

# Southwestern Illinois Flood Prevention District Council

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## Annual Report 2023-2024



August 21, 2024





## Southwestern Illinois Flood Prevention District Council

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August 21, 2024

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County Board Chairman  
St. Clair County  
10 Public Square  
Belleville, IL 62220-1623

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Hon. George E. Green  
Chairman, Monroe County Board of Commissioners  
100 South Main Street  
Waterloo, IL 62298

Charles M. Etwert  
Chief Supervisor of  
Construction and the Works

Chairmen Kern, Prenzler, and Green:

Transmitted herewith is the 2023-2024 Annual Report of the Southwestern Illinois Flood Prevention District Council. The submission of this report is in satisfaction of the requirement of our authorizing statute (70 ILCS 750/40).

Since its creation the Council has had two primary goals: accreditation by the Federal Emergency Management Agency (FEMA) of the Metro East Levee Systems and achieving the Authorized Level of Protection to the extent possible with the funds available.

In FY 2022, total accreditation for all the Metro East Levee Systems was successfully completed. The Council achieved its interim goal of attaining FEMA flood protection standards and obtaining accreditation, using only the funds generated from the dedicated flood protection sales tax.

The Council anticipates FEMA issuing new maps, reflecting the 100-Year Improvements, within the next year.

*a regional partnership to rebuild Mississippi River flood protection*

The Council continues to work with the Corps of Engineers regarding the Council's design and building of the 500-Year Authorized Level of Protection Projects, building the most cost effective and highest priority flood protection projects throughout the Counties of Madison, Monroe, and St. Clair, Illinois to restore the federally Authorized Level of flood protection in the Metro-East.

The Corps of Engineers will provide oversight on the design and construction of these projects, to ensure that funds expended by the Council, where applicable, will be eligible for Work In-Kind (WIK) Credit and Lands, Easements, Rights-of-Way, Relocation, Disposal Areas (LERRDs) Credit. These credits will be utilized to satisfy the non-federal partner thirty-five percent share requirement by the Corps of Engineers.

In the Wood River Levee System, the Council has submitted and received approval of \$27,985,946.76 of WIK Credit and LERRDs Credit and in the East St. Louis/MESD Levee System, the Council has submitted and received approval of \$34,022,340.17 of WIK Credit and LERRDs Credit. Additional WIK Credit and LERRDs Credit will be submitted for both the Wood River and East St. Louis Levee Systems as work is completed.

The Council's FY 2025 budget focuses on the continued design of Authorized Level projects, completion of Bid Package #11 and construction starting on Bid Package #15.

The May/June 2019 100-Year flood event (the second highest event on record at 46.02 ft., and the longest flood event on record at 126 days), tested the seventy-five million dollars of flood protection improvements the Council has built. All improvements performed as designed and the Metro East American Bottom Levees managed the event much better than ever before. Fortunately, there have been no major flood events in the last five years. This follows three major flood events in the previous four years.

With the state passing the "Leveling the Playing Field Act", sales tax receipts increased 18.4% in FY 2021, 16.1% in FY 2022, and 3.6% in FY 2023. With receipts, leveling off an increase of 2.5% is anticipated in FY 2024 and a 1.5% increase is budgeted for FY 2025. With these increases in revenue, the Council will have sufficient funds to complete all the Authorized Level of Protection Projects by FY 2027 without the issuance of a third bond issue.

Corps review and approval times will determine the final construction schedule.

The Counties provided fifty percent of their FPD sales tax funds to the Council earlier this year for the 500-Year Authorized Level Projects. There is currently \$29,468,840 in the three County FPD sales tax funds. It is currently anticipated these funds will be requested in March 2026.

In summary, I am pleased to report on behalf of our Board of Directors, that we continue to make progress in building and financing significant improvements to the flood protection systems in the Metro-East.

Thank you for your continued support of our efforts throughout the year.



