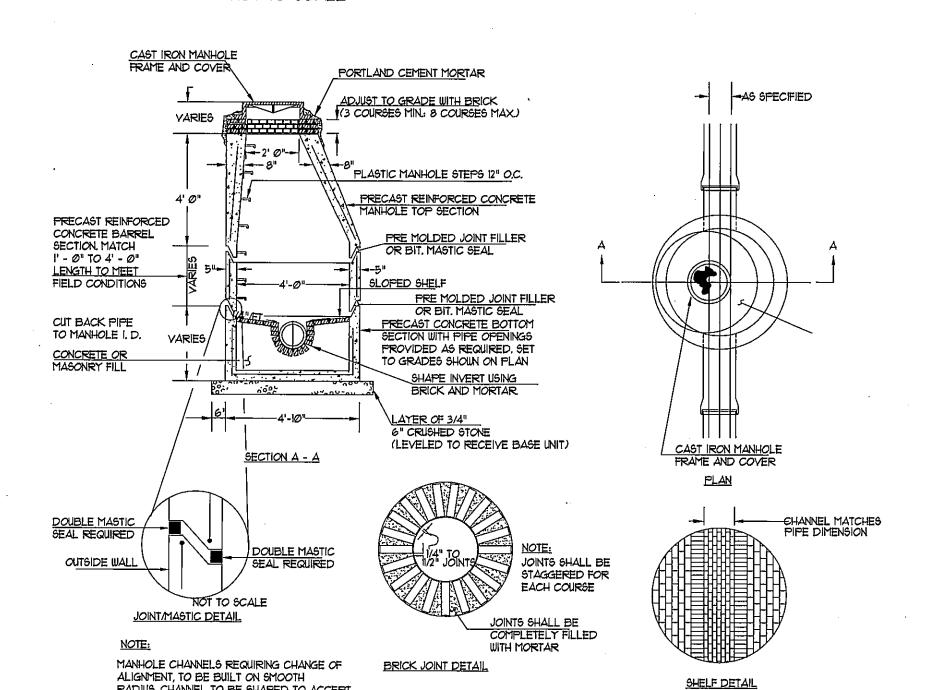
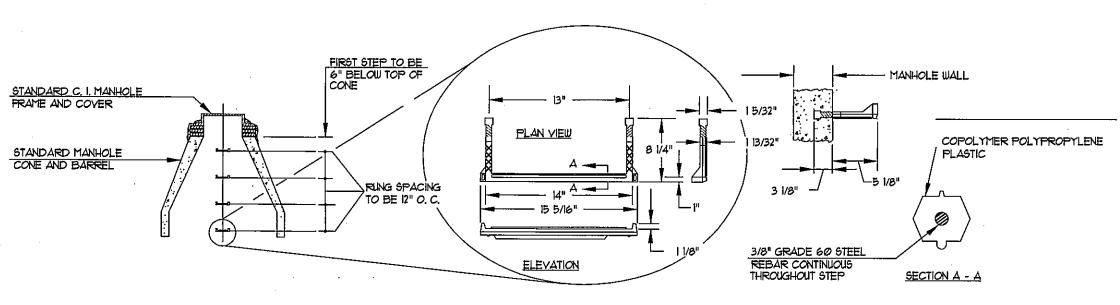


## TYPICAL PAVEMENT GRADING ON SLOPES FOR CATCH BASIN AND INLET NOT TO SCALE



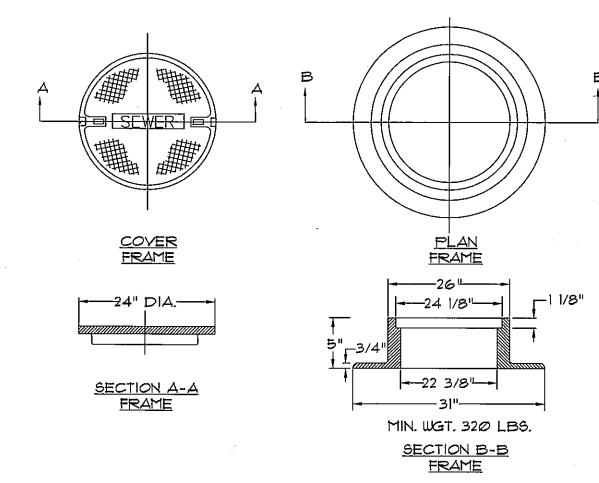
### PRECAST CONCRETE MANHOLE TYPE "A" NOT TO SCALE



RADIUS. CHANNEL TO BE SHAPED TO ACCEPT

ADDITIONAL INLET PIPES.

