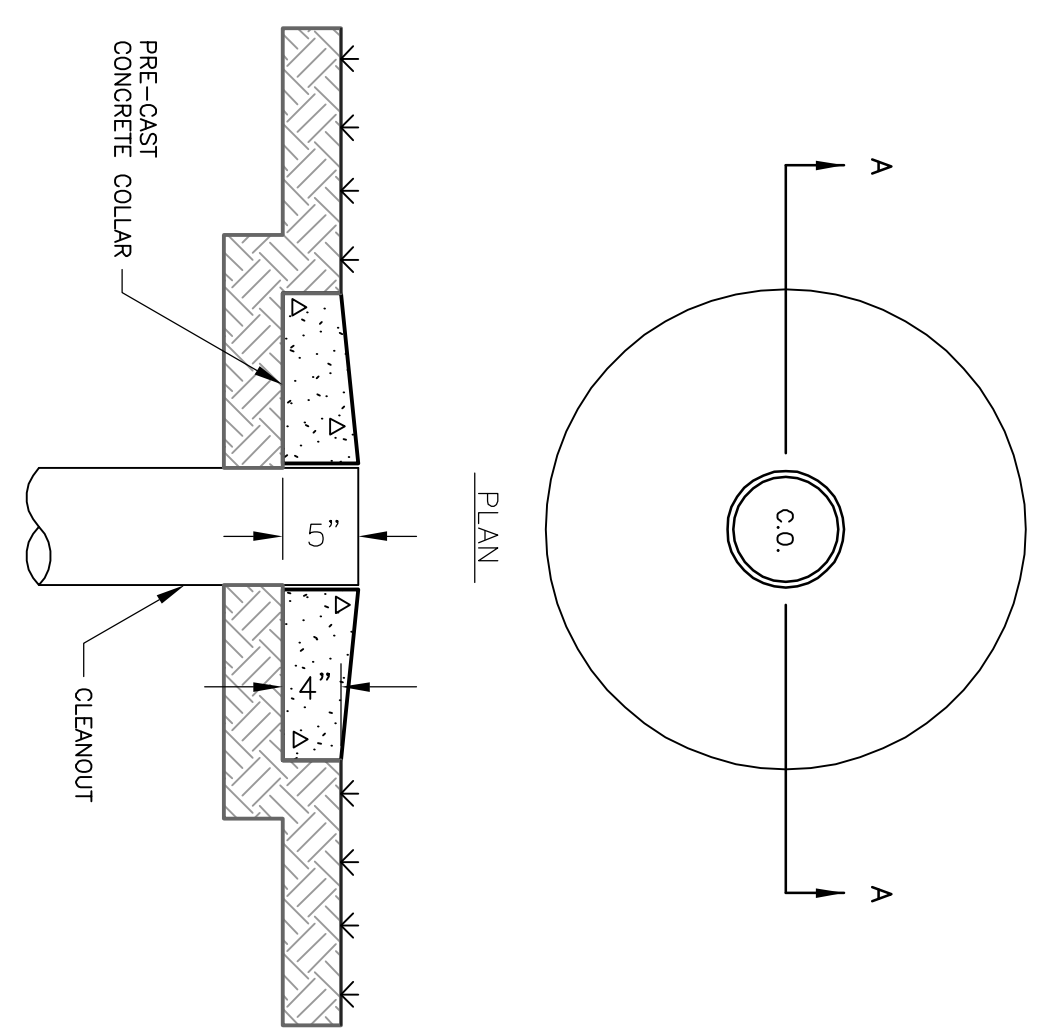


NOTES:  
1. NEOPRENE BOOT, KOR-N-SEAL, OR EQUAL TO BE USED ON ALL PRECAST MANHOLES WITH ALL TYPES OF PRECAST.  
2. PIPE CLAMP (300-SERIES NON-MAGNETIC CORROSION-RESISTANT STEEL), ALUMINUM ALLOY WITH A BLACK ANODIZED SURFACE.  
3. EXPANSION BAND (KORBRAND 6061-T6 ALUMINUM ALLOY WITH A BLACK ANODIZED SURFACE).  
4. USE STAINLESS STEEL DRIP PANS ON ALL MANHOLES IN PAVEMENT.  
5. COAT INTERIOR WITH TWO COATS OF GOAL TAR EPOXY FOR A FINAL THICKNESS OF 21 MILS. WRAP MANHOLE WITH WIDE WRAP MASTIC.  
6. ALL MANHOLES WITHIN NCOT ROW SHALL BE CONSTRUCTED PER NCOT STANDARDS.

