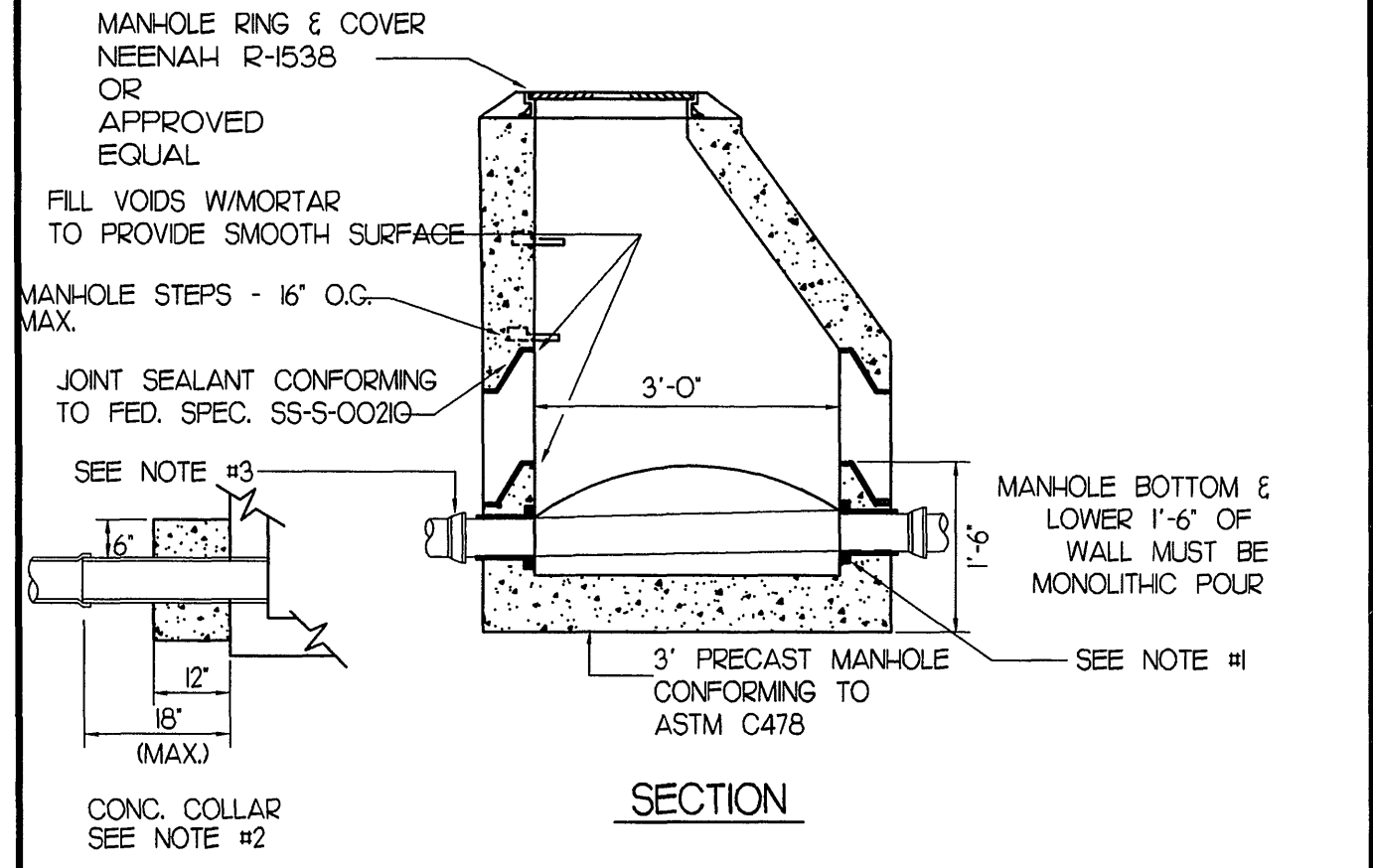
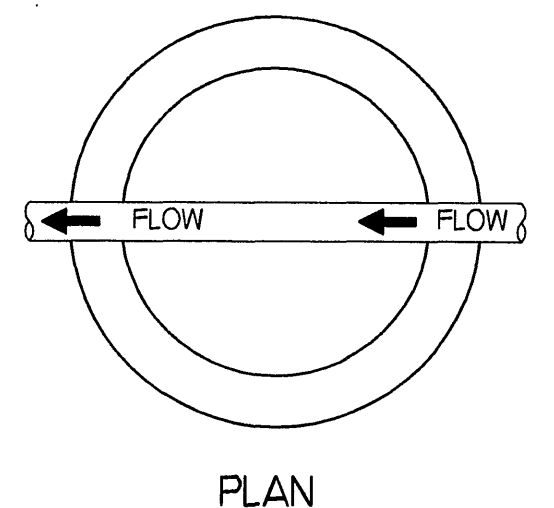
