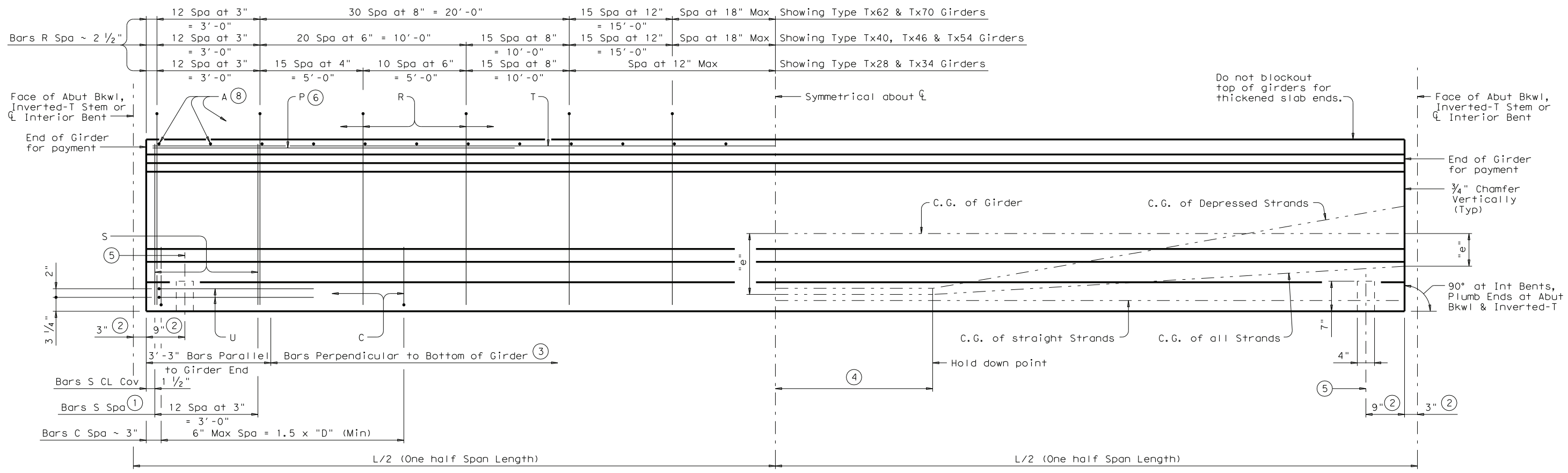


# APPENDIX I

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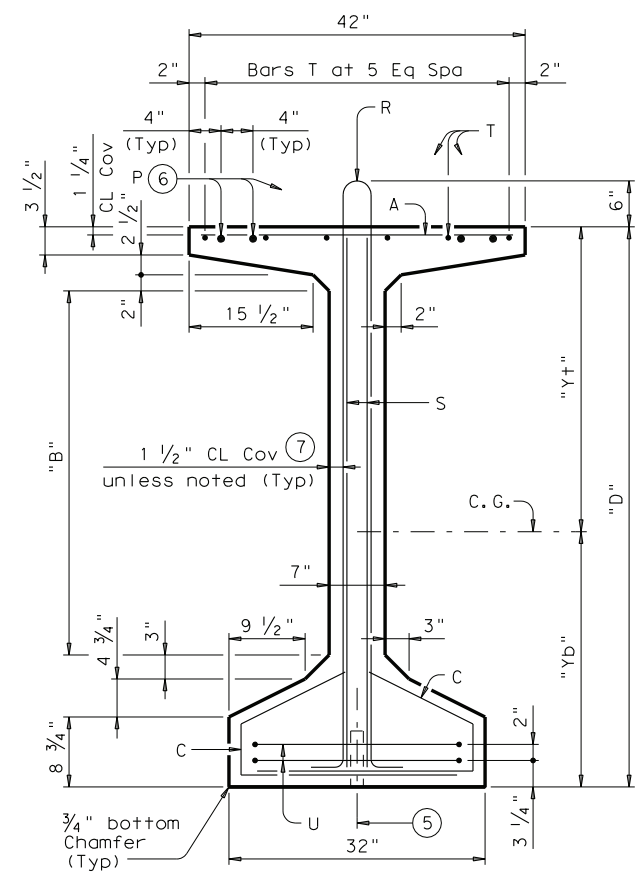
- ① Bundle with Bars R.
- ② Measured along  $\bar{C}$  Girder at Interior Bents; perpendicular to Abutment Bkwl or Inverted-T Stem.
- ③ The average of the top and bottom spacing of Bars R cannot exceed the required spacing.