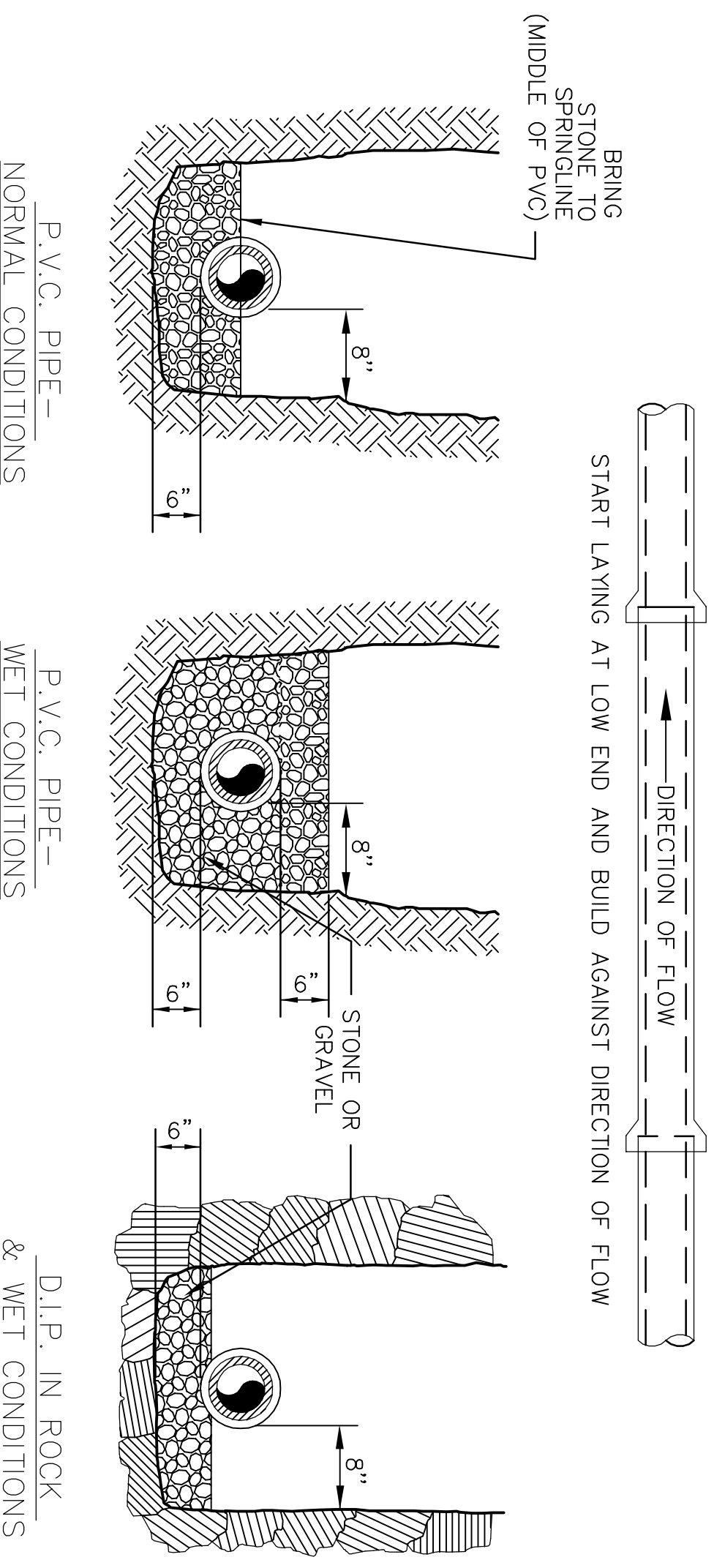
**PRECAST S.S. MANHOLE**  
SD 2-10



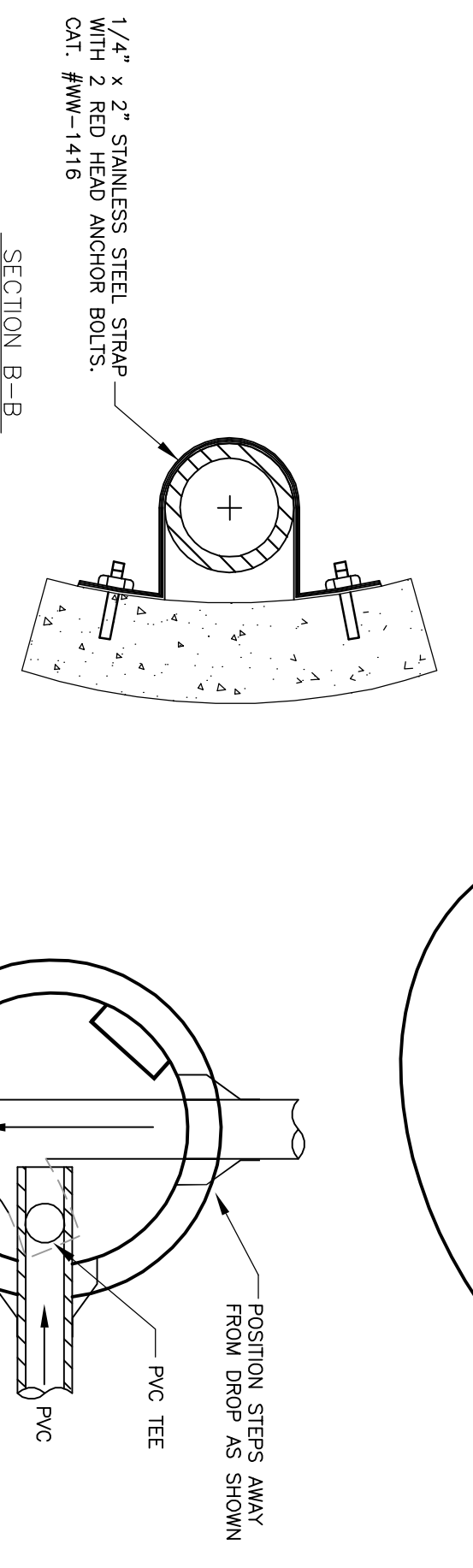
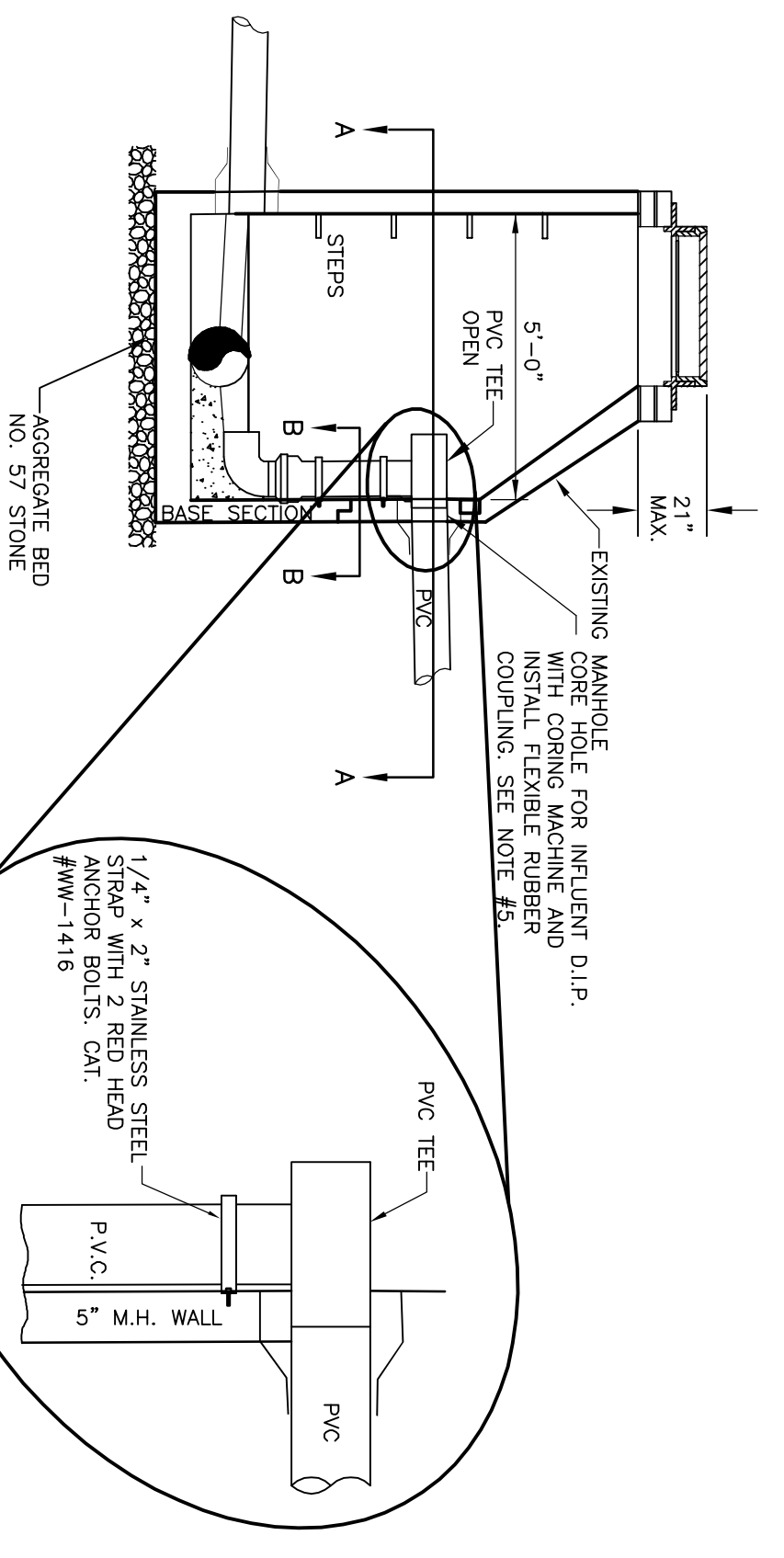
**PRECAST S.S. DROP MANHOLE**  
SD 2-16



**CLEANOUT PAD DETAIL**  
SD 2-22

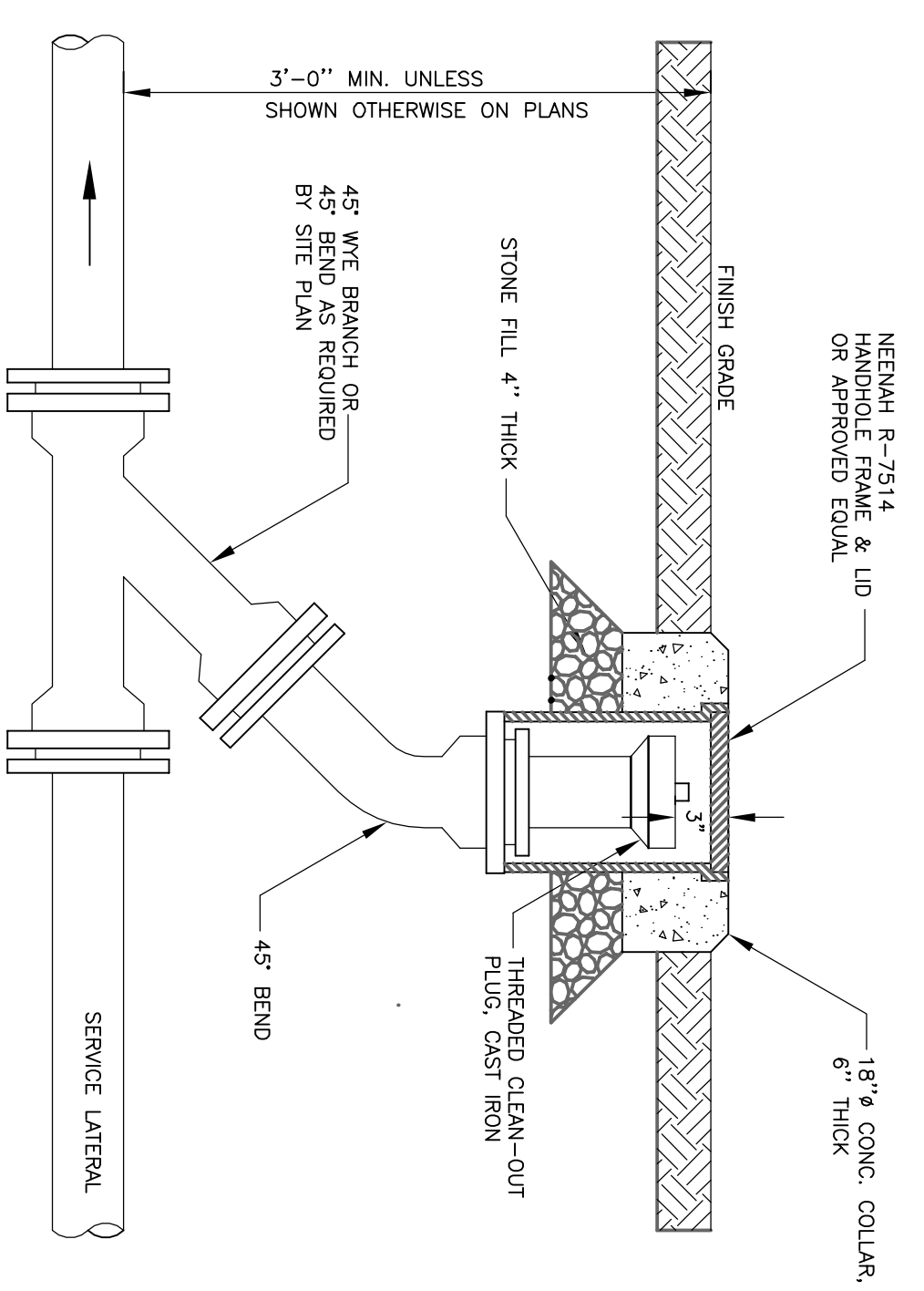


**STANDARD SEWER LINE TRENCHING DETAILS**  
SD 2-24



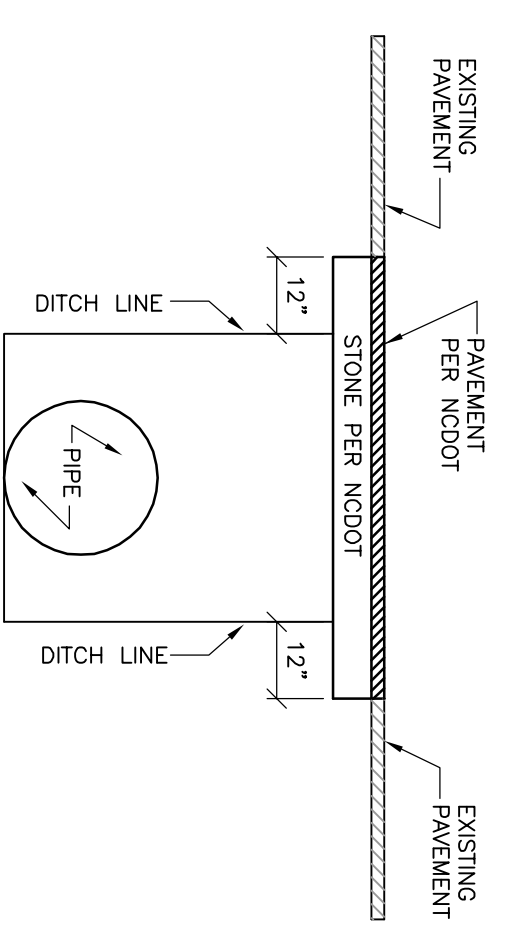
- NOTES:**
1. PIPE FOR INSIDE DROP SHALL BE SDR 35 P.V.C. CONFORMING TO ASTM SPECIFICATION D3034.
  2. BOTTOM BEND TO BE 90° SHORT BEND. BELL SPIGOT OF SDR 35 P.V.C. SPIGOT OF BEND TO REST DIRECTLY ON EXISTING SHELF CONSTRUCTED MASONRY THROUGH FROM DROP.
  3. NOTCH BELL OF P.V.C. DROP TO ACCEPT D.I.P. PVC TEE SPIGOT AS SHOWN.
  4. LOCATE STRAPS AT PIPE BELL AND BEND BELL OF 90° BEND AS SHOWN. ADD EXTRA STRAPS AS NECESSARY TO MAINTAIN MAXIMUM SPACING OF TEN FEET.
  5. HOLE IN MANHOLE WALL TO BE MADE WITH A CORING MACHINE. INSTALL A "COR-N-SEAL" FLEXIBLE RUBBER COUPLING OR EQUAL.
  6. CORE HOLE SHALL NOT ENTER CONE SECTION.