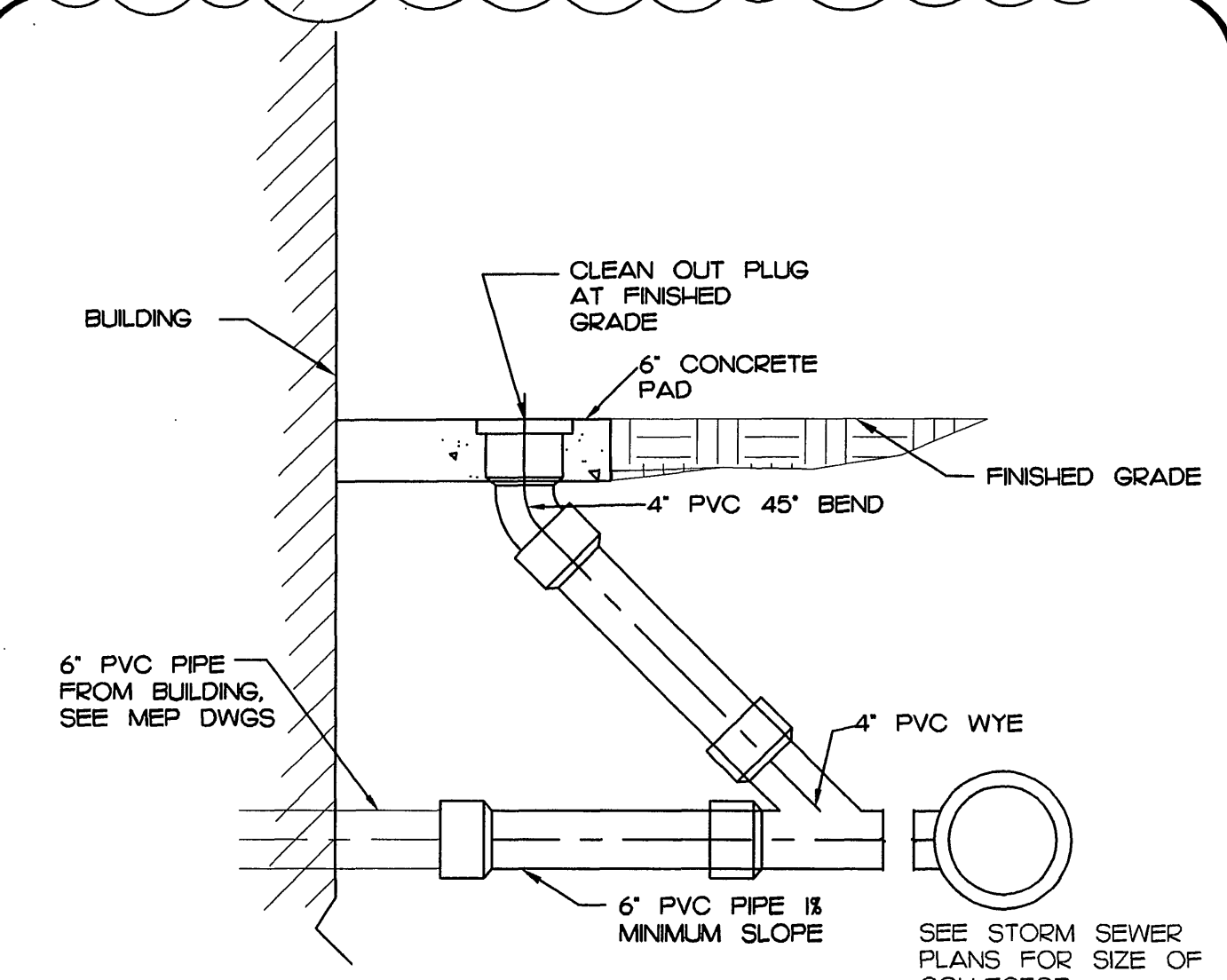