### GIRDER ELEVATION

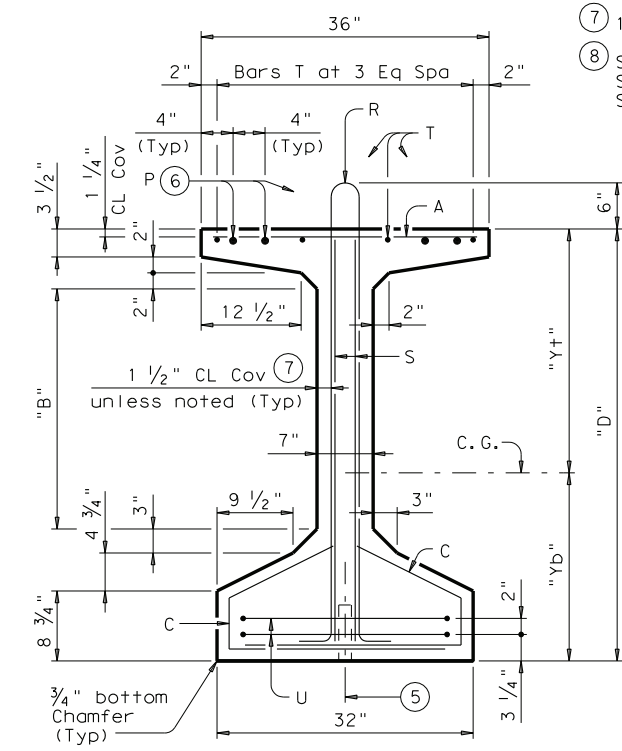
- ④  $L/20$ , but not less than 5'-0" (-0,+2').
- ⑤ 4" x 1 1/2" Vertical Slotted Hole at doweled girder end [labeled (D) on Bridge Layout]. Required for outside girder only or as shown on substructure details. Anchorage holes may be tapered (4 3/4" x 1 3/8") at base. If holes are formed with sheet metal, forms may be left in place.
- ⑥ Bars P (#6 x 15'-0") are only required when "e" at girder ends exceeds 0.25 x "D". At the fabricator's option bars larger than #6 may be used. When L is less than 50 ft, Bars P are to be the same length as Bars T.
- ⑦ 1 3/8" Clear Cover to Bars S.
- ⑧ Space Bars A at 6" Max for girders requiring overhang bracket hangers. Space at 12" Max for all other girders. Tie to Bars R as necessary. See standard IGMS for "Deck Forming Notes".

Girder Type	GIRDER DIMENSIONS AND SECTION PROPERTIES							
	"D" (in.)	"B" (in.)	"Yt" (in.)	"Yb" (in.)	Area (in. <sup>2</sup> )	"Ix" (in. <sup>4</sup> )	"Iy" (in. <sup>4</sup> )	Weight (plf)
Tx28	28	6	15.02	12.98	585	52,772	40,559	610
Tx34	34	12	18.49	15.51	627	88,355	40,731	653
Tx40	40	18	21.90	18.10	669	134,990	40,902	697
Tx46	46	22	25.90	20.10	761	198,089	46,478	793
Tx54	54	30	30.49	23.51	817	299,740	46,707	851
Tx62	62	37 1/2"	33.72	28.28	910	463,072	57,351	948
Tx70	70	45 1/2"	38.09	31.91	966	628,747	57,579	1,006

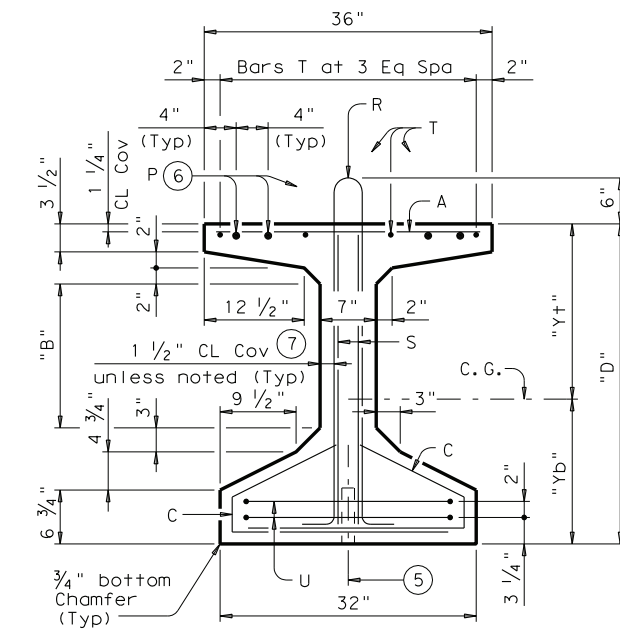
**GENERAL NOTES:**  
 Designed in accordance with AASHTO LRFD Specifications.  
 All concrete must be Class H. Provide Class H(HPC) if shown elsewhere in plans.  
 All reinforcing bars must be Grade 60.  
 An equal area of deformed Welded Wire Reinforcement (WWR) (ASTM A497) may be substituted for Bars A, C, R or T unless otherwise noted.  
 It is permissible for bars or strands to come in contact with materials used in forming anchor holes.



