



SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL  
BOARD OF DIRECTORS MEETING  
**September 16, 2015 7:30 am**

Metro-East Park and Recreation District Office  
104 United Drive, Collinsville, Illinois 62234

1. Call to Order  
*Jim Pennekamp, President*
2. Approval of Minutes of August 19, 2015
3. Public Comment on Pending Agenda Items
4. Program Status Report  
*Chuck Etwert, Chief Supervisor*
5. Budget Update and Approval of Disbursements  
*Chuck Etwert, Chief Supervisor*
6. Design and Construction Update  
*Jay Martin, Amec Foster Wheeler*
7. Change Orders – BP #3 & BP #6  
*Amec Foster Wheeler Environment & Infrastructure*  
*Chuck Etwert, Chief Supervisor*
8. Change Orders – BP #4 & BP #5  
*Amec Foster Wheeler Environment & Infrastructure*  
*Chuck Etwert, Chief Supervisor*
9. Amec Foster Wheeler Work Order #14  
MESD Levee System Authorized Level Field Investigation and Design  
*Amec Foster Wheeler Environment & Infrastructure*  
*Chuck Etwert, Chief Supervisor*
10. Update from Corps of Engineers  
*Michael Feldmann, U.S. Army Corps of Engineers*

AGENDA

11. Public Comment

Executive Session (if necessary)

12. Other Business

13. Adjournment

**Next Meeting: October 21, 2015**

## MINUTES

### SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL BOARD OF DIRECTORS MEETING August 19, 2015

The regular meeting of the Board of Directors was held at the Metro-East Park and Recreation District Office, 104 United Drive, Collinsville, Illinois at 7:30 a.m. on Wednesday August 19, 2015.

#### Members in Attendance

John Conrad, President (Chair, Monroe County Flood Prevention District)  
James Pennekamp, Vice President (Chair, Madison County Flood Prevention District)  
Dan Maher, Secretary/Treasurer (Chair, St. Clair County Flood Prevention District)  
Paul Bergkoetter, St. Clair County Flood Prevention District  
Tom Long, Madison County Flood Prevention District  
Ron Motil, Madison County Flood Prevention District  
Bruce Brinkman, Monroe County Flood Prevention District  
Ronald Polka, Monroe County Flood Prevention District

#### Members Absent

Alvin Parks, Jr., St. Clair County Flood Prevention District

#### Others in Attendance

Alan Dunstan, Madison County Board Chair  
Terry Liefer, Monroe County Board Chair  
Chuck Etwert, SW Illinois FPD Council  
Rich Conner, Levee Issues Alliance  
Mike Feldmann, U.S. Army Corps of Engineers  
Walter Greathouse, Metro-East Sanitary District  
David Human, Husch Blackwell LLP  
Charles Juneau, Juneau Associates  
Ronald S. Kaempfe, IUOE Local 520  
Tracey Kelsey, U.S. Army Corps of Engineers  
Steve Kochan, Wood River Levee & Drainage District  
Rick Mauch, SCI Engineering  
Jay Martin, Amec Foster Wheeler Environment & Infrastructure  
Debra Moore, St. Clair County  
Jon Omvig, Amec Foster Wheeler Environment & Infrastructure  
Joe Parente, Madison County  
Cas Sheppard, SMS Engineers  
Jeff White, Columbia Capital  
Julie Ziino, U.S. Army Corps of Engineers

**Call to order**

President John Conrad noted the presence of a quorum and called the meeting to order at 7:30 am.

**Approval of Minutes of July 15, 2015**

A motion was made by Jim Pennekamp, seconded by Bruce Brinkman, to approve the minutes of the Board meeting held on July 15, 2015. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – abstain  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved.

**Public Comment on Pending Agenda Items**

Mr. Conrad asked if there were any comments from the public on any agenda item on today's agenda. There were none.

**Program Status Report**

Mr. Conrad asked Mr. Etwert to provide a status report for the project.

He indicated that high river conditions have slowly receded during the last month, thus limiting construction and pushing back project completion times an additional thirty days. Approximately 59% of the \$61.2 million of construction, involved in all nine current construction bid packages, has been completed thru July. Slightly less than one million dollars' worth of construction was completed in July. The total amount of construction completed is \$36.5 million.

There are three change orders on this month's agenda. They involve BP #3 for additional pollution insurance coverage and pilot hole drilling, and BP #6 for collection Pipe P 145X. Amec Foster Wheeler will be explaining them later in the meeting.

He indicated that he and AMEC Foster Wheeler continue to meet with the Corps of Engineers regarding the process of the Council moving ahead with 500-year level of protection projects and ensuring that work the Council does is eligible for future Work In-Kind Credit.

The Corps of Engineers has suggested, to avoid potential procedural details that may prevent the Council from taking advantage of Section 1020 of WRRDA 2014, Transfer of Excess Credit, that a comprehensive plan be submitted directly to the Secretary of the Army. Husch Blackwell and Amec Foster Wheeler are currently preparing the suggested plan.

We continue to wait for the WRRDA Implementation Guidelines to be issued, in order, for the Integral Determination reports (IDR) to proceed.

On Monday August 17th, Senator Durbin and the Department of the Army held a meeting at the Council's offices to discuss the Corps' strategy for contracting on a Best Value Tradeoff approach instead of a Lowest-Price Technically Acceptable approach.

They will be developing specific evaluation criteria to achieve proposals that provide for the efficient and timely completion of a project and in recognition that these are cost-shared projects, proposals that provide local economic benefit, with or without a Project Labor Agreement.

The Council and the local community will have an opportunity to make comments and offer suggestions on the draft solicitation which is currently scheduled to be released in September. It should be noted, this meeting was originally posted as a Council meeting, but due to the lack of a quorum, was canceled and held as a meeting hosted by Senator Durbin and the Department of the Army.

He indicated that with the Best Value Tradeoff approach, the Corps will develop the criteria, the FPD will give comments, the Corps will require the FPD share upfront, the Corps will solicit bids, the Corps will make their selection, and the Corps will inform the FPD who has been selected and if the selection includes a PLA. The Corps will not be able to inform the FPD how many bids were received and how many had or did not have a PLA.

Hopefully, the Council will feel comfortable with Corps' criteria to provide funds upfront and their selection would include a PLA. If not, he expressed doubts about future funding of projects. The Corps expects to have the criteria developed in September.

To date, we have not received a response to our August 5, 2015 letter sent, to the City of East St. Louis and MESD, expressing our concern regarding the repair of a sinkhole at the East St. Louis 10.5 ft. diameter combined sewer located on the landside of the Metro East Sanitary District Levee. This condition has existed for quite some time and needs to be corrected in a timely manner, in order, to not delay the certification to FEMA process.

Jeff White of Columbia Capital is here today to present the Resolution Requesting Approval from the County Boards and County Flood Prevention Districts to Issue Sales Tax Revenue Bonds to Finance Authorized Level Levee Improvement Projects and Columbia Capital's recommendations on Selection of Bond Underwriters.

We are tentatively scheduled to have our first conversations with FEMA Region 5 next week to discuss the updating of the flood maps for the Metro East levees and the certification and accreditation process.

Amec Foster Wheeler will be presenting the Metro East Sanitary District Levee Authorized Level Project Summary Report later in the meeting.

The Board was provided copies of Amec Foster Wheeler's Monthly Progress Report for August.

A motion was made by Mr. Maher, seconded by Mr. Motil to accept the Program Status Report for August 2015. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – Aye  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

### **Budget Update and Approval of Disbursements**

Mr. Conrad asked Mr. Etwert to provide a report.

Mr. Etwert noted that financial statement for July 2015 prepared by our fiscal agent, CliftonLarsonAllen was included in the materials sent for the meeting. The report included an accounting of revenues and expenditures for the month ending July 31, 2015, as compared to the fiscal year budget.

Accrued expenditures for the current fiscal year beginning on October 1, 2014 are \$36,601,711 while revenues amounted to \$9,635,099 resulting in a deficit of \$26,966,612. A total of approximately \$23,467,977 is held by the counties in their respective FPD sales tax funds and is available for the Council's use on the project.

Monthly sales tax receipts for May 2015 (the latest month reported by the Illinois Department of Revenue) were down by .81% from the previous year. In general, receipts are still up .50% from last year, which was our highest year.

The report included bank transactions for July 2015. Total disbursements for the month were \$1,716,528.48. The largest payments were to Keller Construction for BP #3 and BP #5, Lane Construction for BP #6, TREVIICOS BP #7B, , Amec Foster Wheeler and Husch Blackwell.

Also, for the Board's review and anyone else who was interested, Mr. Etwert provided copies of each requisition, which was represented on the July 2015 Bank Transaction Schedule prepared by CliftonLarsonAllen.

Mr. Etwert recommended that the Board accept the budget report and disbursements for July 2015.

A motion was made by Mr. Long seconded by Mr. Pennekamp, to accept the budget report and approve the disbursements for July 2015. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – Aye  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

### **Design and Construction Update**

Mr. Conrad called on Jay Martin, Amec Foster Wheeler's program manager, to provide a report. Mr. Martin used a slide presentation to illustrate his remarks. He indicated that due to the high river conditions that there wasn't much progress made during the last month. His presentation, including a few site photos, focused on the status of each bid package and the effects of the flood event as follows:

### **Construction Status**

#### **Bid Packages 3, 4, 5, 6 & 7B**

- Weather and River Levels have stalled progress and impacted schedule
- The USACE 408 Permit prohibits exaction/drilling when the Mississippi River Stage is at or above select levels. Most construction operations have been delayed since May 27, 2015
- As the river recedes and the groundwater level drops some construction activities have re-started as of the end of July

**Bid Package 2A – Fish Lake Pump Stations**

- The construction portion of this project is complete and retainage has been released.
- Amec Foster Wheeler preparing documents for USACE

**Bid Package 2B – WR/MESD/PDP Pump Stations**

- The planned construction portion of this project is complete. Retainage will not be fully released until the completion of the change order and the resolution of all warranty issues (Site 5) are resolved.
- Amec Foster Wheeler preparing close-out documents for USACE

**Bid Package 2C – Site 12 Pump Station Force Mains (MESD)**

- Work on this site will not begin until October 15 to comply with 33 U.S.C 408 (Section 408 alteration permit)
- The NTP was issued March 5, 2015
- The contractor is preparing and Amec Foster Wheeler is reviewing submittals

**Bid Package 3 – Wood River Seepage Improvements**

- Design revisions to Blanket Drain 4 and Random Fill Area 1 pending. Construction cost impacts will be submitted when available
- Piezometer installation – no progress
- Upper Wood River relief well drilling resumes – 3 remain
- Lower Wood River relief wells on hold due to Flood Waters
- Pilot hole drilling resumed at IL RT3 and Hawthorne. 13 Pilot Holes remain.
- Blanket Drain 2 - 40% complete
- Losch Pond Drainage Ditch & Box Culvert – Complete
- Blanket Drains 3,5 & 7, Weir #4, and Indian Creek substantially complete

**Bid Package 4 – MESD Seepage Improvements (Conoco Phillips)**

- Relief well collector system has failed deflection tests. Amec Foster Wheeler is reviewing
- Pump Station installation will resume this month
- Clay Cap placement began this week

**Bid Package 5 – MESD Seepage Improvements**

- Relief well collector systems have failed deflection tests. Amec Foster Wheeler is reviewing
- Clay Cap and Random Fill work will begin when the river/groundwater levels recede. The Clay Cap placement on hold as AFW evaluates a proposed value engineering proposal



- Sluice gate rehabilitation at MoPAC scheduled for completion when the river levels recede

**Bid Package 6 – Prairie du Pont / Fish Lake Seepage Improvements**

- Weather and River Levels have stalled progress

**Bid Package 7B – Wood River Lower (Deep) Cutoff Wall**

- Most construction operations have been delayed since NTP. Groundwater levels on the riverside toe delaying installation of piezometers that must be completed prior to most major features of work beginning
- TREVIICOS and their subcontractors have mobilized to the site
- Clearing & Grubbing underway. Installation of silt fence in progress
- Access and Haul Roads has begun
- Anticipate test section – no sooner than the second week of September

**Construction Photos**

**Bid Package 3 – Wood River – Blanket Drain #7 & Weir #4**

**Bid Package 3 – Wood River – Weir #4**

**Bid Package 7B – Lower Wood River – Site Clearing**

He next discussed the FEMA Certification packages.

**FEMA Certification Update**

**Upper Wood River**

- Pending completion of Blanket Drains #1 & 2 and 17 relief wells in Bid Package 3
- USACE will certify to FEMA (due to Mel Price seepage area)
- Amec Foster Wheeler to submit documentation to USACE in Q4 2015
- USACE submits documentation to FEMA approximately 3-4 months after

**Lower Wood River**

- Certification is pending completion of BP3 & BP7B
- Submit to FEMA Middle of 2016

**Wood River East & West Forks**

- Certification is pending INDR Approval of Interior Drainage Analysis
- Submit to FEMA Fall 2015

**MESD**

- Pending completion of Bid Packages 2B, 4, & 5

- Pending resolution of Chain of Rocks documentation with USACE

**Prairie du Pont & Fish Lake**

- Pending completion of Bid packages 2B & 6 (weather has impacted)
- Submit to FEMA by end of 2015

Lastly, he discussed the status of the Authorized Level (500-Year) Design

**Wood River**

- Reach-by-reach analysis complete
- Costs and project approach presented and approved by Council
- Work order presented and approved
  - Drilling plan progressing and portions submitted for review
  - Subcontract agreement

**MESD**

- Costs and project approach presented for approval today to Council

**PdP/FL**

- Currently being reviewed by the USACE against FEMA improvement

Mr. Conrad asked for a motion to accept Mr. Martin’s progress report. A motion was made by Mr. Bergkoetter with a second by Mr. Brinkman to accept the Amec Foster Wheeler progress report. Mr. Maher called the roll and the following votes were made on the motion:

- Mr. Polka - Aye
- Mr. Brinkman – Aye
- Mr. Bergkoetter - Aye
- Mr. Conrad - Aye
- Mr. Long – Aye
- Mr. Maher – Aye
- Mr. Motil – Aye
- Mr. Parks – absent
- Mr. Pennekamp – Aye

The motion was approved unanimously.

**FY2016 Flood Prevention District Budget**

Mr. Conrad asked Mr. Etwert to explain this item.

He explained by law, the Council's budget for the upcoming year must be adopted by August 31 of each year for the fiscal year beginning October 1. The budget must be submitted to the county boards for approval after which they have 30 days to act on it. A draft budget was presented to the Board of Directors at the July meeting. Accompanying the draft was a cash budget through 2016, when all construction will be completed.

With 59% of construction of the project completed at the end of July, the FY2016 budget focuses on the completion of all construction needed to achieve FEMA accreditation. Unfortunately, during FY2015 we experienced delays due to the obtainment of necessary easements, high river conditions and a contract termination on the Wood River Deep Cutoff Wall Project. This has pushed the accreditation schedule back a year.

We will enter FY2016 with four of the current nine contract packages complete, and three more being completed by the end of the calendar year. This will leave only BP #3, which was delayed due to easement obtainment, and BP #7B, the Wood River Deep Cutoff Wall Project to be completed. BP #3 should be completed by March and BP #7B should have the cutoff wall portion complete by the end of the year and grading and turf restoration completed by May 2016. Certification Packages will be submitted as each levee system is completed.

The recommended FY2016 budget is shown in Table 1.

The draft budget has been adjusted to reflect a \$153,095 (\$1,392,340 to \$1,239,245) reduction in the estimated Corps of Engineers costs for the Authorized Level Projects in the Wood River Levee System.

Also, an adjustment was made to include an estimate of Corps of Engineers costs for Authorized Level Projects in the MESD and the Prairie Du Pont/Fish Levee Systems. This added \$1,500,000 to the proposed budget, and is based on Mr. Feldman's discussion last month where he indicated that the Corps' efficiency improves as a process is repeated. The process of the Council moving ahead on the Authorized level Projects is a new process to the Corps.

True estimated costs cannot be determined until Amec Foster Wheeler has completed the Authorized Level Project Summary Reports for the MESD, which will be presented today, and the Prairie Du Pont/Fish Lake and identify projects. We will continue discussions with the Corps regarding additional reductions to their estimated costs for the Authorized Level Projects in the Wood River Levee System. It is felt that the total of \$2,739,245, currently budgeted for the Corps, will be sufficient for FY2016.

Due to the recent high water event, approximately \$2.4 million of construction funding has been moved from the FY2015 to FY2016.

The construction of the project did not progress as fast as expected in the FY2015. After completing \$16.6 million of construction in FY2014, it appears that \$30.0 million will be completed in FY2015, leaving a balance of \$26.6 million to be completed in FY2016. However, construction of all of the 100-Year Projects will be completed in FY2016. Administrative

expenditures, which are a relatively small portion of our costs, remain virtually unchanged for the next year.

In general, expenditures for next year's budget are based on completion of the 100 year level of protection projects, and the start of the 500-Year Authorized Level Projects.

He indicated that the key assumptions presented last month basically remain the same:

1. Project construction will be complete by May 31, 2016 and FEMA certification will be achieved by December 31, 2016.
2. A 10% construction cost contingency is included for all remaining construction on all projects still being built.
3. Sales tax revenue is estimated to increase by 1.00% over last year, our highest level of receipts. Our current increase level thru July of this year is .50%.
4. Cash flow is based on current available revenue and does not include additional debt financing for the 500-Year Authorized Level Projects.
5. The Council will assist levee districts in establishing funding sources, where and if needed, for the maintenance and operations of the 100-Year improvements being built.
6. County FPD sales tax accounts will be used for the 500-Year Authorized Level Projects.
7. The Council's general and administrative expenses remain the same.

Next he indicated that the cash budget through FY2016 (shown on Tables 2 thru 5), when all construction will be completed, was also updated to reflect, the lower Corps of Engineers Authorized Level expenses for Wood River, the additional Corps of Engineers Authorized Level expenses for MESD and Prairie Du Pont/Fish Lake, and the shifting of construction expenses due to high river stage. All Corps expenses are in-house costs. Our estimated surplus at the end of the 100-Year FEMA Projects is currently estimated to be \$22.2 million.

Table 1 is the proposed budget for the upcoming fiscal year.

Tables 2 thru 5 reflect the cash flow for FY2015 and FY2016, with Table 5 indicating the estimated surplus of \$22.2 million after the completion of the 100-Year projects. However, approximately \$14.1 of the surplus will be spent on the Authorized Level projects thru FY2016.

Mr. Conrad asked for a motion to accept Mr. Etwert's report on the FY2016 Flood Prevention District Budget. A motion was made by Mr. Maher with a second by Mr. Polka to accept Mr.

Etwert's report on the FY2016 Flood Prevention District Budget. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – Aye  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

### **FY2016 Flood Prevention District Annual Report**

Mr. Conrad asked Mr. Etwert to explain this item.

Mr. Etwert explained by law, the Council must submit an Annual Report to each county board describing activities for the past year. We generally submit this report with our annual request for approval of our budget.

The report simply chronicles the activities of the last year and builds on previous reports, so it is actually a summary of the Council's cumulative activities since its inception in June 2009.

He highlighted the available funds for the Authorized Level projects, the Wood River Levee System Authorized Level projects that have been identified, the Work In-Kind Credit Process, and the Authorized Level 500-Year Resolution passed earlier this year.

Mr. Conrad asked for a motion to accept the Annual Report. A motion was made by Mr. Long with a second by Mr. Pennekamp to accept the Annual Report. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – Aye  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

**Resolution Requesting Approval from the County Boards and County Flood Prevention Districts to Issue Sales Tax Revenue Bonds to Finance Authorized Level Levee Improvement Projects**

Mr. Conrad asked Mr. Etwert to explain this item.

Mr. Etwert explained that the Council’s authorizing legislation (70 ILCS 750 Sec. 20 (10)) provides, in part, that:

*“A request to issue revenue bonds by the District must be submitted for approval to the county board of the county in which the district is situated. The county board has 30 calendar days to approve the issuance of such bonds. If the county board does not approve or disapprove the issuance of the bonds within 30 calendar days after the receipt of such request, the request shall be deemed approved. The District shall direct the county to use moneys in the County Flood Prevention Occupation Tax Fund to pay for bonds issued.”*

The resolution, which was developed by our bond counsel, was discussed.

Mr. Jeff White of Columbia Capital was introduced and there was a brief discussion regarding the bond market, which remains positive despite threats of the Federal Reserve raising rates and the China situation.

This resolution after approval will be forwarded to the county flood prevention districts and county boards for their approval. Mr. White offered his services if needed for any county approvals.

Mr. Conrad asked for a motion to approve the Resolution Requesting Approval from the County Boards and County Flood Prevention Districts to Issue Sales Tax Revenue Bonds to Finance Authorized Level Levee Improvement Projects. A motion was made by Mr. Pennekamp with a second by Mr. Bergkoetter to approve the Resolution Requesting Approval from the County Boards and County Flood Prevention Districts to Issue Sales Tax Revenue Bonds to Finance Authorized Level Levee Improvement Projects. Mr. Maher called the roll and the following votes were made on the motion:

- Mr. Polka - Aye
- Mr. Brinkman – Aye
- Mr. Bergkoetter - Aye
- Mr. Conrad - Aye
- Mr. Long – Aye
- Mr. Maher – Aye
- Mr. Motil – Aye
- Mr. Parks – absent
- Mr. Pennekamp – Aye

The motion was approved unanimously.

### **Selection of Bond Underwriters**

Mr. Conrad asked Mr. White to explain this item.

Mr. White explained the approach and the competitive process taken to select the Bond Underwriters for the bond issue. He discussed the differences between a negotiated sale and a competitive sale, and Columbia Capital's preference for a negotiated sale for the FPD issue.

On July, 20, 2015, Columbia Capital issued Requests for Proposals (RFPs) for Bond Underwriting Services. RFP's were sent to 23 firms that regularly underwrite municipal bond transactions in the region and that have the capacity to manage transactions of the anticipated size and magnitude of the Council's. Twelve firms responded in the capacity of senior managing underwriter (the primary underwriting firm involved on a financing) and one firm responded as a co-managing underwriter only (a member of the underwriting team, but not the primary firm). One additional firm provided a non-responsive (late) proposal that was not accepted.

He explained how the proposals were evaluated by qualitative and quantitative approaches, how fees and interest rates affect the economic outcome of an issue, the goal of maximizing the proceeds from this particular financing, and the utilization of two bond programs - Senior Lien Bonds and Subordinate Lien Bonds.

There were four goals: 1) getting the best borrowing cost balance with the best flexibility for the future, 2) putting the right firms in the right places to maximize their individual strengths, 3) ensure substantial Illinois and St. Louis presence on the team, and 4) the inclusion of diversity.

For the Senior Lien Bonds, Columbia Capital recommended that PNC be the senior manager with RBC Capital, Stern Brothers, Stifel Nicolaus and Wells Fargo as co-managers.

For the Subordinate Lien Bonds, Columbia Capital recommended that RBC Capital Markets be the senior managing underwriter, with Citigroup Global Markets, Hutchinson, Shockey, Erley & Co., Loop Capital Markets and Raymond James as co-managing underwriters.

Based on current markets \$65 to \$70 million in bond proceeds are expected. Underwriting fees will total \$300,000 to \$350,000 which is less than one half of percent of the bond proceeds.

He indicated, Columbia Capital will be ready to be in the market as early as November, but is dependent on the projects being identified by Amec Foster Wheeler in conjunction with the Corps of Engineers.

There was a brief discussion regarding how having the name Illinois in the issue, affects the issue, due to the state's financial situation. It varies, but it does have an effect, between fifteen one hundredths of a percent up to a half percent on the total transaction. A large part of the

marketing efforts will be explaining that the Council has nothing to do with the challenges that face Illinois.

It is expected that the Senior Bonds will be rated AA and the Subordinate Lien Bonds will be rated between A2 and A3.

Mr. Conrad asked for a motion to approve PNC as the senior manager with RBC Capital, Stern Brothers, Stifel Nicolaus and Wells Fargo as co-managers for the Senior Lien Bonds and RBC Capital Markets as the senior managing underwriter, with Citigroup Global Markets, Hutchinson, Shockey, Erley & Co., Loop Capital Markets and Raymond James as co-managing underwriters for the Subordinate Lien Bonds as recommended by Columbia Capital. A motion was made by Mr. Long with a second by Mr. Pennekamp to approve PNC as the senior manager with RBC Capital, Stern Brothers, Stifel Nicolaus and Wells Fargo as co-managers for the Senior Lien Bonds and RBC Capital Markets as the senior managing underwriter, with Citigroup Global Markets, Hutchinson, Shockey, Erley & Co., Loop Capital Markets and Raymond James as co-managing underwriters for the Subordinate Lien Bonds as recommended by Columbia Capital. Mr. Maher called the roll and the following votes were made on the motion:

- Mr. Polka - Aye
- Mr. Brinkman – Aye
- Mr. Bergkoetter - Aye
- Mr. Conrad - Aye
- Mr. Long – Aye
- Mr. Maher – Aye
- Mr. Motil – Aye
- Mr. Parks – absent
- Mr. Pennekamp – Aye

The motion was approved unanimously.

President Conrad asked Vice-President Pennekamp to take over the meeting while he briefly left the room.

**Change Orders - BP #3 & BP #6**

Mr. Pennekamp asked Mr. Etwert to explain this item.

Mr. Etwert explained as he had indicated in the Program Status Report that there were three change orders on the agenda that Amec Foster Wheeler would be explaining.

He explained that board approval is required on all change orders if the total of all change orders on a project exceed ten percent of a project's original cost, which is the case for both Bid Package 3 and Bid Package 6.

Mr. Omvig provided the following explanation for the three change orders on the agenda.



**Bid Package 03 – Additional Pollution Coverage UPRR - \$6,825.00**

The Contract Documents do not require the Contractor to purchase railroad insurance. Union Pacific is requiring this insurance. Keller is requesting a change order in the amount of \$6,825.00 for the inclusions of additional pollution coverage now being required by the Union Pacific Railroad.

**Bid Package 03 – Pilot Hole Drilling - \$28,950.00**

The planned design modifications will increase the pilot hole depth by 246 ft. Actual field conditions may vary and it is recommended by the project geotechnical lead to add to this number for potential field variations. Therefore the anticipated pilot hole increase is for an additional 300 feet. Based on the below additional depth justification that was applied to earlier pilot hole depth changes.

<b>RW</b>	<b>Original PH Depth Per CA-C552</b>	<b>PH Depth Addition Per CO#9</b>	<b>PH Depth Addition Per NEW CO</b>	<b>Total Design PH Depth Per Design and Modifications</b>
1017	24	0	11	35
1018	25	0	10	35
1019	27	0	8	35
1020	27	0	8	35
1039	88	0	0	88
1040	88	0	0	88
1041	88	0	0	88
1042	88	0	0	88
1043	88	0	0	88
1044	88	0	0	88
1045	88	0	0	88
1046	88	0	0	88
1064	85	0	0	85
1066	92	0	18	110
1067	0	135	-25	110
1068	0	145	-35	110
1069	0	140	-28	112
1070	0	140	-20	120
1071	92	0	28	120
1072	92	0	33	125
1073	0	135	-10	125
1074	0	140	-15	125
1075	91	0	0	91
1076	93	0	32	125

1077	92	0	33	125
1078	92	0	33	125
1079	92	0	33	125
1080	92	0	33	125
1081	92	0	33	125
1082	92	0	33	125
1083	92	0	33	125
	<b>1996</b>	<b>835</b>	<b>246</b>	<b>3077</b>

Request change order in the amount of:  $300 \text{ FT} \times \$91.90 / \text{FT} \times 1.05\% = \$96.50 = \$28,950.00$

**Bid Package 06 – Collection Pipe P 145X - \$14,496.25**

During the prep work to install the collection pipe at Palmer Creek, the contractor found that the concrete headwall structure for the inlets of the 84” culverts extends much wider toward the banks of the creek. The extension of this concrete structure is in the direct path of pipe P-145A. With the current conditions, the pipe would not be able to be installed per plan.

He requested that the Chief Supervisor be authorized to approve BP #3 requested change order for the Additional Pollution Coverage UPRR - \$6,825.00 with Keller Construction; BP #3 requested change order for the Pilot Hole Drilling - \$28,950.00 with Keller Construction; and BP #6 requested change order for the Collection Pipe P 145X - \$14,496.25 with Lane Construction for a total not to exceed \$50,271.25.

Mr. Conrad returned to the meeting.

Mr. Conrad asked for a motion to accept the recommendation on the change orders. A motion was made by Mr. Motil with a second by Mr. Maher to authorize the Chief Supervisor to approve BP #3 requested change order for the Additional Pollution Coverage UPRR - \$6,825.00 with Keller Construction; BP #3 requested change order for the Pilot Hole Drilling - \$28,950.00 with Keller Construction; and BP #6 requested change order for the Collection Pipe P 145X - \$14,496.25 with Lane Construction for a total not to exceed \$50,271.25.

Mr. Maher called the roll and the following votes were made on the motion.

- Mr. Polka - Aye
- Mr. Brinkman – Aye
- Mr. Bergkoetter - Aye
- Mr. Conrad - Aye
- Mr. Long – Aye
- Mr. Maher – Aye
- Mr. Motil – absent
- Mr. Parks – Aye
- Mr. Pennekamp – Aye

The motion was approved unanimously.

### **Acceptance of Metro East Sanitary District Authorized level Project Summary Report**

Mr. Conrad asked Mr. Omgvig to explain this item.

He explained, as part of the Council's overall plan to design the most critical and cost effective projects to restore the federally authorized level of flood protection, Amec Foster Wheeler has developed a Summary Report of the Authorized Projects in the Metro East Sanitary District Levee System. This was included in the agenda packet and a Project Cost Estimate was provided this morning. These are similar to the reports previously issued for the Wood River Levee System.

Summary Report and Cost Estimate for the Prairie Du Pont/Fish Lake Levee will be developed and presented at a later date.

Amec Foster Wheeler reviewed the Corps' draft Integral Determination Report (IDR) and identified projects that the Council could move forward on and considered the amount of construction that would be eligible for In-Kind credit.

He explained Table 1 which identified the MESD Design Segments

The Corps is currently reviewing those decision segments where the Council's 100-Year Projects are being constructed to determine if there are any positive impacts on the 500-Year Level.

The Corps has an estimated \$152 million of work identified in the draft MESD IDR, with \$128 million worth of work eligible for work-in-kind credit. Of that amount, only 30 percent can be considered for In-Kind Credit, roughly \$36 million. In addition, the Council would have to fund the five percent local cash of requirement of \$7.6 million, of which, it is estimated that the Council has already contributed cash of \$2.6 million.

Amec Foster Wheeler determined that it would be best to do drilling of subsurface investigation for relief wells, seepage berms, pump stations and possibly for deep cutoff walls depending on final estimated costs.

Amec Foster Wheeler would do all the design for the relief wells and pump stations, as they go hand in glove with each other, and seepage berms as needed or as funding is available staying within the In-Kind Credit limits.

The work has been broken down into four distinct bid packages to provide the Council with flexibility.

Bid Package 11 is comprised of ten decision segments involving the construction of 150 relief wells, of which 144 are tributary to existing pump stations and 5 of which drain naturally into the environment.

Bid Package 12 is comprised of five decision segments involving the construction of one new pump station and 50 relief wells, of which 45 are tributary to an existing or proposed pump station and five of which drain naturally into the environment.

Bid Package 13 is comprised of ten decision segments involving the construction of one new lift station and 106 relief wells, of which 84 are tributary to an existing pump station or the newly proposed lift station and 22 of which drain naturally into the environment.

Bid Package 14 is comprised of eleven decision segments involves all of the earthwork, which would include eight seepage berms, one fill area, and a clay cap section. This package will only be executed if additional Work In-Kind Credit is available after the costs of the preceding bid packages is better defined.

If the Board approves the Plan, Amec Foster Wheeler will develop a scope and budget for the completion of field activities and design for the Bid Packages discuss and will return in September with a Work Order. To save time, work is currently being done on the drilling plan, in conjunction with the Wood River work, due to a forty-five to sixty days Corps review after submittal.

He mentioned that there is a risk moving forward, but it is felt to be minimal. Until the finally approval of the IDR is received, there is no guarantee of work-in-kind credit towards the USACE Authorized Level Project. Risk decreases substantially after the IDR approval, and the risk of not receiving work-in-kind credit is eliminated after the revised Project Partnership Agreement (PPA) is approved, which will take approximately a year to complete after the approval of the IDR. The risk is being managed by drilling only on reaches that are not being reevaluated by USACE at this time.

Next, Mr. Omvig discussed the Project Cost Estimate document which is based on their experience of work done to date. They have identified roughly \$15 million for land acquisition, wetland mitigation, cultural/archeological impacts and hazardous waste, which are local sponsor requirements and not applicable to In-Kind work. Actual construction is estimated to be \$33 million versus the Corps estimate of \$36 million.

There was a brief discussion confirming the Council's ability and the plan to pay for the projects identified by Amec Foster Wheeler.

Mr. Conrad asked for a motion to accept the Metro East Sanitary District Authorized Level Project Summary Report and Project Cost Estimate. A motion was made by Mr. Pennekamp, seconded by Mr. Maher, to accept the Metro East Sanitary District Authorized Level Project Summary Report and Project Cost Estimate. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye

Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – Aye  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

Mr. Motil had to leave the meeting.

### **Diversity Program Manager Contract Extension**

Mr. Conrad asked Mr. Etwert to explain this item.

Mr. Etwert explained that the Board's adopted a Minority Business and Workforce Utilization Plan in December 2012. In May 2013, the Board selected Marks & Associates to serve as the Diversity Program Manager for the project based on the firm's qualifications.

The board initially authorized a one year contract with Marks and Associates in July 2013 and last August approved an extension based on the anticipated completion of all projects by May of this year.

Unfortunately, easements, high river conditions, and contract rebidding have extended the construction completion date to May 2016, therefore, an additional \$32,310 is needed for Marks and Associates to continue to provide services thru May 2016.

He then introduced Sandra Marks, who provided an update of her firm's outreach to minority firms and results to date. He noted that Marks and Associates adjusted their team and time allocation throughout the past year overseeing more projects than originally projected.

She indicated that Marks and Associates continues to monitor and implement the policy that the Council has put in place while working closely with Amec Foster Wheeler regarding change orders and schedules, and ensuring commitments made by the prime contractors are fulfilled. There still remains a lot of minority and diversity work remaining on the overall project.

The Economic Impact Report, which will be presented at the completion of the project, will identify the actual type of work performed and the amount paid to minority businesses. At the completion of the project, minority firms will have been involved in testing, hauling, landscaping, electrical, and excavation types of work.

She also noted that Marks and Associates works closely with Dale Stewart and the Southwestern Illinois Building Trades Council, attending labor meetings and seeking additional opportunities.

She noted the inclusion of diversity in the bond underwriters' selection, which indicates the Council's commitment at all levels.

She indicated that the Economic Impact Report will reflect the Council's program integrity and commitment, while documenting the firms utilized, the trades utilized, types of work performed, dollars to the individual firms and to the community.

Mr. Etwert recommended that the Chief Supervisor be authorized to execute a contract extension with Marks & Associates to continue to serve as the Diversity Program Manager for the Council's flood prevention project thru May 2016 at a cost not to exceed \$32,310.00.

A motion was made by Mr. Pennekamp with a second by Mr. Polka to authorize the Chief Supervisor to execute a contract extension with Marks & Associates to continue to serve as the Diversity Program Manager for the Council's flood prevention project thru May 2016 at a cost not to exceed \$32,310.00. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – absent  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

### **Corps of Engineers Update**

Mr. Conrad asked Ms. Kelsey to provide the report from the Corps.

Mr. Kelsey then used a PowerPoint® presentation to provide an update on the project status of the Metro East Projects as follows:

She gave a brief ongoing construction update, first discussing the Wood River Reconstruction which is approaching their milestone for Physical Completion which is September 15<sup>th</sup> and indicates that all the work is completed.

Next she noted that the Chain of Rocks is nearing the Notice of Project Completion milestone, which is the transfer from construction to operation and maintenance, on September 30<sup>th</sup>.

She indicated that the Corps awarded a contract for construction of relief wells on July 27<sup>th</sup> for Mel Price. The contract is for additional relief wells as well as some replacement relief wells located in the interim operation plan area.

She indicated that the Corps continues to work with AMEC Foster Wheeler and Mr. Etwert regarding the process of the Council moving ahead with 500-year level of protection projects and ensuring that work the Council does is eligible for future Work In-Kind Credit.

