

B-504-03 REINFORCING SCHEDULE

Z Range	Product	Type	Tult (MD)
0'-30'	PET	Geotextile	7200 lb/ft
30'8"-40'	PET	Geotextile	10200 lb/ft

Note for Designer:
Example table for
specifying
reinforcing
schedule. For use
adjust Z Range,
Product, Type, and
specify Tult as a
common value of
available material.

Erosion Control
Blanket Material
(Extend as defined
by Roadway)

Use B-504-03

Roadway guardrail: refer to M-606-1
(Predrill 6" hole to core through
membrane and soil reinforcement)
Pointed steel post required

2' Traffic Surcharge

3" HMA

Use B-504-04

Top of subgrade

Roadway Fill, if applicable

5% for $DH \leq 16$
10% for $DH > 16$

LLDPE
Geomembrane
30 mils thick

Note to Designer:
Check superelevation and site
layout for possible changes
needed for geomembrane

1'-0" Wide Strip (Geo-
Composite) Drain at 10'-0"
Max. See Drain Detail on B-
504-W1 or W2

Excavation limit

NOTES:

- Required benches not shown. Contractor is responsible for slope stability during construction. Working drawings shall show any adjustments needed for benching and other requirements.
- 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 tables for B-504-03 and B-504-04 as appropriate.
- All Tult values for reinforcements including tails shall meet or exceed the Tmax values from the corresponding design sheets. The minimum strength of the reinforcing material shall be 4800 Lb/Ft minimum average roll value (MARV) in the Machine Direction placed perpendicular to the face of the wall.
- Pay limits of Structural Backfill (Class 1) shall be bound by top of DH (design height), excavation limits and face of wall. See B504 quantity sheets for additional details. Additional quantities due to benching per 203.06 shall be included in the cost of the work.

Note for Designer: For ease of construction designer may specify reinforcing type and strength. Ex: 4800 PET geotextile for B-504-03 walls up to 18' DH and B-504-04 walls up to 30' DH. Typically limit reinforcing to no more than 3 common strengths. Contact Staff Bridge Branch for assistance.

SECTION VIEW

☆ Barrier required when located within clear zone. See M-606-15 Style CD for details.
☆☆ 1'-0" (Typ) Casing Socket into Rock

Print Date: \$DATE\$
File Name: Sheet_B-504-N3.dgn
Horiz. Scale: Vert. Scale: As Noted
Unit Information Unit Leader Initials

