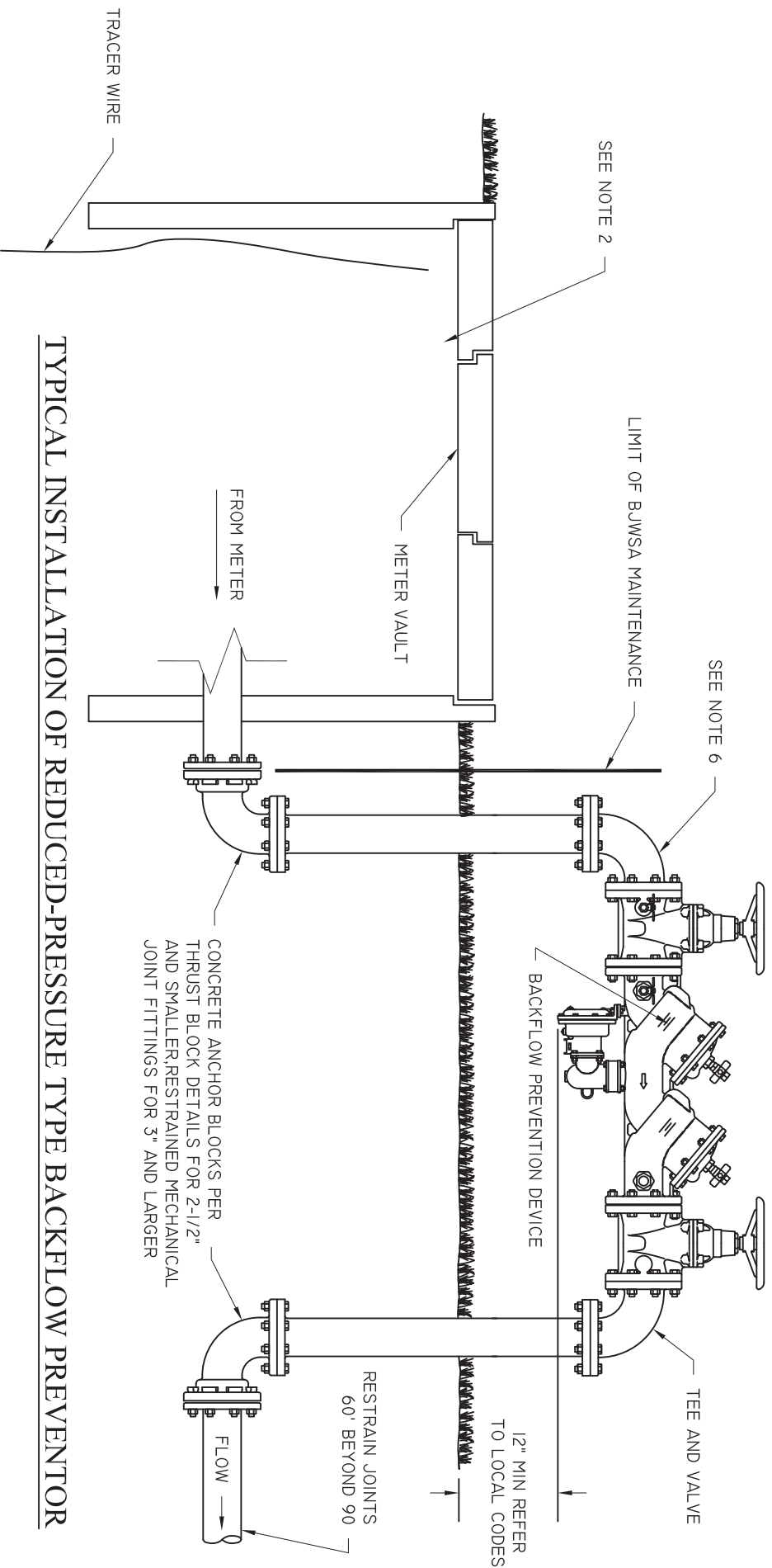


**APPENDIX C – WATER STANDARD DETAIL DRAWINGS**

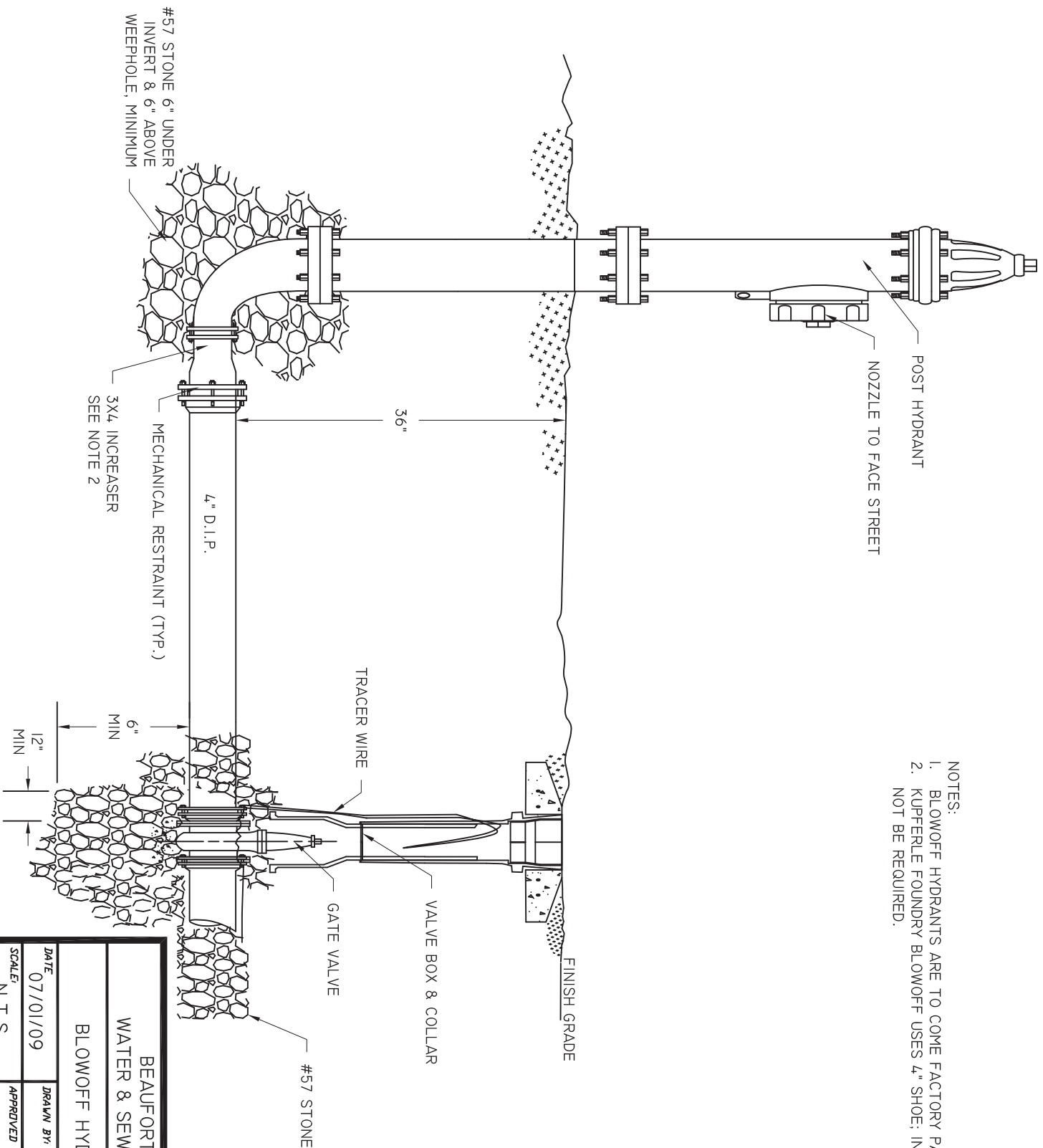
<b><u>DRAWING NUMBER</u></b>	<b><u>TITLE</u></b>
W-01	Backflow Prevention Detail
W-02	Blow-off Hydrant Detail
W-03	Fire Hydrant - Standard
W-04	Fire Hydrant Detail – Under Ditch
W-05	Jumper Connection Ditch
W-06	Meter Vault Detail - Large
W-07	Water Line Crossing Detail
W-08	Water Service – Plan View
W-09	Water Service Profile
W-10	Water Sampling Station
W-11	Meter Bank Detail; 6 Meter Max



