Corps completes outfall canal construction

NEW ORLEANS – The U.S. Army Corps of Engineers has substantially completed work on the levees and floodwalls along the 17th Street, Orleans Avenue and London Avenue outfall canals. The floodwalls and levees now meet the current post-Hurricane Katrina design requirements, as well as the necessary factors of safety for stability and seepage. As a secondary benefit, the strengthened floodwalls and levees will be also able to support the requirements of the Sewerage & Water Board of New Orleans in removing rain water unimpeded from the city, now and in the future.

At the 17th Street Canal, the contractor injected a cement grout mixture into the soil to produce stabilized soil columns, which in turn strengthened the floodwalls and levees, and added embankment at the crown of the levee to reduce the amount of stick-up, or exposed floodwall. At the Orleans Avenue Canal, the contractor used deep soil mixing, which involves mixing cement with the underlying soil, to strengthen the floodwalls and levees; constructed stability berms, or earthen buttresses, at the toe of the levee’s protected side; and installed sheet pile to prevent sub-surface seepage. At the London Avenue Canal, the contractor installed sheet pile to prevent sub-surface seepage and added embankment at the crown of the levee to reduce floodwall stick-up.

The $10 million design effort for the project involved a full-scale field test on the London Avenue Canal and a three-year engineering study with two levels of independent technical review. Construction at the three canals began in January 2011 and cost approximately $60 million. Although work is substantially complete, crews will continue working to establish grass and perform other ancillary tasks.

The 17th Street, Orleans Avenue and London Avenue outfall canals extend from interior pump stations to Lake Pontchartrain in metro New Orleans. Interim Closure Structures currently block 100-year storm surge from entering the canals; they will be replaced with permanent canal closures and pump stations that are scheduled to be complete in 2015. Because of the canal closures, the outfall canals’ primary purpose is to remove rainwater from the city. The floodwalls and levees lining the canals are no longer the primary storm surge defenses for New Orleans.

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