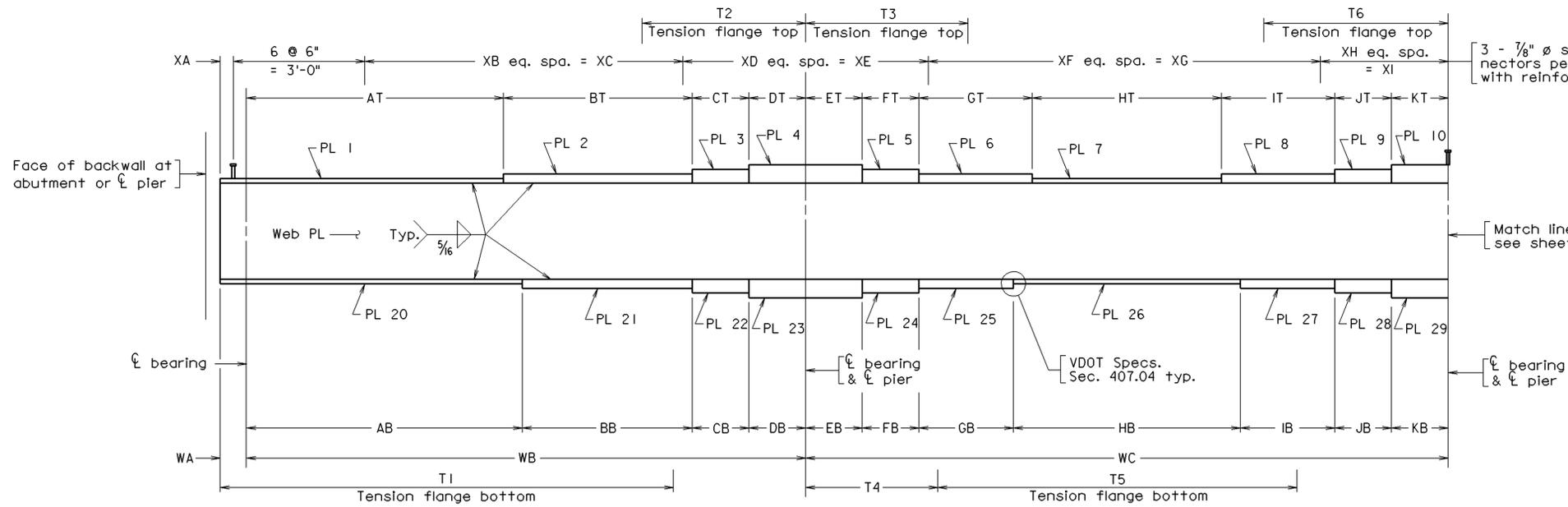
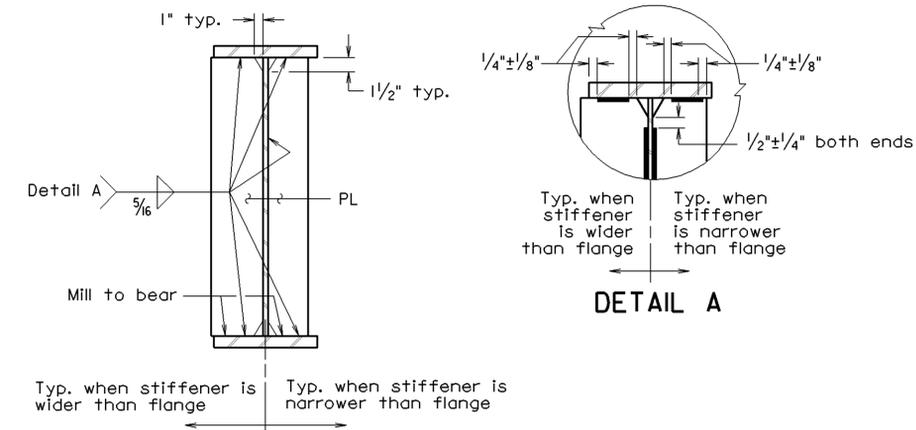


FHWA REGION	STATE	FEDERAL AID		STATE		SHEET NO.
		ROUTE	PROJECT	ROUTE	PROJECT	
3	VA.					



