US 67 CORRIDOR MASTER PLAN

APPENDIX O

FEBRUARY 2020

US 67 CORRIDOR
MASTER PLAN

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PRESIDIO INTERSECTION IMPROVEMENT US 67 AND BUS 67 - ALTERNATIVE A: "T-INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	1,174	$ 3,785
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	10	$ 1,226
752	6015	TREE AND BRUSH REMOVAL	AC		$ 5,500.00	1	$ 5,500

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	24	$ 24,976
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,527	$ 17,689
162	6002	BLOCK SODDING	SY		$ 5.00	3,729	$ 18,645
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	10,105	$ 118,729
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,021	$ 20,210
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,053	$ 20,616
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	88	$ 7,153
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	113	$ 8,163
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	1,172	$ 20,053
536	6002	CONC MEDIAN	SY		$ 43.52	363	$ 15,798
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	94	$ 8,460
536	6005	CONCRETE MEDIAN (NOSE)	SY		$ 77.89	14	$ 1,090
545	6001	CRASH CUSH ATTEN (INSTL)	EA		$ 11,452.85	2	$ 22,906
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 8,744

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 323,742
SIGNS 3%	$ 9,712
TRAFFIC CONTROL 5% (3 MONTHS)	$ 16,187
SUM TOTAL	$ 349,642
40% CONTINGENCY	$ 150,358
GRAND TOTAL ROUNDED	$ 500,000

PRESIDIO INTERSECTION IMPROVEMENT US 67 AND BUS 67 - ALTERNATIVE B: "ROUNDABOUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	1,242	$ 4,004
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	10	$ 1,226
752	6015	TREE AND BRUSH REMOVAL	AC		$ 5,500.00	1	$ 5,500

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	29	$ 30,180
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,602	$ 25,214
162	6002	BLOCK SODDING	SY		$ 5.00	2,747	$ 13,735
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	14,407	$ 169,275
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,882	$ 28,820
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	7,204	$ 29,392
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	126	$ 10,241
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	161	$ 11,631
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	402	$ 48,240
529	6001	CONC CURB (TY I)	LF		$ 7.98	393	$ 3,136
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	1,901	$ 32,526
536	6002	CONC MEDIAN	SY		$ 43.52	805	$ 35,034
536	6005	CONCRETE MEDIAN (NOSE)	SY		$ 77.89	2	$ 156
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 12,468

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 460,778
SIGNS 3%	$ 13,823
TRAFFIC CONTROL 5% (4 MONTHS)	$ 23,039
SUM TOTAL	$ 497,640
40% CONTINGENCY	$ 199,056
GRAND TOTAL ROUNDED	$ 700,000

PRESIDIO INTERSECTION IMPROVEMENT US 67 AND BUS 67 - ALTERNATIVE C: "RE-ROUTE"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	1,488	$ 4,797
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	11	$ 1,348
752	6015	TREE AND BRUSH REMOVAL	AC		$ 5,500.00	1	$ 5,500

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	35	$ 36,424
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	4,079	$ 28,553
162	6002	BLOCK SODDING	SY		$ 5.00	8,514	$ 42,570
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	16,316	$ 191,705
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	3,264	$ 32,640
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	8,158	$ 33,285
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	142	$ 11,542
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	182	$ 13,148
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	1,368	$ 23,406
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	182	$ 16,380
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 14,116

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 455,414
SIGNS 3%	$ 13,662
TRAFFIC CONTROL 5% (4 MONTHS)	$ 22,771
SUM TOTAL	$ 491,847
40% CONTINGENCY	$ 196,739
GRAND TOTAL ROUNDED	$ 700,000

PRESIDIO INTERSECTION IMPROVEMENT O'REILLY ST AND ERMA AVE-ALTERNATIVE A: "Y-INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,855	$ 37,657
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	4,904	$ 24,520
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736
752	6015	TREE AND BRUSH REMOVAL	AC		$ 5,500.00	1	$ 5,500
ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	42	$ 43,709
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,265	$ 22,855
162	6002	BLOCK SODDING	SY		$ 5.00	1,173	$ 5,865
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	13,058	$ 153,425
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,612	$ 26,120
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	6,529	$ 26,638
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	114	$ 9,266
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	146	$ 10,547
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	5,186	$ 88,732
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	2,575	$ 105,858
536	6002	CONC MEDIAN	SY		$ 43.52	76	$ 3,308
536	6005	CONCRETE MEDIAN (NOSE)	SY		$ 77.89	10	$ 779
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 11,300

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 576,815
SIGNS 3%	$ 17,304
TRAFFIC CONTROL 5% (5 MONTHS)	$ 28,841
SUM TOTAL	$ 622,960
40% CONTINGENCY	$ 249,184
GRAND TOTAL ROUNDED	$ 900,000

PRESIDIO INTERSECTION IMPROVEMENT O'REILLY ST AND ERMA AVE-ALTERNATIVE B: "ROUNDABOUT RAISED CURB"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,855	$ 37,657
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	4,904	$ 15,791
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736
752	6015	TREE AND BRUSH REMOVAL	AC		$ 5,500.00	1	$ 5,500

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	42	$ 43,709
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,526	$ 24,682
162	6002	BLOCK SODDING	SY		$ 5.00	1,993	$ 9,965
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	14,103	$ 165,703
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,821	$ 28,210
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	7,052	$ 28,772
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	123	$ 9,997
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	157	$ 11,342
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	489	$ 58,680
529	6001	CONC CURB (TY I)	LF		$ 7.98	799	$ 6,376
529	6002	CONC CURB & GUTTER (TY II)	LF		$ 17.11	5,655	$ 96,757
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	2,241	$ 92,128
536	6002	CONC MEDIAN	SY		$ 43.52	108	$ 4,700
536	6005	CONCRETE MEDIAN (NOSE)	SY		$ 77.89	2	$ 156
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 12,201

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 653,062
SIGNS 3%	$ 19,592
TRAFFIC CONTROL 5% (5 MONTHS)	$ 32,653
SUM TOTAL	$ 705,307
40% CONTINGENCY	$ 282,123
GRAND TOTAL ROUNDED	$ 1,000,000

PRESIDIO INTERSECTION IMPROVEMENT O'REILLY ST AND ERMA AVE-ALTERNATIVE C: "ROUNDABOUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,855	$ 37,657
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	4,904	$ 24,520
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736
752	6015	TREE AND BRUSH REMOVAL	AC		$ 5,500.00	1	$ 5,500
ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	42	$ 43,709
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,686	$ 25,802
162	6002	BLOCK SODDING	SY		$ 5.00	2,909	$ 14,545
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	14,743	$ 173,223
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,949	$ 29,490
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	7,372	$ 30,078
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	129	$ 10,485
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	164	$ 11,847
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	489	$ 58,680
529	6001	CONC CURB (TY I)	LF		$ 7.98	799	$ 6,376
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	5,640	$ 96,500
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	2,514	$ 103,351
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 12,756

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 685,255
SIGNS 3%	$ 20,558
TRAFFIC CONTROL 5% (5 MONTHS)	$ 34,263
SUM TOTAL	$ 740,075
40% CONTINGENCY	$ 296,030
GRAND TOTAL ROUNDED	$ 1,100,000

PRESIDIO INTERSECTION IMPROVEMENT FM 170, UTOPIA ST AND US 67 - ALTERNATIVE A: "4-WAY INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	64	$ 66,604
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	4,859	$ 34,013
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	19,436	$ 228,363
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	3,888	$ 38,880
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	9,718	$ 39,649
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	170	$ 13,818
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	216	$ 15,604
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	1,136	$ 102,240
6XX	6XXX	PAV MARK	LS		5% OF PAVEMENT COST		$ 16,816

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 555,986
SIGNS 3%	$ 16,680
TRAFFIC CONTROL 5% (3 MONTHS)	$ 27,799
SUM TOTAL	$ 600,465
40% CONTINGENCY	$ 240,186
GRAND TOTAL ROUNDED	$ 850,000

PRESIDIO INTERSECTION IMPROVEMENT FM 170, UTOPIA ST AND US 67 - ALTERNATIVE B: "TWO-WAY LEFT-TURN LANE"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	64	$ 66,604
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,870	$ 20,090
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	11,478	$ 134,861
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,296	$ 22,960
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,739	$ 23,415
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	100	$ 8,128
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	128	$ 9,247
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	146	$ 13,108
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 9,931

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 308,343
SIGNS 3%	$ 9,250
TRAFFIC CONTROL 5% (3 MONTHS)	$ 15,417
SUM TOTAL	$ 333,010
40% CONTINGENCY	$ 133,204
GRAND TOTAL ROUNDED	$ 500,000

PRESIDIO INTERSECTION IMPROVEMENT FM 170, UTOPIA ST AND US 67 - ALTERNATIVE C: "4-LANE SEGMENT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	30	$ 31,220
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	7,005	$ 49,035
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	28,020	$ 329,221
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	5,604	$ 56,040
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	14,010	$ 57,161
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	244	$ 19,832
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	312	$ 22,539
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	244	$ 21,924
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 24,240

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 611,212
SIGNS 3%	$ 18,336
TRAFFIC CONTROL 5% (3 MONTHS)	$ 30,561
SUM TOTAL	$ 660,109
40% CONTINGENCY	$ 264,044
GRAND TOTAL ROUNDED	$ 950,000

PRESIDIO INTERSECTION IMPROVEMENT HARRINGTON ST & BLEDSOE BLVD AT US 67 - ALTERNATIVE A: "4-WAY INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	525	$ 2,625
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	4	$ 490

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	34	$ 35,383
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,598	$ 18,186
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	10,391	$ 122,089
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,079	$ 20,790
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,196	$ 21,200
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	91	$ 7,396
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	116	$ 8,380
529	6002	CONC CURB (TY II)	LF		$ 11.07	1,642	$ 18,174
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	884	$ 36,341
536	6002	CONC MEDIAN	SY		$ 43.52	224	$ 9,748
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	460	$ 41,400
536	6005	CONC MEDIAN (NOSE)	SY		$ 77.89	16	$ 1,246
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 8,993

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 352,442
SIGNS 3%	$ 10,573
TRAFFIC CONTROL 5% (3 MONTHS)	$ 17,622
SUM TOTAL	$ 380,637
40% CONTINGENCY	$ 152,255
GRAND TOTAL ROUNDED	$ 550,000

PRESIDIO INTERSECTION IMPROVEMENT HARRINGTON ST & BLEDSOE BLVD AT US 67 - ALTERNATIVE B: "CLOSING BLEDSOE BLVD"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	19	$ 5,985
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	940	$ 12,399
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	306	$ 985
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	3	$ 368

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	34	$ 35,383
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,397	$ 16,779
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	9,585	$ 112,619
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,917	$ 19,170
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	4,793	$ 19,555
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	84	$ 6,828
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	107	$ 7,730
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	2,652	$ 45,376
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	1,064	$ 43,741
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	164	$ 14,760
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 8,295

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 349,972
SIGNS 3%	$ 10,499
TRAFFIC CONTROL 5% (3 MONTHS)	$ 17,499
SUM TOTAL	$ 377,970
40% CONTINGENCY	$ 151,188
GRAND TOTAL ROUNDED	$ 550,000

PRESIDIO INTERSECTION IMPROVEMENT HARRINGTON ST & BLEDSOE BLVD AT US 67 - ALTERNATIVE C: "PEANUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	561	$ 2,805
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	1	$ 123

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	34	$ 35,383
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	1,592	$ 11,144
162	6002	BLOCK SODDING	SY		$ 5.00	84	$ 420
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	6,366	$ 74,797
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,274	$ 12,740
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	3,183	$ 12,987
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	56	$ 4,552
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	71	$ 5,129
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	132	$ 15,840
529	6001	CONC CURB (TY I)	LF		$ 7.97	308	$ 2,455
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	840	$ 14,372
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	456	$ 18,746
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	301	$ 27,090
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 5,510

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 244,093
SIGNS 3%	$ 7,323
TRAFFIC CONTROL 5% (3 MONTHS)	$ 12,205
SUM TOTAL	$ 263,620
40% CONTINGENCY	$ 105,448
GRAND TOTAL ROUNDED	$ 400,000

PRESIDIO INTERSECTION IMPROVEMENT POE CONGESTION RELIEF - ALTERNATIVE A: "PARKING CAPACITY AT POE"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
752	6013	TREE AND BRUSH REMOVAL	AC		$ 5,304.37	33	175044

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6001	PREPAING ROW	AC		$ 4,724.50	33	$ 155,909
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	41,799	$ 292,593
150	6002	BLADING	HR		$ 124.00	400	$ 49,600
162	6002	BLOCK SODDING	SY		$ 5.00	10,656	$ 53,280
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	167,194	$ 1,964,446
310	6009	PRIME COAT (MC-30)	GAL		$ 5.00	33,439	$ 167,195
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	83,597	$ 341,076
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	1,454	$ 118,181
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	1,858	$ 134,222
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	21,174	$ 362,287
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	5,066	$ 455,940
666	6003	REFL PAV MRK TY I (W) 4" (BRK) (100MIL)	LF		$ 0.46	1,026	$ 472
666	6012	REFL PAV MRK TY I (W) 4" (SLD) (100MIL)	LF		$ 0.61	36,840	$ 22,472
666	6224	PAVEMENT SEALER 4"	LF		$ 0.14	$ 37,866.00	$ 5,301

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 4,298,018
SIGNS 3%	$ 128,941
TRAFFIC CONTROL 10% (10 MONTHS)	$ 429,802
SUM TOTAL	$ 4,856,761
40% CONTINGENCY	$ 1,942,704
GRAND TOTAL ROUNDED	$ 6,800,000

PRESIDIO INTERSECTION IMPROVEMENT POE CONGESTION RELIEF ALTERNATIVE B: "UTOPIA STREET RELIEF ROUTE"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	520	$ 2,600

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	190	$ 197,729
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	9,789	$ 68,523
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	39,153	$ 460,028
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	7,831	$ 78,310
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	19,577	$ 79,874
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	341	$ 27,716
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	436	$ 31,497
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	1,160	$ 104,400
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 33,871
XXX	XXXX	BRIDGE STRUCTURE	SF		$ 100.00	60,568	$ 6,056,800

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 7,141,349
SIGNS 3%	$ 214,240
TRAFFIC CONTROL 10% (8 MONTHS)	$ 714,135
SUM TOTAL	$ 8,069,724
40% CONTINGENCY	$ 3,227,890
GRAND TOTAL ROUNDED	$ 11,300,000

PRESIDIO INTERSECTION IMPROVEMENT POE CONGESTION RELIEF - ALTERNATIVE C: "ERMA AVENUE RELIEF ROUTE OVER CIBOLO CREEK"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALKS)	SY		$ 13.19	4,025	$ 53,090
104	6028	REMOVING CONC (MISC)	SY		$ 21.05	47	$ 989
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	5,628	$ 28,140

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	264	$ 274,740
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	15,357	$ 107,499
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	61,425	$ 721,713
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	12,285	$ 122,850
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	30,713	$ 125,309
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	535	$ 43,485
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	683	$ 49,340
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	8,197	$ 140,251
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	7,002	$ 287,847
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	593	$ 53,413
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 53,135
XXX	XXXX	BRIDGE STRUCTURE	SF		$ 100.00	77,356	$ 7,735,600

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 9,797,400
SIGNS 3%	$ 293,922
TRAFFIC CONTROL 10% (15 MONTHS)	$ 979,740
SUM TOTAL	$ 11,071,062
40% CONTINGENCY	$ 4,428,425
GRAND TOTAL ROUNDED	$ 15,500,000

MARFA INTERSECTION IMPROVEMENT SAN ANTONIO STREET AND HIGHLAND AVENUE - ALTERNATIVE A: "WITH BICYCLE LANES"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,333	$ 30,772
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	2,174	$ 10,870
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	20	$ 2,452

