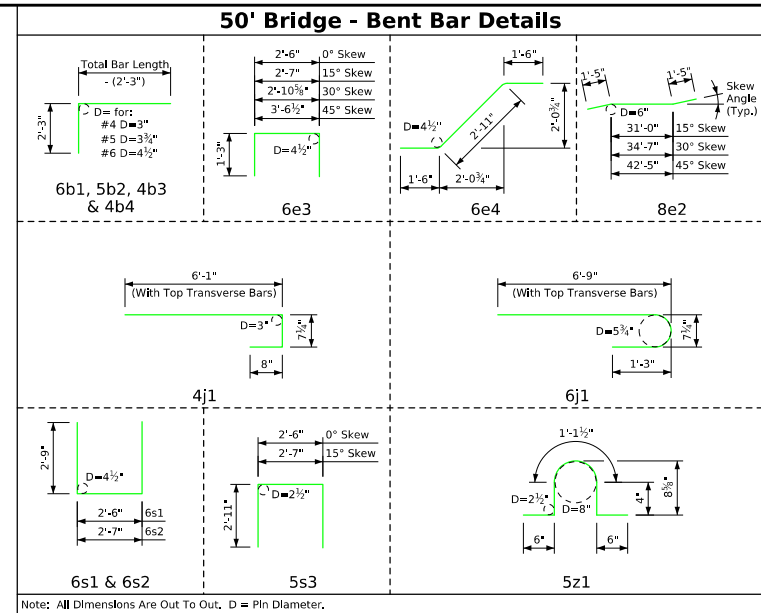


Bill of Reinforcing Steel for Superstructure - 50' Bridge										
Location	Shape	Skew	0 Degree				15 Degree			
			No.	Length	Weight	No.	Length	Weight	No.	Length
Slab Longitudinal Bottom	10a1	40	52'-8"	9065	40	52'-8"	9065	40	52'-8"	9065
Slab Longitudinal Bottom	11a2	20	41'-2"	4374	20	41'-2"	4374	20	41'-2"	4374
Slab Longitudinal Bottom	11a3	20	29'-8"	3152	20	29'-8"	3152	20	29'-8"	3152
Slab Longitudinal Bottom, at Rail	11a4	4	52'-8"	1119	4	52'-8"	1119	4	52'-8"	1119
Slab Longitudinal Bottom, at Rail	10a5	4	38'-6"	663	4	38'-6"	663	4	38'-6"	663
Slab Longitudinal Top	6b1	40	29'-8"	1780	40	29'-8"	1780	40	29'-8"	1780
Slab Longitudinal Top	5b2	40	9'-0"	375	40	9'-0"	375	40	9'-0"	375
Slab Longitudinal Top	4b3	8	28'-10"	154	8	28'-10"	154	8	28'-10"	154
Slab Longitudinal Top, at Rail	4b4	8	9'-5"	50	8	9'-5"	50	8	9'-5"	50
Slab Transverse Bottom	7c2	47	32'-10"	3154	47	34'-0"	3267	33	32'-10"	2215
Slab Transverse Ends, Bottom	7c4	-	-	-	-	-	-	30	VARIES	1091
Slab Transverse, Top	5d2	47	32'-10"	1610	47	34'-0"	1667	33	32'-10"	1130
Slab Transverse Ends, Top	5d4	-	-	-	-	-	-	30	VARIES	557
Top of Slab, Transverse, at W-Beam/Open Rail	4j1	92	7'-5"	456	92	7'-5"	456	92	7'-5"	446
Top of Slab, Transverse, at Single Slope Rail	6j1	92	8'-7"	1186	92	8'-7"	1186	92	8'-7"	1160
Paving Block Lifting Hoops	5z1	10	2'-10"	30	10	2'-10"	30	10	2'-10"	30
Epoxy-Coated Sub Total - W-Beam/Open Rail - LBS.				25,982			26,152			26,211
Epoxy-Coated Sub Total - Single Slope Rail - LBS.				26,712			26,882			26,941
Integral Abutment Bars										
Slab, Transverse at Abutment	8e1	14	32'-10"	1227	-	-	-	-	-	-
Slab, Transverse at Abutment	8e2	47	-	-	14	33'-10"	1265	14	37'-5"	1399
Slab, Hairpins, at Abutment	6e3	72	5'-0"	541	72	5'-1"	550	72	5'-5"	586
Slab, Diagonal, at Abutment	6e4	72	5'-11"	640	72	5'-11"	640	72	5'-11"	640
Wing, Vertical	5m1	40	4'-5"	184	40	4'-5"	184	40	4'-5"	184
Wing, Horizontal	5n1	48	6'-8"	334	48	6'-8"	334	48	6'-8"	334
Epoxy-Coated Sub Total - Integral Abutment - LBS.				2,926			2,973			3,143
High Abutment Bars										
Slab, Diagonal, at Abutment	6e4	72	5'-11"	640	72	5'-11"	640	-	-	-
