



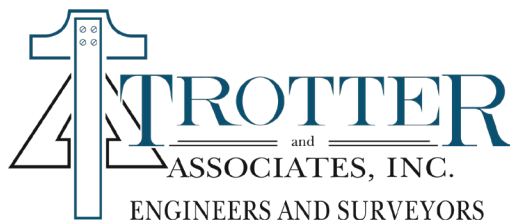
**WHEATON
SANITARY
DISTRICT**

Wheaton Sanitary District Supplemental Memorandum to the 2017 Wastewater Facility Plan



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July 2021

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Memorandum

Date: July 28th, 2021

To: Gary Bingenheimer, IEPA

From: Jillian Kiss, P.E.

Subject: Wheaton Sanitary District
Supplemental Memorandum to the 2017 Wastewater Facility Plan

The purpose of this memorandum is to supplement the Wheaton Sanitary District's 2017 Wastewater Facility Plan (Project Plan) and 2019 Future Facility Siting Study to meet all requirements of the IEPA Water Pollution Control Loan Program's Wastewater Project Planning Submittal Checklist. The District plans on financing the following projects with a low-interest loan secured through the IEPA Water Pollution Control Loan Program: Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation.

Project Planning Approval is the first step in the loan application process. To receive Project Planning Approval by the IEPA's Infrastructure Financial Assistance Section (IFAS), the IEPA will conduct an Environmental Impact Study. Based on the results of this study, loan applicants are required to fulfill public participation requirements regarding the project planning and make available a document from the IEPA called a Preliminary Environmental Impact Determination (PEID). The PEID provides information regarding the potential environmental impacts of the proposed project(s). A public hearing and a public comment period of at least 10 days are all possible public participation requirements that will be determined by the IEPA during the Environmental Impact Study. Once the above requirements are completed, the loan applicant's project(s) will be approved and reserved on the IEPA's Intended Funding List for the upcoming fiscal year. In 2018, the District completed a Wastewater Facilities Plan Update to the 2017 Facility Plan. The Plan reviewed the District's wastewater treatment facility condition, included a review of regulatory requirements, and presented a 20-year capital improvements plan. The capital improvements plan (CIP) included an implementation schedule and budgeting recommendations to guide the District through the subsequent 20 years.

This memo compiles project specific information from the 2017 Wastewater Facility Plan and 2019 Future Facilities Siting Study and focuses specifically on the project implementation plan, as well as the necessary project planning documents and information not included in the Facility Plan. The implementation plan includes:

- the probable construction cost;
- the anticipated construction schedule;
- the financial schedule including arrangement for assuring adequate annual debt service and Operation, Maintenance, and Replacement coverage requirements; and
- a description of the dedicated source of revenue necessary for loan repayment.

The documents enclosed with this memo correspond to and are referenced in the Project Planning Submittal Checklist.

PROJECT #1 – SLUDGE DEWATERING IMPROVEMENTS PROJECT

1. Project Summary

The 2017 Wastewater Facility Plan presented two alternatives for rehabilitation/upgrade of the sludge dewatering facilities. The two alternatives were to build a new Dewatering Building in a new location on the plant site or rehabilitate the existing dewatering building. The District has selected to implement a new sludge dewatering building. Multiple alternatives for the location of the new building were discussed, such as locating the new Dewatering Building adjacent to the existing Sludge Storage Barn or at the site of the recently filled excess flow north pond and repurposing the existing dewatering building for future WAS thickening.

The Future Facilities Siting Study evaluated several future layout alternatives taking into consideration available area within the plant site, floodplain regulations, and pending regulatory requirements. The District will need to strategically evaluate and replace key infrastructure on the existing plant site, as well as add new structures and processes as the plant evolves over the decades to come. A component of the Future Facilities Siting Study was the future siting of the Sludge Dewatering Building, along with Anaerobic Digestion Complex, Sludge Storage Barn, Administration Building, Maintenance Shop, Garage, and future biological process expansion.

Ultimately, the alternative chosen was to build a new Sludge Digestion and Handling Complex on the excess flow north pond site. The District can strategically continue to build each of the other listed structures systematically as required. Therefore, the Sludge Handling Building, Centrate Holding, Digested Sludge Storage, and Deammonification Tankage would be constructed first with a Truck Bay. The Sludge Storage Barn could be constructed at any time and shares a common wall with the proposed Dewatering Building. The benefit to this option is that dewatered sludge could be conveyed directly into the Sludge Storage Barn if the new Dewatering Building is built common wall with the barn. This would eliminate on-site dewatered sludge trucking and reduce potential for noise and odor complaints. This would, however, require pumping digested sludge approximately 1,000 ft from Digester No. 3 across the creek, and to the new Sludge Dewatering Building.

In addition to high phosphorus levels within the dewatering centrate, ammonia can also become concentrated within the waste stream, and has the potential to increase the nitrogen loading to the biological process. This can negatively affect BNR processes due to competition for carbon sources. Therefore, it is recommended that the District plan for the implementation of a DEMON or ANITA Mox process which would consist of a 50,000-gallon (25'x 20') Equalization Tank, a 30' x 30' Biological Reactor, and 50,000-gallon (25'x 20') Centrate Holding Tank.

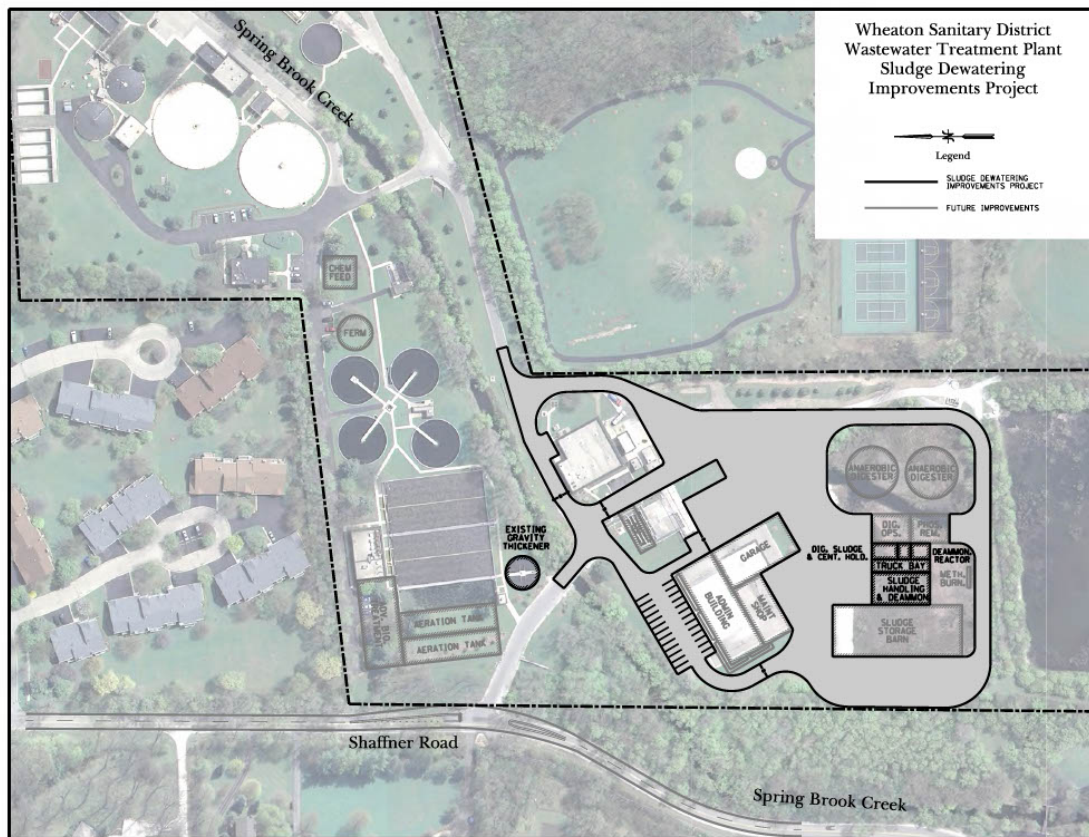
The District did not select the rehabilitation alternative because the space of the existing building is not optimal for dewatering operations at the required capacity. However, the scope of this alternative includes rehabilitation of the existing gravity thickener, similarly to the rehabilitation alternative.

Construction of a new Dewatering Building would allow for proper sizing of rooms to ensure adequate clearances for maintenance and equipment removal. The existing Dewatering Building has been retrofitted several times since its original construction and does not have an ideal layout for dewatering and conveying. Furthermore, the existing Dewatering Building is within the updated FEQ 100-year floodplain. This means that if any significant alterations to the Dewatering Building itself are to be completed, the building would have to include flood-proofing.

The location of the new Dewatering Building is located on the site of what used to be the north excess flow pond, which will be filled by Fall 2022 under a separate project. While the most current Flood Insurance Rate Mapping (FIRM) data classifies the ponds as Zone A, which indicates a flood area for which no base flood elevation (BFE) has been determined, based on the structures and their elevations, the Excess Flow Ponds are hydraulically disconnected from the floodplain from the nearby Spring Brook Creek. Through the DuPage County Stormwater Permitting requirements, the District has taken the first steps for processing a Letter of Map Revision – Based on Fill (LOMR-F). As the project moves forward to completion, the remaining documentation will be provided and submitted to the County and FEMA to have the mapped area revised. Therefore, the decision was made to choose this location because it will allow a new administration building, maintenance shop and garage to be built where the current sludge storage barn is located and not be located in the floodplain.

The Dewatering Building is anticipated to be an approximately 60 ft x 50 ft two-story structure. The Centrate holding tank will be 25 ft x 20 ft, the digested sludge storage tank will be 25 ft x 40 ft, 50,000-gallon (25'x 20') Equalization Tank, and the Biological Reactor is 30' x 30'. A conceptual layout of the proposed Dewatering Building is included as Figure 1.

Figure 1 –Sludge Dewatering Improvements Project Conceptual Layout



2. Basis of Design

The new Dewatering Building will include centrifuge feed pumps, centrifuges, conveyors, liquid polymer blending units, and chemical addition capabilities for phosphorus removal from the recycle stream. New digested sludge pumps will be installed in the existing Digester Control Building to convey digested sludge from Digester No. 3 / Sludge Storage Tank to a new digested sludge holding tank constructed common wall with the new Dewatering Building. This alternative also includes construction of a centrate holding tank. Adequate space would be left available to maintain the ring road around the Sludge Storage Barn, and all entrances to the barn would remain open. The scope of this alternative also includes rehabilitation of the existing gravity thickener.

Sludge Dewatering – Centrifuges

Parameter	Value
Number	2
Maximum Solid Loadings per Unit (Manuf. Specs), lbs per hour	1,500
Operation, hrs/week	46

Centrifuge Feed Pumps

Parameter	Value
Number	2
Type	Positive Displacement
Capacity, each, gpm	70-90
Motor Horsepower, hp	5

3. Inventory of Environmental Impacts

Construction of the Sludge Dewatering Improvements Project will be limited to the site of the existing treatment facility. Currently, the only anticipated environmental impacts are construction-related noise, dust, traffic, and soil displacement. These impacts are minor, temporary, and will be mitigated through best management practices during construction.

The Illinois Historical Preservation Agency (IHPA), Illinois Department of Natural Resources (IDNR), and the U.S. Army Corps of Engineers (USACE) were consulted to determine any additional environmental impacts as a result of constructing the proposed improvements. Project information was also distributed to federally recognized Indian tribes. The Environmental Checklist for the Sludge Dewatering Improvements Project is provided as Appendix A with all Agency correspondence.

- I. Consultation with the IHPA for compliance with Section 106 of the National Historic Preservation Act of 1966 was submitted on June 25, 2021. The clearance letter will be forwarded to the Agency's office upon receipt.
- II. Consultation with the IDNR was received on June 21, 2021. IDNR determined adverse effects are unlikely and consultation under 17 Ill. Adm. Code Part 1075 and 1090 has been terminated.
- III. Consultation with the US Army Corps of Engineers was submitted on July 22, 2021. The clearance letter will be forwarded to the Agency's office upon receipt.
- IV. Consultation with the IDNR Office of Water Resources was submitted on July 22, 2021. The project is located in a flood plain or floodway. A FEMA FIRM map of the project location is included with the Environmental Checklist as Appendix A.
- V. Consultation with the Illinois Department of Agriculture is not applicable. The project does not involve conversion of prime agricultural land to other uses.
- VI. Consultation with additional regulatory entities for secondary/indirect environmental impacts is not applicable. This project does not include 30% or more reserve capacity for future growth in existing or proposed service areas.
- VII. Consultation with a Designed Water Quality Management Agency is not required. Although this project is under the jurisdiction of the Chicago Metropolitan Agency for Planning, this project does not have secondary impacts.

- VIII. Consultation with federally recognized Indian tribes is required and was submitted on June 30, 2021. One response was received July 20, 2021 and is included with this submittal. This project meets the criteria detailed in the environmental checklist that is required for tribal consultation due to the significant ground disturbance (digging) associated with the project.

4. Probable Costs for the Sludge Dewatering Improvements Project

The preliminary opinion of probable costs for the Sludge Dewatering Improvements Project are summarized in the table below. A detailed breakdown of costs is provided as Appendix B.

Table 1. Engineer's Estimate of Probable Construction Cost - Summary

Sludge Dewatering Improvements Project	
Description	Total Probable Cost (2022\$)
GENERAL CONDITIONS	\$1,349,300
SITE WORK	\$829,700
DEWATERING BUILDING	\$5,927,600
GRAVITY THICKENER	\$462,400
Construction Sub-Total	\$8,569,000
Contingency @ 25%	\$2,142,000
Design Engineering @ 7.5%	\$803,500
Construction Engineering @ 7.5%	\$803,500
PROBABLE CONSTRUCTION COST:	\$12,318,000

5. Nutrient Removal and Energy Efficiency Components

The Wheaton Sanitary District's Sludge Dewatering Improvements Project includes a nutrient removal component through chemical addition capabilities for phosphorus removal from the recycle stream and ammonia removal through deammonification. Therefore, since only a limited portion of the project is for nutrient removal, less than 50% of the total project cost is related to nutrient removal and energy efficiency. Based on this assessment, the District is not eligible for the 0.2% Environmental Impact Discount from the fixed loan rate, according to Section 365.210 of the Water Pollution Control Loan Program rules.

6. Anticipated Construction Schedule

The District anticipates that construction of the Sludge Dewatering Improvements Project will commence in February of 2023 and be completed by August of 2024 as presented in the table below.

Table 2. Project Schedule

Sludge Dewatering Improvements Project	
Task	Date
Project Planning Approval	Sept. 1, 2021
IEPA Construct & Operate Permit Submittal	Aug. 1, 2022
Advertise for Bids	Nov. 1, 2022
Commence Construction	Feb. 1, 2023
Complete Construction	Aug. 1, 2024

7. Total Amount to be Borrowed

The District plans to finance the project with a low-interest loan secured through the IEPA Water Pollution Control Loan Program. The total amount to be borrowed is estimated to be \$13,000,000. The amount borrowed is anticipated to include the construction cost, IEPA contingency, construction period interest, and design and construction engineering fees. A breakdown of the amount to be borrowed by the District for the Sludge Dewatering Improvements Project is provided in the table below.

Table 3. Total Estimated Loan Amount

Sludge Dewatering Improvements Project	
Description	Probable Cost
Construction Sub-Total	\$8,569,000
Contingency @ 25%	\$2,142,000
Total Construction Cost	\$10,711,000
Design Engineering	\$803,500
Construction Engineering	\$803,500
Total Probable Capital Cost	\$12,318,000
IEPA Contingency (3% of Construction Cost)	\$321,000
Construction Period Interest (1.5%)	\$190,000
TOTAL ESTIMATED AMOUNT TO BE BORROWED	\$12,829,000
Loan Authorizing Ordinance Amount	\$13,000,000

8. Loan Repayment Schedule

Based on the opinion of probable construction cost, the project schedule presented above, and a conservative IEPA loan interest rate of 2.0 percent, a preliminary loan repayment schedule is presented in the table below. Loan payments are made on a semi-annual basis but are presented as annual payments.

Table 4. Loan Repayment Schedule

Wheaton Sanitary District – Sludge Dewatering Improvements Project						
Loan Principal at 1st Payment:		\$13,000,000				
Interest Rate:		2.0%				
Loan Term (years):		20				
Annual Payment:		\$795,037				
Repayment Schedule:						
Year	Beginning Principal Balance	Principal Payment	Interest Payment	Total Payment	Ending Principal Balance	Payment No.
2025	\$13,000,000	\$535,037	\$260,000	\$795,037	\$12,464,963	1
2026	\$12,464,963	\$545,738	\$249,299	\$795,037	\$11,919,225	2
2027	\$11,919,225	\$556,653	\$238,384	\$795,037	\$11,362,572	3
2028	\$11,362,572	\$567,786	\$227,251	\$795,037	\$10,794,786	4
2029	\$10,794,786	\$579,142	\$215,896	\$795,037	\$10,215,644	5
2030	\$10,215,644	\$590,724	\$204,313	\$795,037	\$9,624,920	6
2031	\$9,624,920	\$602,539	\$192,498	\$795,037	\$9,022,381	7
2032	\$9,022,381	\$614,590	\$180,448	\$795,037	\$8,407,791	8
2033	\$8,407,791	\$626,882	\$168,156	\$795,037	\$7,780,910	9
2034	\$7,780,910	\$639,419	\$155,618	\$795,037	\$7,141,490	10
2035	\$7,141,490	\$652,208	\$142,830	\$795,037	\$6,489,283	11
2036	\$6,489,283	\$665,252	\$129,786	\$795,037	\$5,824,031	12
2037	\$5,824,031	\$678,557	\$116,481	\$795,037	\$5,145,475	13
2038	\$5,145,475	\$692,128	\$102,909	\$795,037	\$4,453,347	14
2039	\$4,453,347	\$705,970	\$89,067	\$795,037	\$3,747,376	15
2040	\$3,747,376	\$720,090	\$74,948	\$795,037	\$3,027,286	16
2041	\$3,027,286	\$734,492	\$60,546	\$795,037	\$2,292,795	17
2042	\$2,292,795	\$749,181	\$45,856	\$795,037	\$1,543,613	18
2043	\$1,543,613	\$764,165	\$30,872	\$795,037	\$779,448	19
2044	\$779,448	\$779,448	\$15,589	\$795,037	\$ (0)	20

9. Loan Priority Scoring

The loan priority scoring is in the table below for the Sludge Dewatering Improvements project based on the criteria in Section 365.345 of the IEPA loan program rules. The detailed scoring decisions are enclosed as Appendix F.

Table 5. Loan Priority Scoring

Sludge Dewatering Improvements Project	
Total Scoring Summary	
Violations and Enforcement Compliance	150
Unsewered Communities and Consolidation	0
Water Quality Improvements	90
Protection of Assets	25
Conservation and Green Infrastructure	20
Readiness to Proceed	0
Economic Factors	0
Population	10
Total	295

PROJECT #2 – SECONDARY CLARIFIER REHABILITATION PROJECT

1. Project Summary

The District operates four round secondary clarifiers; three clarifiers were built in 1977 and a fourth one was built in 1993. The District has reported continual issues with effluent solids from the secondary clarifiers during sustained high flows. Traditionally, secondary effluent concentrations of <10 mg/L TSS are expected from properly designed and functioning clarifiers. The District observes TSS concentrations greater than 10 mg/L routinely, with concentrations in the 15-20 mg/L range during high flows. During the walkthrough of the plant, TAI staff noted that the 6-ft diameter stilling wells in each clarifier appear undersized for 75-ft basins. In reviewing with clarifier manufacturers, a standard stilling well for clarifiers of this size would be 10-12 ft in diameter. This indicates that the existing stilling wells have only 25% of the recommended stilling well surface area. During high flows this is evident as influent is turbulent and at times flows over the top of the stilling well. This occurrence during high flows results in short-circuiting of the mixed liquor and elevated secondary effluent solids concentrations. Additionally, the three original clarifiers are only 10-ft in sidewater depth, significantly below a standard 14-ft depth. This results in less flocculation time and a smaller separation zone between the thickening zone and clear water zone.

Therefore, two alternatives were discussed: replacement or rehabilitation of the existing clarifiers. Due to the significant cost associated with replacing the secondary clarifiers, it was recommended to rehabilitate the structures in the short term since the concrete structures have approximately 30 years of remaining service life. Also, the undersized and overloaded clarifiers should not present an issue due to the downstream tertiary disc filters and replacement of the clarifier mechanical components may last until the structures themselves require replacement.

The Secondary Clarifier Rehabilitation project will include installation of new mixed liquor piping (to alleviate hydraulic bottlenecking), a new splitter structure, replacement of all clarifier mechanisms and

components, and modifications to the sludge conveyance system to allow for increased RAS flows. The new MLSS piping will be upsized to eliminate flatwatering at the aeration basin effluent weirs, and the new clarifier splitter structure should include downward opening weir gates for accurate hydraulic splitting of flows. Additionally, the project will be designed to be compatible with the District's future process change to sidestream enhanced biological phosphorus removal (S2EPBR).

2. Basis of Design

The Secondary Clarifier Rehabilitation Project consists of rehabilitating the clarifiers in the existing basins. It is anticipated that the concrete structures have approximately 30 years of remaining service life. While the clarifiers are undersized and overloaded, a higher-than-average secondary effluent TSS should not present an issue due to the installation of the new tertiary disc filters at the plant. Therefore, a rehabilitation of the clarifier components may last until the structures themselves require replacement, at which time the full replacement should be implemented.

Table 6. Basis of Design Parameters

Parameter	Value
Design Average Flow, MGD	8.9
Peak Hourly Flow, MGD	19.1
Number	4
Diameter, ft.	75
Sidewater Depth (Tanks 1, 2 & 3), ft.	10
Sidewater Depth (Tank 4), ft.	12
Surface Area, sf/clarifier	4,418
Total Surface Area, sf	17,663
Weir Length – Each, lin.ft.	404
Weir Length – Total, lin.ft.	1,616
Weir Loading Rate, gpd/ft	13,906

2.1 Basis of Design Calculations:

Surface Loading Rate @ 19.1 MGD

$$Q/A = \text{Surface Loading Rate (gpd/sf)}$$

$$19,100,000 \text{ gal/day} / 17,663 \text{ sf} = \underline{\underline{1,081 \text{ gpd/sf}}}$$

Solids Loading Rate @ 19.1 MGD

$$= (Q_{PWWF} + Q_{RAS}) \times \text{MLSS Concentration (mg/L)} \times 8.34 \text{ (lb/gal)}$$

$$(19.1 \text{ MGD} + 13.68 \text{ MGD}) \times 3,000 \text{ mg/L} \times 8.34 \text{ lb/gal} = 820,156 \text{ lbs/day}$$

Solids Loading Rate

$$19.1 \text{ MGD} \times 3000 \text{ mg/L MLSS} \times 8.34 \text{ lb/gal} = 477,882 \text{ lb/day}$$

$$477,882 \text{ lb/day} / 17,663 \text{ sf} = \underline{\underline{27.1 \text{ lb/day/sf}}}$$

Table 7. Basis of Design Calculations

	Design	Existing
MLSS Concentration, mg/L	3,000	3,500
Surface Loading Rate at PHF, gpd/sf	1,081	1,081
Solids Loading Rate at PHF, lbs./day/sf	27.1	31.6
Weir Loading Rate, gpd/lf	11,819	4,517

3. Inventory of Environmental Impacts

Construction of the Secondary Clarifier Rehabilitation Project will be limited to the site of the existing treatment facility. Currently, the only anticipated environmental impacts are construction-related noise, dust, traffic, and soil displacement. These impacts are minor, temporary, and will be mitigated through best management practices during construction.

The Illinois Historical Preservation Agency (IHPA), Illinois Department of Natural Resources (IDNR), and the U.S. Army Corps of Engineers (USACE) were consulted to determine any additional environmental impacts as a result of constructing the proposed improvements. The Environmental Checklist for the Secondary Clarifier Rehabilitation is provided as Appendix A.

- IX. Consultation with the IHPA for compliance with Section 106 of the National Historic Preservation Act of 1966 was submitted on June 25, 2021. The clearance letter will be forwarded to the Agency's office upon receipt.
- X. Consultation with the IDNR was received on June 21, 2021. IDNR determined adverse effects are unlikely and consultation under 17 Ill. Adm. Code Part 1075 and 1090 has been terminated.
- XI. Consultation with the US Army Corps of Engineers was submitted on July 22, 2021. The clearance letter will be forwarded to the Agency's office upon receipt.
- XII. Consultation with the IDNR Office of Water Resources was submitted on July 22, 2021. The project is located in a flood plain or floodway. A FEMA FIRM map of the project location is included with the Environmental Checklist as Appendix A.
- XIII. Consultation with the Illinois Department of Agriculture is not applicable. The project does not involve conversion of prime agricultural land to other uses.
- XIV. Consultation with additional regulatory entities for secondary/indirect environmental impacts is not applicable. This project does not include 30% or more reserve capacity for future growth in existing or proposed service areas.
- XV. Consultation with a Designed Water Quality Management Agency is not required. Although this project is under the jurisdiction of the Chicago Metropolitan Agency for Planning, this project does not have secondary impacts.

XVI. Consultation with federally recognized Indian tribes is not required. This project does not meet the criteria detailed in the environmental checklist that is required for tribal consultation.

4. Probable Costs for the Secondary Clarifier Rehabilitation Project

The preliminary opinion of probable costs for the Secondary Clarifier Rehabilitation Project are summarized in the table below. A detailed breakdown of costs is provided as Appendix B.

Table 8. Engineer's Estimate of Probable Construction Cost - Summary

Secondary Clarifier Rehabilitation Project	
Description	Total Probable Cost
General Conditions	\$740,600
Site Work	\$660,000
Clarifier Splitter Structure	\$354,200
Secondary Clarifiers	\$2,655,400
Construction Sub-Total	\$4,410,200
Contingency @ 25%	\$1,103,000
Design Engineering	\$413,500
Construction Engineering	\$413,500
PROBABLE CONSTRUCTION COST:	\$6,340,200

5. Nutrient Removal and Energy Efficiency Components

The Secondary Clarifier Rehabilitation Project includes a nutrient removal component. The secondary clarifiers will be designed to be compatible with the District's future process change to Sidestream Enhanced biological phosphorus removal (S2EBPR). Therefore, all of the total project cost is related to nutrient removal. Based on this assessment, the District is eligible for the 0.2% Environmental Impact Discount from the fixed loan rate, according to Section 365.210 of the Water Pollution Control Loan Program rules.

6. Anticipated Construction Schedule

The District anticipates that construction of the Secondary Clarifier Rehabilitation Project will commence in November of 2022 and be completed by November of 2023 as presented in the table below.

Table 9. Project Schedule

Secondary Clarifier Rehabilitation Project	
Task	Date
Project Planning Approval	Sept. 1, 2021
IEPA Construct & Operate Permit Submittal	April 1, 2022
Advertise for Bids	July 1, 2022
Start of Construction	Nov. 1, 2022
Completion of Construction	Nov. 1, 2023

7. Total Amount to be Borrowed

The District plans on financing the project with a low-interest loan secured through the IEPA Water Pollution Control Loan Program. The total amount to be borrowed is estimated to be \$7,000,000. The amount borrowed is anticipated to include the construction cost, and design and construction engineering fees. A breakdown of the amount to be borrowed by the District for the Secondary Clarifier Rehabilitation Project is provided in the table below.

Table 10. Total Estimated Loan Amount

Secondary Clarifier Rehabilitation Project	
Description	Probable Cost
Construction Sub-Total	\$ 4,410,200
Contingency @ 25%	\$1,103,000
Total Construction Cost	\$5,513,200
Design Engineering	\$413,500
Construction Engineering	\$413,500
Total Probable Capital Cost	\$6,340,200
IEPA Contingency (3%)	\$165,000
Construction Period Interest (1.5%)	\$98,000
TOTAL ESTIMATED AMOUNT TO BE BORROWED	\$6,603,200
Loan Authorizing Ordinance Amount	\$7,000,000

8. Loan Repayment Schedule

Based on the opinion of probable construction cost, the project schedule presented above, and a conservative IEPA loan interest rate of 2.0 percent, a preliminary loan repayment schedule is presented in the table below. Loan payments are made on a semi-annual basis but are presented as annual payments.

