**CAUTION:**
This project requires construction work near perennial and unprotected mine openings. The contractor shall be responsible for thoroughly investigating the site conditions and selecting equipment, equipment operations, personnel, and safety procedures to prevent accidents and injuries.

**NOTE:**
See Figure 6 for additional details.

**GENERAL NOTES:**
1. The drawing shows the original shape and approximate profile of the shaft at the intended location of the closure. Use the drawing as a guide for field layout of the closure. Field verify dimensions prior to fabrication.
2. Contractor shall remove trees, vegetation, and fences as necessary to install structure. Dispose of debris as directed by the Project Manager.
3. Tubular steel, steel plates, and shafts shall be reinforcing steel as specified. Weld all joints. Joints shall be tight so that moisture cannot enter between plies of material, around or chartered all sharp edges and corners.
4. Place a 6" chamber on the outside exposed edges of concrete wall.
5. Tolerances on the center-to-center dimensions between posts shall be 1/8".
6. Place a survey marker, provided by the project manager, into the footing before concrete hardens.
7. Grade fill around structure to minimize erosion from upslope, as directed by the project manager.

**ABANDONED WINE LAND PROGRAM**
**MINING AND MINERALS DIVISION**
**OHIO DEPARTMENT OF NATURAL RESOURCES**

**WALL AND GRATING DETAILS**

**SHAFT 598-02**

**Figure 5**

**Cleveland Mine Safeguard Project**