

HAZEN AND SAWYER
Environmental Engineers & Scientists

May 4, 2015

Joseph Johnson, PE
City of Griffin
Deputy Director of Water & Waste Water
100 South Hill Street
Griffin, Georgia 30223

5775 Peachtree Dunwoody Road
Suite D-520
Atlanta, GA 30342

404 459-6363
hazenandsawyer.com

Re: City of Griffin
2015 Master Services Agreement
Task Order No.3
Still Branch Reservoir
Emergency Action Plan Update

Dear Mr. Johnson

Hazen and Sawyer (H&S) is pleased to submit the attached Task Order Form in conjunction with our Master Service Agreement. The services under this Task Order are associated with developing the inundation limits for a hypothetical breach of the Still Branch Reservoir to be used to update the current Emergency Action Plan (EAP).

In general our Scope of Services includes determining the inundation limits resulting from a hypothetical breach of the Still Branch Reservoir Dam in accordance with the guidelines established by the Georgia Safe Dams Program (GSDP). A breach model will be developed for the reach of Still Branch from the dam downstream to the Flint River (approximately 0.5 miles) and then continuing downstream along the Flint River (approximately 5.5 miles) to a study point below State Route 74. The downstream study point is based on our initial review of the rural area downstream of the dam, the limited development along the study reach, and the estimated dissipation of the flood wave. We anticipate providing the City with a preliminary draft of the modeling results so that the selection of the downstream study point can be evaluated. If it is determined that the breach model should be extended downstream beyond the study point, additional fees will be required. The breach model will be based on the best available digital terrain information which we anticipate is the Digital Elevation Model (DEM) used to develop the USGS Quadrangle Maps in the late 1960s.

Our review of the project area indicates that there is only one major road crossing that will impact the model. The crossing will be reviewed in the field to determine if detailed field surveying is required or if the hydraulic parameters can be estimated based on hand measurements and the DEM data. If field surveying is necessary, additional fees will be required.

We will also review the City's current EAP and provide recommendations for updating the document along with an Evacuation Route Exhibit based on the inundation mapping.

The attached Task Order Form is provided with our detailed Scope of Services and Budgeted Fees. Please let Jeff Powers or me know if you have any questions concerning this issue or require any additional information.

Sincerely,
HAZEN AND SAWYER, P.C.



Pat Rogers, PE
Vice President
Georgia Operations Manager

Scope of Services

The Scope of Services will be provided in accordance with the provisions of the 2015 Master Professional Services Agreement.

Client:

City of Griffin
100 South Hill Street
Griffin, Georgia 30224

Engineer:

Hazen and Sawyer, P.C.
5775 Peachtree Dunwoody Road
Suite D-520
Atlanta, GA 30342

Task 1 – Breach Inundation Mapping

Budget (Not to Exceed): \$16,100

- GSDP Coordination
- Stream Review
- Manning Roughness Values based on Field Observations
- Topographic features based on best available LiDAR Data
- Physical features based on best available Aerial Imagery
- Breach Parameter Development based on GSDP Guidelines
- Breach Flows
- Breach Modeling
- Inundation Mapping
- Draft Report of Findings
- City Meeting
- Final Report of Findings

Task 2 – Emergency Action Plan Update (EAP)

Budget (Not to Exceed): \$2,800

- EAP Review & Recommendations
- Evacuation Map
- Final Review

Notice to Proceed

If you agree with the terms of this Task Order Form, please sign below and return a signed copy to our office via fax or email to initiate work.

Client: _____

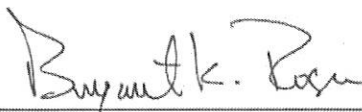
City of Griffin
100 South Hill Street
Griffin, Georgia 30224

Engineer: _____


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5775 Peachtree Dunwoody Road
Suite D-520
Atlanta, GA 30342

Accepted by: _____

Date _____

 5/4/2015
Hazen and Sawyer, P.C. Date

Printed Name: _____


Printed Name: _____