TYPICAL INSTALLATION OF REDUCED-PRESSURE TYPE BACKFLOW PREVENTOR

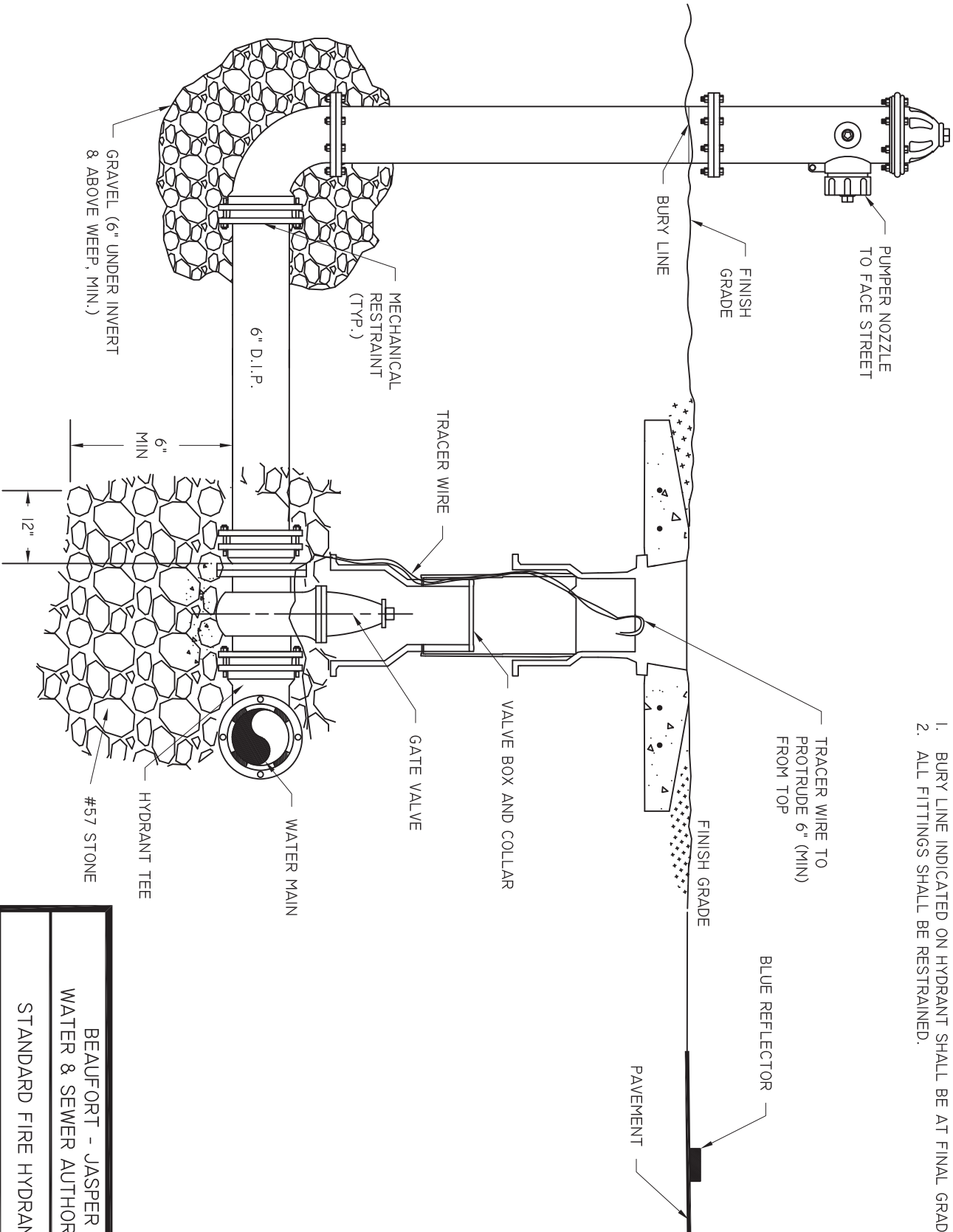
- NOTES:
1. REDUCED-PRESSURE BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED FOR ANY SERVICE WHERE TOXIC MATERIALS ARE USED OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE: HOSPITALS, MEDICAL & DENTAL LABS, MORTUARIES, INDUSTRIAL PLANTS, DRY CLEANERS, IRRIGATION SYSTEMS, OR AS DETERMINED BY BUWSA.
  2. SEE SPECIFIC METER DETAIL FOR MORE INFORMATION.
  3. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ADJACENT TO AND ON PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. WHERE NO SIDEWALKS EXISTS, THE ASSEMBLY SHALL BE INSTALLED BEFORE ANY BRANCH AND AS CLOSE AS POSSIBLE TO THE WATER METER LOCATION. FINAL LOCATION TO BE APPROVED BY BUWSA PRIOR TO INSTALLATION.
  4. SCREENING AND LANDSCAPING PLACES AROUND DEVICE SHALL ALLOW FOR ACCESS BY BUWSA PERSONNEL.
  5. FREEZE PROTECTION IS THE OWNERS RESPONSIBILITY.
  6. PIPING AND FITTINGS THROUGH 2 1/2" SHALL BE SCHD 40 GALVANIZED STEEL. PIPING AND FITTINGS 3" AND LARGER SHALL BE FLANGED DUCTILE IRON.
  7. REFER TO SCDHEC APPROVED LIST OF BACKFLOW PREVENTION DEVICES.
  8. DUAL CHECK VALVES MAY BE INSTALLED IN UNDERGROUND VAULT (PRIOR APPROVAL BY BUWSA REQUIRED).

