

Briargate Parkway at Sand Creek Channel
Bridge

CDR 21-013

ASB 25-33

Soil Density Reports

By

Entech Engineering, Inc.

In

Chronological Order



Entech Engineering
505 Elkton Dr
Colorado Springs, CO 80907
Phone: 719-531-5599

Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
6 / 1	Footing/Foundation Subgrade: At wing wall N 1.	10	Below Grade	02/07/2024	P2	6.4	123.9	98.0	98	-2 / 2	DPMP		GM
7 / 2	Footing/Foundation Subgrade: At wing wall N 1.	8	Below Grade	02/07/2024	P2	7.0	124.5	98.5	98	-2 / 2	DPMP		SR
8 / 3	Footing/Foundation Subgrade: At wing wall N 1.	6	Below Grade	02/07/2024	P2	7.7	125.9	99.6	98	-2 / 2	DPMP		SR
9 / 4	Footing/Foundation Subgrade: At wing wall N 1.	4	Below Grade	02/07/2024	P2	7.2	124.9	98.8	98	-2 / 2	DPMP		SR
1 / 5	Footing/Foundation Subgrade: Wing wall S1 (4th step).	-	At Grade	02/08/2024	P2	7.1	125.5	99.3	95	-2 / 2	DPMP		SR
2 / 6	Footing/Foundation Subgrade: Wing wall S1 (3rd step).	-	At Grade	02/08/2024	P2	6.9	124.8	98.7	95	-2 / 2	DPMP		SR
3 / 7	Footing/Foundation Subgrade: Wing wall S1 (6th step).	1	Below Grade	02/08/2024	P2	6.2	122.8	97.2	95	-2 / 2	DPMP		DB
4 / 8	Footing/Foundation Subgrade: Wing wall S1 (7th step).	1	Below Grade	02/08/2024	P2	6.0	120.9	95.6	95	-2 / 2	DPMP		DB
5 / 9	Footing/Foundation Subgrade: Wing wall S1 (8th step).	1	Below Grade	02/08/2024	P2	6.3	121.8	96.4	95	-2 / 2	DPMP		DB

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P2	ASTM D1557 - A	SM	8.1	126.4



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A handwritten signature in blue ink, appearing to read "Joey Goode".

02/26/2024

Reviewed by: Joey Goode, PE



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10 / 10	Footing/Foundation Subgrade: Footing pad on the east side, 70' south of the north end.	-	At Grade	02/29/2024	P3	9.6	115.9	98	95	-2 / 2	DPMP		SR
11 / 11	Footing/Foundation Subgrade: Footing pad on the east side, 150' south of the north end.	-	At Grade	02/29/2024	P3	9.4	116.3	98	95	-2 / 2	DPMP		SR
12 / 12	Footing/Foundation Subgrade: Footing pad on the east side, 225' south of the north end.	-	At Grade	02/29/2024	P3	9.7	116.4	98	95	-2 / 2	DPMP		SR
13 / 13	Footing/Foundation Subgrade: Footing pad on the west side, 100' south of the north end.	-	At Grade	02/29/2024	P3	9.8	116.2	98	95	-2 / 2	DPMP		SR
15 / 14	Footing/Foundation Subgrade: Footing pad on the west side, 200' south of the north end.	-	At Grade	02/29/2024	P3	9.9	117.1	99	95	-2 / 2	DPMP		SR
14 / 16	Footing/Foundation Subgrade: Footing pad on the west side, 300' south of the north end.	-	At Grade	02/29/2024	P3	9.8	116.4	98	95	-2 / 2	DPMP		SR

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P3	ASTM D1557 - B	Cls 6 R.C.	10.2	118.8

03/06/2024

Reviewed by: Joey Goode, PE



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1 / 17	Foundation Backfill: 10' east & 35' south of the northwest corner of the northwest footing.	2	Below Grade	04/15/2024	P2	5.0	112.3	89	95	-2 / 2	DF/MF		GM
2 / 18	Foundation Backfill: 10' east & 115' south of the northwest corner of the northwest footing.	2	Below Grade	04/15/2024	P2	6.6	125.7	99	95	-2 / 2	DPMP		GM
3 / 19	Foundation Backfill: 10' east & 35' north of the southwest corner of the southwest footing.	2	Below Grade	04/15/2024	P2	6.1	115.1	91	95	-2 / 2	DFMP		GM
4 / 20	Foundation Backfill: 10' east & 35' south of the northwest corner of the northwest footing.	2	Below Grade	04/16/2024	P2	6.3	120.7	96	95	-2 / 2	DPMP	17	GM
4 / 20	Foundation Backfill: 10' west & 35' south of the northeast corner of the northeast footing.	2	Below Grade	04/16/2024	P2	7.1	122.0	97	95	-2 / 2	DPMP		GM
5 / 21	Foundation Backfill: 10' west & 115' south of the northeast corner of the northeast footing.	2	Below Grade	04/16/2024	P2	7.2	129.4	102	95	-2 / 2	DPMP		GM
6 / 22	Foundation Backfill: 10' west & 35' north of the southeast corner of the southeast footing.	2	Below Grade	04/16/2024	P2	8.8	126.1	100	95	-2 / 2	DPMP		GM
7 / 23	Foundation Backfill: 10' west & 35' south of the northeast corner of the northeast footing.	-	At Grade	04/17/2024	P2	4.0	111.8	88	95	-2 / 2	DF/MF		GM
8 / 24	Foundation Backfill: 10' west & 130' south of the northeast corner of the northeast footing.	-	At Grade	04/17/2024	P2	3.5	118.2	94	95	-2 / 2	DF/MF		GM
10 / 26	Foundation Backfill: 10' east & 35' north of the southwest corner of the southwest footing.	-	At Grade	04/17/2024	P2	6.1	130.1	103	95	-2 / 2	DPMP		GM
11 / 27	Foundation Backfill: 10' east & 130' south of the northwest corner of the northwest footing.	-	At Grade	04/17/2024	P2	6.2	129.7	103	95	-2 / 2	DPMP		GM
13 / 29	Foundation Backfill: 10' east & 45' south of the northwest corner of the northwest footing.	-	At Grade	04/17/2024	P2	6.6	127.5	101	95	-2 / 2	DPMP		GM
14 / 30	Foundation Backfill: 10' west & 35' south of the northeast corner of the northwest footing.	-	At Grade	04/17/2024	P2	10.1	120.2	95	95	-2 / 2	DPMP	23	GM
15 / 31	Foundation Backfill: 10' west & 130' south of the northeast corner of the northeast footing.	-	At Grade	04/17/2024	P2	9.2	120.1	95	95	-2 / 2	DPMP	24	GM



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19 / 33	Foundation Backfill: 10' east & 35' north of the southwest corner of the southwest footing.	2	Below Grade	04/16/2024	P2	6.1	120.3	95	95	-2 / 2	DPMP	19	GM
18 / 34	Footing/Foundation Subgrade: Step 1, 30' south & 100' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.1	120.4	95	95	-2 / 2	DPMP		GM
19 / 35	Footing/Foundation Subgrade: Step 2, 30' south & 90' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.1	120.9	96	95	-2 / 2	DPMP		GM
20 / 36	Footing/Foundation Subgrade: Step 3, 30' south & 80' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.5	119.9	95	95	-2 / 2	DPMP		GM
21 / 37	Footing/Foundation Subgrade: Step 4, 30' south & 70' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.6	119.5	95	95	-2 / 2	DPMP		GM
22 / 38	Footing/Foundation Subgrade: Step 5, 30' south & 60' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.1	121.1	96	95	-2 / 2	DPMP		GM
23 / 39	Footing/Foundation Subgrade: Step 6, 30' south & 50' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.2	119.7	95	95	-2 / 2	DPMP		GM
24 / 40	Footing/Foundation Subgrade: Step 7, 30' south & 40' east of the southeast wing wall.	-	At Grade	04/25/2024	P2	6.3	129.9	103	95	-2 / 2	DPMP		GM

Remarks

DF/MF : Density Fail / Moisture Fail
DP/MP : Density Pass / Moisture Pass
DF/MP : Density Fail / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P2	ASTM D1557 - A	SM	8.1	126.4



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A handwritten signature in blue ink, appearing to read "Joey Goode".

05/01/2024

Reviewed by: Joey Goode, PE



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16 /	Footing/Foundation Subgrade: Wing Wall S2 (3rd step).	5	Below Grade	02/08/2024	P2	8.1	120.8	96	95	-2 / 2	DPMP		DB
17 /	Footing/Foundation Subgrade: Wing Wall S2 (2nd step).	6	Below Grade	02/08/2024	P2	8.6	122.9	97	95	-2 / 2	DPMP		DB

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P2	ASTM D1557 - A	SM	8.1	126.4

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25 / 41	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 1).	-	At Grade	06/17/2024	P2	4.5	114.2	90	95	-2 / 2	DFMF		GM
26 / 42	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 3).	-	At Grade	06/19/2024	P2	6.8	119.5	95	95	-2 / 2	DPMP	43	GM
27 / 43	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 3).	-	At Grade	06/18/2024	P2	7.3	112.3	89	95	-2 / 2	DFMP		GM
28 / 44	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 2).	-	At Grade	06/19/2024	P2	6.5	119.9	95	95	-2 / 2	DPMP	48	GM
29 / 45	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 1).	-	At Grade	06/19/2024	P2	6.4	120.5	95	95	-2 / 2	DPMP	41	GM
30 / 46	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall, (step 10).	-	At Grade	06/19/2024	P2	6.5	122.3	97	95	-2 / 2	DPMP		GM
31 / 47	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall, (step 9).	-	At Grade	06/19/2024	P2	6.1	120.1	95	95	-2 / 2	DPMP		GM
32 / 48	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 2).	-	At Grade	06/19/2024	P2	7.0	112.8	89	95	-2 / 2	DFMP		GM
33 / 49	Footing/Foundation Subgrade: Wingwall S1, southwest wingwall, (step 1).	-	At Grade	06/19/2024	P2	6.6	117.2	93	95	-2 / 2	DFMP	41	GM
34 / 50	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 1).	-	At Grade	06/19/2024	P2	6.7	119.4	95	95	-2 / 2	DPMP		GM
35 / 51	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 2).	-	At Grade	06/19/2024	P2	6.2	119.7	95	95	-2 / 2	DPMP		GM
36 / 52	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 3).	-	At Grade	06/19/2024	P2	6.3	119.5	95	95	-2 / 2	DPMP		GM
37 / 53	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 4).	-	At Grade	06/19/2024	P2	6.5	124.0	98	95	-2 / 2	DPMP		GM
38 / 54	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 5).	-	At Grade	06/19/2024	P2	6.3	119.4	95	95	-2 / 2	DPMP		GM



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39 / 55	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 6).	-	At Grade	06/19/2024	P2	6.8	119.8	95	95	-2 / 2	DPMP		GM
40 / 56	Footing/Foundation Subgrade: Wingwall S2, southeast wingwall (step 7).	-	At Grade	06/19/2024	P2	6.6	119.6	95	95	-2 / 2	DPMP		GM

Remarks

DF/MF : Density Fail / Moisture Fail
DP/MP : Density Pass / Moisture Pass
DF/MP : Density Fail / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P2	ASTM D1557 - A	SM	8.1	126.4

07/01/2024

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41 / 57	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 12 of 12.	-	At Grade	07/10/2024	P2	6.5	119.4	95	95	-2 / 2	DPMP		GM
42 / 58	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 11 of 12.	-	At Grade	07/10/2024	P2	6.2	119.6	95	95	-2 / 2	DPMP		GM
43 / 59	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 10 of 12.	-	At Grade	07/10/2024	P2	6.7	119.5	95	95	-2 / 2	DPMP		GM
44 / 60	Footing/Foundation Subgrade: Wingwall N1, Northwest wingwall footing, step 9 of 12.	-	At Grade	07/10/2024	P2	6.6	119.4	95	95	-2 / 2	DPMP		GM
45 / 61	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 8 of 12.	-	At Grade	07/10/2024	P2	6.7	119.4	95	95	-2 / 2	DPMP		GM
46 / 62	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 7 of 12.	-	At Grade	07/10/2024	P2	7.1	120.7	96	95	-2 / 2	DPMP		GM
47 / 63	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 6 of 12.	-	At Grade	07/10/2024	P2	6.4	122.4	97	95	-2 / 2	DPMP		GM
48 / 64	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 5 of 12.	-	At Grade	07/10/2024	P2	6.5	120.1	95	95	-2 / 2	DPMP		GM
49 / 65	Footing/Foundation Subgrade: Wingwall N1, NW wingwall footing, step 4 of 12.	-	At Grade	07/10/2024	P2	9.4	122.2	97	95	-2 / 2	DPMP		GM
50 / 66	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 3 of 12.	-	At Grade	07/10/2024	P2	7.8	119.7	95	95	-2 / 2	DPMP		GM
51 / 67	Footing/Foundation Subgrade: Wingwall N1, Northwest wingwall footing, step 2 of 12.	-	At Grade	07/10/2024	P2	6.9	120.4	95	95	-2 / 2	DPMP		GM
52 / 68	Footing/Foundation Subgrade: Wingwall N1, northwest wingwall footing, step 1 of 12.	-	At Grade	07/10/2024	P2	6.1	125.3	99	95	-2 / 2	DPMP		GM
53 / 69	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 1 of 8.	-	At Grade	07/10/2024	P2	6.8	122.9	97	95	-2 / 2	DPMP		GM
54 / 70	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 2 of 8.	-	At Grade	07/10/2024	P1	11.8	121.0	95	95	-2 / 2	DPMP		GM



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55 / 71	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 3 of 8.	-	At Grade	07/10/2024	P1	10.7	125.5	98	95	-2 / 2	DPMP		GM
56 / 72	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 4 of 8.	-	At Grade	07/10/2024	P1	9.9	122.7	96	95	-2 / 2	DPMP		GM
57 / 73	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 5 of 8.	-	At Grade	07/10/2024	P1	10.2	123.2	96	95	-2 / 2	DPMP		GM
58 / 74	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 6 of 8.	-	At Grade	07/10/2024	P2	9.8	120.8	96	95	-2 / 2	DPMP		GM
59 / 75	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 7 of 8.	-	At Grade	07/10/2024	P2	7.6	120.2	95	95	-2 / 2	DPMP		GM
60 / 76	Footing/Foundation Subgrade: Wingwall N2, northeast wingwall footing, step 8 of 8.	-	At Grade	07/10/2024	P2	6.8	119.5	95	95	-2 / 2	DPMP		GM

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

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Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P2	ASTM D1557 - A	SM	8.1	126.4
P1	ASTM D1557 - A	SC	11.8	127.9

