

Director of Engineering Report

July 17th, 2013

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.

Active Projects

2013 Trestle Modifications Project: This project includes changing the structural support system of the 4 North Stevens Creek trestles.

- Pre-bid was held 4/17/13; Bids opened as scheduled on 4/24/13
- Notice of Intent to Award was given to Christy-Foltz.
- Material has been ordered for the replacement super-structure.
- *Pre-construction meeting scheduled for 7/18/13.*

2012 Energy Efficiency Projects: *This project has a DCEO grant attached to its completion the final grant amount will be established upon certified results at the end of the project.*

- *Blowers and Master Control System is operational; staff is continuing to investigate discharge pressure issues.*
- *Punch list items are being completed;*
- *Will be submitting final grant request DCEO.*

2013 Digester Complex Improvements Project: This project consists of upgrades to the primary digesters' mixing systems with 4 Linear Motion Mixers to replace the current Pearth mixing systems; the addition of an electrical building to gain NFPA 820 code compliance in the primary digester complex; installation of automated drip traps and condensate collectors in the digester complex; and replacement of the waste gas burner to a separate location away from the digester complex.

- *Design Engineers: Donohue and Associates*
- *Pre-bid meeting conducted on June 3rd; Addendum 1 is being issued, will adjust Bid Opening to June 25th.*
- *We are submitting a letter to the Illinois Clean Energy Community Foundation requesting consideration for a funding grant. The letter was submitted by the deadline of July 15th, 2013.*

2013 Roof Rehabilitation Project: The project consists of: Rehabilitation of Bldg. 029 roof, repair of Bldg. 117 roof and replacement of Bldg. 112 and Faries Park Pump Station roofs.

- *The work on this project is complete;*
- *FINAL Change Order #1 is before the Board for consideration.*

2013 Clarifier Painting Project: The district, as part of our ongoing asset management program, paints and rehabilitates a portion of our clarifiers annually. This year, there are 3 primary clarifiers planned for rehabilitation. Painting of Primary Clarifiers 4, 5, and 6 is to be done under this contract.

- *Pre-Bid 6/25/13; Bids Opened 7/1/13*
- *Contract Award with Bazan Painting is before the Board for consideration*

2013 Roads Rehabilitation Project: The project consists of: Rehabilitation of roads around the 7th ward CSO facility, various sections of roadway around the plant, and warranty work in Argenta.

- *Specifications are complete; targeting an August 13th, 2013 bid open.*
- *Included in this year's project will be a separate division to complete warranty work in Argenta IL. It will be under a separate division to establish the amount to bill DAWN's surety company.*
- *Met with a representative of the surety company and walked the repairs in Argenta to review the scope of repair that needs to be completed.*

2012 BioMass to Energy Project: To continue with upgrading the digester complex and reducing the energy needs of the district, the district has received a 500k *DECO Public Sector Biomass to Energy grant*.

- After re-evaluating the biogas to pipeline grade alternative again, district staff has moved toward replacing a co-gen unit in lieu of pipeline grade natural gas.
- We are re-evaluating the size of the high efficiency combined heat and power (CHP) engine (replacement of 1 co-gen unit) and the type/size of gas cleaning system required.
- *Staff received updated report from Clark Dietz this last period; review is ongoing*

INTERGOVERNMENTAL ACTIVITIES

- Argenta – Met with the Argenta Sanitary District and Old Republic (DAWN's surety company) to review repair required on Argenta streets.

Other Activities:

Water Tower Maintenance Contract: The water tower is in need of several maintenance items, most notably the interior coating of the tank. Bids documents being developed are for Interior Coating and physical components of the water tower that currently need repair.

- *No additional information this period; Targeting - September bid open.*

Levee Certification: Levee certification is a technical finding for floodplain mapping purposes as part of the National Flood Insurance Program (NFIP), which concludes there is reasonable certainty that the levee protecting the area will contain the base 100-year regulatory flood. FEMA does not certify levees; FEMA is the recipient of levee certification determination which is forwarded by the District. If levee certification documentation is found to be in order, FEMA will then accredit the levee and the associated flood insurance rate maps depicting flood hazard will show the floodplain areas as protected from the base flood.

The details of requirements are still being reviewed, however the submittal will at least require by the district is a LOMR, Letter of Map Revision. The LOMR for the SDD LEVEE will require the submittal of 3 FEMA forms.

