

**Agenda**  
**Milk River Intercounty Drain Drainage Board**  
**Macomb and Wayne Counties**  
**Thursday, August 13, 2020, at 10:00 a.m.**  
**St. Clair Shores City Hall, Geer Conference Room**  
**27600 Jefferson Avenue, SCS, MI 48081**  
**Virtual Meeting**

**To Join the Zoom Meeting: <https://us02web.zoom.us/j/7499589010>**  
**Meeting ID: 749 958 9010**  
**Password: 12345678a\$**

**To Join by Telephone: (312) 626-6799**  
**Meeting ID: 749 958 9010**  
**Password: 453490**

1. Call to Order  
Board Members  
Michael R. Gregg, Chair, Michigan Department of Agriculture & Rural Development  
Elmeka N. Steele, Esq., Wayne County Drain Commissioner, Wayne County  
Candice Miller, Macomb County Public Works Commissioner, Macomb County  
Bryan Babcock, P.E., Director of Public Works/Water, City of St. Clair Shores  
John Szymanski, Acting City Manager, City of Harper Woods
2. Approval of Agenda
3. Approval of the Minutes for:
  - a. July 16, 2020, Regular Drainage Board Meeting
4. Reports
  - a. Operations and Maintenance B. Avery/K. Walby/K. Seidel
  - b. Sandbagging Project B. Avery/K. Walby/K. Seidel
  - c. Priority 1B and Select Improvements Project G. Tupancy/R. Strassburg
    - Construction Update
  - d. 3<sup>rd</sup> Quarter Financial Report Wayne County Finance Staff
5. New Business
  - a. Proposals for New Level Sensors K Seidel
  - b. Proposed MRIDDD FY21 Budget B. Avery/K. Walby/K. Seidel
6. Unfinished Business
  - a. Interim Financing Options K. Blanchett/T Donnelly
7. Approval of the SEMSD Operations and Maintenance Invoice
8. Public Comment
9. Next Drainage Board Meeting:  
Thursday, September 17, 2020 @ 10:00 a.m.  
St. Clair Shores City Hall, Geer Conference Room
10. Adjournment

**MILK RIVER INTERCOUNTY DRAIN DRAINAGE DISTRICT  
DRAINAGE BOARD MEETING MINUTES  
JULY 16, 2020**

A meeting of the Milk River Intercounty Drain Drainage Board was held on Thursday, July 16, 2020, via teleconference in compliance with the State of Michigan Executive Order No. 2020-02, dated March 13, 2020, and Executive Order No. 2020-129, dated June 19, 2020; electronic (telephonic or video conferencing) attendance will meet the quorum requirements, all votes will be taken by roll call, and public participation will be allowed at the designated portion of the agenda in accordance with the recommendations of Executive Order 2020-129.

**Members Present Via Teleconference**

Michael R. Gregg, Chair, Michigan Dept. of Agriculture & Rural Development, State of Michigan  
Elmeka N. Steele, Esq., Wayne County Drain Commissioner, Wayne County  
Bryan Babcock, P.E., Director of Public Works/Water, City of St. Clair Shores  
Brian Baker, Chief Deputy, Public Works Office, Macomb County  
John Szymanski, Acting City Manager, City of Harper Woods

**Others Present Via Teleconference**

Kyle Seidel, Anderson, Eckstein and Westrick  
Mike Harrington, Anderson, Eckstein and Westrick  
Kip Walby, Southeast Macomb Sanitary District  
Brent Avery, Southeast Macomb Sanitary District  
Lori Hicks, Southeast Macomb Sanitary District  
William Snyder, City of Harper Woods  
Bruce Smith, City of Grosse Pointe Woods  
Cathy Behrens, City of Grosse Pointe Woods  
Brett Smith, City of Grosse Pointe Shores  
John Brennan, Fahey, Schultz, Burzych & Rhodes  
Russ Strassburg, Tetra Tech  
Brady Harrington, State of Michigan  
Patrick Cullen, Wayne County  
Elizabeth Barrera, Wayne County  
Moyna Moore, Wayne County  
Kari Blanchett, PFM Financial Advisors  
Terry Donnelly, Dickinson Wright

**1. Call to Order**

Mr. Gregg called the meeting to order at 10:01 a.m. Board Members will not communicate via text or other private methods of communication while this meeting is in session.

**2. Approval of Agenda**

Ms. Steele moved to approve the agenda with the addition of item 5.b. Drainage Issues and the renumbering of items under 4. Reports. The motion was supported by Mr. Babcock. Motion adopted.

**3. Approval of the Minutes for:**

**a. June 16, 2020, Milk River Intercounty Drain Drainage District Board Meeting**

Mr. Baker moved to approve the June 16, 2020, Milk River Intercounty Drain Drainage District Board Meeting minutes as presented. The motion was supported by Mr. Babcock. Motion adopted.

**4. Reports**

**a. Update on Financing Options**

Ms. Behrens asked how the new loan amount went from \$4,000,000 to \$6,500,000.

Ms. Blanchett replied that the loan amount was obtained by the Engineers and Administration who provided the additional remaining costs of \$13,200,000, plus the added bond issuance costs and additional contingency money of \$182,312, less the money on hand of \$6,998,354 for a total estimated bond amount of \$6,385,000. This bond amount will be adjusted downward for any 2020 supplemental prepayments made.

Ms. Behrens commented that she wanted to confirm all the pre-funding was accounted for, which it is. It now makes sense after reviewing the data.

Mr. Smith asked if the sandbagging costs are included in the landscaping design and construction costs of \$689,853.

Mr. Gregg replied that he believes the sandbagging operation costs were included in the landscaping costs. He asked Mr. Strassburg to confirm with Mr. Tupancy that the sandbagging operation is included in the Landscaping Design and Construction costs.

Mr. Brennan asked if the \$10,870,117 in Construction Costs includes the future general condition costs.

Mr. Strassburg will confirm with Mr. Tupancy that the sandbagging operation costs are included in the Landscaping Costs as well as the future general condition costs.

Mr. Gregg commented that MDOT has committed to prepaying their portion of the supplemental funding. He asked the Communities if they would be able to commit to prepaying the supplemental funding.

Mr. Babcock replied that he would not be able to commit now but he does not see why the City of St. Clair Shores would not be able to prepay their portion.

Mr. Szymanski replied that the City of Harper Woods has been prepaying up to this point but he needs to resolve some issues first before he could make the prepayment commitment.

Ms. Steele replied that Wayne County will be discussing prepaying next week, however, it has been prepaid in the past.

Mr. Smith replied that he will be discussing this with the City of Grosse Pointe Woods' Council, but he does anticipate prepaying.

Ms. Blanchett commented that the deadline for the commitment to prepay supplemental funding is on August 14, 2020.

**b. Operations and Maintenance (O&M)**

The Operations and Maintenance (O&M) update was presented by Kip Walby. Mr. Walby commented that there was a discharge on June 27, 2020, with full compliance. Pump #3 is working well, and Pump #4 has been removed and is being worked on, however, the final report is not completed yet. It will be approximately six to eight months before Pump #4 is back at the Pump Station. The electrical transition for Pump #2 has been done and they are now working on Pump #7 for the electrical transition. They are continually working on the on-site restoration with the cement work being done. The construction trailers have been removed so the construction is wrapping up.

Mr. Szymanski had to leave the audio of the meeting and asked Mr. Snyder to represent the City of Harper Woods for the remainder of the meeting.

Mr. Babcock moved to receive and file the Operations and Maintenance Report. The motion was supported by Mr. Snyder. Motion adopted.

**c. Sandbagging Project**

Mr. Seidel discussed the current Lake St. Clair projected water levels. As of July 14, 2020, the Army Corps of Engineers' report shows the lake level mean at 577.55, which is 100<sup>th</sup> of a foot from the July record. The Army Corps of Engineers is predicting the lake level to trend down for the rest of the month. As of June 15, 2020, the sandbagging operation has been completed with the punch list completed one week later. He reviewed the following expenses through July 15, 2020, and commented there is a fund balance of \$37,039.46:

Overall Cost Summary						
Submitted Pay Estimate	Date	Vendor	Invoice No.	Amount	Budget Remaining	Notes
04	6/2/20	Grosso Trucking & Supply Co.	64542	\$ 1,706.71	\$ 277,379.45	Sand purchase
04	6/4/20	LSI	185488	\$ 7,460.39	\$ 269,919.06	Visqueen, Plywood, PVC materials
00	6/3/20	AEW, Inc.	0126512	\$ 64,978.10	\$ 204,940.96	Engineering Services
00	6/3/20	AEW, Inc.	126512	\$ 9,474.53	\$ 195,466.43	Sandbag Purchase Pass Thru
04	6/8/20	LSI	185505	\$ 43,277.50	\$ 152,188.93	6/1/20 to 6/6/20 Prod. & Install
04	6/15/20	LSI	185610	\$ 36,025.00	\$ 116,163.93	6/8/20 to 6/12/20 Prod. & Install
05	6/22/20	LSI	185737	\$ 20,861.90	\$ 95,302.03	6/15/20 to 6/19/20 Install
05	6/29/20	LSI	185888	\$ 11,508.91	\$ 83,793.12	6/22/20 to 6/24/20 Install
00	7/8/20	AEW, Inc.	0126938	\$ 42,293.30	\$ 41,499.82	Engineering Services
06	7/15/20	LSI	186908	\$ 4,460.36	\$ 37,039.46	Restoration & Relocate bag at 23154 Liberty
					<b>\$ 37,039.46</b>	

Mr. Seidel reviewed the following total payments of \$562,960.54 remitted to each vendor: AEW - \$136,871.20, Grosso - \$29,245.25, LSI - \$342,897.08, SandMaster - \$41,147.01, and DroneView - \$12,800.00.

Mr. Harrington commented he received a call last Sunday from a gentleman who was having some minor leaking so Mr. Harrington will go place some sandbags to plug the hole.

Mr. Seidel commented there are approximately 115 pallets of sandbags left. The Milk River Flooding Preparation Sub-Committee suggested selling the sandbags at \$2.50 per bag or \$100 per pallet. The MRIDDD would keep 30-40 pallets in case additional sandbags are needed. The City of St. Clair Shores and Grosse Pointe Shores would like to purchase some of the available sandbags. That would leave 70-80 pallets available for the City of St. Clair Shores to purchase.

Mr. Brett Smith commented that GPS would need one or two pallets and will have DPW pick them up today.

Ms. Steele moved to authorize the sale of the remaining sandbags at \$2.50 per sandbag or \$100 per pallet, which is the cost to produce the sandbag, to the City of St. Clair Shores and the City of Grosse Pointe Shores. The motion was supported by Mr. Baker. Mr. Babcock abstained from the vote. Motion adopted.

Mr. Seidel commented he will work with Ms. Barrera and Ms. Moore to generate the sandbag invoice and deposit the revenue into the Milk River account.

Mr. Babcock asked if the sandbags worked during the heavy rainfall on July 10, 2020.

Mr. Harrington commented that he had some complaints from Doremus that the water came up over the sandbags.

Mr. Siedel commented that there was no discharge from the Milk River Pump Station so that would have been due to the City's local storm sewer pumps and wind.

Mr. Gregg thanked Mr. Seidel and Mr. Harrington for all the coordination, effort, and logistics put into this sandbagging project; it was a job well done by all involved.

Mr. Snyder moved to receive and file the Sandbagging Operation Report. The motion was supported by Mr. Babcock. Motion adopted.

**d. Priority 1B and Select Improvements Project – Construction Update**

The Drainage District Board received the Engineering Services and Construction Contract Status Report and the Summary of SRF Loan Costs Reports as of July 9, 2020. Mr. Strassburg commented that the engineering contract is approximately 82.83% completed and invoiced through June 30, 2020. The construction contract is approximately 87.83% completed and invoiced through May 22, 2020. He commented that there were no changes to the Additional Construction Cost Summary. He reported the following work is being done: Storm Pump #4 should be back in early 2021 (a six to eight-month timeframe); Storm Pump #5 is out and should be back in November 2021; concrete is mostly done but some of the concrete needs to be repaired; the sheet metal roof is completed; the overhead doors and weatherstripping are complete; the startup and flushing of basins one and two have

been delayed due to COVID but should be done in August if the COVID restrictions (Canadian Company) are lifted; repairs of the stairs; HVAC control issues are being worked on; the recirculation building is completed and work is being done on the controls and conveyor; repaired 13 of the 15 bands and starting to install the chemical feedlines; there are no real safety issues on site and the site is getting cleaned up. He pointed out that the mediation schedule was mid-2022 to be completed, however, it could be completed by the end of 2021. He suggested starting work on the landscaping early next year.

Mr. Gregg asked when the work on the intake pipe will be completed.

Mr. Strassburg replied that he would get an answer to the Board, however, they are on the final stage of the intake work and believes it should be done by the end of July.

Mr. Smith commented that there is no problem with the contractor proceeding with the project. The contractor is not creating any issues at the Lake Front Park.

Mr. Strassburg commented that on June 25, 2020, he was notified by Spence Brothers that due to the high-water levels, water is flowing from the river into the recirculation structure and it is short-circuiting. It is a safety issue and suggested a six-inch extension on the weir. The other issue is the water flows through the gates, and he suggested posting "Warning" signs, so people do not swim or boat in that area. This is a SEMSD issue, however, there may be regulations on signage. He suggested getting a quote on the weir extension from Spence if the Board would like him to proceed with the weir extension.