The Corps doesn't have WRRDA 2014 implementation guidance yet, however, it has submitted the Integral Determination Reports (IDRs) for Wood River and East St. Louis to division so they can initiate their review. However, there is no revised schedule of when it can be anticipated to receive approval of the IDRs.

Lastly, she discussed the recent high water event and the issues, which were a result of the high water event, in the Prairie Du Pont Levee System. The Corps is waiting to see how Amec Foster Wheeler and the contractor are going to address the issues. The Corps is aware that the water must recede prior to assessment of the issue and determination of the solution.

There was a brief discussion regarding the Mel Price design schedule. The current schedule is for a recommended solution report to be approved by August 2016.

Next, there was a brief discussion regarding the contractor who will working on the Mel Price relief wells, to which the Corps indicated they would find out and provide that information.

A Mr. Conrad asked for a motion to accept the Corps report. A motion was made by Mr. Pennekamp with a second by Mr. Long to receive the Corps report. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher - Aye  
Mr. Motil – absent  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

### **Election of Officer for FY2015**

Mr. Conrad asked Mr. Etwert to explain this item.

Mr. Etwert explained that under the Council's bylaws, Board officers (President, Vice-President, and Secretary-Treasurer) serve one year terms, must each be from a different County Flood Prevention District and are elected at the Council's Annual Meeting. In the past, officers have been selected from among the Chairs of the three county flood prevention districts, and the positions have been rotated on an annual basis, but any Board member is eligible to serve as an officer.

There was a brief discussion regarding nominations and it was noted that Mr. Maher would be leaving the Board.

A motion was made by Mr. Long with a second by Mr. Conrad to elect the following slate of officers for FY2015:

President: Jim Pennekamp  
Vice-President: Paul Bergkoetter  
Secretary/Treasurer: John Conrad

Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – Aye  
Mr. Motil – absent  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously and the FY2016 officers were elected.

**Public Comment**

Mr. Conrad asked if there is any public comment. There was none.

**Resolution of Appreciation for Daniel L. Maher**

Mr. Conrad asked Mr. Etwert to read the resolution.

Mr. Etwert indicated that Mr. Maher has informed us that he will be relocating to Champaign, Illinois, and therefore, would be resigning from the Council.

Mr. Etwert then read the following resolution:



RESOLUTION Expressing Recognition and Appreciation to Daniel L. Maher for Distinguished Service in Restoring Flood Protection in the Metro-East

WHEREAS, Daniel L. Maher has served as a Commissioner on the St. Clair County Flood Prevention District since its inception in 2008, with reappointments in 2011 and 2014; and

WHEREAS, he has served on the Board of Directors of the Southwestern Illinois Flood Prevention District Council since its inception in 2009; and

WHEREAS, he has provided outstanding leadership and guidance to the Southwestern Illinois Flood Prevention District Council; and

WHEREAS, he faithfully and with honor, integrity and great distinction served as Secretary/Treasurer, Vice President, and President of the Southwestern Illinois Flood Prevention District Council; and

WHEREAS, his efforts have demonstrated that Counties working together can achieve much; and

WHEREAS, he has always been mindful of the goal of the Southwestern Illinois Flood Prevention District Council of achieving Federal Emergency Management Agency accreditation certifying the Metro-East levees meet federal standards; and

WHEREAS, he has worked tirelessly to avert the threat to classify the area as prone to flooding along with the terrible economic consequences of such action; and

WHEREAS, he has encouraged workforce policies that ensure fair wages and working conditions for project workers, encouraging the use of local workers, and avoiding work stoppages that could delay project completion; and

WHEREAS, the Southwestern Illinois Flood Prevention District Council has made great progress towards meeting its goal of fully protecting the Metro-East from a 100-year flood under his leadership; and

WHEREAS, his leadership helped initiate the restoration of the federally authorized 500-year level of flood protection in the Metro-East providing the region with a higher level of flood protection and economic growth, while simultaneously completing the 100-year level projects.

NOW, THEREFORE, IT IS HEREBY RESOLVED, that the Board of Directors of Southwestern Illinois Flood Prevention District Council formally acknowledges and extends its recognition and appreciation to Daniel L. Maher for his many years of service to the Southwestern Illinois Flood Prevention District Council and his efforts to provide expeditious and cost-effective flood protection to the Metro-East.

Mr. Maher thanked everyone.

Mr. Ronald Kaempfe, Business Manager of the IUOE Local 520 and Vice President of Southwestern Illinois Building Trades Council also thanked Dan for all that he has done.

A motion was made by Mr. Bergkoetter seconded by Mr. Pennekamp, to approve the Resolution of Appreciation for Daniel L. Maher. Mr. Maher called the roll and the following votes were made on the motion:

Mr. Polka - Aye  
Mr. Brinkman – Aye  
Mr. Bergkoetter - Aye  
Mr. Conrad - Aye  
Mr. Long – Aye  
Mr. Maher – abstain  
Mr. Motil – absent  
Mr. Parks – absent  
Mr. Pennekamp – Aye

The motion was approved unanimously.

#### **Other Business**

There was no other business.

#### **Adjournment**

A motion was made by Mr. Maher, seconded by Mr. Pennekamp to adjourn the meeting. The motion was approved unanimously by voice vote, all voting aye.

Respectfully submitted,

John Conrad,  
Secretary/Treasurer, Board of Directors



## Progress Report August 19, 2015

### Southwestern Illinois Levee Systems

By Jay Martin



## Construction Status



- ▶ Bid Package 3, 4, 5, 6 & 7B – Weather and River Levels have stalled progress and impacted schedule.
- ▶ The USACE 408 Permit prohibits excavation/drilling when the Mississippi River Stage is at or above select levels. Most construction operations have been delayed since May 27, 2015.
- ▶ As the river recedes and the groundwater level drops some construction activities have re-started as of the end of July.



## Construction Status

---

- ▶ **Bid Package 2A – Fish Lake Pump Stations**
  - ▶ The construction portion of this project is complete and the retainage has been released.
  - ▶ Amec Foster Wheeler preparing documents for USACE.
  
- ▶ **Bid Package 2B – WR/MESD/PdP Pump Stations**
  - ▶ The planned construction portion of this project is complete. Retainage will not be fully released until the completion of the change order and the resolution of all warranty issues (Site 5) are resolved.
  - ▶ Amec Foster Wheeler preparing close-out documents for USACE.
  
- ▶ **Bid Package 2C – Site 12 Pump Station Force Mains (MESD)**
  - ▶ Work on this site will not begin until October 15 to comply with 33 U.S.C 408 (Section 408 alteration permit).
  - ▶ The NTP was issued in March 5, 2015.
  - ▶ The contractor is preparing and Amec Foster Wheeler is reviewing submittals.

---

3



## Construction Status

---

- ▶ **Bid Package 3 – Wood River Seepage Improvements**
  - ▶ Design revisions to Blanket Drain 4 and Random Fill Area 1 pending. Construction cost impacts will be submitted when available
  - ▶ Piezometer installation – no progress
  - ▶ Upper Wood River relief well drilling resumes – 3 remain.
  - ▶ Lower Wood River relief wells on hold due to Flood Waters
  - ▶ Pilot hole drilling resumed at IL RT3 and Hawthorne. 13 Pilot Holes remain.
  - ▶ Blanket Drain 2 ≈ 40% Complete.
  - ▶ Losch Pond Drainage Ditch & Box Culvert = Complete
  - ▶ Blanket Drains 3, 5 & 7, Weir #4, and Indian Creek substantially complete.

---

4



## Construction Status

---

- ▶ Bid Package 4 – MESD Seepage Improvements (Conoco Phillips)
  - ▶ Relief well collector system has failed deflection tests. Amec Foster Wheeler is reviewing.
  - ▶ Pump Station installation will resume this month.
  - ▶ Clay Cap placement began this week.



## Construction Status

---

- ▶ Bid Package 5 – MESD Seepage Improvements
  - ▶ Relief well collector systems have failed deflection tests. Amec Foster Wheeler is reviewing.
  - ▶ Clay Cap and Random Fill work will begin when the river/groundwater levels recede. The Clay Cap placement on hold as AFW evaluates a proposed value engineering proposal.
  - ▶ Sluice Gate rehabilitation at MoPAC scheduled for completion when the river levels recede.
  
- ▶ Bid Package 6 – Prairie du Pont / Fish Lake Seepage Improvements
  - ▶ Weather and River Levels have stalled progress

## Construction Status



- ▶ Bid Package 7B – Wood River Lower (Deep) Cut-off Wall
  - ▶ Most construction operations have been delayed since NTP. Groundwater levels on the riverside toe delaying installation of piezometers that must be completed prior to most major features of work beginning.
  - ▶ TREVICOS and their subcontractors have mobilized to the site.
  - ▶ Clearing & Grubbing underway. Installation of silt fence in progress.
  - ▶ Access and Haul Roads has begun.
  - ▶ Anticipate test section – no sooner than the second week of September.

7

## Bid Package 3 – Wood River



8

## Bid Package 3 – Wood River



## Bid Package 7B – Lower Wood River



## FEMA Certification Update

---



- ▶ Upper Wood River
  - ▶ Pending completion of Blanket Drain #1&2 & 17 relief wells in Bid Package 3
  - ▶ USACE will certify to FEMA (due to Mel Price seepage area).
  - ▶ Amec Foster Wheeler to submit documentation to USACE in Q4 2015.
  - ▶ USACE submits documentation to FEMA approximately 3-4 months after.
  
- ▶ Lower Wood River
  - ▶ Certification is pending completion of BP3 & BP7B.
  - ▶ Submit to FEMA Middle of 2016
  
- ▶ Wood River East & West Forks
  - ▶ Certification is pending IDNR Approval of Interior Drainage Analysis
  - ▶ Submit to FEMA Fall 2015

---

11

## FEMA Certification Update

---



- ▶ MESD
  - ▶ Pending completion of Bid Packages 2B, 4, & 5.
  - ▶ Pending resolution of Chain of Rocks documentation with USACE.
  
- ▶ Prairie du Pont & Fish Lake
  - ▶ Pending completion of Bid Packages 2B & 6 (weather has impacted).
  - ▶ Submit to FEMA by end of 2015.

---

12



## Authorized Level (500-Year) Design

### Wood River

- Reach-by-reach analysis complete
- Costs and project approach presented and approved by Council
- Work order presented and approved
  - Drilling plan progressing and portions submitted for review
  - Subcontract agreement

### MESD

- Costs and project approach presented for approval today to Council

### PdP/FL

- Currently being reviewed by the USACE against FEMA improvements

Questions?

### CURRENT STATUS

- Ongoing Construction Update
  - Wood River Reconstruction Physical Completion
  - Chain of Rocks – Notice of Project Completion/Transfer to O&M
  - Mel Price – Contract award for relief well construction 27JUL15
- Path Forward on Work in Kind credit eligible FPD activities
- High Water Event – After Action Status



BUILDING STRONG®

# Metro East Sanitary District Authorized Level Project Summary Report

Preliminary Design Phase

Prepared for



Prepared by



**August 13, 2015**

Table of Contents

**1. General Information / Background .....1**

    Authorized Level Project .....1

    Metro East Sanitary District (MESD) Levee System.....1

    USACE Authorized Level Project Decision Segments .....1

**2. Recommended Plan .....4**

    Integral Determination Report (IDR) .....4

    Recommendation .....4

    Development of Bid Packages .....4

**3. Schedule.....5**

**4. Risk in Moving Forward .....5**

Appendix 1 – Bid Package / Design Reach Exhibits

Appendix 2 – Design Process Flow Charts

## 1. General Information / Background

### Authorized Level Project

Following the Southwestern Illinois Flood Prevention District Council's (FPD Council) design and construction of levee improvements that are required for accreditation in accordance with 44 CFR 65.10 criteria (FEMA criteria), the FPD Council desires to advance the implementation of the U.S. Army Corps of Engineers' (USACE) Authorized Level Project. The USACE Authorized Level Project further protects the region from a flood in excess of a 100-year FEMA flood event; specifically, the USACE Authorized Level project protects the many residents and businesses throughout southwestern Illinois against an approximately 500-year flood event (the actual Authorized Level Flood Event is defined as 52 feet on the Mississippi River St. Louis, Missouri gage with 2 feet of freeboard, also called the 52+2 Flood Event).

The USACE requires a 35% local sponsor match of the total estimated engineering and construction costs. The Council and the Corps have executed a Memorandum of Understanding that will allow 30% of those costs to be applied through work-in-kind credits, pending the approval of an Integral Determination Report (IDR) and a revised Partnership Agreement (PPA) between the USACE and the FPD Council. Work-in-kind credits are applied when the local sponsor performs work that would otherwise be part of the Authorized Level Project. Work performed by the local sponsor that is not part of the USACE Authorized Level Project is not eligible for work-in-kind credit. To date, the only project eligible for work-in-kind credit that is part of the Southwestern Illinois Levee Certification Design projects (FEMA certification projects) is Bid Package 7B – Lower Cutoff Wall, which is the deep cutoff wall along the Lower Wood River Levee segment. No work-in-kind credit projects have been completed along the Metro East Sanitary District (MESD) Levee System.

Amec Foster Wheeler was tasked with reviewing the U.S. Army Corps of Engineers' Authorized Level Project decision segments and evaluating cost effectiveness of the most vulnerable improvements of which the FPD Council could begin engineering and construction.

### Metro East Sanitary District (MESD) Levee System

This report covers the MESD Levee System only. The Summary Report for the Prairie du Pont/Fish Lake Levee will be submitted at a later date under a separate cover, while the Wood River Levee Summary Report was submitted on June 17, 2015. Vulnerable reaches along the MESD Levee System are located both north and south of the Chain of Rocks system. The Chain of Rocks system is the segment of the levee system that is operated and maintained by the USACE. No work is proposed along the Chain of Rocks segment.

### USACE Authorized Level Project Decision Segments

The USACE St. Louis District has provided Amec Foster Wheeler and the FPD Council a list of decision segments that require improvements before those segments of levee can adequately protect against the Authorized Level Flood Event. A decision segment is a length of levee, which typically has a length of 330 feet (or some multiple of 330 feet, such as 660 feet). The USACE split the entire levee into individual decision segments to analyze each segment of levee with the available subsurface (boring) information; borings were conducted generally every 330 feet along the MESD Levee System, excluding the Chain of Rocks Levee System. After each decision segment was evaluated for protection against underseepage, a decision was made regarding what underseepage improvements, if any, were needed to correct deficiencies of the particular segment. Underseepage improvements generally consist of seepage berms, fill, relief wells, pump stations, and cutoff walls. Decisions about underseepage improvements were based on factors such as constructability, land use, and cost. Table 1 lists the decision segments provided by the USACE St. Louis District. Each decision segment was evaluated by the USACE as part of the *Credit for Work-In-Kind Contributions, East St. Louis, Illinois, Flood Protection Project Design Deficiency Corrections, May, 2015* (The IDR). The USACE developed the rankings in Table 1, based on their Factor of Safety (FS) against failure at the Authorized Level Flood Event. The "FS Rank w/o AMEC" Column in Table 1 refers to the FS rank before the FEMA

Improvements were constructed; The FEMA improvements are nearly complete as of this report. The “Average FS with AMEC” column in Table 1 refers to the factor of safety for the particular reach of levee after accounting for the FEMA Improvements that are currently underway. The seepage control improvements recommended by USACE are based on evaluations performed as part of the 2011 USACE Limited Reevaluation Report for the MESD Levee System (LRR). It is important to point out that at the time the LRR was completed, none of the FPD Council’s FEMA Improvements were installed; therefore, the USACE has noted which reaches have had work done by the FPD Council and Amec Foster Wheeler subsequent to the initial underseepage analysis as part of the LRR in 2011. Currently, the USACE St. Louis District is reevaluating the decision segments which have had improvements completed as part of the FPD Council’s FEMA improvement projects, which the USACE designates as “AMEC Solution”. Ideally, the extent of the improvements in those reaches would be reduced, or eliminated altogether, thus reducing the overall USACE Authorized Level cost estimate for engineering and construction.

**Table 1 – MESD Design Segments**

Table 1 – MESD Design Segments						
Abbreviations List: AMEC: Amec Foster Wheeler / FPD Council FS: Factor of Safety (higher is better, lower is more vulnerable)				COW: Cutoff Wall PS: Pump Station RW: Relief Well(s)		
Designer Recommended Rank	FS Rank w/o AMEC	Levee Reach Station		Average FS with AMEC	USACE Recommended Plan	AMEC Solution
		From	To			
1*	3	1207+00	1348+90	0.63	Bedrock COW and Clay Cap	AMEC Wells
2	1	781+10	794+30	0.37	Bedrock COW	No New Features
3	2	962+80	972+70	0.40	Seepage Berm	No New Features
4	13	987+50	1018+90	0.89	Shallow COW, 12 RW, PS	No New Features
5	4	1477+60	1497+40	0.61	Bedrock COW & 12 RW	AMEC Wells
6	5	860+60	863+30	0.63	6 RW	No New Features
7	7	773+03	784+50	0.72	20 RW	No New Features
8	6	1114+60	1137+70	0.76	40 RW	AMEC Wells
9	8	791+10	804+60	0.79	20 RW	No New Features
10	9	890+20	893+50	0.83	4 RW	No New Features
11	10	45+60	48+90	0.85	Seepage Berm	No New Features
12	11	1474+30	1477+60	0.88	10 RW	No New Features
13	12	1190+50	1193+80	0.88	2 RW	No New Features
14	14	1203+70	1207+00	0.90	3 RW	No New Features
15	16	844+00	860+60	0.97	Riverside Clay Trench, 19 RW	No New Features
16	18	1098+10	1104+70	1.02	6 RW	No New Features
17	19	982+60	985+90	1.05	4 RW	No New Features

**Table 1 – MESD Design Segments**

Abbreviations List: AMEC: Amec Foster Wheeler / FPD Council FS: Factor of Safety (higher is better, lower is more vulnerable)							COW: Cutoff Wall PS: Pump Station RW: Relief Well(s)
Designer Recommended Rank	FS Rank w/o AMEC	Levee Reach Station		Average FS with AMEC	USACE Recommended Plan	AMEC Solution	
		From	To				
18	20	1022+20	1038+70	1.06	26 RW	No New Features	
19	21	194+10	197+40	1.10	Seepage Berm	No New Features	
20	22	174+30	177+60	1.11	Seepage Berm	No New Features	
21	23	204+00	217+20	1.14	Seepage Berm	No New Features	
22	24	1065+10	1068+40	1.15	4 RW	No New Features	
23	25	804+60	824+20	1.16	14 RW	No New Features	
24	26	1193+80	1203+70	1.18	6 RW	No New Features	
25	27	223+80	233+70	1.19	Seepage Berm	No New Features	
26	17	863+80	890+20	1.21	38 RW	AMEC Wells	
27	28	929+80	936+40	1.25	5 RW	No New Features	
28	15	255+90	262+25	1.26	5 RW	AMEC Wells	
29	29	824+20	844+00	1.27	Riverside Clay Trench, 12 RW	No New Features	
30	30	1071+70	1078+30	1.32	5 RW	No New Features	
31	31	240+30	243+60	1.39	Seepage Berm	No New Features	
32	32	1081+60	1088+20	1.39	3 RW	No New Features	
33	33	68+70	72+00	1.44	Seepage Berm	No New Features	
34	34	1144+30	1180+60	1.45	13 RW and Lift Station	No New Features	
35	35	1091+50	1098+10	1.45	2 RW	No New Features	
36	36	1048+60	1051+90	1.46	3 RW	No New Features	
37	37	956+20	959+50	N/A	Landside Clay Fill	No New Features	
38	38	903+40	913+30	N/A	Landside fill may eliminate need for underseepage controls	No New Features	

## 2. Recommended Plan

### Integral Determination Report (IDR)

On May 13, 2015, the FPD Council and Amec Foster Wheeler received a draft copy of the IDR (draft dated May 7, 2015). The USACE has estimated the total cost of the project to be \$152,300,000. The draft IDR estimated the total cost of work items proposed for work-in-kind credit at \$128,200,000. Of the \$128,200,000, \$36,300,000 is the total for work-in-kind credit that the FPD Council can perform as part of the Authorized Project. In other words, the FPD Council can fund engineering and construction for \$36,300,000 and supply an additional \$7,615,000 in cash to the USACE, and the requirements for the local match to the federal project will have been met. Note that the FPD Council already has a credit with the USACE for \$2,635,000 resulting from cash contributions previously made.

### Recommendation

It is recommended that the FPD Council proceed with the following work:

#### Subsurface investigations for:

- All required relief wells
- All required seepage berms
- All required pump stations
- Cutoff walls (as needed)

#### Design and Construction for:

- All required relief wells
- All required pump stations
- Seepage berms (as needed)

Those items noted 'as needed' will be performed only if the cost estimates for the initial portions of work fall short of the 30% match figure (\$36,300,000). The USACE estimated the total cost for design and construction of all relief wells and pump stations to be approximately \$34.3 Million. By the FPD Council taking on this work, it will be possible for the design and construction of those levee improvements to occur sooner than if the USACE were to perform the design and construction.

Should the FPD Council accept the recommended plan, the only work the USACE will have left to perform as part of the USACE Authorized Level Project is the design and construction of the cutoff walls and, potentially, the seepage berms.

### Development of Bid Packages

Amec Foster Wheeler has reviewed the USACE decision segments and has determined that four construction bid packages will appropriately subdivide the decision segments. By splitting the work into four bid packages, the FPD Council has the ability to cancel any one bid package if the remaining bid package(s) approach the work-in-kind credit contribution limit of \$36,300,000. While there is nothing stopping the FPD Council from constructing improvements in excess of \$36,300,000, the USACE will require Section 408 approval for any work over and above the \$36,300,000 limit, whereas any work done as work-in-kind, as agreed upon in the final IDR, which is still in development, does not require Section 408 approval. The four bid packages have been named Bid Packages 11, 12, 13, and 14, a continuation of the numbering from the FEMA Certification Design and Construction packages. The packages were divided primarily by pump station tributary area. The resultant bid packages are as follows:

- ▶ Bid Package 11 is comprised of ten USACE decision segments and spans from Levee Station 255+90 to 913+30, less the Chain of Rocks system. This package includes the construction of 150



relief wells, 144 of which are tributary to existing pump stations and 5 of which drain naturally into the environment.

- ▶ Bid Package 12 is comprised of five USACE decision segments and spans from Levee Station 929+80 to 1051+90. This package includes the construction of a new pump station, between Stations 987+50 to 1018+90, and 50 relief wells, 45 of which are tributary to an existing or proposed pump station and 5 of which drain naturally into the environment.
- ▶ Bid Package 13 is comprised of ten USACE decision segments and spans from Levee Station 1065+10 to 1497+40. This package includes the construction of a new lift station, between Stations 1144+30 and 1180+60, and 106 relief wells, 84 of which are tributary to an existing pump station or newly proposed lift station and 22 of which drain naturally into the environment.
- ▶ Bid Package 14 is comprised of eleven USACE decision segments and spans from Levee Station 45+60 to 972+70. This package consists of all earthwork which includes 8 seepage berms, 1 fill area, and a clay cap spanning from Station 824+20 to 860+60. This package will only be executed if additional work-in-kind credit is available after the costs of the preceding bid packages is better defined.

Exhibits are appended to this report which depict the approximate location of each improvement as part of the recommended plan; see Appendix 1.

### **3. Schedule**

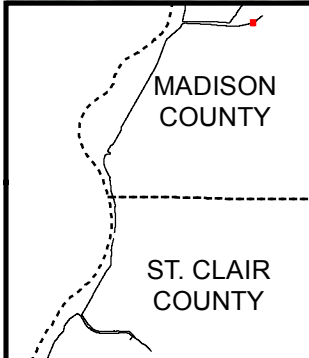
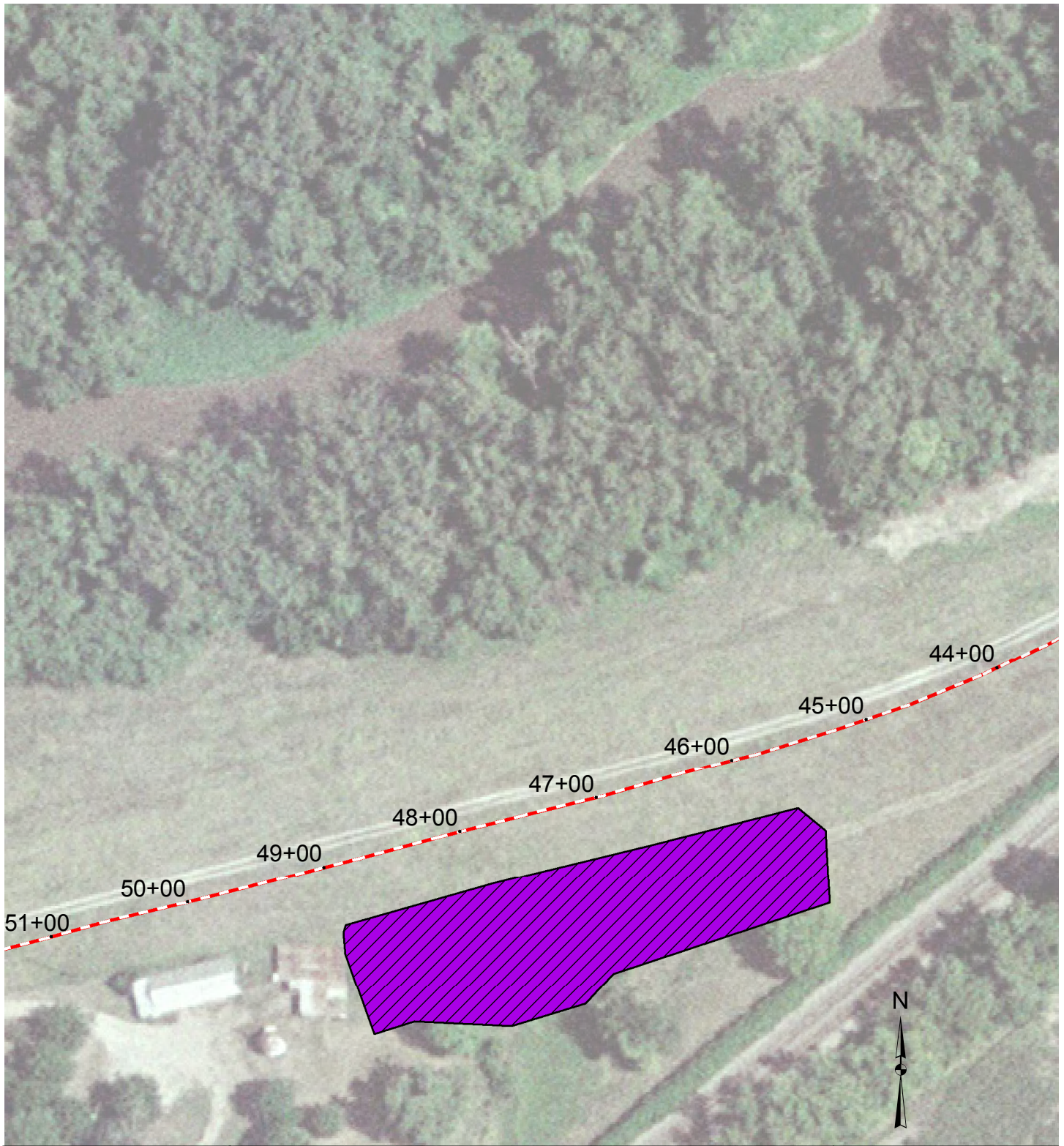
Upon Board approval of this Plan, Amec Foster Wheeler will develop a scope and budget for the completion of field activities and design for the Bid Packages referenced herein. Work on a boring plan for subsurface investigations throughout MESD is already underway, as USACE approval is estimated to be at least 45-60 days once the plan is submitted. If desired, the scope, schedule, and fee for preliminary field work (drilling), and engineering and coordination with USACE, will be presented at the September 2015 FPD Council board meeting, assuming all costs are received by USACE in sufficient time.

AMEC Foster Wheeler, the FPD, and the USACE St. Louis District have worked together to develop the role and responsibilities for each party in the design process. Flow charts outlining the responsibilities through the design process are included as Attachment 2.

### **4. Risk in Moving Forward**

Should the FPD Council accept this recommended plan and move forward with field investigation, conceptual engineering, and drilling of relief well pilot holes, the FPD Council should understand the risk associated in doing so. There is risk associated with moving forward with these activities without an approved IDR and revised PPA. Risk decreases substantially after IDR approval, and risk of not receiving work-in-kind credit is eliminated after the revised PPA is approved. While the IDR for MESD was originally anticipated to be approved in September, 2015, we have been informed by USACE that approval has been delayed due to the Water Resources Reform and Development Act of 2014 (WRRDA 2014) implementation guidance not being issued. Once issued, the approval process is estimated to take four months. Therefore, the earliest we can expect approval of the IDRs is probably December, 2015. The IDRs, which identify the work that will be eligible for Work-In-Kind Credit, reduce the risk of not receiving credit for work performed. All risk is eliminated after approval of the revised Project Partnership Agreements (PPAs), which take approximately a year to complete after approval of the IDRs.

## Appendix 1 – Bid Package / Design Reach Exhibits



**USACE Authorized Level of Protection Planning and Analysis**

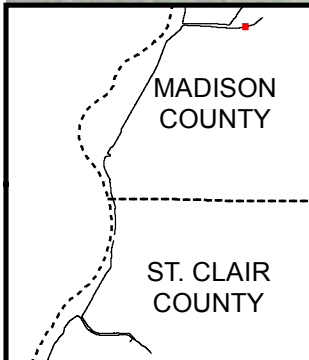
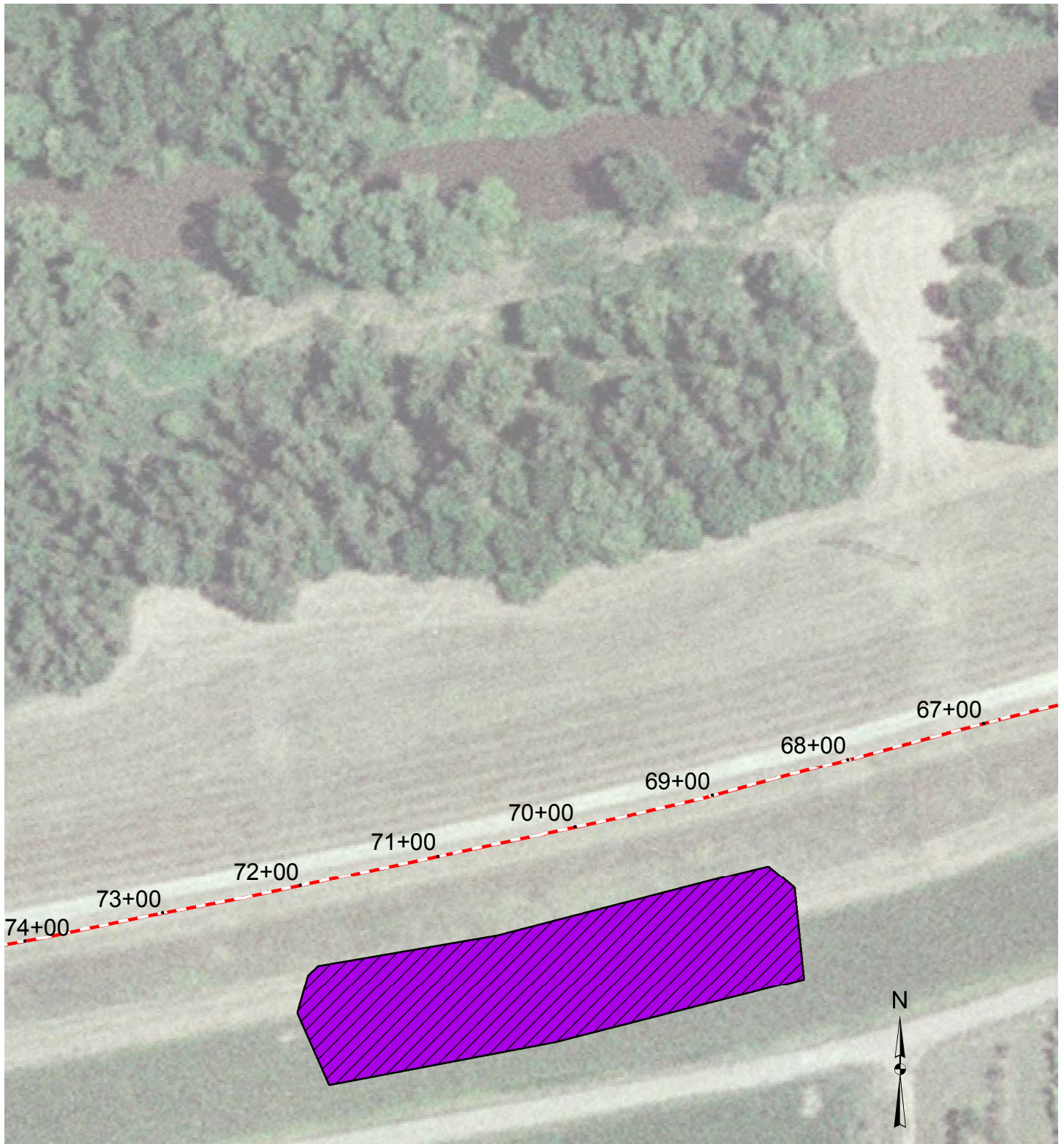
**BID PACKAGE 14**

**MESD**

DESIGN STA: 45+60 TO 48+90

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of Protection Planning and Analysis**

**BID PACKAGE 14**

**MESD**


**DESIGN STA: 68+70 TO 72+00**

08/05/2015

SHEET

2 OF 23

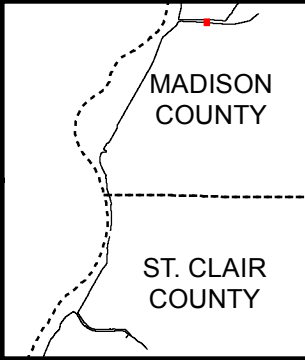
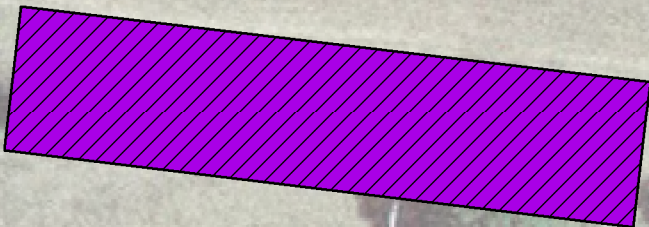
**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



CAHOKIA CREEK DIVERSION CHANNEL

179+00 178+00 177+00 176+00 175+00 174+00 173+00



MADISON COUNTY

ST. CLAIR COUNTY






**USACE Authorized Level of Protection Planning and Analysis**

**BID PACKAGE 14**

**MESD**

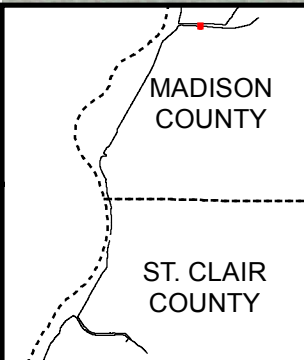
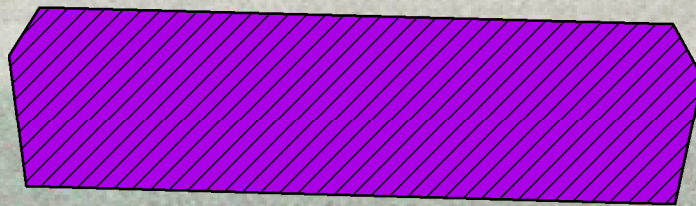
DESIGN STA: 174+30 TO 177+60

