

Keystone XL Project – Montana Major Facility Siting Act Application

Table N-1 Landownership Along Access Roads (Alternative A)

Access Road Number	Access Road Location by Mile Post	Access Road Total Miles	Miles by Ownership	Ownership
CAR-0001	7	2.91	1.30	BLM: MALTA FIELD OFFICE
			0.74	STATE TRUST LANDS - NORTHEAST
			1.43	Private
CAR-0002	14	1.54	0.15	BLM: MALTA FIELD OFFICE
			0.27	STATE TRUST LANDS - NORTHEAST
			1.12	Private
CAR-0003	17	2.41	0.49	BLM: MALTA FIELD OFFICE
			1.92	Private
CAR-0004	20	3.26		Private
CAR-0005	23	2.46	0.24	BLM: MALTA FIELD OFFICE
CAR-A-0001	24.79	2.91	0.02	BLM: MALTA FIELD OFFICE
			2.89	Private
CAR-A-0002	25.92	0.83		Private
CAR-A-0003	31.29	2.42		Private
CAR-A-0004	30.50	0.45		Private
CAR-A-0005	30.50	0.11	0.06	BLM: MALTA FIELD OFFICE
			0.05	Private
CAR-A-0006	39.01	0.98		Private
CAR-A-0007	42.33	5.13	3.55	BLM: MALTA FIELD OFFICE
			0.47	STATE TRUST LANDS - NORTHEAST
			0.35	BITTER CREEK AREA OF ENVIRONMENTAL CONCERN
			0.35	BLM: MALTA FIELD OFFICE
			0.35	BLM WILDERNESS STUDY AREAS
			0.07	Private
CAR-A-0008	47.95	7.39	4.27	BLM: MALTA FIELD OFFICE
			0.74	BLM: MALTA FIELD OFFICE
			0.74	STATE TRUST LANDS - NORTHEAST
			0.55	BITTER CREEK AREA OF ENVIRONMENTAL CONCERN
			0.55	BLM: MALTA FIELD OFFICE
			0.55	BLM WILDERNESS STUDY AREAS
CAR-A-0009	47.95	1.60	1.45	BLM: MALTA FIELD OFFICE

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Access Road Number	Access Road Location by Mile Post	Access Road Total Miles	Miles by Ownership	Ownership
			0.15	STATE TRUST LANDS - NORTHEAST
CAR-A-0010	57.30	4.59	4.59	STATE TRUST LANDS - NORTHEAST
CAR-A-0011	64.05	1.06	1.06	FORT PECK INDIAN RESERVATION
CAR-A-0012	68.64	2.17	2.17	FORT PECK INDIAN RESERVATION
CAR-A-0013	77.06	0.30	0.30	FORT PECK INDIAN RESERVATION
CAR-A-0014	79.65	0.41	0.41	FORT PECK INDIAN RESERVATION
CAR-A-0015	81.12	0.57	0.57	FORT PECK INDIAN RESERVATION
CAR-A-0016	83.07	0.31	0.31	FORT PECK INDIAN RESERVATION
CAR-A-0017	91.96	2.04	2.04	FORT PECK INDIAN RESERVATION
CAR-A-0018	102.15	0.69	0.69	FORT PECK INDIAN RESERVATION
CAR-A-0019	105.33	0.30	0.30	FORT PECK INDIAN RESERVATION
CAR-A-0020	109.47	0.15	0.15	FORT PECK INDIAN RESERVATION
CAR-A-0021	112.58	0.58	0.58	FORT PECK INDIAN RESERVATION
CAR-A-0022	115.71	0.22	0.22	FORT PECK INDIAN RESERVATION
CAR-A-0023	124.48	1.03	1.03	FORT PECK INDIAN RESERVATION
CAR-A-0024	127.05	1.43	1.43	FORT PECK INDIAN RESERVATION
CAR-A-0025	131.16	0.28	0.28	FORT PECK INDIAN RESERVATION
CAR-A-0026	137.31	0.58	0.58	FORT PECK INDIAN RESERVATION
CAR-A-0027	141.32	0.11	0.11	FORT PECK INDIAN RESERVATION
CAR-A-0028	143.43	1.45	1.45	FORT PECK INDIAN RESERVATION
CAR-A-0029	145.52	4.09	4.09	FORT PECK INDIAN RESERVATION
CAR-A-0030	149.67	1.28		Private
CAR-A-0031	154.43	0.47		Private
CAR-A-0032	163.99	1.06		Private
CAR-A-0033	166.56	3.28	0.01	TURTLE MOUNTAIN ALLOTTED LANDS
			3.27	Private
CAR-A-0034	175.49	0.38	0.00	Private
CAR-A-0035	178.33	1.04		Private
CAR-A-0036	51.49	1.12		Private

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Table N-2 Landownership Along Access Roads (Alternative A1A)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
CAR-0001	7.10	2.91	1.30	BLM: MALTA FIELD OFFICE
			0.74	STATE TRUST LANDS - NORTHEAST
			1.43	Private
CAR-0002	14.40	1.54	0.15	BLM: MALTA FIELD OFFICE
			0.27	STATE TRUST LANDS - NORTHEAST
			1.12	Private
CAR-0003	16.86	2.41	0.49	BLM: MALTA FIELD OFFICE
			1.92	Private
CAR-0004	20.01	3.26		Private
CAR-0005	23.26	2.46	0.24	BLM: MALTA FIELD OFFICE
CAR-A-0001	24.79	2.91	0.02	BLM: MALTA FIELD OFFICE
			2.89	Private
CAR-A-0002	25.92	0.83		Private
CAR-A-0003	31.29	2.42		Private
CAR-A-0004	30.50	0.45		Private
CAR-A-0005	30.50	0.11	0.06	BLM: MALTA FIELD OFFICE
			0.05	Private
CAR-A-0006	39.01	0.98		Private
CAR-A-0007	42.33	5.13	3.55	BLM: MALTA FIELD OFFICE
			0.47	STATE TRUST LANDS - NORTHEAST
			0.35	BITTER CREEK AREA OF ENVIRONMENTAL CONCERN
			0.35	BLM: MALTA FIELD OFFICE
			0.35	BLM WILDERNESS STUDY AREAS
			0.07	Private
CAR-A-0008	47.95	7.39	4.27	BLM: MALTA FIELD OFFICE
			0.74	BLM: MALTA FIELD OFFICE
			0.74	STATE TRUST LANDS - NORTHEAST
			0.55	BITTER CREEK AREA OF ENVIRONMENTAL CONCERN
			0.55	BLM: MALTA FIELD OFFICE
			0.55	BLM WILDERNESS STUDY AREAS