All Board Members agreed with obtaining a quote from Spence Brothers for the weir extension proposed by Mr. Strassburg.

Mr. Gregg commented that if Mr. Strassburg obtains a reasonable quote from Spence on the weir extension, proceed with the work. He referred the signage to Mr. Brennan for his review and this will be addressed as a Board.

Mr. Brennan replied that he will look into any signage regulations that may apply. He suggested this be addressed with signage, and possibly grading or installation of a gate. He will have a response for the next Board meeting.

Mr. Smith suggested putting up a sign immediately and wait until the next meeting to possibly use a rope or cable.

Mr. Seidel suggested three buoys with signs reflecting:

Danger  
No Trespassing  
Danger High  
Current Possible  
Keep Out of Area

Mr. Gregg commented that Mr. Brennan and Mr. Seidel will work on the sign wording.

Mr. Seidel commented he will research the wording and buoys. He will also work with Mr. Brennan and SEMSD to get the signs installed.

Mr. Babcock moved to authorize SEMSD to place warning signs and physical barriers in the appropriate places of the tainer gate area to advise no trespassing/danger zone. The motion was supported by Ms. Steele. Motion adopted.

Mr. Baker moved to receive and file the Construction Reports. The motion was supported by Mr. Babcock. Motion adopted.

**e. Updated Financial Reports**

Ms. Moore reviewed the updated Projected Construction Cash Balance as of September 30, 2020, and the Statement of Operations through May 31, 2020. She commented that the Wayne County Finance Staff will prepare the 3<sup>rd</sup> Quarter Financial Reports for the August MRIDDD Board Meeting.

Mr. Snyder moved to receive and file the updated Financial Reports. The motion was supported by Mr. Babcock. Motion adopted.

**5. New Business**

**a. Rosedale Street Bridge Correspondence**

Mr. Babcock reviewed correspondence sent to MDOT regarding the Rosedale Street Bridge. The resident who sent the request to MDOT lives on the southwest side of Rosedale. This home is very low and has a walk-out basement. Mr. Babcock provided this to the Board as a courtesy.

Mr. Brennan commented that he does not believe the Board should respond as it is directed to MDOT.

Mr. Baker moved to receive and file the correspondence addressed to MDOT, dated June 16, 2020, from Mr. Jeff Burns regarding the Rosedale Street Bridge. The motion was supported by Mr. Babcock. Motion adopted.

**b. Drainage Issue**

Mr. Seidel commented that the homeowner at 21803 River Road submitted a PA222 claim for \$28,400 citing poor drainage in their backyard caused a foundation problem. The drainage did not cause the foundation problem, however, the Milk River property could use some drainage improvements in the outfall area. He displayed pictures of the area and commented that Landscape Services quoted \$13,560 as an estimate for regrading and installing edge drain along three property lines.

Mr. Harrington commented that LSI would install an edge drain between the fence and bushes (on the Milk River property) along three property lines to control water ponding.

Mr. Strassburg commented he would review the Spence Brothers' contract to see if the contractor included regrading in the contract.

Mr. Baker confirmed the work would only be done on the Milk River property. He asked what has changed that caused the area to erode.

Mr. Seidel replied yes; work will be done on Milk River property only where the water does not drain well. He commented that it had slowly eroded over time and may have had a drainage issue from the start.

Mr. Smith commented there have been at least 10 foundation permits issued for homes in that area.

Mr. Babcock agreed that foundation problems are very common in that area.

Mr. Brennan commented the MRIDDD should respond to the claim denying the claim and any connection between the foundation problem and the work being done at the Pump Station. The claim should be tendered to the contractor and their insurance carrier for their response. However, we do acknowledge there is a drainage issue on the Milk River property that will be resolved, however, this did not contribute to the foundation problems.

Mr. Seidel commented the drain tile project would fall under the sandbagging operation since it could cause ponding of water with a large rain event.

Mr. Harrington commented if the regrading is not covered under the Spence Brothers' Contract, LSI could start work in two weeks.

Mr. Baker moved to authorize Landscape Services, Inc. (LSI) to perform the drain tile work outlined in proposal #81526, dated July 15, 2020, in the amount of \$13,560.00, with A.E.W. administering the contract with LSI. The motion was supported by Mr. Snyder. Motion adopted.

## **6. Unfinished Business**

### **a. SEMSD FY 21 O&M Charge**

Mr. Seidel displayed the FY19 actual audited expenses showing a total of \$32,356.81 due from MRIDDD to SEMSD, and the estimated FY20 actual expenses showing a total of (\$16,382.52) due from MRIDDD to SEMSD. He proposed a true-up of both fiscal years 2019 and 2020 together and should take place in September. At that time, a letter would be submitted with a summary of the reasons why it was different.

Mr. Baker replied he would be fine with that as long as there is an explanation of the difference.

Mr. Seidel reviewed the revised FY21 SEMSD O&M Budget and indicated SEMSD had received the annual actuarial report, which lowered the FY21 budget amounts for retirement, health care, and the health savings account. As a result, the monthly Milk River O&M charge has decreased to \$49,939.22; a 3% reduction.



Mr. Baker moved to receive and file the revised FY21 O&M charge of \$49,939.22. The motion was supported by Mr. Snyder. Motion adopted.

**b. 2019 Metering Study Report**

Mr. Seidel presented the Macomb County, SEMSD, and MRIDDD Meter Study displaying the map of the proposed two permanent level monitoring sensors. He also reviewed the Motor City Electric Technologies, Inc. Proposal No. 20-0907 for \$106,168.86. The total amount for MRIDDD would be \$143,592.23 and he recommended this project for next year's budget. This project is critical for long-term operation and keeping water out of the lake.

Mr. Baker asked what the sensors would do operationally; how much less would be spilled; if this is not enough, what would be the next steps; and will another hydraulic study be necessary.

Mr. Seidel replied we currently do not know what the levels are in basements. The level sensors give a measure of safety and can see upstream giving more operational control of the system to utilize more in-system storage during certain rain events. There are approximately 3.8 million gallons of in-system storage between the level of the first pump coming on at 25' and the last pump coming on at 30'. The hydraulic study/profiles have already been done and it will be included in the SCADA system within the next year, so Operators have a clear visual understanding where the water is.

Ms. Steele commented there is a permitting process in Wayne County and asked that Ms. Moore be included in the budget discussions. She asked what the future maintenance costs to the MRIDDD would be, who will be managing the data, how will the data be shared and why is a flow meter not being used.

Mr. Seidel replied he will keep Ms. Steele in the loop for the permitting process. He does not have the maintenance numbers yet, however, it should be part of the O&M cost. The cellular modem fee is \$30 per month, the electricity costs at less than \$30 per month, and the calibration cost is \$1,200 every three to five years for an approximate total increase of \$2,000 per year to operate and maintain both level sensors. The data will be stored similar to the way data is currently stored and MRIDDD would own the data. The level sensors are being used because we are looking at the levels and storage volumes, not the flow. The maintenance cost of flow meters is much higher than the level sensors.

Mr. Babcock asked Mr. Seidel if he had any experience with the level sensors.

Mr. Seidel replied yes, the level sensors work great with minimal maintenance required. If this is approved for the budget, AEW would come back to the Board with a proposal for their consideration. He will present a proposal along with the MRIDDD budget at the September MRIDDD Board Meeting.

Mr. Snyder moved to receive and file the SEMSD/MRIDDD 2019 Metering Program and Motor City Electric Technologies, Inc. Proposal No. 20-0907, and direct AEW to include this project in the FY21 Budget for \$145,000.00. The motion was supported by Mr. Babcock. Motion adopted.

**c. AT&T Cell Tower Lease**

Mr. Brennan commented he spoke with Mike Watza of Kitch, Drutchas, Wagner, Valitutti & Sherbrook, who negotiates cell tower deals for a \$10,000 retainer. He believes Mr. Watza would be able to negotiate escalators much better than the ones proposed by AT&T as they have negotiated with AT&T in the past. If Mr. Watza does the negotiating, it would get done quicker and the Board may get up to \$50,000 per year for the lease. The current cell tower lease pays approximately \$30,000 per year. The current lease expires next year. In hiring Mr. Waltz, the Board is gaining specialized knowledge and expertise in negotiating with AT&T on cell tower leases.

Mr. Baker moved to authorize legal counsel, Fahey, Schultz, Burzych & Rhodes, to execute the retention letter with Mike Watza of Kitch, Drutchas, Wagner, Valitutti & Sherbrook to engage in negotiation of the AT&T Cell Tower Lease not to exceed \$10,000, and authorize legal counsel to review and manage any invoices submitted by Mr. Watza related to this service. The motion was supported by Ms. Steele. Motion adopted.

**d. District PA 222 Claims**

Mr. Brennan reviewed the MRIDDD response to the \$28,400 claim submitted by the homeowner at 21803 River Road who had a foundation issue due to backyard flooding. This claim is denied and referred to the Spence Brothers, as the contractor, and their insurance company.

Mr. Baker moved to authorize the MRIDDD Chair to execute the correspondence denying the PA222 Claim submitted by 21803 River Road. The motion was supported by Mr. Snyder. Motion adopted.

Mr. Brennan reviewed the PA222 claim from 21737 River Road who had an issue with backyard flooding. A response to this claim could be sent letting the homeowner know the claim was investigated and the Milk River will be regrading their property and that may alleviate the situation.

At 1:17 p.m., Mr. Baker was excused from the meeting.

**7. Approval of the SEMSD Operations and Maintenance Invoice**

The SEMSD Operations and Maintenance (O&M) Invoice for June 2020 was reviewed. The June 2020 O&M 6-2020 invoice totaled \$62,970.15. The total amount billed included the O&M monthly invoice and the reimbursable pass-through costs.

Mr. Babcock moved to authorize the payment of SEMSD Invoice O&M 6-2020. The motion was supported by Ms. Steele. Motion adopted.

**8. Public Comment**

Mr. Gregg announced Public Comment and asked for any public participants to identify themselves before making public comment. No public comment was made.

**9. Next Drainage Board Meetings**

Mr. Gregg commented the Governor extended the Emergency Declaration to August 11, 2020. If the Board is not able to meet virtually, we need a space to accommodate social distancing.

Mr. Walby commented the St. Clair Shores' Council Chambers could be used.

Mr. Babcock commented the Council Chambers could accommodate the Board Members if that is all that comes to the meeting. He will change the room reservation from the Geer Conference Room to the Council Chambers.

Mr. Smith offered the use of the City of Grosse Pointe Woods' Council Chambers as well.

Mr. Gregg thanked the Board Members and the room that can offer the best compliance with the Executive Order will be used.

The next regularly scheduled board meeting is Thursday, August 13, 2020, at 10:00 a.m. via telephonic and video conference per Executive Order 2020-154, dated July 17, 2020.

**10. Adjournment**

Ms. Steele moved to adjourn the meeting. The motion was supported by Mr. Babcock. Motion adopted.

There was no further discussion to come before the Drainage Board; the meeting adjourned at 1:27 p.m.

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Brian Baker, Chief Deputy Macomb County Public Works Commissioner

NOTE: The foregoing minutes are subject to Milk River Intercounty Drain Drainage Board approval.

**Milk River Intercounty Drain Drainage District  
Engineering Services and Construction Contract Status Report**

August 7, 2020

	Company	Contract Start Date	Contract End Date	Contract Amount	Latest Invoice No.	Invoiced thru Date	Amount Paid in Prior Years	Amount Paid in 2020	TOTAL Amount Paid (incl retainage)	Retainage Amount Being Held	Contract Amount % Completed	Contract Budget Remaining
<b>ENGINEERING SERVICES CONTRACTS</b>												
<b>Design and Construction Management Engineering Services for Priority 1B and Select Improvements Project</b>	Tetra Tech of Michigan, P.C.	July 30, 2014	December 31, 2020	\$3,502,117.72	62	07/31/20	\$2,708,824.56	\$368,905.12	\$3,077,729.68	N/A	100% Design and 84.95% Construction	\$424,388.04
NOTE: Contract End Date changed from 7/31/19 to 12/13/20 and Contract Amount changed from \$2,125,176.00 to \$2,474,386.00 by Amendment No. 1. Contract Amount changed from \$2,474,386.00 to \$2,562,037.00 by Amendment No. 2. Contract Amount changed from \$2,562,037.00 to \$2,642,278.60 by Amendment No. 3. Contract Amount changed from \$2,642,278.60 to \$2,908,274.20 by Amendment No. 4. Contract Amount changed from \$2,908,274.20 to \$3,502,117.72 by Amendment No. 5.												
<b>CONSTRUCTION CONTRACTS</b>												
<b>Construction of Priority 1B and Select Improvements Project</b>	Spence Brothers	Contract Effective Date: October 7, 2016 Contract Time Start Date: October 31, 2016	June 29, 2022	\$40,827,201.00	42	06/19/20	\$29,335,538.13	\$7,172,506.10	\$36,508,044.23	\$1,922,443.00	89.42%	\$4,319,156.77
NOTE: Contract Price increased from \$34,640,028.00 to \$38,448,860.00 by Change Order No. 2. Contract Price increased from \$38,448,860.00 to \$40,827,201.00 and Contract End Date changed from December 30, 2019 to June 29, 2022 by Change Order No. 3.												