07/24/2024

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8 / 77	Other: Bridge Backfill, STA 71+38, 15' east of the bridge.	24	Below Grade	08/05/2024	P3	11.9	113.5	96	95	-2 / 2	DPMP		RF
9 / 78	Other: Bridge Backfill, STA 71+08, 1' east side of the bridge.	24	Below Grade	08/05/2024	P3	11.4	115.9	98	95	-2 / 2	DPMP		RF
10 / 79	Other: Bridge Backfill, STA 70+50, 5' east of the bridge.	24	Below Grade	08/05/2024	P3	8.8	113.2	95	95	-2 / 2	DPMP		RF
11 / 80	Other: Bridge Backfill, STA 70+10, 1' east of the bridge.	24	Below Grade	08/05/2024	P3	10.5	115.4	97	95	-2 / 2	DPMP		RF
12 / 81	Other: Bridge Backfill, STA 69+64, 10' east of the bridge.	24	Below Grade	08/05/2024	P3	8.4	113.2	95	95	-2 / 2	DPMP		RF
16 / 85	Other: Bridge Backfill, STA 69 + 69, 5' east of the bridge, north of the south opening.	23.5	Below Grade	08/06/2024	P3	11.8	112.5	95	95	-2 / 2	DPMP		RF
17 / 86	Other: Bridge Backfill, STA 70 + 01, 10' east of the bridge, north of the south opening.	23.5	Below Grade	08/06/2024	P3	12.1	114.0	96	95	-2 / 2	DPMP		RF
18 / 87	Other: Bridge Backfill, STA 70 + 49, 5' east of the bridge, north of the south opening.	23.5	Below Grade	08/06/2024	P3	9.6	113.4	96	95	-2 / 2	DPMP		RF
19 / 88	Other: Bridge Backfill, STA 70 + 81, 10' east of the bridge, north of the south opening.	23.5	Below Grade	08/06/2024	P3	11.9	113.2	95	95	-2 / 2	DPMP		RF
20 / 89	Other: Bridge Backfill, STA 71 + 08, 15' east of the bridge, south of the north opening.	23.5	Below Grade	08/06/2024	P3	11.9	113.2	95	95	-2 / 2	DPMP		RF
21 / 90	Other: Bridge Backfill, STA 71 + 38, 10' east of the bridge, south of the north opening.	23.5	Below Grade	08/06/2024	P3	11.8	112.9	95	95	-2 / 2	DPMP		RF
22 / 91	Other: Bridge Backfill, STA 71 + 65, 15' east of the bridge, south of the north opening.	23.5	Below Grade	08/06/2024	P3	12.0	113.2	95	95	-2 / 2	DPMP		RF
23 / 92	Other: Bridge Backfill, STA 69 + 54, 12' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	8.6	113.4	96	95	-2 / 2	DPMP		RF
24 / 93	Other: Bridge Backfill, STA 69 + 84, 20' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	8.6	115.1	97	95	-2 / 2	DPMP		RF



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Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd (Bridge)
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
25 / 94	Other: Bridge Backfill, STA 70 + 5, 13' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	8.5	113.2	95	95	-2 / 2	DPMP		RF
26 / 95	Other: Bridge Backfill, STA 70 + 25, 22' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	9.7	112.9	95	95	-2 / 2	DPMP		RF
27 / 96	Other: Bridge Backfill, STA 70 + 75, 15' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	8.5	113.5	96	95	-2 / 2	DPMP		RF
28 / 97	Other: Bridge Backfill, STA 71 + 5, 11' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	8.2	113.6	96	95	-2 / 2	DPMP		RF
29 / 98	Other: Bridge Backfill, STA 71 + 44, 12' northwest of the steel culvert.	25	Below Grade	08/08/2024	P3	8.3	114.0	96	95	-2 / 2	DPMP		RF
30 / 99	Other: Bridge Backfill, STA 71 + 40, 12' northwest of the steel culvert.	24	Below Grade	08/12/2024	P4	10.6	120.6	98	98	-2 / 2	DPMP		RF
31 / 100	Other: Bridge Backfill, STA 71 + 66, 2' northwest of the steel culvert.	24	Below Grade	08/12/2024	P3	9.1	117.4	99	95	-2 / 2	DPMP		RF
163 / 101	Other: Bridge Backfill, STA 71 + 03, 7' northwest of the steel culvert.	24	Below Grade	08/12/2024	P4	11.9	120.6	98	95	-2 / 2	DPMP		RF
164 / 102	Other: Bridge Backfill, STA 70 + 50, 13' northwest of the steel culvert.	24	Below Grade	08/12/2024	P4	12.0	120.7	98	95	-2 / 2	DPMP		RF
32 / 103	Other: Bridge Backfill, STA 71 + 18, 12' southeast of the steel culvert.	23	Below Grade	08/12/2024	P4	11.2	121.4	99	95	-2 / 2	DPMP		RF
33 / 104	Other: Bridge Backfill, STA 71 + 55, 10' southeast of the steel culvert.	23	Below Grade	08/12/2024	P4	12.0	121.0	99	95	-2 / 2	DPMP		RF
34 / 105	Other: Bridge Backfill, STA 69 + 84, 10' southeast of the steel culvert.	23	Below Grade	08/12/2024	P4	11.9	121.0	99	98	-2 / 2	DPMP		RF
35 / 106	Other: Bridge Backfill, STA 69 + 36, 2' southeast of the steel culvert.	23	Below Grade	08/12/2024	P3	9.2	116.8	98	98	-2 / 2	DPMP		RF
36 / 107	Other: Bridge Backfill, STA 71 + 66, 2' southeast of the steel culvert.	23	Below Grade	08/12/2024	P3	8.2	117.1	99	98	-2 / 2	DPMP		RF
37 / 108	Other: Bridge Backfill, STA 69 + 37, 2' southeast of the steel culvert.	24	Below Grade	08/12/2024	P3	8.2	116.8	98	98	-2 / 2	DPMP		RF

Remarks**Comments**



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DP/MP : Density Pass / Moisture Pass

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P3	ASTM D1557 - B	Cls 6 R.C.	10.2	118.8
P4	ASTM D1557 - A	SM	10	122.9

08/19/2024

Reviewed by: Joey Goode, PE



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Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
38 /109	Other: Bridge Backfill, STA 69 + 74, 15' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	10.4	120.6	98	95	-2 / 2	DPMP		RF
39 /110	Other: Bridge Backfill, STA 70 + 48, 20' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	11.9	120.4	98	95	-2 / 2	DPMP		RF
40 /111	Other: Bridge Backfill, STA 71 + 33, 17' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	12.0	121.1	99	95	-2 / 2	DPMP		RF
41 /112	Other: Bridge Backfill, STA 71 + 59, 25' southeast of the steel culvert.	30	Below Grade	08/13/2024	P4	10.2	120.6	98	95	-2 / 2	DPMP		RF
42 /113	Other: Bridge Backfill, STA 71 + 56, 13' southeast of the steel culvert.	30	Below Grade	08/13/2024	P4	11.8	120.3	98	95	-2 / 2	DPMP		RF
43 /114	Other: Bridge Backfill, STA 71 + 53, 15' southeast of the steel culvert.	30	Below Grade	08/13/2024	P4	12.0	121.2	99	95	-2 / 2	DPMP		RF
44 /115	Other: Bridge Backfill, STA 69 + 59, 15' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	11.4	120.6	98	98	-2 / 2	DPMP		RF
45 /116	Other: Bridge Backfill, STA 70 + 04, 12' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	11.8	120.9	98	98	-2 / 2	DPMP		RF
46 /117	Other: Bridge Backfill, STA 70 + 21, 12' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	11.9	121.1	99	95	-2 / 2	DPMP		RF
47 /118	Other: Bridge Backfill, STA 71 + 28, 7' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
48 /119	Other: Bridge Backfill, STA 71 + 35, 24' northwest of the steel culvert.	30	Below Grade	08/13/2024	P4	10.4	120.5	98	95	-2 / 2	DPMP		RF
49 /120	Other: Bridge Backfill, STA 69 + 59, 23' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	11.9	120.8	98	95	-2 / 2	DPMP		RF
50 /121	Other: Bridge Backfill, STA 70 + 97, 11' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	12.0	120.3	98	98	-2 / 2	DPMP		RF
51 /122	Other: Bridge Backfill, STA 70 + 56, 27' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	11.8	120.1	98	98	-2 / 2	DPMP		RF



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Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
52 /123	Other: Bridge Backfill, STA 70 + 51, 12' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	9.9	120.0	98	95	-2 / 2	DPMP		RF
53 /124	Other: Bridge Backfill, STA 70 + 49, 4' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	10.3	120.5	98	98	-2 / 2	DPMP		RF
54 /125	Other: Bridge Backfill, STA 70 + 83, 7' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	11.4	121.1	99	95	-2 / 2	DPMP		RF
55 /126	Other: Bridge Backfill, STA 71 + 46, 15' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	11.9	120.4	98	95	-2 / 2	DPMP		RF
56 /127	Other: Bridge Backfill, STA 71 + 70, 15' northwest of the steel culvert.	29	Below Grade	08/14/2024	P4	9.5	121.6	99	95	-2 / 2	DPMP		RF
57 /128	Other: Bridge Backfill, STA 71 + 43, 8' southeast of the steel culvert.	28	Below Grade	08/14/2024	P4	11.1	120.6	98	98	-2 / 2	DPMP		RF
58 /129	Other: Bridge Backfill, STA 71 + 17, 7' southeast of the steel culvert.	28	Below Grade	08/14/2024	P4	11.9	120.9	98	98	-2 / 2	DPMP		RF
59 /130	Other: Bridge Backfill, STA 70 + 67, 11' southeast of the steel culvert.	28	Below Grade	08/14/2024	P4	11.7	121.1	99	98	-2 / 2	DPMP		RF
60 /131	Other: Bridge Backfill, STA 70 + 21, 13' southeast of the steel culvert.	28	Below Grade	08/14/2024	P4	12.0	120.1	98	95	-2 / 2	DPMP		RF
61 /132	Other: Bridge Backfill, STA 71 + 45, 5' southeast of the steel culvert.	28	Below Grade	08/14/2024	P4	11.4	120.6	98	98	-2 / 2	DPMP		RF
62 /133	Other: Bridge Backfill, STA 71 + 28, 11' northwest of the steel culvert.	28	Below Grade	08/14/2024	P4	12.0	120.6	98	95	-2 / 2	DPMP		RF
63 /134	Other: Bridge Backfill, STA 70 + 02, 12' northwest of the steel culvert.	28	Below Grade	08/14/2024	P4	12.0	120.8	98	98	-2 / 2	DPMP		RF
64 /135	Other: Bridge Backfill, STA 70 + 40, 18' northwest of the steel culvert.	28	Below Grade	08/14/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
65 /136	Other: Bridge Backfill, STA 70 + 11, 15' northwest of the steel culvert.	28	Below Grade	08/14/2024	P4	11.9	121.1	99	98	-2 / 2	DPMP		RF
66 /137	Other: Bridge Backfill, STA 69 + 49, 17' northwest of the steel culvert.	28	Below Grade	08/14/2024	P4	11.9	120.5	98	98	-2 / 2	DPMP		RF



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67 /138	Other: Bridge Backfill, STA 69 + 44, 23' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	10.9	119.9	98	95	-2 / 2	DPMP		RF
68 /139	Other: Bridge Backfill, STA 69 + 37, 2' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	10.2	120.2	98	95	-2 / 2	DPMP		RF
69 /140	Other: Bridge Backfill, STA 69 + 74, 5' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	11.9	120.8	98	98	-2 / 2	DPMP		RF
70 /141	Other: Bridge Backfill, STA 69 + 14, 11' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	11.9	120.3	98	98	-2 / 2	DPMP		RF
71 /142	Other: Bridge Backfill, STA 70 + 49, 2' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	12.0	120.5	98	98	-2 / 2	DPMP		RF
72 /143	Other: Bridge Backfill, STA 70 + 89, 13' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	11.6	120.3	98	98	-2 / 2	DPMP		RF
73 /144	Other: Bridge Backfill, STA 71 + 70, 7' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	10.9	120.7	98	98	-2 / 2	DPMP		RF
74 /145	Other: Bridge Backfill, STA 71 + 64, 2' southeast of the steel culvert.	27	Below Grade	08/15/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
75 /146	Other: Bridge Backfill, STA 71 + 48, 11' northwest of the steel culvert.	27	Below Grade	08/15/2024	P4	11.5	120.6	98	95	-2 / 2	DPMP		RF
76 /147	Other: Bridge Backfill, STA 71 + 98, 16' northwest of the steel culvert.	27	Below Grade	08/15/2024	P4	11.9	120.8	98	95	-2 / 2	DPMP		RF
77 /148	Other: Bridge Backfill, STA 70 + 50, 5' northwest of the steel culvert.	27	Below Grade	08/15/2024	P4	11.2	120.4	98	98	-2 / 2	DPMP		RF
78 /149	Other: Bridge Backfill, STA 70 + 28, 20' northwest of the steel culvert.	27	Below Grade	08/15/2024	P4	11.8	120.7	98	98	-2 / 2	DPMP		RF
79 /150	Other: Bridge Backfill, STA 69 + 52, 22' northwest of the steel culvert.	27	Below Grade	08/15/2024	P4	12.0	120.7	98	98	-2 / 2	DPMP		RF
80 /151	Other: Bridge Backfill, STA 70 + 09, 11' southeast of the steel culvert.	26	Below Grade	08/15/2024	P4	11.1	120.7	98	98	-2 / 2	DPMP		RF
81 /152	Other: Bridge Backfill, STA 70 + 34, 13' southeast of the steel culvert.	26	Below Grade	08/15/2024	P4	11.6	120.9	98	98	-2 / 2	DPMP		RF



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82 /153	Other: Bridge Backfill, STA 70 + 54, 10' southeast of the steel culvert.	26	Below Grade	08/15/2024	P4	11.9	120.4	98	98	-2 / 2	DPMP		RF
83 /154	Other: Bridge Backfill, STA 70 + 84, 18' southeast of the steel culvert.	26	Below Grade	08/15/2024	P4	11.4	120.8	98	98	-2 / 2	DPMP		RF
84 /155	Other: Bridge Backfill, STA 71 + 43, 10' southeast of the steel culvert.	26	Below Grade	08/15/2024	P4	11.7	120.6	98	95	-2 / 2	DPMP		RF
85 /156	Other: Bridge Backfill, STA 71 + 40, 23' northwest of the steel culvert.	26	Below Grade	08/15/2024	P4	11.9	120.6	98	95	-2 / 2	DPMP		RF
86 /157	Other: Bridge Backfill, STA 70 + 62, 18' northwest of the steel culvert.	26	Below Grade	08/15/2024	P4	11.8	120.8	98	98	-2 / 2	DPMP		RF
87 /158	Other: Bridge Backfill, STA 70 + 12, 4' northwest of the steel culvert.	26	Below Grade	08/15/2024	P4	11.4	120.5	98	98	-2 / 2	DPMP		RF
88 /159	Other: Bridge Backfill, STA 69 + 70, 13' northwest of the steel culvert.	26	Below Grade	08/15/2024	P4	11.9	120.6	98	98	-2 / 2	DPMP		RF
89 /160	Other: Bridge Backfill, STA 69 + 59, 22' northwest of the steel culvert.	26	Below Grade	08/15/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
90 /161	Other: Bridge Backfill, STA 71 + 43, 2' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	11.4	120.5	98	95	-2 / 2	DPMP		RF
91 /162	Other: Bridge Backfill, STA 71 + 13, 16' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	11.9	120.4	98	95	-2 / 2	DPMP		RF
92 /163	Other: Bridge Backfill, STA 70 + 83, 10' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	11.8	120.8	98	98	-2 / 2	DPMP		RF
93 /164	Other: Bridge Backfill, STA 70 + 53, 7' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	11.1	120.6	98	98	-2 / 2	DPMP		RF
94 /165	Other: Bridge Backfill, STA 70 + 23, 13' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	11.9	121.1	99	98	-2 / 2	DPMP		RF
95 /166	Other: Bridge Backfill, STA 69 + 93, 16' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	11.7	120.6	98	98	-2 / 2	DPMP		RF
96 /167	Other: Bridge Backfill, STA 69 + 53, 22' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	12.0	120.7	98	98	-2 / 2	DPMP		RF