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Table N-2 Landownership Along Access Roads (Alternative A1A)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
CAR-A-0009	47.95	1.60	1.45	BLM: MALTA FIELD OFFICE
			0.15	STATE TRUST LANDS - NORTHEAST
CAR-A1A-0001	54.56	2.08	1.10	STATE TRUST LANDS - NORTHEAST
			0.98	Private
CAR-A1A-0002	56.81	1.69	0.71	STATE TRUST LANDS - NORTHEAST
			0.98	Private
CAR-A1A-0003	58.81	0.57	0.55	STATE TRUST LANDS - NORTHEAST
			0.02	Private
CAR-A1A-0004	63.82	0.83		Private
CAR-A1A-0005	65.16	0.51		Private
CAR-A1A-0006	67.85	1.12		Private
CAR-A1A-0007	69.86	0.81		Private
CAR-A1A-0008	77.94	0.90		Private
CAR-A1A-0009	81.99	1.30		Private
CAR-A1A-0010	84.13	0.86		Private
CAR-A1A-0011	86.01	0.48	0.19	STATE TRUST LANDS - NORTHEAST
			0.29	Private
CAR-A1A-0012	89.01	2.38		Private
CAR-A1A-0013	87.38	0.02		Private
CAR-A1A-0014	90.78	2.42	1.10	STATE TRUST LANDS - NORTHEAST
			1.32	Private
CAR-A1A-0015	92.87	2.01		Private

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Table N-2 Landownership Along Access Roads (Alternative A1A)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
CAR-A1A-0016	96.09	0.29		Private
CAR-A1A-0017	101.31	0.31	0.31	STATE TRUST LANDS - NORTHEAST
CAR-A1A-0018	103.81	1.14	0.13	STATE TRUST LANDS - NORTHEAST
			1.00	Private
CAR-A1A-0019	105.31	2.15	0.51	STATE TRUST LANDS - NORTHEAST
			1.65	Private
CAR-A1A-0020	114.63	0.70		Private
CAR-A1A-0020	114.63	0.70		Private
CAR-A1A-0021	117.15	0.52		Private
CAR-A1A-0022	122.67	0.37		Private
CAR-A1A-0023	124.70	0.90		Private
CAR-A1A-0024	127.82	1.20	0.01	FORT PECK INDIAN RESERVATION
			1.18	Private
CAR-A1A-0025	130.77	0.36		Private
CAR-A1A-0026	134.09	0.94		Private
CAR-A1A-0027	138.84	1.23		Private
CAR-A1A-0028	141.48	2.45		Private
CAR-A1A-0029	143.08	1.86		Private
CAR-A1A-0030	144.19	0.88	0.26	STATE TRUST LANDS - NORTHEAST
			0.62	Private
CAR-A1A-0031	147.33	0.14		Private

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Table N-2 Landownership Along Access Roads (Alternative A1A)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
CAR-A1A-0032	150.31	1.12		Private
CAR-A1A-0033	152.45	0.55		Private
CAR-A1A-0034	157.52	1.13		Private
CAR-A1A-0035	163.34	0.28		Private
CAR-A1A-0036	165.77	1.02		Private
CAR-A1A-0037	170.24	0.72		Private
CAR-A1A-0038	171.74	1.82		Private
CAR-A1A-0039	174.23	0.85		Private
CAR-A1A-0040	177.24	0.29		Private
CAR-A1A-0041	186.78	0.38		Private
CAR-A1A-0042	190.11	0.78		Private
CAR-A1A-0043	191.77	0.63		Private
CAR-A1A-0044	193.12	0.64		Private
CAR-A1A-0045	196.60	0.55		Private
CAR-A1A-0046	200.40	0.97	0.05	MEDICINE LAKE WETLANDS MANAGEMENT DISTRICT
			0.92	Private
CAR-A1A-0047	202.89	0.44		Private
CAR-A1A-0048	23.26	1.52		Private

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Table N-3 Landownership Along Access Roads (Alternative B)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
CAR-0001	7.10	2.91	1.30	BLM: MALTA FIELD OFFICE
			0.74	STATE TRUST LANDS - NORTHEAST
			1.43	Private
CAR-0002	14.40	1.54	0.15	BLM: MALTA FIELD OFFICE
			0.27	STATE TRUST LANDS - NORTHEAST
			1.12	Private
CAR-0003	16.86	2.41	0.49	BLM: MALTA FIELD OFFICE
			1.92	Private
CAR-0004	20.01	3.26	3.26	Private
CAR-0005	23.26	2.46	0.24	BLM: MALTA FIELD OFFICE
			2.22	Private
CAR-0006	25.46	2.60	2.60	Private
CAR-0007	26.20	0.67	0.67	Private
CAR-0008	33.27	0.87	0.87	BLM: MALTA FIELD OFFICE
CAR-0009	34.24	1.52	1.52	BLM: MALTA FIELD OFFICE
CAR-0010	38.40	1.79	1.41	BLM: MALTA FIELD OFFICE
			0.38	Private
CAR-0011	40.33	0.07	0.07	Private
CAR-0012	43.91	4.76	1.85	BLM: MALTA FIELD OFFICE
			0.68	STATE TRUST LANDS - NORTHEAST
			2.23	Private
CAR-0013	46.47	1.76	1.32	BLM: MALTA FIELD OFFICE
			0.44	Private
CAR-0014	48.53	2.39	0.58	BLM: MALTA FIELD OFFICE
			0.62	STATE TRUST LANDS - NORTHEAST
			1.19	Private
CAR-0015	51.42	1.30	0.78	BLM: MALTA FIELD OFFICE
			0.51	Private
CAR-0016	54.30	4.28	1.81	BLM: MALTA FIELD OFFICE
			2.47	Private
CAR-0017	80.85	0.09	0.09	Private

