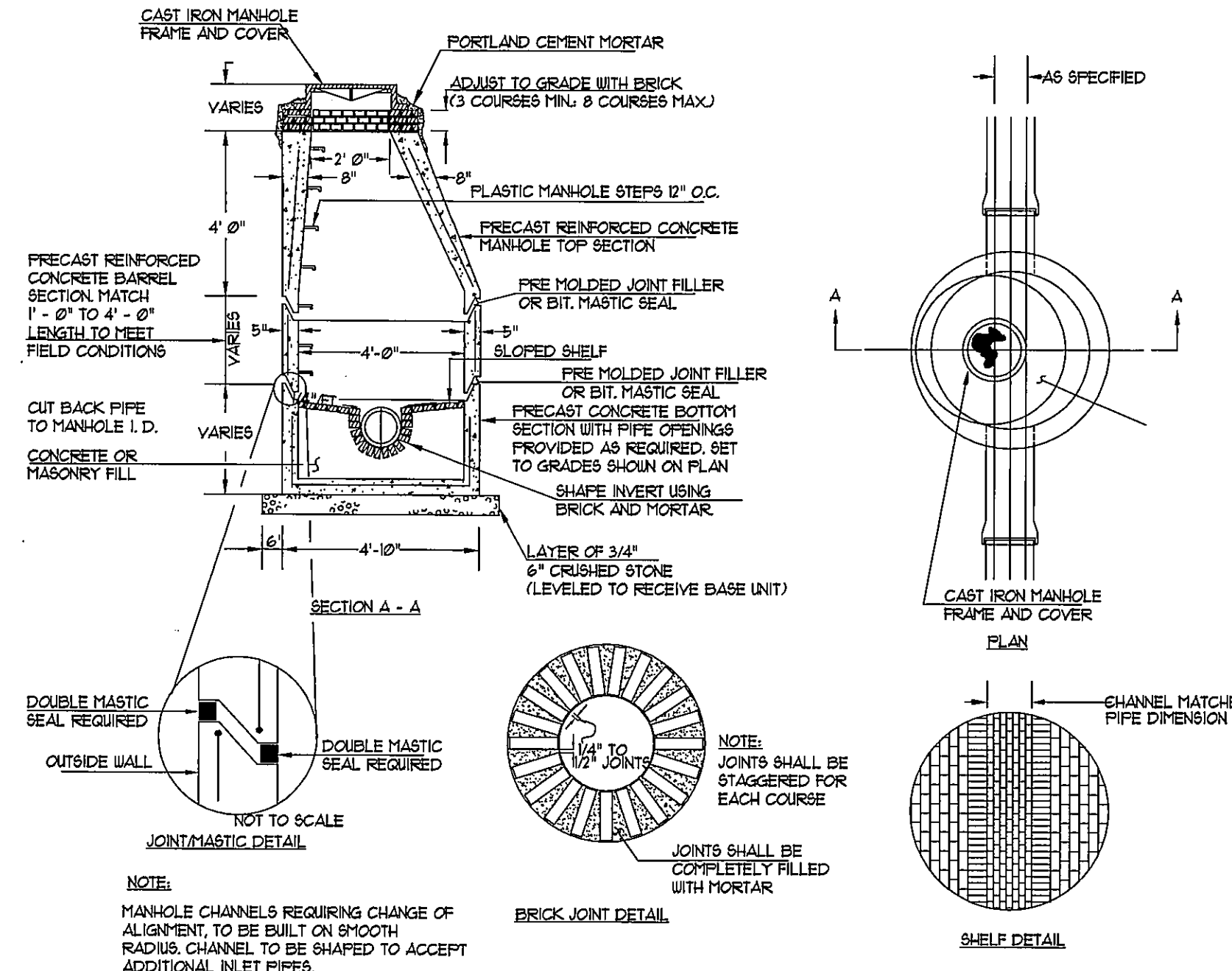


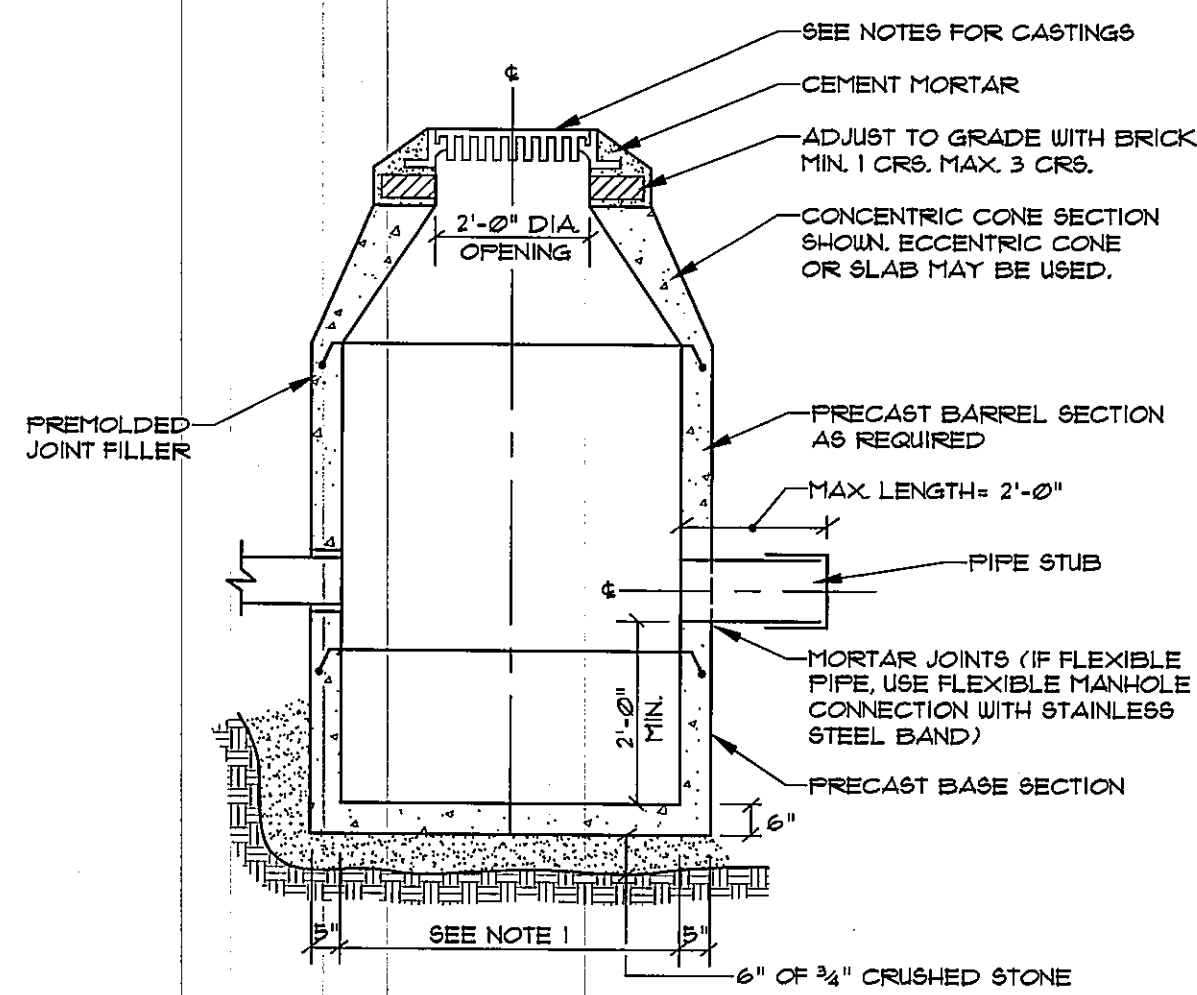
TYPICAL PAVEMENT GRADING ON SLOPES FOR CATCH BASIN AND INLET
NOT TO SCALE

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

- ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000-PSI, PER 90. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-418-67.
- SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
- ALL MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTED OF BRICK MASONRY SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/4" THICK. AFTER THE MORTAR HAS SET, THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.
- CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR FITCH 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 PORTLAND.
- ALL WORK WITHIN THE STREET RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.
- 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.