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



- NOTES:
1. BLOWOFF HYDRANTS ARE TO COME FACTORY PAINTED WHITE.
  2. KUPFERLE FOUNDRY BLOWOFF USES 4" SHOE; INCREASER WILL NOT BE REQUIRED.

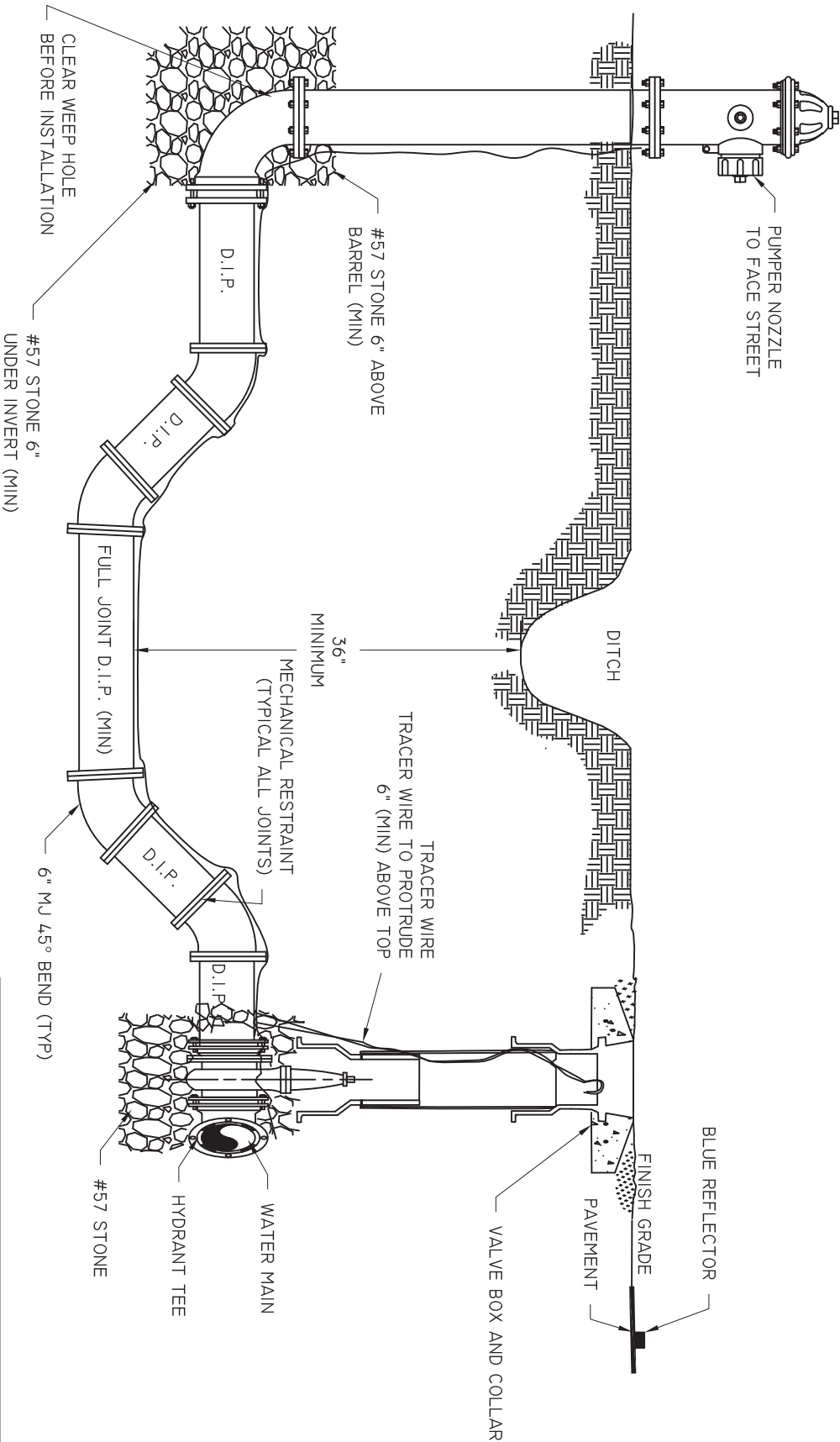
BEAUFORT - JASPER		
WATER & SEWER AUTHORITY		
BLOWOFF HYDRANT DETAIL		
DATE	DRAWN BY	BMC
07/01/09		
SCALE	APPROVED BY	ERS
N.T.S.		
DRAWING #		
W-02		