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



199+00 198+00 197+00 196+00 195+00 194+00 193+00



# USACE Authorized Level of Protection Planning and Analysis

## BID PACKAGE 14

### MESD

DESIGN STA: 194+10 TO 197+40

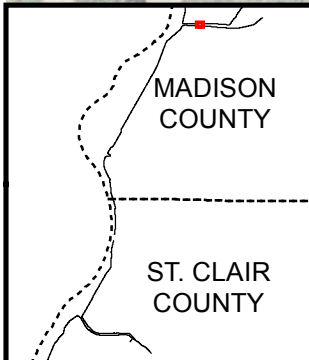
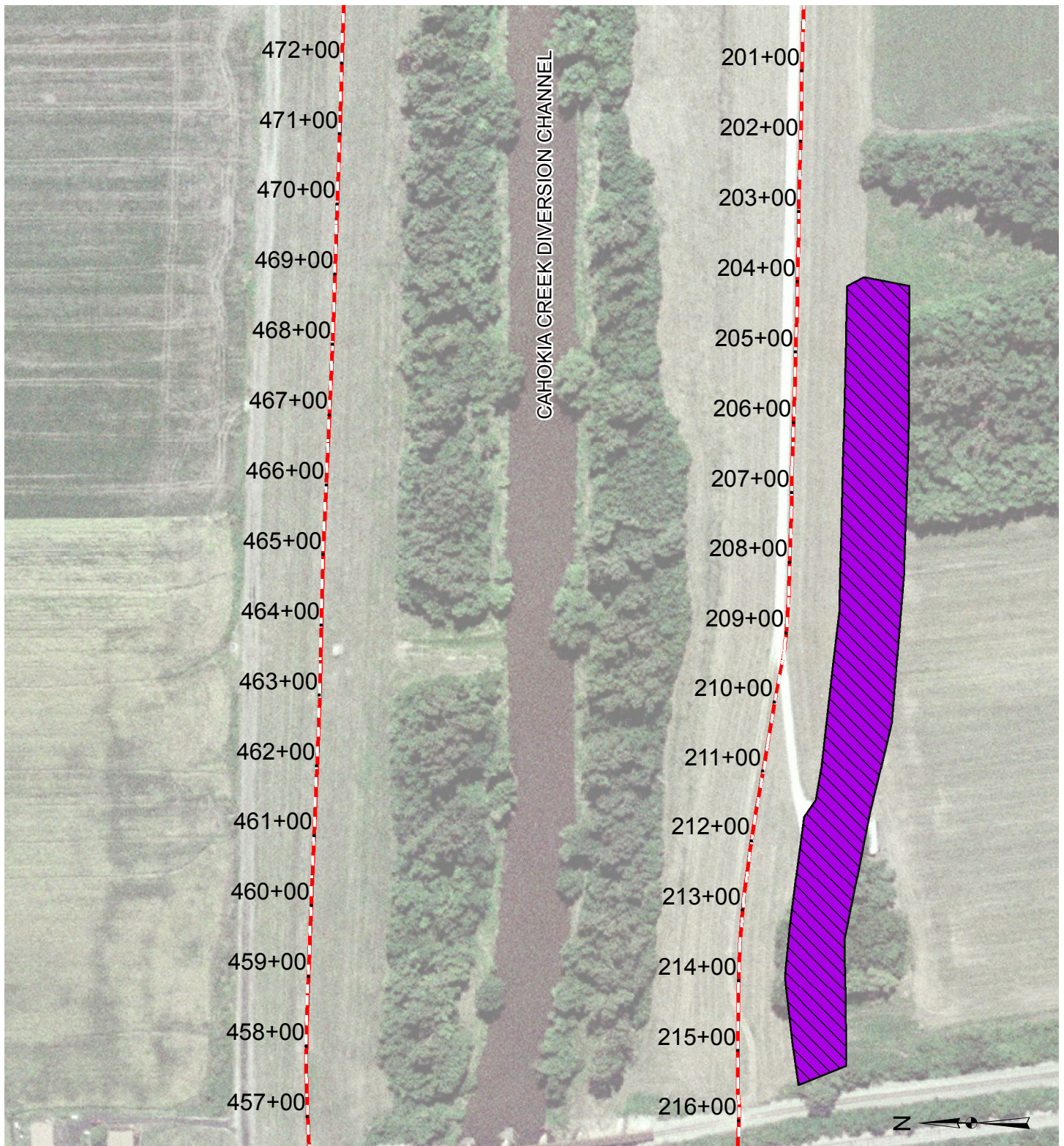
#### Legend

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill

08/05/2015

SHEET

4 OF 23



**USACE Authorized Level of Protection Planning and Analysis**

**BID PACKAGE 14**

**MESD**

**DESIGN STA: 204+00 TO 217+20**

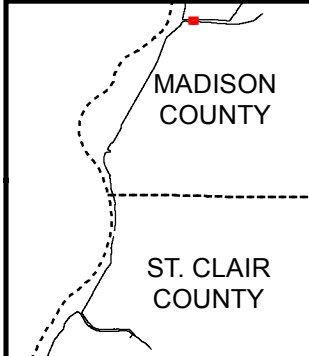
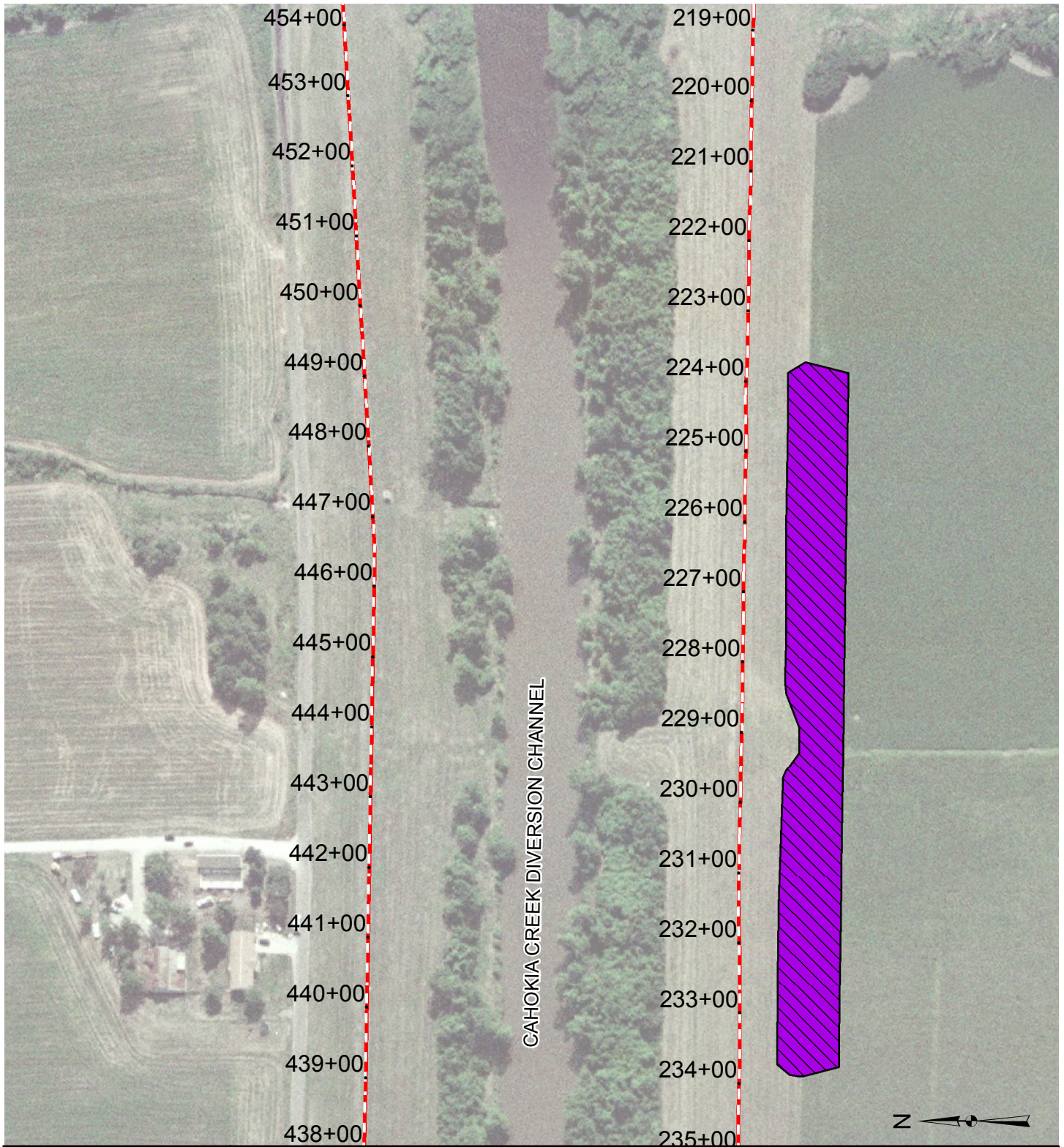
08/05/2015

SHEET

5 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of Protection Planning and Analysis**

**BID PACKAGE 14**






**MESD**

DESIGN STA: 223+80 TO 233+70

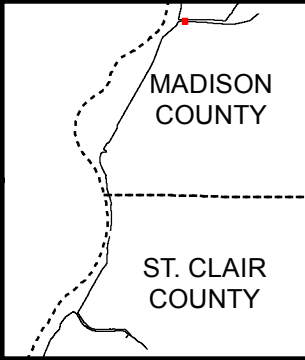
---

08/05/2015 SHEET 6 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill





**USACE Authorized Level of  
Protection Planning and Analysis**

**BID PACKAGE 14**

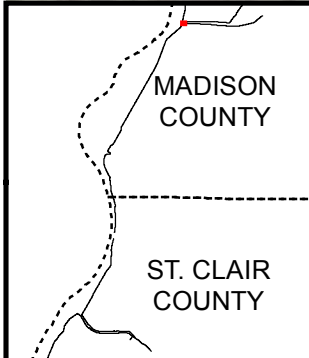
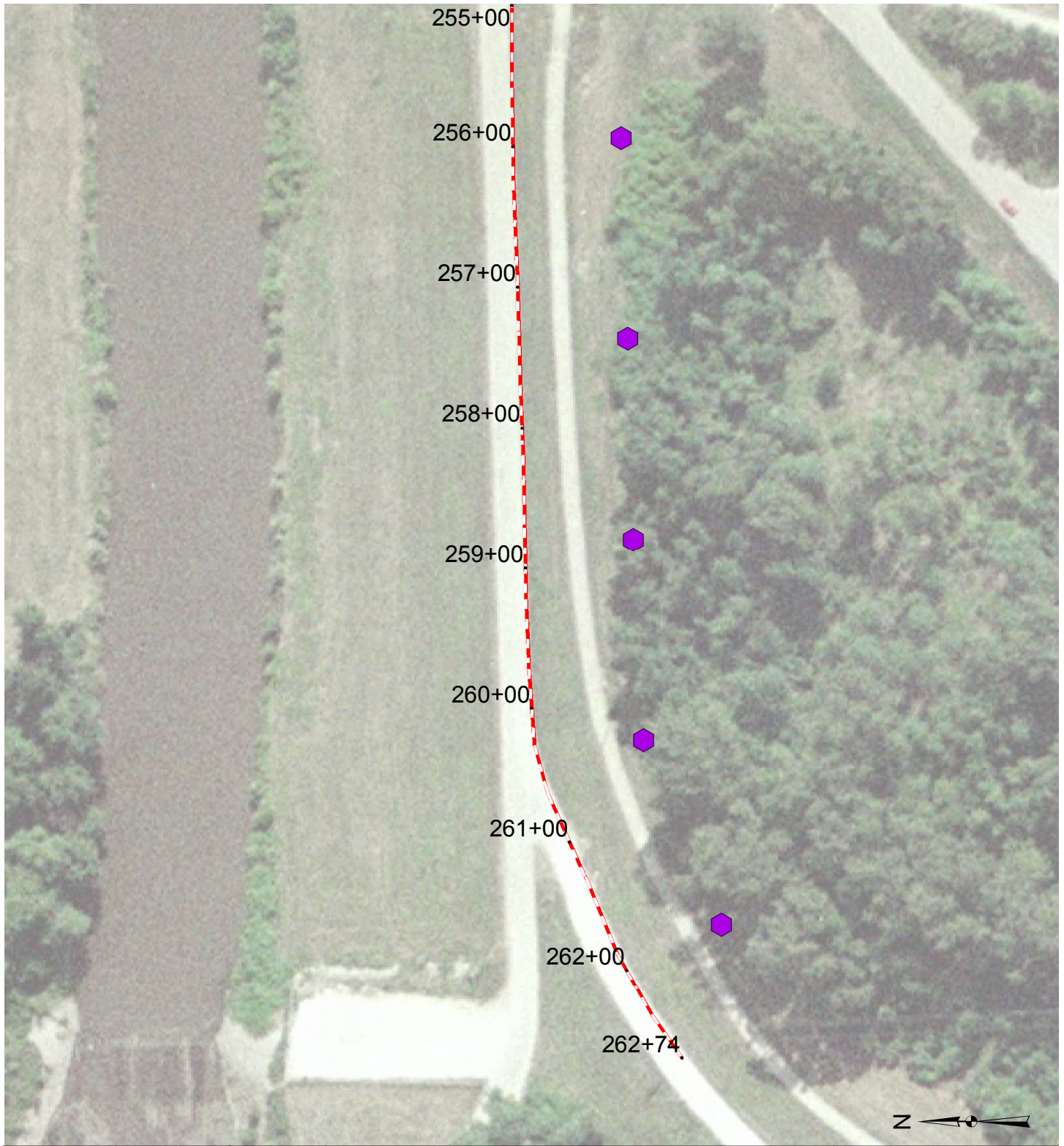
**MESD**

DESIGN STA: 240+30 TO 243+60

---

08/05/2015 SHEET 7 OF 23

Legend	
	New Pump Station
	New Relief Well
	Clay Cap
	New Seepage Berm
	New Fill







**USACE Authorized Level of Protection Planning and Analysis**

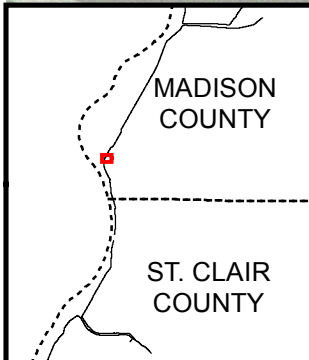
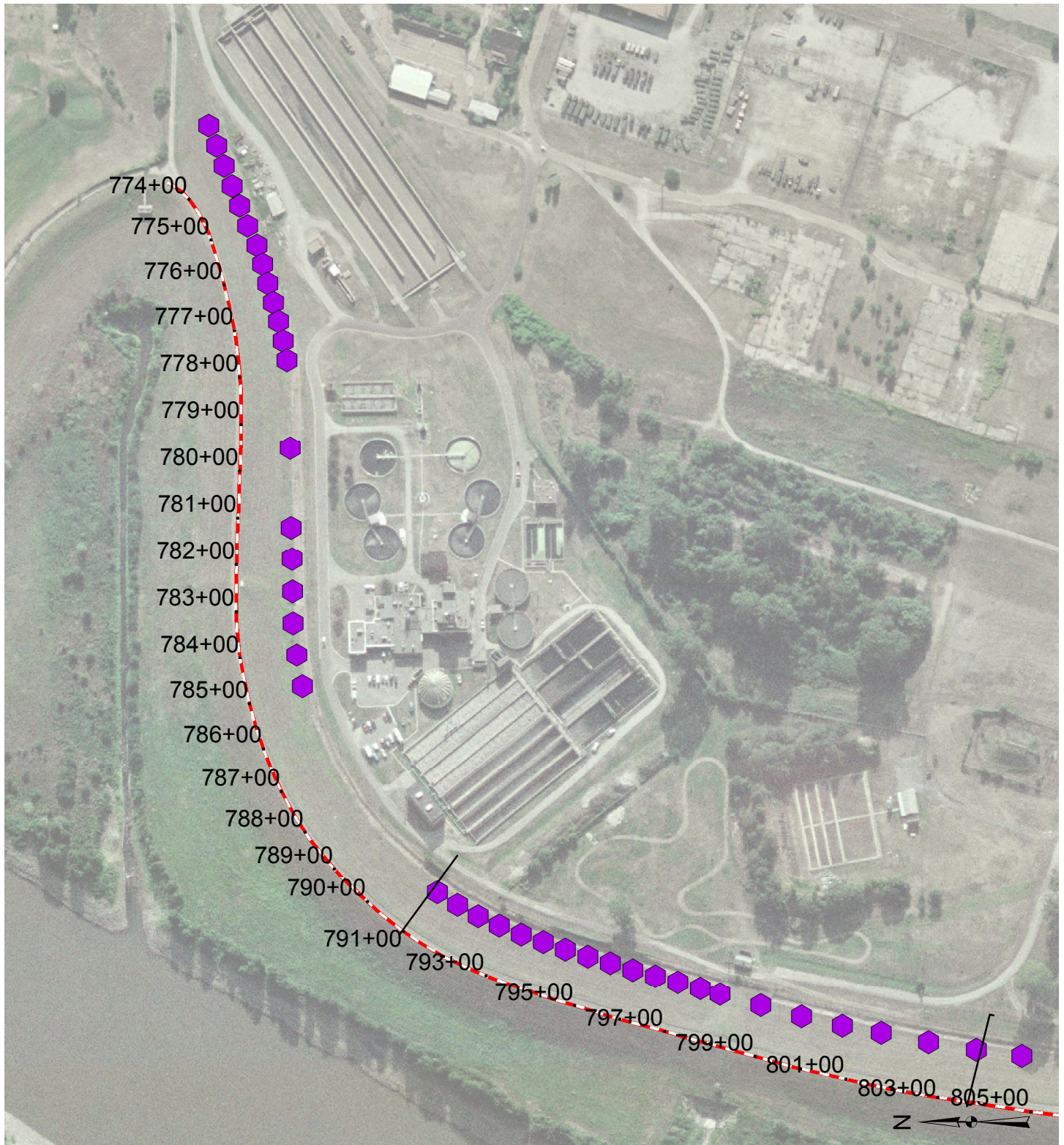
**BID PACKAGE 11**

**MESD**

**DESIGN STA: 255+90 TO 262+25**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of  
Protection Planning and Analysis**

**BID PACKAGE 11**






**MESD**

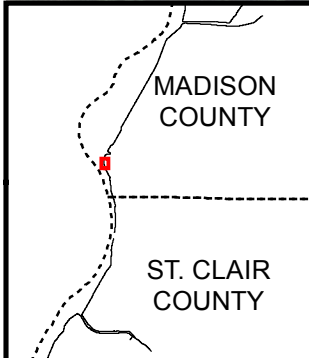
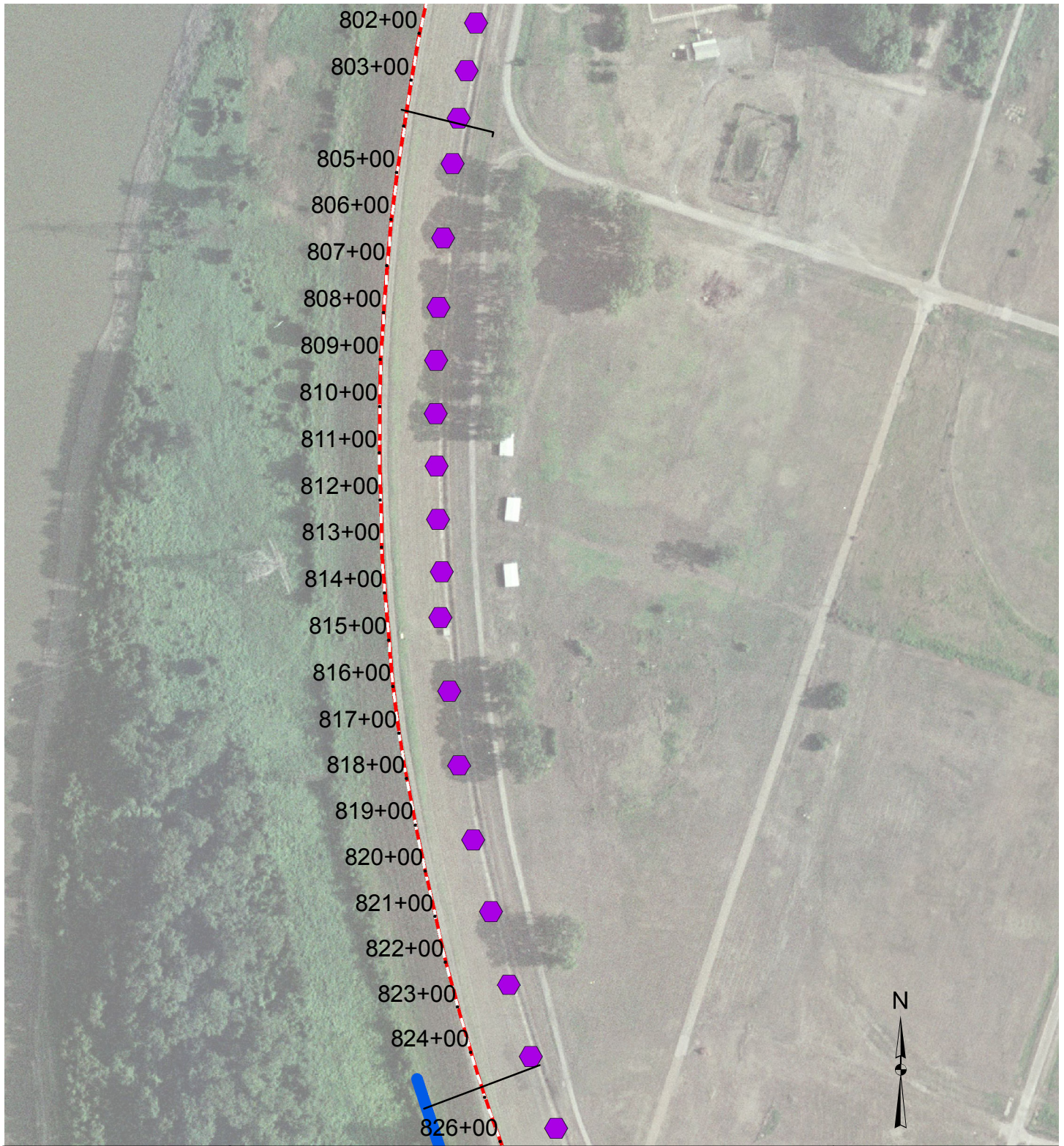
**DESIGN STA: 773+03 TO 824+20**

---

08/05/2015 SHEET 9 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill







**USACE Authorized Level of Protection Planning and Analysis**

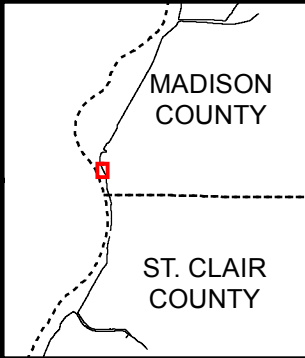
**BID PACKAGE 11**

**MESD**

**DESIGN STA: 804+60 TO 824+20**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill







**USACE Authorized Level of Protection Planning and Analysis**

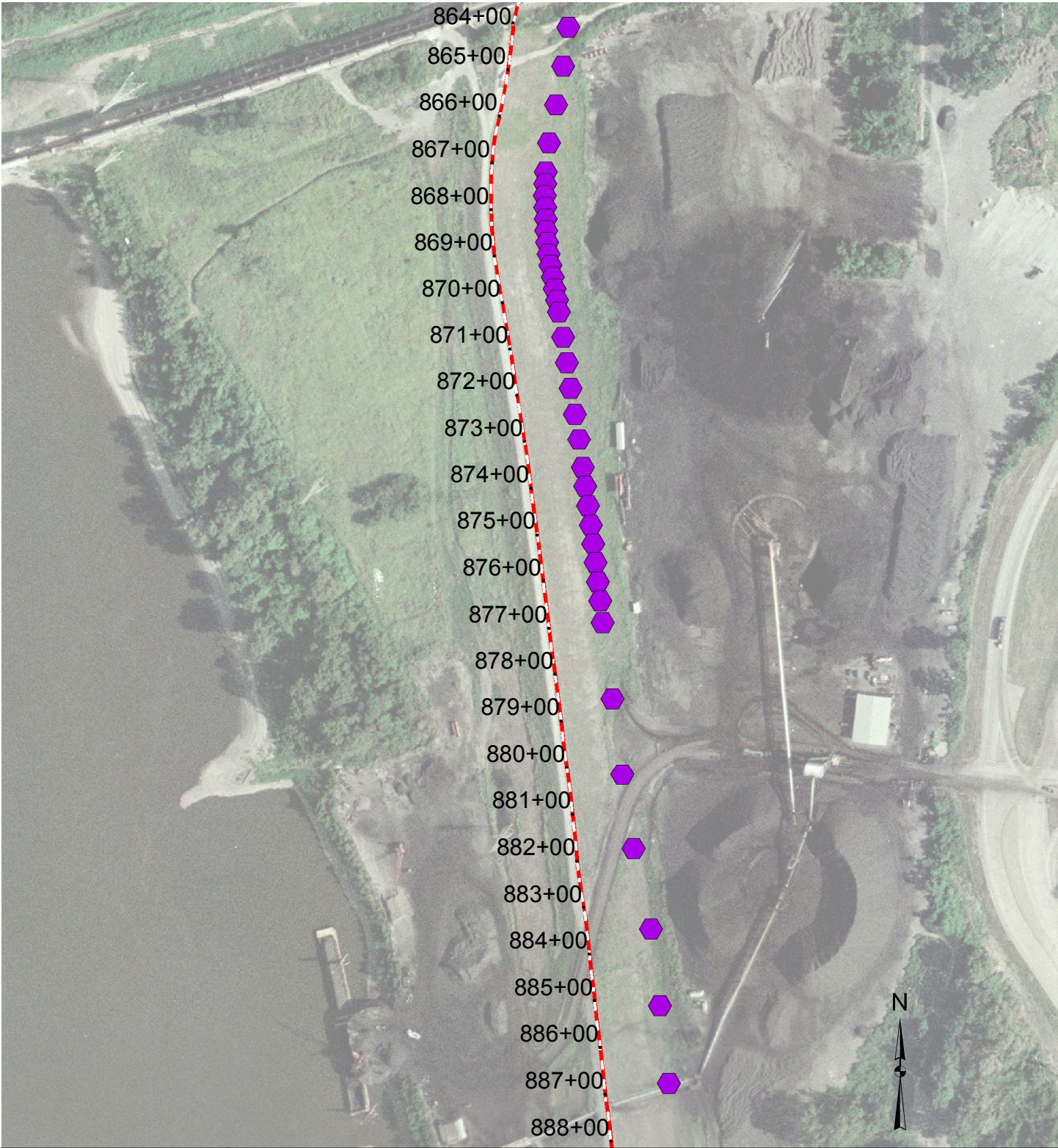
**BID PACKAGE 11**

**MESD**

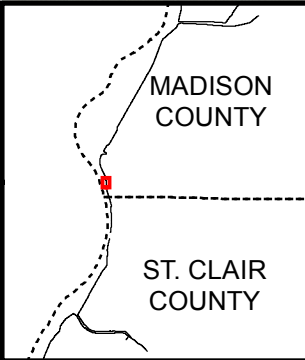
**DESIGN STA: 824+20 TO 863+30**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



864+00  
 865+00  
 866+00  
 867+00  
 868+00  
 869+00  
 870+00  
 871+00  
 872+00  
 873+00  
 874+00  
 875+00  
 876+00  
 877+00  
 878+00  
 879+00  
 880+00  
 881+00  
 882+00  
 883+00  
 884+00  
 885+00  
 886+00  
 887+00  
 888+00








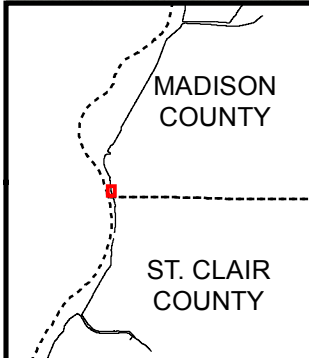
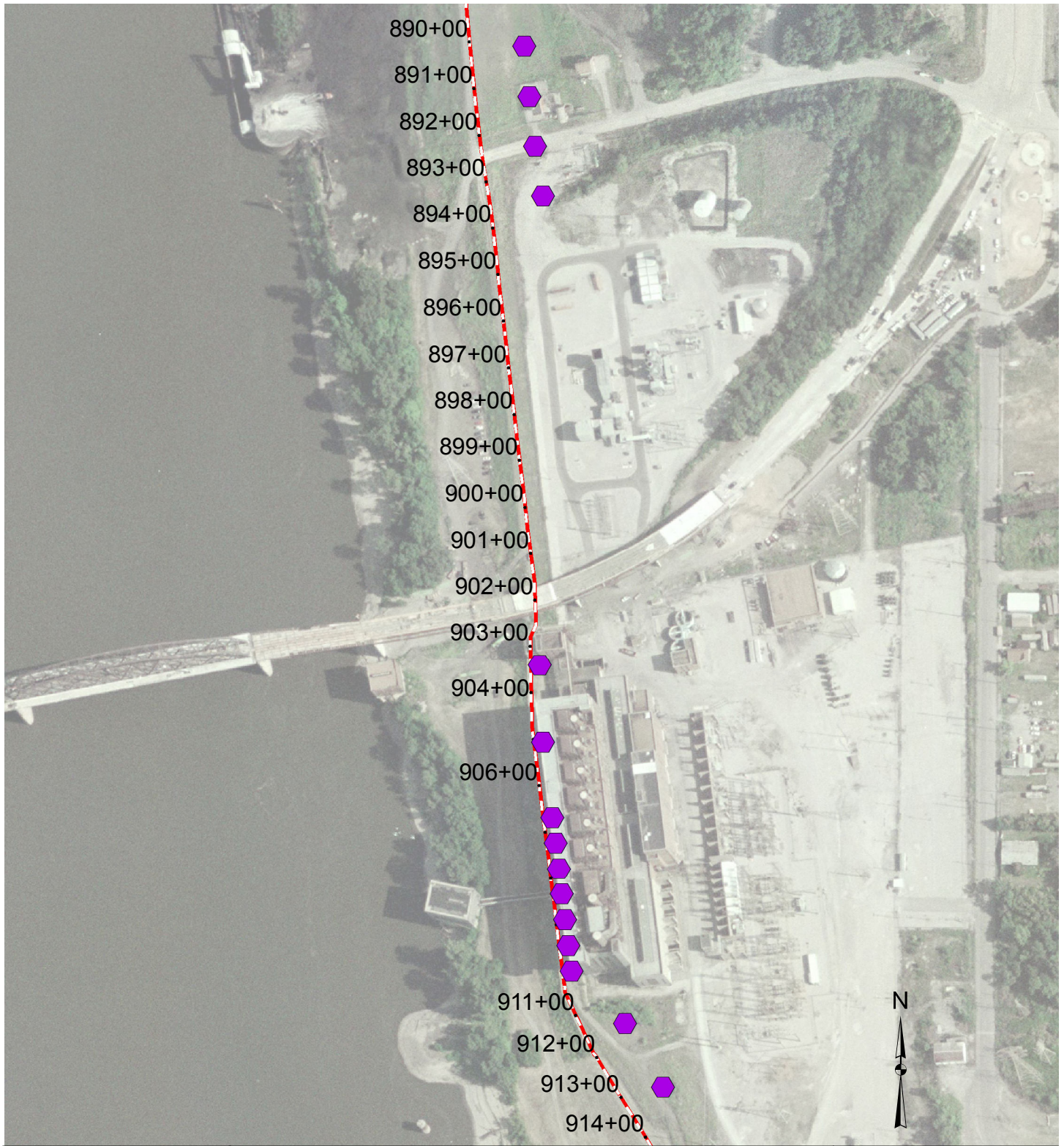
**USACE Authorized Level of Protection Planning and Analysis**

**BID PACKAGE 11**

**MESD**

**DESIGN STA: 863+80 TO 890+20**

- Legend**
-  New Pump Station
  -  New Relief Well
  -  Clay Cap
  -  New Seepage Berm
  -  New Fill








**USACE Authorized Level of Protection Planning and Analysis**

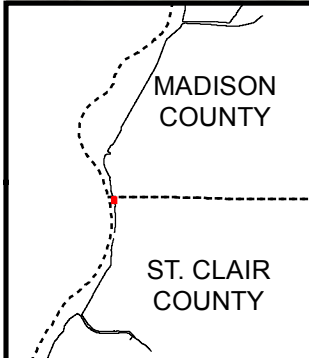
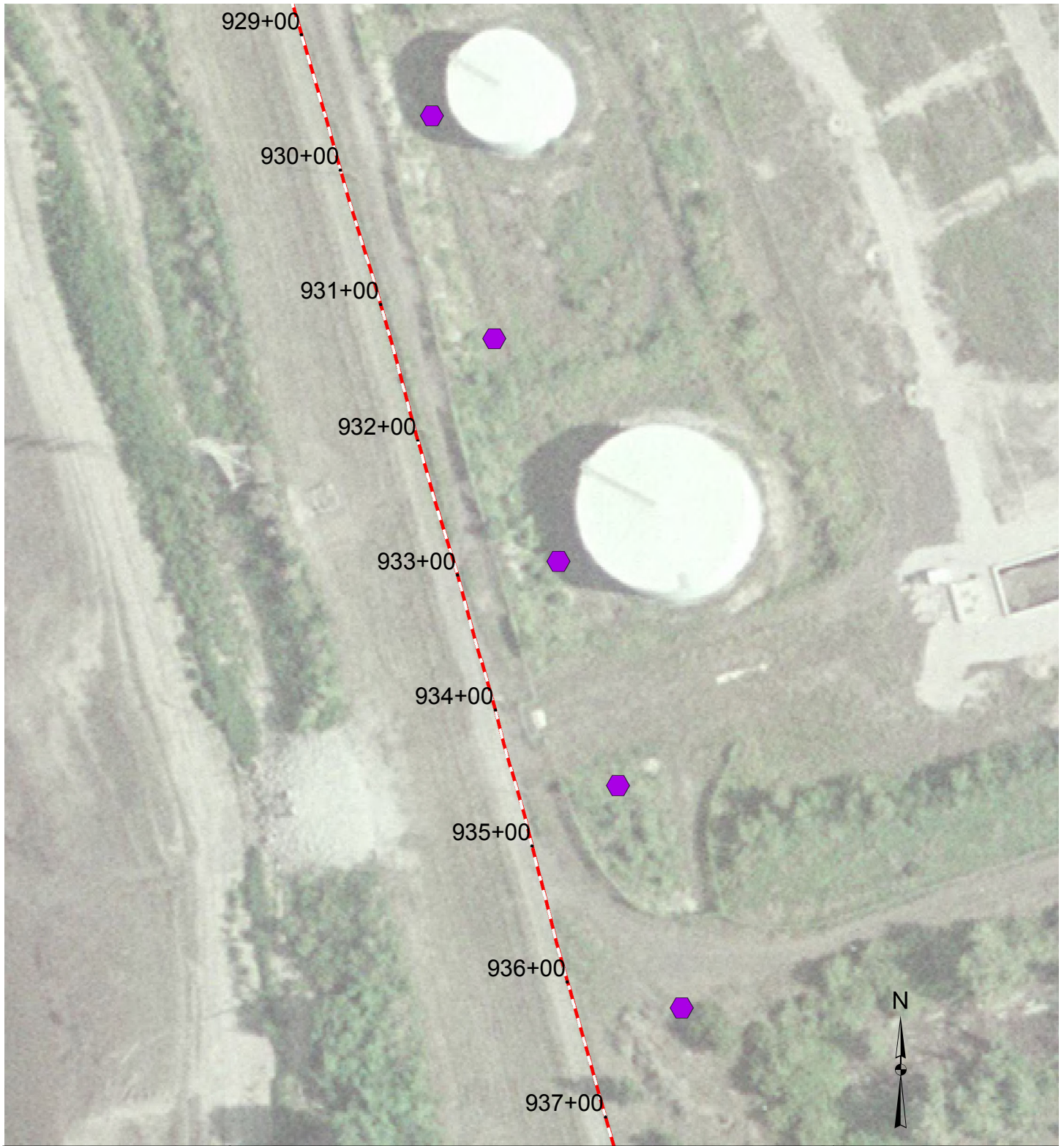
**BID PACKAGE 11**

