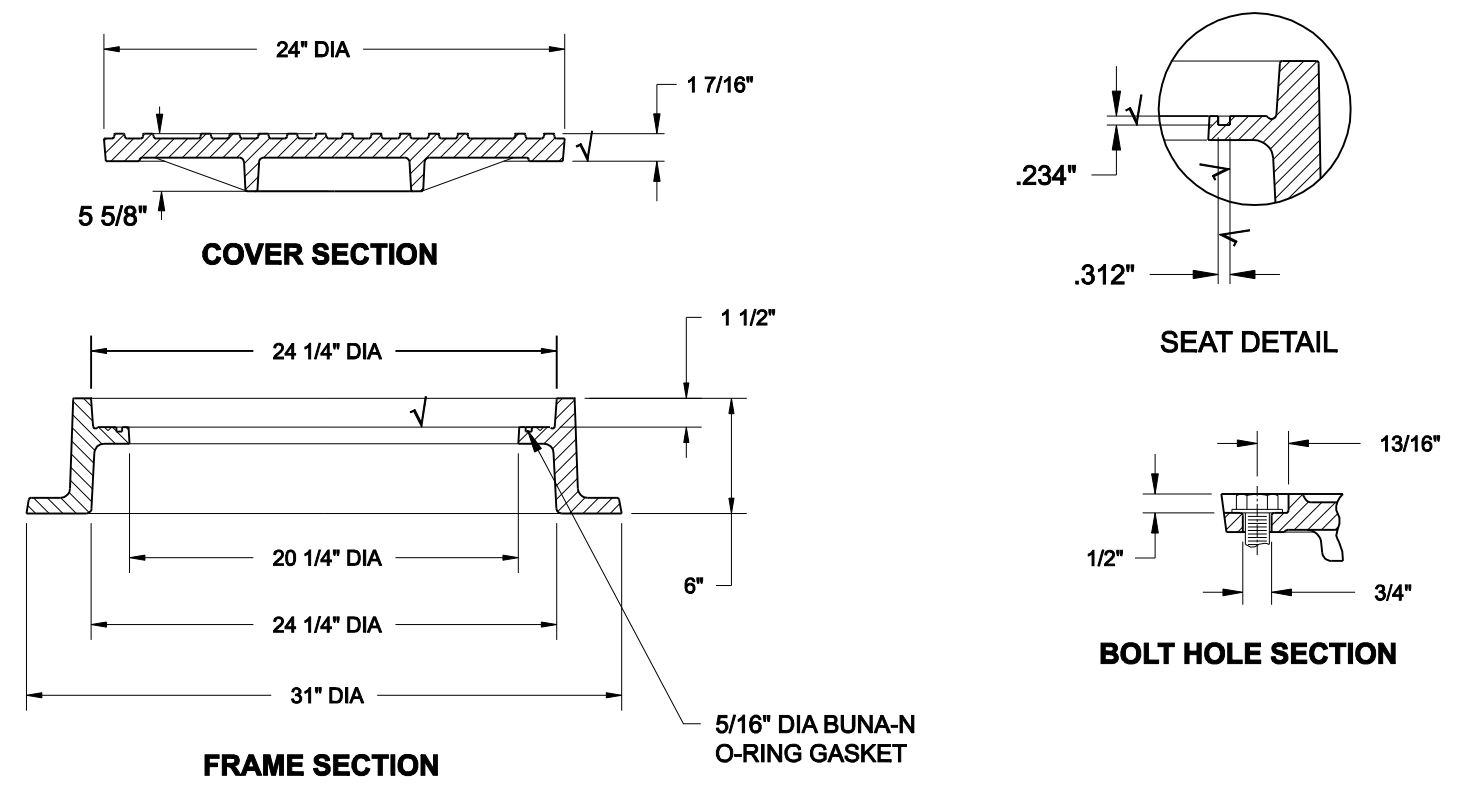
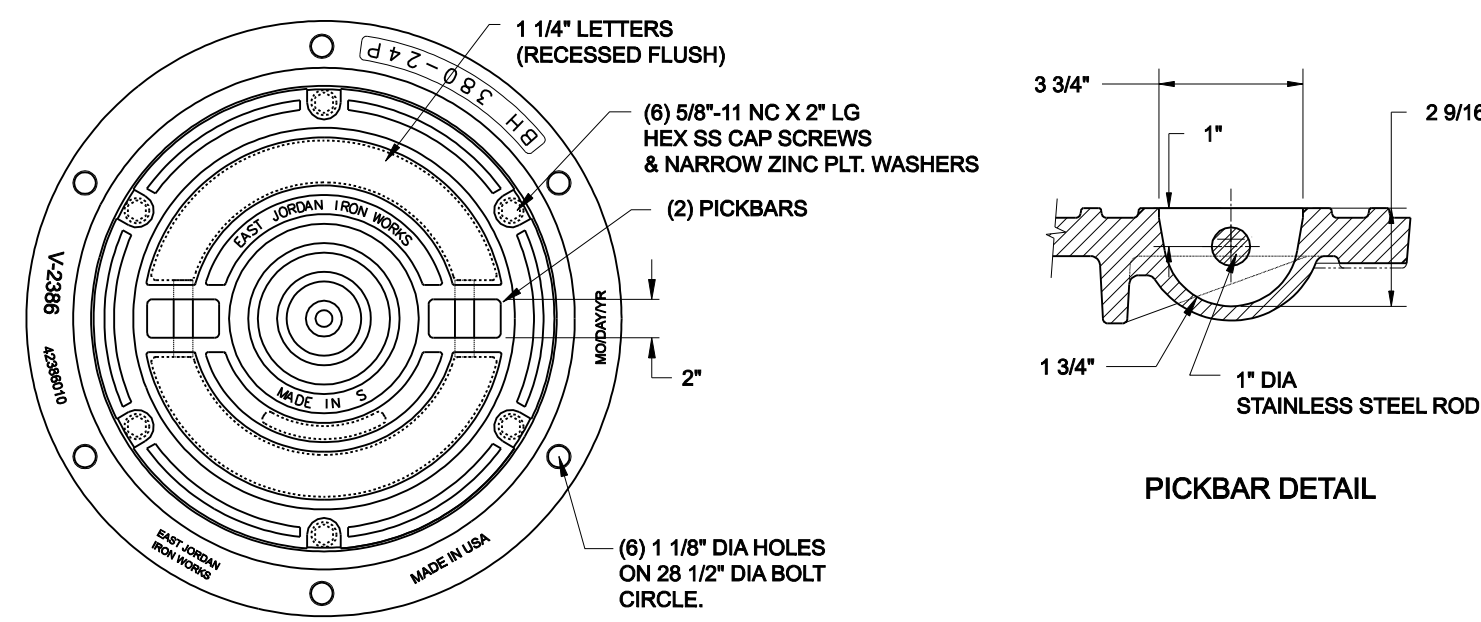