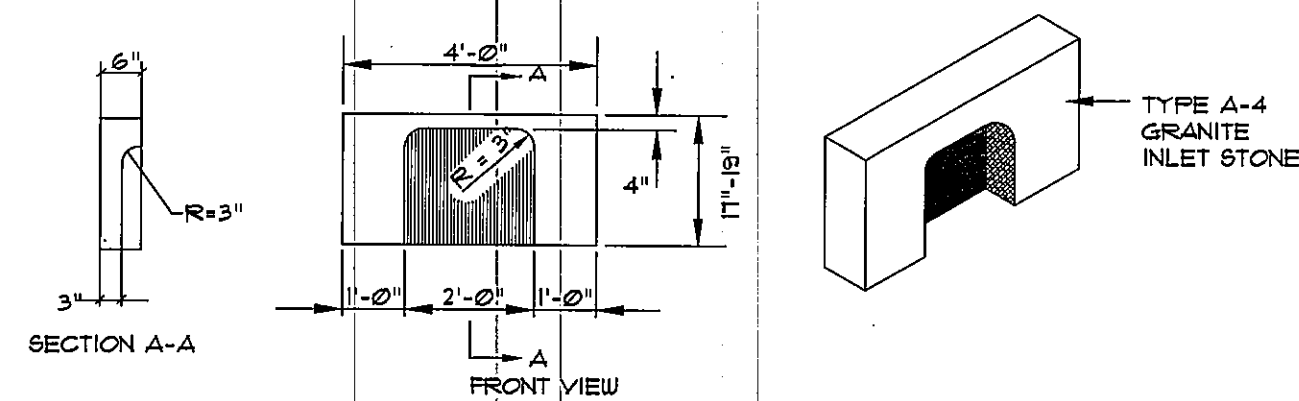


PRECAST CONCRETE MANHOLE TYPE "A"
NOT TO SCALE

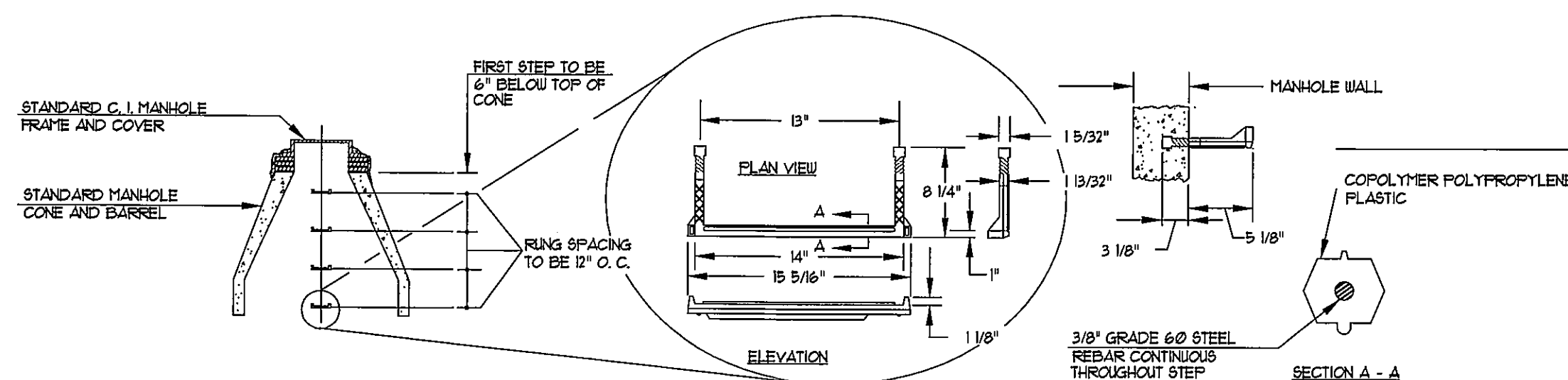


- NOTES:**
- 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
 - DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
 - PIPE SIZES AND INVERTS AS NOTED ON PLANS.
 - CATCH BASIN FRAME AND GRATE TO BE EAST JORDAN FOUNDRY 5250, OR APPROVED EQUAL.
 - DRAINAGE MANHOLE FRAME AND COVER TO BE EAST JORDAN FOUNDRY 102, TYPE A OR APPROVED EQUAL. COVER SHALL BE MARKED "DRAIN".

