

MEMORANDUM

To: Lake Shamineau LID Board
From: Mike Opat, HEI Project Manager
Subject: Task 2B Review Summary
Date: 4/6/2021
Project: Lake Shamineau High Water Outlet
Task 2B: Preliminary Plans, Ditch Petition & Right of Way

SUMMARY OF SERVICES & DELIVERABLES

The purpose of this memorandum is to document the services and deliverables provided by Houston Engineering, Inc. (HEI) as part of Task 2B: Preliminary Plans, Ditch Petition & Right of Way. The agreement for Task 2B became effective on January 1, 2021 and was set to run through March 15, 2021, or until the scope of work was completed. At the present time, the LSLID's ditch outlet petition is still in progress and the groundwater study initiated under Task 2B is just getting underway, so the full scope of services included in Task 2B has not been completed. It is assumed that Task 2B will remain active through May 2021 so that costs pertaining to the groundwater study will be tracked to Task 2B. In the meantime, HEI has prepared a scope and budget for Task 3 that will be considered by the LSLID Board on April 6, 2021. Task 3 would run concurrent with Task 2B until the groundwater study is completed. Apart from the groundwater study, all other remaining tasks in Task 2B have been accounted for in Task 3.

The work completed under Task 2B included the development of 30% level construction plans (plan and profile sheets with limited details). These plans reflected the collection of additional survey information on the proposed construction corridor as well as a geotechnical (i.e., soil and groundwater conditions) evaluation near the proposed pump station. The design work included preliminary designs of key project features, including hydraulic features (piping, pumps, valves, pumpstation, etc.); AIS filtration; forcemain and outlet; channels, pipes, and drainage system; and the lake inlet. This effort also included value engineering considerations and an updated engineer's opinion of probable cost. The deliverables associated with these tasks included a 30% level plan set, a geotechnical report, and the updated engineer's opinion of probable cost (OPC). The updated OPC showed that the estimated costs were in line with previous estimates, with cost increases on some items (e.g., bypass channel) offset by cost savings in other items (e.g., filtration system).

Following the completion of the initial geotechnical evaluation, the LSLID authorized HEI to work with Braun Intertec on further analysis of the groundwater conditions in the vicinity of the proposed pumpstation and lake inlet locations. Monitoring wells were installed on March 31, 2021 and they will be monitored on a biweekly basis for a period of two months, unless it is determined that additional monitoring is warranted. The LSLID authorized the use of contingency funds included in Task 2B, along with the adjustments to the budgets for other Task 2B subtasks, to cover the approximate cost of \$13,000 for the study.

The LSLID is continuing to secure necessary right of way for the project and the completion of the 30% level plans provided greater certainty in quantifying the location and size of the right of way needed for the project. Throughout Task 2B HEI provided support and assistance with landowner negotiations as well as the creation of necessary maps, exhibits and other right of way documents to facilitate the right of way acquisition process.

On March 9, 2020 the LSLID submitted a petition to utilize Todd County Ditch No. 41 (TCD 41) as an outlet. HEI assisted the LSLID with the development of the petition, including the creation of a report summarizing the hydrologic and hydraulic features and associated downstream impacts. The original scope and budget for Task 2B included an assumed number of hours for the purpose of addressing any requests for additional information from the ditch authority, or at least provide an initial budget to keep the project moving while a supplemental scope and budget is developed. With the petition currently in the early stages of the process, the LSLID has yet to receive any such request for information so the remaining budget for this subtask in Task 2B was carried over to Task 3.

Other tasks completed or continued under Task 2B included permitting related efforts pertaining to coordination with the DNR and road authorities. HEI also assisted the LSLID with the development of a draft operation plan.

The contract amount for Task 2B is \$112,000. As of April 6, 2021, HEI has billed \$78,556.27 for services under Task 2B, with another \$2,656 in services provided since March 13, 2021 that has not been billed. With the costs for the pending groundwater study yet to be included, and other related costs not included in Task 3, it is estimated that the total amount that will be billed under Task 2B will be approximately \$100,000.