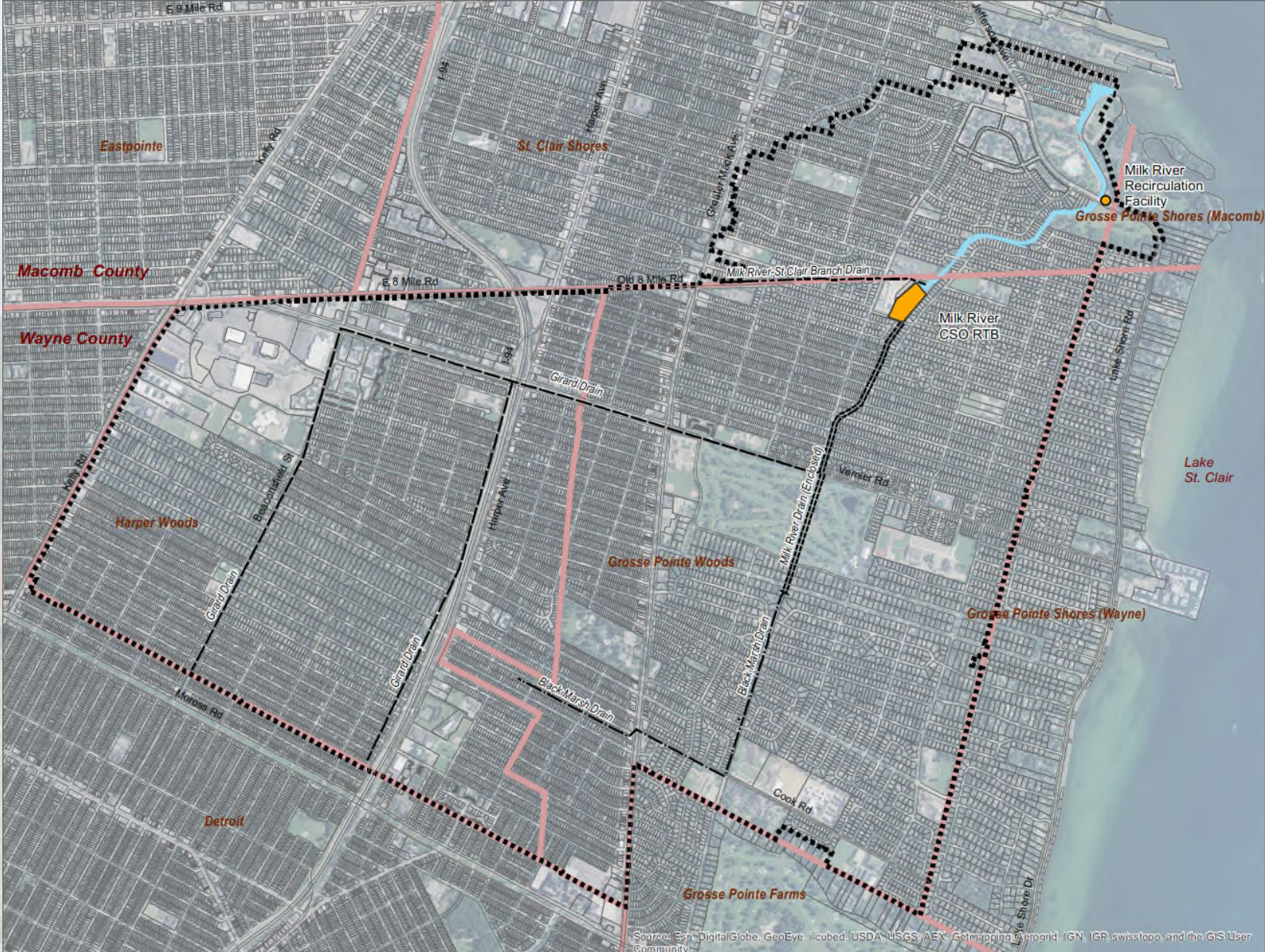




Milk River Intercounty Drain Drainage District

Priority 1B Improvements

Area to be Served by the Priority 1B Improvements Project



Legend

- Milk River Drain (Enclosed)
- Milk River-St Clair Branch Drain
- Girard Drain
- Black Marsh Drain
- Milk River Drain (Open)
- Project Service Boundary
- Municipal Boundary

FACILITIES

- Milk River CSO RTB (Combined Sewer Overflow Retention Treatment Basin) Facilities
 - Sanitary Pumping Facilities
 - Storm Water Pumps
 - Retention Treatment Basin
 - Aeration Basin
 - Blower Building
 - Control Building
 - Maintenance Garage