NOT USED
CATCH BASIN
N.T.S.
C603

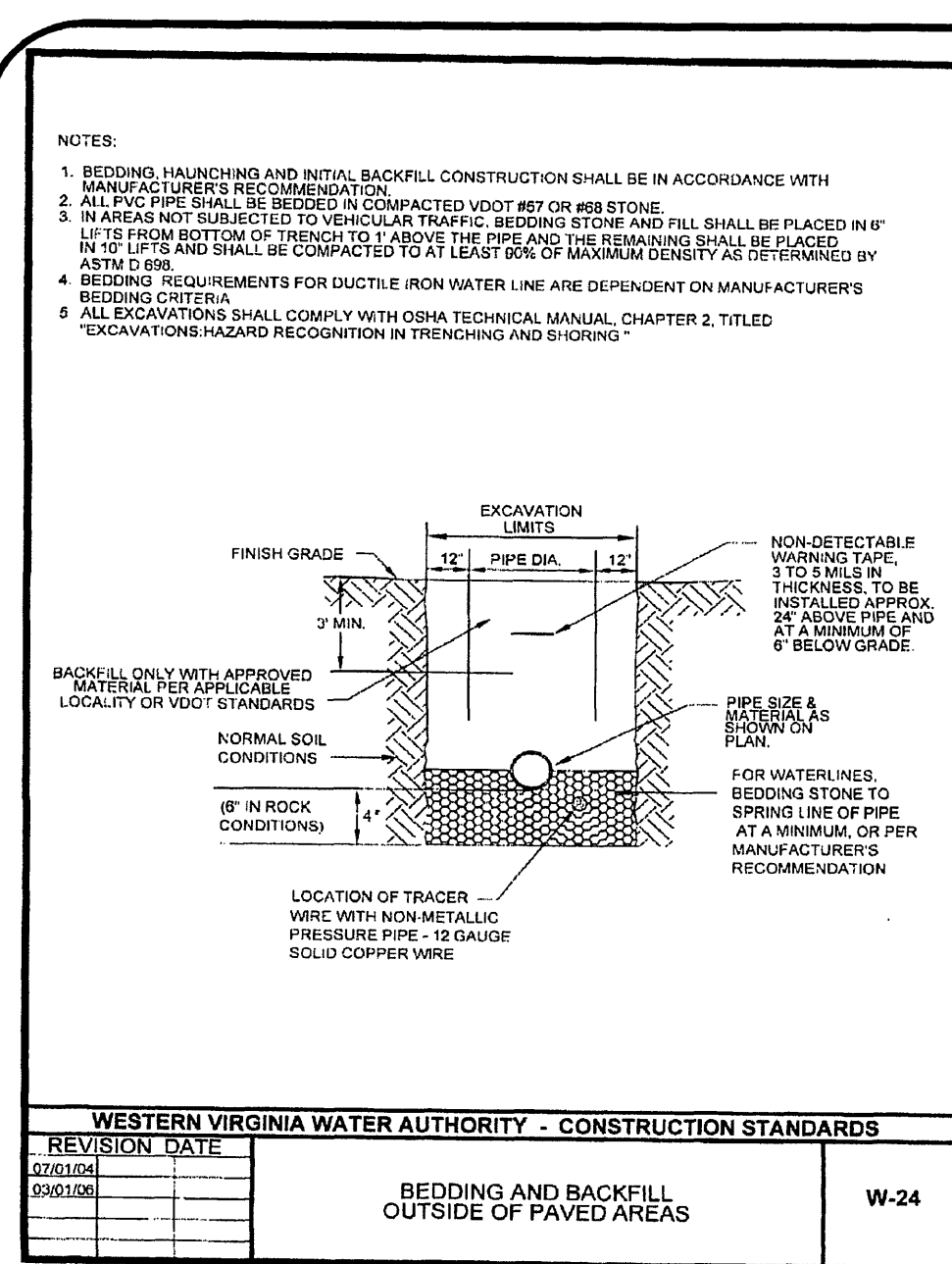


1. LOCK JOINT FLEXIBLE MANHOLE SLEEVE AS MANUFACTURED BY INTERPACE CORP. (OR EQUAL).
2. CONC. COLLAR MAY BE USED IN DRY CONDITIONS IF APPROVED BY A/E.
3. EACH MANHOLE TO HAVE BELL CONNECTION AS SHOWN FOR EACH INLET (ALL TYPES OF PIPING).
4. MANHOLE CONNECTIONS SHALL BE PROVIDED WHEN PVC PIPE IS USED.