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97 /168	Other: Bridge Backfill, STA 69 + 27, 17' southeast of the steel culvert.	25	Below Grade	08/16/2024	P4	10.9	120.5	98	95	-2 / 2	DPMP		RF
98 /169	Other: Bridge Backfill, STA 69 + 34, 25' northwest of the steel culvert.	25	Below Grade	08/16/2024	P4	11.2	120.5	98	95	-2 / 2	DPMP		RF
99 /170	Other: Bridge Backfill, STA 70 + 84, 15' northwest of the steel culvert.	25	Below Grade	08/16/2024	P4	11.7	120.5	98	98	-2 / 2	DPMP		RF
100 /171	Other: Bridge Backfill, STA 70 + 44, 4' northwest of the steel culvert.	25	Below Grade	08/16/2024	P4	11.1	120.8	98	98	-2 / 2	DPMP		RF
101 /172	Other: Bridge Backfill, STA 70 + 04, 22' northwest of the steel culvert.	25	Below Grade	08/16/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
102 /173	Other: Bridge Backfill, STA 71 + 84, 8' northwest of the steel culvert.	25	Below Grade	08/16/2024	P4	11.1	120.6	98	98	-2 / 2	DPMP		RF
103 /174	Other: Bridge Backfill, STA 71 + 75, 20' northwest of the steel culvert.	25	Below Grade	08/16/2024	P4	11.6	121.1	99	95	-2 / 2	DPMP		RF
104 /175	Other: Bridge Backfill, STA 71 + 48, 6' southeast of the steel culvert.	24	Below Grade	08/16/2024	P4	11.4	120.5	98	95	-2 / 2	DPMP		RF
105 /176	Other: Bridge Backfill, STA 71 + 08, 10' southeast of the steel culvert.	24	Below Grade	08/16/2024	P4	11.6	120.5	98	95	-2 / 2	DPMP		RF
106 /177	Other: Bridge Backfill, STA 70 + 75, 15' southeast of the steel culvert.	24	Below Grade	08/16/2024	P4	11.9	120.4	98	95	-2 / 2	DPMP		RF
107 /178	Other: Bridge Backfill, STA 70 + 35, 16' southeast of the steel culvert.	24	Below Grade	08/16/2024	P4	12.0	120.7	98	95	-2 / 2	DPMP		RF
108 /179	Other: Bridge Backfill, STA 71 + 00, 7' southeast of the steel culvert.	24	Below Grade	08/16/2024	P4	11.6	120.5	98	95	-2 / 2	DPMP		RF
109 /180	Other: Bridge Backfill, STA 71 + 30, 16' southeast of the steel culvert.	24	Below Grade	08/16/2024	P4	11.7	120.6	98	98	-2 / 2	DPMP		RF
110 /181	Other: Bridge Backfill, STA 71 + 83, 17' southeast of the concrete buttress.	24	Below Grade	08/16/2024	P4	11.2	120.8	98	98	-2 / 2	DPMP		RF
111 /182	Other: Bridge Backfill, STA 71 + 73, 30' northwest of the concrete buttress.	24	Below Grade	08/16/2024	P4	11.1	120.5	98	98	-2 / 2	DPMP		RF



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112 /183	Other: Bridge Backfill, STA 70 + 13, 5' northwest of the steel culvert.	24	Below Grade	08/16/2024	P4	11.5	120.4	98	98	-2 / 2	DPMP		RF
113 /184	Other: Bridge Backfill, STA 70 + 35, 20' northwest of the steel culvert.	24	Below Grade	08/16/2024	P4	11.8	120.9	98	95	-2 / 2	DPMP		RF
114 /185	Other: Bridge Backfill, STA 70 + 50, 8' northwest of the steel culvert.	24	Below Grade	08/16/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
115 /186	Other: Bridge Backfill, STA 70 + 90, 16' northwest of the steel culvert.	24	Below Grade	08/16/2024	P4	12.0	120.7	98	98	-2 / 2	DPMP		RF
116 /187	Other: Bridge Backfill, STA 69 + 56, 17' northwest of the steel culvert.	24	Below Grade	08/16/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
117 /188	Other: Bridge Backfill, STA 69 + 39, 27' northwest of the concrete buttress.	24	Below Grade	08/16/2024	P4	11.5	120.4	98	98	-2 / 2	DPMP		RF
118 /189	Other: Bridge Backfill, STA 71 + 82, 7' southeast of the steel culvert.	23.5	Below Grade	08/16/2024	P4	11.6	120.5	98	98	-2 / 2	DPMP		RF
119 /190	Other: Bridge Backfill, STA 71 + 99, 21' southeast of the steel culvert.	23	Below Grade	08/16/2024	P4	11.4	120.7	98	98	-2 / 2	DPMP		RF
120 /191	Other: Bridge Backfill, STA 70 + 49, 15' southeast of the steel culvert.	23	Below Grade	08/16/2024	P4	11.9	120.5	98	98	-2 / 2	DPMP		RF
121 /192	Other: Bridge Backfill, STA 70 + 52, 6' southeast of the steel culvert.	23	Below Grade	08/16/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
122 /193	Other: Bridge Backfill, STA 70 + 92, 20' southeast of the steel culvert.	23	Below Grade	08/16/2024	P4	11.2	120.4	98	98	-2 / 2	DPMP		RF
123 /194	Other: Bridge Backfill, STA 69 + 21, 23' southeast of the steel culvert.	23	Below Grade	08/16/2024	P4	11.2	120.4	98	98	-2 / 2	DPMP		RF
124 /195	Other: Bridge Backfill, STA 69 + 31, 16' southeast of the steel culvert.	23	Below Grade	08/16/2024	P4	11.3	120.4	98	98	-2 / 2	DPMP		RF
125 /196	Other: Bridge Backfill, STA 69 + 40, 125' southeast of the concrete buttress.	23	Below Grade	08/16/2024	P4	11.4	120.8	98	98	-2 / 2	DPMP		RF

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.



Entech Engineering
505 Elkton Dr
Colorado Springs, CO 80907
Phone: 719-531-5599

Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd (Bridge)
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P4	ASTM D1557 - A	SM	10	122.9

08/26/2024

Reviewed by: Joey Goode, PE



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Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
126 /197	Other: Bridge Backfill, STA 71 + 68, 28' northwest of the concrete buttress.	23	Below Grade	08/17/2024	P4	10.9	120.6	98	98	-2 / 2	DPMP		RF
127 /198	Other: Bridge Backfill, STA 71 + 98, 4' northwest of the steel culvert.	23	Below Grade	08/17/2024	P4	11.2	120.7	98	98	-2 / 2	DPMP		RF
128 /199	Other: Bridge Backfill, STA 70 + 35, 13' northwest of the steel culvert.	23	Below Grade	08/17/2024	P4	11.6	120.5	98	98	-2 / 2	DPMP		RF
129 /200	Other: Bridge Backfill, STA 70 + 52, 6' northwest of the steel culvert.	23	Below Grade	08/17/2024	P4	10.9	120.4	98	98	-2 / 2	DPMP		RF
130 /201	Other: Bridge Backfill, STA 70 + 90, 5' northwest of the steel culvert.	23	Below Grade	08/17/2024	P4	11.1	120.8	98	98	-2 / 2	DPMP		RF
131 /202	Other: Bridge Backfill, STA 69 + 15, 26' northwest of the steel culvert.	23	Below Grade	08/17/2024	P4	11.6	120.6	98	98	-2 / 2	DPMP		RF
132 /203	Other: Bridge Backfill, STA 69 + 35, 20' southwest of the steel culvert.	23	Below Grade	08/17/2024	P4	11.6	121.1	99	98	-2 / 2	DPMP		RF
133 /204	Other: Bridge Backfill, STA 69 + 36, 21' southeast of the steel culvert.	22	Below Grade	08/17/2024	P4	11.2	120.5	98	98	-2 / 2	DPMP		RF
134 /205	Other: Bridge Backfill, STA 69 + 81, 12' southeast of the steel culvert.	22	Below Grade	08/17/2024	P4	11.6	120.9	98	98	-2 / 2	DPMP		RF
135 /206	Other: Bridge Backfill, STA 70 + 20, 4' southeast of the steel culvert.	22	Below Grade	08/17/2024	P4	11.8	121.2	99	98	-2 / 2	DPMP		RF
136 /207	Other: Bridge Backfill, STA 70 + 50, 18' southeast of the steel culvert.	22	Below Grade	08/17/2024	P4	11.4	120.5	98	98	-2 / 2	DPMP		RF
137 /208	Other: Bridge Backfill, STA 70 + 02, 10' southeast of the steel culvert.	22	Below Grade	08/17/2024	P4	10.9	120.5	98	98	-2 / 2	DPMP		RF
138 /209	Other: Bridge Backfill, STA 69 + 53, 10' northwest of the steel culvert.	27	Below Grade	08/17/2024	P4	11.9	120.5	98	98	-2 / 2	DPMP		RF
139 /210	Other: Bridge Backfill, STA 69 + 49, 10' northwest of the steel culvert.	25	Below Grade	08/17/2024	P4	11.7	120.6	98	98	-2 / 2	DPMP		RF



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240082
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Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
140 /211	Other: Bridge Backfill, STA 69 + 30, 17' northwest of the concrete buttress.	25	Below Grade	08/17/2024	P4	11.3	120.8	98	98	-2 / 2	DPMP		RF
141 /212	Other: Bridge Backfill, STA 69 + 47, 12' northwest of the steel culvert.	23	Below Grade	08/17/2024	P4	11.8	121.1	99	98	-2 / 2	DPMP		RF
142 /213	Other: Bridge Backfill, STA 69 + 50, 35' northwest of the steel culvert.	22	Below Grade	08/19/2024	P4	11.7	120.3	98	98	-2 / 2	DPMP		RF
143 /214	Other: Bridge Backfill, STA 69 + 79, 10' northwest of the steel culvert.	22	Below Grade	08/19/2024	P4	11.5	120.4	98	98	-2 / 2	DPMP		RF
144 /215	Other: Bridge Backfill, STA 70 + 10, 15' northwest of the steel culvert.	22	Below Grade	08/19/2024	P4	10.4	120.3	98	98	-2 / 2	DPMP		RF
145 /216	Other: Bridge Backfill, STA 70 + 49, 16' northwest of the steel culvert.	22	Below Grade	08/19/2024	P4	10.6	120.6	98	98	-2 / 2	DPMP		RF
146 /217	Other: Bridge Backfill, STA 70 + 79, 4' southwest of the steel culvert.	22	Below Grade	08/19/2024	P4	10.4	120.5	98	98	-2 / 2	DPMP		RF
147 /218	Other: Bridge Backfill, STA 70 + 99, 15' southwest of the steel culvert.	22	Below Grade	08/19/2024	P4	11.2	120.4	98	98	-2 / 2	DPMP		RF
148 /219	Other: Bridge Backfill, STA 71 + 30, 3' southwest of the steel culvert.	22	Below Grade	08/19/2024	P4	11.2	120.6	98	98	-2 / 2	DPMP		RF
149 /220	Other: Bridge Backfill, STA 71 + 73, 30' northwest of the concrete buttress.	22	Below Grade	08/19/2024	P4	10.6	121.5	99	98	-2 / 2	DPMP		RF
150 /221	Other: Bridge Backfill, STA 69 + 30, 27' northwest of the concrete buttress.	20	Below Grade	08/19/2024	P4	11.3	120.5	98	98	-2 / 2	DPMP		RF
151 /222	Other: Bridge Backfill, STA 69 + 70, 22' southwest of the steel culvert.	20	Below Grade	08/19/2024	P4	11.5	120.8	98	98	-2 / 2	DPMP		RF
152 /223	Other: Bridge Backfill, STA 70 + 20, 5' southwest of the steel culvert.	20	Below Grade	08/19/2024	P4	11.2	120.3	98	98	-2 / 2	DPMP		RF
153 /224	Other: Bridge Backfill, STA 70 + 50, 13' southwest of the steel culvert.	20	Below Grade	08/19/2024	P4	11.6	120.5	98	98	-2 / 2	DPMP		RF
154 /225	Other: Bridge Backfill, STA 70 + 75, 18' southwest of the steel culvert.	20	Below Grade	08/19/2024	P4	11.4	120.7	98	98	-2 / 2	DPMP		RF



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Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
155 /226	Other: Bridge Backfill, STA 70 + 15, 12' southwest of the steel culvert.	20	Below Grade	08/19/2024	P4	11.8	120.4	98	98	-2 / 2	DPMP		RF
156 /227	Other: Bridge Backfill, STA 71 + 78, 13' southeast of the steel culvert.	30	Below Grade	08/19/2024	P4	11.8	120.7	98	98	-2 / 2	DPMP		RF
157 /228	Other: Bridge Backfill, STA 71 + 77, 9' southeast of the steel culvert.	28	Below Grade	08/19/2024	P4	11.5	127.0	103	98	-2 / 2	DPMP		RF
158 /229	Other: Bridge Backfill, STA 71 + 79, 11' southeast of the steel culvert.	28	Below Grade	08/19/2024	P4	10.8	120.4	98	98	-2 / 2	DPMP		RF
159 /230	Other: Bridge Backfill, STA 71 + 76, 7' southeast of the steel culvert.	26	Below Grade	08/19/2024	P4	11.2	120.9	98	98	-2 / 2	DPMP		RF
160 /231	Other: Bridge Backfill, STA 71 + 73, 9' southeast of the steel culvert.	26	Below Grade	08/19/2024	P4	11.8	120.9	98	98	-2 / 2	DPMP		RF
161 /232	Other: Bridge Backfill, STA 71 + 78, 10' southeast of the steel culvert.	24	Below Grade	08/19/2024	P4	10.8	121.1	99	98	-2 / 2	DPMP		RF
162 /233	Other: Bridge Backfill, STA 71 + 80, 7' southeast of the steel culvert.	22	Below Grade	08/19/2024	P4	10.9	120.4	98	98	-2 / 2	DPMP		RF
165 /234	Other: Bridge Backfill, STA 71 + 69, 31' east of the steel culvert.	20.5	Below Grade	08/20/2024	P4	11.2	120.7	98	98	-2 / 2	DPMP		RF
166 /235	Other: Bridge Backfill, STA 70 + 08, 15' east of the steel culvert.	20	Below Grade	08/20/2024	P4	10.5	120.1	98	98	-2 / 2	DPMP		RF
167 /236	Other: Bridge Backfill, STA 70 + 33, 25' east of the steel culvert.	20	Below Grade	08/20/2024	P4	11.4	120.5	98	98	-2 / 2	DPMP		RF
168 /237	Other: Bridge Backfill, STA 70 + 53, 7' east of the steel culvert.	20	Below Grade	08/20/2024	P4	10.8	120.1	98	98	-2 / 2	DPMP		RF
169 /238	Other: Bridge Backfill, STA 71 + 83, 22' east of the steel culvert.	20	Below Grade	08/20/2024	P4	11.4	120.7	98	98	-2 / 2	DPMP		RF
170 /239	Other: Bridge Backfill, STA 71 + 03, 12' east of the steel culvert.	20	Below Grade	08/20/2024	P4	10.9	120.1	98	98	-2 / 2	DPMP		RF
171 /240	Other: Bridge Backfill, STA 71 + 88, 16' east of the steel culvert.	20	Below Grade	08/20/2024	P4	10.6	120.5	98	98	-2 / 2	DPMP		RF