**5. DIA. INSIDE DROP MANHOLE CONNECTION**  
SD 2-18



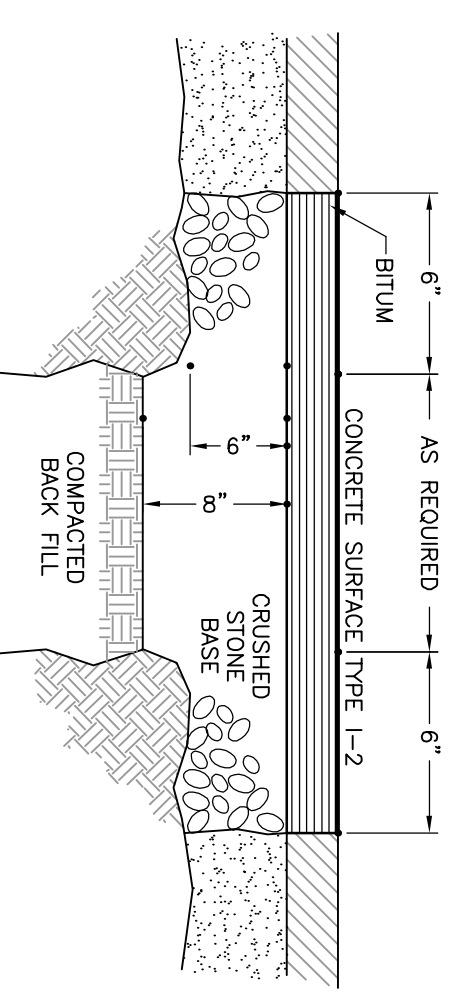
- NOTES:**
1. CLEAN-OUT PIPE AND FITTINGS SHALL BE THE SAME DIAMETER AND MATERIAL AS THE SERVICE LATERAL.
  2. PROVIDE CLEAN-OUTS WHERE INDICATED ON THE PLANS.
  3. D.I.P. CLEAN-OUTS SHALL HAVE BRONZE-THREADED CLEAN-OUT PLUG.
  4. WHERE CLEAN-OUTS ARE INSTALLED ON PIPING UNDER PRESSURE, ALL JOINTS SHALL HAVE RETAINER CLAMPS OR OTHER APPROVED METHOD OF RESTRAINING ALL RISER PIPE, FITTINGS AND CLEAN-OUT PLUG GLANDS OR OTHER RESTRAINTS AND GASKETS FOR THE PRESSURES PRESENT AT THE PARTICULAR POINT OF INSTALLATION.

**SANITARY SEWER SERVICE LATERAL CLEAN-OUT DETAIL**  
SD 2-20



- NOTES:** REFERENCE SPECIFICATIONS FOR BACKFILLING AND COMPACTION REQUIREMENTS. 1. PATCH SHALL BE PERFORMED AFTER THE PIPE IS INSTALLED. 2. PATCH SHALL BE PERFORMED AFTER THE PIPE IS INSTALLED. 3. NEW PAVEMENT TO MEET ALL INDOT REQUIREMENTS.

**PIPE INSTALLATION PAVEMENT REPAIR DETAIL**  
SD 2-30



**PAVEMENT REPAIR DETAIL**  
SD 2-34

DES.	-
CHK.	-
DRWN.	-
DATE	08/15/07

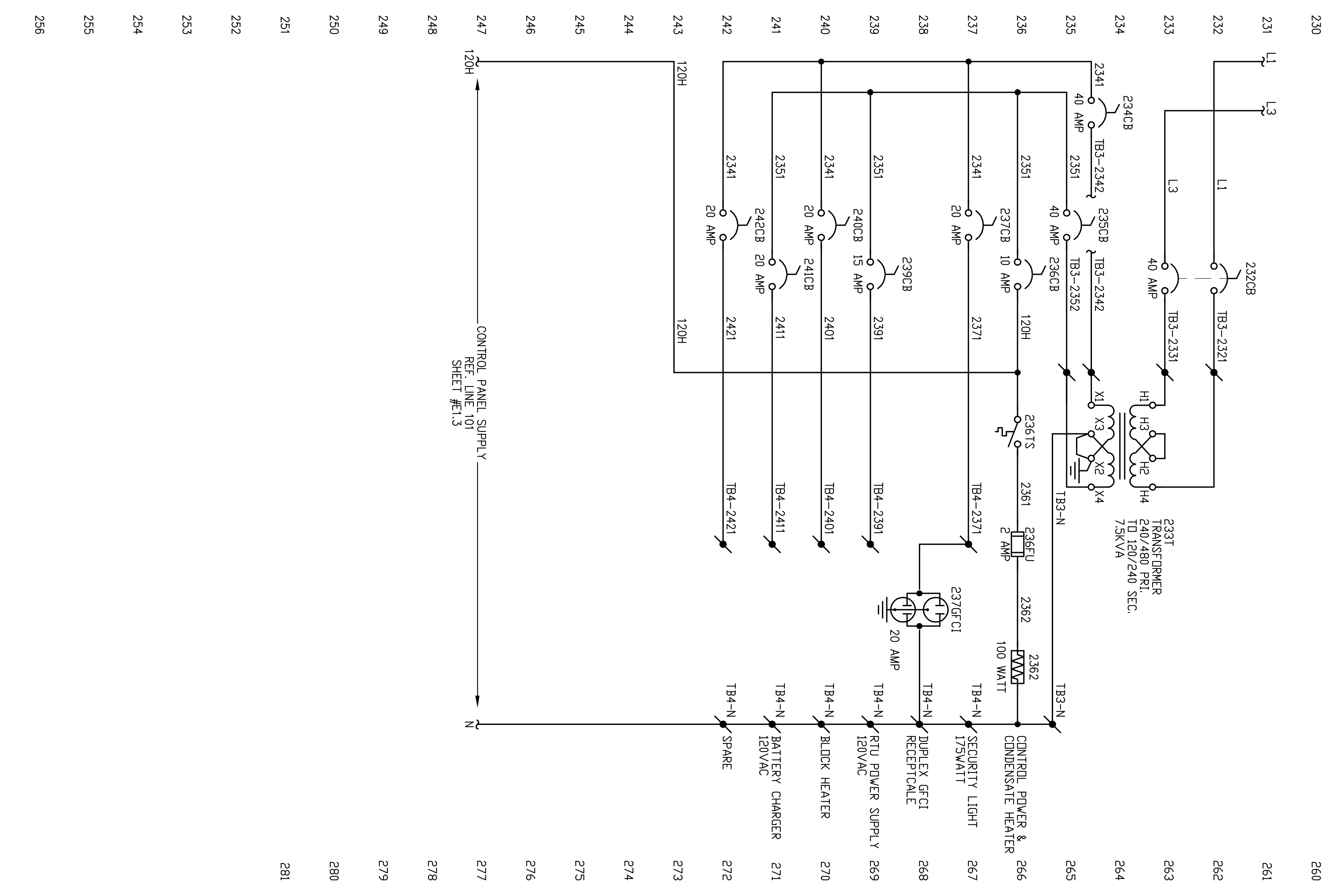
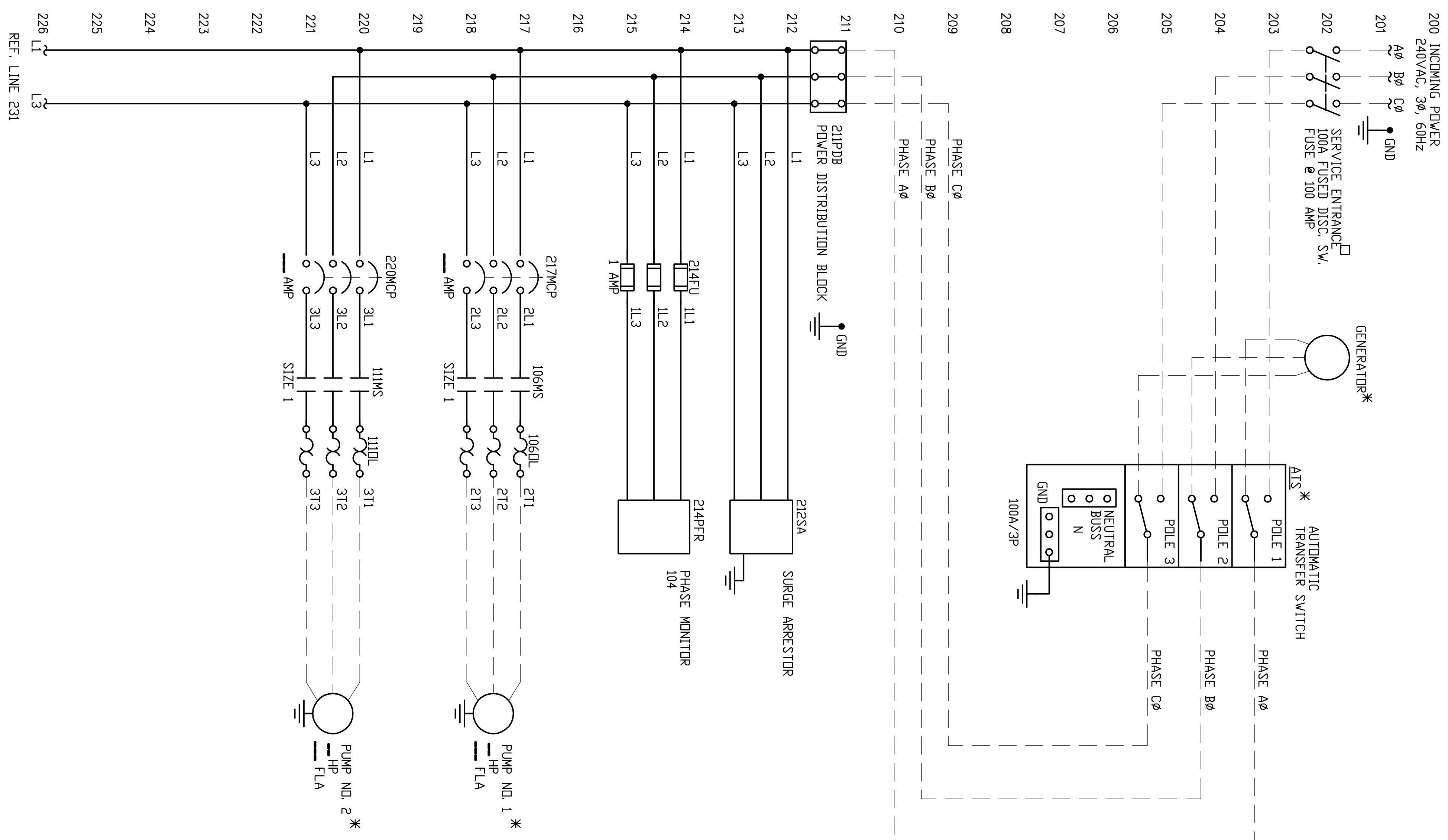
**NORTH BRUNSWICK  
SANITARY DISTRICT**