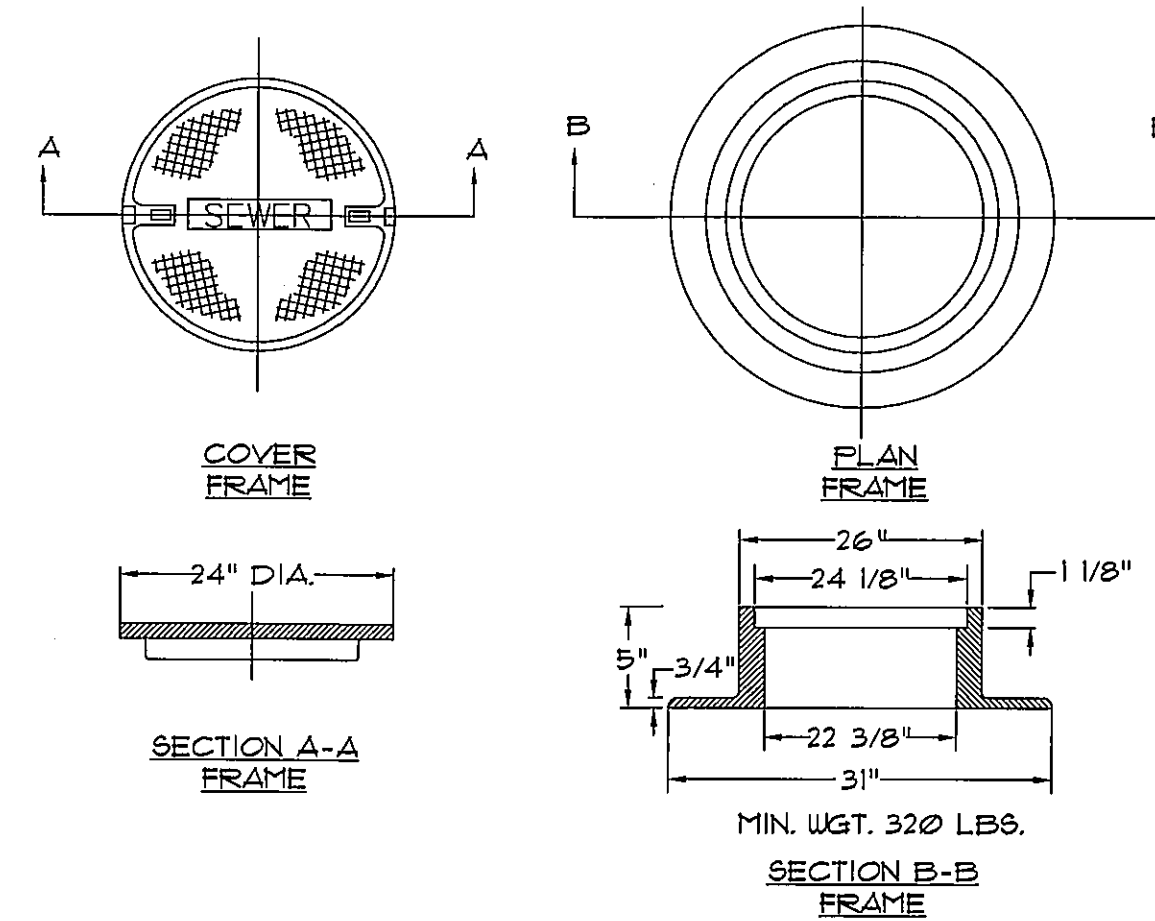
TYPICAL DRAINAGE MANHOLE/CATCH BASIN
NOT TO SCALE



TYPE A-4 GRANITE CATCH BASIN INLET STONE DETAIL
(FOR EXISTING BASIN AT HANCOCK STREET)
NOT TO SCALE

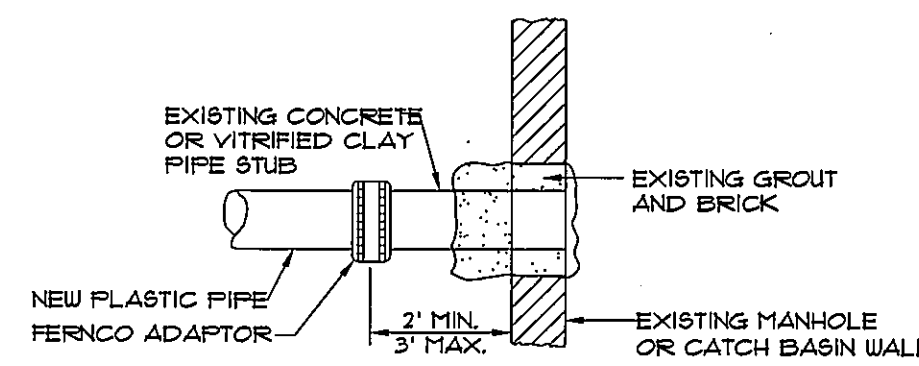


PLASTIC MANHOLE STEPS
NOT TO SCALE



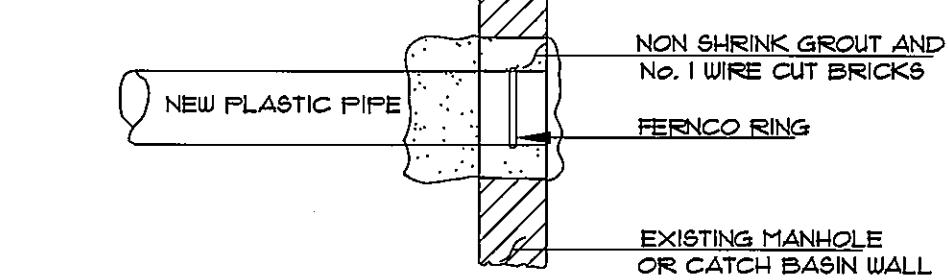
- NOTE:**
- ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" x 24". ALL SANITARY MANHOLE COVERS AND SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.

