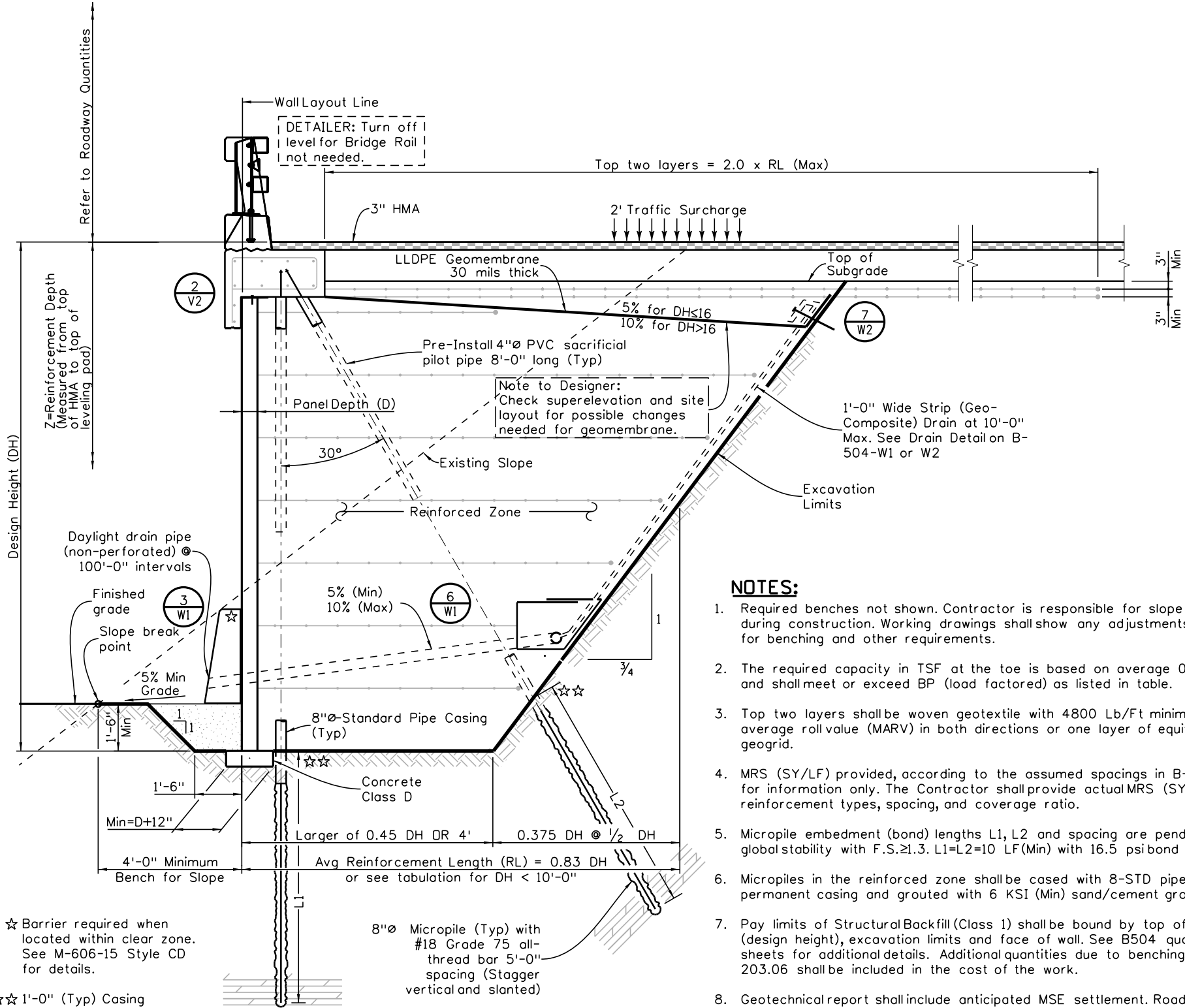


Revision Dates	
09-16	10-24

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By						
Checked By						

Refer to Roadway Quantities



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 capacity in TSF at the toe is based on average 0.83 DH and shall meet or exceed BP (load factored) as listed in table.
- 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.
- MRS (SY/LF) provided, according to the assumed spacings in B-504-H1, for information only. The Contractor shall provide actual MRS (SY/LF), soil reinforcement types, spacing, and coverage ratio.
- Micropile embedment (bond) lengths L1, L2 and spacing are pending upon global stability with F.S. ≥ 1.3. L1=L2=10 LF (Min) with 16.5 psi bond strength.
- Micropiles in the reinforced zone shall be cased with 8-STD pipe permanent casing and grouted with 6 KSI (Min) sand/cement grout.
- 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.
- Geotechnical report shall include anticipated MSE settlement. Roadway construction shall begin after a minimum of 45 days or 90% of anticipated settlement to avoid cracking due to differential settlement.

SECTION VIEW

B-504-D3

(This sheet must be accompanied with B-504-H1)