- A quote has been requested of Stantec, who manages flood plain LOMR submittals, and reviews the same for FEMA on a continual basis.
- FEMA is telling us the State Water Survey has completed hydrology (physical characteristics of the river channels) and only started hydraulic analysis (behavior of the water in the river) on this stretch of the Sangamon River and Stevens Creek. We are working with FEMA/ISWS on how to deal with the dual paths SDD / Illinois State Water Survey (ISWS) are on. If SDD/ISWS don't work together, there is a possibility that any additional hydraulic work SDD submits to IDNR and FEMA for review could be trumped by ISWS and the applicable water surface elevations could then change, causing any levee certification submittals to be re-done.
- *Contacted Stantec this period regarding status of quote. They indicated delay in providing quote has been due to flooding issues they have been dealing with this spring along Mississippi and Missouri Rivers. Quote is forthcoming.*

PROPOSED BOARD ACTION

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

- 1. Contract Award – 2013 Clarifier Painting Contract**
- 2. CHANGE ORDER #1 FINAL – 2013 Roof Rehab Project**

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@sddcleanwater.org



& Associates, Inc.
Consulting Engineers

(217) 423-8600 FAX (217) 423-8677

CHARLES R. HUNSINGER, P.E.
STEVEN G. BAINBRIDGE, P.E., P.L.S.
H. DAVID HARP, P.E.
MATTHEW B. FOSTER, P.E., P.L.S.
CURTIS J. CASSIDY, P.E.

July 8, 2013

ENGINEERING STATUS REPORT

The following is a brief summary of the Projects involving Bainbridge, Gee, Milanski and Associates. Charles Hunsinger will attend the meeting. chunsinger@bgmengineering.com

2013 TRESTLE MODIFICATIONS CONSTRUCTION (12-071)

The project consists of relocating the longitudinal support I-beams for the four trestles and modifying the lateral supports. This work is being done as a separate project from the Trestle Improvements project.

A contract was awarded to Christy-Foltz at the June Board meeting. The steel for the new beams has been ordered. Construction on the first trestle is scheduled to begin around the second week of August. Construction will take about 2 months.

Please notify us immediately if you are not the intended recipient.

OUTSIDE FACILITIES MONTHLY REPORT July 2013

TO: Don Miller, Director of Engineering

FROM: Paul Caswell, Asset Manager

- **Wyckles Facility**
 - Replacement barge mixer has arrived. Staff is finished modifying mounting bracket and is ready for installation.
 - Wyckles Dredge motor has been returned from Bodine and installed.
 - Wet well needs rehabilitated. Couplings, discharge piping, pump rails/brackets, are rusted and structural integrity is compromised. Replacement of ladder into wet will also be included as part of this work. Access ladders have arrived.
 - Quotes have been received from 3 contractors and are in the process of evaluating bids. Estimated rehabilitation cost is \$32,000

- **2013 CCTV Project**
 - Project is out for Bid; Open Bids on 2/22/13
 - Bid unit price was higher than expected – rejecting all bids and will re-bid the work.
 - Project bid on June 6, 2013.
 - Visu Sewer/Walden is the apparent low with prices still higher than expected.
 - All bid recommended to be rejected.
 - Requested proposals to pre-televising the project.
 - Pre-televising should reduce the scope of project (due to lines that already clean) and will reduce risk of unknowns for the contractor.
 - Proposals have been received from Tele-scan, National Power Rodding, and Visu-sewer. Tele-Scan had the lowest proposal at \$1.00 per foot for all televising except Country Club which is \$1.10 per foot.
 - Televising started the week of July 8 and should take four weeks to complete.

- **DAMON Ave**
 - Check and gate valves for the 3 pumps are near the asset life.
 - Purchased one set of valves for backup due to long lead time.
 - Cost ~~ \$28,500.
 - Preparing specifications to bid installation of purchased valves plus acquisition of two more sets.
 - Total cost ~~ \$130,000

- **7th Ward Mixer**
 - Mixer was seized up. It is an older style and cannot be rebuilt.
 - Received replacement quotes in kind where no modification will be necessary on mast assembly or other manufacturer.
 - Approximate Cost to replace in kind ~~\$16,000

- **Stevens Creek Interceptor (42" section) – Exposed section of pipe**
 - There is a section of the 42" interceptor just West of Oakland Ave where the cover dirt over the interceptor has washed away due to storm water over the years (originally installed in 1953).
 - Receiving quote to repair.
 - Acquiring access easement from property owner.

- **Lake Shore Force Main (FM)**
 - District is working with ADM preparing to replace the air release valves and their isolation valves along the FM.

- **Saint Louis Bridge Pump No 1**
 - Pump failed due to broken bearing. Pump was purchased in 1985.
 - Repair cost is \$17,000
 - New replacement pump is \$31,000.
 - Purchasing new pump due to age and high cost of repair.

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

MEMORANDUM

TO: Don Miller, Project Manager

DATE: July 2, 2013

FR: Roger Dudley, Engineering Technician

RE: 2013 Primary Clarifier Painting

At 10:00 AM, July 1, 2013, sealed bids for the 2013 Primary Clarifier Painting project were opened. The project consists of painting the three (3) Primary Clarifiers in the east primary system.

The following bids were returned:

- | | |
|---------------------------|--|
| 1. Bazan Painting | \$146,365.00 |
| 2. George Young & Sons | \$220,000.00 |
| 3. Whitehead Brothers | \$230,494.00 |
| 4. ODLE, Inc. | \$254,100.00 |
| 5. RP Coatings | \$346,680.00 |
| 6. Hartman/Walsh Painting | \$368,000.00 |
| 7. Aetna Coatings | Bid not opened/ arrived at 10:15 AM – returned to bidder |

After review of the bid documents, it is the recommendation of the Sanitary District of Decatur Engineering Department that the bid be awarded to Bazan Painting, the lowest responsive, responsible bidder in the amount of \$146,365.00.