**Milk River Intercounty Drain Drainage District  
Priority 1B and Select Improvements Project**

Additional Construction Cost Summary

August 7, 2020

AA No.	DATE	Description	Amount	Comments
1	3/10/17	Pay Item 35, Concrete Slab in GPW DPW yard	\$38,826.28	
2	3/23/17	Pay Item 36, GPW Permit Fees	\$80,015.00	Amt over \$10K allowance
3	5/23/17	Pay Item 37, Temp Battery Bank	\$5,745.60	
3	5/23/17	Pay Item 38, Additional pressure Relief Valve Spoolpieces	\$10,712.28	
3	5/23/17	Pay Item 39, Delete Hose Reel - Credit	(\$1,702.16)	
3	5/23/17	Pay Item 40, Delete Eye Wash Mixing Valve & Piping - Credit	(\$1,618.28)	
4	9/19/17	Pay Item 41, WCD #3, Add resteel to cast in place beams	\$1,736.49	
4	9/19/17	Pay Item 42, Relocate and Reconnect 2-1/2" FLW Pipe in MH	\$3,291.00	
4	9/19/17	Pay Item 43, SCS Permit Fees	\$13,404.00	Amt over \$10K allowance
5	9/19/17	Pay Item 25, Rem & Dispose Sludge - Credit	(\$84,232.98)	
5	9/19/17	Pay Item 44, Basin #1 Sludge, Gravel, and FLW Pipe Removal	\$573,615.97	
5	9/19/17	Pay Item 45, Bsn #1 FLW Pipe Removal - Credit	(\$26,276.25)	
6	12/15/17	Pay Item 46, No. 1 Storm Pump & Motor Refurbishment Items	\$40,313.66	Amt over \$300K allowance
7	12/21/17	Pay Item No. 47, Proposal Request B, Sodium Hypochlorite Priming Tank	\$22,525.00	
7	12/21/17	Pay Item No. 48, Replace Broken and Cracked Wedge Blocks on Sluice Gates S-1-1 and S-1-2	\$1,505.00	
7	12/21/17	Pay Item No. 49, Blower Valve Inspection	\$361.20	
7	12/21/17	Pay Item 50, Check for AT&T	\$5,880.71	
7	12/21/17	Pay Item 51, Proposal Request D, Control Valve Starters and MCC Bucket Repairs	\$5,109.83	
7	12/21/17	Pay Item 52, RFI 44, Support Column	\$4,753.45	
7	12/21/17	Pay Item 53, Proposal Request C, Increase Height of Proposed Overhead Doors	\$24,853.90	
7	12/21/17	Pay Item 54, Valve Stem Boxes	\$2,203.86	
7	12/21/17	Pay Item 55, Repair Storm Well Sump Pump Base	\$849.54	
8	4/16/18	Pay Item 56, Repair 6" Water main	\$3,312.36	
8	4/16/18	Pay Item 57, Repair Broken Pipes on Service Water System	\$28,180.39	
8	4/16/18	Pay Item 58, Storm Pump #6 Troubleshoot and Repair	\$4,377.45	
8	4/16/18	Pay Item 59, Service Water System Emergency Repairs	\$2,718.89	
8	4/16/18	Pay Item 60, Publishing River Dewater Notice	\$159.75	
8	4/16/18	Pay Item 61, Modifications to 6" ground water discharge piping system in Basin 1	\$11,073.57	
8	4/16/18	Pay Item 62, Remove Concrete Foundation in Basin 1 for grit pump sump	\$63,872.67	

**Milk River Intercounty Drain Drainage District  
Priority 1B and Select Improvements Project**

Additional Construction Cost Summary

August 7, 2020

AA No.	DATE	Description	Amount	Comments
8	4/16/18	Pay Item 63, Demo Concrete Slab along basin in DPW yard	\$11,086.80	
8	4/16/18	Pay Item 64, Modify/Repair Existing Chemical Feed Pumps	\$849.54	
8	4/16/18	Pay Item 65, AT&T Protection during Electrical Room Demolition	\$3,486.69	
8	4/16/18	Pay Item 66, Storm Pump #2 Sole Plate Replacement	\$9,237.85	
8	4/16/18	Pay Item 67, Bar Screen Cleaning, 10 Esitamted During Project	\$15,848.27	
9	7/11/18	Pay Item 68, No. 2 Storm Pump & Motor Refurbishment Items	\$374,935.52	
9	7/11/18	Pay Item 69, Replace Corroded Anchor Bolts for Sole Plate on Storm Pump No. 2.	\$3,868.34	
10	10/9/18	Pay Item 70, Cooling Water Piping for Storm Pumps.	\$41,678.29	
10	10/9/18	Pay Item 71, Smoke (Duct) Detector.	\$1,214.50	
10	10/9/18	Pay Item 72, Move Owner Files.	\$690.76	
11	10/9/18	Pay Item 73, Basin #2 Sludge Removal, Partial	\$0.00	See Note C
12	10/9/18	Pay Item No. 28, Conduit Replacement in DTE Yard.	\$0.00	See Note D
13	12/27/18	Pay Item 74, AT&T Phone Lines Temp & Permanent	\$8,498.41	
13	12/27/18	Pay Item 75, Transformer Feed Emergency Repairs	\$66,303.32	
13	12/27/18	Pay Item 76, Bridge Crane Modifications	\$340,329.35	
13	12/27/18	Pay Item 77, HVCA Intake/Combustion Flues	\$4,684.92	
13	12/27/18	Pay Item 78, Steel Conflicts with bridge crane	\$19,285.18	
14	3/21/19	Pay Item 79, Replace Broken Section of Flushing Water Main	\$11,469.29	
14	3/21/19	Pay Item 80, Storm Well Cleaning	\$7,515.50	
14	3/21/19	Pay Item 81, Dewatering Pump Rebuild	\$21,190.00	
14	3/21/19	Pay Item 82, Blower MVMS Layout	\$35,236.05	
14	3/21/19	Pay Item 83, Explosion Proof Hoist	\$22,634.02	
14	3/21/19	Pay Item 84, Electric Unit Heater Power	\$8,858.47	
14	3/21/19	Pay Item 85, Recirculation Pump Station Check Valves	\$79,328.49	
14	3/21/19	Pay Item 86, Storm Pump #6 Additionall repairs (Pump Only)	\$195,483.83	
15	3/21/19	Pay Item 87, SCADA System Fiber Optic Cable Repair	\$11,320.83	See Note E

**Milk River Intercounty Drain Drainage District  
Priority 1B and Select Improvements Project**

Additional Construction Cost Summary

August 7, 2020

AA No.	DATE	Description	Amount	Comments
16	7/31/19	Pay Item No. 88, Sludge Removal, Basin 1A	\$32,822.97	
16	7/31/19	Pay Item No. 89, Sludge Removal, Basin 2, Partial	\$343,600.52	
16	7/31/19	Pay Item No. 90, PCO #81, MCC-A Dewatering Pump Buckets Replacement	\$36,507.91	
16	7/31/19	Pay Item No. 91, Standby Generator Rental (Part 1 of 2)	\$146,741.31	
17	9/25/19	Pay Item No. 92, SludgeRemoval, Basin2, Non-Disputed Amount	\$985,421.08	
18	10/21/19	Pay Item No. 93, Standby Generator Rental (Part 2 of 2)	\$164,951.20	
19	12/10/19	Pay Item No. 94, Drilled Pier and Foundation Addition	\$12,692.90	
19	12/10/19	Pay Item No. 95, Drilled Pier Obstruction Claim	\$51,275.38	
19	12/10/19	Pay Item No. 96, Level Sensors	\$7,768.07	
19	12/10/19	Pay Item No. 97, EDH-1 Source Feed	\$880.53	
19	12/10/19	Pay Item No. 98, Exhaust Fan EF-14 Voltage	\$2,787.32	
19	12/10/19	Pay Item No. 99, Pump Station Power Loss	\$6,007.10	
19	12/10/19	Pay Item No. 100, Sample Room Power and Control Wirings	\$891.88	
19	12/10/19	Pay Item No. 101, Air Conditioning Unit Voltage	\$2,519.90	
19	12/10/19	Pay Item No. 102, AA No. 6 & 9 Adjustments	(\$1,970.78)	
20	2/26/20	Pay Item No. 103, Storm Pump #6 Additionall repairs (Motor Only)	\$196,171.88	
20	2/26/20	Pay Item No. 104, Storm Pump #7 Additionall repairs (Motor Only)	\$196,171.88	
20	2/26/20	Pay Item 105, Storm Pump #3 Additionall repairs (Pump Only)	\$244,664.68	
21	4/16/20	Add Pay Item 106, Basin 2 Sludge Removal, Disputed Amount	\$406,700.54	
21	4/16/20	Add Pay Item 107, Sludge Press Enclosure	\$29,982.09	
21	4/16/20	Add Pay Item 108, SG-1 through 4 Basin 2 Gate Wedges	\$7,762.14	
		Sub-Total	<b>\$5,004,952.90</b>	
		Contract Unforeseen Conditions Allowance including CO Nos. 2 & 3	\$7,487,173.00	
		Balance Unforeseen Conditions	\$2,482,220.10	

**NOTES**

- A Contract Unforeseen Conditions Allowance is not part of SRF Loan
- B SRF Loan Contingency is \$2,182,539
- C \$32,890.33 transferred from Pay Item No. 25, Remove and Dispose of Sludge from Retention Basins. No Unforeseen Conditions Allowance used.
- D Authorized use of \$60K from \$75K Allowance for Electrical Service Metering Modifications. No Unforeseen Conditions Allowance used.
- E Not SRF Loan Eligible. Fiber cable connects Marter Road Booster Pump Station to NESDS SCADA System. Damage not caused by Milk River project. Cost should be charged to SEMSD.

**Milk River Intercounty Drain Drainage District**  
**October 1, 2019 - September 30, 2020**  
**Budget and Expense Report for Quarter Ending June 30, 2020**

	3rd Qtr Ending 6/30/2020		
	19/20 BUDGET	19/20 ACTUAL	% BUDGET REMAINING
<b><u>REVENUE</u></b>			
Community Assessments	\$ 4,010,722	\$ 2,448,421	39%
Interfund Chargeback Revenue	\$ -	\$ -	0%
Misc. Receipts/Land Rental (AT&T)	\$ 24,040	\$ 14,023	42%
Interest on Investments	\$ 58,000	\$ 28,858	50%
Grosse Pointe Shores Excess Flow	\$ 132,000	\$ 99,000	75%
<b>TOTAL REVENUE</b>	<b>\$4,224,762</b>	<b>\$ 2,590,302</b>	<b>39%</b>
<b><u>EXPENDITURES</u></b>			
Office/Computer Supplies	\$ -	\$ -	0%
Vehicle Supplies	\$ -	\$ -	0%
Parts/Other Equipment	\$ 15,000	\$ 9,856	34%
Clothing Allowance	\$ -	\$ -	0%
Lubricants/Motor Fuels	\$ -	\$ -	0%
Bulk Chemicals	\$ 32,000	\$ 20,791	35%
<b>Supplies</b>	<b>\$ 47,000</b>	<b>\$ 30,647</b>	<b>35%</b>
SEMSD	\$ 619,038	\$ 464,278	25%
Misc. Fees	\$ 6,500	\$ 6,049	7%
Lab Services	\$ 8,000	\$ 7,096	11%
Engineering Services	\$ 54,000	\$ 34,410	36%
Legal Services	\$ 26,000	\$ 7,835	30%
FMD Support Allocation	\$ -	\$ -	0%
DPS/ESG Admin Allocation	\$ 65,000	\$ 48,750 *	25%
Outside Facility Support Chargeback	\$ 14,888	\$ -	0%
Engineering (Internal)	\$ 13,056	\$ -	0%
Central Services Chargeback	\$ 5,416	\$ 9,099	0%
Personnel Chargeback	\$ -	\$ -	0%
Indirect Cost	\$ 15,635	\$ 11,491	0%
M&B Finance	\$ 57,612	\$ 43,209 *	25%
Legal (Internal)	\$ -	\$ -	0%
Misc. Contractual Services	\$ 34,000	\$ 198,541	-484%
Sewage Disposal Charges	\$ 2,121,781	\$ 1,326,521	37%
Data Circuits & Telephone	-	1,309	
<b>Contractual Services</b>	<b>\$ 3,040,926</b>	<b>\$ 2,158,587</b>	<b>29%</b>



		3rd Qtr Ending 6/30/2020		
		19/20 BUDGET	19/20 ACTUAL	% BUDGET REMAINING
Electricity		\$ 265,000	\$ 182,576	31%
Gas		\$ 26,000	\$ 7,333	72%
Water & Sewer		\$ 12,000	\$ 8,091	33%
	<b>Utilities</b>	<b>\$ 303,000</b>	<b>\$ 198,001</b>	<b>35%</b>
Building Repairs & Maint.		\$ 8,000	\$ 4,334	46%
Equipment Repairs & Maint.		\$ 25,000	\$ 6,451	74%
Inspection for Sanit Sewer and Repair		\$ -	\$ -	0%
Vehicle Repair & Maint.		\$ -	\$ -	0%
Equipment Rental		\$ 12,000	\$ 1,335	11%
Equipment Storage Building/Rental		\$ -	\$ -	0%
Machinery & Equipment		\$ -	\$ -	0%
	<b>Other Operating Expense</b>	<b>\$ 45,000</b>	<b>\$ 12,120</b>	<b>73%</b>
Transfer to/from Reserve				
	<b>Total Transfers</b>			
Additional Priority 1b Cost Over SRF Funding		\$ 788,836	\$ -	100%
<b>TOTAL O&amp;M EXPENSE</b>		<b>\$ 4,224,762</b>	<b>\$ 2,399,355</b>	<b>43%</b>
<b>NET INCOME/(LOSS)</b>		<b>\$ 190,948</b>		

\* Chargebacks not yet posted, resulting in an estimate of 75% of budget used to present a better picture of expenditures



## **ANDERSON, ECKSTEIN & WESTRICK, INC.**

**CIVIL ENGINEERS - SURVEYORS - ARCHITECTS**

51301 Schoenherr Road, Shelby Township, MI 48315

586.726.1234 | [www.aewinc.com](http://www.aewinc.com)

July 31, 2020

Michael Gregg  
Milk River Intercounty Drain Drainage District (MRIDDD)  
Constitution Hall  
525 West Allegan Street  
P.O. Box 30017  
Lansing, Michigan 48909

**Reference: Proposal for Professional Services**

Level Sensors on the Girard and Black Marsh Drains

Dear Mr. Gregg:

Thank you for considering Anderson, Eckstein and Westrick, Inc. for providing continued professional engineering and surveying services for the referenced project.