**MESD**

**DESIGN STA: 903+40 TO 913+30**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill







**USACE Authorized Level of Protection Planning and Analysis**

**BID PACKAGE 12**

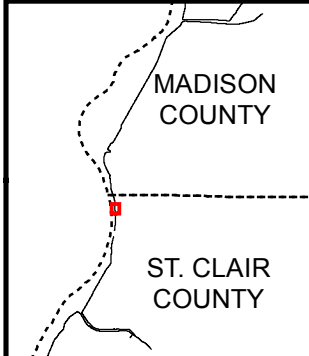
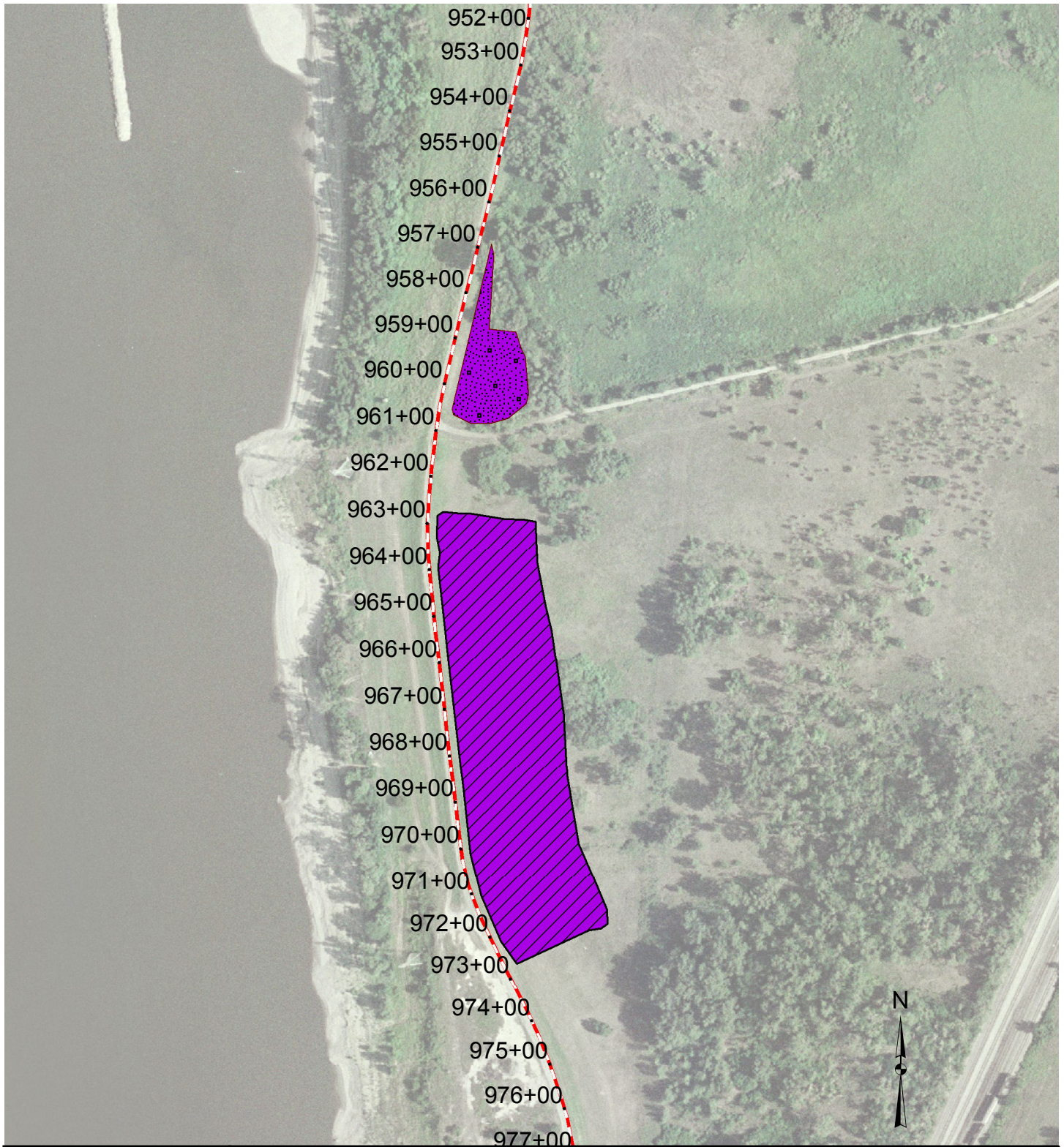
**MESD**

**DESIGN STA: 929+80 TO 936+40**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill





**USACE Authorized Level of  
Protection Planning and Analysis**

**BID PACKAGE 14**






**MESD**

DESIGN STA: 956+20 TO 972+70

---

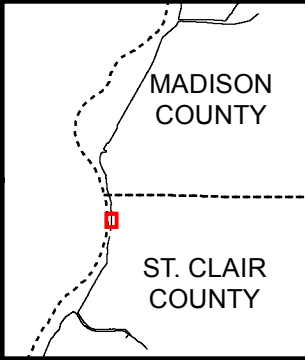
08/05/2015 SHEET 15 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



983+00  
 984+00  
 985+00  
 986+00  
 987+00  
 988+00  
 989+00  
 990+00  
 991+00  
 992+00  
 993+00  
 994+00  
 995+00  
 996+00  
 997+00  
 998+00  
 999+00  
 1000+00  
 1001+00  
 1004+00  
 1005+00  
 1006+00  
 1007+00  
 1008+00  
 1009+00  
 1010+00  
 1011+00  
 1012+00  
 1013+00  
 1014+00  
 1015+00








**USACE Authorized Level of Protection Planning and Analysis**

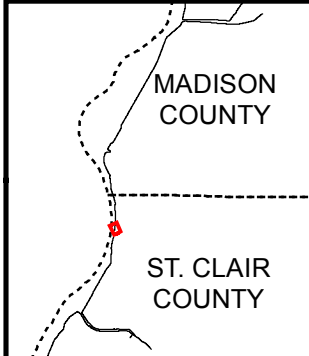
**BID PACKAGE 12**

**MESD**

**DESIGN STA: 982+60 TO 1014+00**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill








**USACE Authorized Level of  
Protection Planning and Analysis**

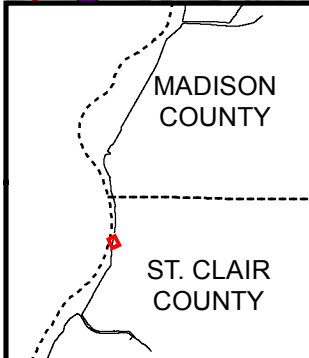
**BID PACKAGE 12**

**MESD**

**DESIGN STA: 1022+20 TO 1038+70**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill








**USACE Authorized Level of  
Protection Planning and Analysis**

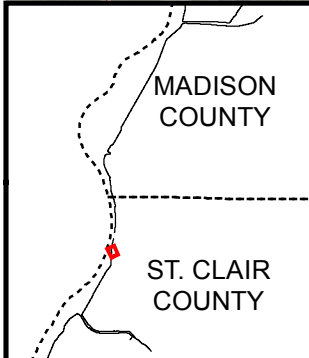
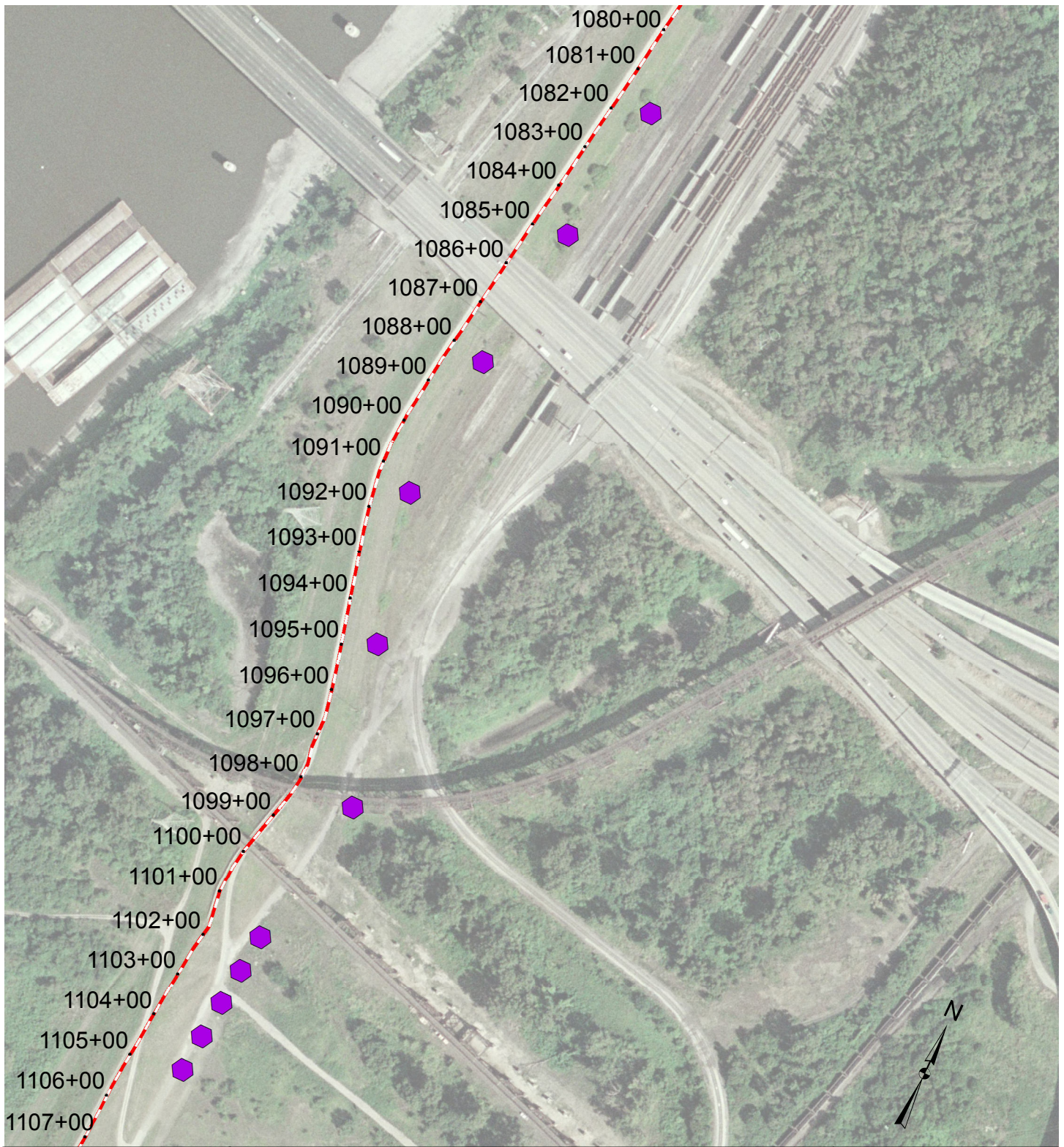
**BID PACKAGE 12, 13**

**MESD**

**DESIGN STA: 1048+60 TO 1078+30**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of  
Protection Planning and Analysis**

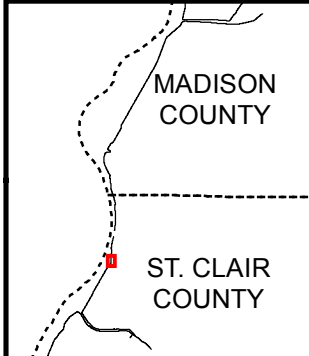
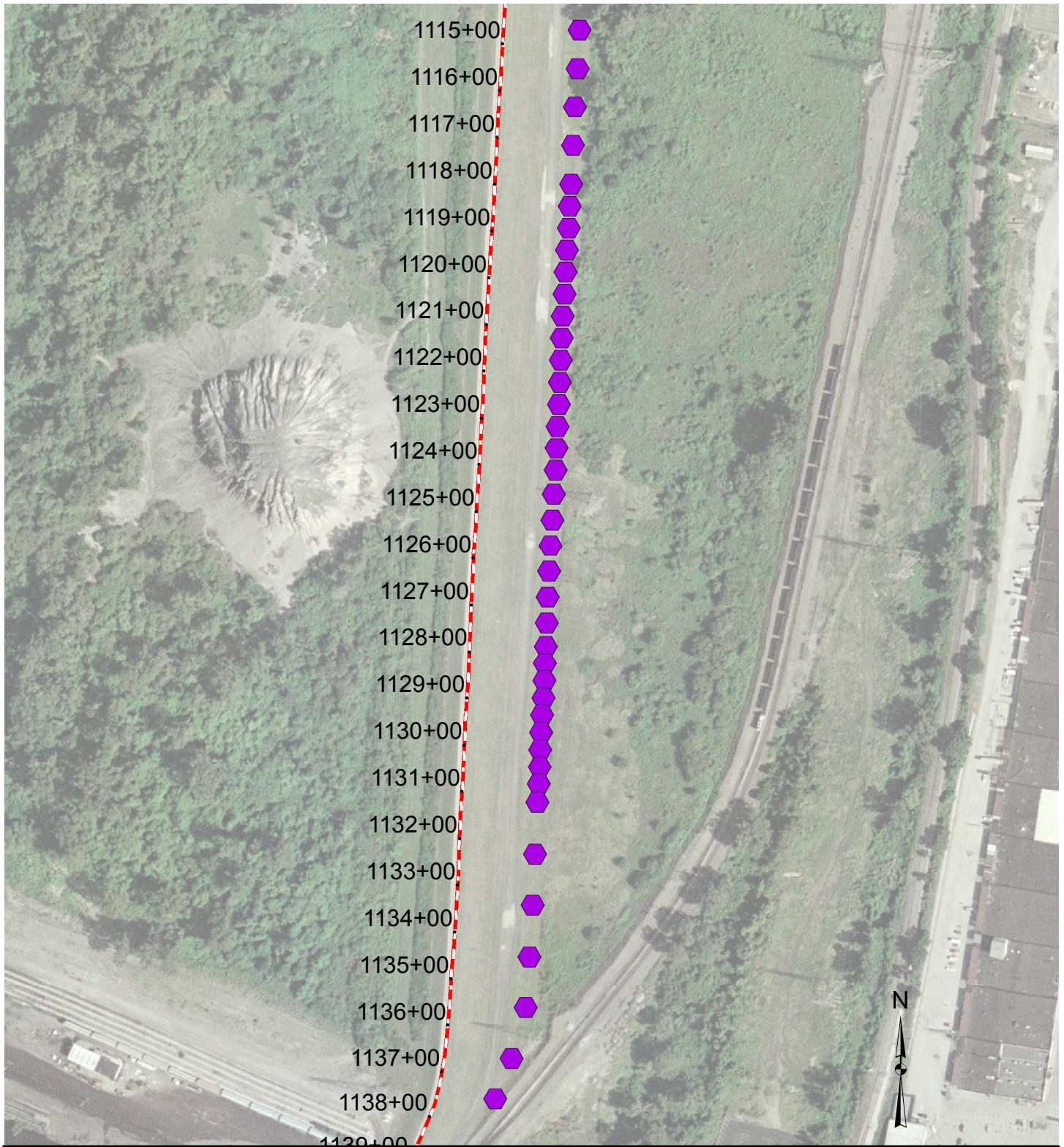
**BID PACKAGE 13**

**MESD**

**DESIGN STA: 1081+60 TO 1104+70**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of  
 Protection Planning and Analysis**

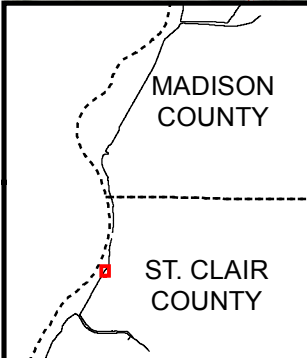
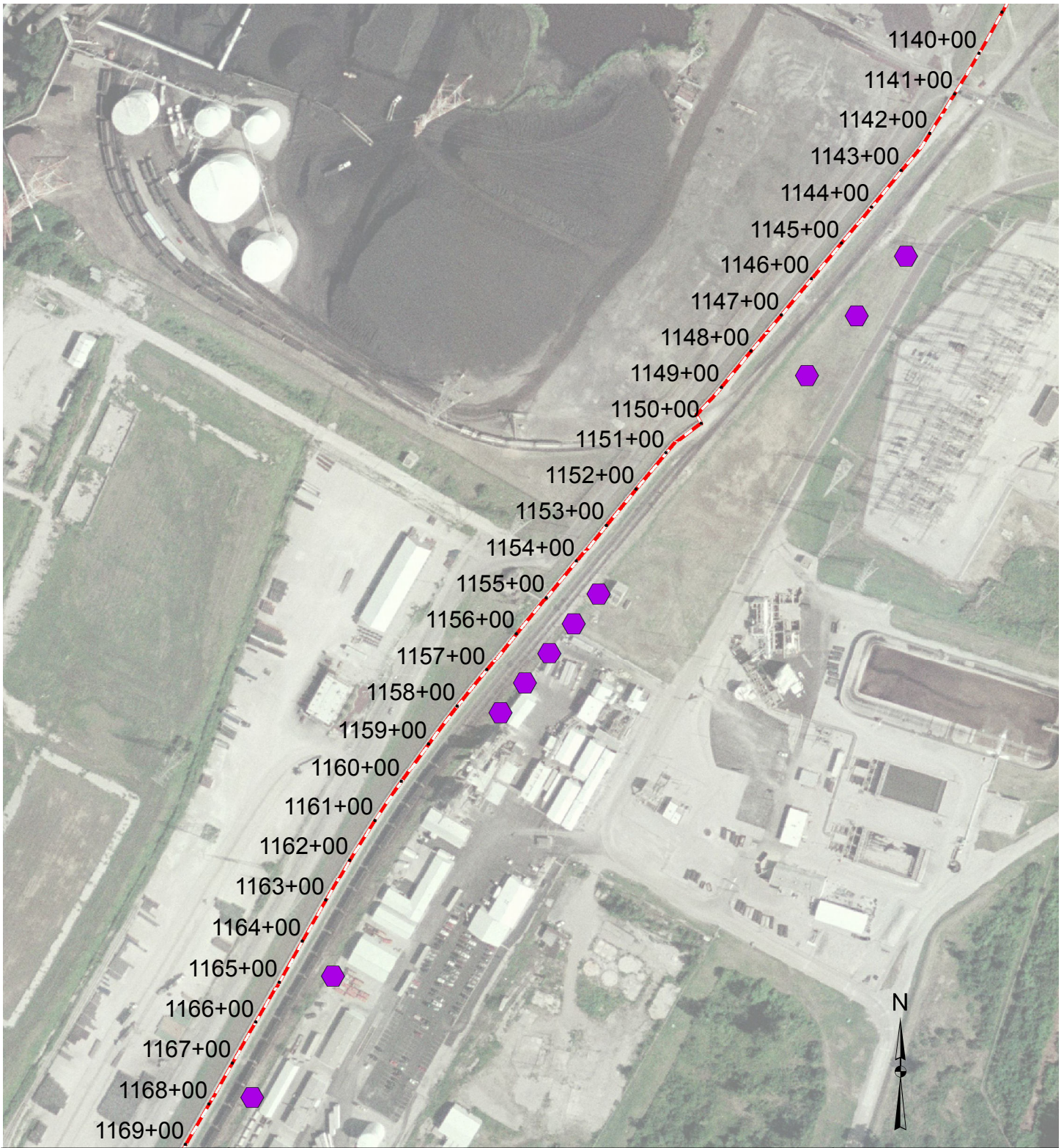
**BID PACKAGE 13**

**MESD**

**DESIGN STA: 1114+60 TO 1137+70**

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of  
Protection Planning and Analysis**

**BID PACKAGE 13**






**MESD**

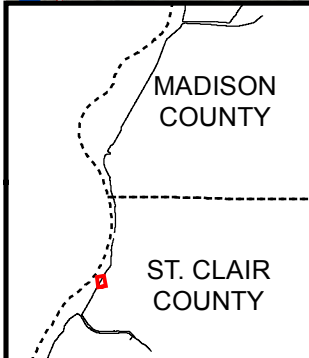
DESIGN STA: 1144+30 TO 1168+00

---

08/05/2015 SHEET 21 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill



**USACE Authorized Level of  
Protection Planning and Analysis**

**BID PACKAGE 13**

**MESD**






**DESIGN STA: 1170+70 TO 1207+00**

08/05/2015

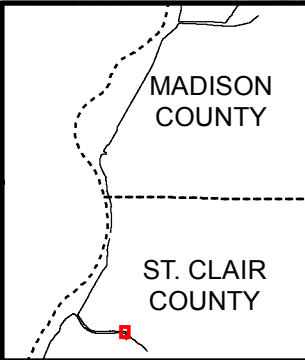
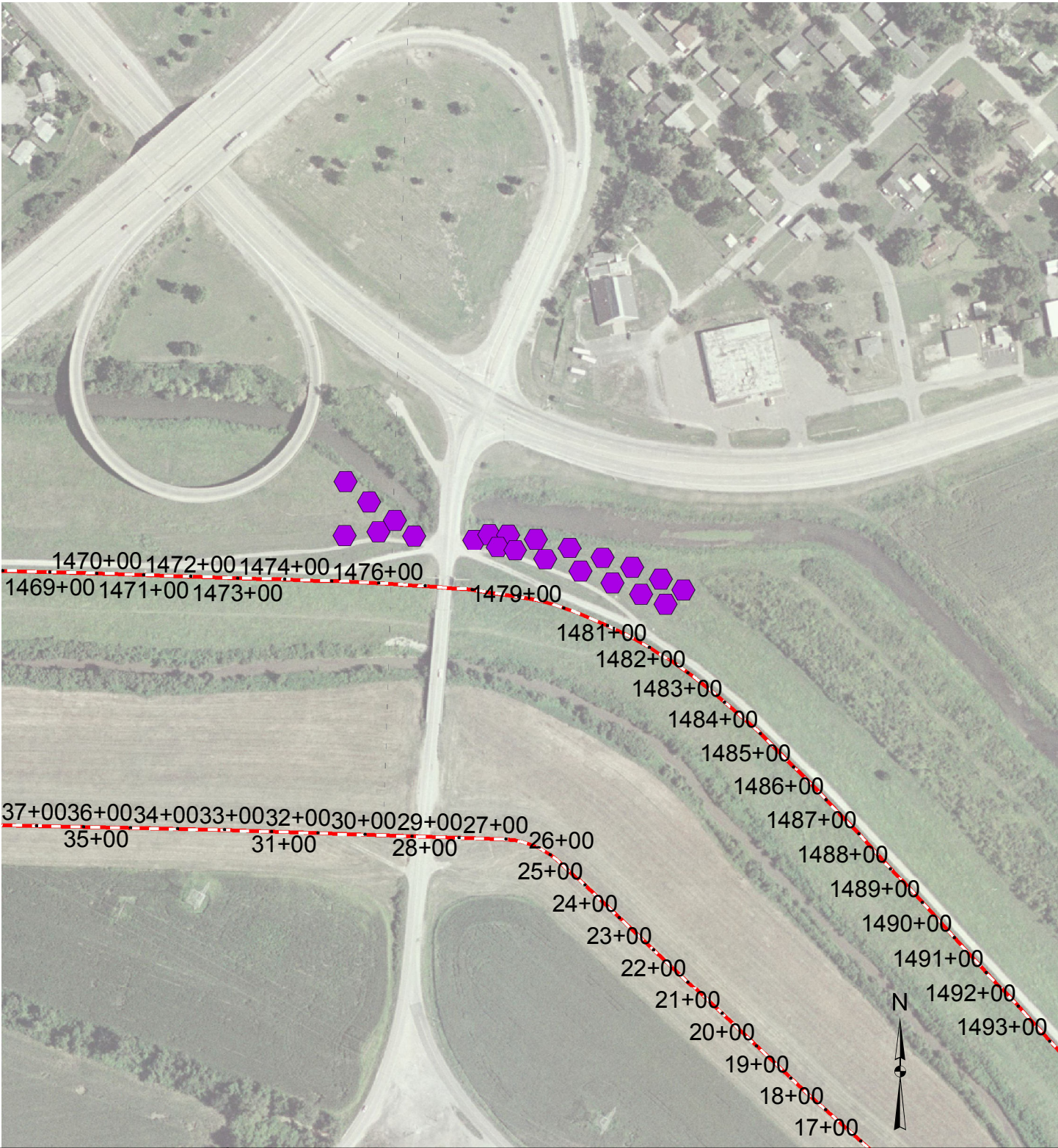
SHEET

22 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill





**USACE Authorized Level of  
Protection Planning and Analysis**

**BID PACKAGE 26**






**MESD**

DESIGN STA: 1474+30 TO 1497+40

---

08/05/2015 SHEET 23 OF 23

**Legend**

-  New Pump Station
-  New Relief Well
-  Clay Cap
-  New Seepage Berm
-  New Fill

## Appendix 2 – Design Process Flow Charts

# Authorized Level – Seepage Berm Design



## Preliminary (LRR)

Review existing sub-surface data & analyze underseepage to determine seepage berm solution. Identify:

- Material type (semi-perv, sand, etc)
- Beginning & end of each berm
- Height at levee toe (define toe dist.)
- Design width (perp. to levee)
- Thickness at toe of berm

**1** Field Walk to verify berm will work

**2** Identify existing flood-related conflicts in berm footprint (relief wells, piezometers)

**3** Determine if additional boring are needed

**4** Yes / No

**5** Borings (Drilling)

**6** Boring Logs & Lab Work

**7** Re-review berm design with new boring data. Identify / Confirm:

- Material type (semi-perv, sand, etc)
- Beginning & end of each berm
- Height at levee toe (define toe dist.)
- Design width (perp. to levee)
- Thickness at toe of berm

**8** Design Data Report (DDR)

**9** VE Study

**10** Topo Survey

**11** 35% Plans

**12** USACE Review of 35% Design

**13** Identify Piezometer Locations

**14** Utility Coordination

**15** Re-work Drainage as Necessary

**16** Interior Drainage Analysis

**17** Legal Survey

**18** 65% Plans

**19** USACE Review of 65% Design

**20** Update DDR

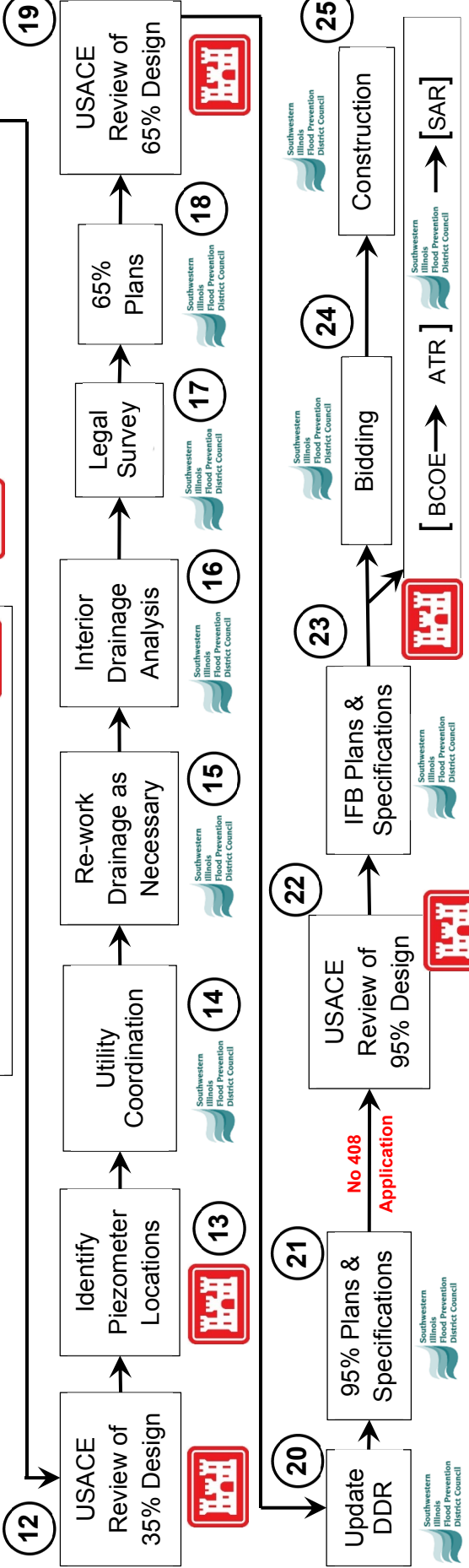
**21** 95% Plans & Specifications

**22** USACE Review of 95% Design

**23** IFB Plans & Specifications

**24** Bidding

**25** Construction



# Authorized Level – Relief Well Design



## Preliminary (LRR)

Review existing sub-surface data & analyze underseepage to determine relief well solution. Identify:

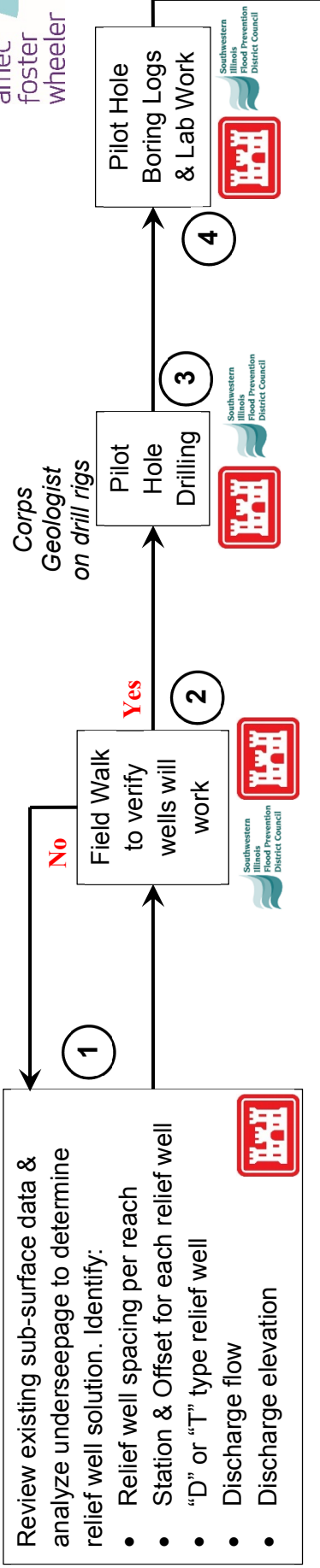
- Relief well spacing per reach
- Station & Offset for each relief well
- "D" or "T" type relief well
- Discharge flow
- Discharge elevation

Corps Geologist on drill rigs

**Yes**

Field Walk to verify wells will work

**No**



Re-review well data with pilot hole data. Identify / Confirm:

- Relief well spacing per reach
- Station & Offset for each relief well
- "D" or "T" type relief well
- Discharge flow
- Discharge elevation
- Aquifer percent penetration

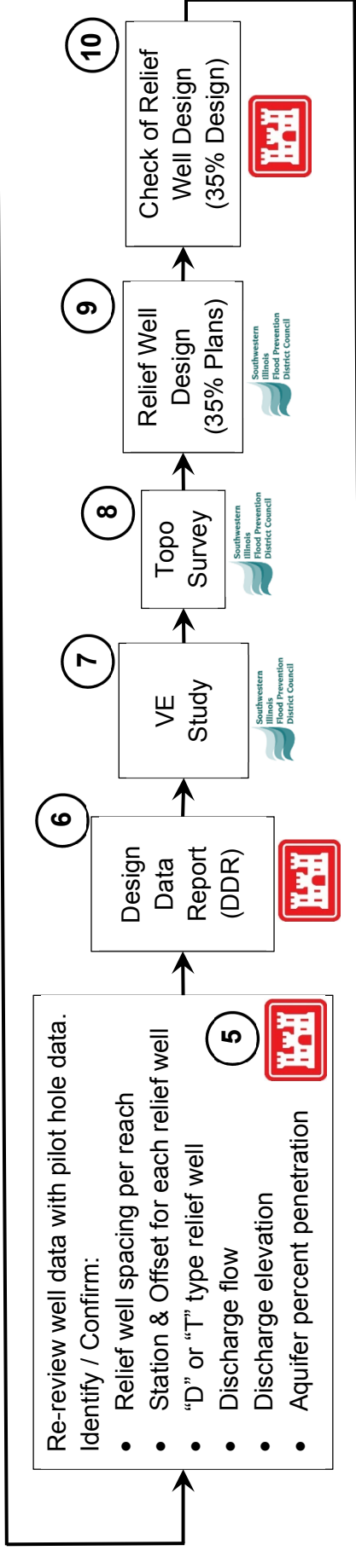
Design Data Report (DDR)

VE Study

Topo Survey

Relief Well Design (35% Plans)

Check of Relief Well Design (35% Design)



Identify Piezometer Locations

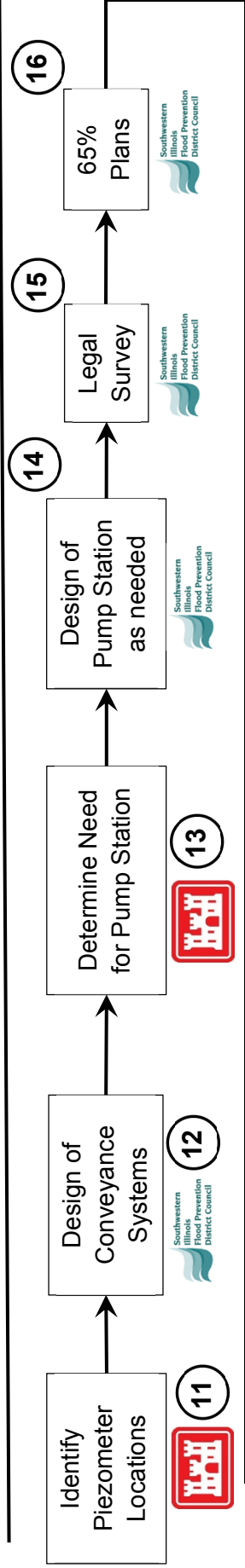
Design of Conveyance Systems

Determine Need for Pump Station

Design of Pump Station as needed

Legal Survey

65% Plans



USACE Review of 65% Design

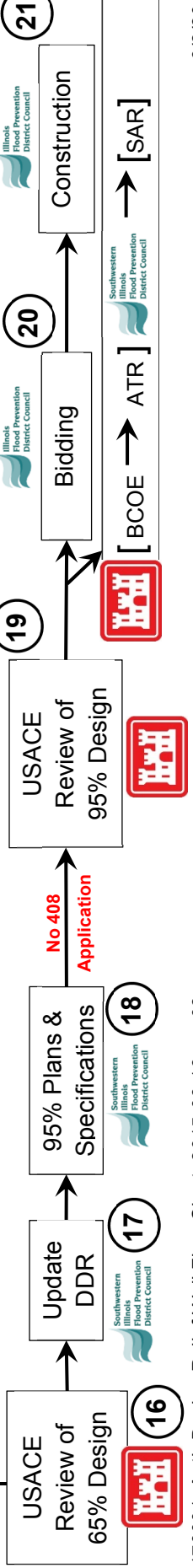
Update DDR

95% Plans & Specifications

USACE Review of 95% Design

Bidding

Construction

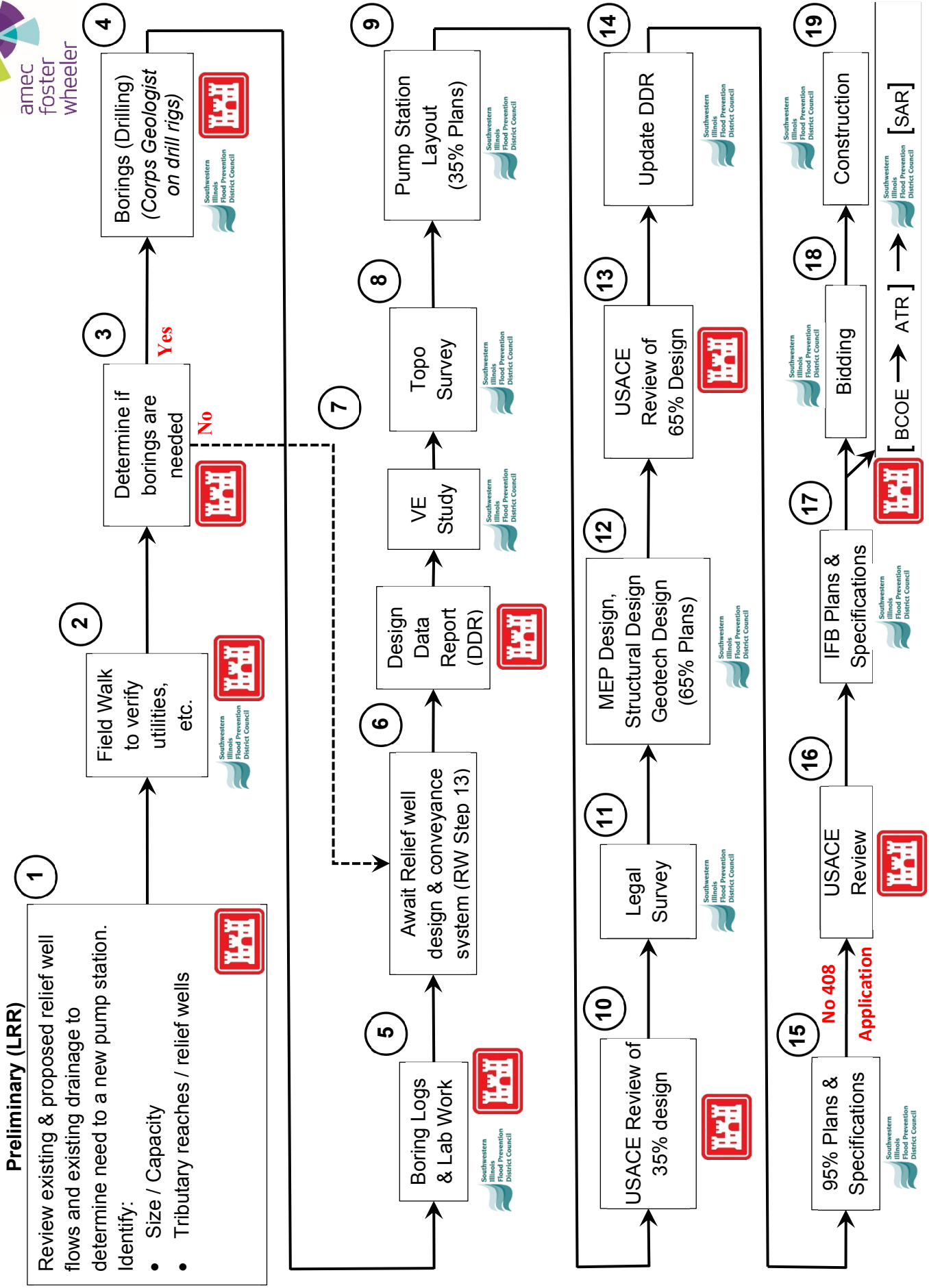


**No 408 Application**

[BCOE -> ATR]

[SAR]

# Authorized Level – Pump Station Design





# Metro East Sanitary District Authorized Level Project Cost Estimate

Preliminary Design Phase

Prepared for



Prepared by



**August 13, 2015**

## 1. Cost Estimate

### Total Cost

Based primarily of previous bid line items from over a dozen local contractors, preliminary construction cost estimates have been developed for each of the recommended bid packages. For cost estimating purposes, a higher contingency of 10%-20% was applied toward cost line items that experienced higher fluctuations in the previous bid line items. These estimates are preliminary, and represent a planning level estimate. The total construction cost at this time is \$51,247,390.