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Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
172 /241	Other: Bridge Backfill, STA 71 + 98, 25' east of the steel culvert.	20	Below Grade	08/20/2024	P4	11.1	120.4	98	98	-2 / 2	DPMP		RF
173 /242	Other: Bridge Backfill, STA 71 + 58, 11' east of the southeast wing wall.	18	Below Grade	08/20/2024	P4	10.9	120.5	98	98	-2 / 2	DPMP		RF
174 /243	Other: Bridge Backfill, STA 71 + 85, 33' east of the steel culvert.	18	Below Grade	08/20/2024	P4	11.2	120.7	98	98	-2 / 2	DPMP		RF
175 /244	Other: Bridge Backfill, STA 70 + 25, 15' east of the steel culvert.	18	Below Grade	08/20/2024	P4	11.8	121.3	99	98	-2 / 2	DPMP		RF
176 /245	Other: Bridge Backfill, STA 70 + 61, 23' east of the steel culvert.	18	Below Grade	08/20/2024	P4	11.1	120.7	98	98	-2 / 2	DPMP		RF
177 /246	Other: Bridge Backfill, STA 70 + 30, 7' east of the steel culvert.	18	Below Grade	08/20/2024	P4	10.9	120.5	98	98	-2 / 2	DPMP		RF
178 /247	Other: Bridge Backfill, STA 70 + 05, 21' east of steel culvert.	18	Below Grade	08/20/2024	P4	10.9	120.6	98	98	-2 / 2	DPMP		RF
179 /248	Other: Bridge Backfill, STA 69 + 81 9' east of steel culvert.	18	Below Grade	08/20/2024	P4	11.1	120.4	98	98	-2 / 2	DPMP		RF
180 /249	Other: Bridge Backfill, STA 69 + 13, 18' north of the southwest wing wall.	20	Below Grade	08/20/2024	P4	11.4	120.8	98	98	-2 / 2	DPMP		RF
181 /250	Other: Bridge Backfill, STA 69 + 59, 27' west of steel culvert.	19	Below Grade	08/20/2024	P4	11.8	120.2	98	98	-2 / 2	DPMP		RF
182 /251	Other: Bridge Backfill, STA 69 + 95, 10' west of steel culvert.	19	Below Grade	08/20/2024	P4	10.9	120.6	98	98	-2 / 2	DPMP		RF
183 /252	Other: Bridge Backfill, STA 70 + 25, 30' west of the steel culvert.	19	Below Grade	08/20/2024	P4	10.4	120.4	98	98	-2 / 2	DPMP		RF
184 /253	Other: Bridge Backfill, STA 70 + 55, 7' west of the steel culvert.	19	Below Grade	08/20/2024	P4	11.7	120.6	98	98	-2 / 2	DPMP		RF
185 /254	Other: Bridge Backfill, STA 70 + 85, 28' west of the steel culvert.	19	Below Grade	08/20/2024	P4	11.6	121.2	99	98	-2 / 2	DPMP		RF
186 /255	Other: Bridge Backfill, STA 71 + 30, 13' west of the steel culvert.	19	Below Grade	08/20/2024	P4	11.4	120.5	98	98	-2 / 2	DPMP		RF



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Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
187 /256	Other: Bridge Backfill, STA 69 + 33, 27' east of the southeast wing wall.	17	Below Grade	08/20/2024	P4	10.6	120.8	98	98	-2 / 2	DPMP		RF
188 /257	Other: Bridge Backfill, STA 69 + 78, 22' east of the steel culvert.	17	Below Grade	08/20/2024	P4	11.9	120.7	98	98	-2 / 2	DPMP		RF
189 /258	Other: Bridge Backfill, STA 70 + 25, 7' east of the steel culvert.	17	Below Grade	08/20/2024	P4	10.8	120.6	98	98	-2 / 2	DPMP		RF
190 /259	Other: Bridge Backfill, STA 70 + 50, 24' east of the steel culvert.	17	Below Grade	08/20/2024	P4	11.2	120.4	98	98	-2 / 2	DPMP		RF
191 /260	Other: Bridge Backfill, STA 70 + 80, 9' east of the steel culvert.	17	Below Grade	08/20/2024	P4	10.9	120.7	98	98	-2 / 2	DPMP		RF
192 /261	Other: Bridge Backfill, STA 71 + 15, 20' east of the steel culvert.	17	Below Grade	08/20/2024	P4	10.8	120.6	98	98	-2 / 2	DPMP		RF
193 /262	Other: Bridge Backfill, STA 71 + 28, 25' west of the steel culvert.	18	Below Grade	08/20/2024	P4	10.8	120.6	98	98	-2 / 2	DPMP		RF
194 /263	Other: Bridge Backfill, STA 70 + 96, 10' west of the steel culvert.	18	Below Grade	08/20/2024	P4	11.5	120.7	98	98	-2 / 2	DPMP		RF
195 /264	Other: Bridge Backfill, STA 70 + 71, 18' west of the steel culvert.	18	Below Grade	08/20/2024	P4	11.7	120.8	98	98	-2 / 2	DPMP		RF
196 /265	Other: Bridge Backfill, STA 70 + 51, 11' east of the steel culvert.	18	Below Grade	08/20/2024	P4	12.0	121.2	99	98	-2 / 2	DPMP		RF
197 /266	Other: Bridge Backfill, STA 70 + 21, 30' east of the steel culvert.	18	Below Grade	08/20/2024	P4	11.4	120.7	98	98	-2 / 2	DPMP		RF
198 /267	Other: Bridge Backfill, STA 69 + 84, 8' east of the steel culvert.	18	Below Grade	08/20/2024	P4	10.8	120.7	98	98	-2 / 2	DPMP		RF
199 /268	Other: Bridge Backfill, STA 69 + 52, 24' east of the steel culvert.	18	Below Grade	08/20/2024	P4	11.5	120.7	98	98	-2 / 2	DPMP		RF
200 /269	Other: Bridge Backfill, STA 69 + 32, 23' west of the southwest wing wall.	18	Below Grade	08/20/2024	P4	11.1	120.9	98	98	-2 / 2	DPMP		RF

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.



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Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P4	ASTM D1557 - A	SM	10	122.9

08/29/2024

Reviewed by: Joey Goode, PE



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Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
201 /270	Other: Bridge Backfill, STA 71 + 43, 32' west of the steel culvert.	17	Below Grade	08/21/2024	P4	11.9	120.5	98	98	-2 / 2	DPMP		RF
202 /271	Other: Bridge Backfill, STA 70 + 75, 8' west of the steel culvert.	17	Below Grade	08/21/2024	P4	12.0	120.8	98	98	-2 / 2	DPMP		RF
203 /272	Other: Bridge Backfill, STA 70 + 75, 17' west of the steel culvert.	17	Below Grade	08/21/2024	P4	11.8	120.7	98	98	-2 / 2	DPMP		RF
204 /273	Other: Bridge Backfill, STA 70 + 55, 8' west of the steel culvert.	17	Below Grade	08/21/2024	P4	10.9	120.4	98	98	-2 / 2	DPMP		RF
205 /274	Other: Bridge Backfill, STA 70 + 25, 20' west of the steel culvert.	17	Below Grade	08/21/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
206 /275	Other: Bridge Backfill, STA 69 + 70, 10' west of the steel culvert.	17	Below Grade	08/21/2024	P4	11.9	120.4	98	98	-2 / 2	DPMP		RF
207 /276	Other: Bridge Backfill, STA 69 + 50, 42' west of the steel culvert.	17	Below Grade	08/21/2024	P4	11.8	121.2	99	98	-2 / 2	DPMP		RF
208 /277	Other: Bridge Backfill, STA 69 + 33, 6' west of the southwest wing wall.	17	Below Grade	08/21/2024	P4	11.7	120.7	98	98	-2 / 2	DPMP		RF
209 /278	Other: Bridge Backfill, STA 69 + 22, 21' west of the southwest wing wall.	17	Below Grade	08/21/2024	P4	12.0	120.6	98	98	-2 / 2	DPMP		RF
210 /279	Other: Bridge Backfill, STA 69 + 39, 35' east of the southeast wing wall.	16	Below Grade	08/21/2024	P4	11.7	120.5	98	98	-2 / 2	DPMP		RF
211 /280	Other: Bridge Backfill, STA 69 + 24, 15' east of the steel culvert.	16	Below Grade	08/21/2024	P4	12.0	120.6	98	98	-2 / 2	DPMP		RF
212 /281	Other: Bridge Backfill, STA 70 + 83, 15' east of the steel culvert.	16	Below Grade	08/21/2024	P4	11.9	120.7	98	98	-2 / 2	DPMP		RF
213 /282	Other: Bridge Backfill, STA 70 + 52, 25' east of the steel culvert.	16	Below Grade	08/21/2024	P4	12.0	120.4	98	98	-2 / 2	DPMP		RF
214 /283	Other: Bridge Backfill, STA 70 + 22, 8' east of the steel culvert.	16	Below Grade	08/21/2024	P4	11.5	120.5	98	98	-2 / 2	DPMP		RF



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Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd (Bridge)
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
215 /284	Other: Bridge Backfill, STA 71 + 98, 22' east of the steel culvert.	16	Below Grade	08/21/2024	P4	11.8	120.8	98	98	-2 / 2	DPMP		RF
216 /285	Other: Bridge Backfill, STA 71 + 72, 10' east of the steel culvert.	16	Below Grade	08/21/2024	P4	10.5	120.5	98	98	-2 / 2	DPMP		RF
217 /286	Other: Bridge Backfill, STA 71 + 21, 10' west of the steel culvert.	16	Below Grade	08/21/2024	P4	10.9	120.6	98	98	-2 / 2	DPMP		RF
218 /287	Other: Bridge Backfill, STA 70 + 95, 25' west of the steel culvert.	16	Below Grade	08/21/2024	P4	11.6	120.7	98	98	-2 / 2	DPMP		RF
219 /288	Other: Bridge Backfill, STA 70 + 70, 16' west of the steel culvert.	16	Below Grade	08/21/2024	P4	11.5	120.4	98	98	-2 / 2	DPMP		RF
220 /289	Other: Bridge Backfill, STA 70 + 35, 9' west of the steel culvert.	16	Below Grade	08/21/2024	P4	11.8	120.9	98	98	-2 / 2	DPMP		RF
221 /290	Other: Bridge Backfill, STA 70 + 05, 27' west of the steel culvert.	16	Below Grade	08/21/2024	P4	11.3	121.1	99	98	-2 / 2	DPMP		RF
222 /291	Other: Bridge Backfill, STA 69 + 47, 5' west of the steel culvert.	16	Below Grade	08/21/2024	P4	10.5	120.2	98	98	-2 / 2	DPMP		RF
223 /292	Other: Bridge Backfill, STA 69 + 34, 20' north of the southwest wing wall.	16	Below Grade	08/21/2024	P4	10.7	120.7	98	98	-2 / 2	DPMP		RF
224 /293	Other: Bridge Backfill, STA 69 + 30, 15' north of the southwest wing wall.	16	Below Grade	08/21/2024	P4	10.2	120.6	98	98	-2 / 2	DPMP		RF
225 /294	Other: Bridge Backfill, STA 71 + 13, 10' east of the steel culvert.	15	Below Grade	08/21/2024	P4	10.5	120.5	98	98	-2 / 2	DPMP		RF
226 /295	Other: Bridge Backfill, STA 70 + 79, 15' east of the steel culvert.	15	Below Grade	08/21/2024	P4	11.8	120.8	98	98	-2 / 2	DPMP		RF
227 /296	Other: Bridge Backfill, STA 70 + 45, 6' east of the steel culvert.	15	Below Grade	08/21/2024	P4	11.8	120.8	98	98	-2 / 2	DPMP		RF
228 /297	Other: Bridge Backfill, STA 69 + 98, 29' east of the steel culvert.	15	Below Grade	08/21/2024	P4	11.1	120.7	98	98	-2 / 2	DPMP		RF
229 /298	Other: Bridge Backfill, STA 69 + 60, 30' east of the steel culvert.	15	Below Grade	08/21/2024	P4	11.1	120.5	98	98	-2 / 2	DPMP		RF



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505 Elkton Dr.
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Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
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Project:

240082
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230 /299	Other: Bridge Backfill, STA 69 + 40, 10' east of the steel culvert.	15	Below Grade	08/21/2024	P4	10.8	120.6	98	98	-2 / 2	DPMP		RF
231 /300	Other: Bridge Backfill, STA 69 + 24, 26' northeast of the southeast wing wall.	15	Below Grade	08/21/2024	P4	11.4	120.9	98	98	-2 / 2	DPMP		RF
232 /301	Other: Bridge Backfill, STA 70 + 84, 42' west of the steel culvert.	15	Below Grade	08/21/2024	P4	10.8	120.5	98	98	-2 / 2	DPMP		RF
233 /302	Other: Bridge Backfill, STA 70 + 65, 10' west of the steel culvert.	15	Below Grade	08/21/2024	P4	10.9	120.5	98	98	-2 / 2	DPMP		RF
234 /303	Other: Bridge Backfill, STA 70 + 25, 12' west of the steel culvert.	15	Below Grade	08/21/2024	P4	11.9	120.8	98	98	-2 / 2	DPMP		RF
235 /304	Other: Bridge Backfill, STA 69 + 99, 28' west of the steel culvert.	15	Below Grade	08/21/2024	P4	10.5	120.5	98	98	-2 / 2	DPMP		RF
236 /305	Other: Bridge Backfill, STA 69 + 69, 7' west of the steel culvert.	15	Below Grade	08/21/2024	P4	10.8	120.6	98	98	-2 / 2	DPMP		RF
237 /306	Other: Bridge Backfill, STA 69 + 43, 10' west of the steel culvert.	15	Below Grade	08/21/2024	P4	10.9	120.7	98	98	-2 / 2	DPMP		RF
238 /307	Other: Bridge Backfill, STA 69 + 34, 28' northwest of the southwest wing wall.	15	Below Grade	08/21/2024	P4	10.6	120.8	98	98	-2 / 2	DPMP		RF
239 /308	Other: Bridge Backfill, STA 71 + 08, 20' east of the steel culvert.	14	Below Grade	08/21/2024	P4	10.5	120.5	98	98	-2 / 2	DPMP		RF
240 /309	Other: Bridge Backfill, STA 70 + 82, 5' east of the steel culvert.	14	Below Grade	08/21/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
241 /310	Other: Bridge Backfill, STA 70 + 52, 27' east of the steel culvert.	14	Below Grade	08/21/2024	P4	10.6	120.9	98	98	-2 / 2	DPMP		RF
242 /311	Other: Bridge Backfill, STA 70 + 12, 11' east of the steel culvert.	14	Below Grade	08/21/2024	P4	11.2	120.8	98	98	-2 / 2	DPMP		RF
243 /312	Other: Bridge Backfill, STA 69 + 71, 37' east of the steel culvert.	14	Below Grade	08/21/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
244 /313	Other: Bridge Backfill, STA 69 + 42, 13' east of the steel culvert.	14	Below Grade	08/21/2024	P4	10.4	120.9	98	98	-2 / 2	DPMP		RF