DH (Ft)	RL**(Ft)			MRS (CY/LF)	MRS (SY/LF)	BM1 (CY/LF)	PLG (Ft/LF)	BP (TSF)
	(Min)	(Avg)	(Max)					
2.000	4.000	4.750	5.500	0.352	2.444	0.477	5.50	0.543
2.667	4.000	5.000	6.000	0.494	3.222	0.619	6.00	0.662
3.333	4.000	5.250	6.500	0.648	3.472	0.773	6.50	0.798
4.000	4.000	5.500	7.000	0.815	4.333	0.940	7.00	0.953
4.667	4.000	5.750	7.500	0.994	4.611	1.119	7.50	1.130
5.333	4.000	6.000	8.000	1.185	4.889	1.310	8.00	1.333
6.000	4.000	6.250	8.500	1.389	5.167	1.514	8.50	1.565
6.667	4.000	6.500	9.000	1.605	5.467	1.730	9.00	1.831
7.333	4.000	6.750	9.500	1.833	5.778	1.958	9.50	2.138
8.000	4.000	7.000	10.000	2.074	6.083	2.199	10.00	2.492
8.667	4.000	7.250	10.500	2.327	6.389	2.452	10.50	2.904
9.333	4.200	7.500	11.200	2.662	6.683	2.717	11.20	3.379
10.000	4.500	8.250	12.000	3.056	6.967	3.000	12.00	3.919
10.667	4.800	8.800	12.800	3.477	7.233	3.300	12.80	4.529
11.333	5.100	9.350	13.600	3.925	7.483	3.600	13.60	5.209
12.000	5.400	9.900	14.400	4.400	7.717	3.900	14.40	5.959
12.667	5.700	10.450	15.200	4.902	7.933	4.200	15.20	6.789
13.333	6.000	11.000	16.000	5.432	8.133	4.500	16.00	7.699
14.000	6.300	11.550	16.800	5.989	8.317	4.800	16.80	8.689
14.667	6.600	12.100	17.600	6.573	8.483	5.100	17.60	9.759
15.333	6.900	12.650	18.400	7.184	8.633	5.400	18.40	10.909
16.000	7.200	13.200	19.200	7.822	8.767	5.700	19.20	12.139
16.667	7.500	13.750	20.000	8.488	8.883	6.000	20.00	13.449
17.333	7.800	14.300	20.800	9.180	8.983	6.300	20.80	14.839
18.000	8.100	14.850	21.600	9.900	9.067	6.600	21.60	16.309
18.667	8.400	15.400	22.400	10.647	9.133	6.900	22.40	17.859
19.333	8.700	15.950	23.200	11.421	9.183	7.200	23.20	19.489
20.000	9.000	16.500	24.000	12.222	9.217	7.500	24.00	21.199
20.667	9.300	17.050	24.800	13.051	9.233	7.800	24.80	22.989
21.333	9.600	17.600	25.600	13.906	9.233	8.100	25.60	24.859
22.000	9.900	18.150	26.400	14.789	9.217	8.400	26.40	26.809
22.667	10.200	18.700	27.200	15.699	9.183	8.700	27.20	28.839
23.333	10.500	19.250	28.000	16.636	9.133	9.000	28.00	30.949
24.000	10.800	19.800	28.800	17.600	9.067	9.300	28.80	33.139
24.667	11.100	20.350	29.600	18.591	8.983	9.600	29.60	35.409
25.333	11.400	20.900	30.400	19.610	8.883	9.900	30.40	37.759
26.000	11.700	21.450	31.200	20.656	8.767	10.200	31.20	40.189
26.667	12.000	22.000	32.000	21.728	8.633	10.500	32.00	42.699
27.333	12.300	22.550	32.800	22.828	8.483	10.800	32.80	45.289
28.000	12.600	23.100	33.600	23.956	8.317	11.100	33.60	47.959
28.667	12.900	23.650	34.400	25.110	8.133	11.400	34.40	50.709
29.333	13.200	24.200	35.200	26.291	7.933	11.700	35.20	53.539
30.000	13.500	24.750	36.000	27.500	7.717	12.000	36.00	56.449
30.667	13.800	25.300	36.800	28.736	7.483	12.300	36.80	59.439
31.333	14.100	25.850	37.600	29.999	7.233	12.600	37.60	62.509
32.000	14.400	26.400	38.400	31.289	6.967	12.900	38.40	65.659
32.667	14.700	26.950	39.200	32.606	6.683	13.200	39.20	68.889
33.333	15.000	27.500	40.000	33.951	6.389	13.500	40.00	72.199
34.000	15.300	28.050	40.800	35.322	6.083	13.800	40.80	75.689
34.667	15.600	28.600	41.600	36.721	5.778	14.100	41.60	79.259
35.333	15.900	29.150	42.400	38.147	5.467	14.400	42.40	82.909
36.000	16.200	29.700	43.200	39.600	5.167	14.700	43.20	86.639
36.667	16.500	30.250	44.000	41.080	4.889	15.000	44.00	90.449
37.333	16.800	30.800	44.800	42.588	4.611	15.300	44.80	94.339
38.000	17.100	31.350	45.600	44.122	4.333	15.600	45.60	98.309
38.667	17.400	31.900	46.400	45.684	4.056	15.900	46.40	102.459
39.333	17.700	32.450	47.200	47.273	3.778	16.200	47.20	106.789
40.000	18.000	33.000	48.000	48.889	3.500	16.500	48.00	111.299

** RL for top two geotextile layers = 2 x RL (Max)

*** For example spacing on B-504-H2: DH=16' requires 18.8 SY/LF woven geotextile corresponding to 7.822 CY/LF volume of MRS with Class 1 backfill paid separately

All seals for this set of drawings are applied to the cover page(s)

Print Date: \$DATE\$	
File Name: Sheet_B-504-D3.dgn	
Horiz. Scale: Vert. Scale: As Noted	
Unit Information Unit Leader Initials	

Sheet Revisions

Date:	Comments	Init.

Colorado Department of Transportation



2829 West Howard Place, 3rd Floor
Denver, CO 80204
Phone: 303-512-4079
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Staff Bridge Branch

Initials

As Constructed

No Revisions:

Revised:

Void:

MICROPILE A-FRAME WITH PANEL FACING MSE WALL 3/4:1 SOIL EXCAVATION

Designer: XXXXXXXXX	Structure XXXXXXXXXXXXX
Detailer: XXXXXXXXX	Numbers XXXXXXXXXXXXX
Sheet Subset: WALL	Subset Sheets: WXX of XXX

Project No./Code

Sheet Number