Notes:  
 The Contractor has the option of eliminating the intermediate web stiffeners by increasing the web thickness to .  
 For spacing of intermediate diaphragm connector PL's and intermediate web stiffener PL's, see Framing Plan, sheet .  
 For bolted splice details, sheet .  
 The top and bottom flanges as shown in Girder Elevation, the web and all splice plates are areas of tensile stress for Charpy V-Notch impact requirements.



BEARING STIFFENERS

GIRDER ELEVATION

PLATE DIMENSION TABLE

Girder	Web PL	PL 1	PL 2	PL 3	PL 4	PL 5	PL 6	PL 7	PL 8	PL 9	PL 10	PL 20	PL 21	PL 22	PL 23	PL 24	PL 25	PL 26	PL 27	PL 28	PL 29	

GIRDER DIMENSION TABLE

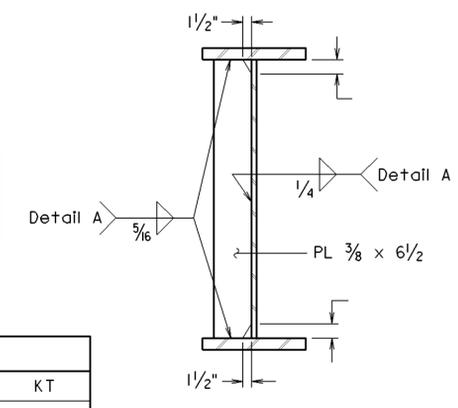
Girder	AB	AT	BB	BT	CB	CT	DB	DT	EB	ET	FB	FT	GB	GT	HB	HT	IB	IT	JB	JT	KB	KT

GIRDER DIMENSION TABLE

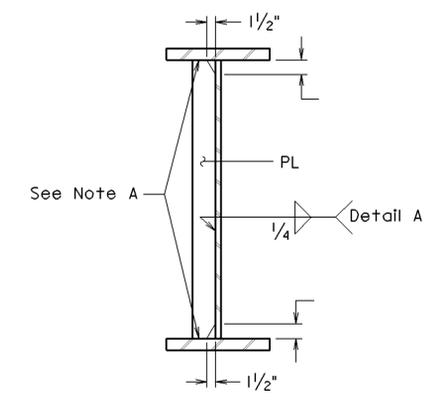
Girder	WA	WB	WC	XA	XB	XC	XD	XE	XF	XG	XH	XI

TENSION FLANGES

Girder	T1	T2	T3	T4	T5	T6



CROSS FRAME CONNECTOR PLATE



TRANSVERSE INTERMEDIATE STIFFENER

Note A: 5/16" fillet weld (both sides) to compression flange(s). Tight fit to tension flange(s).

05-16-01  
SGDET4A

Not to scale

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STRUCTURE AND BRIDGE DIVISION					
GIRDER DETAILS					
No.	Description	Date	Designed: .....	Date	Plan No.
			Drawn: .....		Sheet No.
			Checked: .....		
Revisions					

**STEEL PLATE GIRDER  
4-SPAN CONTINUOUS – STRAIGHT  
GIRDER DETAILS (SHEET 1 OF 2)**

**NOTES TO DESIGNER:**

Standard is to be used for straight, 4-span continuous, steel plate girders. The standard includes girder details: tables for plate sizes, dimensions, and tension flange limits; and details for stiffeners, connector plates, etc. Details for two spans of a 4-span continuous unit are on this standard and continued on standard SGDET4B. The standard is used along with standards SGCAM4A and SGCAM4B (camber diagram) and standards SGDL4A and SGDL4B (dead load deflection and top of slab elevations along centerline girder).

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:**

NOTES:

Complete first note (alternate web thickness). Add sheet number(s) to note(s).

GIRDER ELEVATION:

Show location(s) of permissible field splice(s) (bolted splice) and adjust spacing of stud shear connectors in vicinity of splice if required.

PLATE DIMENSION TABLE:

Fill in table.

TENSION FLANGES:

Fill in table.

GIRDER DIMENSION TABLE:

Fill in table.

BEARING STIFFENERS:

Add plate size(s) and location(s).

CROSS FRAME CONNECTOR PLATE:

Add dimensions. See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.21-3.