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	6	$ 6,244
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,254	$ 15,778
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	9,016	$ 111,257
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,804	$ 18,040
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	4,508	$ 18,393
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	79	$ 6,421
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	101	$ 7,296
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	2,217	$ 37,933
531	6001	CONC SIDEWALKS (4")	SY		$ 40.97	1,714	$ 70,227
666	6003	REFL PAV MRK TY I (W)4"(BRK)(100MIL)	LF		$ 0.46	100.00	$ 46
666	6012	REFL PAV MRK TY I (W)4"(SLD)(100MIL)	LF		$ 0.61	2,196.80	$ 1,340
666	6042	REFL PAV MRK TY I (W)12"(SLD)(100MIL)	LF		$ 3.00	6,129.91	$ 18,390
666	6048	REFL PAV MRK TY I (W)24"(SLD)(100MIL)	LF		$ 4.50	1,212	$ 5,454
666	6057	REFL PAV MRK TY I(W)(DBL ARROW)(100MIL)	EA		$ 161.00	1	$ 161
666	6060	REFL PAV MRK TY I(W)(TPL ARRW)(100MIL)	EA		$ 110.00	7	$ 770
666	6105	REFL PAV MRK TY I (W)(BIKE ARW)(100MIL)	EA		$ 78.00	19	$ 1,482
666	6111	REFL PAV MRK TY I(W)(BIKE SYML)(100MIL)	EA		$ 235.00	19	$ 4,465
666	6126	REFL PAV MRK TY I (Y)4"(SLD)(100MIL)	LF		$ 0.83	923	$ 766
666	6167	REFL PAV MRK TY II (W) 4" (BRK)	LF		$ 0.25	100.00	$ 25
666	6170	REFL PAV MRK TY II (W) 4" (SLD)	LF		$ 0.12	2,196.80	$ 272
666	6180	REFL PAV MRK TY II (W) 12" (SLD)	LF		$ 0.99	6,129.91	$ 6,038
666	6182	REFL PAV MRK TY II (W) 24" (SLD)	LF		$ 2.48	1,212	$ 3,006
666	6185	REFL PAV MRK TY II (W) (DBL ARROW)	EA		$ 57.46	1	$ 57
666	6186	REFL PAV MRK TY II (W) (TPL ARRW)	EA		$ 57.46	7	$ 402
666	6200	REFL PAV MRK TY II (W) (BIKE ARROW)	EA		$ 19.82	19.00	$ 377
666	6202	REFL PAV MRK TY II (W) (BIKE SYMBOL)	EA		$ 21.76	19	$ 413
666	6205	REFL PAV MRK TY I (Y)4"(BRK)(100MIL)	LF		$ 0.18	923.38	$ 166
678	6028	PAV SURF PREP FOR MRK (BIKE SYMBOL)	EA		$ 8.31	19	$ 158

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 379,471
SIGNS 3%	$ 11,384
TRAFFIC CONTROL 5% (3 MONTHS)	$ 18,974
SUM TOTAL	$ 409,829
40% CONTINGENCY	$ 163,932
GRAND TOTAL ROUNDED	$ 600,000

MARFA INTERSECTION IMPROVEMENT SAN ANTONIO STREET AND HIGHLAND AVENUE - ALTERNATIVE B: "WITHOUT BICYCLE LANES"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,333	$ 30,772
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	2,174	$ 10,870
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	20	$ 2,452

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	6	$ 6,244
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,254	$ 15,778
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	9,016	$ 105,933
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,804	$ 18,040
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	4,508	$ 18,393
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	79	$ 6,421
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	101	$ 7,296
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	2,217	$ 37,933
531	6001	CONC SIDEWALKS (4")	SY		$ 40.97	1,714	$ 70,227
666	6003	REFL PAV MRK TY I (W)4"(BRK)(100MIL)	LF		$ 0.46	128.50	$ 59
666	6012	REFL PAV MRK TY I (W)4"(SLD)(100MIL)	LF		$ 0.61	197.19	$ 120
666	6042	REFL PAV MRK TY I (W)12"(SLD)(100MIL)	LF		$ 3.00	3,057.48	$ 9,172
666	6048	REFL PAV MRK TY I (W)24"(SLD)(100MIL)	LF		$ 4.50	767	$ 3,449
666	6057	REFL PAV MRK TY I(W)(DBL ARROW)(100MIL)	EA		$ 161.00	4	$ 644
666	6060	REFL PAV MRK TY I(W)(TPL ARRW)(100MIL)	EA		$ 110.00	3	$ 330
666	6126	REFL PAV MRK TY I (Y)4"(SLD)(100MIL)	LF		$ 0.83	970	$ 805
666	6167	REFL PAV MRK TY II (W) 4" (BRK)	LF		$ 0.25	128.50	$ 32
666	6170	REFL PAV MRK TY II (W) 4" (SLD)	LF		$ 0.12	197.19	$ 24
666	6180	REFL PAV MRK TY II (W) 12" (SLD)	LF		$ 0.99	3,057.48	$ 3,012
666	6182	REFL PAV MRK TY II (W) 24" (SLD)	LF		$ 2.48	767	$ 1,901
666	6185	REFL PAV MRK TY II (W) (DBL ARROW)	EA		$ 57.46	4	$ 230
666	6186	REFL PAV MRK TY II (W) (TPL ARRW)	EA		$ 57.46	3	$ 172
666	6205	REFL PAV MRK TY I (Y)4"(BRK)(100MIL)	LF		$ 0.18	970	$ 175

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 350,486
SIGNS 3%	$ 10,515
TRAFFIC CONTROL 5% (3 MONTHS)	$ 17,524
SUM TOTAL	$ 378,525
40% CONTINGENCY	$ 151,410
GRAND TOTAL ROUNDED	$ 550,000

MARFA INTERSECTION IMPROVEMENT SAN ANTONIO STREET AND HIGHLAND AVENUE - ALTERNATIVE C: "TWO-WAY CYCLE TRACK"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,333	$ 30,772
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	2,174	$ 10,870
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	20	$ 2,452

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	6	$ 6,244
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,254	$ 15,778
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	9,016	$ 111,257
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,804	$ 18,040
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	4,508	$ 18,393
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	79	$ 6,421
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	101	$ 7,296
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	2,217	$ 37,933
531	6001	CONC SIDEWALKS (4")	SY		$ 40.97	1,714	$ 70,227
666	6012	REFL PAV MRK TY I (W)4"(SLD)(100MIL)	LF		$ 0.61	2,570.98	$ 1,568
666	6042	REFL PAV MRK TY I (W)12"(SLD)(100MIL)	LF		$ 3.00	3,934.32	$ 11,803
666	6048	REFL PAV MRK TY I (W)24"(SLD)(100MIL)	LF		$ 4.50	1,064	$ 4,786
666	6060	REFL PAV MRK TY I(W)(TPL ARRW)(100MIL)	EA		$ 110.00	4	$ 440
666	6105	REFL PAV MRK TY I (W)(BIKE ARW)(100MIL)	EA		$ 78.00	20	$ 1,560
666	6111	REFL PAV MRK TY I(W)(BIKE SYML)(100MIL)	EA		$ 235.00	20	$ 4,700
666	6126	REFL PAV MRK TY I (Y)4"(SLD)(100MIL)	LF		$ 0.83	963	$ 799
666	6170	REFL PAV MRK TY II (W) 4" (SLD)	LF		$ 0.12	2,570.98	$ 319
666	6180	REFL PAV MRK TY II (W) 12" (SLD)	LF		$ 0.99	3,934.32	$ 3,875
666	6182	REFL PAV MRK TY II (W) 24" (SLD)	LF		$ 2.48	1,064	$ 2,638
666	6186	REFL PAV MRK TY II (W) (TPL ARRW)	EA		$ 57.46	4	$ 230
666	6200	REFL PAV MRK TY II (W) (BIKE ARROW)	EA		$ 19.82	20	$ 396
666	6202	REFL PAV MRK TY II (W) (BIKE SYMBOL)	EA		$ 21.76	20	$ 435
666	6205	REFL PAV MRK TY I (Y)4"(BRK)(100MIL)	LF		$ 0.18	963.11	$ 173
5084	6001	FIXED BALLARDS	EA		$ 610.00	57	$ 34,770

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 404,176
SIGNS 3%	$ 12,125
TRAFFIC CONTROL 5% (3 MONTHS)	$ 20,209
SUM TOTAL	$ 436,510
40% CONTINGENCY	$ 174,604
GRAND TOTAL ROUNDED	$ 650,000

MARFA INTERSECTION IMPROVEMENT LINCOLN STREET AND HIGHLAND STREET - ALTERNATIVE A: "ROUNDABOUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	10	$ 3,150
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	222	$ 2,928
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	50	$ 250
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	17	$ 2,084

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	4	$ 4,163
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	1,199	$ 8,393
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	4,793	$ 56,315
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	959	$ 9,590
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	2,397	$ 9,780
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	42	$ 3,414
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	54	$ 3,901
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	35	$ 4,200
529	6001	CONC CURB (TY I)	LF		$ 7.98	76	$ 606
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	376	$ 6,433
531	6001	CONC SIDEWALK	SY		$ 41.11	225	$ 9,250
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	25	$ 2,250
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST		$ 4,149.99

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 130,858
SIGNS 3%	$ 3,926
TRAFFIC CONTROL 5% (4 MONTHS)	$ 6,543
SUM TOTAL	$ 141,326
40% CONTINGENCY	$ 56,530
GRAND TOTAL ROUNDED	$ 200,000

MARFA INTERSECTION IMPROVEMENT LINCOLN STREET AND HIGHLAND STREET - ALTERNATIVE B: "ROUNDABOUT WITH BIKE LANES"

REMOVAL								
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY		
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	20	$	6,300
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,051	$	27,053
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	3,305	$	16,525
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	17	$	2,084

ROADWAY ITEMS								
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY		
100	6002	PREPARING ROW	STA		$ 1,040.68	4	$	4,163
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,341	$	16,387
162	6002	BLOCK SODDING	SY		$ 5.00	1,207	$	6,035
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	9,361	$	104,750
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,873	$	18,730
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	4,681	$	19,098
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	82	$	6,665
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	104	$	7,513
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	35	$	4,200
529	6001	CONC CURB (TY I)	LF		$ 7.98	76	$	606
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	2,798	$	47,874
531	6001	CONC SIDEWALK	SY		$ 41.11	2,226	$	91,511
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST		$	7,838
5032	6001	BIKE RACK (INSTALL)	EA		$ 531.00	30	$	21,167

**Item 247 total includes a 5% contingency*

SUBTOTAL	$	408,499
SIGNS 3%	$	12,255
TRAFFIC CONTROL 5% (5 MONTHS)	$	20,425
SUM TOTAL	$	441,179
40% CONTINGENCY	$	208,821
GRAND TOTAL ROUNDED	$	650,000

MARFA INTERSECTION IMPROVEMENT LINCOLN STREET AND HIGHLAND STREET - ALTERNATIVE C: "T-INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	20	$ 6,300
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,051	$ 27,053
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	3,305	$ 16,525
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	17	$ 2,084

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	4	$ 4,163
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,312	$ 16,184
162	6002	BLOCK SODDING	SY		$ 5.00	609	$ 3,045
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	9,246	$ 108,636
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,850	$ 18,500
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	4,623	$ 18,862
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	81	$ 6,584
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	103	$ 7,441
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	3,472	$ 59,406
531	6001	CONC SIDEWALK	SY		$ 41.11	2,254	$ 92,662
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST		$ 8,001
5032	6001	BIKE RACK (INSTALL)	EA		$ 531.00	30	$ 15,930

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 411,375
SIGNS 3%	$ 12,341
TRAFFIC CONTROL 5% (3 MONTHS)	$ 20,569
SUM TOTAL	$ 444,285
40% CONTINGENCY	$ 177,714
GRAND TOTAL ROUNDED	$ 650,000

ALPINE INTERSECTION IMPROVEMENT FM 1703 AND US 67 - ALTERNATIVE A: "TWO-WAY LEFT TURN LANE"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	2,729	$ 13,645.00

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	17	$ 17,692
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	4,303	$ 30,121
162	6002	BLOCK SODING	SY		$ 5.00	1,747	$ 8,735
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	17,211	$ 202,221
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	3,443	$ 34,430
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	8,606	$ 35,112
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	150	$ 12,192
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	192	$ 13,870
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	2,112	$ 36,136
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	20	$ 1,800
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 14,891

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 420,845
SIGNS 3%	$ 12,625
TRAFFIC CONTROL 5% (3 MONTHS)	$ 21,042
SUM TOTAL	$ 454,513
40% CONTINGENCY	$ 181,805
GRAND TOTAL ROUNDED	$ 650,000

ALPINE INTERSECTION IMPROVEMENT FM 1703 AND US 67 - ALTERNATIVE B: "THREE-WAY STOP"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	116	$ 374

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	11	$ 11,447
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,711	$ 18,977
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	10,841	$ 127,376
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,169	$ 21,690
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,421	$ 22,118
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	95	$ 7,722
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	121	$ 8,741
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	116	$ 1,978
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	77	$ 6,930
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 9,382

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 236,735
SIGNS 3%	$ 7,102
TRAFFIC CONTROL 5% (3 MONTHS)	$ 11,837
SUM TOTAL	$ 255,674
40% CONTINGENCY	$ 102,269
GRAND TOTAL ROUNDED	$ 400,000

ALPINE INTERSECTION IMPROVEMENT FM 1703 AND US 67 - ALTERNATIVE C: "ROUNDABOUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	8	$ 2,520
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	116	$ 374
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	3	$ 368
658	6060	REMOVE DELIN & OBJECT MARKER ASSMS	EA		$ 39.05	8	$ 312

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	11	$ 11,447
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,201	$ 22,407
162	6002	BLOCK SODDING	SY		$ 5.00	6,127	$ 30,635
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	12,804	$ 150,441
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,561	$ 25,610
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	6,402	$ 26,120
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	112	$ 9,103
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	143	$ 10,330
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	687	$ 82,440
529	6001	CONC CURB (TY I)	LF		$ 7.98	553	$ 4,413
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	935	$ 15,998
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	109	$ 9,810
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 11,080

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 413,409
SIGNS 3%	$ 12,402
TRAFFIC CONTROL 5% (4 MONTHS)	$ 20,670
SUM TOTAL	$ 446,481
40% CONTINGENCY	$ 178,593
GRAND TOTAL ROUNDED	$ 650,000

ALPINE INTERSECTION IMPROVEMENT ORANGE ST, WEST SUL ROSS AVE AT US 67-ALTERNATIVE A: "CLOSING ORANGE ST AND SUL ROSS AVE"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	92	$ 1,213
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	494	$ 2,470
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	4	$ 490

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	12	$ 12,488
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,427	$ 23,989
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	13,708	$ 161,062
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,742	$ 27,420
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	6,854	$ 27,964
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	120	$ 9,754
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	153	$ 11,053
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 11,863

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 289,766
SIGNS 3%	$ 8,693
TRAFFIC CONTROL 5% (3 MONTHS)	$ 14,488
SUM TOTAL	$ 312,948
40% CONTINGENCY	$ 125,179
GRAND TOTAL ROUNDED	$ 450,000

ALPINE INTERSECTION IMPROVEMENT ORANGE ST, WEST SUL ROSS AVE AT US 67-ALTERNATIVE B: "RE-ROUTE VIA PLUM STREET"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	91	$ 1,200
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	564	$ 2,820
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	9	$ 1,103

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	20	$ 20,814
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	6,942	$ 48,594
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	27,768	$ 326,260
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	5,554	$ 55,540
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	13,884	$ 56,647
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	242	$ 19,670
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	309	$ 22,322
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 24,022

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 578,992
SIGNS 3%	$ 17,370
TRAFFIC CONTROL 5% (4 MONTHS)	$ 28,950
SUM TOTAL	$ 625,311
40% CONTINGENCY	$ 250,125
GRAND TOTAL ROUNDED	$ 900,000

ALPINE INTERSECTION IMPROVEMENT ORANGE ST, WEST SUL ROSS AVE AT US 67- ALTERNATIVE C: "RE-ROUTE VIA PEACH STREET"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	91	$ 1,200
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	564	$ 1,818
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	9	$ 1,103

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	18	$ 18,732
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	6,534	$ 45,738
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	26,133	$ 307,050
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	5,227	$ 52,270
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	13,067	$ 53,313
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	228	$ 18,532
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	291	$ 21,022
529	6002	CONC CURB (TY II)	LF		$ 11.07	80	$ 885
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	216	$ 19,440
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 22,609

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 563,714
SIGNS 3%	$ 16,911
TRAFFIC CONTROL 5% (4 MONTHS)	$ 28,186
SUM TOTAL	$ 608,811
40% CONTINGENCY	$ 243,524
GRAND TOTAL ROUNDED	$ 900,000

ALPINE INTERSECTION IMPROVEMENT SUL ROSS UNIVERSITY AND US 67 ALTERNATIVE A: "PEDESTRIAN RING"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALKS)	SY		$ 13.19	1,673	$ 22,067
104	6028	REMOVING CONC (MISC)	SY		$ 21.05	248	$ 5,220
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	284	$ 1,419
752	6013	TREE AND BRUSH REMOVAL	AC		$ 5,304.37	2	$ 10,609
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	11	$ 1,349

