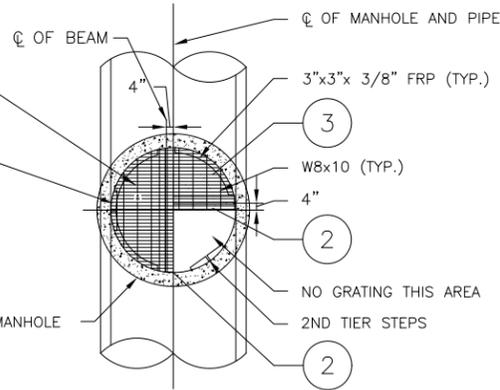


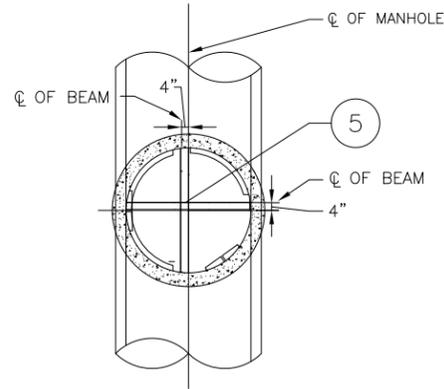
1" GALVANIZED BAR GRATING
BEARING BARS 1" x 3/16"
@ 1-3/16" O.C.
CROSS BARS @ 4" O.C.
(Mc Nichols GW-100)

1ST TIER
FIBERGLASS MANHOLE
STEPS @ 12" O.C.
STAGGERED @ 12" O.C.

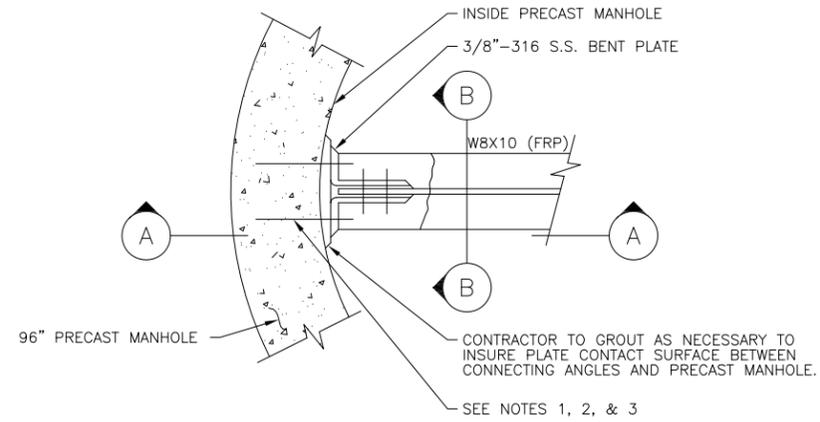
96" PRECAST MANHOLE



PLAN VIEW OF LANDING
(W/GRATING SHOWN)



PLAN VIEW OF LANDING
(W/O GRATING SHOWN)

