APPENDIX D Access Roads Associated with the Leach XPress Project

APPENDIX D Temporary and Permanent Access Roads Associated with the Leach XPress Project Approx. Approx. Access Road ID Milepost **Proposed Use Existing Use** Upgrade Requirements^a Width Length (feet)b (feet) LEX **TAR-166** 0.6 Temporary Existing field road Grading and gravel 482 15 **TAR-145** 1.7 Existing field road 25 Temporary Grading and gravel 1,318 **TAR-146** 2.1 25 Existing field road Grading and gravel 4,994 Temporary **TAR-147** 3.6 Temporary Existing field road Grading, gravel, and tree clearing 1,651 25 **TAR-148** 5.1 Temporary Existing field road Grading, gravel, and tree clearing 4,331 25 **TAR-149** 6.5 25 **Temporary** Existing field road Grading and gravel 6.447 8.6, RR-1 **TAR-122** 14 Temporary Existing gravel and dirt road None 1,736 **TAR-123** 10.3 Temporary Existing field road Grading, widening, and gravel 870 20 **TAR-124** 11.3 Temporary Existing gravel and dirt road Grading and gravel 563 20 THE 25 **TAR-125** 14.1. RR-2 Temporary Existing gravel and dirt road None 3,971 PAR-72 17.1. RR-3 Permanent Existing gravel road Grading, widening, and gravel 2.570 25 LEACH PAR-175 17.4 Permanent Open land / Forested land Clearing, grading, and gravel 843 10 **TAR-70** 18.0 Temporary Forested land / Existing paved road Clearing, grading, and gravel 1,275 25 TAR-75 19.1 Temporary Existing gravel drive Grading and widening 218 25 **XPRESS** 25 TAR-13 21.1 Open land 660 Temporary Grading and gravel TAR-21.2 Open land / Forested land Clearing, grading, and gravel 518 25 Temporary HDD-1 PROJECT **TAR-126** 21.3 Grading, clearing, and gravel 964 25 Temporary Open land / Existing dirt road TAR-14 21.4 Open land / Existing dirt road Grading and gravel 2.488 25 Temporary 10 **TAR-168** 24.3 Temporary Existing gravel road None 1,285 **TAR-169** 24.6 Temporary Existing gravel road None 2.601 15 TAR-HDD-2 25.2. RR-5 25 Open land / Forested land Clearing, grading, and gravel 258 Temporary TAR-156 25.8, RR-5 Temporary Existing dirt road / Open land Grading, clearing, and gravel 741 10 TAR-156A 25.8, RR-5 Temporary Existing dirt road / Open land Grading, clearing, and gravel 89 10 TAR-25 25.8, RR-5 Temporary Forested land / Open land Clearing, grading, and gravel 379 HDD-3 25 **TAR-167** 26.9. RR-5 Temporary Existing field road / Forested land Clearing, grading, and gravel 6.413 TAR-27 28.6 Temporary Existing field road Grading and gravel 334 16 **TAR-38** Existing dirt and gravel road 3,512 25 31.1 Temporary None TAR-63 25 34.8 Existing dirt road Grading, clearing, and gravel 943 **Temporary TAR-39** 38.9 Temporary Existing field road Grading 2,167 10 TAR-62 45.1 Temporary Existing dirt road None 235 25 TAR-2 46.2 1,539 25 Temporary Existing dirt road / Forest / Open land Clearing and grading

