

# Environmental Constraints Matrix



**ENVIRONMENTAL CONSTRAINTS MATRIX  
SUMMARY OF IMPACTS BY ALTERNATIVE ALIGNMENT LOOP 9, SEGMENT A**

Alternative Alignment or Mod. Option	Length (miles)	Area (acres)	Visual and Potential Access Impacts	Air Quality Impacts	Traffic Noise Impacts (Mod. Options in Review)	Community Impacts										Natural Resources								Cultural Resources				HazMat		Water Wells		Other		
						Potential Displacements: Residential	Potential Displacements: Sheds/Barns	Potential Displacements: Commercial	Community Facilities Within the Project Area	Changes in Community Cohesion <sup>4</sup>	Environmental Justice Issues <sup>5</sup>	Access and Travel Patterns <sup>6</sup>	Public Services <sup>7</sup>	State and Federal Protected Species <sup>8</sup>			Water Resources				Flood Zones			Farmland Protection		Recorded Archeology Sites	Recorded Historic Properties	Century Farm Sites	High Probability Area (acres)	Pipeline Crossings	Hazardous Materials Sites of Potential Concern	Public	Private	Airport
														Federal Threatened and Endangered Species	State Threatened and Endangered Species	Species of Greatest Concern	Total Wetlands (acres)	Total Open Waters (acres)	Total Streams (Linear Feet)	Individual Streams	100-Year Floodplain (acres)	Floodway (acres)	500-Year Floodplain (acres)	Prime Farmland (acres)	Statewide Important Farmland Soils									
<b>1</b>	8.90	598	Yes	No	27	63	57	3	0	No	No	No	No	0	7	28	1.62	0.78	14,529	22	18.6	6.7	1.4	126.8	157.4	0	0	0	0	3	1	0	1	0
<b>2</b>	8.88	596	Yes	No	27	63	58	3	0	No	No	No	No	0	7	28	1.69	3.39	13,832	21	17.8	4.3	1.3	135.8	155.6	0	0	0	0	3	1	0	1	0
<b>3</b>	8.96	604	Yes	No	30	70	62	3	0	No	No	No	No	0	7	28	2.60	2.48	13,713	20	22.2	4.3	1.3	159.8	176.2	0	0	0	0	3	1	0	1	0
<b>4</b>	8.98	604	Yes	No	27	63	63	2	0	No	No	No	No	0	7	28	1.55	1.16	13,047	20	12.1	6.5	1.8	138.4	169.9	0	0	0	0	3	1	0	1	0
<b>A</b>	2.21	140	Yes	No	NA	2	7	0	0	No	No	No	No	0	7	28	0.00	0.00	2,017	5	0.0	0.0	0.0	9.5	125.6	0	0	0	0	0	1	0	0	0
<b>B</b>	2.18	140	Yes	No	NA	6	4	6	0	No	No	No	Yes	0	7	28	0.17	0.06	2,139	5	0.0	0.0	0.0	1.4	128.7	0	0	0	0	0	1	0	0	0
<b>C</b>	1.23	71	Yes	No	NA	3	5	0	0	No	No	No	No	0	7	28	0.00	0.00	3,240	4	3.4	5.6	1.6	41.1	8.6	0	0	0	0	1	0	0	0	0
<b>D</b>	3.60	269	Yes	No	NA	21	41	1	0	No	No	No	No	0	7	28	2.62	2.44	4,364	5	13.5	8.1	2.2	43.3	3.2	0	0	0	0	2	0	0	0	0
	TO BE DETERMINED																																	
<b>Preferred</b>	TO BE DETERMINED																																	
<b>Selected</b>	TO BE DETERMINED																																	

Notes:

- 1 Estimates provided are current as of February 2022. All information is subject to change.
- 2 Data derived from both desktop/online resources and field studies where access was granted.
- 3 Environmental Constraints Matrix will be updated as design continues, environmental technical reports are approved, and field evaluations continue.
- 4 The proposed project is not anticipated to have an adverse effect on community cohesion as discussed further in the Community Impact Analysis.
- 5 No disproportionate adverse impacts are anticipated for Environmental Justice communities in the study area as discussed further in the Community Impact Analysis.
- 6 Travel patterns may change as a result of the proposed project; however, negative impacts to access and travel patterns are not anticipated as discussed further in the Community Impact Analysis.
- 7 The proposed project is not anticipated to have an adverse effect on Public Services, including Emergency Services as discussed further in the Community Impact Analysis.
- 8 The proposed project is within range of and contains suitable habitat for.