FACILITIES

- Recycle Pump Station
- Intake Pipe
- Forcemain



Regulatory Oversight

ACO – ENFORCEMENT NOTICE



STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENT
LANSING



NOTICE No. EN-000114

ENFORCEMENT NOTICE

CERTIFIED MAIL 7007 1490 0003 9691 5856

Mr. Butler Benton, Drain Commissioner
Milk River Intercounty Drainage Board
400 Monroe Street, Suite 400
Detroit, Michigan 48226

Dear Mr. Benton:

SUBJECT: Milk River CSO Retention/Treatment Basin (Milk River CSO RTB)

THE DEPARTMENT OF Natural Resources and Environment (DNRE), Water Resources Division (WRD), Southeast Michigan District Office, has referred the Milk River Intercounty Drainage Board (ICDB) to the WRD's Enforcement Unit requesting escalated enforcement action for violations of law as set forth herein.

PERMIT NO. MI0025500

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4 and 1995-18,

Milk River Intercounty Drainage Board
415 Clifford
Detroit, Michigan 48226

is authorized to discharge from the Milk River CSO Retention/Treatment Basin facility located at

1190 West Parkway Drive
Grosse Pointe Woods, Michigan 48236

MICHIGAN NPDES PERMIT

NEEDED IMPROVEMENTS

- STORM AND SANITARY PUMP RECONDITIONING (IMPROVE RELIABILITY)
- RETENTION BASIN IMPROVEMENTS (IMPROVE PERFORMANCE)
- SITE AND BUILDING IMPROVEMENTS (UPDATE AGING INFRASTRUCTURE)
- CLEAN AND RECONDITION RECIRCULATION PIPING
- IMPROVE RECIRCULATION INTAKE TO ACCOUNT FOR ZEBRA AND QUAGGA MUSSELS
- REPAIR DAMAGED FORCEMAIN UNDER MILK RIVER
- COMPLETE IMPROVEMENTS REQUIRED BY ADMINISTRATIVE CONSENT ORDER
- IMPROVE OPERATION, SAMPLING, AND MONITORING OF THE FACILITY
- IMPROVEMENTS TO BLOWER AND DISINFECTION BUILDINGS

STORM PUMPS

- The Milk River CSO RTB has 7 storm water pumps – capable of pumping upto 862,000 gpm
- The pump sizes include (4) 60-inch pumps and (3) 72-inch pumps
- Storm Pumps are used to reduce the hydraulic grade (pressure/level) within the sewer system
- When needed the pumps operate by pumping to the RTB for storage and possible treatment
- Due to the size and complexity of the pumps repairs take many months
- Due to the age of the pumps (Date), repairs are needed prior to the need of emergency repairs

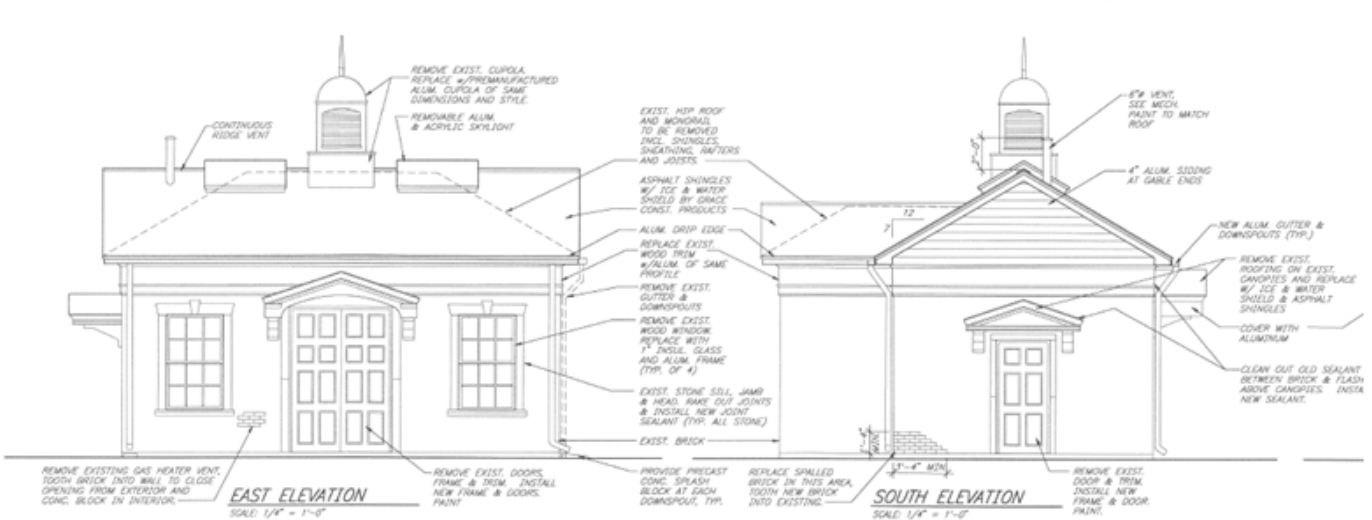
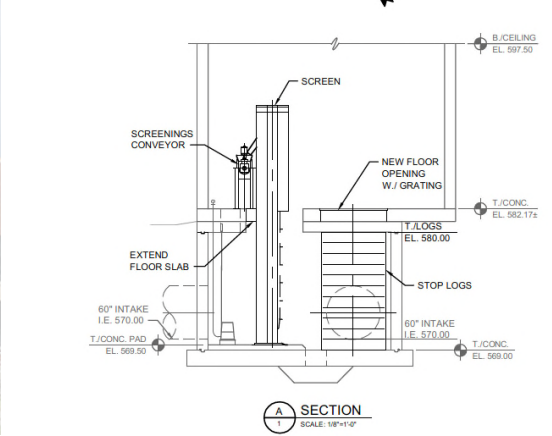