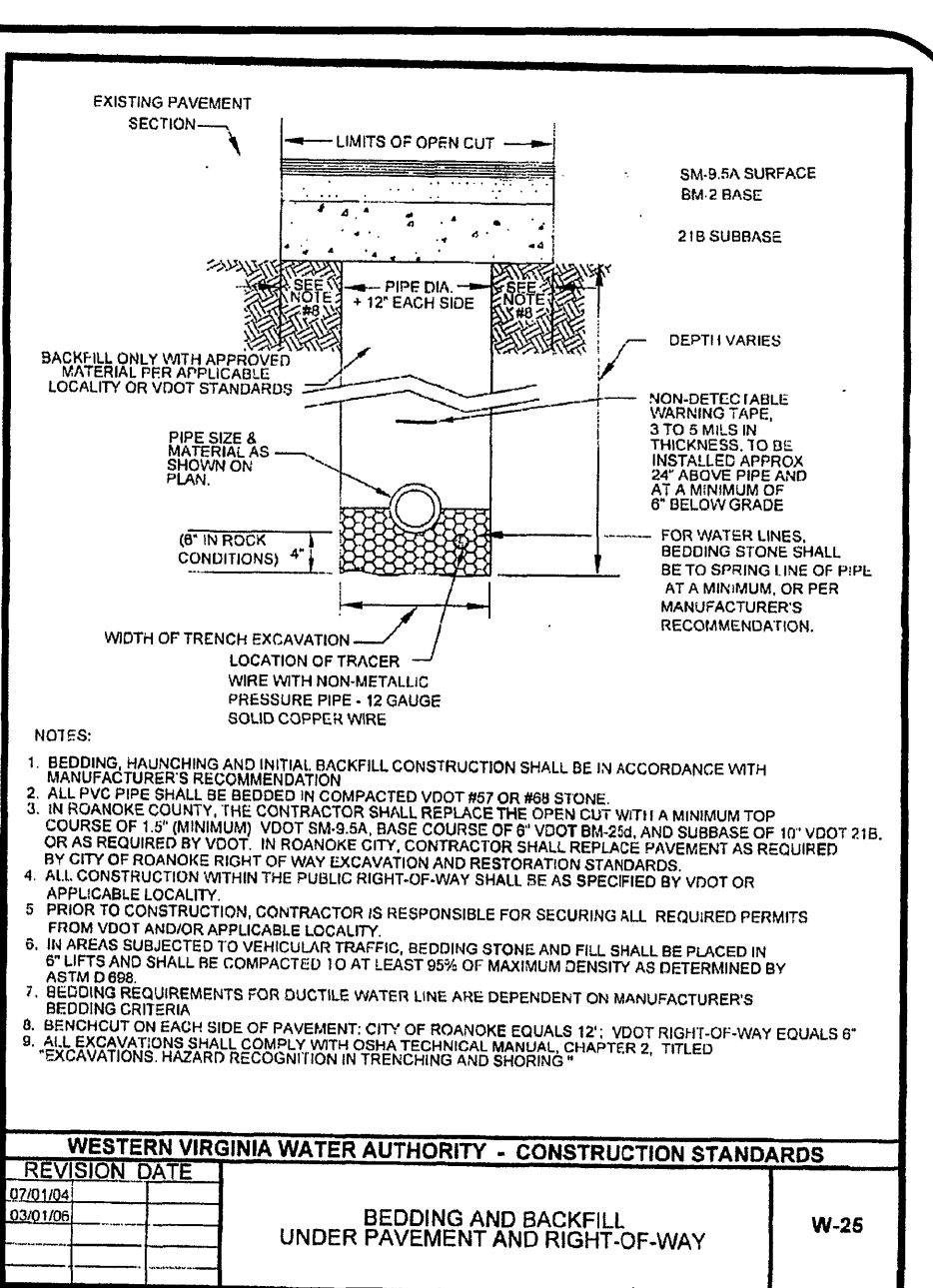
3' DIAMETER
MANHOLE DETAIL
N.T.S.
C603



ROOF DRAIN CONNECTION
NOT TO SCALE
C603

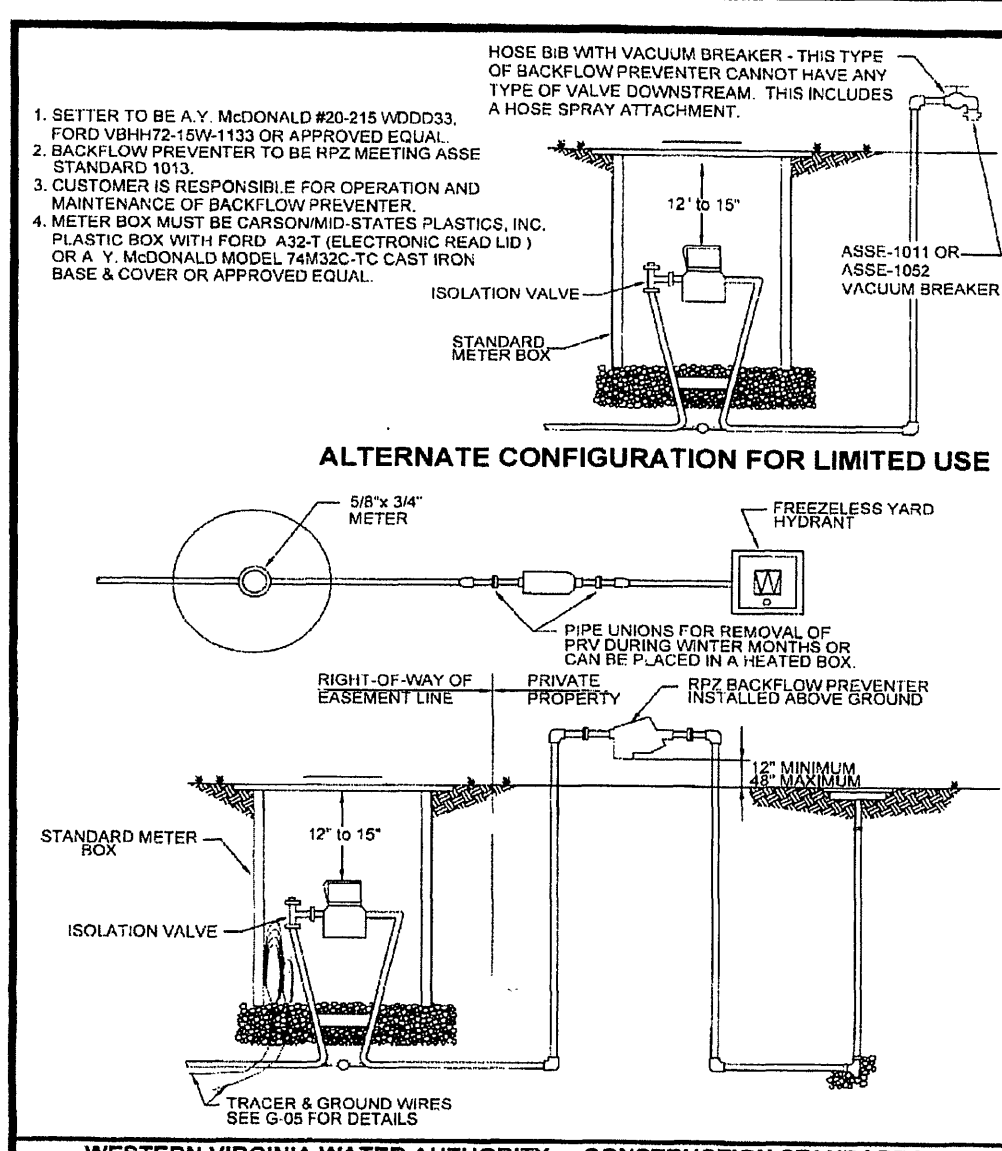


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS
REVISION DATE
27/01/04
09/01/06
BEDDING AND BACKFILL
OUTSIDE OF PAVED AREAS
W-24
C603

