



**DIRECTOR OF ENGINEERING REPORT**

**Nov 17, 2021**

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**

**20-07 Digester Complex Improvements:**

SCOPE: The Digester #3 floating cover and the face brick on all four digester tanks is being replaced.						
Contractor: Christy-Foltz			R.E. Inspector: SDD/W Gray - Donohue			
Engineer: Donohue and Associates						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion
11/17/20	12/01/20	12/22/20	02/17/21	03/18/21	03/18/21	3/13/2022 + 30 Final
Submittals Reviewed: 6 complete / 0 open						
Requests for Information (RFIs): 6 complete / 0 open						
Owner Requests for Proposal/Change Order (RFPCO): 1 complete / 4 open						

**Key Activities:** Digester #4 brick facial removal has been completed.  
Final coordination issues with the Digester Cover submittal were resolved this last period.

*Change Order #1 is before the board for consideration.*

**Issues:** Digester #3 Cover delivery is scheduled for 20 weeks out. Updated schedule from contractor indicates they are to begin installation of the cover on 3/11/22; 2 days before current substantial completion. Effectively meaning the contractor is 128 days behind the current schedule. Staff is expecting a proposal from the contractor requesting a time extension.

**Pending Changes:**

1. WCD 01: Additional Pump Down of Digester Contents: Contract documents required SDD to bring digester liquid elevation down to 593.0. Digester 3 quit pumping down at 595.33 and Digester #2 at 595.8. Contractor was put on time and material for the additional pumping required. \$ 31,668.00
2. Digesters #4 and #1 cold joint repairs. District issued Field Order to remove damaged concrete, prepare the leaking concrete seam, and install Xypex patch along the cold joint in the concrete walls. Work is being performed on a T&M basis. \$ T&M
3. Excessive corrosion was discovered on the interior access hatch infrastructure on Digester #3. Contractor was directed to replace corroded material with SS plate and angle. Work was done on a T&M basis. \$ T&M – Dig #3
4. Excessive corrosion was discovered on the interior access hatch infrastructure on Digester #4 and 1. RFPCO was requested for these hatches. A negotiated price of 28,776 Each. \$57,552.00



**20-01 Lake Shore Drive PS Replacement:**

SCOPE: The lift station is being reconfigured with submersible pumps.						
Contractor: Christy-Foltz			R.E. Inspector: SDD/ J Edenburn - CDI			
Engineer: Clark Dietz Engineers, Inc						
Advertise	Pre-bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Contract Completion
12/02/20	01/05/21	02/03/21	03/24/21	04/07/21	04/07/21	4/2/2022 + 30 Final
Submittals Reviewed: 38 received / 38 completed / 12 Rejected						
Requests for Information (RFIs): 1 submitted/1 completed						
Owner Requests for Proposal/Change Order (RFPCO): 1 Issued/1 Completed						
Change Orders: 1 completed						

**Key Activities:** Bypass operations scheduled to begin on Nov 3<sup>rd</sup> were delayed due to both electrical component failures and a deficient operational strategy. Contract requires 24/7 coverage at the site, and that was not being planned. Contractor was made aware of the issue and is adjusting their operational strategy according to the contract.

Looking ahead, contractor is expected to test bypass pumps on 11/15/21 and begin bypass “proof of operability” through 11/21/21.

**Issues:** The schedule provided shows substantial completion being 05/16/22 which is 5 weeks beyond contractual substantial completion date. The district received a request for a time extension which has been denied.

While setting up the bypass operations, the contractor punctured the ADM force main which required shutting down ADM pumps from 830am to right at 300pm on Thursday November 4<sup>th</sup> while repairs were made.

1. **Changes:** NONE PENDING

**20-01 South Shores Sewer Rehab:**

SCOPE: CIPP lining of approximately 17,700 LF of sewer, tie-in connections and approximately 700 vertical feet of cementitious manhole restoration.						
Contractor: SAK Construction			Engineer: Farnsworth Group, Inc			
Advertise	Pre-bid	Bid Open	Intent Award Final Award	Notice to Proceed	Pre-Construction	Contract Completion
12/15/20	02/02/21	03/02/21	03/17/21 05/26/21	06/21/21	06/15/21	270 Substantial 300 Final
Submittals Reviewed: 4 received / 0 outstanding						
Requests for Information (RFIs): none						
Owner Requests for Proposal/Change Order (RFPCO): none						

**Key Activities:** Sewer cleaning, and 30” lining operations are ongoing in a timely fashion. Manhole rehab started on 11/8/21 and is progressing on the West side of Rt. 51.

