

Appendix D

Cost Estimates

Hybrid Alternative

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
West Bypass/State Highway FF						
Construction of 4 Lane Typical Section from a 2 Lane Typical Section AC	Weaver Road	Farm Road 194	2.25	Miles	\$ 4,000,000.00	\$ 9,000,000.00
Nelson Mill Bridge			1	LS	\$ 5,000,000.00	\$ 5,000,000.00
Construction of 4 Lane Typical Section	Farm Road 194	State Highway 14	4.36	Miles	\$ 7,000,000.00	\$ 30,520,000.00
Construction of a 4 Land Typical Section	State Highway 14	US 160	3.14	Miles	\$ 7,000,000.00	\$ 21,980,000.00
Subtotal						\$ 66,500,000.00
Right - Of - Way Cost (110 foot wide x 11880 foot long)	Weaver Road	Farm Road 194	1306800.00	sq. ft.	\$ 6.00	\$ 7,840,800.00
Right - Of - Way Cost (150 foot wide x 23020.8 foot long)	Farm Road 194	State Highway 14	3453120.00	sq. ft.	\$ 4.00	\$ 13,812,480.00
Right - Of - Way Cost (150 foot wide x 16579.2 foot long)	State Highway 14	US 160	2486880.00	sq. ft.	\$ 4.00	\$ 9,947,520.00
Subtotal						\$ 31,600,800.00
Kansas Expressway						
Construction of 4 Lane Typical Section **	Republic Road	Steinert Road	2.47	Miles		\$ 14,649,196.45
Construction of 4 Lane Typical Section	Steinert Road	West Bypass/Highway	3.65	Miles	\$ 7,000,000.00	\$ 25,550,000.00
James River Bridge			2	EA	\$ 4,000,000.00	\$ 8,000,000.00
Subtotal						\$ 48,199,196.45
Right - Of - Way Cost (150 foot wide x 19272 foot long)	Steinert Road	West Bypass/Highway	2890800.00	sq. ft.	\$ 4.00	\$ 11,563,200.00
Subtotal						\$ 11,563,200.00
Est. Drainage Structures					5%	\$ 5,734,959.82
Env. Documentation					3%	\$ 3,440,975.89
Design Fees					8%	\$ 9,175,935.72
Construction Eng.					10%	\$ 11,469,919.65
Subtotal						\$ 29,821,791.08
James River Freeway Interchange Work			2	EA	\$ 15,000,000.00	\$ 30,000,000.00
Estimated Total						\$ 217,684,987.53

** Data received from the Kansas Expressway Extension Plan

Kansas Expressway

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
Construction of 4 Lane Typical Section **	Republic Road	Steinert Road	2.47	Miles		\$ 14,649,196.45
Construction of 4 Lane Typical Section	Steinert Road	State Highway 14	4.49	Miles	\$ 7,000,000.00	\$ 31,430,000.00
James River Bridge (2 Structures Total)			1	EA	\$ 12,000,000.00	\$ 12,000,000.00
Subtotal						\$ 58,079,196.45
Est. Drainage Structures					5%	\$ 2,903,959.82
Env. Documentation					3%	\$ 1,742,375.89
Design Fees					8%	\$ 4,646,335.72
Construction Eng.					10%	\$ 5,807,919.65
Subtotal						\$ 15,100,591.08
Right - Of - Way Cost (150 foot wide x 23707.2 foot long)	Steinert Road	State Highway 14	3556080.0	sq. ft.	\$ 4.00	\$ 14,224,320.00
James River Freeway Interchange Work			1	LS	\$ 15,000,000.00	\$ 15,000,000.00
Estimated Total						\$ 102,404,107.53

** Data received from the Kansas Expressway Extension Plan

West Bypass/State Highway FF

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
Construction of 4 Lane Typical Section from a 2 Lane Typical Section AC	Weaver Road	Farm Road 194	2.25	Miles	\$ 4,000,000.00	\$ 9,000,000.00
Nelson Mill Bridge			1	LS	\$ 6,000,000.00	\$ 6,000,000.00
Construction of 4 Lane Typical Section	Farm Road 194	State Highway 14	4.36	Miles	\$ 7,000,000.00	\$ 30,520,000.00
Subtotal						\$ 45,520,000.00
Est. Drainage Structures					5%	\$ 2,276,000.00
Env. Documentation					3%	\$ 1,365,600.00
Design Fees					8%	\$ 3,641,600.00
Construction Eng.					10%	\$ 4,552,000.00
Subtotal						\$ 11,835,200.00
Right - Of - Way Cost (110 foot wide x 11880 foot long)	Weaver Road	Farm Road 194	1306800.0	sq. ft.	\$ 6.00	\$ 7,840,800.00
Right - Of - Way Cost (150 foot wide x 23020.8 foot long)	Farm Road 194	State Highway 14	3453120.0	sq. ft.	\$ 4.00	\$ 13,812,480.00
James River Freeway Interchange Work			1	LS	\$ 15,000,000.00	\$ 15,000,000.00
Estimated Total						\$ 94,008,480.00