Sincerely,

Charles M. Etwert  
Chief Supervisor of Construction and the Works



# I. Introduction

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On August 15, 2007, the Federal Emergency Management Agency announced their intention to “de-accredit” the Mississippi River levee systems protecting a 174 square mile area in three Illinois counties known as the American Bottom. The practical effect of this action would be to cripple the area economically and put an enormous financial burden on businesses and residents in this area. The threat of this action by FEMA prompted a chain of events that is without precedent in the area. The result is a cooperative regional effort to improve flood protection and secure FEMA accreditation for the levee system protecting the American Bottom from flooding.

The American Bottom is an area of incalculable economic value and historical significance. It is home to over 156,000 residents. Businesses in the area employ over 56,000 people. Some of the nation’s most prestigious companies have major manufacturing facilities having national significance in the area. Additionally, the area is rich in multimodal transportation assets that make it well positioned as a future center of commerce and industry.

The region’s leadership recognized that extraordinary measures were necessary to protect this economic asset and the homes and livelihoods of a substantial portion of the region’s population. A new revenue source was created in 2008 and a regional organization was formed to conduct an ambitious plan to maintain a level of flood protection that has been in place for some 80 years.

Acting on a plan to improve flood protection, even one that may be subject to adjustment from time to time, is an essential ingredient in helping businesses and citizens prepare for the future, to restore investor confidence in the area, and to assure taxpayers that their money is being spent effectively. The unpredictability of the Mississippi River serves as a constant reminder that we need to demonstrate real progress in conducting that plan.

The purpose of this report is to outline the activities of the Southwestern Illinois Flood Prevention District Council in 2023-2024 in achieving the continuance of FEMA 100-Year Level of Protection accreditation and the design & construction of 500-Year Level of Protection (also known as the Authorized Level) improvements.



## II. Background

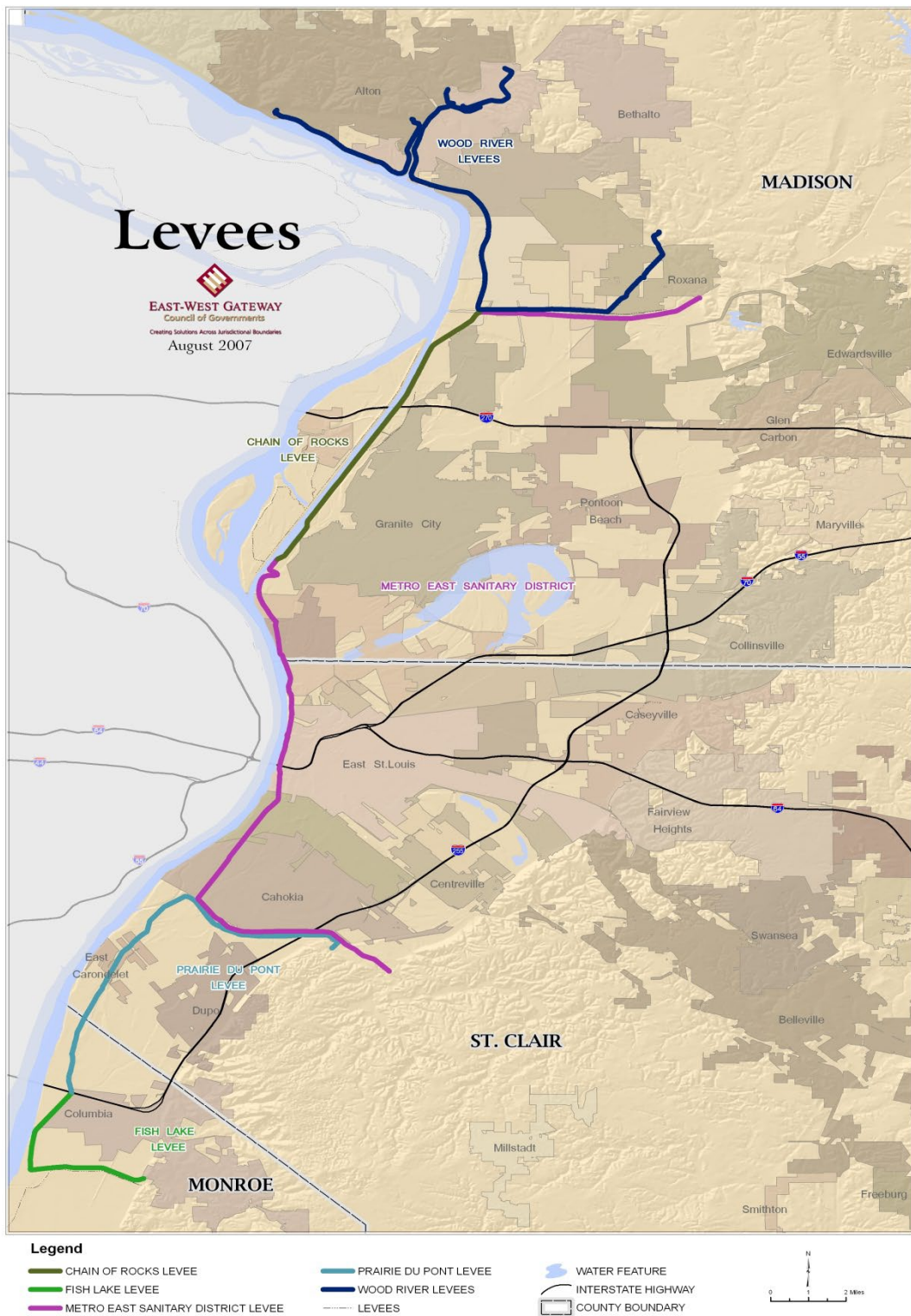
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A system of 65 miles of mainline and wing levees protects an area called the American Bottom in Southwestern Illinois from flooding by the Mississippi River. The American Bottom is an area of 174 square miles that is home to over 156,000 people and more than 56,000 jobs. The levee system was authorized by Congress and designed and built by the U.S. Army Corps of Engineers to provide protection from a flood event on the Mississippi River of 54 feet on the St. Louis gauge. The American Bottom has not been flooded by the Mississippi River in the 80 years since the flood protection system was initially built, including during the flood of record in 1993, as much as a 380-year event.