**OWNER:**  
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SANITARY DISTRICT  
P.O. BOX 2230  
516 VILLAGE ROAD NE  
LELAND, N.C. 28451-2230  
TEL (910) 371-9949  
FAX (910) 371-6441

**UTILITY DETAILS**







**LIFT STATION DETAILS**  
**-- PUMP SPECIFICATIONS**

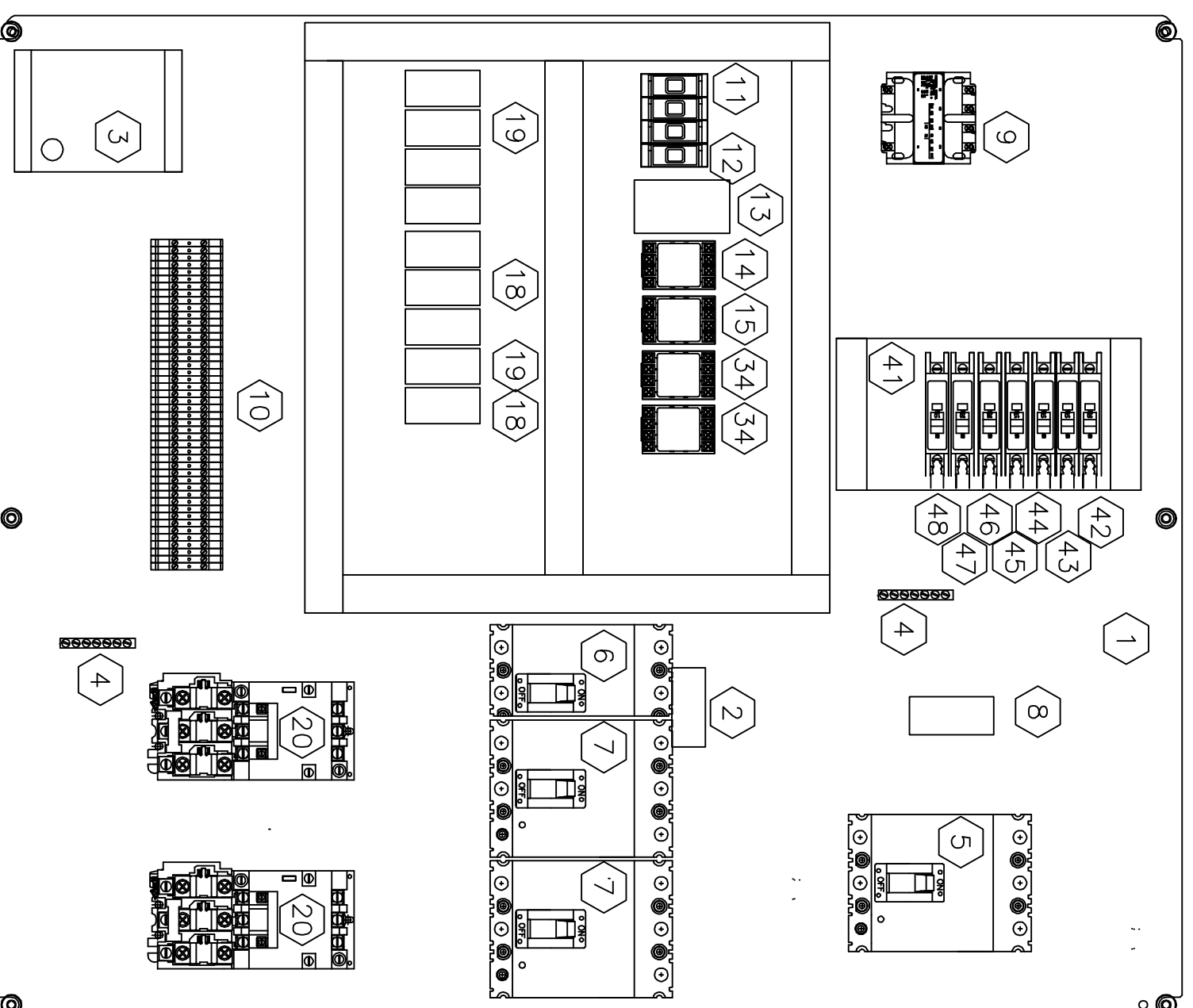
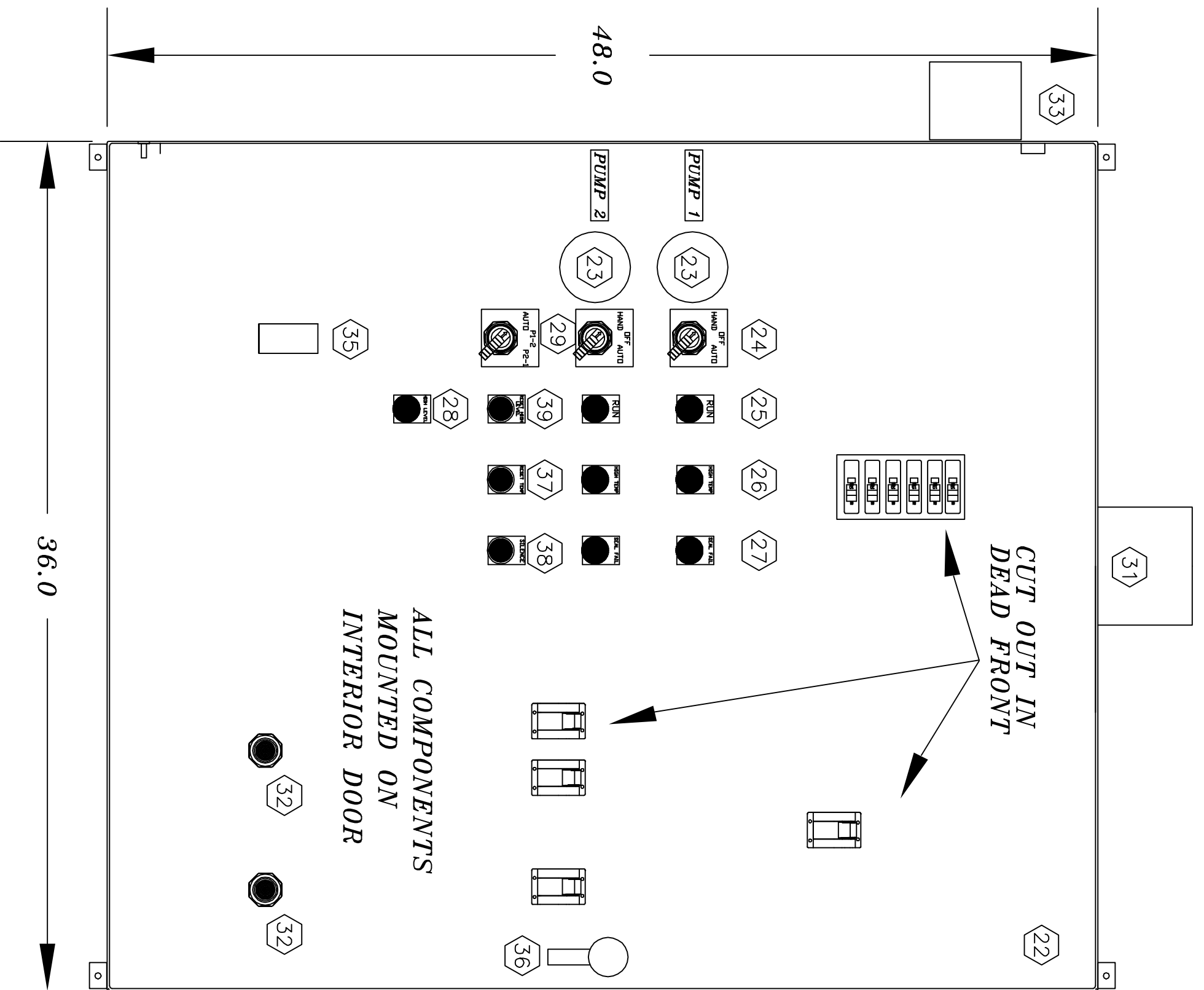
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**NORTH BRUNSWICK**  
**SANITARY DISTRICT**