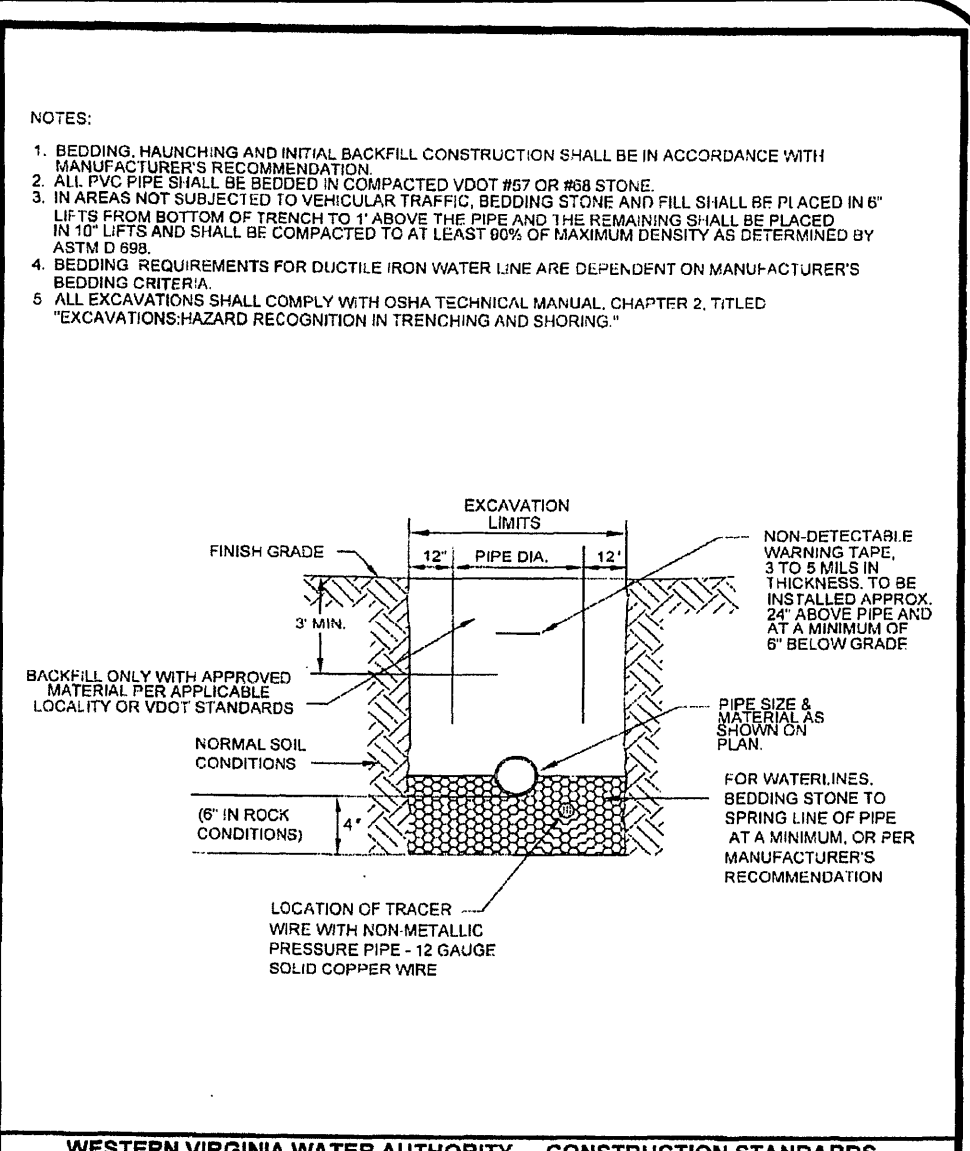


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS
REVISION DATE
07/01/04
09/01/06
BEDDING AND BACKFILL
UNDER PAVEMENT AND RIGHT-OF-WAY
W-25
C603