## PLASTIC MANHOLE STEPS NOT TO SCALE



ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" x 5". ALL SANITARY MANHOLE COVERS AND SHALL HAVE "SEWER" CAST INTO THE COVER ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER

CAST IRON MANHOLE COVER AND FRAME NOT TO SCALE

#### GENERAL NOTES FOR MANHOLES AND CATCH BASINS ALL CONCRETE SHALL BE CLASS "A" AND HAVE A

MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000-16s. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.

PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478-67.

SEWER BRICK SHALL CONFORM TO ASTM SPEC.

DESIGNATE ON C-32-63, GRADE MA AND SA.

4. ALL MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. 9. IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH %" THICK, AFTER THE MORTAR HAS SET, THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.

5. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.

MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.

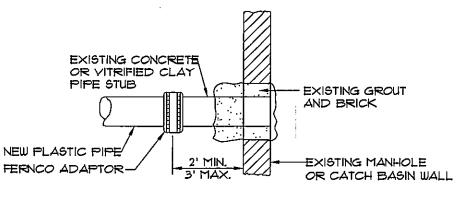
ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION AND OFFSET, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.

EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR. AND SHALL REMAIN THE PROPERTY OF THE CITY OF

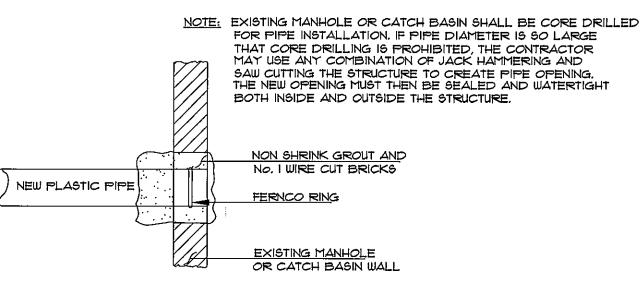
ALL WORK WITHIN THE STREET RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.

10. ALL CATCH BASIN OUTLET PIPES SHALL BE INSTALLED WITH AN OIL AND FLOATABLES SEPARATOR. THE SEPARATOR SHALL BE THE "SNOUT" OR AN APPROVED EQUAL AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

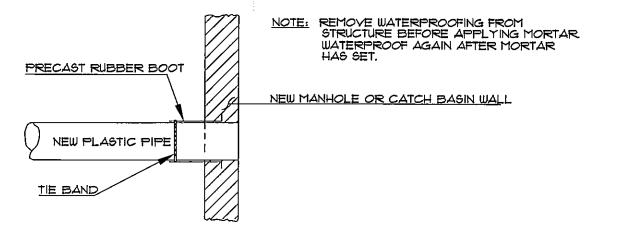
MANHOLE FRAME, GRATE AND COVERS SHALL COMPLY WITH CITY OF PORTLAND TECHNICAL STANDARDS AND REQUIREMENTS.



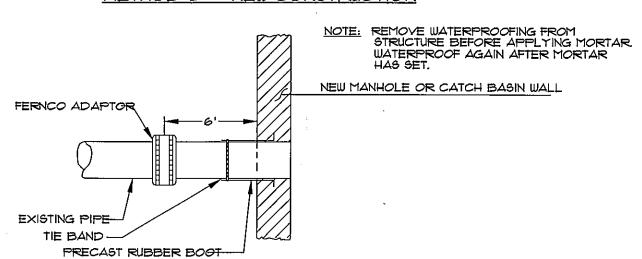
### METHOD 4 - NEW PIPE TO EXISTING STRUCTURE STUB



#### METHOD 3 - NEW PIPE INTO EXISTING STRUCTURE

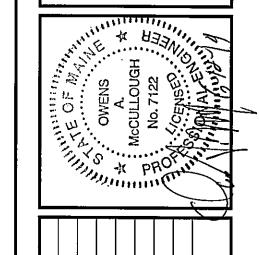


# METHOD 2 - NEW CONSTRUCTION



METHOD I - EXISTING PIPE INTO NEW STRUCTURE

PLASTIC PIPE CONNECTION DETAIL NOT TO SCALE



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AITHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT IT LABILITY TO SEBAGO TECHNICS. INC.	MODIFIED WITHOU	SHALL NOT BE	THIS PLAN S
STATUS:	DATE:	BY:	REV:
SUBMIT SITE PLAN APPLICATION TO CITY	07-29-13	WTC	A
CITY SUBMITTAL 3	09-03-13	WTC	മ
CITY SUBMITTAL 4	09-17-13	WTC	ပ
CITY SUBMITTAL 5	10-03-13	WTC	Ω
CITY SUBMITTAL 6	10-15-13	WTC	Ш
CITY SUBMITTAL 7	01-07-13	WTC	뜨
FOUNDATION PERMIT SET	06-12-14	WTC	9

SCALE 07-26-13 AS SHOWN

SHEET 10 OF 12