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	26	$ 28,411
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	3,580	$ 25,060
162	6002	BLOCK SODDING	SY		$ 5.00	6,288	$ 31,440
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	14,318	$ 168,229
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,864	$ 28,640
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	7,159	$ 29,209
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	125	$ 10,160
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	160	$ 11,558
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	873	$ 104,760
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	902	$ 37,061
529	6002	CONC CURB (TY II)	LF		$ 11.07	261	$ 2,889
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	310	$ 27,900
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 12,390

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 558,370
SIGNS 3%	$ 16,751
TRAFFIC CONTROL 5% (5 MONTHS)	$ 27,918
SUM TOTAL	$ 603,039
40% CONTINGENCY	$ 241,216
GRAND TOTAL ROUNDED	$ 850,000

ALPINE INTERSECTION IMPROVEMENT SUL ROSS UNIVERSITY AND US 67 ALTERNATIVE B: "FREE FLOW ON US 67"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALKS)	SY		$ 13.19	1,673	$ 22,067
104	6024	REMOVING CONC (RETAINING WALLS)	SY		$ 12.45	142	$ 1,768
104	6028	REMOVING CONC (MISC)	SY		$ 21.05	248	$ 5,220
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	2,127	$ 10,635
752	6013	TREE AND BRUSH REMOVAL	AC		$ 5,304.37	2	$ 10,609
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	11	$ 1,349

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	21	$ 22,947
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,965	$ 20,755
162	6002	BLOCK SODDING	SY		$ 5.00	8,379	$ 41,895
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	11,859	$ 139,337
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,372	$ 23,720
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,930	$ 24,194
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	104	$ 8,453
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	132	$ 9,536
423	6006	RETAINING WALL (STONE)	SF		$ 75.00	1,278	$ 95,877
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	1,079	$ 18,462
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	332	$ 13,658
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	120	$ 10,800
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 10,262

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 491,544
SIGNS 3%	$ 14,746
TRAFFIC CONTROL 5% (5 MONTHS)	$ 24,577
SUM TOTAL	$ 530,868
40% CONTINGENCY	$ 212,347
GRAND TOTAL ROUNDED	$ 750,000

ALPINE INTERSECTION IMPROVEMENT SUL ROSS UNIVERSITY AND US 67 ALTERNATIVE C: "ROUNDABOUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALKS)	SY		$ 13.19	1,673	$ 22,067
104	6024	REMOVING CONC (RETAINING WALLS)	SY		$ 12.45	142	$ 1,768
104	6028	REMOVING CONC (MISC)	SY		$ 21.05	248	$ 5,220
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	2,310	$ 11,550
752	6013	TREE AND BRUSH REMOVAL	AC		$ 5,304.37	2	$ 10,609
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	11	$ 1,349

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	23	$ 25,132
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,924	$ 20,468
162	6002	BLOCK SODDING	SY		$ 5.00	7,587	$ 37,935
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	11,696	$ 137,422
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,340	$ 23,400
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,848	$ 23,860
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	102	$ 8,291
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	130	$ 9,391
423	6006	RETAINING WALL	SF		$ 75.00	1,278	$ 95,850
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	744	$ 89,280
529	6001	CONC CURB (TY I)	LF		$ 7.97	481	$ 3,834
529	6002	CONC CURB (TY II)	LF		$ 11.07	3,070	$ 33,979
536	6002	CONC MEDIAN	SY		$ 43.52	274	$ 11,924
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	197	$ 17,730
536	6005	CONCRETE MEDIAN (NOSE)	SY		$ 77.86	2	$ 156
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 10,118

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 601,332
SIGNS 3%	$ 18,040
TRAFFIC CONTROL 5% (6 MONTHS)	$ 30,067
SUM TOTAL	$ 649,439
40% CONTINGENCY	$ 259,776
GRAND TOTAL ROUNDED	$ 950,000

ALPINE SUL ROSS UNIVERSITY AND US 67 ALTERNATIVE D: "REALIGNMENT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALKS)	SY		$ 13.19	1,673	$ 22,067
104	6028	REMOVING CONC (MISC)	SY		$ 21.05	248	$ 5,220
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	1,930	$ 9,650
496	6032	REMOV STR (ROCKWALL)	EA		$ 1,500.00	1	$ 1,500
752	6013	TREE AND BRUSH REMOVAL	AC		$ 5,304.37	3	$ 15,913
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	11	$ 1,349

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	23	$ 25,132
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	763	$ 5,341
162	6002	BLOCK SODDING	SY		$ 5.00	13,276	$ 66,380
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	3,049	$ 35,824
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	610	$ 6,100
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	1,525	$ 6,222
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	27	$ 2,195
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	34	$ 2,456
529	6002	CONC CURB (TY II)	LF		$ 11.07	2,490	$ 27,559
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	61	$ 5,490
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 2,640

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 241,039
SIGNS 3%	$ 7,231
TRAFFIC CONTROL 5% (4 MONTHS)	$ 12,052
SUM TOTAL	$ 260,322
40% CONTINGENCY	$ 104,129
GRAND TOTAL ROUNDED	$ 400,000

US 67/US 90 Y-INTERSECTION - ALTERNATIVE A: "FREE FLOW Y-INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	23	$ 7,245
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736
658	6060	REMOVE DELIN & OBJECT MARKER ASSMS	EA		$ 22.29	22	$ 490

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	126	$ 131,126
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	11,614	$ 81,298
162	6002	BLOCK SODDING	SY		$ 5.00	32,410	$ 162,050
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	46,456	$ 545,835
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	9,292	$ 92,920
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	23,228	$ 94,770
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	404	$ 32,837
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	517	$ 37,348
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	4,461	$ 76,328
536	6002	CONC MEDIAN	SY		$ 43.52	464	$ 20,193
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST		$ 40,186

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 1,323,361
SIGNS 3%	$ 39,701
TRAFFIC CONTROL 10% (6 MONTHS)	$ 132,336
SUM TOTAL	$ 1,495,398
40% CONTINGENCY	$ 598,159
GRAND TOTAL ROUNDED	$ 2,100,000

US 67/US 90 Y-INTERSECTION - ALTERNATIVE B: "ROUNDABOUT"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	23	$ 7,245
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736
658	6060	REMOVE DELIN & OBJECT MARKER ASSMS	EA		$ 22.29	22	$ 490

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	125	$ 130,085
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	13,845	$ 96,915
162	6002	BLOCK SODDING	SY		$ 5.00	35,023	$ 175,115
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	55,377	$ 650,652
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	11,076	$ 110,760
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	27,689	$ 112,971
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	482	$ 39,177
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	616	$ 44,500
528	6003	COLORED TEXTURED CONC	SY	8" DEPTH	$ 120.00	1,984	$ 238,080
529	6001	CONC CURB (TY I)	LF		$ 7.98	1,238	$ 9,879
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	4,813	$ 82,350
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	5,706	$ 513,540
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST		$ 47,903

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 2,260,399
SIGNS 3%	$ 67,812
TRAFFIC CONTROL 10% (6 MONTHS)	$ 226,040
SUM TOTAL	$ 2,554,250
40% CONTINGENCY	$ 1,021,700
GRAND TOTAL ROUNDED	$ 3,600,000

US 67/US 90 Y-INTERSECTION - ALTERNATIVE C: "SINGLE POINT INTERSECTION"

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	23	$ 7,245
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736
658	6060	REMOVE DELIN & OBJECT MARKER ASSMS	EA		$ 22.29	22	$ 490

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	127	$ 132,166
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	13,199	$ 92,393
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	52,793	$ 620,291
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	10,559	$ 105,590
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	26,397	$ 107,700
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	460	$ 37,389
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	587	$ 42,405
536	6002	CONC MEDIAN	SY		$ 43.52	6,801	$ 295,980
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	192	$ 17,280
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST		$ 45,669

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 1,505,333
SIGNS 3%	$ 45,160
TRAFFIC CONTROL 10% (6 MONTHS)	$ 150,533
SUM TOTAL	$ 1,701,027
40% CONTINGENCY	$ 680,411
GRAND TOTAL ROUNDED	$ 2,400,000

US 67 and I-10 INTERCHANGE ACCESS RAMPS RECONSTRUCTION

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
354	6057	PLANE ASPH CONC PAVE (4")	SY		$ 6.00	10,378	$ 62,268
658	6060	REMOVE DELIN & OBJECT MARKER ASSMS	EA		$ 30.00	80	$ 2,400

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,500.00	48	$ 72,000
110	6001	EXCAVATION ROADWAY	CY		$ 12.00	1,150	$ 13,800
247	6382	FL BS (CMP IN PLC)(TY A GR 5)(8")	SY	8" DEPTH	$ 15.00	7,000	$ 105,000
251	6028	REWORK BS MTL (TY B)(8")(DENS CONT)	SY		$ 5.00	10,378	$ 51,890
310	6006	PRIME COAT (CSS-1H)	GAL	4" SUBGRADE TRT (0.2 GAL/SY)	$ 5.00	3,882	$ 19,410
340	6014	D-GR HMA(SQ) TY-B PG70-22	TON	4" AT (440 LBS/SY)	$ 84.00	4,270	$ 358,697

SUBTOTAL	$ 685,465
SIGNS 2%	$ 13,709
TRAFFIC CONTROL 5% (8 MONTHS)	$ 34,273
SUM TOTAL	$ 733,447
35% CONTINGENCY	$ 256,707
GRAND TOTAL ROUNDED	**$ 1,000,000**

ALPINE ONE-WAY STREETS W/PED IMPROVEMENTS AT US 67 AND 15TH, 14TH, 13TH, AND 12TH STREET

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	3,791	$ 50,003
104	6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF		$ 5.00	5,190	$ 25,950
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	34	$ 35,383
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	5,308	$ 37,156
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	21,229	$ 249,430
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	4,246	$ 42,460
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	10,615	$ 43,309
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	185	$ 15,037
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	236	$ 17,049
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	7,065	$ 120,882
531	6001	CONCRETE SIDEWALK	SY		$ 41.11	4,744	$ 195,026
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	24	$ 2,160
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 18,364

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 852,945
SIGNS 3%	$ 25,588
TRAFFIC CONTROL 10% (8 MONTHS)	$ 85,294
SUM TOTAL	$ 963,828
40% CONTINGENCY	$ 385,531
GRAND TOTAL ROUNDED	$ 1,400,000

ALPINE ONE-WAY COMPLETE STREETS W/PED IMPROVEMENTS AT US 67 AND 6TH, 5TH, AND 4TH STREET

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 315.00	52	$ 16,380
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	2,539	$ 33,489
104	6017	REMOVING CONC (DRIVEWAYS)	SY		$ 9.46	115	$ 1,088
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	2,475	$ 12,375
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	7	$ 858

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	21	$ 21,854
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,673	$ 18,711
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	10,692	$ 125,626
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,139	$ 21,390
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	5,346	$ 21,812
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	93	$ 7,559
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	119	$ 8,597
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	5,644	$ 96,569
530	6004	DRIVEWAY (CONC)	SY		$ 48.57	29	$ 1,409
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	3,733	$ 153,464
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 9,249

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 550,429
SIGNS 3%	$ 16,513
TRAFFIC CONTROL 10% (7 MONTHS)	$ 55,043
SUM TOTAL	$ 621,985
40% CONTINGENCY	$ 248,794
GRAND TOTAL ROUNDED	$ 900,000

ALPINE PED BLOCK W/TWO-LANE TWO-WAY ON HOLLAND AVENUE BETWEEN 4TH AND 6TH STREETS

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 200.00	18	$ 3,600
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	1,314	$ 4,236
104	6036	REMOVING CONC (SIDEWALK or RAMP)	SY		$ 11.34	559	$ 6,341
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.59	6	$ 736

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	27	$ 28,098
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	7,501	$ 52,507
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	30,002	$ 352,508
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	6,001	$ 60,010
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	15,001	$ 61,204
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	261	$ 21,214
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	334	$ 24,128
432	6003	RIPRAP (CONC) (6 IN)	CY	6 IN	$ 376.30	57	$ 21,449
529	6008	CONC CURB & GUTTER (TY II)	LF		$ 17.11	4,472	$ 76,516
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	6,931	$ 284,933
531	6004	CURB RAMP (TY 1)	EA		$ 1,341.14	20	$ 26,823
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 25,953
5084	6001	FIXED BOLLARD	EA		$ 610.00	39	$ 23,790

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 1,074,048
SIGNS 3%	$ 32,221
TRAFFIC CONTROL 10% (9 MONTHS)	$ 107,405
SUM TOTAL	$ 1,213,674
40% CONTINGENCY	$ 485,470
GRAND TOTAL ROUNDED	$ 1,700,000

ALPINE INTERSECTION IMPROVEMENTS AT CHERRY STREET AND US 67

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6029	REMOVING CONC (CURB or CURB & GUTTER)	LF		$ 5.00	302	$ 1,511
644	6076	REMOVE SM RD SN SUP&AM	EA		$ 122.60	3	$ 368

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	8	$ 8,325
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	1,682	$ 11,774
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	6,726	$ 79,027
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,346	$ 13,460
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	3,363	$ 13,721
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	59	$ 4,796
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	75	$ 5,418
536	6004	CONC DIRECTIONAL ISLAND	SY		$ 90.00	1,048	$ 94,320
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 5,821

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 238,541
SIGNS 3%	$ 7,156
TRAFFIC CONTROL 5% (3 MONTHS)	$ 11,927
SUM TOTAL	$ 257,624
40% CONTINGENCY	$ 103,050
GRAND TOTAL ROUNDED	$ 400,000

ALPINE ADD LEFT TURN LANES ON 11TH STREET AT US 67

REMOVAL							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 13.19	17	$ 224

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	7	$ 7,285
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	1,354	$ 9,478
247	6312	FL BS (CMP IN PLACE)(TY D GR 1-2)(8”)	SY		$ 11.19	5,414	$ 63,612
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	1,083	$ 10,830
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	2,707	$ 11,045
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	48	$ 3,901
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	61	$ 4,407
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 4,690

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 115,471
SIGNS 3%	$ 3,464
TRAFFIC CONTROL 5% (3 MONTHS)	$ 5,774
SUM TOTAL	$ 124,709
40% CONTINGENCY	$ 49,884
GRAND TOTAL ROUNDED	$ 200,000

4-WAY SIGNALIZED INTERSECTION

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
416	6031	DRILL SHAFT (TRF SIG POLE) (30 IN)	LF		$ 251.13	46	$ 11,552
531	6004	CURB RAMPS (TY 1)	EA		$ 1,750.00	8	$ 14,000
618	6023	CONDT (PVC) (SCH 40) (2")	LF		$ 15.00	200	$ 3,000
618	6024	CONDT (PVC) (SCH 40) (2") (BORE)	LF		$ 35.00	360	$ 12,600
618	6029	CONDT (PVC) (SCH 40) (3")	LF		$ 25.00	125	$ 3,125
618	6030	CONDT (PVC) (SCH 40) (2") (BORE)	LF		$ 40.00	100	$ 4,000
620	6008	ELEC CONDR (NO.8) INSULATED	LF		$ 3.00	785	$ 2,355
624	6010	GROUND BOX TY D (162922) W/APRON	EA		$ 1,250.00	5	$ 6,250
628	6128	ELC SRV TY D 120/240 060(NS)GS(N)GC(O)	LF		$ 1.00	5,500	$ 5,500
680	6003	INSTALL HWY TRF SIG (SYSTEM)	EA		$ 1.00	32,000	$ 32,000
682	6001	VEH SIG SEC (12")LED(GRN)	EA		$ 300.00	8	$ 2,400
682	6003	VEH SIG SEC (12")LED(YEL)	EA		$ 300.00	8	$ 2,400
682	6005	VEH SIG SEC (12")LED(RED)	EA		$ 300.00	8	$ 2,400
682	6018	PED SIG SEC (LED)(COUNTDOWN)	EA		$ 1,000.00	8	$ 8,000
682	6023	BACK PLATE (12")(3 SEC)	EA		$ 100.00	8	$ 800
686	6045	INS TRF SIG PL AM(S)1 ARM (24')	EA		$ 7,000.00	4	$ 28,000
687	6001	PED POLE ASSEMBLY	EA		$ 3,000.00	8	$ 24,000
687	6002	PEDESTRIAN PUSH BUTTON POLE	EA		$ 2,000.00	8	$ 16,000
688	6001	PED DETECT PUSH BUTTON (APS)	EA		$ 1,250.00	8	$ 10,000

SUBTOTAL	$ 188,382
TRF SIG CBL 5%	$ 9,419
PAV MRK 5%	$ 9,419
TRAFFIC CONTROL 5%	$ 9,419
SUM TOTAL	$ 216,639
40% CONTINGENCY	$ 86,656
GRAND TOTAL ROUNDED	$ 305,000

4 WAY STOP CONTROL INTERSECTION

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	0.44	$ 18
644	6001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA		$ 518.00	4	$ 2,072
666	6048	REFL PAV MRK TY I (W)24" (SLD)(100MIL)	LF		$ 4.50	476	$ 2,142
666	6182	REFL PAV MRK TY II (W)24" (SLD)	LF		$ 2.48	476	$ 1,180
678	6008	PAV SURF PREP FOR MRK (24")	LF		$ 1.18	476	$ 562

SUBTOTAL	$ 5,974
TRAFFIC CONTROL	$ 1,000
SUM TOTAL	$ 6,974
40% CONTINGENCY	$ 2,790
GRAND TOTAL ROUNDED	$ 10,000

PULL OUT AREAS -SHORT TERM

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	6	$ 6,244
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	1,424	$ 9,969
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	1,899	$ 21,247
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	380	$ 3,798
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	949	$ 3,874
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	17	$ 1,342
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	21	$ 1,524
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 1,589

**Item 247 total includes a 5% contingency*

SUBTOTAL	$ 49,586
SIGNS 3%	$ 1,488
TRAFFIC CONTROL 5% (3 MONTHS)	$ 2,479
SUM TOTAL	$ 53,553
40% CONTINGENCY	$ 21,421
GRAND TOTAL ROUNDED	**$ 75,000**

REST AREA-MID TERM

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	11	$ 11,447
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	2,612	$ 18,281
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	3,482	$ 38,964
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	696	$ 6,964
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	1,741	$ 7,103
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	30	$ 2,461
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	39	$ 2,795
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 2,914
BUILDING ITEMS							
***		SHLTER SMALL	EA	AVERAGE SIZE IS 600 SF/$45.83	$ 27,489.00	2	$ 54,978

**Item 247 total includes a 5% contingency*

*** SHELTER SMALL PRICE DETERMINED FROM NCSU 2015 COST ANALYSIS FOR IMPROVING PARK FACILITIES STUDY

SUBTOTAL	$ 145,907
SIGNS 3%	$ 4,377
TRAFFIC CONTROL 5% (10 MONTHS)	$ 7,295
SUM TOTAL	$ 157,580
40% CONTINGENCY	$ 63,032
GRAND TOTAL ROUNDED	**$ 225,000**

REST AREA-LONG TERM

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	39	$ 40,587
110	6001	EXCAVATION ROADWAY	CY	9" DEPTH	$ 7.00	10,523	$ 73,659
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 11.19	14,030	$ 156,999
310	6009	PRIME COAT (MC-30)	GAL		$ 10.00	2,806	$ 28,061
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	7,015	$ 28,622
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	122	$ 9,916
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	156	$ 11,262
6XX	6XXX	PAV MRK	LS		5% OF PAVEMENT COST		$ 11,743
BUILDING ITEMS							
***		SHELTER SMALL	EA	AVERAGE SIZE IS 600 SF/$45.83	$ 27,489.00	3	$ 82,467
###		PUBLIC REST ROOMS	EA	AVERAGE SIZE IS 900 SF/$225.00	$ 202,500.00	2	$ 405,000

**Item 247 total includes a 5% contingency*

*** SHELTER SMALL PRICE DETERMINED FROM NCSU 2015 COST ANALYSIS FOR IMPROVING PARK FACILITIES STUDY

COST WAS BASED FROM INFORMATION FOUND IN VA.GOV/GRANTS/PUBLIC_RESTROOMS

SUBTOTAL	$ 848,314
SIGNS 3%	$ 25,449
TRAFFIC CONTROL 5% (10 MONTHS)	$ 42,416
SUM TOTAL	$ 916,179
40% CONTINGENCY	$ 366,472
GRAND TOTAL ROUNDED	**$ 1,300,000**

Presidio - Bicycle Lane with Buffer

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 11.25	4186.67	$ 47,100
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	8255	$ 26,581
104	6028	REMOVING CONC (MISC)	SY		$ 10.00	49.11	$ 491
354	6021	PLANE ASPH CONC PAV(0" TO 2")	SY	MILLING EX. PAVT	$ 5.00	42343.56	$ 211,718
100	6002	PREPARING ROW	STA		$ 1,040.68	62	$ 64,522
340	6034	D-GR HMA(SQ) TY-C PG64-22	TON	2" DEPTH	$ 120.00	3674.89	$ 440,987
316	6004	ASPH (TIER I)	GAL	Tack Coat	$ 4.08	23647.94	$ 96,484
529	6002	CONC CURB (TY II)	LF		$ 11.07	10406.00	$ 115,194
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	6735.56	$ 276,899
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST	1	$ 26,874

SUB TOTAL	$ 1,306,849
SIGNS 3%	$ 39,205
TRAFFIC CONTROL 5% (10 MONTHS)	$ 65,342
SUM TOTAL	$ 1,411,397
40% CONTINGENCY	$ 564,559
GRAND TOTAL ROUNDED	$ 2,000,000

Marfa Alternative A - Shared Use Path

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 307.39	15	$ 4,611
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 11.25	5353.89	$ 60,231
104	6017	REMOVING CONC (DRIVEWAYS)	SY		$ 9.46	445.67	$ 4,216
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	10790	$ 34,744
354	6021	PLANE ASPH CONC PAV(0" TO 2")	SY	MILLING EX. PAVT	$ 5.00	35738.26	$ 178,691
644	6076	REMOVAL SM RD SN SUP & AM	EA		$ 122.60	19	$ 2,329
100	6002	PREPARING ROW	STA		$ 1,040.68	60	$ 62,441
340	6034	D-GR HMA(SQ) TY-C PG64-22	TON	2" DEPTH	$ 120.00	2776.86	$ 333,224
110	6001	EXCAVATION ROADWAY	CY	4" DEPTH	$ 7.00	113.99	$ 798
162	6002	BLOCK SODDING	SY		$ 5.00	67.38	$ 337
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 10.73	1026.90	$ 11,019
310	6009	PRIME COAT (MC-30)	GAL		$ 3.84	205.38	$ 789
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	513.45	$ 2,095
316	6004	ASPH (TIER I)	GAL	2nd Course Tack Coat	$ 4.08	410.76	$ 1,676
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	9.04	$ 735
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	11.30	$ 816
529	6002	CONC CURB (TY II)	LF		$ 11.07	10790.00	$ 119,445
530	6004	DRIVEWAY (CONC)	SY		$ 48.57	484.86	$ 23,549
531	6001	CONC SIDEWALK (4")	SY	SHARED USE PATH	$ 41.11	9801.58	$ 402,943
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST	1	$ 17,518

SUB TOTAL	$ 1,262,205
SIGNS 3%	$ 37,866
TRAFFIC CONTROL 5% (10 MONTHS)	$ 63,110
SUM TOTAL	$ 1,363,182
40% CONTINGENCY	$ 545,273
GRAND TOTAL ROUNDED	$ 2,000,000

Marfa Alternative B - Two Way Cycle Track

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 307.39	15	$ 4,611
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 11.25	2916.97	$ 32,816
104	6017	REMOVING CONC (DRIVEWAYS)	SY		$ 9.46	245.87	$ 2,326
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	5768.6	$ 18,575
354	6021	PLANE ASPH CONC PAV(0" TO 2")	SY	MILLING EX. PAVT	$ 5.00	35738.26	$ 178,691
644	6076	REMOVAL SM RD SN SUP & AM	EA		$ 122.60	19	$ 2,329
100	6002	PREPARING ROW	STA		$ 1,040.68	60	$ 62,441
340	6034	D-GR HMA(SQ) TY-C PG64-22	TON	2" DEPTH	$ 120.00	2776.86	$ 333,224
658	6005	INSTL DEL ASSM (D-SW)SZ 1(FLX)SRF(BI)	EA		$ 130.00	106.80	$ 13,884
110	6001	EXCAVATION ROADWAY	CY	4" DEPTH	$ 7.00	391.89	$ 2,743
162	6002	BLOCK SODDING	SY		$ 5.00	125.84	$ 629
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 10.73	3530.50	$ 37,882
310	6009	PRIME COAT (MC-30)	GAL		$ 3.84	706.10	$ 2,711
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	1765.25	$ 7,202
316	6004	ASPH (TIER I)	GAL	2nd Course Tack Coat	$ 4.08	1412.20	$ 5,762
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	31.07	$ 2,525
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	38.84	$ 2,805
529	6002	CONC CURB (TY II)	LF		$ 11.07	10790.00	$ 119,445
530	6004	DRIVEWAY (CONC)	SY		$ 48.57	868.22	$ 42,170
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	7733.44	$ 317,922
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST	1	$ 19,606

SUB TOTAL	$ 1,210,300
SIGNS 3%	$ 36,309
TRAFFIC CONTROL 5% (10 MONTHS)	$ 60,515
SUM TOTAL	$ 1,307,124
40% CONTINGENCY	$ 522,849
GRAND TOTAL ROUNDED	$ 2,000,000

Marfa Alternative C - Angled Parking

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6013	PREP ROW (TREE) (2" TO 12" DIA)	EA		$ 307.39	15	$ 4,611
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 11.25	2916.97	$ 32,816
104	6017	REMOVING CONC (DRIVEWAYS)	SY		$ 9.46	245.87	$ 2,326
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	5768.6	$ 18,575
354	6021	PLANE ASPH CONC PAV(0" TO 2")	SY	MILLING EX. PAVT	$ 5.00	35738.26	$ 178,691
644	6076	REMOVAL SM RD SN SUP & AM	EA		$ 122.60	19	$ 2,329
340	6034	D-GR HMA(SQ) TY-C PG64-22	TON	2" DEPTH	$ 120.00	2776.86	$ 333,224
100	6002	PREPARING ROW	STA		$ 1,040.68	60	$ 62,441
110	6001	EXCAVATION ROADWAY	CY	4" DEPTH	$ 7.00	514.53	$ 3,602
162	6002	BLOCK SODDING	SY		$ 5.00	67.39	$ 337
247	6312	FL BS (C MP IN PLACE)(TY D GR 1-2)-8"	SY		$ 10.73	4635.39	$ 49,738
310	6009	PRIME COAT (MC-30)	GAL		$ 3.84	927.08	$ 3,560
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	2317.69	$ 9,456
316	6004	ASPH (TIER I)	GAL	2nd Course Tack Coat	$ 4.08	1854.15	$ 7,565
316	6126	AGGR(TY-PB GR-4 SAC-A)	CY	2nd Course	$ 81.28	40.79	$ 3,316
316	6173	AGGR(TY-B GR-3 SAC-B)	CY	1st Course	$ 72.24	50.99	$ 3,683
529	6002	CONC CURB (TY II)	LF		$ 11.07	5768.60	$ 63,858
530	6004	DRIVEWAY (CONC)	SY		$ 48.57	245.87	$ 11,942
531	6001	CONC SIDEWALK (4")	SY		$ 41.11	2916.97	$ 119,917
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST	1	$ 20,527

SUB TOTAL	$ 932,513
SIGNS 3%	$ 27,975
TRAFFIC CONTROL 5% (10 MONTHS)	$ 46,626
SUM TOTAL	$ 1,007,114
40% CONTINGENCY	$ 402,846
GRAND TOTAL ROUNDED	$ 1,400,000

Alpine Alternative A - Shared Use Path

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
104	6015	REMOVING CONC (SIDEWALK)	SY		$ 11.25	16812.56	$ 189,141
104	6017	REMOVING CONC (DRIVEWAYS)	SY		$ 9.46	2928.11	$ 27,700
104	6021	REMOVING CONC (CURB)	LF		$ 3.22	23125	$ 74,463
354	6021	PLANE ASPH CONC PAV(0" TO 2")	SY	MILLING EX. PAVT	$ 5.00	82729.78	$ 413,649
100	6002	PREPARING ROW	STA		$ 1,040.68	157	$ 163,387
340	6034	D-GR HMA(SQ) TY-C PG64-22	TON	2" DEPTH	$ 120.00	6709.76	$ 805,171
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	43177.33	$ 176,164
529	6002	CONC CURB (TY II)	LF		$ 11.07	27117.00	$ 300,185
530	6004	DRIVEWAY (CONC)	SY		$ 48.57	2928.11	$ 142,218
531	6001	CONC SIDEWALK	SY	WITH SHARED USE PATH	$ 41.11	23311.40	$ 958,332
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST	1	$ 49,067

SUB TOTAL	$ 3,299,476
SIGNS 3%	$ 98,984
TRAFFIC CONTROL 5% (10 MONTHS)	$ 164,974
SUM TOTAL	$ 3,563,434
40% CONTINGENCY	$ 1,425,373
GRAND TOTAL ROUNDED	$ 5,000,000

Alpine Option 2 - Bicycle Lane with Buffer

ROADWAY ITEMS							
ITEM	CODE	ITEM DESCRIPTION	UNIT	REMARKS	UNIT COST	QUANTITY	
100	6002	PREPARING ROW	STA		$ 1,040.68	157	$ 163,387
354	6021	PLANE ASPH CONC PAV(0" TO 2")	SY	MILLING EX. PAVT	$ 5.00	82729.78	$ 413,649
340	6034	D-GR HMA(SQ) TY-C PG64-22	TON	2" DEPTH	$ 120.00	6709.76	$ 805,171
316	6004	ASPH (TIER I)	GAL	1st Course Tack Coat	$ 4.08	43177.33	$ 176,164
6XX	6XXX	PAV MRK	LF		5% OF PAVEMENT COST	1	$ 49,067

SUB TOTAL	$ 1,607,437
SIGNS 3%	$ 48,223
TRAFFIC CONTROL 5% (10 MONTHS)	$ 80,372
SUM TOTAL	$ 1,736,032
40% CONTINGENCY	$ 694,413
GRAND TOTAL ROUNDED	$ 2,500,000

Planning level cost estimate for Pavement Recommended Projects

Project Type	Total Length (Miles)	Unit Cost ($/mile)[1]	Total Cost ($)
Localized Patching (Surface Treatment)	3.66	$ 128,170.05	$ 468,718
Localized Patching (ACP)	9.59	$ 304,100.15	$ 2,916,016
Resurfacing	0.90	$ 817,376.37	$ 735,639
Base Rehabilitation and Resurfacing	143.22	$ 1,128,485.08	$ 161,621,634
		Sub Total	$ 165,742,007
		40% Contingency	$ 66,296,803
		Grand Total	$ 232,100,000

Assumptions

1. For localized patching, base deformation only extends 4 inches into the existing base and base will be reworked.
2. Short term traffic control plan will be used for localized patching.
3. For base rehabilitation and resurfacing, base will be completely replaced.
4. Base rehabilitation will be 9 inches in depth throughout the entire corridor.
5. Long term traffic control plan will be used for base rehabilitation and resurfacing.
6. Along the East Ave and Holland Ave within Alpine, existing base is assumed to be cement stabilized base.
7. Typical corridor sections consist of two-lane undivided roadway with 12 feet lanes and 6 feet shoulders.
8. Between RM 905.5 and RM 900 existing base is assumed to be 8 in of flexible base.
9. Localized patching required per PPS is based on the pavement condition and engineering judgement.

[1] Unit Cost were obtained from TxDOT's unit bid prices retrieved on October 2019. Multiple relevant bid codes and assumption were used to develop unit cost for each project type.