LOAD RATING	COATING	ESTIMATED WEIGHT	MATERIAL SPECIFICATION
HEAVY DUTY	DIPPED	COVER: 190 LBS 86 kg	COVER - GRAY IRON ASTM A48 CL35B

√ DESIGNATES MACHINE SURFACE

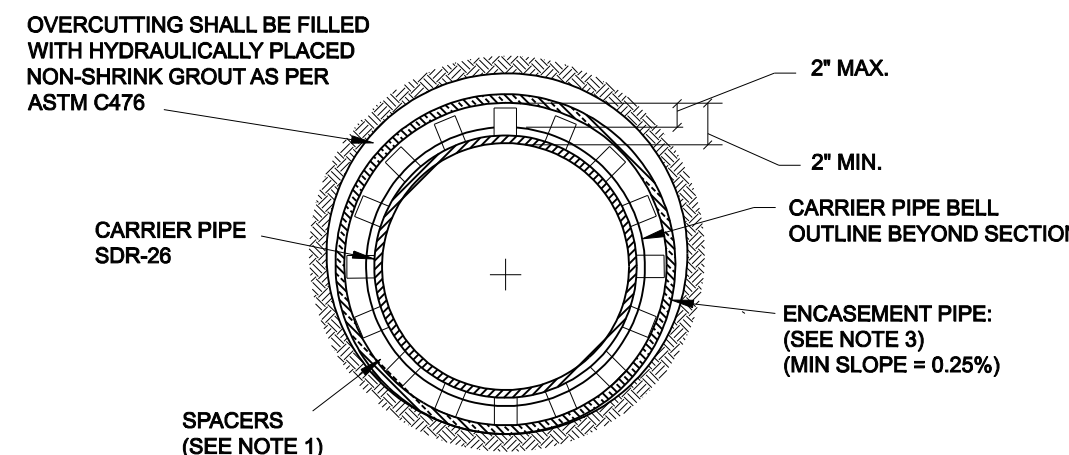
**CAST IRON FRAME AND COVER**



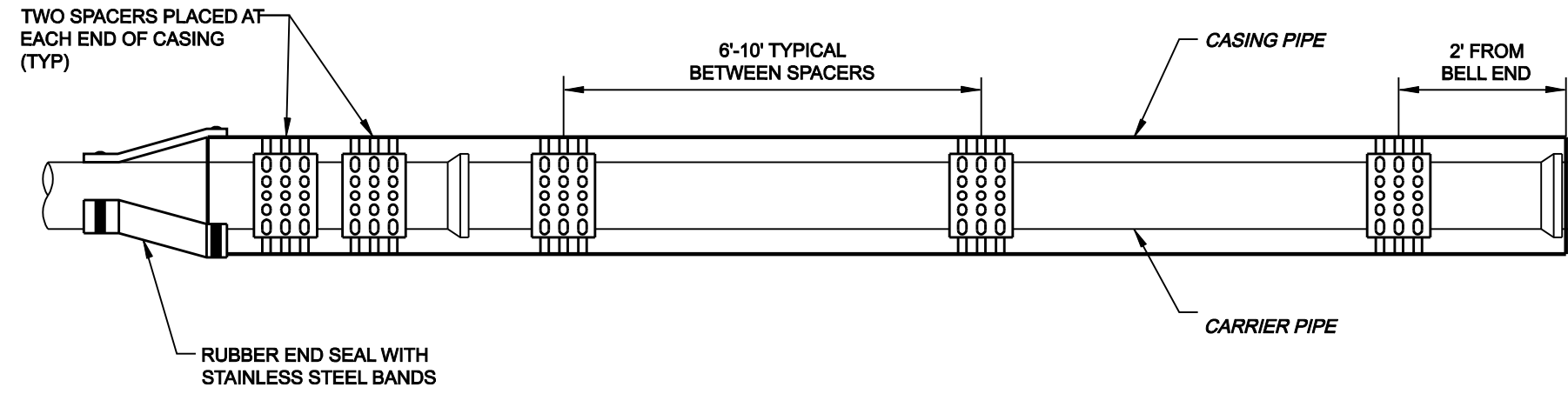
LOAD RATING	COATING	ESTIMATED WEIGHT	MATERIAL SPECIFICATION
HEAVY DUTY	UNDIPPED	COVER: 160 LBS 73kg FRAME: 210 LBS 95kg ASSY : 370 LBS 168kg	COVER - GRAY IRON ASTM A48 CL35B FRAME - GRAY IRON ASTM A48 CL35B