Mississippi River flood protection consists of five “federal” levees (see Figure 1), i.e., levees designed and built by the federal government and whose owners participate in the Corps of Engineers Public Law 84-99 emergency assistance program. Federal law authorized the construction of the following five (5) levees:

- **Wood River Levee** - Operated and maintained by the Wood River Drainage and Levee District. Construction authorized under Section 4 of the Flood Control Act of 1938, Pub. L. 75-761, with subsequent improvement was authorized under Section 1001(20) of the Water Resources Development Act of 2007, Pub. L. 110-114 (“WRDA 2007”)
- **Chain of Rocks Canal, Levee, and Locks** - Operated and maintained by the Army Corps of Engineers. Construction authorized under the River & Harbors Act of 1945, Pub. L. 79-114
- **East St. Louis Levee** - Operated and maintained by the Metro East Sanitary District. The Flood Control Act of 1936, Pub., authorized construction. Law 74-738, as modified by the Flood Control Act of 1965, Pub. L. 89-298, and the Water Resources Development Act of 1976, Pub. L. 94-587. Subsequent improvement authorized under the Energy and Water Development Appropriations Act of 1988, Pub. L. 100-202
- **Prairie DuPont Levee** - Operated and maintained by the Prairie DuPont Levee and Sanitary District. Construction was authorized under the Federal Flood Control Act of 1936. Subsequent improvement was authorized under Section 102(8) of the Water Resources Development Act of 2000, Pub. L. 106-541 (“WRDA 2000”) and Section 5070 of the WRDA 2007
- **Fish Lake Levee** - Operated and maintained by the Fish Lake Drainage and Levee District. The Flood Control Act of 1954 authorized construction. Subsequent improvement was authorized under Section 102(8) of WRDA 2000 and Section 5070 of WRDA 2007

The Metro-East Sanitary District (formerly the East Side Levee and Sanitary District, originally formed in 1910) is authorized by the Metro-East Sanitary District Act of 1974, 70 ILCS 2905/. The Wood River and Fish Lake Districts were authorized by the Illinois Drainage Code, 70 ILCS 605/. The Prairie DuPont District was authorized by the Sanitary District Act of 1907, 70 ILCS 2205/. The Levee Districts own and have primary responsibility for maintaining the levee systems (except for the Chain of Rocks Levee, which is owned and maintained by the Corps of Engineers).