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Table N-3 Landownership Along Access Roads (Alternative B)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
CAR-0018	96.55	0.70	0.21	STATE TRUST LANDS - NORTHEAST
			0.48	Private
CAR-0019	100.68	0.61	0.17	STATE TRUST LANDS - NORTHEAST
			0.43	Private
CAR-0020	102.44	0.36	0.36	Private
CAR-0021	108.56	0.88	0.88	Private
CAR-0022	115.37	7.26	0.62	BLM: MILES CITY FIELD OFFICE
			6.63	Private
CAR-0023	124.25	1.01	1.01	Private
CAR-0024	127.94	3.80	0.62	BLM: MILES CITY FIELD OFFICE
			3.18	Private
CAR-0025	129.98	2.58	2.58	Private
CAR-0026	139.37	2.96	2.96	Private
CAR-0027	153.14	3.02	3.02	Private
CAR-0028	157.24	3.66	3.66	Private
CAR-0029	164.13	0.24	0.24	Private
CAR-0030	165.84	0.43	0.43	Private
CAR-0031	182.97	1.00	1.00	Private
CAR-0032	211.54	9.61	8.50	BLM: MILES CITY FIELD OFFICE
			1.10	Private
CAR-0033	219.59	0.12	0.12	Private
CAR-0034	222.40	1.84	1.84	Private
CAR-0035	224.96	1.74	1.74	Private
CAR-0036	228.20	0.67	0.67	Private
CAR-0037	239.64	5.75	5.75	Private
CAR-0038	253.18	0.35	0.35	Private
CAR-0039	272.36	2.25	0.24	STATE TRUST LANDS - EASTERN
			2.01	Private
CAR-0040	279.13	0.57	0.57	Private
CAR-0041	280.16	0.76	0.48	BLM: MILES CITY FIELD OFFICE
			0.28	Private
CAR-0042	292.05	2.69	0.52	BLM: MILES CITY FIELD OFFICE

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Table N-3 Landownership Along Access Roads (Alternative B)

Access Road Number	Access Road Location by MP	Access Road Total Miles	Miles by Ownership	Ownership
			2.17	Private
CAR-0043	296.95	3.27	3.27	Private
CAR-0044	328.45	5.34	5.34	Private
CAR-0045	338.74	0.32	0.32	Private
CAR-0046	340.59	1.25	1.25	Private
CAR-0047	361.86	0.76	0.76	Private
CAR-0048	364.57	3.22	3.22	Private
CAR-0049	365.68	2.72	2.72	Private
CAR-0050	370.57	0.51	0.51	Private
CAR-0051	380.56	2.07	2.07	Private
CAR-0052	401.03	2.53	2.53	Private

Overview of Environmental Information Associated with Access Roads (Circular MFSA-2, Section 3.7(7)(b))

Further analysis of access roads is included in Table N-4.

Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>3.7(2-6)</u>					
<u>2. Overlay of land use information</u>	-	-	-	-	-
<u>a) Cities, towns, residential clusters, unincorporated areas</u>	<u>0</u>	<u>0.3</u>	<u>0</u>	<u>Attachment A, Figure 2</u>	<u>One existing access road along Route A1A is adjacent to Medicine Lake rural residential area. Route A and B have no impacts on residential areas.</u>
<u>b) Developed residential, industrial, and commercial areas</u>	<u>0</u>	<u>0.2</u>	<u>0</u>	<u>Attachment A, Mapbook 1</u>	<u>Adjacent to farmland</u>
<u>c) Designated residential growth areas</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>Access roads do not cross any designated residential growth areas on any Route.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>d) Roads and highways</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>Access roads do not cross federal or state highways or roads designated as scenic routes of scenic byways.</u>
<u>e) Railroads and ROW's</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>Attachment A, Figure 2</u>	<u>Two BNSF rail roads are crossed by access roads</u>
<u>f) Transmission lines 50 kV and larger</u>	<u>1</u>	<u>0</u>	<u>7</u>	<u>Attachment A, Figure 2</u>	<u>Refer to map for crossing locations</u>
<u>g) Grassland rangeland</u>	<u>0</u>	<u>0</u>	<u>0.5</u>	<u>Attachment A, Mapbook 1</u>	<u>An existing access road crosses this cover type, no impacts are anticipated</u>
<u>h) Forested</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A</u>	<u>No forested lands are crossed by access roads</u>
<u>i) Communication infrastructure</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 1</u>	<u>No communication infrastructures will be impacted by access roads</u>
<u>j) Military installations</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 1</u>	<u>Not crossed; no impact</u>
<u>k) Agency conservation easements</u>	<u>0</u>	<u>0.1</u>	<u>1.4</u>		<u>Route B has one existing access road that crosses 'B' Cornwell Conservation Easement B, and route A1A has one existing access road that crosses a USFWS easement. Route A has no impacts on agency conservation easements.</u>
<u>l) Airports and airstrips</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 1</u>	<u>Access roads do not cross any public airstrips.</u>
<u>m) National trails</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 1</u>	<u>Access roads do not cross any national trails.</u>
<u>n) Cropland (dry, irrigated, mechanically irrigated)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Mapbook 1</u>	<u>No cropland is impacted by access roads because, all roads are pre-existing.</u>
<u>o) Prime or unique farmlands or orchards</u>	<u>3.1</u>	<u>4.2</u>	<u>2.7</u>	<u>Attachment A, Mapbook 1</u>	<u>Existing roads will be used in these areas, therefore no impacts are expected.</u>
<u>p) Permitted mines</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Mapbook 1</u>	<u>Access roads do not cross any permitted mines.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>q) Platted subdivisions</u>	<u>0</u>	<u>0</u>	<u>0</u>		<u>There are no future plans to develop in the Keystone XL Project area. Documentation of this communication has been inserted into Attachment F.</u>
<u>r) Major public buildings</u>	<u>0</u>	<u>0</u>	<u>0</u>		<u>No major buildings are impact by access roads</u>
<u>s) Pipelines 8 inches or greater</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>Attachment A, Mapbook 1</u>	<u>Unknown size</u>
<u>t) Schools</u>	<u>0</u>	<u>0</u>	<u>0</u>		<u>No schools are impacted by access roads</u>
<u>u) Ag. Experiment stations</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>N/A</u>	<u>Not crossed; no Impact</u>
<u>v) Individual residences</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Mapbook 1</u>	<u>No individual residences are impacted by access roads</u>
<u>w) Public concern over structure locations in fence lines and field boundaries</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>No concerns specific to access roads have been identified to date. The majority of access roads are existing therefore, no concerns are anticipated.</u>
<u>3. Construction crew size, skill and wage levels</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Attachment P, Page 2</u>	<u>The crews constructing the pipeline will also be responsible for access road construction. Crew sizes, skill, and wages will be the same.</u>
<u>4. Assessment of impacts on agricultural, residential, commercial, industrial, mining, and public land uses</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Chapter 4 - Section 4.3.2 ?</u>	<u>With the exception of CAR-0040 on Route B, all Project access roads are pre-existing and will require only temporary widening. All roads will be temporary and be reclaimed to pre-construction conditions unless requested by the landowner. Associated impacts will be minimal and temporary.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>5. Social impacts</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>All Project access roads are temporary. If existing access roads require widening, associated impacts will be minimal and temporary.</u>
<u>6. Public attitudes and concerns</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 5.3.1</u>	<u>Refer to text for over all Project attitudes and concerns.</u>
<u>a) concern over social, socioeconomic, tax, land use changes the facility could cause individual resentment and public debate</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>No issues specific to access roads have been identified to date. All county commissioners are in favor of having the KXL Project pass through their county. They anticipate no social concerns and expect positive social and economic impacts and little or no negative environmental and land use impacts from the Keystone XL Project. County Commissioners in Daniels, Roosevelt and Sheridan counties were favorable to the A-1-A alternate route.</u>
<u>b) concern about natural environmental features</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>Access roads will not permanently impact any natural environmental features.</u>
<u>c) issues that may divide communities, cause individual resentment and public debate</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>No issues specific to access roads have been identified to date. All project access roads are temporary; therefore, no issues are anticipated.</u>
<u>d) concern to landowners & residents in close proximity</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>No direct concerns are anticipated. Landowners may see increased traffic, but this will only be temporary.</u>
<u>3.7 (8 to 19) – Please refer to Table N- for information related to Section 3.7(7)</u>					
<u>8. Earth resource impacts. ...an estimate of</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 4.3.7.2</u>	<u>See quantification below.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>the mileage of each alternative location and associated access roads crossing each category of mapped information requested below</u>					
<u>a) Overlay of wind and water erosion risk and a discussion of impacts considering soil characteristics, slope, predicted amount of disturbance and climatic conditions</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Attachment A, Mapbook 5 Section Chapter 4 Sec 4.3.7.2</u>	<u>Refer to text</u>
<u>Severe water erosion potential</u>	<u>4.3</u>	<u>6.9</u>	<u>12.0</u>		
<u>Severe wind erosion potential</u>	<u>0</u>	<u>0</u>	<u>0.1</u>		
<u>b) Overlay and discussion of mass movement potential</u>	<u>0.53</u>	<u>0.53</u>	<u>0.37</u>	<u>Attachment A, Mapbook 5 Section 4.3.7.2</u>	<u>Refer to text</u>
<u>c) Overlay and discussion of constraints to reclamation and revegetation</u>	<u>1.67</u>	<u>0.35</u>	<u>0.54</u>	<u>Section 4.3.7.2</u>	<u>Refer to text</u>
<u>9. Engineering of the facility in each alternative location</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>-</u>
<u>a) Location differences relating to the feasibility of expanding the transmission capacity through multiple circuiting or design modifications, ROW width</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>N/A</u>
<u>Location differences relating to the feasibility of expanding the transmission capacity through multiple circuiting or design modifications, ROW width</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>c) Poor or seasonally restricted areas</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Attachment P, page 3, Response to SIR-1, Section</u>	<u>The access roads identified will be used for construction only. Construction is not anticipated during periods of limited access; therefore poor access should not be of concern during those periods. Roads will be reclaimed and will not be used during operation of the pipeline.</u>
<u>d) Compatibility or interference with transmission, transportation or communication facilities</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>Temporary construction and use of access roads is anticipated to cause no impacts to transmission, transportation, or communication facilities.</u>
<u>e) Discussion and supporting documentation of problems or concerns associated with crossing highways or encroachment on highway ROWs through consultation with the Montana Department of Transportation (MDT).</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Attachment A, Mapbook 1 Section 4.3.11.2</u>	<u>Access roads do not cross any major thorough fairs. Refer to text for MDT consultation.</u>
<u>f) Floodplains</u>	<u>1.8</u>	<u>3.0</u>	<u>0</u>	<u>Attachment A, Mapbook 3</u>	<u>Because access roads will be temporary and will not be used in inclement weather, no adverse impacts to floodplains resulting from use are anticipated.</u>
<u>10. Visual resource and viewer information</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>In process</u>
<u>a) Scenic quality overlay</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>In process</u>
<u>b) Visual contrast overlay</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>In process</u>
<u>c) Tabulation of classes of scenic quality</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>In process</u>
<u>d) Explanation of any difference with FS visual</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>Forest Service land is not located on any or near any access roads, hence</u>

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>inventory maps</u>					<u>no FS visual inventory.</u>
<u>e) Identification of key observation points</u>	-	-	-	-	<u>In process</u>
<u>f) Viewer characteristics</u>	-	-	-	-	<u>In process</u>
<u>g) Photographs from observation points</u>	-	-	-	-	<u>In process</u>
<u>h) Viewsheds for key observation points</u>	-	-	-	-	<u>In process</u>
<u>11. Assessment of visual resource impacts</u>	-	-	-	-	<u>In process</u>
<u>12. Description of existing biological resources and an assessment of impacts to these resources for each alternative and access roads...</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	-
<u>a) A list of species and habitats of greatest susceptibility to project-related impacts and an explanation of rationale used to create the list.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Attachment E</u>	<u>See Attachment E for list of special status plants and animals and associated habitats. The four vegetation types were determined from the landcover dataset. This dataset was digitized from 2006 satellite imagery from the National Agriculture Imagery Program (NAIP). The landcover/land use layer was subsequently compared and cropland types further attributed compared with Montana Department of Revenues (MDR) agricultural land reappraisal layer. The access roads are pre-existing therefore no additional impacts to these habitat types and associated species are foreseen.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>b) An evaluation of impacts to each species or habitat listed in (a) including:</u>	-	-	-	<u>Attachment E</u>	<u>Refer to text</u>
<u>i. National wildlife refuges and ranges</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any wildlife refuges or ranges.</u>
<u>ii. State wildlife management areas and wildlife habitat protection areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Project access roads do not cross any State wildlife management areas or habitat protection areas.</u>
<u>iii. National recreation areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads will not cross any National Recreation Areas.</u>
<u>vi. Corridors of rivers in the National Wild and Scenic rivers system and rivers eligible for inclusion in the system.</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any corridors of rivers in the National Wild and Scenic rivers system and rivers eligible for inclusion in the system.</u>
<u>vii. Managed roadless areas greater than 5,000 acres in size</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any managed roadless areas greater than 5,000 acres in size.</u>
<u>ix. Unique habitats and natural areas designated by the National Park Services, USDA Forest Service, BLM, or the State of Montana as national natural landmarks, natural areas, research natural areas, areas of critical environmental concerns, special interest areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Section 4.3.11.3</u>	<u>Access roads do not cross any natural areas designated by the National Park Services, USDA Forest Service, BLM, or the State of Montana as national natural landmarks, natural areas, research natural areas, areas of critical environmental concerns, and special interest areas. Two existing access roads are adjacent to the Bitter Creek ACEC: However according to the Malta BLM field office the project is allowed to utilize existing roads with the understanding that the BLM may restrict use.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>x. Designated critical habitat for Threatened and Endangered species</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any designated critical habitat for Threatened and Endangered species.</u>
<u>xi. Streams and rivers listed as having fisheries value class of I or II by FWP</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any streams or rivers listed as having fisheries values class of I or II by FWP.</u>
<u>xii. Agricultural experiment stations</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any agricultural experiment stations.</u>
<u>xiii. Habitats occupied at least seasonally by resident state or federally listed threatened or endangered species.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Confidential - Sensitive Biological Data</u>	<u>These access roads are existing roads that may need improvement. Impacts would be similar to those discussed in Section 4.3.4.10</u>
<u>xiv. Specially managed buffer areas around wilderness</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any wilderness areas.</u>
<u>xv. Winter distribution of elk, deer, moose, pronghorn, mountain goat, and bighorn sheep, and areas where they concentrate during severe winters based on consultation.</u>	-	-	-	-	-

