



September 17, 2021

NYS Department of Environmental
Conservation
Attn: Kimberly Merchant
6274 East Avon-Lima Road
Avon, NY 14414

Re: Genesee County Industrial Development Agency d/b/a Genesee County Economic
Development Center response to public comments on SPDES

Dear Ms. Merchant:

We are in receipt of a comment letter (Comment Letter) that the New York State Department of Environmental Conservation (NYSDEC) received dated September 2, 2021 for the State Pollutant Discharge Elimination System (SPDES) Permit for the Science, Technology and Advanced Manufacturing Park's (STAMP) direct discharge (Discharge) into Oak Orchard Creek in the Town of Shelby. The Comment Letter was written by the Mayor of the Village of Medina and the Supervisor of the Town of Shelby and focuses on concerns that they have about the impact of the discharge to the hydrology of Oak Orchard Creek. We have provided the Comment Letter to JM Davidson Engineering, the engineering firm that prepared the hydrologic analysis for the Discharge for a detailed response. A copy of JM Davidson's responses to the Comment Letter are attached hereto.

By way of background, as the Department considers these comments, I would like to note that the GCEDC has had extensive outreach with the Town of Shelby about the Discharge. On February 6, 2020, the GCEDC held a public meeting at the Town of Shelby Town Hall that was advertised in the paper and coordinated with Supervisor Houseknecht on the Right of Way Permit that the GCEDC was seeking for their forcemain through the Iroquois Wildlife Refuge. That public hearing started with an overview of our project (6 mgd discharge into Oak Orchard Creek) and then solicited comments and feedback from the public. That public hearing was part of a 30 day comment period set by US Fish and Wildlife for the public to send in questions. No comments were received from the Town of Shelby (or the Village of Medina) at that time and no Board members attended the meeting. In June and July of 2020 conversations began with

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Supervisor Smith to outline the GCEDC's request for consent from the Town of Shelby for the formation of our sewer works corporation, as well as the need for a second resolution to approve the construction of the force main. On or about July 21, 2020 the GCEDC mailed to the Town Hall a petition for consent and had attached to that the basis of design report for the force main and waste water treatment facility. That basis of design report states that the force main is being engineered to handle 6 mgd capacity for discharge (page 10 of the basis of design report).

On October 13, 2020, the GCEDC attended the Town of Shelby Board meeting to make a presentation on its request for consent from the Town at which point the Town Board unanimously voted in favor of the resolution. In June 2021 the GCEDC became aware that the Town of Shelby was planning on approving the construction of the force main at their Board meeting. The GCEDC contacted Supervisor Smith and asked if he would like the GCEDC to attend the meeting. Supervisor Smith stated that the Town was all set and there was no need for the GCEDC to attend. The Board approved the resolution that night.

If you have any questions, please don't hesitate to contact me at (585) 343-4866, ext. 17 or email at mmasse@gcedc.com.

Very truly yours,



Mark A. Masse
SR VP of Operations
Genesee County Economic
Development Center

September 22, 2021

New York State Department of Conservation
625 Broadway
Albany, New York 12207

**SUBJECT: GENESEE COUNTY ECONOMIC DEVELOPMENT CENTER
STAMP FACILITY WASTEWATER TREATMENT FACILITY SPDES PERMIT
RESPONSES TO COMMENTS FROM TOWN OF SHELBY & VILLAGE OF MEDINA**

To Whom It May Concern,

Below is the response to comments received from the Town of Shelby and the Village of Medina, dated September 2, 2021, regarding concerns related to the proposed STAMP Wastewater Treatment Facility and Force Main project (Project) and its discharge into Oak Orchard Creek. JM Davidson Engineering, DPC (JMD) has prepared these responses as they relate to the STAMP Discharge Analysis to Oak Orchard Creek, dated May 22, 2020 (Discharge Analysis), which was conducted based on design parameters set by CPL and our understanding of the Project.

Comment 1: Orleans County as a whole has an extremely flat topography. Drainage and flooding concerns are always one of our main issues we are concerned with on a daily basis because of this. There are areas of Oak Orchard Creek that are within the 100 year flood plan where water is almost to the top of the stream bank such as Butts Park in Medina. It does not take an extreme amount of water to flood this area. The park is used on a daily basis for fishing, kayaking, wading, picnicking, and several other sporting events.

The Project has taken flooding considerations into account in the selection of the forcemain outfall location. The outfall location was specifically selected because of the favorable topography. The outfall is located in one of the few areas along Oak Orchard Creek where the channel is confined within a ravine-like setting that contains flood flows. Upstream potential outfall locations, which would have been more cost effective, are located in low lying areas that are known to flood and thus were not selected.