Safety Recommended Improvements Planning Level Cost Estimates

Planning	Countermeasures	Unit	Quantity	Cost Per Unit	Cost
Short	Horizontal Curve Warning Signs	EA	54	$600	$33,000
	Chevrons	EA	144	$600	$87,000
	Advisory Speed Limit Signs	EA	58	$600	$35,000
	Vertical Grade Signs	EA	72	$600	$44,000
	Curve Blocks View Sign	EA	19	$600	$12,000
	Install centerline rumble strip	MILE	83	$2,000	$166,000
	Install shoulder rumble strip	MILE	153	$800	$123,000
	Passing lane ahead and lane ends merge left sign	EA	100	$600	$60,000
	No passing zone signs	EA	213	$600	$128,000
	Tree Trimming/Brush Removal	MILE	26	$2,000	$52,000
	Install Weather Warning Sign	EA	33	$600	$20,000
	Install advanced warning signs for railroad crossing	EA	2	$600	$2,000
	Flashing beacon for railroad crossing	EA	2	$6,000	$12,000
				Subtotal	$774,000
				45% Mobilization, Contingency, Construction Engineering, and Traffic Control	$349,000
				TOTAL SHORT TERM PROJECTS	**$1,123,000**
Mid	Improve design and application of barrier systems	EA	91	$3,000	$273,000
	Add/Extend Guardrail	MILE	20	$167,000	$3,340,000
	Provide Guardrail end treatment	EA	246	$3,000	$738,000
	Flashing Beacon Signs	EA	26	$10,000	$260,000
	Sequential Dynamic Curve Warning Sign	EA	7	$26,000	$182,000
	Provide adequate sight distance	CY	35310	$200	$7,062,000
	Provide lighting at intersections	EA	56	$10,000	$560,000
	Raised Pavement Markers	EA	11985	$100	$1,199,000
	Design safer slopes when fill height is less than 5 feet	CY	141228	$100	$14,123,000
	Provide Turnouts	SY	55860	$200	$11,172,000
	Superelevation Improvement	TON	21500	$100	$2,150,000
	High Friction Surface Treatment	SY	227256	$50	$11,363,000
	Provide dynamic speed feedback system	EA	4	$10,000	$40,000
	Add left turn lanes to existing rest area	EA	1	$396,000	$396,000
	Highway Rail Grade Crossing Safety System	EA	2	$10,000	$20,000
	Provide Rest Area	EA	2	$1,000,000	$2,000,000
				Subtotal	$54,878,000
				45% Mobilization, Contingency, Construction Engineering, and Traffic Control	$24,696,000
				TOTAL MID TERM PROJECTS	**$79,574,000**
Long	Widen Shoulders from 6 to 10 feet	MILE	66	$750,000	$49,500,000
	Widen Shoulders from 4 to 10 feet	MILE	21	$1,050,000	$22,050,000
	Construct Texas Super 2	MILE	46	$2,100,000	$96,600,000
	Grade Separation at Old Alpine Highway	EA	1	$5,200,000	$5,200,000
				Subtotal	$173,350,000
				45% Mobilization, Contingency, Construction Engineering, and Traffic Control	$78,008,000
				TOTAL LONG TERM PROJECTS	**$251,358,000**
				Total for All Safety Projects (Rounded)	**$332,100,000**

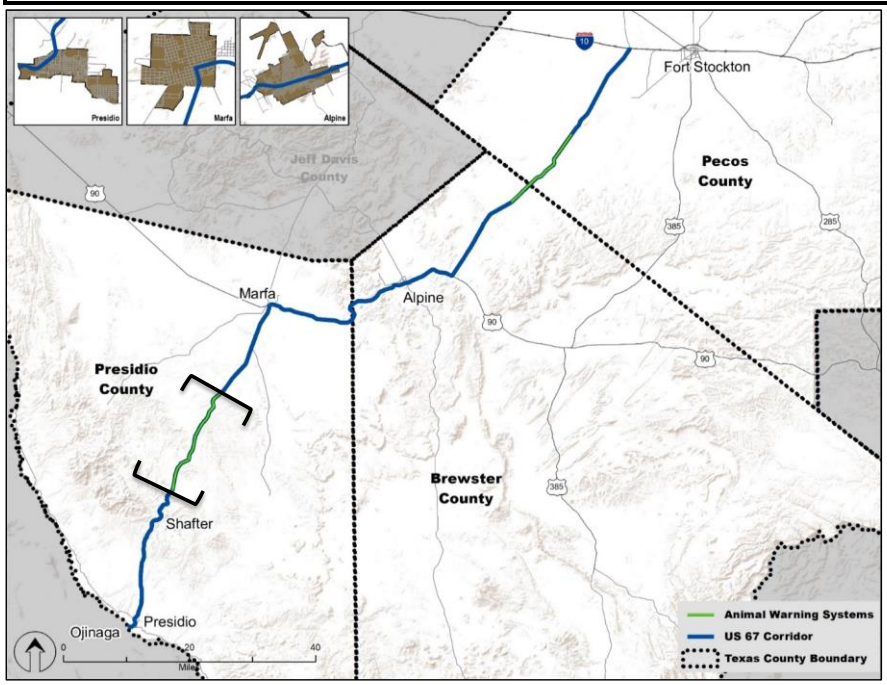
Detailed Cost Breakdown by ITS Category

Categories	Project Number	Capital Projects		2019 Total Costs
Crash Countermeasures / Surface Transportation and Weather	CC1.1	Animal Warning System South	$	3,700,000
	CC1.2	Animal Warning System North	$	2,300,000
	CC2.1/STW.1	Weather Warning System Paisano Pass/Total Station	$	750,000
	CC3/CC8	Bicycle/Pedestrian Warning System #1 at Alpine	$	100,000
	CC3/CC8	Bicycle/Pedestrian Warning System #2 at Alpine	$	100,000
	CC3/CC8	Bicycle/Pedestrian Warning System #3 at Marfa	$	100,000
	CC6	Highway-Rail Crossing Warning System	$	250,000
	CC9	Over-Height Vehicle Warning System	$	250,000
	CC11.1	Flashing Beacon Curve Warning System (Ten locations)	$	1,500,000
	CC11.2	Sequential Dynamic Curve Warning System (Seven Locations)	$	3,150,000
		Crash Countermeasures / Surface Transportation and Weather Subtotal	*$*	*12,200,000*
Traffic Management	TM5 / TTI4	Real Time Travel Time Information/Vehicle Detection	$	500,000
		Traffic Management Subtotal	*$*	*500,000*
Operations and Maintenance	OM2.1	Rockslide Warning System at Shafter	$	750,000
	OM2.2	Rockslide Warning System at Paisano Pass	$	750,000
		Operations and Maintenance Subtotal	*$*	*1,500,000*
Emergency Services	ES1.1	Next Gen 911 for Presidio County	$	4,000,000
	ES1.2	Next Gen 911 for Brewster and Pecos Counties	$	4,000,000
	ES2.1	Smartphone Applications for First Responders	$	300,000
		Emergency Services Subtotal	*$*	*8,300,000*
Tourism and Traveler Information	TTI3.1	Dynamic Message Sign outside of Marfa	$	550,000
	TTI3.2	Dynamic Message Sign outside of Alpine	$	550,000
	TT13.3	Dynamic Message Sign outside of Presidio	$	300,000
		Tourism and Traveler Information Subtotal	*$*	*1,400,000*
Communications and Power	COM1.1	Study To Provide Fiber Access Along Corridor	$	500,000
	COM1.2	Study To Provide Enhanced Cellular Communications Along Corridor	$	500,000
	COM1.3	Study on Data Over Current Radio System	$	300,000
		Communications and Power Subtotal	*$*	*1,300,000*
Total Station	TOT1.1	Total Station between Alpine and Fort Stockton (RWIS, CCTV, Vehicle Detection)	$	550,000
	TOT1.2	Total Station between Shafter and Marfa (RWIS, CCTV, Vehicle Detection)	$	550,000
	TOT1.3	Total Station at Location Presidio and Shafter (RWIS, CCTV, Vehicle Detection)	$	550,000
		Total Station Subtotal	*$*	*1,650,000*
Other	OTH1.1	Smart Parking at POE	$	1,900,000
	OTH1.2	Incident Management Support Truck	$	100,000
	OTH1.3	Traffic Incident Management Training	$	100,000
	OTH1.4	Establish Corridor Coordination Groups	$	-
		Other Subtotal	*$*	*2,100,000*
		Total Capital Budget	$	28,950,000
		Total Capital Budget (rounded)	**$**	**29,000,000**

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	297,430
Project Name	Construction	$	2,974,300
Animal Warning System South			
	2016 Total Cost	$	3,271,730
Project Number	2019 Total Cost*	$	3,700,000
CC1.1	*accounts for 4% increase rounded to the next higher hundred-thousand		

Description

This project will consist of installing large animal sensors in each direction of travel every 500 feet for 20 miles. The sensors will communicate to a cabinet at either end which will trigger flashers on appropriate static signs placed every five miles if an animal is detected. Engineering is estimated at 10% of construction costs. The proposed project limits are identified for the south section is shown in brackets.



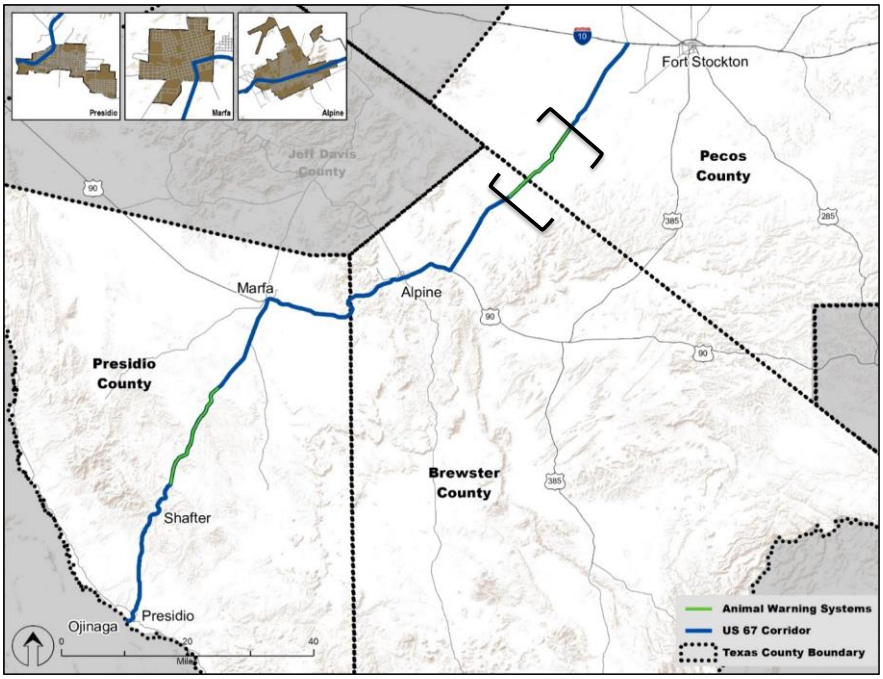
Cost Estimate

Item	Unit/mile	Total Cost
Purchasing	$ 87,500	$ 1,750,000
Planning	$ 58,300	$ 58,300
Installation	$ 58,300	$ 1,166,000
2016 Total Cost		$ 2,974,300

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	180,790
Project Name	Construction	$	1,807,900
Animal Warning System North			
	2016 Total Cost	$	1,988,690
Project Number	2019 Total Cost*	$	2,300,000
CC1.2	*accounts for 4% increase rounded to the next higher hundred-thousand		

Description

This project will consist of installing large animal sensors in each direction of travel every 500 feet for 12 miles. The sensors will communicate to a cabinet at either end which will trigger flashers on static signs placed every four miles if an animal is detected. Engineering is estimated at 10% of construction costs. The proposed project limits are identified for the north section is shown in brackets.



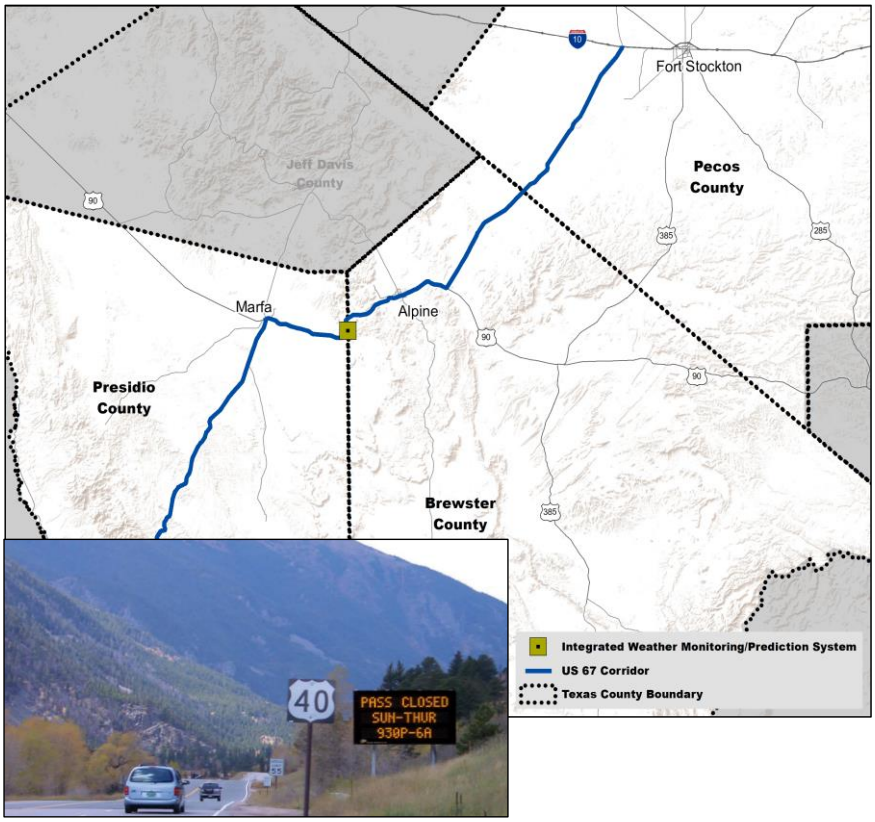
Cost Estimate

Item	Unit/mile	Total Cost
Purchasing	$ 87,500	$ 1,050,000
Planning	$ 58,300	$ 58,300
Installation	$ 58,300	$ 699,600
2016 Total Cost		$ 1,807,900

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	58,500
Project Name	Construction	$	585,000
Weather Warning System Paisano Pass/Total Station	2016 Total Cost	$	643,500
Project Number	2019 Total Cost*	$	750,000
CC2.1	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a new Roadway Weather Information System (RWIS) station at the Paisano Pass. The weather station will have full power and communications. The local controller will connect to two Dynamic Message Signs (DMS) deployed for each direction of travel approaching the pass. The DMS shall display adverse weather condition warnings. In addition, and matching the total station concept, counters and a camera will also be included at the site. Engineering is estimated at 10% of construction costs.



Source: skylineproducts.com

Source: Arizona DOT Dust Warning System

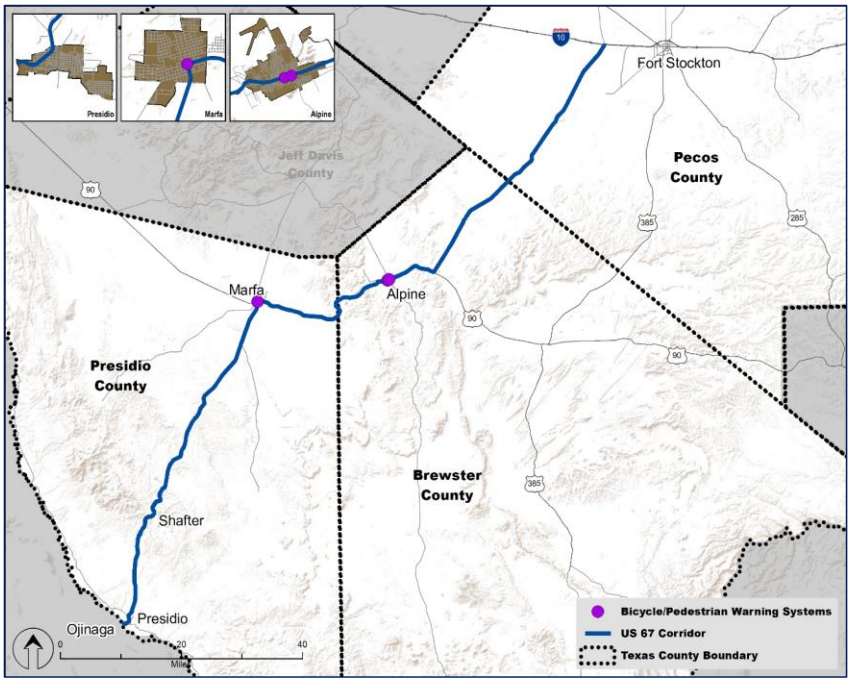
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
New DMS	Each	2	$ 87,500	$ 175,000
Power and Coms	Mile	4	$ 50,000	$ 200,000
RWIS	Each	1	$ 75,000	$ 75,000
Pan–Tilt–Zoom (PTZ) camera	Each	1	$ 75,000	$ 75,000
Counters	Each	2	$ 30,000	$ 60,000
2016 Total Cost				$ 585,000

Owner	Cost per location		
TxDOT	Engineering (Study and Design)	$	7,000
Project Name	Construction	$	70,000
Bicycle/Pedestrian Warning System (Two intersections in Alpine and one intersection in Marfa)	2016 Total Cost	$	77,000
Project Number	2019 Total Cost*	$	100,000
CC3/CC8	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of installing a pedestrian button on each side of US 67 that activates flashers on two static signs as well as in pavement lighting. Engineering is estimated at 10% of construction costs.