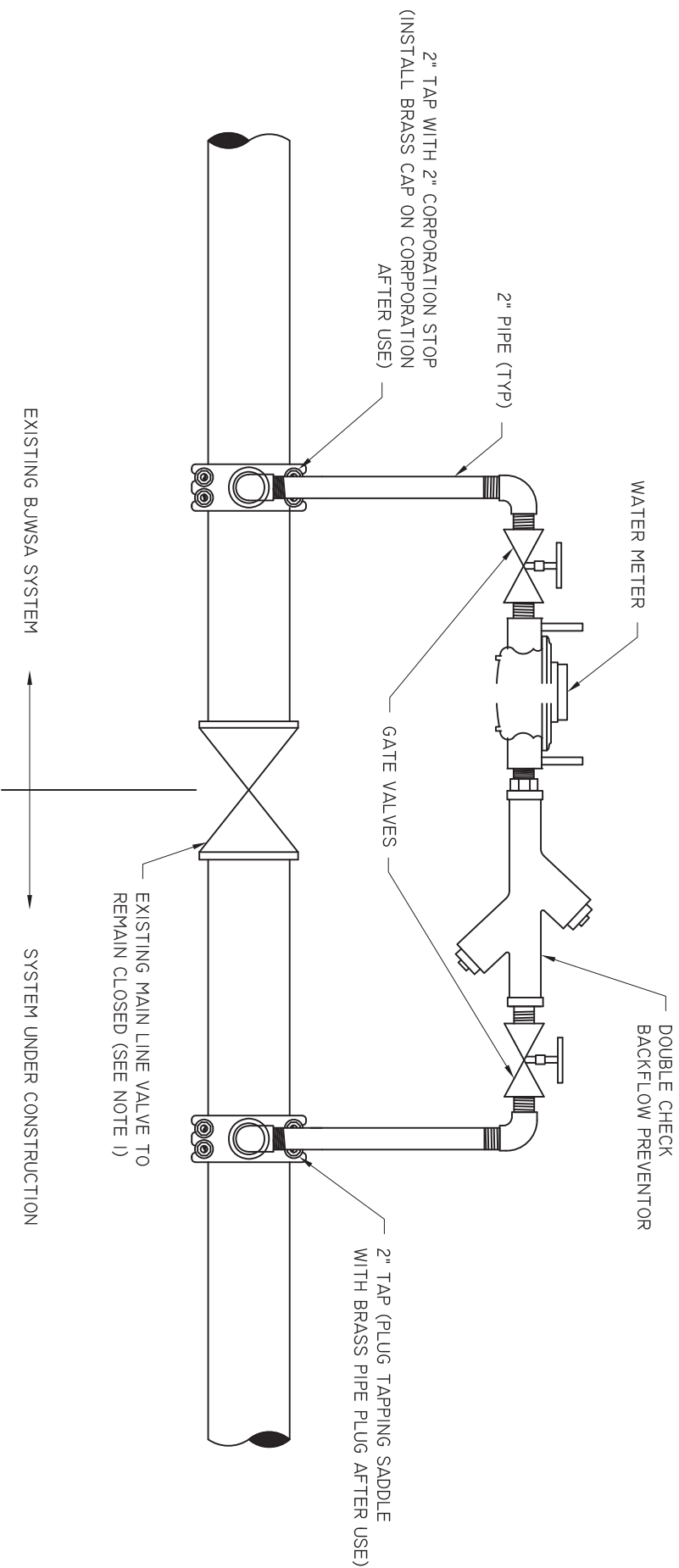
- NOTES:
1. BURY LINE INDICATED ON HYDRANT SHALL BE AT FINAL GRADE.
  2. ALL FITTINGS SHALL BE RESTRAINED.

BEAUFORT - JASPER		
WATER & SEWER AUTHORITY		
STANDARD FIRE HYDRANT		
DATE	DRAWN BY	DRAWING #
07/01/09	BMC	W-03
SCALE	APPROVED BY	
N.T.S.	ERS	

- NOTES:
1. BURY LINE INDICATED ON HYDRANT SHALL BE AT FINAL GRADE.
  2. ALL FITTINGS SHALL BE RESTRAINED.

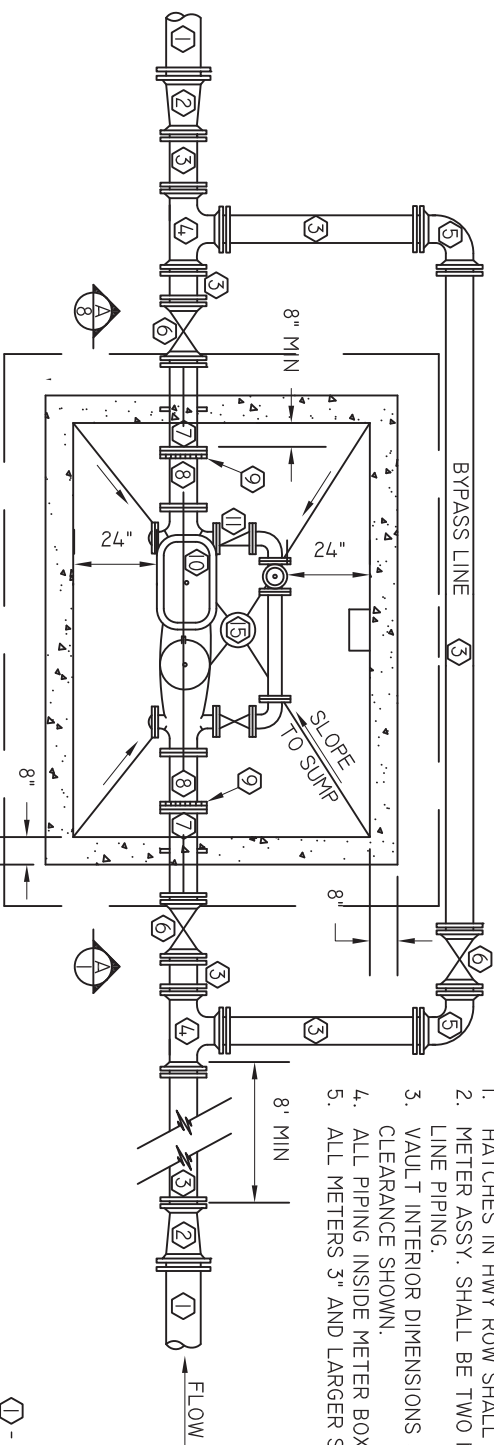


BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
FIRE HYDRANT DETAIL UNDER DITCH			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			W-04
SCALE	APPROVED BY	ERS	
N.T.S.			