CAST IRON MANHOLE COVER AND FRAME
NOT TO SCALE



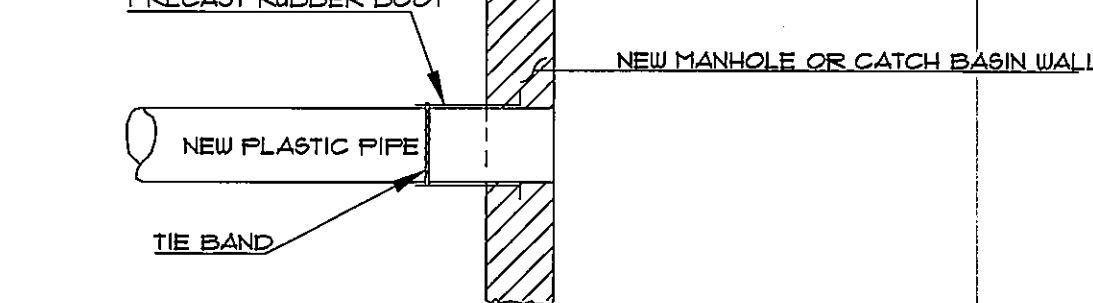
METHOD 4 - NEW PIPE TO EXISTING STRUCTURE STUB

NOTE: EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION. IF PIPE DIAMETER IS SO LARGE THAT CORE DRILLING IS PROHIBITED, THE CONTRACTOR MAY USE ANY COMBINATION OF JACK HAMMERING AND SAW CUTTING THE STRUCTURE TO CREATE PIPE OPENING. THE NEW OPENING MUST THEN BE SEALED AND WATERTIGHT BOTH INSIDE AND OUTSIDE THE STRUCTURE.



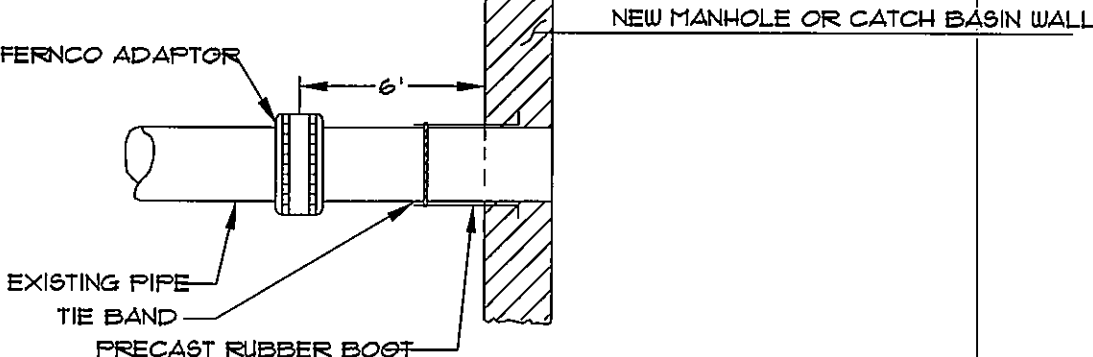
METHOD 3 - NEW PIPE INTO EXISTING STRUCTURE

NOTE: REMOVE WATERPROOFING FROM STRUCTURE BEFORE APPLYING MORTAR. WATERPROOF AGAIN AFTER MORTAR HAS SET.



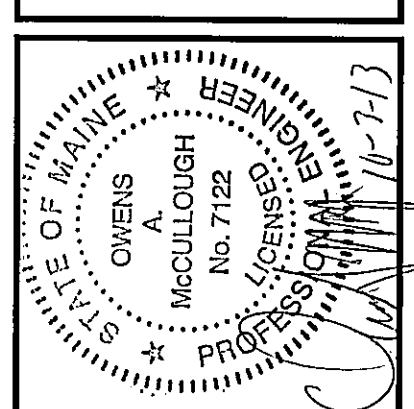
METHOD 2 - NEW CONSTRUCTION

NOTE: REMOVE WATERPROOFING FROM STRUCTURE BEFORE APPLYING MORTAR. WATERPROOF AGAIN AFTER MORTAR HAS SET.



METHOD 1 - EXISTING PIPE INTO NEW STRUCTURE

PLASTIC PIPE CONNECTION DETAIL
NOT TO SCALE



| | |
|----------|----------|
| DATE | SCALE |
| 07-26-13 | AS SHOWN |

SEBAGO TECHNICAL SERVICES
WWW.SEAGOTECHNICALSERVICES.COM
75 John Roberts Rd., Suite 1A
Scarborough, ME 04106
Tel: 207-262-2101

PROJECT NO. 13251
FIELD BOOK DESIGN CHKD
13251 WTC WTC WTC MAL

DETAILS OF:
SEAPORT LOFTS
NEWBURY/HANCOCK STREET
PORTLAND, MAINE
FOR:
113 NEWBURY STREET, LLC
35 FAY STREET, SUITE 107B
BOSTON, MA 02118-4320

DATE 07-26-13
SCALE AS SHOWN

SHEET 12 OF 14