Source: Courtesy of Jaime Sullivan

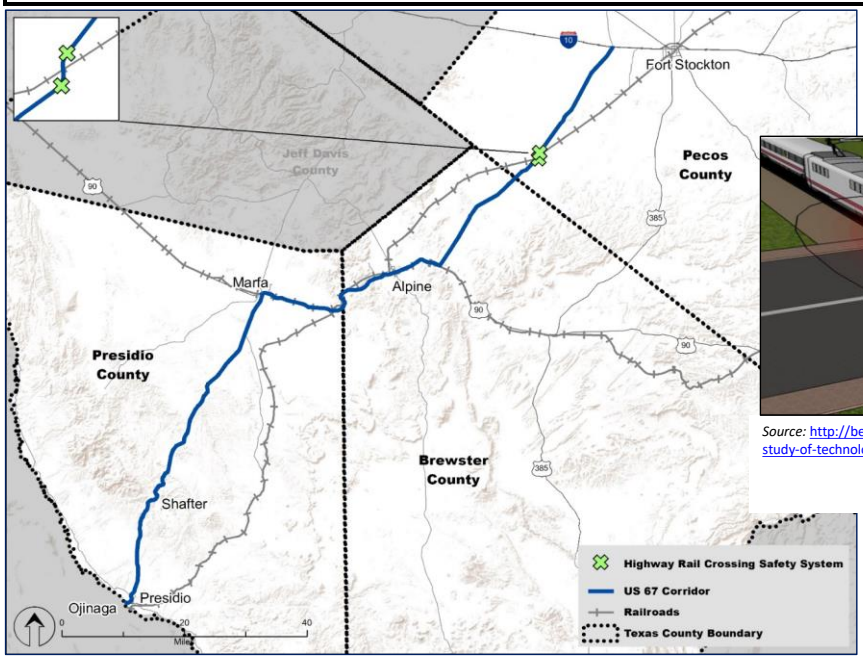
Cost Estimate

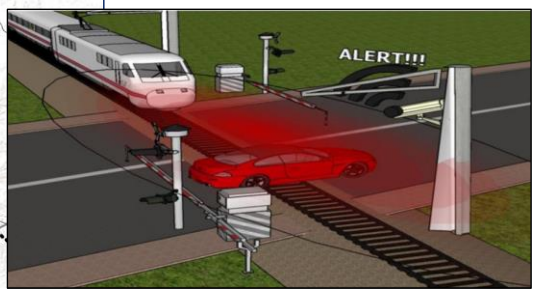
Item	Unit	Quant	Unit Cost	Total Cost
Ped Button	Each	2	$ 10,000	$ 20,000
Static Sign/ Flashers	Each	2	$ 10,000	$ 20,000
Power and Coms	Mile	0.1	$ 50,000	$ 5,000
In pavement lights	Each	1	$ 25,000	$ 25,000
2016 Total Cost				$ 70,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	18,000
Project Name	Construction	$	180,000
Highway-Rail Crossing Warning System	2016 Total Cost	$	198,000
Project Number	2019 Total Cost*	$	250,000
CC6.1	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a stopped vehicle detection system at the grade crossing. A controller will be installed that can activate flashers on static warning signs on the relative approach. Engineering is estimated at 10% of construction costs.





Source: http://begiralerailway.com/wp-content/uploads/2019/06/Comparative-study-of-technologies-for-the-detection-of-obstacles-in-level-crossings-v2.pdf

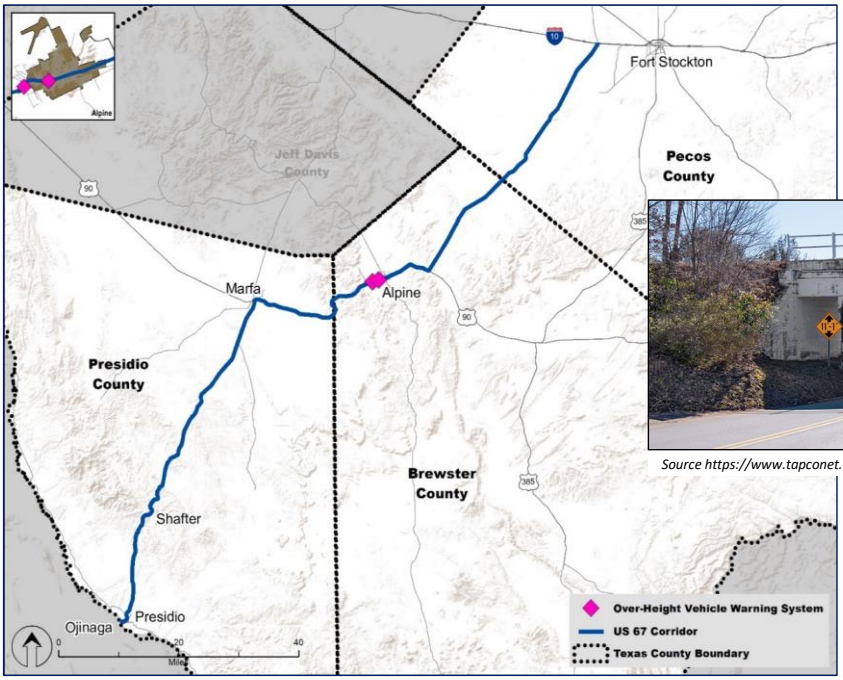
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Vehicle Detector	Each	2	$ 30,000	$ 60,000
Static Sign/ Flashers	Each	2	$ 10,000	$ 20,000
Integration with RR	Each	1	$ 50,000	$ 50,000
Power and Coms	Mile	1	$ 50,000	$ 50,000
2016 Total Cost				$ 180,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	17,500
Project Name	Construction	$	175,000
Over-Height Vehicle Warning System			
	2016 Total Cost	$	192,500
Project Number	2019 Total Cost*	$	250,000
CC9	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of installing over-height vehicle detectors in both directions of US 67 approaching the low bridge crossing on the southwest side of Alpine. Warnings will be provided to trucks using flashing beacons with a static sign. Engineering is estimated at 10% of construction costs.



Source https://www.tapconet.com/solar-led-division/overheight-warning-system

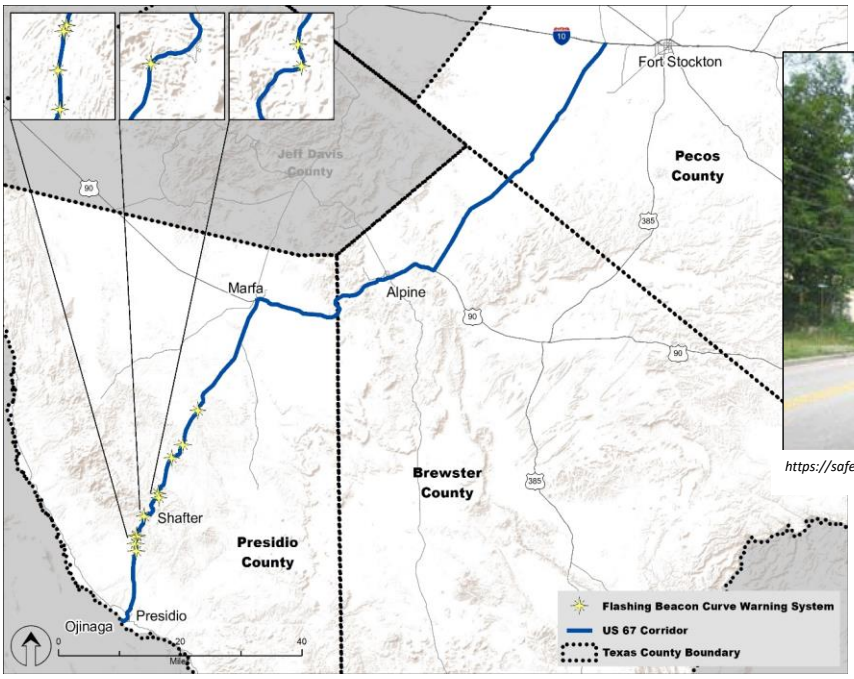
Cost Estimate

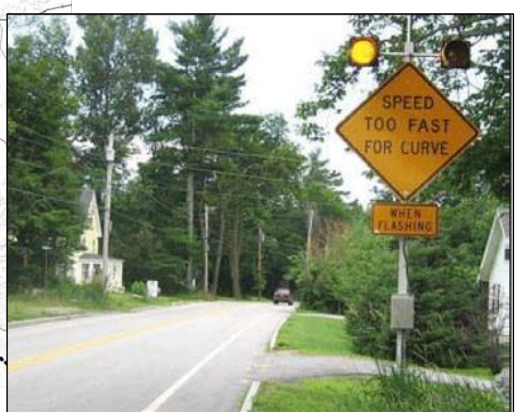
Item	Unit	Quant	Unit Cost	Total Cost
Vehicle Detector	Each	2	$ 15,000	$ 30,000
Static Sign/ Flashers	Each	2	$ 10,000	$ 20,000
Power and Coms	Mile	1	$ 50,000	$ 50,000
Controller & Misc.	Each	1	$ 75,000	$ 75,000
2016 Total Cost				$ 175,000

Owner	Cost per location		
TxDOT	Engineering (Study and Design)	$	10,000
Project Name	Construction	$	100,000
Flashing Beacon Curve Warning System (Ten locations)	2016 Total Cost	$	110,000
Project Number	2019 Total Cost*	$	150,000
CC11.1	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a speed detection system for both directions approaching the designated curve. A controller will monitor the detectors and activate flashers on a static sign automatically when warranted. Engineering is estimated at 10% of construction costs.





https://safety.fhwa.dot.gov/roadway_dept/horicurves/fhwasa15084/ch4.cfm

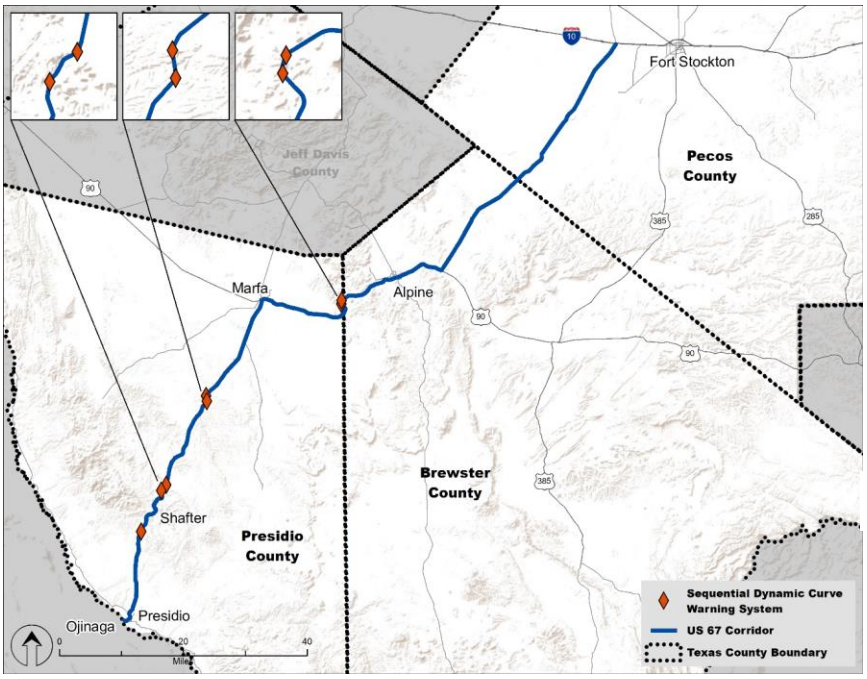
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Vehicle Detector	Each	2	$ 15,000	$ 30,000
Static Sign/ Flashers	Each	2	$ 10,000	$ 20,000
Power and Coms	Mile	1	$ 50,000	$ 50,000
2016 Total Cost				$ 100,000

Owner	Cost per location		
TxDOT	Engineering (Study and Design)	$	35,500
Project Name	Construction	$	355,000
Sequential Dynamic Curve Warning System (Seven Locations)	2016 Total Cost	$	390,500
Project Number	2019 Total Cost*	$	450,000
CC11.2	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a speed detection system for both directions approaching the designated curve. A controller will monitor the detectors and automatically light chevron signs in a sequential manner through the curve when warranted. Engineering is estimated at 10% of construction costs.



https://www.roadtraffic-technology.com/contractors/driver_info/trafficalm

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Vehicle Detector	Each	2	$ 15,000	$ 30,000
Static Sign/ Flashers	Each	20	$ 10,000	$ 200,000
Power and Coms	Mile	1	$ 50,000	$ 50,000
Controller & Misc.	Each	1	$ 75,000	$ 75,000
2016 Total Cost				$ 355,000

Owner	Cost for third party data		
TxDOT	Engineering (Study and Design)	$	40,000
Project Name	Annual Third Party for 4 years	$	400,000
Real Time Travel Time Information/Vehicle Detection	2016 Total Cost	$	440,000
	2019 Total Cost*	$	500,000
Project Number	*accounts for 4% increase rounded to the next higher fifty-thousand		
TM5 / TTI4			

Description
This project will procure real time data from a third party vendor. The purpose is to disseminate travel times between communities. An average cost estimate for the first 4 years is provided at this point.

Source: https://towardsdatascience.com/vehicle-detection-and-tracking-6665d6e1089b

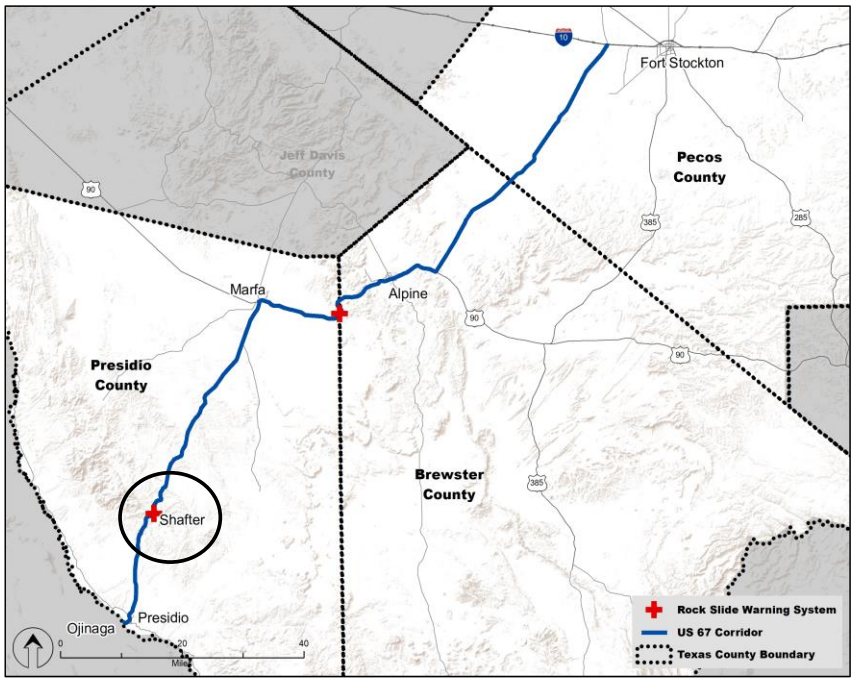
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost	
Third Party Vendor (4 year contract)				$	400,000
2016 Total Cost				$	400,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	150,000
Project Name	Construction	$	500,000
Rock Slide Warning System at Shafter			
	2016 Total Cost	$	650,000
Project Number	2019 Total Cost*	$	750,000
OM2.1	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

There are no off the shelf rock slide warning systems from vendors. This will need to be engineered using new sensors. This project will consist of adding a dynamic message sign (DMS) in both directions approaching the area of concern. Rock slide detection sensors will identify when conditions indicate a potential rock slide. These sensors will send a warning message to the authorities or maintenance staff regarding the conditions to allow for consideration of a road closure. Engineering is estimated at 30% of construction costs. The proposed project location is identify in a circle.



https://upload.wikimedia.org/wikipedia/commons/c/c3/Falling_rocks_sign.jpg

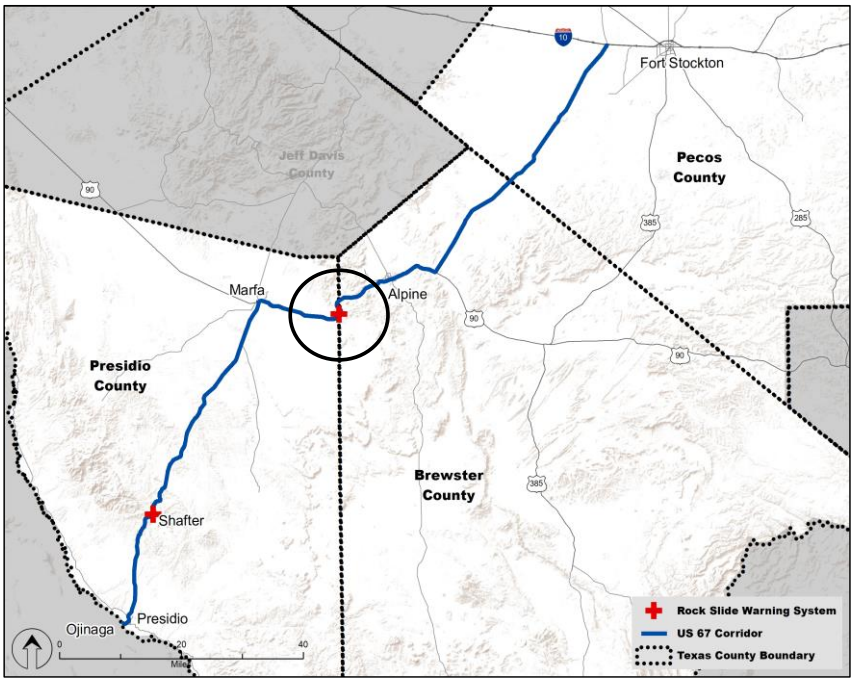
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Detector/ Sensor	Each	2	$ 100,000	$ 200,000
Dynamic Message Signs	Each	2	$ 87,500	$ 175,000
Power and Coms	Mile	1	$ 50,000	$ 50,000
Controller & Misc.	Each	1	$ 75,000	$ 75,000
2016 Total Cost				$ 500,000

Owner	Cost per location		
TxDOT	Engineering (Study and Design)	$	150,000
Project Name	Construction	$	500,000
Rock Slide Warning System at Paisano Pass			
	2016 Total Cost	$	650,000
Project Number	2019 Total Cost*	$	750,000
OM2.2	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

There are no off the shelf rock slide warning systems from vendors. This will need to be engineered using new sensors. This project is separate from the weather warning system, but will be integrated into the weather warning system if deployed. The system will take advantage of the Dynamic Message Sign in both directions approaching the area of concern. Rock slide detection sensors will identify when conditions indicate a potential rock slide. These sensors will send a warning message to the authorities or maintenance staff about the road closure. Engineering is estimated at 30% of construction costs. The proposed project location is identify in a circle.