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>White-Tail deer</u>	<u>1.2</u>	<u>9.1</u>	<u>12.6</u>	<u>Attachment A, Figure 3, Section 4.3.4.5</u>	<u>Several existing access roads cross land used by deer and pronghorn species during the winter. Impacts to big game would be short-term similar to those discussed in section 4.3.4.5. Construction activities would be prohibited within winter range between December 1 and May 15 on BLM lands and roads would be reclaimed with the conclusion of construction.</u>
<u>Mule Deer</u>	<u>22.6</u>	<u>23.8</u>	<u>68.1</u>	<u>Attachment A, Figure 3, Section 4.3.4.5</u>	
<u>Pronghorn</u>	<u>17.0</u>	<u>17.0</u>	<u>39.5</u>	<u>Attachment A, Figure 3, Section 4.3.4.5</u>	
<u>Elk</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 3, Section 4.3.4.5</u>	
<u>Moose</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 3, Section 4.3.4.5</u>	
<u>Mountain Goat</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 3, Section 4.3.4.5</u>	
<u>Bighorn Sheep</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 3</u>	
<u>xvi. Major elk summer security areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 3</u>	
<u>xvii. Mountain goat and big horn sheep seasonal habitat</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Attachment A, Figure 3</u>	
<u>xviii. Sage and sharp-tailed grouse leks and winter distribution</u>	<u>6.8</u>	<u>5.1</u>	<u>25.4</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>Sage Grouse General Distribution</u>	<u>25.1</u>	<u>27.5</u>	<u>25.9</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>These access roads are existing roads that may need improvement including widening. This may temporarily impact suitable breeding/nesting/ wintering habitat but the area will be reclaimed once construction is complete.</u>
<u>Sage Grouse Lek Area</u>	<u>5.0</u>	<u>5.0</u>	<u>25.4</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>These access roads are existing roads that may need improvement including widening. This may permanently impact suitable lek areas with the clearing of sagebrush.</u>
<u>Sharp-Tail Grouse General Distribution</u>	<u>54.9</u>	<u>72.8</u>	<u>71.4</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>These access roads are existing roads that may need improvement including widening. This may temporarily impact suitable breeding/ nesting/ wintering habitat but the area will be reclaimed once construction is complete.</u>
<u>Sharp-tail Grouse Lek Area</u>	<u>1.8</u>	<u>0.0</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>These access roads are existing roads that may need improvement including widening. This may cause long-term impacts to suitable lek areas with the clearing of vegetation.</u>
<u>xix. High waterfowl population densities</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-</u>	<u>Access roads will not impact areas with high waterfowl population densities. These access roads are existing roads that may need improvement but will not directly impact waterfowl populations.</u>

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>xx. Any undeveloped land or water areas that contain known natural features of unusual scientific educational or recreational significance</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross areas that contain undeveloped water or areas that contain known natural features of unusual scientific educational or recreational significance.</u>
<u>xxi. Mature riparian forests</u>	<u>0</u>	<u>0</u>	<u>0</u>	-	<u>Access roads do not cross any mature riparian forests.</u>
<u>xxii. Nesting colonies</u>	<u>0.8</u>	<u>0.1</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>(See individual descriptions)</u>
<u>American White Pelican</u>	<u>0</u>	<u>0.1</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>Two access roads associated with Alternative A1A (A1A-CAR-A1A-0037 and A1A-CAR-A1A-0040) cross 0.1 miles of an historic occurrence of the American White Pelican and/or its protection zone as provided by the MTNHP. The information received from the MTNHP does not indicate if the record is an individual sighting or an actual nesting colony of 5 or more pairs. These access roads are existing roads that may need improvement but will not directly impact nesting colonies.</u>
<u>Caspian Tern</u>	<u>0</u>	<u><0.1</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>Access roads A1A-CAR-A1A-0037 cross 0.03 miles of an historic occurrence of the Caspian Tern or its protection zone as provided by the MTNHP. The information received from the MTNHP does not indicate if the</u>

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
					record is an individual sighting or an actual nesting colony of 5 or more pairs. These access roads are existing roads that may need improvement but will not directly impact nesting colonies.
<u>Common Tern</u>	<u>0</u>	<u>0.1</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	Two access roads (A1A-CAR-A1A-0037 and A1A-CAR-A1A-0040) cross 0.1 miles of an historic occurrence of the Common Tern or its protection zone as provided by the MTNHP. The information received from the MTNHP does not indicate if the record is an individual sighting or an actual nesting colony of 5 or more pairs. These access roads are existing roads that may need improvement but will not directly impact nesting colonies.
<u>Forster's Tern</u>	<u>0.8</u>	<u>0.1</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	Three access roads, two associated with Alternative A1A (A1A-CAR-A1A-0037 and A1A-CAR-A1A-0040) and one associated with Alternative A (A-CAR-A-0029) cross 0.1 and 0.8 miles, respectively, of historic occurrences of the Forster's Tern or its protection zone as provided by the MTNHP. The information received from the MTNHP does not indicate if the record is an individual sighting or an actual nesting colony of 5 or more pairs. These access roads are existing roads that may need

