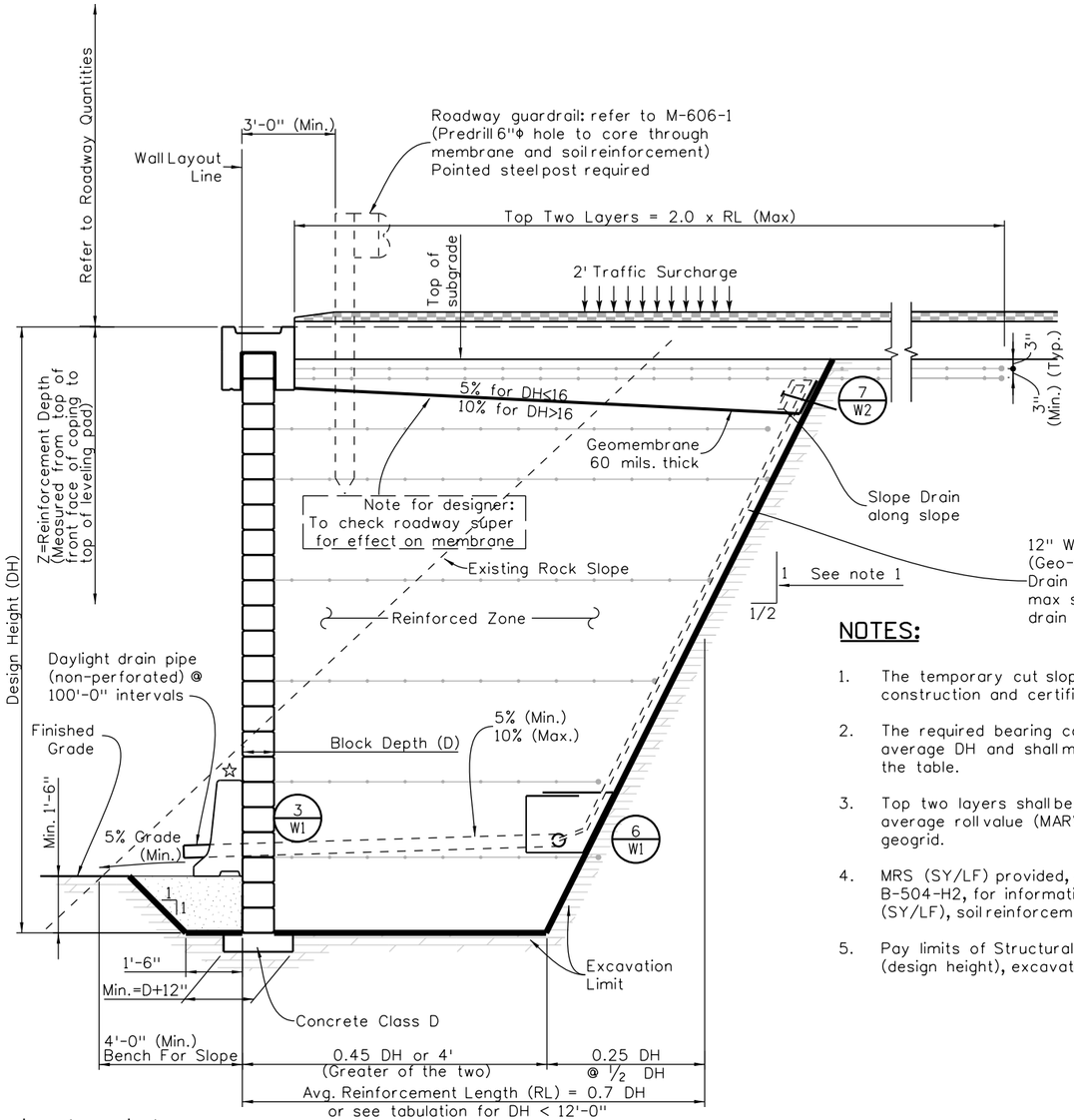
B-504-B3

(This sheet must be accompanied with B-504-H2)



☆Barrier only required when located next to traffic

SECTION VIEW

Note for the Designer:
Check slope stability during excavation shown on Geotech recommendation.

