

BI-03D.01 Road design guidelines set minimum standards for the construction and maintenance of the road network

Expectations

Road design guidelines ensure that the development and maintenance of the physical operating environment adequately considers prevailing site conditions, the experience of mobile equipment operators (controllers) and equipment types/mix. Road networks/excavations are constructed and maintained to meet designs.

Specify

Scheduled and damage repair works are included in the required activities of the Road Construction crew(s) on site - with appropriate equipment to maintain segregated roadways and provide best possible driving directions with consideration of prevailing sunrise/sunset positions, dust sources and other factors which impact operator's ability to safely operate.

Mine Design engineering guidelines ask and answer the key questions:

1. If truck haulage is considered, are the ramps designed to accommodate truck haulage?
2. Can they be loaded and have adequate turning and dumping areas or are additional excavations required?
3. What distance must equipment travel for repairs and refuelling?
4. Is the loss of production opportunity less costly than the cost of establishing service and refuelling areas?
5. Can we use satellite systems?

Site road design guidelines provide site specifications for:

- Grade
- Curvature
- Line of sight (including orientation of U/G portals, management of doors/ventilation screens and longer haul roads)
- Pavement shape

- Surface material
- Guideposts
- Parking areas
- Stockpiles, accesses to bins and roadways around infrastructure
- Safety berms or windrows
- Signs and barriers
- Lighting (area and traffic control)
- The installation of one way block lights for intersections, long driveages and drifts
- Location and requirements for installation of required infrastructure (pipes, cables, lighting, etc.)

Implement

Road construction and maintenance crews undertake required road construction and maintenance tasks - confirming that designs are delivered and maintained.

Monitor

Regular inspections and post construction QA/QC and Survey checks confirm that designed road networks are in place and meet ongoing site requirements.