

# Director of Engineering Report

Mar21, 2012

District staff manages projects, consultants, contractors and equipment suppliers. Consultant reports and Project Managers reports are included in this section and detail the status of the associated study, design, or construction projects.

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## Active Projects

### **Argenta Collection System:**

- Contractor is Dawn, Inc. – \$5,967,246.52
- *As of Feb 29, 465 days into a 453 day contract; 100% Elapsed time - Work is 97% complete*
- *Collection system, and Force main installations are complete; DAWN is not working and will re-mobilize in spring to finish up restoration, seeding, pump station generator, and punch list items.*

**2011 Stevens Creek South Interceptor Rehab:** This rehab project includes lining a total of 13,500 LF of primarily 48" interceptor with 24 manholes requiring significant rehabilitation.

- *Contractor: Kenney Construction*
- *Work is complete; contractor is preparing final backup for field orders to finalize project with FINAL change order.*

**2011 Trestle Improvement Project:** This project includes Replacement of the 4 concrete North Stevens Creek trestles (reusing existing piers) and repair the New Main Interceptor trestle.

- *Contractor: ECI; Contract end date: July 20, 2012*
- *As of Feb 29, 128 days into a 270 day contract; 47% Elapsed time - Work is 62% complete*
- *Trestles 1, 2, 3, and 4 have been replaced. Rehab work on #5 is underway. Some reconstruction of the upstream access is underway to prepare for the rehab inside the trestle.*

**2011 Eastside Booster Pump Station Project:** This project includes relocating the electrical cabinets to a new location, eliminating confined space entry into the pump area of the station, and installation of hatches over the pumps.

- *Otto-Baum; Contract Award 8/17/11; Notice to Proceed was issued 9/26/11; Project Completion is 3/23/12 – 180 day contract.*
- *Building activities to be completed this week.*
  - *Facia and guttering; Sidewalks and entry; electrical conduit; disconnects; Ameren feeds to building*
  - *Pump station is back in operation via temporary connections.*
- *There has been a delay in receiving the control cabinets and will be another 2-3 weeks before they arrive on site.*
- *Contractor should be finalizing site grading next week, and removing the large pile of remaining soil from the site.*

**2011 LEVEE Improvement Project:** This project is considered maintenance by IEPA. The purpose of the project is to increase the elevation of the levee consistent with a 100 year Army Corps of Engineers certified levee.

- *Christy Foltz: Contract Award 7/14/11; Notice to Proceed 7/29/11; Contract Completion Date 1/25/12*
- *Concrete/gates/grouting work on levee is complete. Fencing is installed (top barbed wire will be finished 3/23/12 and lower tension will be completed by 3/30/12.*
- *The weather has allowed contractor to continue on with road base preparation.*
- *We issued a Field Order this period to modify the base material preparation for the oil and chip roads. As base material was being prepared, the contractor was unable to prepare only the top 6" of road material as provided for on the plans (over 12" of base course material was being impacted). Resolution was to bring in a tiller from Dunn and till up to the depth needed for regrading the levee road to drain water away from the wall. This Field Order (which will be incorporated into a future change order) will cause a net decrease to the contract around \$47,000.*

- *Material that has been stockpiled for dirt work in the SouthEast area of the plant has been too wet, but is drying well and should be workable next week, weather permitting.*

**2011 High Efficiency Blower Project:** District has received a \$400,000 grant from DCEO for this project. This project begins the districts movement to the higher efficiency, lower cost to operate blower scheme that current technology offers.

- *Blowers and Electrical equipment have all been delivered.*
- *LEANDER Construction: Contract Award 1/18/12; Contract Completion Date 5/15/12*
- *All concrete work is complete and underground conduit is installed.*
- *Bodine is onsite and is continuing conduit installation.*

**2011 Sewer Cleaning and CCTV Project:** As part of an ongoing Asset Management program for our Interceptor System, the district cleans and televises approximately 10% of the system each year. This years work includes 3,472 LF along Finley Creek, 8,962 LF along East Side Separation Sewer, 12,114 LF along South Shores/Mt Zion, 3,964 LF along Hickory Point, 7,424 LF along Hickory Point West, and 3,808 LF along the SouthEast Interceptors.

- *VISU-Sewer: Contract Award 1/18/12; Contract Completion Date 3/29/12.*
- *Contractor is finishing up week of 3/23/12. There was a significant amount of grit that had settled in the 42" interceptor that runs along the lake by the South Water Treatment plant and into the cloverleaf North of South Shores and then turns North.*
- *Final Change Order should be ready next month.*

**2011 Primary Clarifier #1 & #2 Rehab:** This project includes the removal and replacement of the primary clarifiers #1 and #2 drive mechanisms; the replacement of the bridge; and replaces electrical conduit and controls.