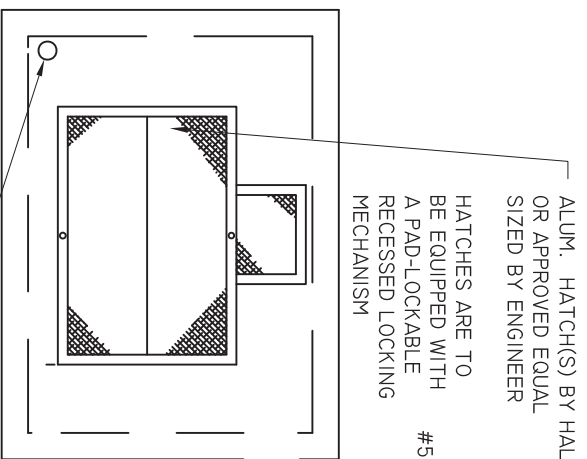
- NOTES:
1. MAIN LINE VALVE SHALL REMAIN CLOSED AT ALL TIMES UNTIL PERMIT TO OPERATE IS ISSUED BY SC DHEC. MAINLINE VALVE SHALL ONLY BE OPERATED BY BJWSA PERSONNEL. VIOLATION OF THIS POLICY IS PUNISHABLE BY A FINE OF NOT LESS THAN \$500 PLUS ESTIMATED WATER USAGE AND POSSIBLE CRIMINAL PROSECUTION.
  2. ALL WATERLINE EXTENSIONS MUST CONTAIN A JUMPER CONNECTION FOR FILLING/CHLORINATION REQUIREMENTS.
  3. METER AND BACKFLOW ASSEMBLY MUST BE OBTAINED FROM BJWSA.
  4. TAPING SADDLES AND CORPORATION STOPS SHALL COMPLY WITH BJWSA SPECIFICATIONS.
  5. ALL TAPS ON MAINLINE SHALL BE HORIZONTAL.

BEAUFORT - JASPER			
WATER & SEWER AUTHORITY			
JUMPER CONNECTION DETAIL			
DATE	DRAWN BY	BMC	DRAWING #
07/01/09			W-05
SCALE	APPROVED BY	ERS	
N.T.S.			

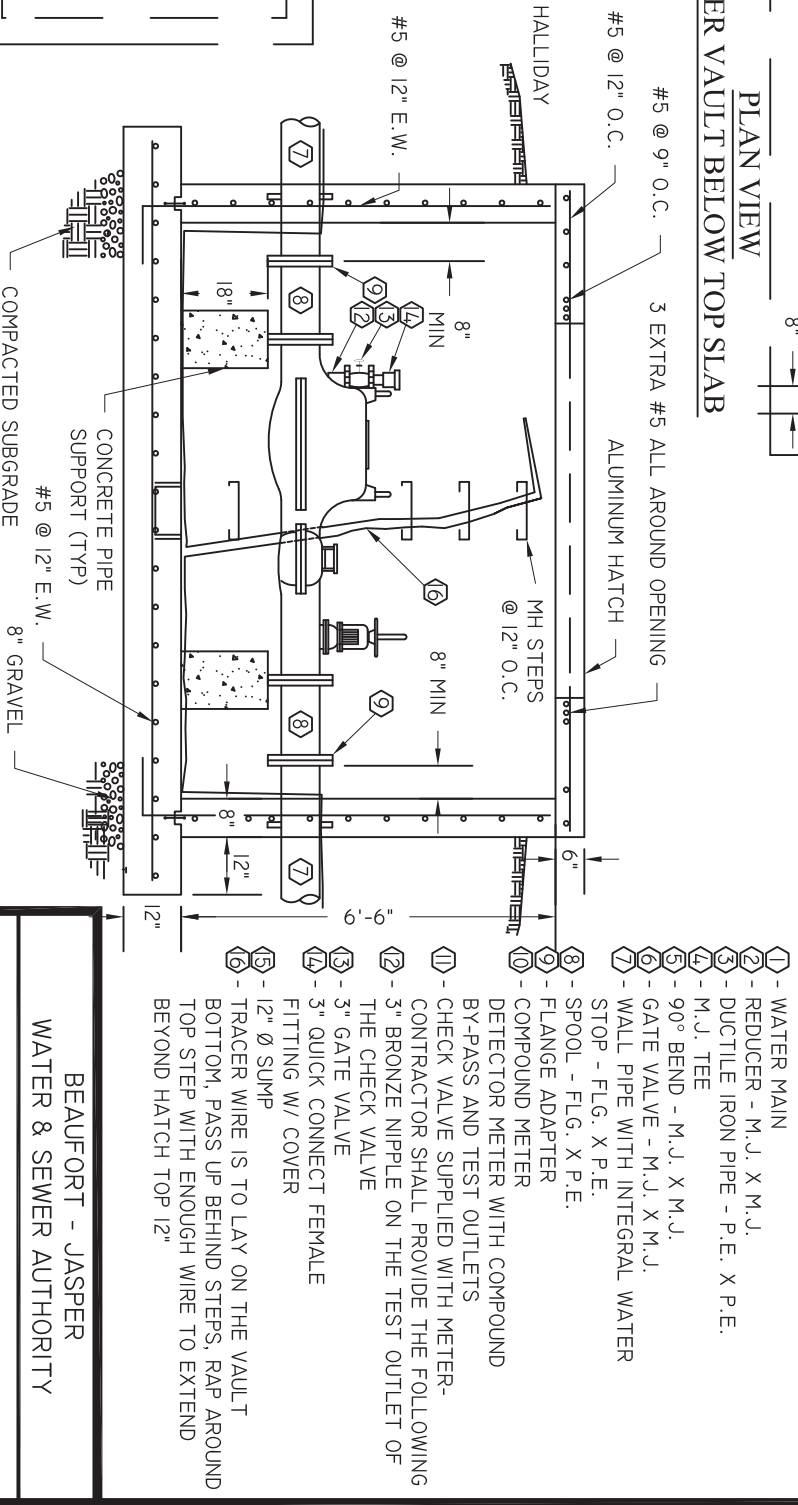


- NOTES:
1. HATCHES IN HWY ROW SHALL BE H20 TRAFFIC RATED.
  2. METER ASSY. SHALL BE TWO NOMINAL PIPE SIZES SMALLER THAN MAIN LINE PIPING.
  3. VAULT INTERIOR DIMENSIONS SHALL BE SIZED TO PROVIDE THE MINIMUM CLEARANCE SHOWN.
  4. ALL PIPING INSIDE METER BOX SHALL BE DIP.
  5. ALL METERS 3" AND LARGER SHALL COMPLY.

