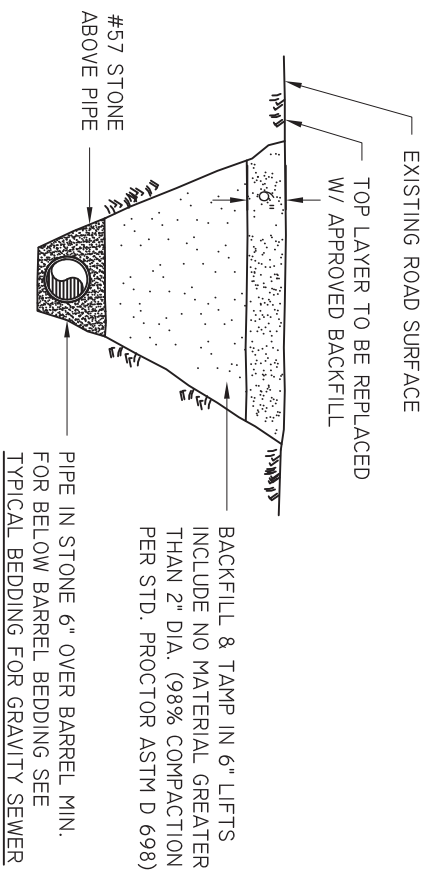


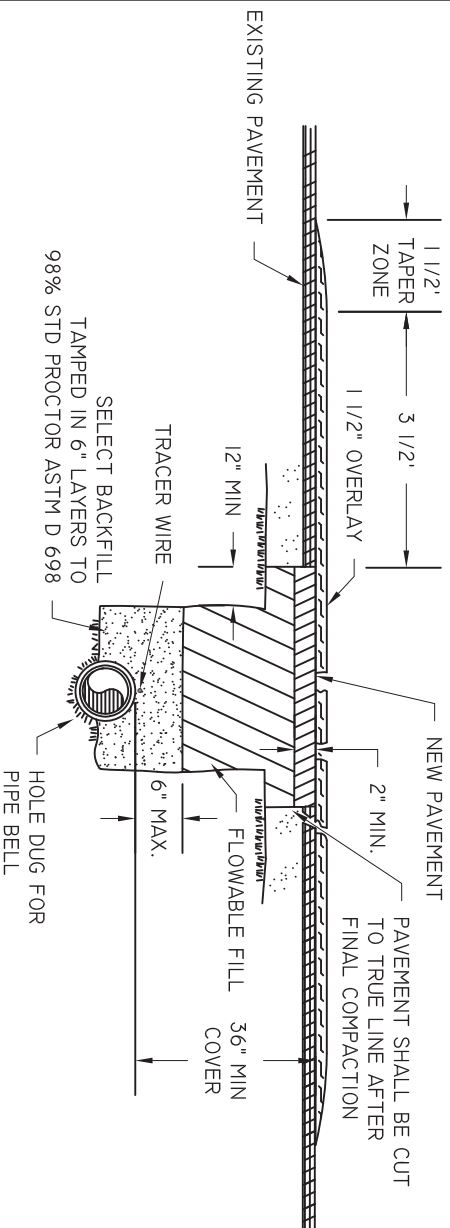
**APPENDIX B – WASTEWATER/SEWER STANDARD DETAIL DRAWINGS**

<b><u>DRAWING NUMBER</u></b>	<b><u>TITLE</u></b>
S-01	Bedding Detail – Gravity Pipe
S-02	Force Main Crossing
S-03	Gravity Main Crossing
S-04	Grease Trap Detail
S-05	Manhole – Cover and Frame
S-06	Manhole - Drop
S-07	Manhole – Flat Top
S-08	Manhole – Force Main Control
S-09	Manhole - Standard
S-10	Sewer Service Double
S-11	Sewer Service - Single
S-12	Pump Station Site Plan
S-13A	Pump Station Section I
S-13B	Pump Station Section II
S-14	Pump Station Wet Well Detail
S-15	Pump Station Fencing Detail
S-16	Pump Station Electrical Layout
S-17	Pump Station Control Panel & Main Disconnect
S-18	Pump Station Bubbler
S-19	Pump Station Hatch Detail
S-20A	Pump Station 2” Duplex Grinder, Plan
S-20B	Pump Station 2” Duplex Grinder, Section
S-21	Pump Station Residential Control Panel
S-22	Pump Station, Simplex Grinder
S-23A	Pump Station (Above Ground – 6x6), Site Plan
S-23B	Pump Station (Above Ground – 6x6), Detail #1
S-23C	Pump Station (Above Ground – 6x6), Detail #2
S-23D	Pump Station (Above Ground – 6x6), Detail #3
S-24	Sewer Check Valve
S-25	Sewer Air Release Pedestal Assembly
S-26	Duplex Residential Grinder Layout
S-27	Pump Station Residential Duplex Control Panel
S-28	Pump Station 6x6 Grate Detail

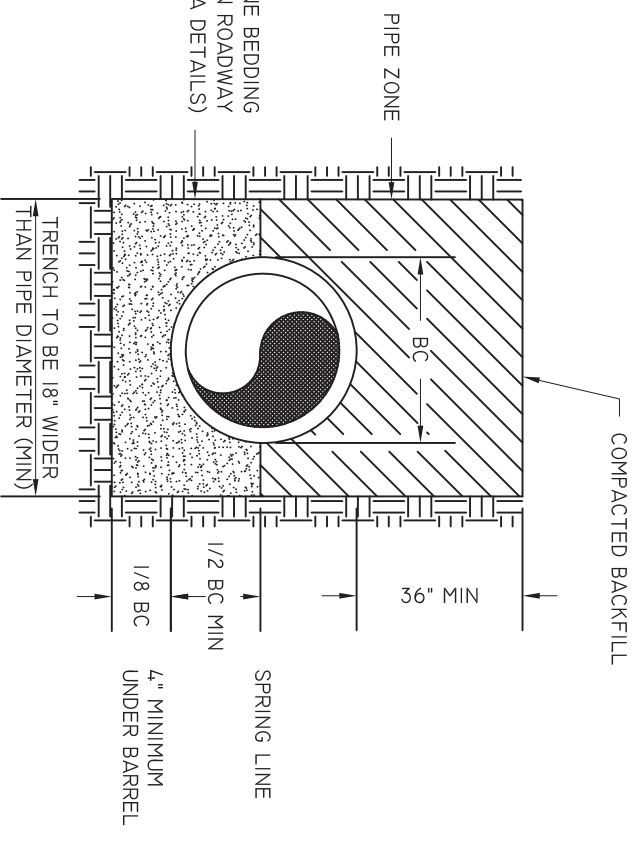


## UNPAVED ROADWAY BEDDING DETAIL

(STONE ABOVE PIPE IN ROADWAY AND PAVED AREA DETAILS)



## PAVED AREA DETAIL



## TYPICAL BEDDING FOR GRAVITY SEWER PIPE

### NOTES:

1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH INSTALLATION CUT. FINAL CUT TO BE MADE AFTER FINAL COMPACTION.
2. MATCH EXISTING PAVEMENT TYP. THICKNESS IS TO BE 2" UNLESS EXISTING IS THICKER.
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT, IF MORE STRINGENT.

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

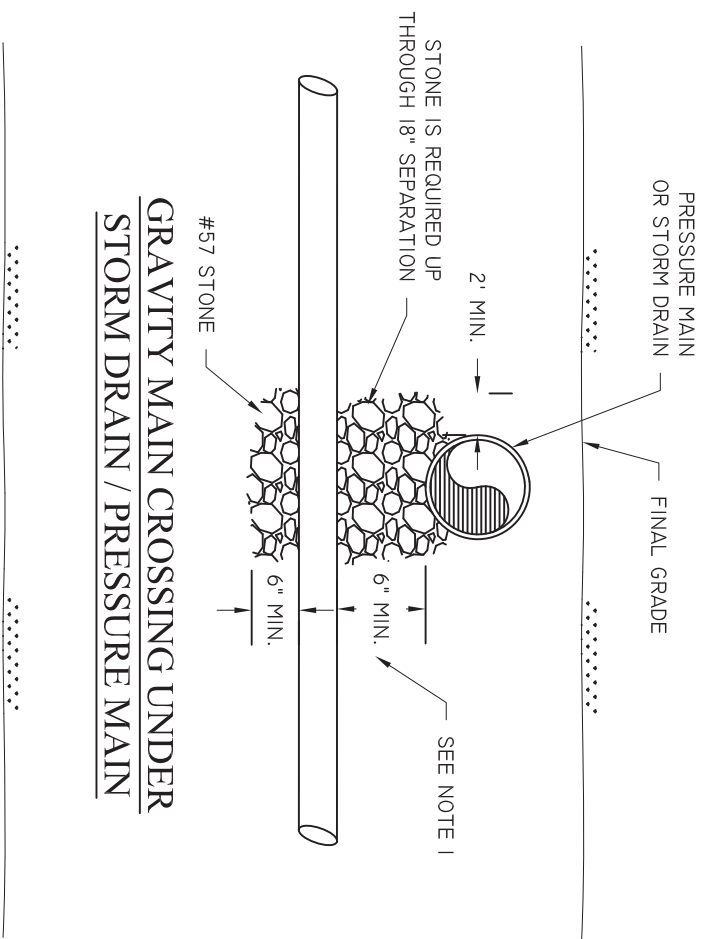
BEDDING DETAIL, GRAVITY PIPE

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-01
SCALE	APPROVED BY	ERS	
N.T.S.			

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

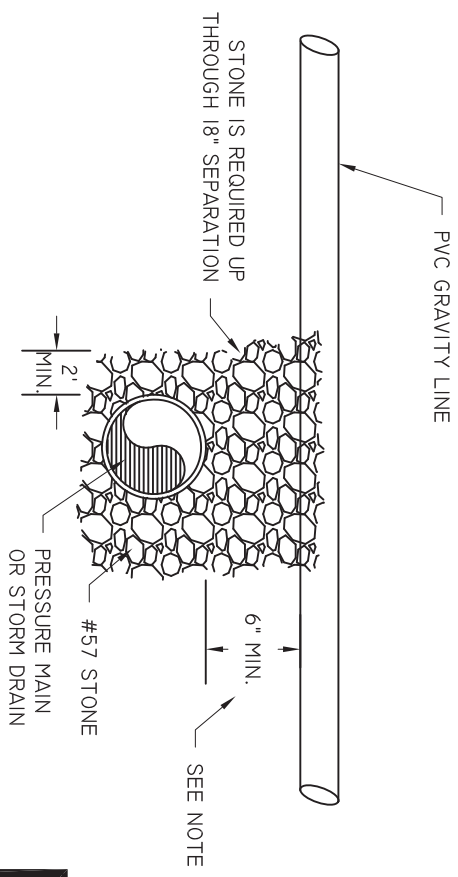
RESERVED

DATE	DRAWN BY	DRAWING #
07/01/09	BMC	S-02
SCALE	APPROVED BY	
N.T.S.	ERS	



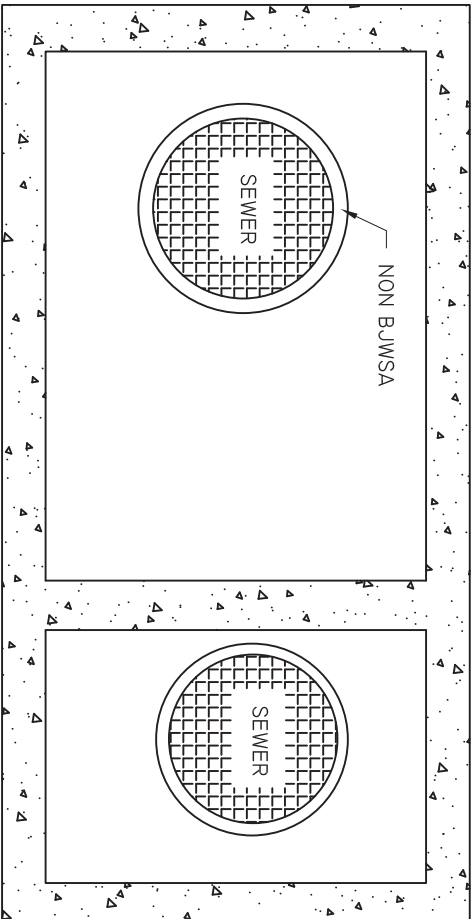
NOTE:  
 1. SYSTEMS SHOULD NOT BE DESIGNED WITH LESS THAN 12" SEPARATION. IF LESS SEPARATION IS UNAVOIDABLE, WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED.

**GRAVITY MAIN CROSSING UNDER  
 STORM DRAIN / PRESSURE MAIN**

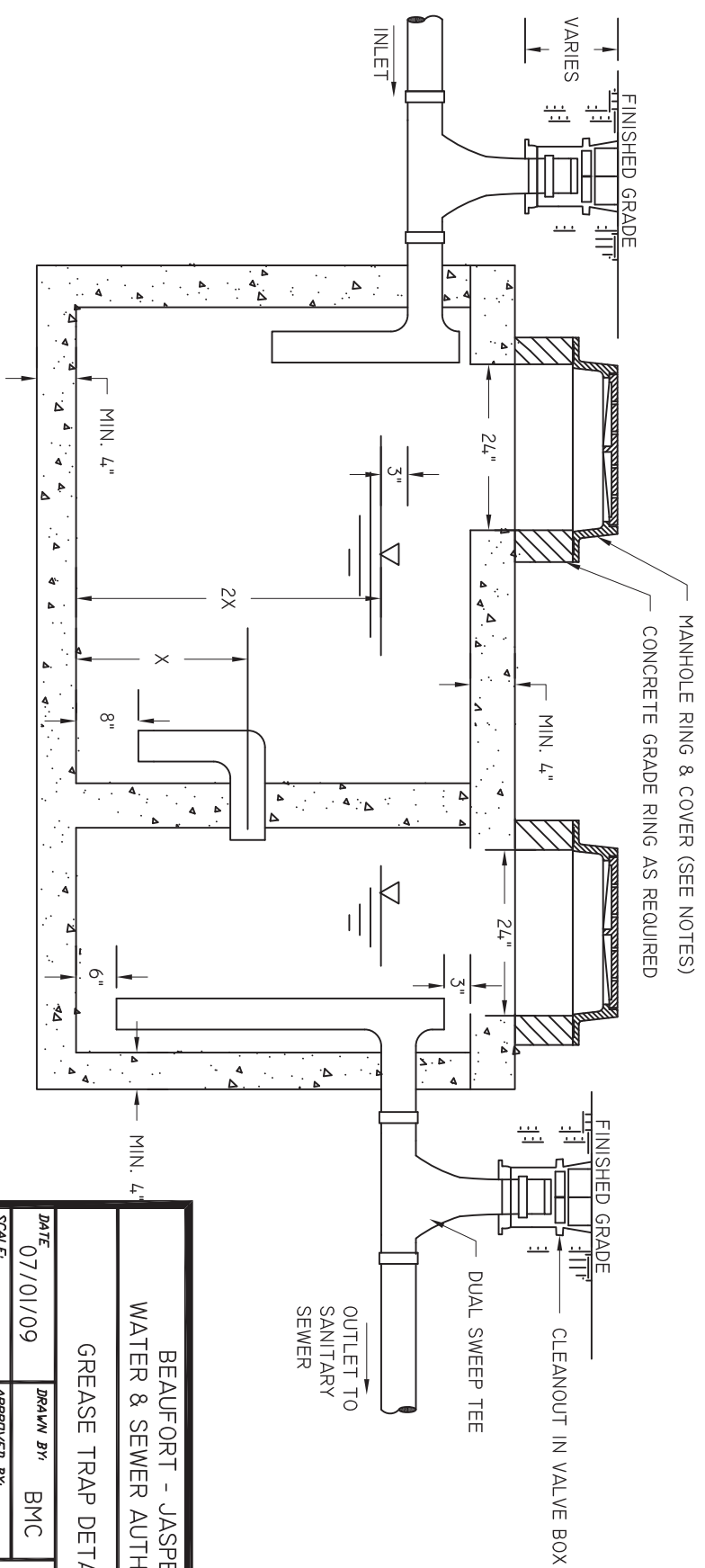


**GRAVITY MAIN CROSSING OVER  
 STORM DRAIN / PRESSURE MAIN**

BEAUFORT - JASPER WATER & SEWER AUTHORITY			
GRAVITY MAIN CROSSING			
DATE 07/01/09	DRAWN BY BMC	DRAWING # S-03	
SCALE N.T.S.	APPROVED BY ERS		



- NOTES:
1. MANHOLE RING & COVER SHALL BE GAS AND WATER TIGHT PROVIDING A 22" MINIMUM CLEAR OPENING. REFER TO MANHOLE COVER AND FRAME DETAIL.
  2. VOLUME OF GREASE TRAP SHALL BE BASED UPON ULTIMATE LOADING. SIZING CALCULATIONS MUST BE APPROVED BY BUWSA. MINIMUM SIZE SHALL BE 1,000 GALLONS. REFER TO SPECIFICATIONS FOR SIZING CALCULATIONS.
  3. CONCRETE GRADE RINGS SHALL BE UTILIZED TO BRING COVER TO FINISHED GRADE.
  4. GREASE TRAP SHALL BE PRECAST ONLY.
  5. CLEANOUTS SHALL BE INSTALLED WITHIN 2' OF GREASE TRAP ON BOTH THE INLET AND OUTLET.