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TAR-40	48.9	Temporary	Existing dirt road	None	883	10
TAR-41	49.5	Temporary	Existing dirt road	Widening and gravel	2,271	10
PAR-176	49.8	Permanent	Forested land	Clearing, grading, and gravel	16	10
TAR-32	51.6	Temporary	Existing field road	None	915	10
TAR-20	59.4	Temporary	Existing field road	Clearing	1,199	10
TAR-33	64.5	Temporary	Existing dirt road	Widening and gravel	433	15
TAR-60	65.9	Temporary	Open land / Existing dirt road	Widening and gravel	1,652	25
TAR-16	66.9	Temporary	Existing dirt road	Widening	318	25
TAR-128	66.9	Temporary	Open land	Grading and gravel	119	25
TAR-59	67.3	Temporary	Open land / Existing dirt road	Gravel	2,275	15
TAR-74	68.8	Temporary	Open land / Existing dirt road	Gravel	1,691	15
TAR-73	74.3	Temporary	Existing dirt road	Widening and gravel	1,482	25
TAR-71	74.6	Temporary	Existing dirt road	Widening and gravel	1,879	25
TAR-34	76.8	Temporary	Existing dirt road	Widening and gravel	721	15
PAR-177	83.2	Permanent	Open land	Grading and gravel	7	10
TAR-42	85.3	Temporary	Existing dirt road	None	1,952	10
TAR-44	87.1	Temporary	Open land / Existing field road	None	926	10
TAR-30	87.5	Temporary	Open land / Existing field road	Grading	2,052	15
TAR-15	89.4	Temporary	Forested land / Open land	Clearing, grading, and gravel	573	25
TAR-HDD-4	89.4	Temporary	Open land / Forested land	Clearing, grading, and gravel	913	25
TAR-19	89.7	Temporary	Existing dirt road	Widening and gravel	806	25
TAR-18	89.8	Temporary	Existing dirt road / Open land	Grading and gravel	1,464	25
TAR-57	102.3	Temporary	Existing dirt road / Open land	Widening and gravel	993	25
TAR-58	103.3	Temporary	Existing field road	Widening and gravel	2,834	25
TAR-76	104.7	Temporary	Open land	Grading, clearing, and gravel	301	25
TAR-43	105.5	Temporary	Existing dirt road	Gravel	331	10
TAR-3	109.7	Temporary	Existing dirt road	Clearing, widening, and gravel	939	10
TAR-22	110.1	Temporary	Forested land	Clearing and gravel	129	10
TAR-28	110.5	Temporary	Existing dirt road	None	1,698	10
TAR-23	111.7	Temporary	Existing gravel and dirt road	Clearing, grading, and gravel	1,571	10
TAR-56	113.7	Temporary	Open land / Existing dirt road	Grading and gravel	1,865	25
TAR-24	115.7	Temporary	Existing dirt road	Gravel	1,791	15
TAR-25	116.5	Temporary	Existing dirt and gravel road	Widening and gravel	2,526	10
TAR-26	116.7	Temporary	Open land / Existing gravel road	Gravel	702	15

APPENDIX D Temporary and Permanent Access Roads Associated with the Leach XPress Project Approx. Approx. Access Road ID Milepost **Proposed Use Existing Use** Upgrade Requirements^a Width Length (feet)b (feet) PAR-178 116.7 Permanent 17 10 Open land Grading and gravel TAR-5 117.7 Temporary Open land / Existing dirt road Widening and gravel 2.069 25 TAR-172 119.6 Existing field road 15 Temporary Widening and gravel 1,990 TAR-171 119.8 15 Temporary Existing field road Widening and gravel 1,672 TAR-17 119.9 Temporary Open land / Existing dirt road Grading, clearing, widening, and 3,513 15 gravel TAR-HDD-5 120.0 Temporary Open land Clearing, grading and gravel 661 25 TAR-10 120.1 Temporary Forested land / Open land Clearing and gravel 303 25 TAR-66 122.5 25 Temporary Open land Grading and gravel 720 TAR-21 25 125.7 Temporary Existing paved drive and dirt road None 537 THE 10 **TAR-164** 129.4 Temporary Open land / Existing dirt road Grading, widening, and gravel 1.295 TAR-52 130.2 Existing dirt road Grading, widening, and gravel 1,483 15 Temporary LEACH XPRESS TAR-51 130.8 66 10 Temporary Existing gravel road None TAR-HDD-6 10 130.8 Temporary Open land Clearing, grading and gravel 388 **TAR-165** 131.2 Temporary Existing gravel road None 1,465 10 R-801 Loop TAR-53 0.6 Temporary Existing gravel road None 2.201 25 25 **TAR-49** 2.3 Widening and gravel 554 **Temporary** Existing gravel road PROJECT **TAR-48** 4.2 Temporary Existing field road Grading, widening, and gravel 1,246 25 **TAR-133** 5.5 25 Temporary Forested land Clearing, grading, and gravel 123 TAR-47 5.9 Existing field road 2.097 25 Temporary Grading and gravel Grading and gravel 25 TAR-50 6.2 Temporary Existing field road 1,293 TAR-8 7.7 Temporary Existing dirt road Widening and gravel 1,203 25 **TAR-134** 9.4 25 Temporary Existing gravel road / Open land Widening and gravel 2,442 PAR-179 14.2 Permanent Forested land Clearing, grading, and gravel 139 10 TAR-46 14.5 Existing dirt road / Forested land Gravel 1.468 25 Temporary TAR-77 15.2 Open land / Existing dirt road 2,545 25 Temporary Grading and gravel 25 TAR-68 15.6 Existing field road 3.003 Temporary Widening and gravel **TAR-135** 19.3 Temporary Existing field road Grading and gravel 1,112 25 **TAR-136** 20.4 5,413 25 Temporary Existing field road Grading and gravel **TAR-137** 21.1 Existing dirt road / Field road / Forested Clearing, grading, and gravel 3,250 25 **Temporary** land **TAR-138** 22.5 Temporary Existing field road Grading and gravel 1,743 25 22.8 223 25 **TAR-160** Temporary (Pipe Yard 21) Open land Grading and gravel

