

## NOTES:

TOP VIEW

2'-6"

SECTION VIEW

COVER DETAIL

38Y MANHOLE

NOT TO SCALE

BACKFILL PER CITY OF PORTLAND

PROPOSED LATERAL, BRACED WITH

CONCRETE AS

STABILITY.

NECESSARY FOR

TYPICAL PIPE TRENCH DETAIL

1. CONCRETE CASING AROUND PIPE SHALL CONTINUE LENGTHWISE FOR AT LEAST 4' OF PIPE,

OR LENGTH OF PIPE DAMAGED DURING CONSTRUCTION, WHICHEVER IS GREATER. 2. INSTALL ALL ITEMS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. 3. ENGINEER SHALL BE CONTACTED DURING CONNECTION TO BRICK SEWER. IF SEWER IS FOUND TO BE IN VERY GOOD CONDITION BY ENGINEER, THEN ONLY CONCRETE CASING

AROUND PROPOSED LATERAL AND STUB SHALL BE REQUIRED.

SPRING LINE

CONNECTION TO BRICK SEWER

NOT TO SCALE

6" THICK CONCRETE 4000 -

PSI @28 DAYS

EXISTING BRICK SEWER -

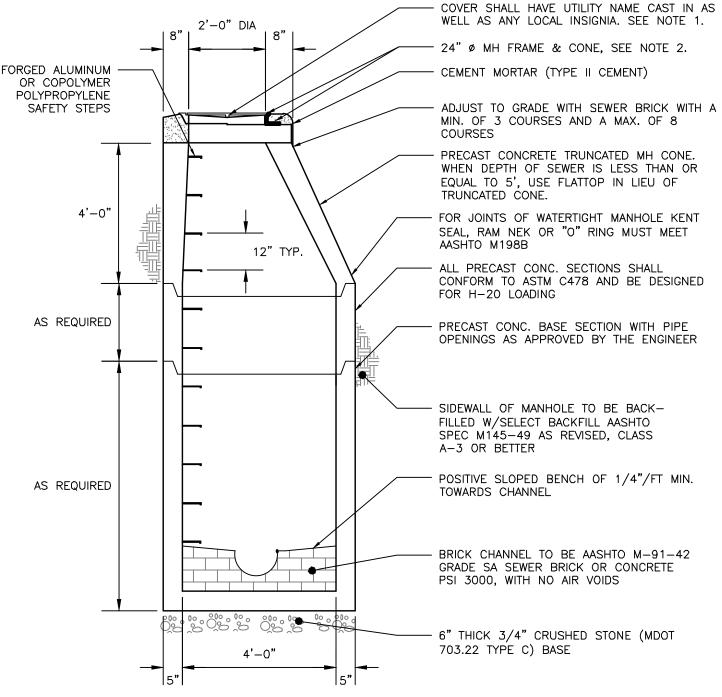
6"X6" W2.9 X W2.9

EXISTING SEWER BEDDING -

WELDED WIRE FABRIC MIN.

2" CONCRETE COVER ALL SIDES

- 1. MANHOLE COVER FOR SEWER MANHOLE SHALL BE ENGRAVED "SEWER", AND SHALL BE EITHER ITEM # 2160A AS MANUFACTURED BY EAST JORDAN CO. OR ITEM # 14960002 AS MANUFACTURED BY NEENAH FOUNDRY. MANHOLE COVER FOR STORM SEWER SHALL BE ENGRAVED "DRAIN", AND SHALL BE EITHER ITEM # 2160A AS MANUFACTURED BY EAST JORDAN CO. OR ITEM # 14960003 AS MANUFACTURED BY NEENAH FOUNDRY.
- 2. MANHOLE FRAME SHALL BE EITHER ITEM # 14960001, AS MANUFACTURED BY NEENAH FOUNDRY, OR ITEM # 1960Z, AS MANUFACTURED BY EAST JORDAN CO.
- 3. WITHIN CITY OF PORTLAND ROW, STORM DRAIN MANHOLE SHALL CONFORM WITH "STANDARD PRECAST SEWER MANHOLE DETAIL", WITH THE EXCEPTION THAT THE COVER SHALL BE MARKED AS "DRAIN". REFER TO CITY OF PORTLAND TECHNICAL MANUAL, SECTION 2 - SANITARY SEWER AND
- 4. SUBMITTAL REQUIRED FOR MANHOLES, MANHOLE FRAMES & MANHOLE COVERS