**Figure 1 –  
Levee Systems**

The Southwestern Illinois Flood Prevention District Council was formed in 2009 through an Intergovernmental Agreement between the Flood Prevention Districts of Madison, St. Clair and Monroe counties as authorized by the Illinois Flood Prevention District Act of 2008, 70 ILCS 750/. The primary responsibility of the FPD Council is to plan, finance, design, and build capital improvements to the levee system. The Council's interim goal to assure accreditation by FEMA in accordance with criteria described in 44 CFR 65.10 – Mapping of Areas Protected by Levee Systems was achieved April 2022. The Council's long-term goal is to achieve the Authorized Level of Protection, as defined by the Corps of Engineers.

In 2007, the Corps indicated that the agency had “reduced confidence” that the levee system could protect against a flood that has a 1% chance of being equaled or exceeded in any single year (commonly referred to as a 100-year flood or a base flood) without flood fighting. FEMA's announced decision to deaccredit the levee systems in our area, which is the industrial core of the St. Louis region, was based on this assertion by the Corps. In July 2009, FEMA issued preliminary flood insurance rate maps for the area that showed the American Bottom as a flood hazard area with no protection from flooding. Appeals of those maps were submitted by a number of local governments during the 90-day period provided by law; all those appeals were denied in September 2010.

The region's leadership did not agree with the decision by FEMA to deaccredit the levee system. A number of area governments, businesses and citizens joined to file a lawsuit challenging this decision based, in part, on the lack of any documentation of levee system deficiencies. With the lawsuit and complaints about the mapping process across the country, FEMA agreed to revamp its mapping process.

While the Corps built the levee systems in this area in the 1940s and 1950s using design standards in place at the time for an elevated level of flood protection, the current “design deficiencies” are measured relative to current engineering standards. The issue is not a failure of adequate maintenance by local levee districts, or any dramatic change in the condition of the levees, but primarily a change in engineering standards and in the procedures for measuring risk. The levee systems have consistently been determined to be in *acceptable* or *marginally acceptable* condition by annual and more thorough 3-year periodic inspections by the Corps.

According to its own preliminary evaluations and cost estimates, the Corps suggested that it could cost hundreds of millions of dollars to restore and maintain the authorized (54 feet flood elevation) level of flood protection. Further, the schedule to make these investments would be open-ended, dependent entirely on the pace of federal appropriations. Making assumptions consistent with typical levels of federal appropriations, the project could take decades to complete. While the federal government could pay as much as 65% of the cost, it could take decades for those funds to be authorized and appropriated, so there would be significant uncertainty about the cost and schedule of the project. That continued uncertainty would impose extremely prohibitive costs on residents and businesses in the area, and, more importantly, would subject the area to increased flood risk.

Because of the uncertainty of federal funding and the complexity and time-consuming nature of the USACE project development process, levee improvements will be primarily locally funded. The three affected counties imposed a ¼-cent sales tax to pay for the restoration of the levee system and formed a new organization, the Southwestern Illinois Flood Prevention District Council, to conduct the levee improvement project. The tax has been collected since January 2009 and will generate over seventeen million dollars in 2024.





### III. FPD Council Activities

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The following describes the work of the Council over its fifteen-year existence. Work done this year continues to bring the Council closer to meeting its objectives. The Project Timeline since the announcement of de-accreditation by FEMA is shown in Figure 2.

In the early years, the greatest challenge and source of doubt about the project was the continued involvement of the Corps of Engineers in granting permission for most of the improvements to the levee system that the Council has proposed. The Corps is an institution that moves very deliberately, is governed by elaborate and extensive guidelines and procedures, most of which apply to federally funded projects but are being applied to our locally funded project. This process caused significant early delays in the design process. Most of that is now behind us, with the Council and the Corps of Engineers working together to complete all construction as soon as possible.