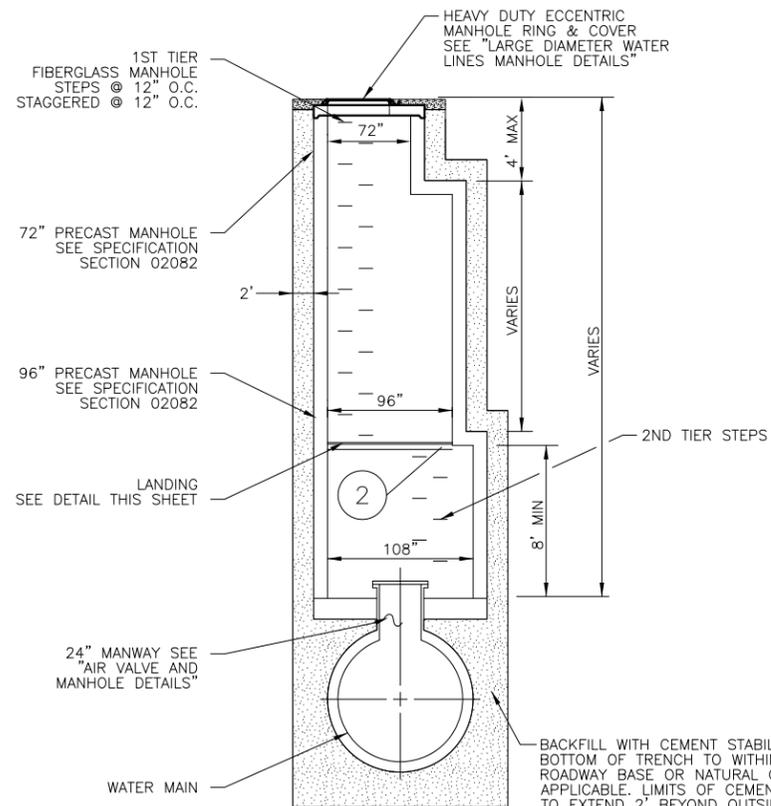


BEAM CONNECTION DETAIL

2 NO SCALE

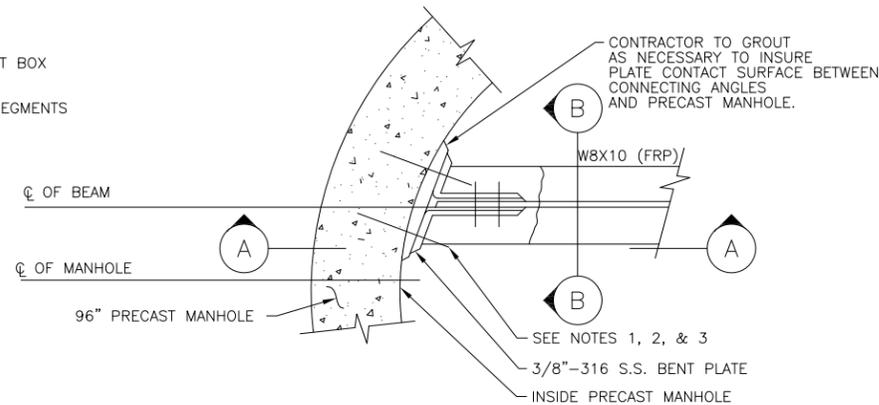
NOTE:

1. ALL STEEL TO BE GRADE 40.
2. ALL CONCRETE TO BE CLASS "A".
3. COORDINATE THE LOCATION AND TYPE JOINTS BETWEEN OFFSET BOX AND PRECAST SECTIONS.
4. PROVIDE RAMNEK OR APPROVED EQUAL BETWEEN PRECAST SEGMENTS OF THE MANHOLE.



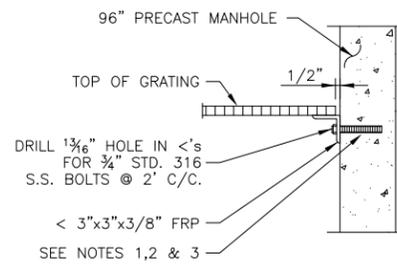
PROFILE

1 EXTRA DEPTH - ACCESS MANHOLE
(SEE PLANS FOR LOCATION)
NO SCALE



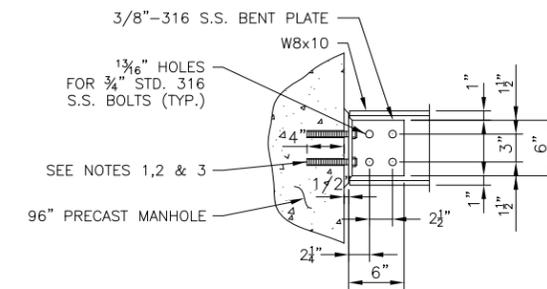
BEAM CONNECTION DETAIL

3 NO SCALE



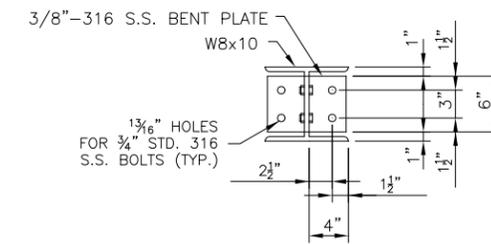
ANGLE CONNECTION DETAIL

4 NO SCALE



SECTION A

NO SCALE



SECTION B

NO SCALE

NOTES:

1. CONTRACTOR TO DRILL 1 1/8" DIAMETER HOLES 4" DEEP, INTO PRECAST MANHOLE FOR 3/4" DIAMETER ANCHOR BOLTS.
2. GROUT IN 3/4" DIAMETER ANCHOR BOLTS WITH GRUTEM 435 AS MANUFACTURED BY I.W. INDUSTRIES, OR APPROVED EQUAL, MANUFACTURERS INSTRUCTIONS IN THE USE OF ALL MATERIALS SPECIFIED SHALL BE FOLLOWED IN STRICT ACCORDANCE.
3. ANCHOR BOLTS SHALL BE 3/4" DIAMETER x 6" LONG 316 S.S. ALL THREAD BOLTS WITH 2" PROJECTION.

CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
STANDARD LDWL EXTRA DEPTH MANHOLE DETAILS	
(NOT TO SCALE)	
APPROVED BY:	APPROVED BY:
CITY ENGINEER	DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: NOV-10-2016	DWG NO: