

DIRECTOR OF ENGINEERING REPORT

September 27, 2023

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

22ENG44 East Headworks Grit Classifier Replacement:

SCOPE: Removal and replacement of the east headworks grit classifiers, grit removal conveyor and all appurtenances necessary to deliver a fully functioning integrated grit washing and removal system. SDD has pre-purchased grit washers, the removal conveyor, and grit dumpster distribution sweep plate. Contractor will assume responsibility for coordinating receiving, unloading, and staging equipment from the manufacturers.

Contractor: Christy-Foltz, Inc Original Contract Price: \$169,950.00

Engineer: SDD R.E. Inspector: SDD

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Advertise	Pre-bid	Bid Open	Final Assaud	Notice to	Pre-	Contract Completion
Advertise Pre-blu	ый Орен	Final Award	Proceed	Construction	Dates	
05/10/23	05/30/23	06/15/23	06/21/23	9/21/23	9/21/23	1/29/24

Key Activities: Grit removal conveyor arrived in August and is stored at SDD site. We are anticipating a mid-October delivery of the Grit Classifiers and issued the Notice to Proceed and held a preconstruction conference this period.

21CMP04 Fermentation Reactor Pilot:

SCOPE: The construction of a pilot fermenter system which will include installation of a new primary sludge pump in the existing Primary Clarifier Control Structure (Structure 210) and associated piping; piping modifications downstream of existing waste activated sludge (WAS) pump in the WAS Pump Station (Structure 112); a new compressed air mixing system; a steel frac tank that has been fabricated as a fermenter (Temporary Structure 100) and requires connections to primary sludge, WAS, compressed air mixing system, odorous air treatment system, and Primary Effluent Channel (Structure 022).

Contractor: Burdick Original Contract Price: \$956,796.00

Engineer: Black and Veatch R.E. Inspector: SDD

Advertise	Pre-bid	Bid Open	Final Award	Notice to	Pre-	Contract Completion
Auvertise	Fie-bid	ви Орен		Proceed	Construction	Dates
03/24/23	04/04/23	05/09/23	06/21/23	07/31/23	07/24/23	12/21/23

Key Activities: Burdick has created the laydown pad for the Frac Tank. Rain for Rent has also delivered the Frac Tank onsite. Over ground piping has been installed. Awaiting 6" HDPE connecting tool arrival for additional connections. Hard piping to the Frac Tank, 210 Building, and 112 Building are being fabricated by Burdick in their shop. Christy Foltz, Burdick's subcontractor, has poured the equipment pad for the frac tank and is preparing the 210-equipment pad.

Burdick discovered and repaired a natural gas leak on the east side of the plant. The leak was coming from the lower packing of the valve that feeds the 210 building.

Procurement of different materials for the Frac Tank are still on track for the pilot project to start January 2024. I&C is coordinating Scada work with Farnsworth Engineering and their Engineers and plc programs for the 210, 112, and 009 buildings.

SDD EST. 1917 SANITARY DISTRICT OF DECATUR, IL

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NON-CONSTRUCTION ACTIVITY

DESIGN - 22ENG31 ADMINISTRATIVE OFFICE COMPLEX:

Phase 1 - Schematic Design (10 weeks) is in process and will focus on:

- 1. Confirm programming of interior spaces and adjacencies
- 2. Review public access and site security concerns.
- 3. Conduct a preliminary code analysis.
- 4. Develop conceptual designs for the building layout and site orientation.
- 5. Identify major laboratory equipment.
- 6. Establish building security requirements.
- 7. Develop conceptual HVAC system options.
- 8. Confirm existing electrical utilities and power capacity.
- 9. Review energy efficient design strategies for net zero goals.
- 10. Review available site utilities, including potable water, non-potable water, sanitary, gas, and electric.
- 11. Perform siting evaluation based on existing utility locations, potential roadway improvements, and public access.
- 12. Perform and prepare topographic survey of the proposed site.
- 13. Evaluate drainage and detention requirements.
- 14. Evaluate parking requirements.
- 15. Develop a schematic design level cost opinion.

Design kickoff meeting with AEX is scheduled for 9/25/23. The staff is negotiating the agreement with Black and Veatch for the assistance with the design of the laboratory and expect an agreement will be reached and available at the October trustee meeting.

22ENG02 - Lost Bridge Force Main Renewal

The designer is Clark Deitz Engineers (CDI). This project is being considered for being a SRF project which would require a Facility Planning Amendment (FPA) be filed with the agency. We expect the FPA to be completed by the end of October.

Soil borings have been scheduled for 9/26 - 9/28 on Lost Bridge Rd bridge. SKS engineers is providing this service.

Dewatering Well Cleaning (North Final Clarifiers)

Three quotes were received for well cleaning services on the wells surrounding the North Cluster of clarifiers. The lowest cost quote was from SKS Engineers in the amount of \$11,550. Staff is proceeding with scheduling the cleaning work with a 2-3 week lead time for beginning the cleaning effort.

UPCOMING PROJECTS:

Collection System Master Plan - Resiliency Evaluation

The staff is working with Clark Dietz Engineers (CDI). This scope of work will focus on the NE Quadrant of Decatur.