STANDARD PRECAST SEWER MANHOLE NOT TO SCALE

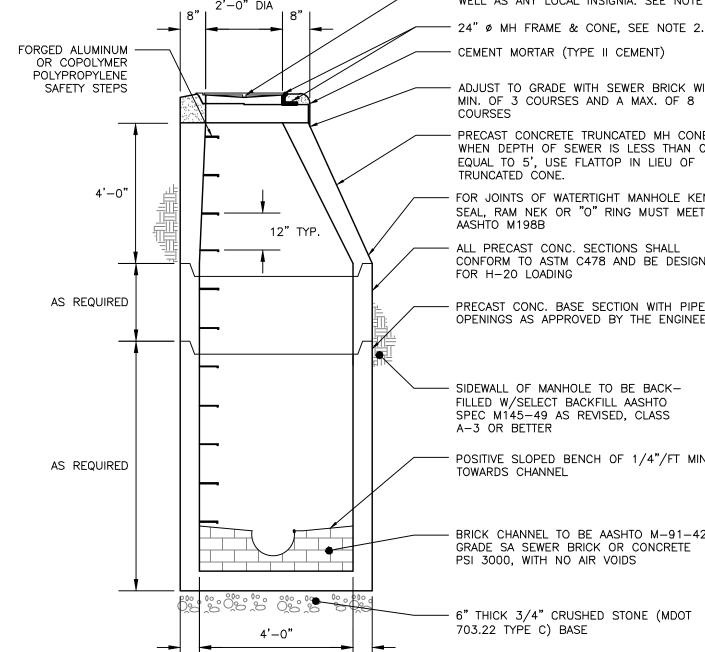
MANHOLE COVERS SHALL BE 24" x 5".

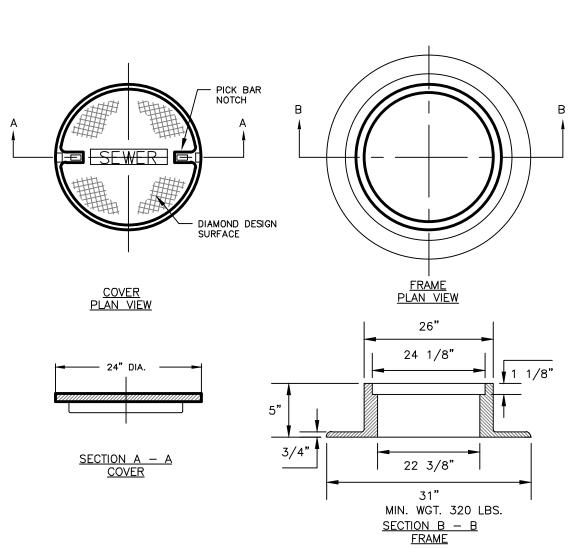
HAVE "SEWER" CAST INTO THE COVER.

SHALL HAVE "DRAIN" CAST INTO THE COVER.

