

## 2.6 Access Roads

Access to the Property will be via two routes: the primary access route from the east, and a secondary access route from the west (Figure 2-1). Design details for the roadways are provided in Appendix D. The primary access road to the Property will extend approximately 3.7 mi from SR 83 at a point between mile markers 46 and 47 and end at the main guard building at the entrance to the plant. The main access road will be designed for 35-mph traffic and consist of two lanes, one in each direction. Each lane will be 14-ft wide with a 4-ft wide shoulder, providing a 36-ft wide road bed. Each side of the roadway, will have a collection ditch which will typically be 4 ft deep with side slopes of 2H:1V. The resulting 8-ft wide channel on each side will collect and direct rain water. The total road corridor with collection ditches will be at least 52 ft wide. The access road will be crowned in the center with the surface sloped 2% to each side. The road surface will consist of 8 in of compacted ADOT aggregate (Class 2). The minimum easement for the access road on level ground will be 68 ft, and greater where cut and fill toe lines extend beyond the minimum distance.

The intersection of the access road with SR 83 will be at a point that provides clear line of sight for up to 2,500 ft in each direction. SR 83 will be modified to provide safe ingress and egress from the access road. Modifications will include a 500-ft long center accelerating lane, 12 ft wide, going north allowing drivers to safely accelerate to speed before merging with traffic. This center lane will extend for 500 ft to the south of the intersection to serve as a left-turn lane for northbound traffic to turn onto the access road. A 220-ft long deceleration and right turn lane, 12-ft wide, will also be constructed for traffic turning onto the access road from the north. The 12-ft wide lane will continue to the south of the intersection for 500 ft to serve as an accelerating lane for traffic leaving the access road and going south to Sonoita.

Secondary access to the plant will be provided to the west over the ridge of the Santa Rita Mountains, and will connect to Santa Rita Road at Helvetia Road. This west access road is considered a secondary access for plant maintenance employees to access the fresh water pump stations and pipeline. The design for the secondary access road from Santa Rita Road to the plant entrance is based on one 11-ft wide lane without shoulders, similar to existing FS roads.

In-plant roads will generally measure 24-ft wide with 5-ft wide drainage channels, as required, along both sides of the road. In-plant roads will extend from the plant entrance around the perimeter of the process facilities and along the crushed ore conveyor to the mine truck shop. An access road will leave the perimeter road at the crushed ore stockpile and serve the fresh water storage tank, potable water tank, and process water tank. All traffic on plant roads will be right hand traffic until reaching the mine truck shop. At this point, traffic will become left hand drive to accommodate haul trucks in the area. Access to the PLS and raffinate ponds at the leach pad, and the powder magazines south of the mine and west of the waste rock storage area, will be from the haul road that runs from the primary crusher southwest between the open pit and waste rock storage areas. This road will be a left-hand drive to accommodate the haul trucks in the area.

Haul roads will generally be 125 ft wide inclusive of safety berms and ditches. Haul trucks will have the right-of-way and all plant traffic crossing the haul roads must yield to the haul trucks.