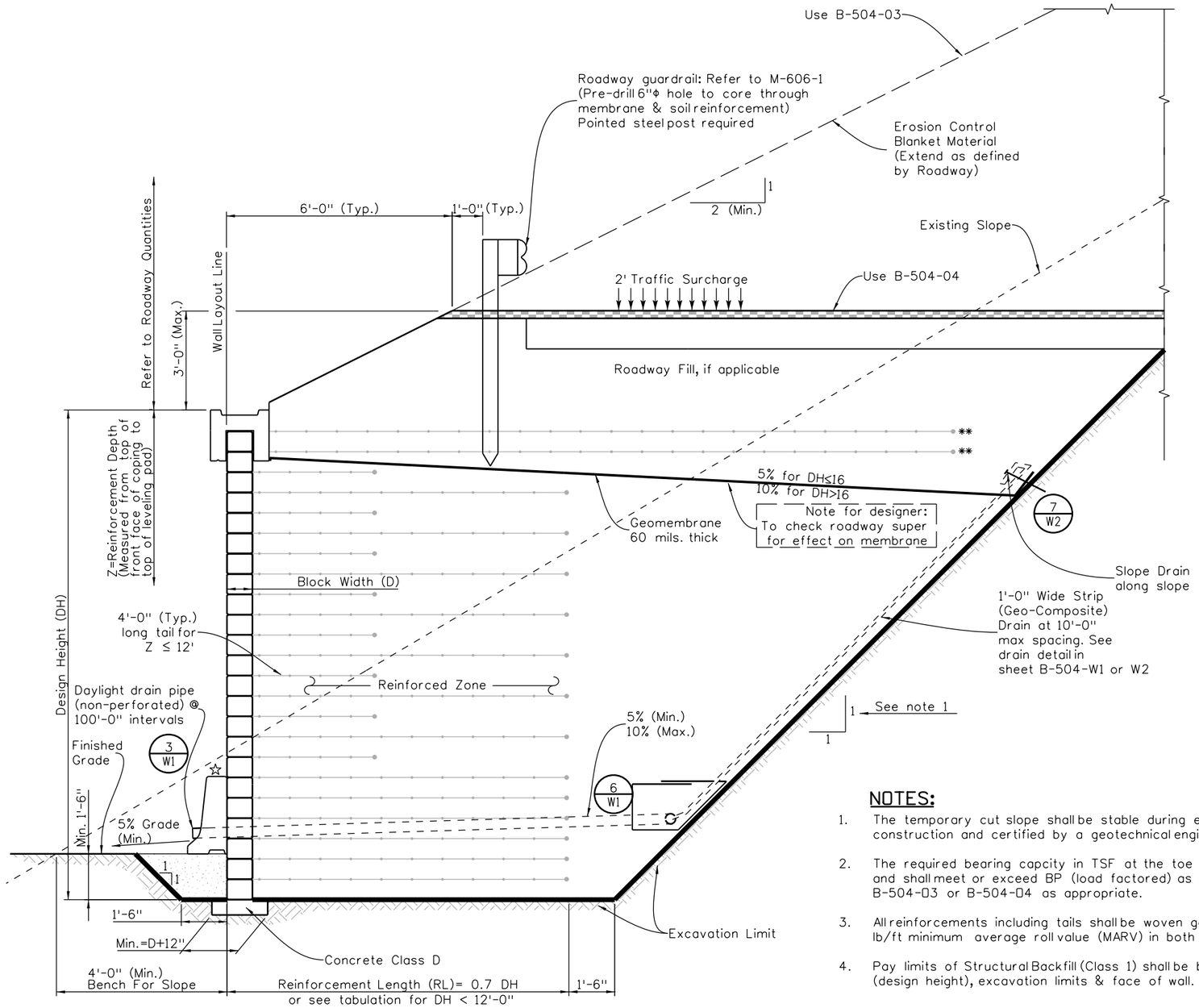

SECTION VIEW

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

B-504-N1

(This sheet must be accompanied with B-504-03 or 04)