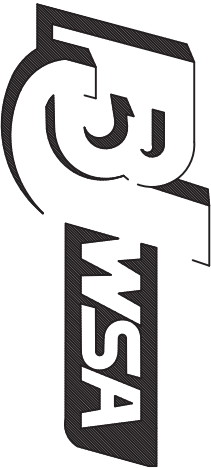


BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

GREASE TRAP DETAIL

DATE	07/01/09	DRAWN BY	BMC	DRAWING #	S-04
SCALE	N.T.S.	APPROVED BY	ERS		

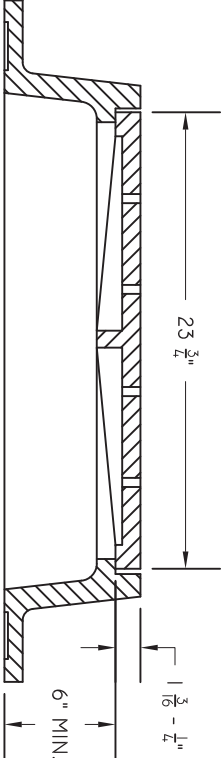
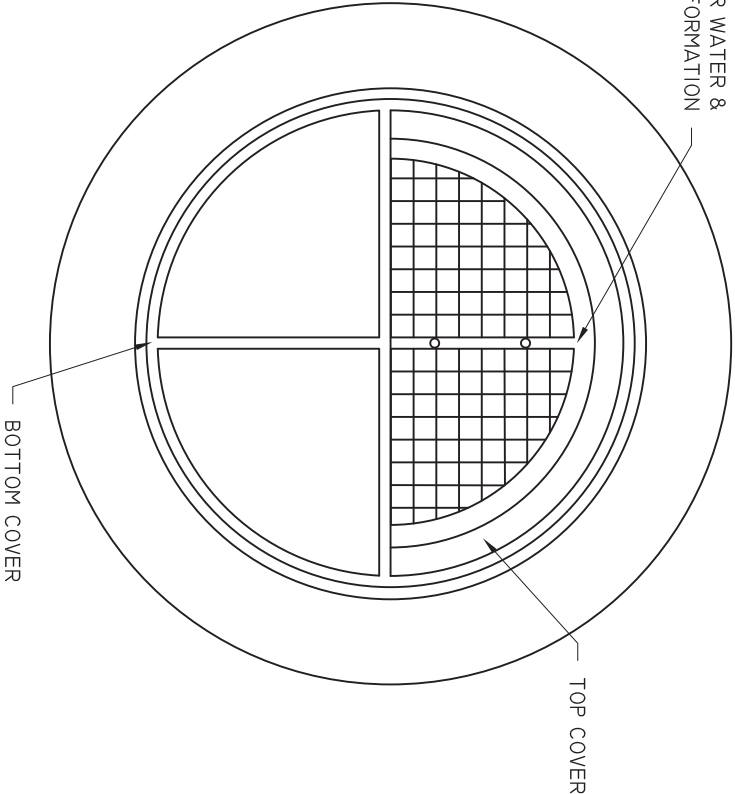
BEAUFORT-JASPER WATER & SEWER  
AUTHORITY LOGO TO BE CAST ON COVER  
CONTACT BEAUFORT JASPER WATER &  
SEWER AUTHORITY FOR INFORMATION



LOGO

NOTES:

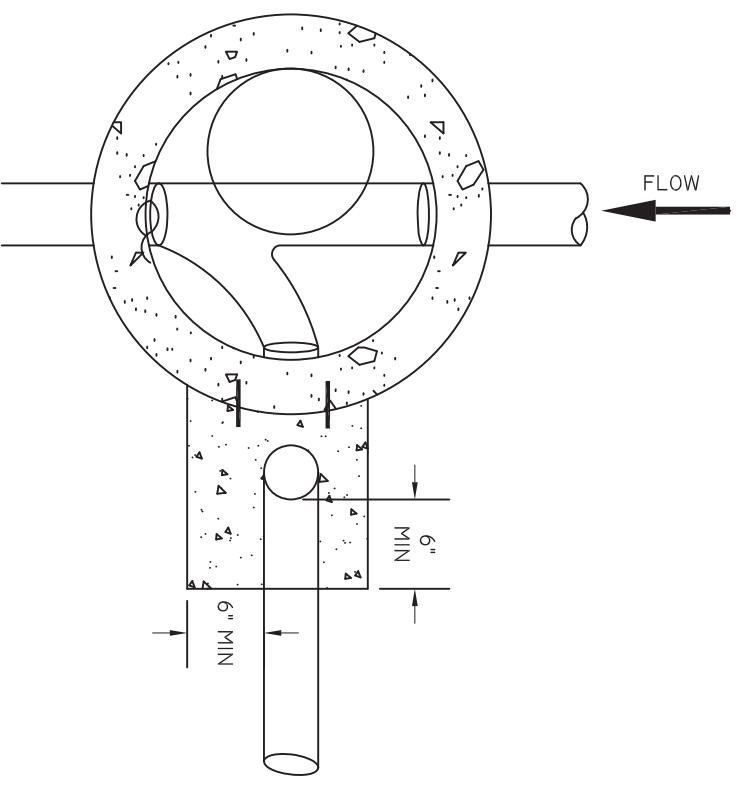
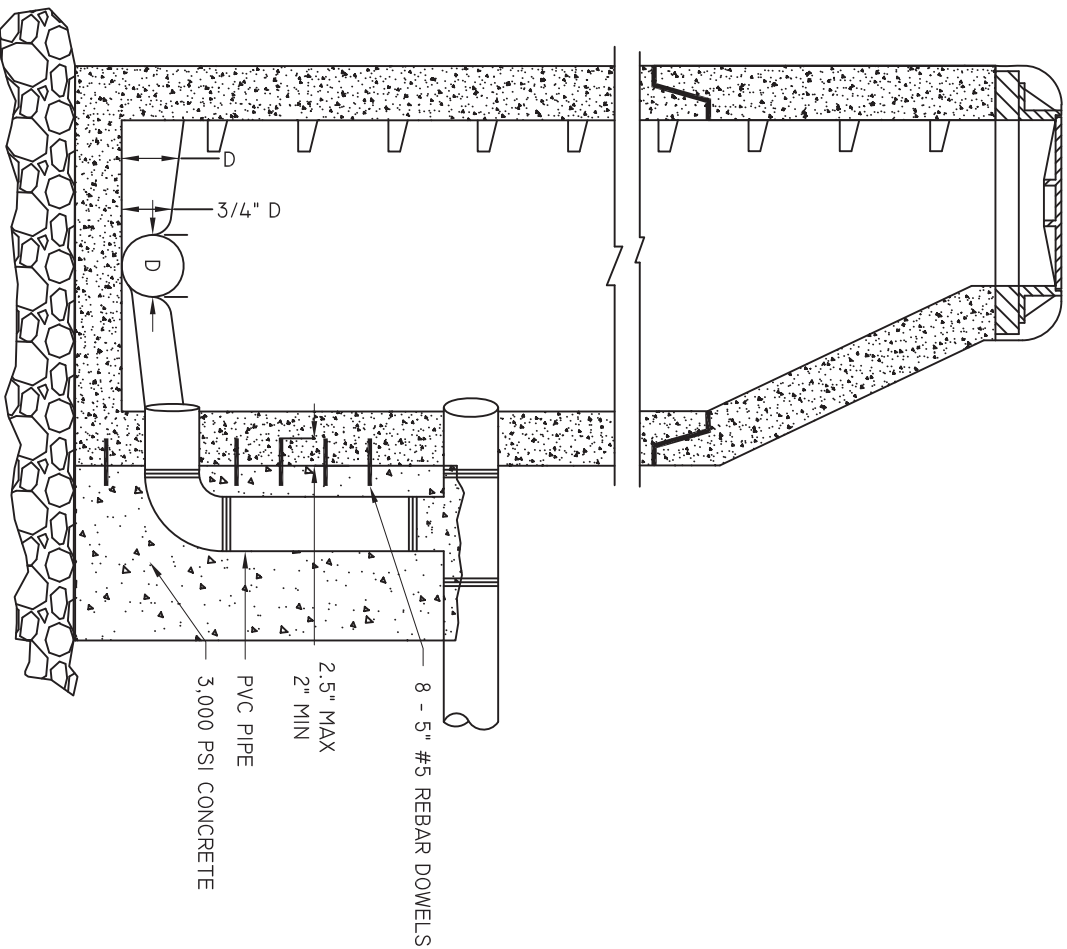
1. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD UNLESS AN ALTERNATIVE SPECIFICATION IS MADE.
2. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS: GRAY IRON-ASTM CLASS 35, DUCTILE IRON-GRADE 60-40-18.
3. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN



BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

MANHOLE, COVER AND FRAME

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-05
SCALE	APPROVED BY	ERS	
N.T.S.			



PLAN VIEW

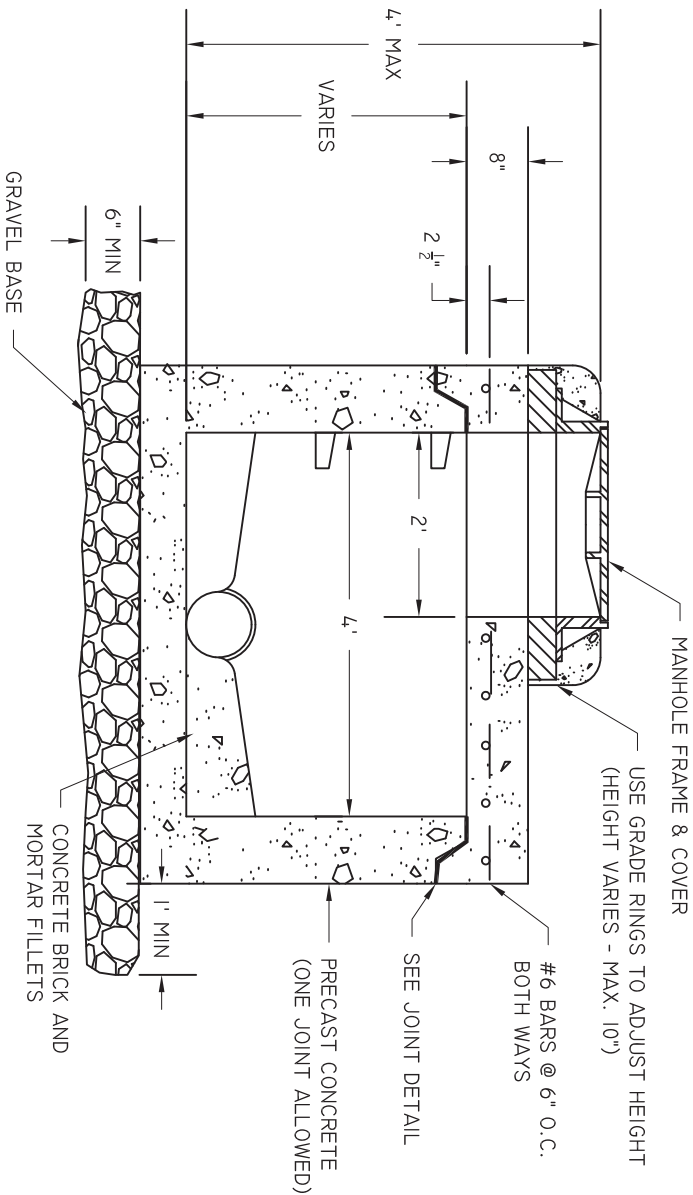
SECTION VIEW

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

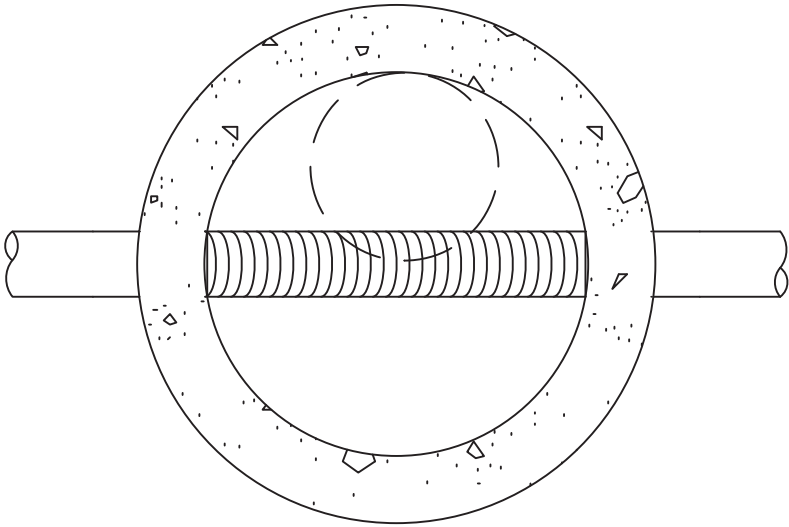
DROP MANHOLE

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-06
SCALE	APPROVED BY	ERS	
N.T.S.			

NOTES:  
1. REFER TO STANDARD SPECIFICATIONS  
FOR INTERIOR COATING REQUIREMENTS.



SECTION VIEW

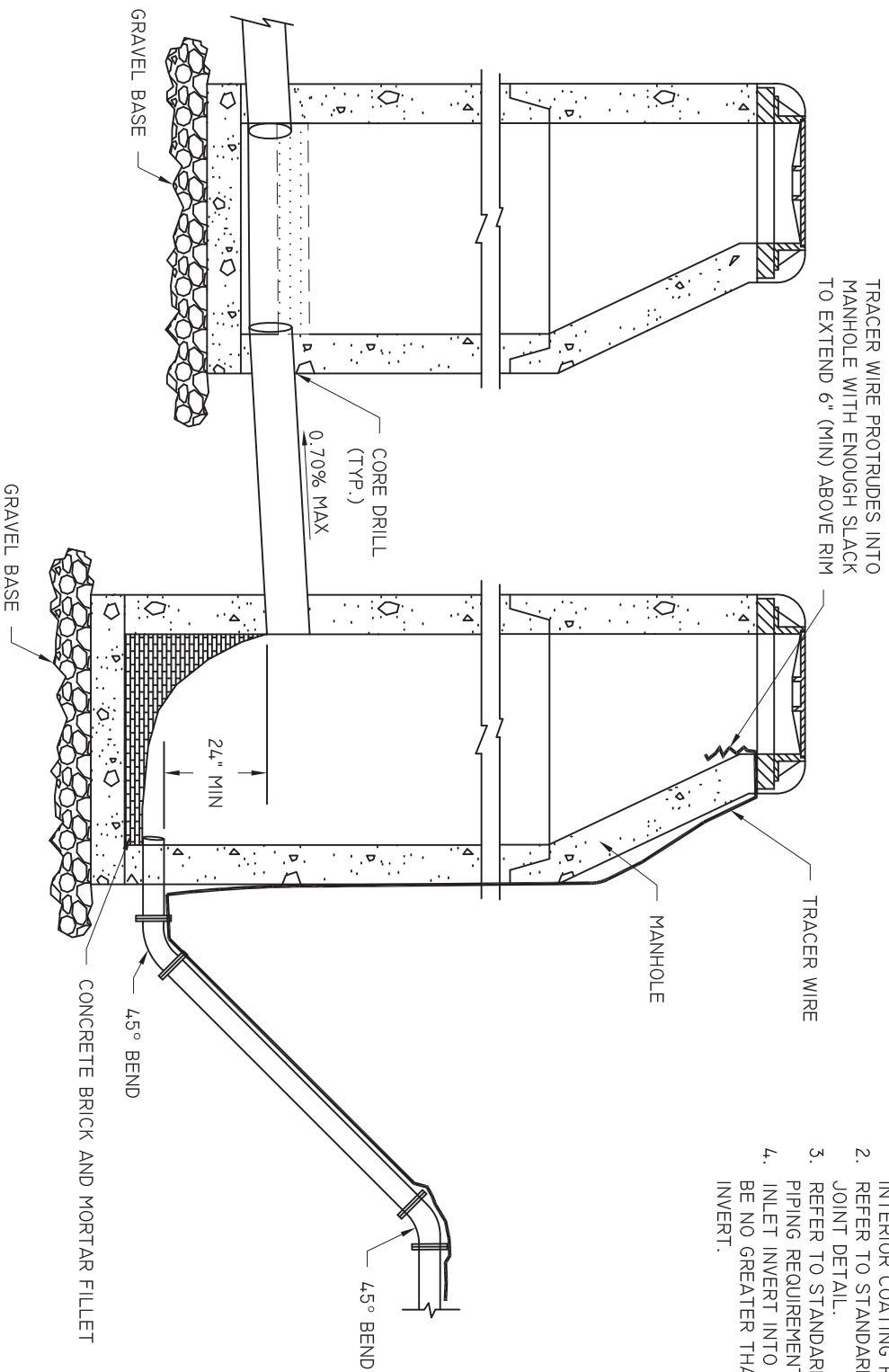


PLAN VIEW

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

FLAT TOP MANHOLE

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-07
SCALE	APPROVED BY	ERS	
N.T.S.			

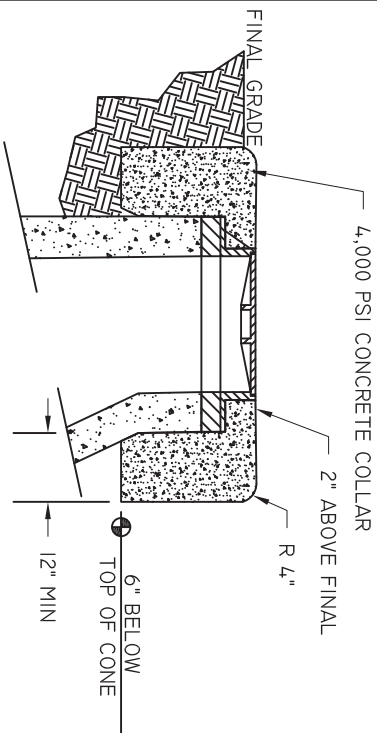


- NOTES:
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
  2. REFER TO STANDARD MANHOLE DETAIL FOR JOINT DETAIL.
  3. REFER TO STANDARD SPECIFICATIONS FOR PIPING REQUIREMENTS.
  4. INLET INVERT INTO EXISTING MANHOLE SHOULD BE NO GREATER THAN 0.2' ABOVE OUT GOING INVERT.