PLAN VIEW  
METER VAULT BELOW TOP SLAB



PLAN VIEW  
METER VAULT ABOVE TOP SLAB



- 1 - WATER MAIN
- 2 - REDUCER - M.J. X M.J.
- 3 - DUCTILE IRON PIPE - P.E. X P.E.
- 4 - M.J. TEE
- 5 - 90° BEND - M.J. X M.J.
- 6 - GATE VALVE - M.J. X M.J.
- 7 - WALL PIPE WITH INTEGRAL WATER STOP - FLG. X P.E.
- 8 - SPOOL - FLG. X P.E.
- 9 - FLANGE ADAPTER
- 10 - COMPOUND METER DETECTOR METER WITH COMPOUND BY-PASS AND TEST OUTLETS
- 11 - CHECK VALVE SUPPLIED WITH METER- CONTRACTOR SHALL PROVIDE THE FOLLOWING
- 12 - 3" BRONZE NIPPLE ON THE TEST OUTLET OF THE CHECK VALVE
- 13 - 3" GATE VALVE
- 14 - 3" QUICK CONNECT FEMALE FITTING W/ COVER
- 15 - 12" Ø SUMP
- 16 - TRACER WIRE IS TO LAY ON THE VAULT BOTTOM, PASS UP BEHIND STEPS, RAP AROUND TOP STEP WITH ENOUGH WIRE TO EXTEND BEYOND HATCH TOP 12"

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

10" AND GREATER METER DETAIL

DATE  
07/01/09  
SCALE  
N.T.S.