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
					improvement but will not directly impact nesting colonies.
<u>Franklin's Gull</u>	<u>0.8</u>	<u>0.1</u>	<u>0</u>	<u>Attachment A, T-Line Confidential 1 Sensitive Biological Data</u>	<u>Three access roads, two associated with Alternative A1A (A1A-CAR-A1A-0037 and A1A-CAR-A1A-0040) and one associated with Alternative A (A-CAR-A-0029) cross 0.1 and 0.8 miles, respectively, of historic occurrences of the Franklin's Gull or its protection zone as provided by the MTNHP. The information received from the MTNHP does not indicate if the record is an individual sighting or an actual nesting colony of 5 or more pairs. These access roads are existing roads that may need improvement but will not directly impact nesting colonies.</u>
<u>xviii. Habitats occupied at least seasonally and critical to species listed as "species of special concern or interest" by the FWP, or species listed or considered candidates for listing by the U.S. Fish and Wildlife service as threatened or endangered.</u>	<u>18.9</u>	<u>21.7</u>	<u>27.9</u>	<u>Attachment A, Figure 3</u>	<u>No critical habitat is crossed by any of the Alternative Routes or Access Roads.</u>
<u>xix. Locations of known nests of raptorial birds within ½ mile of alternative facility locations.</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Attachment A, Figure 3</u>	<u>The 2008 raptor nest surveys were limited to the proposed centerline only.</u>
<u>c) A general assessment of impacts from hunting and fishing pressure if increased access to</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>Consultation with the BLM (BLM 2008 – PL_KU_BLM_121108) confirmed that new</u>

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>secure habitats would likely occur in the general vicinity of each alternative line location because new access roads would be constructed outside the impact zone</u>					<u>construction of or improvement to existing tracks/roads associated with the pipeline would result in increased use and pressures regarding hunting and fishing. Currently, public lands are experiencing an increase in hunting. The construction of the pipeline itself would not affect current hunting and fishing status. Hunting and fishing pressures on private lands would be site-specific and depend on whether the landowners allowed these activities on their property. A permanent access road on private lands that allowed hunting would increase hunting and/or fishing pressures in that area.</u>
<u>d) A description of the method used to evaluate impacts to wildlife, fisheries, and vegetation.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 4.3.4.6</u>	<u>Refer to text</u>
<u>e) For impacts described in (b) and (c), a description of mitigating measures that could be implemented to reduce significant impacts and the cost of such measures.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>Mitigation measures that agencies will require for the Project have not been defined; Keystone will conform to the Best Management Practices listed in the CMRP.</u>
<u>f) Documentation that agencies with management responsibility for any affected biological resources have been consulted concerning impacts and mitigation and a description and evaluation of the mitigation measures suggested by these</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>-</u>	<u>See Attachment F for correspondence documentation. Mitigation measures suggested by management agencies for the Project are summarized in Response to SIR-1, Section 3.7(12)(f) in Attachment P.</u>

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	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>agencies.</u>					
<u>13. Cultural, historical, and paleontological data</u>	-	-	-	-	-
<u>a) Results of an on-the-ground survey and documentation</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>The DEQ did not require on-the-ground surveys in regard to access roads in MT. File search only.</u>
<u>b) Consultation with State Historic Preservation Office (SHPO) relative to eligibility for listing on the national register</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 4.3.92</u>	<u>Refer to text</u>
<u>14. Assessment of impacts to cultural, historical, and paleontological resources.</u>	-	-	-	-	-
<u>a) For each of the following potentially affected cultural resource properties or sites and for any properties or sites identified by (13)(b) which may be eligible for listing on the national register, a discussion of whether the facility would affect the</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>4.3.9.4</u>	<u>Refer to text</u>
<u>i. National historic landmarks, and national register historic districts and sites;</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>4.3.9.4</u>	<u>Refer to text</u>
<u>ii. National register historic districts and sites nominated to or designated by SHPO;</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>4.3.9.4</u>	<u>Refer to text</u>
<u>b) A discussion of whether the proposed facility would affect the qualities of:</u>	-	-	-	-	<u>Refer to text</u>
<u>i. Areas with geologic units or formations that show a high probability of including significant paleontological</u>	<u>61.6</u>	<u>77.6</u>	<u>86.8</u>	<u>4.3.8.2</u>	<u>Refer to text</u>

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<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>resources; and</u>					
<u>ii. Sites that have, or may have, religious or heritage significance and value to Native Americans as identified by Section 3.4(1)(t).</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>4.3.9.2</u>	<u>Refer to text</u>
<u>c) Identification of special construction methods and topographic screening that could eliminate or reduce impacts, and a discussion of the likelihood of success of each measure in reducing impact.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>4.3.9.4</u>	<u>Refer to text</u>
<u>d) Documentation that consultation has occurred with SHPO, affected state and federal agencies, and tribes regarding any affected cultural sites, impacts, and mitigation.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>4.3.9.2</u>	<u>Refer to text</u>
<u>15. Baseline data for recreation areas and sites</u>					
<u>a) Maps depicting recreation areas and sites.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
<u>b) Description of each site or area, how area is used, and use level estimates</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
<u>c) List of possible recreation areas & sites</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
<u>16. Assessment of impacts on recreation areas and sites</u>					<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
					be impacted.
a) <u>Change in access</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
b) <u>Aesthetic impacts on sites</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
c) <u>Location of facility relative to site</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
d) <u>Description of how activities and experiences could change</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
e) <u>Description of regional supply of recreational opportunities for affected sites.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
f) <u>Documentation of consultation</u>					<u>Access roads do not cross or lead to any recreation areas. Therefore, recreation areas will not be impacted.</u>
<u>17. Overlay showing names of perennial streams crossed and WQ classification</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Attachment A, Mapbook 3</u>	<u>Refer to Map</u>
<u>18. Assessment of impacts to surface and ground water</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 4.3.5.5</u>	<u>Refer to text</u>
<u>Impact to water users</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross areas that would result in impacts to water users.</u>
<u>Impact to hydrology and stream banks</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads that cross streams are existing roads. No additional impacts are anticipated.</u>

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Table N-4 Access Road Additional Information Overview