**Issue:** No construction related issues currently. Staff has been fielding several community related noise issue calls in the NE Allen Bend area along the lake. Sound has been vector trucks cleaning, excavator preparing for inversion of liners, etc.... Contractor will be out of the area within 2 weeks.

**20-19 Wyckles Facility Sludge Inlet Repairs:**

SCOPE: Scope of work includes the removal of existing lagoon chutes that have collapsed and reinstalling chutes incorporating a shotcrete blanket to bridge the void left by removing the chute below the discharge.						
Contractor: Christy Foltz				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
01/22/21	03/04/21	04/15/21	04/22/21	05/03/21	05/13/21	90 days

**Key Activities:** All work is complete. *Final Change Order is before the board for consideration.*

**20-13 Grit Drying Bed Upgrades:**

SCOPE: Scope of work includes the removal of existing concrete structure and installation of a 50'x60' grit drying structure with bin blocks and site drainage upgrades.						
Contractor: Christy Foltz				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
03/10/21	03/24/21	04/15/21	04/22/21	05/03/21	05/13/21	90 days
Submittals Reviewed: 5 submitted / 0 outstanding. Requests for Information (RFIs): 0 submitted Owner Requests for Proposal/Change Order (RFPCO): 0 requested						

**Key Activities:** All work is complete. *There is a final change order before the board for consideration.*

**20-08 Roof Rehabilitation Project:**

SCOPE: Each year the SDD Asset Management Program plans for rehabilitation on roofing systems on the district facilities. Of the 16 roofs inspected, 10 require attention. The scope includes replacement of existing roofing system of Bldg. 871 (well house) at Wyckles Facility. The balance of the 9 roofs is for application of coatings on buildings 870 & 872 (Wyckles Facility), 860 (St. Louis Bridge Pump Station), 584 (Oakland Avenue C.S.O. Facility), 526 (7th Ward C.S.O.), 502 (McKinley Avenue C.S.O.), and 557, 559, 561 (Lincoln Park C.S.O.).						
Contractor: Top Quality Roofing				Engineer: SDD		
Advertise	Pre-Bid	Bid Open	Final Award	Notice to Proceed	Pre-Construction	Scheduled Completion
03/30/21	04/13/21	05/11/21	06/16/21	08/04/21	08/04/21	120 days

**Key Activities:** Roofing material has been placed at all locations except for the Wyckles Facility. Staff expects this work to be completed before Thanksgiving.

**Demolition of 1245 Koshinski Lane property**

SCOPE: The district is taking quotes for the demolition a single-family home located on property used for obtaining clay for the south sludge lagoon project.
Quotes have been requested from: Entler Excavating, Beyers Construction, Luka Excavating, JRH Services, Klein Excavating and are due by 3PM on November 22, 2021.
Site visit was scheduled and held on 11/11/21 at 10am for parties interested in walking the site with the owner.



**NON-CONSTRUCTION ACTIVITY**

**ADMINISTRATIVE OFFICE MASTER PLANNING:**

Update: Staff expects a draft of the Phase 3 report to be delivered the week of 11/15/21.

Phase 1 – Current State facility assessment looked at the condition and costs to maintain existing administrative infrastructure.

Phase 2 – Space Needs and Building Utilization was to assess the current space available, evaluate the utilization of that space and calculate the raw space required based on industry standards.

Phase 3 - (\$10,000) Phase 3 is to perform a pre-design level study ranging from modifications and upgrades to the existing facilities to the possibility of a new facility, based on the space needs that were identified in Phase 2. The study includes a high-level cost opinion that provides context for the findings from Phase 1 and 2. A review of the existing lab space as a standalone structure is also included in Phase 3.

**PLANNING: PHOSPHORUS REMOVAL**

Staff issued the request for qualifications (RFQ) for firms qualified and interested in performing Program Manager (PM) services to the Sanitary District of Decatur for Phosphorous Removal Planning, Design Criteria generation, Design Administration, Watershed management and general NPDES Permit compliance items related to milestones for meeting permit target dates.

