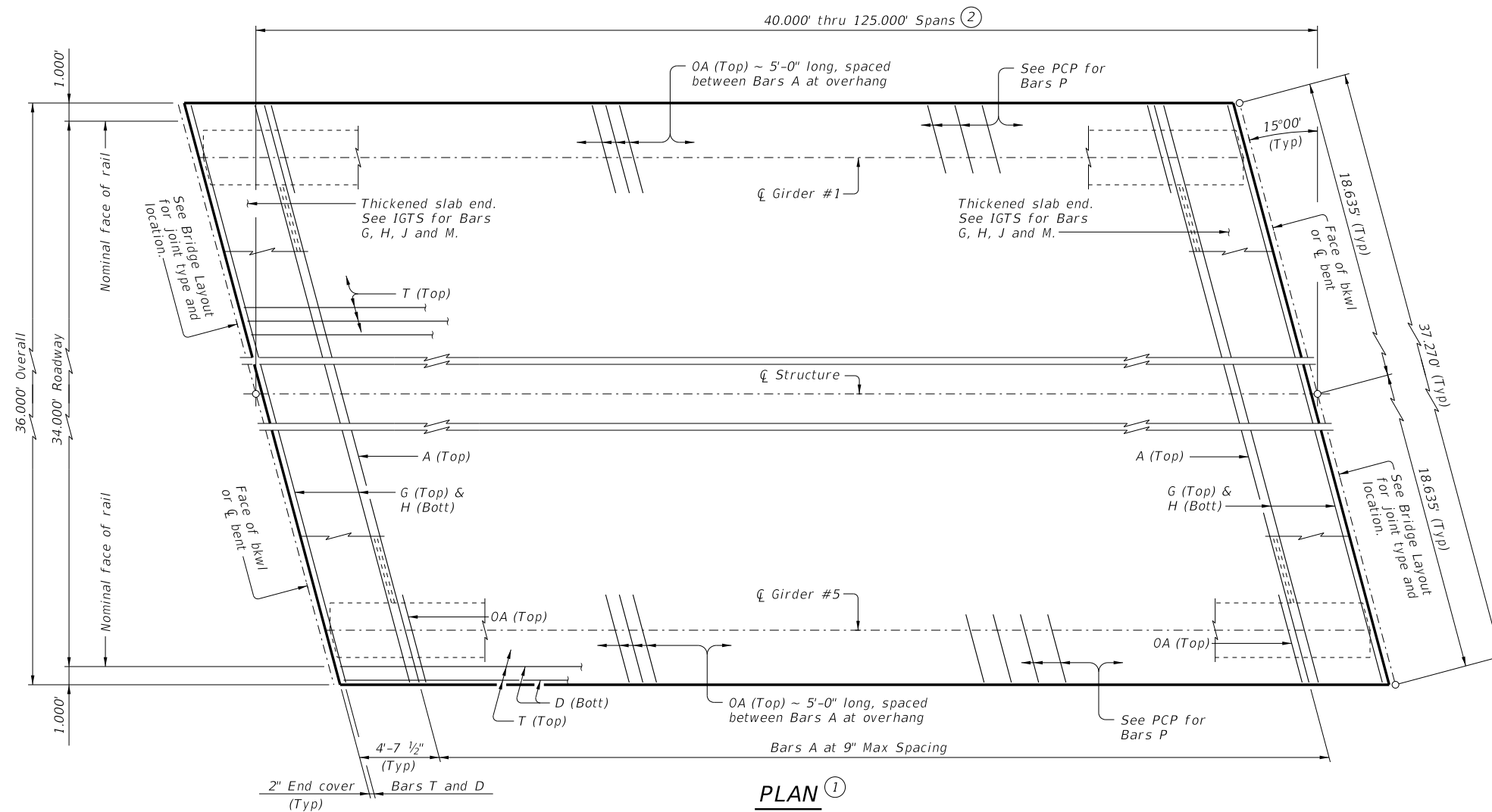


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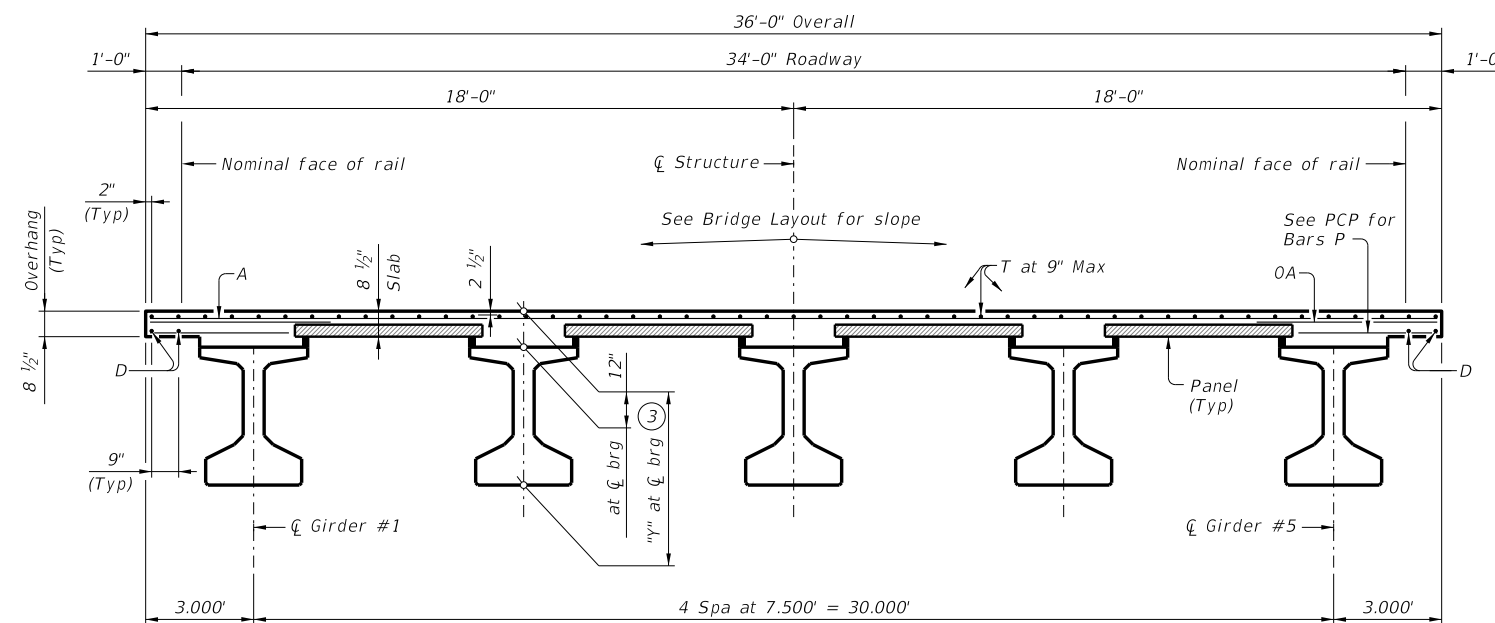
**BAR TABLE**

BAR	SIZE
A	#4
D	#4
G	#4
H	#4
J	#4
M	#4
OA	#5
P	#4
T	#4



**PLAN** ①

- ① If multi-span units (with slab continuous over interior bents) are indicated on the Bridge Layout, see standard IGCS for adjustment to slab reinforcement and quantities.
- ② Span lengths for prestressed concrete I-Girder type:  
 Type Tx28 for spans lengths 40,000' thru 75,000'.  
 Type Tx34 for spans lengths 40,000' thru 85,000'.  
 Type Tx40 for spans lengths 40,000' thru 95,000'.  
 Type Tx46 for spans lengths 40,000' thru 110,000'.  
 Type Tx54 for spans lengths 40,000' thru 125,000'.
- ③ "Y" value shown is based on theoretical girder camber, dead load deflection from an 8 1/2" concrete slab, a constant roadway grade, and using precast panels (PCP). The Contractor will adjust this value as necessary for any roadway vertical curve.