DWG. NO. ---  
CADD. ---  
DRAWN. ---  
DATE: 08/15/07

BILL OF MATERIALS			MANUFACTURER
ITEM	QUAN	DESCRIPTION	
1	1	MOUNTING PANEL CAT# A-42P36	HOFFMAN
2	1	LIGHTNING ARRESTER CAT# SDSA3650	SQUARE D
3	1	100 WATT SPACE HEATER CAT# D-AH1001A	HOFFMAN
4	2	COPPER GROUND BAR CAT# PK7GTA	SQUARE D
5	1	MAIN CIRCUIT BREAKER CAT# FAL34100	SQUARE D
6	1	TRANSFORMER PRIMARY BREAKER CAT# FAL24050	SQUARE D
7	2	MOTOR STARTER BREAKERS CAT# FAL34030	SQUARE D
8	1	NEUTRAL POWER DISTRIBUTION BLOCK CAT# 1321580	MARATHON
9	1	CONTROL POWER TRANSFORMER 120 -24 VAC CAT# 9070 T50D23	SQUARE D
10	45	TERMINAL BLOCKS CAT# 102010	WEIDMULLER
11	1	3 POLE, CLASS CC FUSE BLOCK / FUSES CAT# CHC3 / FND-R-1	BUSSMANN
12	1	1 POLE, MIDGET FUSE BLOCK / FUSE CAT# CHM1 / FNM-1	BUSSMANN
13	1	PHASE LOSS/UNDERVOLTAGE/REVERSAL RELAY CAT# 84873010	CRUZET
14	1	ALTERNATING RELAY / BASE CAT# LJR211DA / RUC3M	CRUZET / SQUARE D
15	1	LAG DELAY TIMER / BASE CAT# 9050 JCK11V20 / RUC2M	SQUARE D
16			
17			
18	4	4 POLE DT RELAY / BASE CAT# RYM4AB2F7 / RYZE2S114M	SQUARE D
19	5	4 POLE DT RELAY / BASE CAT# RYM4AB2B7 / RYZE2S114M	SQUARE D
20	2	THREE PHASE 5 HP - 230 VOLT STARTER CAT# 8536 SC03V02S	SQUARE D
21			
22	1	ENCLOSURE CAT# A-42H3612SSLP3P1	HOFFMAN
23	2	ELAPSED TIME METER CAT# 711-0160	REDDINGTON
24	2	*HAND - OFF - AUTO * SELECTOR SWITCH CAT# 9001 SKS43FBH13	SQUARE D

BILL OF MATERIALS			MANUFACTURER
ITEM	QUAN	DESCRIPTION	
25	2	*RUN* GREEN PILOT LIGHT CAT# ZB4BV6 / ZB4BV03	TELEMECANIQUE
26	2	*HIGH TEMP* AMBER PILOT LIGHT CAT# ZB4BV6 / ZB4BV05	TELEMECANIQUE
27	2	*SEAL FAIL* RED PILOT LIGHT CAT# ZB4BV6 / ZB4BV04	TELEMECANIQUE
28	1	*HIGH LEVEL* RED PILOT LIGHT CAT# ZB4BV6 / ZB4BV04	TELEMECANIQUE
29	1	*AUTO - PL-2 - P2-1* SELECTOR SWITCH CAT# 9001 SKS46FBH13	SQUARE D
30			
31	1	EXTERNAL ALARM LIGHT CAT# LRX-25	INGRAM
32	2	OVERLOAD RESET MECHANISM CAT# 9066 RA-1	SQUARE D
33	1	NEMA 4X ALARM HORN CAT# 855-B10LE22	ALLEN-BRADLEY
34	2	PUMP PROTECTION RELAYS / BASE CAT# MINCAS II / RUC3M	FLYGT / SQUARE D
35	1	GFCI RECEPTACLE CAT# 85991	LEVITON
36			
37	1	*HIGH TEMP RESET* PUSHBUTTON CAT# ZB4BA18 / ZB4BZ102	TELEMECANIQUE
38	1	*SILENCE* PUSHBUTTON* CAT# ZB4BA18 / ZB4BZ101	TELEMECANIQUE
39	1	*HIGH LEVEL RESET* PUSHBUTTON CAT# ZB4BA18 / ZB4BZ102	TELEMECANIQUE
40			
41	1	DEM MOUNTING INTERIOR CAT# QDN8-16L100	SQUARE D
42	1	SPACE HEATER BREAKER CAT# Q0110	SQUARE D
43	1	AREA LIGHT BREAKER CAT# Q0120	SQUARE D
44	1	CONVENIENCE RECEPTACLE BREAKER CAT# Q0115	SQUARE D
45	1	GENERATOR BATTERY CHARGER BREAKER CAT# Q0120	SQUARE D
46	1	GENERATOR BLOCK HEATER BREAKER CAT# Q0230	SQUARE D
47	1	FLDW. METER BREAKER CAT# Q0120	SQUARE D
48	1	SYSTEM CONTROL POWER BREAKER CAT# Q0110	SQUARE D