√ DESIGNATES MACHINE SURFACE

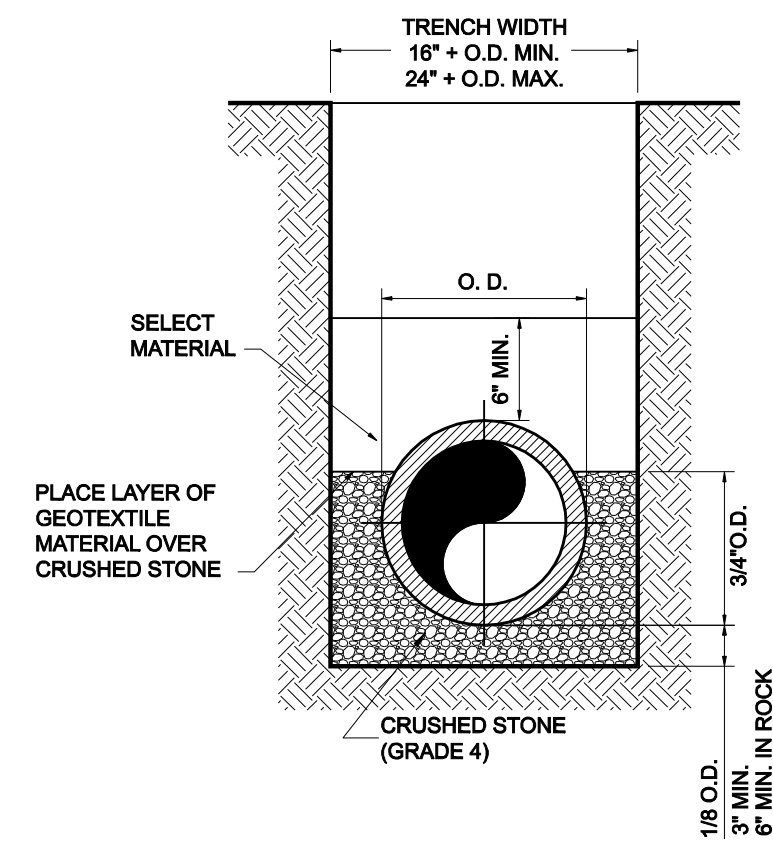
**PRESSURE TYPE FRAME AND COVER**



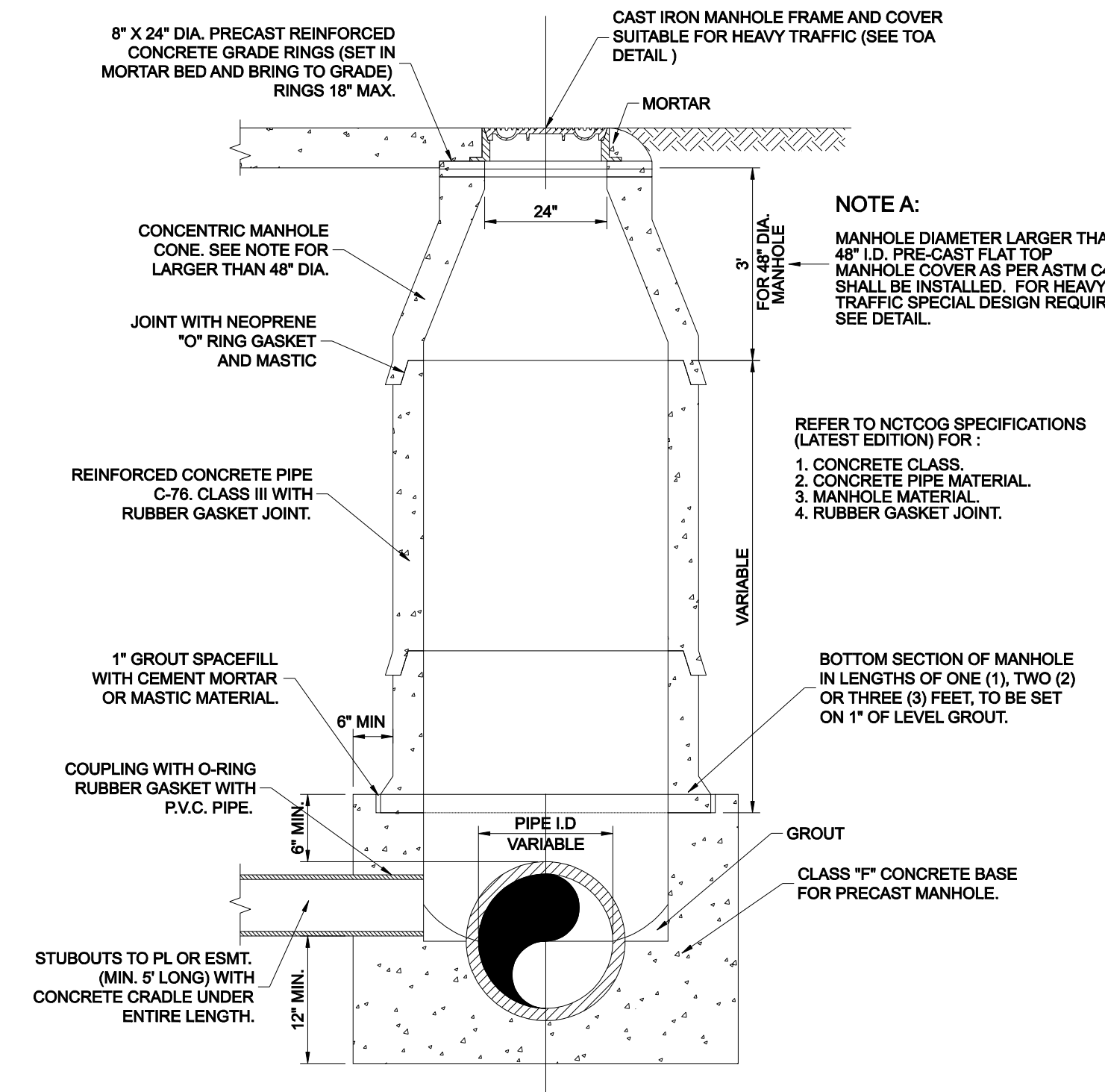
- NOTES:
- (1) HIGH DENSITY POLYETHYLENE SPACERS, RACI OR EQUAL, SHALL BE USED. WHERE NO CASING PIPE IS REQUIRED OVERCUTTING AROUND UTILITY SHALL BE FILLED WITH HYDRAULICALLY PLACED NON-SHRINK GROUT AS PER ASTM C476.
  - (2) END GROUTING FOR ALL ENCASMENTS SHALL BE AS PER ASTM STANDARD C476 (1:7 GROUT WITH 5% TO 40% AIR ENTRAINMENT). GROUT SHALL BE PLACED BY HYDRAULIC PUMP FROM THE LOWER END OF THE ENCASMENT PIPE, THEREBY INSURING COMPLETE FILLING OF ENCASMENT PIPE.
  - (3) ENCASMENT PIPE SHALL BE EITHER DUCTILE IRON PIPE OR HIGH DENSITY STEEL PIPE. ALL JOINTS TO BE WELDED 100%.



