

FIGURE 6.11 Pump house at the Salado pump station. Note soil settlement relative to pile-supported foundation blocks.

Communications Equipment

The main radio antenna buckled and became inoperable. This antenna was used to transmit continuous operations information and was the principal means of emergency communication.

Water Tank

The main 10-m-diameter water tank was 5.5 m high; it was constructed of approximately 7-mm-thick steel plate. Its purpose was to supply water for fire fighting. The 2,000-barrel tank was full at the time of the earthquake. As shown in Figure 6.12, wrinkling occurred near the top of the tank, apparently in response to sloshing. A large circumferential bulge, or "elephant's foot" buckle, developed at the juncture between the tank and its concrete ring wall (Figure 6.13). The main pipe outlet from the tank pulled free of a compression coupling, thereby disconnecting the tank from the station piping network.

Crude Oil Tank

The 15-m-diameter oil tank, which provides surge-pressure relief and oil storage, was about half full during the earthquake. The tank was con-