

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

***MONTHLY PROGRESS REPORT #10
FOR STANTEC CONSULTING SERVICES INC.***

Period Covered:

8-July-2017 thru 4-August-2017

Submitted by:

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

**Telephone: (419) 380-8910
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I. Invoice Summary and Project Financial Status

- Invoice Number 1236491 totaling \$1,075.88, for the authorized Supplemental Services related to field investigations for permitting and aerial survey (Han. Co. PO No. 01608968), is submitted for consideration. This invoice includes time and expenses applied by Stantec staff.
- A second invoice, Invoice Number 1237812 totaling \$29,403.20 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 (\$13,902.50), Storm Water Engineering, LLC (\$1,009.00), Mannik & Smith Group (\$2,034.25) and Hart Associates (\$1,260.00).
- A third invoice, Invoice Number 1237813 totaling \$34,908.48 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.
- To-date approximately 70.1% 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.
- Additional calibration and refinement of the model runoff and water surface elevations to reflect additional topographical information generated from the aerial photography of the watershed continued as it relates to the proposed Hydraulic Improvements within the City of Findlay.
- Examined iterations of possible floodplain bench widening 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.
- Completed identification of wetland delineation within the area of detailed design of the proposed Hydraulic Improvements. The delineation field work was completed the week of July 3rd. Began development of wetland delineation report and related figures. Draft should be completed by August 31st.

Aerial & Ground-Based Survey

- Bockrath continued ground-based boundary and topographic survey and provided surface points to Stantec for processing. Stantec and Bockrath staff have also engaged in review of the processed information provided by Kucera.
- Bockrath will need to complete nominal field efforts related to the boundary and topographic surveys to confirm processed points for the proposed Hydraulic Improvements and to complete data collection within the river while river levels are safe for such work.

Geotechnical & Brownfields

- Finalized review of available prior studies and investigations and completed memo of recommendations for additional soil sampling and testing. Nine (9) additional new geoprobe locations were selected and will be completed the week of August 14th.
- Completed the geotechnical report and geomorphology report. A final copy of the geotechnical report has been provided to MWCD. Details from the geomorphology will be utilized within the design for the hydraulic improvements.

Hydraulic Improvements Preliminary & Final Engineering

- Processed survey data from Bockrath and integrated utility information gathered from the City of Findlay and local utility companies.
- Completed local site visits and meetings with City staff to review sewers within the project area and aid in further defining project constraints.
- Began development of design basis/preliminary design memorandum to confirm design criteria and refine project estimates.
- Continued bi-weekly coordination conference calls with the project team.
- Continued contact with the Norfolk-Southern RR regarding recommended bridge modifications. Followed-up regarding the project narrative and conceptual sketches of proposed bridge modifications provided to NS staff for consideration. 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 development of responses to written questions and comments from the public meeting 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
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; Field survey nearly complete, with local confirmation required.	8/31/2017
D.2 – Cultural and Historic Resources	12/31/2017	Coordination with SHPO, USACE and OEPA On-Going	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 reviewed; Plan developed for additional investigations	9/22/2017
E.2 – Preliminary Design Report	10/6/2017	Continuing consolidating data and updating model runs	10/6/2017
E.3 – Detailed Design	3/23/2018	Review of available survey underway	3/23/2018
E.4 – NSRR Coordination	1/12/2018	Concept plan provided to NS, awaiting reply	1/12/2018
E.5 – Permitting	9/30/2018	Wetland delineation field work complete; Report development underway	9/30/2018
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

\$_____.

Clark Lynn Army, General Manager

Date