The schedule published in the RFQ follows the following timeline:

PRE-SUBMITTAL CONFERENCE	<del>06/08/21</del>	Completed
RFQ'S DUE	<del>07/16/21</del>	Completed
REVIEW SUBMITTED RFQ'S	<del>07/19 thru 07/30</del>	Completed
SCHEDULE/ COMPLETE PROPOSAL INTERVIEWS	<del>08/09 thru 08/20</del>	Completed
MAKE SELECTION	<del>08/24/21</del>	Completed
AWARD CONTRACT	10/20/21 DELAYED	

Black and Veatch is awaiting comments back from SDD on the SCOPE of WORK.

**DESIGN: Fermentation Reactor – Black and Veatch**

Design Kickoff Meeting	<del>03/10/21</del>	Complete
Preliminary Engineering Assessment	<del>05/10/21</del>	Complete
30% Design Submittal/Review	<del>06/21/21</del>	Complete
90% Design Submittal/Review	<del>08/19/21 10/29/21</del>	Complete
Final Design Submittal	<del>08/27/21</del> 12/10/21	

Opinion of probable construction cost arrived for review by SDD. Projected cost is significantly higher than expected and staff is considering alternatives to proceeding with the construction.

**UPCOMING PROJECTS:**

**Effluent Pump #03 Replacement:** Staff is beginning to prepare project plans to replace the third effluent pump. This is the last of 3 pumps that we are converting to VFDs which replaces 3 of the 5 original Flygt pumps in the station. Trustees approved the purchase of this pump on Aug 18, 2021. A purchase order has been issued for its procurement. Lead time of the pump is 24 months, and we expect to advertise an installation bid specification in the month of December.



## DIRECTOR OF ENGINEERING REPORT

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**Replacement of Sludge Transfer Pump:** <<No Update>> Staff is preparing plans for the procurement and installation of a replacement transfer pump. This pump moves sludge from the main treatment plant to the Wyckles Facility.

**Sodium Bisulfite Tank Replacement:** <<No Update>> Development of project plans to replace the two sodium bisulfite tanks is ongoing.

**STUDY: East Headworks Grit Flow Modeling – Clemson Engineering Hydraulics**

<<No Update>> This effort is to model the flow of grit through the east primary headworks. Dr David Werth of Clemson Engineering is the hydraulic modeling expert that worked with SDD through the effluent pump station flow issues. The district experiences imbalanced grit loading through this structure and with the West Headworks upgrades is desiring to address the imbalanced grit load. This modeling effort is expected to be around \$30,000.

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**INTERGOVERNMENTAL ACTIVITIES**

Staff is working through an intergovernmental agreement with the CITY to address the costs of relocation for the Faries Park Interceptor.

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**PROPOSED BOARD ACTION**

For the Board's consideration from the Engineering Dept this meeting:

1. **Change Order 01 – Digester Improvements**
2. **Change Order 01 – Sludge Inlet Repairs**
3. **Change Order 01 – Grit Drying Bed**

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



# Memorandum

Date: November 1, 2021

To: Donald B. Miller, P.E., Director of Engineering

From: Will Gray, P.E., Donohue & Associates

Re: Project Status Report  
2020-07 Digester Improvements Project  
Donohue Project No. 13782

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## 2020-07 Digester Improvements Project

- Progress meetings are being held monthly on the last Thursday of the month.
- Christy-Foltz has identified coating failures inside both digester #2 and #3, with the failures in #2 being more prevalent than those inside #3. C-F to remove the failed coatings back to a solid edge as a T&M change order (RFPCO #002). C-F has removed the failed coatings from within Digester #2 & Digester #3.
- Christy-Foltz has completed removal of Digester #3 lid. They left the center scaffolding assembled in the tank to assist with installation of the new lid.
- Digester #4 has been cleaned. Digester #2 is back in operation. C-F to begin brick removal work on Digester #4.
- Christy-Foltz has removed all the brick on Digester #2 and #3. Ridgelok panels for Digester #2 and #3 have been installed. Panels for Digester #4 are on site and will be installed once brick is removed.
- The exterior concrete wall repairs are complete on Digester #2 and #3. This work to be paid for as a T&M Change Order (RFPCO #003). Digester #4 wall to be inspected for damage once brick is removed.
- The manway to Digester #3 was replaced as a T&M change order. Pricing for replacement of manway to Digester #1 and #4 has been received from C-F in RFPCO #004. District to decide if they want to replace those manways soon.
- C-F will be soon moving the staircase that was temporarily moved to the north side of the digester complex back to its original position on the west side of the complex.
- WesTech submitted the digester cover shop drawing, and it was approved by Donohue on October 21, 2021. They are expecting a lead time of 20-weeks before the cover will ship to site. Using October 21, 2021 as the start date of the 20-weeks gives an expected shipment date of March 10, 2022. The project's contractual substantial completion date is March 13, 2022. Given this information, it is the opinion of Donohue and the District that the project will not be substantially complete by March 13, 2022. A letter was sent to notify Christy Foltz on October 29, 2021 that the project schedule is not in compliance with the contractual substantial completion date. The letter requires C-F to provide the District and Donohue with