Table 11. Loan Repayment Schedule

Wheaton Sanitary District – Secondary Clarifier Rehabilitation Project						
Loan Principal at 1st Payment:		\$7,000,000				
Interest Rate:		2.0%				
Loan Term (years):		20 years				
Annual Payment:		\$428,097				
Repayment Schedule:						
Year	Beginning Principal Balance	Principal Payment	Interest Payment	Total Payment	Ending Principal Balance	Payment No.
2024	\$7,000,000	\$288,097	\$140,000	\$428,097	\$6,711,903	1
2025	\$6,711,903	\$293,859	\$134,238	\$428,097	\$6,418,044	2
2026	\$6,418,044	\$299,736	\$128,361	\$428,097	\$6,118,308	3
2027	\$6,118,308	\$305,731	\$122,366	\$428,097	\$5,812,577	4
2028	\$5,812,577	\$311,845	\$116,252	\$428,097	\$5,500,732	5
2029	\$5,500,732	\$318,082	\$110,015	\$428,097	\$5,182,649	6
2030	\$5,182,649	\$324,444	\$103,653	\$428,097	\$4,858,205	7
2031	\$4,858,205	\$330,933	\$97,164	\$428,097	\$4,527,272	8
2032	\$4,527,272	\$337,552	\$90,545	\$428,097	\$4,189,721	9
2033	\$4,189,721	\$344,303	\$83,794	\$428,097	\$3,845,418	10
2034	\$3,845,418	\$351,189	\$76,908	\$428,097	\$3,494,229	11
2035	\$3,494,229	\$358,212	\$69,885	\$428,097	\$3,136,017	12
2036	\$3,136,017	\$365,377	\$62,720	\$428,097	\$2,770,640	13
2037	\$2,770,640	\$372,684	\$55,413	\$428,097	\$2,397,956	14
2038	\$2,397,956	\$380,138	\$47,959	\$428,097	\$2,017,818	15
2039	\$2,017,818	\$387,741	\$40,356	\$428,097	\$1,630,077	16
2040	\$1,630,077	\$395,495	\$32,602	\$428,097	\$1,234,582	17
2041	\$1,234,582	\$403,405	\$24,692	\$428,097	\$831,176	18
2042	\$831,176	\$411,473	\$16,624	\$428,097	\$419,703	19
2043	\$419,703	\$419,703	\$8,394	\$428,097	\$ (0)	20

9. Loan Priority Scoring

The loan priority scoring is in the table below for the Secondary Clarifier Rehabilitation project based on the criteria in Section 365.345 of the IEPA loan program rules. The detailed scoring decisions are enclosed as Appendix F.

Table 12. Loan Priority Scoring

Secondary Clarifier Rehabilitation Project	
Total Scoring Summary	
Violations and Enforcement Compliance	150
Unsewered Communities and Consolidation	0
Water Quality Improvements	65
Protection of Assets	25
Conservation and Green Infrastructure	20
Readiness to Proceed	0
Economic Factors	0
Population	10
Total	270

IMPLEMENTATION PLAN

The table below summarizes the capital costs and implementation details for the projects seeking SRF funding, listed in order of construction date.

Project	Capital Cost Million \$	Construction Start Date	Project Completion Date
Sludge Dewatering Improvements	\$12.3	Feb. 2023	Aug. 2024
Secondary Clarifier Rehabilitation	\$6.3	Nov. 2022	Nov. 2023

1. Dedicated Source of Revenue

As part of the IEPA low-interest loan project planning documentation, the existing user charge and O, M, and R Certification sheet is required to be submitted. The following provides a description of the existing user charge system and rate structure, the basis for billing, the average residential customer water consumption, the total number of customers and the breakdown.

1.1 Wheaton Sanitary District Summary of Receipts, Expenditures, and Fund Transfers

The budget for the fiscal year ending April 30, 2022, is summarized below. Net income for the District's User Charge Fund is positive and can support the annual debt service associated with the projects estimated at \$1,223,134. The projects can be supported without adjustment of the existing user rate structure.

Table 13: Wheaton Sanitary District FY 21/22 Budget Summary

Description	Budget 21/22
Estimated Beginning Funds Balance (5/1/21)	\$15,994,421
Receipts	\$30,269,158
Expenditures	\$27,818,130
Total Receipts Over (Under) Expenditures	\$2,451,028
Total Estimated Combined Ending Fund Balance (4/30/22)	\$18,445,449

1.2 User Rates and Revenue Considerations

The Wheaton Sanitary District billings are based on metered water use from each of the municipalities and private water companies it services (City of Wheaton, Villages of Carol Stream, Glen Ellyn, and Illinois American Water) charged per 1,000 gallons of water used. The average residential customer in the District uses 5,000 gallons per billing period. Customers are billed monthly.

1.3 Sewer User Rates

The current residential user rate structure is a treatment and conveyance fee of \$5.46 per 1,000 gallons of water used, with a minimum charge of \$10.92 per month.

1.4 Other User Fees

Residential customers are charged a fixed base charge of \$11.82 per month. Customers are also charged a collector sewer maintenance charge of \$0.57 per 1,000 gallons, with a minimum charge of \$1.14 per month.

1.5 Average Residential Customer Sewer Bill

The average residential customer uses 5,000 gallons used per month. For the average residential customer, the monthly sewer bill is \$41.97 calculated as follows:

$$(5.0 \text{ units} * \$5.46/\text{unit}) + \$11.82 + (5.0 \text{ units} * \$0.57/\text{unit}) = \$41.97/\text{month}$$

In addition, there is a reduced single occupant (for residential single occupants) charge of \$26.90/ month, based on a usage of 2,500 gallons used per month.

Table 14. Annual Residential Water and Sewer Bill Rates⁽¹⁾

Cost Allocation	Rate (Per Month)
Treatment and Conveyance Rate	\$27.30
Base Charge (Flat Rate)	\$11.82
Collector Sewer Maintenance Charge	\$2.85
Total Average Cost of Sewer Bill⁽²⁾	\$41.97
(1) Effective May 1, 2021	
(2) Assumes an average of 5,000 gallons of metered water consumption	

1.6 Economic Impact

The Median Household Income for the Wheaton Sanitary District is \$103,470 based on the years 2015-2019 (in 2019 dollars). The estimated percentage of MHI to be used for payment of sewer fees (including the Base Charge) is 0.49%. Therefore, based on the affordability criteria established by the IEPA, existing fees are considered affordable.

2. IEPA Construction Permit Status

It is anticipated that after the Project Planning Submittal is approved and the project designs are completed that WPC-PS-1 Application for Permit for each project will be submitted to obtain the IEPA Permit to Construct and Operate. Each project will be submitted in accordance with its corresponding schedule.

3. Local Newspaper Information

The Daily Herald
 155 E Algonquin Road
 Arlington Heights, IL 60005

4. Funding Nomination Forms

The funding nomination forms for the Sludge Dewatering Improvements project and the Secondary Clarifiers Improvements project are included as Appendix D.

LIST OF ATTACHMENTS

**Appendix A – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects
IEPA Environmental Checklists**

**Appendix B – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects
EOPCCs**

Appendix C – Project Location and Site Maps

**Appendix D – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects
Funding Nomination Forms**

**Appendix E – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects
Wastewater Project Planning Submittal Checklist**

**Appendix F – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects
Consultant's Loan Priority Scoring**

Appendix A – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects IEPA Environmental Checklists

IEPA Loan Applicant Environmental Checklist and Certification Form

Loan Applicant: Wheaton Sanitary District - Sludge Dewatering Improvements Project L17#:

This form must be signed by the loan applicant's Authorized Representative. All loan applicants must provide items 1 and 2 below. The information that must be provided for items 3-8 are specific to conditions of the project. See the attached instructions that explain the requirements and provide contact information. If you believe an item is not required for your project, enter N/A instead of the date of response and provide an explanation in the planning report. For checklist items marked as N/A, also indicate the page number of the planning report where the explanation is located.

Provide records of consultation with Illinois Department of Natural Resources (IDNR), State Historic Preservation Office (SHPO) for the National Historic Preservation Act, Section 106 sign-off.

1) Date of IDNR, SHPO response: Submitted 6/25/2021

Provide records of consultation with IDNR's Impact Assessment Section for evaluation pursuant to the Illinois Endangered Species Protection Act [520 ILCS 10/11], the Illinois Natural Areas Preservation Act [525 ILCS 30/17], Title 17 Illinois Administrative Code, Part 1075, and Interagency Wetlands Policy Act of 1989 (Illinois Administrative Code, Part 1090).

2) Date of EcoCAT printout: 6/16/2021

Date of IDNR follow-up letter (when protected resources are identified): 6/21/2021

For projects located within any wetland, river, stream, flood plain, floodway, waterway, any body of water, or construction located within 250 feet of a wetland; provide records of consultation from:

3) U.S. Army Corps of Engineers (USACE) Date of USACE response: Submitted 7/22/2021

For projects located within a flood plain or floodway, or along a jurisdictional river, lake, or stream without a mapped floodway or flood plain, provide records of consultation from:

4) IDNR Office of Water Resources (OWR) Date of IDNR OWR response: Submitted 7/22/2021

If the project involves conversion of prime agricultural land to other uses, provide records of consultation from:

5) Illinois Department of Agriculture (IDOA). Date of IDOA response: N/A (Page 5 of Supplemental Memo)

If the project includes 30% or more reserve capacity for future growth in the existing or proposed service areas, provide records of consultation from all applicable environmental regulatory entities listed on this form for the known growth/development areas associated with the identified secondary/indirect environmental impacts.

6) Secondary impacts list of applicable regulatory entities and date of their responses: N/A
(Page 5 of Supplemental Memo)

If any project with secondary impacts is located in a county under the jurisdiction of a Designated Water Quality Management Agency (DWQMA), which are the Greater Egypt Regional Planning & Development Commission (GERPDC), the Southwestern Illinois Metropolitan and Regional Planning Commission (SIMAPC), and the Chicago Metropolitan Agency for Planning (CMAP), provide records of consultation from:

7) **Date of DWQMA response:** N/A (Page 5 of Supplemental Memo)

For certain projects, Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires consultation with all interested, federally recognized Indian tribes. Consultation is required if construction has the potential to affect properties that have religious or cultural significance to Indian tribes previously residing in Illinois. Check all boxes below that apply to this project. If applicable, consultation is required with the Tribal Historic Preservation Office of each interested tribe. If a response is not received in 30 days, consider consultation closed.

- ☒ **Significant ground disturbance (digging)**
Examples: new sewers, utility lines (above and below ground), foundations, footings, grading, access roads. This does not include sewer lining; in-place sewer or water main replacements without an increase to the trench size; or re-building a lift station, well, or above-ground building without increasing the footprint.
- ☐ **New construction in undeveloped natural areas**
Examples: treatment plants, pipelines, or other new facilities in undeveloped natural areas such as forests, etc.
- ☐ **Visual changes and/or audible changes**
Examples: construction of a focal point that is out of character with the surrounding natural area, impairment of the view from an observation point in the natural landscape, impairment of the historic scenic qualities of an area, or an increase in noise levels above an acceptable standard in areas known and appreciated for their quietness.
- ☐ **Atmospheric changes**
Example: introduction of lights that create skyglow in an area with a dark night sky.
- ☐ **Work on a building with significant tribal association**
Examples: rehabilitation, demolition, or removal of a surviving ancient tribal structure(s), or a structure that is believed to be the location of a significant tribal event or that served as a tribal school or community hall.
- ☐ **Transfer, lease, or sale of a historic property of religious and cultural significance**
Examples: Involves properties that contain archaeological sites, burial grounds, sacred landscapes or features, ceremonial areas, or structures with significant tribal association.
- ☐ **None of the above apply – Tribal Consultation is Not Applicable**

8) **Date Submitted to Interested Tribes** All tribes contacted 6/30/2021 **List tribes contacted below or attach a list. Indicate contact date and if a response was received. Copies of all responses must be submitted to IEPA.**

Citizen Potawatomi Nation, Oklahoma
Forest County Potawatomi Community of Wisconsin
Hannahville Indian Community, Michigan
Kickapoo Tribe of Oklahoma
Little Traverse Bay Bands of Odawa Indians, Michigan
Menominee Indian Tribe of Wisconsin
Prairie Band Potawatomi Nation
Miami Tribe of Oklahoma

No response received at time of submission. Response received from the Miami Tribe of Oklahoma on 7/20/2021 and is attached.

Certification: By signing this form, the Loan Applicant certifies that the applicable environmental evaluations were conducted for the proposed project locations, and if the review results for any of these environmental evaluations include recommendations, conditions, certifications, and/or permits, the Loan Applicant agrees to comply.

Signed: Sue Buech
Loan Applicant's Authorized Representative

Date: 7/16/2021



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

DuPage County
Wheaton

Secondary Clarifier and Gravity Thickener Rehabilitation, New Construction of a Sludge Dewatering Building, Paving Improvements at the Wastewater Treatment Plant, Wheaton Sanitary District
1S649 Shaffner Road
SHPO Log #009062521

August 18, 2021

Lindsay Muth
Trotter and Associates, Inc.
40W201 Wasco Rd., Suite D
St. Charles, IL 60175

Dear Ms. Muth:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please call 217/782-4836.

Sincerely,

Carey L. Mayer, AIA
Deputy State Historic
Preservation Officer

Applicant: Trotter and Associates, Inc
Contact: Lindsay Muth
Address: 40W201 Wasco Road
Suite D
St. Charles, IL 60175

IDNR Project Number: 2114862
Date: 06/16/2021

Project: Wheaton Sanitary District – WWTP Improvements
Address: 1 S 649 Shaffner Road, Wheaton

Description: Construction of improvements to the existing Wheaton Sanitary District WWTP.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Belleau Woods INAI Site
Herrick Lake Forest Preserve INAI Site
Belleau Woods Land And Water Reserve
Black-Billed Cuckoo (*Coccyzus erythrophthalmus*)
Rusty Patched Bumble Bee (*Bombus affinis*)

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage

Township, Range, Section:

39N, 10E, 19

39N, 10E, 30



IL Department of Natural Resources

Contact

Brian Willard
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction

IL Environmental Protection Agency
Infrastructure Financial Assistance Section
P.O. Box 19276
Springfield, Illinois 62794 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

JB Pritzker, Governor

Colleen Callahan, Director

June 21, 2021

Lindsay Muth
Trotter and Associates, Inc
40W201 Wasco Road
Suite D
St. Charles, IL 60175

RE: Wheaton Sanitary District – WWTP Improvements
Project Number(s): 2114862
County: DuPage

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe

Adam Rawe
Division of Ecosystems and Environment
217-785-5500



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

October 5, 2021

Operations Division
Regulatory Branch
LRC-2021-00744

SUBJECT: No Permit Required for Improvements to the Wheaton Sanitary District Wastewater Treatment Plant, City of Wheaton, DuPage County, Illinois (Latitude 41.84457, Longitude - 88.14529)

Sue Baert
Wheaton Sanitary District
1 S 649 Shaffner Road
Wheaton, Illinois 60189

Dear Ms. Baert:

This is in response to your July 22, 2021 request that the U.S. Army Corps of Engineers issue a permit or letter of no objection for the above-referenced activity. The subject project has been assigned number LRC-2021-00744. Please reference this number in all future correspondence concerning this project.

Following a review of the information you furnished to this office and assuming your project is conducted only as set forth in the information provided, this office has determined that the subject property does not require a Department of the Army (DA) permit to complete the proposed work. Please be aware that any unpermitted discharge into an area within the jurisdiction of this office may result in civil or criminal enforcement under the Clean Water Act, 33 U.S.C. Sec. 1319.

