

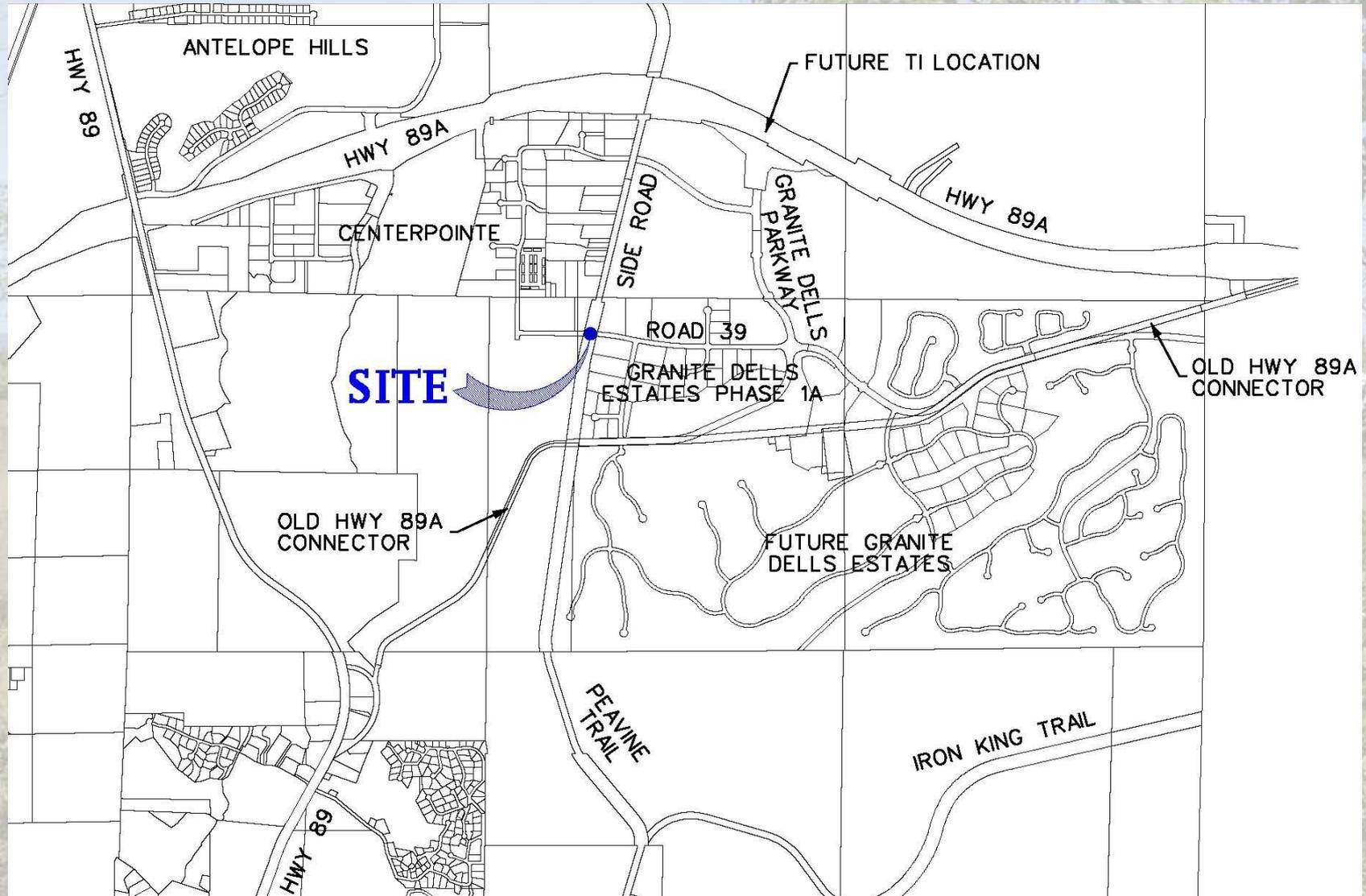
A photograph of a dirt road leading through a field with mountains in the background. The road is in the center, flanked by dry grass and some green plants. In the distance, there are rolling hills and mountains under a clear blue sky. A utility pole is visible on the left side of the road.

Peavine Trail Crossing Design Alternative Analysis For Granite Dells Estates Proposed Road 39

**Prepared for the City of Prescott by
Lyon Engineering and Development**

November 20, 2009

Location Map



Public Comments

- 45 Public comments were reviewed by both the City of Prescott and Lyon Engineering
- Comments and exhibits were organized into five major categories
 - Safety (8)
 - Functional Design Criteria (19)
 - Community Asset (11)
 - Revised Matrix and Analysis of Report Contents (3)
 - Miscellaneous Comments and Correspondence (4)

Public Comments

- A summary cover letter and the cumulative input from the public was incorporated as an appendix in the original report
- The comments were reviewed as they pertained to the design criteria and national standards used to make the recommendations contained in the original report

At-Grade vs. Grade Separated Warrants

- Based on Federal standards, year 2030 projected average daily traffic, and the estimated level of service, an at-grade crossing is a safe option at this location.
- A grade-separated crossing is also a safe option at this location, but is not warranted based on Federal guidelines.

