

Engineering and Administration Work

Houston Engineering – Task 2A

September 9, 2020

Task 2A - Scope of Effort – Alternative Analysis and Ditch Petition

SubTask	Task Description (not listed in chronological order)
1	Continued Outreach with Landowners, agencies, meetings
2	Investigate Bypass Alternatives- Examples include Ditch along Pulaski road, pipe to Fish Trap Creek, or combination
3	Value Engineering – Investigate possible cost savings for alternatives for lake inlet installation, options for pump station location and construction, project phasing and contract structure, and update engineer’s preliminary opinion of cost
4	Wetland Delineation – conduct field delineation of the construction corridor, prepare report, revise for comments
5	Todd County Ditch 41 Petition Process – assist with preparation and submittal, participate in meetings, provide engineering support to address requests from Todd County ditch authority
6	Assist with 429 Hearing (update feasibility report, presentation at meeting)
7	Project Management to include progress meetings and updates
	Total Cost for Above Services – \$44,000
8	Contingency for additional services approved by the LSLID Board - \$3,500
	Total Contract Amount for Task 2A Services - \$47,500

Note: These services will be delivered at the direction of the LSLID Board and will provide a defined route for the project and prepare for the next steps for detail design, operational plans, and final alignment determination. These services include estimated costs for the landowner meetings and petition process, since there are unknowns in the amount of work that will be required. For example, if detailed modeling is required by Todd County, the costs could be greater. In addition, virtual meetings are assumed for most meetings.

It is anticipated that these services will be completed by October 31, 2020 or later depending on completion of petition process.

These costs can be matched by the DNR grant, after an agreement is signed with the DNR.

See attached Memorandum from Mike Opat, dated September 3, 2020 for further description of services.

MEMORANDUM

To: Lake Shamineau LID Board
From: Mike Opat, HEI Project Manager
Subject: Summary of Scope of Services & Deliverables
Date: 9/3/2020
Project: Lake Shamineau High Water Outlet
Task 2A: Alternative Analysis & Ditch Petition

SUMMARY OF SCOPE OF SERVICES & DELIVERABLES

The purpose of this memorandum is to document the basis for the scope of services to be provided by Houston Engineering, Inc. (HEI) as part of Task 2A: Alternative Analysis & Ditch Petition. The memorandum will also describe the deliverables that will be provided by HEI to the Lake Shamineau Lake Improvement District (LSLID). The scope of services was developed through a series of discussions between the LSLID (Cindy Kevern and Rick Rosar) and HEI (Mike Opat). The scope of services was developed to include subtasks and associated labor hours anticipated through the month of October and was bound by factors such as the budget and funding involved. The goal with these subtasks is to continue to provide the LSLID with information to aid in decision making and to keep the project progressing forward. The timeline associated with this task order brings the project closer to the winter months, so certain subtasks were included to ensure that necessary information can be collected before freeze-up so that delays will not be incurred over the winter months. The subtasks included in Task 2A are described in more detail below.

Task 2A will include further investigation of alternatives for routing lake water to Fish Trap Creek. A cursory look at possible options to convey the water from the outlet of the forcemain pipe at County Road 203 to Fish Trap was conducted during Task 1. At that time the focus was placed on an alternative that was believed to be the most feasible, in terms of both cost and right of way acquisition. Under Task 2A, HEI will take a closer look at other alternatives for routing project discharges to the creek. The first alternative to be investigated will be a bypass around the Zetah property beginning at the Erickson property and running along Pulaski Road. If this option does not appear to be feasible, HEI will take closer look at a ditch (and possibly some buried pipe) running along Atlantic Road and Pulaski Road to the tributary feeding Fish Trap Creek. Other options that would be studied if those options are not feasible would include the extension of the forcemain all the way to Fish Trap Creek along with a combination of a longer forcemain and a ditch along Pulaski Road. HEI will provide concept maps and updated costs estimates for each alternative investigated.

The scope of services also includes a value engineering effort to identify potential cost savings in the current project cost estimate, either through potential changes in the project or through refinements in the estimates. Specifically, HEI will focus on potential means and methods for installing the intake system in the lake, and the constructability and location of the pump station. HEI will provide updated costs estimates reflecting the results from these efforts.

Wetland delineations must be completed during the growing season, so Task 2A includes the delineation of wetlands along the areas impacted by the project, along with submittal of the necessary paperwork

for regulatory concurrence of the delineations before field conditions preclude these activities from happening. HEI will hold off on the fieldwork until the final project route is identified, but timing (i.e. weather, field conditions) may require that this work is completed before the route is finalized in order to avoid delays in project development over the winter months. HEI will keep the LSLID apprised of the timing considerations and will obtain approval from the LSLID before completing any fieldwork before the route is finalized. The deliverable associated with this task is a wetland delineation report.

The LSLID is submitting a petition to utilize Todd County Ditch No. 41 (TCD 41) as an outlet and Todd County, through its role as the ditch authority for TCD 41, might request additional engineering data in support of the petition. The extent of the engineering effort that could be required is not known at this point, so Task 2A includes an assumed number of hours for the purpose of addressing any such request or at least provide an initial budget to keep the project moving while a supplemental scope and budget is developed. Other subtasks included in Task 2A include continued outreach with landowners and agencies, as well as additional support to the LSLID including assistance with the Chapter 429 process. A contingency in the amount of \$3,500 has also been included to account for additional hours that might be requested by the LSLID. HEI will not expend any contingency funds without prior direction and approval from the LSLID.