This determination is valid for a period of 5 years from the date of this letter and covers only your project as depicted in the plans titled, "Wheaton Sanitary District Wastewater Treatment Plant Improvements Projects Site Map" in the submittal dated July 22, 2021, prepared by Trotter and Associates, Inc. Soil erosion and sediment controls (SESC) measures shall be implemented at the project site and properly maintained throughout construction of the project. Proper installation and regular maintenance of SESC measures will prevent construction materials from entering downstream locations.

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in DuPage County, please contact the DuPage County Stormwater Management at (630) 682-6724.

This determination is based only on the proposed activity and is not an approved jurisdiction determination for the subject parcel. If you wish to receive an approved jurisdiction determination or have any questions, please contact me at (312) 846-5544 or email at stasi.f.brown@usace.army.mil.

Sincerely,

Stasi Brown
Senior Project Manager
Regulatory Branch

Copy Furnished:

Trotter and Associates, Inc. (Jillian Kiss)



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103

August 22, 2021

Subject: Application No. N20210119
Applicant: Wheaton Sanitary District
Project: Sludge Dewatering Building and Secondary Clarifier Rehabilitation
Watercourse: Spring Brook Creek
Community: City of Wheaton

Sue Baert
Wheaton Sanitary District
1 South 649 Shaffner Road
Wheaton, Illinois 60189

Dear Ms. Baert:

This concerns your August 9, 2021 application for an Illinois Department of Natural Resources, Office of Water Resources (IDNR/OWR) permit for the above-referenced project. Spring Brook Creek has a designated floodway. The application was submitted to us on your behalf by Jillian Kiss of Trotter and Associates, Inc. The site of the proposed work is located in the Southwest Quarter of Section 19, Township 39 North, Range 10 East of the Third Principal Meridian in DuPage County.

Upon review of your application we understand the project involves constructing a new sludge dewatering building, clarifier rehabilitation, and underground piping in the floodway of Spring Brook Creek. The clarifier rehabilitation will not alter or regrade any portion of the Spring Brook Creek floodway.

On April 11, 1997, the Illinois Department of Natural Resources, Office of Water Resources (IDNR/OWR) delegated its floodway permitting authority for certain construction activities to the DuPage County Department of Economic Development and Planning (EDP). By copy of this letter, we are informing EDP of your project and that we are delegating the permit review to them. Further review by IDNR/OWR is not necessary provided you receive an EDP permit or certification.

Please be informed that Application Nos. N20210108 and N20210109 were previously submitted for this project. These applications will be deactivated.

If you have any questions, please contact Mark Hoskins of my staff at 847-608-3116.

Sincerely,

William T. Boyd, P.E.
Chief, Northeastern Illinois Regulatory Programs Section

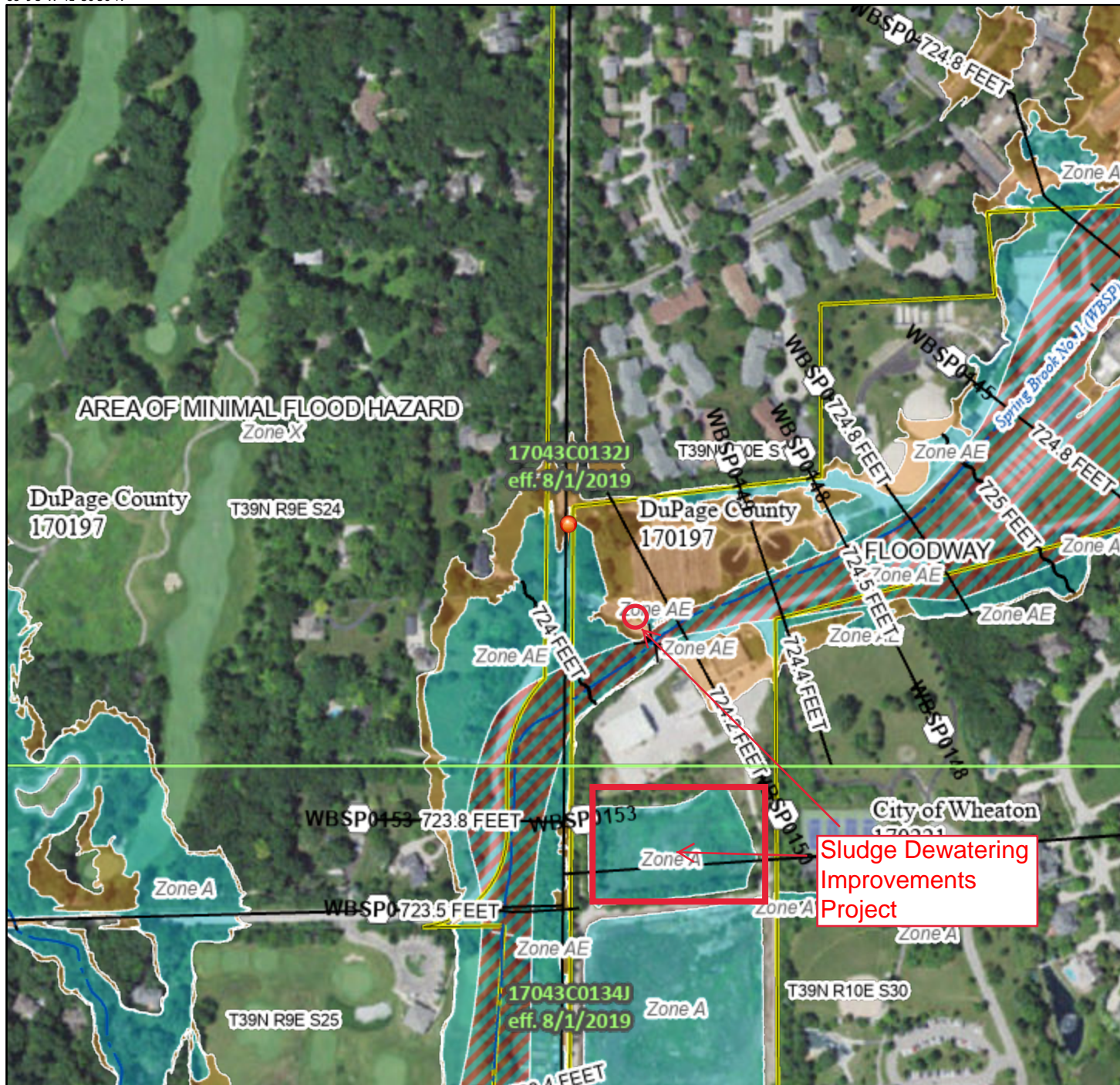
WTB/MH:

cc: Clayton Heffter, DuPage County Stormwater Management Commission
City of Wheaton Engineering Department
Jillian Kiss, Trotter Associates Inc.

National Flood Hazard Layer FIRMMette



88°9'5"W 41°50'56"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



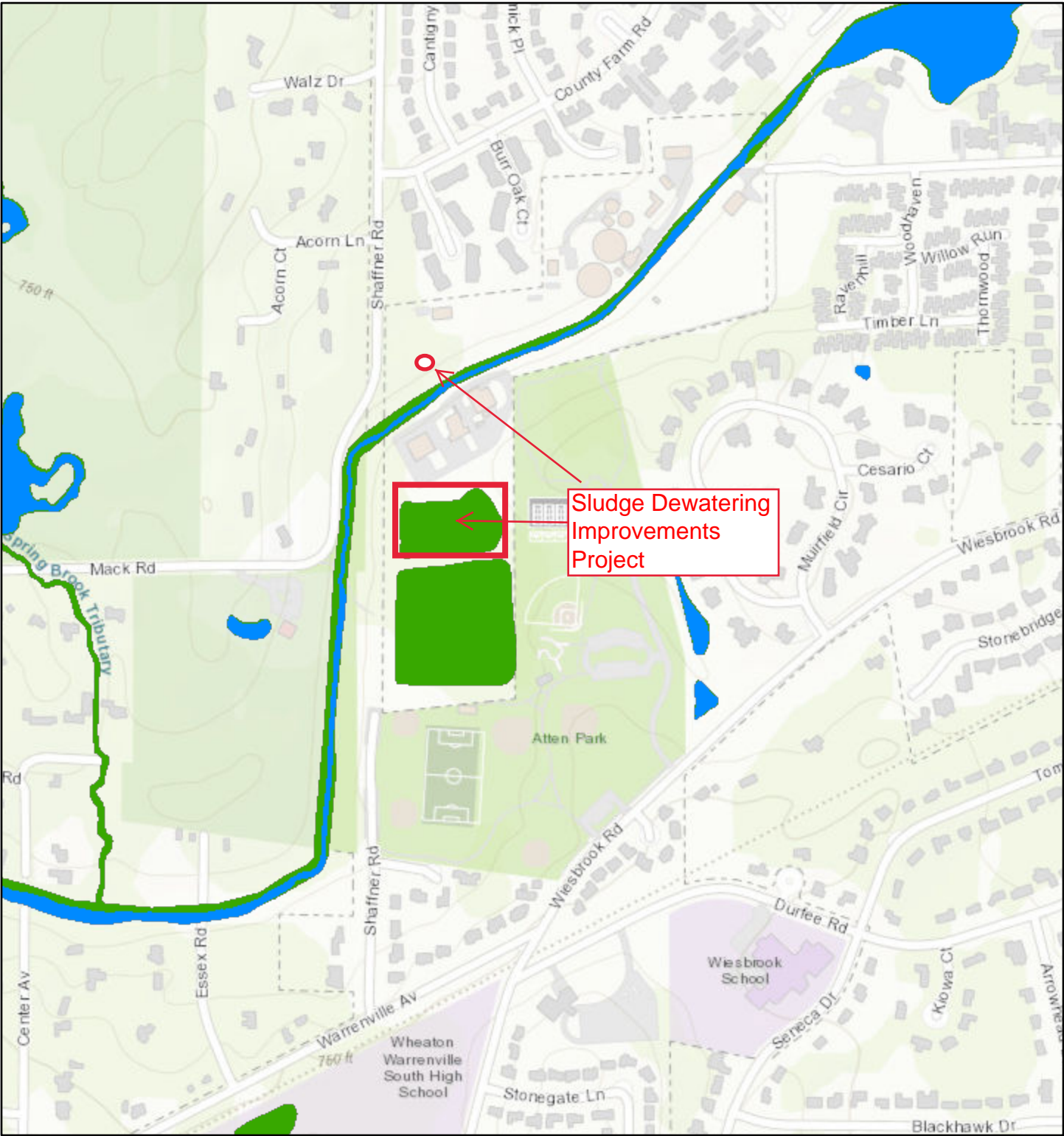
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/29/2021 at 10:30 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

DuPage County Wetlands Map Initiative



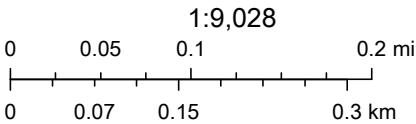
6/16/2021, 3:15:51 PM

 DuPage County  Project Location

Wetlands

 Regulatory Wetland

 LAKES_PONDS



DuPage County GIS, City of Wheaton, County of DuPage, Wheaton Park District, Esri Canada, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355
Ph: (918) 541-1300 • Fax: (918) 542-7260
www.miamination.com



Via email: l.muth@trotter-inc.com

July 20, 2021

Lindsay Muth, Staff Engineer
Trotter & Associates, Inc.
40W201 Wasco Rd, Suite D
St. Charles, IL 60175

Re: Wheaton Wastewater Treatment Plant Sludge Dewatering Improvements, DuPage County, Illinois – Comments of the Miami Tribe of Oklahoma

Dear Ms. Muth,

Aya, kikwehsitoole – I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding Wheaton Wastewater Treatment Plant Sludge Dewatering Improvements in DuPage County, Illinois.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Illinois, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter
Tribal Historic Preservation Officer

IEPA Loan Applicant Environmental Checklist and Certification Form

Loan Applicant: Wheaton Sanitary District - Secondary Clarifier Rehabilitation Project L17#: _____

This form must be signed by the loan applicant's Authorized Representative. All loan applicants must provide items 1 and 2 below. The information that must be provided for items 3-8 are specific to conditions of the project. See the attached instructions that explain the requirements and provide contact information. If you believe an item is not required for your project, enter N/A instead of the date of response and provide an explanation in the planning report. For checklist items marked as N/A, also indicate the page number of the planning report where the explanation is located.

Provide records of consultation with Illinois Department of Natural Resources (IDNR), State Historic Preservation Office (SHPO) for the National Historic Preservation Act, Section 106 sign-off.

1) **Date of IDNR, SHPO response:** Submitted 6/25/2021

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2) **Date of EcoCAT printout:** 6/16/2021

Date of IDNR follow-up letter (when protected resources are identified): 6/21/2021

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If the project involves conversion of prime agricultural land to other uses, provide records of consultation from:

5) **Illinois Department of Agriculture (IDOA). Date of IDOA response:** N/A (Page 11 of Supp. Memo)

If the project includes 30% or more reserve capacity for future growth in the existing or proposed service areas, provide records of consultation from all applicable environmental regulatory entities listed on this form for the known growth/development areas associated with the identified secondary/indirect environmental impacts.

6) **Secondary impacts list of applicable regulatory entities and date of their responses:** N/A (Page 11 of Supp. Memo)

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Examples: new sewers, utility lines (above and below ground), foundations, footings, grading, access roads. This does not include sewer lining; in-place sewer or water main replacements without an increase to the trench size; or re-building a lift station, well, or above-ground building without increasing the footprint.
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Examples: construction of a focal point that is out of character with the surrounding natural area, impairment of the view from an observation point in the natural landscape, impairment of the historic scenic qualities of an area, or an increase in noise levels above an acceptable standard in areas known and appreciated for their quietness.
- ☐ **Atmospheric changes**
Example: introduction of lights that create skyglow in an area with a dark night sky.
- ☐ **Work on a building with significant tribal association**
Examples: rehabilitation, demolition, or removal of a surviving ancient tribal structure(s), or a structure that is believed to be the location of a significant tribal event or that served as a tribal school or community hall.
- ☐ **Transfer, lease, or sale of a historic property of religious and cultural significance**
Examples: Involves properties that contain archaeological sites, burial grounds, sacred landscapes or features, ceremonial areas, or structures with significant tribal association.
- ☒ **None of the above apply – Tribal Consultation is Not Applicable**

8) **Date Submitted to Interested Tribes** N/A (Page 12 of Supplemental Memo) **List tribes contacted below or attach a list. Indicate contact date and if a response was received. Copies of all responses must be submitted to IEPA.**

Certification: By signing this form, the Loan Applicant certifies that the applicable environmental evaluations were conducted for the proposed project locations, and if the review results for any of these environmental evaluations include recommendations, conditions, certifications, and/or permits, the Loan Applicant agrees to comply.