NOTES:

1. The temporary cut slope shall be stable during entire period of wall construction and certified by a geotechnical engineer.
2. The required bearing capacity in TSF at the toe is based on 0.70 average DH and shall meet or exceed BP (load factored) as listed in the table.
3. Top two layers shall be woven geotextile with 4800 lb/ft minimum average roll value (MARV) in both directions or one layer of equivalent geogrid.
4. MRS (SY/LF) provided, according to the assumed spacings in B-504-H2, for information only. The Contractor shall provide actual MRS (SY/LF), soil reinforcement types, spacing, and coverage ratio.
5. Pay limits of Structural Backfill (Class 1) shall be bound by top of DH (design height), excavation limits & face of wall.

	DH (FT)	RL**(FT) (Min.)	RL**(FT) (Avg.)	RL**(FT) (Max.)	MRS (C.Y./LF)	MRS (S.Y./LF)	BM1 (C.Y./LF)	PLG (Ft/LF)	BP (TSF)
	2.000	4.000	4.500	5.000	0.333	2.222	0.458	5.00	0.480
	2.667	4.000	4.667	5.333	0.461	2.889	0.586	5.33	0.583
	3.333	4.000	4.833	5.667	0.597	3.056	0.722	5.67	0.700
	4.000	4.000	5.000	6.000	0.741	3.778	0.866	6.00	0.833
	4.667	4.000	5.167	6.333	0.893	3.963	1.018	6.33	0.987
	5.333	4.000	5.333	6.667	1.053	4.148	1.178	6.67	1.165
	6.000	4.000	5.500	7.000	1.222	4.333	1.347	7.00	1.371
	6.667	4.000	5.667	7.333	1.399	5.148	1.524	7.33	1.612
	7.333	4.000	5.833	7.667	1.584	5.352	1.709	7.67	1.896
	8.000	4.000	6.000	8.000	1.778	5.556	1.903	8.00	2.236
	8.667	4.000	6.167	8.333	1.979	5.759	2.104	8.33	2.645
	9.333	4.200	6.533	8.867	2.258	6.844	2.383	8.87	2.884
	10.000	4.500	7.000	9.500	2.593	7.333	2.718	9.50	3.010
	10.667	4.800	7.467	10.133	2.950	7.822	3.075	10.13	3.136
	11.333	5.100	7.933	10.767	3.330	8.311	3.455	10.77	3.263
	12.000	5.400	8.400	11.400	3.733	9.733	3.858	11.40	3.391
	12.667	5.700	8.867	12.033	4.160	10.274	4.285	12.03	3.518
	13.333	6.000	9.333	12.667	4.609	10.815	4.734	12.67	3.647
	14.000	6.300	9.800	13.300	5.081	12.444	5.206	13.30	3.775
	14.667	6.600	10.267	13.933	5.577	13.037	5.702	13.93	3.904
	15.333	6.900	10.733	14.567	6.095	13.630	6.220	14.57	4.032
***	16.000	7.200	11.200	15.200	6.637	15.467	6.762	15.20	4.161
	16.667	7.500	11.667	15.833	7.202	16.111	7.327	15.83	4.290
	17.333	7.800	12.133	16.467	7.789	16.756	7.914	16.47	4.420
	18.000	8.100	12.600	17.100	8.400	18.800	8.525	17.10	4.549
	18.667	8.400	13.067	17.733	9.034	19.496	9.159	17.73	4.679
	19.333	8.700	13.533	18.367	9.691	20.193	9.816	18.37	4.808
	20.000	9.000	14.000	19.000	10.370	22.444	10.495	19.00	4.938
	20.667	9.300	14.467	19.633	11.073	23.193	11.198	19.63	5.068
	21.333	9.600	14.933	20.267	11.799	23.941	11.924	20.27	5.198
	22.000	9.900	15.400	20.900	12.548	26.400	12.673	20.90	5.328