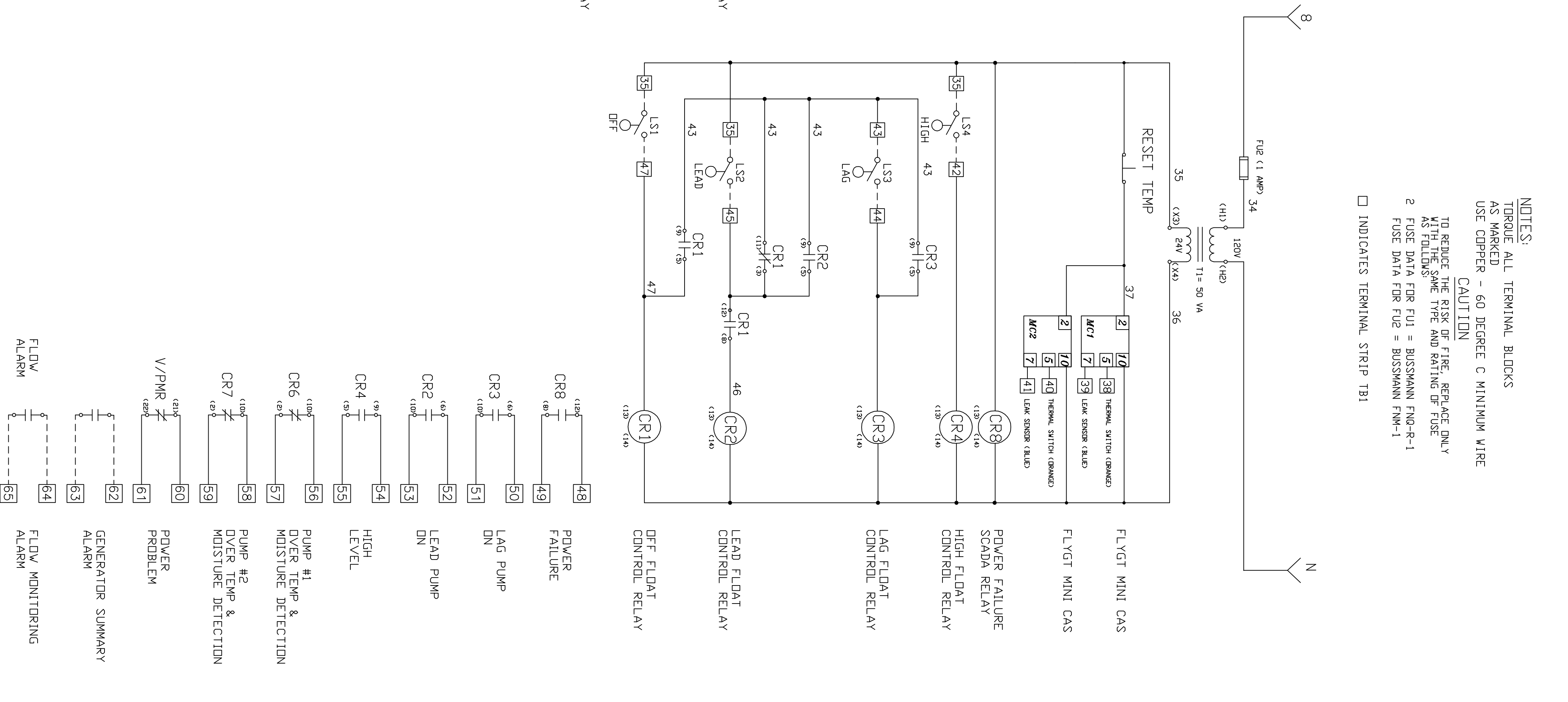
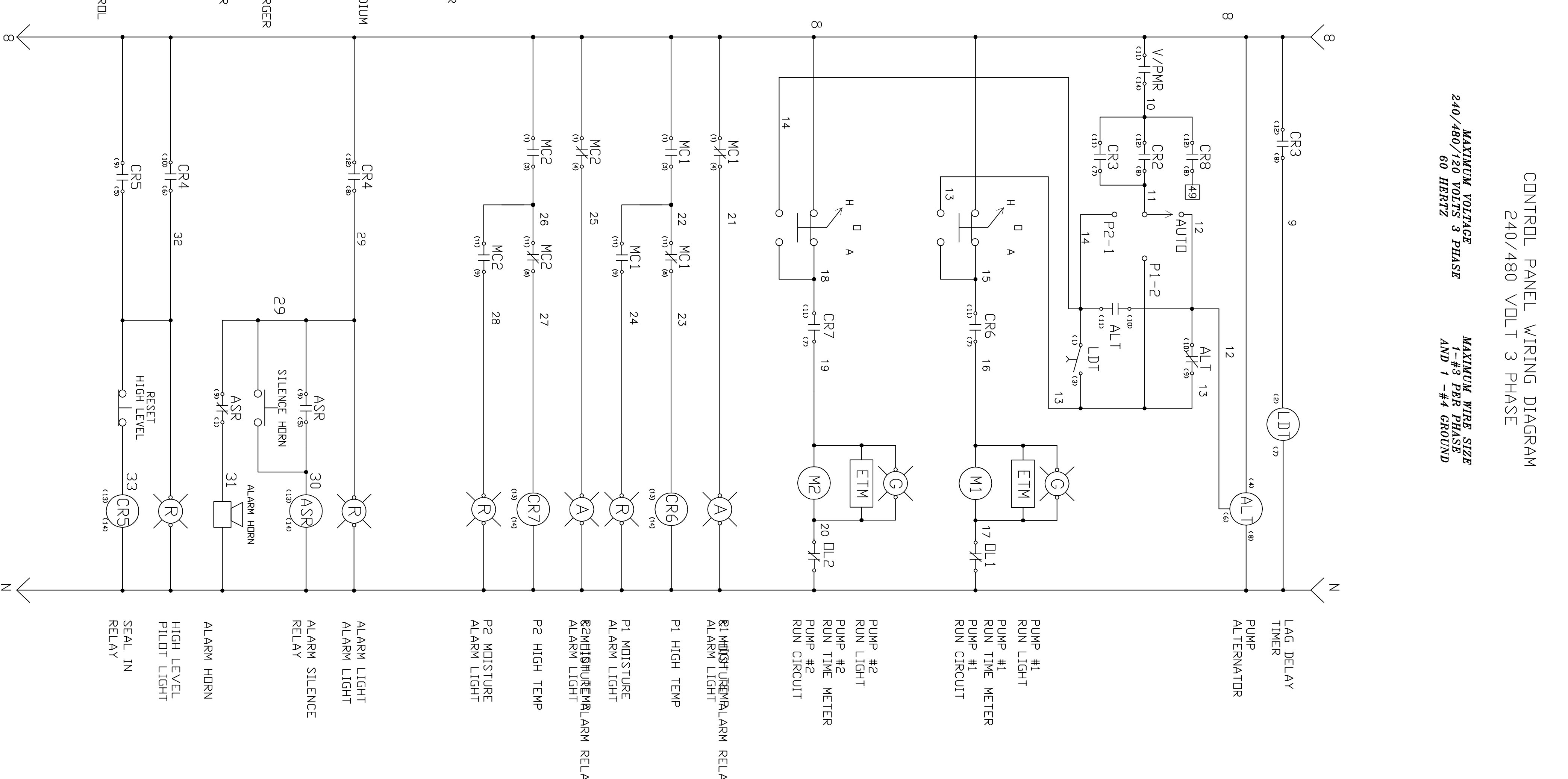
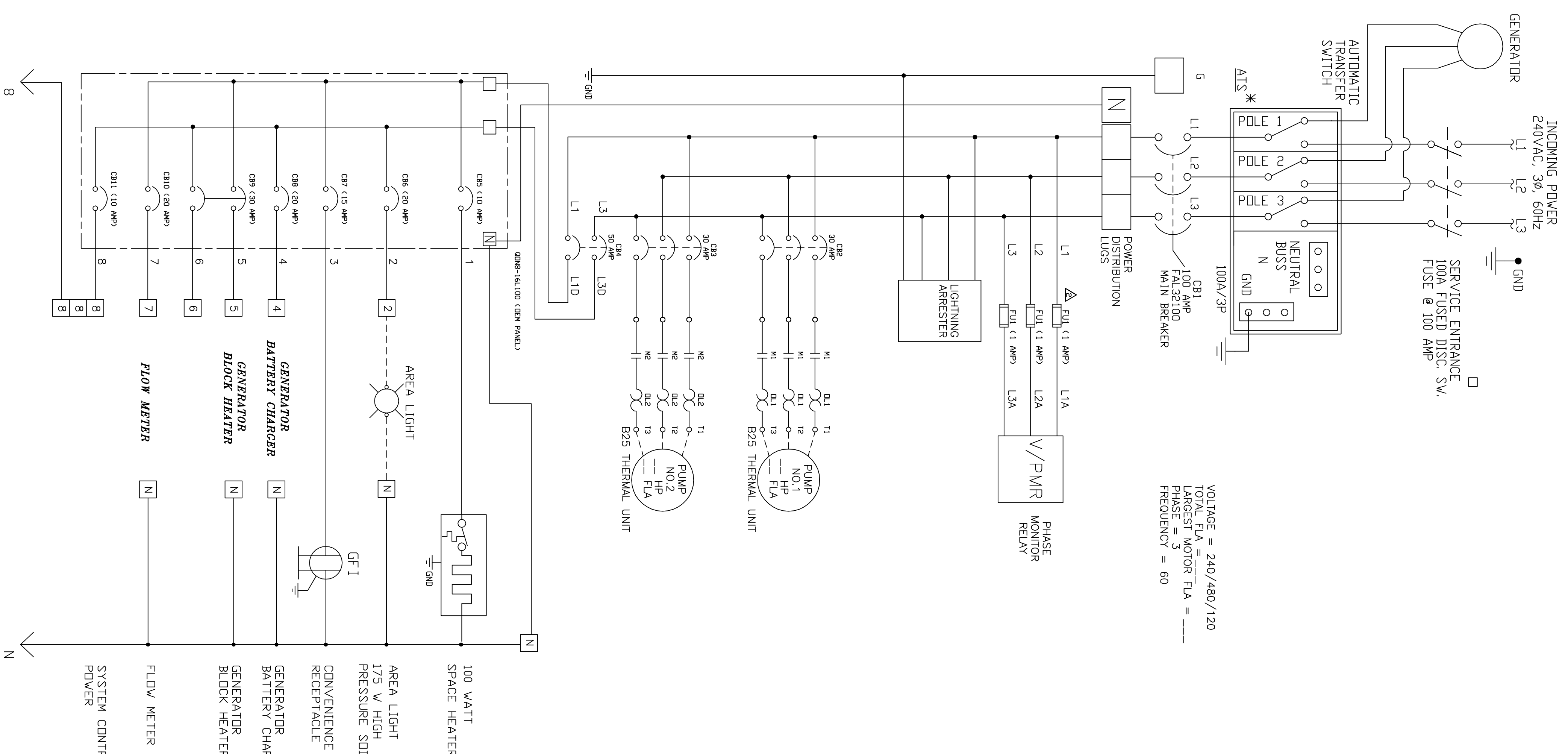
---HP DUPLEX  
 ---CONTROL PANEL  
 ---VOLT 3 PHASE  
 FRONT ELEVATION &  
 PANEL LAYOUT

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**LIFT STATION DETAILS  
 -- PUMP SPECIFICATIONS**

DES. ---  
 QCL. ---  
 DRWN. ---  
 DATE: 08/15/07

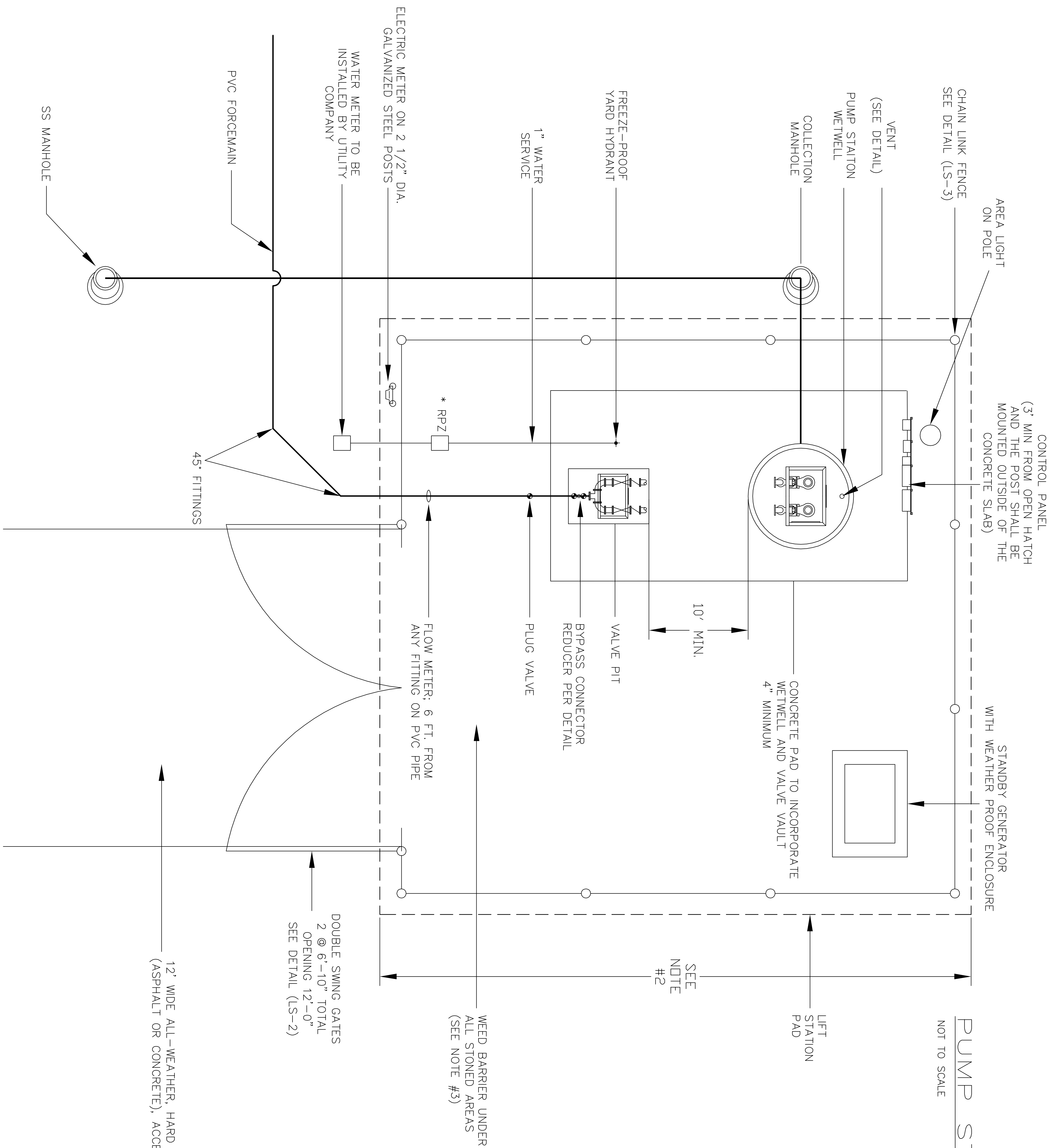


**LIFT STATION DETAILS  
-- PUMP SPECIFICATIONS**

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**NORTH BRUNSWICK  
SANITARY DISTRICT**

DSS  
DCL  
DBN  
DATE: 08/15/07



**PUMP STATION SITE DETAIL**  
NOT TO SCALE

**NOTES:**

1. LIFT STATION SITE PLAN MAY CHANGE DUE TO THE LAND & SPACE AVAILABLE.
2. LIFT STATION PADS SHALL BE:  
40'x40' FOR WETWELLS LESS THAN 10' DIAMETER;  
50'x50' FOR WETWELLS 10' DIAMETER OR GREATER.  
FENCED AREAS SHALL BE 37'x37' AND 47'x47' RESPECTIVELY.
3. PAD AREAS SHALL BE #57 STONE OVER MIRAFI FABRIC.