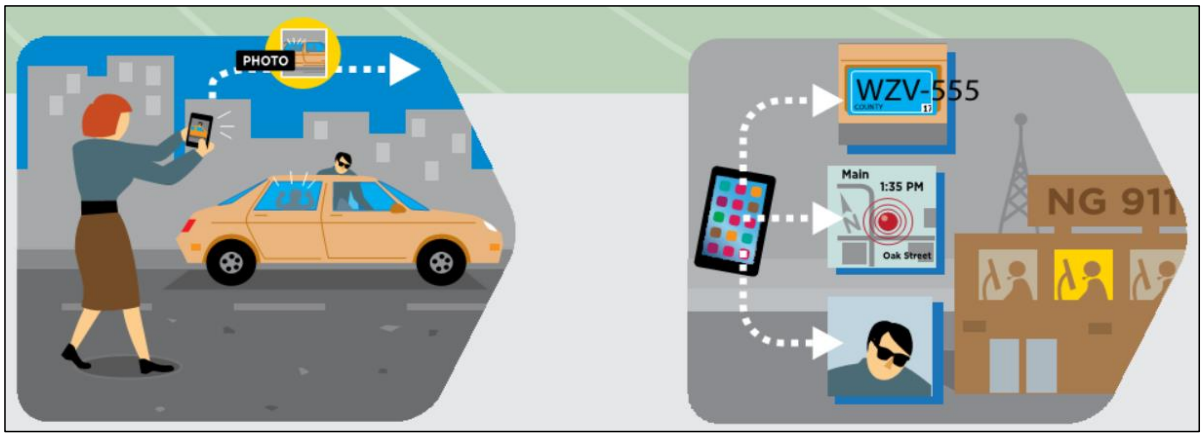
https://upload.wikimedia.org/wikipedia/commons/c/c3/Falling_rocks_sign.jpg

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost	
Detector/ Sensor	Each	2	$ 100,000	$	200,000
Dynamic Message Signs	Each	2	$ 87,500	$	175,000
Power and Coms	Mile	1	$ 50,000	$	50,000
Controller & Misc.	Each	1	$ 75,000	$	75,000
2016 Total Cost				$	500,000

Owner	Cost		
TxDOT	Study	$	900,000
Project Name	Application development	$	3,000,000
Next Gen 911 for Presidio County			
	2019 Total Cost*	$	4,000,000
Project Number	*rounded to the nearest million		
ES1.1			

Description
This tool requires computer hardware and software improvements and coordination with emergency response agencies (911 call centers, first responders, local hospitals, and others) combined with GIS mapping technology. Engineering is estimated at 30% of study costs.

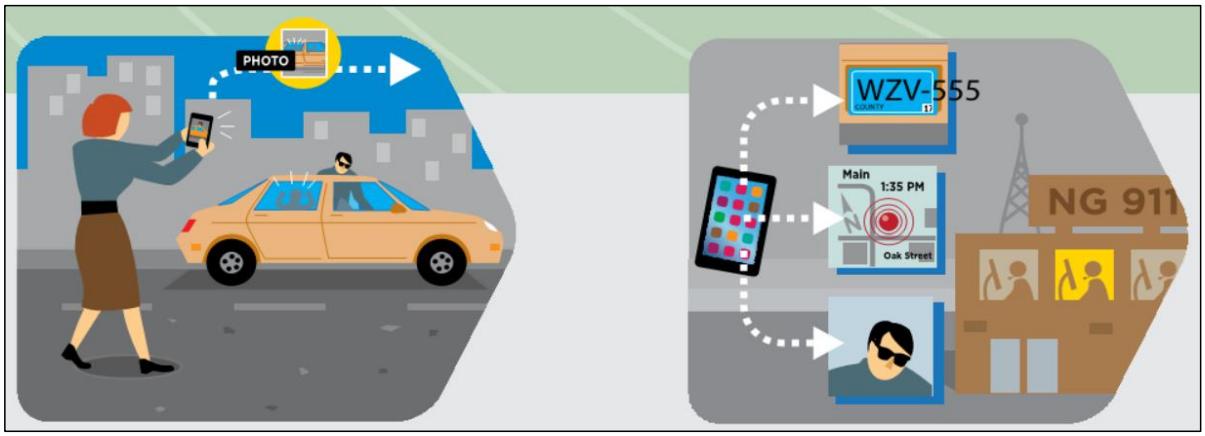


Source: National 911 Project

Decisions can not be made on if it is possible to proceed and what the costs are until a thorough study is completed. The study will need to look at the existing 911 system hardware and software and determine what is required to upgrade or replace the current system. Costs can vary widely. Estimates are from $1-5M per public safety answering point (PSAP). $3M is assumed as a planning level cost.

Owner	Cost		
TxDOT	Study	$	900,000
Project Name	Application development	$	3,000,000
Next Gen 911 for Brewster and Pecos Counties			
	2019 Total Cost*	$	4,000,000
Project Number	*rounded to the nearest million		
ES1.2			

Description
This tool requires computer hardware and software improvements and coordination with emergency response agencies (911 call centers, first responders, local hospitals, and others) combined with GIS mapping technology. Engineering is estimated at 30% of construction costs.

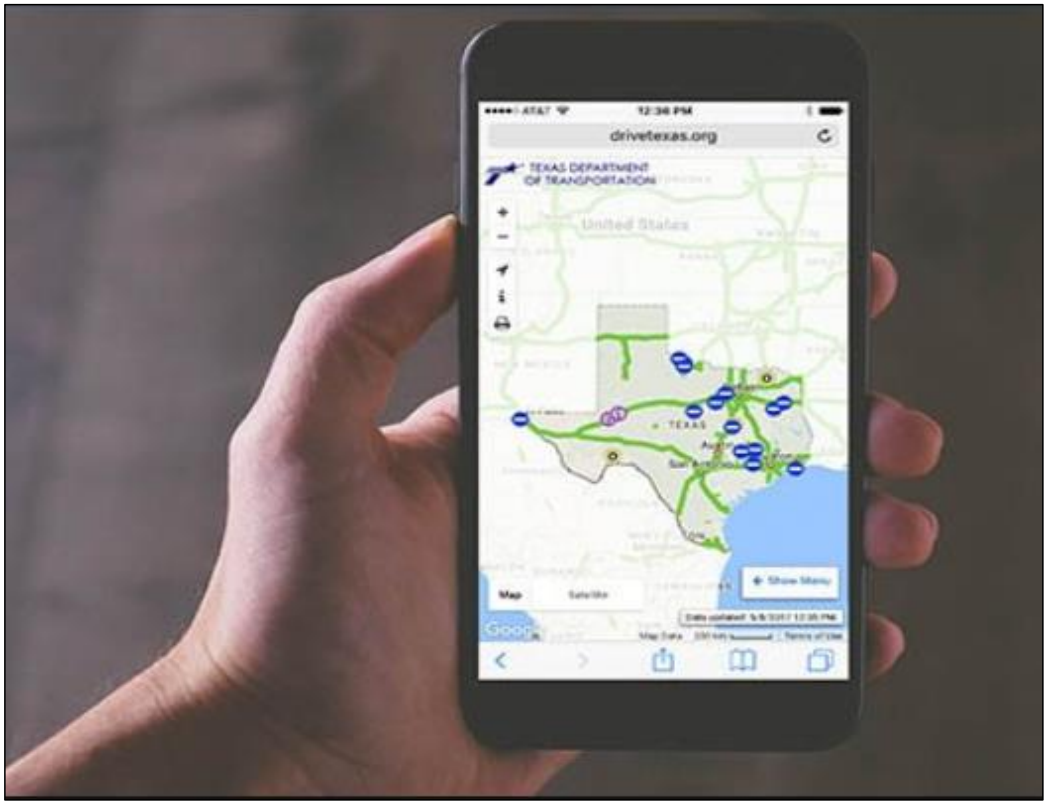


Source: National 911 Project

Decisions can not be made on if it is possible to proceed and what the costs are until a thorough study is completed. The study will need to look at the existing 911 system hardware and software and determine what is required to upgrade or replace the current system. Costs can vary widely. Estimates are from $1-5M per public safety answering point (PSAP). $3M is assumed as a planning level cost.

Owner	Cost		
TxDOT			
Project Name	Application development	$	300,000
Smartphone Applications for First Responders			
	2019 Total Cost*	$	300,000
Project Number	*rounded to the nearest hundred-thousand		
ES2.1			

Description
This tool requires computer hardware and software improvements and coordination with emergency response agencies (911 call centers, first responders, local hospitals, and others) combined with GIS mapping technology.



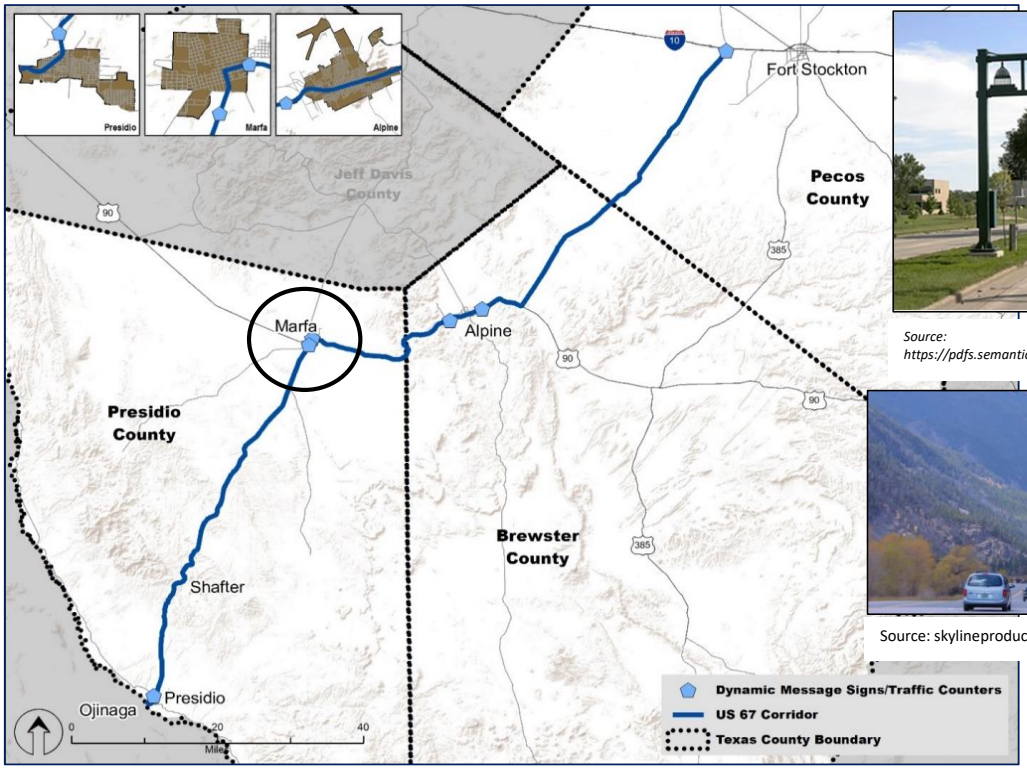
Source: Driving Texas DOT

The development of an application requires a study to determine what services are proposed to be included. The application is expected to be based off of existing systems (i.e., an existing TMC that has all the data). Application development can be completed in house depending on staff knowledge, or contracted out. It is likely that the software developer for the TMC will have the capabilities and knowledge to develop an application to support the TMC functions in a cost effective manner.

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	41,500
Project Name	Construction	$	415,000
Dynamic Message Sign outside of Marfa			
	2016 Total Cost	$	456,500
Project Number	2019 Total Cost*	$	550,000
TTI3.1	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a Dynamic Message Sign approaching and leaving the Marfa. Engineering is estimated at 10% of construction costs. The proposed project location is identify in a circle.



Source: https://pdfs.semanticscholar.org/e900/95e0701875a4c1f9

Source: skylineproducts.com

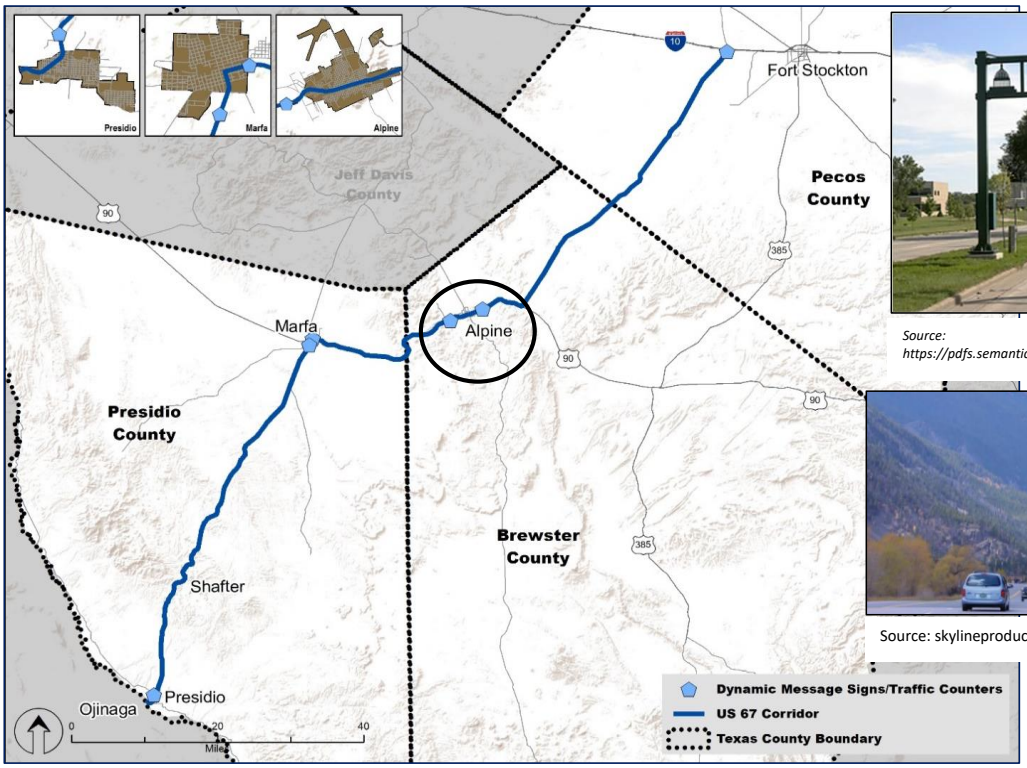
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Dynamic Message Sign	Each	4	$ 87,500	$ 350,000
Integration	Each	1	$ 25,000	$ 25,000
Power and Coms	Each	4	$ 10,000	$ 40,000
2016 Total Cost				$ 415,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	41,500
Project Name	Construction	$	415,000
Dynamic Message Sign outside of Alpine	2016 Total Cost	$	456,500
Project Number	2019 Total Cost*	$	550,000
TTI3.2	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a portable Dynamic Message Sign approaching and leaving the Alpine. Engineering is estimated at 10% of construction costs.