	DH (FT)	RL** (FT)	MRS (CY/LF)	MRS (SY/LF)	BM1 (CY/LF)	PLG (Ft/LF)	03 BP (TSF)	04 BP (TSF)
	2.000	6.000	0.444	3.111	0.755	9.500	0.335	1.083
	2.667	6.000	0.593	3.778	0.997	10.167	0.409	1.179
	3.333	6.000	0.741	4.222	1.257	10.833	0.489	1.290
	4.000	6.000	0.889	4.889	1.532	11.500	0.575	1.419
	4.667	6.000	1.037	5.333	1.825	12.167	0.669	1.568
	5.333	6.000	1.185	6.000	2.133	12.833	0.771	1.740
	6.000	6.000	1.333	6.444	2.458	13.500	0.884	1.942
	6.667	7.000	1.728	8.000	3.047	15.167	0.973	1.859
	7.333	7.000	1.901	8.444	3.430	15.833	1.091	2.042
	8.000	8.000	2.370	10.222	4.125	17.500	1.178	1.982
	8.667	8.000	2.568	10.667	4.565	18.167	1.301	2.151
	9.333	8.000	2.765	11.556	5.022	18.833	1.435	2.341
	10.000	8.000	2.963	12.000	5.495	19.500	1.581	2.557
	10.667	8.000	3.160	12.889	5.985	20.167	1.742	2.804
	11.333	8.000	3.358	13.333	6.491	20.833	1.918	3.091
	12.000	8.400	3.733	14.756	7.192	21.900	2.042	3.151
	12.667	8.867	4.160	16.363	7.960	23.033	2.156	3.176
	13.333	9.333	4.609	18.074	8.767	24.167	2.269	3.207
	14.000	9.800	5.081	19.889	9.614	25.300	2.383	3.244
	14.667	10.267	5.577	21.807	10.500	26.433	2.496	3.285
	15.333	10.733	6.095	23.830	11.426	27.567	2.610	3.329
***	16.000	11.200	6.637	25.956	12.392	28.700	2.723	3.377
	16.667	11.667	7.202	28.185	13.397	29.833	2.837	3.427
	17.333	12.133	7.789	30.519	14.441	30.967	2.950	3.479
	18.000	12.600	8.400	32.956	15.525	32.100	3.064	3.532
	18.667	13.067	9.034	35.496	16.648	33.233	3.177	3.588
	19.333	13.533	9.691	38.141	17.811	34.367	3.290	3.645
	20.000	14.000	10.370	40.889	19.014	35.500	3.404	3.703
	20.667	14.467	11.073	43.741	20.256	36.633	3.517	3.762
	21.333	14.933	11.799	46.696	21.537	37.767	3.631	3.822
	22.000	15.400	12.548	49.756	22.858	38.900	3.744	3.882
	22.667	15.867	13.320	52.919	24.219	40.033	3.858	3.944
	23.333	16.333	14.115	56.185	25.619	41.167	3.971	4.006
	24.000	16.800	14.933	59.556	27.058	42.300	4.085	4.069
	24.667	17.267	15.774	63.030	28.537	43.433	4.198	4.133
	25.333	17.733	16.639	66.607	30.056	44.567	4.312	4.197
	26.000	18.200	17.526	70.289	31.614	45.700	4.425	4.261
	26.667	18.667	18.436	74.074	33.211	46.833	4.539	4.326
	27.333	19.133	19.370	77.963	34.848	47.967	4.652	4.391
	28.000	19.600	20.326	81.956	36.525	49.100	4.765	4.456
	28.667	20.067	21.305	86.052	38.241	50.233	4.879	4.522
	29.333	20.533	22.308	90.252	39.997	51.367	4.992	4.588
	30.000	21.000	23.333	94.556	41.792	52.500	5.106	4.655
	30.667	21.467	24.382	98.963	43.626	53.633	5.219	4.721
	31.333	21.933	25.453	103.474	45.500	54.767	5.333	4.788
	32.000	22.400	26.548	108.089	47.414	55.900	5.446	4.855
	32.667	22.867	27.666	112.807	49.367	57.033	5.560	4.923
	33.333	23.333	28.807	117.630	51.360	58.167	5.673	4.990
	34.000	23.800	29.970	122.556	53.392	59.300	5.787	5.058
	34.667	24.267	31.157	127.585	55.463	60.433	5.900	5.126
	35.333	24.733	32.367	132.719	57.574	61.567	6.014	5.194
	36.000	25.200	33.600	137.956	59.725	62.700	6.127	5.262
	36.667	25.667	34.856	143.296	61.915	63.833	6.241	5.330
	37.333	26.133	36.135	148.741	64.145	64.967	6.354	5.399
	38.000	26.600	37.437	154.289	66.414	66.100	6.467	5.467
	38.667	27.067	38.762	159.941	68.723	67.233	6.581	5.536
	39.333	27.533	40.110	165.696	71.071	68.367	6.694	5.605
	40.000	28.000	41.481	171.556	73.458	69.500	6.808	5.673

** RL for top two geotextile layers = 2 x RL (For roadway)
RL=PLG (For 2:1 Infinite Slope)

*** For example with reinforcement at each block: DH=16' requires 25.95 SY/LF woven geotextile corresponding to 6.637 CY/LF volume of MRS with Class 1 backfill paid separately

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 capcity in TSF at the toe is based on 0.7 DH and shall meet or exceed BP (load factored) as listed in the table for B-504-03 or B-504-04 as appropriate.
3. All reinforcements including tails shall be woven geotextile with 4800 lb/ft minimum average roll value (MARV) in both directions.
4. Pay limits of Structural Backfill (Class 1) shall be bound by top of DH (design height), excavation limits & face of wall.

Revision Dates	(Preliminary Stage Only)
09-16	

Quantities			
Quantities By	INITIAL	Checked By	DATE

Detail			
Detailed By	INITIAL	Checked By	DATE

Design			
Designed By	INITIAL	Checked By	DATE

nguyenh 9:18:29 AM C:\Users\nguyenh\Desktop\Worksheet dgn and PDF\Sheet_B-504-N1.dgn

Print Date: 9/6/2016
File Name: Sheet_B-504-N1.dgn
Horiz. Scale: 1:4 Vert. Scale: As Noted
Staff Bridge Branch-Unit 0XXX 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:

BLOCK FACING GRS WALL
FOR BACKSLOPE OR ROADWAY
WITH 1:1 SOIL EXCAVATION

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

Project No./Code
Project Number
Code
Sheet Number