A total of \$15,613,968 is included in the Amec Foster Wheeler estimate that represents costs associated with land/easements/rights of way, wetland mitigation, any unforeseen cultural/archeological impacts, and relief wells in areas of hazardous waste were not accounted for in the USACE estimate. This total of \$15,613,968 is not included in the work-in-kind limit of \$36,300,000. The Amec Foster Wheeler estimate, less the necessary conveyance systems (\$2,744,500) and the \$15,613,968 not applied to the work-in-kind limit, results in a cost of \$32,888,922 versus the USACE estimated cost of \$36,300,000.

To date, the USACE has not provided a cost for review and oversight of the improvements included in the recommended plan. A revised version of this report will be issued when those costs become available.

### Development of Bid Packages

Amec Foster Wheeler has reviewed the USACE decision segments and has determined that four construction bid packages will appropriately subdivide the decision segments. By splitting the work into four bid packages, the FPD Council has the ability to cancel any one bid package if the remaining bid package(s) approach the work-in-kind credit contribution limit of \$36,300,000. While there is nothing stopping the FPD Council from constructing improvements in excess of \$36,300,000, the USACE will require Section 408 approval for any work over and above the \$36,300,000 limit, whereas any work done as work-in-kind, as agreed upon in the final IDR, which is still in development, does not require Section 408 approval. The four bid packages have been named Bid Package 11, 12, 13, and 14, a continuation of the numbering from Amec Foster Wheeler's Certification Design. The packages were divided mainly by which wells are tributary to which pump station. The resultant bid packages are as follows:

- ▶ Bid Package 11 is comprised of ten USACE decision segments and spans from Levee Station 255+90 to 913+30, minus the Chain of Rocks system. This package includes the construction of 150 relief wells, 144 of which are tributary to existing a/an existing pump station(s) and 5 of which drain naturally.
- ▶ Bid Package 12 is comprised of five USACE decision segments and spans from Levee Station 929+80 to 1051+90. This package includes the construction of a new pump station, between Stations 987+50 to 1018+90, and 50 relief wells, 45 of which are tributary to an existing or newly proposed pump station, and 5 of which drain naturally.
- ▶ Bid Package 13 is comprised of ten USACE decision segments and spans from Levee Station 1065+10 to 1497+40. This package includes the construction of a new lift station, between Stations 1144+30 and 1180+60, and 106 relief wells, 84 of which are tributary to an existing pump station or newly proposed lift station, and 22 of which drain naturally.
- ▶ Bid Package 14 is comprised of eleven USACE decision segments and spans from Levee Station 45+60 to 972+70. This package consists of all earthwork which includes 8 seepage berms, 1 fill area, and a clay cap spanning from Station 824+20 to 860+60.



## Appendix 1 – Preliminary Cost Estimate

## MESD Quantities & Cost Summary

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
1	Cultural / Archeological (Unforeseen) Impacts Cost	LS	\$ 50,000.00	20%	4	240,000
2	ROW Acquisition - Uniform Federal Relocation Costs	AC	\$ 30,000.00	20%	160	5,760,000
3	Wetland Mitigation	AC	\$ 35,000.00	20%	25	1,050,000
4	Mobilization (% varies)	LS	\$ 454,000.00	10%	4	1,997,600
5	Clear & Grub - Light Vegetation	AC	\$ 3,840.00	20%	10	46,080
6	Utility Relocation - Miscellaneous Additional Relocation Costs	LS	\$ 150,000.00	20%	4	720,000
7	Dewatering (5 to 15 feet)	LF	\$ 350.00	20%	5,050	2,121,000
8	Manhole - Complete (48-Inch Diameter)	EA	\$ 3,500.00	5%	88	323,400
9	Manhole - Complete (60-Inch Diameter)	EA	\$ 3,750.00	5%	14	55,125
10	Relief Well - Existing - Abandon	EA	\$ 4,000.00	5%	312	1,310,400
11	Relief Well - New - Type "D"	VF	\$ 575.00	5%	26,500	15,999,375
12	Relief Well - New - Type "T"	VF	\$ 600.00	5%	4,000	2,520,000
13	Relief Well - New - Hazardous Waste Premium	EA	\$ 74,340.00	20%	96	8,563,968
14	Pipe - 12-Inch RCP Pipe	LF	\$ 60.00	10%	3,900	257,400
16	Pipe - 18-Inch RCP Pipe	LF	\$ 65.00	10%	600	42,900
18	Pipe - 24-Inch RCP Pipe	LF	\$ 70.00	10%	7,400	569,800
20	Pipe - 36-Inch RCP Pipe	LF	\$ 120.00	10%	7,700	1,016,400
21	Pipe - 14-Inch DI Forcemain Pipe	LF	\$ 260.00	10%	3,000	858,000
22	Air Release Valves	EA	\$ 3,000.00	10%	6	19,800
23	Pump Station (987+50 to 1018+90) - 32 MGD	CY	\$ 1,350,000.00	20%	1	1,620,000
24	Lift Station - (1144+30 to 1080+60) - 4.5 MGD	LS	\$ 750,000.00	20%	1	900,000
25	Clay Cap	CY	\$ 25.00	5%	7,000	183,750
26	Seepage Berm Material	CY	\$ 20.00	20%	201,103	4,826,480
27	Fill Material (Random Fill)	CY	\$ 15.00	5%	11,042	173,912
28	Seeding	AC	\$ 2,000.00	20%	30	72,000
32	Sub-Total					\$ 51,247,390
33	Construction Estimate					\$ 51,247,390

## Bid Package #11

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
1	Cultural / Archeological (Unforeseen) Impacts Cost	LS	\$ 50,000.00	20%	1	\$ 60,000
2	ROW Acquisition - Uniform Federal Relocation Costs	AC	\$ 30,000.00	20%	40	\$ 1,440,000
3	Wetland Mitigation	AC	\$ 35,000.00	20%	5	\$ 210,000
4	Mobilization (% varies)	LS	\$ 454,000.00	10%	1	\$ 499,400
6	Utility Relocation - Miscellaneous Additional Relocation Costs	LS	\$ 150,000.00	20%	1	\$ 180,000
7	Dewatering (5 to 15 feet)	LF	\$ 350.00	20%	1,600	\$ 672,000
8	Manhole - Complete (48-Inch Diameter)	EA	\$ 3,500.00	5%	14	\$ 51,450
10	Relief Well - Existing - Abandon	EA	\$ 4,000.00	5%	107	\$ 449,400
11	Relief Well - New - Type "D"	VF	\$ 575.00	5%	13,800	\$ 8,331,750
12	Relief Well - New - Type "T"	VF	\$ 600.00	5%	1,100	\$ 693,000
14	Pipe - 12-Inch RCP Pipe	LF	\$ 60.00	10%	1,100	\$ 72,600
20	Pipe - 36-Inch RCP Pipe	LF	\$ 120.00	10%	5,300	\$ 699,600
28	Seeding	AC	\$ 2,000.00	20%	5	\$ 12,000
32	Sub-Total					\$ 13,371,200
33	Construction Estimate					\$ 13,371,200

## Bid Package #12

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
1	Cultural / Archeological (Unforeseen) Impacts Cost	LS	\$ 50,000.00	20%	1	\$ 60,000
2	ROW Acquisition - Uniform Federal Relocation Costs	AC	\$ 30,000.00	20%	40	\$ 1,440,000
3	Wetland Mitigation	AC	\$ 35,000.00	20%	5	\$ 210,000
4	Mobilization (% varies)	LS	\$ 454,000.00	10%	1	\$ 499,400
6	Utility Relocation - Miscellaneous Additional Relocation Costs	LS	\$ 150,000.00	20%	1	\$ 180,000
7	Dewatering (5 to 15 feet)	LF	\$ 350.00	20%	1,625	\$ 682,500
8	Manhole - Complete (48-Inch Diameter)	EA	\$ 3,500.00	5%	53	\$ 194,775
10	Relief Well - Existing - Abandon	EA	\$ 4,000.00	5%	8	\$ 33,600
11	Relief Well - New - Type "D"	VF	\$ 575.00	5%	4,500	\$ 2,716,875
12	Relief Well - New - Type "T"	VF	\$ 600.00	5%	500	\$ 315,000
14	Pipe - 12-Inch RCP Pipe	LF	\$ 60.00	10%	900	\$ 59,400
18	Pipe - 24-Inch RCP Pipe	LF	\$ 70.00	10%	5,600	\$ 431,200
23	Pump Station (987+50 to 1018+90) - 32 MGD	LS	\$ 1,350,000.00	20%	1	\$ 1,620,000
28	Seeding	AC	\$ 2,000.00	20%	5	\$ 12,000
32	Sub-Total					\$ 8,454,750
33	Construction Estimate					\$ 8,454,750

## Bid Package #13

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
1	Cultural / Archeological (Unforeseen) Impacts Cost	LS	\$ 50,000.00	20%	1	\$ 60,000
2	ROW Acquisition - Uniform Federal Relocation Costs	AC	\$ 30,000.00	20%	40	\$ 1,440,000
3	Wetland Mitigation	AC	\$ 35,000.00	20%	5	\$ 210,000
4	Mobilization (% varies)	LS	\$ 454,000.00	10%	1	\$ 499,400
6	Utility Relocation - Miscellaneous Additional Relocation Costs	LS	\$ 150,000.00	20%	1	\$ 180,000
7	Dewatering (5 to 15 feet)	LF	\$ 350.00	20%	1,825	\$ 766,500
8	Manhole - Complete (48-Inch Diameter)	EA	\$ 3,500.00	5%	21	\$ 77,175
9	Manhole - Complete (60-Inch Diameter)	EA	\$ 3,750.00	5%	14	\$ 55,125
10	Relief Well - Existing - Abandon	EA	\$ 4,000.00	5%	197	\$ 827,400
11	Relief Well - New - Type "D"	VF	\$ 575.00	5%	8,200	\$ 4,950,750
12	Relief Well - New - Type "T"	VF	\$ 600.00	5%	2,400	\$ 1,512,000
13	Relief Well - New - Hazardous Waste Premium	EA	\$ 74,340.00	20%	96	\$ 8,563,968
14	Pipe - 12-Inch RCP Pipe	LF	\$ 60.00	10%	1,900	\$ 125,400
16	Pipe - 18-Inch RCP Pipe	LF	\$ 65.00	10%	600	\$ 42,900
18	Pipe - 24-Inch RCP Pipe	LF	\$ 70.00	10%	1,800	\$ 138,600
20	Pipe - 36-Inch RCP Pipe	LF	\$ 120.00	10%	2,400	\$ 316,800
21	Pipe - 14-Inch DI FORCEMAIN PIPE	LF	\$ 260.00	10%	3,000	\$ 858,000
22	Air Release Valves	EA	\$ 3,000.00	10%	6	\$ 19,800
24	Lift Station - (1144+30 to 1080+60) - 4.5 MGD	LS	\$ 750,000.00	20%	1	\$ 900,000
28	Seeding	AC	\$ 2,000.00	20%	5	\$ 12,000
32	Sub-Total					\$ 21,555,818
33	Construction Estimate					\$ 21,555,818

## Bid Package #14

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
1	Cultural / Archeological (Unforeseen) Impacts Cost	LS	\$ 50,000.00	20%	1	\$ 60,000
2	ROW Acquisition - Uniform Federal Relocation Costs	AC	\$ 30,000.00	20%	40	\$ 1,440,000
3	Wetland Mitigation	AC	\$ 35,000.00	20%	10	\$ 420,000
4	Mobilization (% varies)	LS	\$ 454,000.00	10%	1	\$ 499,400
5	Clear & Grub - Light Vegetation	AC	\$ 3,840.00	20%	10	\$ 46,080
6	Utility Relocation - Miscellaneous Additional Relocation Costs	LS	\$ 150,000.00	20%	1	\$ 180,000
25	Clay Cap	CY	\$ 25.00	5%	7,000	\$ 183,750
26	Seepage Berm Material	CY	\$ 20.00	20%	201,103	\$ 4,826,480
27	Fill Material (Random Fill)	CY	\$ 15.00	5%	11,042	\$ 173,912
28	Seeding	AC	\$ 2,000.00	20%	15	\$ 36,000
32	Sub-Total					\$ 7,865,622
33	Construction Estimate					\$ 7,865,622



Memo to: Board of Directors  
From: Chuck Etwert  
Subject: Program Status Report for September 2015  
Date: September 14, 2015

High river conditions have receded and construction has resumed during the last month. Approximately 62% of the \$61.3 million of construction, involved in all nine current construction bid packages, has been completed thru August. With 1.6 million dollars' worth of construction completed in August, the total amount of construction completed is \$38.4 million.

We will have two change order items on this month's agenda. The first item concerns three change orders involving BP #3 for the Hawthorne Pipe Changes (which is a credit), BP #3 for the Russell Commons Buried Waste, and BP #6 for the Existing Pipe in Clay Cap. Amec Foster Wheeler will be explaining them at the meeting.

The second change order item concerns possible change orders resulting from recent changes presented by USACE to the scope of the authorized plan for design deficiency corrections in the East St. Louis (ESTL) levee systems, which could result in the elimination of 14,300 lineal feet of deep cutoff wall. Amec Foster Wheeler will be explaining the situation and the current status of discussions with the contractors involved. A copy of the Corps of Engineers letter is attached.

AMEC Foster Wheeler and I continue to meet with the Corps of Engineers regarding the process of the Council moving ahead with 500-year level of protection projects and ensuring that work the Council does is eligible for future Work In-Kind Credit.

The Corps of Engineers has informed us that it now anticipates the earliest the Integral Determination Reports (IDRs) for the Metro-East projects will be approved by the Assistant Secretary of the Army in February, but this is still contingent on receipt of WRRDA 2014 Section 1018 Implementation Guidelines.

To date, we haven't received the Department of the Army's draft solicitation utilizing a Best Value Tradeoff approach instead of a Lowest-Price Technically Acceptable approach. They are developing specific evaluation criteria to achieve proposals that provide for the efficient and timely completion of a project and in recognition that these are cost-shared projects, proposals that provide local economic benefit, with or without a Project Labor Agreement.

With the 100-Year Projects now over sixty percent complete, on August 25<sup>th</sup>, Amec Foster Wheeler, Husch Blackwell, and I had a conference call with FEMA regarding the certification process. FEMA also invited the Corps of Engineers, since they will be providing certification on a portion of the levee system.

The discussion went well, with FEMA indicating their schedule and a willingness to work with us regarding our schedule. FEMA is currently working on work maps which will be followed by preliminary and final maps. Amec Foster Wheeler is in the process of providing FEMA our planned certification schedule. Another conference call will be scheduled after their review of our submittal.

To date, we have not received a response to our August 5, 2015 letter sent, to the City of East St. Louis and MESD, expressing our concern regarding the repair of a sinkhole at the East St. Louis 10.5 ft. diameter combined sewer located on the landside of the Metro East Sanitary District Levee. This condition has existed for quite some time and needs to be corrected in a timely manner, in order, to not delay the certification to FEMA process.

We have received a refund of \$33,109.03 from AT&T for the relocation of cable at #1 Henry Street in Alton, which was required as part of Bid Package 7A construction. AT&T requested a pre-payment of \$81,276.64 prior to proceeding with the relocation project. The Board approved the request last September.

Amec Foster Wheeler will present their Work Order for the Metro East Sanitary District Levee Authorized Level Field Investigation and Design which was discussed at last month's meeting. The Work Order will include complete Construction Documents and associated Design Services in support of the design and construction of levee improvements throughout the Metro East Sanitary District Levee System.

I have also included in your Board packet, a copy of Amec Foster Wheeler's Monthly Progress Report for September and an article from the Belleville News Democrat regarding the issuance of additional bonds.





REPLY TO

DEPARTMENT OF THE ARMY  
ST. LOUIS DISTRICT CORPS OF ENGINEERS  
1222 SPRUCE STREET  
ST. LOUIS, MISSOURI 63103-2833

SEP 04 2015

Programs and Project  
Management Division

Mr. Charles Etwert  
Chief Supervisor of Construction and the Works  
Southwestern Illinois Flood Prevention District Council  
104 United Drive  
Collinsville, Illinois 62234

RE: East St. Louis Flood Protection Project – Design Deficiency Corrections

Dear Mr. Etwert:

I am writing in regard to potential changes to the scope of the authorized plan for design deficiency corrections in the East St. Louis (ESTL) levee system. The system has an approved Limited Reevaluation Report (LRR) which identifies the authorized plan (52 ft + 2 ft) for addressing design deficiencies for underseepage and through seepage.

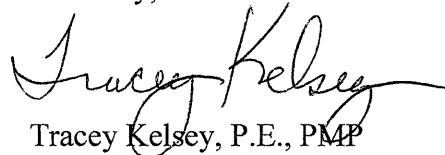
As discussed during our meeting on August 20, 2015, continued analysis conducted on the ESTL deep cutoff wall design (approximately station 1200+00 to 1350+00) incorporating actual field data from the construction completed by the Southwestern Illinois Flood Prevention District Council (FPD) for the FEMA accreditation project indicates that an alternate solution may exist which could potentially eliminate several thousand feet of deep cutoff wall identified in the authorized plan and reduce total project cost. Per the approved LRR, the current estimated total project cost is \$152 million. Estimated cost for the cutoff wall construction in the reach, including associated HTRW costs, is \$62.9 million. While the engineering work necessary to fully identify the specifics and cost of the alternate plan is not complete, we anticipate this change will result in savings to the total project cost.

In order to incorporate your work into the solution for the authorized level of protection, the collector system, pump station and manholes must be installed in a manner that addresses our design standards. Typical collection systems for under seepage controls, installed at other St. Louis District projects, are installed using reinforced concrete pipes (RCP) with water tight gasketed joints wrapped with a non-woven geotextile. The RCP pipes are robust, resistant to deflection, and the wrapped joints provide a redundant barrier to prevent soil migration of the foundation material into the pipe and manholes. The excavation immediately below and around the pipe is backfilled with some form of flowable fill such as IDOT 1019 (controlled low strength material). The flowable fill ensures backfill of all voids and a higher strength than manually compacted material.

If a collector system solution that can fit into the 52+2 solution is achieved, then elimination of approximately 14,300 ft of deep cut-off wall may be realized. Based on our preliminary analysis, the supplemental work to achieve the 52+2 project level may consist of a combination of 50 to 100 surface discharging relief wells, some fill in depressed areas and constructing some blanket drains over existing topography.

Please consider this information as you formulate your design and construction of corrective actions and repairs to the levee system. USACE will continue with the analysis of ESTL to determine the specifics of potential changes to the authorized plan. The ultimate decision to incorporate these potential changes into the authorized project will depend on the plan you identify for the system. If you have any questions, please contact me at 314.331.8477 or [tracey.b.kelsey@usace.army.mil](mailto:tracey.b.kelsey@usace.army.mil).

Sincerely,

A handwritten signature in black ink that reads "Tracey Kelsey". The signature is written in a cursive, flowing style.

Tracey Kelsey, P.E., PMP  
Program Manager  
Programs and Project Management Division

c: Mr. Bob Shipley, Metro East Sanitary District



Southwestern Illinois Flood Prevention District Council  
c/o Charles Ewert  
104 United Drive  
Collinsville, IL 62234

---

## **Monthly Project Progress Report September 2015**

---

AMEC FOSTER WHEELER Project No. 563170001  
Period Ending Date: September 7, 2015

*Date of Issue: September 11, 2015*

# Table of Contents

<b>1. OVERVIEW .....</b>	<b>4</b>
1.1 PROJECT DESCRIPTION .....	4
1.2 AMEC FOSTER WHEELER SCOPE .....	4
1.3 KEY CONTACTS / PEOPLE .....	4
<b>2. HEALTH, SAFETY, SECURITY, ENVIRONMENT (HSSE) .....</b>	<b>5</b>
2.1 HSSE REPORTS .....	5
<b>3. PROJECT STATUS UPDATE .....</b>	<b>6</b>
3.1 BID PACKAGE 2A .....	6
3.1.1 Calendar .....	6
3.1.2 Progress .....	6
3.1.3 Property Acquisition.....	6
3.1.4 Levee Board Considerations .....	6
3.1.5 Submittals .....	6
3.1.6 Change Orders .....	6
3.1.7 Field Activities and Look Ahead .....	6
3.1.8 QC/QA Activities .....	6
3.1.9 Considerations .....	6
3.1.10 Payment Progress.....	6
3.2 BID PACKAGE 2B .....	7
3.2.1 Calendar .....	7
3.2.2 Progress .....	7
3.2.3 Property Acquisition – All property is acquired.....	7
3.2.4 Levee Board Considerations – None .....	7
3.2.5 Submittals .....	7
3.2.6 Change Orders – See Change Order Log attached .....	7
3.2.7 Field Activities and Look Ahead .....	7
3.2.8 QC/QA Activities .....	7
3.2.9 Considerations .....	7
3.2.10 Payment Progress.....	7
3.3 BID PACKAGE 2C .....	8
3.3.1 Calendar .....	8
3.3.2 Progress .....	8
3.3.3 Property Acquisition.....	8
3.3.4 Levee Board Considerations .....	8
3.3.5 Submittals .....	8
3.3.6 Change Orders .....	8
3.3.7 Field Activities and Look Ahead .....	8
3.3.8 QC/QA Activities .....	8
3.3.9 Considerations .....	8
3.3.10 Payment Progress.....	8
3.4 BID PACKAGE 3.....	9
3.4.1 Calendar .....	9
3.4.2 Progress .....	9
3.4.3 Property Acquisition.....	9
3.4.4 Levee Board Considerations .....	10
3.4.5 Submittals .....	10
3.4.6 Change Orders .....	10
3.4.7 Field Activities and Look Ahead .....	10
3.4.8 QC/QA Activities .....	10
3.4.9 Considerations .....	10
3.4.10 Payment Progress.....	10
3.5 BID PACKAGE 4.....	11
3.5.1 Calendar .....	11
3.5.2 Progress .....	11
3.5.3 Property Acquisition – All property is acquired.....	11

3.5.4	Levee Board Considerations .....	11
3.5.5	Submittals – on-going .....	11
3.5.6	Change Orders .....	11
3.5.7	Field Activities and Look Ahead .....	11
3.5.8	QC/QA Activities .....	11
3.5.9	Considerations .....	11
3.5.10	Payment Progress .....	11
3.6	BID PACKAGE 5 .....	12
3.6.1	Calendar .....	12
3.6.2	Progress .....	12
3.6.3	Property Acquisition .....	12
3.6.4	Levee Board Considerations .....	12
3.6.5	Submittals .....	12
3.6.6	Change Orders .....	12
3.6.7	Field Activities and Look Ahead .....	12
3.6.8	QC/QA Activities .....	12
3.6.9	Considerations .....	12
3.6.10	Payment Progress .....	12
3.7	BID PACKAGE 6 .....	13
3.7.1	Calendar .....	13
3.7.2	Progress .....	13
3.7.3	Property Acquisition .....	13
3.7.4	Levee Board Considerations - None .....	13
3.7.5	Submittals – on-going .....	13
3.7.6	Change Orders – See Change Order Log attached .....	13
3.7.7	Field Activities and Look Ahead – See table above .....	13
3.7.8	QC/QA Activities - ABNA is testing material; Geotechnology performing QA testing .....	13
3.7.9	Considerations - None .....	13
3.7.10	Payment Progress - See Contract Invoice Log attached .....	13
3.8	BID PACKAGE 7A .....	14
3.8.1	Calendar .....	14
3.8.2	Progress .....	14
3.8.3	Property Acquisition – Not applicable .....	14
3.8.4	Levee Board Considerations - None .....	14
3.8.5	Submittals – on-going .....	14
3.8.6	Change Orders - See Change Order Log attached .....	14
3.8.7	Field Activities and Look Ahead .....	14
3.8.8	QC/QA Activities – None .....	14
3.8.9	Considerations - None .....	14
3.8.10	Payment Progress – See Contract Invoice Log attached .....	14
3.9	BID PACKAGE 7B .....	15
3.9.1	Calendar .....	15
3.9.2	Progress .....	15
3.9.3	Property Acquisition .....	15
3.9.4	Levee Board Considerations .....	15
3.9.5	Submittals – Once contract is signed .....	15
3.9.6	Change Orders - See Change Order Log attached .....	15
3.9.7	Field Activities and Look Ahead .....	15
3.9.8	QC/QA Activities .....	15
3.9.9	Considerations .....	15
3.9.10	Payment Progress – See Contract Invoice Log attached .....	15

## 1. OVERVIEW

### 1.1 Project Description

Levees along the east side of the Mississippi River within four levee districts have been found to be out of compliance with FEMA Requirement 44CFR 65.10 and therefore have been de-certified. The four districts are: Wood River Drainage and Levee District, Metro-East Sanitary District, Prairie du Pont Drainage and Levee District, and Fish Lake Drainage and Levee District. The counties involved have formed an overarching entity called the Southwestern Illinois Flood Prevention District Council (SIFPDC). Amec Foster Wheeler has been selected by the SIFPDC to design and manage the construction of levee system improvements necessary to demonstrate compliance with FEMA Requirement 44CFR 65.10.

**Bid Package 2A** is composed of the construction of one (1) pump station within the Fish Lake Levee District System.

**Bid Package 2B** is composed of the construction of five (5) pump stations within the Wood River, MESD, and Prairie du Pont Levee Districts.

**Bid Package 2C** is composed of the installation of two force mains and associated structures from Site 12 pump station to levee discharge.

**Bid Package 3** is composed of the construction of seepage control improvements within the Wood River Drainage and Levee District Levee System.

**Bid Package 4** is composed of the construction of seepage control improvements within the Metro East Sanitary District Levee System, from Station 1209+00 to 1242+00. This package also includes the construction of one (1) pump station.

**Bid Package 5** is composed of the construction of seepage control improvements within the Metro East Sanitary District Levee System.

**Bid Package 6** is composed of the construction of seepage control improvements within the Prairie du Pont Drainage and Levee District and Fish Lake Drainage and Levee District Levee Systems.

**Bid Package 7A** is composed of the construction of a shallow cut-off wall and flush clay cap near the upstream portion of the Upper Wood River Levee System, from station 20+00 to 38+00.

**Bid Package 7B** is composed of the construction of a deep cut-off wall and protruding clay cap in the Lower Wood River Levee System, from station 132+00 to 170+00.

### 1.2 Amec Foster Wheeler Scope

Based on baseline budgets and baseline schedules, monitor and manage the program performance.

- track program cost
- monitor program budget
- track program progress
- monitor program schedule
- complete earned value analysis, performance measurements and forecasting
- schedule and cost variance management and corrective action plans

### 1.3 Key Contacts / People

Program Manager	Jay Martin, PE, 615.333.0630 <a href="mailto:jay.w.martin@amecfw.com">jay.w.martin@amecfw.com</a>
Project Manager	Jon Omvig, AICP, 636.200.5118 <a href="mailto:jon.omvig@amecfw.com">jon.omvig@amecfw.com</a>
Resident Engineer	Jim Solari, PE, 314.478-9287 <a href="mailto:james.solari@amecfw.com">james.solari@amecfw.com</a>
Construction QA Manager	Kevin Williams, 618.401.7226 <a href="mailto:kevin.williams@amecfw.com">kevin.williams@amecfw.com</a>
Project Coordinator	Kendra Mitchom, 618.346.9120 <a href="mailto:kendra.mitchom@amecfw.com">kendra.mitchom@amecfw.com</a>

## 2. HEALTH, SAFETY, SECURITY, ENVIRONMENT (HSSE)

### 2.1 HSSE Reports

<b>Health/Safety</b>		
<p>The Contractors continue to conduct daily toolbox safety talks.</p> <p>Amec Foster Wheeler continues to conduct monthly safety meetings with the contractors every third Tuesday.</p>		
<b>Security</b>		
<p>No issues during this reporting period.</p>		
<b>Environment (SWPPP)</b>		
<p>An Amec Foster Wheeler environmental representative is inspecting the SWPPP efforts on a weekly basis.</p>		
<b>River Stage</b>		
<p>The USACE 408 permit dictates that excavations shall cease when the Mississippi River Stage is:</p>		
<b>Bid Package</b>	<b>River Stage</b>	<b>River Elevation</b>
2A	17.0	396.94
2B	27.06	407.00
2C	15.03	394.97 (Mel Price)
3	16.0	411.48 (Mel Price)
4	25.0	404.94
5	25.0	404.94
6	25.0	404.94
7A	21.52	417.0 (Mel Price)
7B	21.52	417.0 (Mel Price)
<p>The 408 permit Mississippi River restrictions have ceased and critically delayed excavation, well drilling, etcetera from May 27, 2015 to the first week of August.</p>		

### 3. PROJECT STATUS UPDATE

#### 3.1 Bid Package 2A

##### 3.1.1 Calendar

Bid Date:	June 11, 2013
Contract executed	October 11, 2013
Schedule received	October 29, 2013
Anticipated start of field activities	January 22, 2014
Start of field activities	January 27, 2014
Anticipated completion date	<i>December 1, 2014</i>
Final Walk Through	Substantial completion August 12, 2014
Final Acceptance	<i>December 1, 2014</i>

##### 3.1.2 Progress

- The construction portion of this project is complete and the retainage has been released.
- Amec Foster Wheeler (AFW) preparing closeout documents for USACE.

##### 3.1.3 Property Acquisition

- The construction portion of the project is complete.

##### 3.1.4 Levee Board Considerations

- None

##### 3.1.5 Submittals

- Contractor submittals complete.

##### 3.1.6 Change Orders

- See Change Order Log attached. The construction portion of the project is complete.

##### 3.1.7 Field Activities and Look Ahead

- The construction portion of the project is complete.

##### 3.1.8 QC/QA Activities

- The construction portion of the project is complete.

##### 3.1.9 Considerations

- The construction portion of the project is complete.

##### 3.1.10 Payment Progress

- See Contract Invoice Log attached. The project is complete and the retainage is released.



### 3.2 Bid Package 2B

#### 3.2.1 Calendar

Bid Date:	October 1, 2013
Contract executed	December 16, 2013
Schedule received	December 17, 2013
Anticipated start of field activities	February 17, 2014
Start of field activities	February 24, 2014
Anticipated completion date	<i>April 15, 2015 (Contract Completion Date)</i>
Final Walk Through	Awaiting the potential Site 5 warranty issue resolution.
Final Acceptance	

#### 3.2.2 Progress

- The construction portion of the pump project is complete.
- Close-out paperwork being processed.
- Retainage will not be released until the potential Site 5 warranty issues are resolved.

3.2.3 Property Acquisition – All property is acquired.

3.2.4 Levee Board Considerations – None

3.2.5 Submittals

- Final project closeout submittals being reviewed by Amec.

3.2.6 Change Orders – See Change Order Log attached.

- Modification to construct guardrail at Site 12 is complete.

3.2.7 Field Activities and Look Ahead

- None other than previously mentioned.

3.2.8 QC/QA Activities

- The construction portion of the project is complete, except for the potential warranty issues at Site 5.

3.2.9 Considerations

- None

3.2.10 Payment Progress

- See Contract Invoice Log attached.

### 3.3 Bid Package 2C

#### 3.3.1 Calendar

Bid Date:	November 12, 2014
Contract executed	February 9, 2015
Schedule received	
Anticipated start of field activities	
Start of field activities	
Anticipated completion date	<i>December 15, 2015 (Contract Completion Date)</i>
Final Walk Through	
Final Acceptance	

#### 3.3.2 Progress

1. The contract was executed on February 9, 2015.
2. The Notice-to-Proceed was issued on March 5, 2015
3. Contractor preparing and Amec is reviewing submittals.
4. The site work cannot begin until October 15<sup>th</sup> per the 408 permit.

#### 3.3.3 Property Acquisition

- All property is acquired.

#### 3.3.4 Levee Board Considerations

- None

#### 3.3.5 Submittals

- AMEC reviewing submittals as received.

#### 3.3.6 Change Orders

- None

#### 3.3.7 Field Activities and Look Ahead

- None until October 15, 2015 per the 408 permit.

#### 3.3.8 QC/QA Activities

- None

#### 3.3.9 Considerations

- None

#### 3.3.10 Payment Progress

- None

### 3.4 Bid Package 3

#### 3.4.1 Calendar

Bid Date:	December 3, 2013
Contract executed	January 27, 2014
Schedule received	December 3, 2013
Anticipated start of field activities	Various field activities have started
Start of field activities	
Anticipated completion date	<i>This completion date was delayed due to design modifications, river, weather and RR land acquisition. Keller evaluating a recent major design revisions and will submit an updated schedule once the change orders are approved.</i>  <i>Upper Wood River Completion predicted substantial completion for November 1, 2015. But, this is dependent on the Russell Commons manhole and pipe backfill direction.</i>
Final Walk Through	
Final Acceptance	

#### 3.4.2 Progress

○

##### Upper Wood River:

- Blanket Drain 2 - Keller to began the work on August 17, 2015 and will complete the work in September, weather dependent.
- 33 Piezometer installation complete. Transducers are being monitored.
- Blanket Drain 3 construction and Weir 1 - Substantial Completion on May 13, 2015.
- Blanket Drain 1 planned to install in September/October
- There are 18 Upper Wood River relief wells are complete.
- The manhole excavations in Russell Commons have encountered trash/debris. This will lead to a change order.

##### Lower Wood River:

- Union Pacific land acquisition is complete and NTP was issued on June 10, 2015:
- Blanket Drain 6, Seepage Berms 1-4, and random fill areas 1 & 2 can now begin as weather and river elevation permit. Work in Upper Wood River has taken priority over this work.
- Relief Wells – As of September 10, 2015, there are 4 out of 67 Lower Wood River Relief Wells installed.
- Various “Hartford” pilot holes are being drilled and relief wells are being designed.
- 25 of the 33 pyrometers are complete. Transducers have been installed in the completed piezometers.
- Union Pacific land acquisition complete. Contractor acquiring permits and flagging agreements.
- Blanket Drain 5 & 7 and weir 4 was Substantial Completion on July 31, 2015.
- Blanket Drain 4 - Critical Delay - Amec Foster Wheeler Engineering revised the scope of work. The Contactor was provided drawing on August 11, 2015 for review and price.

#### 3.4.3 Property Acquisition

- A partial NTP was issued March 13, 2014 and rejected by the Contractor. All land acquisition has been obtained except for the MOPAC / UP railroad parcels which encompass 6 sites. Due to recent land acquisition, an additional partial NTP was issued January 14, 2015.
- Due to the railroad land acquisition, a partial NTP was given on June 9, 2015 for the UP portion of the project.