a revised construction schedule showing how they will bring the project back into compliance with the contractual substantial completion date, or provide justification for a time extension. A response is expected by the next job progress meeting, which is scheduled for November 4, 2021.

CHANGE ORDER LOG

- Change Order #1 will be issued soon, it will contain pricing for RFPCO #002 and #003.
- RFPCO#001 – Brick Recycling was rejected by the District.
- RFPCO #002 – Coating Repair is proceeding as a T&M change order.
- RFPCO #003 – Digester Wall Repair is proceeding as a T&M change order.
- RFPCO #004 – Digester Manway Replacement Unit Pricing
- RFI #006 – Digester #3 Manway Repair T&M
- Stewart Spreading Additional Pumping

Updated: 11-1-2021	Open	Closed	Total
Submittals	0	7	7
RFI	0	6	6
Change Order Request	4	1	5
Change Orders	0	0	0

November 5, 2021

Sanitary District of Decatur  
501 Dipper Lane  
Decatur, IL 62522

Attn: Don Miller, Director of Engineering

Re: 20-06 South Shores Rehab  
Project Status Report

Dear Don:

We are pleased to provide the following project status summary for the current project that Farnsworth Group is currently working on for the District. Our most recent monthly invoice for work on this current project is attached for your consideration.

**1. 20-06 South Shores Sewer Rehab (L17-5456):**

**A. Construction Progress:**

- Cured-in-place lining installation is proceeding along the second segment of the interceptor sewer main 763 between Manholes 763B-01 and 763-22. As of 11/05/21, an initial portion of this segment has been lined from manhole 763B-01 to 763-40. This is the final segment of sewer remaining to be CIPP lined and is anticipated to be completed by end of December.
- Cured-in-place lining installation along the first segment of sewer interceptor main branch (763) from Manholes 22 to the pump station is complete.
- Cured-in-place lining installation along the 12" sewer main branch (763A) is complete.
- Cured-in-place lining installation along the 18" sewer main branch (763B) is complete.
- Bypass piping is installed and operational for the second segment of the interceptor main 763 from S. Main St. (Bus 51) to the east end of S. Shores Dr.
- Cleaning and televising work is proceeding along the second segment of the interceptor sewer main 763 between Manholes 763B-01 and 763-22.
- Access manhole between 763-31 and 763-32 has been installed.
- Manhole rehabilitation work has begun this past week on the first segment of interceptor sewer main 763 between Manhole 22 and the St. Louis Bridge Pump Station.

**B. Construction administration and on-site observation are ongoing with review of shop drawings and Contractor Pay Applications.**

- RFI's: 8 RFI's received via email; 8 RFI's reviewed and returned via email to date
- Change Orders: None received to date



Sanitary District of Decatur

October 1, 2021

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- Shop Drawings: 7 submittals received; 7 submittals reviewed and returned to date
  - Contractor Pay Applications: Pay Application #4 has been reviewed and recommended by Farnsworth and submitted to the District for review and approval.
  - Additional Construction Observation provided this month: 16 Hours
- C. As of this Project Invoice #12 (Invoice No. 228971), we have billed \$135,892.49 to date on the project scope which is 65% of the total estimated fee of \$207,800. The additional construction observation services billed to date of \$5,443.59 have been provided separately from the Base scope on an as needed basis.

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.

Kevin N. Hannel, PE  
Engineering Manager



November 4, 2021

Mr. Donald Miller  
Sanitary District of Decatur  
501 S. Dipper Lane  
Decatur, IL 62522

Re: Lakeshore Drive Lift Station Replacement Project  
SDD Project No. 20-01  
Clark Dietz Project No. D0540030  
Monthly Progress Update

Dear Mr. Miller:

This letter summarizes the work of the Lakeshore Drive Lift Station construction project for October 2021. This month their major activities included reviewing submittals and coordinating weekly progress meetings.