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

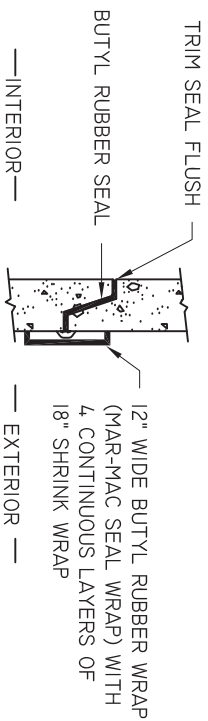
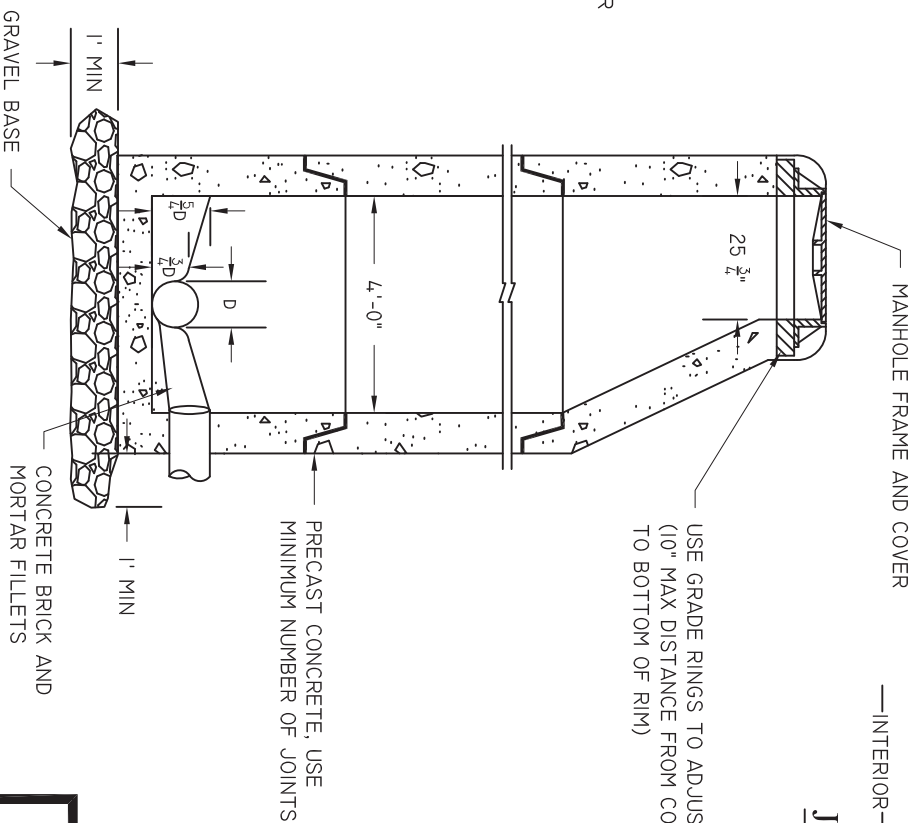
FORCE MAIN CONTROL MANHOLE

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-08
SCALE	APPROVED BY	ERS	
N.T.S.			

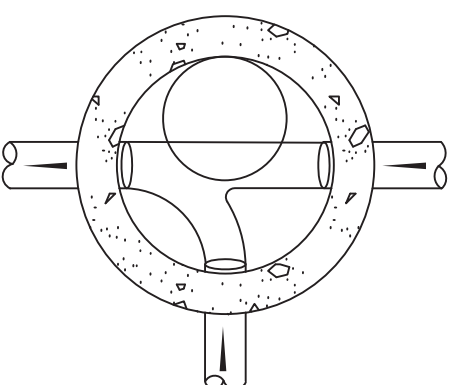


## RURAL MANHOLE PROTECTIVE COLLAR

- NOTES:
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
  2. CONCRETE GROUTING IS NOT ALLOWED INSIDE MANHOLES.
  3. RIM ELEVATION ON RURAL MANHOLES SHALL BE 6" HIGHER THAN NEAREST MANHOLE OUTSIDE THE RURAL AREA.



## JOINT DETAIL

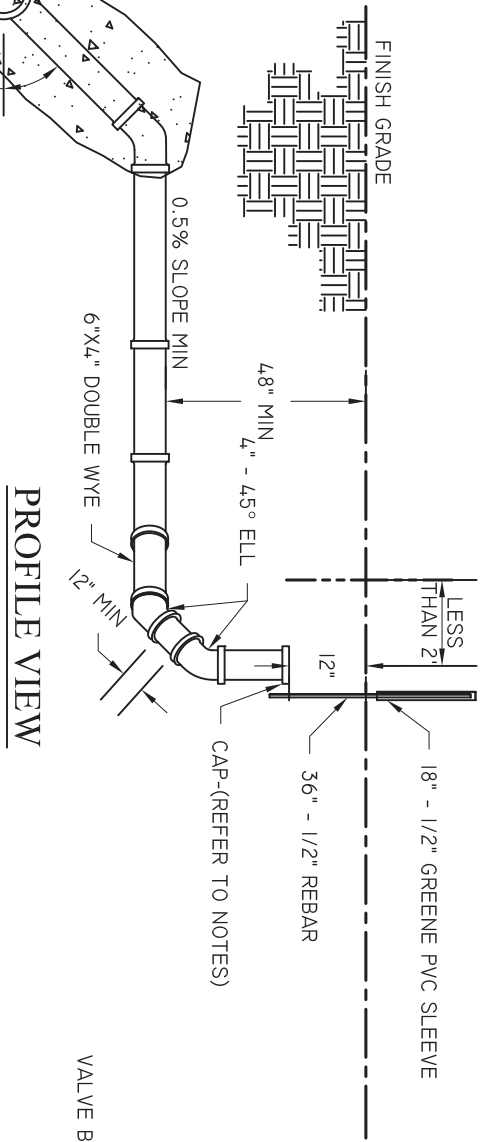


## PLAN VIEW

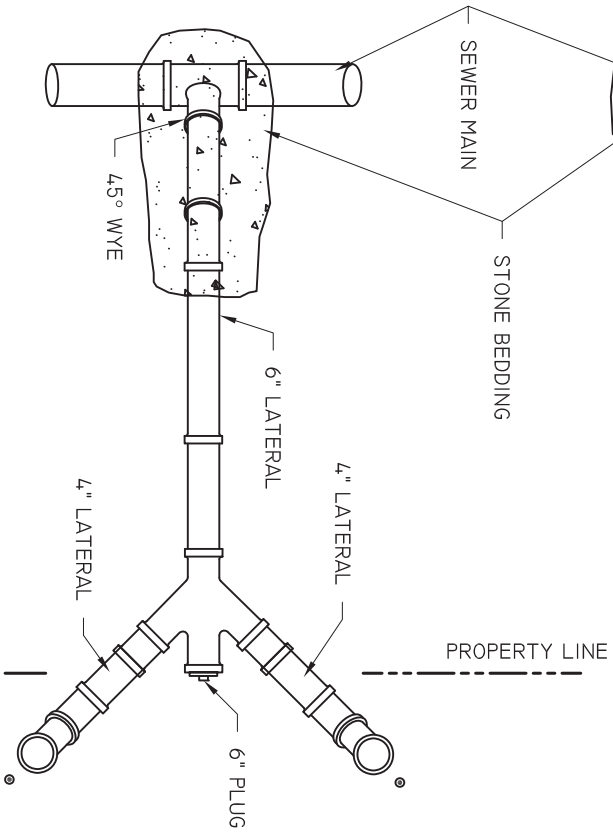
## SECTION VIEW

BEAUFORT - JASPER WATER & SEWER AUTHORITY			
STANDARD MANHOLE			
DATE 07/01/09	DRAWN BY BMC	DRAWING # S-09	
SCALE N.T.S.	APPROVED BY ERS		

BUWSA OWNERSHIP      HOMEOWNER OWNERSHIP



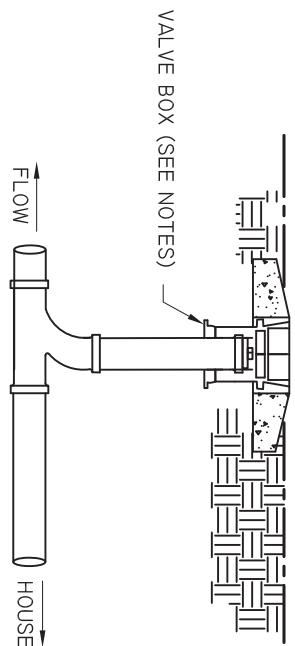
PROFILE VIEW



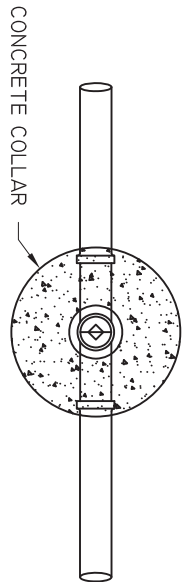
PLAN VIEW

BUWSA OWNERSHIP      HOMEOWNER OWNERSHIP

- NOTES:
1. DOUBLE SERVICE LATERALS SHALL ONLY BE ALLOWED FOR RESIDENTIAL SERVICES.
  2. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
  3. CLEAN OUTS INSIDE GRASSSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
  4. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.



CLEAN OUT INSTALLATION - PROFILE VIEW



CLEAN OUT - PLAN VIEW

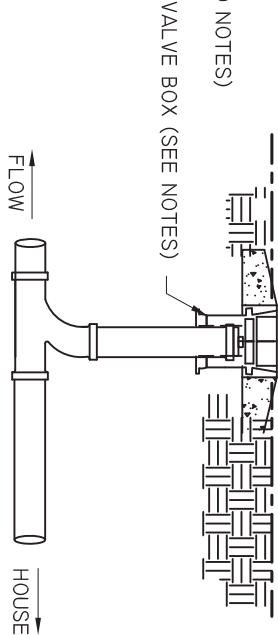
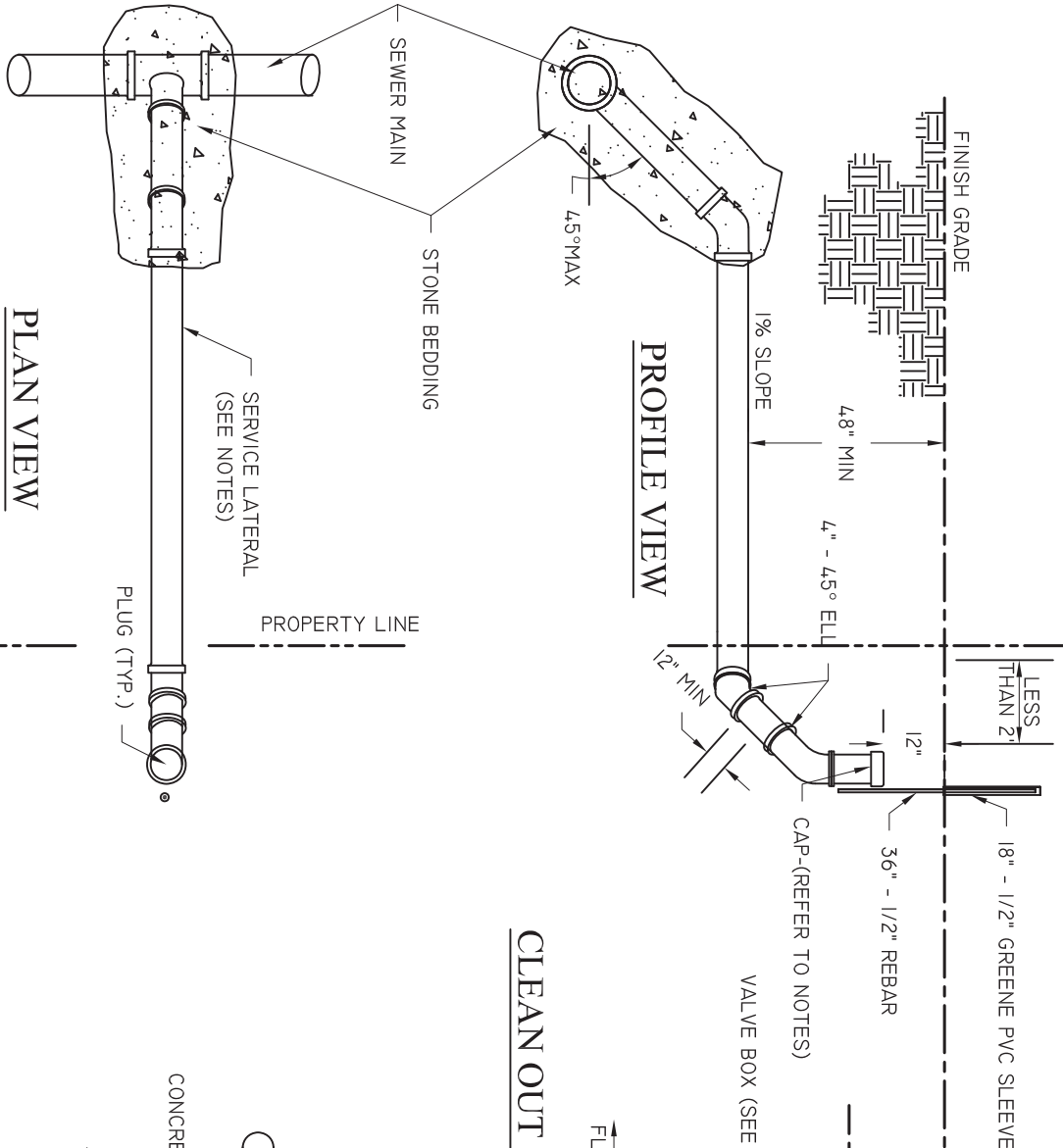
BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
SEWER SERVICE, DOUBLE			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-10
SCALE	APPROVED BY	ERS	
N.T.S.			

BUWSA OWNERSHIP

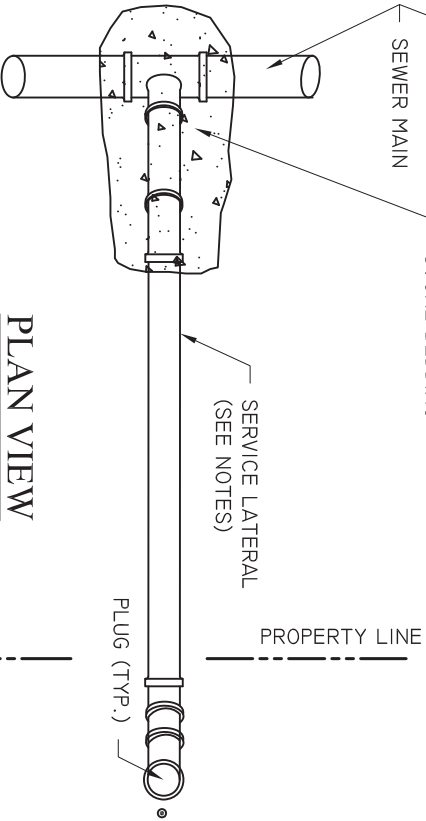
HOMEOWNER OWNERSHIP

- NOTES:
1. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
  2. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
  3. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.

PROFILE VIEW



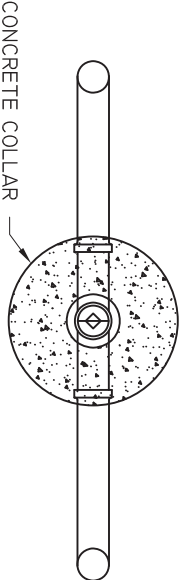
CLEAN OUT INSTALLATION - PROFILE VIEW



PLAN VIEW

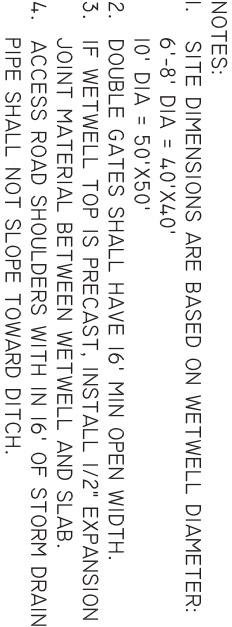
BUWSA OWNERSHIP

HOMEOWNER OWNERSHIP



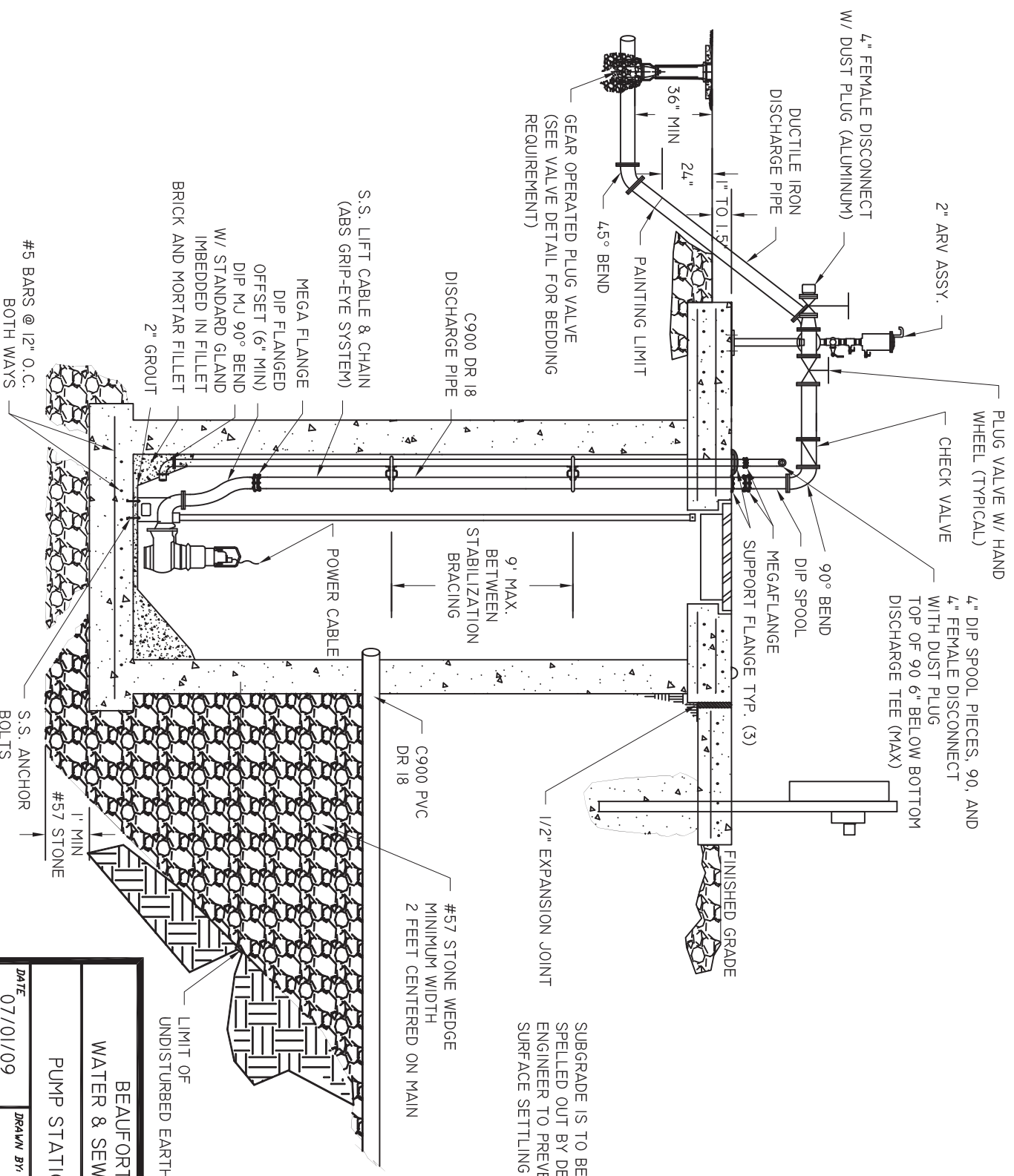
CLEAN OUT - PLAN VIEW

BEAUFORT - JASPER WATER & SEWER AUTHORITY			
SEWER SERVICE, SINGLE			
DATE 07/01/09	DRAWN BY BMC	DRAWING # S-11	
SCALE N.T.S.	APPROVED BY ERS		



