SECTION "A-A"

7-5/8"

7-3/8"

6-3/4" 7-3/16"

TOP SECTION

5-1/4" DROP LID

VALVE BOX

5-3/4"

10-1/4"

BOTTOM

PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS II (TYPE 1) OR CLASS III. TRENCH BACKFILLED IN LOOSE 6"

LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE

TOP TO BE FLUSH WITH FINISH GRADE AND LEFT EXPOSED

VALVE IN TRAFFIC AREA

CONCRETE COLLAR SHALL BE PLACED WHERE VALVE IS IN A TRAFFIC AREA.

NCDOT CONCRETE --BRICK

PAVEMENT-

3000 PSI POURED IN PLACE CONCRETE COLLAR

TOP SECTION

BOTTOM SECTION

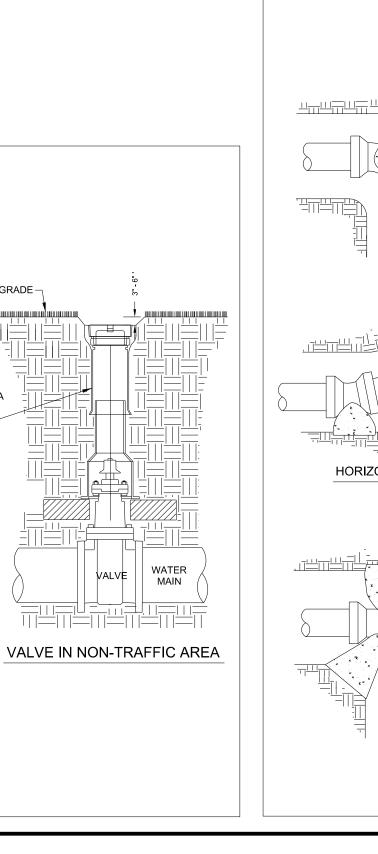
Valve Box Detail

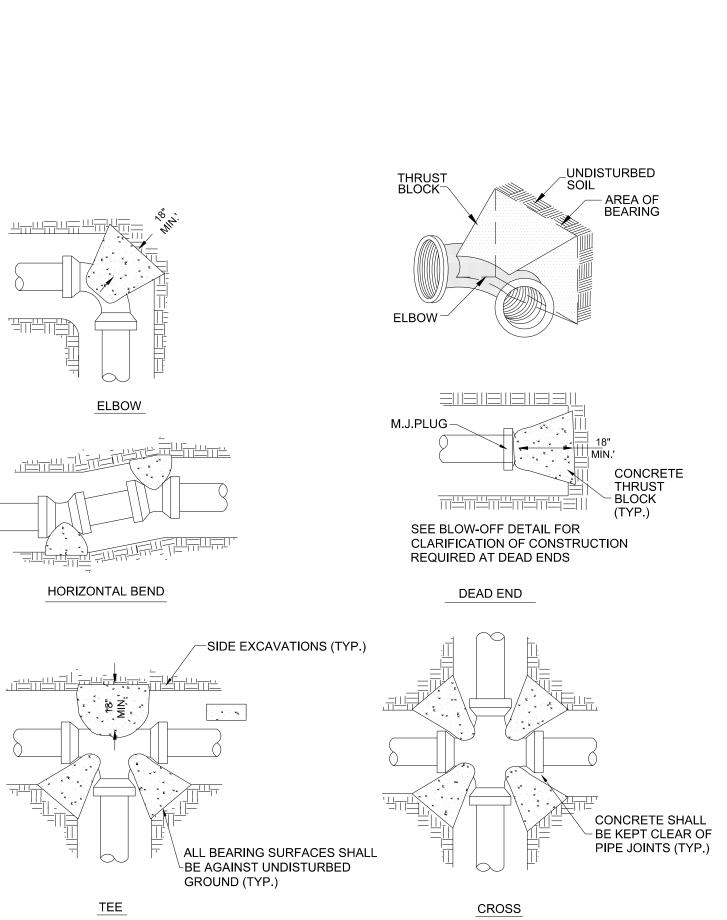
OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE

DEPARTMENT OF TRANSPORTATION.

