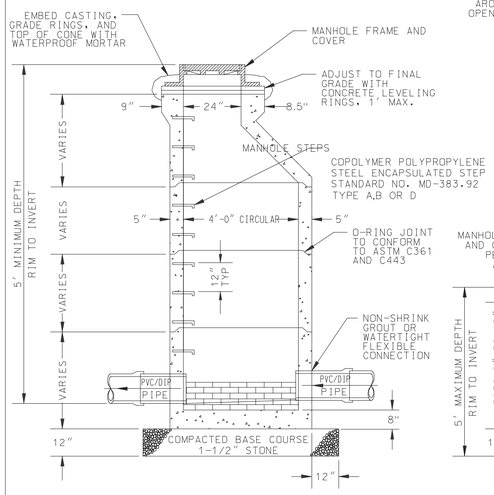
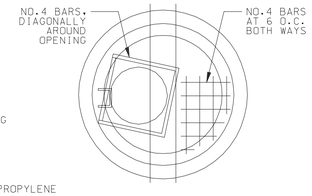
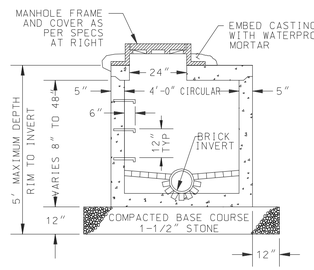


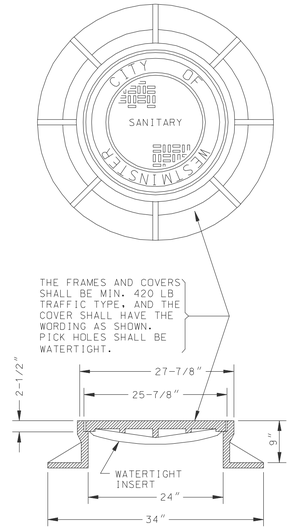
STANDARD MANHOLE TYPE 1



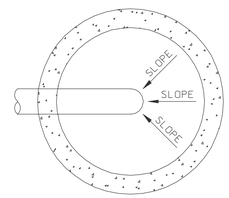
TOP VIEW



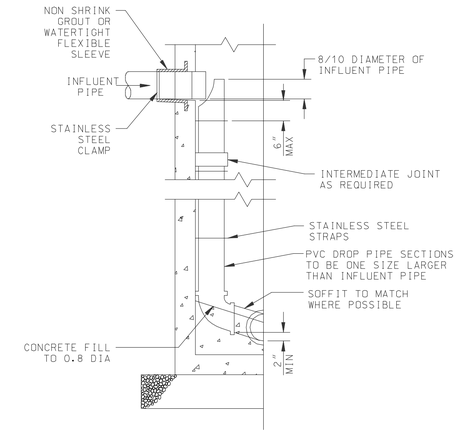
SHALLOW MANHOLE TYPE 2



MANHOLE FRAME & COVER



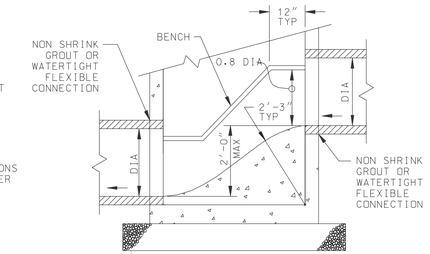
INVERT AT TERMINAL MANHOLE



MANHOLE DIAMETERS FOR MULTIPLE DROP CONNECTIONS

INFLUENT PIPE DIA.	NO. OF CONNECTIONS 1	2	3
6"-8"	4'-0"	5'-0"	5'-0"
10"-15"	5'-0"	6'-0"	6'-0"
18"-24"	5'-0"	6'-0"	7'-0"
27"-30"	5'-0"	7'-0"	10'-0"