## DEVELOP SITE SPECIFIC LAYOUT

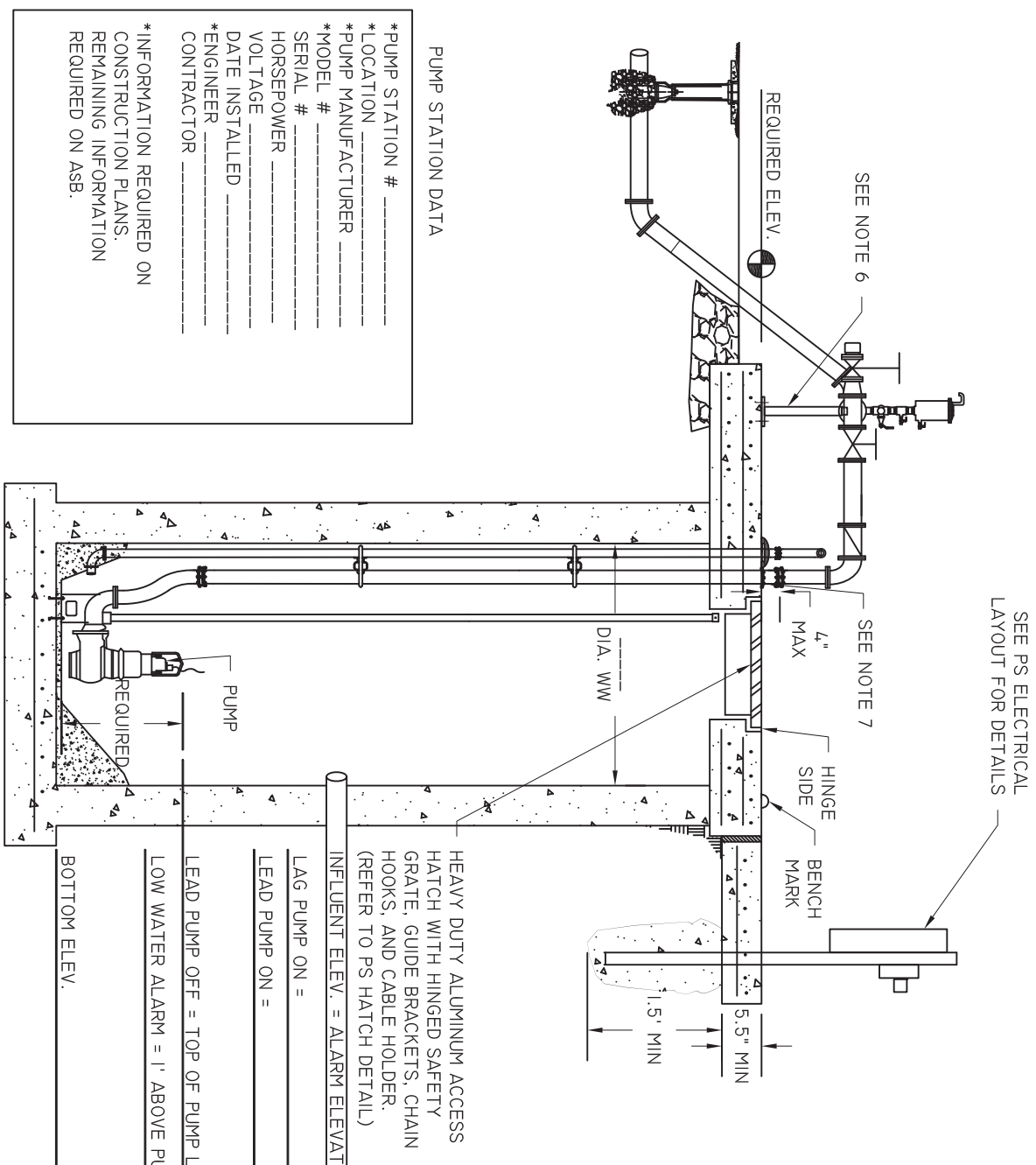
BEAUFORT - JASPER WATER & SEWER AUTHORITY		
PS SITE PLAN		
DATE 07/01/09	DRAWN BY BMC	DRAWING # S-12
SCALE: N.T.S.	APPROVED BY ERS	



BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

PUMP STATION SECTION I

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-13A
SCALE	APPROVED BY	ERS	
N.T.S.			



PUMP STATION DATA

\*PUMP STATION # \_\_\_\_\_  
\*LOCATION \_\_\_\_\_  
\*PUMP MANUFACTURER \_\_\_\_\_  
\*MODEL # \_\_\_\_\_  
SERIAL # \_\_\_\_\_  
HORSEPOWER \_\_\_\_\_  
VOLTAGE \_\_\_\_\_  
DATE INSTALLED \_\_\_\_\_  
\*ENGINEER \_\_\_\_\_  
CONTRACTOR \_\_\_\_\_

\* INFORMATION REQUIRED ON CONSTRUCTION PLANS, REMAINING INFORMATION REQUIRED ON ASB.

SEE PS ELECTRICAL LAYOUT FOR DETAILS

- NOTES:
1. ALL WETWELL PIPING SHALL BE ONE SOLID PIECE OF FUSIBLE C900 PVC, WITH NO JOINTS.
  2. ALL BOLTS, GUIDE RAILS, BRACKETS, HANGERS, AND LIFTING APPURTENANCES INSIDE WET WELL SHALL BE 316 STAINLESS STEEL.
  3. DISCHARGE AND VENT PIPING PENETRATIONS SHALL BE SEALED WITH SS LINK SEALS.
  4. WETWELL INTERIOR AND DISCHARGE PIPING SHALL BE COATED WITH HYDROGEN SULFIDE RESISTANT COATING. (SEE SPECIFICATIONS FOR REQUIREMENTS)
  5. EXTERIOR PIPING SHALL BE PAINTED. (SEE SPECIFICATIONS FOR REQUIREMENTS)
  6. PROVIDE ADJUSTABLE SUPPORT TO ABOVE GROUND PIPING AT THIS POINT. FURNISH SUBMITTAL FOR APPROVAL ON PROPOSED SUPPORT PRIOR TO PROCEEDING.
  7. PROTECT EXPOSED PVC FROM UV
  8. DETERIORATION SUBMIT ON PROPOSED METHOD, ALL THROUGH TOP PIPING SUPPORTED ON WW TOP BY UNIFLANGES.
  10. ATTACH FLOAT CABLES & BUBBLER SUPPORT CABLE TO SAFETY GRATE. ATTACHMENTS AWAY FROM THE HINGE SHALL BE IN THE FOLLOWING ORDER:  
AIR TUBING SUPPORT  
OFF PUMP  
ON PUMP  
ALARM (HIGH)

HEAVY DUTY ALUMINUM ACCESS HATCH WITH HINGED SAFETY GRATE, GUIDE BRACKETS, CHAIN HOOKS, AND CABLE HOLDER. (REFER TO PS HATCH DETAIL)

INFLUENT ELEV. = ALARM ELEVATION = \_\_\_\_\_

LAG PUMP ON = \_\_\_\_\_

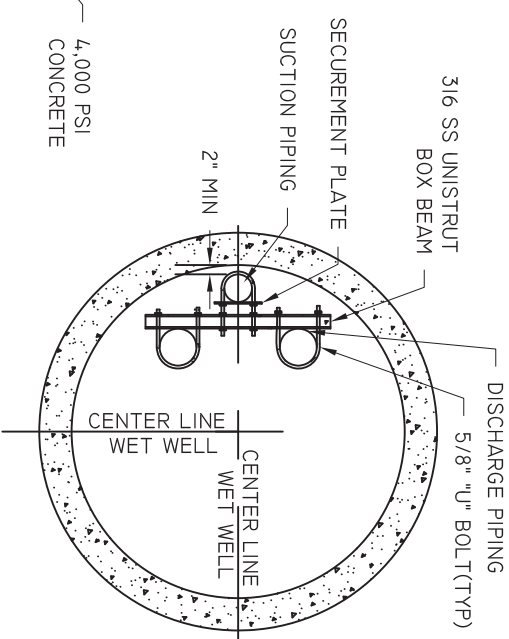
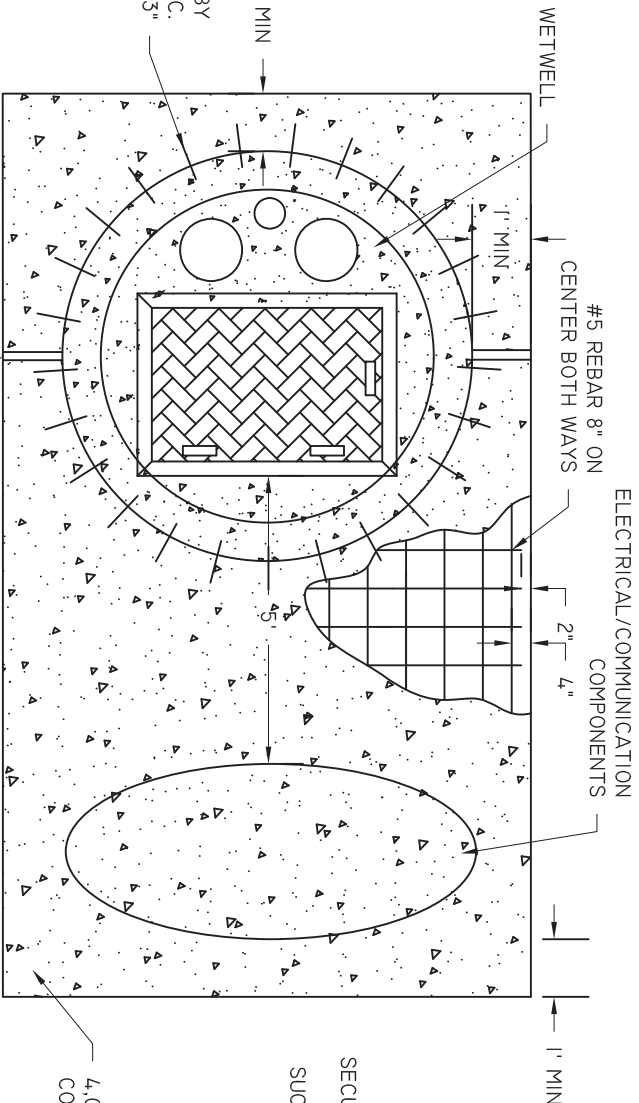
LEAD PUMP ON = \_\_\_\_\_

LEAD PUMP OFF = TOP OF PUMP LIFTING EYE = \_\_\_\_\_

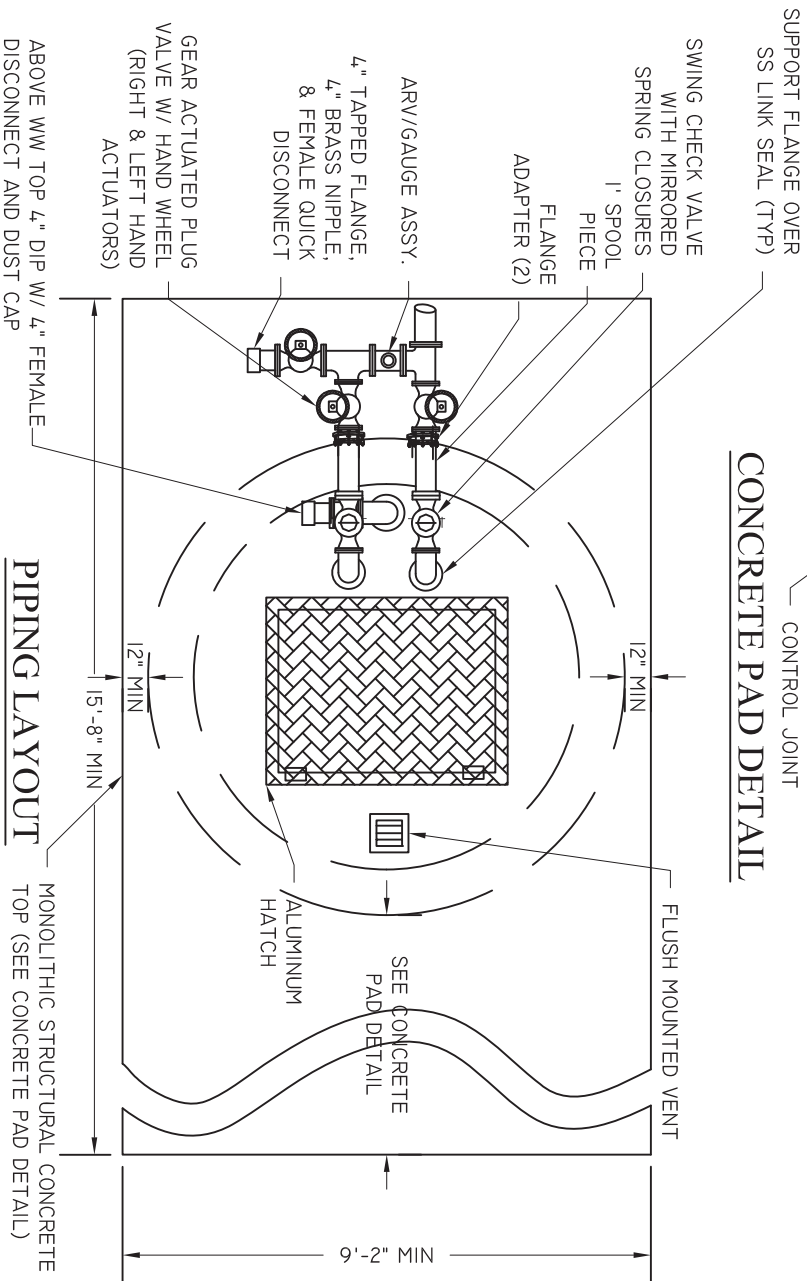
LOW WATER ALARM = 1' ABOVE PUMP CAVATATION = \_\_\_\_\_

BOTTOM ELEV. \_\_\_\_\_

BEAUFORT - JASPER WATER & SEWER AUTHORITY			
PUMP STATION SECTION II			
DATE 07/01/09	DRAWN BY BMC	DRAWING # S-13B	
SCALE N.T.S.	APPROVED BY ERS		



## CONCRETE PAD DETAIL



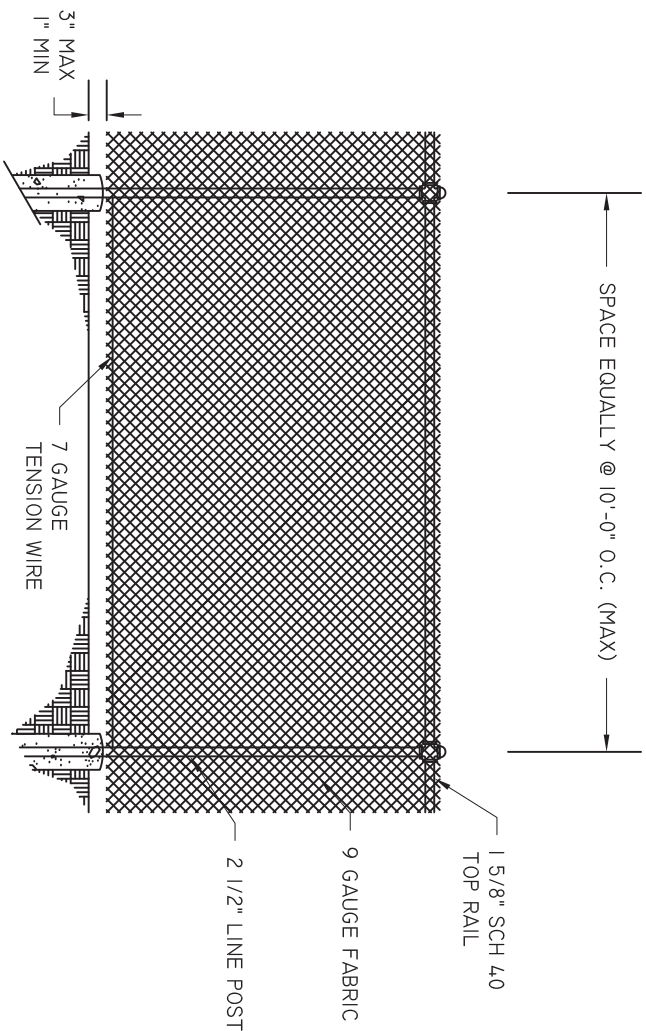
- NOTES:
1. CONCRETE IS TO BE A MINIMUM OF 5 1/2" THICK
  2. REINFORCING IS TO BE 2" ABOVE BOTTOM
  3. ALL EXPOSED EDGES SHALL BE SHAMPERED (1"X1" MIN)
  4. VERTICAL PIPING BRACING IS NOT EXCEED 9' ON CENTER