Slab, Transverse at Abutment	8e5	18	40'-8"	1954	18	42'-1"	2023	-	-	-
Slab, Transverse at Abutment, Cap Ends	8e6	4	5'-2"	55	4	5'-4"	57	-	-	-
Abutment Hairpins	6e1	184	8'-0"	2211	168	8'-0"	2019	-	-	-
Abutment Hairpins, Cap Ends	6e2	-	-	-	16	8'-1"	194	-	-	-
Abutment Hairpins, Cap Ends	5e3	24	8'-4"	209	24	8'-5"	211	-	-	-
Spiral	#2	16	38'-6"	102	16	38'-6"	102	-	-	-
Spiral Spacers, L 7/8x7/8x1/8x 0.7		48	1'-10"	62	48	1'-10"	62	-	-	-
Epoxy-Coated Sub Total - High Abutment - LBS.				5,069			5,144			
Non-Coated Sub Total - High Abutment - LBS.				164			164			
Open Rail - Integral Abutment - See Sheets J305-33-25										
				4,462					4,462	
Open Rail - High Abutment - See Sheets J305-35-25				3,920					-	
Single Slope Rail - Integral Abutment - See Sheets J305-27-25 & J305-31-25				4,367					4,407	4,455
Single Slope Rail - High Abutment - See Sheets J305-29-25 & J305-31-25				3,868					-	
Integral Abutment Total - Epoxy Coated - LBS				33,370					33,816	33,412
With W-Beam Guardrail				28,908					29,354	28,950
With Single Slope Rail				34,005					34,491	34,119
High Abutment Total - Epoxy Coated - LBS				34,971					-	
With W-Beam Guardrail				31,051					-	
With Single Slope Rail				35,649					-	
High Abutment Total - Non Coated - LBS				164					-	

Estimated Quantities for Superstructure - 50' Bridge									
Item	Skew	Integral Abutment				High Abutment			
		0°	15°	30°	45°	0°	15°		
* Structural Concrete (Bridge)	C.Y.	140.8	141.2	142.4	145.0	153.5	154.2		
Reinf. Steel Epoxy Coated With Open Rail	LBS.	33,370	33,587	33,816	33,412	34,971	35,216		
Reinf. Steel Epoxy Coated With W-Beam Guardrail	LBS.	28,908	29,125	29,354	28,950	31,051	31,296		
Reinf. Steel Epoxy Coated With Single Slope Rail	LBS.	34,005	34,224	34,491	34,119	35,590	35,888		
Reinf. Steel Non-Coated	LBS.	-	-	-	-	164	164		
* Includes 4 wings for integral abutment at 1.18 CY each and temporary paving blocks; excludes rail concrete.									



Latest Revision Date

Approved by Bridge Engineer

Standard Design - 30'-0" Roadway, Single Span Bridge

Single Span Concrete Slab Bridges

July, 2025

Superstructure Details
50'-0" Bridge

J305-10-25