

**Maumee Watershed Conservancy District
Hancock County Flood Diversion**

MONTHLY PROGRESS REPORT #11

FOR STANTEC CONSULTING SERVICES INC.

Period Covered:

5-August-2017 thru 8-September-2017

Submitted by:

**Stantec Consulting Services Inc.
4540 Heatherdowns Boulevard, Suite A
Toledo, Ohio 43614**

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I. Invoice Summary and Project Financial Status

- Invoice Number 1251138 totaling \$44,055.90 for the initial stages of preliminary engineering related to the proposed Hydraulic Improvements (Han. Co. PO No. 01703439), is submitted for consideration. This invoice includes time and expenses applied by Stantec staff as well as subconsultant invoices from Bockrath & Associates Engineering and Surveying, LLC (\$20,708.75), Mannik & Smith Group (\$1,317.75) and Hart Associates (\$613.10).
- A second invoice, Invoice 1251139 totaling \$77,903.81 for tasks associated with the detailed design and permitting of the Hydraulic Improvements (Han. Co. PO No. 01705464), is submitted for consideration. This invoice includes time and expenses applied by Stantec staff as well as a subconsultant invoice from Storm Water Engineering LLC (\$750.00).
- To-date approximately 74.9% of the total authorized funds for the Program have been invoiced.

II. Major Issues and Decisions

Proof of Concept

- The original tasks associated with the Proof of Concept Report are completed and no invoicing will occur for those tasks moving forward.

Hydrology & Hydraulics (H&H) Modeling

- Finalization for the “typical storm” event is complete and incorporated into the HEC-HMS (hydrology) and HEC-RAS (hydraulics) models that can be utilized for the basis of design moving forward. Calibrated data has been incorporated into the lower reaches of the model for use and confirmation of the Hydraulic Improvement design efforts.
- Examined iterations of possible floodplain bench widening and in-line structure removals areas for impacts on the future water surface elevations and provided feedback to the design team.

Permitting

- Continued coordination with Mannik & Smith Group (MSG) for permitting consultation with OEPA, USACE and SHPO related to the Hydraulic Improvements. The final consultation plan has been submitted to the regulatory agencies. A formal work plan and public involvement plan for supplemental archaeological surveys at Meeks Court and just west of Swale Park will be completed and submitted prior to commencing field efforts in late October.
- Completed the draft wetland delineation report and related figures. A copy of the report will be submitted to the OEPA and USACE for concurrence and a formal jurisdictional determination.

Aerial & Ground-Based Survey

- Bockrath completed additional detailed efforts at the in-line structures in the river for confirmation of geomorphology and predicted post-construction water surface elevations.
- Bockrath will be assisting in the creation of boundary descriptions for easements as design progresses. We have also requested that they submit a right of entry request to Norfolk-Southern (NS) to allow detailed survey of the railroad right-of-way through the project area. The request was submitted to NS on August 31st. This field work should occur in October.

Geotechnical & Brownfields

- Nine (9) geoprobe sample locations were taken in August. Elevated lead levels were noted in some of the samples. Coordination within the design of the hydraulic

improvements will be required for permitting, as well as material handling, stockpiling, additional sampling and ultimate disposal during construction.

- Continued coordination of geomorphology within the design efforts for the Hydraulic Improvements.

Hydraulic Improvements Preliminary & Final Engineering

- Continued tracking and coordination of utility information gathered from the City of Findlay and local utility companies. A local meeting will be held the week of September 18th to discuss potential impacts to the local sewers within Swale Park.
- Continued development of design basis/preliminary design memorandum to confirm design criteria and refine project estimates. The draft report will be provided for review by October 6th.
- Continued bi-weekly coordination conference calls with the project team and efforts toward 60% design package to be submitted in early December.
- Continued contact with the Norfolk-Southern RR regarding recommended bridge modifications. Additional follow-up will be on-going for the next several months to obtain an estimate for the cost of the anticipated cooperative agreement with NS.

Public Information & Outreach

- Continued coordination with HART for the addition of documents to Program webpage (www.HancockCountyFlooding.com) to reflect the addition of program-related documents.
- Coordinated with MWCD Project Manager for finalization and posting of responses to written questions and comments from the public meetings in April and May 2017.

III. Schedule

Task	Proposed Timeline	Current Status	Anticipated Timeline
A. Data Collection & Analysis			
A.1 – Update Hydraulic Modeling, H&H Data Collection & Analysis	9/9/2016	Complete	N/A
A.2 – Economics Impact Analysis	9/30/2016	Complete	N/A
A.3 – Geotechnical Borings	10/28/2016	Complete	N/A
A.4 – Surveying	9/23/2016	Complete	N/A
A.5 – Pre-Permitting, Mussel Recon, Cultural	10/28/2016	Complete	N/A
A.6 – Transportation	9/30/2016	Complete	N/A
A.7 – Precipitation Modeling	10/31/2016	Complete	N/A
B. - Concept Refinement			
B.1 – Project Adjustments & Improvements	10/14/2016	Complete	N/A
B.2 – Model Refinement	10/14/2016	Complete	N/A
B.3 – Estimating & BCR Analysis	10/14/2016	Complete	N/A
B.4 – Permitting Coordination	10/31/2016	Complete	N/A
B.5 – Report & Presentation	10/31/2016	Complete	N/A

Task	Proposed Timeline	Current Status	Anticipated Timeline
C – Supplemental #1			
C.1 – Wetland Delineation & Habitat Assessment	1/31/2017	Field Work and Report Complete for Diversion Channel	N/A
C.2 – Archaeological Survey	1/31/2017	Field Work and Report for Diversion Channel Complete for areas East of I75	N/A
C.3 – Aerial Surveying	12/31/2016	Aerial Imagery Complete; Processing Complete and Submitted	N/A
D – Hydraulic Improvements (Preliminary Design)			
D.1 – Site Assessment & Survey	7/31/2017	Geotech report complete and submitted; Original field survey scope complete, with additional effort on NSRR ROW forthcoming.	8/31/2017
D.2 – Cultural and Historic Resources	12/31/2017	Coordination with SHPO, USACE and OEPA On-Going; Field work for archaeological survey anticipated in October/November	12/31/2017
D.3 – Program Management	On-Going	On-Going	On-Going
E – Hydraulic Improvements (Final Design)			
E.1 – Site Assessment & Survey	9/22/2017	Brownfield data acquired and under review; Beginning development of Rule 27-13 permit application package	9/22/2017
E.2 – Preliminary Design Report	10/6/2017	Continuing consolidating data and updating model runs; Text under development	10/6/2017
E.3 – Detailed Design	3/23/2018	Design iterations underway; Utility coordination on-going; Preliminary grading plans and property impacts being developed	3/23/2018
E.4 – NSRR Coordination	1/12/2018	Concept plan provided to NS, awaiting reply; Follow-up on-going	1/12/2018
E.5 – Permitting	9/30/2018	Wetland delineation field work complete; Report developed as draft; Additional coordination with OEPA and USACE on-going	9/30/2018

Task	Proposed Timeline	Current Status	Anticipated Timeline
E.6 – Program Management	On-Going	On-Going	On-Going

Respectfully Submitted

STANTEC CONSULTING SERVICES INC.



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APPROVAL OF PAYMENT:

On behalf of the Maumee Watershed Conservancy District and in accordance with the Memorandum of Agreement, I hereby recommend payment in favor of Stantec Consulting Services Inc. by the Hancock County Commissioners in the amount of

\$ 121,959.71.

Clark Lynn Army, General Manager Date