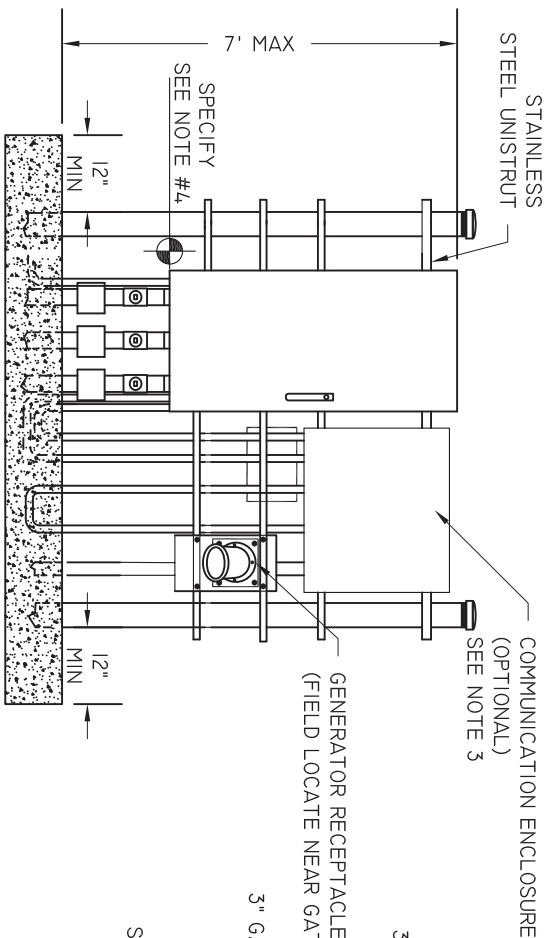
## PS LATERAL SUPPORT BRACKET

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

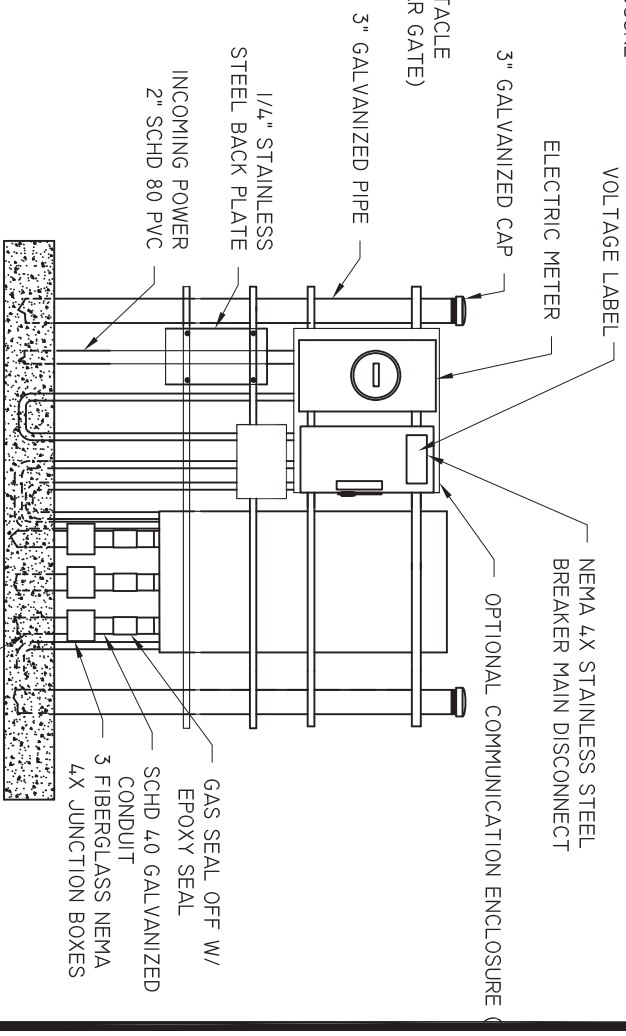
PUMP STATION WETWELL DETAIL

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-14
SCALE	APPROVED BY	ERS	
N.T.S.			

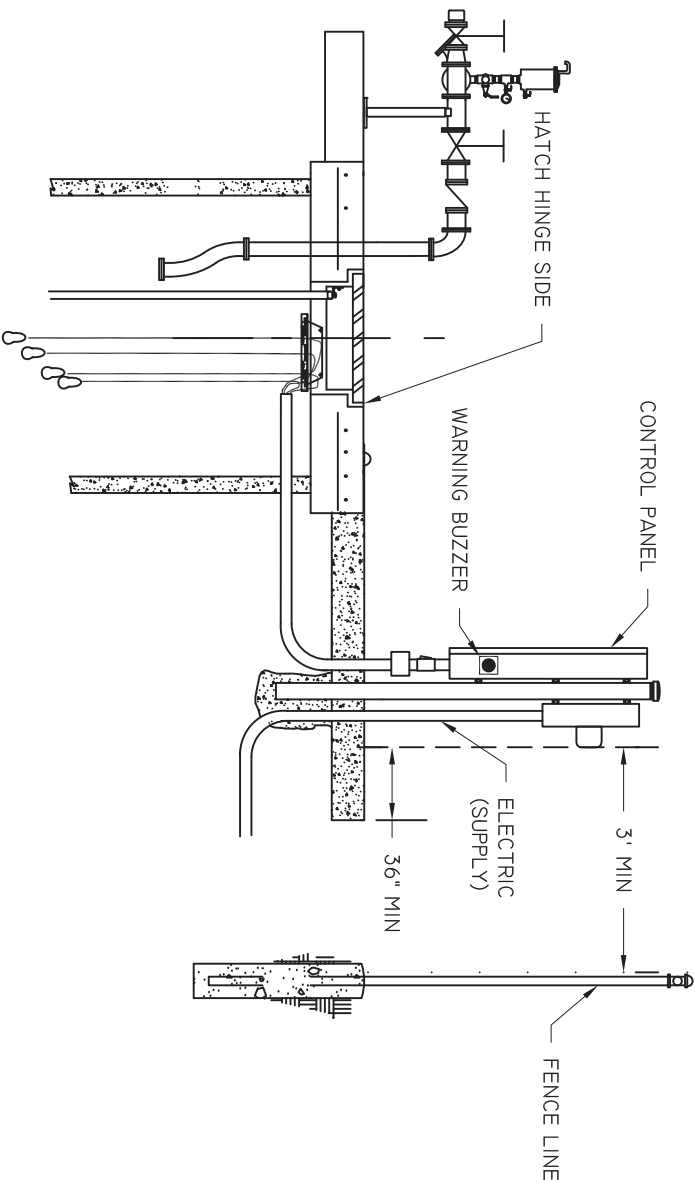




**FRONT VIEW**



**REAR VIEW**



**SECTION VIEW**

- NOTES:
1. ALL PENETRATIONS MUST ENTER THROUGH BOTTOM
  2. L-BEE'S MAY BE USED SPARINGLY UPON WRITTEN REQUEST
  3. SEE SPECIFICATIONS FOR COMMUNICATIONS REQUIREMENTS
  4. MUST BE ABOVE 25 YEAR FLOOD ELEVATION. PROVIDE CERTIFICATION OF THIS ELEVATION FOR THE PS

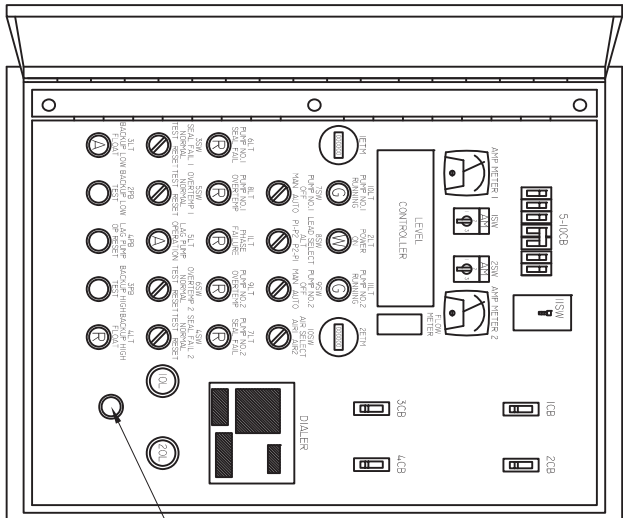
BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

PUMP STATION ELECTRICAL LAYOUT

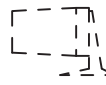
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			
SCALE	APPROVED BY	ERS	
N.T.S.			

**S-16**

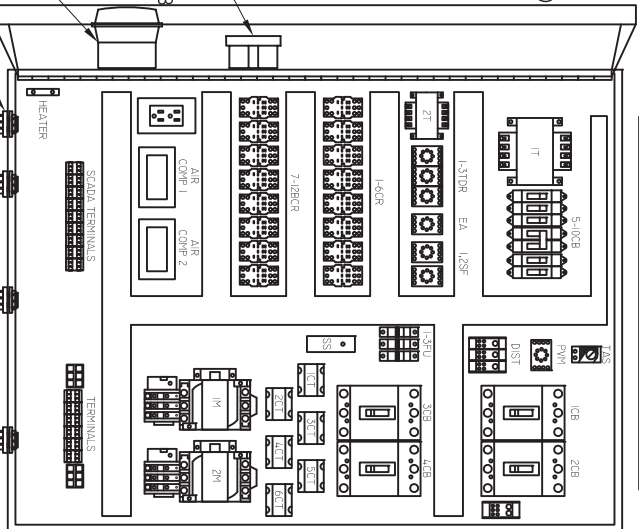
INNER DOOR LAYOUT



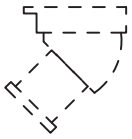
GENERAL FLASHING  
ALARM LIGHT  
(REMOVELY MOUNTED)



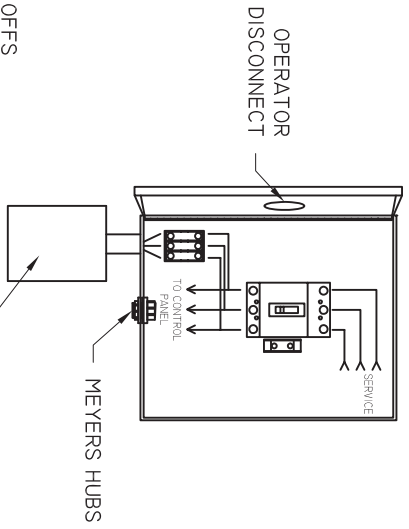
SUB-PANEL LAYOUT



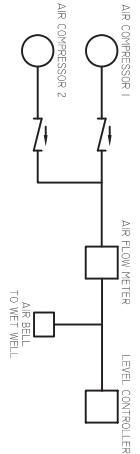
GENERATOR RECEPTACLE  
(REMOVELY MOUNTED)



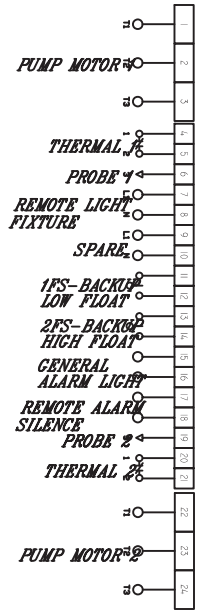
ENCLOSURE: 4XSS 20"H X 16"W X 8"D  
MAIN DISCONNECT



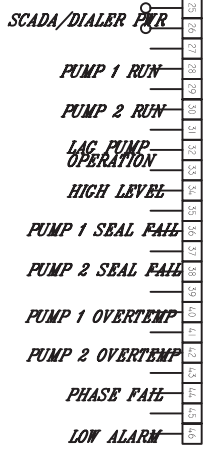
PNEUMATIC DIAGRAM



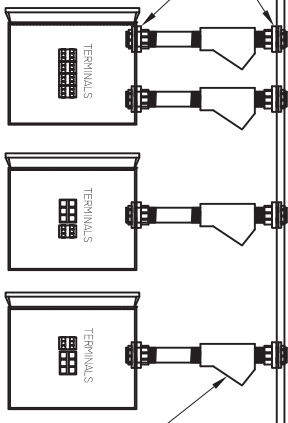
TERMINAL BLOCK LAYOUT



SCADA TERMINAL BLOCK LAYOUT



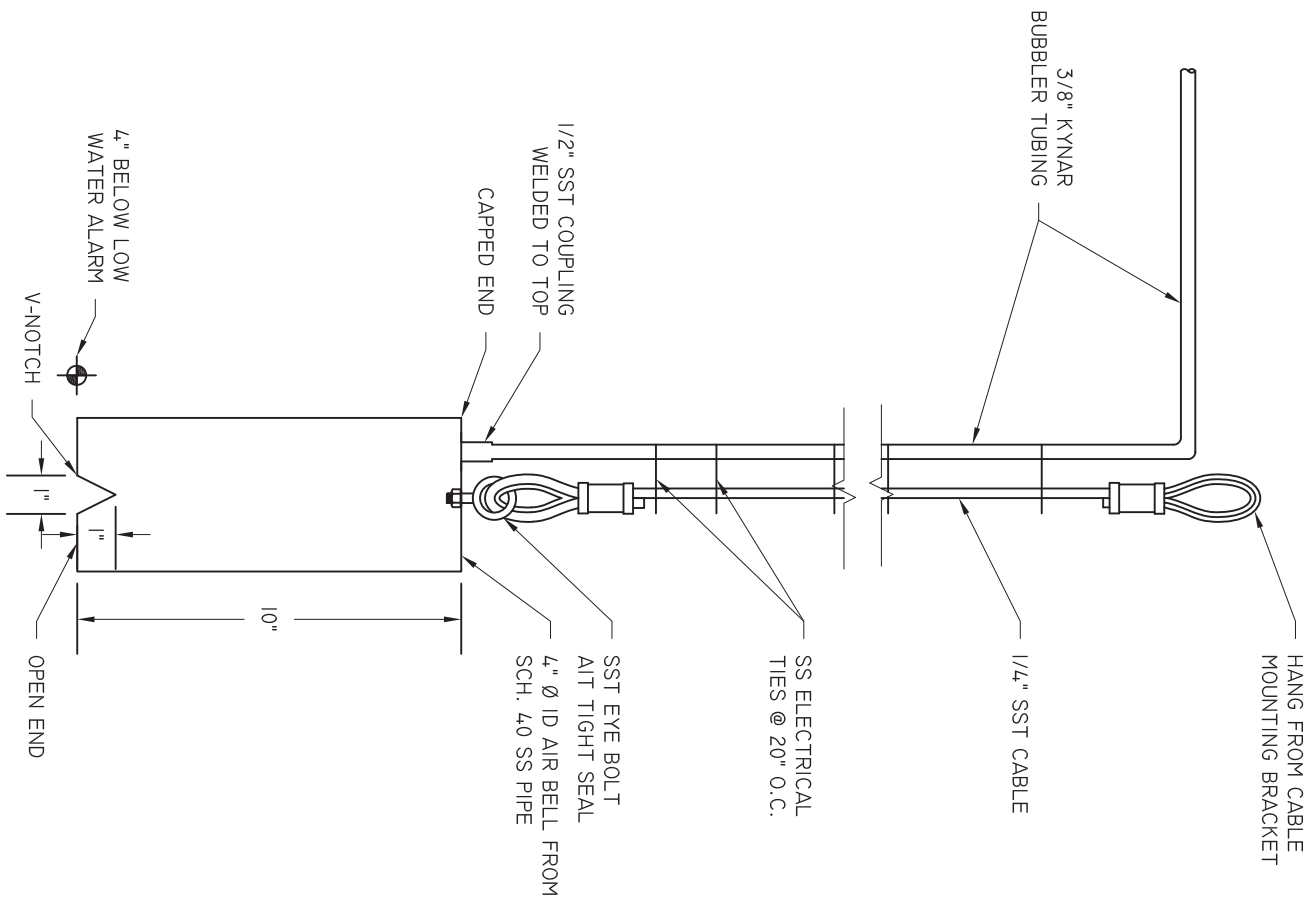
JUNCTION BOXES: 4XFG 10"H X 8"W X 4"D  
JUNCTION BOXES



- NOTES:
1. PANEL STRUCTURAL MEMBERS SHALL NOT BLOCK COMPONENTS VISIBLE THROUGH INNER DOOR.
  2. JUNCTION BOXES MAYBE OFFSET TO LEFT OR RIGHT OF CONTROL PANEL. THEY MUST BE OFFSET ON LARGER STATIONS.

ENCLOSURE: 4XSS - MINIMUM 20"H X 16"W  
ENCLOSURE IS TO HAVE "LOCK ON" PROVISION

PS CONTROL PANEL & MAIN DISCONNECT			
BEAUFORT - JASPER WATER & SEWER AUTHORITY			
DATE 07/01/09	DRAWN BY BMC	DRAWING # S-17	
SCALE N.T.S.	APPROVED BY ERS		

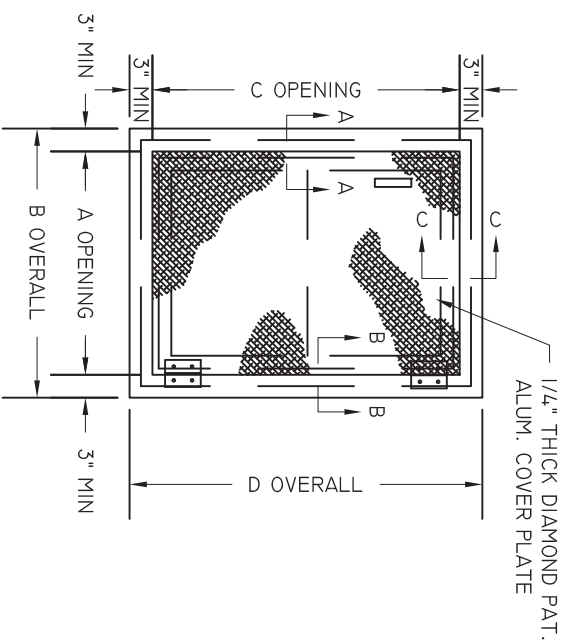


NOTE:  
1. ALL STAINLESS STEEL IS 316

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

PUMP STATION BUBBLER

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-18
SCALE	APPROVED BY	ERS	
N.T.S.			