**Understanding of the Project**

There is about 3.8 million gallons of in-system storage between the level of the first pump and the last pump turning on at Milk River. In order to more efficiently utilize the potential in-system storage, the wastewater levels in the upstream interceptors should be monitored. Installing level sensors on the Girard Drain and Black Marsh Drain are proposed to monitor in-system levels upstream of the Milk River RTB.

The first level sensor is proposed on the Black Marsh Drain at Renaud. The other level sensor is proposed on the Girard Drain at Harper & Vernier. The real time data provided at these locations will aid in management of the sewer system, allowing operators to more efficiently operate the system.

**Services to be Provided**

AEW is proposing to provide the following services for this project.

- Complete topographical surveys of the metering and cabinet sites.
- Complete a site plan for the location of the meter, conduit and cabinet.
- Coordination with Motor City Electric.
- Complete a permit application for siting the equipment above grade in the City of Grosse Pointe Woods, Harper Woods and Wayne County Department of Roads.
  - Evaluate lines of sight for the new above grade equipment.
- Complete a permit application for the below grade equipment in the Wayne County owned Girard Drain and Black March Creek.
- As-needed construction oversight.
- Provide Milk River Board updates of the work progress.



Michael Gregg  
July 31, 2020  
Page 2

### Fee for Professional Services

All permit fees and DTE fees will be paid by AEW and passed on to Milk River with a 7% markup. These fees with the markup are estimated to be approximately \$4,000. Project engineering fees will be on an hourly basis per our existing contract with the Milk River. Estimates of these costs and fee are as follows:

Design Engineering Services (Est. Cost \$ 12,500) .....	Hourly
Construction Engineering Services (Est. Cost \$9,500) .....	Hourly
<u>Permit and DTE Fees (Est. \$4,000) .....</u>	<u>TBD</u>
Total Estimated Cost.....	\$26,000

### Execution of the Agreement

We trust that this proposal meets your needs. Please advise if any modifications or clarifications are required. When you are prepared to authorize us to proceed, please sign, date, and return one copy of this agreement with original signatures.

We appreciate the opportunity to work with you on this project. If you have any questions or require additional information please call me.

Sincerely,

Anderson, Eckstein and Westrick, Inc.

Accepted By

Taylor Sting, PE  
Licensed Engineer

**Kyle M. Seidel**

Kyle M. Seidel  
Jul 31 2020 2:40 PM

Kyle M. Seidel, PE, CFM  
Senior Project Engineer

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name, Title

\_\_\_\_\_  
Date

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## Motor City Electric Technologies Inc.

A Subsidiary of Motor City Electric Co.

9440 Grinnell St.  
Detroit, MI 48213-1151  
TEL: (313) 921-5300  
FAX: (313) 921-5310  
[www.mceco.com](http://www.mceco.com)

July 7, 2020

Milk River Intercounty Drain Drainage District (MRIDDD)  
Constitution Hall  
525 West Allegan Street  
PO Box 30017  
Lansing, MI 48909

Attention: Mr. Michael Gregg

Subject: Milk River Intercounty Drain Drainage District (MRIDDD)  
New Level and Flow monitoring locations – 2019 Metering Program  
Motor City Electric Technologies Proposal No. 20-0907

Dear Mr. Gregg:

Motor City Electric Technologies is pleased to offer our **budgetary** proposal for electrical engineering services, control panel fabrication, electrical installation and supply of related electrical equipment necessary for the implementation of the proposed new level and flow monitoring locations PLS-03, PLS-04.

### **SCOPE OF SERVICES**

Motor City Electric Technologies will provide electrical engineering, layouts, detail design drafting, necessary calculations, programming, control panel material, panel fabrication, electrical installation and software/material as outlined in the Scope of Services section of this bid document.

A. Electrical engineering will include the following as required:

1. Control Panel Hardware Engineering
2. Panel Drawings with Bills of Material.
3. PLC programming and documentation
4. DIGI cellular modem provisioning and programming
5. Headend SCADA programming for new locations.
6. O&M Manuals. (1 hard copy, 1 electronic)
7. Start-up/Debug
8. Field Device Calibration.
9. Training. (8 hour session)
10. Update electrical drawings to "as-built" condition per marked up drawings provided by the field installation contractor.

B. Our proposal includes furnishing the following material:

# Motor City Electric Technologies Inc.

Page 2 of 3

## **Two (2) New Level Sensor Locations – the following will be furnished and electrically installed at PLS-03, PLS-04:**

- NEMA 4x Enclosure
- Sub-plate
- Allen Bradley PLC with I/O
- DIGI Cellular Modem
- Power Monitoring Relay
- New antenna, connectors, antenna cable
- A/R – circuit breakers, terminals, relays, tags, etc.
- Battery Backup with Trickle Charger
- Vega WL61 Radar Level Sensor

## **Electrical installation at each location will include (typical):**

1. Furnish and install an equipment rack consisting of the DTE Energy Meter, the Service Entrance Disconnect Switch, and the SCADA/Monitoring Panel.
2. Furnish and install an underground conduit from the DTE Energy Meter to a utility pole up to one hundred lineal feet (100 LFT).
3. Furnish and install a conduit from the SCADA/Monitoring Panel to the manhole where the Level/Flow Sensors are to be mounted.
4. Install the Level Sensors in the manholes and extend the sensor cables to the SCADA/Monitoring Panels.
5. Excavation, backfill, and restoration.
6. Electrical permits.
7. Applicable taxes.

## **PRICING**

Total price for engineering, panel fabrication, material, electrical installation and start-up/commissioning services as stated above for the above will be One Hundred Six Thousand One Hundred Sixty Eight and 86/100 (**\$106,168.86**) Dollars.

Material	\$9,680.00
Shop Labor/Panel Fabrication	3,312.00
Electrical Installation	82,679.86
Engineering/Project Management	<u>10,497.00</u>
<b>Total</b>	<b>\$106,168.86</b>

## **SCHEDULE**

In accordance with the above, it is Motor City Electric Technologies' intention to begin work on this project immediately upon receipt of order and complete all work within a mutually agreed upon time frame.

## TERMS AND CONDITIONS

1. All prices shall remain in effect subject to your acceptance for 60 days.
2. Our terms of payment are thirty (30) days net from date of invoice. We will invoice the last working day of each month for all engineering performed that month. We will invoice for field equipment upon shipment of equipment.
3. Our controls and electrical price does not include the following:
  - Mechanical/Pneumatic Installation
  - Field Painting
  - Spare Parts
  - Road permits
  - Road ROW/Line of Sight Studies
  - DTE Charges
  - Bonds/fees
  - DIGI monthly fees
  - Taxes
4. Motor City Electric Technologies will not be responsible for correctness or accuracy of any information supplied by others or the subsequent errors resulting from such incorrect information.
5. We will use our best judgment and accepted design practices in the development of our engineering and drafting, and thereby limit responsibility solely to the correction of errors and/or omission in the documents, drawings and panel fabrication to provide a workable system.
6. Motor City Electric Technologies will not be held liable for any schedule delays due to drawing approval delays and/or errors or omissions of others. Control panel fabrication will begin only after approved design drawings have been returned to Motor City Electric Technologies.
7. Back charges for any field additions, deletions, modifications or "corrections" authorized and implemented without our knowledge and consent will not be accepted.

Thank you for the opportunity to quote these services. We look forward to working with you on this project. Should you have any questions regarding our proposal, please do not hesitate to call.

Sincerely,



Robert R. Maechtle  
Senior Estimator/Project Manager

/re



## MEMORANDUM

To: Brett McDonald, P.E., SEMSD  
From: Karen Ridgway, P.E., ASI  
Dane Wiebe, ASI  
Project: Northeast Sewage Disposal System  
Subject: Grosse Pointe Shores Flow Rate Exceedances  
Date: May 13, 2020

---

### Introduction

The purpose of this memorandum is to evaluate the impact of Grosse Pointe Shores (GPS) exceeding its contract capacity flow rate on other Northeast Sewage Disposal System (NESDS) customers. The memorandum also proposes a new methodology for estimating GPS flow exceedances using the available daily average flow rate data from the Cook Road Pump Station.

Figure 1 shows a schematic of the NESDS. The NESDS outlet contractual capacity to the Great Lakes Water Authority (GLWA) is 127-cfs. The Southeast Macomb Sanitary District (SEMSD) is allocated 102-cfs, the Milk River Intercounty Drains Drainage District (MRIDDD) is allocated 22-cfs, and Grosse Pointe Shores (GPS) is allocated 3-cfs.

The contract capacity of the NESDS is fully allocated to its customers and the total capacity matches the firm capacity of the Kerby Road Pump Station (KRPS). The NESDS has limited storage volume available in the Grosse Pointe Interceptor (GPI) and the KRPS wet well. If SEMSD and MRIDDD are discharging their respective contractual flow rates in wet weather, the GPS exceedances will overload the GPI and KRPS. Alternatively, the GPS exceedances may limit the capacity of another NESDS customer.

### Grosse Pointe Shores Background

GPS has a single connection to the NESDS located near the intersection of Chalfonte Road and Cook Road. GPS pumps wastewater from the Cook Road Pump Station at Lakeshore Road into a 20-inch diameter forcemain with a highpoint 372-feet west of the pump station. The forcemain discharges into a 30-inch diameter gravity sewer that runs westerly along Cook Road to Chalfonte Road.

The intermittent pumped flow rates are attenuated and equalized in the gravity sewer. The 30-inch diameter gravity sewer discharges into a regulator chamber at Chalfonte Road prior to discharge into the GPI through an 8-inch pipe. Construction drawings for the Cook Road PS show two 4-cfs pumps and two 10-cfs pumps.

In 2015, ASI inspected the regulator chamber at Chalfonte and found that a mechanical gate was not present, however the 10-inch by 10-inch regulator gate opening remains. A downstream 8-inch diameter outlet pipe runs from the regulator chamber to the GPI at Cook Road and Chalfonte Road. Analysis of the 8-inch diameter GPS outlet pipe estimates that it is capable of delivering about 5 to 6-cfs under surcharged conditions.

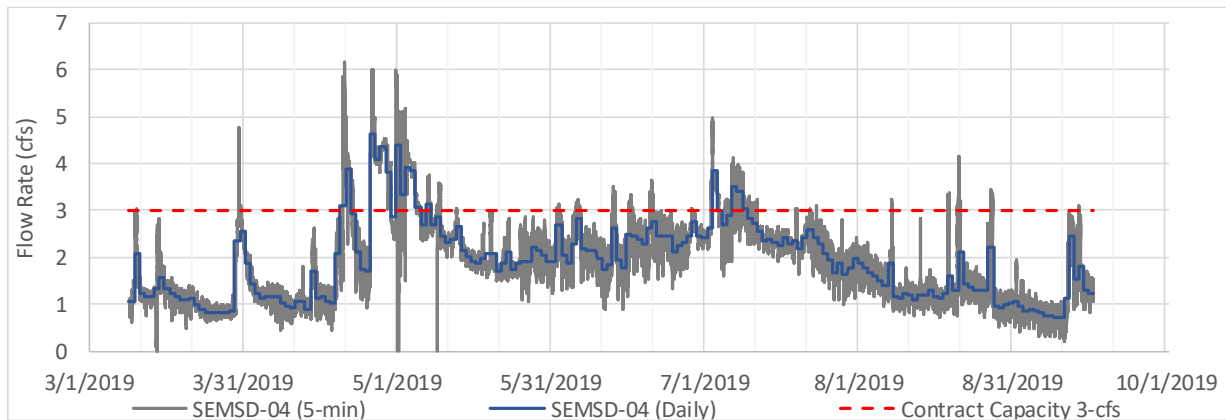
Wastewater volume pumped at the Cook Road PS is currently being metered by GPS using two strap-on Doppler flow meters installed on the discharge piping for the sanitary pumps. The Doppler flow meters have totalizers that are read once per day on weekdays. Total volume is recorded, which allows for estimation of average daily flow rates during weekdays. Pumping rate versus time is not recorded, and it is therefore not possible to determine the peak flow rate being discharged into the GPI by GPS using the totalizer readings.

