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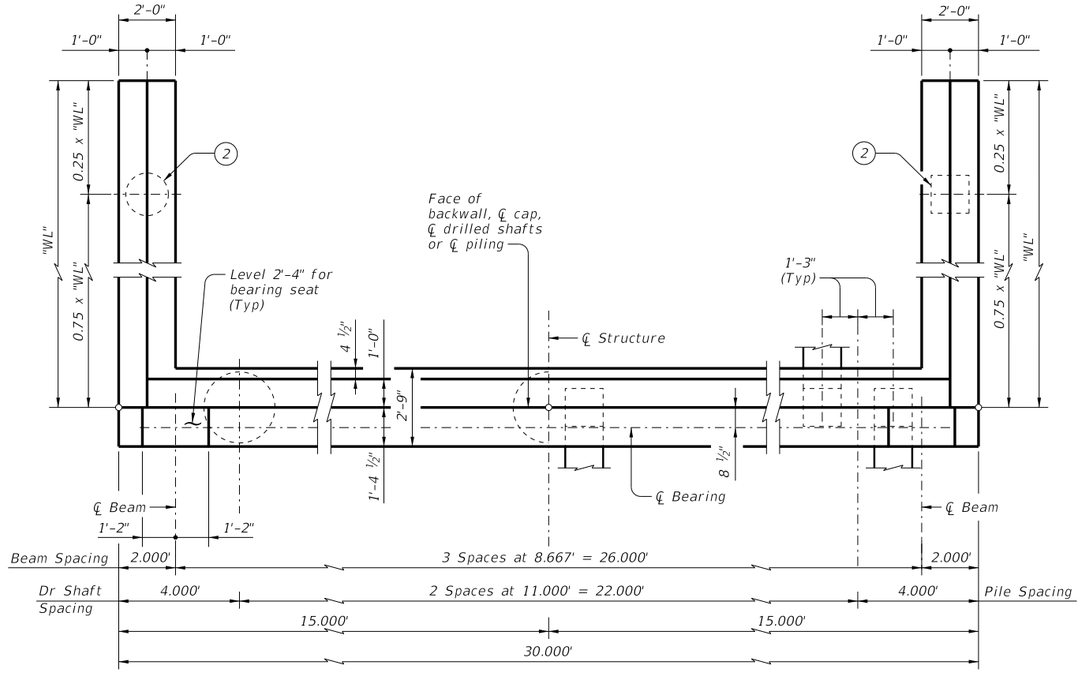
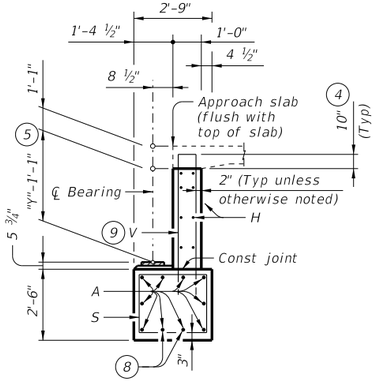
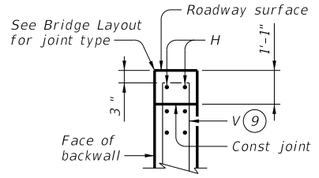


PLAN (1)



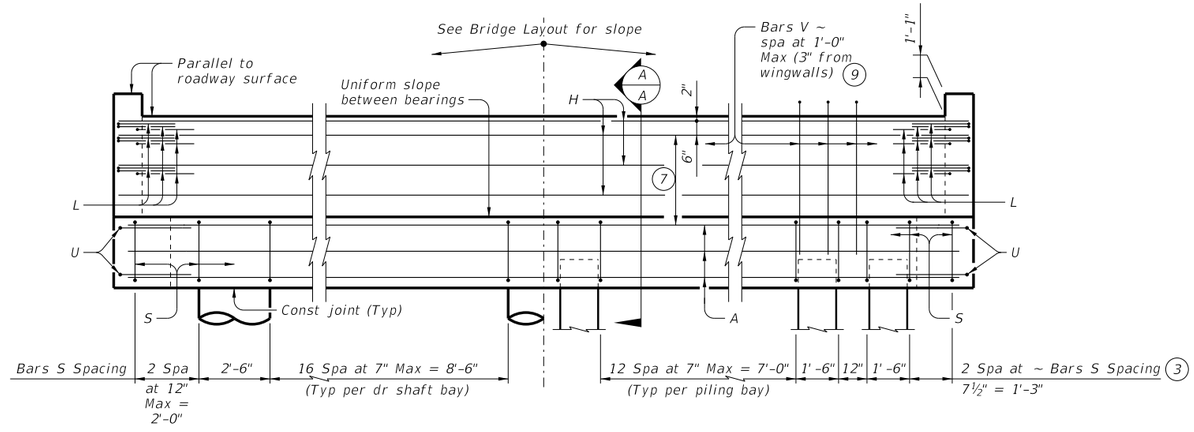
SECTION A-A

(With approach slab) (6)



BACKWALL DETAIL

(Without approach slab) (6)



ELEVATION

(1) See Table A for variable dimensions based on header slope and beam type.

