

# POWDERHOUSE ROAD

## CORRIDOR STUDY

### PROJECT OVERVIEW

In 2022, AVI Engineering, along with Stantec Consulting Services (Traffic) and Front Range Stormwater & Floodplain Consulting (Drainage), was tasked with completing analysis on the 7.2-mile stretch of the Powderhouse Road Corridor from Dell Range Blvd. north to US HWY 85. Scope of work included developing current and projected traffic volumes and drainage culvert crossing analysis and sizing. Also, the study included 35% planning level construction drawings and estimated construction costs.

### RECOMMENDED DESIGN ELEMENTS

- Classify entire corridor as Minor Arterial
- Intersection improvements at Powderhouse and Dell Range
- Realignment of the Powderhouse Rd centerline to square it with Four Mile Rd., Iron Mountain Rd., and US 85.
- Extension of Powderhouse to US 85 - Paved
- Safe, accessible, and continuous pedestrian connection along the entire corridor
- Provide continuous bike lanes (City) and widened shoulders (County) along the entire corridor
- Provide street lighting at the key intersections described in this report and non-motorized crossings where appropriate.
- Connectivity of current Greenway was deemed to be appropriate by the Project Steering Committee during the initial reviews of the project. However, the sidewalk along Section 20 described should be designed at eight (8) feet in width to provide for multipurpose use.
- Posted speeds: 35 mph (City); 45 mph (county)
- Improve and add lighting and signage throughout the corridor.

### RIGHT-OF WAY ACQUISITION

The proposed alignment also requires acquisitions from five property owners along the studied corridor. AVI met with all owners who would be impacted with acquisitions:

- 1608 Columbia Dr.
- 1701 East Four Mile Rd.
- 1790 Pegasus Road
- 7715 Powderhouse Rd.
- 7826 Powderhouse Rd.

For more information and links to the full draft of the plan please go to:  
<https://www.plancheyenne.org/project/powderhouse-study/>

# POWDERHOUSE ROAD

## CORRIDOR STUDY

Powderhouse Road Corridor Study Project					
Estimate Totals		Current Amount (\$)	5-Year Amount (\$)	10-Year Amount (\$)	15-Year Amount (\$)
Phase 1 - Dell Range Blvd to Storey Blvd Improvements		\$5,040,386.09	\$6,432,951.83	\$8,210,257.82	\$10,478,600.68
Phase 2 - Storey Blvd to Four Mile Road Improvements		\$5,497,997.51	\$7,016,992.85	\$8,955,658.60	\$11,429,941.95
Phase 3a - Four Mile Road to Iron Mountain Road Improvements		\$6,615,047.88	\$8,442,663.64	\$10,775,215.95	\$13,752,209.45
Phase 3b - Iron Mountain Road to US HWY 85 Improvements		\$9,555,897.34	\$12,196,015.59	\$15,565,549.83	\$19,866,024.26
Project Subtotal (Construction Costs)		\$26,709,328.82	\$34,088,623.92	\$43,506,682.20	\$55,526,776.33
Phase 2 Land Acquisition	Jahnke, Cynthia	9,584	SF	\$6.00	\$57,504.00
Phase 2 Land Acquisition	Cheyenne Light Fuel & Power (BHE)	38,770	SF	\$6.00	\$232,620.00
Phase 3a Land Acquisition	Schlotthauer, Jerry	18,296	SF	\$6.00	\$109,776.00
Phase 3b Land Acquisition	Pegasus Ranch LLC	45,738	SF	\$6.00	\$274,428.00
Phase 3b Land Acquisition	Hazlip, Anna	50,006	SF	\$6.00	\$300,036.00
ROW Acquisition Total					\$974,364.00