## WETWLL ACCESS HATCH

NOT TO SCALE

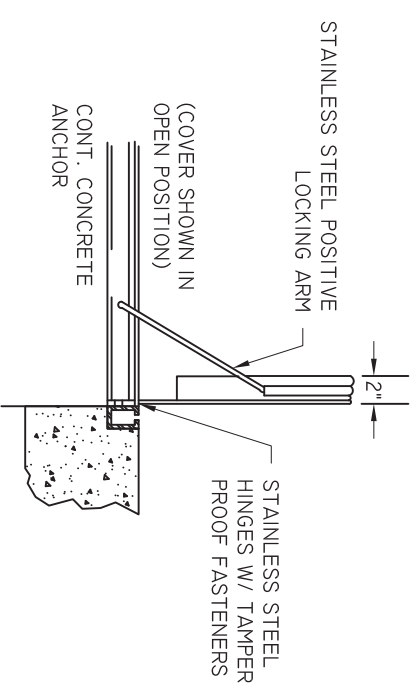
WETWELL DIA	DIMENSION		LIFT WT.
	A	C	
6'	32"	48"	24 LBS
8' - 10'	36"	48"	26 LBS

### NOTES:

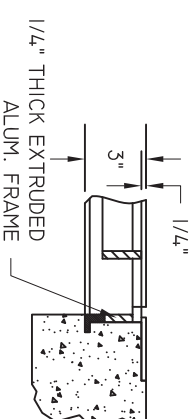
- ALL HATCHES SHALL BE EQUIPPED WITH A SAFETY GRATE. DIMENSIONS "A" & "C" SHALL INCLUDE ANY RESTRICTION IMPOSED BY SAFETY GRATE.
- FOR LOCATION OF ACCESSORIES SEE PUMP OUTLINE DIMENSIONS.
- HATCH SHALL BE EQUIPPED WITH A PAD-LOCKABLE RECESSED LOCKING MECHANISM.
- HATCH DIMENSIONS SHOWN ARE MINIMUM SIZES ALLOWED. THE ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING MINIMUM HATCH DIMENSIONS FOR PUMP SELECTED.
- FLOATS AND BUBBLER SHALL BE HUNG FROM THE SAFETY GRATE.



SECTION A-A



SECTION B-B



SECTION C-C

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

PUMP STATION HATCH DETAIL

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-19
SCALE	APPROVED BY	ERS	
N.T.S.			



HEAVY DUTY CLAM SHELL ACCESS HATCH WITH SAFETY GRATE,  
UPPER GUIDE BRACKETS, CHAIN HOOKS AND CABLE HOLDER  
(REFER TO PS HATCH DETAIL FOR DIMENSIONS)

SURVEY BENCHMARK EPOXY MOUNTED  
BRONZE DISK WITH TOP ELEVATION  
OF WETWELL STAMPED ON DISK

CONTROL PANEL WITH ALARM  
TO BE LOCATED IN FIELD

4.2" X 50" X 4.8"H  
(SEE NOTE 1)

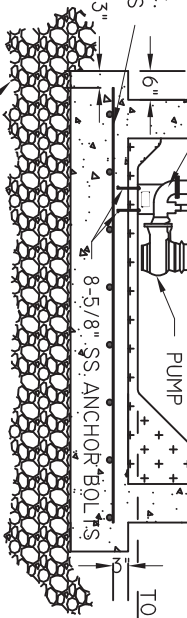
FINISHED GRADE

2" HDPE TUBING

2" SCH 80 PVC PIPE

1 1/4" X 4" BRASS NIPPLE  
1 1/4" X 2" BRASS BUSHING  
2" BRASS STREET ELBOW  
2" SCH 80 FEMALE THREAD ADAPTER

#5 BARS @ 12" O.C.  
BOTH WAYS



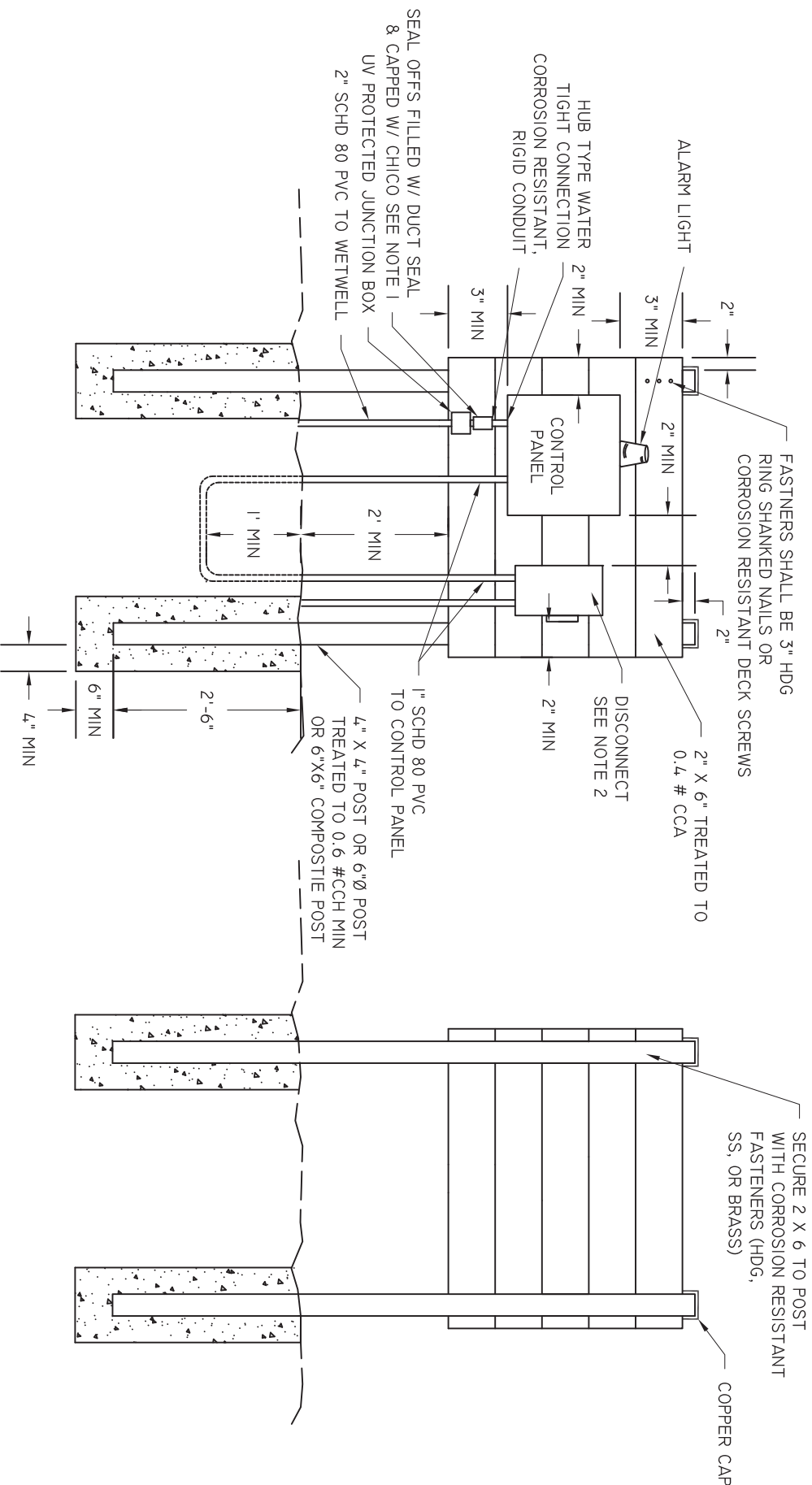
- LEGEND:
- 01. 2" FEMALE IPT TO GLUE SCH 80 ADAPTER
  - 02. 2" BRASS NIPPLE
  - 03. 4 - 2" UNIONIZED BALL VALVES
  - 04. 2" FLAPPER CHECK VALVE
  - 05. PRESSURE GAUGE ATTACHMENT ASSEMBLY

- NOTES:
- 1. AN ACCESS COVER DESIGNED TO BE OPEN/REMOVED BY AN INDIVIDUAL SHALL NOT WEIGH MORE THAN 50LBS. VAULT MAY BE PRECAST CONCRETE W/ ALUMINUM HATCH OR QUARTZITE BOX WITH ALUMINUM HATCH. BOX SHALL DRAIN TO WET WELL.
  - 2. GRINDERS PS DO NOT REQUIRE:
    - LINING OF THE WETWELL OR RECEIVING MH
    - BUBBLER CONTROL SYSTEM
  - 3. DESIGN NOT SPECIFICALLY CALLED OUT SHALL BE CONSTRUCTED AS SET FORTH IN EARLIER PUMP STATION DRAWINGS.
  - 4. MIN. RUNTIME WITH NO FLOW BETWEEN INVERT & LEAD PUMP OFF = 60 SEC

SECTION

NOT TO SCALE

BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
PUMP STATION 2" DUPLEX			
GRINDER, SECTION			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-20B
SCALE	APPROVED BY	ERS	
N.T.S.			

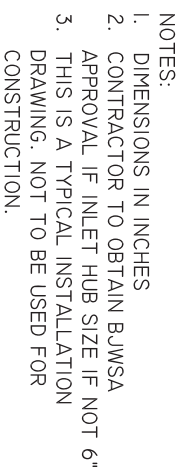
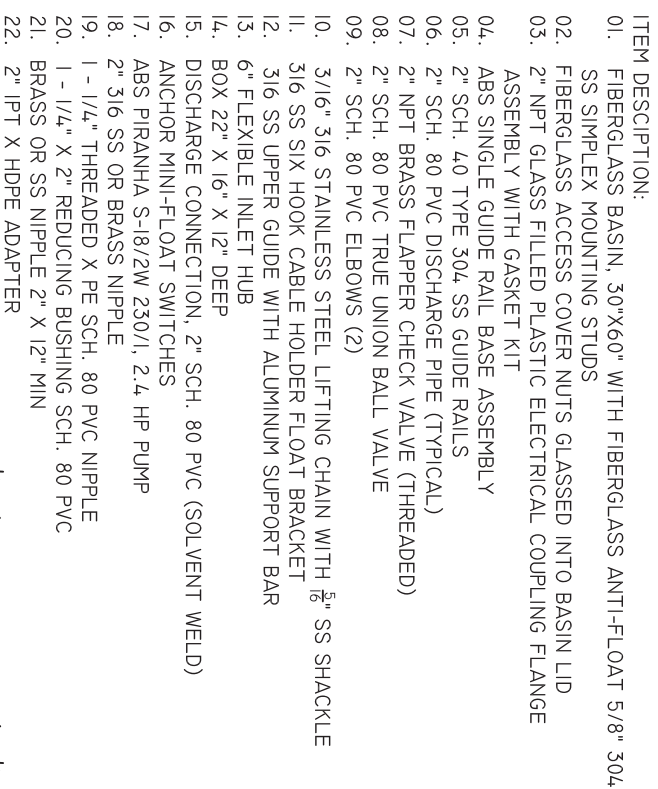


FRONT

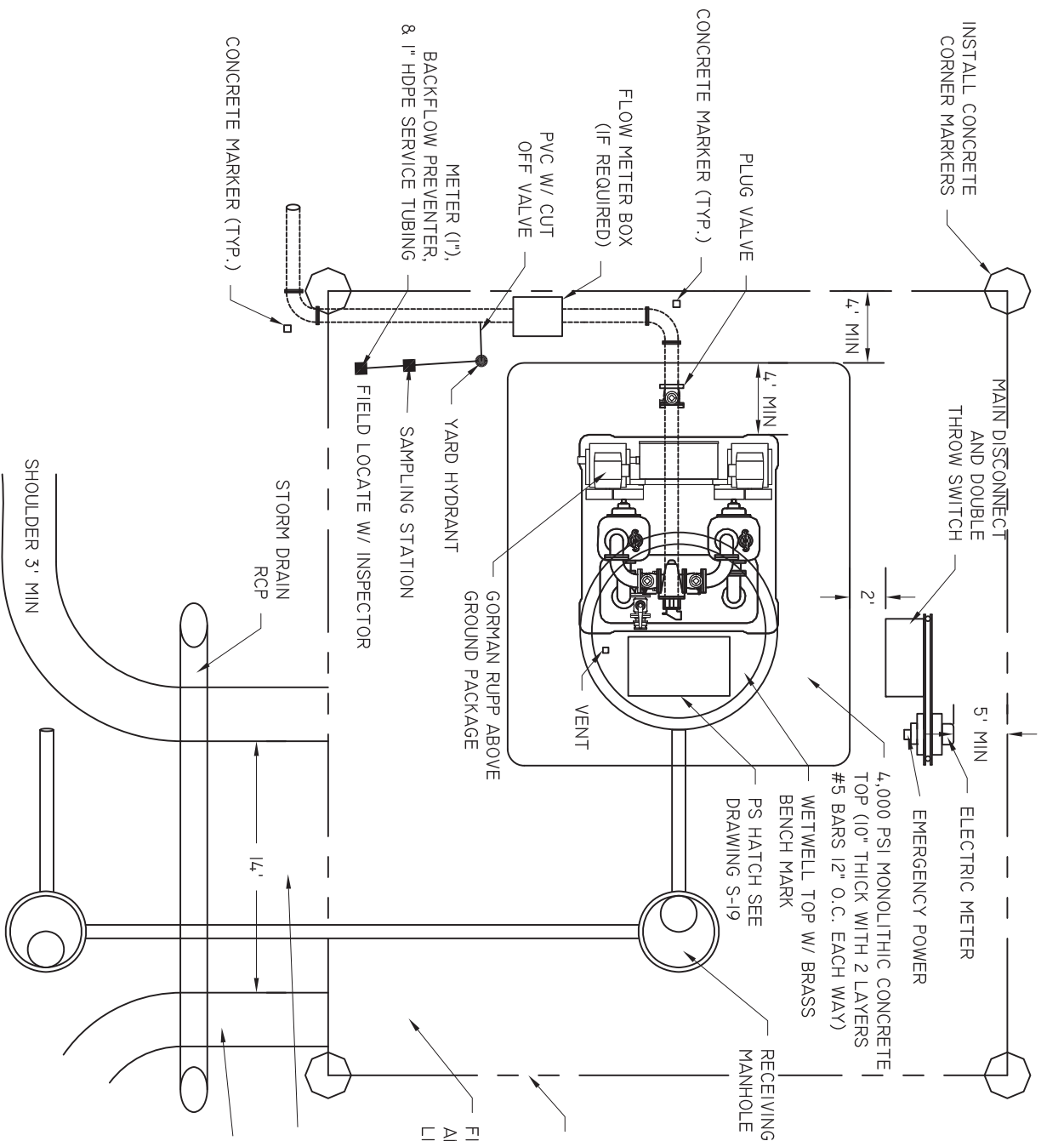
REAR

- NOTES:
1. BUWSA INSPECTOR TO BE PRESENT DURING FILLING.
  2. DISCONNECT SERVICE BACK TO HOUSE IS OWNER'S RESPONSIBILITY.