Existing conditions



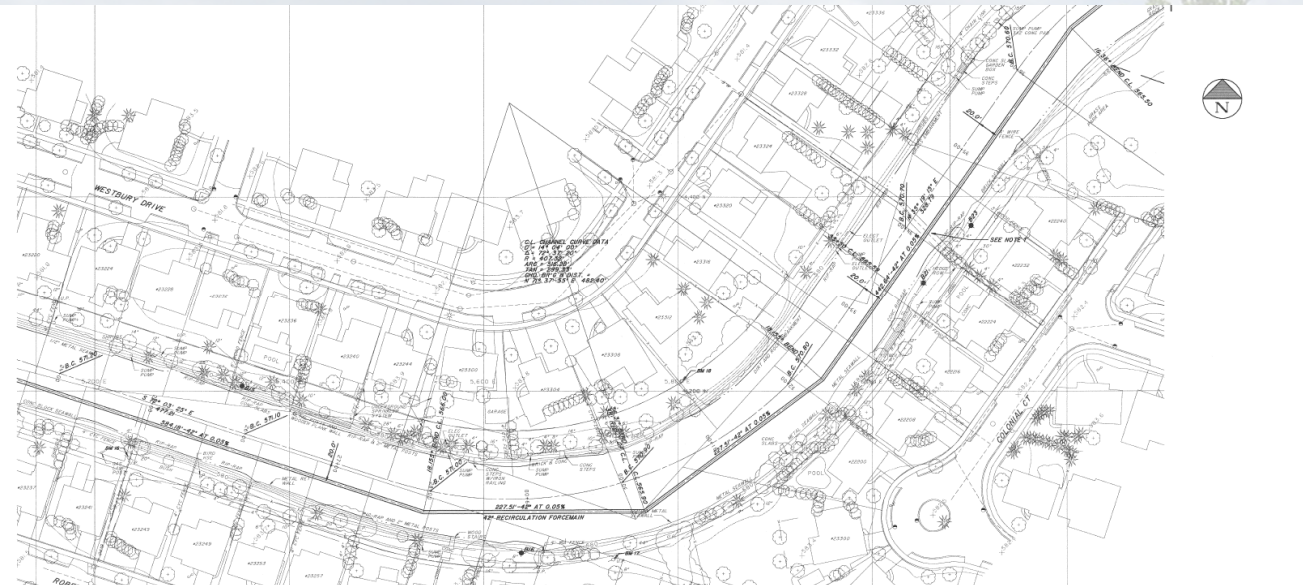
RECYCLE PUMP STATION

- Update aged condition
- Build addition for new mussel control equipment
- Add water service for operational safety
- Improve communication and monitoring of facility
- Replace screening equipment for Lake intake water