The FPD Council began operations in July 2009. Since that time, the organization has:

- Completed a comprehensive inspection of the levee system
- Performed an economic analysis of the costs of mandatory flood insurance
- Provided support to local governments to appeal preliminary flood insurance rate maps,
- Conducted a design competition to determine the most cost-effective approach to assuring compliance with FEMA standards for levee system accreditation
- Sold \$94 million in bonds to pay for levee improvements.
- Completed the design of levee system improvements that will meet FEMA standards
- Developed a budget to complete the 100-Year Level of Protection solely with the proceeds from the FPD sales tax
- Received all required permits from state and federal agencies to proceed with construction
- Awarded contracts on the eleven construction packages required to complete the 100-Year Level of Protection
- Completed all construction needed to achieve FEMA accreditation
- Committed to restore the federally Authorized Level of Mississippi Flood River Protection in the Metro-East, designing and building the most critical and cost-effective projects
- Sold an additional \$83.8 million in bonds for 500-Year Authorized Level Protection Projects
- Initiated the design and construction of 500-Year Authorized Level Protection Projects in Madison, Monroe, and St. Clair Counties.
- Received FEMA's letter of continued accreditation for the Prairie Du Pont/Fish Lake Levee System in November 2019
- Refunded the 2010 Series Bonds, saving \$13.2 million dollars in debt service cost over the life of the bonds
- Received FEMA's letter of continued accreditation for the Wood River East & West Fork Levee System in March 2021
- Received FEMA's letter of continued accreditation for the Lower Wood River Levee System in March 2021
- Received FEMA's letter of continued accreditation for the Upper Wood River Levee System in March 2021

- Received FEMA's letter of continued accreditation for the East St. Louis/MESD Levee System in April 2022

The Council's general goals have been to:

- assure compliance with FEMA accreditation standards with available revenue sources

**Goal achieved April 26, 2022**

- build all critical and cost-effective Authorized Level Protection Projects, with the funds available, to achieve 500-Year flood level protection.

Notwithstanding the Council's strong disagreements with FEMA's decision to deaccredit the Metro-East levees and the Council's efforts to overturn that decision, the Council initiated action on achieving compliance with FEMA accreditation criteria. In October 2010, the Council engaged a team of engineering consultants led by AMEC Environment & Infrastructure, Inc. (now WSP USA Environment & Infrastructure Inc.) to design and manage construction of improvements to the levee system.

Today, after years of design work, multiple levee system inspections, drilling over 2000 borings along the entire length of the levee system and submitting thousands of pages and many gigabytes of electronic files of design documentation to the Corps of Engineers, the Council has completed the 100-Year construction. The Council built the project, using only funds from the dedicated sales tax and has significant funds to utilize towards the 500-Year Authorized Level of Protection.

The Council has worked to comply with all relevant environmental laws and regulations. The Illinois Environmental Protection Agency has granted approval for the project under Sec. 401 of the Clean Water Act to certify that the project will not discharge pollutants into any bodies of water. Similarly, the Corps of Engineers has granted conditional approval under Sec. 404 of the Clean Water Act for mitigating the project's impact on wetlands.

The Council continues to collaborate closely with our congressional delegation to help expedite the project and to advance legislation that would streamline future design approvals and would enable future funding of improvements to the levee systems. All the members continue to be supportive of the project and are working on our behalf to advance our interests with the Corps, with FEMA, and in Congress.

The general design features of the FEMA Certification Levee System Improvements are provided in Appendix I to this report.

In December 2015, the Council was successful with the issuance of additional sales tax revenue bonds which will generate a net \$77.5 million for the 500-Year Authorized Level of Protection Projects. It is the intent, to use these funds, to build the most cost effective and highest priority flood protection projects throughout the Counties of Madison, Monroe, and St. Clair, Illinois.

The Corps of Engineers is providing oversight on the design and construction of these projects, to ensure that funds expended by the Council will be eligible for future Work In-Kind Credit (WIK) and Lands, Easements, Rights-of-Way, Relocation, Disposal Areas (LERRDs) Credit.

The Council has accepted Authorized Level Project Summary Reports for the Wood River Levee System, the Metro East Sanitary District (MESD) Levee System, and the Prairie DuPont/Fish Lake Levee System.