- *Contractor: Joseph J Henderson % Son, Inc. (JJH) Contract Award: 1/30/12;*
- *District is working through obtaining insurance information prior to issuing Notice to Proceed – expect to issue NTP week of 3/23/12.*

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## **INTERGOVERNMENTAL ACTIVITIES**

None this period

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## **Other Activities:**

**South Shores Drive Bridge Replacement:** Bridge is being raised 3 feet as it is being replaced. We have an interceptor at the current level of the bridge, subsequently to raise the bridge, we must raise the interceptor.

- *City of Decatur has requested SDD enter into an Intergovernmental Agreement (IGA) for the raising of the interceptor.*
- *The agreement is before the Board for consideration.*

**Water Tower Maintenance Contract:** SDD is preparing to take bids for the multiple year management of the water tower as a district asset. The water tower is in need of several maintenance items, most notably the interior coating of the tank, and the exterior coating on the tank. Evaluation done last spring showed the interior lining of the tank had begun blistering and needed immediate attention. The bids documents being developed are for Painting, Lining, and virtually all physical components of the water tower maintenance is covered in the proposals.

- *The interior and exterior coating specifications were outlined this last period and will finish and advertise the maintenance and management portions of the specification prior to the April board of trustee meeting.*

**2012 Energy Savings and Grants Investigation:** To continue with upgrading the digester complex and reducing the energy needs of the district, the district is evaluating grant opportunities again in 2012 to look at opportunities to tap into DCEO Public Sector Energy Grants, DECO Public Sector Biogas Grants, and an Illinois Clean Energy Foundation Biogas/Biomass Grant. This investigation is an extension to the 2011 Grant for high efficiency blowers, and will look further into the grant potential in the channel air blowers, digester co-gen system, mixing system upgrades, and into air demand needs in Nitrification Aeration system.

- *Investigation with Clark-Dietz Engineers is ongoing. Grant applications are to be submitted by mid July.*

**DAF Upgrades:** District maintenance staff is working closely with the district asset manager on the pending upgrades to the DAF units. Several valves/pumps have been replaced in the DAF building this last period, and plans are to keep progressing through the DAF's to bring 2, 3, 4 and 5 into solid operable condition.

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**PROPOSED BOARD ACTION**

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

**1. South Shores Drive Bridge – Intergovernmental Agreement w/ City of Decatur**

Further details can be found in the Summary of Motions.

If there are any questions, please contact me by telephone at 422-6931 ext 216, or by email at DonM@sdd.dst.il.us

**BAINBRIDGE**

March 12, 2012

**GEE** & Associates

**MILANSKI**

1670 South Taylorville Road, Decatur, Illinois 62521  
(217) 423-8600 FAX (217) 423-8677

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## **ENGINEERING STATUS REPORT**

The following is a brief summary of the Projects involving Bainbridge, Gee, Milanski and Associates. Charles Hunsinger and Curt Cassidy will attend the meeting. [chunsinger@bgmengineering.com](mailto:chunsinger@bgmengineering.com)

### **ARGENTA SANITARY SEWER CONSTRUCTION (08-076C)**

This project consists of the construction a sanitary sewer collection system for the entire Village of Argenta. The Contractor is Dawn Contractors, Inc. from Joliet, Illinois. Construction is expected to take until June 2012.

Dawn is maintaining the streets through the winter. Work will resume in the spring when landscaping the street paving can be completed.

### **TRESTLE IMPROVEMENTS CONSTRUCTION (09-063)**

The project consists of replacing 4 concrete trestles on the North Stevens Creek Interceptor and repair to the 60" Main Interceptor trestle.

Trestles 1, 2, 3 & 4 are now complete. The Contractor has started work at Trestle 5, which is east of the plant on the 60-inch "New Main Interceptor". The work will involve lining the pipe and installing joint seals.

Payment Estimate 4 is before the Board for \$551,196.54. The project is 62% complete and 47% of the time has elapsed.

### **STEVENS CREEK SOUTH SEWER REHABILITATION CONSTRUCTION (09-093)**

This project consists of lining and joint repair of the 48" diameter Stevens Creek South Interceptor and two 60" interceptors between the old and new head works.

All work is complete. The Contractor must submit backup information for several field orders so they can be incorporated into a change order. We are currently having discussions with the subcontractor National Power Rodding about the scope of extra work.

