ELEVATION

1. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 5'-6" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.

<u>NOTES</u>

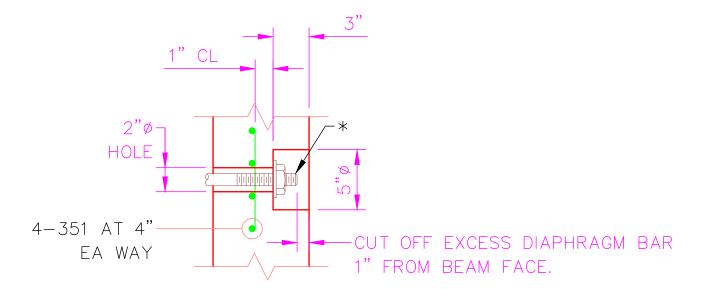
2. CHAMFER EDGES OF BEAMS 1/2" OR 3/4".

3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE 1/8" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.

4. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.

- 5. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A416 GRADE 270.
- 6. PRESTRESSING DATA IS AS FOLLOWS:
- A. USE 25 $-\frac{1}{2}$ "ø LOW-RELAXATION (A = 0.153 SQ IN) STRANDS. PRETENSION STRANDS TO 30,983 LBS EACH.
- B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH OF 4,500 PSI.
- C. THE TOTAL JACKING FORCE OF PRETENSIONING IS XXX,XXX LBS.
- D. THE NET PRESTRESSING FORCE OF THE STRANDS AFTER LOSSES IS XXX,XXX LBS.
- 7. CONCRETE STRENGTH = 6,000 PSI.

8. BARS MK 651 SHALL ONLY BE LOCATED ON ONE END OF GIRDERS 3-1, 3-2, 5-1 AND 5-2 AND ON BOTH ENDS OF GIRDERS 4-1 AND 4-2,



* DIAPHRAGM BAR SHALL BE A 1"Ø PLAIN BAR, THREADED 5" ON EACH END, WITH ¼" x 3½"Ø WASHERS AND HEX NUTS (ASTM A709 GRADE 36).
DIAPHRAGM BAR SHALL BE TIGHTENED AS PER SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, END OF DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS SHALL BE PAINTED WITH SPECIAL PROTECTIVE COATING AS PER SPECIFICATIONS.

AFTER PAINTING, THE RECESS SHALL BE FILLED WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF DIAPHRAGM BAR IS NOT REQUIRED.