<u>Generalized Rule Content</u>	<u>Miles Crossed</u>			<u>Location in Document</u>	<u>AR Comment</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>		
<u>Impacts to municipal watershed</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross any municipal watersheds.</u>
<u>Impacts to potable water</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>Access roads do not cross any potable water sources</u>
<u>Impacts to streams</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	-	<u>Access roads that cross streams are existing roads. No additional impacts are anticipated.</u>
<u>19. Noise, radio, and television impacts</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 4.3.13</u>	<u>During construction, Keystone will be required to comply with any local construction noise requirements. Areas directly adjacent to access roads will experience a short-term inconvenience from construction equipment noise for a period of 1 week to 30 days.</u>
<u>a) for 230 kV</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>No Impact</u>
<u>b) for 230 kV</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>No Impact</u>
<u>c) Induced currents</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>No impact</u>
<u>d) Noise impacts</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Section 4.3.13</u>	<u>During construction, Keystone will be required to comply with any local construction noise requirements. Areas directly adjacent to access roads will experience a short-term inconvenience from construction equipment noise for a period of 1 week to 30 days</u>
<u>e) Potential impacts of electrical and magnetic fields</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>N/A</u>
<u>f) Radio and TV impacts</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>N/A</u>
<u>g) mitigation to reduce noise, EMF, induced currents, and interference with communication facilities.</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>		<u>N/A</u>

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Overview of Environmental Information Associated with Access Roads (Circular MFSA-2, Section 3.7(7)(a))

Access roads identified for all alternatives are primarily previously existing roads used for agriculture and livestock purposes. One access road, CAR-0040 on Route B (0.6 mile) is not a pre-existing road. Impacts from access roads will be temporary and very similar to that of the pipeline construction. All access roads will be restored to their pre-construction condition, unless requested by the land owner or land manager. Impacts associated with the construction and use of these access roads are summarized by Route in Table N-5. Differences are highlighted as follows:

- **3.2(1)(d)** Minimal impacts to areas with rugged topography and slopes greater than 30 percent will occur. Route A and A1A have a tenth of a mile impact on slopes greater than 30 percent. Route B will impact less than five hundredths of a mile on slopes greater than 30 percent. Locations with topography that cannot be negotiated by construction traffic will be identified and routes will be adjusted prior to construction.
- **3.4(1)(s)** Access roads associated with Route B would cross the most formations with high potential for paleontological resources. Because the majority of these roads are pre-existing, the potential for finding new resources is low. Any paleontological resources identified during expansion or reclamation of access roads would be avoided by adherence to the paleontological mitigation plan. No paleontological resources will be removed from federal lands; removal from non-federal lands will only occur with the landowner's permission.
- **3.4(1)(g)** Any property which is deemed eligible for listing (TCP's, Historic districts and sites) on the NRHP will be considered in final location of access roads in accordance with the National Historic Preservation Act of 1966, as amended. Impacts to these sites are not anticipated, since access roads are primarily pre-existing.
- **3.4(1)(t)** Any Traditional Cultural Property (TCP) that may be impacted by access roads construction or operation will be treated in accordance with the National Historical Preservation Act (NHPA), as amended, and its implementing regulations, other applicable federal statutes, and any Programmatic Agreement entered into in furtherance of such laws and regulations as appropriate. Location of TCPs will be determined through the NEPA process, through government-to-government consultations by the Department of State
- **3.4(1)(j)** One stream segment listed in MDEQ's 303(d) listing is crossed by access roads on each route. None of the pollutants listed as causes of impairment on these segments will be affected by the temporary use of access roads.
- **3.4(1)(k)** Impacts to soil resources resulting from access roads would be similar to those described in Section 4.3.7.2. After construction is complete, Keystone will reclaim temporary roads as near as practicable to pre-construction conditions unless requested by the land owner or land manager.
- **3.4(1)(e)(m)** Impacts to wildlife, including special status species, resulting from access roads is similar to the impacts discussed in 4.3.4.5 and 4.3.4.10. Because the majority of these roads are existing dirt or graveled roads used for agriculture or livestock purposes, impacts will be limited to road improvements that would temporarily increase the size of the existing roads and traffic use. Direct impacts from the improvement and use of access roads include vehicular collisions. Indirect impacts include the loss of terrestrial wildlife habitat and disturbance from increased noise and human presence. Keystone will reclaim temporary roads to pre-construction conditions unless requested by the land owner or land manager. Therefore, impacts will be short-term with the exception of woody vegetation removal and impacts to greater sage-grouse core and lek areas. One access road, B,CAR-0040-B, is not currently an existing road and will be constructed within grassland/rangeland habitat. Biological surveys of access road locations and additional consultation with the USFWS, BLM, and state wildlife agencies will be conducted prior to construction in order to reduce impacts to wildlife species potentially occurring within the project area.

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- 3.4(1)(I) Nearly all access roads would be constructed on previously disturbed ROWs and would be reclaimed to pre-construction conditions unless the landowner requested that they be left in the enhanced condition. Consequently, there would be short-term visual disturbance during construction, but the existing character of the landscape would be retained after completion of reclamation. Temporary access roads are compatible with existing visual management plans.

Table N-5 Access Road Environmental Information Overview

<u>Access Road Analysis</u>	<u>Miles Crossed</u>			<u>Comments</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>	
<u>3.2.1(d)</u>				
<u>a)i. national wilderness areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>ii. national primitive areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>iii. national wildlife refuges and ranges</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>iv. state wildlife management areas and wildlife habitat protection areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>v. national parks and monuments</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>vi. state parks</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>vii. national recreation areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>viii. corridors of rivers in the national wild and scenic rivers system and rivers eligible for inclusion in the system</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>ix. roadless areas of 5,000 acres or greater in size, managed by federal or state agencies to retain their roadless character</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>x. rugged topography defined as areas with slopes greater than 30 percent</u>	<u>0.1</u>	<u>0.1</u>	<u><0.1</u>	<u>Based on nationwide data: Actual slopes will be identified prior to construction; routes at locations with restrictive topography will be adjusted.</u>
<u>xi. specially managed buffer areas surrounding national wilderness areas and national primitive areas.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>3.4.1</u>				
<u>b) state or federal waterfowl production area</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>

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Table N-5 Access Road Environmental Information Overview

