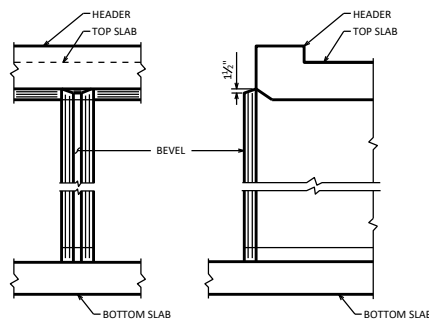


PLAN

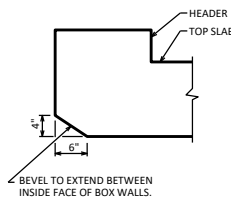


ELEVATION

SECTION C4

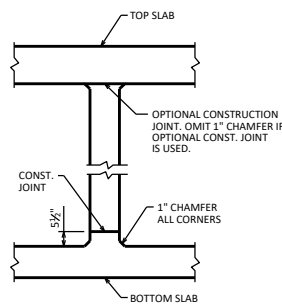
INLET NOSE CENTER WALL DETAILS

TYPICAL ALL INLETS

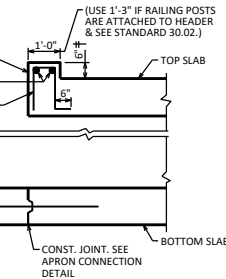


SECTION C3

TYPICAL ALL INLETS



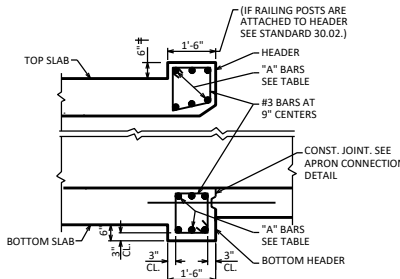
SECTION C5



SECTION C2

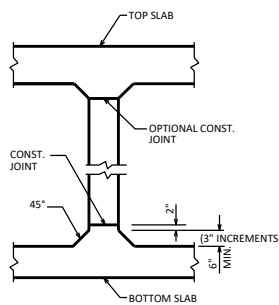
(OUTLET HEADERS SHOWN FOR SKEW OF 20° AND UNDER)

† IF RAILING POSTS ARE ATTACHED TO HEADER THIS DIMENSION MAY BE INCREASED IF NECESSARY TO KEEP RAILING PARALLEL TO ROADWAY. INCREASE WING HEIGHT IF NECESSARY.



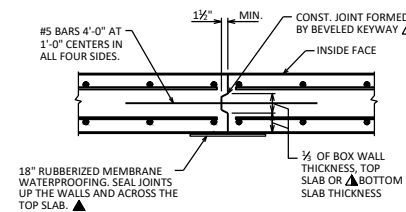
SECTION C2

(INLET HEADERS SHOWN FOR SKEW OVER 20°)



HAUNCH DETAIL

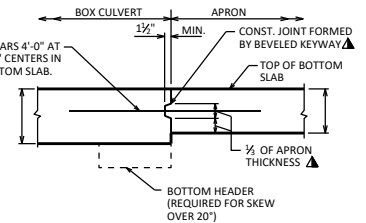
(PROVIDE HAUNCH DETAIL ONLY WHEN REQUIRED AS PER DESIGN)



VERTICAL CONSTRUCTION JOINT

▲ IN LIEU OF KEVED CONST. JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED FOR KEVED CONST. JOINTS AND SAW CUT JOINTS.

OPTIONAL CONSTRUCTION JOINT. OMIT 1" CHAMFER IF OPTIONAL CONST. JOINT IS USED.



APRON CONNECTION DETAIL

* HEADER LENGTH	"A" BARS
TO 11'-0"	6 - #7
OVER 11'-0" - 14'-0"	6 - #8
OVER 14'-0" - 17'-0"	6 - #9
OVER 17'-0" - 20'-0"	6 - #10

* HEADER LENGTH EQUALS THE DISTANCE BETWEEN C/L OF WALLS IN ONE CELL MEASURED ALONG THE SKEW.