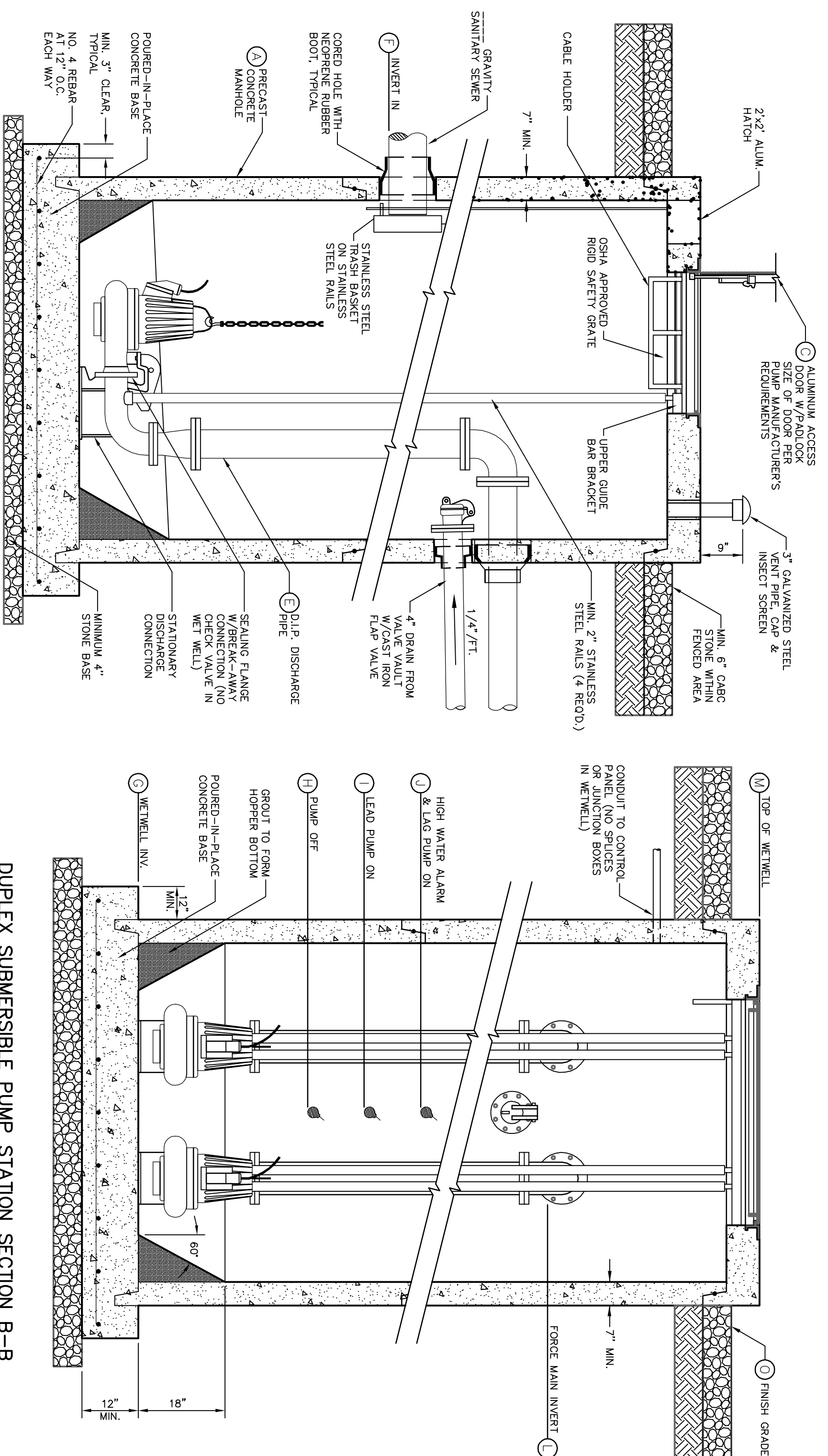
SEE NOTE #2

WEED BARRIER UNDER ALL STONED AREAS (SEE NOTE #3)

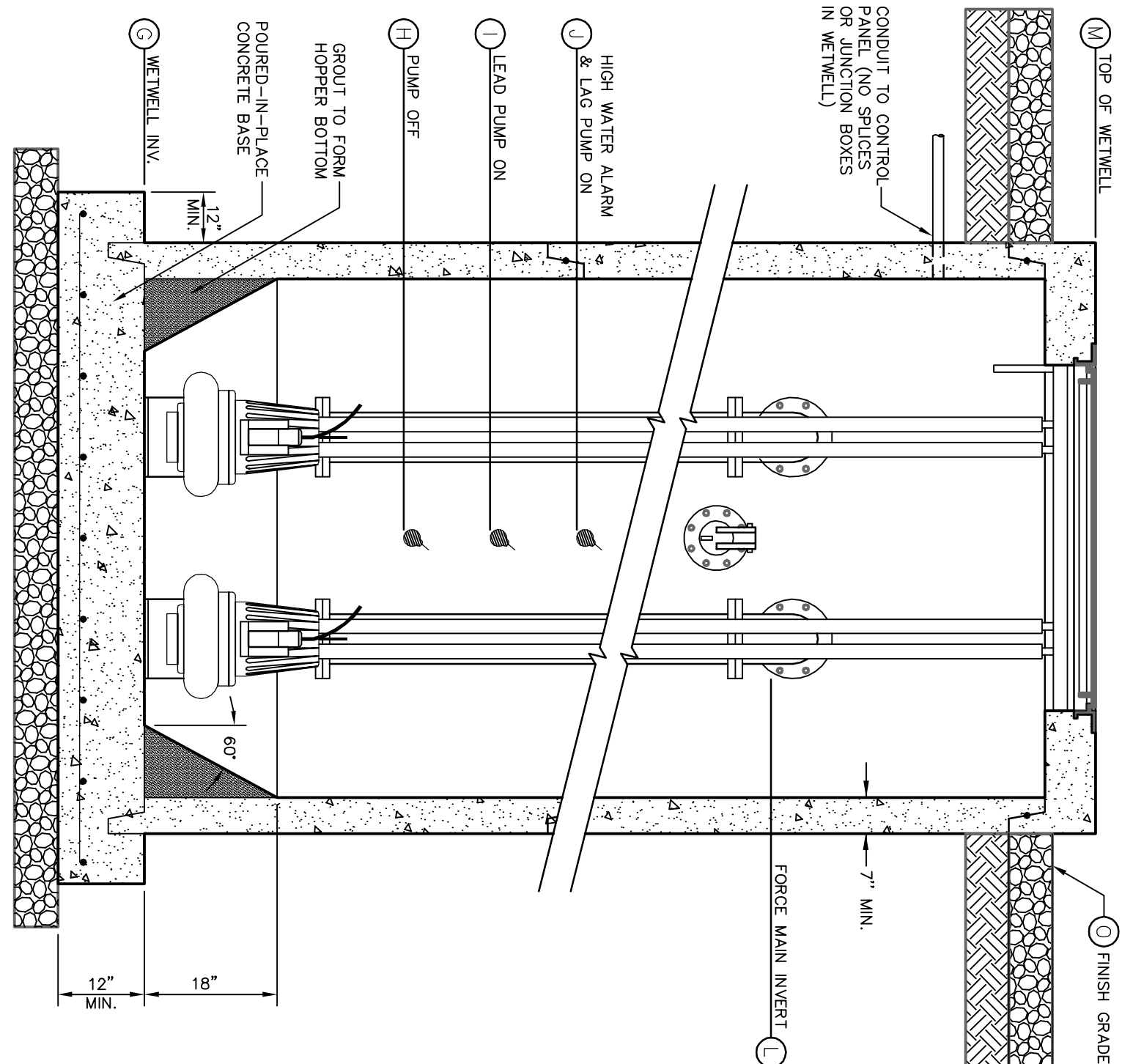
DOUBLE SWING GATES  
2 @ 6'-10" TOTAL  
OPENING 12'-0"  
SEE DETAIL (LS-2)