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APPENDIX D Temporary and Permanent Access Roads Associated with the Leach XPress Project Approx. Approx. Access Road ID Milepost **Proposed Use Existing Use** Upgrade Requirements^a Width Length (feet)b (feet) **TAR-161** 24.1 Temporary (Pipe Yard 23) Open land / Existing gravel drive 248 25 Grading and gravel BM-111 Loop **TAR-139** 0.0 Driveway / open land Grading and gravel 248 25 Temporary TAR-162 166 25 1.0 Temporary Forested land Clearing, grading, and gravel **TAR-140** 1.4 Temporary Existing dirt road Grading and gravel 255 25 R-501 Abandonment **TAR-80** 0.9 Open land / existing dirt road 204 25 Temporary Gravel TAR-81 Gravel 263 25 1.0 Temporary Existing gravel road 25 TAR-151 1.9 **Temporary** Open land Grading 1.542 TAR-152 2.1 Temporary Open land / Existing dirt road Grading 2,554 25 25 **TAR-153** 2.1 Temporary Open land Grading 4,523 25 TAR-82 3.1 Open land Grading and gravel 520 Temporary **TAR-83** 3.2 Temporary Open land Grading and gravel 1,329 25 25 **TAR-154** 3.3 Temporary Open land Grading 133 TAR-84 3.3 Temporary Existing driveway None 336 25 5 TAR-85 3.4 Open land None 187 Temporary - Walking Path **TAR-86** 3.5 Temporary Open land / Existing gravel road Gravel 207 25 **TAR-87** 3.5 Temporary - Walking Path Open land None 5 385 **TAR-88** 4.1 Temporary - Walking Path Open land None 72 5 5 **TAR-89** 3 4.1 Temporary - Walking Path Open land None 5 TAR-90 4.2 Temporary - Walking Path Open land None 813 6.5 25 TAR-93 Existing dirt road / Open land Clearing, grading, and gravel 590 Temporary TAR-94 8.0 Open land 322 5 Temporary – Walking Path None 25 TAR-95 8.1 Temporary Existing field road Widening and grading 1.965 **TAR-96** 8.1 Temporary - Walking Path Open land None 538 5 TAR-97 8.2 5 Open land None 448 Temporary- Walking Path **TAR-98** 8.9 Temporary Existing dirt / Field road Widening and grading 1.282 25 **TAR-99** 8.9 Open land None 292 5 Temporary- Walking Path 9.2 5 **TAR-101** Temporary- Walking Path Open land None 562 **TAR-104** 9.7 712 25 Temporary Open land / Forested land Clearing, grading, and gravel 25 **TAR-105** 11.9 Temporary Open land Gravel 524 TAR-155 12.0 995 25 **Temporary** Open land Gravel **TAR-107** 5 13.3 Temporary- Walking Path Open land None 696 **TAR-108** 5 13.8 Temporary- Walking Path Open land None 194