- Submittals: Christy-Foltz has sent 56 submittals, five were reviewed and returned during the October 2021. Twenty-three submittals have been in whole or in part rejected. When scoping the project Clark Dietz assumed a total of 40 submittal reviews. We have been concerned that there are many submittals that the contractor has not yet set so this month we also made and transmitted a log of additional submittals that we are expecting.
- RFIs: Christy-Foltz has sent six RFIs, two were reviewed this month.
- RFPs and Change Orders: We have sent one RFP for the elimination of the 20-inch forcemain, which resulted in Change Order 1. The contractor has sent one change request which was reviewed and commented upon.
- Pay Application: Christy-Foltz has sent four pay applications.
- Meetings: Clark Dietz prepared agendas, lead, and prepared minutes for four construction progress meetings during this billing period, at your request.
- Schedule: Christy-Foltz has submitted four proposed construction schedules. The last schedule was rejected. It did not have much additional data than the first three schedules, but the task dates were more realistic. We believe there is risk that the contract schedule will not be met based on the current status of rejected shop drawings and the pace of work to date. Weekly progress meetings are being held to help the Contractor get back on schedule.

Significant upcoming contract dates are summarized as follows:

- April 2, 2022 – Substantial Completion
- May 2, 2022 – Final Completion

In November, we anticipate that the contractor will tap the 30" forcemain that is used to convey flow from Lakeshore Drive lift station to the Eastside Booster station. Once the forcemain is tapped, bypass pumping can be started and then demolition of the existing station can start, and construction of the new station can begin. We anticipate that Clark Dietz's time during this period will include receiving and reviewing additional shop drawings, coordinating with the contractor regarding their schedule and questions, and attending and preparing agendas and minutes for progress meetings.

The District has requested that we have near full-time construction inspection on days and during activities that there is a significant amount of work occurring at the construction site. We will track this time separately from our existing task. No time for this task occurred during October, but we will have hours for observation in November.



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



October 7, 2021

Mr. Steve Capin  
Project Manager  
City of Evansville  
Water & Sewer Utility  
1500 Waterworks Rd  
Evansville, IN 47713

Re: East WWTP Capacity Expansion Improvements  
Phase 2 Construction Services - Project Status Report  
Clark Dietz Project No. E0080372  
Invoice No. 22

Dear Mr. Capin:

This invoice covers work performed August 28, 2021 through September 24, 2021. Invoices from Arcadis, CTL, Hafer, NV Grant Services, Powers Engineering, Sellers, and VS Engineering are included with this invoice. Clark Dietz worked on the following tasks during this period.

- Sub-consultant coordination
- Bi-weekly project meetings
- RPR Services
- Pay Application Review
- RFI review (2 reviewed and returned)
- Submittal review (8 reviewed and returned)
- RFPs preparation (3 prepared)
- Field order preparation (1 prepared)
- AAR preparation (0 prepared)

Work that we anticipate in the coming month includes:

- Submittal Review
- RFI review
- Sub-consultant coordination
- Bi-weekly project meetings
- RPR Services
- Field Order preparation
- Pay application review

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



October 7, 2021

Mr. Joe Hackney  
Village Manager  
Village of St. Joseph  
PO Box 716  
St. Joseph, IL 61873-0716

Re: Wastewater Treatment Plant Upgrades  
Treatment Plant Design - Project Status Report  
Clark Dietz Project No. S0010100  
Invoice No. 13

Dear Mr. Hackney:

This invoice covers work performed from August 28, 2021 through September 24, 2021. Clark Dietz worked on the following tasks as part of the Wastewater Treatment Plant Design:

- IEPA Construction permit application submittal, which required: finalization of the Preliminary Engineering Report, Finalization of 90% drawings and specifications, and preparation of the permit application paperwork.
- Coordinate IEPA SRF paperwork.
- Coordination between electrical, structural, and mechanical engineering.
- Electrical engineering design detail work on all structures and processes
- Mechanical engineering design (plumbing and HVAC) for the buildings
- Site piping and grading design
- Controls system design and coordination with the SCADA integrator

In the coming month we anticipate the following tasks:

- Submit IEPA required documentation for the SRF loan funding
- Final design coordination items
- Internal QAQC

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