PROJECT REFERENCE NO. SHEET NO. **BRIDGE 320035** BR-0112 UC-3A UTILITY CONSTRUCTION PLANS DESIGNED BY: SLK 1223 Jones Franklin Rd. DRAWN BY: Raleigh, N.C. 27606 CHECKED BY: MVZ Liscense No. F-0377 Bus: 919 851 8077 APPROVED BY: MVZ Fax: 919 851 8107 10773 TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN NORTH CAROLINA DEPARTMENT OF CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION TRANSPORTATION DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED PHONE: (919)707-6690 UTILIBET SECTION FAX: (919)250-4151 PLANS ONLY

UTILITY CONSTRUCTION





NOTES:

- THRUST BLOCKS SHALL BE INSTALLED
 ON PVC WATER DISTRIBUTION LINES
 6" THRU 12" DIA. IN THE MANNER SHOWN.
- 2.) PIPE GREATER THAN 12 INCH
 DIAMETER SHALL REQUIRE RESTRAINT
 JOINT PIPE FOR THE PROPER LENGTH.
- 3.) SAC-CRETE SHALL NOT BE ALLOWED.
- 4.) NO CONCRETE SHALL BE PLACED ON BOLTS. WRAP JOINT FITTINGS WITH PLASTIC.
- 5.) CONCRETE SHALL BE A MINIMUM 3,000 psi.
- 6.) ALL BEARING SURFACES SHALL BE AGAINST UNDISTURBED

CONCRETE THRUST BLOCK DETAIL

THRUST BLOCKING SCHEDULE						
FITTING SIZE (IN.)	MINIMUM BLOCKING AREA AND VOLUME IN S.F. AND (C.Y.)					
	11 1/4°	22 1/2°	45°	90°	TEE	PLUG
2			0.23 (0.11)	0.38 (0.11)	0.30 (0.11)	0.30 (0.11)
4			0.83 (0.18)	1.35 (0.18)	0.98 (0.18)	0.98 (0.18)
6	0.40 (0.01)	0.80 (0.02)	1.73 (0.20)	3.00 (0.33)	2.17 (0.25)	2.17 (0.25)
8	0.80 (0.02)	1.50 (0.04)	3.08 (0.34)	5.40 (0.60)	3.83 (0.42)	3.83 (0.42)
10	1.20 (0.03)	2.30 (0.07)	4.72 (0.52)	8.40 (0.94)	5.92 (0.66)	5.92 (0.66)
12	1.70 (0.05)	3.30 (0.12)	6.82 (0.75)	12.00 (1.33)	8.48 (0.94)	8.48 (0.94)
16	3.00 (0.33)	5.90 (0.65)	11.60 (0.86)	21.30 (1.57)	15.00 (0.97)	15.00 (0.97)
20	4.60 (0.52)	9.20 (0.76)	18.00 (1.32)	33.30 (3.60)	23.30 (1.87)	23.30 (1.87)
24	6.70 (0.75)	13.20 (0.97)	26.00 (2.28)	48.00 (5.29)	33.60 (3.24)	33.60 (3.24)
30	10.40 (0.77)	20.70 (1.80)	40.60 (4.45)	75.00 (10.30)	52.50 (6.32)	52.50 (6.32)
36	15.00 (1.28)	29.80 (3.11)	58.40 (7.67)	108.0 (17.90)	75.60 (10.90)	75.60 (10.90)

NOTE: Values given are based on 200 psi water pressure and 2000 lb/sf soil bearing capacity. Soils with less bearing capacity such as muck, peat or soft clay will require greater blocking areas and volumes.

The thrust blocking shown above is based on the use of mechanical joint as shown on plans.