

RULE 2: Permits

Access Roads

Access roads are frequently traveled roads which are not used for the transportation of coal. Access road preliminary designs and construction drawings are certified by a qualified registered professional engineer.

An existing road provides access from Highway 12 for ranching and timbering up Lorencito Canyon. This road will be upgraded to a haul road from Highway 12 to the Jeff Canyon haul road. From there it will be used as an access road to the office area. This will provide access for personnel and equipment. The access roads are designed to American Association of State Highway Transportation Officials Policy on Geometric Design for Local Rural Roads. This access road is shown on **Map 2.05.3-1**.

Alignments follow existing roads, ridge lines, and stable slopes when possible; and follow the topography so as to minimize cuts and fills and avoid flood plains. Any crossings of drainages will be done at right angles. Except for crossings, no segments of access road are located in the channel of an ephemeral, intermittent, or perennial stream. Intermittent or perennial natural drainages will not be altered or relocated. No unique, endangered, or special environment or cultural resources are known to be impacted by the road system.

Access road design will accommodate the needs of specific uses of the road. The design maximum speed is 25 miles per hour. Grades will be limited to 15% for limited distances prescribed by the regulations.

A 20-foot wide travel way is proposed for the main access road. The travel way is crowned (5%), ditched adjacent to cuts, and has culverts or swales when necessary to prevent ponding. Typical cross sections are shown in **Figure 2.05.3-14**.

Vegetation will be cleared for no more than the width needed for the roadway, drainage control, and any cut and fill. Topsoil will be removed from road cut and embankment footprints and stored for use in reclamation and as a vegetation growth medium for cut and fill slopes.

Cut slopes will not be steeper than 1.5h:1v in unconsolidated materials or 0.25h:1v in rock. In areas of steep side slopes, the road alignment will be shifted so that the entire road width rests on the cut benches.

Embankment material will be free of organic matter, peat, or other unsuitable (acid-producing) materials. In the event an embankment is required on side-slopes greater than 33%, the embankment will be plowed, stepped, or keyed. Embankment slopes will not be steeper than 1.5h:1v unless the material consists of a minimum of 85% rock, in which case the slopes may be placed up to 1.35h:1v. Embankment materials containing less than 25% rock larger than 6 inches will be placed in uniform layers not exceeding 12 inches before compaction, and compacted within acceptable levels of moisture content. Material consisting of large-size rock will be placed in uniform layers not exceeding the average size of particles, lifts not in excess of 36 inches, and placed in a manner to minimize voids, pockets, and bridging. The final layer will contain material which has less than 25% rock larger than 6 inches in largest dimension in a uniform later not exceeding 12 inches.

Technical Revision 21 proposed an access road to access drill location LC-17-20. The access road will be located off a haul road and will be approximately 30 feet long by 14 feet wide.