DRAWN BY  
BMC  
APPROVED BY  
ERS

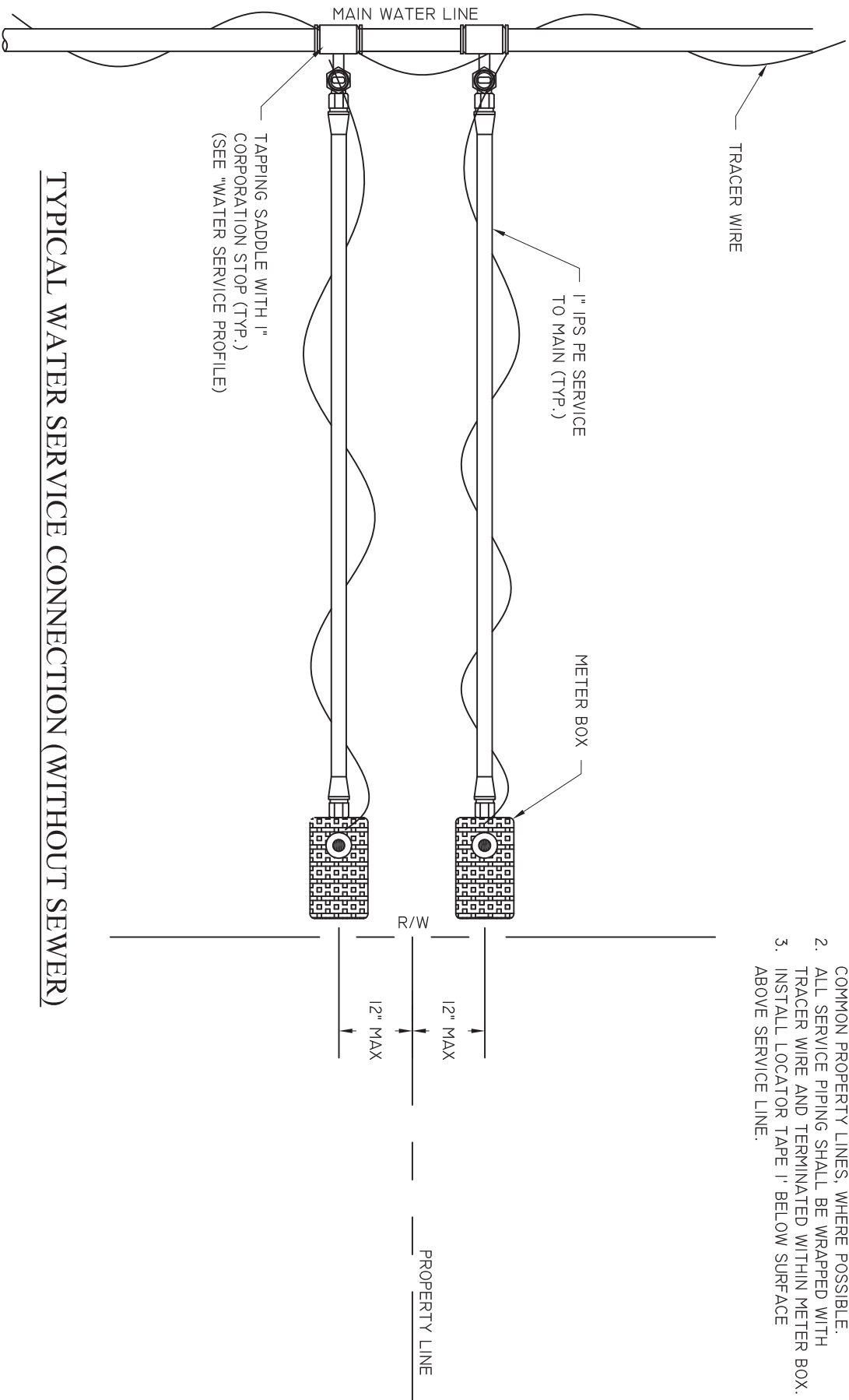
DRAWING #  
W-06

BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

RESERVED

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

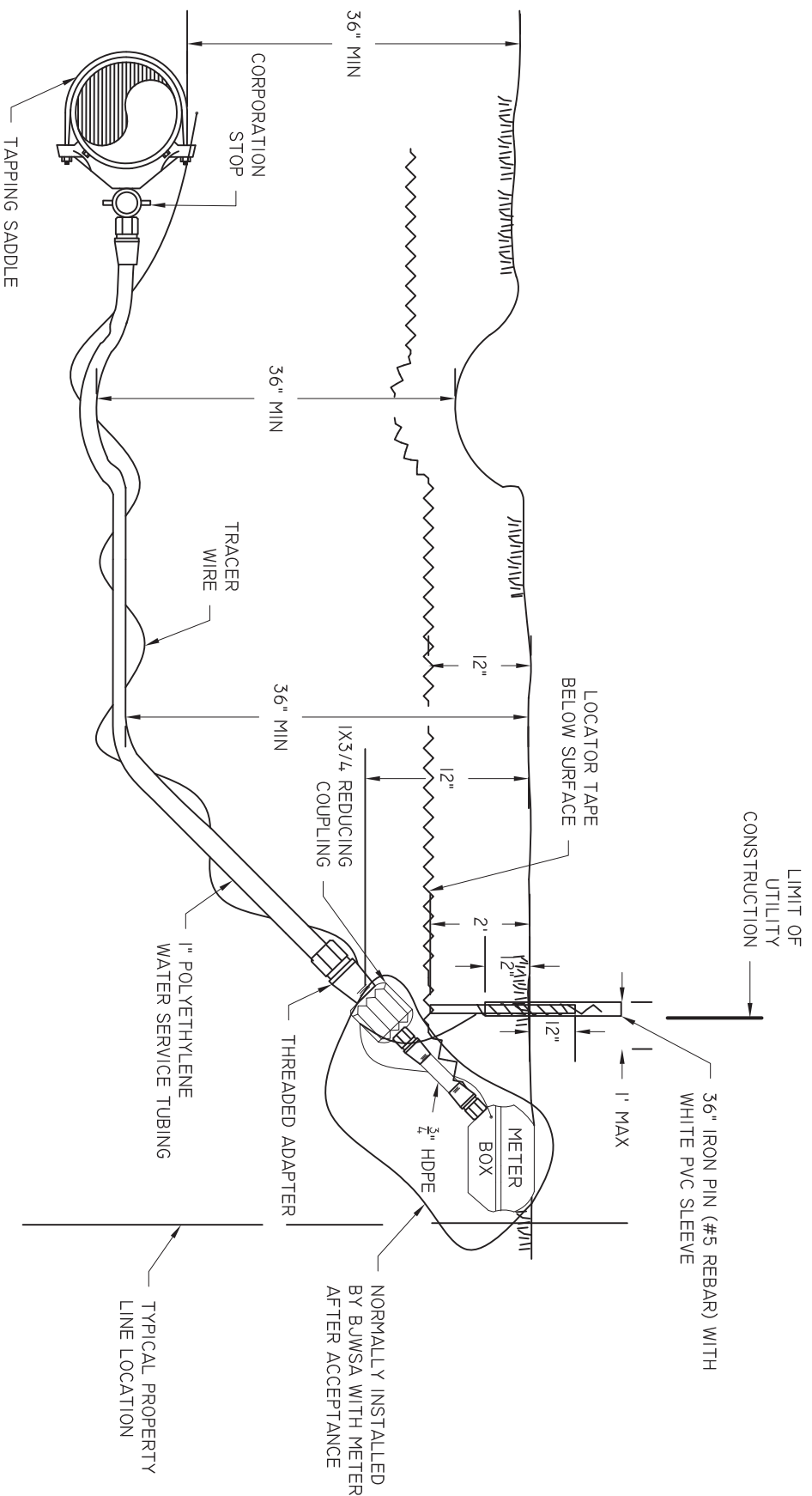




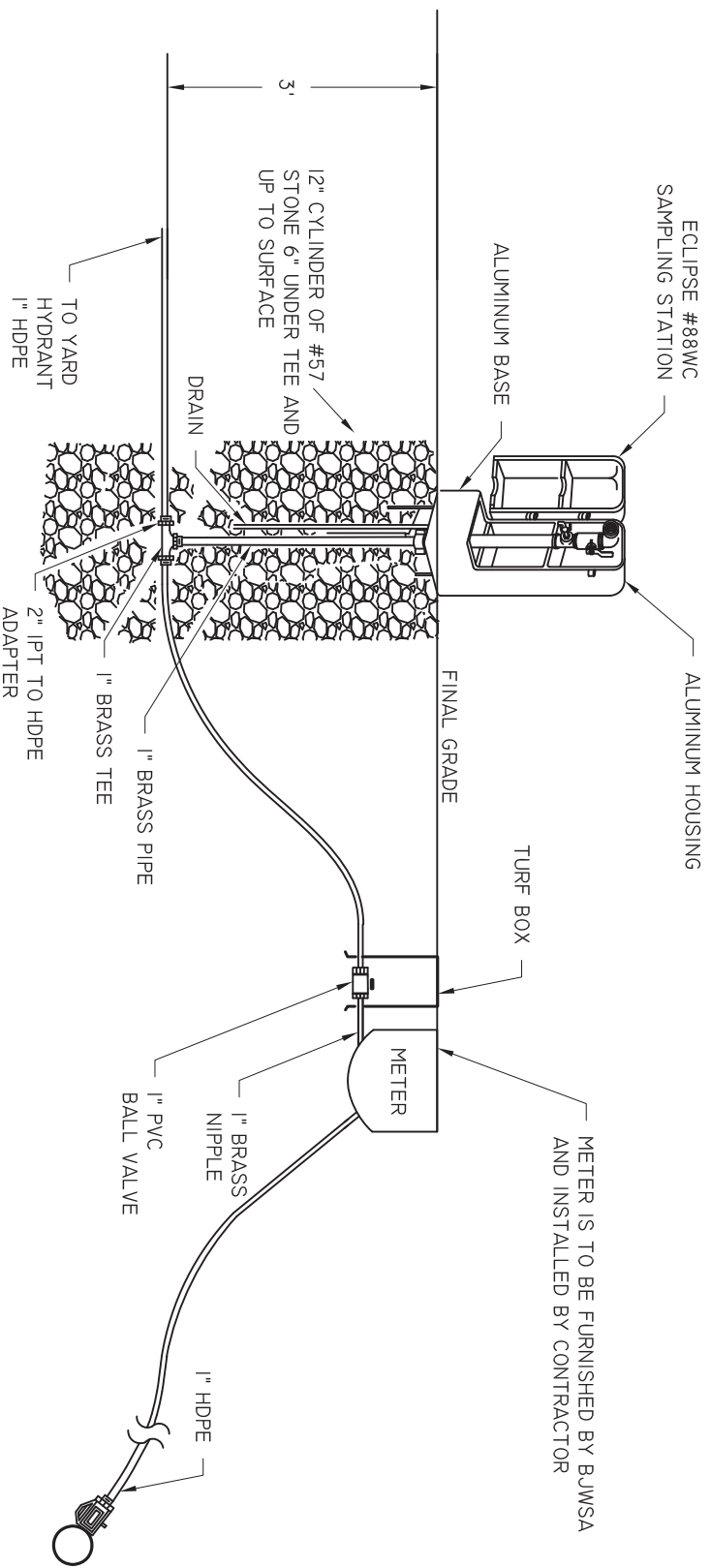
- NOTES:
1. WATER SERVICES SHALL BE INSTALLED TO COMMON PROPERTY LINES, WHERE POSSIBLE.
  2. ALL SERVICE PIPING SHALL BE WRAPPED WITH TRACER WIRE AND TERMINATED WITHIN METER BOX.
  3. INSTALL LOCATOR TAPE 1' BELOW SURFACE ABOVE SERVICE LINE.