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245 /314	Other: Bridge Backfill, STA 69 + 17, 27' from the northeast corner of the southeast wing wall.	14	Below Grade	08/21/2024	P4	11.1	120.8	98	98	-2 / 2	DPMP		RF
246 /315	Other: Bridge Backfill, STA 69 + 49, 27' northeast of the southeast wing wall.	13	Below Grade	08/22/2024	P4	11.9	120.5	98	98	-2 / 2	DPMP		RF
247 /316	Other: Bridge Backfill, STA 69 + 84, 7' east.	13	Below Grade	08/22/2024	P4	11.1	120.5	98	98	-2 / 2	DPMP		RF
248 /317	Other: Bridge Backfill, STA 70 + 50, 27' east of the steel culvert.	13	Below Grade	08/22/2024	P4	9.9	120.4	98	98	-2 / 2	DPMP		RF
249 /318	Other: Bridge Backfill, STA 70 + 90, 9' east of the steel culvert.	13	Below Grade	08/22/2024	P4	11.6	120.7	98	98	-2 / 2	DPMP		RF
250 /319	Other: Bridge Backfill, STA 70 + 20, 28' east of the steel culvert.	13	Below Grade	08/22/2024	P4	10.8	120.5	98	98	-2 / 2	DPMP		RF
251 /320	Other: Bridge Backfill, STA 70 + 05, 25' west of the steel culvert.	13	Below Grade	08/22/2024	P4	10.4	120.5	98	98	-2 / 2	DPMP		RF
252 /321	Other: Bridge Backfill, STA 70 + 85, 7' west of the steel culvert.	13	Below Grade	08/22/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
253 /322	Other: Bridge Backfill, STA 70 + 55, 22' west of the steel culvert.	13	Below Grade	08/22/2024	P4	11.8	120.7	98	98	-2 / 2	DPMP		RF
254 /323	Other: Bridge Backfill, STA 70 + 02, 11' west of the steel culvert.	13	Below Grade	08/22/2024	P4	11.9	119.8	98	98	-2 / 2	DPMP		RF
255 /324	Other: Bridge Backfill, STA 69 + 42, 5' west of the steel culvert.	13	Below Grade	08/22/2024	P4	10.8	120.5	98	98	-2 / 2	DPMP		RF
256 /325	Other: Bridge Backfill, STA 69 + 18, 30' northwest of the southwest wing wall, 56' west of the steel culvert	6	Below Grade	08/22/2024	P4	11.0	116.6	95	95	-2 / 2	DPMP		RF
257 /326	Other: Bridge Backfill, STA 69 + 12, 23' northeast of the southeast wing wall, 40' east of the steel culvert.	12	Below Grade	08/22/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
258 /327	Other: Bridge Backfill, STA 69 + 56, 39' west of the steel culvert.	12	Below Grade	08/22/2024	P4	10.5	120.8	98	98	-2 / 2	DPMP		RF



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259 /328	Other: Bridge Backfill, STA 69 + 81, 5' east of the steel culvert.	12	Below Grade	08/22/2024	P4	10.6	120.5	98	98	-2 / 2	DPMP		RF
260 /329	Other: Bridge Backfill, STA 70 + 11, 20' east of the steel culvert.	12	Below Grade	08/22/2024	P4	10.4	120.4	98	98	-2 / 2	DPMP		RF
261 /330	Other: Bridge Backfill, STA 70 + 46, 9' east of the steel culvert.	12	Below Grade	08/22/2024	P4	10.9	120.7	98	98	-2 / 2	DPMP		RF
262 /331	Other: Bridge Backfill, STA 70 + 71, 31' east of the steel culvert.	12	Below Grade	08/22/2024	P4	10.2	120.5	98	98	-2 / 2	DPMP		RF
263 /332	Other: Bridge Backfill, STA 70 + 05, 10' east of the steel culvert.	12	Below Grade	08/22/2024	P4	10.3	120.4	98	98	-2 / 2	DPMP		RF
264 /333	Other: Bridge Backfill, STA 71 + 06, 38' west of the steel culvert.	12	Below Grade	08/23/2024	P4	10.6	120.5	98	98	-2 / 2	DPMP		RF
265 /334	Other: Bridge Backfill, STA 70 + 69, 10' west of the steel culvert.	12	Below Grade	08/23/2024	P4	11.9	120.7	98	98	-2 / 2	DPMP		RF
266 /335	Other: Bridge Backfill, STA 70 + 49, 5' west of the steel culvert.	12	Below Grade	08/23/2024	P4	9.9	120.5	98	98	-2 / 2	DPMP		RF
267 /336	Other: Bridge Backfill, STA 70 + 09, 20' west of the steel culvert.	12	Below Grade	08/23/2024	P4	11.8	120.3	98	98	-2 / 2	DPMP		RF
268 /337	Other: Bridge Backfill, STA 69 + 75, 8' west of the steel culvert.	12	Below Grade	08/23/2024	P4	11.5	120.8	98	98	-2 / 2	DPMP		RF
269 /338	Other: Bridge Backfill, STA 69 + 60, 18' west of the steel culvert.	12	Below Grade	08/23/2024	P4	12.0	119.8	98	98	-2 / 2	DPMP		RF
270 /339	Other: Bridge Backfill, STA 68 + 42, 6' west of the steel culvert.	12	Below Grade	08/23/2024	P4	11.8	120.5	98	98	-2 / 2	DPMP		RF
271 /340	Other: Bridge Backfill, STA 69 + 29, 5' northwest from the southwest wing wall, 40' west of the steel culvert.	5	Below Grade	08/23/2024	P4	12.0	119.8	98	98	-2 / 2	DPMP		RF
272 /341	Other: Bridge Backfill, STA 70 + 32, 29' east of the steel culvert.	11	Below Grade	08/23/2024	P4	11.4	120.5	98	98	-2 / 2	DPMP		RF
273 /342	Other: Bridge Backfill, STA 70 + 12, 15' east of the steel culvert.	11	Below Grade	08/23/2024	P4	11.4	120.6	98	98	-2 / 2	DPMP		RF



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274 /343	Other: Bridge Backfill, STA 69 + 89, 32' east of the steel culvert.	11	Below Grade	08/23/2024	P4	11.9	120.8	98	98	-2 / 2	DPMP		RF
275 /344	Other: Bridge Backfill, STA 69 + 67, 6' east of the steel culvert.	11	Below Grade	08/23/2024	P4	11.4	120.5	98	98	-2 / 2	DPMP		RF
276 /345	Other: Bridge Backfill, STA 69 + 32, 50' east of the steel culvert.	11	Below Grade	08/23/2024	P4	10.5	120.6	98	98	-2 / 2	DPMP		RF
277 /346	Other: Bridge Backfill, STA 69 + 02, 38' east of the steel culvert, 18' northeast of the southeast wing wall.	11	Below Grade	08/23/2024	P4	11.5	120.7	98	98	-2 / 2	DPMP		RF
278 /347	Other: Bridge Backfill, STA 70 + 80, 30' west of the steel culvert.	11	Below Grade	08/23/2024	P4	10.8	119.8	98	98	-2 / 2	DPMP		RF
279 /348	Other: Bridge Backfill, STA 70 + 50, 10' west of the steel culvert.	11	Below Grade	08/23/2024	P4	10.8	120.5	98	98	-2 / 2	DPMP		RF
280 /349	Other: Bridge Backfill, STA 70 + 10, 21' west of the steel culvert.	11	Below Grade	08/23/2024	P4	11.8	119.9	98	98	-2 / 2	DPMP		RF
281 /350	Other: Bridge Backfill, STA 69 + 80, 12' west of the steel culvert.	11	Below Grade	08/23/2024	P4	11.2	120.4	98	98	-2 / 2	DPMP		RF
282 /351	Other: Bridge Backfill, STA 69 + 41, 37' west of the steel culvert.	11	Below Grade	08/23/2024	P4	10.2	119.9	98	98	-2 / 2	DPMP		RF
283 /352	Other: Bridge Backfill, STA 69 + 19, 41' west of the steel culvert, 5' northwest of the southwest wing wall.	6	Below Grade	08/23/2024	P4	11.8	120.6	98	98	-2 / 2	DPMP		RF
284 /353	Other: Bridge Backfill, STA 70 + 49, 25' east of the steel culvert.	10	Below Grade	08/23/2024	P4	11.5	117.6	96	95	-2 / 2	DPMP		RF
285 /354	Other: Bridge Backfill, STA 70 + 20, 36' east of the steel culvert.	10	Below Grade	08/23/2024	P4	10.9	117.9	96	95	-2 / 2	DPMP		RF
286 /355	Other: Bridge Backfill, STA 69 + 99, 5' east of the steel culvert.	10	Below Grade	08/23/2024	P4	10.9	116.9	95	95	-2 / 2	DPMP		RF
287 /356	Other: Bridge Backfill, STA 69 + 39, 20' east of the steel culvert.	10	Below Grade	08/23/2024	P4	11.5	116.2	95	95	-2 / 2	DPMP		RF



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288 /357	Other: Bridge Backfill, STA 68 + 97, 22' northeast of the southeast wing wall, 50' east of the steel culvert.	10	Below Grade	08/23/2024	P4	11.2	118.2	96	95	-2 / 2	DP/MP		RF

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P4	ASTM D1557 - A	SM	10	122.9

09/04/2024

Reviewed by: Joey Goode, PE



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Test Results

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289 /358	Other: Bridge Backfill, STA 71 + 77, 24' west of the culvert.	18	Below Grade	10/01/2024	P7	10.3	120.8	98	98	-2 / 2	DPMP		RF
290 /359	Other: Bridge Backfill, STA 71 + 56, 15' west of the culvert.	20	Below Grade	10/01/2024	P7	8.9	120.8	98	98	-2 / 2	DPMP		RF
291 /360	Other: Bridge Backfill, STA 72 + 05, 28' west of the northwest wing wall.	14	Below Grade	10/01/2024	P7	10.9	120.8	98	98	-2 / 2	DPMP		RF
292 /361	Other: Bridge Backfill, STA 71 + 44, 17' west of the culvert.	14	Below Grade	10/01/2024	P7	9.2	120.8	98	98	-2 / 2	DPMP		RF
293 /362	Other: Bridge Backfill, STA 71 + 83, 17' west of the northwest wing wall.	16	Below Grade	10/01/2024	P7	10.7	121.1	98	98	-2 / 2	DPMP		RF
294 /363	Other: Bridge Backfill, STA 71 + 63, 15' west of the culvert.	16	Below Grade	10/01/2024	P7	10.6	121.4	98	98	-2 / 2	DPMP		RF
295 /364	Other: Bridge Backfill, STA 71 + 70, 45' west of the culvert.	12	Below Grade	10/01/2024	P7	10.5	121.2	98	98	-2 / 2	DPMP		RF
296 /365	Other: Bridge Backfill, STA 71 + 58, 10' east of the culvert.	25	Below Grade	10/02/2024	P7	10.6	120.9	98	98	-2 / 2	DPMP		RF
297 /366	Other: Bridge Backfill, STA 71 + 58, 20' east of the culvert.	25	Below Grade	10/02/2024	P7	9.1	121.1	98	98	-2 / 2	DPMP		RF
298 /367	Other: Bridge Backfill, STA 71 + 41, 16' east of the culvert.	14	Below Grade	10/02/2024	P7	7.8	120.8	98	98	-2 / 2	DPMP		RF
299 /368	Other: Bridge Backfill, STA 71 + 73, 11' from the southeast wing wall.	23	Below Grade	10/02/2024	P7	10.6	121.1	98	98	-2 / 2	DPMP		RF
300 /369	Other: Bridge Backfill, STA 71 +5 8, 4' east of the culvert.	23	Below Grade	10/02/2024	P7	10.8	121.5	98	98	-2 / 2	DPMP		RF
301 /370	Other: Bridge Backfill, STA 71 + 38, 16' east of the culvert.	13	Below Grade	10/02/2024	P7	10.4	122.4	99	98	-2 / 2	DPMP		RF
302 /371	Other: Bridge Backfill, STA 71 + 79 10' northeast of the wing wall.	21	Below Grade	10/02/2024	P7	10.9	120.9	98	98	-2 / 2	DPMP		RF



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303 /372	Other: Bridge Backfill, STA 71 + 53, 22' east of the culvert.	21	Below Grade	10/02/2024	P7	10.4	120.8	98	98	-2 / 2	DPMP		RF
304 /373	Other: Bridge Backfill, STA 71 + 33, 4' east of the culvert.	13	Below Grade	10/02/2024	P7	10.6	121.3	98	98	-2 / 2	DPMP		RF
305 /374	Other: Bridge Backfill, STA 71 + 03, 12' east of the culvert.	11	Below Grade	10/02/2024	P7	10.2	121.2	98	98	-2 / 2	DPMP		RF
306 /375	Other: Bridge Backfill, STA 71 + 08, 10' east of the culvert.	11	Below Grade	10/02/2024	P7	8.1	120.9	98	98	-2 / 2	DPMP		RF
307 /376	Other: Bridge Backfill, STA 71 + 80, 11' northeast of the wing wall.	19	Below Grade	10/02/2024	P7	10.4	120.8	98	98	-2 / 2	DPMP		RF
308 /377	Other: Bridge Backfill, STA 71 + 66, 15' east of the culvert.	19	Below Grade	10/02/2024	P7	10.8	121.3	98	98	-2 / 2	DPMP		RF
309 /378	Other: Bridge Backfill, STA 71 + 33, 12' east of the culvert.	13	Below Grade	10/02/2024	P7	7.6	122.4	99	98	-2 / 2	DPMP		RF
310 /379	Other: Bridge Backfill, STA 71 + 80, 7' from the northeast wing wall.	5	Below Grade	10/03/2024	P7	10.2	117.5	95	95	-2 / 2	DPMP		RF
311 /380	Other: Bridge Backfill, STA 71 + 78, 9' from the northeast wing wall.	10	Below Grade	10/03/2024	P7	9.6	118.1	95	95	-2 / 2	DPMP		RF
312 /381	Other: Bridge Backfill, STA 71 + 75, 6' from the northeast wing wall.	17	Below Grade	10/03/2024	P7	9.1	120.8	98	98	-2 / 2	DPMP		RF
313 /382	Other: Bridge Backfill, STA 71 + 57, 3' east of the culvert.	17	Below Grade	10/03/2024	P7	9.8	121.7	98	98	-2 / 2	DPMP		RF
314 /383	Other: Bridge Backfill, STA 71 + 24, 17' east of the culvert.	12	Below Grade	10/03/2024	P7	10.5	122.1	99	98	-2 / 2	DPMP		RF
315 /384	Other: Bridge Backfill, STA 70 + 99, 12' east of the culvert.	12	Below Grade	10/03/2024	P7	9.5	121.7	98	98	-2 / 2	DPMP		RF
316 /385	Other: Bridge Backfill, STA 71 + 57, 27' east of the culvert.	15	Below Grade	10/03/2024	P7	8.9	121.6	98	98	-2 / 2	DPMP		RF
317 /386	Other: Bridge Backfill, STA 71 + 37, 9' east of the culvert.	15	Below Grade	10/03/2024	P7	9.9	121.6	98	98	-2 / 2	DPMP		RF



