

APPENDIX F

Estimates and Engineering Information

**SUMMARY OF ESTIMATED NEW CONSTRUCTION COSTS FOR ALTERNATIVE O-1
FROM OLD PASCO ROAD TO FORT KING ROAD**

TYPICAL SECTION	Urban 4-Lane Divided			
	w/Sidewalk and Multiuse Path			
SEGMENT	A	B	C	TOTAL
Mainline	\$13,812,685	\$11,893,674	\$12,661,007	\$38,367,366
Multi-use Path	\$667,721	\$574,982	\$612,077	\$1,854,780
Bridge	\$1,999,000	\$0	\$0	\$1,999,000
Intersections				
Old Pasco Road	\$168,000	\$0	\$0	\$168,000
McKendree Road	\$86,000	\$0	\$0	\$86,000
Boyette Road	\$489,000	\$0	\$0	\$489,000
Curley Road	\$0	\$602,000	\$0	\$602,000
Handcart Road	\$0	\$461,000	\$0	\$461,000
Hackamore Road	\$0	\$0	\$239,000	\$239,000
Artifact Road	\$0	\$0	\$69,000	\$69,000
Fairview Heights Road	\$0	\$0	\$79,000	\$79,000
Fort King Road	\$0	\$0	\$217,000	\$217,000
Total	\$17,222,406	\$13,531,656	\$13,877,084	\$44,631,146
Design (15% Construction)	\$2,583,361	\$2,029,748	\$2,081,563	\$6,694,672
CEI (10% Construction)	\$1,722,241	\$1,353,166	\$1,387,708	\$4,463,115
Total	\$4,305,602	\$3,382,914	\$3,469,271	\$11,157,787
TOTAL COSTS	\$21,528,008	\$16,914,570	\$17,346,355	\$55,788,933

**SUMMARY OF ESTIMATED NEW CONSTRUCTION COSTS FOR ALTERNATIVE O-2
FROM OLD PASCO ROAD TO FORT KING ROAD**

TYPICAL SECTION	Urban 4-Lane Divided			
	w/Sidewalk and Multiuse Path			
SEGMENT	A	B	C	TOTAL
Mainline	\$13,873,218	\$11,248,555	\$12,373,411	\$37,495,184
Multi-use Path	\$673,283	\$545,905	\$600,495	\$1,819,683
Bridge	\$1,999,000	\$0	\$0	\$1,999,000
Intersections				
Old Pasco Road	\$168,000	\$0	\$0	\$168,000
McKendree Road	\$86,000	\$0	\$0	\$86,000
Boyette Road	\$489,000	\$0	\$0	\$489,000
Curley Road	\$0	\$602,000	\$0	\$602,000
Handcart Road	\$0	\$461,000	\$0	\$461,000
Hackamore Road	\$0	\$0	\$239,000	\$239,000
Artifact Road	\$0	\$0	\$69,000	\$69,000
Fairview Heights Road	\$0	\$0	\$79,000	\$79,000
Fort King Road	\$0	\$0	\$217,000	\$217,000
Total	\$17,288,501	\$12,857,460	\$13,577,906	\$43,723,867
Design (15% Construction)	\$2,593,275	\$1,928,619	\$2,036,686	\$6,558,580
CEI (10% Construction)	\$1,728,850	\$1,285,746	\$1,357,791	\$4,372,387
Total	\$4,322,125	\$3,214,365	\$3,394,477	\$10,930,967
TOTAL COSTS	\$21,610,626	\$16,071,825	\$16,972,383	\$54,654,834