In addition, in order to analyze the Project's potential impacts on drainage and flooding, the Discharge Analysis was prepared and submitted to NYSDEC. NYSDEC has reviewed and accepted the Discharge Analysis. The Discharge Analysis model was used to compare anticipated flood elevations and extents from the anticipated peak flood discharges for multiple events to those same discharges with an additional 9.3 cfs (6 MGD) (the maximum discharge through the forcemain). The analysis showed that flow during a 100-year event would increase from roughly 2,420 cfs to 2,430 cfs at the peak, an increase of only 0.4%. This increase in discharge was shown to have an unappreciable increase (from 0.01 up to 0.02 ft) in water surface elevations downstream.

Comment 2: Stream and stream bank erosion is another concern with this discharge. Orleans County already has a lot of areas along the river that are already eroding, or have the potential to erode if the water level of the creek is to increase. Most of these areas are private residential properties downstream and municipal roads such as Oak Orchard River Road, which has already seen mass erosion and is now restricted to one lane. There is also major flooding and erosion concerns down at Point Breeze where Lake Ontario water levels are controlled by the International Joint Commission, determines the creek water level and restricts

how fast the creek can drain into the lake. By increasing the water level in the creek unstable soils on the stream bank will become saturated and have a higher potential of eroding

As noted above, the increase of a maximum of 9.3 cfs (6 MGD) is a small fraction of the peak flows anticipated during storm events. The discharge will have the most impact on maintaining base flows within the channel, particularly during dry seasons when the gauge records indicate that the flows in the channel can drop to very low levels. Oak Orchard River Road, Point Breeze, and Lake Ontario are miles downstream of the forcemain outfall where the minimal impact due to the increased flow is far outweighed by the impact of natural runoff entering the system.

Comment 3: Increasing the amount of water into the creek will also increase water velocity. This increase in velocity will stir up any loose sediments in the creek bottom and increase the turbidity of the water. Sediment is the number one pollutant in our creeks and is very difficult to recapture after it has already entered the water. Areas around the proposed discharge pipe will be subject to erosion depending on the velocity of the coming out of the pipe. Note only will the creek bank be subject to erosion but the creek bottom as well. This addition of water, depending on the evaluation of the outlet of the discharge pipe, will mix any sediments on the creek bottom into the water and increase the waters turbidity and erode the creek bank below the discharge pipe.

The modeling indicated that the increased discharge would have little to no appreciable impact to velocity at peak storm events. The greatest impact will be during low flow conditions; however, this increase will still be far less than a storm event response.

In addition, as noted in the Basis of Design Report that has been submitted in connection with the Project, CPL has designed the outfall discharge to minimize soil erosion. The outfall discharge includes grouted heavy stone rip rap to dissipate the anticipated flow and reduce the velocity. The discharge also includes heavy stone rip rap placed along the entire stream bank to reduce erosion and stabilize the creek banks.

Comment 4: Six million gallons of water a day may not seem to be much to some when looking at how much water flows Oak Orchard Creek. You must remember that the creek decreases in slope downstream from the proposed discharge. These are areas where the velocity of the water slow down and allows the silt and sediment to settle out of the water causing sedimentation in the creek. In these areas the amount of water coming in can be greater than the amount that is being discharged, resulting in higher than normal water level. The key thing to remember is that the amount of water will be discharged daily and can compound in areas downstream where water buildup can occur.

While there are areas where the slope of Oak Orchard Creek drops significantly, to our knowledge, these areas are typically downstream of Glenwood Lake and the Glenwood Lake Dam. The discharges downstream of the dam are subject to the regulation of the hydroelectric dam.

Comment 5: Given that communication by GCEDC and the Town of Shelby in particular took place during COVID 2/2/20, 6/20, 7/20, 9/20, the general public and in particular the Village of Medina, which has a sizable investment in its own wastewater treatment facility that relies on discharge to Oak Orchard Creek, there is a heightened level of concern and anxiety within the communities and in Orleans County that this project lacked appropriate oversight given in particular the circumstances of the past year.

We understand that GCEDC has addressed this comment under separate cover.

Comment 6: The analysis provided by GCEDC regarding impact to Oak Orchard Creek was provided by Clark Patterson Lee, an engineering firm retained by GCEDC and we do not feel it is prudent or suitable for Medina and Shelby to rely on an analysis provided by a firm that does not represent our respective best interests.

The Discharge Analysis, which investigated potential flooding impacts associated with the forcemain discharge, was prepared by JMD, a subconsultant to CPL. JMD had no other role or interest in the design of the STAMP facility. Krista Greer at JMD is a Licensed Professional Engineer (NY, MD, PA) and Certified Floodplain Manager with a Master's degree in water resources engineering and over 15 years of experience in hydrologic and hydraulic modeling, stream restoration, stormwater management, and storm system design. Further, as noted above, NYSDEC has reviewed and accepted the Discharge Analysis independent from JMD's preparation of the same.

Sincerely,

JM Davidson Engineering, D.P.C.

A handwritten signature in blue ink that reads "Krista Greer". The signature is written in a cursive style and is centered within a light gray rectangular box.

Krista Greer, PE, CFM
Water Resources Engineer