

Revision Dates		(Preliminary Stage Only)	
09-16			

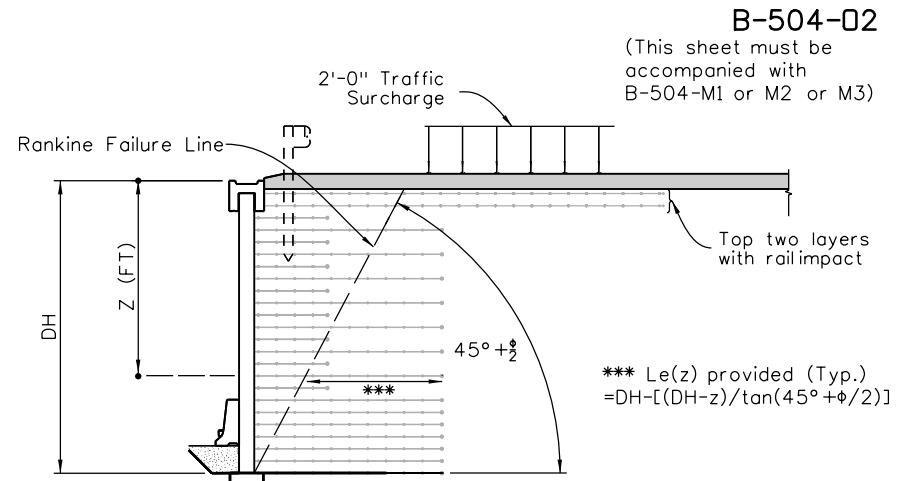
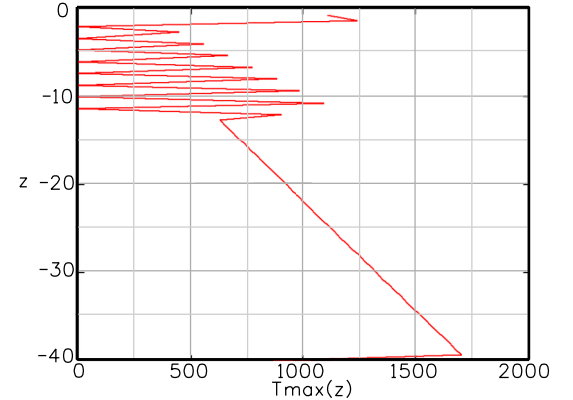
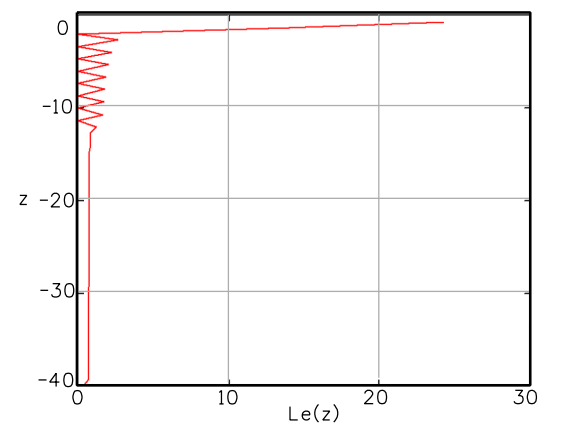
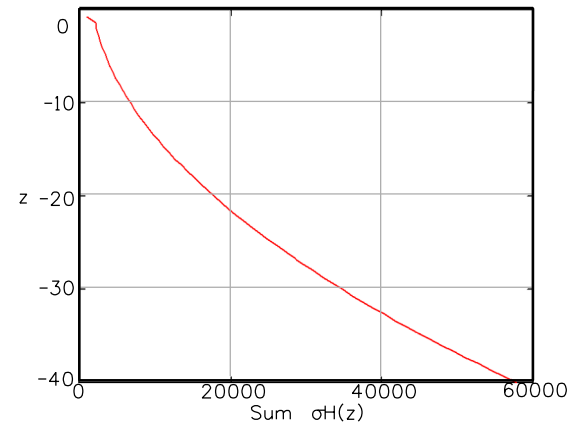
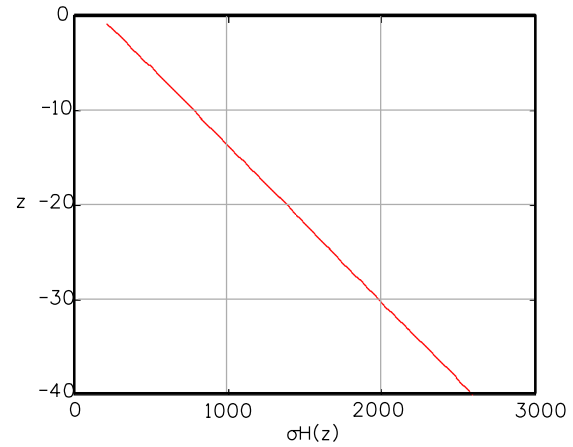
Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE

DH or Z (FT)	# OF BLOCKS	σH (lb./Ft.)	$\Sigma \sigma H \times \text{spacing}$ (lb./Ft.)	RL TYPE	SPACING	Le (Ft.)
0.667	Coping	207.095	1.04E+03	TOP	12"	24.303
1.333	2	252.368	2.11E+03	TOP	16"	13.945
2.000	3	292.712	2.30E+03	TAIL	N/A	NA
2.667	4	333.055	2.52E+03	FULL	16"	2.612
3.333	5	373.398	2.77E+03	TAIL	N/A	NA
4.000	6	413.741	3.05E+03	FULL	16"	2.195
4.667	7	454.084	3.35E+03	TAIL	N/A	NA
5.333	8	494.427	3.68E+03	FULL	16"	1.981
6.000	9	534.77	4.04E+03	TAIL	N/A	NA
6.667	10	575.113	4.42E+03	FULL	16"	1.852
7.333	11	615.456	4.83E+03	TAIL	N/A	NA
8.000	12	655.799	5.27E+03	FULL	16"	1.765
8.667	13	696.143	5.73E+03	TAIL	N/A	NA
9.333	14	736.486	6.22E+03	FULL	16"	1.703
10.000	15	776.829	6.74E+03	TAIL	N/A	NA
10.667	16	817.172	7.29E+03	FULL	16"	1.656
11.333	17	857.515	7.86E+03	TAIL	N/A	NA
12.000	18	897.858	8.46E+03	FULL	12"	1.214
12.667	19	938.201	9.08E+03	FULL	8"	0.802
13.333	20	978.544	9.73E+03	FULL	8"	0.795
14.000	21	1.02E+03	1.04E+04	FULL	8"	0.789
14.667	22	1.06E+03	1.11E+04	FULL	8"	0.783
15.333	23	1.10E+03	1.19E+04	FULL	8"	0.778
16.000	24	1.14E+03	1.26E+04	FULL	8"	0.773
16.667	25	1.18E+03	1.34E+04	FULL	8"	0.768
17.333	26	1.22E+03	1.42E+04	FULL	8"	0.764
18.000	27	1.26E+03	1.51E+04	FULL	8"	0.760
18.667	28	1.30E+03	1.59E+04	FULL	8"	0.757
19.333	29	1.34E+03	1.68E+04	FULL	8"	0.754
20.000	30	1.38E+03	1.77E+04	FULL	8"	0.751
20.667	31	1.42E+03	1.87E+04	FULL	8"	0.748
21.333	32	1.46E+03	1.97E+04	FULL	8"	0.745
22.000	33	1.50E+03	2.07E+04	FULL	8"	0.742
22.667	34	1.54E+03	2.17E+04	FULL	8"	0.740
23.333	35	1.58E+03	2.28E+04	FULL	8"	0.738
24.000	36	1.62E+03	2.38E+04	FULL	8"	0.736
24.667	37	1.66E+03	2.49E+04	FULL	8"	0.734
25.333	38	1.71E+03	2.61E+04	FULL	8"	0.732
26.000	39	1.75E+03	2.72E+04	FULL	8"	0.730
26.667	40	1.79E+03	2.84E+04	FULL	8"	0.728
27.333	41	1.83E+03	2.97E+04	FULL	8"	0.727
28.000	42	1.87E+03	3.09E+04	FULL	8"	0.725
28.667	43	1.91E+03	3.22E+04	FULL	8"	0.724
29.333	44	1.95E+03	3.35E+04	FULL	8"	0.722
30.000	45	1.99E+03	3.48E+04	FULL	8"	0.721
30.667	46	2.03E+03	3.61E+04	FULL	8"	0.720
31.333	47	2.07E+03	3.75E+04	FULL	8"	0.718
32.000	48	2.11E+03	3.89E+04	FULL	8"	0.717
32.667	49	2.15E+03	4.04E+04	FULL	8"	0.716
33.333	50	2.19E+03	4.18E+04	FULL	8"	0.715
34.000	51	2.23E+03	4.33E+04	FULL	8"	0.714
34.667	52	2.27E+03	4.48E+04	FULL	8"	0.713
35.333	53	2.31E+03	4.64E+04	FULL	8"	0.712
36.000	54	2.35E+03	4.79E+04	FULL	8"	0.711
36.667	55	2.39E+03	4.95E+04	FULL	8"	0.710
37.333	56	2.43E+03	5.11E+04	FULL	8"	0.709
38.000	57	2.47E+03	5.28E+04	FULL	8"	0.708
38.667	58	2.51E+03	5.45E+04	FULL	8"	0.708
39.333	59	2.55E+03	5.62E+04	FULL	8"	0.707
40.000	60	2.59E+03	5.79E+04	FULL	4"	0.353

Note: Le of top two layers are not developed, layers used for avoiding roadway tension cracks.

* Summation of σH above Z includes rail impact.

** Tributary spacing



APPLICATION DIAGRAM (DH=16' AS SHOWN)

Note to Designer:
Refer to Bridge Design Manual (BDM) for Design Criteria and Examples

Print Date: 9/6/2016	0000
File Name: Sheet_B-504-02.dgn	
Horiz. Scale: As Noted Vert. Scale: As Noted	
Staff Bridge Branch-Unit OXXX Unit Leader Initials	

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

4201 East Arkansas Avenue
Room 107
Denver, CO 80222
Phone: 303-757-9309 FAX: 303-757-9197

Staff Bridge Branch **Initials**

As Constructed
No Revisions:
Revised:
Void:

LRFD GRS WALL WITH ROADWAY RAIL DESIGN CHARTS/TABLE			
Designer:	XXXXXXX	Structure Numbers	Wall-X-XX-XX
Detailer:	XXXXXXX	Subset Sheets:	WXX of XXX
Sheet Subset:	Wall		

Project No./Code
Project Number
Code
Sheet Number