Theoretical capacity evaluations have been completed for the interceptors. Additional risk assessment data has been requested for pumping stations and is being prepared by staff.



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Clarifier Rehabilitation (South Cluster)

Similar to previous projects, staff is utilizing drafting services from Clark Dietz for preparing drawings necessary for this project. The project includes replacement of 3 isolation gates on the influent channels, painting 2 carbon steel clarifiers, performing maintenance work on the clarifier floors, and repairing 8 isolation gates in the nitrification aeration tanks.

Final revisions to plan drawings were provided to CDI this last period and technical specification development is ongoing.

INTERGOVERNMENTAL ACTIVITIES

Staff has continued participating in meetings with the CITY and ADM for the "NE quadrant work group" looking at water and wastewater needs in this corridor. ADM service partners have formally supplied the needed wastewater flow information necessary for establishing pumping demand for the Brush College pump station.

Force main routing to the Damon PS is under review.

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

SANITARY DISTRICT OF DECATUR, IL

PROJECT MANAGER REPORT

September 11th, 2023

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ACTIVE PROJECTS

22ENG45 Primary Clarifier #5 Replacement Project:

SCOPE: Removal and replacement of the existing primary clarifier. Work will include the procurement, installation and commissioning of a new circular primary clarifier and appurtenances. Painting of UV light exposed and submerged carbon steel components, and miscellaneous electrical adjustments to facilitate the removals and commissioning of the new process unit.

Contractor: Plocher Original Contract Price: \$1,155,600.00

Engineer: SDD Sum of Change Orders: \$0

R.E. Inspector: SDD Total Value: \$1,155,600.00

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Advortico	vertise Pre-bid	Bid Open	Final Award	Notice to	Pre-	Contract Completion
Auvertise				Proceed	Construction	Dates
00/16/22	09/27/22	11/01/22	11/17/22	11/20/22	Feb 2024	330 days-Substantial
09/16/22	09/2//22	11/01/22	11/17/22	11/30/22	(tentative)	360 days - Final

Key Activities: <<No Update from August>> Component delivery moved from October 2023 to late February 2024 (provided by Walker Process representative). Original key dates were demolition starting 08/09/23, coating removal/reapplication start 08/23/23, clarifier install start 09/06/23, and cleanup/demobilization finish 10/12/23. New dates will be updated following a solid manufacturing schedule.

21ENG40 Replacement of Sludge Transfer Pump:

SCOPE: Remove and replace the existing Abel Sludge Transfer Pump (south) that has reached the end of its useful life.						
Contractor: Burdick Plumbing and Heating Original Co					ct Price: \$303,5	74.00
Engineer: SDD				Sum of Change Orders: \$0		
R.E. Inspector: SDD				Total Value: \$303,574.00		
Advortice	Pre-bid Bid Open	Did Onon	Final Award	Notice to	Pre-	Contract Completion
Advertise	Pre-blu	Bid Open	Filial Awaru	Proceed	Construction	Dates
00/24/22	10/11/22 11/03/22	11/17/22	01/09/23	12/20/22	180 days-Substantial	
09/21/22					210 days - Final	

Key Activities: Abel Pump installed 9/11/2023. Fitment of pipes and electrical connections is ongoing and estimated project completion is the middle of October.

22ENG08 Roof Replacement and Maintenance Project

SCOPE: Wet Insulation replacement and wood nailer replacement. EPDM roofing maintenance throughout complex buildings. Modified Bituminous Membrane roofing repair and replacement as needed. Metal roof panel installation and replacement of roofing system. Fluid Applied Roofing repair and replacement as needed. Miscellaneous shingles to be fixed, and granular roofs to be touched up.

Contractor: TBD Original Contract Price: \$TBD Engineer: SDD Sum of Change Orders: \$0 R.E. Inspector: SDD Total Value: \$TBD

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Auvertise		rillal Awaru	Proceed	Construction	Dates	
08/24/23	09/07/23	09/28/23	TBD	TBD	TBD	90 days-Substantial
00/24/23	03/07/23	03/26/23	IBD	IBD	160	120 days - Final



PROJECT MANAGER REPORT

September 11th, 2023

Key Activities: Bids were rejected from the bidding process from contractors over bidding the work and the scope of the project. The contract is back out to bid, with a pre-bid meeting 09/07/2023 and bid opening 09/28/2023.

22ENG09 Seal Coating and Road Repair

SCOPE: Removal and replacement of roadway around the Digester complex, Water tower access road, and various patches around the Sanitary District Plant. Seal coating around the Administration building, and Maintenance building. Restriping of the parking lots adjacent to the maintenance and administration buildings.

Contractor: Dunn Company, INC.

Engineer: SDD

Sum of Change Orders: \$0

R.E. Inspector: SDD

Total Value: \$196,365.00

Notice to Pre- Contract Completion

Advertise Pre-bid Bid Open Final Award Notice to Pre-Contract Completion Dates

05/26/23 06/13/23 06/29/23 07/19/23 07/25/23 08/08/23 90 days-Substantial 120 days - Final

Key Activities: This project is complete we are waiting for the final administrative paperwork to arrive. Admin parking lot and Maintenance parking lot have both been seal coated and crack filled. The parking spaces have been painted and updated to ADA standards. Digester roadway, water tower roadway, and two patches have been milled down, and base course has been added. The culvert at the base of the water tower has been replaced. The surface course has been laid and the roadways have been opened to traffic.

