



Concrete Systems Inc.
9 Commercial St., Hudson, NH, 03051
Phone 603-889-4163
Fax 603-889-2417

PRECAST BOX CULVERT MULTI-BARREL

MANHOLE ACCESS OPENING AS
REQUIRED PER JOB SPECIFICATIONS
CSI CAN PROVIDE 48"Ø OR 30"Ø RISER
AS WELL AS 24"Ø OR 30"Ø GRADE RINGS

OPTIONAL HEADWALL
PER JOB SPECIFICATIONS

PIPE PENETRATION
PER JOB CONDITIONS

WEEP HOLES AS REQUIRED

FLAT END
7'-2" MAX

CULVERT PIECES UP TO 7'-6"

RECESSED BOLT POCKET
PLATED CONNECTION
AT EACH JOINT

OPTIONAL PRECAST
CUT-OFF WALL

DRILL & DOWEL IN
FIELD FOR CUT-OFF
WALL CONNECTION

GENERAL NOTES:

1. REFERENCE STANDARDS:

AASHTO "LRFD BRIDGE DESIGN SPECIFICATIONS"
ASTM C1577

2. DESIGN PARAMETERS:

LIVE LOAD: AS SPECIFIED

EARTH COVER: PER JOB CONDITIONS

CONCRETE: DESIGN STRENGTH $f'_c = 5000$ PSI

UNIT WEIGHT = 150 PCF

REINFORCING: ASTM A615 (REBAR) GR 60

ASTM A1064 (WWF) $F_y = 65$ KSI

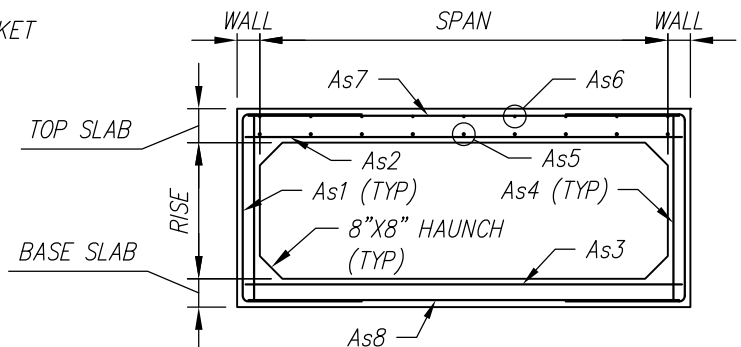
SOIL UNIT WEIGHT = 120 PCF

MINIMUM LATERAL PRESSURE = 30 PCF

MAXIMUM LATERAL PRESSURE = 60 PCF

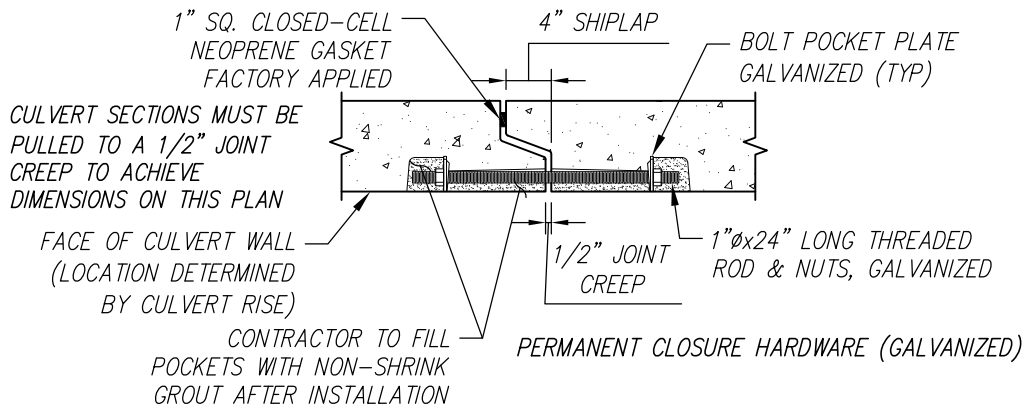
COVER TO REINFORCING: 1 1/2" U.N.O.

3. EXTERIOR DAMPPROOFING CAN BE SUPPLIED BY CSI.



REINFORCING SECTION

Scale: N.T.S.



CONNECTION HARDWARE DETAIL

Scale: N.T.S.