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

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Staff Bridge Branch

Initials

DH (Ft)	RL**(Ft)			MRS (CY/LF)	MRS (SY/LF)	BM1 (CY/LF)	PLG (Ft/LF)	03 BP (TSF)	04 BP (TSF)
	(Min)	(Avg)	(Max)						
2.000	4.000	4.500	5.000	0.333	2.667	0.458	5.00	0.417	0.934
2.667	4.000	4.667	5.333	0.461	3.333	0.586	5.33	0.534	1.107
3.333	4.000	4.833	5.667	0.597	3.944	0.722	5.67	0.667	1.293
4.000	4.000	5.000	6.000	0.741	4.667	0.866	6.00	0.820	1.509
4.667	4.000	5.167	6.333	0.893	5.296	1.018	6.33	0.995	1.774
5.333	4.000	5.333	6.667	1.053	6.074	1.178	6.67	1.195	2.097
6.000	4.000	5.500	7.000	1.222	6.722	1.347	7.00	1.426	2.493
6.667	4.000	5.667	7.333	1.399	7.556	1.524	7.33	1.898	2.984
7.333	4.000	5.833	7.667	1.584	8.222	1.709	7.67	2.254	3.608
8.000	4.000	6.000	8.000	1.778	9.111	1.903	8.00	3.068	4.419
8.667	4.000	6.167	8.333	1.979	9.796	2.104	8.33	3.676	5.51
9.333	4.200	6.533	8.867	2.258	10.963	2.383	8.87	3.868	5.835
10.000	4.500	7.000	9.500	2.593	12.000	2.718	9.50	3.847	5.713
10.667	4.800	7.467	10.133	2.950	13.422	3.075	10.13	3.858	5.647
11.333	3.683	7.933	10.767	3.330	14.511	3.455	10.77	3.892	5.622
12.000	3.900	8.400	11.400	3.733	16.089	3.858	11.40	4.093	5.625
12.667	4.117	8.867	12.033	4.160	17.770	4.285	12.03	4.321	5.649
13.333	4.333	9.333	12.667	4.609	19.556	4.734	12.67	4.548	5.69
14.000	4.550	9.800	13.300	5.081	21.444	5.206	13.30	4.776	5.744
14.667	4.767	10.267	13.933	5.577	23.437	5.702	13.93	5.003	5.808
15.333	4.983	10.733	14.567	6.095	25.533	6.220	14.57	5.230	5.881
16.000	5.200	11.200	15.200	6.637	27.733	6.762	15.20	5.458	5.96
16.667	5.417	11.667	15.833	7.202	30.037	7.327	15.83	5.685	6.045
17.333	5.633	12.133	16.467	7.789	32.444	7.914	16.47	5.913	6.136
18.000	5.850	12.600	17.100	8.400	34.956	8.525	17.10	6.140	6.23
18.667	6.067	13.067	17.733	9.034	37.570	9.159	17.73	6.367	6.328
19.333	6.283	13.533	18.367	9.691	40.289	9.816	18.37	6.595	6.429
20.000	6.500	14.000	19.000	10.370	43.111	10.495	19.00	6.822	6.532
20.667	6.717	14.467	19.633	11.073	46.037	11.198	19.63	7.050	6.638
21.333	6.933	14.933	20.267	11.799	49.067	11.924	20.27	7.277	6.746
22.000	7.150	15.400	20.900	12.548	52.200	12.673	20.90	7.504	6.855
22.667	7.367	15.867	21.533	13.320	55.437	13.445	21.53	7.732	6.966
23.333	7.583	16.333	22.167	14.115	58.778	14.240	22.17	7.959	7.079
24.000	7.800	16.800	22.800	14.933	62.222	15.058	22.80	8.187	7.193
24.667	8.017	17.267	23.433	15.774	65.770	15.899	23.43	8.414	7.308
25.333	8.233	17.733	24.067	16.639	69.422	16.764	24.07	8.641	7.424
26.000	8.450	18.200	24.700	17.526	73.178	17.651	24.70	8.869	7.541
26.667	8.667	18.667	25.333	18.436	77.037	18.561	25.33	9.096	7.659
27.333	8.883	19.133	25.967	19.370	81.000	19.495	25.97	9.324	7.778
28.000	9.100	19.600	26.600	20.326	85.067	20.451	26.60	9.551	7.897
28.667	9.317	20.067	27.233	21.305	89.237	21.430	27.23	9.778	8.017
29.333	9.533	20.533	27.867	22.308	93.511	22.433	27.87	10.006	8.138
30.000	9.750	21.000	28.500	23.333	97.889	23.458	28.50	10.233	8.259
30.667	9.967	21.467	29.133	24.382	102.370	24.507	29.13	10.461	8.381
31.333	10.183	21.933	29.767	25.453	106.956	25.578	29.77	10.688	8.503
32.000	10.400	22.400	30.400	26.548	111.644	26.673	30.40	10.915	8.626
32.667	10.617	22.867	31.033	27.666	116.437	27.791	31.03	11.143	8.749
33.333	10.833	23.333	31.667	28.807	121.333	28.932	31.67	11.370	8.872
34.000	11.050	23.800	32.300	29.970	126.333	30.095	32.30	11.598	8.996
34.667	11.267	24.267	32.933	31.157	131.437	31.282	32.93	11.825	9.12
35.333	11.483	24.733	33.567	32.367	136.644	32.492	33.57	12.052	9.244
36.000	11.700	25.200	34.200	33.600	141.956	33.725	34.20	12.28	9.369
36.667	11.917	25.667	34.833	34.856	147.370	34.981	34.83	12.507	9.494
37.333	12.133	26.133	35.467	36.135	152.889	36.260	35.47	12.735	9.619
38.000	12.350	26.600	36.100	37.437	158.511	37.562	36.10	12.962	9.744
38.667	12.567	27.067	36.733	38.762	164.237	38.887	36.73	13.190	9.87
39.333	12.783	27.533	37.367	40.110	170.067	40.235	37.37	13.417	9.996
40.000	13.000	28.000	38.000	41.481	176.000	41.606	38.00	13.644	10.122

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

*** For example with reinforcement at each block: DH=16' requires 27.73 SY/LF woven geotextile corresponding to 6.637 CY/LF volume of MRS with Class 1 backfill paid separately

As Constructed		TRUNCATED BASE BLOCK FACING GRS WALL FOR BACKSLOPE OR ROAD WAY WITH 1/2:1 ROCK EXCAVATION		Project No./Code
No Revisions:		Designer: XXXXXXXX	Structure XXXXXXXXXXXXX	
Revised:		Detailer: XXXXXXXX	Numbers XXXXXXXXXXXXX	
Void:		Sheet Subset: WALL	Subset Sheets: WXX of XXX	Sheet Number

\$PLOT_INFO\$