#### 3.4.4 Levee Board Considerations

- None other than previously mentioned.

#### 3.4.5 Submittals

- Submittal process ongoing.

#### 3.4.6 Change Orders

- Major Upcoming Change Orders:
  - Modifications to Blanket Drain 4. Contractor to provide schedule for completion once the modifications have been approved.
- See Change Order Log attached.

#### 3.4.7 Field Activities and Look Ahead

- As indicated above.

#### 3.4.8 QC/QA Activities

Testing as required.

#### 3.4.9 Considerations

- Critical Delay: Current contract completion date was not met due to land acquisition delays, etcetera.

#### 3.4.10 Payment Progress

- See Contract Invoice Log attached.

### 3.5 Bid Package 4

#### 3.5.1 Calendar

Bid Date:	December 3, 2013
Contract executed	February 6, 2014
Schedule received	December 3, 2013
Anticipated start of field activities	February 24, 2014
Start of field activities	March 17, 2014
Anticipated completion date	<i>June 30, 2015 (Contract Completion Date). This date to be revised due to the High River days and potential change orders.</i>
Final Walk Through	
Final Acceptance	

#### 3.5.2 Progress

- The 408 permit river restrictions have ceased and critically delayed the project from May 27, 2015 to August 17, 2015.
- Clay cap earthwork has started on August 17, 2015 and is halfway completed.
- Site 09 pump station in complete except fencing around the station.
- RW collector system - The 24 inch diameter pipe did not pass the air tests and the deflection or the mandrel tests. Contractor submitted RFI. Amec Foster Wheeler (AFW) is reviewing. The Relief Well conversions and abandonments on hold until resolved.

3.5.3 Property Acquisition – All property is acquired.

3.5.4 Levee Board Considerations

- None

3.5.5 Submittals – on-going

3.5.6 Change Orders

- See Change Order Log attached.

3.5.7 Field Activities and Look Ahead

- See above

3.5.8 QC/QA Activities

- Clay material testing is on-going.

3.5.9 Considerations

- None

3.5.10 Payment Progress

- See Contract Invoice Log attached.

### 3.6 Bid Package 5

#### 3.6.1 Calendar

Bid Date:	December 3, 2013
Contract executed	January 27, 2014
Schedule received	December 3, 2013
Anticipated start of field activities	February 17, 2014
Start of field activities	February 17, 2014
Anticipated completion date	<i>September 30, 2015 (Contract Completion Date). Completion date dependent on the protruding clay cap value engineering direction. The schedule to be revised accordingly.</i>
Final Walk Through	
Final Acceptance	

#### 3.6.2 Progress

- The 408 permit river restrictions have ceased and critically delayed excavation, well drilling, etcetera from May 27, 2015 to August 17, 2015. The 208,000 cubic yards of clay placement is on-hold as Amec Foster Wheeler evaluates a potential protruding clay cap value engineering proposal.
- Relief Wells and Piezometers - Relief Well and Piezometer work complete. Transducers to be installed in the Piezometers.
- RW collector system - Portions of the collector pipe did not pass the deflection or the mandrel tests. Contractor submitted RFI. AFW evaluating.
- Sluice Gate rehabilitation at MoPac and 408 Pump Station in.

#### 3.6.3 Property Acquisition

- All property is acquired.

#### 3.6.4 Levee Board Considerations

- None.

#### 3.6.5 Submittals

- Submittal process underway.

#### 3.6.6 Change Orders

- See Change Order Log attached.

#### 3.6.7 Field Activities and Look Ahead

- See above table

#### 3.6.8 QC/QA Activities

- Juneau/SCI on site for QC testing as needed.

#### 3.6.9 Considerations

- None other than previously mentioned.

#### 3.6.10 Payment Progress

- See Contract Invoice Log attached.

### 3.7 Bid Package 6

#### 3.7.1 Calendar

Bid Date:	June 11, 2013
Contract executed	October 3, 2013
Schedule received	October 31, 2013
Anticipated start of field activities	November 11, 2013
Start of field activities	November 19, 2013
Anticipated completion date	<i>September 30, 2015 (Contract Completion Date)</i>
Final Walk Through	
Final Acceptance	

#### 3.7.2 Progress

- The 408 permit river restrictions have ceased and critically delayed the project from May 27, 2015 to August 10, 2015.
- Seepage Berms – work continues as weather allows.
- Clay Caps to continue the week of September 21<sup>st</sup>.
- Relief Wells and Piezometers - Relief well drilling complete (67).
- 15 of 16 PZs are complete.
- Relief well collector system is 85% complete.

#### 3.7.3 Property Acquisition

- All property is acquired.

#### 3.7.4 Levee Board Considerations - None

#### 3.7.5 Submittals – on-going

#### 3.7.6 Change Orders – See Change Order Log attached

#### 3.7.7 Field Activities and Look Ahead – See table above

#### 3.7.8 QC/QA Activities - ABNA is testing material; Geotechnology performing QA testing

#### 3.7.9 Considerations - None

#### 3.7.10 Payment Progress - See Contract Invoice Log attached

### 3.8 Bid Package 7A

#### 3.8.1 Calendar

Bid Date:	August 13, 2014
Contract executed	September 17, 2014
Schedule received	October 1, 2014
Anticipated start of field activities	October 6, 2014
Start of field activities	October 6, 2014
Anticipated completion date	<i>June 26, 2015 (contract completion date)</i>
Final Walk Through	
Final Acceptance	

#### 3.8.2 Progress

- This project is complete.
- Amec Foster Wheeler preparing closeout documentation.

3.8.3 Property Acquisition – Not applicable

3.8.4 Levee Board Considerations - None

3.8.5 Submittals – on-going

3.8.6 Change Orders - See Change Order Log attached

#### 3.8.7 Field Activities and Look Ahead

- Notice of Award issued September 9, 2014
- Contract Executed September 17, 2014
- Notice to Proceed issued September 22, 2014
- Work began onsite on October 6, 2014 – Site clearing, removal of asphalt pavement, etc.
- Complete work platform and lower portion of clay cap below finished grade.
- SAR Team site visit for initial wall construction, addressed comments in their report.
- Initial quality Control testing results exceeding minimum permeability requirements by two orders of magnitude.
- Geo-Solutions finished the Slurry Wall construction.
- This project is complete.

3.8.8 QC/QA Activities – None

3.8.9 Considerations - None

3.8.10 Payment Progress – See Contract Invoice Log attached.



### 3.9 Bid Package 7B

#### 3.9.1 Calendar

Bid Date:	August 13, 2014
Contract executed	September 12, 2014
Schedule received	June 19, 2015
Anticipated start of field activities	August 2015
Start of field activities	
Anticipated completion date	<i>Substantial Completion of January 21, 2016 with a final completion of May 1, 2016</i>
Final Walk Through	
Final Acceptance	

#### 3.9.2 Progress

- TREVIICOS received Notice-to-Proceed June 9, 2015
- Pre-Construction Meeting held June 15, 2015
- Treviicos mobilizing July 2015 and continuing into August.
- Work Progress:
  - Treviicos and subcontractors have cleared and grubbed
  - Treviicos installed silt fence
  - Treviicos installing access roads.
  - Treviicos completing the plant setup.
  - Work Platform installation in progress.
  - Piezometer and inclinometer installation in progress.
  - Test panel schedule for the week of September 21, 2015.

#### 3.9.3 Property Acquisition

#### 3.9.4 Levee Board Considerations

#### 3.9.5 Submittals – Once contract is signed.

#### 3.9.6 Change Orders - See Change Order Log attached

#### 3.9.7 Field Activities and Look Ahead

#### 3.9.8 QC/QA Activities

#### 3.9.9 Considerations

#### 3.9.10 Payment Progress – See Contract Invoice Log attached.

**CONTRACT INVOICE LOG**

**Contractor:** Korte & Luitjohan Contractors, Inc  
 12052 Highland Road  
 Highland, IL 62249

**Project:** SWILCD  
**Construction Package:** BP2A

**Original Contract Amount:** \$747,500.00  
**Change Order #1:** \$2,245.00      Limatorque Actuator  
**Change Order #2:** \$7,730.00      Additional Road Aggregate  
**Change Order #3:** \$434.00      Monroe County Building Permit  
**Change Order #4:** \$0.00      Contract Time Extension  
**Change Order #5:** \$0.00      Contract Time Extension 2  
**Change Order #6:** \$0.00      Contract Time Extension 3  
**Change Order #7:** \$5,189.21      Additional Rock and Testing  
**Change Order #8:** \$34,501.32      Stumpf Property Pipe Extension  
**Total Change Order Amount:** \$50,099.53  
**Total Revised Contract Amount:** \$797,599.53

Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed to Date (\$)	Amount Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retained	Current Payment Invoice	Date Paid by FPD	Estimate to Complete Including Retainage (\$)
<u>1</u>	11/15/2013	11/27/2013	\$11,000.00	\$1,100.00	\$9,900.00	\$9,900.00	11/1/2013	\$737,600.00
<u>2</u>	2/5/2014	2/10/2014	\$76,000.00	\$7,600.00	\$68,400.00	\$58,500.00	2/18/2014	\$679,100.00
<u>3</u>	3/6/2014	3/13/2014	\$228,500.00	\$22,850.00	\$205,650.00	\$137,250.00	3/25/2014	\$541,850.00
<u>4</u>	3/31/2014	4/15/2014	\$372,400.00	\$37,240.00	\$335,160.00	\$129,510.00	4/22/2014	\$420,504.00
<u>5</u>	4/30/2014	5/13/2014	\$432,500.00	\$43,250.00	\$389,250.00	\$54,090.00	5/22/2014	\$366,414.00
<u>6</u>	5/31/2014	6/10/2014	\$635,890.00	\$50,742.00	\$585,148.00	\$195,898.00	6/19/2014	\$170,516.00
<u>7</u>	6/30/2014	7/14/2014	\$684,000.00	\$53,147.00	\$630,853.00	\$45,705.00	7/17/2014	\$124,811.00
<u>8</u>	7/31/2014	8/12/2014	\$753,929.00	\$37,895.45	\$716,033.55	\$85,180.55	8/19/2014	\$39,630.45
<u>9</u>	8/31/2014	9/9/2014	\$759,118.21	\$37,895.45	\$721,222.76	\$5,189.21	9/15/2014	\$41,875.45
<u>10</u>	11/30/2014	12/12/2014	\$797,599.53	\$38,094.45	\$759,505.08	\$38,282.32	12/18/2014	\$38,094.45
<u>11</u>	12/31/2014	1/15/2015	\$797,599.53	\$1,800.00	\$795,799.53	\$36,294.45	1/26/2015	\$1,800.00
<u>12</u>	3/31/2015	4/10/2015	\$797,599.53	\$0.00	\$797,599.53	\$1,800.00	4/16/2015	\$0.00

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT** Bid Package 2A

**PROJECT NUMBER:** SIFPDC-BP2A

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1	Limitorque Actuator	Spec	\$2,245.00	\$0.00	2A.8	\$ 28,700.00	7.82%	0.30%	2/10/2014	Approved	Specification change due to MESD levee district negative experience with spec'd material; spec change to alleviate possible future problems and for consistency with other bid packages
2	Additional Roadway Aggregate	Field	\$7,730.00	\$0.00	2A.3	\$ 141,200.00	5.47%	1.03%	3/18/2014	Approved	Required by Monroe County
3	Building Permit	Field	\$434.00	\$0.00	2A.1	\$ 36,200.00	1.20%	0.06%	3/4/2014	Approved	Required by Monroe County
4	Contract Time Extension	Field	\$0.00	\$0.00	NA	NA	NA	0.00%	3/31/2014	Approved	Contract extended 90 days due to material fabrication delay
5	2nd Contract Time Extension	Field	\$0.00	\$0.00	NA	NA	NA	0.00%	7/24/2014	Approved	Time extension request due to abnormal weather and high river level days that impeded construction
6	3rd Contract Time Extension	Field	\$0.00	\$0.00	NA	NA	NA	0.00%	8/21/2014	Approved	Time extension request due to abnormal weather and high river level days that impeded construction
7	Additional Rock instead Pump Station and Pipe Testing T&M	Field	\$5,189.21	\$0.00	NA	NA	NA	0.69%	9/2/2014	Approved	Additional rock installed for maintenance purposes; Time and material for pipe testing needed
8	Pipe Extension on Stump Property	Field	\$34,501.32	\$0.00	NA	NA	NA	4.62%	9/29/2014	Approved	To enable property owner equipment access to property
			<b>Total of Project Change Orders</b>	<b>\$50,099.53</b>						<b>Total</b>	<b>\$ 50,099.53</b>

**Original Contract Amount** \$747,500.00  
**Revised Contract Amount** \$797,599.53  
**% Change from Original Amount** 6.70%

\*Board approval required

**CONTRACT INVOICE LOG**

**Contractor:** Korte & Luitjohan Contractors, Inc  
 12052 Highland Road  
 Highland, IL 62249

**Project:** SWILCD  
**Construction Package:** BP2B

**Original Contract Amount:** \$3,865,405.00  
**Change Order #1:** \$434.00 Monroe County Building Permit  
**Change Order #2:** \$7,965.00 Additional Road Aggregate  
**Change Order #3:** \$0.00 Fence and Aggregate Changes  
**Change Order #4:** \$8,570.00 Razor Wire on Fence per MESD Request  
**Change Order #5:** \$0.00 Contract Time Extension  
**Change Order #6:** \$50,600.00 Site 16 Duct Bank  
**Change Order #7:** \$4,760.00 Site 12 Existing Force Mains  
**Change Order #8:** \$74,200.00 Site 10 Electrical Changes  
**Change Order #9:** \$0.00 Time Extension  
**Change Order #10:** \$10,276.92 Site 12 Guard Rail  
**Total Change Order Amount:** \$156,805.92  
**Total Revised Contract Amount:** \$4,022,210.92

Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed and Store to Date	Cumulative Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retained	Current Payment Invoice	Date Paid by FPD	Estimate to Complete Including Retainage(\$)
1	2/5/2014	2/10/2014	\$51,750.00	\$5,175.00	\$46,575.00	\$46,575.00	<a href="#">2/18/2014</a>	\$3,818,830.00
2	3/6/2014	3/13/2014	\$132,450.00	\$13,245.00	\$119,205.00	\$72,630.00	<a href="#">3/25/2014</a>	\$3,746,634.00
3	3/31/2014	4/15/2014	\$504,300.00	\$50,430.00	\$453,870.00	\$334,665.00	<a href="#">4/22/2014</a>	\$3,419,934.00
4	4/30/2014	5/13/2014	\$846,000.00	\$84,600.00	\$761,400.00	\$307,530.00	<a href="#">5/22/2014</a>	\$3,112,404.00
5	5/31/2014	6/12/2014	\$1,295,000.00	\$129,500.00	\$1,165,500.00	\$404,100.00	<a href="#">6/19/2014</a>	\$2,708,304.00
6	6/30/2014	7/14/2014	\$1,736,000.00	\$173,600.00	\$1,562,400.00	\$396,900.00	<a href="#">7/17/2014</a>	\$2,311,404.00
7	7/31/2014	8/11/2014	\$2,180,100.00	\$205,850.00	\$1,974,250.00	\$411,850.00	<a href="#">8/19/2014</a>	\$1,899,554.00
8	8/31/2014	9/8/2014	\$2,927,440.00	\$243,217.00	\$2,684,223.00	\$709,973.00	<a href="#">9/15/2014</a>	\$1,198,151.00
9	9/30/2014	10/9/2014	\$3,144,000.00	\$255,524.00	\$2,888,476.00	\$204,253.00	<a href="#">10/16/2014</a>	\$1,044,498.00
10	10/31/2014	11/7/2014	\$3,420,000.00	\$269,324.00	\$3,150,676.00	\$262,200.00	<a href="#">11/18/2014</a>	\$787,058.00
11	11/30/2014	12/12/2014	\$3,648,600.00	\$282,764.00	\$3,365,836.00	\$215,160.00	<a href="#">12/18/2014</a>	\$646,098.00
12	12/31/2014	1/12/2015	\$3,840,000.00	\$292,334.00	\$3,547,666.00	\$181,830.00	<a href="#">1/26/2015</a>	\$464,268.00
13	1/31/2015	2/9/2015	\$3,897,320.00	\$295,200.00	\$3,602,120.00	\$54,454.00	<a href="#">2/18/2015</a>	\$409,814.00
14	2/28/2015	3/10/2015	\$3,968,238.00	\$298,710.00	\$3,669,528.00	\$67,408.00	<a href="#">3/19/2015</a>	\$342,406.00
15	3/31/2015	4/10/2015	\$4,011,934.00	\$200,596.00	\$3,811,338.00	\$141,810.00	<a href="#">4/16/2015</a>	\$200,596.00
16	4/30/2015	5/12/2015	\$4,011,934.00	\$10,000.00	\$4,001,934.00	\$190,596.00	<a href="#">5/18/2015</a>	\$20,276.92
17	7/31/2015	8/11/2015	\$4,022,210.92	\$10,000.00	\$4,012,210.92	\$10,276.92		\$10,000.00

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT Bid Package 2B**

**PROJECT NUMBER:** SIFPDC-BP2B

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1	Building Permit	Field	\$434.00	\$0.00	2B.1	\$ 32,720.00	1.33%	0.01%	2/24/2014	Approved	Required by Monroe County
2	Additional Roadway Aggregate	Field	\$7,965.00	\$0.00	2B.3	\$ 171,825.00	4.64%	0.21%	3/18/2014	Approved	Required by Monroe County
3	Site 10, 12, 15 fence and aggregate changes	Field	\$0.00	\$0.00	NA	NA	0.00%	0.00%	8/12/2014	Approved	Field changes to enable constructability and provide maintenance ease
4	Razor Wire on Fence	Other	\$0.00	\$8,570.00	NA	NA	NA	0.22%	8/19/2014	Approved	Razor wire on fence at Site 10, 12, & 16 per MESD Levee District request; To be paid by MESD
5	Time Extension	Other	\$0.00	\$0.00	NA	NA	0.00%	0.00%	8/19/2014	Approved	Time extension for July 2014 weather/high river days that impeded construction
6*	Site 16 Duct Bank	Field	\$50,600.00	\$0.00	2B.55	\$ 23,990.00	210.92%	1.31%	9/29/2014	Approved	USACE required underground electrical service to pump station per Ameren; Ameren to credit FPD amount paid to Ameren for overhead lines; Board approval required
7	Site 15 Grating and Supports	Field	\$4,760.00	\$0.00		\$ 352,645.00	1.35%	0.12%	10/17/2014	Approved	Grating and support for Site 15 to enable functionality of the system
8*	Site 10 Electric Change	Field	\$74,200.00	\$0.00	2B.27	\$ 17,705.00	419.09%	1.92%	11/19/2014	Approved	Ameren requires upgrades to the existing pump station at Site 10. Board approval required
9	Time Extension	Other	\$0.00	\$0.00	NA	NA	0.00%	0.00%	12/2/2014	Approved	Request for Time Extension to move our completion date to 4/15/15 due to the contract documents for Bid Package 2B contractor is only allowed to work at Site 12 between October 15th to March 15th.
10	Site 12 Guard Rail	Field	\$10,276.92	\$0.00	NA	NA	NA	0.27%	4/17/2015	Approved	Install approximately 74 LF of FRP handrails per the attached drawings for OSHA compliance
<b>Total of Project Change Orders</b>			<b>\$148,235.92</b>	<b>\$8,570.00</b>						<b>Total</b>	<b>\$ 156,805.92</b>
<b>Original Contract Amount</b>			<b>Revised Contract Amount</b>		<b>% Change from Original Amount</b>						
<b>\$3,865,405.00</b>			<b>4,022,210.92</b>		<b>4.06%</b>						

Approved

\*Board approval required

### CONTRACT INVOICE LOG

**Contractor:** Haier Plumbing  
301 North Elkton Street, P. O. Box 400  
Okawville, IL 62271

**Project:** SWILCD  
**Construction Package:** BP2C

**Original Contract Amount:** \$281,632.00  
**Change Order #1:**  
**Change Order #2:**  
**Change Order #3:**  
**Total Change Order Amount:** \$0.00  
**Total Revised Contract Amount:** **\$281,632.00**

Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed to Date (\$)	Amount Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retained (\$)	Amount Invoiced (\$)	Date Paid by FPD	Estimate to Complete Including Retainage (\$)

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT Bid Package 2C**

**PROJECT NUMBER: SIFPDC-BP2C**

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
<b>Total of Project Change Orders</b>			<b>\$0.00</b>	<b>\$0.00</b>						<b>Total</b>	<b>\$ -</b>
<b>Original Contract Amount</b>			<b>281,632.00</b>	<b>% Change from Original Amount</b>							
<b>\$281,632.00</b>			<b>281,632.00</b>	<b>0.00%</b>							

Approved

\*Board approval required





**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT**Bid Package 03

**PROJECT NUMBER:** SIFPDC-BP03

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1	IDOT Permit	Other	\$1,000.00	\$0.00	3.01	\$ 498,000.00	0.20%	0.01%	5/21/2014	Approved	IDOT Required Permit
2	Piezometer 39 Relocate	Field	\$16,600.00	\$0.00	3.30	\$ 307,224.00	5.40%	0.16%	9/18/2014	Approved	Post bid design change to enable more effective operability
3	Russell Commons Fence Remove and Replace	Field	\$11,361.00	\$0.00	NA	NA	NA	0.11%	10/2/2014	Approved	Remove and replace fence installed by property owner post bid
4	Additional Hydro Excavating	Field	\$2,245.60	\$0.00	3.39	\$1,884,009.24	0.12%	0.02%	10/8/2014	Approved	Due to the relocation of RW's 1077 to 1080; added costs for hydro excavation
5	Permits for relief well conversions due to change with IL Public Health Dept	Other	\$3,071.25	\$0.00	3.37	\$ 82,812.00	3.71%	0.03%	10/22/2014	Approved	Permits for relief well conversions due to change with IL Public Health Dept
6*	RR3 Material for Blanket Drains-pending verifying material	Field	\$278,694.99	\$0.00	3.08-3.14	\$2,034,478.00	13.70%	2.76%	11/19/2014	Approved	Blanket Drains material change from CA1 to RR3 to improve effectiveness; Change requires Board approval
7*	Indian Creek Rip Rap	Field	\$57,436.00	\$0.00	3.40	\$ 193,713.36	29.65%	0.57%	11/19/2014	Approved	Due to the extreme scour of the banks and creek bed since the time of the original design, in order for the per plan design to be constructed, it is going to require a substantial amount of additional rip rap RR4 to be placed. Board approval required
8	Credit-Remove Vacuum Testing of Manholes	Other	\$ (5,820.00)	\$0.00	3.29	\$ 37,896.00	-15.36%	-0.06%	2/2/2015	Approved	PCN approved to remove the requirements for ASTM C1244 Standard Test Method for Concrete Sewer
9*	Hawthorne Changes North & South including Ameren	Other	\$558,066.80	\$0.00	3.02 3.04 3.06 3.07 3.29 3.32 3.02 3.09 3.16 3.23 3.25 3.26 3.29 3.36 3.37	\$1,884,009.24	29.62%	5.54%	2/18/2015	Approved	Change Description submitted in change order memo for Board approval 2/18/15
10*	Blanket Drain 2 Revisions & RW 1077 to 1080 Changes	Other	\$477,917.72	\$0.00				4.74%	2/18/2015	Approved	Change Description submitted in change order memo for Board approval 2/18/15; change order pending credit before processing
11	Blanket Drain 1 Revisions	Other	\$ (59.97)	\$0.00	3.08	\$ 15,160.00	-0.40%	0.00%	2/26/2015	Approved	Revised limits of Blanket Drain 1 and change surface aggregate material
12*	Toe Wall and Handrails Wiers 2, 3, and 4	Field	\$ 60,362.00	\$0.00	3.48 3.49 3.50	\$ 381,000.00	15.84%	0.60%	4/15/2015	Approved	Toe wall for additional structural support due to the field conditions and soil types the weirs are being installed in. The toe walls were added to mitigate this potential failure. Handrails were added to the weirs as a result of OSHA regulations and for added maintenance personnel safety during inspections and flood events.
13*	Additional Pollution Coverage UPRR	Other	\$ 6,825.00	\$0.00	3.01	\$ 498,000.00	1.37%	0.07%	8/19/2015	Approved	Additional Pollution Coverage required by Union Pacific Railroad

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT**Bid Package 03

**PROJECT NUMBER:** SIFPDC-BP03

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
14*	Pilot Hole Drilling	Other	\$ 28,950.00	\$0.00	3.32	\$ 147,604.20	19.61%	0.29%	8/19/2015	Approved	Actual field conditions may vary and it is recommended by the project geotechnical lead to add to this number for potential field variations. Therefore the anticipated pilot hole increase is for an additional 300 feet. Board approval required
<b>Total</b>											<b>\$ 1,496,670.39</b>

**Total of Project Change Orders \$1,496,670.39 \$0.00**

Original Contract Amount Revised Contract Amount % Change from Original Amount  
**\$10,082,345.00 11,579,015.39 14.84%**

\*Board approval required

### CONTRACT INVOICE LOG

**Contractor:** Haier Plumbing  
 301 North Elkton Street, P. O. Box 400  
 Okawville, IL 62271

**Project:** SWILCD  
**Construction Package:** BP04

<b>Original Contract Amount:</b>	\$3,190,232.45	
<b>Change Order #1:</b>	\$8,196.30	Flyght Pump & Locking Sewer Lids per MESD
<b>Change Order #2:</b>	\$949.90	Fence Polycarbonate
<b>Change Order #3:</b>	\$10,488.00	Fence Grounding per Ameren
<b>Change Order #4:</b>	\$1,533.00	2 Additional Posts in Concrete per Phillips 66 Request
<b>Change Order #5:</b>	\$2,127.35	Time and material for new fence grounding
<b>Change Order #6:</b>	\$2,402.40	Per MESD Request
<b>Change Order #7:</b>	\$0.00	Contract Time Extension
<b>Change Order #8:</b>	\$1,656.00	2" Well Point SS Pipe
<b>Change Order #9:</b>	\$54,680.20	Site 9 Electrical Changes
<b>Change Order #10:</b>	\$35,602.21	Work Stoppage due to Soil Testing
<b>Change Order #11:</b>	\$80,046.18	Relief Well Construction Obstruction due to Cobble
<b>Change Order #12:</b>	\$0.00	Contract Time Extension to June 30, 2015
<b>Change Order #13:</b>	\$8,981.67	Relief Well 141XB Re-Design
<b>Change Order #14:</b>	\$948.75	Offset Oufall Line of RW 153X
<b>Change Order #15:</b>	\$79,051.00	Clay Cap Benching and Key Volume (3,437 CY)
<b>Total Change Order Amount:</b>	\$286,662.96	
<b>Total Revised Contract Amount:</b>	\$3,476,895.41	

Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed to Date (\$)	Amount Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retained (\$)	Amount Invoiced (\$)	Date Paid by FPD	Estimate to Complete Including Retainage (\$)
1	4/11/2014	4/15/2014	\$259,243.33	\$25,924.33	\$233,319.00	\$233,319.00	4/22/2014	\$2,965,109.75
2	6/11/2014	6/12/2014	\$269,731.33	\$26,973.13	\$242,758.20	\$9,439.20	6/19/2014	\$2,967,108.45
3	8/5/2014	8/11/2014	\$325,641.68	\$32,564.17	\$293,077.51	\$50,319.32	8/14/2014	\$2,920,449.49
4	10/1/2014	10/9/2014	\$970,413.05	\$97,041.31	\$873,371.75	\$580,294.24	10/13/2014	\$2,344,213.65
5	11/10/2014	11/11/2014	\$1,576,916.93	\$157,691.69	\$1,419,225.24	\$545,853.49	11/14/2014	\$1,798,360.16
6	12/9/2014	12/11/2014	\$1,805,617.83	\$180,561.78	\$1,625,056.05	\$205,830.81	12/18/2014	\$1,647,209.55
7	1/7/2015	1/13/2015	\$1,981,951.82	\$198,195.18	\$1,783,756.65	\$158,700.59	1/26/2015	\$1,488,508.95
8	1/31/2015	2/6/2015	\$2,353,390.85	\$235,339.09	\$2,118,051.77	\$334,295.13	2/13/2015	\$1,269,862.22
9	2/27/2015	3/9/2015	\$2,402,889.49	\$240,288.95	\$2,162,600.54	\$44,548.77	3/19/2015	\$1,225,313.45
10	3/31/2015	4/10/2015	\$2,512,569.69	\$251,256.97	\$2,261,312.72	\$98,712.18	4/16/2015	\$1,136,531.69
11	4/30/2015	5/12/2015	\$2,599,540.09	\$259,954.01	\$2,339,586.08	\$78,273.36	5/18/2015	\$1,058,258.33
12	6/30/2015	7/7/2015	\$2,608,521.08	\$260,852.12	\$2,347,668.96	\$8,082.50	7/9/2015	\$1,050,175.45
13	9/10/2015	9/14/2015	\$2,815,521.76	\$281,552.18	\$2,533,969.58	\$186,300.00		\$942,925.83

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT:** Bid Package 04

**PROJECT NUMBER:** SIFPDC-BP04

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1	Flight Pump and Locking Sewer Lids	Other	\$0.00	\$8,196.30	4.27	\$ 222,500.00	3.68%	0.26%	3/11/2014	Approved	To be paid by MESD Levee District
2	PVC Fence Panel Fillers	Field	\$949.90	\$0.00	4.22	\$ 140,360.00	0.68%	0.03%	4/4/2014	Approved	To accommodate field condition
3	Furnish and Install Fence Grounding	Field	\$10,488.00	\$0.00	4.22	\$ 140,360.00	7.47%	0.33%	4/17/2014	Approved	Ameren required fence to be grounded; grounding to be every 200ft with 20ft ground rod
4	2 Additional Posts in Concrete per Phillips 66 Request	Field	\$1,533.00	\$0.00	4.22	\$ 140,360.00	1.09%	0.05%	6/17/2014	Approved	2 Additional posts per P66 request
5	Time and material for new fence grounding	Field	\$2,127.35	\$0.00	4.22	\$ 140,360.00	1.52%	0.07%	7/17/2014	Approved	Change order for additional grounding needed as requested by Phillips 66; Time and material
6	Razor Wire on Fence	Other	\$0.00	\$2,402.40	NA	NA	NA	0.08%	8/20/2014	Approved	Razor wire on fence at pump station per MESD Levee District request; to be paid by MESD Levee District
7	Time Extension Request for Fence Delay and High River	Other	\$0.00	\$0.00	NA	NA	NA	0.00%	8/27/2014	Approved	Contract time extension of 43 working days due to security fence approval delay and high river level days that impeded construction
8	Well Point Stainless Steel Pipe diameter change 1-1/4" to 2"	Field	\$1,656.00	\$0.00	4.16	\$ 878,900.00	0.19%	0.05%	9/15/2014	Approved	Well point stainless steel pipe diameter change from 1-1/4" to 2" to improve operability/constructability.
9*	Site 9 Electrical Changes	Other	\$54,680.20	\$0.00	4.28	\$ 222,500.00	24.58%	1.71%	11/19/2014	Approved	Ameren requires upgrades to the existing pump station at Site 9. Board approval required
10	Work stoppage for impacted soil	Other	\$35,602.21	\$0.00	NA	NA	NA	1.12%	1/8/2015	Approved	Work stopped to perform testing due to encountering hydrocarbon odor
11	RW Construction Obstruction	Field	\$80,046.18	\$0.00	4.16	\$ 878,900.00	9.11%	2.51%	1/15/2015	Approved	RW Construction Obstruction due to Cobble Layer during drilling
12	Contract Time Extension	Other	\$0.00	\$0.00	NA	NA	NA	0.00%	2/10/2015	Approved	Contract time extension to June 30, 2015
13	RW 141XB Re-design	Field	\$8,981.67	\$0.00	4.16	\$ 878,900.00	1.02%	0.28%	2/17/2015	Approved	60-slot RW re-design to 40-slot
14	Off-setting Outfall Line of RW 153X	Field	\$948.75	\$0.00	4.16	\$ 878,900.00	0.11%	0.03%	3/6/2015	Approved	Off-setting Outfall Line of RW 153X
15	Clay Cap Benching and Key Volume (3,437 CY)	Other	\$79,051.00	\$0.00	NA	NA	NA	2.48%	8/24/2015	Approved	Clay Cap Benching and Key Volume (3,437 CY) The Clay quantity for the benching was not included in the original BP04 bid tab
<b>Total</b>											<b>\$ 286,662.96</b>
<b>Total of Project Change Orders</b>			<b>\$276,064.26</b>	<b>\$10,598.70</b>							

Original Contract Amount **\$3,190,232.45** Revised Contract Amount **3,476,895.41** % Change from Original Amount **8.99%**

\*Board approval required



**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT:** Bid Package 05

**PROJECT NUMBER:** SIFPDC-BP05

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1*	Locking Sewer Lids	Other	\$0.00	\$19,698.78	5.18-5.22	\$ 113,685.00	17.33%	0.24%	3/18/2014	Approved	To be paid by MESD Levee District
2	Gravity Drain Cleaning	Field	\$2,815.00	\$0.00	5.29	\$ 67,225.00	4.19%	0.03%	4/16/2014	Approved	Anticipated \$2,815.00 change to accommodate field condition and constructability
3	Rip Rap Survey	Field	\$1,224.14	\$0.00	NA	NA	NA	0.01%	6/18/2014	Approved	Operator and equipment cost for assistance with survey done on rip rap discovered on railroad embankment
4	Manhole JN1601 Extension	Field	\$683.99	\$0.00	5.21	\$ 9,325.00	7.34%	0.01%	7/18/2014	Approved	4ft extension due to BP05 and BP2B grade conflict
5	Permits for relief well conversions due to change with IL Public Health Dept	Other	\$1,863.75	\$0.00	5.26	\$ 211,728.64	0.88%	0.02%	10/30/2014	Approved	Permits for relief well conversions due to change with IL Public Health Dept; Owner will be responsible for all permits and fees
6	Relief Wells Rehabs	Other	\$103,690.00	\$0.00	NA	NA	NA	1.26%	10/30/2014	Approved	Relief well rehabilitations in the plans but were omitted from the bid tab
7*	PZ Seal Modifications	Design	\$31,680.00	\$0.00	5.22	\$ 171,680.00	18.45%	0.38%	11/19/2014	Approved	The new detail extends the concrete seal 4' below ground surface which should provide more stability for the above-grade part of the piezometer.
8	Installation and testing 10" Relief Wells instead of 8" Wells	Design	\$45,199.00	\$0.00	5.28	\$ 2,156,379.63	2.10%	0.55%	2/2/2015	Approved	Based on site-specific designs performed after pilot hole drilling, ten wells were final-designed with 10" diameter screens and risers to optimize well length and/or meet the USACE entrance velocity standard.
9*	RW Construction Obstruction	Field	\$107,201.00	\$0.00	5.27 5.28	\$ 3,204,234.48	3.35%	1.30%	1/15/2015	Approved	RW Construction Obstruction due to Cobble Layer during drilling; submitted January 21, 2015 for Board approval
10	Credit-Remove Vacuum Testing of Manholes	Other	\$ (5,095.00)	\$0.00	5.18-5.21	\$ 113,685.00	-4.48%	-0.06%	2/2/2015	Approved	PCN approved to remove the requirements for ASTM C1244 Standard Test Method for Concrete Sewer
11	Contract Time Extension	Other	\$0.00	\$0.00	NA	NA	NA	0.00%	2/10/2015	Approved	Contract Time Extension to September 30, 2015
12	Delete - PZ Seal Modifications	Other	\$ (31,680.00)	\$0.00	5.22	\$ 171,680.00	-18.45%	-0.38%	4/16/2015	Approved	Delete piezometer seal modifications
13	Remaining Relief Well Permits	Other	\$9,056.25	\$0.00	NA	NA	NA	0.11%	4/16/2015	Approved	Per spec sec 00 800 par 6.4-Owner will be responsible for all permits and fees
14	60 Slot Relief Well Redesign	Field	\$110,334.93	\$0.00	5.27 5.28	\$ 3,204,234.48	3.44%	1.34%	4/16/2015	Approved	60 Slot Relief Well Redesign

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT Bid Package 05**

**PROJECT NUMBER:** SIFPDC-BP05

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
15	RW Construction Obstruction	Field	\$83,011.64	\$0.00	5.27 5.28	\$ 3,204,234.48	2.59%	1.01%	5/15/2015	Within approved budget	RW Construction Obstruction due to Cobble Layer during drilling; submitted January 21, 2015 for Board appro
16	PZ 875L Alignment Test and Repair	Field	\$3,622.38	\$0.00	NA	NA	NA	0.04%	7/7/2015	Approved	Alignment test and repairs