Peavine Trail-Road 39 Alternate Crossing Decision Matrix

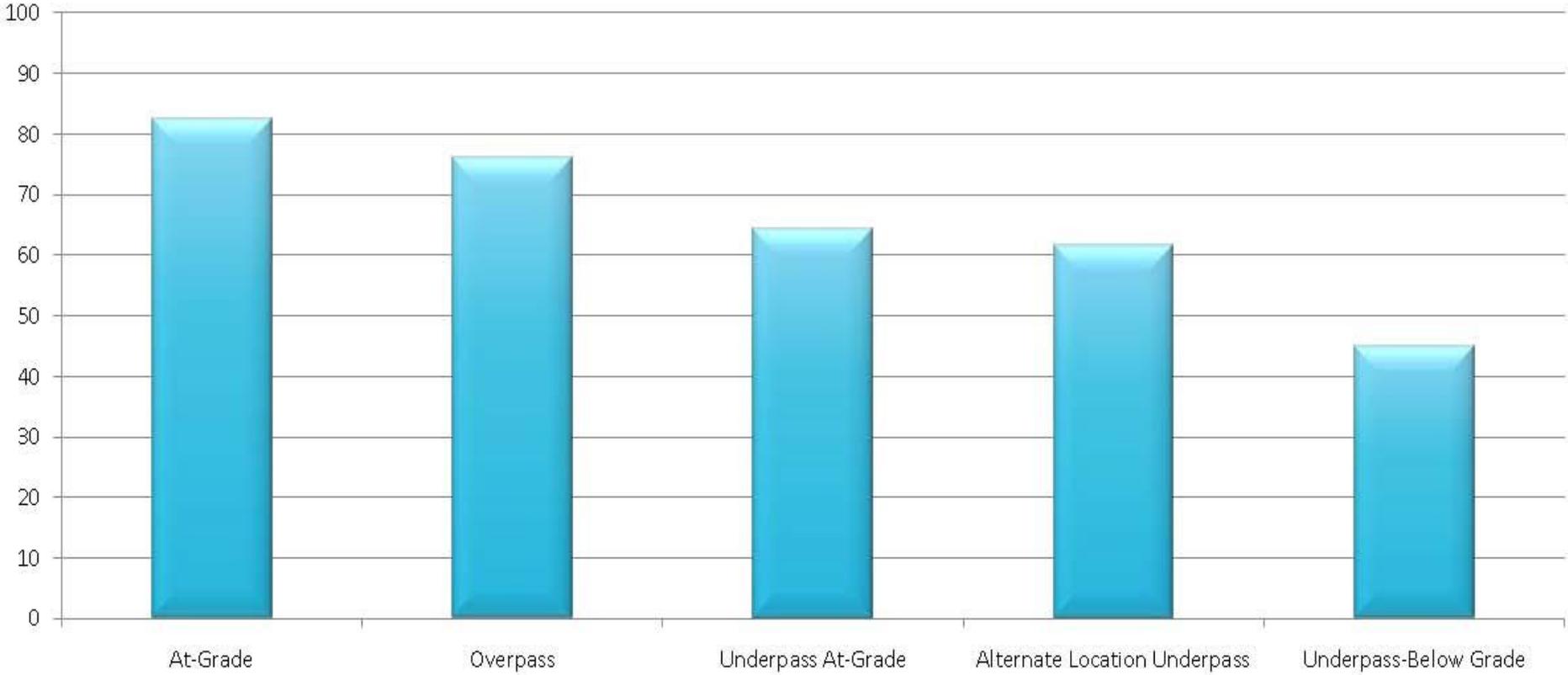
	Category Total Weight	Item Weight	At-Grade		Overpass		Underpass At-Grade		Alternate Location Underpass		Underpass-Below Grade		Score Range
			Option 1		Option 2		Option 3		Option 4		Option 5		
			Score ¹ (1-10)	Adjusted Weight ²									
Safety	30												1=Least Safe 10=Most Safe
Trail Users-Peavine		30	7	21	9	27	9	27	9	27	4	12	
Aesthetics	5												1=Least Aesthetic 10=Most Aesthetic
Visual Impact		5	8	4	5	2.5	5	2.5	5	2.5	7	3.5	
Usability and Convenience	30												1=Less Usable 10=Most Usable (Current Condition)
Pedestrian		10	7	7	8	8	9	9	9	9	2 *	2	
Equestrian		7	7	4.9	8	5.6	5	3.5	5	3.5	4 *	2.8	
Bicycle		10	8	8	5	5	9	9	9	9	2 *	2	
Maintenance Vehicle		3	10	3	8	2.4	8	2.4	8	2.4	2 *	0.6	
Cost	25												1=High Cost 10=Low Cost
Structure/Foundation		7	10	7	2	1.4	2	1.4	2	1.4	2	1.4	
Earthwork		4	10	4	3	1.2	2	0.8	3	1.2	4	1.6	
Maintenance		4	10	4	8	3.2	6	2.4	6	2.4	1	0.4	
Energy Usage		2	9	1.8	9	1.8	7	1.4	7	1.4	4	0.8	
ROW Impact		8	10	8	10	8	2	1.6	1	0.8	10	8	
Adjacent Property Owner Impact	10												1=High Impact 10=Low Impact
Encroachment onto Property		5	10	5	10	5	3	1.5	1	0.5	10	5	
Usability/Access to Land		5	10	5	10	5	4	2	1	0.5	10	5	
Total	100		82.7		76.1		64.5		61.6		45.1		

(1) - Option's "score" is based on a 1-10 range

(2) - Option's "adjusted weight" is calculated by multiplying the "item weight" by the "score" divided by 10

(*) - Option 5 scores in this area are lower than Option 3 and 4 due to the possibility of standing water and muddy conditions following a rain or snow event

Peavine Trail-Road 39 Alternate Crossing Decision Matrix Scores



Recommended Option

At-Grade Crossing