TRANSVERSE INTERMEDIATE STIFFENER:

Add plate size and dimensions. See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.21-3.

**STEEL PLATE GIRDER  
4-SPAN CONTINUOUS – STRAIGHT  
GIRDER DETAILS (SHEET 1 OF 2)**

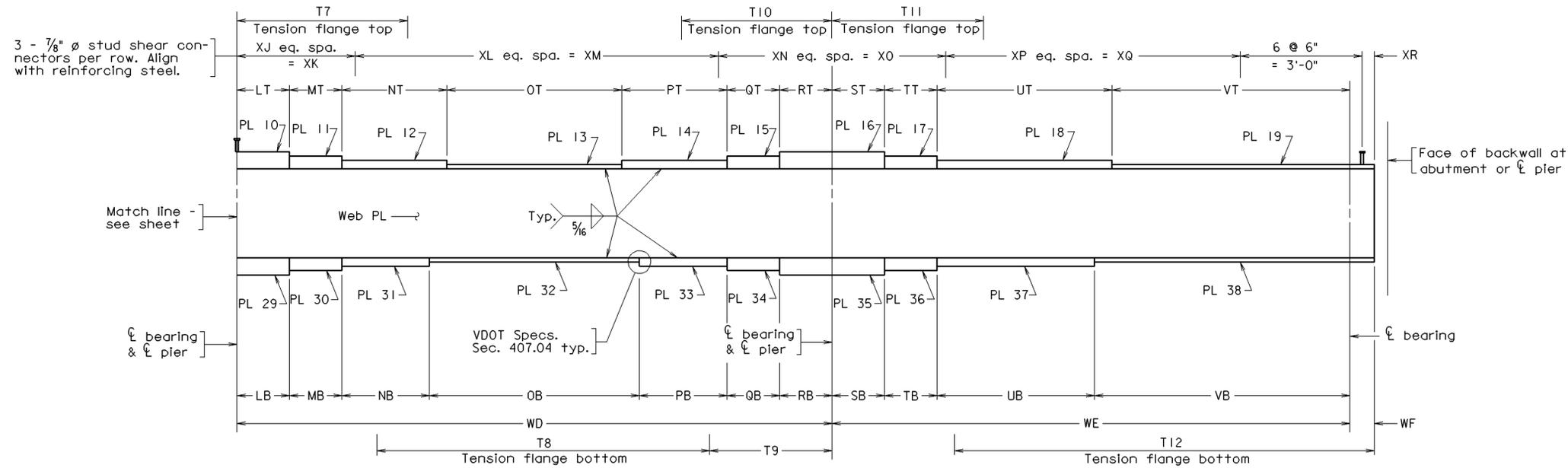
**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD (Continued):**

FLANGE CLIP DETAIL:

Add flange clip detail from cell library (see file no. SGCELLS1A) for skewed bridges. Add angle, dimension(s) and location(s). See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.24.

**STANDARD SGDET4A: NOTES TO DESIGNER**

VOL. V - PART 7  
DATE: 01May16  
SHEET 3 of 3  
FILE NO. SGDET4A



**GIRDER ELEVATION**

**PLATE DIMENSION TABLE**

Girder	Web PL	PL 10	PL 11	PL 12	PL 13	PL 14	PL 15	PL 16	PL 17	PL 18	PL 19	PL 29	PL 30	PL 31	PL 32	PL 33	PL 34	PL 35	PL 36	PL 37	PL 38	

**GIRDER DIMENSION TABLE**

Girder	LB	LT	MB	MT	NB	NT	OB	OT	PB	PT	QB	QT	RB	RT	SB	ST	TB	TT	UB	UT	VB	VT	

**GIRDER DIMENSION TABLE**

Girder	WD	WE	WF	XJ	XK	XL	XM	XN	XO	XP	XQ	XR

**TENSION FLANGES**

Girder	T7	T8	T9	T10	T11	T12

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STRUCTURE AND BRIDGE DIVISION			
<b>GIRDER DETAILS</b>			
No.	Description	Date	Designed: .....
			Drawn: .....
			Checked: .....
	Revisions		
		Date	Plan No.
			Sheet No.