**SUMMARY OF ESTIMATED NEW CONSTRUCTION COSTS FOR ALTERNATIVE O-3
FROM OLD PASCO ROAD TO FORT KING ROAD**

TYPICAL SECTION	Urban 4-Lane Divided			
	w/Sidewalk and Multiuse Path			
SEGMENT	A	B	C	TOTAL
Mainline	\$13,877,000	\$11,546,000	\$11,808,000	\$37,231,000
Multi-use Path	\$673,457	\$560,340	\$573,051	\$1,806,848
Bridge	\$1,999,000	\$0	\$0	\$1,999,000
Intersections				
Old Pasco Road	\$168,000	\$0	\$0	\$168,000
McKendree Road	\$86,000	\$0	\$0	\$86,000
Boyette Road	\$489,000	\$0	\$0	\$489,000
Curley Road	\$0	\$602,000	\$0	\$602,000
Handcart Road	\$0	\$461,000	\$0	\$461,000
Hackamore Road	\$0	\$0	\$239,000	\$239,000
Artifact Road	\$0	\$0	\$69,000	\$69,000
Fairview Heights Road	\$0	\$0	\$79,000	\$79,000
Fort King Road	\$0	\$0	\$217,000	\$217,000
Total	\$17,292,457	\$13,169,340	\$12,985,051	\$43,446,848
Design (15% Construction)	\$2,593,869	\$1,975,401	\$1,947,758	\$6,517,027
CEI (10% Construction)	\$1,729,246	\$1,316,934	\$1,298,505	\$4,344,685
Total	\$4,323,114	\$3,292,335	\$3,246,263	\$10,861,712
TOTAL COSTS	\$21,615,571	\$16,461,675	\$16,231,314	\$54,308,560

**MITIGATION COSTS FOR ALTERNATIVE O-1
FROM OLD PASCO ROAD TO FORT KING ROAD**

ALTERNATIVE O-1				
Segment	A	B	C	Total
Typical section	Urban 4-Lane Div ided	Urban 4-Lane Div ided	Urban 4-Lane Div ided	
Required ROW (Width--Ft)	166	166	166	
Affected Wetlands (Acres)	4.44	5.10	4.71	14.25
Mitigation Construction (\$85,000/affected Acre)	\$377,400	\$433,500	\$400,350	\$1,211,250
Design (15% Construction)	\$56,610	\$65,025	\$60,053	\$181,688
CEI (10% Construction)	\$37,740	\$43,350	\$40,035	\$121,125
Mitigation ROW Required (Ratio 2.5:1 Acres)	11.10	12.75	11.78	35.63
Mitigation ROW Costs (ROW x \$48,000/Ac x 3.0)	\$1,598,400	\$1,836,000	\$1,695,600	\$5,130,000
Total Cost for Mitigation	\$2,070,150	\$2,377,875	\$2,196,038	\$6,644,063

