

Additional Project Information

Regional San proposes to use existing access structures to insert inflatable plugs 10' past the levee toes of the pipe on the north and south side levees and fill with controlled low strength material (CLSM).

The plugs will be inserted using a hand rod. Once the plugs are 10' past the levee toes, the plug will be attached to and inflated with an air hose. Staff will monitor the pressure of the plug with a pressure gauge to ensure proper inflation. A camera will also be used to visually confirm that the plug is in place and inflated properly to ensure there are no gaps between the plug and pipe wall. The camera will be pulled out prior to pouring the CLSM into the pipe. The CLSM will be poured in lifts. The sections of pipe within the levee sections up to 10' past the levee toes will fill entirely with CLSM. The inflatable plugs, hand rods, and air hose are sacrificial and will be left in the pipe.

Calculations will be done to determine the amount of CLSM required to fill the pipes within the levee sections. Staff will monitor the amount of CLSM poured and verify that the calculated CLSM volume is correct given the diameter and length of pipe to be filled.

The CLSM shall conform to the standards set forth in the Sacramento Area Sewer District's Standards and Specifications dated March 13, 2019. Per Section 308.14 Controlled Low Strength Materials, all CLSM must conform to ACI 229R and have a 28-day unconfined compressive strength of 50 to 125 psi. Cement must be Type I or Type II Portland cement conforming to ASTM C150. Fly ash must be in accordance with ASTM C618. Water quality must conform to ASTM C94. Aggregates must comply with ASTM C33. Aggregates will be sand with no more than 10% passing a #200 sieve.