Signed: Sue Baert
Loan Applicant's Authorized Representative

Date: 7/16/2021



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

DuPage County
Wheaton

Secondary Clarifier and Gravity Thickener Rehabilitation, New Construction of a Sludge Dewatering Building, Paving Improvements at the Wastewater Treatment Plant, Wheaton Sanitary District
1S649 Shaffner Road
SHPO Log #009062521

August 18, 2021

Lindsay Muth
Trotter and Associates, Inc.
40W201 Wasco Rd., Suite D
St. Charles, IL 60175

Dear Ms. Muth:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please call 217/782-4836.

Sincerely,

Carey L. Mayer, AIA
Deputy State Historic
Preservation Officer

Applicant: Trotter and Associates, Inc
Contact: Lindsay Muth
Address: 40W201 Wasco Road
Suite D
St. Charles, IL 60175

IDNR Project Number: 2114862
Date: 06/16/2021

Project: Wheaton Sanitary District – WWTP Improvements
Address: 1 S 649 Shaffner Road, Wheaton

Description: Construction of improvements to the existing Wheaton Sanitary District WWTP.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Belleau Woods INAI Site
Herrick Lake Forest Preserve INAI Site
Belleau Woods Land And Water Reserve
Black-Billed Cuckoo (*Coccyzus erythrophthalmus*)
Rusty Patched Bumble Bee (*Bombus affinis*)

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: DuPage

Township, Range, Section:

39N, 10E, 19

39N, 10E, 30



IL Department of Natural Resources

Contact

Brian Willard
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction

IL Environmental Protection Agency
Infrastructure Financial Assistance Section
P.O. Box 19276
Springfield, Illinois 62794 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

JB Pritzker, Governor

Colleen Callahan, Director

June 21, 2021

Lindsay Muth
Trotter and Associates, Inc
40W201 Wasco Road
Suite D
St. Charles, IL 60175

RE: Wheaton Sanitary District – WWTP Improvements
Project Number(s): 2114862
County: DuPage

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe

Adam Rawe
Division of Ecosystems and Environment
217-785-5500



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET
CHICAGO, ILLINOIS 60604-1437

October 5, 2021

Operations Division
Regulatory Branch
LRC-2021-00744

SUBJECT: No Permit Required for Improvements to the Wheaton Sanitary District Wastewater Treatment Plant, City of Wheaton, DuPage County, Illinois (Latitude 41.84457, Longitude - 88.14529)

Sue Baert
Wheaton Sanitary District
1 S 649 Shaffner Road
Wheaton, Illinois 60189

Dear Ms. Baert:

This is in response to your July 22, 2021 request that the U.S. Army Corps of Engineers issue a permit or letter of no objection for the above-referenced activity. The subject project has been assigned number LRC-2021-00744. Please reference this number in all future correspondence concerning this project.

Following a review of the information you furnished to this office and assuming your project is conducted only as set forth in the information provided, this office has determined that the subject property does not require a Department of the Army (DA) permit to complete the proposed work. Please be aware that any unpermitted discharge into an area within the jurisdiction of this office may result in civil or criminal enforcement under the Clean Water Act, 33 U.S.C. Sec. 1319.

This determination is valid for a period of 5 years from the date of this letter and covers only your project as depicted in the plans titled, "Wheaton Sanitary District Wastewater Treatment Plant Improvements Projects Site Map" in the submittal dated July 22, 2021, prepared by Trotter and Associates, Inc. Soil erosion and sediment controls (SESC) measures shall be implemented at the project site and properly maintained throughout construction of the project. Proper installation and regular maintenance of SESC measures will prevent construction materials from entering downstream locations.

It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. For projects located in DuPage County, please contact the DuPage County Stormwater Management at (630) 682-6724.

This determination is based only on the proposed activity and is not an approved jurisdiction determination for the subject parcel. If you wish to receive an approved jurisdiction determination or have any questions, please contact me at (312) 846-5544 or email at stasi.f.brown@usace.army.mil.

Sincerely,

Stasi Brown
Senior Project Manager
Regulatory Branch

Copy Furnished:

Trotter and Associates, Inc. (Jillian Kiss)



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103

August 22, 2021

Subject: Application No. N20210119
Applicant: Wheaton Sanitary District
Project: Sludge Dewatering Building and Secondary Clarifier Rehabilitation
Watercourse: Spring Brook Creek
Community: City of Wheaton

Sue Baert
Wheaton Sanitary District
1 South 649 Shaffner Road
Wheaton, Illinois 60189

Dear Ms. Baert:

This concerns your August 9, 2021 application for an Illinois Department of Natural Resources, Office of Water Resources (IDNR/OWR) permit for the above-referenced project. Spring Brook Creek has a designated floodway. The application was submitted to us on your behalf by Jillian Kiss of Trotter and Associates, Inc. The site of the proposed work is located in the Southwest Quarter of Section 19, Township 39 North, Range 10 East of the Third Principal Meridian in DuPage County.

Upon review of your application we understand the project involves constructing a new sludge dewatering building, clarifier rehabilitation, and underground piping in the floodway of Spring Brook Creek. The clarifier rehabilitation will not alter or regrade any portion of the Spring Brook Creek floodway.

On April 11, 1997, the Illinois Department of Natural Resources, Office of Water Resources (IDNR/OWR) delegated its floodway permitting authority for certain construction activities to the DuPage County Department of Economic Development and Planning (EDP). By copy of this letter, we are informing EDP of your project and that we are delegating the permit review to them. Further review by IDNR/OWR is not necessary provided you receive an EDP permit or certification.

Please be informed that Application Nos. N20210108 and N20210109 were previously submitted for this project. These applications will be deactivated.

If you have any questions, please contact Mark Hoskins of my staff at 847-608-3116.

Sincerely,

William T. Boyd, P.E.
Chief, Northeastern Illinois Regulatory Programs Section

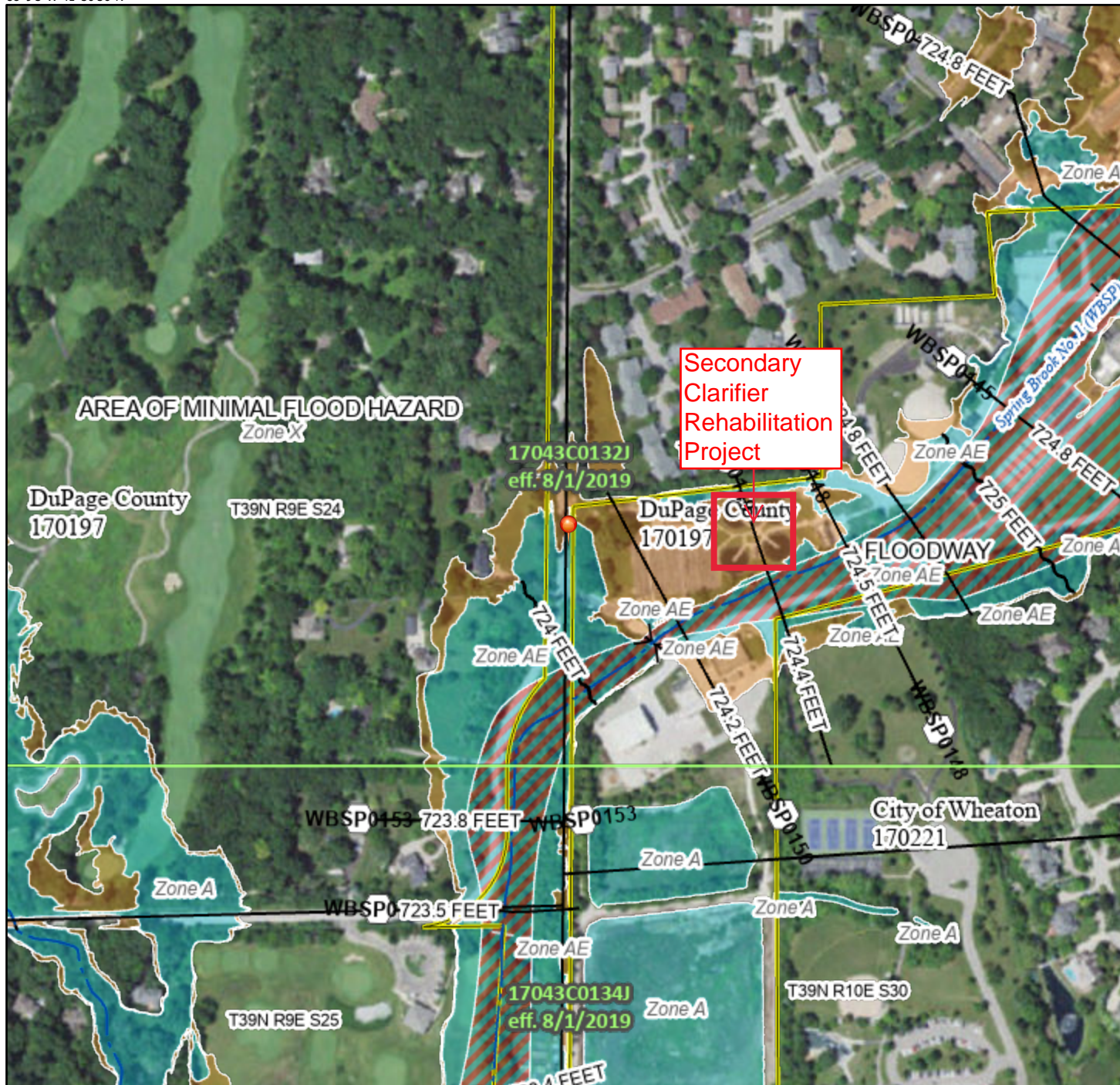
WTB/MH:

cc: Clayton Heffter, DuPage County Stormwater Management Commission
City of Wheaton Engineering Department
Jillian Kiss, Trotter Associates Inc.

National Flood Hazard Layer FIRMMette



88°9'5"W 41°50'56"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



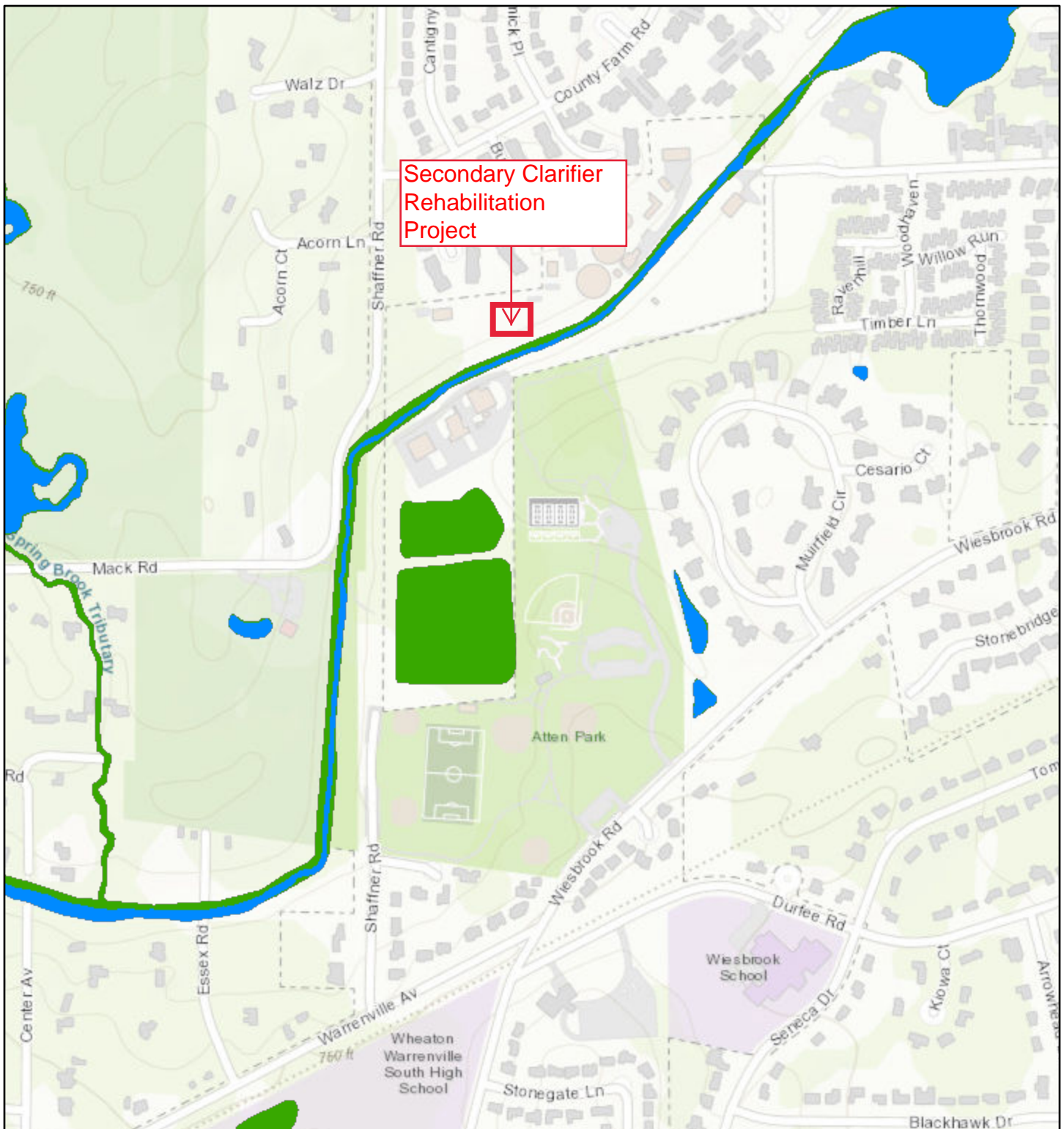
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/29/2021 at 10:30 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

DuPage County Wetlands Map Initiative



6/16/2021, 3:15:51 PM

DuPage County

Project Location

Wetlands

Regulatory Wetland

LAKES_PONDS

1:9,028
0 0.05 0.1 0.2 mi
0 0.07 0.15 0.3 km

DuPage County GIS, City of Wheaton, County of DuPage, Wheaton Park District, Esri Canada, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

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Appendix B – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects EOPCCs

