



DIRECTOR OF ENGINEERING REPORT

Nov 20, 2024

District Engineering manages projects, consultants, contractors, and equipment suppliers. Consultant reports and Project Managers reports are included in this section along with details regarding the status of the associated study, design, or construction projects.

ACTIVE PROJECTS

22ENG31 ADMINISTRATIVE WORKFORCE CENTER

SCOPE: Construction and commissioning of a new 26,000 sq ft Administration Building. The building includes the addition of a new Wastewater Treatment Plant laboratory facility, administration offices, maintenance offices, break room, multi-purpose meeting room.						
Contractor: Christy- Foltz			Original Contract Price: \$14,961,550.00			
Engineer: AEX			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value: \$14,961,550.00			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
06/25/24	07/02/24	07/30/24	09/27/24	10/09/24	10/08/24	365 days

Key Activities: Construction began this period. Footings and foundations are being set currently and the geo-thermal wells are being installed.

To address the long lead time on the specified new 750kVa transformer (152 weeks), the contractor proposed using a refurbished transformer with a 20-week lead time. AEX has issued a construction change directive to procure the refurbished transformer.

UPCOMING PROJECTS:

STUDY – Detailed Assessment of Primary Clarifier Control Structure (Building 210)

Staff is working with Black and Veatch to determine a rehabilitation path forward on the existing Primary Clarifier Control Structure. The underside of the deck in 210 shows “alligator” cracking which, structurally can indicate there is an alkali silica reaction (ASR) inducing cracking of the deck. Black and Veatch structural staff has requested SDD perform a petrograph analysis on this area of the deck. The petrograph core sample was collected this period and staff has sent off for analysis.

DESIGN – EASTSIDE INTERCEPTOR CIPP LINING

SDD entered into a design agreement with Farnsworth Group in Sept-2024 for this project. The projected timeline is:

- | | |
|--|-----------------------|
| 1. Submission of Facility Planning Report | 12/2024 – On schedule |
| 2. Topo/Boundary Survey/Easements (target) | 02/2025 |
| 3. Design Engineering Complete w/cost update | 03/2025 |
| 4. IEPA Facility Planning Approval | 06/2025 |
| 5. Advertise | 07/2025 |
| 6. Bid Open | 09/2025 |
| 7. SRF Loan Approval (if rank priority is given) | 10/2025* |
| 8. Final Award | 11/2025* |

*Because the funding for this project is an SRF loan, there is dependence on the loan being made available prior to final award.

DESIGN – Final Clarifier Upgrades Project

Update: The project includes replacement of 3 isolation gates on the influent channels, replacement of 3 clarifiers, performing maintenance work on the clarifier #11 floor, repairing division structure steel distribution channels, and repairing all isolation gates in the nitrification aeration tanks.

The scope has been revised and plan drawings are being revised accordingly. Plans and Specifications development is commencing.

INTERGOVERNMENTAL ACTIVITIES

1. Staff has continued participating in meetings as needed with the CITY and ADM for the “NE quadrant work group” looking at water and wastewater needs in this corridor. The force main routing for the City’s new Brush College pump station has been modified to traverse the street side of the houses along Damon Ave. City is continuing to attain the easements for the force main. Staff is coordinating the upgrades identified at the DAMON pumping station with the NE Quadrant Master Plan recommendation of creating an additional passage underneath the railroad to the West of the station. The project timelines have been slipping with the ADM service partners delaying their start-up dates.
2. *The pull of the 2” fiber optic line for the CITY IT department was successfully completed this period. There is a change order for the Lost Bridge FM project that is up for trustee consideration under Old Business.*

If there are questions, please contact me at 422-6931 ext 216, or by email at DonM@sddcleanwater.org.



Project Managers reports are included in this section along with details regarding the status of the associated study, design, or construction projects.

