## **DEPARTMENT OF TRANSPORTATION** STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

**DATE** September 9, 2013

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Divisions of Engineering, Operations, Field Districts, Construction, and Offices of Program Control, TO Program Delivery, Engineering Services, Innovative Program Delivery, TIA, and ACEC, ASHE, CRC

**SUBJECT** USACE 404 Permit Regional Conditions (GDOT Data Collection and Design Diagrams)

In 2012, the United States Army Corp of Engineers (USACE) reissued the Nationwide Permitting Program, requiring profile and cross section "diagrams" when proposing either new culverts or replacing existing culverts on perennial streams. This does not apply to culvert extensions. The diagrams must be included with the application for a 404 Permit submitted by the ecologist to the USACE. The purpose of the diagrams is to demonstrate that the proposed culvert design will not deter fish passage. Although these guidelines were developed for Nationwide Permits, the requirement to include the diagrams applies to all permits issued by the USACE (Nationwide, Regional and Individual).

To comply with these requirements, GDOT has developed the following guidance with more detail published at the links below. The data collection will be handled as an Additional Survey Request, after preliminary design of the culvert has occurred and before application for a 404 Permit is submitted.

- 1. The designer completes preliminary design of culvert and notifies Project Manager and NEPA Analyst.
- 2. The Project Manager initiates an Additional Survey Request to the State Location Bureau and the Office of Environmental Services/Ecologist to provide "perennial stream profiles and cross sections".
- 3. A Pre-Field Survey Meeting is held with ecologist, designer, and surveyor to review the 404 Permit requirements and available information. Further field activities will be scheduled from this meeting.
- 4. The ecologist flags stream features to be incorporated into the Digital Terrain Model (DTM), including field indicators of bank-full elevation (pink flagging) and data points along the stream channel to indicate where cross sections (blue flagging) should be developed by the designer.
- 5. Data collection occurs. The profile diagram needed covers 50 feet upstream and downstream of the proposed culvert. However, so that the designer has flexibility for slight adjustments, GDOT's normal practice will be to survey 100 feet upstream and downstream. Detailed guidelines for data collection are published in the GDOT Automated Survey Manual (Appended to the end of document).
- The data is used to create a separate DTM (independent from the original survey database DTM). The naming convention of the 404 Permit DTM as well as the standards and workflow procedures for incorporating the survey data into the InRoads Survey/Design Software are published in the InRoads Survey Data Processing Guidelines (Appendix C).
- 7. The DTM is sent to the designer to prepare profiles and cross-section diagrams, as shown in the 2012 Nationwide Permit Regional Conditions on Pages 3 and 4. Profiles are required at the bank-full elevation and along the stream bottom. There are 3 cross section diagrams needed: the approximate beginning, middle, and end of proposed culvert, as flagged by the ecologist. For replacement culverts, two cross sections are enough (beginning and end).
- 8. Designer submits design diagrams to ecologist for submittal with the 404 permit application.

These guidelines are effective immediately. The GDOT Project Manager should coordinate with the project NEPA Analyst and ecologist to determine status of 404 Permits and applicability of these requirements.

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