

Appendix G

Preliminary Corridor Concepts - Potential Environmental Effects

Table G-1. Preliminary Corridor Concepts – Potential Environmental Effects

Impact Category ^{1,2}		Corridor Concept																					
		1		1A		2		3		4		4A		5		6		7		8		9	
		SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC
Measure		Total		Total		Total		Total		Total		Total		Total		Total		Total		Total		Total	
Rank (Based on Public Input at 2019 Public Meetings)	N/A	1	N/A (developed after 2019 Public Meetings)	6	7	2	N/A (developed after 2019 Public Meetings)	8	9	5	4	3	4	5	6	7	8	9	10	11	12	13	
Carried Forward as Detailed Study Alternative	N/A	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	No	Yes	Yes	No	No	No	No	
Length (L-line)	Miles	21.49	20.80	19.77	19.63	21.37	20.68	19.64	19.38	19.04	19.36	20.18	20.18	19.04	19.36	19.36	19.36	20.18	20.18	20.18	20.18	20.18	
Proposed Interchanges	No.	5.33	16.16	5.33	14.44	5.34	15.47	5.33	14.44	5.19	16.18	5.19	15.49	5.19	14.45	5.19	14.19	5.14	13.90	5.73	13.63	6.49	13.69
		9		6		9		9		6		9		6		9		8		9		10	
Proposed Interchanges	No.	2	7	2	4	2	4	2	4	2	7	2	4	2	7	2	7	2	6	3	6	4	6
Natural Resource Impacts																							
Modeled Wetlands	Acres	249.78		244.19		238.08		233.75		314.83		309.25		304.73		299.67		291.88		270.35		291.03	
		107.05	142.73	107.05	137.14	107.03	131.05	107.32	126.43	176.79	138.04	176.79	132.46	176.77	127.96	176.77	122.90	169.96	121.92	158.83	111.52	183.45	107.58
NWI / NC CREWS Wetlands	Acres	224.59		262.98		248.08		236.95		216.73		255.12		240.58		232.12		245.16		253.18		282.63	
		36.32	188.27	36.32	226.66	36.31	211.77	36.96	199.99	34.80	181.93	34.80	220.32	34.79	205.79	34.79	197.33	27.72	217.44	42.83	210.35	79.15	203.48
Streams	Linear Feet / (Crossings) ³	25,845 (23)		14,805		20,824 (15)		20,906 (15)		26,935 (24)		15,895 (19)		21,609 (16)		22,089 (16)		18,919 (16)		25,221 (19)		30,369 (20)	
		2,575 (4)	23,270 (19)	2,574 (4)	12,231 (14)	2,574 (4)	18,250 (11)	2,474 (4)	18,432 (11)	3,664 (5)	23,270 (19)	3,664 (5)	12,231 (14)	3,664 (5)	17,946 (11)	3,656 (5)	18,432 (11)	3,084 (5)	15,834 (11)	5,948 (7)	19,273 (12)	7,664 (7)	22,705 (13)
Ponds	Acres	18.15		18.04		21.80		22.69		16.27		16.16		20.04		20.18		21.99		20.65		30.84	
		7.19	10.96	7.19	10.85	7.15	14.65	7.20	15.49	5.17	11.10	5.17	10.99	5.17	14.87	5.17	15.01	6.16	15.83	6.52	14.13	16.10	14.74
HQW	Linear Feet	926		533		925		925		926		533		925		925		925		925		925	
			926		533		925		925		926		533		925		925		925		925		925
Designated Shellfish Harvest Area ⁴	Acres	0		0		0		0		0		0		0		0		0		0		0.08	
																						0.08	
Essential Fish Habitat ⁵	Acres	0		0		0		0		0		0		0		0		0		3.43		38.80	
SC Critical Area	Acres	0		0		0		0		0		0		0		0		0		0		76.15	
																						76.15	
Known Federally Protected Species ⁶	Study Area Occurrence	0		0		0		0		0		0		0		0		0		0		0	
100-Year Floodplain	Acres	112.40		51.94		213.95		204.22		112.40		51.94		198.69		202.21		202.52		180.05		214.13	
			112.40		51.94		213.95		204.22		112.40		51.94		198.69		202.21		202.52		180.05		31.40
Floodway	Acres	2.46		1.10		2.46		2.46		2.46		1.10		2.46		2.46		2.46		2.46		2.46	
			2.46		1.10		2.46		2.46		2.46		1.10		2.46		2.46		2.46		2.46		2.46
Human Environment Impacts																							
Residential – Single Family / Mobile Home	No. Structures	145		161		179		225		91		107		126		169		151		246		287	
		64	81	64	97	63	116	63	162	9	82	9	98	9	117	9	160	9	142	41	205	54	233
Residential – Apartment / Condominium ⁷	No. Structures	4		4		4		4		4		4		4		4		13		15		31	
			4		4		4		4				4				4		13		15		31