The Council has adopted policies that emphasize the use of our local workforce on the construction of the project. It is the Council's policy that all contractors working on the project use a Project Labor Agreement (PLA) and comply with Illinois law regarding the use of prevailing wages. The Council also implemented a minority business and workforce utilization policy. The Council remains committed to employing local labor and local firms to the maximum extent possible on the project, and to paying fair wages and providing good working conditions for everyone working on the project.

The Council is going to maximize WIK Credit and LERRDs Credit work as much as possible, satisfy the 5% cash requirement by providing the Corps funds for oversight on design and construction, and construct projects 100% where the Corps' benefit cost ratio is low and Corps funds are not anticipated.

Between 2016 and 2018, there were five significant events that have impacted the 100-Year and 500-Year Levee System Improvements affecting certification, design and construction.

In December 2016, the Corps of Engineers informed the Council the Wood River Levee System amended Project Partnership Agreement, originally scheduled to be approved in January 2017, would not be approved for at least two years. This delay was due to additional field information obtained during the design and construction of the 100-Year Projects and the design of the 500-Year Projects. This information indicated that the estimated cost of the Wood River Levee Systems projects would exceed the amount identified in the Wood River Levee System Reevaluation Report for Design Deficiency Corrections approved in 2011 by more than twenty percent, which required a new decision document be approved.

A new decision document required that a Risk Assessment and a Supplemental Report be completed, which takes at least twenty-four months. The amended Project Partnership Agreement for the Wood River Levee System was executed on July 26, 2019. During this time delay, the Council accumulated \$16,041,496 of Work In-Kind Credit which will be utilized on the Wood River Levee System.

In the spring of 2017, at the end of April and the beginning of May, the Metro East area experienced its second record flood event. The April/May flood event was the sixth highest elevation ever recorded, following the third highest flood event which occurred December/January 2016.

All of the Council's projects performed as designed and no problems were experienced, which reflects the design and construction management provided by Wood Environment & Infrastructure Solutions, Inc. and the performance of the Council's contractors. The April/May 2017 flood event was a good test of the improvements that had been constructed to date.

Unfortunately, the flood event delayed construction that needed to be completed, such as the East St. Louis 126 Inch Sewer Rehabilitation, the MESD clay cap project, and the four remaining relief wells in the Wood River Levee System. However, all these projects were finally completed during FY 2018.

In May 2017, the Corps of Engineers received notification of FY 2017 Work Plan Funding and FY 2018 President's Budget Funding. The Corps received FY 2017 Work Plan Funding of \$31.7 million for the Wood River Levee System and zero dollars for the MESD Levee System. Due to the Risk Assessment and Supplemental Report mentioned earlier, the Corps of Engineers only had the ability to use about fifty percent of the \$31.7 million dollars in the Wood River area on the second phase of the Wood River Deep Cutoff Wall Project..

Therefore, the Council and the Corps of Engineers' St. Louis District both requested a portion of the funds be reprogrammed to the MESD Levee System, where the Corps of Engineers had a project (Cahokia Relief Wells) designed and ready to build. Unfortunately, after waiting almost a year, the Council was informed, with the approval of the 2018 appropriations bill, new baseline and updated reprogramming limits, the request to reprogram the Wood River funds to East St. Louis would have to be updated and resubmitted.

The Corps suggested, the Council wait until the Corps was informed of FY 2018 Work Plan Funding for the MESD Levee System. Unfortunately, the the Corps didn't receive any FY 2018 Work Plan Funds. However, in November 2018 the Corps did receive \$95.2 million dollars for the MESD Levee System, eliminating the need to transfer funds from the Wood River Levee System. The Corps will spend the Wood River funds on Wood River Levee System, utilizing a Council design and also designing and constructing other Authorized Level Projects.