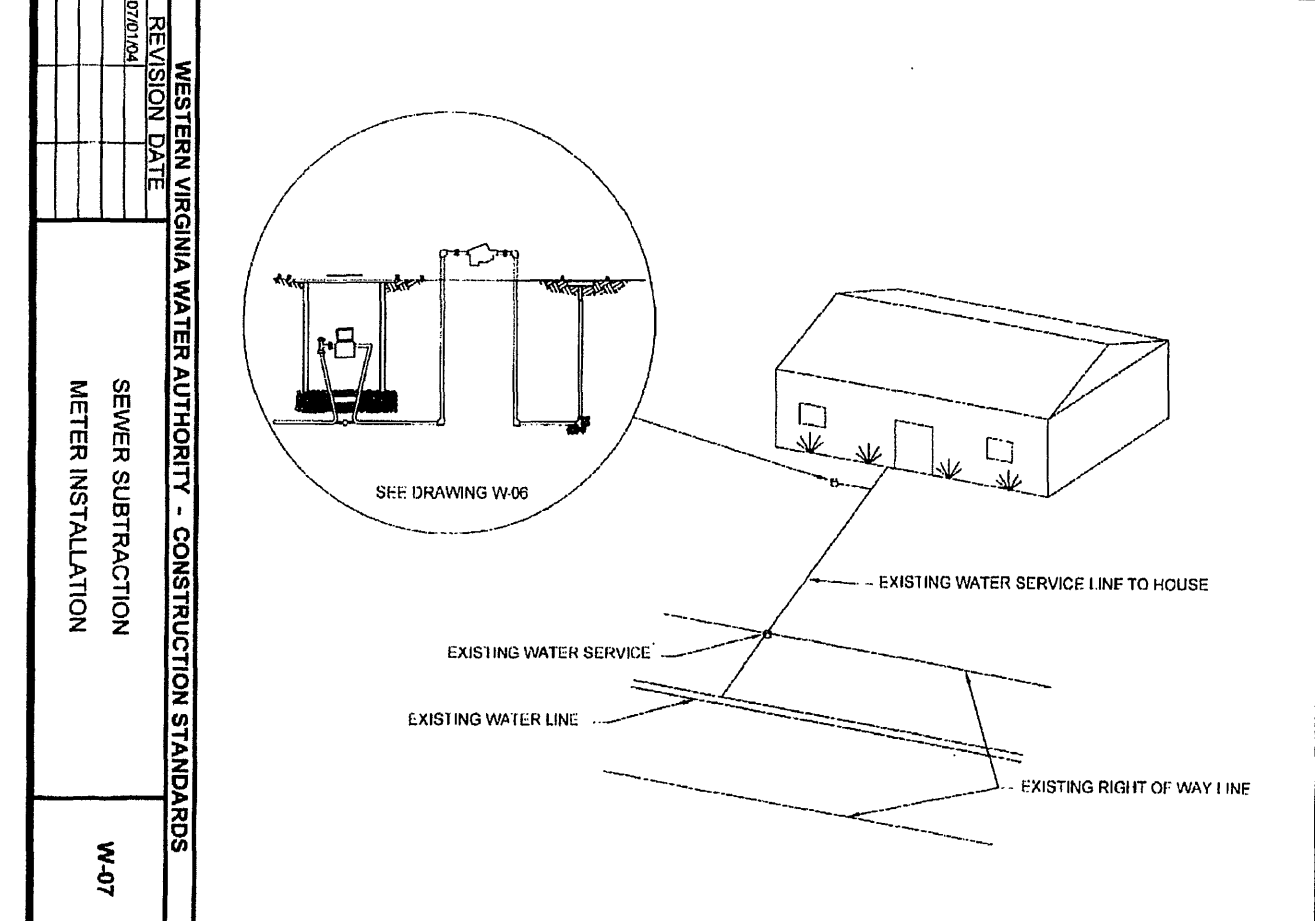
PIPE BEDDING
DETAILS
(N.T.S.)
C603



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS
REVISION DATE
07/01/04
09/01/06
SPRINKLER
SERVICE
W-06
C603

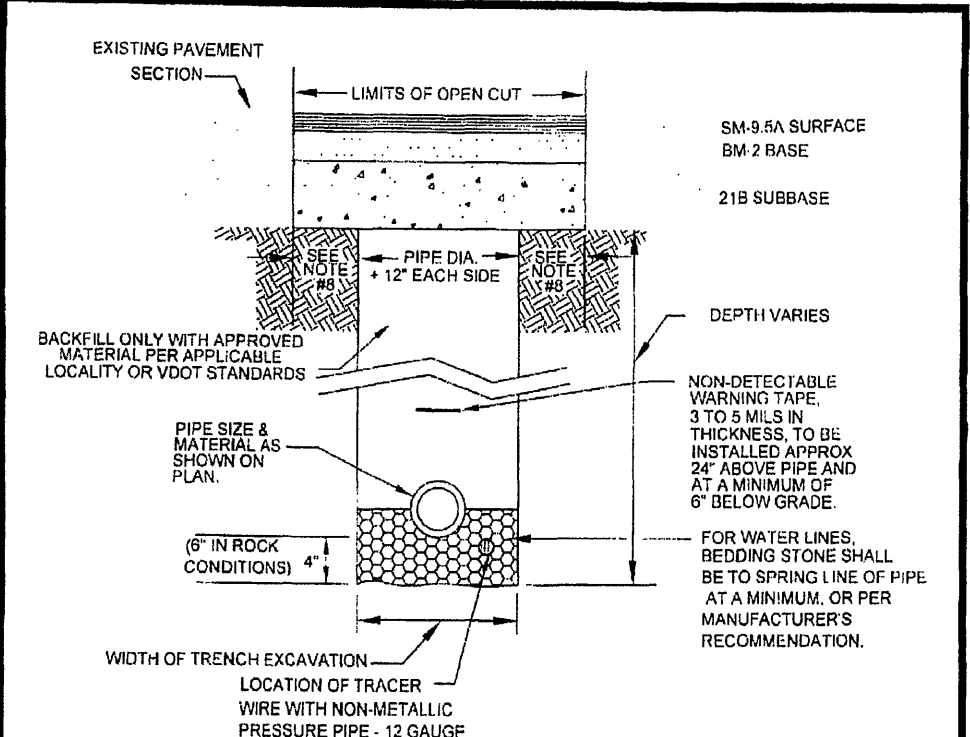


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS
REVISION DATE
07/01/04
09/01/06
BEDDING AND BACKFILL
OUTSIDE OF PAVED AREAS
W-24
C603