Entech Engineering
505 Elkton Dr.
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Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd (Bridge)
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
318 /387	Other: Bridge Backfill, STA 71 + 10, 12' east of the culvert.	11	Below Grade	10/03/2024	P7	10.2	121.4	98	98	-2 / 2	DPMP		RF
319 /388	Other: Bridge Backfill, STA 71 + 66, 3' east of the culvert.	13	Below Grade	10/03/2024	P7	10.1	120.9	98	98	-2 / 2	DPMP		RF
320 /389	Other: Bridge Backfill, STA 71 + 68, 24' east of the culvert.	11	Below Grade	10/03/2024	P7	9.7	120.8	98	98	-2 / 2	DPMP		RF
321 /390	Other: Bridge Backfill, STA 71 + 83, 10' northeast of the wing wall.	7	Below Grade	10/03/2024	P7	10.2	117.5	95	95	-2 / 2	DPMP		RF
322 /391	Other: Bridge Backfill, STA 71 + 50, 32' east of the culvert.	11	Below Grade	10/03/2024	P7	9.9	120.8	98	98	-2 / 2	DPMP		RF
323 /392	Other: Bridge Backfill, STA 71 + 28, 18' east of the culvert.	10	Below Grade	10/03/2024	P7	10.5	119.2	96	95	-2 / 2	DPMP		RF
324 /393	Other: Bridge Backfill, STA 70 + 69, 28' east of the culvert.	10	Below Grade	10/03/2024	P7	10.2	117.5	95	95	-2 / 2	DPMP		RF
325 /394	Other: Bridge Backfill, STA 70 + 79, 5' east of the culvert.	10	Below Grade	10/03/2024	P7	9.2	118.9	96	95	-2 / 2	DPMP		RF
326 /395	Other: Bridge Backfill, STA 71 + 57, 9' west of the culvert.	13	Below Grade	10/03/2024	P7	9.2	121.4	98	98	-2 / 2	DPMP		RF
327 /396	Other: Bridge Backfill, STA 71 + 50, 27' west of the culvert.	13	Below Grade	10/03/2024	P7	9.7	121.4	98	98	-2 / 2	DPMP		RF
328 /397	Other: Bridge Backfill, STA 71 + 38, 12' west of the culvert.	12	Below Grade	10/03/2024	P7	10.1	120.8	98	98	-2 / 2	DPMP		RF
329 /398	Other: Bridge Backfill, STA 71 + 57, 15' west of the culvert.	12	Below Grade	10/03/2024	P7	10.3	120.8	98	98	-2 / 2	DPMP		RF
330 /399	Other: Bridge Backfill, STA 71 + 68, 23' from the northwest wing wall.	11	Below Grade	10/03/2024	P7	9.8	121.6	98	98	-2 / 2	DPMP		RF
331 /400	Other: Bridge Backfill, STA 71 + 11, 17' west of the culvert.	10	Below Grade	10/04/2024	P7	10.7	118.4	96	95	-2 / 2	DPMP		RF
332 /401	Other: Bridge Backfill, STA 71 + 33, 7' west of the culvert.	10	Below Grade	10/04/2024	P7	10.4	117.1	95	95	-2 / 2	DPMP		RF



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333 /402	Other: Bridge Backfill, STA 71 + 57, 11' west of the culvert.	10	Below Grade	10/04/2024	P7	10.8	117.1	95	95	-2 / 2	DPMP		RF
334 /403	Other: Bridge Backfill, STA 71 + 68, 47' west of the culvert.	10	Below Grade	10/04/2024	P7	10.4	117.1	95	95	-2 / 2	DPMP		RF
336 /405	Other: Bridge Backfill, STA 72 + 61, 17' west of the northwest wing wall.	11	Below Grade	10/05/2024	P4	8.6	122.1	99	98	-2 / 2	DPMP		RF
337 /406	Other: Bridge Backfill, STA 72 + 78, 7' west of the northwest wing wall.	11	Below Grade	10/05/2024	P4	8.4	121.4	99	98	-2 / 2	DPMP		RF
338 /407	Other: Bridge Backfill, STA 71 + 94, 38' west of the northwest wing wall.	13	Below Grade	10/05/2024	P4	8.9	119.8	98	98	-2 / 2	DPMP		RF
339 /408	Other: Bridge Backfill, STA 69 + 71, 7' west of the culvert.	8	Below Grade	10/05/2024	P7	8.9	117.2	95	95	-2 / 2	DPMP		RF
340 /409	Other: Bridge Backfill, STA 79 + 11, 3' west of the culvert.	8	Below Grade	10/05/2024	P7	9.2	117.7	95	95	-2 / 2	DPMP		RF
341 /410	Other: Bridge Backfill, STA 69 + 48, 6' west of the culvert.	8	Below Grade	10/05/2024	P7	10.5	118.1	95	95	-2 / 2	DPMP		RF
342 /411	Other: Bridge Backfill, STA 69 + 41, 27' west of the culvert.	8	Below Grade	10/05/2024	P7	9.5	117.7	95	95	-2 / 2	DPMP		RF
343 /412	Other: Bridge Backfill, STA 70 + 48, 21' west of the culvert.	8	Below Grade	10/05/2024	P7	9.1	120.2	97	95	-2 / 2	DPMP		RF
344 /413	Other: Bridge Backfill, STA 70 + 88, 7' west of the culvert.	8	Below Grade	10/05/2024	P7	9.1	119.2	96	95	-2 / 2	DPMP		RF
345 /414	Other: Bridge Backfill, STA 69 + 49, 45' west of the culvert.	8	Below Grade	10/05/2024	P7	8.1	117.4	95	95	-2 / 2	DPMP		RF
346 /415	Other: Bridge Backfill, STA 69 + 90, 45' west of the culvert.	8	Below Grade	10/05/2024	P7	8.6	119.4	96	95	-2 / 2	DPMP		RF
347 /416	Other: Bridge Backfill, STA 70 + 30, 30' west of the culvert.	8	Below Grade	10/05/2024	P7	10.6	117.4	95	95	-2 / 2	DPMP		RF
348 /417	Other: Bridge Backfill, STA 70 + 60, 10' west of the culvert.	8	Below Grade	10/05/2024	P7	9.2	119.4	96	95	-2 / 2	DPMP		RF



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349 /418	Other: Bridge Backfill, STA 71 + 00, 6' west of the culvert.	8	Below Grade	10/05/2024	P7	9.3	118.1	95	95	-2 / 2	DPMP		RF
350 /419	Other: Bridge Backfill, STA 71 + 20, 32' west of the culvert.	8	Below Grade	10/05/2024	P7	9.5	120.3	97	95	-2 / 2	DPMP		RF
351 /420	Other: Bridge Backfill, STA 71 + 59, 10' west of the culvert.	8	Below Grade	10/05/2024	P7	8.7	117.3	95	95	-2 / 2	DPMP		RF
352 /421	Other: Bridge Backfill, STA 71 + 69, 42' west of the culvert.	8	Below Grade	10/05/2024	P7	8.6	119.7	97	95	-2 / 2	DPMP		RF
353 /422	Other: Bridge Backfill, STA 72 + 69, 13' west of the northwest wing wall.	9	Below Grade	10/05/2024	P7	7.8	118.6	96	95	-2 / 2	DPMP		RF
354 /423	Other: Bridge Backfill, STA 72 + 08, 16' west of the northwest wing wall.	6	Below Grade	10/10/2024	P7	7.1	118.2	95	95	-2 / 2	DPMP		RF
355 /424	Other: Bridge Backfill, STA 71 + 83, 7' west of the northwest wing wall.	6	Below Grade	10/10/2024	P7	7.2	117.4	95	95	-2 / 2	DPMP		RF
356 /425	Other: Bridge Backfill, STA 71 + 50, 30' west of the culvert.	6	Below Grade	10/10/2024	P7	7.9	120.4	97	95	-2 / 2	DPMP		RF
357 /426	Other: Bridge Backfill, STA 69 + 21, 17' east of the southeast wing wall.	8	Below Grade	10/10/2024	P7	7.2	117.1	95	95	-2 / 2	DPMP		RF
358 /427	Other: Bridge Backfill, STA 69 + 52, 9' east of the culvert.	8	Below Grade	10/10/2024	P7	7.1	117.2	95	95	-2 / 2	DPMP		RF
359 /428	Other: Bridge Backfill, STA 69 + 89, 17' east of the culvert.	8	Below Grade	10/10/2024	P7	7.9	117.2	95	95	-2 / 2	DPMP		RF
360 /429	Other: Bridge Backfill, STA 70 + 50, 5' east of the culvert.	8	Below Grade	10/10/2024	P7	8.1	117.7	95	95	-2 / 2	DPMP		RF
361 /430	Other: Bridge Backfill, STA 71 + 28, 22' east of the culvert.	8	Below Grade	10/10/2024	P7	7.8	119.2	96	95	-2 / 2	DPMP		RF
362 /431	Other: Bridge Backfill, STA 71 + 62, 5' east of the culvert.	8	Below Grade	10/10/2024	P7	7.6	119.4	96	95	-2 / 2	DPMP		RF
363 /432	Other: Bridge Backfill, STA 71 + 84, 8' east of the southeast wing wall.	8	Below Grade	10/10/2024	P7	7.6	117.8	95	95	-2 / 2	DPMP		RF



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Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
364 /433	Other: Bridge Backfill, STA 68 + 90, 5' north of the southeast wing wall.	6	Below Grade	10/11/2024	P7	7.3	118.5	96	95	-2 / 2	DPMP		RF
365 /434	Other: Bridge Backfill, STA 69 + 34, 40' east of the culvert.	6	Below Grade	10/11/2024	P7	8.1	117.6	95	95	-2 / 2	DPMP		RF
366 /435	Other: Bridge Backfill, STA 69 + 74, 17' east of the culvert.	6	Below Grade	10/11/2024	P7	9.1	119.1	96	95	-2 / 2	DPMP		RF
367 /436	Other: Bridge Backfill, STA 70 + 00, 5' east of the culvert.	6	Below Grade	10/11/2024	P7	7.8	118.1	95	95	-2 / 2	DPMP		RF
368 /437	Other: Bridge Backfill, STA 70 + 70, 25' east of the culvert.	6	Below Grade	10/11/2024	P7	10.3	117.6	95	95	-2 / 2	DPMP		RF
369 /438	Other: Bridge Backfill, STA 71 + 32, 3' east of the culvert.	6	Below Grade	10/11/2024	P7	7.9	118.1	95	95	-2 / 2	DPMP		RF
370 /439	Other: Bridge Backfill, STA 71 + 57, 35' east of the culvert.	6	Below Grade	10/11/2024	P7	7.8	117.4	95	95	-2 / 2	DPMP		RF
371 /440	Other: Bridge Backfill, STA 71 + 93, 7' southeast of the northeast wing wall.	6	Below Grade	10/11/2024	P7	8.2	117.4	95	95	-2 / 2	DPMP		RF

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P7	ASTM D1557 - A	SM	9	123.9
P4	ASTM D1557 - A	SM	10	122.9

10/14/2024

Reviewed by: Joey Goode, PE



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Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
289 /358	Other: Bridge Backfill, STA 71 + 77, 24' west of the culvert.	18	Below Grade	10/01/2024	P7	10.3	120.8	98	98	-2 / 2	DPMP		RF
290 /359	Other: Bridge Backfill, STA 71 + 56, 15' west of the culvert.	20	Below Grade	10/01/2024	P7	8.9	120.8	98	98	-2 / 2	DPMP		RF
291 /360	Other: Bridge Backfill, STA 72 + 05, 28' west of the northwest wing wall.	14	Below Grade	10/01/2024	P7	10.9	120.8	98	98	-2 / 2	DPMP		RF
292 /361	Other: Bridge Backfill, STA 71 + 44, 17' west of the culvert.	14	Below Grade	10/01/2024	P7	9.2	120.8	98	98	-2 / 2	DPMP		RF
293 /362	Other: Bridge Backfill, STA 71 + 83, 17' west of the northwest wing wall.	16	Below Grade	10/01/2024	P7	10.7	121.1	98	98	-2 / 2	DPMP		RF
294 /363	Other: Bridge Backfill, STA 71 + 63, 15' west of the culvert.	16	Below Grade	10/01/2024	P7	10.6	121.4	98	98	-2 / 2	DPMP		RF
295 /364	Other: Bridge Backfill, STA 71 + 70, 45' west of the culvert.	12	Below Grade	10/01/2024	P7	10.5	121.2	98	98	-2 / 2	DPMP		RF
296 /365	Other: Bridge Backfill, STA 71 + 58, 10' east of the culvert.	25	Below Grade	10/02/2024	P7	10.6	120.9	98	98	-2 / 2	DPMP		RF
297 /366	Other: Bridge Backfill, STA 71 + 58, 20' east of the culvert.	25	Below Grade	10/02/2024	P7	9.1	121.1	98	98	-2 / 2	DPMP		RF
298 /367	Other: Bridge Backfill, STA 71 + 41, 16' east of the culvert.	14	Below Grade	10/02/2024	P7	7.8	120.8	98	98	-2 / 2	DPMP		RF
299 /368	Other: Bridge Backfill, STA 71 + 73, 11' from the southeast wing wall.	23	Below Grade	10/02/2024	P7	10.6	121.1	98	98	-2 / 2	DPMP		RF
300 /369	Other: Bridge Backfill, STA 71 +5 8, 4' east of the culvert.	23	Below Grade	10/02/2024	P7	10.8	121.5	98	98	-2 / 2	DPMP		RF
301 /370	Other: Bridge Backfill, STA 71 + 38, 16' east of the culvert.	13	Below Grade	10/02/2024	P7	10.4	122.4	99	98	-2 / 2	DPMP		RF
302 /371	Other: Bridge Backfill, STA 71 + 79 10' northeast of the wing wall.	21	Below Grade	10/02/2024	P7	10.9	120.9	98	98	-2 / 2	DPMP		RF



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303 /372	Other: Bridge Backfill, STA 71 + 53, 22' east of the culvert.	21	Below Grade	10/02/2024	P7	10.4	120.8	98	98	-2 / 2	DPMP		RF
304 /373	Other: Bridge Backfill, STA 71 + 33, 4' east of the culvert.	13	Below Grade	10/02/2024	P7	10.6	121.3	98	98	-2 / 2	DPMP		RF
305 /374	Other: Bridge Backfill, STA 71 + 03, 12' east of the culvert.	11	Below Grade	10/02/2024	P7	10.2	121.2	98	98	-2 / 2	DPMP		RF
306 /375	Other: Bridge Backfill, STA 71 + 08, 10' east of the culvert.	11	Below Grade	10/02/2024	P7	8.1	120.9	98	98	-2 / 2	DPMP		RF
307 /376	Other: Bridge Backfill, STA 71 + 80, 11' northeast of the wing wall.	19	Below Grade	10/02/2024	P7	10.4	120.8	98	98	-2 / 2	DPMP		RF
308 /377	Other: Bridge Backfill, STA 71 + 66, 15' east of the culvert.	19	Below Grade	10/02/2024	P7	10.8	121.3	98	98	-2 / 2	DPMP		RF
309 /378	Other: Bridge Backfill, STA 71 + 33, 12' east of the culvert.	13	Below Grade	10/02/2024	P7	7.6	122.4	99	98	-2 / 2	DPMP		RF
310 /379	Other: Bridge Backfill, STA 71 + 80, 7' from the northeast wing wall.	5	Below Grade	10/03/2024	P7	10.2	117.5	95	95	-2 / 2	DPMP		RF
311 /380	Other: Bridge Backfill, STA 71 + 78, 9' from the northeast wing wall.	10	Below Grade	10/03/2024	P7	9.6	118.1	95	95	-2 / 2	DPMP		RF
312 /381	Other: Bridge Backfill, STA 71 + 75, 6' from the northeast wing wall.	17	Below Grade	10/03/2024	P7	9.1	120.8	98	98	-2 / 2	DPMP		RF
313 /382	Other: Bridge Backfill, STA 71 + 57, 3' east of the culvert.	17	Below Grade	10/03/2024	P7	9.8	121.7	98	98	-2 / 2	DPMP		RF
314 /383	Other: Bridge Backfill, STA 71 + 24, 17' east of the culvert.	12	Below Grade	10/03/2024	P7	10.5	122.1	99	98	-2 / 2	DPMP		RF
315 /384	Other: Bridge Backfill, STA 70 + 99, 12' east of the culvert.	12	Below Grade	10/03/2024	P7	9.5	121.7	98	98	-2 / 2	DPMP		RF
316 /385	Other: Bridge Backfill, STA 71 + 57, 27' east of the culvert.	15	Below Grade	10/03/2024	P7	8.9	121.6	98	98	-2 / 2	DPMP		RF
317 /386	Other: Bridge Backfill, STA 71 + 37, 9' east of the culvert.	15	Below Grade	10/03/2024	P7	9.9	121.6	98	98	-2 / 2	DPMP		RF