In June 2017, the Corps of Engineers informed the Council that it would be utilizing a Risk Informed Design Process for the East St. Louis Design Deficiency Project for the Metro East Sanitary District (MESD) Levee System. The Risk Informed Design Process determines which projects (based on vulnerability and effect) should be completed first, to achieve the most effective use of available funds. In the past the Corps looked at a system in general when accessing a risk factor, now they will be providing a risk factor for individual hazards or segments. The determination of individual project risk factors changes project priorities and design responsibilities between the Corps of Engineers and WSP.

All of these events impacted the 100-Year and 500-Year Levee System Improvements affecting certification, design and construction.

Another significant event occurred in 2019, but had no affect on certification, design, or construction. On June 8, 2019, the Mississippi River at St. Louis reached a flood elevation of 46.02 ft., the second highest elevation ever recorded. It was a 100-Year Flood event and the river remained above flood stage for a record length of time of 126 days.

All of the improvements built by the Council performed as designed without any problems. Three record flood events, in less than four years, confirmed the need for the work the Council completed for the 100-Year accreditation and will complete for the 500-Year Authorized Level.

In 2020, another significant event, the COVID-19 Pandemic, occurred and changed the way the Council met, and also lowered sales tax revenues in FY 2020 by almost two percent. Fortunately, mainly to the state of Illinois passing the "Leveling the Playing Field Act", sale tax revenue rebounded in FY 2021 with a eighteen percent increase and in FY 2022 with an additional sixteen percent increase. Receipts leveled off in FY 2023 to 3.6% and a 2.5% increase is anticipated for FY 2024.

Current design and construction for FY 2025 includes the Council 1) completing construction of MESD Bid Package #11, 2) starting construction of Prairie DuPont/Fish Lake Bid Package #15, and 3) WSP completing the design of MESD Bid Package #18A, Prairie DuPont/Fish Lake Bid Packages #16 & #17, and Wood River Bid Package #9.

The general design features of the Wood River Levee System, the Metro East Sanitary District (MESD) Levee System and the Prairie DuPont/Fish Lake Levee System Authorized Level Projects are provided in Section VI and Appendix IV of this report.

In summary, progress continues in building and financing significant improvements to the flood protection systems in the Metro-East. With the continued support of the area's leadership and cooperation from the Corps of Engineers, the Council will be able to meet any remaining challenges to completion of the Authorized Level of Protection.



Figure 2

# Project Timeline

## 2007

**August - FEMA Announce De-accreditation**

## 2008

May - Legislation Becomes Law to Enable Sales Tax and Flood Prevention Districts

July – County Flood Prevention Districts Formed by Counties

July/September – Tax Approved by County Boards

September – Counties Advance Funding for Project Development Work

## 2009

January – Tax Collection Begins

June – Intergovernmental Agreement Signed

June – First Meeting of FPD Council

July – FPD Council Staff Hired

August - FPD Council Authorizes Challenges of FIRMS

September – Financial Advisor Selected

September - Project Strategy Adopted

December – Begin Levee Inspection

December – Select Consultant for Design Competition

## 2010

February - Issue RFP for Design Competition

June – Design Consultants Selected

October – Begin Design and Pre-Construction Testing

November – 2010 Series Bonds Issued

Figure 2

***Project Timeline***

**2011**

March – Progress Drawings Submitted  
May – 30% Design Drawings Submitted  
June – Project Implementation Plan  
September – 60% Design Drawings Submitted

**2012**

January/December – Design of 100 –Year Projects

**2013**

January/December – Design of 100-Year Projects Continues  
September – USACE Permits Approved  
September – Construction Begins

**2014**

April – Design of 100-Year Projects Completed  
August – All 100-Year Construction Contracts Awarded

**2015**

February – 500-Year Authorized Level Resolution Approved (Appendix III)  
July – Design of 500-Year Projects Begins  
August/September – USACE Proposes New Cost Saving Alternative Reducing  
Costs by \$50M and Extending Construction Schedule  
October – East St. Louis 126-Inch Sewer Rehabilitation Project Required for  
Accreditation  
December – 2015 Series Bonds for 500-Year Authorized Level Projects Issued  
December – Third Highest Flood Event on record Delays Construction



Figure 2

***Project Timeline***

**2016**

April – Council Completes Wood River Deep Cutoff Wall Project – Eligible for \$14M Work In-Kind Credit (WIK)

