



Bridge Design Details 10.3 March 2026

T-Beam Girder Reinforcement

T-Beam main reinforcement is detailed very similarly to box girder main reinforcement. Both top and bottom main reinforcement bar cut-offs shall be shown. An example of bottom bar detailing is shown in Figure 10.3.1 below. Use a SECTION to show bar placement in the vertical direction, especially where there are bar bundles.

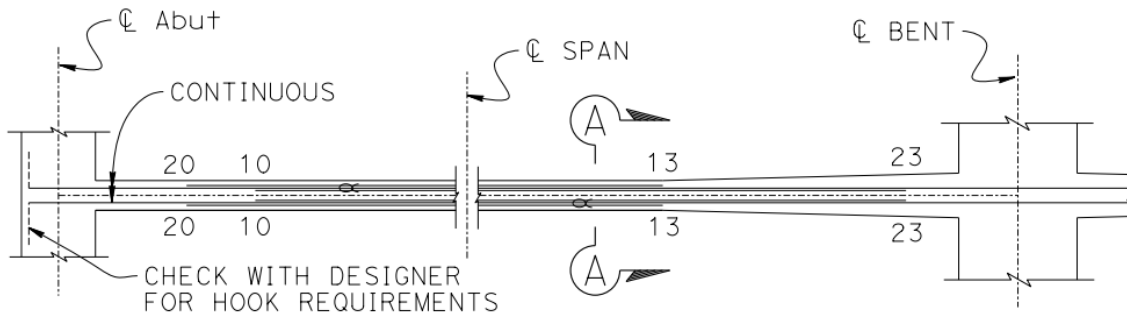
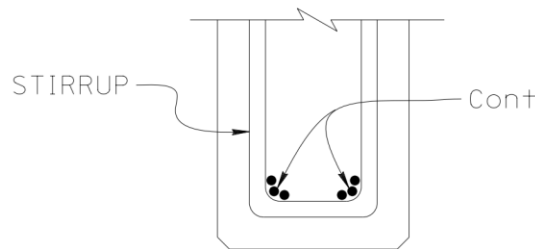


Figure 10.3.1 T-Beam Girder Reinforcement Example



SECTION A-A
 $1\frac{1}{2}'' = 1'-0''$

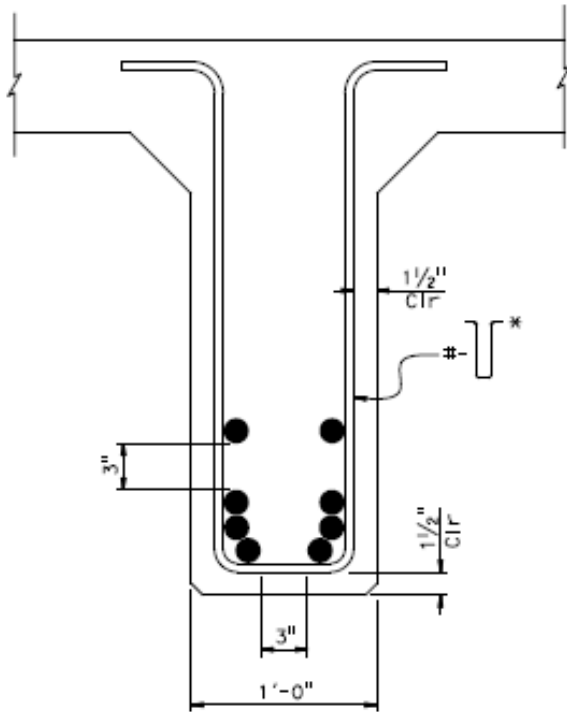
Figure 10.3.2 Typical Girder Section



Below are example sections showing vertical layout of main girder reinforcement with required spacing between bundles. The tables below show distances, "X", to the center of gravity of the group of bars from the bottom of the girder for various quantities of steel, assuming #11 rebar.

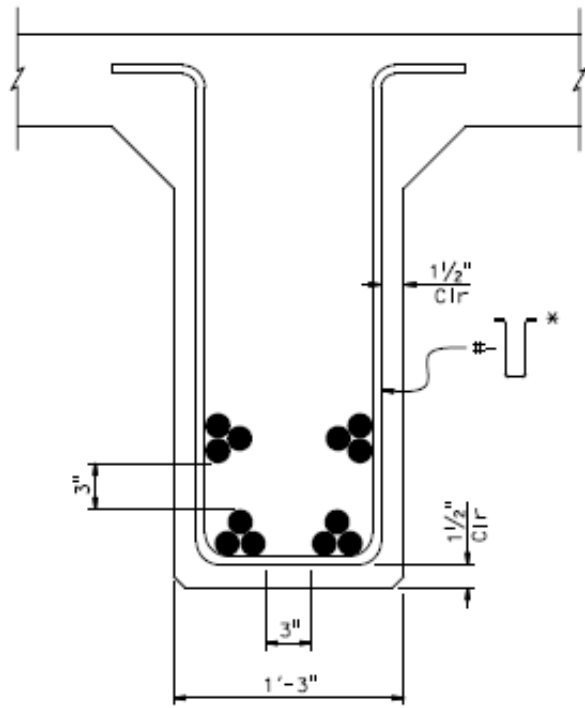
For example, the drawing on the left shows a total of 8 - #11 bars and 1.5" Clr. The center of gravity of the total group is 6.0" from the bottom of the girder.

*Refer to GIRDER LAYOUT sheet for spacing



No. OF BARS	X
4	2.9"
6	3.4"
8	4.7"
10	5.6"
12	6.4"

Figure 10.3.3 12-inch wide T-Beam



No. OF BARS	X
2	2.9"
4	3.6"
6	4.4"
8	6.0"

Figure 10.3.4 15-inch wide T-Beam