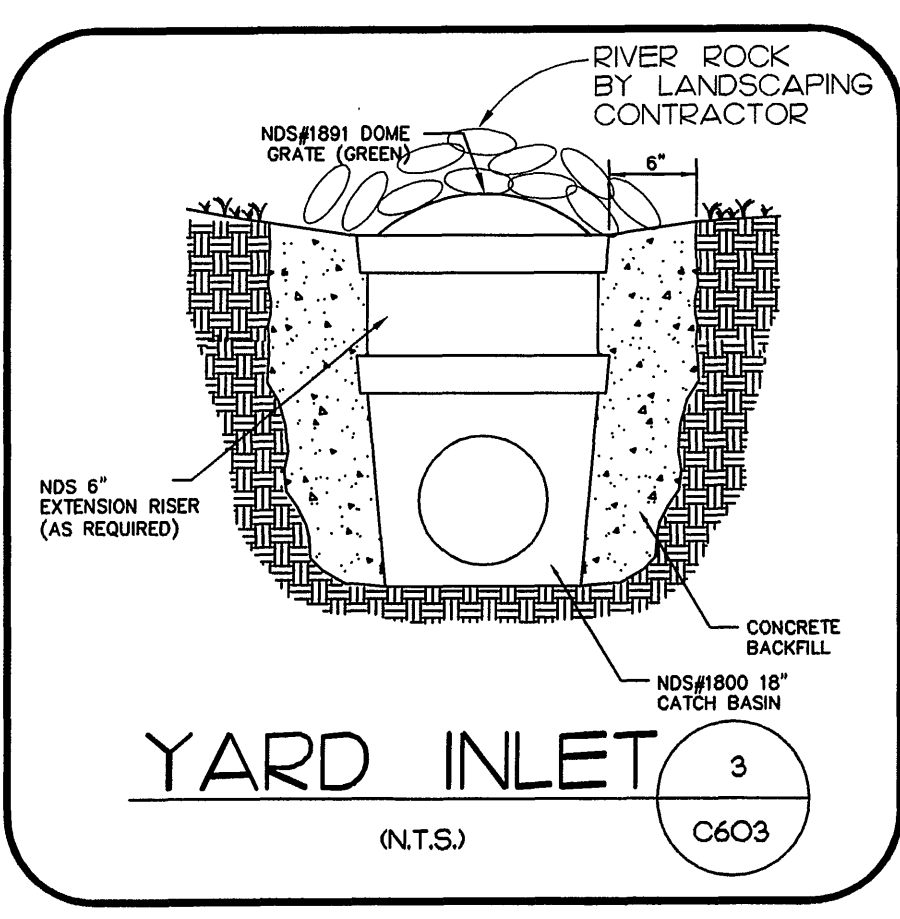


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS
REVISION DATE
07/01/04
09/01/06
SEWER SUBSTATION
METER INSTALLATION
W-07
C603

MISCELLANEOUS
WWA DETAILS
NOT TO SCALE
C603

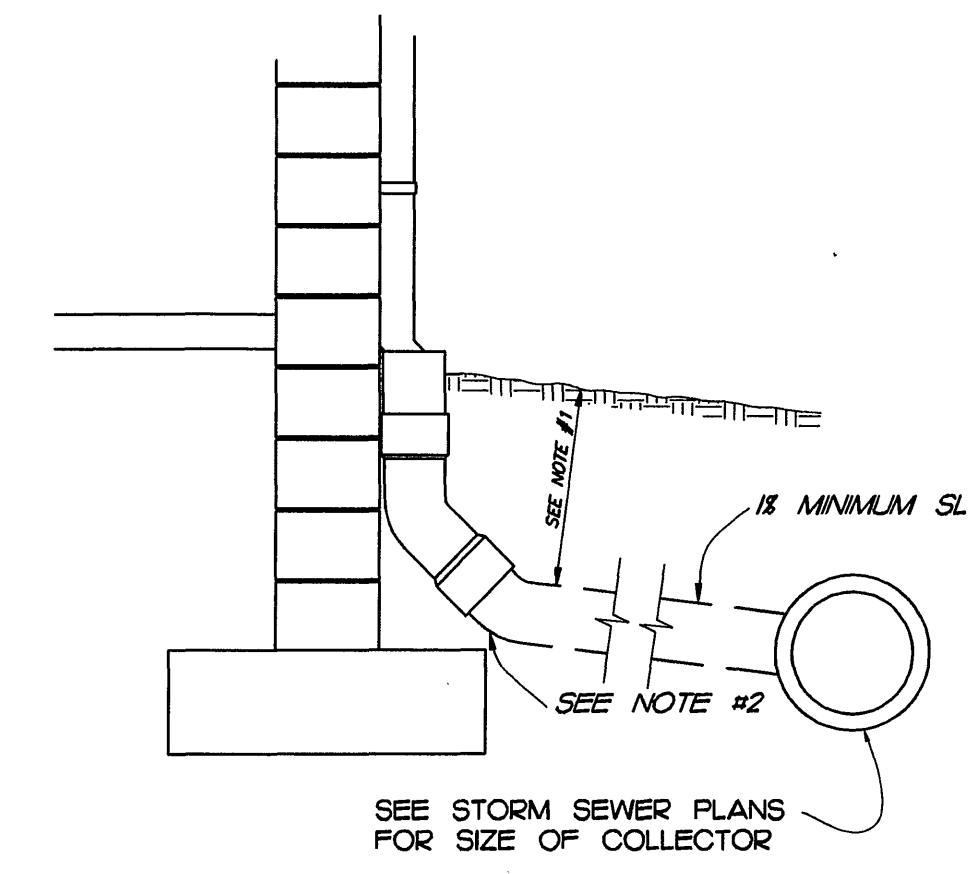


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS
REVISION DATE
07/01/04
09/01/06
BEDDING AND BACKFILL
UNDER PAVEMENT AND RIGHT-OF-WAY
W-25
C603