Sludge Dewatering Improvements				
Description			Total Probable Cost (2022\$)	
SUMMARY				
GENERAL CONDITIONS			\$1,349,300	
SITE WORK			\$829,700	
DEWATERING BUILDING			\$5,927,600	
GRAVITY THICKENER			\$462,400	
Construction Sub-Total			\$8,569,000	
Contingency @ 25%			\$2,142,000	
Engineering @ 15%			\$1,607,000	
PROBABLE PROJECT COST:			\$12,318,000	
IEPA Contingency (3%)			\$321,000	
Construction Period Interest (1.5%)			\$190,000	
TOTAL ESTIMATED AMOUNT TO BE BORROWED:			\$12,829,000	
Description	Quantity	Unit	Unit Price (2022\$)	Total Probable Cost (2022\$)
GENERAL CONDITIONS				
Job Trailer	18	Mo.	\$1,100	\$19,800
Mobilization/Demobilization	1	Lump Sum	\$27,000	\$27,000
Supervision	18	Mo.	\$26,000	\$468,000
Surveying	1	Lump Sum	\$13,000	\$13,000
Record Drawing	1	Lump Sum	\$5,500	\$5,500
Bonds & Insurance (2%)	1	Lump Sum	\$136,000	\$136,000
Overhead and Profit (10%)	1	Lump Sum	\$680,000	\$680,000
TOTAL GENERAL CONDITIONS:				\$1,349,300
SITE WORK				
Sidewalk	250	Sq. Ft.	\$20	\$5,000
Restoration	1	Lump Sum	\$11,000	\$11,000
Paving Removal & Replacement (Full Depth)	5100	Sq. Yd.	\$50	\$255,000
Primary Effluent Structure Tap (Centrate)	1	Lump Sum	\$2,700	\$2,700
Piping				
6" DIP Centrate Piping	500	Lin. Ft.	\$130	\$65,000
6" DIP Drain Piping	200	Lin. Ft.	\$130	\$26,000
8" DIP Digested Sludge Piping	1300	Lin. Ft.	\$270	\$351,000
Electrical Service Contingency	1	Lump Sum	\$82,000	\$82,000
Electrical Ductbank	200	Lin. Ft.	\$160	\$32,000
TOTAL SITE WORK:				\$829,700

DEWATERING BUILDING				
Demo Existing Equipment (Ex. Bldg)	1	Lump Sum	\$55,000	\$55,000
Excavation	1000	Cu. Yds.	\$40	\$40,000
Haul-Off	800	Cu. Yds.	\$40	\$32,000
Aggregate Base	300	Cu. Yds.	\$110	\$33,000
Concrete				
Walls	965	Cu. Yds.	\$1,100	\$1,061,500
Slabs	327	Cu. Yds.	\$1,100	\$359,700
Elevated Deck	85	Cu. Yds.	\$1,600	\$136,000
Footings	200	Cu. Yds.	\$1,600	\$320,000
Architectural				
Exterior Brick	8100	Sq. Ft.	\$40	\$324,000
Louvers	4	Sq. Ft.	\$50	\$200
Interior Single Doors	8	Each	\$3,300	\$26,400
Exterior Single Doors (fiberglass)	5	Each	\$5,500	\$27,500
Exterior Double Doors (fiberglass)	2	Each	\$11,000	\$22,000
Liquid Water Repellent	8100	Sq. Ft.	\$2	\$16,200
Steel Lintels and Sills	250	Lin. Ft.	\$50	\$12,500
Firestopping	1	L.S.	\$11,000	\$11,000
Roof Planks	4500	Sq. Ft.	\$10	\$45,000
Roof	45	SQ	\$2,200	\$99,000
Coping / Fascia	270	Lin. Ft.	\$20	\$5,400
Paint	12000	Sq. Ft.	\$5	\$60,000
Millwork	1	Lump Sum	\$11,000	\$11,000
Process				
Digested Sludge Pumps (Dig. Control Bldg)	3	Each	\$33,000	\$99,000
Digested Sludge Pump Installation	3	Each	\$8,200	\$24,600
Centrifuge Feed Pumps	3	Each	\$27,000	\$81,000
Centrifuge Feed Pump Installation	3	Each	\$8,200	\$24,600
Centrifuges	2	Each	\$519,000	\$1,038,000
Centrifuge Installation	2	Each	\$55,000	\$110,000
Polymer Blending Units	3	Each	\$49,000	\$147,000
Polymer Unit Installation	3	Each	\$11,000	\$33,000
Screw Conveyors	1	Lump Sum	\$273,000	\$273,000
Conveyor Installation	1	Lump Sum	\$38,000	\$38,000
Aluminum Platforms & Grating	1	Lump Sum	\$82,000	\$82,000
Crane System	1	Lump Sum	\$109,000	\$109,000
Piping				
1" PVC Polymer Piping	200	Lin. Ft.	\$50	\$10,000
6" DIP Digested Sludge Piping	150	Lin. Ft.	\$130	\$19,500
8" DIP Centrate Piping	75	Lin. Ft.	\$220	\$16,500
6" DIP Valves	15	Each	\$2,200	\$33,000
6" DIP Fittings	30	Each	\$1,100	\$33,000
8" DIP Fittings	20	Each	\$1,300	\$26,000
Polymer Injection Manifold/Ring	2	Each	\$2,700	\$5,400
Mechanical				
Louvers	2	Each	\$2,700	\$5,400
Ductwork	150	Lin. Ft	\$130	\$19,500
Air Handling Unit	2	Each	\$82,000	\$164,000
Exhaust Fans	8	Each	\$8,200	\$65,600

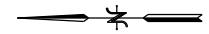
Unit Heater	8	Each	\$5,500	\$44,000
1.5" Potable Water	100	Lin. Ft	\$40	\$4,000
Roof Drains	200	Lin. Ft.	\$40	\$8,000
Restroom Fixtures	1	Lump Sum	\$16,000	\$16,000
Electrical				
MCC Sections	8	Each	\$22,000	\$176,000
Conduit, Wiring, Labor	1	Lump Sum	\$164,000	\$164,000
Interior Lighting	35	Each	\$2,700	\$94,500
Exterior Lighting	8	Each	\$2,700	\$21,600
Equipment Connections	30	Each	\$2,700	\$81,000
SCADA/Controls	1	Lump Sum	\$164,000	\$164,000
TOTAL DEWATERING BUILDING:				\$5,927,600
GRAVITY THICKENER				
Demo Existing Mechanisms	1	Each	\$27,000	\$27,000
Process				
Mechanism	1	Each	\$328,000	\$328,000
Mechanism Installation	1	Each	\$27,000	\$27,000
Walkway	1	Each	\$27,000	\$27,000
Electrical				
Conduit, Wiring, Labor	1	Lump Sum	\$16,000	\$16,000
MCC Sections	1	Each	\$22,000	\$22,000
Exterior Lighting	2	Each	\$2,200	\$4,400
Controls / SCADA Integration	1	Lump Sum	\$11,000	\$11,000
TOTAL GRAVITY THICKENER:				\$462,400

Secondary Clarifier Rehabilitation					
Description			Total Probable Cost (2022\$)		
SUMMARY					
GENERAL CONDITIONS			\$740,600		
SITE WORK			\$660,000		
CLARIFIER SPLITTER STRUCTURE			\$354,200		
SECONDARY CLARIFIERS			\$2,655,400		
Construction Sub-Total			\$4,410,200		
Contingency @ 25%			\$1,103,000		
Engineering @ 15%			\$827,000		
PROBABLE PROJECT COST:			\$6,340,200		
IEPA Contingency (3%)			\$165,000		
Construction Period Interest (1.5%)			\$98,000		
TOTAL ESTIMATED AMOUNT TO BE BORROWED:			\$6,603,200		
Description		Quantity	Unit	Unit Price (2022\$)	Total Probable Cost (2022\$)
GENERAL CONDITIONS					
Job Trailer		12	Mo.	\$1,200	\$14,400
Eng Trailer		12	Mo.	\$1,200	\$14,400
Mobilization/Demobilization		1	Lump Sum	\$29,000	\$29,000
Supervision		8	Mo.	\$28,000	\$224,000
Surveying		1	Lump Sum	\$14,000	\$14,000
Record Drawing		1	Lump Sum	\$5,800	\$5,800
Bonds & Insurance (2%)		1	Lump Sum	\$73,000	\$73,000
Overhead and Profit (10%)		1	Lump Sum	\$366,000	\$366,000
TOTAL GENERAL CONDITIONS:					\$740,600
SITE WORK					
Paving Removal & Replacement (Full Depth)		100	Sq. Yd.	\$170	\$17,000
Sidewalk		1000	Sq. Ft.	\$20	\$20,000
Silt Fence & SE/SC Control		1	Lump Sum	\$29,000	\$29,000
Restoration		1	Lump Sum	\$23,000	\$23,000
Aeration Basin Channel Modifications		1	Lump Sum	\$17,000	\$17,000
Piping					
60" DIP MLSS Piping		300	Lin. Ft.	\$1,400	\$420,000
DIP Fittings		1	Lump Sum	\$116,000	\$116,000
Electrical Ductbank		150	Lin. Ft.	\$120	\$18,000
TOTAL SITE WORK:					\$660,000
CLARIFIER SPLITTER STRUCTURE					
Demo Existing Structure		1	Lump Sum	\$58,000	\$58,000
Bypass Pumping		1	Lump Sum	\$58,000	\$58,000
Excavation		200	Cu. Yds.	\$50	\$10,000
Concrete					
Walls		25	Cu. Yds.	\$1,200	\$30,000
Slab		15	Cu. Yds.	\$1,200	\$18,000
Aggregate Base		15	Cu. Yds.	\$120	\$1,800
Downward Opening Weir Gates (5 ft)		4	Each	\$17,000	\$68,000
Weir Gate Installation		4	Each	\$5,800	\$23,200
Fiberglass Grating		200	Sq. Ft.	\$30	\$6,000
36" DIP Wall Sleeves		4	Each	\$8,700	\$34,800
36" x 24" DIP Reducers		4	Each	\$8,700	\$34,800

Piping Connections	4	Each	\$2,900	\$11,600
TOTAL SPLITER STRUCTURE:				\$354,200
SECONDARY CLARIFIERS				
Demo Existing Mechanisms	4	Each	\$58,000	\$232,000
Process				
Mechanisms (75-ft)	4	Each	\$464,000	\$1,856,000
Mechanism Installation	4	Each	\$75,000	\$300,000
Walkways	4	Each	\$29,000	\$116,000
Electrical				
Conduit, Wiring, Labor	1	Lump Sum	\$58,000	\$58,000
MCC Sections	2	Each	\$23,000	\$46,000
Exterior Lighting	8	Each	\$2,300	\$18,400
Controls / SCADA Integration	1	Lump Sum	\$29,000	\$29,000
TOTAL SECONDARY CLARIFIERS:				\$2,655,400

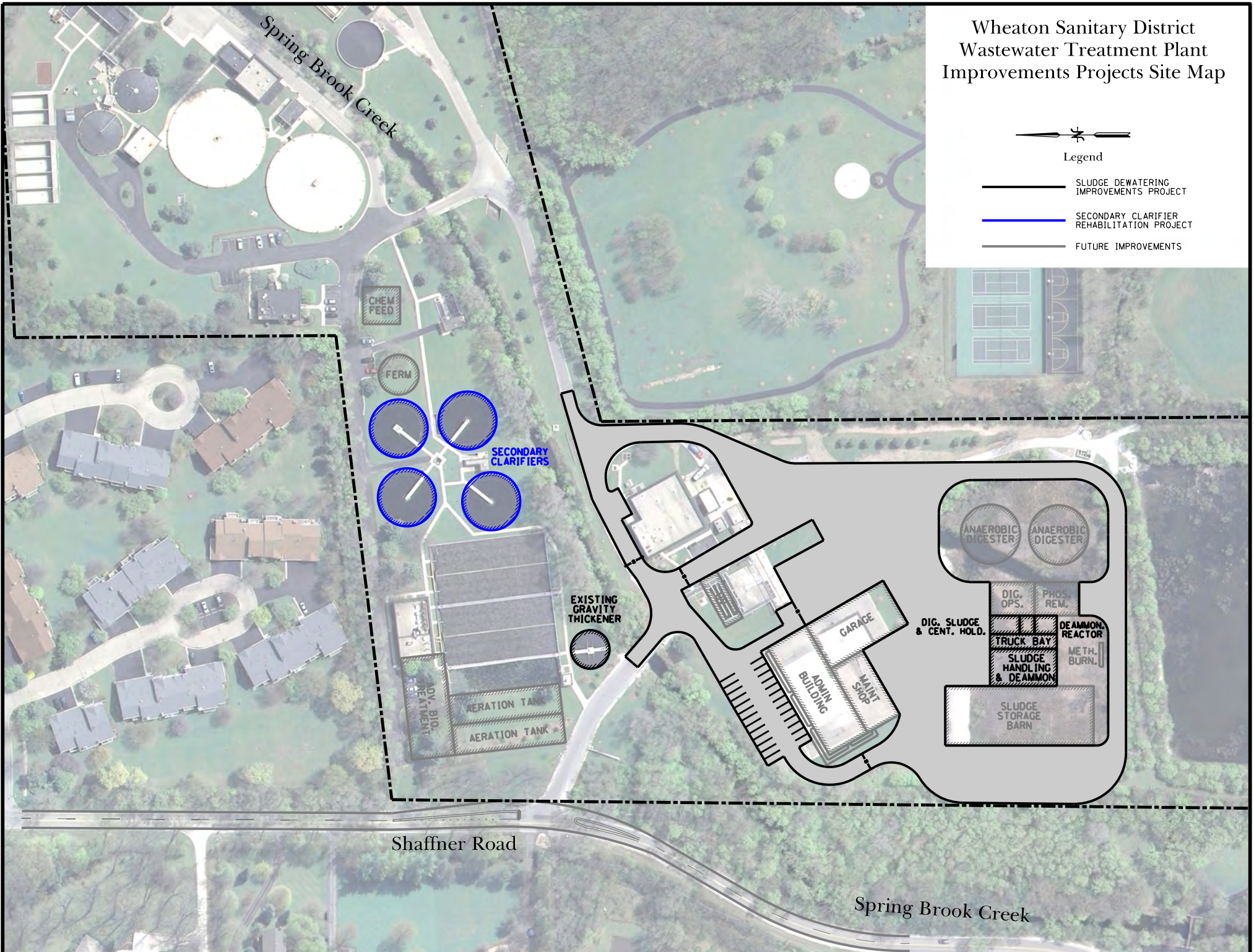
Appendix C – Project Location and Site Maps

Wheaton Sanitary District Wastewater Treatment Plant Improvements Projects Site Map



Legend

- SLUDGE DEWATERING IMPROVEMENTS PROJECT
- SECONDARY CLARIFIER REHABILITATION PROJECT
- FUTURE IMPROVEMENTS





Geneva Rd.

Main St.

Roosevelt Rd.

Shaffner Rd.

Spring Brook


Wheaton Sanitary District WWTW

Butterfield Rd.