**TYPICAL TRANSVERSE SECTION**

(Showing girder type Tx46)

**TABLE OF SECTION DEPTHS**

GIRDER TYPE	"Y" AT $\bar{C}$ BRG ③
	Ft/In
Tx28	3'-4"
Tx34	3'-10"
Tx40	4'-4"
Tx46	4'-10"
Tx54	5'-6"

HL93 LOADING

SHEET 1 OF 2



**PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx28 THRU Tx54) 34' ROADWAY 15° SKEW**

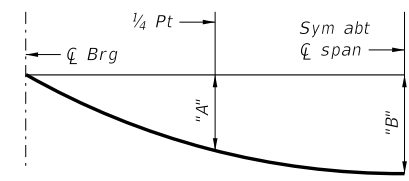
**SIG-34-15**

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TABLE OF DEAD LOAD DEFLECTIONS

TYPE T <sub>x</sub> 28 GIRDERS			TYPE T <sub>x</sub> 34 GIRDERS			TYPE T <sub>x</sub> 40 GIRDERS			TYPE T <sub>x</sub> 46 GIRDERS			TYPE T <sub>x</sub> 54 GIRDERS		
SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"	SPAN LENGTH	"A"	"B"
Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft	Ft
40	0.008	0.012	40	0.005	0.007	40	0.003	0.005	40	0.002	0.003	40	0.001	0.002
45	0.014	0.019	45	0.008	0.012	45	0.005	0.008	45	0.004	0.005	45	0.002	0.003
50	0.021	0.030	50	0.013	0.018	50	0.008	0.012	50	0.006	0.008	50		



DEAD LOAD DEFLECTION DIAGRAM

Calculated deflections shown are due to the concrete slab on interior girders only ( $E_c = 5000$  ksi). Adjust values as required for exterior girders and if optional slab forming is used. These values may require field verification.

TABLE OF ESTIMATED QUANTITIES

SPAN LENGTH	REINF CONCRETE SLAB	Prestressed Concrete Girders			TOTAL REINF STEEL
		ABUT TO INT BT	INT BT TO INT BT	ABUT TO ABUT	
Ft	SF	LF	LF	LF	Lb
40	1,440	197.46	197.50	197.41	3,312
45	1,620	222.46	222.50	222.41	3,726
50	1,800	247.46	247.50	247.41	4,140
55	1,980	272.46	272.50	272.41	4,554
60	2,160	297.46	297.50	297.41	4,968
65	2,340	322.46	322.50	322.41	5,382
70	2,520	347.46	347.50	347.41	5,796
75	2,700	372.46	372.50	372.41	6,210
80	2,880	397.46	397.50	397.41	6,624
85	3,060	422.46	422.50	422.41	7,038
90	3,240	447.46	447.50	447.41	7,452
95	3,420	472.46	472.50	472.41	7,866
100	3,600	497.46	497.50	497.41	8,280
105	3,780	522.46	522.50	522.41	8,694
110	3,960	547.46	547.50	547.41	9,108
115	4,140	572.46	572.50	572.41	9,522
120	4,320	597.46	597.50	597.41	9,936
125	4,500	622.46	622.50	622.41	10,350

- (4) Fabricator will adjust lengths for girder slopes as required.
- (5) Reinforcing steel weight is calculated using an approximate factor of 2.3 lbs/SF.

**MATERIAL NOTES:**  
 Provide Class S concrete ( $f'c = 4,000$  psi).  
 Provide Class S (HPC) concrete if shown elsewhere in the plans.  
 Provide Grade 60 reinforcing steel.  
 Provide bar laps, where required, as follows:  
 Uncoated ~ #4 = 1'-7"  
 Epoxy coated ~ #4 = 2'-5"  
 Deformed welded wire reinforcement (WWR) (ASTM A1064) of equal size and spacing may be substituted for Bars A, AA, D, OA, P or T unless noted otherwise.

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications.  
 Multi-span units, with slab continuous over interior bents, may be formed with the details shown on this sheet and the I-Girder Continuous Slab Detail (IGCS) standard.  
 See I-Girder Thickened Slab End Details (IGTS) standard for details and quantity adjustments.  
 See Prestressed Concrete Panels (PCP) standard and Prestressed Concrete Panel Fabrication Details (PCP-FAB) standard for panel details not shown.  
 See I-Girder Miscellaneous Slab Details (IGMS) standard for miscellaneous details.  
 See applicable rail details for rail anchorage in slab.  
 See Permanent Metal Deck Forms (PMD) standard for details and quantity adjustments if this option is used.  
 This standard is drawn showing right forward skew.  
 See Bridge Layout for actual skew direction.  
 This standard does not support the use of transition bents.

Cover dimensions are clear dimensions, unless noted otherwise.

**Bridge Division Standard**

**PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE T<sub>x</sub>28 THRU T<sub>x</sub>54) 34' ROADWAY 15° SKEW**

**SIG-34-15**

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