	22.667	10.200	15.867	21.533	13.320	27.200	13.445	21.53	5.458
	23.333	10.500	16.333	22.167	14.115	28.000	14.240	22.17	5.588
	24.000	10.800	16.800	22.800	14.933	30.667	15.058	22.80	5.718
	24.667	11.100	17.267	23.433	15.774	31.519	15.899	23.43	5.848
	25.333	11.400	17.733	24.067	16.639	32.370	16.764	24.07	5.978
	26.000	11.700	18.200	24.700	17.526	35.244	17.651	24.70	6.109
	26.667	12.000	18.667	25.333	18.436	36.148	18.561	25.33	6.239
	27.333	12.300	19.133	25.967	19.370	37.052	19.495	25.97	6.369
	28.000	12.600	19.600	26.600	20.326	40.133	20.451	26.60	6.500
	28.667	12.900	20.067	27.233	21.305	41.089	21.430	27.23	6.630
	29.333	13.200	20.533	27.867	22.308	44.326	22.433	27.87	6.760
	30.000	13.500	21.000	28.500	23.333	45.333	23.458	28.50	6.891
	30.667	13.800	21.467	29.133	24.382	48.726	24.507	29.13	7.021
	31.333	14.100	21.933	29.767	25.453	49.785	25.578	29.77	7.152
	32.000	14.400	22.400	30.400	26.548	53.333	26.673	30.40	7.282
	32.667	14.700	22.867	31.033	27.666	54.444	27.791	31.03	7.413
	33.333	15.000	23.333	31.667	28.807	58.148	28.932	31.67	7.543
	34.000	15.300	23.800	32.300	29.970	59.311	30.095	32.30	7.674
	34.667	15.600	24.267	32.933	31.157	63.170	31.282	32.93	7.805
	35.333	15.900	24.733	33.567	32.367	64.385	32.492	33.57	7.935
	36.000	16.200	25.200	34.200	33.600	68.400	33.725	34.20	8.066
	36.667	16.500	25.667	34.833	34.856	72.519	34.981	34.83	8.197
	37.333	16.800	26.133	35.467	36.135	76.741	36.260	35.47	8.327
	38.000	17.100	26.600	36.100	37.437	81.067	37.562	36.10	8.458
	38.667	17.400	27.067	36.733	38.762	85.496	38.887	36.73	8.589
	39.333	17.700	27.533	37.367	40.110	90.030	40.235	37.37	8.719
	40.000	18.000	28.000	38.000	41.481	94.667	41.606	38.00	8.850

** RL for top two geotextile layers = 2.0 x RL (Max.)

*** For example spacing on B-504-H2: DH=16' requires 15.467 SY/LF reinforcement corresponding to 6.637 CY/LF volume of MRS with Class 1 paid for separately

Revision Dates (Preliminary Stage Only): 09-16

Quantities: Quantities By / Checked By — INITIAL / DATE
Detail: Detailed By / Checked By — INITIAL / DATE
Design: Designed By / Checked By — INITIAL / DATE

Print Date: 9/6/2016
File Name: Sheet_B-504-B3.dgn
Horiz. Scale: 1:4 Vert. Scale: As Noted
Staff Bridge Branch-Unit 0XXX Unit Leader Inititals

Sheet Revisions		
Date:	Comments	Init.

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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:

TRUNCATED BASE BLOCK FACING MSE WALL WITH ROADWAY RAIL AND 1/2:1 ROCK EXCAVATION

Designer: XXXXXXX
Detailer: XXXXXXX
Sheet Subset: Wall
Structure Numbers: Wall-X-XX-XX / Wall-X-XX-XX
Subset Sheets: WXX of XXX

Project No./Code
Project Number
Code
Sheet Number

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