## Temporary Flow Meters

A temporary flow meter was installed in the 10-inch by 10-inch regulator opening from May 27, 2016 through July 12, 2016 by HRC. During this period, there were two storms with resulting peak with flow rates that exceeded 3-cfs with maximum values of about 6-cfs.

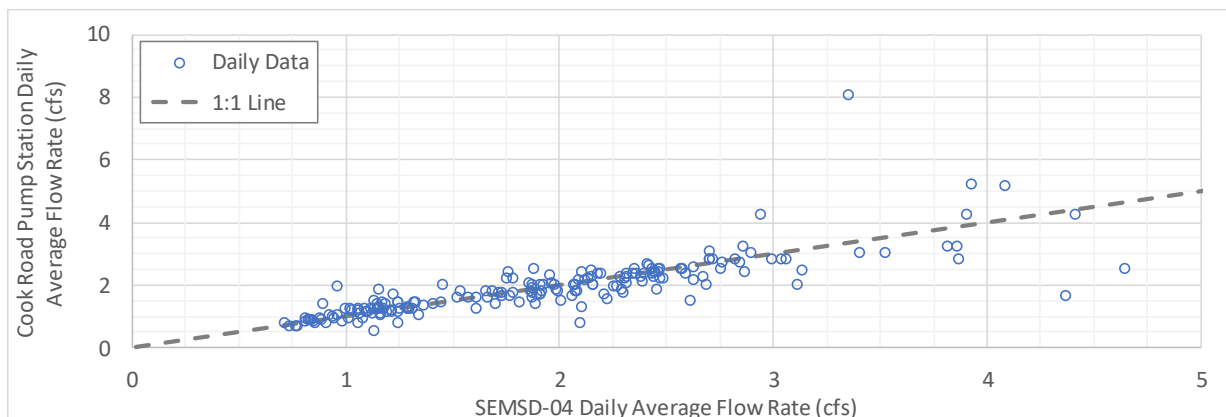
More recently, two temporary meters were installed on the Cook Road connection. One flow meter (SEMSD-03) was installed in the 8-inch pipe between the regulator chamber and the GPI. This meter was installed on March 8, 2019 and was dislodged during the storm event of April 20, 2019 and was later removed. The second flow meter (SEMSD-04) was installed in the 30-inch sewer just upstream of the regulator chamber. SEMSD-04 was installed from March 8, 2019 through September 17, 2019. During this period, there were multiple storms with resulting peak flow rates that exceeded 3-cfs with maximum values of about 6-cfs.

Figure 2 shows SEMSD-04 flow rate from March 9, 2019 through September 17, 2019. Meter SEMSD-04 data was input to ASI's Data Analysis Toolbox (DAT). The data was reviewed and missing or erroneous data have been estimated using fill-in techniques to provide a complete data set.



**Figure 2 – Meter SEMSD-04 Flow Rate from March 9, 2019 through September 17, 2019**

A plot of daily flow rate data is presented on Figure 3 for Meter SEMSD-04 and the Cook Road PS from March 9, 2019 through September 17, 2019. The Cook Road Pump Station totalizers are manually read once each workday, and not necessarily at the same time each day. This uncertainty contributes to the scatter when comparing the datasets. This figure shows that the two meters are in relatively good agreement. The SEMSD-04 dataset can be used to determine a daily average flow rate versus daily flow volume exceedance relationship that could be applied to the Cook Road PS totalizer dataset.



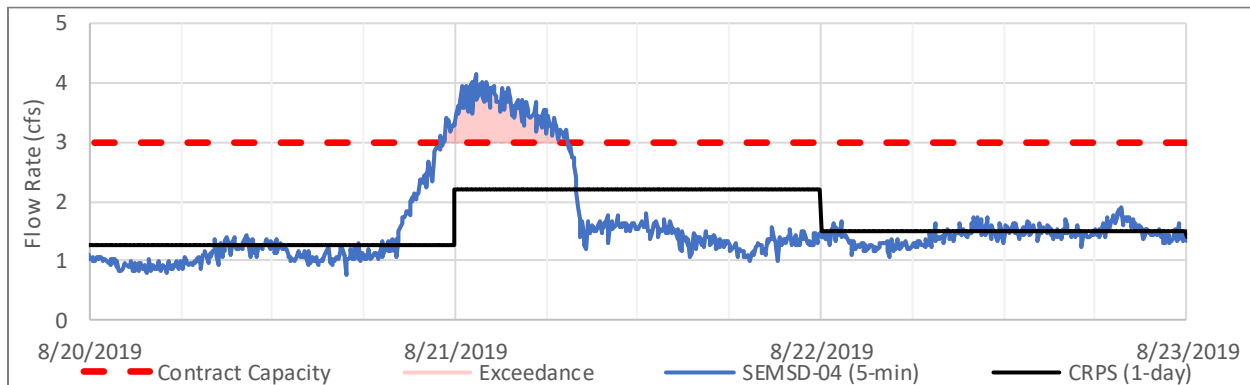
**Figure 3 – Meter SEMSD-04 versus Cook Road PS for March 9, 2019 through September 17, 2019**



## Estimating Flow Exceedances from Daily Totalizer Data

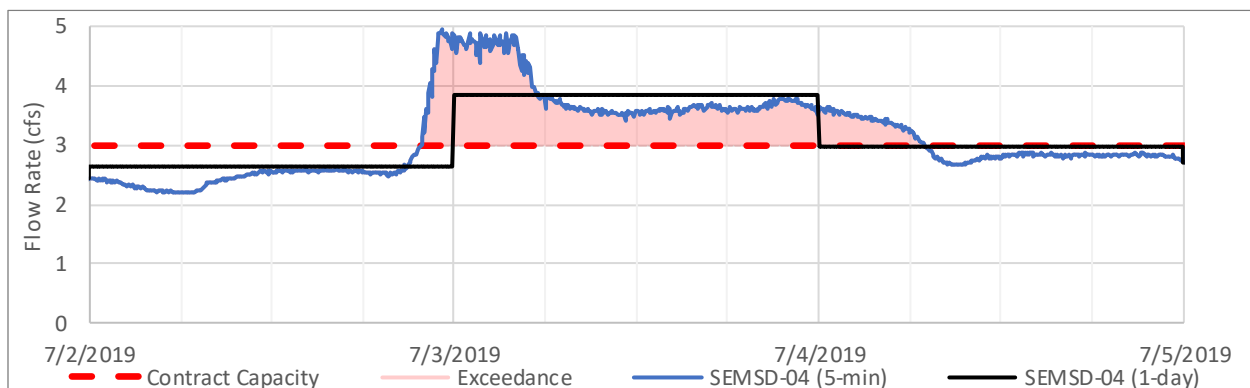
A methodology for estimating the wet weather flow exceedances was developed using temporary meter data from SEMSD-04. This methodology is approximate because wet weather may only occur for a small part of a day. The methodology will later be applied to the daily totalizer data for 2019.

This situation is illustrated on Figure 4 using the temporary flow meter data for SEMSD-04 for a storm in August 2019. In this example, 5-minute flow rates are shown as the blue series, and the daily average flow rate value (of the 5-minute data) are shown as the black series. On August 21, 2019, the 5-minute data shows a peak flow rate of about 4-cfs and a total exceedance volume of 0.1 MG. The daily average flow rate is only 2.1-cfs and there is no exceedance. Therefore, even though the flow rate exceeds the contract capacity for part of the day, the period of low flow rates effectively lowers the daily average flow rate value below the contract capacity and no flow rate exceedance or volume exceedance would be estimated using daily average data.



**Figure 4 – Example 1: Flow Rate Exceedance for Short Duration Event**

Figure 5 illustrates an example of a flow rate exceedance for a longer duration storm event in July 2019. This example shows exceedances for both datasets on July 3, 2019. On July 3, 2019, the estimated exceedance volumes for the 5-minute and daily datasets are the same since the 5-minute dataset provided flow rate was above the contract capacity of 3-cfs for the entire day. On July 2, 2019 and July 4, 2019, the estimated exceedance volume for the 5-minute and daily datasets are different. This is a result of the flow rate being below the contract capacity for a portion of the day.



**Figure 5 – Example 2: Flow Rate Exceedance for Long Duration Event**

These examples highlight the need for a permanent 5-minute flow meter on the Cook Road connection to GPI. In the interim, a reliable relationship between daily average flow rate and daily exceedance volume can be used to estimate exceedances as follows.

## Methodology for Estimating Exceedance Volume from Daily Flow Rate Data

Temporary flow meter SEMSD-04 data was used to develop a relationship between daily average flow rate and daily exceedance volume. From March 9, 2019 through September 17, 2019 while meter SEMSD-04 was in service there were 52 days where a 5-minute flow rate value exceeded the contract capacity of 3-cfs. To filter out dry weather exceedances, only days with a total exceedance volume greater than 0.1 MG were analyzed.

During this 6-month period, there were 17 days for which the flow rates exceeded 3-cfs and the exceedance volume was greater than 0.1 MG. These exceedances occurred from about eight (8) storm events. This indicates that exceedances are occurring about once per month. The peak 5-minute flow rate, daily average flow rate and daily exceedance volume for these 17 days are given on Table 1. The data for meter SEMSD-04 flow rate versus time is plotted on Figure 6. The 17 days with flow rates exceeding 3-cfs and daily exceedance volumes greater than 0.1 MG are shaded in pink.

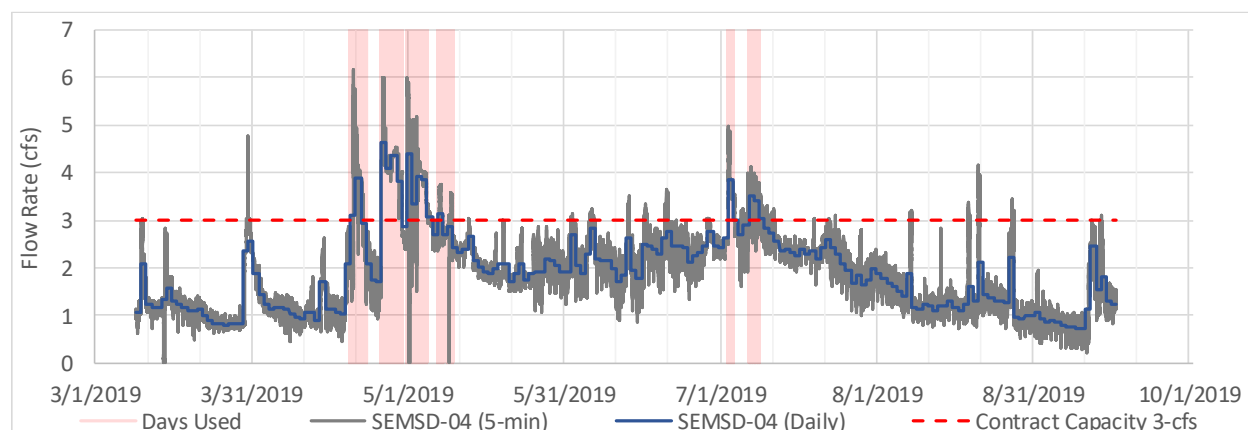


Figure 6 – Meter SEMSD-04 Flow Rate from March 9, 2019 through September 17, 2019

Table 1 Summary of Wet Weather Days with Flow Exceedances

Date	Peak 5-Minute Flow Rate (cfs)	Daily Average Flow Rate (cfs)	Daily Exceedance Volume (MG)
4/20/2019	6.2	3.1	0.47
4/21/2019	5.0	3.9	0.58
4/22/2019	3.9	2.9	0.11
4/26/2019	6.0	4.6	1.06
4/27/2019	4.4	4.1	0.70
4/28/2019	4.5	4.4	0.88
4/29/2019	4.5	3.8	0.53
5/1/2019	6.0	4.4	1.16
5/2/2019	5.2	3.3	0.37
5/3/2019	4.5	3.9	0.60
5/4/2019	4.0	3.9	0.56
5/7/2019	3.8	3.1	0.19
5/9/2019	3.6	2.9	0.12
7/3/2019	4.9	3.9	0.55
7/7/2019	4.1	3.5	0.34
7/8/2019	4.0	3.4	0.27
8/21/2019	4.2	2.1	0.12



The daily average flow rate versus the daily exceedance volume for these 17 days is plotted on Figure 7. Based on the available data, the daily average flow rate exceedances are separated into three cases.