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318 /387	Other: Bridge Backfill, STA 71 + 10, 12' east of the culvert.	11	Below Grade	10/03/2024	P7	10.2	121.4	98	98	-2 / 2	DPMP		RF
319 /388	Other: Bridge Backfill, STA 71 + 66, 3' east of the culvert.	13	Below Grade	10/03/2024	P7	10.1	120.9	98	98	-2 / 2	DPMP		RF
320 /389	Other: Bridge Backfill, STA 71 + 68, 24' east of the culvert.	11	Below Grade	10/03/2024	P7	9.7	120.8	98	98	-2 / 2	DPMP		RF
321 /390	Other: Bridge Backfill, STA 71 + 83, 10' northeast of the wing wall.	7	Below Grade	10/03/2024	P7	10.2	117.5	95	95	-2 / 2	DPMP		RF
322 /391	Other: Bridge Backfill, STA 71 + 50, 32' east of the culvert.	11	Below Grade	10/03/2024	P7	9.9	120.8	98	98	-2 / 2	DPMP		RF
323 /392	Other: Bridge Backfill, STA 71 + 28, 18' east of the culvert.	10	Below Grade	10/03/2024	P7	10.5	119.2	96	95	-2 / 2	DPMP		RF
324 /393	Other: Bridge Backfill, STA 70 + 69, 28' east of the culvert.	10	Below Grade	10/03/2024	P7	10.2	117.5	95	95	-2 / 2	DPMP		RF
325 /394	Other: Bridge Backfill, STA 70 + 79, 5' east of the culvert.	10	Below Grade	10/03/2024	P7	9.2	118.9	96	95	-2 / 2	DPMP		RF
326 /395	Other: Bridge Backfill, STA 71 + 57, 9' west of the culvert.	13	Below Grade	10/03/2024	P7	9.2	121.4	98	98	-2 / 2	DPMP		RF
327 /396	Other: Bridge Backfill, STA 71 + 50, 27' west of the culvert.	13	Below Grade	10/03/2024	P7	9.7	121.4	98	98	-2 / 2	DPMP		RF
328 /397	Other: Bridge Backfill, STA 71 + 38, 12' west of the culvert.	12	Below Grade	10/03/2024	P7	10.1	120.8	98	98	-2 / 2	DPMP		RF
329 /398	Other: Bridge Backfill, STA 71 + 57, 15' west of the culvert.	12	Below Grade	10/03/2024	P7	10.3	120.8	98	98	-2 / 2	DPMP		RF
330 /399	Other: Bridge Backfill, STA 71 + 68, 23' from the northwest wing wall.	11	Below Grade	10/03/2024	P7	9.8	121.6	98	98	-2 / 2	DPMP		RF
331 /400	Other: Bridge Backfill, STA 71 + 11, 17' west of the culvert.	10	Below Grade	10/04/2024	P7	10.7	118.4	96	95	-2 / 2	DPMP		RF
332 /401	Other: Bridge Backfill, STA 71 + 33, 7' west of the culvert.	10	Below Grade	10/04/2024	P7	10.4	117.1	95	95	-2 / 2	DPMP		RF



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333 /402	Other: Bridge Backfill, STA 71 + 57, 11' west of the culvert.	10	Below Grade	10/04/2024	P7	10.8	117.1	95	95	-2 / 2	DPMP		RF
334 /403	Other: Bridge Backfill, STA 71 + 68, 47' west of the culvert.	10	Below Grade	10/04/2024	P7	10.4	117.1	95	95	-2 / 2	DPMP		RF
336 /405	Other: Bridge Backfill, STA 72 + 61, 17' west of the northwest wing wall.	11	Below Grade	10/05/2024	P4	8.6	122.1	99	98	-2 / 2	DPMP		RF
337 /406	Other: Bridge Backfill, STA 72 + 78, 7' west of the northwest wing wall.	11	Below Grade	10/05/2024	P4	8.4	121.4	99	98	-2 / 2	DPMP		RF
338 /407	Other: Bridge Backfill, STA 71 + 94, 38' west of the northwest wing wall.	13	Below Grade	10/05/2024	P4	8.9	119.8	98	98	-2 / 2	DPMP		RF
339 /408	Other: Bridge Backfill, STA 69 + 71, 7' west of the culvert.	8	Below Grade	10/05/2024	P7	8.9	117.2	95	95	-2 / 2	DPMP		RF
340 /409	Other: Bridge Backfill, STA 79 + 11, 3' west of the culvert.	8	Below Grade	10/05/2024	P7	9.2	117.7	95	95	-2 / 2	DPMP		RF
341 /410	Other: Bridge Backfill, STA 69 + 48, 6' west of the culvert.	8	Below Grade	10/05/2024	P7	10.5	118.1	95	95	-2 / 2	DPMP		RF
342 /411	Other: Bridge Backfill, STA 69 + 41, 27' west of the culvert.	8	Below Grade	10/05/2024	P7	9.5	117.7	95	95	-2 / 2	DPMP		RF
343 /412	Other: Bridge Backfill, STA 70 + 48, 21' west of the culvert.	8	Below Grade	10/05/2024	P7	9.1	120.2	97	95	-2 / 2	DPMP		RF
344 /413	Other: Bridge Backfill, STA 70 + 88, 7' west of the culvert.	8	Below Grade	10/05/2024	P7	9.1	119.2	96	95	-2 / 2	DPMP		RF
345 /414	Other: Bridge Backfill, STA 69 + 49, 45' west of the culvert.	8	Below Grade	10/05/2024	P7	8.1	117.4	95	95	-2 / 2	DPMP		RF
346 /415	Other: Bridge Backfill, STA 69 + 90, 45' west of the culvert.	8	Below Grade	10/05/2024	P7	8.6	119.4	96	95	-2 / 2	DPMP		RF
347 /416	Other: Bridge Backfill, STA 70 + 30, 30' west of the culvert.	8	Below Grade	10/05/2024	P7	10.6	117.4	95	95	-2 / 2	DPMP		RF
348 /417	Other: Bridge Backfill, STA 70 + 60, 10' west of the culvert.	8	Below Grade	10/05/2024	P7	9.2	119.4	96	95	-2 / 2	DPMP		RF



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Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd (Bridge)
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
349 /418	Other: Bridge Backfill, STA 71 + 00, 6' west of the culvert.	8	Below Grade	10/05/2024	P7	9.3	118.1	95	95	-2 / 2	DPMP		RF
350 /419	Other: Bridge Backfill, STA 71 + 20, 32' west of the culvert.	8	Below Grade	10/05/2024	P7	9.5	120.3	97	95	-2 / 2	DPMP		RF
351 /420	Other: Bridge Backfill, STA 71 + 59, 10' west of the culvert.	8	Below Grade	10/05/2024	P7	8.7	117.3	95	95	-2 / 2	DPMP		RF
352 /421	Other: Bridge Backfill, STA 71 + 69, 42' west of the culvert.	8	Below Grade	10/05/2024	P7	8.6	119.7	97	95	-2 / 2	DPMP		RF
353 /422	Other: Bridge Backfill, STA 72 + 69, 13' west of the northwest wing wall.	9	Below Grade	10/05/2024	P7	7.8	118.6	96	95	-2 / 2	DPMP		RF
354 /423	Other: Bridge Backfill, STA 72 + 08, 16' west of the northwest wing wall.	6	Below Grade	10/10/2024	P7	7.1	118.2	95	95	-2 / 2	DPMP		RF
355 /424	Other: Bridge Backfill, STA 71 + 83, 7' west of the northwest wing wall.	6	Below Grade	10/10/2024	P7	7.2	117.4	95	95	-2 / 2	DPMP		RF
356 /425	Other: Bridge Backfill, STA 71 + 50, 30' west of the culvert.	6	Below Grade	10/10/2024	P7	7.9	120.4	97	95	-2 / 2	DPMP		RF
357 /426	Other: Bridge Backfill, STA 69 + 21, 17' east of the southeast wing wall.	8	Below Grade	10/10/2024	P7	7.2	117.1	95	95	-2 / 2	DPMP		RF
358 /427	Other: Bridge Backfill, STA 69 + 52, 9' east of the culvert.	8	Below Grade	10/10/2024	P7	7.1	117.2	95	95	-2 / 2	DPMP		RF
359 /428	Other: Bridge Backfill, STA 69 + 89, 17' east of the culvert.	8	Below Grade	10/10/2024	P7	7.9	117.2	95	95	-2 / 2	DPMP		RF
360 /429	Other: Bridge Backfill, STA 70 + 50, 5' east of the culvert.	8	Below Grade	10/10/2024	P7	8.1	117.7	95	95	-2 / 2	DPMP		RF
361 /430	Other: Bridge Backfill, STA 71 + 28, 22' east of the culvert.	8	Below Grade	10/10/2024	P7	7.8	119.2	96	95	-2 / 2	DPMP		RF
362 /431	Other: Bridge Backfill, STA 71 + 62, 5' east of the culvert.	8	Below Grade	10/10/2024	P7	7.6	119.4	96	95	-2 / 2	DPMP		RF
363 /432	Other: Bridge Backfill, STA 71 + 84, 8' east of the southeast wing wall.	8	Below Grade	10/10/2024	P7	7.6	117.8	95	95	-2 / 2	DPMP		RF



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364 /433	Other: Bridge Backfill, STA 68 + 90, 5' north of the southeast wing wall.	6	Below Grade	10/11/2024	P7	7.3	118.5	96	95	-2 / 2	DPMP		RF
365 /434	Other: Bridge Backfill, STA 69 + 34, 40' east of the culvert.	6	Below Grade	10/11/2024	P7	8.1	117.6	95	95	-2 / 2	DPMP		RF
366 /435	Other: Bridge Backfill, STA 69 + 74, 17' east of the culvert.	6	Below Grade	10/11/2024	P7	9.1	119.1	96	95	-2 / 2	DPMP		RF
367 /436	Other: Bridge Backfill, STA 70 + 00, 5' east of the culvert.	6	Below Grade	10/11/2024	P7	7.8	118.1	95	95	-2 / 2	DPMP		RF
368 /437	Other: Bridge Backfill, STA 70 + 70, 25' east of the culvert.	6	Below Grade	10/11/2024	P7	10.3	117.6	95	95	-2 / 2	DPMP		RF
369 /438	Other: Bridge Backfill, STA 71 + 32, 3' east of the culvert.	6	Below Grade	10/11/2024	P7	7.9	118.1	95	95	-2 / 2	DPMP		RF
370 /439	Other: Bridge Backfill, STA 71 + 57, 35' east of the culvert.	6	Below Grade	10/11/2024	P7	7.8	117.4	95	95	-2 / 2	DPMP		RF
371 /440	Other: Bridge Backfill, STA 71 + 93, 7' southeast of the northeast wing wall.	6	Below Grade	10/11/2024	P7	8.2	117.4	95	95	-2 / 2	DPMP		RF

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P7	ASTM D1557 - A	SM	9	123.9
P4	ASTM D1557 - A	SM	10	122.9

10/14/2024

Reviewed by: Joey Goode, PE



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Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
335 /404	Other: Bridge Backfill, STA 72 + 68, 11' west of the northwest wing wall.	8	Below Grade	10/05/2024	P4	8.2	119.6	97	95	-2 / 2	DPMP		RF
372 /441	Other: Bridge Backfill, STA 69 + 46, 27' west of the culvert.	6	Below Grade	10/15/2024	P7	7.2	119.1	96	95	-2 / 2	DPMP		RF
373 /442	Other: Bridge Backfill, STA 69 + 42, 7' west of the culvert.	6	Below Grade	10/15/2024	P7	7.8	117.1	95	95	-2 / 2	DPMP		RF
374 /443	Other: Bridge Backfill, STA 69 + 80, 3' west of the culvert.	6	Below Grade	10/15/2024	P7	7.6	118.4	96	95	-2 / 2	DPMP		RF
375 /444	Other: Bridge Backfill, STA 70 + 10, 20' west of the culvert.	6	Below Grade	10/15/2024	P7	8.1	117.8	95	95	-2 / 2	DPMP		RF
376 /445	Other: Bridge Backfill, STA 70 + 50, 25' west of the culvert.	6	Below Grade	10/15/2024	P7	11.0	117.4	95	95	-2 / 2	DPMP		RF
377 /446	Other: Bridge Backfill, STA 70 + 51, 6' west of the culvert.	6	Below Grade	10/15/2024	P7	7.8	118.2	95	95	-2 / 2	DPMP		RF
378 /447	Other: Bridge Backfill, STA 70 + 90, 17' west of the culvert.	6	Below Grade	10/15/2024	P7	9.2	117.4	95	95	-2 / 2	DPMP		RF
379 /448	Other: Bridge Backfill, STA 71 + 30, 8' west of the culvert.	6	Below Grade	10/15/2024	P7	10.2	117.4	95	95	-2 / 2	DPMP		RF
380 /449	Other: Bridge Backfill, STA 69 + 19, 16' northwest of the southwest wing wall.	3	Below Grade	10/15/2024	P7	7.8	117.7	95	95	-2 / 2	DPMP		RF
381 /450	Other: Bridge Backfill, STA 69 + 55, 13' west of the culvert.	4	Below Grade	10/15/2024	P7	8.1	117.5	95	95	-2 / 2	DPMP		RF
382 /451	Other: Bridge Backfill, STA 69 + 84, 27' west of the culvert.	4	Below Grade	10/15/2024	P7	8.1	117.8	95	95	-2 / 2	DPMP		RF
383 /452	Other: Bridge Backfill, STA 70 + 00, 7' west of the culvert.	4	Below Grade	10/15/2024	P7	7.8	117.6	95	95	-2 / 2	DPMP		RF
384 /453	Other: Bridge Backfill, STA 70 + 25, 26' west of the culvert.	4	Below Grade	10/15/2024	P7	8.1	118.1	95	95	-2 / 2	DPMP		RF