<u>Access Road Analysis</u>	<u>Miles Crossed</u>			<u>Comments</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>	
<u>c) national natural landmarks, natural areas, research natural areas, areas of critical environmental concern, special interest areas, research botanical areas, outstanding natural areas designated by the national park service, the USDA forest service, the Bureau of Land Management, or the State of Montana</u>	<u>1.4</u>	<u>1.4</u>	<u>0</u>	<u>Two access roads are adjacent to the Bitter Creek ACEC. Reference text in Section 4.3.11.3</u>
<u>d) designated critical habitat for state or federally listed threatened and endangered species</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>e) habitats occupied at least seasonally by resident state or federally listed threatened or endangered species</u>	<u>18.9</u>	<u>21.6</u>	<u>27.9</u>	<u>Reference Section 4.3.4.5 - Impacts similar to those discussed under terrestrial wildlife.</u>
<u>f) national historic landmarks, national register historic districts and sites</u>	<u>9.5</u>	<u>9.8</u>	<u>9.6</u>	<u>Reference Section 4.3.9.2a</u>
<u>g) national register historic districts and sites nominated to or designated by SHPO</u>	<u>9.5</u>	<u>9.8</u>	<u>9.6</u>	<u>Reference Section 4.3.9.2a</u>
<u>h) municipal watersheds</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>i) streams and rivers listed in Montana department of fish, wildlife and parks river database as being class I or II streams or rivers</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>j) Streams listed by DEQ pursuant to 75-5-702, MCA that are not attaining beneficial uses of water.</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>Access roads associated with Routes A and A1A both cross reaches of Buggy Creek, which has partial support of aquatic life and non-salmonid fisheries uses due to iron concentrations. An access road associated with Route B cross Sandstone Creek, which has partial support of aquatic life and non-salmonid fisheries uses due to Nitrogen concentrations. Neither of the pollutants listed as causes will be affected by construction or operation of the Project. Refer to Section 4.3.5.5 for text regarding general potential impacts.</u>

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Table N-5 Access Road Environmental Information Overview

<u>Access Road Analysis</u>	<u>Miles Crossed</u>			<u>Comments</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>	
<u>k) Highly erodible soils and areas with severe reclamation constraints, defined as soils developed on Cretaceous shales, intrusives, and certain lathstring deposits.</u>	<u>0.5</u>	<u>0.5</u>	<u>.37</u>	<u>Refer to text in Section (4.3.7.2)</u>
<u>l) areas where the presence of the facility would be incompatible with published visual management plans or regulations designed to protect view sheds adopted by federal, state, or local governments.</u>	-	-	-	<u>Nearly all access roads would be constructed on previously disturbed ROWs (see below) and would be reclaimed to pre-construction conditions unless the landowner requests that they be left in the enhanced condition. Consequently, there would be short-term visual disturbance during construction, but the existing character of the landscape would be retained after completion of reclamation and the access roads would be compatible with visual management plans. The two permanent access roads, located on Route B, are within BLM VRM Class 4 areas.</u>
<u>i. Class II</u>	<u>16.7</u>	<u>15.3</u>	<u>20.3</u>	<u>VRM Class Objective: To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.</u>
<u>ii. Class III</u>	<u>2.7</u>	<u>1.3</u>	<u>5.1</u>	<u>VRM Class Objective: To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.</u>
<u>iii. Class IV</u>	<u>42.2</u>	<u>61.1</u>	<u>61.5</u>	<u>VRM Class Objective: To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.</u>

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<u>Access Road Analysis</u>	<u>Miles Crossed</u>			<u>Comments</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>	
<u>m) Winter distribution of elk, deer, moose, pronghorn, mountain goat, and bighorn sheep and areas where they concentrate during severe winters, as identified by the Montana Department of Fish, Wildlife and Parks, the Bureau of Land Management, and the USDA Forest Service.</u>	<u>23.7</u>	<u>32.4</u>	<u>69.8</u>	<u>Reference Section 4.3.4.5 - Impacts similar to those discussed under terrestrial wildlife. Winter distribution of elk, moose, mountain goat, and big horn sheep are not crossed by access roads.</u>
<u>i. elk</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>ii. combined deer</u>	<u>23.7</u>	<u>32.4</u>	<u>69.8</u>	
<u>iii. mule deer</u>	<u>22.6</u>	<u>23.8</u>	<u>68.2</u>	
<u>iv. white-tail deer</u>	<u>1.2</u>	<u>9.1</u>	<u>12.6</u>	
<u>v. moose</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>vi. pronghorn</u>	<u>17.0</u>	<u>17.0</u>	<u>39.5</u>	
<u>vii. mountain goat</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>viii. bighorn sheep</u>	<u>0</u>	<u>0</u>	<u>0</u>	
<u>n) Major elk summer security areas</u>	<u>0</u>	<u>0</u>	<u>0</u>	-
<u>o) Seasonally occupied mountain sheep and mountain goat habitats</u>	<u>0</u>	<u>0</u>	<u>0</u>	-
<u>p) Sage and sharp-tailed grouse leks and winter habitats</u>	<u>23.1</u>	<u>21.3</u>	<u>0.0</u>	<u>Reference Section 4.3.4.10 for specific discussion on impacts to lekking birds (Chapter 4, page 4-45)</u>
<u>q) High waterfowl densities (prime waterfowl habitat)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>r) Undeveloped land or water areas with natural features of unusual scientific, educational or recreational significance</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>Not crossed; no impact</u>
<u>s) Geologic units or formations with a high probability of including paleontological resources</u>	<u>61.5</u>	<u>77.6</u>	<u>86.8</u>	<u>Potential impacts would be similar to those that occur during pipeline construction. Refer to Section 4.3.8.2 for a more in-depth discussion of impacts on paleontological resources.</u>

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Table N-5 Access Road Environmental Information Overview

<u>Access Road Analysis</u>	<u>Miles Crossed</u>			<u>Comments</u>
	<u>Route A</u>	<u>Route A1A</u>	<u>Route B</u>	
<u>t) Sites that have religious or heritage significance to Native Americans</u>	<u>9.5</u>	<u>9.8</u>	<u>9.6</u>	<u>Reference General project statement in Section 4.3.9.2</u>
<u>u) Standing water bodies, including any lake, wetland, marsh or reservoir; and intermittent water bodies and internally drained basins that reach a surface area of 20 acres or more at least 1 year out of 10.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>No impact</u>
<u>v) Surface supplies of potable water</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>No impact</u>
<u>w) Active faults near substations, switchyards, or terminus points</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>Potential impacts would be similar to those that occur during pipeline construction. Refer to Section 4.3.6.1 for a more in-depth discussion of impacts on seismic hazards.</u>