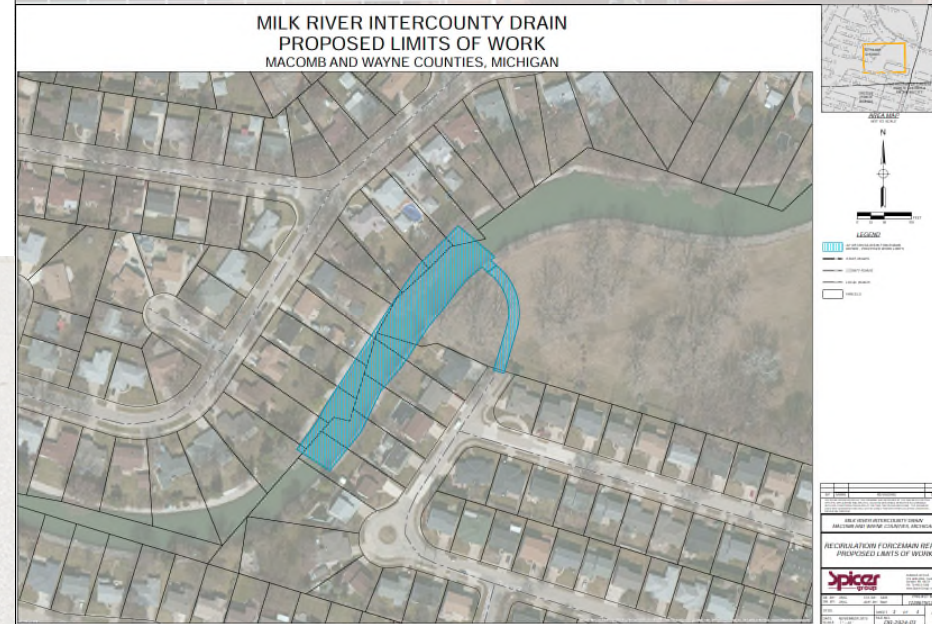


FORCEMAIN REPAIR

- 42-INCH Forcemain under the Milk River provides water from Lake St. Clair to the head of the Milk River Channel to improve water quality of the river.



- Inspections were completed during design to determine the location of the pipe break. The contractor will need to excavate under the river and repair the damaged portion of piping.
- Access for this repair work will be provided through an easement from the Edsel and Eleanor Ford House property off of Colonial Court.



PROJECT COSTS

ESTIMATED PROJECT COST SUMMARY TABLE

Based on apparent low bid from June 28, 2016

| | |
|---|----------------------------|
| CONSTRUCTION COST | \$33,340,028 ¹ |
| DESIGN COSTS (Engineering Contract & Force Account; funded by Stormwater, Asset Management, and Wastewater Grant (SAW Grant)) | \$1,397,165 |
| ENGINEERING COSTS (Engineering Contract; Construction Engineering & Project Performance Certification Services) | \$1,130,373 ⁶ |
| Estimated Force Account | \$374,734 ² |
| Estimated Bond & Finance Costs | \$156,536 ³ |
| Estimated Project Cost Subtotal | \$36,398,836 |
| State Revolving Fund (SRF) Loan Contingency | \$2,182,539 ⁴ |
| Estimated Total Project Cost | \$38,581,375 |
| LESS Non-SRF Funding | (\$2,311,375) ⁵ |
| Estimated SRF Loan Amount | \$36,270,000 |
| Estimated SRF Loan Amount | \$36,270,000 |
| LESS Estimated Green Project Reserve (GPR) | (\$100,000) |
| Estimated SRF Loan Amount with GPR | \$36,170,000 |

1. Apparent Low bid amount (\$34,640,000) less Unforeseen Conditions allowance (\$1,300,000), which comes out of loan contingency

2. Force account costs for construction and project performance certification only

3. Bond Atty-\$60,750; Fin Consult-\$42,986; Credit Rating-\$21,750; Treasury Filing-\$1,000; Legal Pub-\$30,000; MITN ad- \$50

4. SRF loan contingency assumed at 6% of estimated project cost subtotal plus or minus to round loan amount to nearest \$5K