**Case 1:** Daily average flow rates below 2.5-cfs are estimated to result in zero exceedance volume and are likely to be dry weather days.

$$\text{Exceedance Volume [MG]} = 0$$

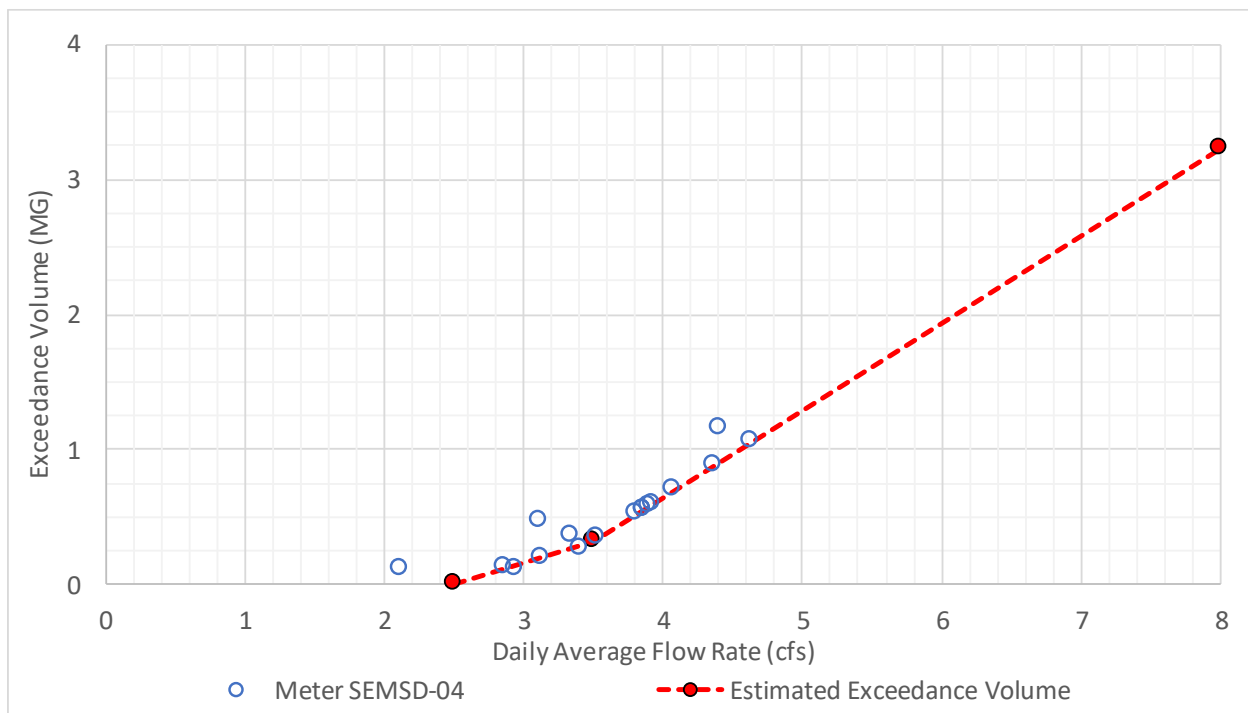
**Case 2:** Daily average flow rates between 2.5 and 3.5-cfs are estimated to result in exceedance volumes of between 0.0 and 0.3 MG. For this range of flow rates, the estimated exceedance volume assumes that the exceedance only occurred over a portion of the day, which results in a slightly higher exceedance volume to flow rate value when compared to flow rates above 3.5-cfs (Case 3).

$$\text{Exceedance Volume [MG]} = 0.32 \times \text{Flow Rate [cfs]} - 0.81$$

**Case 3:** Daily average flow rates between 3.5 and 8.0-cfs are estimated to result in exceedance volumes of between 0.3 and 3.2 MG. For this range of flow rates, the estimated exceedance volume assumes that the entire day was above the contract capacity of 3-cfs. This line represents the minimum possible daily exceedance volume for a given daily average flow rate.

$$\text{Exceedance Volume [MG]} = 0.65 \times \text{Flow Rate [cfs]} - 1.94$$

The equations listed above can be used to estimate the exceedance volume using the Cook Road Pump Station daily totalizer data.

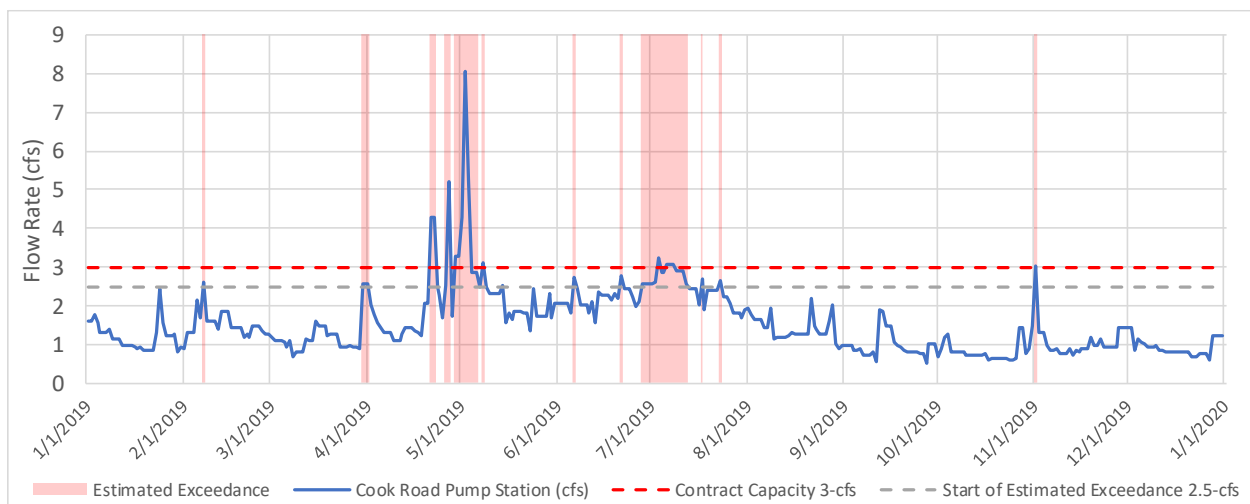


**Figure 7 – Meter SEMSD-04 Daily Average Flow Rate versus Daily Exceedance Volume**

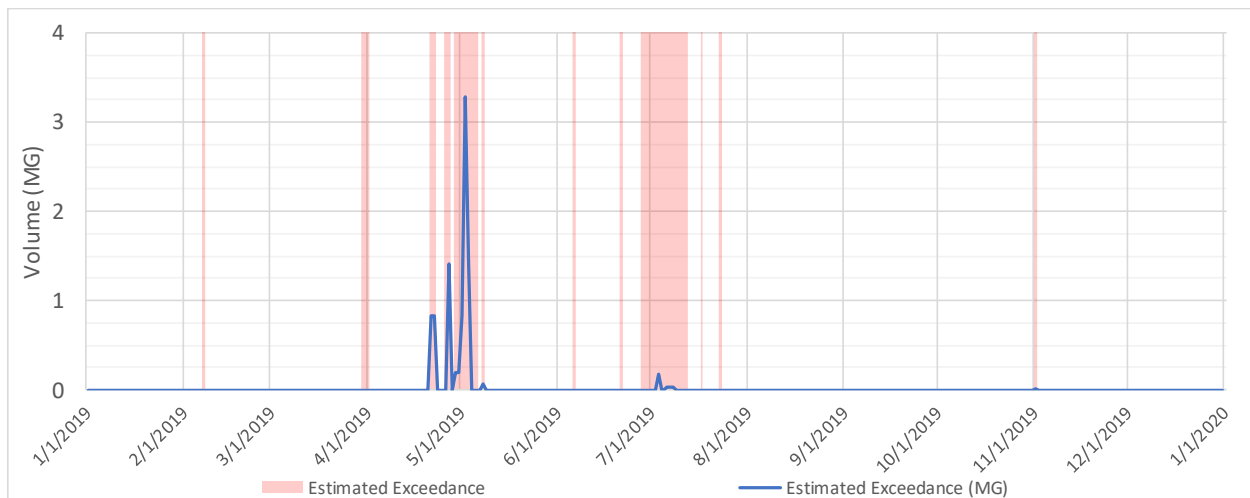
## Exceedance Volumes for Year 2019 Data

The methodology presented above was applied to year 2019 data for the Cook Road PS totalizer readings. Figure 8 shows the daily average flow rate for year 2019 and the days with estimated exceedances. The red dashed line is GPS's contract capacity of 3-cfs, and the grey dashed line is the lower flow rate limit of 2.5-cfs when exceedance volumes will start to be estimated.

Figure 9 shows the estimated exceedance volume for year 2019. Using this methodology, GPS is estimated to have exceeded its contract capacity of 3-cfs on 37-days with a total exceedance volume of 11.5 MG. The estimated exceedance volumes using this methodology clearly occurred during wet weather as shown on Figure 8. As shown on Figure 8, there were about 12 wet weather events in 2019 for which GPS exceeded their contract capacity flow rate into the NESDS.



**Figure 8 – Grosse Pointe Shores Flow Rate and Estimated Exceedance Days for Year 2019**



**Figure 9 – Grosse Pointe Shores Estimated Exceedance Volume for Year 2019**

## Impact of Exceedances on the MRIDDD and SEMSD

Flow meter data presented on Figure 8 shows that GPS regularly exceeds its 3-cfs capacity in wet weather, and this flow rate exceedance may utilize capacity of either the MRIDDD or SEMSD in the NESDS.

The peak wet weather capacity of the pumps at the MRBPS currently is limited to about 96-cfs, with an adjustment factor of 0.96, and the SEMSD capacity is 102-cfs. It is important to note that the GPS exceedances are not creating the limitation at the MRBPS. The issue is thought to be related to the high head losses of the in-line rubber check valves on the pump discharge pipes. It is recommended that the MRBPS capacity issue be investigated and corrected so that upstream Retention Treatment Basin (RTB) discharge is reduced and dewatering of in-system and RTB storage can occur sooner following wet weather.

The MRIDDD outlets at the Milk River RTB and the Harper Woods connection are being operated to maintain the peak wet weather flow rates to about 22-cfs which is the MRIDDD contract capacity. Until the MRBPS capacity issue is further evaluated, the GPS exceedances are utilizing the capacity shortfall of the SEMSD at the MRBPS.

A review of recent meter data and NESDS operating protocols indicate that SEMSD may be compensated by GPS for the GPS exceedances.

## Conclusion and Recommendations

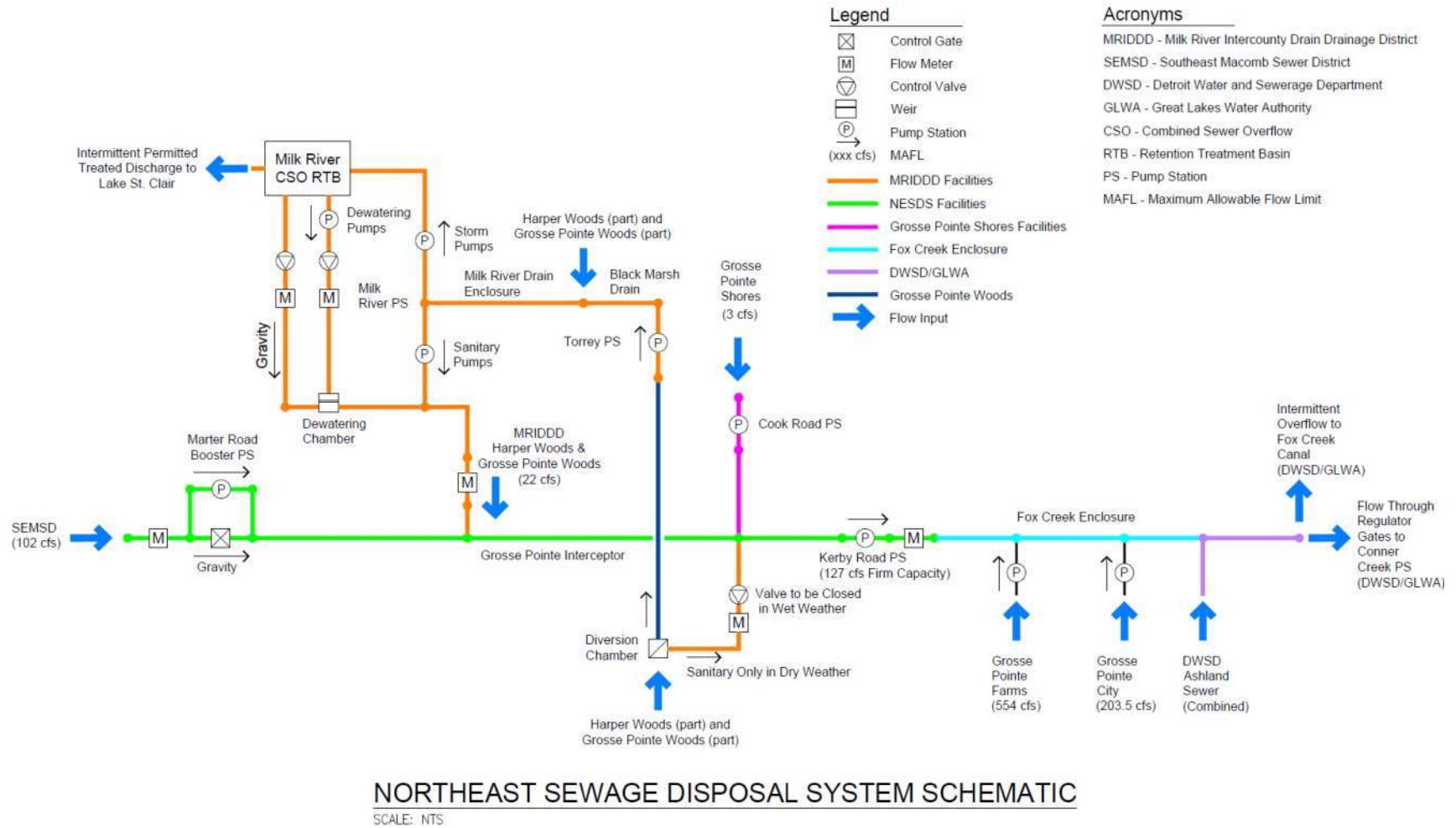
An improved methodology for estimating GPS exceedance volumes using the available daily totalizer readings from the Cook Road PS was developed and is presented in this memorandum. This methodology uses the daily totalizer volumes at Cook Road PS to estimate the exceedances. Installation of a new permanent flow meter on the GPS connection to the GPI to better estimate flow rates and calculate exceedances is recommended.