Source: https://pdfs.semanticscholar.org/e900/95e0701875a4c1f9

Source: skylineproducts.com

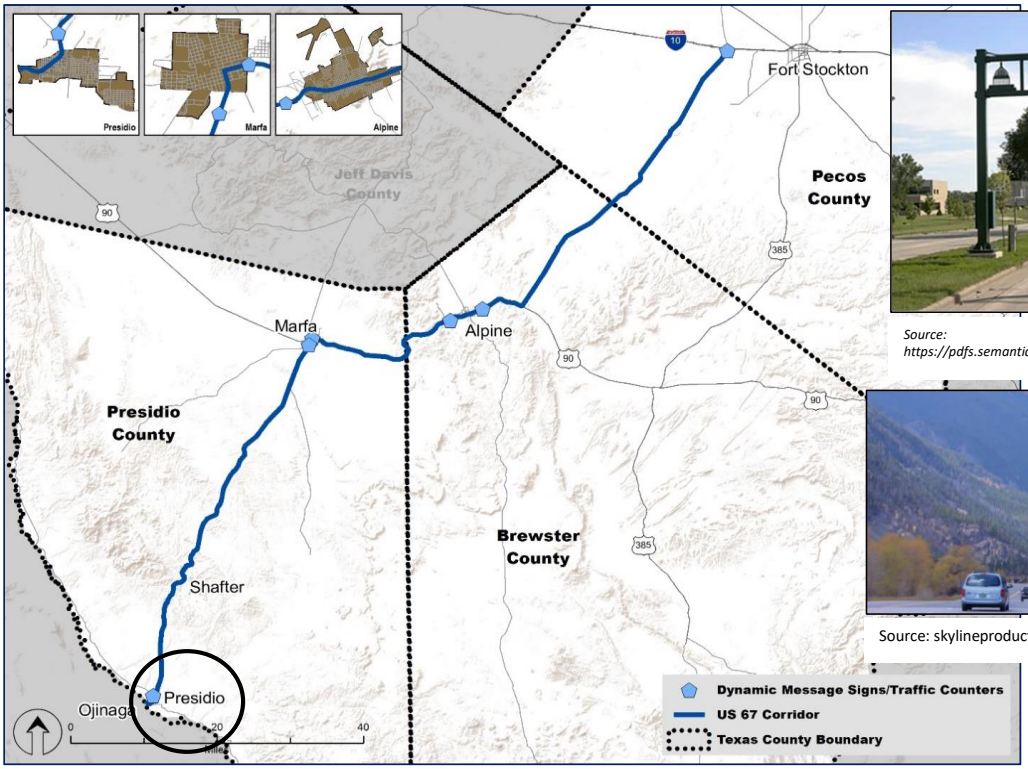
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Dynamic Message Sign	Each	4	$ 87,500	$ 350,000
Integration	Each	1	$ 25,000	$ 25,000
Power and Coms	Each	4	$ 10,000	$ 40,000
2016 Total Cost				$ 415,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	22,000
Project Name	Construction	$	220,000
Dynamic Message Sign outside of Presidio	2016 Total Cost	$	242,000
Project Number	2019 Total Cost*	$	300,000
TT13.3	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of adding a portable Dynamic Message Sign approaching and leaving the Presidio. Engineering is estimated at 10% of construction costs.



Source: https://pdfs.semanticscholar.org/e900/95e0701875a4c1f9

Source: skylineproducts.com

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Dynamic Message Sign	Each	2	$ 87,500	$ 175,000
Integration	Each	1	$ 25,000	$ 25,000
Power and Coms	Each	2	$ 10,000	$ 20,000
2016 Total Cost				$ 220,000

Owner	Cost		
TxDOT			
Project Name	Study	$	500,000
Study To Provide Fiber Access Along Corridor			
	2019 Total Cost*	$	500,000
Project Number	*rounded to the nearest hundred-thousand		
COM1.1			

Description
This project will consist of identifying the locations and installing fiber optic cable along the corridor. Engineering is included in the cost.

Private fiber optic cable exists along large stretches of the US 67 corridor. A study is required to determine the cost of deploying state-owned and maintained fiber as opposed to leasing any fiber that is available. Fiber optic communications is not a requirement of any of the other proposed ITS systems, but would support all of them. The cost analysis should address one time and ongoing costs for all proposed systems along the corridor that are outside of communities.

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Owner	Cost		
TxDOT			
Project Name	Study	$	500,000
Study To Provide Enhanced Cellular Communications Along Corridor			
	2019 Total Cost*	$	500,000
Project Number	*rounded to the nearest hundred-thousand		
COM1.2			

Description
This project will analyze the existing cellular connections and provides information on enhancing the cellular service along the corridor. Engineering is included in the cost.

Private cellular communications exists throughout most of the US 67 corridor. A study is required to determine the cost of deploying state-owned and maintained cellular communications as opposed to utilizing existing private provider networks. The study should investigate opportunities for public private partnerships where cellular data service could be provided in exchange for private party access to TXDOT ROW.

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Owner	Cost		
TxDOT			
Project Name	Study	$	250,000
Study on Data Over Current Radio System			
	2019 Total Cost*	$	300,000
Project Number	*rounded to the nearest hundred-thousand		
COM1.3			

Description
This project will use the existing patrol's radio system and analyze the ability to send data over the current radio system. In particular, the ability to send an image over radio signals when there is no cellular services.

Conceptually, images can be sent over both digital and analog radio. Bandwidth is a big restriction for video; single images are also a concern but requires much less. For images, special equipment may be needed to upload the image in the field and download the image at another location. This study will determine if there is a way to accomplish this with the existing radio system with additional procured equipment.

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Owner	Cost		
TxDOT	Engineering (Study and Design)	$	42,300
Project Name	Construction	$	423,000
Total Station between Alpine and Fort Stockton (RWIS, CCTV, Vehicle Detection)	2016 Total Cost	$	465,300
Project Number	2019 Total Cost*	$	550,000
TOT1.1	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of installing roadway weather information system (RWIS), pavement sensors, closed circuit television (CCTV), traffic detection, and radio tower at one location to minimize costs and improve maintainability. Engineering is estimated at 10% of construction costs.

Source: skylineproducts.com

Source: Arizona DOT Dust Warning System

Source: https://www.cctvcamerapros.com

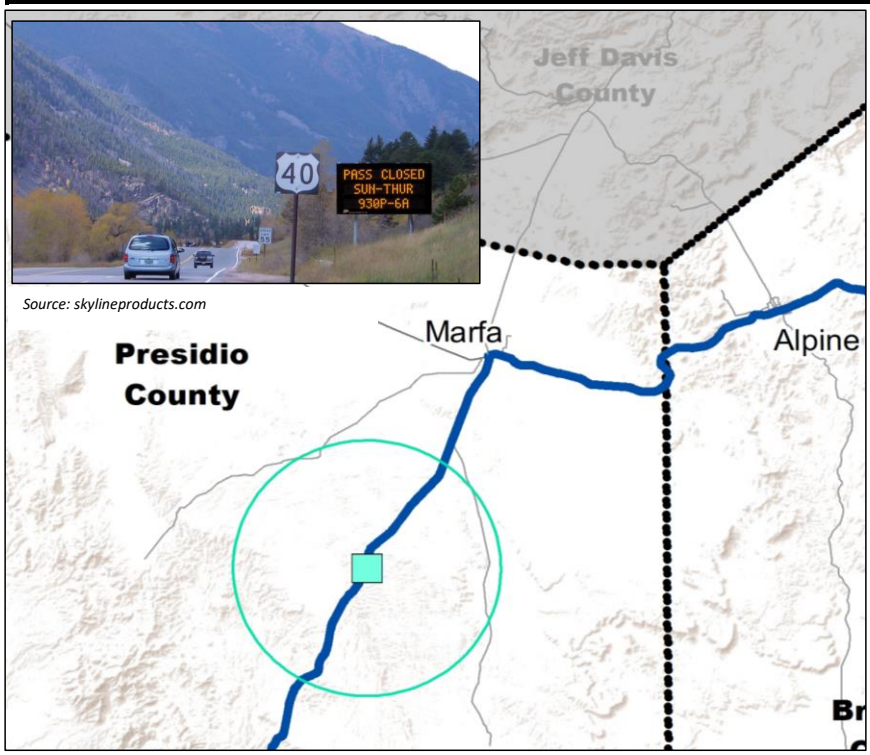
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
RWIS	Each	1	$ 75,000	$ 75,000
Pan–Tilt–Zoom (PTZ) camera	Each	1	$ 15,000	$ 15,000
Power and Coms	Mile	1	$ 200,000	$ 200,000
Cabinet and misc.	Each	1	$ 75,000	$ 75,000
Traffic Sensors	Each	4	$ 2,000	$ 8,000
Communications Tow	Unit	1	$ 50,000	$ 50,000
2016 Total Cost				$ 423,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	42,300
Project Name	Construction	$	423,000
Total Station between Shafter and Marfa (RWIS, CCTV, Vehicle Detection)	2016 Total Cost	$	465,300
Project Number	2019 Total Cost*	$	550,000
TOT1.2	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of installing roadway weather information system (RWIS), pavement sensors, closed circuit television (CCTV), traffic detection, and radio tower at one location to minimize costs and improve maintainability. Engineering is estimated at 10% of construction costs.



Source: skylineproducts.com

Source: Arizona DOT Dust Warning System

Source: https://www.cctvcamerapros.com

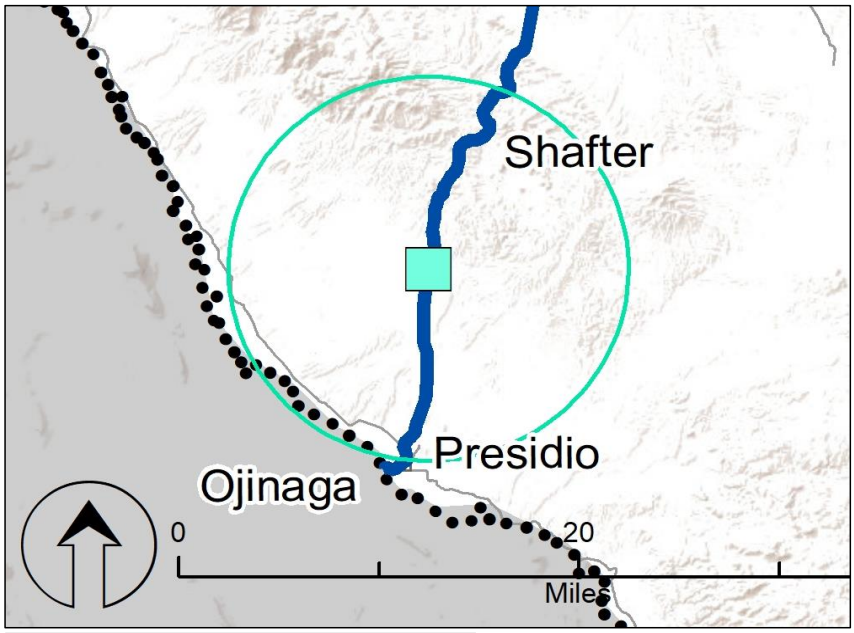
Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
RWIS	Each	1	$ 75,000	$ 75,000
Pan–Tilt–Zoom (PTZ) camera	Each	1	$ 15,000	$ 15,000
Power and Coms	Mile	1	$ 200,000	$ 200,000
Cabinet and misc.	Each	1	$ 75,000	$ 75,000
Traffic Sensors	Each	4	$ 2,000	$ 8,000
Communications Tower	Unit	1	$ 50,000	$ 50,000
2016 Total Cost				$ 423,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	42,300
Project Name	Construction	$	423,000
Total Station at Location Presidio and Shafter (RWIS, CCTV, Vehicle Detection)	2016 Total Cost	$	465,300
Project Number	2019 Total Cost*	$	550,000
TOT1.3	*accounts for 4% increase rounded to the next higher fifty-thousand		

Description

This project will consist of installing roadway weather information system (RWIS), pavement sensors, closed circuit television (CCTV), traffic detection, and radio tower at one location to minimize costs and improve maintainability. Engineering is estimated at 10% of construction costs.



Source: Arizona DOT Dust Warning System

Source: skylineproducts.com

Source: https://www.cctvcamerapros.com

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
RWIS	Each	1	$ 75,000	$ 75,000
Pan–Tilt–Zoom (PTZ) camera	Each	1	$ 15,000	$ 15,000
Power and Coms	Mile	1	$ 200,000	$ 200,000
Cabinet and misc.	Each	1	$ 75,000	$ 75,000
Traffic Sensors	Each	4	$ 2,000	$ 8,000
Communications Tow	Unit	1	$ 50,000	$ 50,000
2016 Total Cost				$ 423,000

Owner	Cost		
TxDOT	Engineering (Study and Design)	$	382,500
Project Name	Construction	$	1,275,000
Smart Parking at POE			
	2016 Total Cost	$	1,657,500
Project Number	2019 Total Cost*	$	1,900,000
OTH1.1	*accounts for 4% increase rounded to the next higher hundred-thousand		

Description

This project will design and deploy a smart parking system to be used on major holidays only. The system will require some form of manual check in and automated assignment. It will send the traveler to a designated area and then will provide notification to groups to proceed to the gate. Engineering including initial planning is 30% of construction costs.

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Smart Parking	System	1	$ 300,000	$ 300,000
Pan–Tilt–Zoom (PTZ) camera	Each	10	$ 75,000	$ 750,000
Power and Coms	Mile	1	$ 50,000	$ 50,000
Cabinet and misc.	Each	1	$ 75,000	$ 75,000
Sensors	Each	50	$ 2,000	$ 100,000
2016 Total Cost				$ 1,275,000

Owner	Cost		
TxDOT	Procurement	$	61,000
Project Name			
Incident Management Support Truck	Total 2016	$	61,000
	Total 2019*	$	100,000
	*accounts for 4% increase rounded to the next higher fifty-thousand		
Project Number	**Potential funding source**		
OTH1.2	FHWA		

Description

This project consists of procuring a vehicle to provide incident management support for the corridor. This vehicle can be new or an older repurposed vehicle such as a fire truck. The vehicle will be outfitted with appropriate lights, arrow boards, dynamic message signs, and support equipment to support a lane closure such as cones and flares. The vehicle will be positioned within the corridor and deployed for major events.

Source: https://cdn.firehouse.com/files/base/cygnus/fhc/image/2018/01/960w/Irving_Blocker_Fire_Ap

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Used Fire Truck	each	1	$ 50,000	$ 50,000
Modifications	package	1	$ 10,000	$ 10,000
Extra Equipment	package	1	$ 1,000	$ 1,000
2016 Total Cost				$ 61,000

Owner	Cost		
TxDOT	Coordination/procurement	$	60,000
Project Name			
Traffic Incident Management Training	2016 Total Cost	$	60,000
	2019 Total Cost*	$	100,000
	*accounts for 4% increase rounded to the next higher fifty-thousand		
Project Number	**Potential funding source**		
OTH1.3	FHWA		

Description

This project will seek appropriate incident management training from FHWA or other sources and offer to all incident responders in the corridor. This includes police, fire, and towing/recovery firms. Costs are entirely coordination and procurement.

Source: http://www.montana.edu/ltap/resources/tim/index.html

Source: https://ops.fhwa.dot.gov/eto_tim_pse/publications/timhandbook/chap3.htm

Cost Estimate

Item	Unit	Quant	Unit Cost	Total Cost
Training course	each	4	$ 15,000	$ 60,000
2016 Total Cost				$ 60,000

Owner	Cost		
TxDOT	Coordination/procurement	$	-
Project Name			
Establish Corridor Coordination Groups			
	Total	$	-
Project Number	Potential funding source		
OTH1.4	FHWA		

Description
This project consists solely of staff time organizing and managing corridor working groups and recurring meetings with agencies to coordinate planning and operations. No specific cost is associated with this effort.

13 FT 7 IN
Texas Department of Transportation
PRESIDIO TEXAS
CITY of ALPINE
BREWSTER COUNTY
1882
THE CITY OF MARFA
MARFA TEXAS
OUR 67
US 67 CORRIDOR
MASTER PLAN