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385 /454	Other: Bridge Backfill, STA 70 + 50, 5' west of the culvert.	4	Below Grade	10/15/2024	P7	7.8	117.2	95	95	-2 / 2	DPMP		RF
386 /455	Other: Bridge Backfill, STA 70 + 90, 21' west of the culvert.	4	Below Grade	10/15/2024	P7	7.6	117.4	95	95	-2 / 2	DPMP		RF
387 /456	Other: Bridge Backfill, STA 71 + 10, 8' west of the culvert.	4	Below Grade	10/15/2024	P7	7.8	117.6	95	95	-2 / 2	DPMP		RF
388 /457	Other: Bridge Backfill, STA 71 + 45, 21' west of the culvert.	4	Below Grade	10/15/2024	P7	10.1	117.8	95	95	-2 / 2	DPMP		RF
389 /458	Other: Bridge Backfill, STA 71 + 60, 7' west of the culvert.	4	Below Grade	10/15/2024	P7	7.6	118.4	96	95	-2 / 2	DPMP		RF
390 /459	Other: Bridge Backfill, STA 71 + 68, 37' west of the culvert.	4	Below Grade	10/15/2024	P7	8.3	117.6	95	95	-2 / 2	DPMP		RF
391 /460	Other: Bridge Backfill, STA 72 + 00, 18' west of the northwest wing wall.	4	Below Grade	10/15/2024	P7	7.9	117.7	95	95	-2 / 2	DPMP		RF
392 /461	Other: Bridge Backfill, STA 72 + 50, 7' west of the northwest wing wall.	4	Below Grade	10/15/2024	P7	8.5	117.6	95	95	-2 / 2	DPMP		RF
393 /462	Other: Bridge Backfill, STA 69 + 06, 23' northeast of the southeast wing wall.	5	Below Grade	10/16/2024	P7	7.6	117.2	95	95	-2 / 2	DPMP		RF
394 /463	Other: Bridge Backfill, STA 69 + 29, 11' northeast of the southeast wing wall.	5	Below Grade	10/16/2024	P7	7.2	117.6	95	95	-2 / 2	DPMP		RF
395 /464	Other: Bridge Backfill, STA 69 + 59, 33' east of the culvert.	5	Below Grade	10/16/2024	P7	7.9	117.8	95	95	-2 / 2	DPMP		RF
396 /465	Other: Bridge Backfill, STA 69 + 90, 5' east of the culvert.	5	Below Grade	10/16/2024	P7	7.5	118.1	95	95	-2 / 2	DPMP		RF
397 /466	Other: Bridge Backfill, STA 70 + 50, 18' east of the culvert.	5	Below Grade	10/16/2024	P7	7.7	117.2	95	95	-2 / 2	DPMP		RF
398 /467	Other: Bridge Backfill, STA 70 + 80, 4' east of the culvert.	5	Below Grade	10/16/2024	P7	8.4	117.5	95	95	-2 / 2	DPMP		RF
399 /468	Other: Bridge Backfill, STA 71 + 10, 20' east of the culvert.	5	Below Grade	10/16/2024	P7	7.9	117.8	95	95	-2 / 2	DPMP		RF



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400 /469	Other: Bridge Backfill, STA 71 + 58, 8' east of the culvert.	5	Below Grade	10/16/2024	P7	7.7	117.2	95	95	-2 / 2	DPMP		RF
401 /470	Other: Bridge Backfill, STA 71 + 68, 38' east of the culvert.	5	Below Grade	10/16/2024	P7	8.1	117.2	95	95	-2 / 2	DPMP		RF
402 /471	Other: Bridge Backfill, STA 71 + 85, 8' southeast of the northeast wing wall.	4	Below Grade	10/16/2024	P7	7.4	117.1	95	95	-2 / 2	DPMP		RF
403 /472	Other: Bridge Backfill, STA 68 + 96, 18' northeast of the southeast wing wall.	3	Below Grade	10/16/2024	P7	8.7	117.2	95	95	-2 / 2	DPMP		RF
404 /473	Other: Bridge Backfill, STA 68 + 28, 13' northeast of the southeast wing wall.	3	Below Grade	10/16/2024	P7	7.2	119.0	96	95	-2 / 2	DPMP		RF
405 /474	Other: Bridge Backfill, STA 69 + 52, 25' east of the culvert.	3	Below Grade	10/16/2024	P7	7.2	117.9	95	95	-2 / 2	DPMP		RF
406 /475	Other: Bridge Backfill, STA 69 + 95, 30' east of the culvert.	3	Below Grade	10/16/2024	P7	7.5	117.5	95	95	-2 / 2	DPMP		RF
407 /476	Other: Bridge Backfill, STA 70 + 40, 5' east of the culvert.	3	Below Grade	10/16/2024	P7	7.9	117.8	95	95	-2 / 2	DPMP		RF
408 /477	Other: Bridge Backfill, STA 70 + 90, 17' east of the culvert.	3	Below Grade	10/16/2024	P7	7.2	117.1	95	95	-2 / 2	DPMP		RF
409 /478	Other: Bridge Backfill, STA 71 + 59, 13' east of the culvert.	3	Below Grade	10/16/2024	P7	7.6	118.1	95	95	-2 / 2	DPMP		RF
410 /479	Other: Bridge Backfill, STA 71 + 78, 12' southeast of the northeast wing wall.	3	Below Grade	10/16/2024	P7	7.5	118.2	95	95	-2 / 2	DPMP		RF
411 /480	Other: Bridge Backfill, STA 69 + 34, 15' northwest of the southwest wing wall.	4	Below Grade	10/16/2024	P7	7.4	117.6	95	95	-2 / 2	DPMP		RF
412 /481	Other: Bridge Backfill, STA 69 + 51, 13' west of the culvert.	4	Below Grade	10/16/2024	P7	7.8	117.6	95	95	-2 / 2	DPMP		RF
413 /482	Other: Bridge Backfill, STA 69 + 80, 3' west of the culvert.	4	Below Grade	10/16/2024	P7	7.4	117.8	95	95	-2 / 2	DPMP		RF
414 /483	Other: Bridge Backfill, STA 70 + 15, 13' west of the culvert.	4	Below Grade	10/16/2024	P7	7.3	117.2	95	95	-2 / 2	DPMP		RF



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415 /484	Other: Bridge Backfill, STA 70 + 40, 3' west of the culvert.	4	Below Grade	10/16/2024	P7	7.9	117.8	95	95	-2 / 2	DPMP		RF
416 /485	Other: Bridge Backfill, STA 70 + 75, 22' west of the culvert.	4	Below Grade	10/16/2024	P7	7.1	117.2	95	95	-2 / 2	DPMP		RF
417 /486	Other: Bridge Backfill, STA 71 + 00, 8' west of the culvert.	4	Below Grade	10/16/2024	P7	7.3	117.6	95	95	-2 / 2	DPMP		RF
418 /487	Other: Bridge Backfill, STA 71 + 53, 15' west of the culvert.	4	Below Grade	10/16/2024	P7	7.2	117.8	95	95	-2 / 2	DPMP		RF
419 /488	Other: Bridge Backfill, STA 71 + 91, 14' southwest of the northwest wing wall.	4	Below Grade	10/16/2024	P7	7.1	117.4	95	95	-2 / 2	DPMP		RF
420 /489	Other: Bridge Backfill, STA 72 + 50, 7' southwest of the northwest wing wall.	4	Below Grade	10/16/2024	P7	7.6	118.1	95	95	-2 / 2	DPMP		RF
421 /490	Other: Bridge Backfill, STA 68 + 99, 16' northeast of the southeast wing wall.	2	Below Grade	10/16/2024	P7	7.4	117.8	95	95	-2 / 2	DPMP		RF
422 /491	Other: Bridge Backfill, STA 69 + 29, 10' northeast of the southeast wing wall.	2	Below Grade	10/16/2024	P7	7.4	117.3	95	95	-2 / 2	DPMP		RF
423 /492	Other: Bridge Backfill, STA 69 + 44, 8' east of the culvert.	2	Below Grade	10/16/2024	P7	7.4	117.8	95	95	-2 / 2	DPMP		RF
424 /493	Other: Bridge Backfill, STA 69 + 80, 18' east of the culvert.	2	Below Grade	10/16/2024	P7	7.1	117.9	95	95	-2 / 2	DPMP		RF
425 /494	Other: Bridge Backfill, STA 70 + 10, 3' east of the culvert.	2	Below Grade	10/16/2024	P7	7.5	117.8	95	95	-2 / 2	DPMP		RF
426 /495	Other: Bridge Backfill, STA 70 + 40, 21' east of the culvert.	2	Below Grade	10/16/2024	P7	7.1	119.8	97	95	-2 / 2	DPMP		RF
427 /496	Other: Bridge Backfill, STA 70 + 75, 6' east of the culvert.	2	Below Grade	10/16/2024	P7	7.8	118.4	96	95	-2 / 2	DPMP		RF
428 /497	Other: Bridge Backfill, STA 71 + 00, 15' east of the culvert.	2	Below Grade	10/16/2024	P7	7.3	117.4	95	95	-2 / 2	DPMP		RF
429 /498	Other: Bridge Backfill, STA 71 + 57, 5' east of the culvert.	2	Below Grade	10/16/2024	P7	7.0	117.2	95	95	-2 / 2	DPMP		RF



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430 /499	Other: Bridge Backfill, STA 71 + 63, 35' east of the culvert.	2	Below Grade	10/16/2024	P7	7.2	117.8	95	95	-2 / 2	DPMP		RF
431 /500	Other: Bridge Backfill, STA 69 + 41, 3' west of the culvert.	2	Below Grade	10/17/2024	P7	7.5	117.4	95	95	-2 / 2	DPMP		RF
432 /501	Other: Bridge Backfill, STA 69 + 63, 22' west of the culvert.	2	Below Grade	10/17/2024	P7	10.5	117.6	95	95	-2 / 2	DPMP		RF
433 /502	Other: Bridge Backfill, STA 69 + 95, 12' west of the culvert.	2	Below Grade	10/17/2024	P7	8.2	117.4	95	95	-2 / 2	DPMP		RF
434 /503	Other: Bridge Backfill, STA 70 + 25, 5' west of the culvert.	2	Below Grade	10/17/2024	P7	8.7	117.1	95	95	-2 / 2	DPMP		RF
435 /504	Other: Bridge Backfill, STA 70 + 50, 23' west of the culvert.	2	Below Grade	10/17/2024	P7	8.3	118.2	95	95	-2 / 2	DPMP		RF
436 /505	Other: Bridge Backfill, STA 70 + 80, 12' west of the culvert.	2	Below Grade	10/17/2024	P7	8.1	117.6	95	95	-2 / 2	DPMP		RF
437 /506	Other: Bridge Backfill, STA 71 + 10, 10' west of the culvert.	2	Below Grade	10/17/2024	P7	10.4	118.2	95	95	-2 / 2	DPMP		RF
438 /507	Other: Bridge Backfill, STA 71 + 56, 18' west of the culvert.	2	Below Grade	10/17/2024	P7	8.1	117.8	95	95	-2 / 2	DPMP		RF
439 /508	Other: Bridge Backfill, STA 71 + 83, 20' southwest of the northwest wing wall.	2	Below Grade	10/17/2024	P7	7.8	117.5	95	95	-2 / 2	DPMP		RF
440 /509	Other: Bridge Backfill, STA 68 + 75, 10' northeast of the southeast wing wall.	1	Below Grade	10/17/2024	P7	7.4	117.3	95	95	-2 / 2	DPMP		RF
441 /510	Other: Bridge Backfill, STA 69 + 00, 18' northeast of the southeast wing wall.	1	Below Grade	10/17/2024	P7	9.3	117.2	95	95	-2 / 2	DPMP		RF
442 /511	Other: Bridge Backfill, STA 69 + 25, 29' northeast of the southeast wing wall.	1	Below Grade	10/17/2024	P7	7.4	117.4	95	95	-2 / 2	DPMP		RF
443 /512	Other: Bridge Backfill, STA 69 + 50, 22' east of the culvert.	1	Below Grade	10/17/2024	P7	8.9	117.7	95	95	-2 / 2	DPMP		RF
444 /513	Other: Bridge Backfill, STA 69 + 80, 5' east of the culvert.	1	Below Grade	10/17/2024	P7	7.4	117.4	95	95	-2 / 2	DPMP		RF



Entech Engineering
505 Elkton Dr.
Colorado Springs, CO 80907
Phone: 719-531-5599

Soil Density Report

Client:

Classic Communities
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Project:

240082
Sand Creek Crossing - Briargate Blvd (Bridge)
Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
445 /514	Other: Bridge Backfill, STA 70 + 20, 20' east of the culvert.	1	Below Grade	10/17/2024	P7	7.5	117.3	95	95	-2 / 2	DPMP		RF
446 /515	Other: Bridge Backfill, STA 70 + 60, 7' east of the culvert.	1	Below Grade	10/17/2024	P7	7.2	117.6	95	95	-2 / 2	DPMP		RF
447 /516	Other: Bridge Backfill, STA 71 + 00, 30' east of the culvert.	1	Below Grade	10/17/2024	P7	7.9	118.2	95	95	-2 / 2	DPMP		RF
448 /517	Other: Bridge Backfill, STA 71 + 55, 11' east of the culvert.	1	Below Grade	10/17/2024	P7	7.6	118.1	95	95	-2 / 2	DPMP		RF
449 /518	Other: Bridge Backfill, STA 71 + 67, 40' east of the culvert.	1	Below Grade	10/17/2024	P7	7.3	118.4	96	95	-2 / 2	DPMP		RF
450 /519	Other: Bridge Backfill, STA 69 + 44, 7' west of the culvert.	1	Below Grade	10/17/2024	P7	7.4	117.3	95	95	-2 / 2	DPMP		RF
451 /520	Other: Bridge Backfill, STA 69 + 60, 25' west of the culvert.	1	Below Grade	10/17/2024	P7	8.4	117.7	95	95	-2 / 2	DPMP		RF
452 /521	Other: Bridge Backfill, STA 70 + 00, 12' west of the culvert.	1	Below Grade	10/17/2024	P7	7.7	117.6	95	95	-2 / 2	DPMP		RF
453 /522	Other: Bridge Backfill, STA 70 + 50, 7' west of the culvert.	1	Below Grade	10/17/2024	P7	7.3	118.8	96	95	-2 / 2	DPMP		RF
454 /523	Other: Bridge Backfill, STA 71 + 00, 21' west of the culvert.	1	Below Grade	10/17/2024	P7	7.1	117.2	95	95	-2 / 2	DPMP		RF
455 /524	Other: Bridge Backfill, STA 71 + 56, 8' west of the culvert.	1	Below Grade	10/17/2024	P7	7.9	117.3	95	95	-2 / 2	DPMP		RF
456 /525	Other: Bridge Backfill, STA 71 + 68, 38' west of the culvert.	1	Below Grade	10/17/2024	P7	7.7	117.3	95	95	-2 / 2	DPMP		RF
457 /526	Other: Bridge Backfill, STA 72 + 20, 24' southwest of the northwest wing wall.	1	Below Grade	10/17/2024	P7	7.3	117.8	95	95	-2 / 2	DPMP		RF

Remarks

DP/MP : Density Pass / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.



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Project:

240082
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Sand Creek Crossing - Briargate Blvd
Colorado Springs, CO

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P4	ASTM D1557 - A	SM	10	122.9
P7	ASTM D1557 - A	SM	9	123.9

10/18/2024

Reviewed by: Joey Goode, PE