**MITIGATION COSTS FOR ALTERNATIVE O-2
FROM OLD PASCO ROAD TO FORT KING ROAD**

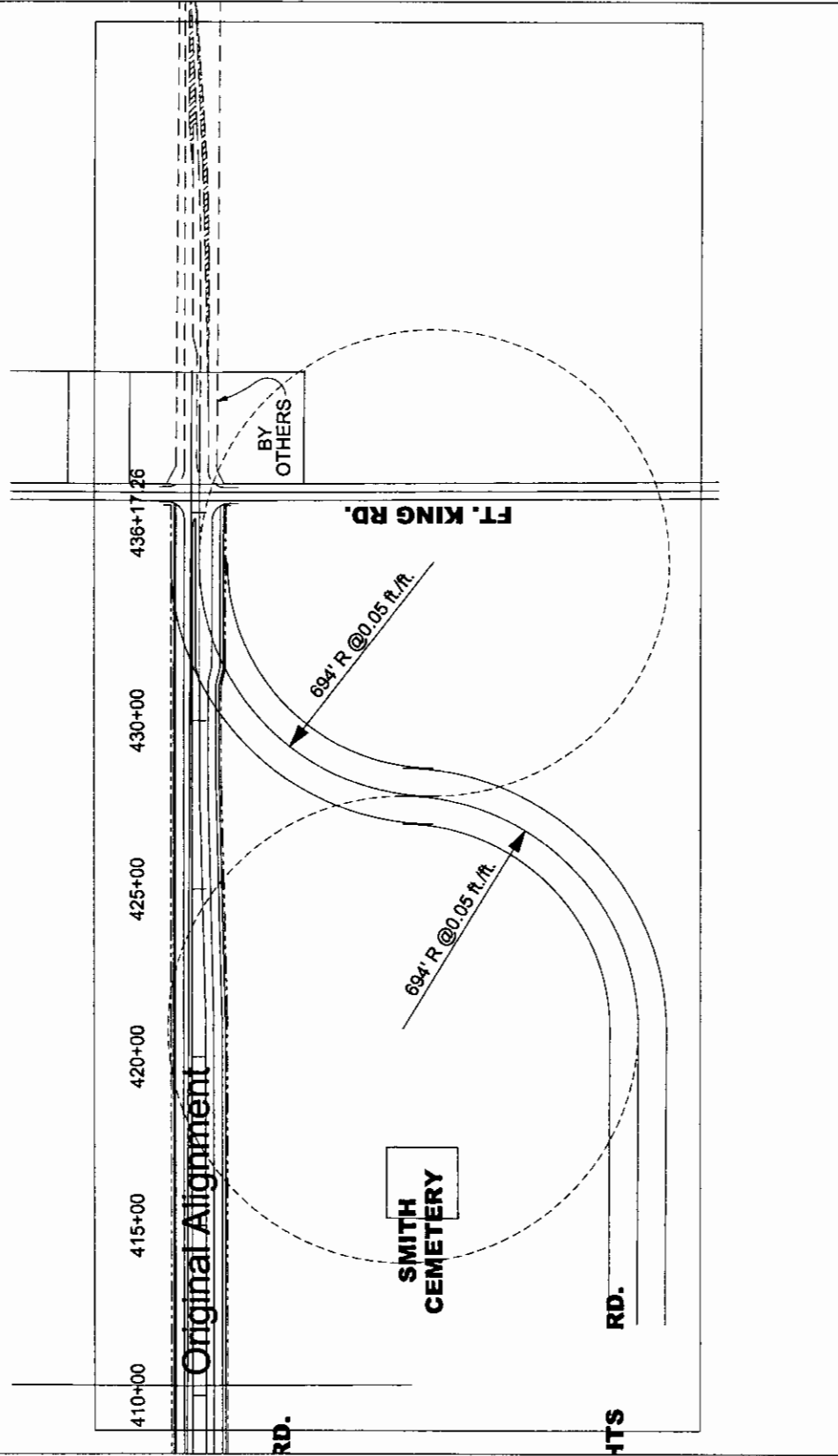
ALTERNATIVE O-2				
Segment	A	B	C	Total
Typical section	Urban 4-Lane Div ided	Urban 4-Lane Div ided	Urban 4-Lane Div ided	
Required ROW (Width--Ft)	166	166	166	
Affected Wetlands (Acres)	3.61	1.70	1.21	6.52
Mitigation Construction (\$85,000/affected Acre)	\$306,850	\$144,500	\$102,850	\$554,200
Design (15% Construction)	\$46,028	\$21,675	\$15,428	\$83,130
CEI (10% Construction)	\$30,685	\$14,450	\$10,285	\$55,420
Mitigation ROW Required (Ratio 2.5:1 Acres)	9.03	4.25	3.03	16.30
Mitigation ROW Costs (ROW x \$48,000/Ac x 3.0)	\$1,299,600	\$612,000	\$435,600	\$2,347,200
Total Cost for Mitigation	\$1,683,163	\$792,625	\$564,163	\$3,039,950

**MITIGATION COSTS FOR ALTERNATIVE O-3
FROM OLD PASCO ROAD TO FORT KING ROAD**

ALTERNATIVE O-3				
Segment	A	B	C	Total
Typical Section	Urban 4-Lane Div ided	Urban 4-Lane Div ided	Urban 4-Lane Div ided	
Required ROW (Width--Ft)	166	166	166	
Affected Wetlands (Acres)	3.53	5.31	3.18	12.02
Mitigation Construction (\$85,000/affected Acre)	\$300,050	\$451,350	\$270,300	\$1,021,700
Design (15% Construction)	\$45,008	\$67,703	\$40,545	\$153,255
CEI (10% Construction)	\$30,005	\$45,135	\$27,030	\$102,170
Mitigation ROW Required (Ratio 2.5:1 Acres)	8.83	13.28	7.95	30.05
Mitigation ROW Costs (ROW x \$48,000/Ac x 3.0)	\$1,270,800	\$1,911,600	\$1,144,800	\$4,327,200
Total Cost for Mitigation	\$1,645,863	\$2,475,788	\$1,482,675	\$5,604,325