ACTIVE PROJECTS

22ENG02 Lost Bridge Force Main Replacement

SCOPE: Installation of a 14-inch force main under Lake Decatur via horizontal directional drilling, abandonment of existing 10-inch force main route, installation of piping, connections, valves, valve vaults and fittings, paving improvements, site restoration, and other ancillary improvements.						
Contractor: Burdick Plumbing & Heating Co.			Original Contract Price: \$2,986,151			
Engineer: Clark Dietz			Sum of Change Orders: \$52,000			
R.E. Inspector: SDD			Total Value: \$3,038,151			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
04/10/24	04/16/24	05/01/24	05/24/24	6/25/24	7/25/24	3/21/25

Key Activities: The 14" fused PVC pipe, 2" fiber conduit, and three tracer wires were successfully pulled through the bore from Chandler Park to the Lost Bridge Pump station. ECI completed all boring operations and has demobilized. Connections at the pump station are complete and the restoration of Oak Ridge Dr. is underway with an expected roadway re-open date of 11/27/24.

Electrical conduit servicing the existing magnetic flow meter was partially uncovered and found to be severely corroded. This conduit passes under the service drive which is scheduled for replacement during the project. I&C staff is coordinating the replacement of the failed conduit while it is exposed and avoid future disruption to the service drive.

Change order Items #1 below is before the board for consideration.

Pending Change Items

Num.	Description	Est. Value
1	Additional pull of CITY fiber optic conduit	\$82,000
2	PVC pipe supplier requested to use blue pipe under the lake instead of green that was specified. Credit of \$545/pipe section was negotiated. (55 sections of pipe)	(\$30,000)
3	Add Tee and Riser pipe for future bypass of pump station	\$20,729 (est)

24ENG17 Sewer Televising and Rating

SCOPE: Request for Proposals submitted to televise and rate conditions for the Northeast Interceptor, Pershing Rd. Bypass, Route 51 Bypass, Old Main Interceptor, New Main Interceptor, and Eastside Interceptor.						
Contractor: Telescan Inc.			Original Contract Price: \$143,396.25			
Engineer: SDD			Sum of Change Orders:			
R.E. Inspector: SDD			Total Value: \$143,396.25			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
02/29/24	03/14/24	03/28/24	05/16/24	06/04/24	06/04/24	10/31/24

Key Activities: Finalized PACP reports were received this period, and GIS databases will be updated.

24ENG44 Building 044 Safety Improvements

SCOPE: Project involves installation of FRP panels and louvers on the 044 building to extend the existing siding to the concrete block wall. This effort will eliminate precipitation blowing into the ferrous Chloride tank retention area.						
Contractor: Christy-Foltz			Original Contract Price: \$84,650			
Engineer: SDD			Sum of Change Orders:			
R.E. Inspector: SDD			Total Value: \$84,650			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
07/02/24	07/16/24	08/06/24	08/06/24	09/10/24	09/17/24	120 days

Key Activities: Fiber Reinforced Panels have been delivered and construction initiated on 11/13/24. Anticipated completion date is 12/06/24.

24MNT07 Fence Replacement

SCOPE: Project involves removal of approximately 1,500 feet of existing 6' chain link fencing along the east side of the plant and installation of 8' aluminized 1" mesh security chain link fencing and replacement of approximately 66 feet of fencing at the Damon Ave. pump station.						
Contractor: General Fence			Original Contract Price: \$158,863			
Engineer: SDD			Sum of Change Orders:			
R.E. Inspector: SDD			Total Value: \$158,863			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
07/02/24	07/30/24	08/29/24	09/30/24	10/17/24	10/17/24	120 days

Key Activities: Fence repair at Damon Ave. pump station is complete. Removal and replacement on the southeast side of the plant is underway. Anticipated completion date is 12/20/24.

22COL12 Damon Ave. Pump Station Upgrades

SCOPE: Project involves installation of two new electrical service duct banks, installing pre-procured dual service switchboard and ATS, and installation of contractor supplied 1600amp CT cabinet and electrical service meter bases.						
Contractor:			Original Contract Price:			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
07/02/24	7/9/24	8/1/24	9/27/24	9/27/24	10/15/24	90 days

Key Activities: Delivery of the CT cabinets is expected by 12/6/24. Current shipping estimates for the meter bases is the first week of December but not confirmed. The pump station will operate on generator power while demolition and installation of new electric service is in progress. We anticipate postponing project initiation until January to allow sufficient time for equipment deliveries and avoid operating the pump station on temporary power during the holidays when minimal staffing is expected.