**TYPE Tx62 & Tx70**



**TYPE Tx46 & Tx54**



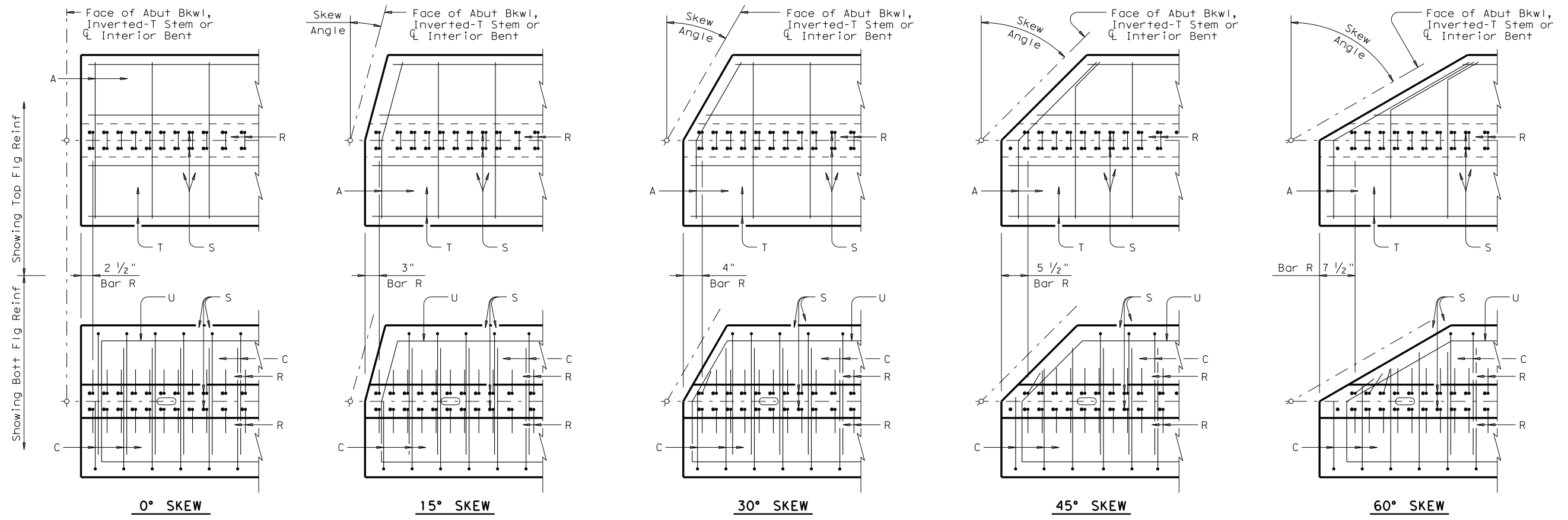
**TYPE Tx28, Tx34 & Tx40**

Texas Department of Transportation  
 Bridge Division  
**PRESTRESSED CONCRETE  
 I-GIRDER DETAILS**

IGD

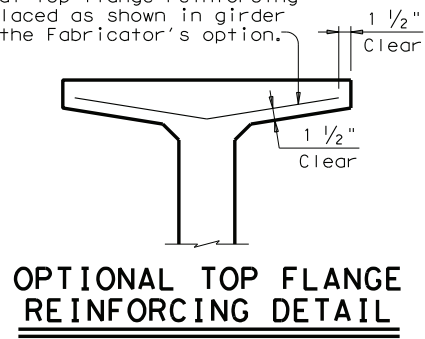
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© TxDOT June 2007	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				
02/09 General Notes, 12/10 Optional Top Flange Reinforcing.	COUNTY	CONTROL	SECT	JOB HIGHWAY