Respectfully Submitted

pc: Kent Newton
Ron Guffey
file

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

MEMORANDUM

TO: Don Miller

DATE: June 24, 2013

FR: Roger Dudley

RE: 2013 ROOF REPLACEMENT & REHABILITATION PROJECT PROGRESS REPORT #3

This project consists of complete tear off and reroof of WAS Pump Room (Bldg. 112), Lake Shore Pump Station & rehabilitation the I&C Shop (Bldg. 029) & repair damaged portions of roof at DAF Bldg. (Bldg. 117). Added to the project were repairs to Administration Bldg., 7th Ward CSO, Oakland Avenue CSO and McKinley Avenue CSO.

Notice of Award was issued on April 25, 2013.

Performance-payment bond and insurance certificates have been approved.

Notice to Proceed was issued on May 22, 2013.

Contractor completed project on June 21, 2013.

Change Order #1 is before the board in the amount of \$9,000.00 for the additional repairs mentioned above.

SANITARY DISTRICT OF DECATUR

501 Dipper Lane Decatur, Illinois (217) 422-6931

Change Order # 1

CONTRACT CHANGE ORDER

Project: 2013 Roof Rehabilitation & Replacement

Owner: SANITARY DISTRICT OF DECATUR

Change Order No. 1

Date: June 21, 2013

To: Top Quality Roofing Company
P.O. Box 193 - Mt. Zion, IL 62549

Attn: Mr. Randy Doty

You are hereby requested to comply with the following described changes from the contract plans and specifications:

Field Order 1 – Rehabilitation & repair of various pump station & CSO roofs for the lump sum price of \$9,000.00. The Sanitary District had purchased materials during 2012 fiscal year with the intentions of repairing several roofs using in house labor. The District at this time does not have the manpower to accomplish this task, and Engineering Department negotiated a lump sum price to complete the previous year's repairs. Repairs are as follows:

1. Administration Bldg. – Re-caulk all coping cap joints
2. McKinley Avenue CSO – Roof lap maintenance and recoat.
3. Wyckles Facility – Re-caulk counter flashing reglet.
4. 7th Ward CSO – Repair roof seams and coat.
5. Oakland Avenue CSO – Repair roof seams and coat.

Previous Contract Amount: \$70,295.00

Change in Contract Time: 0 days

Change This Order: \$9,000.00

Adjusted Completion Date: N/A

Adjusted Contract Amount: \$79,295.00

This document will become a part of the Contract Documents and all Provisions contained herein shall apply fully hereto.

Recommended (Engineering Technician):

By: Ray Dudley Date: 6/24/13

Recommended (Project Manager):

By: Donald B. Rupp Date: 6/24/13

Accepted (Contractor) **TOP QUALITY ROOFING COMPANY**

By: [Signature] Date: 6/24/13

Approved (Owner): **SANITARY DISTRICT OF DECATUR**

By: _____ Date: _____

FIELD ORDER

PROJECT: 2013 Roof Replacement & Rehabilitation

OWNER: Sanitary District of Decatur

FIELD ORDER NUMBER: 1

DATE: June 4, 2013

CONTRACTOR: Top Quality Roofing Company

ATTENTION: Mr. Randy Doty

Gentlemen:

This Field Order given to Top Quality Roofing Company covers a change in the requirements of the plans and/or specifications of the above listed project to meet field conditions encountered during construction as follows:

Contract Item No. N/A **Reference Drawing No.** N/A

Order: Provide additional work as provided on attached quote from Top Quality Roofing Company.

This order will subsequently be confirmed by incorporating into an appropriate CHANGE ORDER in accordance with the General Conditions for this work.

BY:



Sanitary District of Decatur

Original to: Top Quality Roofing Company

Copies to: Ryan Benson – Garland Company

Don Miller – Sanitary District of Decatur

File

Specializing in

- Commercial & Industrial Roofing
- Residential Roofing
- Architectural Sheet Metal



State Highway 121
 P.O. Box 103
 Mt. Zion, Illinois 62549
 Phone: (217) 864-9483
 Fax: (217) 864-5900

Roofing Company

May 15, 2013

Decatur Sanitary District
 501 Dipper Lane
 Decatur, Illinois 62522

Project: Various repairs to five additional buildings. All materials to be furnished by Sanitary District.

- Administration Building: Re-caulk all coping cap joints on four roof areas.
- McKinley: Maintenance to laps (re-coat).
- Wyckles: Re-caulk counterflashing reglet.
- 7th Ward: Strip in seams on EPDM roof and coat.
- Oakland: Cover strip laps on EPDM roof and coat.

Our price for labor only would be ~~\$9,800.00~~

Should you have any questions regarding this proposal, please feel free to call.

We appreciate the opportunity to quote this work.

Sincerely,

Top Quality Roofing Company

Randy Doty

Proposal accepted: Signature: _____

Date: _____

Price renegotiated to \$9,000.⁰⁰/₁₀₀