BEAUFORT - JASPER		
WATER & SEWER AUTHORITY		
PUMP STATION RESIDENTIAL		
CONTROL PANEL		
DATE	DRAWN BY	BMC
07/01/09		
SCALE	APPROVED BY	ERS
N.T.S.		
DRAWING #		
S-21		



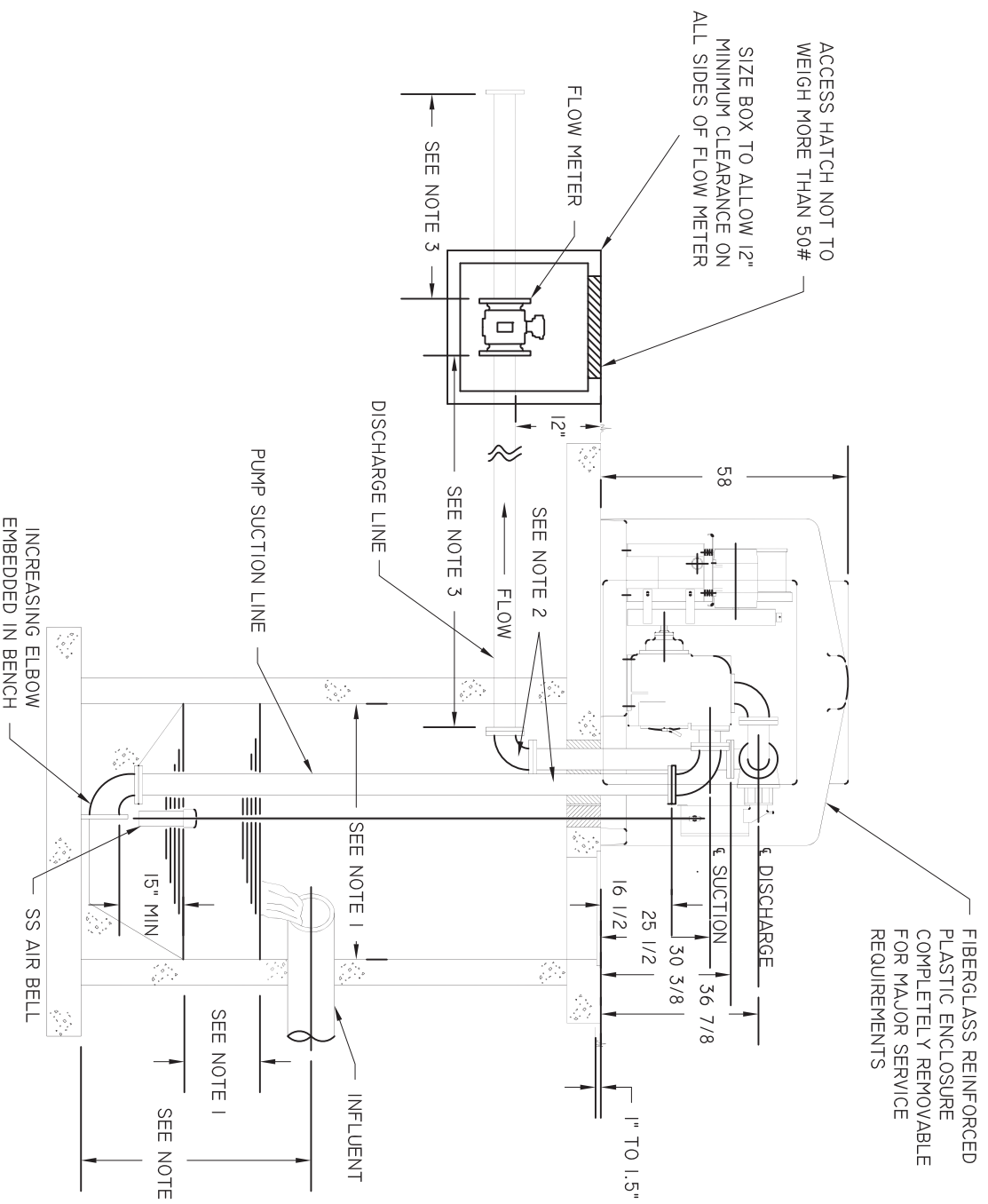
BEAUFORT - JASPER WATER & SEWER AUTHORITY			
PUMP STATION, RESIDENTIAL SIMPLEX GRINDER			
DATE	DRAWN BY	DRAWING #	
07/01/09	BMC	S-22	
SCALE	APPROVED BY		
N.T.S.	ERS		



- NOTES:
1. SITE DIMENSIONS ARE BASED ON WETWELL DIAMETER:  
6' DIA. = 40' X 40'  
8'-10' DIA. = 50' X 50'
  2. ALL NON-FENCED P.S. SITES ARE TO HAVE CONCRETE PROPERTY CORNER MONUMENTS. MONUMENTS ARE TO EXTEND ABOVE FINAL GRADE.

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY  
PUMP STATION, ABOVE GROUND  
SITE PLAN

DATE	07/01/09	DRAWN BY	BMC	DRAWING #	S-23A
SCALE	N.T.S.	APPROVED BY	ERS		



## ELEVATION VIEW

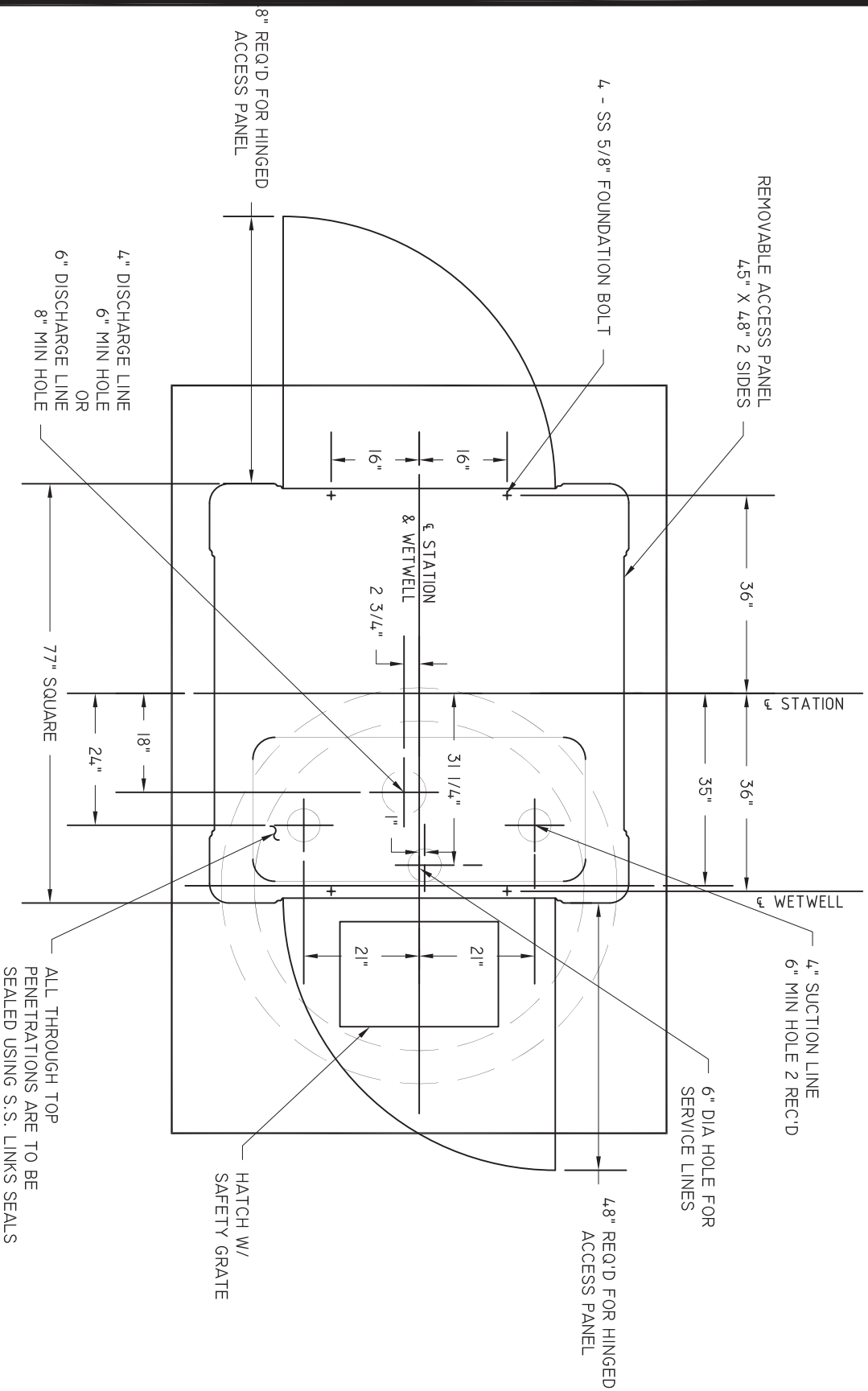
- NOTES:
1. THE INVERT OF THE INFLUENT LINE SHOULD BE PROPERLY DESIGNED TO ALLOW AT LEAST FIVE MINUTES LAPSED TIME BETWEEN SUCCESSIVE STARTS OF THE PUMP TO PREVENT SHORT CYCLING OF THE ELECTRIC MOTOR AND CONTROL.
  2. ALL PIPING INSIDE WETWELL TO BE Q900 DR18 PVC. FITTINGS TO BE FLANGED, EPOXY COATED, AND LINED FOR SEWER GASES. ALL HARDWARE AND BOLTS TO BE 316 STAINLESS STEEL.
  3. FLOWMETER WILL REQUIRE A MINIMUM LENGTH OF UNRESTRICTED FLOW BEFORE AND AFTER FLOW METER. SEE MANUFACTURER RECOMMENDATIONS.



BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

PUMP STATION, ABOVE GROUND  
6X6 DETAIL #1

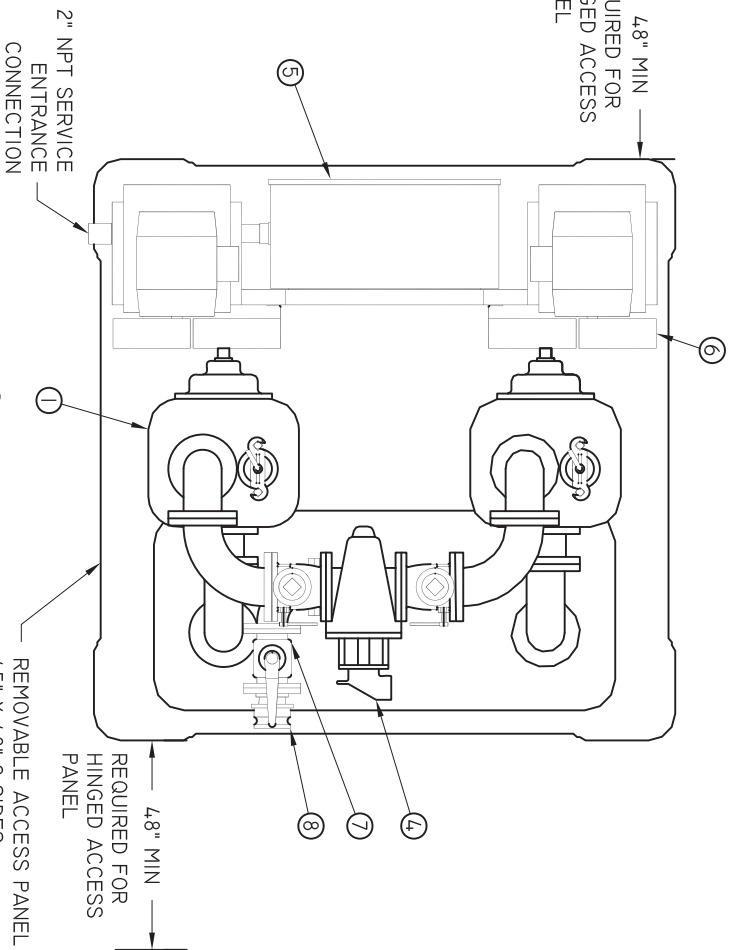
DATE	07/01/09	DRAWN BY	BMC	DRAWING #	S-23B
SCALE	N.T.S.	APPROVED BY	ERS		



BEAUFORT - JASPER  
WATER & SEWER AUTHORITY  
PUMP STATION, ABOVE GROUND  
6X6 DETAIL #2

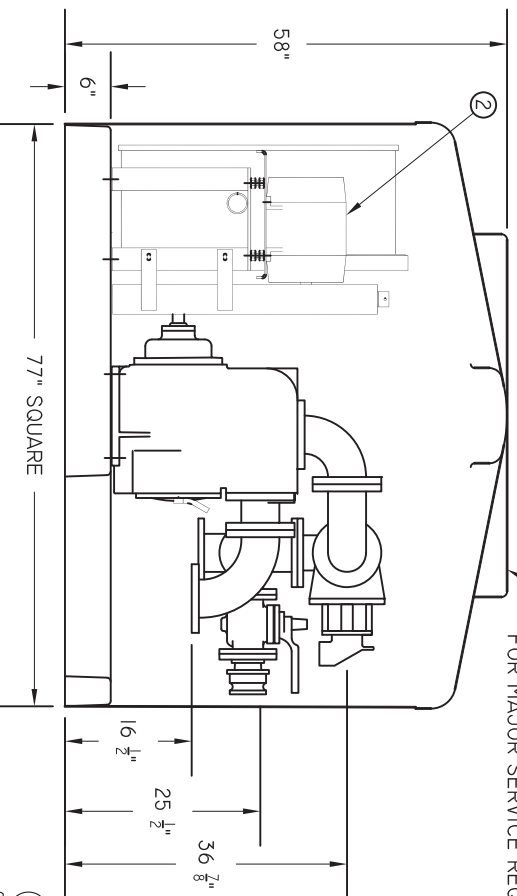
DATE	07/01/09	DRAWN BY	BMC	DRAWING #	S-23C
SCALE	N.T.S.	APPROVED BY	ERS		

4.8" MIN  
REQUIRED FOR  
HINGED ACCESS  
PANEL



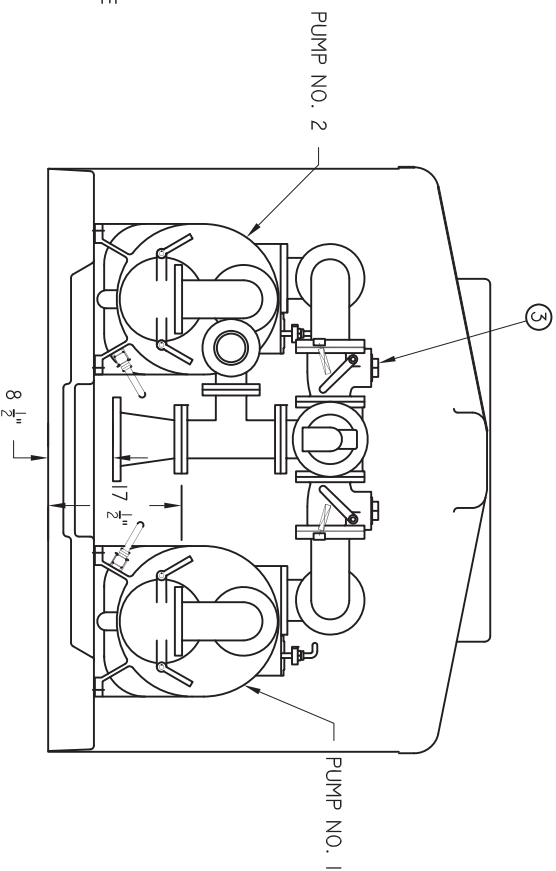
TOP VIEW

FIBERGLASS REINFORCED PLASTIC ENCLOSURE COMPLETELY REMOVABLE FOR MAJOR SERVICE REQUIREMENTS



SIDE VIEW

ITEM	DESCRIPTION	MAT'L & SIZE
1	PUMP	CAST IRON T4A-B
2	MOTOR	CAST IRON 4"
3	CHECK VALVE	CAST IRON 4"
4	PLUG VALVE	CAST IRON 4"
5	MOTOR CONTROL PANEL	STEEL
6	BELT GUARD	STEEL
7	BY-PASS PLUG VALVE	CAST IRON 3"
8	OPW ADAPTER	ALUMINUM



SIDE VIEW

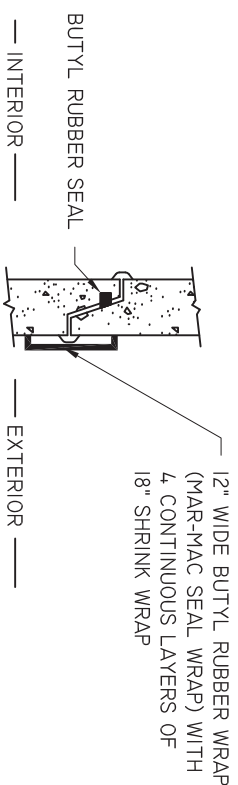
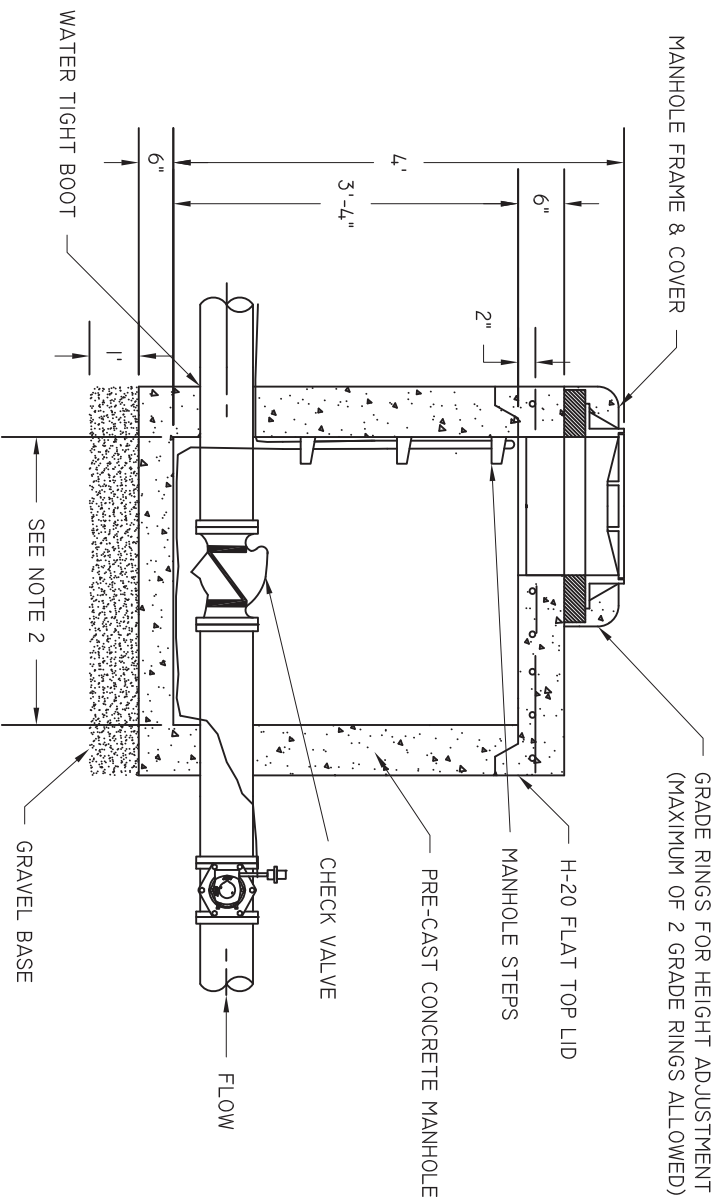
NOTES:  
1. FLANGE CONNECTIONS ARE TO BE 125#

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY  
PUMP STATION, ABOVE GROUND  
6X6 DETAIL #3