Wheaton Sanitary District
WWTP Location Map

Legend

 Wheaton Sanitary District

 Rivers and Streams

0 1,200 2,400 4,800 Feet



**Appendix D – Sludge Dewatering Improvements and Secondary Clarifier
Rehabilitation Projects Funding Nomination Forms**



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Funding Nomination Form for Water Pollution Control Loan Program

Annual Filing Deadline: March 31

For Agency Use Only

Date Received

Loan Number: L17

☒ Check here if new project without a loan number

1. Legal Name of Applicant: Wheaton Sanitary District

2. Address: 1 S. 649 Shaffner Road

3. Organizational Type:

- ☒ Unit of Local Government
☐ Investor Owned Water Utility
☐ Not for Profit Water Corporation
☐ Mutually or Cooperatively Owned System
☐ Other: _____

4. Location Information:

- a) County: DuPage
b) U.S. Congressional District #: 6
c) Illinois House District #: 95
d) Illinois Senate District #: 48

5. Authorized Representative:

Name: Sue Baert
Title: Plant Superintendent
Phone: 630-668-1515
Email: baert@wsd.dst.il.us

6. Engineer:

Name: Jillian Kiss
Firm: Trotter and Associates
Address: 40 W 201 Wasco Road
Suite D
St. Charles, IL, 60175
Phone: 630-587-0470
Email: j.kiss@trotter-inc.com

7. Brief Description of Proposed Project Including Cost Estimate
(Attach additional pages if necessary)

Estimated Cost: \$13,000,000.00

Sludge Dewatering Improvements Project - Design, purchase, and construction of a new Dewatering Building which will include centrifuge feed pumps, centrifuges, conveyors, liquid polymer blending units, and chemical addition capabilities for phosphorus removal from the recycle stream and a centrate holding tank, digested sludge storage tank and biological reactor for deammonification. In addition, the existing gravity thickener will be rehabilitated.

8. Reason for Project: New parts for the existing sludge dewatering system can no longer be obtained

If this project is compliance-related, or involves regionalization, indicate above.

9. Project Location(s): 1 S 649 Shaffner Road, Wheaton, IL, 60189

(May be address, address start & end points, latitude/longitude, or brief description)

10. Does the applicant own and operate a Wastewater Treatment Plant or Facility? ☒ Yes ☐ No

If YES, complete a. through e. If Applicant has multiple treatment facilities, questions only apply to facilities impacted by the proposed project.

a. NPDES Permit Number(s) of the Treatment Facility(s): IL0031739
b. Name of Treatment Facility(s): Wheaton Sanitary District WWTP
c. Design Average Flow (DAF) of the Treatment Facility: 8.9 MGD
d. Latitude and Longitude of the discharge (from NPDES permit): 4150'45"N 8808'39"W
e. Name of the receiving body of water (from NPDES permit): Spring Brook Creek

If NO, complete f. and g.

f. Name of entity providing wastewater treatment: _____
g. Average flow per day delivered to this facility by the applicant: _____ MGD

11. Loan Applicant's current service population: ~63,000

12. Protection of Assets (using an AMP or Equivalent)

a. Has the loan applicant implemented a system-wide Asset Management Plan (AMP)? ☒ Yes ☐ No
b. Is the loan applicant currently developing a system-wide Asset Management Plan? ☐ Yes ☒ No
c. Will the loan be used to develop a system-wide Asset Management Plan? ☐ Yes ☒ No

13. Additional Questions regarding this Project

a. Will the project result in a 20% or greater reduction in water or energy use by the applicant? ☐ Yes ☒ No
b. Does the project include resiliency components, such as facilities built for redundancy? ☒ Yes ☐ No
c. Does the project implement green infrastructure, such as green roofs, constructed wetlands, etc.? ☐ Yes ☒ No
d. Does the project implement one or more agricultural best management practices (BMPs)? ☐ Yes ☒ No
e. Will the project correct a situation that has resulted in overflows or basement backups? ☐ Yes ☒ No
f. Will 50% or more of the project costs provide service to an unsewered area? ☐ Yes ☒ No

14. Project Schedule

a. Project Plan Approval Date: 9/1/2021
b. Advertise for Bids: 11/1/2022
c. Construction Start Date: 2/1/2023
d. Completion of Construction: 8/1/2024

Authorized Representative: Sue Bant Date: 7/16/2021



Illinois Environmental Protection Agency

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Funding Nomination Form for Water Pollution Control Loan Program

Annual Filing Deadline: March 31

For Agency Use Only

Date Received

Loan Number: L17

☒ Check here if new project without a loan number

1. Legal Name of Applicant: Wheaton Sanitary District

2. Address: 1 S 649 Shaffner Road,
Wheaton, IL 60189

3. Organizational Type:

- ☒ Unit of Local Government
☐ Investor Owned Water Utility
☐ Not for Profit Water Corporation
☐ Mutually or Cooperatively Owned System
☐ Other: _____

4. Location Information:

- a) County: DuPage
b) U.S. Congressional District #: 6
c) Illinois House District #: 95
d) Illinois Senate District #: 48

5. Authorized Representative:

Name: Sue Baert
Title: Plant Superintendent
Phone: 630-668-1515
Email: baert@wsd.dst.il.us

6. Engineer:

Name: Jillian Kiss
Firm: Trotter and Associates, Inc
Address: 40W201 Wasco Rd., Suite D
St. Charles, IL, 60175
Phone: 630-587-0470
Email: j.kiss@trotter-inc.com

7. Brief Description of Proposed Project Including Cost Estimate
(Attach additional pages if necessary)

Estimated Cost: \$7,000,000.00

The Secondary Clarifier Rehabilitation Project consists of rehabilitating the clarifiers in their existing basins. Additionally, the rehabilitation will include installation of new mixed liquor piping, a new splitter structure, replacement of all clarifier mechanisms and components, and modifications to the sludge conveyance system to allow for increased RAS flows.

8. Reason for Project: The overflow rate of the clarifiers at the design maximum flow is above Illinois EPA guidelines.
If this project is compliance-related, or involves regionalization, indicate above.

9. Project Location(s): 1 S 649 Shaffner Road, Wheaton, IL 60189
(May be address, address start & end points, latitude/longitude, or brief description)

10. Does the applicant own and operate a Wastewater Treatment Plant or Facility? ☒ Yes ☐ No
 If YES, complete a. through e. If Applicant has multiple treatment facilities, questions only apply to facilities impacted by the proposed project.

a. NPDES Permit Number(s) of the Treatment Facility(s): IL0031739

b. Name of Treatment Facility(s): Wheaton Sanitary District WWTP

c. Design Average Flow (DAF) of the Treatment Facility: 8.9 MGD

d. Latitude and Longitude of the discharge (from NPDES permit): 4150'40"N 8808'39"W

e. Name of the receiving body of water (from NPDES permit): Spring Brook Creek

If NO, complete f. and g.

f. Name of entity providing wastewater treatment: _____

g. Average flow per day delivered to this facility by the applicant: _____ MGD

11. Loan Applicant's current service population: ~63,000

12. Protection of Assets (using an AMP or Equivalent)

a. Has the loan applicant implemented a system-wide Asset Management Plan (AMP)? ☒ Yes ☐ No

b. Is the loan applicant currently developing a system-wide Asset Management Plan? ☐ Yes ☒ No

c. Will the loan be used to develop a system-wide Asset Management Plan? ☐ Yes ☒ No

13. Additional Questions regarding this Project

a. Will the project result in a 20% or greater reduction in water or energy use by the applicant? ☐ Yes ☒ No

b. Does the project include resiliency components, such as facilities built for redundancy? ☒ Yes ☐ No

c. Does the project implement green infrastructure, such as green roofs, constructed wetlands, etc.? ☐ Yes ☒ No

d. Does the project implement one or more agricultural best management practices (BMPs)? ☐ Yes ☒ No

e. Will the project correct a situation that has resulted in overflows or basement backups? ☐ Yes ☒ No

f. Will 50% or more of the project costs provide service to an unsewered area? ☐ Yes ☒ No

14. Project Schedule

a. Project Plan Approval Date: 9/1/2021

b. Advertise for Bids: 7/1/2022

c. Construction Start Date: 11/1/2022

d. Completion of Construction: 11/1/2023

Authorized Representative: Sue Bant Date: 7/16/2021

Appendix E – Sludge Dewatering and Secondary Clarifier Rehabilitation Projects Wastewater Project Planning Checklist



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Wastewater Project Planning Submittal Checklist

Planning File

Before the Agency will begin review of a Project Plan, all of the items below comprising the basic minimum requirements of a Project Plan must be included and the page number(s) of all items noted. Project planning must contain all pertinent information detailed in Ill. Adm. Code 35 Section 365.320(e). The loan applicant should be familiar with their planning responsibilities as detailed in Sections 365.320 and 365.330.

Complete this form online using Adobe Acrobat Reader, save it to your computer, then print and sign it.

Loan Applicant: Wheaton Sanitary District

Consulting Engineer: Trotter and Associates, Inc.

Phone Number: (630) 587-0470

Project Description:

The Wheaton Sanitary District is proposing two wastewater projects to be funded by the WPCLP as part of a capital improvements program in their 2017 Wastewater Facility Plan. The projects include the Sludge Dewatering Improvements Project and the Secondary Clarifier Rehabilitation Project.

Fill in the blank with the page(s) where each item below is found in the project plan. Additional information and/or examples for each item number are provided by corresponding numbers contained in the attached instructions.

No.	Page(s) or Comment	Information
1.	1-1 to 1-2, 2-1 to 2-5	Loan applicant's background, total population served by the applicant, customer base, and project location information.
2.	3-1 to 3-12, 4-2 to 4-3, 5-1 to 5-66	Detailed description of the EXISTING collection system and treatment facilities.
3.	Supplemental Memo Pages 2-3 and 9-10	Project description that explains the need and justification of the proposed project, including the benefits of the project.
4.	5-4 to 5-11	Discussion of the system's compliance with all applicable laws and regulations and with existing and proposed NPDES permit limits.
5.	Not Applicable	Information regarding an anti-degradation analysis for a new or modified NPDES Permit (if applicable). Only applicable to certain treatment plant projects.
6.	Supplemental Memo Pages 4-5 and 10-11	Basis of design for chosen alternative.
7.	Supplemental Memo Pages 5-6 and 12-13	Cost and effectiveness analysis summary and completed certification form. See form on page 4.
8.	Supplemental Memo Pages 5-6, 11-12 and Appendix A	Inventory of environmental impacts of selected alternative, a discussion of the required mitigation measures, and a completed IEPA Loan Applicant Environmental Checklist form with sign-off documentation.
9.	Appendix C	Reproducible 8.5 X 11 inch map(s) showing the project(s) location(s) relative to the community.

No.	Page(s) or Comment	Information
10.	Supplemental Memo Pages 5-6, 12-13 and Appendix B	An estimate of the total project costs and a detailed estimate of construction item costs.
11.	Supplemental Memo Pages 7-8 and 13-14	Estimated loan terms, including: IEPA loan amount, interest rate, repayment period in years, and the annual loan repayment.
12.	Supplemental Memo Pages 15-17 and attached	Financial arrangements for assuring adequate annual debt service and O, M, and R coverage, a description of the dedicated source of revenue necessary for loan repayment, and any other funding involved in the project.
13.	Supplemental Memo Pages 16-17	Detailed description of the existing residential rate structure, water consumption, any proposed rate changes, and the proposed average monthly residential bill because of the project(s).
14.	Attached	One copy of completed Existing User Charge and O, M, and R Certification Sheet found on page 3 (attached) should be submitted with the Project Plan.
15.	Supplemental Memo Pages 6 and 12	Discussion of any "green" project components that are part of the proposed project.
16.	Supplemental Memo Pages 7, 12, and 15	Schedule for project implementation.
17.	N/A	Copies of inter-governmental and/or service agreements.
18.	Supplemental Memo Page 17	IEPA construction permit status.
19.	Supplemental Memo Page 17	Name and address of the local newspaper(s).

Three (3) copies of the Project Plan and related documents should be submitted along with one (1) copy of this completed checklist (pages 1 through 4) to:

Infrastructure Financial Assistance Section (IFAS)
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

IFAS will distribute the planning documents to the appropriate Agency staff for review, comment, and approval. IFAS will contact the loan applicant if further information is needed. Please use the box below for any special instructions or notes.



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Existing User Charge and O, M, and R Certification Sheet

63,000	Number of current residential customers served by the system.
5,000	Actual average residential water use per customer per month (based on historical billing data)
\$41.97	Current average monthly residential bill

Provide details that apply to your specific user rate charges:

Water use charges:	_____	per	_____	gallons
	_____	per	_____	cubic feet
Flat Fee or Monthly User Charge:	\$11.82			
Debt Service Charge:	_____			
Capital Improvement Charge:	_____			
Wholesale Charge:	_____			
Meter Service Fee (average-sized meter):	_____			
Other Charge:	\$5.46	Explain:	Treatment & Conveyance Rate (per 1,000 gallons)	
Other Charge:	_____	Explain:	Collector Sewer Maintenance Charge (\$0.57/1,000 gals)	

1. Is the water/sewer fund annually operating in a positive or negative balance at this time? (select one)

☒ Positive ☐ Negative

2. Based upon your most recent annual budget please indicate the net operating income for your water/sewer fund:

\$2,451,028.00

- Net Operating Income = Total Revenue - Total Cost of Providing Service
- Total Revenue = Revenue from user charges, commercial, residential, or wholesale, plus any other dedicated water/sewer fund revenue
- Total Cost of Providing Service = All Operation and Maintenance costs (including replacement fund) plus dedicated water/sewer fund debt

3. Will a rate increase or other revenue generating action be necessary to pay for this project? (select one)

☐ Yes ☒ No

4. If a rate increase (or other cost increase) is necessary, please provide the proposed user rate charges and proposed average monthly residential water bill as an attachment.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Sue Baert	Plant Superintendent
_____ Authorized Representative (Printed)	_____ Title
<u>Sue Baert</u> Signature	<u>7/16/2021</u> Date



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Water Pollution Control Loan Program (WPCLP) Project Planning Certification of Cost and Effectiveness Analysis

Loan Applicant: Wheaton Sanitary District


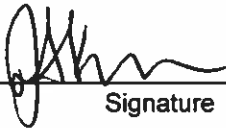
Project No. _____

Section 602(b)(13) of the federal Water Pollution Control Act requires all public loan recipients to complete a cost and effectiveness analysis prior to receiving a loan for wastewater-related projects from the State Revolving Fund (SRF).

Please verify that both requirements 1 and 2 have been met by checking the boxes below. The form must be signed by the loan applicant's authorized representative, and the professional engineer who completed the analysis on behalf of the loan applicant, as applicable.

- ☒ 1. Loan applicant has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under the Illinois Water Pollution Control Loan Program (WPCLP).
- ☒ 2. Loan applicant has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation taking into account the following:
- a) The cost of constructing the project or activity;
 - b) The cost of operating and maintaining the project or activity over the life of the project or activity; and
 - c) The cost of replacing the project or activity.

We certify that both requirements checked above have been completed for the project. To the best of my knowledge, this information is true and correct.