23ENG45 Primary Clarifiers 4 and 6 Procurement
23ENG45 Primary Clarifiers 4 and 6 Installation

SCOPE: 1. Procure new Primary Clarifiers and; 1. Installation of pre-procured mechanisms in clarifiers #4 and #6.						
Manufacturer: Kusters Water			Purchase Price: \$1,296,742			
Contractor: TBD			Original Contract Price: \$			
Engineer: SDD			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
03/12/24 - P	N/A	05/01/24	05/31/24	06/10/24		365 days
09/03/24 - I	10/1/24	10/29/24				180 days

Key Activities:

Equipment delivery is expected by the end of April, 2025 for both clarifiers. Plocher Construction was the low bidder for the installation of equipment. *There is a contract before the board for consideration under old business.*

22ENG43 Dewatering Wells West Cluster Relocation

SCOPE: Boring and installation of three 36" diameter wells to dewater the west cluster of nitrification clarifiers.						
Contractor:			Original Contract Price: \$			
Engineer: LRE Water			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
10/30/2024	11/19/24	12/17/24				

Key Activities: Bid documents are advertised. Five well-drilling contractors have been notified of the open bids and three have responded with interest.

24ENG07 Digester #1 Lid Replacement

SCOPE: Removal of the District's current Digester No. 1 Cover and replacing it with a new digester cover. This includes removal and re-installation of the existing linear motion mixing equipment, and the replacement of the drive for the mixing equipment.						
Contractor:			Original Contract Price: \$			
Engineer: Donahue			Sum of Change Orders: \$0			
R.E. Inspector: SDD			Total Value:			
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion Dates
10/30/2024	11/06/24	12/03/24				

Key Activities: Bid documents are advertised and pre-bid meeting was held as scheduled. An addendum is being prepared.

**Sanitary District of Decatur
CONTRACTOR PROPOSAL - BID TABULATION**

Project: **PC 4 & 6 Replacement**
 Bid Date: **10/29/2024**
 Bid Time: **10:00 AM**

Item #	Pay Item	QTY	UOM	Engineers Estimate		Christy-Foltz		Plocher Construction	
				Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Miscellaneous Contingency	2	EA	\$ 5,000	\$ 10,000	\$ 5,000	\$ 10,000	\$ 5,000	\$ 10,000
2	Mobilization	1	EA	\$ 40,000	\$ 40,000	\$ 10,000	\$ 10,000	\$ 100,000	\$ 100,000
3	Primary Clarifier Removal	2	EA	\$ 100,000	\$ 200,000	\$ 118,500	\$ 237,000	\$ 50,000	\$ 100,000
4	316 SS Primary Clarifier Installation	2	EA	\$ 170,000	\$ 340,000	\$ 117,000	\$ 234,000	\$ 120,000	\$ 240,000
5	316 SS Beach Plate and Scum Installation	2	EA	\$ 10,000	\$ 20,000	\$ 6,000	\$ 12,000	Included	Included
6	Coatings	2	EA	\$ 50,000	\$ 100,000	\$ 40,000	\$ 80,000	\$ 40,000	\$ 80,000
7	Mechanical	2	LS	\$ 15,000	\$ 30,000	\$ 2,000	\$ 4,000	\$ 10,000	\$ 20,000
8	Electrical	2	LS	\$ 25,000	\$ 50,000	\$ 25,000	\$ 50,000	\$ 22,000	\$ 44,000
9	All other contract work required to deliver a fully functional Primary Clarifier	2	LS	\$ 25,000	\$ 50,000	\$ 219,795	\$ 439,590	\$ 22,500	\$ 45,000
10									
				\$ 840,000.00		\$ 1,076,590.00		\$ 639,000.00	

SDD
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CHANGE ORDER NO.: 1

Owner:	Sanitary District of Decatur	Owner's Project No.:	22ENG02
Engineer:	Clark Dietz Engineers	Engineer's Project No.:	D0540050
Contractor:	Burdick Mechanical Contractors	Contractor's Project No.:	PL2794
Project:	Lost Bridge Force Main Replacement		
Contract Name:			
Date Issued:	10/03/24	Effective Date of Change Order:	10/16/24

The Contract is modified as follows upon execution of this Change Order:

Description:

Attach a 2" fiber optic conduit (selected and supplied by the CITY) to the new 14" SDD force main and pull it along with the new 14" force main from the Chandler Park launch pit to the Lost Bridge Road Pump Station landing pit.