(2) See Table A to determine if wingwall foundations are required.

(3) For piling larger than 16", adjust Bars S spacing as required to avoid piling.

(4) Increase as required to maintain 3" from finished grade.

(5) See Steel Beam Standard Design (SBSD-28) standard for "Y" value.

(6) See Bridge Layout to determine if approach slab is present.

(7) Use 2 spaces at 12" Max for W18 through W24 beams and 3 spaces at 12" Max for W27 beams and larger.

(8) With pile foundations, replace Bars A located at bottom centerline of cap with 2 ~ #11 x 7'-0" (per bay) placed between piling groups. Deduct 159 lbs total from reinforcing steel total.

(9) Field bend as needed to clear piles.

TABLE A

Header Slope	Beam Type	Wingwall Type	Wingwall Length "WL"
2:1	W18	Cantilevered	7.000'
	W21	Cantilevered	7.000'
	W24	Cantilevered	8.000'
	W27	Cantilevered	8.000'
	W30	Cantilevered	8.000'
	W33	Cantilevered	9.000'
	W36	Cantilevered	9.000'
	W40	Cantilevered	10.000'
3:1	W18	Cantilevered	10.000'
	W21	Cantilevered	10.000'
	W24	Cantilevered	11.000'
	W27	Cantilevered	12.000'
	W30	Founded	13.000'
	W33	Founded	13.000'
	W36	Founded	14.000'
	W40	Founded	15.000'

MATERIAL NOTES:

Provide Class C Concrete, f'c = 3,600 psi.
Provide Class C (HPC) Concrete if shown elsewhere in the plans.
Provide Grade 60 reinforcing steel.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.
See Bridge Layout for beam type, header slope, and foundation type, size, and length.
See Common Foundation Details (FD) standard sheet for all foundation details and notes.
See Concrete Riprap (CRR) standard sheet or Stone Riprap (SRR) standard sheet for riprap attachment details, if applicable.
See Standard Erection and Bracing Requirements (SBBR) standard sheet for location and size of anchor bolt required for erection bracing.
See applicable rail details for rail anchorage in wingwalls.
These abutment details may be used with standard SSB-28 only.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are out-to-out of bar.

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ABUTMENTS
STEEL BEAM SPANS
28' ROADWAY

ASB-28

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2:1 HEADER SLOPE

TABLE OF ESTIMATED QUANTITIES (11) (W18 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	6	#6	29' – 8"	267
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44
V	29	#5	10' – 1"	305
wH1	14	#6	8' – 1"	170
wH2	16	#6	6' – 8"	160
wS	16	#4	7' – 10"	84
wV	16	#5	10' – 1"	168
Reinforcing Steel			Lb	3,243
			CY	13.4

TABLE OF ESTIMATED QUANTITIES (11) (W21 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	6	#6	29' – 8"	267
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44
V	29	#5	10' – 6"	318
wH1	14	#6	8' – 1"	170
wH2	16	#6	6' – 8"	160
wS	16	#4	7' – 10"	84
wV	16	#5	10' – 6"	175
Reinforcing Steel			Lb	3,263
			CY	13.7

TABLE OF ESTIMATED QUANTITIES (11) (W24 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	6	#6	29' – 8"	267
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44
V	29	#5	11' – 1"	335
wH1	14	#6	9' – 1"	191
wH2	16	#6	7' – 8"	184
wS	18	#4	7' – 10"	94
wV	18	#5	11' – 1"	208
Reinforcing Steel			Lb	3,368
			CY	14.8

TABLE OF ESTIMATED QUANTITIES (11) (W27 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	8	#6	29' – 8"	356
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44
V	29	#5	11' – 7"	350
wH1	14	#6	9' – 1"	191
wH2	20	#6	7' – 8"	230
wS	18	#4	7' – 10"	94
wV	18	#5	11' – 7"	217
Reinforcing Steel			Lb	3,527
			CY	15.2

TABLE OF ESTIMATED QUANTITIES (11) (W30 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	8	#6	29' – 8"	356
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44
V	29	#5	12' – 1"	365
wH1	14	#6	10' – 1"	212
wH2	20	#6	8' – 8"	260
wS	20	#4	7' – 10"	
wV	20	#5	12' – 1"	252
Reinforcing Steel			Lb	3,639
			CY	16.2

TABLE OF ESTIMATED QUANTITIES (11) (W33 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	8	#6	29' – 8"	356
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44
V	29	#5	12' – 7"	381
wH1	14	#6	10' – 1"	212
wH2	20	#6	8' – 8"	260
wS	20	#4	7' – 10"	105
wV	20	#5	12' – 7"	262
Reinforcing Steel			Lb	3,665
			CY	16.7

TABLE OF ESTIMATED QUANTITIES (11) (W36 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	8	#6	29' – 8"	356
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' – 3"	44

TABLE OF ESTIMATED QUANTITIES (11) (W40 BEAMS)

Bar	No.	Size	Length	Weight
A (8)	10	#11	29' – 0"	1,541
H	8	#6	29' – 8"	356
L	18	#6	4' – 0"	108
S	38	#5	10' – 0"	396
U	4	#6	7' –	

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