5. This includes SAW Grant-\$1,397,165; Tetra Tech proposed Amendment No. 1-\$349,210; Prepayments-\$565,200

6. Includes \$349,210 for proposed Amendment No. 1 for Extended Construction Phase

CONTRACTOR SCHEDULE

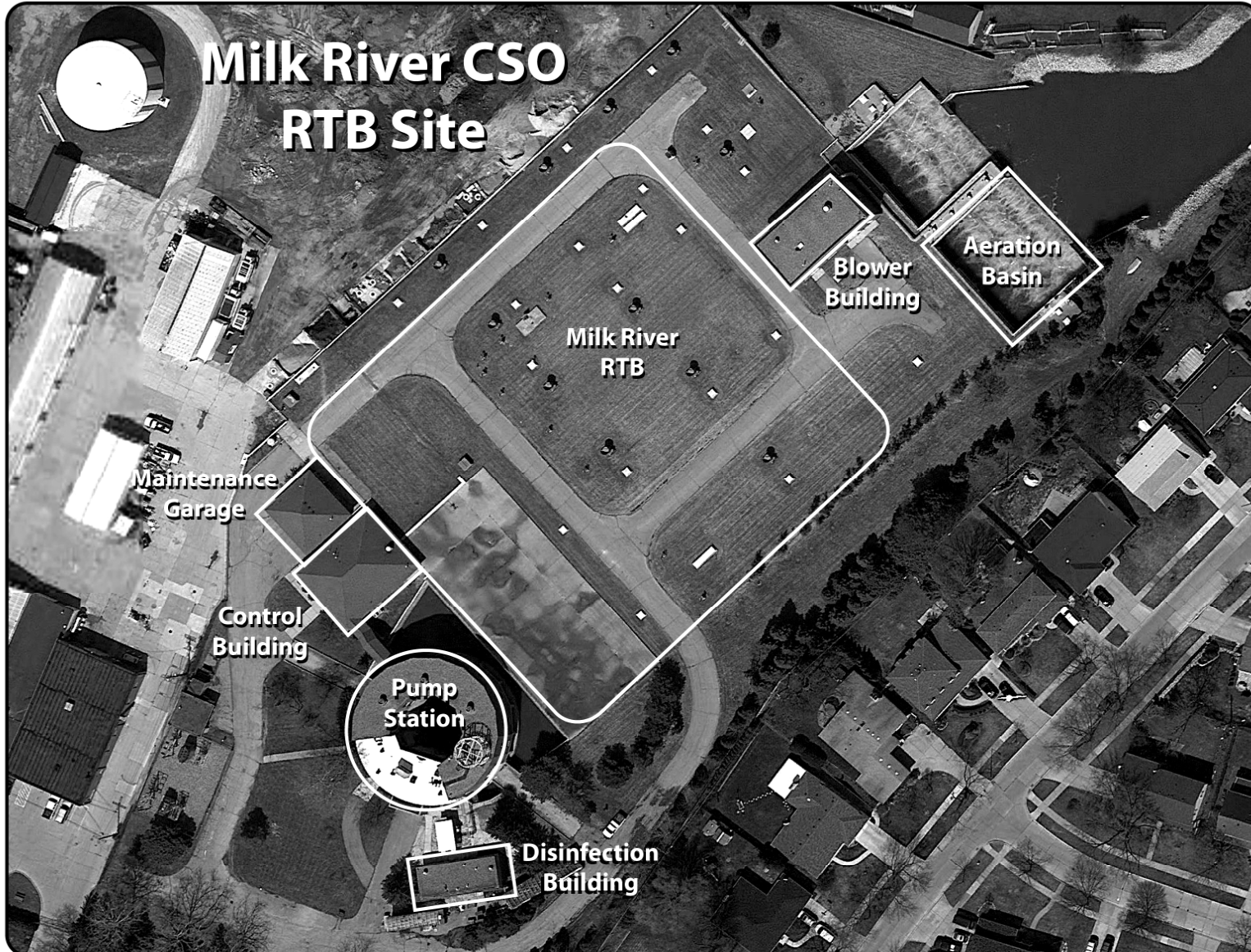
- Start work October, 2016
- Beginning of Pump Rehabilitation February, 2017
- Beginning of Sewer Repair Work December, 2017
- Completion of Work at Recycle Pump Station May, 2019
- Completion of Work at CSO Facility November, 2019
- Project Performance Certification January, 2021

Contractor Working Allowable Hours – 7:30am to 6pm

TYPE OF CONSTRUCTION



- Recycle Pump Station
 - Building Addition
 - Excavation
 - Paving
 - Cleaning and Removal of Sediment from Pipes
- Milk River CSO Facility
 - Excavation
 - Sheet Piling
 - Building Rehabilitation
 - Major Equipment Repairs
 - Removal of Basin Sediment and Grit
 - Paving and Site Improvements
 - Concrete Improvements and Repair of Basin
- Forcemain Repair
 - Excavation of Pipe within Milk River
 - Pipe Repair
 - Restoration



Staff Available for Questions and Answers

Greg Tupancy, P.E. – Wayne County
James Rydquist, P.E. – Tetra Tech
Dave Weiss – Tetra Tech