**STEEL PLATE GIRDER  
4-SPAN CONTINUOUS – STRAIGHT  
GIRDER DETAILS (SHEET 2 of 2)**

**NOTES TO DESIGNER:**

Standard is the continuation of standard SGDET4A. See notes to designer on that standard.

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:**

PLATE DIMENSION TABLE:

Fill in table.

TENSION FLANGES:

Fill in table.

GIRDER DIMENSION TABLE:

Fill in table.

FLANGE CLIP DETAIL:

Add flange clip detail from cell library (see file no. SGCELLS1A) for skewed bridges. Add angle, dimension(s) and location(s). See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.24.



**STEEL PLATE GIRDER  
4-SPAN CONTINUOUS – STRAIGHT  
CAMBER DIAGRAM**

**NOTES TO DESIGNER:**

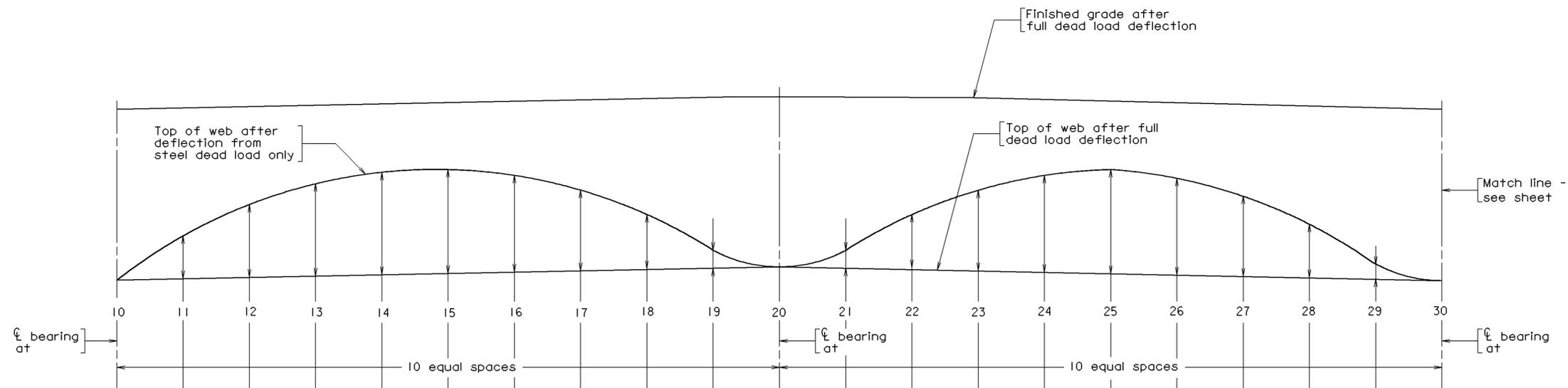
Standard is to be used for straight, 4-span continuous, steel plate girders. The standard includes camber diagram and table for deflections. The standard is used along with standards SGDET4A and SGDET4B (girder details; tables for plate sizes, dimensions, and tension flange limits; and details for stiffeners, connector plates, etc.) and SGDLD4A and SGDLD4B (dead load deflection and top of slab elevations along centerline girder).

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:**

CAMBER DIAGRAM:

Detail shows hump vertical curve with left support at a higher elevation than right support. Detail may be replaced with other shapes. See file no. SGCELLS4 and SGCELLS4A for modification with other cells.

Fill in dimensions on diagram and fill in table.



Girder	Point	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
	$\Delta_s$ 's																						
	$\Delta_c$																						
	Total																						

All values in Dead Load Deflection Table are in inches.

$\Delta_s$  = Deflection of girder from dead load of concrete deck slab and bolsters.

$\Delta_c$  = Deflection of girder from dead load (e.g. parapet) added after deck slab is cast.

### DEAD LOAD DEFLECTIONS

TOP OF SLAB ELEVATIONS ALONG $\bar{C}$ GIRDER																					
Point	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Girder																					
Girder																					
Girder																					
Girder																					
Girder																					
Girder																					

05-16-01  
SGDL4A

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STRUCTURE AND BRIDGE DIVISION			
<b>DEAD LOAD DEFLECTIONS AND SLAB ELEVATIONS</b>			
No.	Description	Date	Designed: .....
			Drawn: .....
			Checked: .....
	Revisions		
		Date	Plan No.
			Sheet No.