Corridor Concept																									
Impact Category ^{1,2}	Measure	1	1A	2	3	4	4A	5	6	7	8	9													
		Total		Total		Total		Total		Total		Total													
		SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	SC	NC	Total									
Commercial / Industrial ⁶	No. Structures	111		45		117		121		110		44		116		114		107		118		140			
		29	82	29	16	29	88	29	92	24	86	24	20	24	92	24	90	24	83	24	94	44	96		
		32.95		36.80		22.71		36.11		43.29		47.13		38.77		42.67		91.80		48.42		65.42			
Approved / Planned Residential Dev.	Acres	8.86	24.09	8.86	27.94	8.86	13.85	8.86	27.25	16.25	27.04	16.25	30.89	16.24	22.53	14.08	28.59	19.85	71.95	25.57	22.85	49.34	16.08		
		0.57		0		0.57		0.57		0.57		0.57		0.57		0.57		0.57		0.57		1.68			
Public Park	Acres		0.57				0.57		0.57		0.57				0.57		0.57		0.57		0.57	1.11	0.57		
		4		4		9		11		1		1		6		8		3		4		4			
Church	No. Properties	3	1	3	1	3	6	3	8		1		1		6		8		3		4		4		
		2		1		2		5			5		4		5		7		3		4		4		
Cemetery ⁹	Boundary		2		1		2	1	4	3	3	2	3	3	3	4	3	4	1	2	1	3	1	3	
		0		1		0		0		0		1		0		0		0		0		0		0	
EMS / Fire Station	No. Structures				1								1												
		16.13 (1)		0		28.80 (2)		47.45 (4)		16.13 (1)		16.13 (1)		0		28.80 (2)		45.98 (4)		65.48 (4)		19.28 (2)		34.55 (4)	
Golf Course ¹⁰	Acres (No. Courses)		16.13 (1)				28.80 (2)		47.45 (4)		16.13 (1)				28.80 (2)		45.98 (4)		7.56 (1)		57.93 (4)		3.13 (1)		31.42 (4)
		0		0		0		1		0		0		0		1		0		0		0		0	
Library	No. Structures								1								1								
Physical Environment Impacts																									
Hazardous Waste Site - RCRA	No. Sites	2		1		2		2		2		1		2		2		2		3		3			
		1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2		
Registered USTs	No. Sites	6		6		6		6		6		6		6		6		6		6		7			
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3		
Communication Tower	No. Structures	2		2		2		2		2		2		2		2		2		1		1		1	
			2		2		2		2				2						1		1		1		
Electrical Substation	No. Sites	1		1		2		2		2		0		1		1		1		0		0		0	
		1		1		1	1	1	1	1	1					1									
Water Tower	No. Structures	1		1		1		1		0		0		0		0		0		0		0		0	
		1		1		1		1		1					1										
Wastewater Treatment Plant	No. Sites	1		1		1		1		0		0		0		0		0		0		0		0	
		1		1		1		1		1															
NPDES Stormwater Permit	No. Sites	1		0		1		1		1		0		1		1		1		1		1		1	
			1						1			1							1		1		1		

¹ Impacts based on 400-foot impact boundary (generally 200 feet each side of concept centerline).

² Potential impacts are not anticipated for the following resource categories: Determined Eligible Historic sites/boundaries, NC Natural Heritage Areas, NC Anadromous Fish Spawning Areas, NC Primary Nursery Areas, public water supply wells, 303(d) waters, daycares, private conservation easements, government facilities, hospitals, recreational facilities, or schools.

³ Number of L-line crossings.

⁴ Harvest Areas classification of Prohibited located within the study area.

⁵ Essential Fish Habitat for Snapper, Grouper located within the study area.

⁶ NC: American Alligator (T); SC: Spotted Turtle and Wood Stork are found within 3-miles of the study area and may occur within the study area where suitable habitat exists. SCDNR recommends surveys to rule out presence of species before proceeding with construction at the determined project location.

⁷ Structure count only – apartment and condominium buildings within the same complex are counted individually.

⁸ Structure count only - multiple businesses may be located within a structure.

⁹ Cemetery spans the NC / SC border for Concepts 4, 4A and 5.

¹⁰ Farmstead Golf Links spans the NC / SC border. Only the NC portion of Farmstead Links is crossed in Concepts 3 and 6. Concept 7 crosses both NC and SC portions of Farmstead Links.