DATE 07/01/09	DRAWN BY BMC	DRAWING # S-23D
SCALE N.T.S.	APPROVED BY ERS	



THE GORMAN-RUPP CO.  
MADEIRA, OHIO ST. THOMAS, ONTARIO



# TITLE DETAIL

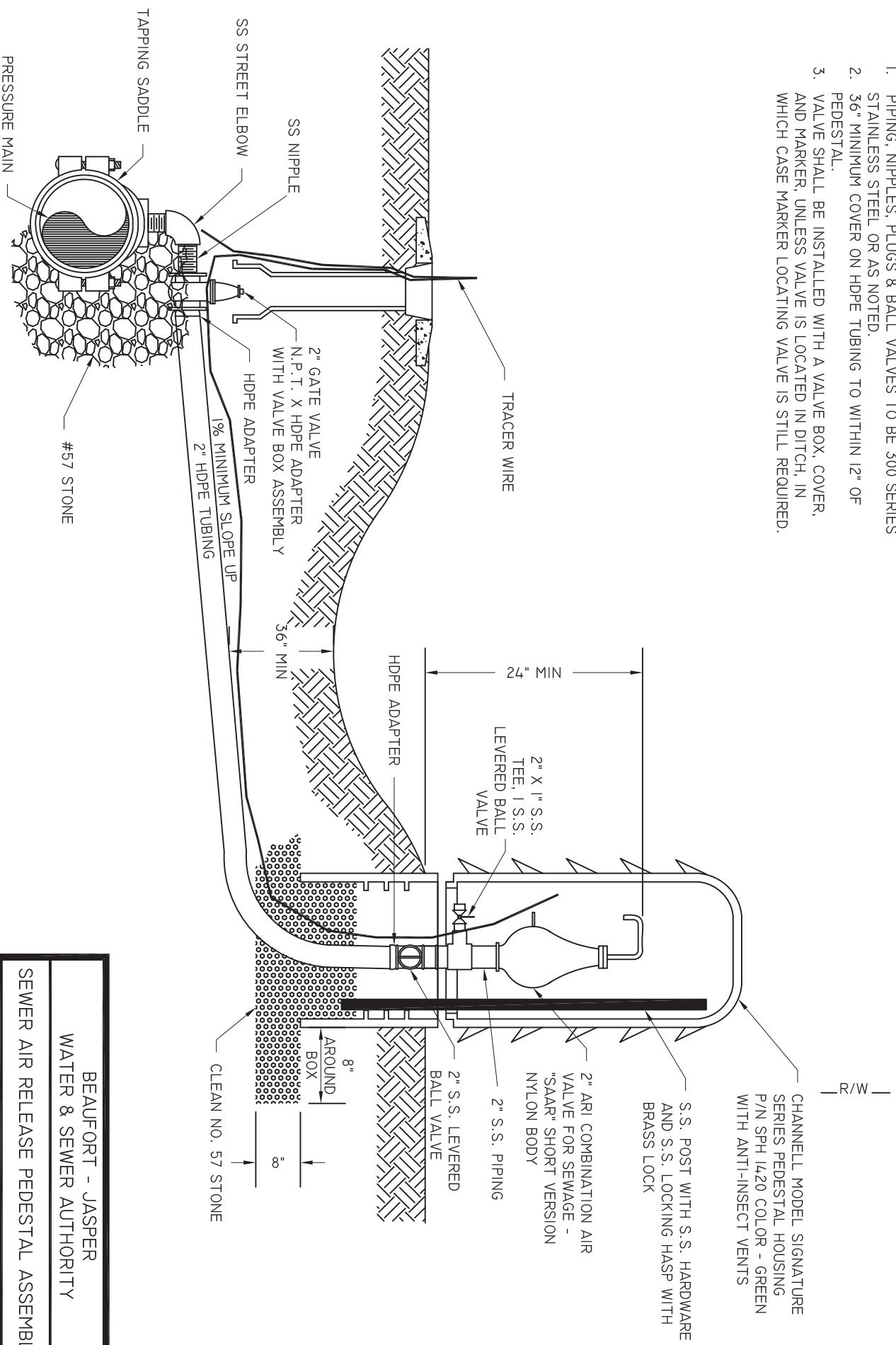
- NOTES:
1. SET TOPS OF MANHOLES FLUSH WITH FINAL GRADE UNLESS NOTED OTHERWISE.
  2. REFER TO SPECIFICATIONS FOR REQUIRED MANHOLE DIAMETER.
  3. CHECK VALVE SHALL BE INSTALLED AS NEAR TIE-IN TO F.M. AS POSSIBLE.

## SEWER CHECK VALVE IN MANHOLE

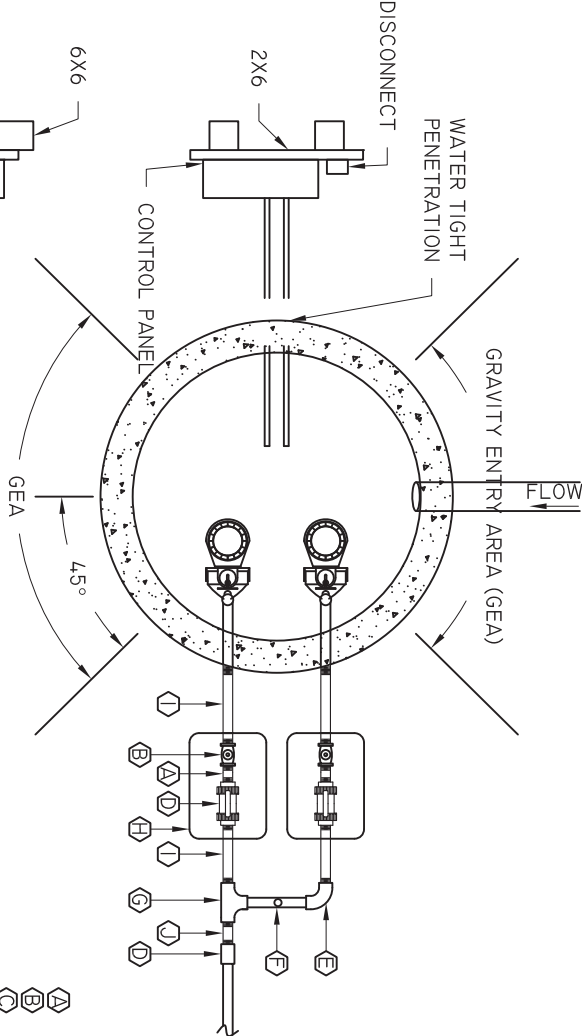
NOT TO SCALE

BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
SEWER CHECK VALVE			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-24
SCALE	APPROVED BY	ERS	
N.T.S.			

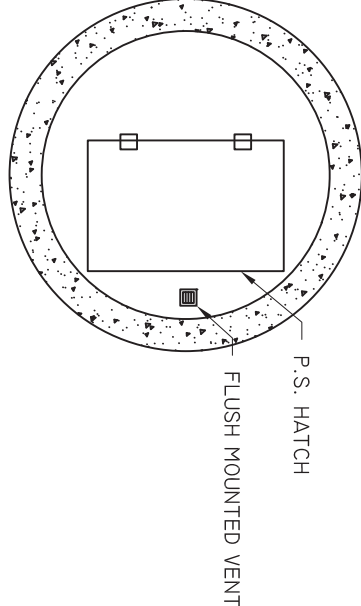
- |  |                    |                   |
|--|--------------------|-------------------|
| BEAUFORT - JASPER<br>WATER & SEWER AUTHORITY |                    |                   |
| SEWER AIR RELEASE PEDESTAL ASSEMBLY          |                    |                   |
| DATE<br>07/01/09                             | DRAWN BY<br>BMC    | DRAWING #<br>S-25 |
| SCALE<br>N.T.S.                              | APPROVED BY<br>ERS |                   |



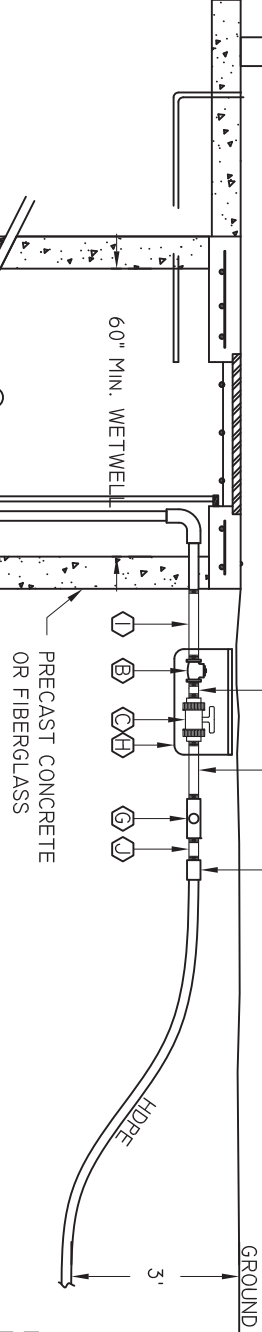
SUBSURFACE PLAN VIEW



WETWELL TOP



- A BRASS OR SS NIPPLE 2"X1"
- B 2" FLAPPER CHECK VALVE (BRASS)
- C TRUE UNION PVC BALL VALVE WITH 1PT THREADS
- D BRASS FEMALE 1PT TO HDPE ADAPTER 2"
- E BRASS OR SS 90° 2"
- F PRESSURE TEST PORT
- G 2"X2" BRASS TEE
- H 22"X16"X12" VALVE BOX WITH LID
- I BRASS OR SS NIPPLE 12" MIN
- J BRASS OR SS NIPPLE 2" MIN

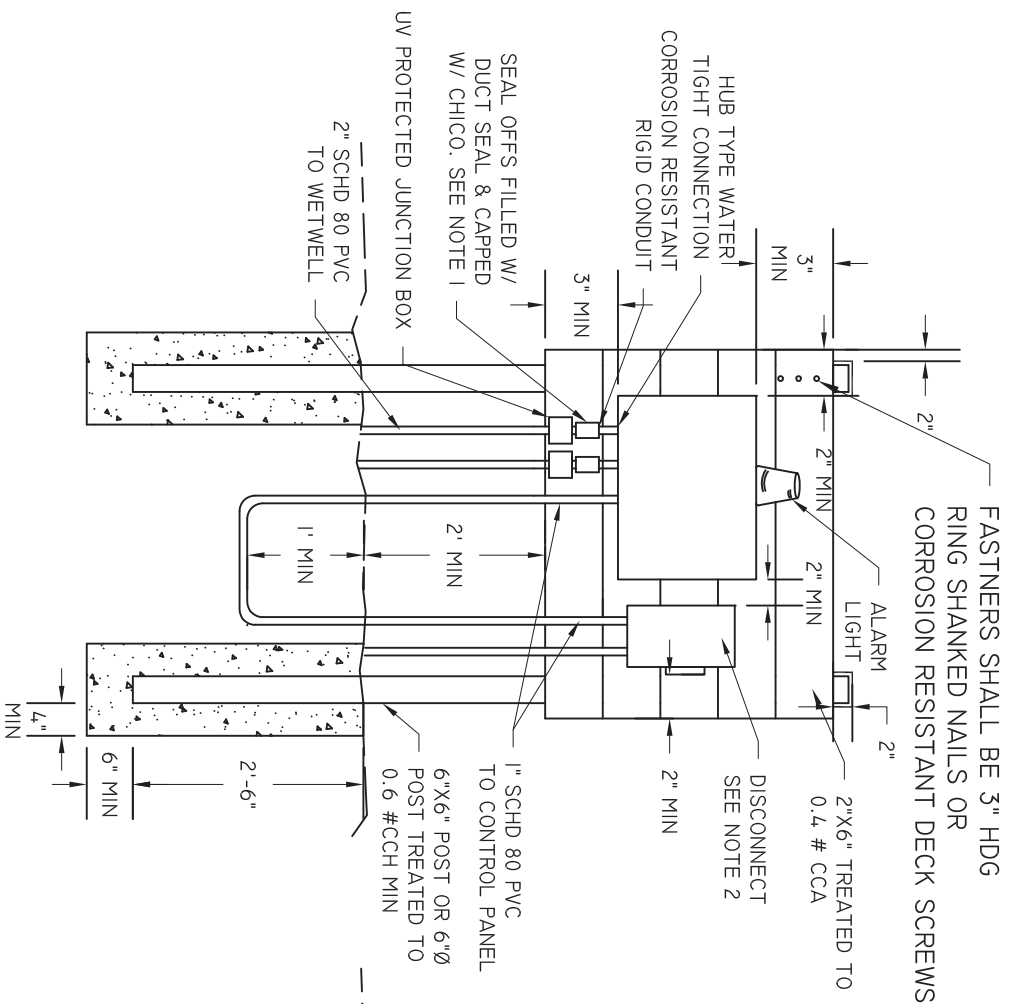


- I 1/4"X4" BRASS NIPPLE
- J 1/4"X2" BRASS BUSHING
- K 2" BRASS STREET ELBOW
- L 2" SCH 80 FEMALE THREAD ADAPTER

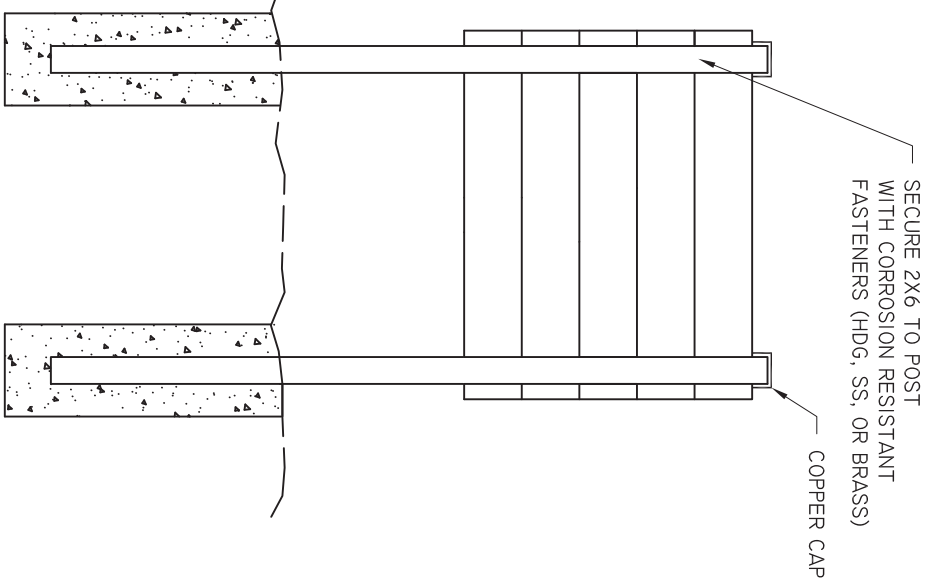
- NOTES:
1. YARD HYDRANT IS TO BE PLACED WITHIN 10' OF PUMP STATION.
  2. SEE S-19 FOR HATCH DETAIL.
  3. SEE S-27 FOR CONTROL PANEL DETAIL.

SUBSURFACE SECTION VIEW

BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
DUPELX RESIDENTIAL GRINDER LAYOUT			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-26
SCALE	APPROVED BY	ERS	
N.T.S.			



## FRONT

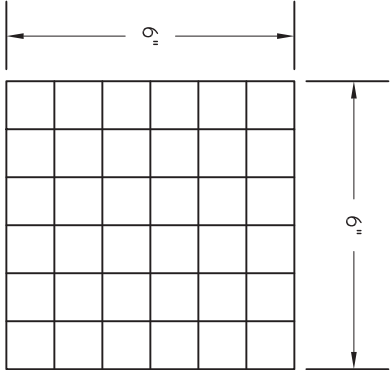


## BACK

- NOTES:
1. BUWSA INSPECTOR TO BE PRESENT DURING FILLING.
  2. DISCONNECT SERVICE BACK TO HOUSE IS OWNER'S RESPONSIBILITY.

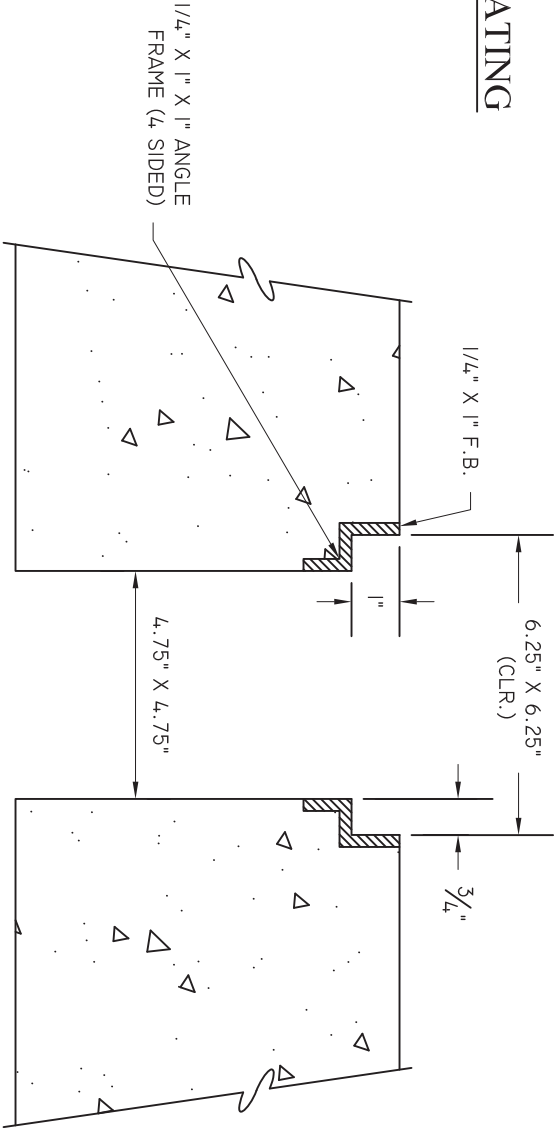
BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
PUMP STATION RESIDENTIAL DUPLEX			
CONTROL PANEL			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-27
SCALE	APPROVED BY	ERS	
N.T.S.			

6" X 6" X 1" GRATING DETAIL FOR STRUCTURE # \_\_\_\_\_



SHIP WITH 6"X6"X1" GRATING

1" X 1" X 1" ALUM. GRATING



SECTION THRU FRAME

BEAUFORT - JASPER		
WATER & SEWER AUTHORITY		

PUMP STATION 6X6 GRATE DETAIL		
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DATE	DRAWN BY	BMC	DRAWING #
07/01/09			S-28
SCALE	APPROVED BY	ERS	
N.T.S.			