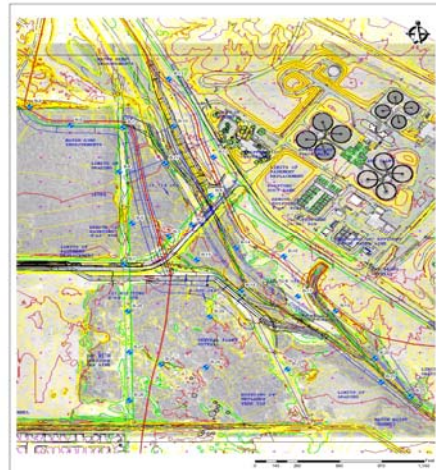


# CCWRD Central Plant Las Vegas Wash Improvements

## Clark County Water Reclamation District

GES and Eagle are working together on this project. The project consists of channel and flood plain improvements to the Las Vegas Wash at the CCWRD Central Plant site. The improvements consist of a 600 foot wide flood plain channel and a low flow channel about 100 feet wide. The channel will be lined with 3 to 4 feet of heavy rip rap having an average size of 18 to 24 inches. A portion of the channel will consist of a concrete lined 9-foot drop structure. In order to ensure containment of the 100-year flood, earthen levees will be constructed along the western margin of the flood plain channel. The earthen levees will be on the order of 12 feet in height, with a crest width of about 14 feet. A weir will be constructed across the existing Central Plant Outfall, a box culvert currently discharging treated effluent into the Las Vegas Wash channel.



Temporary construction dewatering will be required to facilitate construction of the channel because the rip rap and underlying bedding will be constructed below groundwater in order to reduce the channel slope to 0.20 percent needed to hinder future erosion. About 160 dewatering wells are expected to be required to dewater the site. GES will be performing full scale pump tests in order to develop a construction dewatering plan. GES performed a geotechnical investigation that included drilling 29 borings, performing laboratory tests, performing engineering analyses, and providing recommendations for temporary construction dewatering, earthwork, excavations and stability, pipe bedding and pipe zone backfill, pipe loads, conventional spread footings, reinforced concrete boxes, low flow channel and containment levees, rip rap and pavement sections.