**STEEL PLATE GIRDER  
4-SPAN CONTINUOUS – STRAIGHT  
DEAD LOAD DEFLECTION (SHEET 1 OF 2)**

**NOTES TO DESIGNER:**

Standard is to be used for straight, 4-span continuous, steel plate girders. The standard includes table for deflections and top of slab elevations along centerline girder for the first two spans of a 4-span continuous unit and is continued on standard SGDL4B. The standard is used along with standards SGDET4A and SGDET4B (girder details; tables for plate sizes, dimensions, and tension flange limits; and details for stiffeners, connector plates, etc.) and standards SGCAM4A and SGCAM4B (camber diagram).

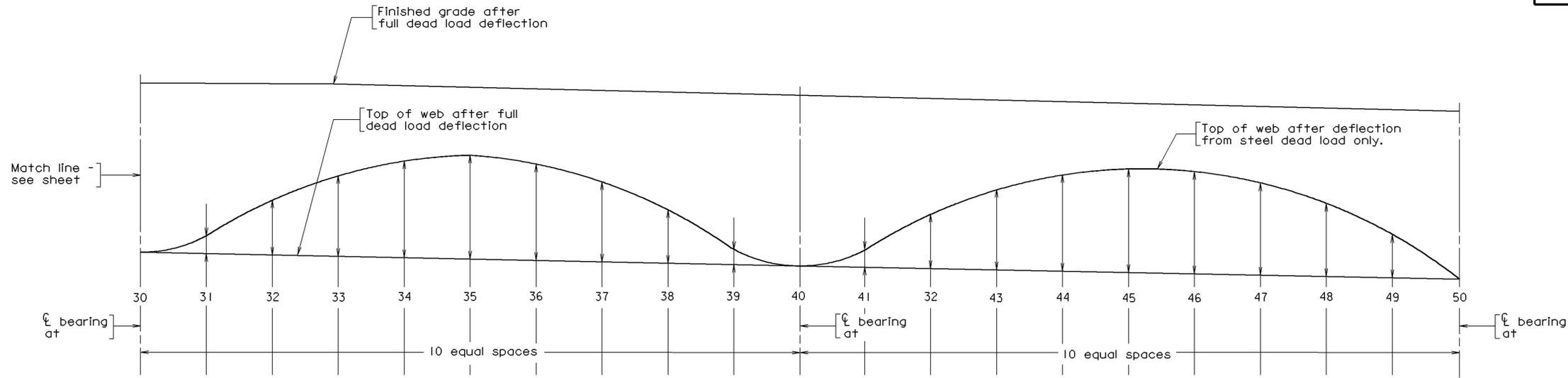
**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:**

DEAD LOAD DEFLECTION DIAGRAM:

Fill in table of dead load deflections.

TOP OF SLAB ELEVATIONS ALONG CENTERLINE GIRDER:

Fill in table.



Girder	Point	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
	$\Delta_s$ 's																						
	$\Delta_c$																						
	Total																						

All values in Dead Load Deflection Table are in inches.

$\Delta_s$  = Deflection of girder from dead load of concrete deck slab and bolsters.

$\Delta_c$  = Deflection of girder from dead load (e.g. parapet) added after deck slab is cast.

### DEAD LOAD DEFLECTIONS

### TOP OF SLAB ELEVATIONS ALONG $\bar{C}$ GIRDER

Point	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Girder																						
Girder																						
Girder																						
Girder																						
Girder																						

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SGDL4B

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STRUCTURE AND BRIDGE DIVISION					
<b>DEAD LOAD DEFLECTIONS AND SLAB ELEVATIONS</b>					
No.	Description	Date	Designed: .....	Date	Plan No.
			Drawn: .....		Sheet No.
			Checked: .....		
Revisions					

**STEEL PLATE GIRDER  
4-SPAN CONTINUOUS – STRAIGHT  
DEAD LOAD DEFLECTION (SHEET 2 OF 2)**

**NOTES TO DESIGNER:**

Standard is the continuation of standard SGDL4A. See notes to designer on that standard.

**ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:**

See standard SGDL4A.