In 2019, GPS exceeded its contract capacity flow rate of 3-cfs in wet weather at its connection to the NESDS by up to 3-cfs. The GPS exceedances are not creating overloading of the NESDS at this time because the SEMSD cannot achieve their full contractual capacity of 102-cfs at the MRBPS. The MRBPS is conveying a maximum flow rate of about 96-cfs leaving about 6-cfs of unused capacity. The deficiency at the MRBPS is recommended to be investigated and corrected. Once corrected, the GPS exceedance may create overloading and/or a reduction of peak wet weather flow rates from the MRIDDD and SEMSD.

Under the Memorandum of Understanding (MOU) between SEMSD and GPS executed on June 19, 2018, the SEMSD may request compensation from GPS for their exceedances. In the MOU, it was expected that the GPS exceedances would reduce the peak wet weather flow rates from the MRIDDD and GPS would compensate the MRIDDD for their exceedances. A review of flow meter data and current NESDS operating protocols indicates that the MRIDDD is fully utilizing its allocated capacity of 22-cfs in wet weather and is not being negatively impacted by the GPS exceedances. Instead, GPS is using part of SEMSD's allocated capacity when GPS exceeds its allocated capacity of 3-cfs in wet weather.

The exceedances occurred during wet weather in 2019 are estimated to have a total volume of 11.5 MG. It is recommended that the SEMSD be compensated for these exceedances in accordance with the MOU, not the MRIDDD.

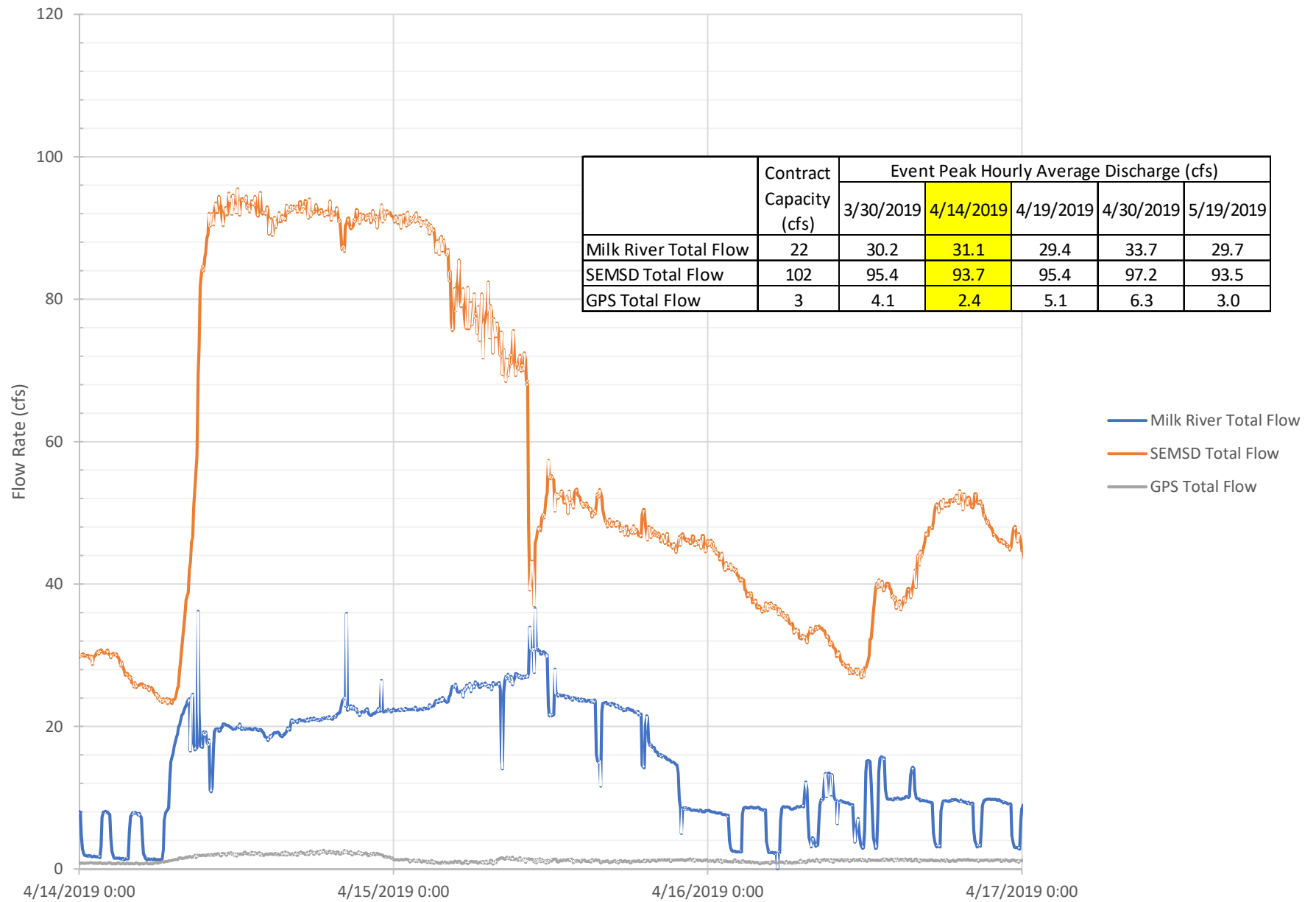




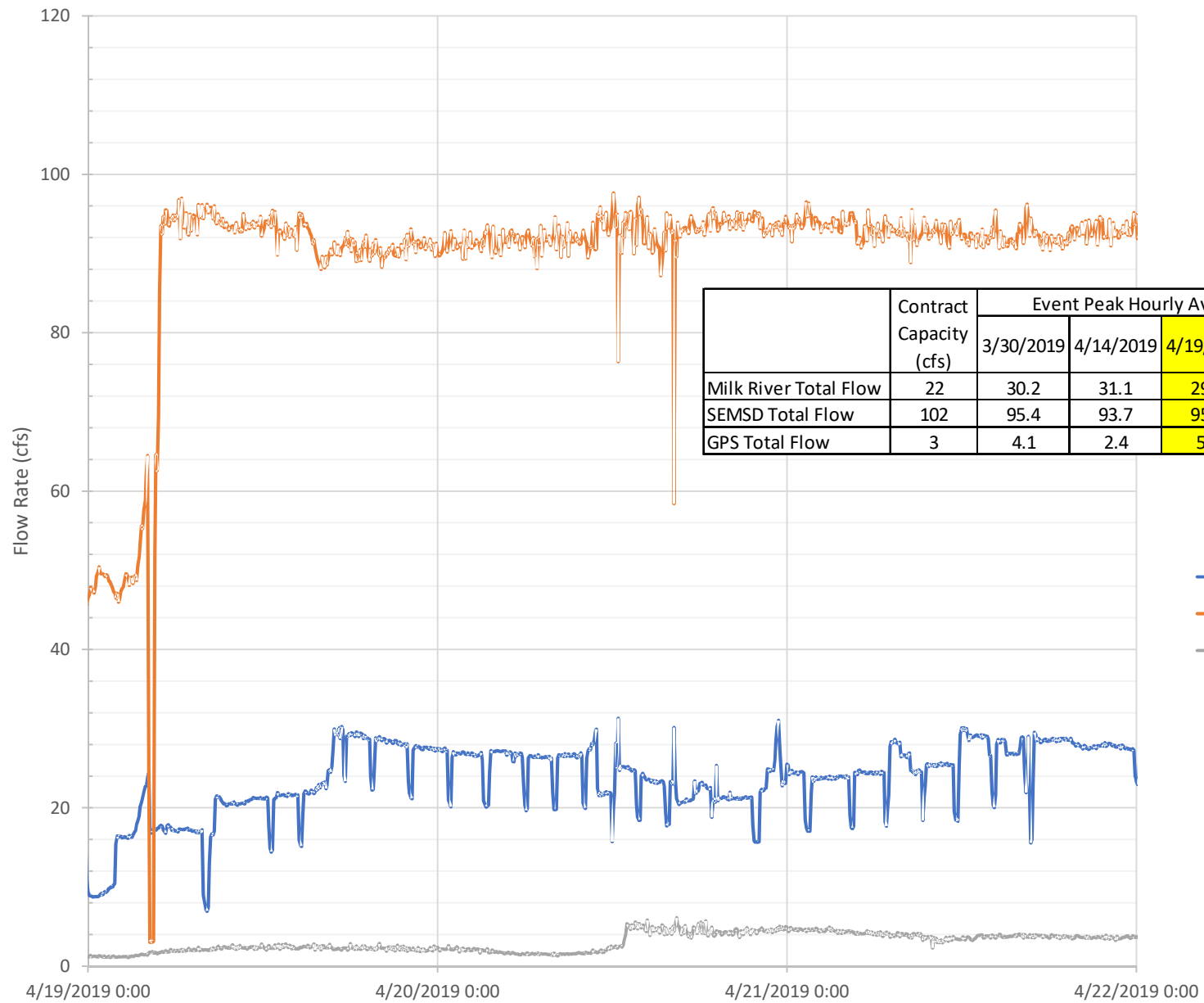
Revised: September 2018

Figure 1 – NESDS Schematic

## April 14th, 2019 Event

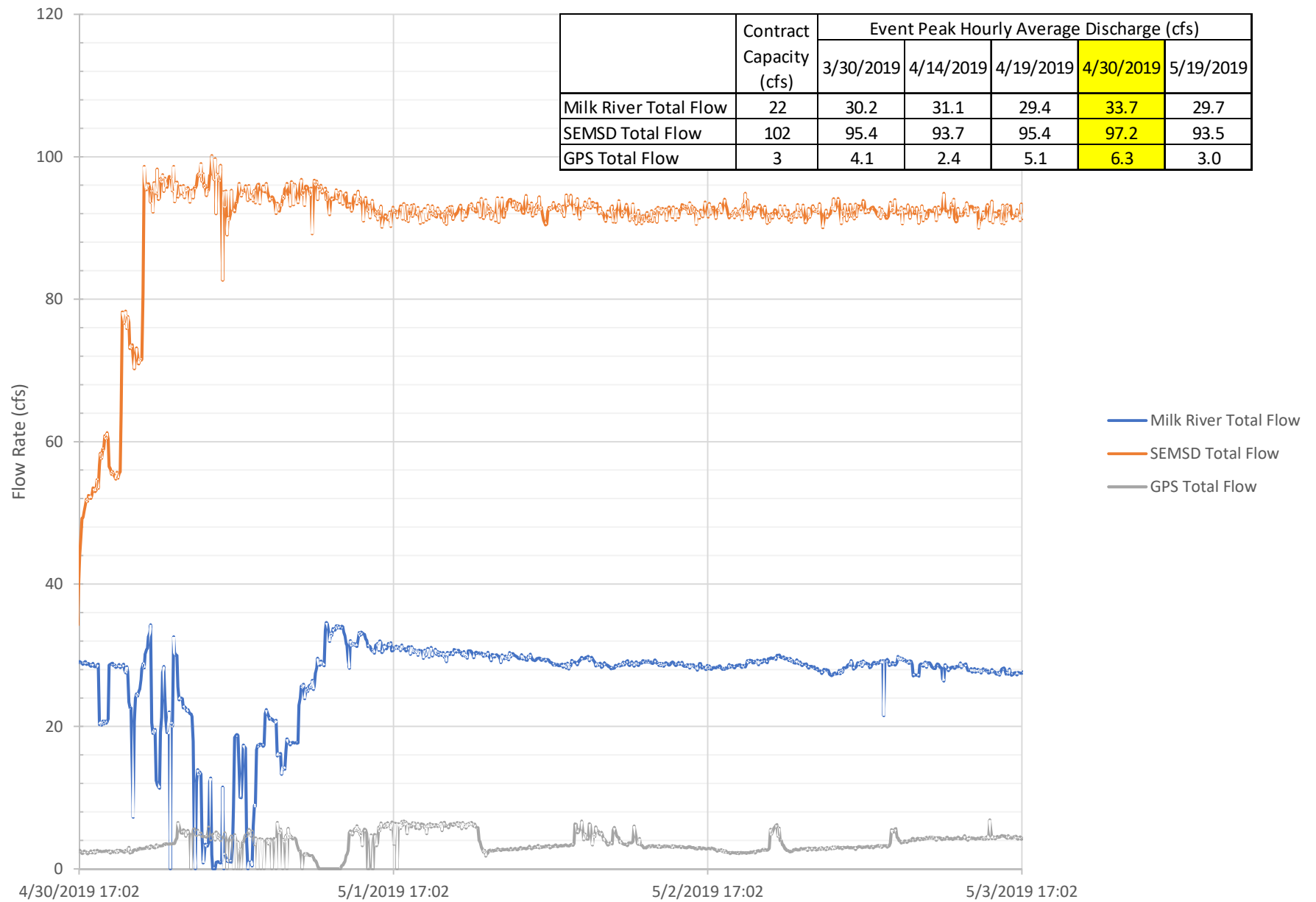


## April 19th, 2019 Event





## April 30th, 2019 Event



**Wayne County Department of Public Services  
Environmental Services Group  
Milk River Intercounty Drain Drainage District  
2020 - 2021 O&M BUDGET  
Budget Summary**

**O&M**

**Revenue**

Municipal Assessments	\$ 3,687,214
Interest Income	\$ 39,000
Misc. Receipts/Land Rental (AT&T)	\$ 24,040
Grosse Pointe Shores Excess Flow Fee	\$ -
<b>Total Revenue</b>	<b>\$ 3,750,254</b>

**Expense**

Supplies	\$ 47,100
Contractual Services	\$ 3,349,454
Utilities	\$ 300,500
Other	\$ 53,200
<b>Total Expense</b>	<b>\$ 3,750,254</b>

**O&M Assessment**

	Historical Percentages	FY 2021 O&M
Grosse Pointe Woods	60.50%	\$ 2,230,758
Harper Woods	35.11%	\$ 1,294,491
St. Clair Shores	0.42%	\$ 15,447
County of Wayne	1.67%	\$ 61,713
State of Michigan	2.30%	\$ 84,805
	100.00%	\$ 3,687,214

**Priority 1B Improvements Project Debt Payment Assessment (Estimated)**

	Principal Spring due MFA Apr 1	Interest Spring due MFA Apr 1	Interest Fall due MFA Oct 1	Total
Grosse Pointe Woods	740,988	\$ 189,774	\$ 180,512	\$ 1,111,274
Harper Woods	661,900	\$ 169,519	\$ 161,245	\$ 992,665
St. Clair Shores	-	\$ -	\$ -	\$ -
County of Wayne	-	\$ -	\$ -	\$ -
State of Michigan	42,112	\$ 10,785	\$ 10,259	\$ 63,156
<b>Total</b>	<b>1,445,000</b>	<b>\$ 370,078</b>	<b>\$ 352,016</b>	<b>\$ 2,167,094</b>

NOTE: St. Clair Shores and County of Wayne have each prepaid their Assessment for the Project. The above interest payments are estimated, actual amounts will be based on actual draws.