**SANITARY SEWER MAIN ENCASMENT**



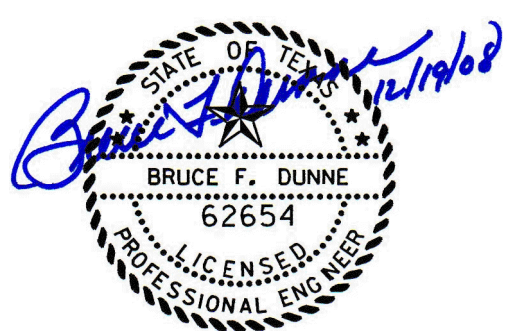
**CLASS "B+" EMBEDMENT**  
TYPICAL BACKFILL WATER MAIN  
P.V.C. WATER PIPE



- NOTE A:
- MANHOLE DIAMETER LARGER THAN 48\"/>
- REFER TO NCTCOG SPECIFICATIONS (LATEST EDITION) FOR:
1. CONCRETE CLASS.
  2. CONCRETE PIPE MATERIAL.
  3. MANHOLE MATERIAL.
  4. RUBBER GASKET JOINT.

NOTE:  
IF FALSE MANHOLE BOTTOMS ARE REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED.

ALL MANHOLES SHALL PASS VACUUM TEST AS PER NCTCOG SPECIFICATIONS



NO.	REVISION	BY	DATE

**Addison!** TOWN OF ADDISON  
DALLAS COUNTY, TEXAS  
WATER, SANITARY SEWER & STORM DRAIN  
BROOKHAVEN CLUB DR, PONTE AVE & VITRUVIAN PARK

**SANITARY SEWER DETAILS**

**icon** Consulting Engineers, Inc. 250 W. Southlake Blvd., Suite 117  
Civil Engineers - Designers - Planners Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	JAM	SAM	OCT 14, 2008	PW #2008-009	15

WATER, SANITARY SEWER, & STORM DRAIN IMPROVEMENTS - BROOKHAVEN CLUB DRIVE, PONTE AVENUE & VITRUVIAN PARK