National Avenue

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
Construction of 4 Lane Typical Section from a 2 Lane Typical Section	Lakewood Street	Farm Road 192	2.10	Miles	\$ 4,000,000.00	\$ 8,400,000.00
Construction of 4 Lane Typical Section	Farm Road 192	State Highway CC	2.46	Miles	\$ 7,000,000.00	\$ 17,220,000.00
James River Bridge			1	LS	\$ 8,500,000.00	\$ 8,500,000.00
Construction of 4 Lane Typical Section from a 2 Lane Typical Section (Cheyenne)	State Highway CC	State Highway 14	2.12	Miles	\$ 7,000,000.00	\$ 14,840,000.00
Subtotal						\$ 48,960,000.00
Est. Drainage Structures					5%	\$ 2,448,000.00
Env. Documentation					3%	\$ 1,468,800.00
Design Fees					8%	\$ 3,916,800.00
Construction Eng.					10%	\$ 4,896,000.00
Subtotal						\$ 12,729,600.00
Right - Of - Way Cost (150 foot wide x 11088 foot long)	Lakewood Street	Farm Road 192	1663200.0	sq. ft.	\$ 7.00	\$ 11,642,400.00
Right - Of - Way Cost (150 foot wide x 12988.8 foot long)	Farm Road 192	State Highway CC	1948320.0	sq. ft.	\$ 6.00	\$ 11,689,920.00
Right - Of - Way Cost (150 foot wide x 11193.6 foot long)	State Highway CC	State Highway 14	1679040.0	sq. ft.	\$ 8.00	\$ 13,432,320.00
James River Freeway Interchange Work			1	LS	\$ 15,000,000.00	\$ 15,000,000.00
Estimated Total						\$ 113,454,240.00

Campbell Avenue/U.S. 160

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
James River Freeway Interchange Alterations			1	EA	\$ 10,000,000.00	\$ 10,000,000.00
Construction for Widening of 4 Lane Typical Section to 6 Lane Typical Section	James River Freeway	Weaver Road	1.80	Lane Miles	\$ 2,000,000.00	\$ 3,600,000.00
Construction for Widening of 4 Lane Typical Section to 6 Lane Typical Section	Weaver Road	State Highway 14	11.02	Lane Miles	\$ 2,000,000.00	\$ 22,040,000.00
James River Bridge (Widen 4 Existing Structures)			1	LS	\$ 6,000,000.00	\$ 6,000,000.00
Subtotal						\$ 41,640,000.00
Est. Drainage Structures					5%	\$ 2,082,000.00
Env. Documentation					3%	\$ 1,249,200.00
Design Fees					8%	\$ 3,331,200.00
Construction Eng.					10%	\$ 4,164,000.00
Subtotal						\$ 10,826,400.00
Right - Of - Way Cost (30 foot wide/side; 60 foot wide total x 4752 foot long)	James River Freeway	Weaver Road	285120.0	sq. ft.	\$ 10.00	\$ 2,851,200.00
Right - Of - Way Cost (30 foot wide/side; 60 foot wide total x 29092.8 foot long)	Weaver Road	State Highway 14	1745568.0	sq. ft.	\$ 8.00	\$ 13,964,544.00
James River Freeway Interchange Work			1	LS	\$ 15,000,000.00	\$ 15,000,000.00
Estimated Total						\$ 84,282,144.00

U.S. 160 to Willard (Widening)

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
Construction of 4 Lane Typical Section from a 2 Lane Typical Section	Interstate 44	Missouri Highway 123	8.37	Miles	\$ 4,000,000.00	\$ 33,480,000.00
Subtotal						\$ 33,480,000.00
Est. Drainage Structures					5%	\$ 1,674,000.00
Env. Documentation					3%	\$ 1,004,400.00
Design Fees					8%	\$ 2,678,400.00
Construction Eng.					10%	\$ 3,348,000.00
Subtotal						\$ 8,704,800.00
Right - Of - Way Cost						
Estimated Total						\$ 42,184,800.00

Missouri Highway 13 to I-44

Item	From	To	Number of Units	Unit	Unit Cost	Estimated Cost
Construction of 4 Lane Typical Section	Farm Road 80	Interstate 44	3.93	Miles	\$ 7,000,000.00	\$ 27,510,000.00
Subtotal						\$ 27,510,000.00
Est. Drainage Structures					5%	\$ 1,375,500.00
Env. Documentation					3%	\$ 825,300.00
Design Fees					8%	\$ 2,200,800.00
Construction Eng.					10%	\$ 2,751,000.00
Subtotal						\$ 7,152,600.00
Right - Of - Way Cost (150 foot wide x 20750.4 foot long)	Farm Road 80	Interstate 44	3112560.0	sq.ft.	\$ 4.00	\$ 12,450,240.00
Estimated Total						\$ 47,112,840.00