INSIDE DROP CONNECTION

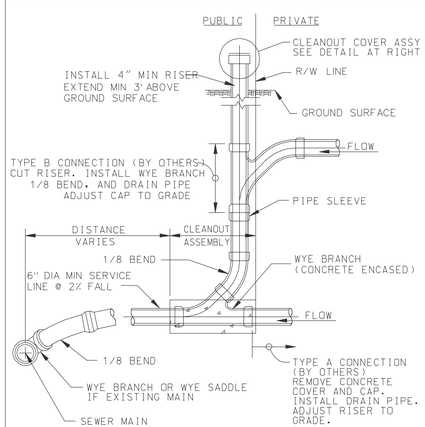


MANHOLE CHUTE

MANHOLE NOTES:

1. PRECAST CONCRETE MANHOLE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. DESIGNATION C 478 LATEST REQUIREMENTS.
2. ALL INVERTS OF MANHOLES TO BE BRICKED TO GRADE. SMOOTH AND EVEN FINISH.
3. ALL OPENINGS FOR PIPES IN PRECAST MANHOLES WITHOUT FLEXIBLE CONNECTIONS SHALL BE CAST, WITH KEY, FOR GROUTING OF PIPES.

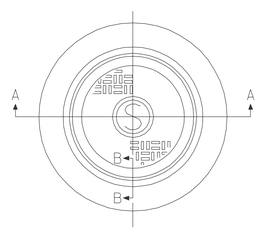
PRECAST CONCRETE MANHOLES



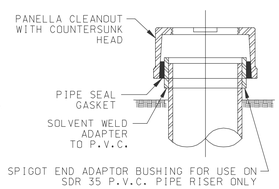
NOTES:

1. MATERIAL TO BE SDR 35 P.V.C. OR D.I.P. ALL JOINTS TO BE PUSH ON RUBBER GASKET JOINTS.
2. CLEANOUT STUB TO BE LEFT 3' ABOVE SURFACE FOR UNIMPROVED LOTS AND PROVIDED WITH A PANNELLA CLEANOUT CAP.
3. FOR CLEANOUTS SUBJECT TO AIR TESTS, CONTRACTOR TO PLACE WEIGHT ON RISER OR RESTRAIN RISER TO Y-BRANCH.
4. THE INSTALLATION OF THE STANDARD CLEANOUTS SHALL CONFORM TO BOTH THE CITY OF WESTMINSTER AND THE STATE OF MARYLAND SPECIFICATIONS.

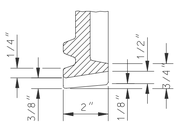
STANDARD CONNECTION



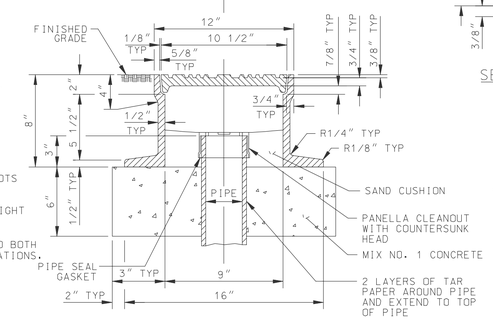
PLAN



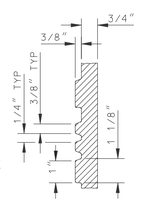
NON-TRAFFIC BEARING



SECTION B-B



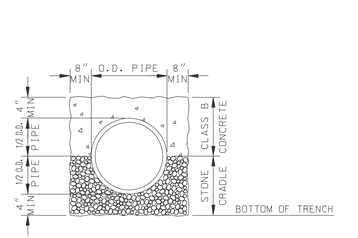
SECTION A-A



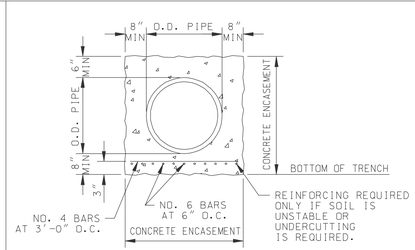
DETAIL OF CORRUGATION

TRAFFIC BEARING CLEANOUT COVER ASSEMBLY

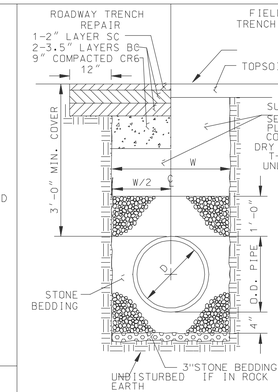
SEWER HOUSE CONNECTION (SHC)