DESIGNER NOTES

SEE BRIDGE MANUAL SECTION 36.2 FOR ADDITIONAL REQUIREMENTS FOR PEDESTRIAN UNDERPASSES AND CATTLE PASSES.

● DETAIL NOT ALLOWED WHEN HAUNCHES ARE REQ'D OR FOR PEDESTRIAN UNDERPASSES. OMIT 1" CHAMFER IF ALTERNATIVE CONSTRUCTION JOINT IS USED.

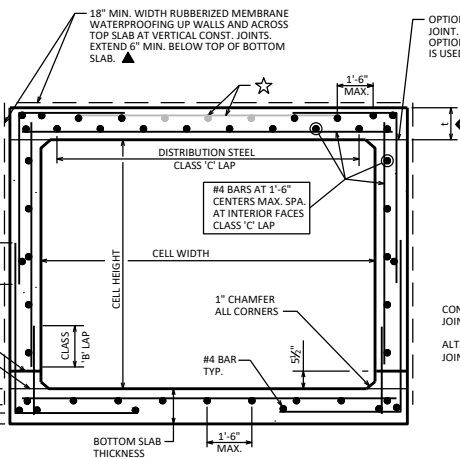
◆ t = 1'-0" MIN. FOR PEDESTRIAN UNDERPASSES.
t = 1'-0" MIN. FOR SLABS WITH DEPTH OF FILLS < 2'-0"
t = 6 1/2" MIN. OTHERWISE

★ TOP BARS FOR TOP SLAB:

- FOR t < 10' WITH DEPTH OF FILLS ≥ 2'-0". BARS NOT REQUIRED
- FOR t ≥ 10': #4 AT 1'-6" MAX. EACH DIRECTION
- FOR PEDESTRIAN UNDERPASSES: #4 AT 1'-6" MAX. EACH DIRECTION
- FOR SLABS WITH DEPTH OF FILLS < 2'-0": #4 AT 1'-0" MAX. EACH DIRECTION. USE CLASS 'C' LAPS

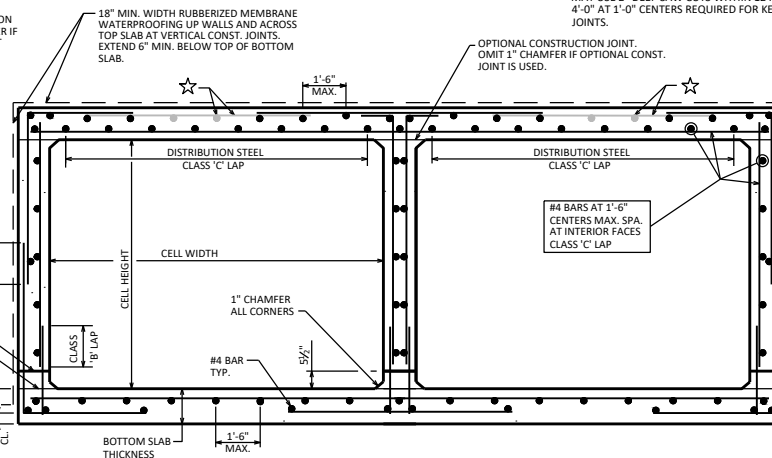
▲ FOR PEDESTRIAN UNDERPASSES, PROVIDE A CONTINUOUS SHEET MEMBRANE FOR THE ENTIRE LENGTH OF THE CULVERT IN LIEU OF 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING STRIPS OVER THE JOINTS. USE BID ITEM "SHEET MEMBRANE WATERPROOFING FOR BURIED STRUCTURES" (S16.0610.S), UNLESS DIRECTED OTHERWISE. INCLUDE THE FOLLOWING NOTE:

SHEET MEMBRANE WATERPROOFING REQUIRED ON THE WALLS AND ACROSS TOP SLAB FOR ENTIRE CULVERT LENGTH. EXTEND 6" MIN. BELOW THE TOP OF BOTTOM SLAB.



SECTION THRU BOX

SINGLE CELL BOX



SECTION THRU BOX

TWIN CELL BOX

BOX CULVERT DETAILS



BUREAU OF
STRUCTURES

APPROVED: *Laura Shadewald*

DATE:
1-25