Loan Applicant's Authorized Representative	
Sue Baert	Plant Superintendent
Printed Name	Title
	7/16/2021
Signature	Date
Professional Engineer (P.E.)	
Jillian Kiss	Project Engineer
Printed Name	Title
	7/21/2021
Signature	Date

Appendix F – Sludge Dewatering Improvements and Secondary Clarifier Rehabilitation Projects Consultant's Loan Priority Scoring

Total Scoring Summary	
Violations and Enforcement Compliance	150
Unsewered Communities and Consolidation	0
Water Quality Improvements	90
Protection of Assets	25
Conservation and Green Infrastructure	20
Readiness to Proceed	0
Economic Factors	0
Population	10
TOTAL	295

Violations and Enforcement Compliance

Points Awarded **150**

- A maximum of **600** points may be awarded under this subsection (e).
- 200 points will be awarded if the project is necessary to correct a violation of the Act or Board rules, other than reporting, that has resulted in any of the following:
 - referral to the Illinois Attorney General's Office;
 - referral to USEPA;
 - a court order directing the loan applicant to remedy the violation
 - a Pollution Control Board or order directing the loan applicant to remedy the violation; or
 - an administrative order from USEPA directing the loan applicant to remedy the violation.
- 150 points will be awarded if the project is necessary to correct a violation of the Act or Board rules, other than reporting.
- 150 points will be awarded if the project improves or replaces infrastructure that requires a construction permit or National Pollution Discharge Elimination System (NPDES) permit.**
- 75 points will be awarded if the completed project results in the applicant's removal from the Agency's Critical Review or Restricted Status list.
- 75 points will be awarded if the completed project corrects sanitary sewer overflows (SSOs), combined sewer overflows (CSOs), or basement backups.

Note: The replacement of the infrastructure will require a construction permit at the District's wastewater treatment plant.

Unsewered Communities and Consolidation

Points Awarded **0**

- A maximum of 200 points may be awarded under this subsection (f).
- Points will be awarded if the project provides wastewater collection and treatment service to a municipality as follows:
 - 200 points will be awarded if the loan applicant does not have centralized waste water treatment and discharges to surface waters;
 - 100 points will be awarded if the loan applicant does not have centralized waste water treatment; or
 - 50 points will be awarded if the loan applicant has centralized waste water treatment and greater than 50% of the project's costs is to provide sewer service to an unsewered area.
- 100 points will be awarded if the project consolidates one or more treatment works and eliminates a discharge to a water of the United States.

Water Quality Improvements

Points Awarded **90**

- A maximum of **150** points may be awarded under this subsection (g).
- Points will be awarded if the project improves a named cause of impairment for a receiving water body identified as a high priority pursuant to section 303(d) of the CWA.
 - 50 points will be awarded if the project improves two or more causes of impairments; or
 - 25 points will be awarded if the project improves one cause of impairment.
- Points will be awarded if the project improves a named cause of impairment for a receiving water body designated as medium priority pursuant to section 303(d) of the CWA.
 - 25 points will be awarded if the project improves two or more causes of impairments; or
 - 15 points will be awarded if the project improves one cause of impairment.**
- Points will be awarded if the project improves a receiving water body that has an approved total maximum daily load (TMDL) pursuant to section 303(d)(1)(C) of the CWA.
 - 75 points will be awarded if the project improves a receiving water body with an approved TMDL for two or more causes of impairments.
 - 50 points will be awarded if the project improves a receiving water body with an approved TMDL for one cause of impairment.
- Points will be awarded if the project will result in a reduction of phosphorus or nitrogen in the receiving water body.
 - 75 points will be awarded if the project will reduce both nitrogen and phosphorus.**
 - 50 points will be awarded if the project will reduce nitrogen or phosphorus.

Note: Spring Brook Creek is medium priority per Illinois' 2018 303(d) list: <https://www2.illinois.gov/epa/Documents/epa/water-quality/watershed-management/tmdl/2018/303d-list/appendix-a-2.pdf>

Note: This project includes implementation of chemical addition capabilities for phosphorus removal from the recycle stream and ammonia removal through deammonification.

Protection of Assets

Points Awarded **25**

- A maximum of 75 points may be awarded under this subsection (h).
- Points will be awarded if the applicant is implementing an asset management plan, fiscal sustainability plan, or other equivalent operation and maintenance plan.
 - 75 points will be awarded if the facility has a design average flow of less than 1 million gallons per day.
 - 25 points will be awarded if the facility has a design average flow of equal to or greater than 1 million gallons per day.**
- 25 points will be awarded if the applicant has a design average flow of less than 1 million gallons per day and the applicant is developing an asset management plan, fiscal sustainability plan, or other equivalent operation and maintenance plan.

Note: Wheaton Sanitary District has a wastewater facility plan that meets the EPA's criteria

Conservation and Green Infrastructure

Points Awarded **20**

- A maximum of 75 points may be awarded under this subsection (i).
- 25 points will be awarded if the project will achieve 20% or greater reduction in water or energy use of the loan applicant.
- 20 points will be awarded if the project contains resiliency components, including facilities built for redundancy, or if the project assists a loan applicant with planning for potential service disruptions, natural or manmade.**
- 15 points will be awarded if the project improves green infrastructure, including, but not limited to, green roofs, pervious pavement, rainwater harvesting or cisterns, sustainable landscaping, stormwater control, constructed wetlands, LEED certified buildings, and riparian buffers.
- 15 points will be awarded if the project implements one or more agricultural BMPs.

Note: The project contains resiliency components

Readiness to Proceed

Points Awarded **0**

- A maximum of 120 points may be awarded under this subsection (j).
- 20 points will be awarded if the loan application required by Section 365.350(a) has been submitted to the Agency.
- 20 points will be awarded if the applicant has obtained necessary permits to begin construction of the project or the Agency determines that no permit is required for the project.
- 40 points will be awarded if the requirements of Section 365.350(a) through (d) have been satisfied.
- 40 points will be awarded if the requirement of Section 365.350(e) has been satisfied.

Economic Factors

Points Awarded **0**

- A maximum of 135 points may be awarded under this subsection (k).
- Median Household Income (MHI). The following points will be awarded based on the MHI of the applicant's service population as a percentage of the statewide average MHI:

Points	MHI as % of Statewide MHI
50	Below 70%
40	70 - 79.99%
30	80 - 89.99%
20	90 - 99.99%
0	At or Above 100%

IL MHI (2018) = \$45,886; Wheaton Sanitary District MHI = \$101,470

- User Rates. The following points will be awarded based on the average annual residential user fees after the project is constructed as a percentage of MHI of the applicant's service population (i.e., average annual user fees/MHI) x 100).

Points	Rate as % of MHI
50	At or Above 2%
25	1 - 1.99%
0	Below 1%

0.49% for sewer bills, based on FY2022 user rates

- Unemployment Rate. The following points will be awarded when the applicant's unemployment rate is greater than the statewide average:

Points	Unemployment Rate Percentage Points Greater than Statewide Average
35	3 percentage points or more
25	1.5 - 2.99 percentage points
15	0.1 - 1.49 percentage points

April 2021 IL = 7.1%, DuPage County = 5.5%, per https://www2.illinois.gov/ides/im/Pages/Current_Monthly_Unemployment_Rates.aspx

Population

Points Awarded **10**

- A maximum of 50 points may be awarded under this subsection (l).
- The following points will be awarded based on applicant's service population.

Points	Service Population
50	Less than 10,000
25	10,000 - 34,999
10	35,000 - 74,999
0	At or Above 75,000

Total Scoring Summary	
Violations and Enforcement Compliance	150
Unsewered Communities and Consolidation	0
Water Quality Improvements	65
Protection of Assets	25
Conservation and Green Infrastructure	20
Readiness to Proceed	0
Economic Factors	0
Population	10
TOTAL	270

Violations and Enforcement Compliance **Points Awarded 150**

- 1) A maximum of 650 points may be awarded under this subsection (e).
- 2) 200 points will be awarded if the project is necessary to correct a violation of the Act or Board rules, other than reporting, that has resulted in any of the following:
 - A) referral to the Illinois Attorney General's Office;
 - B) referral to USEPA;
 - C) a court order directing the loan applicant to remedy the violation
 - D) a Pollution Control Board order directing the loan applicant to remedy the violation; or
 - E) an administrative order from USEPA directing the loan applicant to remedy the violation.
- 3) 150 points will be awarded if the project is necessary to correct a violation of the Act or Board rules, other than reporting.
- 4) 150 points will be awarded if the project improves or replaces infrastructure that requires a construction permit or National Pollution Discharge Elimination System (NPDES) permit.
- 5) 75 points will be awarded if the completed project will result in the applicant's removal from the Agency's Critical Review or Restricted Status list.
- 6) 75 points will be awarded if the completed project corrects sanitary sewer overflows (SSOs), combined sewer overflows (CSOs), or basement backups.

Note: The replacement of the infrastructure will require a construction permit at the District's wastewater treatment plant.

Unsewered Communities and Consolidation **Points Awarded 0**

- 1) A maximum of 200 points may be awarded under this subsection (f).
- 2) Points will be awarded if the project provides wastewater collection and treatment service to a municipality as follows:
 - A) 200 points will be awarded if the loan applicant does not have centralized waste water treatment and discharges to surface waters;
 - B) 100 points will be awarded if the loan applicant does not have centralized waste water treatment; or
 - C) 50 points will be awarded if the loan applicant has centralized waste water treatment and greater than 50% of the project's costs is to
- 3) 100 points will be awarded if the project consolidates one or more treatment works and eliminates a discharge to a water of the United States.

Water Quality Improvements **Points Awarded 65**

- 1) A maximum of 150 points may be awarded under this subsection (g).
- 2) Points will be awarded if the project improves a named cause of impairment for a receiving water body identified as a high priority pursuant to section 303(d) of the CWA.
 - A) 50 points will be awarded if the project improves two or more causes of impairments; or
 - B) 25 points will be awarded if the project improves one cause of impairment.
- 3) Points will be awarded if the project improves a named cause of impairment for a receiving water body designated as medium priority pursuant to section 303(d) of the CWA.
 - A) 25 points will be awarded if the project improves two or more causes of impairments; or
 - B) 15 points will be awarded if the project improves one cause of impairment.
- 4) Points will be awarded if the project improves a receiving water body that has an approved total maximum daily load (TMDL) pursuant to section 303(d)(1)(C) of the CWA.
 - A) 75 points will be awarded if the project improves a receiving water body with an approved TMDL for two or more causes of impairments.
 - B) 50 points will be awarded if the project improves a receiving water body with an approved TMDL for one cause of impairment.
- 5) Points will be awarded if the project will result in a reduction of phosphorus or nitrogen in the receiving water body.
 - A) 75 points will be awarded if the project will reduce both nitrogen and phosphorus.
 - B) 50 points will be awarded if the project will reduce nitrogen or phosphorus.

Note: Spring Brook Creek is medium priority per Illinois' 2018 303(d) list: <https://www2.illinois.gov/epa/Documents/iepa/water-quality/watershed-management/tmdl/2018/303d-list/appendix-a-2.pdf>.
Note: The project will allow the secondary clarifiers to be compatible with the District's future process change to Sidestream enhanced biological phosphorus removal (SE2BPR).

Protection of Assets **Points Awarded 25**

- 1) A maximum of 75 points may be awarded under this subsection (h).
- 2) Points will be awarded if the applicant is implementing an asset management plan, fiscal sustainability plan, or other equivalent operation and maintenance plan.
 - A) 75 points will be awarded if the facility has a design average flow of less than 1 million gallons per day.
 - B) 25 points will be awarded if the facility has a design average flow of equal to or greater than 1 million gallons per day.
- 3) 25 points will be awarded if the applicant has a design average flow of less than 1 million gallons per day and the applicant is developing an asset management plan, fiscal sustainability

Note: Wheaton Sanitary District has a Wastewater Facility plan that meets the IEPA's criteria

Conservation and Green Infrastructure **Points Awarded 20**

- 1) A maximum of 75 points may be awarded under this subsection (i).
- 2) 25 points will be awarded if the project will achieve 20% or greater reduction in water or energy use of the loan applicant.
- 3) 20 points will be awarded if the project contains resiliency components, including facilities built for redundancy, or if the project assists a loan applicant with planning for potential service disruptions, natural or manmade.
- 4) 15 points will be awarded if the project implements green infrastructure, including, but not limited to, green roofs, pervious pavement, rainwater harvesting or cisterns,
- 5) 15 points will be awarded if the project implements one or more agricultural BMPs.

Note: The project contains resiliency components.

Readiness to Proceed **Points Awarded 0**

- 1) A maximum of 120 points may be awarded under this subsection (j).
- 2) 20 points will be awarded if the loan application required by Section 365.350(a) has been submitted to the Agency.
- 3) 20 points will be awarded if the applicant has obtained necessary permits to begin construction of the project or the Agency determines that no permit is required for the project.
- 4) 40 points will be awarded if the requirements of Section 365.350(a) through (d) have been satisfied.
- 5) 40 points will be awarded if the requirement of Section 365.350(e) has been satisfied.

Economic Factors **Points Awarded 0**

- 1) A maximum of 135 points may be awarded under this subsection (k).
- 2) Median Household Income (MHI). The following points will be awarded based on the MHI of the applicant's service population as a percentage of the statewide average MHI:

Points	MHI as % of Statewide MHI
50	Below 70%
40	70 - 79.99%
30	80 - 89.99%
20	90 - 99.99%
0	At or Above 100%

IL MHI (2019) = \$65,886; Wheaton Sanitary District MHI = \$103,470

- 3) User Rates. The following points will be awarded based on the average annual residential user fees after the project is constructed as a percentage of

Points	Rate as % of MHI
50	At or Above 2%
25	1 - 1.99%
0	Below 1%

0.49% for sewer bills, based on FY 21/22 user rates

- 4) Unemployment Rate. The following points will be awarded when the applicant's unemployment rate is greater than the statewide average:

Points	Unemployment Rate Percentage Points Greater than Statewide Average
35	3 percentage points or more
25	1.5 - 2.99 percentage points
15	0.1 - 1.49 percentage points

April 2021 IL = 7.1%, DuPage County = 5.5%, per https://www2.illinois.gov/files/mi/Pages/Current_Monthly_Unemployment_Rates.aspx

Population **Points Awarded 10**

- 1) A maximum of 50 points may be awarded under this subsection (l).
- 2) The following points will be awarded based on applicant's service population.

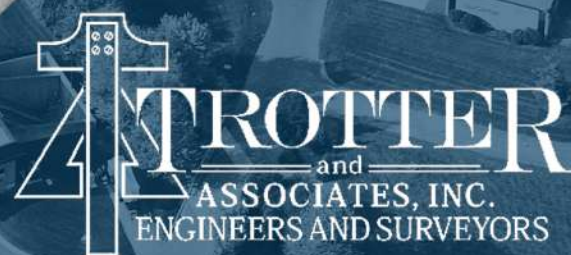
Points	Service Population
50	Less than 10,000
25	10,000 - 34,999
10	35,000 - 74,999
0	At or Above 75,000

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