12' WIDE ALL-WEATHER, HARD SURFACE  
(ASPHALT OR CONCRETE), ACCESS DRIVE

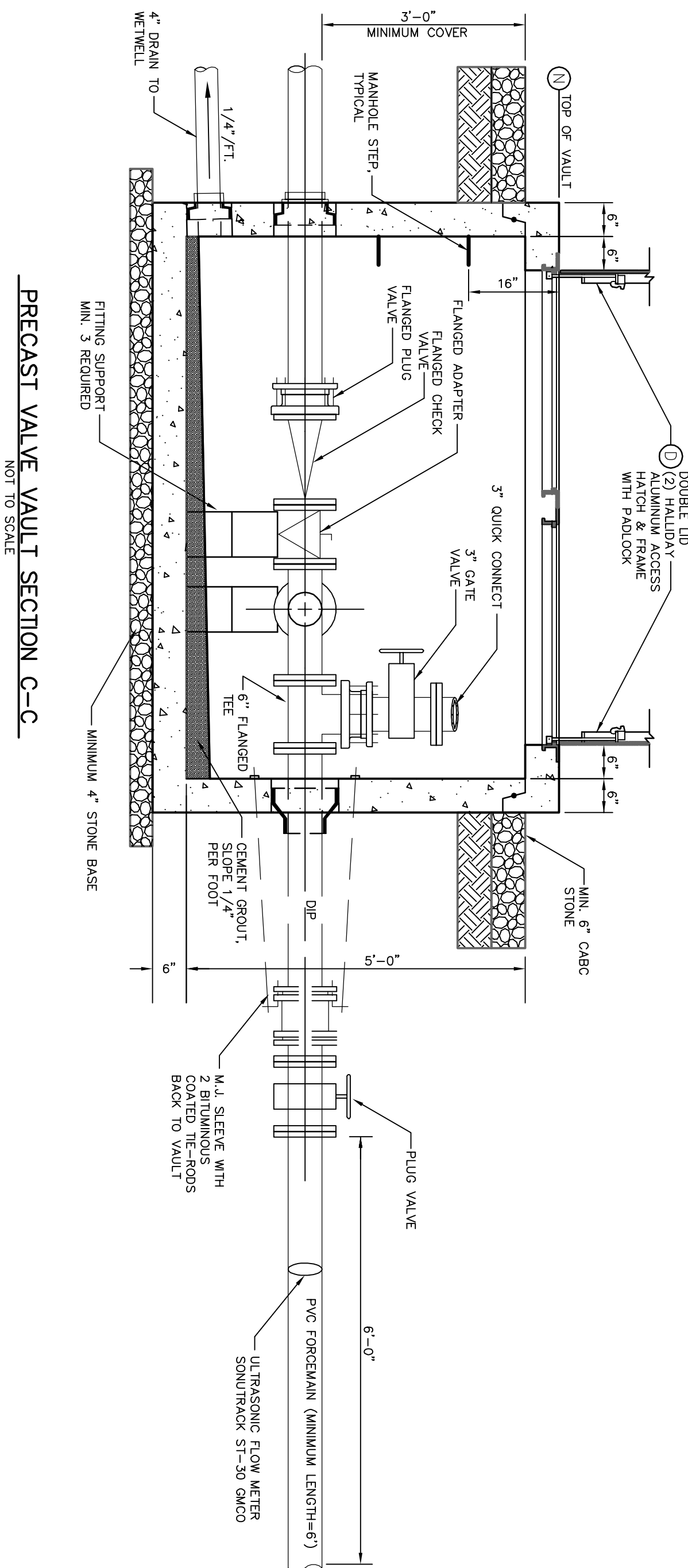
\* RPZ MUST MEET THE UNIVERSITY OF SOUTHERN CALIFORNIA STANDARDS



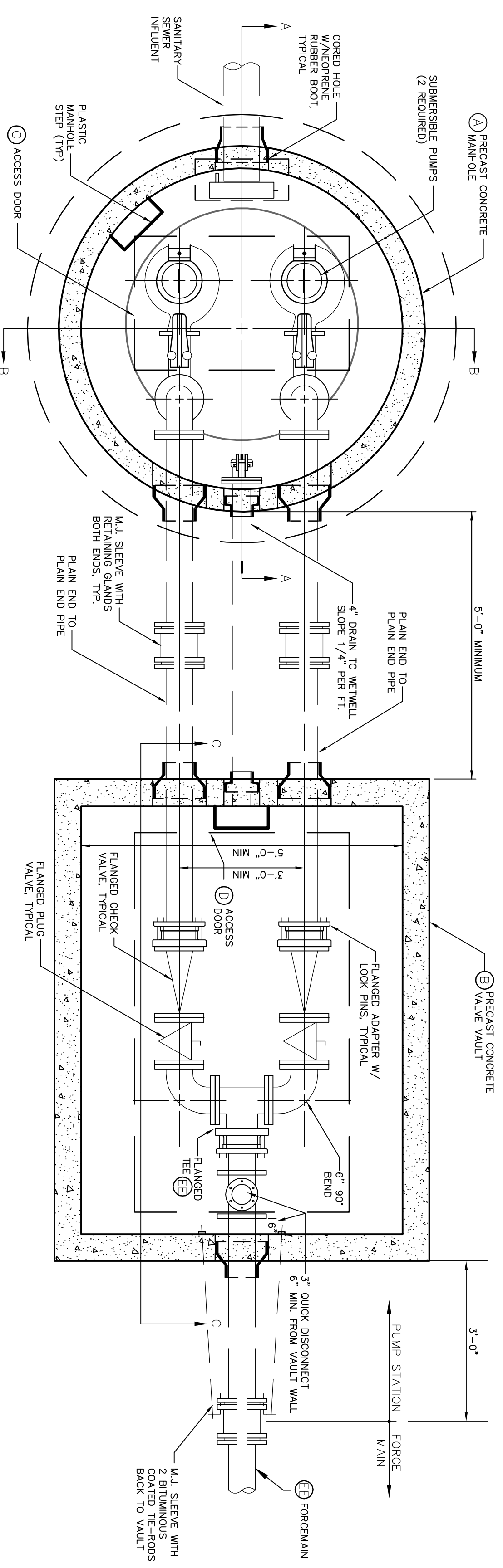
DUPLEX SUBMERSIBLE PUMP STATION SECTION A-A  
NOT TO SCALE



DUPLEX SUBMERSIBLE PUMP STATION SECTION B-B  
NOT TO SCALE



PRECAST VALVE VAULT SECTION C-C  
NOT TO SCALE



DUPLEX SUBMERSIBLE PUMP STATION PLAN  
NOT TO SCALE

PUMP SCHEDULE  
NO SCALE

PUMP STATION NUMBER	PUMP DISCHARGE DRAINER (SFD)	DESIGN CAPACITY (GPM)	DESIGN TDH (FT)	HP	VOLTAGE PHASE

DIMENSION SCHEDULE

A (DIA)	B (W/L)	C (W/L)	D (W/L)	E (DIA)	EE (DIA)

ELEVATION SCHEDULE (FT)

F	G	H	I	J	K	L	M	N	O

GENERAL NOTES

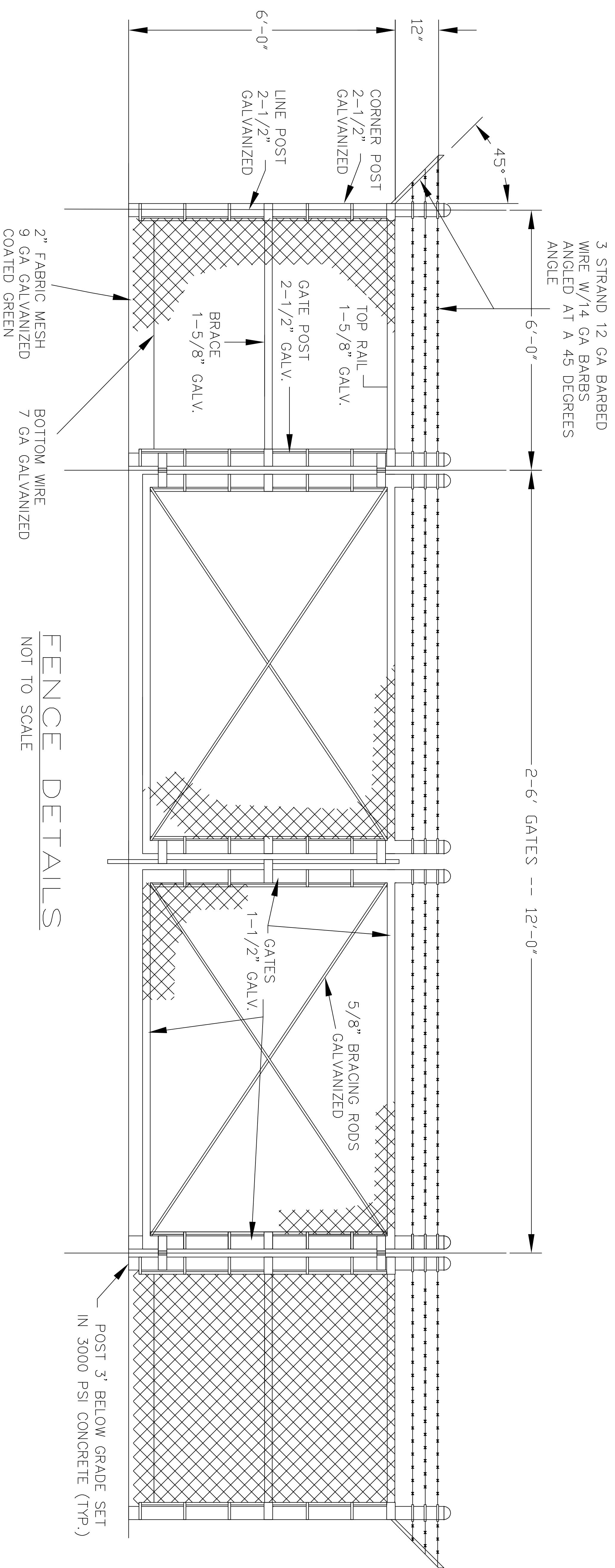
1. (A) DENOTES A PUMP STATION DIMENSION/SIZE OR ELEVATION - SEE SCHEDULE.
2. ALL PUMP STATION PIPING IS FLANGED-END TO PLAN-END (E) D.I.P., UNLESS NOTED OTHERWISE.
3. ALL FITTINGS INSIDE WET WELL AND VALVE VAULT TO BE FLANGED AND BITUMINOUS COATED, MINIMUM 1 MIL THICK.
4. ALL PIPE OPENINGS IN WET WELL AND VALVE VAULT TO BE COURED AND FITTED WITH NEOPRENE RUBBER BOOTS.
5. VALVE VAULT PIPING SHALL BE SUPPORTED WITH MASONRY OR STEEL SUPPORTS AT A MINIMUM OF 3 POINTS.
6. INSTALL A 1/4" TAP AND TEST COCK ON PIPING WITHIN VALVE VAULT.
7. FOR ORIENTATION OF WET WELL AND VALVE VAULT SEE PUMP STATION SITE PLAN.

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NORTH BRUNSWICK  
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CGL. —  
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FENCE DETAILS  
NOT TO SCALE

LIFT STATION DETAILS

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DES.	-
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DRWN.	-
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LS-3