Attachments:

- Proposal from the General Contractor for the additional 2" conduit.**

Change in Contract Price	Change in Contract Times
Original Contract Price: \$ <u> 2,986,151.00 </u>	Original Contract Times: Substantial Completion: <u> 150 </u> Ready for final payment: <u> 180 </u>
[Increase] [Decrease] from previously approved Change Orders No. 1 to No. [N/A] : \$ <u> 0 </u>	[Increase] [Decrease] from previously approved Change Orders No.1 to No. [N/A] : Substantial Completion: <u> 0 </u> Ready for final payment: <u> 0 </u>
Contract Price prior to this Change Order: \$ <u> 2,986,151.00 </u>	Contract Times prior to this Change Order: Substantial Completion: <u> 150 </u> Ready for final payment: <u> 180 </u>
[Increase] [Decrease] this Change Order: \$ <u> 82,000.00 </u>	[Increase] [Decrease] this Change Order: Substantial Completion: <u> 0 </u> Ready for final payment: <u> 0 </u>
Contract Price incorporating this Change Order: \$ <u> 3,068,151.00 </u>	Contract Times with all approved Change Orders: Substantial Completion: <u> 150 </u> Ready for final payment: <u> 180 </u>

Recommended by Engineer (if required)

By: Donald B Miller, P.E.

Title: SDD Director of Engineering

Date: 10/3/24

Authorized by Owner

Authorized by Owner

By: _____

Title: _____

Date: _____

Approved by Funding Agency (if applicable)



1175 N. 20th Street, Decatur, IL 62521
P.O. Box 496, Decatur, IL 62525
p: (217) 429-2385 / f: (217) 429-9781

Sanitary District of Decatur
501 S Dipper Ln.
Decatur, IL. 62522

Added 2" Conduit bore

Don, Our proposal to complete the added 2" to the current 14" bore is \$82,000.00. This will include all preparation, necessary equipment and labor to add the 2" to the existing bore. The 2" pipe will be supplied to us by the City of Decatur/Bodine Electric.

In the event that the 2" DOES NOT make the complete bore route, the pricing will be as follows:

- 1) Set-up and start the bore. Flat rate \$41,000.00
- 2) \$25.31 per foot installed up to 1620'. At that point the full price of \$82,000.00 will be billed.
- 3) Just to confirm. If the 2" makes it no problem the total add will be \$82,000.00

Please contact me with any questions or comments.

Thank-you,

Jeffrey S Burdick
Burdick Plbg.&Htg.Co. Inc.
1175 N. 20th St.
Decatur, IL. 62521
CL: 217-519-1402



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Memorandum

Date: November 4, 2024
To: Donald B. Miller, P.E., Director of Engineering
From: Will Gray, P.E., Donohue & Associates

Re: **Project Status Report**
Digester No.1 Cover Replacement
Donohue Project No. 14454

Project Progress Items

- Project advertised for bidders on 10/22.
- Pre Bid Meeting will be held on 11/6 @ 2pm.
- Bid Opening will be held on 12/3 @ 1pm.

November 8, 2024

Sanitary District of Decatur
501 Dipper Lane
Decatur, IL 62522

Attn: Don Miller, Director of Engineering

Re: Eastside Interceptor Sewer Rehabilitation
Project Status Report

Dear Don:

We are pleased to provide the following project status summary for the Eastside Interceptor Sewer Rehabilitation project. Our most recent monthly invoice for work on this project is attached for your consideration.

1. Eastside Interceptor Sewer Rehabilitation:

1. IEPA SRF Loan Facility Planning Report – Facility Planning Report work is underway and shall be completed by the end of 2024.
2. Construction Access – Currently in process of scheduling Survey to complete topographic/boundary survey.
3. Design Engineering – Shall commence upon completion of Task No. 2
4. Bidding Coordination – Shall commence upon completion of Task No. 3 and upon authorization from the District to advertise the project for bids.
- 5A. IEPA SRF Loan Application – Shall commence upon completion of Task No. 1 and shall coincide with Tasks 2 and 3 until an executed Loan Agreement has been received from IEPA.
- 5B. IEPA SRF Loan Administration – Shall commence upon the execution of the Loan Agreement and will be ongoing during construction phase of the project.

If you have any questions or need any additional information regarding the status of this project, please feel free to contact me any time. Thanks.

Sincerely,

FARNSWORTH GROUP. INC.

Shane Niedzwecki, PE
Senior Engineer