

PART I. EXECUTIVE SUMMARY

The City of Rome, Georgia is located at the headwaters of the Coosa River. Rome is the county seat of Floyd County and is approximately 73 miles northwest of Atlanta, GA and approximately 90 miles south-southeast of Chattanooga, TN. Floyd County is located in the northwest area of Georgia along the Alabama-Georgia state line and Rome is approximately 25 miles east of the Alabama-Georgia state line. The Etowah and Oostanaula Rivers merge to form Coosa River in downtown Rome near the center of the levee system.

The levee project was originally constructed in May 4, 1938 and completed on February 17, 1939. A Flood Control Project was authorized by Section 5, Act of Congress (Public No. 738-74th Congress), authorizing the construction of certain public works on rivers and harbors for flood control and for other purposes, which states, under Mobile River Basin, "Rome Georgia: Levees on Coosa River to protect people and city property; special report on record in Office of the Chief of Engineers; estimated construction cost, \$330,000."

The protective work forms a U-shaped loop around the Fourth Ward of the city and connects with high ground at both ends. Before the completion of the project, stages in excess of 28 feet on the Rome gauge would inundate parts of the Fourth Ward. The project provides protection against the maximum flood of record, which occurred in 1886 and corresponds to a stage of 40.3 on the gauge on Fifth Avenue Bridge over the Oostanaula River.



The levee system is currently shown as accredited by FEMA on the most recent National Flood Insurance Mapping (FIRM). The documentation provided to FEMA for accreditation was developed by USACE and this documentation was provided for review. The USCAE analysis indicates a 99.6 percent chance of non-exceedance of 100-year flood event (1%/year).

This periodic levee inspection was performed on 12 August 2010. The pump Station inspection was performed 11 August 2010. The local Sponsor showed an active response to operation and maintenance of the project. No major deficiencies were found but some remedial actions are anticipated and required for the minor deficiencies before the next periodic inspection to insure a more efficient operation of the levee system.

The following were some of the project deficiencies:

1. From Station 0+00 to 6+50 the inside slope of the levee was covered with vegetation and could not be adequately inspected. Recommend that vegetation be removed.
2. At the sewage lift station, the City has constructed a street at the inside toe of the levee. This street "cuts" into the levee toe, leaving a much steeper section. The cut section is only about 2 to 3 feet high and is standing, however, much steeper than recommended for an earth embankment.

3. The concrete gate installed to permanently seal off the road through the Levee at sewage lift station house at Ave "A" appear to be causing unequal settlement in the existing retaining wall foundations parallel to centerline of road on each side of road thru Levee. The gate was installed in the existing stop log shafts by the Levee Sponsor. The modification to the stop log openings and levee prism have been made without prior advice from the District. The construction joint in the retaining wall supporting one end of the concrete gate has opened up 3½ inches at the bottom. On the other end of the gate the retaining wall construction joint is also opening unevenly. The structural stability of the aforementioned structures is questionable. Recommend that the District investigate.
4. From Station 16+20 to 20+50 a privacy fence encroaches on the toe of the levee. A carport was also added and it extends to just inside the privacy fence. This reach also had several large pecan trees within the 15 foot buffer at the inside toe of the levee. There is a smokehouse on levee toe landside at Sta 94+00. Recommend that privacy fence, carport and smoke house be moved to clear the 25ft required buffer from toe.
5. Drainage ditch behind the hotel, just south of Turner McCall Blvd Bridge, has mature vegetation prohibiting a complete inspection. There appears to be a culvert in this area but the intake was not accessible due to heavy vegetation. Recommend that all vegetation be removed from these areas.
6. Station 45+60 to 46+85: This reach has vegetation within the 15 foot buffer and along the toe of the slope, which prohibits a complete inspection. Power poles were also located on the slope in this reach. Recommend that all vegetation be removed within the 15 foot buffer and power pole be removed to clear the 25ft buffer from toe.
7. At stop log opening No.2 the Sponsor has replaced it with a 30 ton swing steel gate. Our observation of swing gate is that it appears that skin plate is on the side opposite of the water load. Recommend that the District investigate.
8. At the sewage lift station located at stop log No.1, there is settlement of the concrete slab between building and retaining wall. Recommend monitoring for addition settlements.
9. At the sewage lift station located at stop log No.1, the slab at top of levee has settled to a lower elevation than levee crown. Recommend that the District investigate.
10. There is possible water line seepage on levee toe river side from Sta 89+00 to 90+00. Recommend investigating water line and repairing any leaks.
11. The top of the levee is not at a consistent elevation, rather undulates along several reaches. Recommend that surface elevation be repaired to current design criteria and in agreement with USACE guidance. The top of levee embankments should be graded to drain. For more information see Section 5.9 Design Criteria Review, Geotechnical Review Item c.
12. O&M Manuel does not address all the upgrades and alterations to levee project. Recommend that sponsor to updates O&M Manuel to reflect these changes.
13. Culverts have not been visually inspected by means of using video cameras. Recommend that Sponsor performs a visual inspection using a video camera and maintain a video record of the inspection.

The overall engineering determination concludes that the minor deficiencies would not prevent the system from performing as intended under the current established level of flood protection. Repairs should be made and investigations completed as recommended within two years from the time of the inspection. The next periodic inspection is scheduled for FY 2015.