CONCRETE ARCH PROTECTION

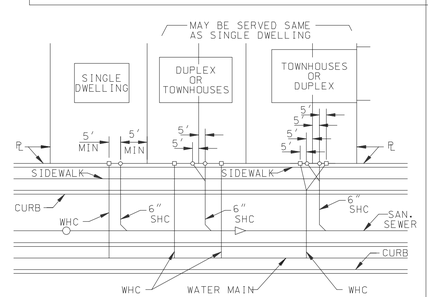


CONCRETE ENCASEMENT

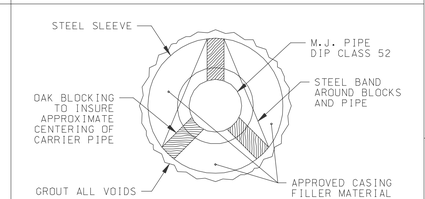


D=PIPE SIZE	W=MAXIMUM TRENCH WIDTH
6"	24"
8"	24"
10"	30"
12"	30"
15"	36"
18"	42"
21"	42"
24"	48"
27"	54"
30"	60"
33"	66"
36"	66"
42"	72"
48"	84"

TRENCH DETAIL



TYPICAL METHODS FOR SERVICE



CASING DIAMETER	MAX. LENGTH	INSTALLATION METHOD
UP TO 36"	175'	BORING
30" TO 60"	200'	JACKING
48" AND UP	NO MAX.	TUNNELING

CASING SHOULD NORMALLY BE 6" TO 8" LARGER THAN THE MAX. O.D. OF THE CARRIER PIPE BELLS.

SLEEVE & CARRIER PIPE INSTALLATION

GENERAL NOTES:

1 ALL CONCRETE SHALL BE SHA MIX NO. 1 UNLESS OTHERWISE NOTED.
2 THE MINIMUM ACCEPTABLE SIZE FOR SEWER SERVICE PIPE SHALL BE 6" DIAMETER, CONSTRUCTED ON A 2% RISE FROM THE MAIN. LARGER SIZES SHALL BE INSTALLED WHERE SPECIFICALLY CALLED OUT IN THE PLANS.
3 SEWER MAINS AND APPURTENANCES ARE SUBJECT TO INSPECTION AND TESTING IN ACCORDANCE WITH THE STANDARD PROCEDURES OF THE CITY OF WESTMINSTER AND THEIR INSPECTORS IN THE FIELD.
4 MINIMUM VERTICAL CLEARANCE AT CROSSINGS BETWEEN SEWER LINES WITH OTHER UTILITIES SHALL BE 12". WATER SHALL CROSS ABOVE SANITARY SEWER. MINIMUM LATERAL CLEARANCE FROM UTILITY POLES, INLETS, CURB AND GUTTER, MANHOLES, AND OTHER MISCELLANEOUS STRUCTURES SHALL BE 36". ALL CLEARANCES SHALL BE MEASURED FROM OUTSIDE TO OUTSIDE EDGES.

DATE	REVISION	BY

CITY PROJECT NO.
ROADS
SEWER
WATER

CITY OF WESTMINSTER

CITY OF WESTMINSTER

STANDARD SEWER CONSTRUCTION DETAILS

CARROLL COUNTY MARYLAND

SHEET: OF:
DATE:
SCALE HOR NONE VERT

CITY OF WESTMINSTER FILE NO.