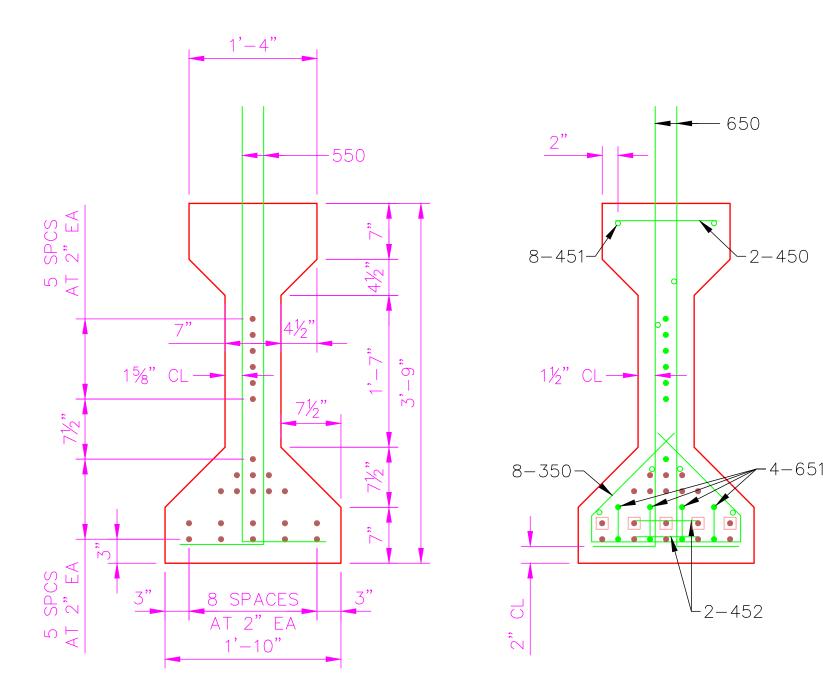
RECESS DETAIL FOR DIAPHRAGM BAR ENDS

BEAM	А	В	D	Е	Н	X
3-1	61'-9"	60'-10"	5"	6"	30'-5"	11"
3-2	61'-9"	60'-10"	5"	6"	30'-5"	11"
4-1	61'-9"	60'-9"	6"	6"	30'-4½"	10½"
4-2	61'-9"	60'-9"	6"	6"	30'-4½"	10½"
5-1	61'-9"	59'-9"	6"	1'-6"	29'-10½"	4½"
5-2	61'-9"	59'-9"	6"	1'-6"	29'-10½"	4½"

MAINTAIN 1" MINIMUM CLEARANCE UNLESS NOTED OTHERWISE

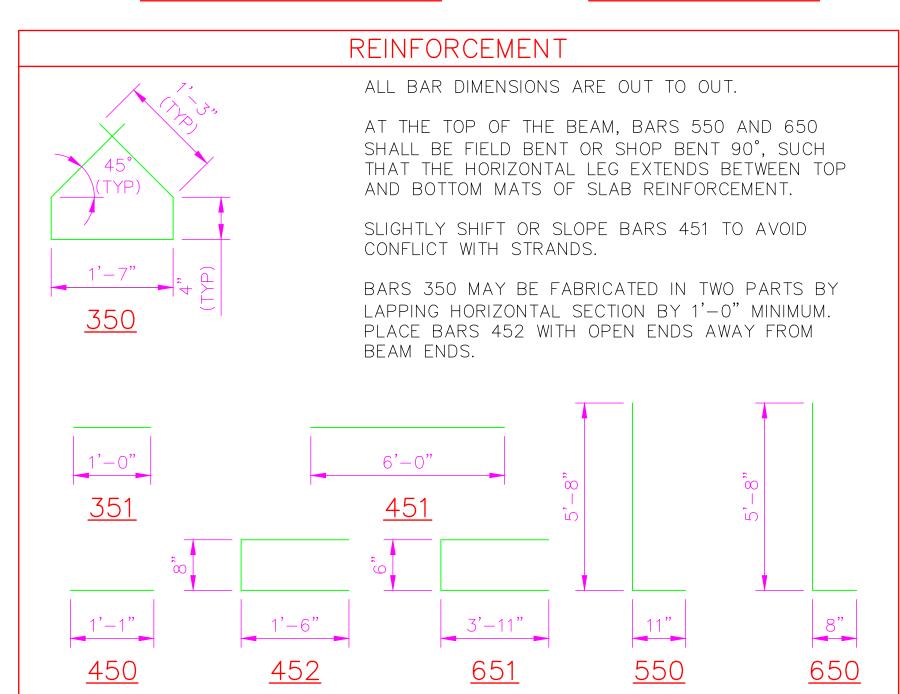
• INDICATES ½"Ø PRESTRESSED STRANDS

● INDICATES DEBOND FOR 12'-0" EA END



SECTION AT MIDPOINT

SECTION AT END



REV: REVISION DESCRIPTION:

DATE:



ANDY'S BEST CAD 1323 CARLYLE PARK CIRCLE HIGHLANDS RANCH, CO 80129 303-808-3352

> T: 03/14/22 E: AS SHOWN

DRAWN: DESIGNED: CLIENT: DATE: SCALE:

SWITCH SUPERSTRUCTURE
REINFORCED CONCRETE
ENGINEERING DRAWINGS

TYPE III PSC BEAM MITCH BEAM DETAILS

DRAWING NO:

RC106