**\$483,305.86**

**Total of Project Change Orders**      **\$463,607.08**      **\$19,698.78**  
 Original Contract Amount      **8,739,787.70**      % Change from Original Amount  
**\$8,256,481.84**      **5.85%**

\*Board approval required

**CONTRACT INVOICE LOG**

**Contractor:** The Lane Construction Corporation  
90 Fieldstone Ct.  
Cheshire, CT 06410-1212

**Project:** SWILCD 56317001.008.0017  
**Construction Package:** BP06  
**Original Contract Amount:** \$12,857,127.75  
**Change Order #1:** \$0.00 Spiral Wound Slip Lining  
**Change Order #2:** \$1,870.00 Bronze Survey Markers  
**Change Order #3:** \$132,809.60 Red Flint Filter Pack Material  
**Change Order #4:** \$12,040.40 Air Testing of HDPE Storm Sewer Pipe 12" 18" and 24"  
**Change Order #5:** \$29,566.29 SaniTite pipe upgrade and air testing on 30"-42" pipe  
**Change Order #6:** \$26,950.00 Vacuum testing manholes  
**Change Order #7:** \$205,863.75 Additional Pilot Hole Drilling & Additional Pilot Hole Sampling  
**Change Order #8:** \$4,210.00 Raise to Grade Piezometer  
**Change Order #9:** \$9,504.00 Modify Piezometer  
**Change Order #10:** \$18,339.63 12" Surface Aggregate  
**Change Order #11:** \$1,282,932.15 Relief Well Quantity Changes  
**Change Order #12:** \$37,935.66 Various Changes for Board Approval  
**Change Order #13:** \$43,664.49 Various Changes for Board Approval  
**Change Order #14:** \$177,854.69 Relief Well Construction Obstruction  
**Change Order #15:** \$0.00 Contract Time Extension to September 30, 2015  
**Change Order #16:** \$10,004.04 Concrete Headwall and Flap Gate at RW-200X; HDPE pipe 12 inch added to P-200X; HDPE pipe 12 inch added to 70-C; Manhole – 48 inch deleted JN-70 C; HDPE pipe 12 inch  
**Change Order #17:** (\$10,106.25) Credit-Remove Vacuum Testing of Manholes  
**Change Order #18:** \$63,230.97 60 Slot Relief Well Redesign  
**Change Order #19:** \$20,923.32 Relief Well Construction Obstruction  
**Change Order #20:** \$17,910.08 Abandon Existing PZ P37 12" Agg Surface Abandon Existing PZ 239L and install new PZ  
**Change Order #21:** \$4,562.64 Relief Well Construction Obstruction  
**Change Order #22:** \$83,071.89 RCP at Pulcher's Driveway and Increase in Relief Well Quantities  
**Change Order #23:** \$38,213.76 Emergency T&M Work - Flood Event June 2015; Modifications to PDP/FL Piezometers 204L, 537L, and 679L  
**Change Order #24:** \$14,496.25 Collection Pipe P 145X  
**Total Change Order Amount:** **\$2,225,847.36**  
**Total Revised Contract Amount:** **\$15,082,975.11**

Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed to Date (\$)	Amount Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retainage	Amount Invoiced (\$)	Date Paid by FPD	Estimate to Complete Including Retainage (\$)
1	12/1/2013	12/9/2013	\$85,500.00	\$8,550.00	\$76,950.00	\$76,950.00	<a href="#">12/20/2013</a>	\$12,780,177.75
2	1/1/2014	2/10/2014	\$302,624.00	\$30,262.40	\$272,361.60	\$195,411.60	<a href="#">2/20/2014</a>	\$12,584,766.15
3	2/3/2014	2/10/2014	\$1,082,723.00	\$108,272.30	\$974,450.70	\$702,089.10	<a href="#">2/20/2014</a>	\$11,882,677.05
4	3/1/2014	3/14/2014	\$1,486,548.00	\$148,654.80	\$1,337,893.20	\$363,442.50	<a href="#">3/25/2014</a>	\$11,519,234.55
5	4/1/2014	4/16/2014	\$2,819,792.90	\$281,979.29	\$2,537,813.61	\$1,199,920.41	<a href="#">4/22/2014</a>	\$10,321,184.14
6	5/1/2014	5/13/2014	\$3,912,098.90	\$391,209.89	\$3,520,889.01	\$983,075.40	<a href="#">5/22/2014</a>	\$9,338,108.74
7	6/1/2014	6/10/2014	\$4,741,611.90	\$474,161.19	\$4,267,450.71	\$746,561.70	<a href="#">6/19/2014</a>	\$8,591,547.04
8	7/1/2014	7/14/2014	\$5,406,637.90	\$540,663.79	\$4,865,974.11	\$598,523.40	<a href="#">7/17/2014</a>	\$8,125,833.24
9	8/1/2014	8/8/2014	\$5,785,001.65	\$578,500.17	\$5,206,501.49	\$340,527.38	<a href="#">8/19/2014</a>	\$8,073,440.31
10	9/3/2014	9/5/2014	\$6,053,869.33	\$605,386.93	\$5,448,482.40	\$241,980.91	<a href="#">9/15/2014</a>	\$7,849,799.02
11	10/1/2014	10/3/2014	\$6,752,179.87	\$675,217.99	\$6,076,961.88	\$628,479.49	<a href="#">10/16/2014</a>	\$8,504,251.69



Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed to Date (\$)	Amount Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retainage	Amount Invoiced (\$)	Date Paid by FPD	Estimate to Complete Including Retainage (\$)
12	11/1/2014	11/10/2014	\$7,466,202.56	\$746,620.26	\$6,719,582.30	\$642,620.41	<a href="#">11/18/2014</a>	\$7,899,566.94
13	12/1/2014	12/8/2014	\$8,071,969.19	\$807,196.92	\$7,264,772.27	\$545,189.97	<a href="#">12/18/2014</a>	\$7,398,041.46
14	1/1/2015	1/13/2015	\$9,086,036.15	\$454,301.81	\$8,631,734.33	\$1,366,962.07	<a href="#">1/26/2015</a>	\$6,031,079.39
15	2/1/2015	2/6/2015	\$10,631,046.43	\$531,552.32	\$10,099,494.11	\$1,467,759.77	<a href="#">2/18/2015</a>	\$4,741,174.30
16	3/1/2015	3/9/2015	\$11,159,175.28	\$557,958.76	\$10,601,216.51	\$501,722.40	<a href="#">3/19/2015</a>	\$4,249,455.94
17	4/1/2015	4/10/2015	\$12,128,575.99	\$606,428.80	\$11,522,147.19	\$920,930.68	<a href="#">4/16/2015</a>	\$3,381,649.98
18	5/1/2015	5/8/2015	\$13,089,041.43	\$654,452.07	\$12,434,589.36	\$912,442.17	<a href="#">5/18/2015</a>	\$2,490,131.13
19	6/1/2015	6/5/2015	\$13,723,208.55	\$686,160.43	\$13,037,048.13	\$602,458.77	<a href="#">6/16/2015</a>	\$1,910,145.08
20	7/1/2015	7/6/2015	\$14,005,443.45	\$700,272.17	\$13,305,171.28	\$268,123.15	<a href="#">7/14/2015</a>	\$1,725,093.82
21	8/1/2015	8/7/2015	\$14,045,434.28	\$702,271.71	\$13,343,162.57	\$37,991.28	<a href="#">8/20/2015</a>	\$1,725,316.29
22	9/1/2015	9/11/2015	\$14,070,459.28	\$703,522.96	\$13,366,936.32	\$23,773.75		\$1,716,038.79

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT:** Bid Package 06

**PROJECT NUMBER:** SIFPDC-BP06

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1	Spiral Wound (Slip-Lining)	Spec	\$0.00	\$0.00	6.20	\$ 1,629,000.00	0.00%	0.00%	2/27/2014	Approved	Specification change to coordinate and be consistent with material and methods used by Corps of Engineers
2	Bronze Survey Markers	Spec	\$1,870.00	\$0.00	6.40	\$ 1,039,884.00	0.18%	0.01%	3/18/2014	Approved	Specification change to make consistent with other bid packages. Comments back from Corps of Engineers on other bid packages but was missed on this bid package.
3	Red Flint Filter Pack	Spec	\$132,809.60	\$0.00	6.39 6.40	\$ 1,806,432.00	7.35%	1.03%	6/20/2014	Approved	Specification change as required by the Corp of Engineers. The change order cost of \$132,809.60 is based on original bid quantities and may increase based on final relief well design. If final quantizes result in increase of 10% above original line item, Board approval required
4	Air Testing of HDPE Storm Sewer Pipe 12" 18" and 24"	Spec	\$12,040.40	\$0.00	NA	NA	NA	0.09%	7/17/2014	Approved	Specification change to make consistent with other bid packages.
5*	SaniTite pipe upgrade and air testing on 30"-42" pipe	Spec	\$29,566.29	\$0.00	6.25 6.26 6.27	\$ 149,797.00	19.74%	0.23%	7/17/2014	Approved	Specification change to make consistent with other bid packages. Board approval required
6	Vacuum testing manholes	Spec	\$26,950.00	\$0.00	NA	NA	NA	0.21%	7/17/2014	Approved	Specification change to make consistent with other bid packages. Board approval required
7*	Additional Pilot Hole Drilling & Additional Pilot Hole Sampling	Design	\$205,863.75	\$0.00	6.38	\$ 251,775.00	81.76%	1.60%	7/17/2014	Approved	Design change to accommodate actually quantities. Bid quantities were very preliminary since no pilot holes were drilled at the time and Amec had not received the USACE design template for relief wells. Board approval required
8*	Raise to Grade Piezometer	Field	\$4,210.00	\$0.00	6.45	\$ 21,050.00	20.00%	0.03%	7/17/2014	Approved	PZ 689L to be raised to grade to accommodate field conditions. Board approval required
9	Modify Piezometer	Field	\$9,504.00	\$0.00	6.43	\$ 132,960.00	7.15%	0.07%	7/18/2014	Approved	Modify piezometers seal to provide additional concrete
10	Surface Aggregate	Design	\$18,339.63	\$0.00	NA	NA	NA	0.14%	8/25/2014	Approved	12 inch Aggregate Surface Course, Type A" item for driveways and field access roads. This was not included in the original proposal and was added per detail on sheet CC-C513 and various plan sheets showing the locations.
11*	Relief Well Quantity Change	Design	\$1,282,932.15	\$0.00	6.39 6.40	\$ 1,806,432.00	71.02%	9.98%	9/12/2014	Approved	Additional quantities required due to deeper pilot holes required to achieve necessary penetration. Board approval required.
12*	Additional 50VF of Pilot Hole Drilling; Decrease RW Add Riser 1 EA; Add RW Abandonment 1 EA; PZ 679R Convert to Below Grade Piezometer; T&M 2 Clay Cap Undercut	Field	\$37,935.66	\$0.00	6.09 6.38 6.42 6.46 6.32	\$ 575,290.00	6.59%	0.30%	10/10/2014	Approved	See change order summary presented to Board for review and approval in the October 15, 2014 Board Meeting
13*	Hydraulic structure painting of the 84" bulkhead; T&M 3 Clay Cap Undercut; Modify PZ Raise to Grade to PZ Raise to Grade Special	Field	\$43,664.49	\$0.00	NA	NA	NA	0.34%	11/19/2014	Approved	Board approval required
14*	RW Construction Obstruction	Field	\$177,854.69	\$0.00	6.39 6.40	\$ 1,806,432.00	9.85%	1.38%	1/21/2015	Approved	RW Construction Obstruction due to Cobble Layer during drilling. Board approval required.
15	Contract Time Extension	Other	\$0.00	\$0.00	NA	NA	NA	0.00%	2/10/2015	Approved	Contract Time Extension to September 30, 2015

**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT:** Bid Package 06

**PROJECT NUMBER:** SIFPDC-BP06

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
16*	Concrete Headwall and Flap Gate at RW-200X; HDPE pipe 12 inch added to P-200X; HDPE pipe 12 inch added to 70-C; Manhole – 48 inch deleted JN-70 C; HDPE pipe 12 inch deleted P-S516 for 70C.	Field	\$10,004.04	\$0.00	6.39 6.40	\$ 1,806,432.00	0.55%	0.08%	2/12/2015	Approved	Change Description submitted in change order memo for Board approval 2/18/15
17	Credit-Remove Vacuum Testing of Manholes		\$ (10,106.25)	\$0.00	NA	NA	NA	-0.08%	3/4/2015	Approved	PCN approved to remove the requirements for ASTM C1244 Standard Test Method for Concrete Sewer
18*	60 Slot Relief Well Redesign	Field	\$63,230.97	\$0.00	6.40	\$ 1,039,884.00	6.08%	0.49%	3/18/2015	Approved	60-slot RW re-design to 40-slot; Board approval required
19	RW Construction Obstruction	Field	\$20,923.32	\$0.00	6.39 6.40	\$ 1,806,432.00	1.16%	0.16%	5/8/2015	Approved	RW Construction Obstruction due to Cobble Layer during drilling. To be processed under budget Board approved 1/21/15
20*	Abandon Existing PZ P37 12" Agg Surface Abandon Existing PZ 239L and install new PZ	Field	\$17,910.08	\$0.00	6.04 6.43 6.44	\$ 554,700.00	3.23%	0.14%	5/15/2015	Approved	Changes proposed to accommodate field conditions. Board approval required.
21	RW Construction Obstruction	Field	\$4,562.64	\$0.00	6.39 6.40	\$ 1,806,432.00	0.25%	0.04%	5/29/2015	Approved	RW Construction Obstruction due to Cobble Layer during drilling. To be processed under budget Board approved 1/21/15
22*	RCP at Pulcher's Driveway Increase in Relief Well Quantities	Field	\$83,071.89	\$0.00	6.39 6.40	\$ 1,806,432.00	4.60%	0.65%	6/17/2015	Approved	RCP at Pulcher's Driveway Increase in Relief Well Quantities Board approval required
23*	Emergency T&M Work - Flood Event June 2015; Modifications to PDP/FL Piezometers 204L, 537L, and 679L	Field	\$38,213.76	\$0.00	NA	NA	NA	0.30%	7/15/2015	Approved	Emergency T&M Work - Flood Event June 2015; Modifications to PDP/FL Piezometers 204L, 537L, and 679L
24*	Collection Pipe P 145X	Field	\$14,496.25	\$0.00	NA	NA	NA	0.11%	8/19/2015	Approved	Extra work to accommodate field conditions related to Collection Pipe P 145X; Board approval required

**Total** \$ **2,225,847.36**

**Total of Project Change Orders** \$2,225,847.36

**Original Contract Amount** \$12,857,127.75

**Revised Contract Amount** \$15,082,975.11

**% Change from Original Amount** 17.31%

\*Board approval required

**CONTRACT INVOICE LOG**

**Contractor:** Kamadulski Excavating & Grading Co., Inc.  
4336 State Route 162  
Granite City, IL 62040

**Project:** SWILCD 56317001.010.001  
**Construction Package:** BP7A  
**Original Contract Amount:** \$3,076,208.70  
**Change Order #1:** \$13,850.00 Boat Access Ramp  
**Change Order #2:** \$108,897.50 Utility Conflicts  
**Change Order #3:** \$98,660.80 Excavation Levee Slope and Crown Quantity Adjustment  
**Change Order #4:** \$66,693.00 Slurry Wall Quantity Settlement  
**Change Order #5:** \$0.00 Contract Time Extension to June 26, 2015  
**Change Order #6:** \$7,500.00 Site demolition and restoration as required by City of Alton  
**Change Order #7:** \$3,540.25 Clay Cap Volume Change  
**Total Change Order Amount:** \$299,141.55  
**Total Revised Contract Amount:** **\$3,375,350.25**

Payment Request No.	Pay Request Date	Pay Request Recommended Approval Date	Total Completed to Date (\$)	Amount Retained (10% to 50%) then (5% to 95%)	Total Earned Less Retainage	Amount Invoiced (\$)	Date Paid by FPD	Estimate to Complete Including Retainage (\$)
1	10/31/2014	11/3/2014	\$886,675.70	\$88,667.57	\$798,008.13	\$798,008.13	<a href="#">11/18/2014</a>	\$2,292,050.57
2	11/30/2014	12/8/2014	\$1,824,863.95	\$182,486.40	\$1,642,377.55	\$844,369.42	<a href="#">12/18/2014</a>	\$1,556,578.65
3	12/31/2015	1/9/2015	\$2,520,707.13	\$126,035.37	\$2,394,671.76	\$752,294.21	<a href="#">1/26/2015</a>	\$902,945.24
4	2/28/2015	3/10/2015	\$2,587,400.13	\$129,370.02	\$2,458,030.11	\$63,358.35	<a href="#">3/19/2015</a>	\$906,279.89
5	3/31/2015	4/10/2015	\$2,727,400.13	\$136,370.02	\$2,591,030.11	\$133,000.00	<a href="#">4/16/2015</a>	\$773,279.89
6	5/4/2015	5/10/2015	\$3,278,416.10	\$163,920.82	\$3,114,495.28	\$523,465.17	<a href="#">5/18/2015</a>	\$249,814.72
7	6/5/2015	6/12/2015	\$3,371,810.00	\$67,436.20	\$3,304,373.80	\$189,878.52	<a href="#">6/16/2015</a>	\$67,436.20
7	7/8/2015	7/8/2015	\$3,375,350.25	\$0.00	\$3,375,350.25	\$70,976.45	<a href="#">7/14/2015</a>	\$0.00





**TITLE: CONSTRUCTION CHANGE ORDER LOG**

**CLIENT:** Southwestern Illinois Flood Prevention District Council  
**PROJECT:** Bid Package 7B (RE-BID)

**PROJECT NUMBER:** SIFDC-BP7B (Re-Bid)

Change Request Number	Description	Change Type (Field, Design, Spec, Other)	Cost to FPD	Cost to Others	As Bid Line Item #	Original Cost of Associated Line Item	% of Original Line Item	% of Original Contract	Date	Status	Comments
1	Contract Time Extension	Other	\$0.00	\$0.00	NA	NA	NA	NA	9/2/2015	Approved	34 additional calendar days to be added to Contract time due to high river levels
<b>Total of Project Change Orders</b>			<b>\$0.00</b>	<b>\$0.00</b>						<b>Total</b>	<b>\$ -</b>

Original Contract Amount    Revised Contract Amount    % Change from Original Amount  
**\$13,991,000.00**            **13,991,000.00**            **0.00%**

\*Board approval required





## **Metro-East News** AUGUST 26, 2015

# Southwestern Illinois Flood Prevention District looks to issue bonds for levee projects

BY JOSEPH BUSTOS

*News-Democrat*

---

By the end of the year, the regional flood prevention district could be taking on a large amount of debt in order to carry out levee upgrade projects.

The Southwestern Illinois Flood Prevention District Council is looking to borrow money to pay for projects that would help bring the area's levees up to the 500-year flood protection level.

Chuck Ewert, the district's chief supervisor of Construction and the Works, expects the district to issue \$65 million to \$70 million worth of bonds by the end of the year.

The district council has approved a resolution authorizing the district to issue up to \$100 million in bonds, but Ewert said it most likely won't be that high.

After the bonds are issued, Ewert said the district would spend the next calendar year working engineering and design of the projects. Physical construction of bringing the levies to a 500-year flood level would begin during the 2017 fiscal year which begins on Oct. 1, 2016.

The district is carrying out projects rather than pledging cash because the district and the U.S. Army Corps of Engineers could not agree on the inclusion of project labor agreements on levy projects.

The U.S. Army Corps of Engineers is committed to paying for 65 percent of the cost of bringing the levies up to the 500-year level. The remainder would come from the flood prevention district.

Federal government officials have yet to give final approval on whether projects carried out by the flood prevention district will count toward a work-in-kind credit. However the district's planned projects have been identified by the U.S. Army Corps of Engineers as work

needed to bring the levees to the 500-year protection level.

Final approval of the projects might be as much as two years away, even though the district is confident the projects would be accepted.

"We don't want to wait two years and do nothing," Etwert said. "It's too important of an issue, you never know when the 500-year flood will come. The sooner you can get work done, the better."

How much the district can borrow is based on how much revenue it receives from a 25 percent sales tax, and on interest rates, which are at historic lows.

"If rates go up higher, we'll borrow less," Etwert said. "We have to wait and see."

Before the flood prevention district issues the bonds, the action has to be approved by the St. Clair, Madison and Monroe county boards.

Terry Liefer, chairman of the Monroe County Board, said he expects his board to review the request within the next month.

He said he expects Monroe County Board members to give their blessing to the bond issue.

Madison County Administrator Joseph Parente said he expected his county board to consider the bond resolution in October.

"The board just needs to pass the same resolution the flood prevention district passed," Parente said. "The board has been committed to the project."

The St. Clair County Board is scheduled to review the request next week.

St. Clair County Administrative Adviser Dan Maher, who also sits on the flood prevention council, said the bond sale is expected to take place in November.

He added the district will need a bond rating, and rating agencies will look at whether the state could withhold money from the district.

"We should do fairly well on our bond rating because the state can't interfere with the sales tax," Maher said.

In 2010, the flood prevention district took out \$94 million in bonds to help with work along the levees to bring them up to a 100-year flood level.

"It was always the intent of council to do two separate bond issues, and possibly a third if the need should arrive," Maher said.

The district will stay in existence until all of the debt is paid off.

Etwert said almost all of the work to bring the levees to a 100-year flood level should be done by the end of the calendar year.

So far \$36.5 million of \$61.2 million of work has been completed, Etwert said.

Restoring the levees to the 100-year flood level allows them to be accredited by the Federal Emergency Management Agency and avoids higher flood insurance rates for area property owners.

The Army Corps of Engineers has the authority to increase the levee protection level to the 500-year flood level, but doing so depends on funding.

*Contact reporter Joseph Bustos at [jbustos@bnd.com](mailto:jbustos@bnd.com) or 618-239-2451. Follow him on Twitter: @JoeBReporter.*





Memo to: Board of Directors  
From: Chuck Etwert  
Subject: Budget and Disbursement Report for August 2015  
Date: September 14, 2015

Current Budget Highlights

Attached is the financial statement for August 2015 prepared by our fiscal agent, CliftonLarsonAllen. The report includes an accounting of revenues and expenditures for the month ending August 31, 2015, as compared to our fiscal year budget.

Accrued expenditures for the current fiscal year beginning on October 1, 2014 are \$38,272,471 while revenues amounted to \$10,627,187 resulting in a deficit of \$27,645,284. A total of approximately \$24,176,234 is held by the counties in their respective FPD sales tax funds and is available for the Council's use on the project.

Monthly sales tax receipts for June 2015 (the latest month reported by the Illinois Department of Revenue) were down up .66% from the previous year. In general, receipts are up .53% from last year, which was our highest year.

Monthly Disbursements

Attached is the list of bank transactions for August 2015. Total disbursements for the month were \$954,876.44. The largest payments were to Keller Construction for BP #3 and BP #5, TREVIICOS South for BP #7B, Lane Construction for BP #6, Amec Foster Wheeler, and Husch Blackwell.

Recommendation:

Accept the budget report and disbursements for August 2015.



**SOUTHWESTERN ILLINOIS FLOOD PREVENTION  
DISTRICT COUNCIL**

**GENERAL FUND  
STATEMENT OF REVENUES AND EXPENDITURES – BUDGET AND ACTUAL**

**ELEVEN MONTHS ENDING AUGUST 31 2015 AND 2014**



**CliftonLarsonAllen**

CliftonLarsonAllen LLP  
www.cliftonlarsonallen.com

Board Members  
Southwestern Illinois Flood Prevention District Council  
Collinsville, Illinois

We have compiled the accompanying General Fund Statement of Revenues and Expenditures – Budget and Actual of Southwestern Illinois Flood Prevention District Council (the “Council”) for the eleven months ended August 31, 2015 and 2014. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or provide any assurance about whether the financial statements are in accordance with accounting principles generally accepted in the United States of America.

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the compilation in accordance with Statement on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of financial statements without undertaking to obtain or provide assurance that there are no material modifications that should be made to the financial statements. During our compilation we did become aware of departures from accounting principles generally accepted in the United States of America that are described in the following paragraph.

Management has omitted the management discussion and analysis. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

Management has not presented government-wide financial statements to display the financial position and changes in financial position of its governmental activity. Accounting principles generally accepted in the United States of America require the presentation of government-wide financial statements. The change in fund balance for the Council's governmental activity is not reasonably determinable.

Management has not presented a balance sheet for the general fund. Accounting principles generally accepted in the United States of America require the presentation of a balance sheet for each fund contained in the financial statements. The amounts that would be reported in a balance sheet of the general fund for the Council are not reasonably determinable.

Management has not presented a change in fund balance on the Statement of Revenues and Expenditures – Budget and Actual. Accounting principles generally accepted in the United States of America require the Statement of Revenues, Expenditures and Changes in Fund Balance include a presentation of changes in fund balance. The amounts that would be reported in government-wide financial statements for the Council's governmental activity is not reasonably determinable.

Management has also elected to omit substantially all of the disclosures required by generally accepted accounting principles. If the omitted disclosures were included with the financial statements, they might influence the user's conclusions about the Council's results of operations. Accordingly, these financial statements are not designed for those who are not informed about such matters.

The accompanying original and final budget amounts presented on the General Fund Statement of Revenues and Expenditures – Budget and Actual presented for the year ending September 30, 2015 and 2014, have not been compiled or examined by us, and, accordingly, we do not express an opinion or any other form of assurance on them.

We are not independent with respect to Southwestern Illinois Flood Prevention District Council.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

CliftonLarsonAllen LLP

St. Louis, Missouri  
September 8, 2015



**SOUTHWESTERN ILLINOIS FLOOD PROTECTION DISTRICT COUNCIL  
GENERAL FUND  
STATEMENT OF REVENUES AND EXPENDITURES - BUDGET AND ACTUAL  
ELEVEN MONTHS ENDED AUGUST 31, 2015 (Actual)  
FISCAL YEAR ENDING SEPTEMBER 30, 2015 (Budget)**

	BUDGET		ACTUAL	VARIANCE WITH FINAL BUDGET POSITIVE (NEGATIVE)
	ORIGINAL	FINAL		
<b>REVENUES</b>				
Sales Tax Proceeds From Districts	\$ 11,195,000	\$ 11,195,000	\$ 10,360,363	\$ 834,637
Interest Income	60,000	60,000	266,824	(206,824)
Other Contributions	-	-	-	-
Total Revenues	<u>11,255,000</u>	<u>11,255,000</u>	<u>10,627,187</u>	<u>627,813</u>
<b>EXPENDITURES</b>				
Current				
Design and Construction				
Engineering Design & Construction Management	8,131,050	8,131,050	2,497,822	5,633,228
Construction	45,791,362	45,791,362	25,312,896	20,478,466
Construction and design by US ACE	-	-	-	-
Federal Cost-Share	-	-	-	-
Total Design and Construction	<u>53,922,412</u>	<u>53,922,412</u>	<u>27,810,718</u>	<u>26,111,694</u>
Professional Services				
Legal & Legislative Consulting	216,000	216,000	236,722	(20,722)
Diversity Program Manager	64,140	64,140	57,200	6,940
Construction Oversight	-	-	-	-
Other	-	-	-	-
Impact Analysis/Research	-	-	-	-
Financial Advisor	120,000	120,000	13,940	106,060
Bond Underwriter/Conduit Issuer	-	-	9,778	(9,778)
Total Professional Services	<u>400,140</u>	<u>400,140</u>	<u>317,640</u>	<u>82,500</u>
Refund of Surplus Funds to County FPD Accounts				
Madison County	1,882,480	1,882,480	1,523,763	358,717
Monroe County	197,080	197,080	159,525	37,555
St. Clair County	1,920,440	1,920,440	1,554,490	365,950
Total Refund of Surplus Funds to County	<u>4,000,000</u>	<u>4,000,000</u>	<u>3,237,778</u>	<u>762,222</u>
Debt Service				
Principal and Interest	7,101,239	7,101,239	7,101,239	-
Federal Interest Subsidy	(844,610)	(844,610)	(421,850)	(422,760)
Total Debt Service	<u>6,256,629</u>	<u>6,256,629</u>	<u>6,679,389</u>	<u>(422,760)</u>
Total Operating Expenses	<u>64,579,181</u>	<u>64,579,181</u>	<u>38,045,525</u>	<u>26,533,656</u>
General and Administrative Costs				
Salaries, Benefits	206,000	206,000	175,970	30,030
Advertising	-	-	-	-
Bank Service Charges	1,500	1,500	1,375	125
Conference Registration	500	500	311	189
Equipment and Software	2,000	2,000	25	1,975
Fiscal Agency Services	26,500	26,500	25,100	1,400
Audit Services	15,000	15,000	14,500	500
Furniture	-	-	-	-
Meeting Expenses	1,000	1,000	-	1,000
Postage/Delivery	400	400	358	42
Printing/Photocopies	2,500	2,500	2,570	(70)
Professional Services	20,000	20,000	192	19,808
Publications/Subscriptions	250	250	115	135
Supplies	1,500	1,500	2,594	(1,094)
Telecommunications/Internet	2,500	2,500	2,410	90
Travel	7,500	7,500	458	7,042
Insurance	1,000	1,000	968	32
Total General & Administrative Costs	<u>288,150</u>	<u>288,150</u>	<u>226,946</u>	<u>61,204</u>
Total Expenditures	<u>64,867,331</u>	<u>64,867,331</u>	<u>38,272,471</u>	<u>26,594,860</u>
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	(53,612,331)	(53,612,331)	(27,645,284)	25,967,047
OTHER FINANCING SOURCES				
Proceeds From Borrowing	-	-	-	-
NET CHANGE IN FUND BALANCE	<u>\$ (53,612,331)</u>	<u>\$ (53,612,331)</u>	<u>\$ (27,645,284)</u>	<u>\$ 25,967,047</u>

**SOUTHWESTERN ILLINOIS FLOOD PROTECTION DISTRICT COUNCIL  
GENERAL FUND  
STATEMENT OF REVENUES AND EXPENDITURES - BUDGET AND ACTUAL  
ELEVEN MONTHS ENDED AUGUST 31, 2014 (Actual)  
FISCAL YEAR ENDING SEPTEMBER 30, 2014 (Budget)**

	BUDGET		ACTUAL	VARIANCE WITH FINAL BUDGET
	ORIGINAL	FINAL		POSITIVE (NEGATIVE)
<b>REVENUES</b>				
Sales Tax Proceeds From Districts	\$ 11,237,000	\$ 11,237,000	\$ 10,155,595	\$ 1,081,405
Interest Income	650,000	650,000	766,473	(116,473)
Other Contributions	-	-	100,000	(100,000)
Total Revenues	<u>11,887,000</u>	<u>11,887,000</u>	<u>11,022,068</u>	<u>864,932</u>
<b>EXPENDITURES</b>				
Current				
Design and Construction				
Engineering Design & Construction Management	4,000,000	4,000,000	2,800,496	1,199,504
Construction	60,000,000	60,000,000	15,735,677	44,264,323
Construction and design by US ACE	1,000,000	1,000,000	2,477,634	(1,477,634)
Federal Cost-Share	-	-	-	-
Total Design and Construction	<u>65,000,000</u>	<u>65,000,000</u>	<u>21,013,807</u>	<u>43,986,193</u>
Professional Services				
Legal & Legislative Consulting	210,000	210,000	149,388	60,612
Construction Oversight	210,000	210,000	164,780	45,220
Other	-	-	-	-
Impact Analysis/Research	-	-	2,856	(2,856)
Financial Advisor	40,000	40,000	17,694	22,306
Bond Underwriter/Conduit Issuer	100,000	100,000	-	100,000
Total Professional Services	<u>560,000</u>	<u>560,000</u>	<u>334,718</u>	<u>225,282</u>
Refund of Surplus Funds to County FPD Accounts				
Madison County	2,270,400	2,270,400	2,531,066	(260,666)
Monroe County	220,800	220,800	252,578	(31,778)
St. Clair County	2,308,800	2,308,800	2,542,164	(233,364)
Total Refund of Surplus Funds to County	<u>4,800,000</u>	<u>4,800,000</u>	<u>5,325,808</u>	<u>(525,808)</u>
Debt Service				
Principal and Interest	7,107,440	7,107,440	7,102,339	5,101
Federal Interest Subsidy	(910,140)	(910,140)	(422,305)	(487,835)
Total Debt Service	<u>6,197,300</u>	<u>6,197,300</u>	<u>6,680,034</u>	<u>(482,734)</u>
Total Operating Expenses	<u>76,557,300</u>	<u>76,557,300</u>	<u>33,354,367</u>	<u>43,202,933</u>
General and Administrative Costs				
Salaries, Benefits	192,331	192,331	193,141	(810)
Advertising	-	-	-	-
Bank Service Charges	600	600	1,340	(740)
Conference Registration	500	500	372	128
Equipment and Software	4,000	4,000	1,768	2,232
Fiscal Agency Services	23,000	23,000	37,450	(14,450)
Furniture	-	-	-	-
Meeting Expenses	1,000	1,000	28	972
Postage/Delivery	400	400	314	86
Printing/Photocopies	2,500	2,500	2,130	370
Professional Services	20,000	20,000	8,663	11,337
Publications/Subscriptions	250	250	2,124	(1,874)
Supplies	1,500	1,500	2,023	(523)
Telecommunications/Internet	2,000	2,000	3,215	(1,215)
Travel	15,000	15,000	2,548	12,452
Insurance	1,000	1,000	981	19
Total General & Administrative Costs	<u>264,081</u>	<u>264,081</u>	<u>256,097</u>	<u>7,984</u>
Total Expenditures	<u>76,821,381</u>	<u>76,821,381</u>	<u>33,610,464</u>	<u>43,210,917</u>
<b>EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES</b>				
	(64,934,381)	(64,934,381)	(22,588,396)	42,345,985
<b>OTHER FINANCING SOURCES</b>				
Proceeds From Borrowing	10,000,000	10,000,000	-	10,000,000
<b>NET CHANGE IN FUND BALANCE</b>	<u>\$ (54,934,381)</u>	<u>\$ (54,934,381)</u>	<u>\$ (22,588,396)</u>	<u>\$ 32,345,985</u>