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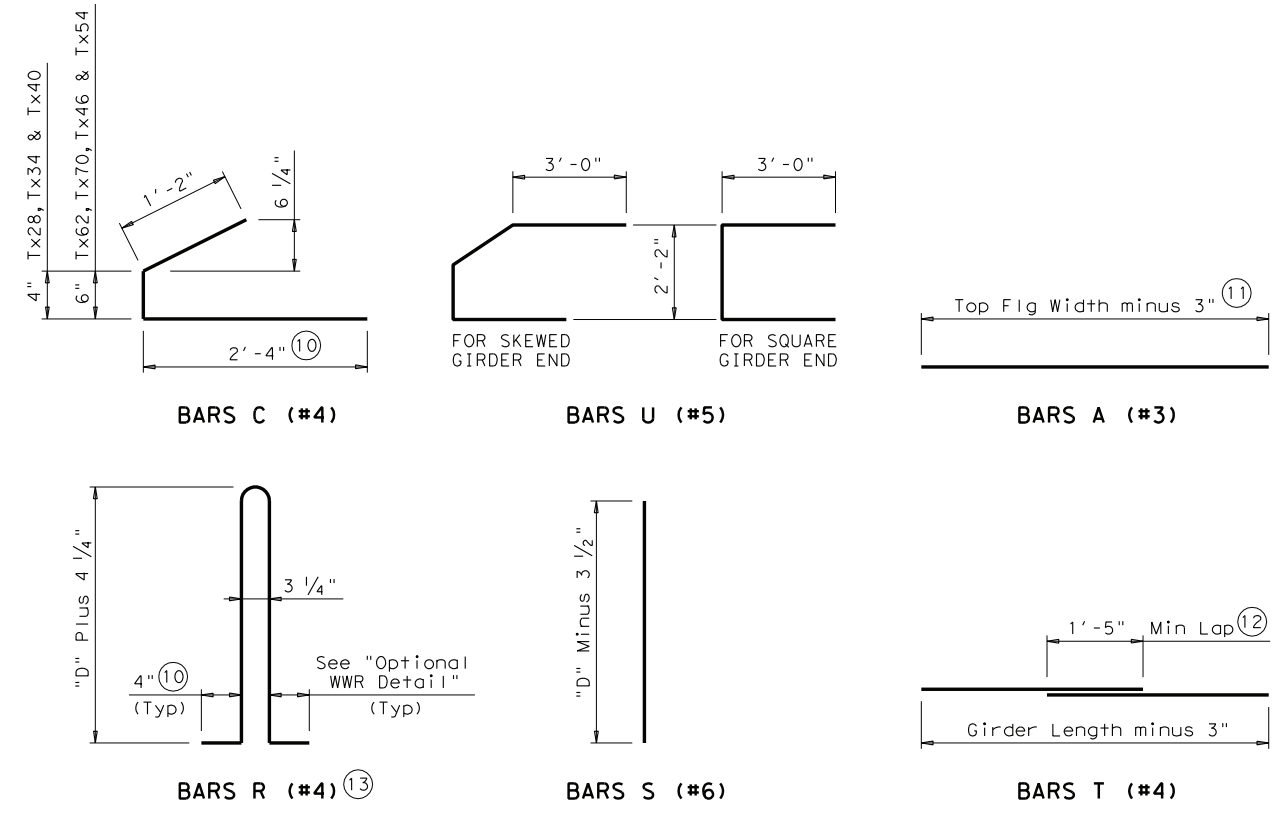
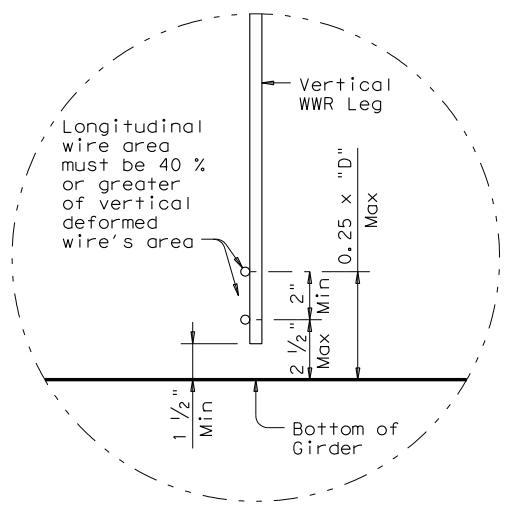


**PLAN OF GIRDER ENDS** ⑨

To control top flange cracking that may occur during form removal, additional top flange reinforcing may be placed as shown in girder ends at the Fabricator's option.



- ⑨ Reinforcing patterns shown are provided as guides to determine reinforcement placement in skewed ends. Place Bars S as close to girder end as cover requirements permit, which may prevent them to be bundled with Bars R.
- ⑩ Bars may be cut or bent at skewed end as required.
- ⑪ Increase as necessary for bars at skewed end.
- ⑫ No portion of bar less than 10 ft.
- ⑬ For Welded Wire Reinforcement (WWR) option, area of Bars R may be reduced in proportion to the increase in reinforcement yield strength over 60 ksi. Yield strength of WWR is limited to 75 ksi.



LEVELS DISPLAYED	PATH:
1	

FILE: igdstde1.dgn	DN: TxDOT	CK: JMH	DW: JTR	CK: JMH
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REVISIONS				
02/09 General Notes.	COUNTY	CONTROL	SECT	JOB
12/10 Optional Top Flange Reinforcing.				HIGHWAY