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TAR-109	16.8	Temporary	Open land	Gravel	247	25
TAR-177	17.3	Temporary	Open land	Gravel	472	18
TAR-111	20.1	Temporary	Open land	Gravel	1,538	25
TAR-112	21.6	Temporary	Existing field road / Open land	Grading and gravel	2,042	25
TAR-178	23.1	Temporary	Open land	Gravel	1,310	25
TAR-113	23.8	Temporary	Open land	Gravel	457	20
TAR-173	23.8	Temporary	Open land	Grading and gravel	2,212	25
TAR-174	26.3	Temporary	Open land	Grading and gravel	2,165	25
Aboveground Facilities	5					
LEX						
PAR-F-2	0.0	Permanent (LEX launcher facility)	Existing gravel road	None	139	29
PAR-MLV-1	3.1	Permanent (MLV Site #1)	Open land	Grade and gravel	161	10
PAR-F-3	7.6, RR-1	Permanent (Lone Oak CS)	Existing property access	Grade, gravel, and trim trees	441	24
PAR-MLV-2	18.5, RR-4	Permanent (MLV Site #2)	Agricultural land	Grading and gravel	292	20
PAR-MLV-3	31.7	Permanent (MLV Site #3)	Open land	Grading and gravel	76	10
PAR-MLV-4	49.3	Permanent (MLV Site #4)	Open land	Grading and gravel	192	10
PAR-F-5	57.2	Permanent (Summerfield CS)	Existing farm road (Town Hwy 209)	Grade and gravel	3,421	16
PAR-127	65.6	Permanent (MLV Site #5)	Existing dirt road	Grading and gravel	838	20
PAR-MLV-6	84.3	Permanent (MLV Site #6)	Open land	Grading and gravel	132	10
PAR-MLV-7	104.2	Permanent (MLV Site #7)	Open land	Grading and gravel	165	10
PAR-MLV-8	122.0	Permanent (MLV Site #8)	Forested land	Clearing, grading, and gravel	391	10
LEX1						
PAR-F-21	0.0	Permanent (K-260 RS)	Existing field road / forested land	Clearing, grading and gravel	2,241	20
PAR-F-27	0.0	Permanent (K-260 RS) (tie-in valve)	Forested land	Clearing, grading and gravel	211	16
PAR-F-26	0.0	Permament (K-260 RS)	Existing driveway / Forested land	Clearing, grading and gravel	1,253	18
PAR-F-22	0.3	Permanent (K-260 RS)	Existing field road	Grading and gravel	4,169	20
PAR-F-6	1.2	Permanent (LEX1 receiver facility)	Open land	Grading and gravel	956	25
R-801 Loop						
PAR-F-8	0.0	Permanent (R-System RS)	Existing driveway / existing farm road	Grading and gravel	557	8
PAR-F-28	0.05	Permanent (R-System RS tie- in facility)	Open land	Grading and gravel	385	16
PAR-F-29	0.06	Permanent (R-System RS)	Existing driveway / existing farm road	None	798	20

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Access Road ID	Milepost	Proposed Use	Existing Use	Upgrade Requirements ^a	Approx. Length (feet)	Approx Width (feet) ^b
PAR-MLV-9	9.7	Permanent (MLV Site #9)	Existing gravel road / Forested land	Grading and gravel	178	10
PAR-F-19	12.8	Permanent (Benton RS)	Open land	Gravel	12	25
PAR-F-20	24.2	Permanent (McArthur RS)	Forested land	Clearing, grading, and gravel	686	20
PAR-F-11	24.2	Permanent (McArthur RS)	Existing dirt road / Forested land	Clearing, grading, and gravel	541	20
BM-111 Loop						
PAR-F-24	2.85	Permanent (Ceredo CS)	Existing gravel road	Gravel	37	20
Existing Columbia Pipeline System						
PAR-F-14	51.5 ^d	Permanent (Oak Hill CS)	Agricultural land	Grading and gravel	712	24
PAR-F-25	0.0 ^d	Permanent (Crawford CD regulator valve facility)	Open land	Grading and gravel	46	16
TAR-F-15	51.5 ^c	Temporary (Oak Hill CS)	Existing farm road (Mining Haul Rd) / Agricultural land	Existing – grading New –grading and gravel	2,174	20-60
PAR-F-16	51.5 ^c	Permanent (Oak Hill CS)	Agricultural land / Forested land	Clearing, grading, and gravel	1,849	16
PAR-F-12	34.7 °	Permanent (R-486 OS)	Agricultural land	Grading and gravel	370	20
PAR-F-13	37.1 °	Permanent (R-130 OS)	Existing driveway / Open land	Grading and gravel	63	16
TAR-F-17	53.7 °	Temporary (R-543 OS)	Existing gravel road	None	123	20

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a All temporary access roads will be utilized during the construction phase only and returned to pre-construction conditions following Project completion. Any upgrade requirements listed for permanent access roads reflect the permanent disposition of the road, as peeded to maintain access during operation of the Project facilities

requirements listed for permanent access roads reflect the permanent disposition of the road, as needed to maintain access during operation of the Project facilities.

Approximate width corresponds to the average width of the proposed access road; however, an expanded width across short distances may be required in specific locations to accommodate safe turning areas for construction equipment.

^c Milepost is associated with Columbia's existing Line R-501.