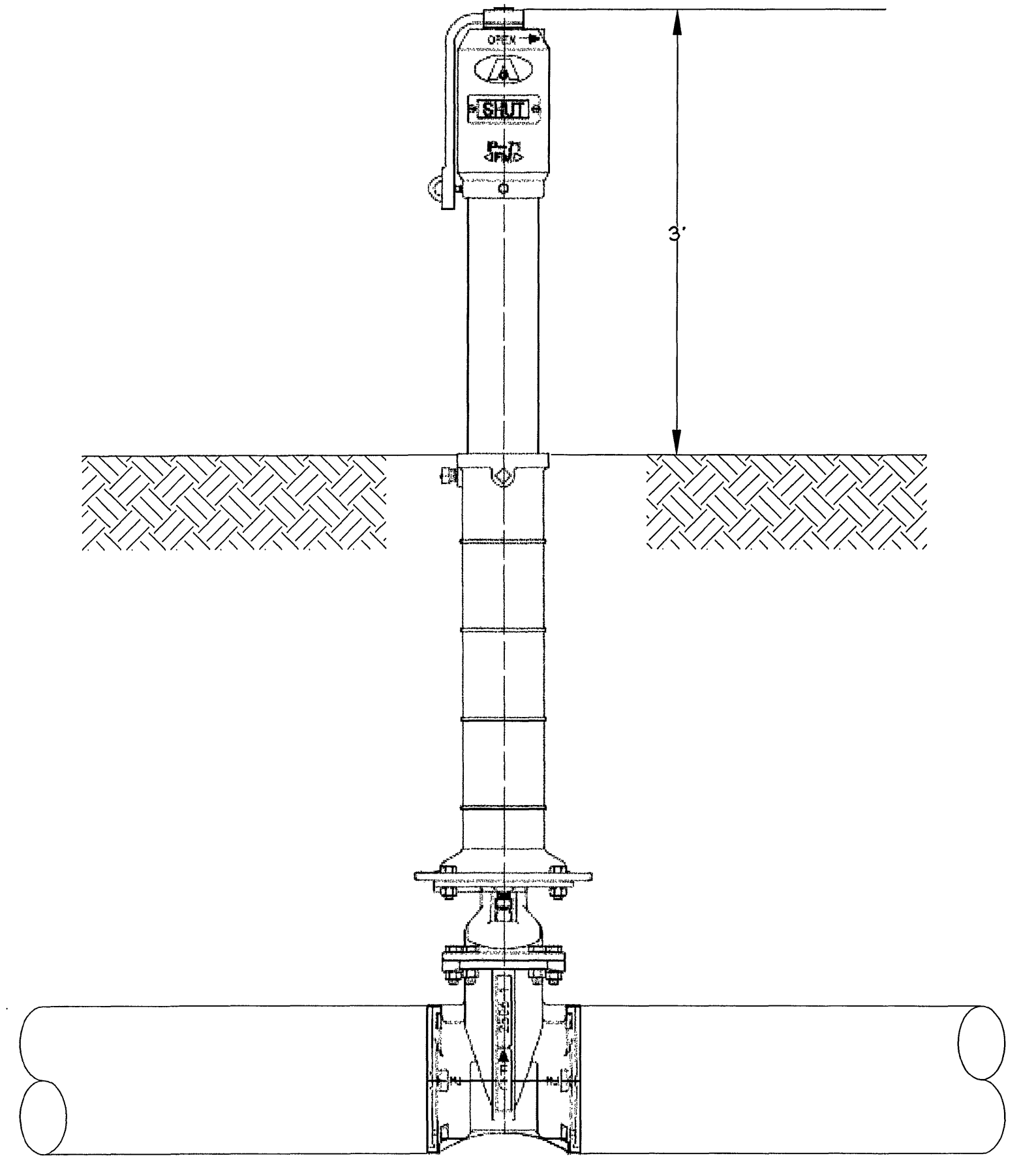


YARD INLET
(N.T.S.)
C603

- NOTES:
1. REGARDLESS OF DEPTH OF COVER, PIPE MUST BE SCHEDULE 40 PVC. REFER TO SPECIFICATIONS FOR ALLOWABLE PIPE TYPES.
 2. A WATERTIGHT CONNECTION SHALL BE MAINTAINED WITH ANY TRANSITION FROM SCHEDULE 40 PVC PIPE TO ANY OTHER PIPE TYPE.
 3. THE DOWNSPOUT COLLECTOR DRAIN SHALL BE INSTALLED BEFORE THE DOWNSPOUTS ARE INSTALLED.



DOWNSPOUT COLLECTOR
NOT TO SCALE
C603



POST INDICATOR
VALVE
NOT TO SCALE
C603

APPROVED
APR 16 2010

UTILITY DETAILS
ROANOKE, VIRGINIA

REVISIONS	BY
CITY COMMENTS 01-25-2010	JN
CITY COMMENTS 03-26-2010	JN

BIDDERS SHALL NOT CONTACT THE ENGINEER
FREELAND and KAUFFMAN, INC.
Engineers • Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8915



CHEDDAR'S CASUAL CAFE
CHEDDAR'S DEVELOPMENT
2250 JOHN CARPENTER FREEWAY
SUITE 100
IRVING, TEXAS 75063

DRAWN
JUN
CHECKED
JDC
DATE
11/25/09
SCALE

DRAWING
C603