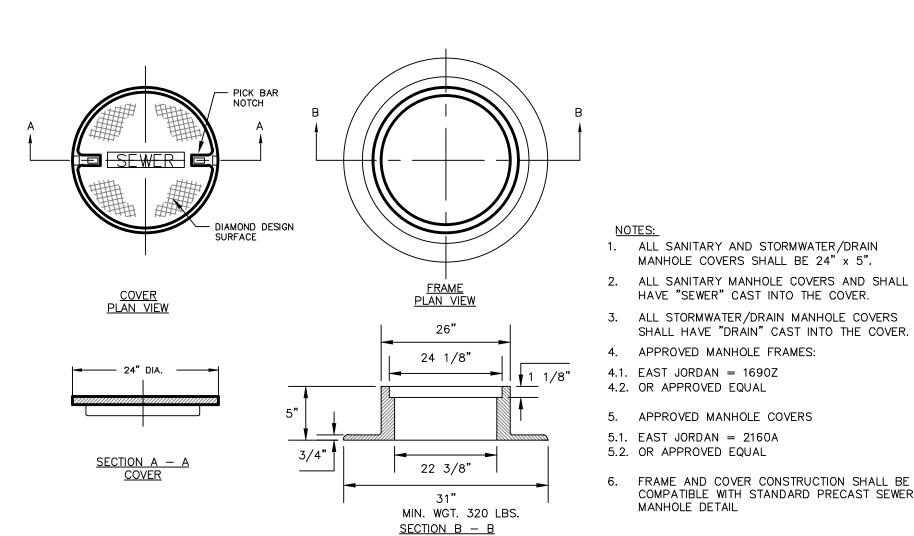
FRAME AND COVER CONSTRUCTION SHALL BE COMPATIBLE WITH STANDARD PRECAST SEWER

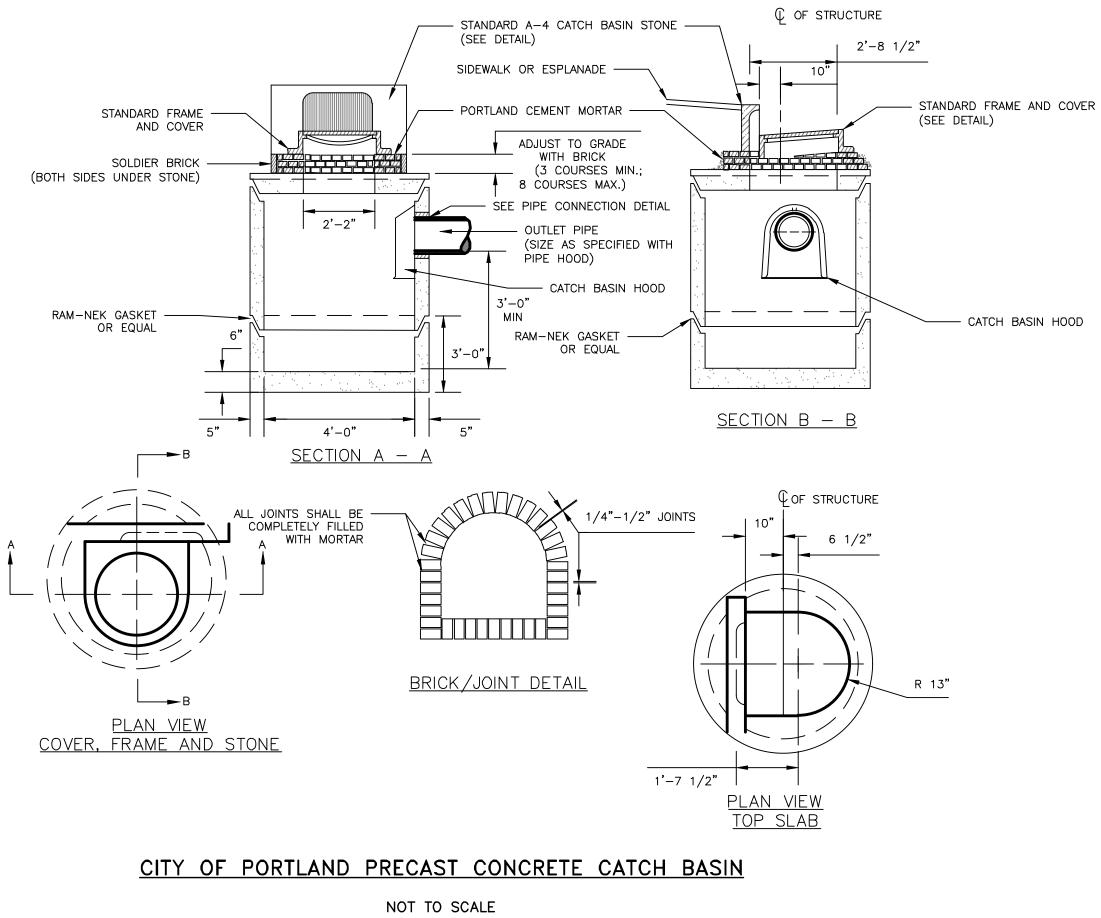
MANHOLE DETAIL





CAST IRON MANHOLE COVER AND FRAME NOT TO SCALE

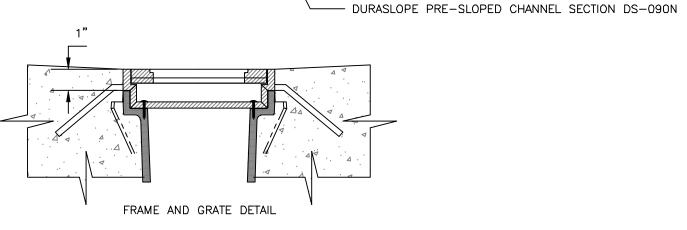




- DURASLOPE CLASS 'D' GRATE DUCTILE IRON DS-232 MIN 22" SAW CUT CONSTRUCTION METHODS (SEE NOTE 4) - SECTION AT DURASLOPE CHANNEL OPTION 1: 2X4 WOOD MEMBER SUSPENSION METHOD: ATTACHED TO EX. SLAB WITH HARDENED NAIL; SUSPEND CHANNEL WITH WIRE FROM REBAR - NEW FELT EXPANSION JOINT OPTION 2: #3 OR #4 REBAR STAKE SUSPENSION METHOD; LENGTH OF STAKE WILL VARY WITH SLOPE OF DRAIN EX. OR NEW -CONCRETE SLAB TRENCH DEPTH VARIES WITH SLOPE #4 REBAR: HORIZONTAL PLACE OF DRAIN TOP & BOTTOM OF CONCRETE; POUR 3" CLR AT BOTTOM EXISTING SOIL

NOTES:

- 1. CHANNELS TO BE INSTALLED WITH A BLANK GRATE; GRATE TO BE PROTECTED FROM CONCRETE POUR (COVER HOLES
- 2. SET DRAIN IN CHANNEL SURROUNDED BY 8" OF CONCRETE OR THICKNESS OF THE CONCRETE SLAB WITH A MIN. OF 3500 PSI 3. AVOID FULL LOAD TRAFFIC FOR 28 DAYS OR UNTIL
- CONCRETE HAS COMPLETELY HARDENED 4. REFER TO MANUFACTURER'S INSTRUCTIONS FOR COMPLETE INSTALLATION DETAILS



DURASLOPE CLASS D TRENCH DRAIN INSTALLATION NOT TO SCALE

ISSUED FOR CONSTRUCTION

COMMENT/RESPONS FINAL SUBMISSION BIDDING COA FOR CONSTRUCTION CITY COMMENTS CITY APPROVED PLA REVISION DETAILS DRAINAGE 1060\_DETAILS 4/20/2015 SCALE: DESIGNED BY: DRAWN BY: CHECKED BY:

ISSUED FOR

PRELIM. APPLICATION

PC PROGRESS S

PC DD SET

DRAWING NO