TYPICAL WATER SERVICE CONNECTION (WITHOUT SEWER)

BEAUFORT - JASPER		
WATER & SEWER AUTHORITY		
WATER SERVICE PLAN VIEW		
DATE 07/01/09	DRAWN BY BMC	DRAWING # W-08
SCALE N.T.S.	APPROVED BY ERS	

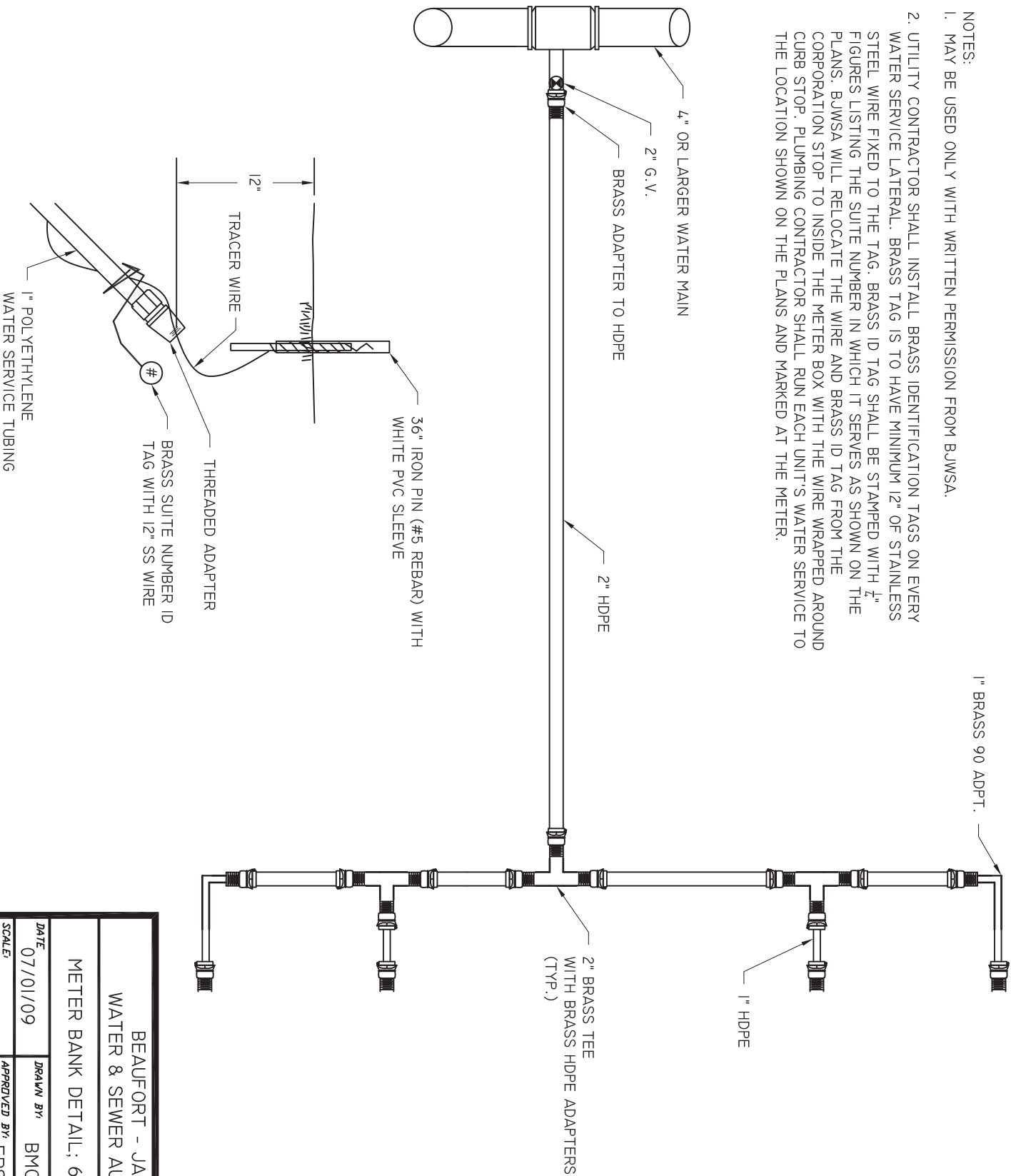


BEAUFORT - JASPER		
WATER & SEWER AUTHORITY		
WATER SERVICE PROFILE		
DATE	DRAWN BY	DRAWING #
07/01/09	BMC	W-09
SCALE	APPROVED BY	
N.T.S.	ERS	



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

- NOTES:
1. MAY BE USED ONLY WITH WRITTEN PERMISSION FROM BUWSA.
  2. UTILITY CONTRACTOR SHALL INSTALL BRASS IDENTIFICATION TAGS ON EVERY WATER SERVICE LATERAL. BRASS TAG IS TO HAVE MINIMUM 12" OF STAINLESS STEEL WIRE FIXED TO THE TAG. BRASS ID TAG SHALL BE STAMPED WITH  $\frac{1}{4}$ " FIGURES LISTING THE SUITE NUMBER IN WHICH IT SERVES AS SHOWN ON THE PLANS. BUWSA WILL RELOCATE THE WIRE AND BRASS ID TAG FROM THE CORPORATION STOP TO INSIDE THE METER BOX WITH THE WIRE WRAPPED AROUND CURB STOP. PLUMBING CONTRACTOR SHALL RUN EACH UNIT'S WATER SERVICE TO THE LOCATION SHOWN ON THE PLANS AND MARKED AT THE METER.



BEAUFORT - JASPER  
WATER & SEWER AUTHORITY

METER BANK DETAIL; 6 METER MAX

DATE	DRAWN BY	BMC	DRAWING #
07/01/09			W-11
SCALE	N.T.S.		APPROVED BY ERS