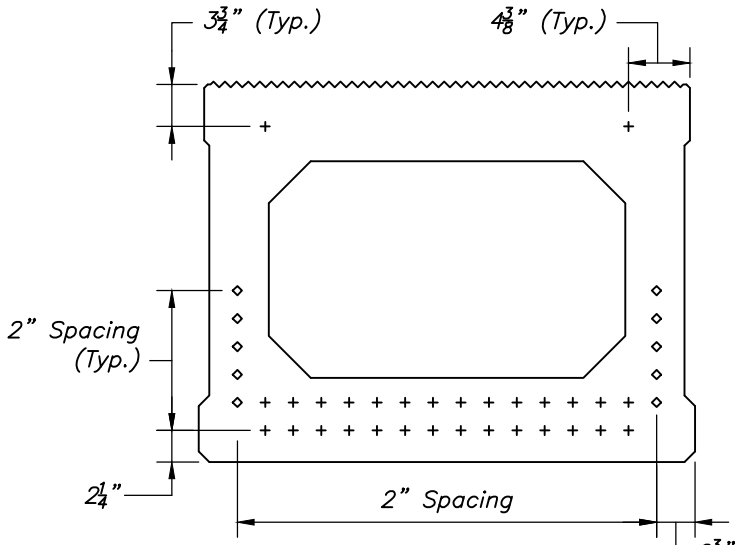
MassDOT Highway Division

STANDARD STRAND LOCATION 24" THRU 36" DEEP BEAMS

PRECAST CONCRETE BOX BEAMS

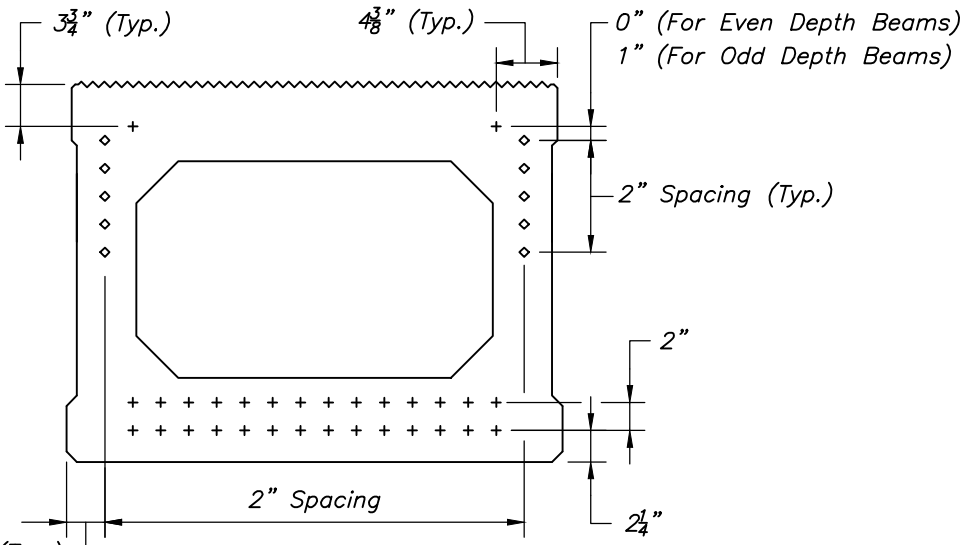
DATE OF ISSUE
JUNE 2013

DRAWING NUMBER
4.2.5



STRAND LOCATION AT MIDSPAN

NOT TO SCALE

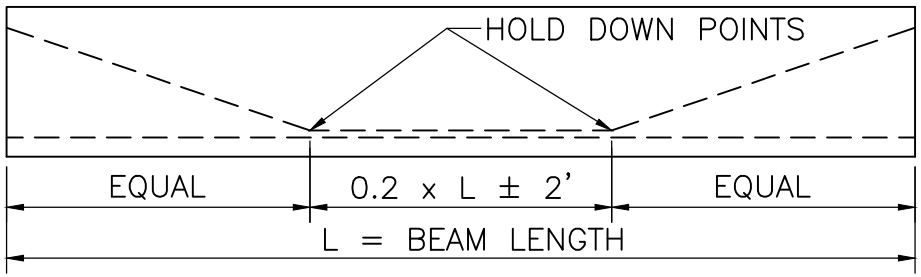


STRAND LOCATION AT END OF BEAM

NOT TO SCALE

NOTES:

1. + Denotes straight strands.
2. ◇ Denotes draped strands. The total hold down force of all draped strands for each beam should not exceed 75% of the total beam weight.
3. ⊕ Denotes debonded strands (none shown above). No more than 25% of the total number of strands and no more than 40% of the strands in each row shall be debonded. In addition, no more than 40% of the debonded strands, or four (4) strands, whichever is greater, shall have the debonding terminated at any one section. The spacing between debonded strands in a layer shall be 4" minimum. Exterior strands in each layer shall be fully bonded. In general, the length of debonded strand from each end of the beam should be limited to approximately 15% of the span length.
4. Design must accommodate hold down location tolerance shown below.
5. If required by design, a maximum of 2 fully stressed strands may be provided in the top flange at the specified locations. Otherwise, provide a minimum of 2 strands at the same locations pretensioned to 2 Kips each.



HOLD DOWN POINTS FOR DRAPED STRANDS

NOT TO SCALE