**Priority 1B Assessment Table**

	Priority 1b Percentage	Percentage of Bond Issued
Grosse Pointe Woods	50.50%	51.28%
Harper Woods	45.11%	45.81%
St. Clair Shores (Prepaid)	0.31%	0.00%
County of Wayne (Prepaid)	1.21%	0.00%
State of Michigan	2.87%	2.91%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

NOTE: The additional costs of the project is being spread over 3 years beginning with Fiscal Year 18/19. In FY21, the third year of supplemental payments, the board is considering a loan to cover the remaining cost over

**Wayne County Department of Public Services Environmental Services Group  
Milk River Intercounty Drain Drainage District  
2020 - 2021 O&M BUDGET**

	BUDGET	Actual	PROP. BUDGET	INCREASE/
	FY 2020	FY20 thru June 30, 2020	FY 2021	(DECREASE)
<b>REVENUE</b>				
Community Assessments	\$ 4,010,722	\$ 2,448,421	\$ 3,687,214	\$ (323,507)
Interfund Chargeback Revenue		\$ -	\$ -	\$ -
Misc. Receipts/Land Rental (AT&T)	\$ 24,040	\$ 14,023	\$ 24,040	\$ -
Interest on Investments	\$ 58,000	\$ 28,858	\$ 39,000	\$ (19,000)
Grosse Pointe Shores Excess Flow Fee	\$ 132,000	\$ 99,000	\$ -	\$ (132,000)
<b>TOTAL REVENUE</b>	<b>\$ 4,224,762</b>	<b>\$ 2,590,302</b>	<b>\$ 3,750,254</b>	<b>\$ (474,507)</b>
<b>EXPENDITURES</b>				
Office/Computer Supplies	\$ -	\$ -	\$ 100	\$ 100
Vehicle Supplies	\$ -	\$ -	\$ -	\$ -
Parts/Other Equipment	\$ 15,000	\$ 9,856	\$ 15,000	\$ -
Clothing Allowance	\$ -	\$ -	\$ -	\$ -
Lubricants/Motor Fuels	\$ -	\$ -	\$ -	\$ -
Bulk Chemicals	\$ 32,000	\$ 20,791	\$ 32,000	\$ -
<b>Supplies</b>	<b>\$ 47,000</b>	<b>\$ 30,647</b>	<b>\$ 47,100</b>	<b>\$ 100</b>
SEMSD	\$ 619,038	\$ 464,278	\$ 599,271	\$ (19,767)
Misc. Fees	\$ 6,500	\$ 6,049	\$ 6,500	\$ -
Lab Services	\$ 8,000	\$ 7,096	\$ 10,000	\$ 2,000
Engineering Services	\$ 54,000	\$ 34,410	\$ 54,000	\$ -
Legal Services	\$ 26,000	\$ 7,835	\$ 40,000	\$ 14,000
FMD Support Allocation	\$ -	\$ -	\$ -	\$ -
DPS/ESG Admin Allocation	\$ 65,000	\$ 48,750	\$ 90,000	\$ 25,000
Outside Facility Support Chargeback	\$ 14,888	\$ -	\$ -	\$ (14,888)
Engineering (Internal)	\$ 13,056	\$ -	\$ -	\$ (13,056)
Central Services Chargeback	\$ 5,416	\$ 9,099	\$ 12,000	\$ 6,584
Personnel Chargeback	\$ -	\$ -	\$ -	\$ -
Indirect Cost	\$ 15,635	\$ 11,491	\$ 15,000	\$ (635)
M&B Finance	\$ 57,612	\$ 43,209	\$ 58,000	\$ 388
Legal (Internal)	\$ -	\$ -	\$ -	\$ -
Misc. Contractual Services	\$ 34,000	\$ 198,541	\$ 127,000	\$ 93,000
Sewage Disposal Charges	\$ 2,121,781	\$ 1,326,521	\$ 2,337,684	\$ 215,903
Data Circuits & Telephone	\$ -	\$ 1,309	\$ -	\$ -
<b>Contractual Services</b>	<b>\$ 3,040,926</b>	<b>\$ 2,158,588</b>	<b>\$ 3,349,454</b>	<b>\$ 308,529</b>
Electricity	\$ 265,000	\$ 182,576	\$ 255,000	\$ (10,000)
Gas	\$ 26,000	\$ 7,333	\$ 20,500	\$ (5,500)
Water & Sewer	\$ 12,000	\$ 8,091	\$ 25,000	\$ 13,000
<b>Utilities</b>	<b>\$ 303,000</b>	<b>\$ 198,000</b>	<b>\$ 300,500</b>	<b>\$ (2,500)</b>
Building Repairs & Maint.	\$ 8,000	\$ 4,334	\$ 7,000	\$ (1,000)
Equipment Repairs & Maint.	\$ 25,000	\$ 6,451	\$ 18,000	\$ (7,000)
Inspection ofr Sanit Sewer and Repair	\$ -	\$ -	\$ -	\$ -
Vehicle Repair & Maint.	\$ -	\$ -	\$ -	\$ -
Equipment Rental	\$ 12,000	\$ 1,335	\$ 6,000	\$ (6,000)
Machinery & Equipment	\$ -	\$ -	\$ 22,200	\$ 22,200
<b>Other Operating Expense</b>	<b>\$ 45,000</b>	<b>\$ 12,120</b>	<b>\$ 53,200</b>	<b>\$ 8,200</b>
Additional Priority 1b Cost Over SRF Funding	\$ 788,836	\$ -	\$ -	\$ (788,836)
<b>TOTAL O&amp;M EXPENSE</b>	<b>\$ 4,224,762</b>	<b>\$ 2,399,355</b>	<b>\$ 3,750,254</b>	<b>\$ (474,507)</b>

**Wayne County Department of Public Services  
Environmental Services Group  
Milk River Intercounty Drain Drainage District  
2020 - 2021  
Reserves**

**Cash Balance as of June 30, 2020**

Operations & Maintenance (O&M)	\$	25,752
Supplemental Funding Construction Project	\$	2,214,293
Reserve for Replacement	\$	341,791
		<hr/>
Total	\$	<b><u>2,581,836</u></b>

**Wayne County Department of Public Services  
Environmental Services Group  
Milk River Intercounty Drain Drainage District  
2020 - 2021  
Debt**

**SRF 5446-01**

<u>DATE</u>		<u>INTEREST</u>		<u>PRINCIPAL</u>		<u>TOTAL</u>
4/1/2021	\$	370,078	\$	1,445,000.00	\$	1,815,078
10/1/2021	\$	352,016		0	\$	352,016

SRF 5446-01 had its first drawdown on 02/02/17. The first principal payment is due on 4/01/2021.

This Fiscal Year includes the first principal payment due for the SRF project. Interest will continue to be estimated until the full amount of the loan is drawn. The interest showing for 4/1/21 and 10/1/21 is up to date based on the most recent amortization schedule.

**INVOICE # O&M 7-2020**

August 13, 2020

Ms. Suzanne Abouzenni, MBA, CPA  
Division Director  
Management & Budget  
DPS Finance Division  
400 Monroe, 3<sup>rd</sup> Floor  
Detroit, MI 48226

Mr. James Grezlik  
Department Manager 2, Budget Analyst  
Management & Budget  
DPS Finance Division Environmental Services  
400 Monroe, 3<sup>rd</sup> Floor  
Detroit, MI 48226

Dear Ms. Abouzenni & Mr. Grezlik:

The MRIDDD's monthly bill for the operation and maintenance of the system is \$599,270.67 per year or \$49,939.22 per month. In addition, the SEMSD will pass-through costs for approved budget items.

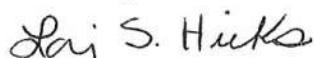
July 2020 Amount Due

Operation and Maintenance .....	\$49,939.22
<u>Pass-Through Costs for Reimbursement.....</u>	<u>\$ 6,614.84</u>
Total Due.....	<b>\$56,554.06</b>

Attached is a summary of the pass-through costs along with a copy of the invoices for services rendered or material purchased for your records. Please note that this payment is due within 30 days of the date of this invoice. Make checks payable to the Southeast Macomb Sanitary District, reference the invoice number on the check, and mail to Marie Tighe at 20001 Pleasant, St. Clair Shores, MI 48080.

If you have any questions, feel free to contact our office at (586) 777-1284.

Sincerely,



Lori S. Hicks  
Administrative Assistant/Controller

Attachments: FYTD Pass-Through Costs  
Summary of Pass-Through Costs  
Pass-Through Invoices

FY20 to Date SEMSD Pass Through Costs to MRIDDD 07/2020				
Account	Approved Budget	Actual Spent	Remaining	% Spent
Parts - Other Equipment	\$ 15,000.00	\$ 10,452.77	\$ 4,547.23	70%
Bulk Chemicals	\$ 32,000.00	\$ 24,565.00	\$ 7,435.00	77%
Miscellaneous Fees	\$ 6,500.00	\$ 6,048.74	\$ 451.26	93%
Laboratory Services	\$ 8,000.00	\$ 7,096.00	\$ 904.00	89%
Miscellaneous Contractual Services	\$ 34,000.00	\$ 8,740.41	\$ 25,259.59	26%
Building Repairs & Maintenance	\$ 8,000.00	\$ 5,579.98	\$ 2,420.02	70%
Equipment Repairs & Maintenance	\$ 25,000.00	\$ 7,444.17	\$ 17,555.83	30%
Equipment Rental	\$ 12,000.00	\$ 1,334.66	\$ 10,665.34	11%
<b>Total</b>	<b>\$ 140,500.00</b>	<b>\$ 71,261.73</b>	<b>\$ 69,238.27</b>	<b>51%</b>



**Summary of SEMSD Pass-Through Costs to MRIDDD**  
**SEMSD August, 2020 O&M Invoice # O&M 07-2020**

Account	Date of Invoice	Vendor	Description of Expense	Amount
Building Repairs & Maintenance	5/8/2020	The Sherwin Williams Company	Paint (Charged on May O&M Inv)	\$ (38.64)
Building Repairs & Maintenance	5/8/2020	The Sherwin Williams Company	Paint (Charged on May O&M Inv)	\$ (180.40)
Building Repairs & Maintenance	6/2/2020	Home Depot	2 Drill Bit Sets & Push Broom (Charged on May O&M Inv)	\$ (174.98)
Building Repairs & Maintenance	7/5/2020	Home Depot	Cabinet Counter and Mount	\$ 90.47
Building Repairs & Maintenance	7/10/2020	Earl J. Weil & Son Plumbing Service	Kitchen Sink Cabled and Trap Repaired	\$ 225.00
Miscellaneous Contractual Services	7/11/2020	Comcast (7/15/20-8/14/20)	Internet, Cable & Phone	\$ 238.62
Equipment Repairs & Maintenance	7/13/2020	Downriver Refrigeration Supply Co.	Air Filters	\$ 151.15
Equipment Repairs & Maintenance	7/14/2020	Office Depot	Printer, Warranty and Folders	\$ 842.37
Bulk Chemicals	7/15/2020	JCI Jones Chemicals, Inc.	Chlorine Refill	\$ 3,774.00
Parts - Other Equipment	7/16/2020	Gilbert's Pro Hardware	Screw	\$ 1.84
Parts - Other Equipment	7/20/2020	Gilbert's Pro Hardware	Rechargeable Flashlights & Weed Killer	\$ 419.94
Miscellaneous Contractual Services	7/23/2020	Cintas	First Aid Kit Replacements	\$ 160.47
Building Repairs & Maintenance	7/29/2020	Vinyl Graphix	17 "Danger" Signs	\$ 1,105.00
<b>Total Pass-Through Costs</b>				<b>\$ 6,614.84</b>