# Flood Prevention District Sales Tax Trends 2009-2015

2009												County Share		
Jan	Feb	March	April	May	June	July	August	Sept	October	November	December		Total	
Madison	\$321,968	\$336,765	\$397,425	\$387,385	\$414,350	\$421,402	\$399,616	\$401,188	\$400,090	\$404,847	\$405,930	\$492,814	\$4,783,780	46.319%
St. Clair	\$337,979	\$362,696	\$424,556	\$398,395	\$419,126	\$438,230	\$411,968	\$410,484	\$429,852	\$412,637	\$446,806	\$581,721	\$5,074,450	49.134%
Monroe	\$31,641	\$32,903	\$37,830	\$38,757	\$41,326	\$40,847	\$37,817	\$37,497	\$38,652	\$42,270	\$40,332	\$49,755	\$469,627	4.547%
Total Month	\$691,588	\$732,364	\$859,811	\$824,537	\$874,802	\$900,479	\$849,401	\$849,169	\$868,594	\$859,754	\$893,068	\$1,124,290	\$10,327,857	
Cumulative Total	\$691,588	\$1,423,952	\$2,283,763	\$3,108,300	\$3,983,102	\$4,883,581	\$5,732,982	\$6,582,151	\$7,450,745	\$8,310,499	\$9,203,567	\$10,327,857		
2010														
Madison	\$353,146	\$374,416	\$456,795	\$462,697	\$440,815	\$452,308	\$427,329	\$433,047	\$419,455	430,210	\$442,904	\$529,069	\$5,222,191	47.272%
St. Clair	\$367,458	\$399,480	\$464,089	\$439,748	\$439,139	\$458,299	\$421,447	\$423,718	\$424,971	\$429,581	\$457,927	587067	\$5,312,924	48.094%
Monroe	\$36,770	\$34,324	\$39,884	\$43,769	\$44,358	\$43,102	\$46,499	\$41,816	\$42,207	\$42,746	\$45,411	\$51,004	\$511,890	4.634%
Total Month	\$757,374	\$808,220	\$960,768	\$946,214	\$924,312	\$953,709	\$895,275	\$898,581	\$886,633	\$902,537	\$946,242	\$1,167,140	\$11,047,005	
Cumulative Total	\$757,374	\$1,565,594	\$2,526,362	\$3,472,576	\$4,396,888	\$5,350,597	\$6,245,872	\$7,144,453	\$8,031,086	\$8,933,623	\$9,879,865	\$11,047,005		
% change/month	9.51%	10.36%	11.74%	14.8%	5.7%	5.9%	5.4%	5.8%	2.1%	5.0%	6.0%	3.8%		
% change/total	9.51%	9.95%	10.62%	11.72%	10.39%	9.56%	8.95%	8.54%	7.79%	7.50%	7.35%	6.96%	6.96%	
2011														
Madison	\$380,021	\$383,976	\$460,129	\$454,562	\$466,904	\$477,396	\$436,637	\$473,303	\$448,256	\$444,204	\$455,842	\$538,000	\$5,419,230	48.108%
St. Clair	\$363,984	\$395,231	\$455,562	\$437,820	\$436,490	\$475,972	\$433,460	\$433,777	\$441,030	\$412,793	\$451,390	\$594,129	\$5,331,638	47.330%
Monroe	\$38,315	\$34,759	\$41,192	\$44,975	\$41,786	\$45,836	\$44,887	\$43,323	\$42,564	\$42,690	\$42,252	\$51,266	\$513,845	4.562%
Total Month	\$782,320	\$813,966	\$956,883	\$937,357	\$945,180	\$999,204	\$914,984	\$950,403	\$931,850	\$899,687	\$949,484	\$1,183,395	\$11,264,713	
Cumulative Total	\$782,320	\$1,596,286	\$2,553,169	\$3,490,526	\$4,435,706	\$5,434,910	\$6,349,894	\$7,300,297	\$8,232,147	\$9,131,834	\$10,081,318	\$11,264,713		
% change/month	3.29%	0.71%	-0.40%	-0.94%	2.26%	4.77%	2.20%	5.77%	5.10%	-0.32%	0.34%	1.39%		
% change/total	3.29%	1.96%	1.06%	0.52%	0.88%	1.58%	1.67%	2.18%	2.50%	2.22%	2.04%	1.97%	1.97%	
2012														
Madison	\$381,470	\$406,476	\$473,049	\$471,191	\$481,989	\$477,254	\$427,562	\$434,603	\$428,193	\$428,521	\$429,127	\$523,240	\$5,362,675	47.481%
St. Clair	\$361,727	\$415,491	\$468,490	\$432,173	\$468,782	\$473,567	\$425,923	\$441,838	\$438,184	\$424,289	\$454,916	\$589,183	\$5,394,563	47.763%
Monroe	\$37,471	\$38,904	\$46,086	\$46,051	\$46,231	\$45,671	\$43,063	\$45,307	\$45,641	\$46,230	\$45,429	\$51,062	\$537,146	4.756%
Total Month	\$780,668	\$860,871	\$987,625	\$949,415	\$997,002	\$996,492	\$896,548	\$921,748	\$912,018	\$899,040	\$929,472	\$1,163,485	\$11,294,384	
Cumulative Total	\$780,668	\$1,641,539	\$2,629,164	\$3,578,579	\$4,575,581	\$5,572,073	\$6,468,621	\$7,390,369	\$8,302,387	\$9,201,427	\$10,130,899	\$11,294,384		
% change/month	-0.21%	5.76%	3.21%	1.29%	5.48%	-0.27%	-2.01%	-3.02%	-2.13%	-0.07%	-2.11%	-1.68%		
% change/total	-0.21%	2.83%	2.98%	2.52%	3.15%	2.52%	1.87%	1.23%	0.85%	0.76%	0.49%	0.26%	0.26%	

# Flood Prevention District Sales Tax Trends 2009-2015

## 2013

	Jan	Feb	March	April	May	June	July	August	Sept	October	November	December	Total
Madison	\$375,398	\$383,170	\$424,507	\$425,469	\$457,212	\$451,494	\$436,686	\$442,449	\$430,541	\$429,499	\$432,541	\$500,233	\$5,189,199
St. Clair	\$381,645	\$395,527	\$449,397	\$434,001	\$457,942	\$462,603	\$422,892	\$432,195	\$430,014	\$419,350	\$448,076	\$560,165	\$5,293,807
Monroe	\$37,888	\$39,679	\$45,689	\$45,913	\$48,212	\$47,694	\$42,672	\$45,143	\$44,733	\$44,723	\$47,111	\$53,853	\$543,310
Total Month	\$794,931	\$818,376	\$919,593	\$905,383	\$963,366	\$961,791	\$902,250	\$919,787	\$905,288	\$893,572	\$927,728	\$1,114,251	\$11,026,316
Cumulative Total	\$794,931	\$1,613,307	\$2,532,900	\$3,438,283	\$4,401,649	\$5,363,440	\$6,265,690	\$7,185,477	\$8,090,765	\$8,984,337	\$9,912,065	\$11,026,316	
% change/month	1.83%	-4.94%	-6.89%	-4.64%	-3.37%	-3.48%	0.64%	-0.21%	-0.74%	-0.61%	-0.19%	-4.23%	
% change/total	1.83%	-1.72%	-3.66%	-3.92%	-3.80%	-3.74%	-3.14%	-2.77%	-2.55%	-2.36%	-2.16%	-2.37%	-2.37%

## 2014

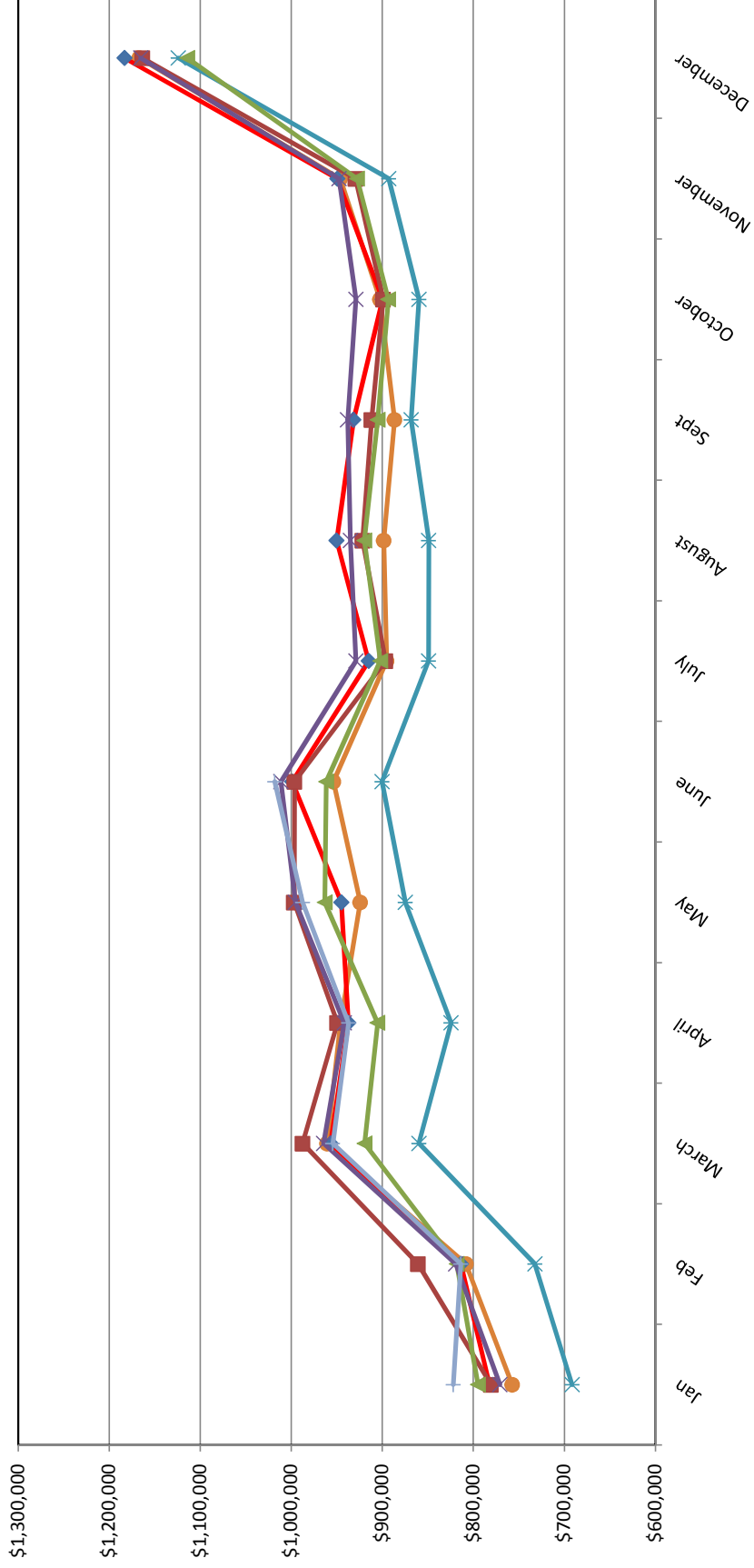
	Jan	Feb	March	April	May	June	July	August	Sept	October	November	December	Total
Madison	\$373,895	\$383,909	\$456,964	\$457,729	\$484,657	\$491,911	\$455,629	\$454,995	\$442,808	\$447,128	\$452,169	\$521,522	\$5,423,317
St. Clair	\$354,762	\$395,885	\$460,143	\$436,379	\$458,819	\$470,546	\$426,263	\$434,064	\$445,419	\$433,077	\$446,001	\$591,387	\$5,352,747
Monroe	\$42,321	\$39,665	\$47,587	\$47,796	\$52,206	\$49,022	\$47,357	\$46,167	\$50,056	\$48,920	\$49,552	\$52,714	\$573,362
Total Month	\$770,978	\$819,459	\$964,694	\$941,905	\$995,682	\$1,011,479	\$929,249	\$935,226	\$938,283	\$929,126	\$947,722	\$1,165,623	\$11,349,426
Cumulative Total	\$770,978	\$1,590,437	\$2,555,131	\$3,497,036	\$4,492,718	\$5,504,197	\$6,433,446	\$7,368,671	\$8,306,955	\$9,236,081	\$10,183,803	\$11,349,426	
% change/month	-3.01%	0.13%	4.90%	4.03%	3.35%	5.17%	2.99%	1.68%	3.64%	3.98%	2.16%	4.61%	
% change/total	-3.01%	-1.42%	0.88%	1.71%	2.07%	2.62%	2.68%	2.55%	2.67%	2.80%	2.74%	2.93%	2.93%

## 2015

	Jan	Feb	March	April	May	June	July	August	Sept	October	November	December	Total
Madison	\$399,500	\$390,593	\$446,269	\$464,703	\$481,304	\$486,423							\$2,668,792
St. Clair	\$379,901	\$383,206	\$462,400	\$425,254	\$455,740	\$483,020							\$2,589,520
Monroe	\$42,760	\$39,903	\$45,866	\$47,189	\$50,546	\$48,723							\$274,987
Total Month	\$822,161	\$813,702	\$954,534	\$937,146	\$987,590	\$1,018,166							\$5,533,299
Cumulative Total	\$822,161	\$1,635,863	\$2,590,397	\$3,527,543	\$4,515,133	\$5,533,299							
% change/month	6.64%	-0.70%	-1.05%	-0.51%	-0.81%	0.66%							
% change/total	6.64%	2.86%	1.38%	0.87%	0.50%	0.53%							

# Flood Prevention District Sales Tax Trends 2009-2015

## Actual Receipts 2009-2014



**SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL  
SUPPLEMENTARY SUPPORTING SCHEDULE  
BANK TRANSACTIONS  
August 31, 2015**

Beginning Bank Balance August 1,		\$	<b>322,563.31</b>
Receipts			
UMB	08/19/2015 Funds Transfer/Construction	684,848.18	
UMB	08/19/2015 Funds Transfer/Admin	28,518.25	
UMB	08/24/2015 Funds Transfer/Construction	287,550.60	
The Bank of Edwardsville	08/31/2015 August Interest	51.90	<b>1,000,968.93</b>
Disbursements			
Microsoft Office	08/01/2015 Subscription	0.99	
Juneau Associates	08/06/2015 Design & Construction	24,719.73	
Marks & Associates	08/06/2015 Professional Services	3,590.00	
Smith Dawson & Andrews	08/06/2015 Construction	5,000.00	
Sprague & Urban, Attorneys at Law	08/06/2015 Construction	1,875.00	
CliftonLarsonAllen LLP	08/10/2015 Fiscal Agent	2,107.75	
Columbia Capital	08/10/2015 Construction	600.00	
Lahuko Farms- c/o Alfon W. Larson	08/10/2015 Construction	500.00	
AT & T	08/13/2015 Telephone	100.29	
Husch Blackwell	08/17/2015 Legal & Legislative	17,874.00	
Husch Blackwell	08/17/2015 Construction	886.05	
Husch Blackwell	08/17/2015 Construction Legal	39,074.50	
Charles Etwert	08/19/2015 Travel & Phone Reimbursements	651.88	
Columbia Capital	08/19/2015 Construction	3,062.50	
Cost Less Copy Center	08/19/2015 Board Member Materials	397.80	
The Bank-Service Fees	08/19/2015 Wire Fee	10.00	
The Bank-Service Fees	08/19/2015 Wire Fee	10.00	
The Bank-Service Fees	08/20/2015 Wire Fee	15.00	
The Bank-Service Fees	08/20/2015 Wire Fee	15.00	
The Bank-Service Fees	08/20/2015 Wire Fee	15.00	
The Bank-Service Fees	08/20/2015 Wire Fee	15.00	
Keller Construcion Inc	08/20/2015 Construction	55,830.38	
Korte & Luitjohan Contractors Inc	08/20/2015 Construction	10,276.92	
The Lane Construction Corporation	08/20/2015 Construction	37,991.28	
TREVICOS South	08/20/2015 Construction	239,705.28	
Keller Construcion Inc	08/20/2015 Construction	203,864.63	
The Bank-Service Fees	08/20/2015 Wire Fee	15.00	
Amec Foster Wheeler Environment & Infrast	08/21/2015 Design & Construction	277,386.10	
Wood River Drainage and Levee District	08/21/2015 Construction	7,102.00	
The Bank-Service Fees	08/24/2015 Wire Fee	10.00	
United States Postal Service	08/24/2015 Postage	6.15	
FED EX	08/24/2015 Delivery Fees	21.00	
Office Depot	08/24/2015 Office Supplies	18.14	
ABNA	08/25/2015 Design & Construction	1,756.05	
East-West Gateway Council of Governments	08/25/2015 Supervisory Mgt Services	17,125.33	
CDW Government	08/26/2015 Office Supplies	142.20	
Endicia	08/26/2015 Postage	50.00	
Dorgan, McPike & Assoc, LTD	08/27/2015 Legal & Legislative	3,000.00	
Walmart	08/27/2015 Office Supplies	36.33	
The Bank-Service Fees	08/31/2015 Bank Service Fees	19.16	
			<b>954,876.44</b>
		\$	<b>368,655.80</b>



Memo to: Board of Directors

From: Chuck Etwert

Subject: Change Orders BP #3 & BP #6

Date: September 14, 2015

Per the Board's Construction Change Order Policy, any change order which causes a line item to increase by more than ten percent must be approved by the Board. Board approval is also required on all change orders if the total of all change orders on a project exceed ten percent of a project's original cost, which currently applies to Bid Package 03 and 06.

We have two change orders on Bid Package 3 and one on Bid package 6 which Amec Foster Wheeler will be explaining at the meeting.

**Bid Package 03 – Hawthorne Pipe Changes (\$9,678.67 credit)**

In Lower Wood River (LWR) along Route 3 in Hartford we determined after clearing the heavy brush and trees along the roadside ditch, that the "T"-Type relief well outfall headwalls would not be feasible to place in the bottom of the ditch, as the ditch is much narrower than anticipated, and the side slopes are too steep. This change order eliminates the concrete headwall structure at each manhole in this area, as well as the HDPE pipe that runs from the "T"-Type relief well manhole to the headwall. This change order changes the pipe material to concrete pipe since a portion of the pipe will be exposed to UV light at the toe of the ditch. Due to the elimination of the headwall, the flap gate type also changed. The result will be a concrete pipe with a flap gate in lieu of HDPE pipe with a headwall and a duckbill check valve.

<b>14-003 RFP 0025 -- Hawthorne Pipe Changes</b>						
	<b>Description</b>	<b>QTY</b>	<b>Unit of M</b>	<b>Unit Price</b>	<b>Total Price</b>	
	<b>Add Change Order</b>					
100	Flap Gates (1066-1074 & 1076 to 1080)	14	EA	\$3,201.00	\$44,814.00	
200	12" RCP (CA7 & <b>NO Fabric</b> )	112.76	FT	\$64.95	\$7,323.76	
300	RCP & Trash Rack	1	LSUM	\$3,395.00	\$3,395.00	
310	24" DIP	12	FT	0	\$0.00	
320	Trash Rack	1	ea	0	\$0.00	
400	36" RCP (CA7 & <b>NO Fabric</b> )	47.87		\$124.05	\$5,938.27	
500	Option Replace 36" CMP	24	FT	\$124.05	\$2,977.20	
600	15" Flap Gate	1	EA	\$2,894.00	\$2,894.00	
				<b>Total Add Change Order</b>	<b>\$67,342.24</b>	
	<b>Deduct Change Order</b>					
1000	End Section & Flap Gate :	-14	ea	\$4,800.00	-\$67,200.00	Contract Item
2000	12" HOPE	-112.76	FT	\$62.50	-\$7,047.50	Contract Item
3000	24" RCP	-12	FT	\$82.23	-\$986.76	Contract Item
4000	36" HOPE	-47.87	FT	\$112.84	-\$5,401.65	Contract Item
5000	CMP	-1	LSUM	\$0.00	\$0.00	Contract Item
6000	15" Flanged Duckbill	1	ea	\$3,615.00	\$3,615.00	Change Order #9
				<b>Total Deductive Change Order</b>	<b>-\$77,020.91</b>	

### **Bid Package 03 – Russell Commons Buried Waste \$780,000.00**

In Upper Wood River (UWR), at Russell Commons Park, there are seven manhole excavations which consist of trash/debris, not shown per on the drawings and specifications. This discovered trash/debris is considered a differing site condition. These manhole excavations are approximately 25 to 34 feet deep, 30 feet wide and approximately 50 ft. long. Rough order of magnitude calculation of the excavation quantity, benching at this point is an estimated only. The rough order of magnitude price below is based on excavation, stockpiling the trash/debris, environmental analysis as and importing new fill, constructing a haul road for landfill truck hauling, potential multiple moving of trash stockpile. The Contractor has provided us with a \$780,000 rough order of magnitude (ROM) cost. We have issued a Request for Proposal (RFP) on September 11, 2015 to the Contractor and will refine this change order. We request approval of this ROM cost to allow the contractor to continue work at Russell Commons and not stop work. Please note, this is only a ROM and the change order will be based on the Contractor supplied unit rates and the actual quantity of material.

This work is part of the Upper Wood River levee system, which is being certified by USACE, therefore completion of construction in this area is on the critical path to certification of Upper Wood River.



## **Bid Package 06 – Existing Pipe in Clay Cap \$29,950.00**

A 12 inch Standard Dimension Ratio (SDR) pipe was discovered at PDP Levee Station 368+00 in the riverside existing slope beneath the proposed clay cap. The buried pipe extends over the levee from a vault to a discharge at the riverside levee toe, and is used to dewater storm drainage from the surrounding property owners.

Amec Foster Wheeler propose to have the Contractor grout the existing 12” SDR pipe in place with Type 1 Portland Cement and water proportioned at 6 gallons of water per 94 pound bag of cement. The Contractor will then bed, place, and backfill a new 12 inch SDR above the newly constructed clay cap, on the same alignment as the original SDR, in accordance with the pipe manufacturer’s recommendations, and cover with random fill per 31 00 00 of our specifications.

The pipe material, joint type, cell classification (if applicable), and SDR shall be the same as that of the existing pipe. Backfill over and around the new pipe will be compacted to 95% of the material’s standard proctor maximum dry density. Backfill depth (cover) over the new pipe shall be in accordance with manufacturer’s recommendations for the specific SDR of the new pipe (i.e. SDR 35, SDR 26, etc.). Install RR-3 rip rap at the discharge end of the new pipe to protect the pipe and provide a splash pad/energy dissipater no less than 5’ from the end of the pipe. During construction of the clay cap, the contractor shall allow full operation of the “pumping station.”

In the event of an emergency, prior to the riverside pipe being replaced, the contractor shall install a “bypass” from the manhole on the crest of the levee to the toe. Acceptable methods would be a coupler installed temporarily in the manhole to allow a lay flat hose to be attached. Contractor will be instructed to describe temporary emergency measures in the proposal to accomplish the work.

Recommendation: Authorize the Chief Supervisor to approve BP03 requested change order for the Hawthorne Pipe Changes (\$9,678.67 credit) with Keller Construction; BP03 requested change order for the Russell Commons Buried Waste ROM of \$780,000.00 with Keller Construction; and BP06 requested change order for the Existing Pipe in Clay Cap for \$29,950.00 with Lane Construction; for a total not to exceed **\$800, 271.33.**





Memo to: Board of Directors

From: Chuck Etwert

Subject: Change Orders BP #4 & BP #5

Date: September 14, 2015

Per the Board's Construction Change Order Policy, any change order which causes a line item to increase by more than ten percent must be approved by the Board. Board approval is also required on all change orders if the total of all change orders on a project exceed ten percent of a project's original cost, which currently applies to Bid Package #3 and #6, and will apply to Bid Packages #4 & #5, if action is taken.

As explained in the Program Progress report, the Corps of Engineers has reevaluated the effects of the 100-Year level protection work and has determined potential changes to the scope of the authorized plan for design deficiency corrections in the East St. Louis (ESTL) levee system. These changes would eliminate as much as 14,300 lineal feet of deep cutoff wall in MESD and utilize the improvements made by the FPD Council and reduce the overall total cost of the Authorized Level (500-Year) flood protection by as much as \$62,900,000. Prior to this re-evaluation, the Corps had estimated the Authorized Level (500-Year) costs to be \$145.4 million for the MESD Levee System. This would be a forty-three percent reduction in estimated cost.

Cost savings to the FPD Council could be in the range of \$30,400,000. This is based on \$12,900,000 of the \$62,900,000 being for hazardous waste removal, which is 100% FPD Council funded, and 35% of \$50,000,000 ( $\$62,900,000 - \$12,900,000$ ) which is \$17,500,000.  $\$12,900,000 + \$17,500,000 = \$30,400,000$ .

In the recent discussions with the Corps they have indicated that the improvements made by the Council need Authorized Level of Protection through the planned life of their project. The collection system that is currently in the process of being installed was reviewed through the 408 permit process, and reviewed from the standpoint of whether it is injurious to the levee. The Corps did not

review the plans from a standpoint of conforming to their Authorized Level flood event design requirements. The Corps has stated that in order to eliminate as much as 14,300 LF of the deep cut off wall in MESD and utilize the improvements made by the FPD Council, the collection system must be constructed to St. Louis District Corps' standards. The typical St. Louis District pipe collection system is concrete pipe, not the high density polyethylene (HDPE) pipe that is currently being installed.

The savings identified above would be reduced by the cost of replacing the HDPE pipe with concrete pipe as well as installing the estimated 50 to 100 surface discharging relief wells.

Amec Foster Wheeler is currently evaluating the possible replacement of the HDPE pipe with Reinforced Concrete Pipe.

Amec Foster Wheeler met with Keller Construction and Haier Plumbing individually on September 3. Plans for the Reinforced Concrete Pipe (RCP) were not complete at that time, however they provided each contractor with an overview of the Corps specifications. Both Contractors have provided a cost for the Change Order, however the costs they have submitted are greater than 110% of the Amec Foster Wheeler estimate. Amec Foster Wheeler believes that with additional clarification it may be possible to get the Change Orders within a reasonable range of our estimates. Additionally, Amec Foster Wheeler has submitted several requests to the USACE that may result in a slightly lower cost option.

Amec Foster Wheeler will continue to negotiate with each contractor, with the goal of having an acceptable cost prior to the Board Meeting.

Recommendation: If acceptable cost prices are determined, authorize the Chief Supervisor to approve change orders for BP #4 with Haier Plumbing and BP 5B with Keller Construction for the replacement of HDPE pipe with Reinforced Concrete Pipe for a maximum total to be identified and presented to the Board at the meeting.



Memo to: Board of Directors  
From: Chuck Etwert  
Subject: Amec Foster Wheeler Work Order 14  
MESD Authorized Level Field Investigation and Design  
Date: September 14, 2015

As discussed during the MESD Levee System Authorized Level Project Summary Report at last month's meeting, Amec Foster Wheeler proposes the development of four bid packages for the MESD Levee System.

At the meeting, they will present their Work Order for the MESD Authorized Level Field Investigation and Design, which will include complete Construction Documents and associated Design Services in support of the design and construction of levee improvements throughout the MESD Levee system.

Services include:

- Land Surveys
- Assisting USACE with Underseepage Analysis
- Seepage Berm/Clay Cap/ Fill Solutions
- Relief Well Solutions (New & Rehabilitated)
- General Civil Improvements (New Pump Stations, Conveyance Systems, Roads)
- Stakeholder Coordination
- Bid Phase Services

A detailed scope of work and cost estimate for the MESD Levee System Authorized Level Field Investigation and Design is attached to this memo.

**Recommendation:** Authorize the Chief Supervisor to execute Work Order 14 with Amec Foster Wheeler Environment & Infrastructure Inc. for the MESD Levee System Authorized Level Field Investigation and Design, as shown in the attachment, in the amount of \$5,972,432.





**WORK ORDER NO: MSA01-WO14**

**Metro East Sanitary District Authorized Level Field Investigation and Design**

**September 16, 2015,**

By and Between

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler)

and

**Southwestern Illinois Flood Prevention District Council (CLIENT)**

CLIENT Office:	<u>104 United Drive</u> <u>Collinsville, IL 62234</u>	Amec Foster Wheeler Project No:	<u>563170001</u>
CLIENT Contact:	<u>Charles Etwert</u>	Work Order Type: (Check One)	
Amec Foster Wheeler Office:	<u>15933 Clayton Road</u> <u>Suite 215</u> <u>Ballwin, MO 63011</u>	Time and Materials (rates attached)	<u>X</u>
		Fixed Price	<u>                    </u>
Amec Foster wheeler Contact:	<u>Jon Omvig</u>	CLIENT Reference No:	<u>n/a</u>

1. SCOPE OF WORK: See Attachment A (incorporated herein by reference)

2. LOCATION/CLIENT FACILITY INVOLVED: Metro East Sanitary District Levee System

3. PERIOD OF PERFORMANCE: September 16, 2015 through December 31, 2017

4. AUTHORIZED FUNDING: \$5,972,432.00

5. SPECIAL PROVISIONS: n/a

**Southwestern Illinois Flood Prevention District Council**

**Amec Foster Wheeler Environment & Infrastructure, Inc.**

By: \_\_\_\_\_

Name: Charles Etwert

Title: Chief Supervisor of Construction and the Works

By: \_\_\_\_\_

Name: Jon Omvig

Title: St. Louis Office Manager

Date: \_\_\_\_\_

Address: 104 United Drive  
Collinsville, IL 62234

Date: \_\_\_\_\_

Address: 15933 Clayton Road, Suite 215  
Ballwin, MO 63011

## **Attachment A Scope of Work**

### **WORK ORDER NO: MSA01-WO14**

Amec Foster Wheeler's services will include review of the specific Authorized Level improvements identified by the U.S. Army Corps of Engineers (USACE) in the *Limited Reevaluation Report, Design Deficiency Corrections, East St. Louis, Illinois Flood Protection Project, Madison County, IL*, dated August, 2010. Amec Foster Wheeler will also review supplemental reports and additional pertinent documents (if any are available) prepared after the reevaluation reports, if provided by USACE. Amec Foster Wheeler's review of the reports is for the purpose of proposing a schedule to the Southwestern Illinois Flood Protection District Council (SIFPDC) for the design and construction of Authorized Level improvements identified by USACE. Amec Foster Wheeler's services do not include an analysis of the existing condition of the levees or an analysis of whether the improvements recommended in the Reports provide the level of protection indicated and/or desired by USACE. Amec Foster Wheeler is relying upon the Reports for such recommendations and identification.

Services to be provided by Amec Foster Wheeler under this Work Order include complete Construction Documents and associated Design Services in support of the design and construction of levee improvements throughout the Metro East Sanitary District (MESD) Levee system to protect against the Authorized Level Flood Event, as defined by the Corps of Engineers. Services to be provided by Amec Foster Wheeler under this Work Order include:



1. **LAND SURVEYS**

- 1.1. Prepare land-based topographic surveys to locate limits of physical features, ground elevations and improvements to supplement aerial photos and Lidar survey data.
- 1.2. Prepare boundary surveys for those properties that will require fee simple ROW acquisition, to include:
  - obtain a title commitment (in anticipation of the purchase of title insurance)
  - prepare a property boundary survey meeting the minimum standards of an “Urban Class Boundary Survey” or ALTA/ASCM land title survey
- 1.3. Prepare strip map surveys for those properties that will require an easement for ROW acquisition, to include:
  - obtain an informational title commitment (no title insurance)
  - prepare a property boundary survey meeting the minimum standards of an “Urban Class Boundary Survey” or ALTA/ASCM land title survey
- 1.4. Prepare permanent easement and temporary construction easement (TCE) acquisition documents, to include:
  - recordable exhibit
  - legal description
  - permanent easement language
  - TCE language
  - calculate area to be acquired

2. **ASSIST USACE WITH UNDERSEEPAGE ANALYSIS**

- 2.1. Support The U.S. Army Corps of Engineers St. Louis District with information needed for underseepage analysis. Much work has been completed by Amec Foster Wheeler, on behalf of the FPD Council, in MESD; Amec Foster Wheeler will use its expertise, experience, and data to ensure the St. Louis District is basing their underseepage solutions for the Authorized Level Flood Event on not only Corps-obtained data and analyses, but also on FPD Council-obtained data.

### 3. **SEEPAGE BERM / CLAY CAP / FILL SOLUTIONS**

- 3.1. The design solutions proposed by the St. Louis District will be reviewed in conjunction with the other underseepage solutions planned and the through-seepage alternative solutions will be evaluated to provide a constructible and efficient approach
- 3.2. Prepare utility relocation construction documents for non-utility company relocated utilities, to include:
  - construction drawings
  - specifications
  - construction cost estimate
- 3.3. Coordinate utility relocations for utility company relocated utilities, to include:
  - coordinate conflict resolution
  - coordinate schedule
  - coordinate relocation cost
- 3.4. Drill Seepage Berm Soil Borings
  - sub-contract with driller(s) to perform soil borings according to approved Drilling Plan
  - conduct soil borings at each proposed seepage berm location in accordance with the approved Drilling Plan.
  - provide drilling oversight and coordination, health and safety plans, and procurement
  - provide a qualified on-site drill rig monitor to supervise the work and log samples

Note:

All laboratory testing associated with seepage berm soil borings will be conducted by USACE, including determination of grain size at various aquifer depths and classification of soils; furthermore, USACE will be preparing the soil borings for use in Bentley gINT software. The aforementioned items are specifically excluded from the Amec Foster Wheeler scope of work.

- 3.5. Prepare complete seepage berm / clay cap / gravel ditch fill construction drawings, to include:
  - limits of existing right-of-way
  - limits of new right-of-way
  - limits of temporary construction easements
  - limits of wetlands and limits of assumed wetland disturbance
  - aerial photo background
  - topographic information (existing contours and utilities)
  - length, width, depth and location of seepage berms
  - length, height and location of clay blankets
  - length and location of gravel ditch fill
  - appurtenant ditching, road relocation, etc.
- 3.6. Prepare complete seepage berm / clay cap / fill specifications.

- 3.7. Prepare a construction cost estimate.
- 3.8. Prepare Hydrologic and Hydraulic (H&H) modeling for interior drainage impacts associated with design improvements for submittal to regulatory agencies as needed.
- 3.9. All designs will be in accordance with USACE practices and procedures to ensure Work-in-kind credit is obtained.

#### 4. **RELIEF WELL SOLUTIONS (NEW & REHABILITATED)**

##### 4.1. GEOTECHNICAL ANALYSIS AND DESIGN

4.2. Confirm re-use or abandonment of existing Relief Wells with the St. Louis District.

4.3. Prepare complete utility relocation construction documents, to include:

- construction drawings
- specifications
- construction cost estimate

4.4. Prepare complete utility relocation construction documents for non-utility company relocated utilities, to include:

- construction drawings
- specifications
- construction cost estimate

4.5. Coordinate utility relocations for utility company relocated utilities, to include:

- coordinate conflict resolution
- coordinate schedule
- coordinate relocation cost

4.6. Drill Pilot Holes

- sub-contract with driller(s) to perform pilot holes according to approved Drilling Plan
- conduct a pilot hole at each proposed relief well location that does not already have an associated pilot hole
- each pilot hole will be an SPT soil boring to a depth approximately 10 feet below the estimated bottom of the new relief well
- provide drilling oversight and coordination, health and safety plans, and procurement
- provide a qualified on-site drill rig monitor to supervise the work and log samples

Note:

All laboratory testing associated with relief well pilot holes will be conducted by USACE, including determination of grain size at various aquifer depths and classification of soils; furthermore, USACE will be preparing the soil borings (pilot holes) for use in Bentley gINT software. The aforementioned items are specifically excluded from the Amec Foster Wheeler scope of work.

4.7. Prepare complete relief well construction drawings, to include:

- limits of existing right-of-way
- limits of new right-of-way
- limits of temporary construction easements
- limits of wetlands and limits of assumed wetland disturbance
- aerial photo background
- topographic information (existing contours and utilities)

- existing relief wells to be abandoned
  - existing relief wells to be rehabilitated
  - existing relief wells to be rehabilitated and converted from D type to T type
  - new D type and new T type relief wells
  - appurtenant relief well discharge ditching, conveyance, storage, etc.
- 4.8. Prepare specification for abandonment of unneeded or deficient relief wells.
- 4.9. Prepare specification for installation of new relief wells.
- 4.10. Prepare a construction cost estimate.
- 4.11. All designs will be in accordance with USACE practices and procedures to ensure Work-in-kind credit is obtained.

5. **GENERAL CIVIL IMPROVEMENTS (NEW PUMP STATIONS, CONVEYANCE SYSTEMS, ROADS)**

- 5.1. Complete full design of 2 pump stations, including geotechnical analysis, mechanical design, electrical design, plumbing design, structural design, and general civil design.
- 5.2. All designs will be in accordance with USACE practices and procedures to ensure Work-in-kind credit is obtained.
- 5.3. Coordinate with pump station appurtenances suppliers to design 3 new pump stations.
- 5.4. Drill Pump Station Soil Borings
- sub-contract with driller(s) to perform soil borings according to approved Drilling Plan
  - conduct soil borings at each proposed pump station location in accordance with the approved Drilling Plan.
  - provide drilling oversight and coordination, health and safety plans, and procurement
  - provide a qualified on-site drill rig monitor to supervise the work and log samples

Note:

All laboratory testing associated with pump station soil borings will be conducted by USACE, including determination of grain size at various aquifer depths and classification of soils; furthermore, USACE will be preparing the soil borings for use in Bentley gINT software. The aforementioned items are specifically excluded from the Amec Foster Wheeler scope of work.

- 5.5. Prepare complete civil construction drawings, to include:
- limits of existing right-of-way
  - limits of new right-of-way
  - limits of temporary construction easements
  - limits of wetlands and limits of assumed wetland disturbance
  - aerial photo background
  - topographic information (existing contours and utilities)
  - new pump stations
  - gravity drain rehabilitation
  - appurtenant ditching, road relocation, etc.
- 5.6. Prepare complete specifications.
- 5.7. Prepare a construction cost estimate.

6. **STAKEHOLDER COORDINATION**

- 6.1. Meet with the Council as needed to present and discuss design progress.
- 6.2. Attend public meetings as needed to present design progress.
- 6.3. Attend meetings as needed with MESD to discuss design solutions.
- 6.4. Attend coordination meetings with the USACE as needed.



7. **BID PHASE SERVICES**

7.1. Provide bid procurement services for each bid package, to include:

- Advertisement
- Pre-Bid Meeting
- Respond to question regarding the clarity or intent of the contract documents.
- Prepare and issue addenda.
- Receive and open bids in public forum

7.2. Coordinate with construction management team to review bids and recommend contractor selection for each bid package.