Concept. 1

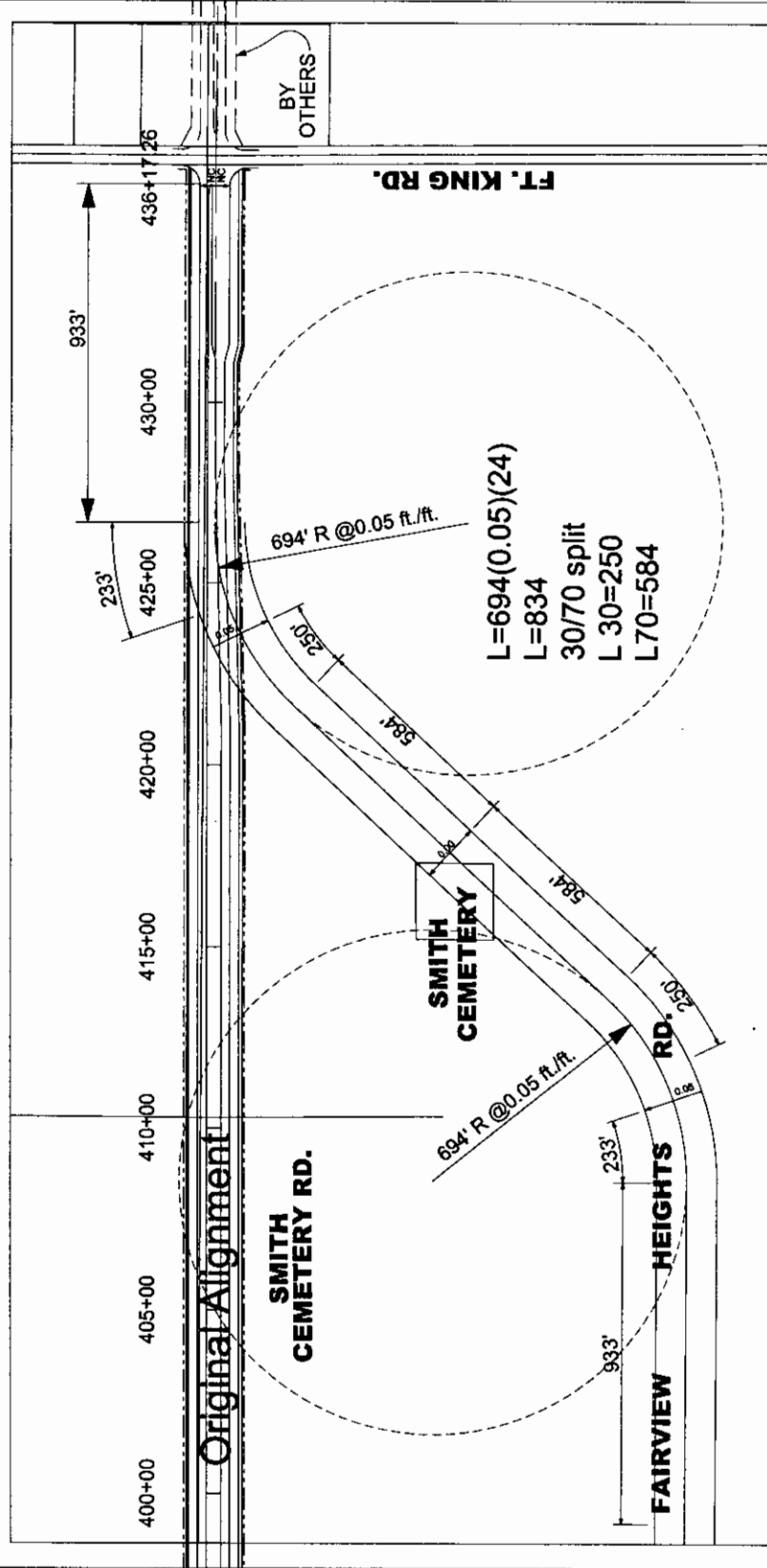
Shows no tangent for 0.05% superelevation can be attained at Ft. King Road and between the 2 curves in order to minimize wetland impacts for 45 MPH.



Concept 2

Governing factor is length of curve is 568',
thereby limiting the split ratio.

L=694(0.07)(24)
L=1166
20/80 split
L 20=233
L 80=933



Concept 3

L=819(0.05)(24)
 L=983
 30/70 split
 L 30=295
 L70=688