23ENGXX Sidewalk and Stairs Replacement Project

SCOPE: Removal and replacement of the stairs east of the Admin building, handrails and the sidewalks directly attached to them. Contractor: TBD Original Contract Price: \$TBA Sum of Change Orders: \$0 Engineer: SDD R.E. Inspector: SDD **Total Value:** \$TBA Notice to Pre-Contract Advertise Pre-bid Bid Open Final Award Proceed Construction **Completion Dates** 90 days-Substantial 09/08/2023 09/14/2023 10/05/2023 TBD TBD **TBD** 120 days - Final

Key Activities: Project was advertised and the pre-bid meeting held as scheduled. Bid opening is scheduled for October 5th.



PROJECT MANAGER REPORT – Frac Tank

September 11th, 2023

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ACTIVE PROJECTS

21CMP04 Fermentation Pilot Project

- Bi-Weekly job progress meetings are held every other Thursday. Onsite with Burdick and in a conference call with Black and Veech.
- Burdick has created the laydown pad for the Frac Tank. Rain for Rent has also delivered the Frac Tank onsite.
- Over ground piping has been installed. Awaiting 6" HDPE connecting tool arrival for additional connections. Hard piping to the Frac Tank, 210 Building, and 112 Building are being fabricated by Burdick in their shop.
- Burdick has investigated a gas leak on the east side of the plant and found the source of one leak. The leak was coming from the lower packing of the valve that feeds the 210 building.
- Procurement of different materials for the Frac Tank are still on track for the pilot project to start January 2024.
- I&C is coordinating Scada work with Farnsworth Engineering and their Engineers and plc programs for the 210, 112, and 009 buildings.
- Christy Foltz, Burdick's subcontractor, has poured the equipment pad for the frac tank and is preparing the 210-equipment pad.





September 12, 2023

Mr. Don Miller, P.E. Sanitary District of Decatur 501 S. Dipper Lane Decatur, IL 62522

Re: Monthly Progress Update

Dear Mr. Miller:

This letter summarizes Clark Dietz's work on several projects for the Sanitary District of Decatur that were performed from July 31 through August 25, 2023.

CD Project #	Project	Work Completed this Month/Anticipated Work
D0540040	On-Call Drafting Invoice No. 12	This month:
	1110100110.12	Tasks:
		 Continued work on 50% submittal drawings for project 23ENG99, which includes gate rehabilitation at the Nitrification Aeration Tanks, Nitrification Aeration Tank Effluent Channel, Nitrification Clarifier Dewatering Wells, Nitrification Tank Distribution Structures, and Coating of Two (2) Nitrification Clarifiers.
		 Review Comments on 50% review plans from SDD via in person meeting on 8/8/23.
		 Provide SDD staff with Technical Specification for WWTP Coatings for incorporation into Bid Documents.
		o 90% Review Plans submitted to SDD via email on 8/23/23.
		Meetings:
		 Project Review Mtg via Teams on 8/8/23.
		o 90% Plan Review Mtg. in person on 8/25/23.
		 Schedule: Project is on target, if not slightly ahead of schedule, with 50% & 90% plans being delivered 2 weeks ahead of original timeline.
		In the coming month we anticipate the following:
		 Review and incorporate 90% Review comments to plans for project 23ENG99.
		 Continue to work towards Bid Documents deliverable for 23ENG99 by Mid-September.
		Continued coordination with SDD staff for 23ENG99.
D0540050	Lost Bridge	Work this month:
	Force Main	 Held regular internal progress meetings.
	Invoice No. 2	 Began compiling SRF Loan Application Documents to determine information request items for District.
		Continued Facility Plan Amendment as required for SRF funding and received some environmental signoffs. A draft of this amendment is expected by the end of September .

		Schedule: We are currently on schedule. Potential delays could be caused by 1) in ability to get timely geotechnical information and 2) slow responses from state and federal agencies on environmental clearance requests. In the coming month(s) we anticipate: Coordination of soil boring locations and coordination with the county regarding traffic control requirements on the causeway and other requirements in this area. Preliminary survey Follow-up coordination with directional drillers regarding feasibility based on the Geotech report. Prepare alternatives evaluation.
D0540060	NE Sewer <u>Master Plan</u> Invoice No. 2	 Work this month: Held a progress meeting with Clark Dietz and the District. Preliminary capacity calculations for interceptors completed. Reviewed as-built information to confirm District GIS data. Prepared outline for Master Plan report. Schedule: We are currently on schedule. In the coming month(s) we anticipate: Finalize data collection and review. Prepare preliminary calculations for remaining capacities in the sewers. Schedule a meeting to discuss system risk assessment.

Please call me at 217-373-8933 if you have any questions.

Very Truly Yours, Clark Dietz, Inc.

Andrea W. Bretl, P.E. Project Manager