### **2011 LEVEE IMPROVEMENTS CONSTRUCTION (09-043)**

This project consists of raising the levees around the treatment plant. The levee along the river and Stevens Creek will be raised with a concrete wall.

The concrete wall is complete. The Contractor is finishing the installation of the flood gates and fencing. The Contractor did not request payment this month.

# Sanitary District Of Decatur

501 Dipper Lane \* Decatur, Illinois 62522 \* 217/ 422-6931

## MONTHLY ACTIVITY SUMMARY

### Main Plant Facility Maintenance Division

To: Don Miller

Fr: Fred McKinney / Craig Jones

Date Mar 5 , 2012

#### Work Orders:

For the month of Feb., these are the totals of work orders completed.

WORK ORDER SUMMARY	July-11	Aug-11	Sept-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	
Total # Work-Orders Completed	628	679	958	807	804	1,038	882	796	
Total # PM Work Orders Completed	567	616	883	729	656	803	733	656	
COMPLETED BY TYPE									
Weekly PM's	540	531	721	586	569	640	607	548	
Safety PM's						24	22	32	
6 Month PM's	22	54	128	96	16	110	79	58	
Yearly PM's	5	31	34	47	33	29	25	18	

**Digester Complex:** Eight new sludge valves have been installed, plus four new gas valves.

#### Nitrification Return Pump:

New check valve and valve has been purchased. Installation will be in the near future.

#### Secondary Clarifier #6:

The bottom of Clarifier has been removed and contractors will be completely renovating as soon as contract is awarded.

#### Effluent Building 325:

ASSET MANAGEMENT review of all equipment in this building is underway and we expect to complete by the end of January. Painting of electrical room is complete..

#### Nitrification Clarifiers:

Nitrification clarifiers have been painted, new seals and scum arms have been installed in the tanks, and new scum trough has been installed on #4 tank. Number two clarifier will have a new scum plate installed in the spring.

CC. Monte Cherry  
Kent Newton

SANITARY DISTRICT OF DECATUR  
501 Dipper Lane Decatur, Illinois  
(217) 422-6931 Fax (217) 423-8171

MONTHLY REPORT  
February 2012

TO: Don Miller, Director of Engineering

FROM: Randy McEldowney, Outside Facilities Manager

- **CSO Events**

- We had 1 event due to excessive rainfall. We received over .7" of rainfall for the month.

- **7<sup>th</sup> Ward Interceptor**

- An 8" sewer tap had roots coming into the SDD 30" interceptor at 1645 W. Forest. Entler Excavating was working on a city sewer close the obstruction. I had them dig up the sewer and repair the tap. Total cost for the repair was \$4,571.88.

- **Wyckles Pit Hog**

- Pump on dredge quit working. Took pump to DIE for repair. Repair cost: \$11,839. New pump cost: \$40,000. Told DIE to repair. The pump has been repaired and is at Wyckles.

- **2011 Sewer Cleaning & CCTV Project**

- Visu-Sewer will have the project completed by March 16..



**Sanitary District of Decatur**  
501 Dipper Lane \* Decatur, Illinois 62522 \* 217/422-6931

**MEMORANDUM**

**TO:** Don Miller

**DATE:** March 12, 2012

**FR:** Randy McEldowney

**RE:** 2011 Sewer Cleaning & CCTV Project  
PROGRESS REPORT #2

This project consists of cleaning and televising approximately 39,744 linear feet of the Finley Creek, South Shores/Mt. Zion, Hickory Point, East Side Separation & Southeast Interceptors of varying sizes. Visu-Sewer started on January 31<sup>st</sup> on the East Side Separation Interceptor. 98% of the project is complete.

Notice of Award was issued to Visu-Sewer, Inc. on January 18, 2012.

Notice to Proceed was issued for January 30, 2012.

Bond & insurance submittal were approved.



**Sanitary District of Decatur**  
501 Dipper Lane \* Decatur, Illinois 62522 \* 217/422-6931

**MEMORANDUM**

**TO:** Don Miller

**DATE:** March 12, 2012

**FR:** Roger Dudley

**RE:** 2011 PRIMARY CLARIFIERS #1 & #2 REHABILITATION PROJECT  
PROGRESS REPORT #1

Project consists of removal & replacement of clarifier mechanism in primary clarifiers #1 & #2, coating the interior walls and channels of both clarifiers.

Notice of Award was issued on January 30, 2012.

Awaiting the submittal of contractor insurance and bonds for approval.