December – Corps Informs Council of Two-Year Delay for Wood River PPA Approval Delaying Utilization of WIK

December – Wood River East & West Forks Accreditation Package to FEMA

**2017**

March – Upper Wood River Accreditation Package to FEMA

April/May – Sixth Highest Flood Event on Record Delays Construction Again

June – Corps Informs Council of Utilization of Risk Informed Design Process in MESD Changing Priorities

July – Prairie Du Pont/Fish Lake Accreditation Package to FEMA

October – Lower Wood River Accreditation Package to FEMA

**2018**

February – Completion of 100-Year FEMA Certification Levee System Improvements

May – East St. Louis Work In-Kind Credit Receives Preliminary Approval

August – East St. Louis (MESD) Accreditation Package to FEMA

November – Corps receives \$95.2 M Work Plan Funds for East St. Louis Design Deficiency Corrections

**2019**

February – Corps gives Preliminary Approval for \$16M of Work In-Kind Credit for the Wood River Levee System

April – East St. Louis Design Deficiency Project Partnership Agreement Executed

Figure 2

***Project Timeline***

**2019**

April – FEMA accepts East St. Louis /MESD Levee System as structurally sound

May – Corps Approves \$12M of Work In-Kind Credit for East St. Louis Flood Protection Project

July – Wood River Design Deficiencies Corrections Project Partnership Agreement Executed

May/June – 100-Year Flood Event on Mississippi River, Second Highest Ever at 46.02 FT., Lasting a Record 125 Days. All 100-Year Improvements Operate as Designed

November – FEMA issues letter of continued accreditation for the Prairie Du Pont/Fish Lake Levee System

December – Award of first Authorized Level construction contract BP #18

**2020**

January – Council refunds 2010 Series Bonds saving over \$13.2 million in debt service costs

January - Award of second Authorized Level construction contract BP #14A

**2021**

March - FEMA issues letter of continued accreditation for the Wood River East & West Fork Levee System

FEMA issues letter of continued accreditation for the Lower Wood River Levee System

FEMA issues letter of continued accreditation for the Upper Wood River Levee System

**2022**

April – FEMA issues letter of continued accreditation for the East St. Louis/MESD Levee System

**Total FEMA Accreditation Achieved**

August - Award of third Authorized Level construction contract BP #11

**2023**

Authorized Level Projects Design Continues

Authorized Level Projects Construction Continues

**2024**

November – Anticipated award of fourth Authorized Level construction contract BP #15

**2025**

August - Anticipated award of fifth Authorized Level construction contract BP #18A

November – Anticipated award of sixth, seventh, and eighth Authorized Level construction contracts BP #9, BP #16, & BP #17



## IV. Financing and Budget

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Revenue from a dedicated sales tax is used to support the Council's ongoing design and construction activities. (See Figure 3, which reflects monthly receipts for various years).

In FY 2020, COVID started in March and sales tax revenues for the fiscal year were down \$206,868.

In FY 2021, the state passed the "Leveling the Playing Field Act" and sales tax revenues increased by 18.4%, followed by an increase of 16.1% in FY 2022 and 3.6% in FY 2023.

Currently, FY 2024 sale tax revenues are projected to increase 2.5% over FY 2023.

Sales tax receipts are conservatively projected to increase by one and one-half percent in FY 2025.

The Council issued bonds for \$94,195,000 in November 2010. After setting aside funds for a debt service reserve and costs of issuance, \$87 million was available to fund construction of the FEMA Certification Levee System Improvements.

In December 2015, additional bonds were issued providing \$77.5 million in funds for the 500-Year Authorized Level of Protection Projects.

In the Fall of 2019, with interest rates at a historic low level, the Council started the process of refunding the 2010 Series Bonds. The results, completed in early 2020, exceeded projections, with the refunding providing the Council \$13.2 million dollars in debt service savings through the life of the bonds.

The following tables provide a summary of the Council's financial situation.

Table 1 is a financial summary of the Council's activities through September 30, 2023, prepared by Scheffel Boyle.

Table 1A is the Council's draft FY 2025 budget.

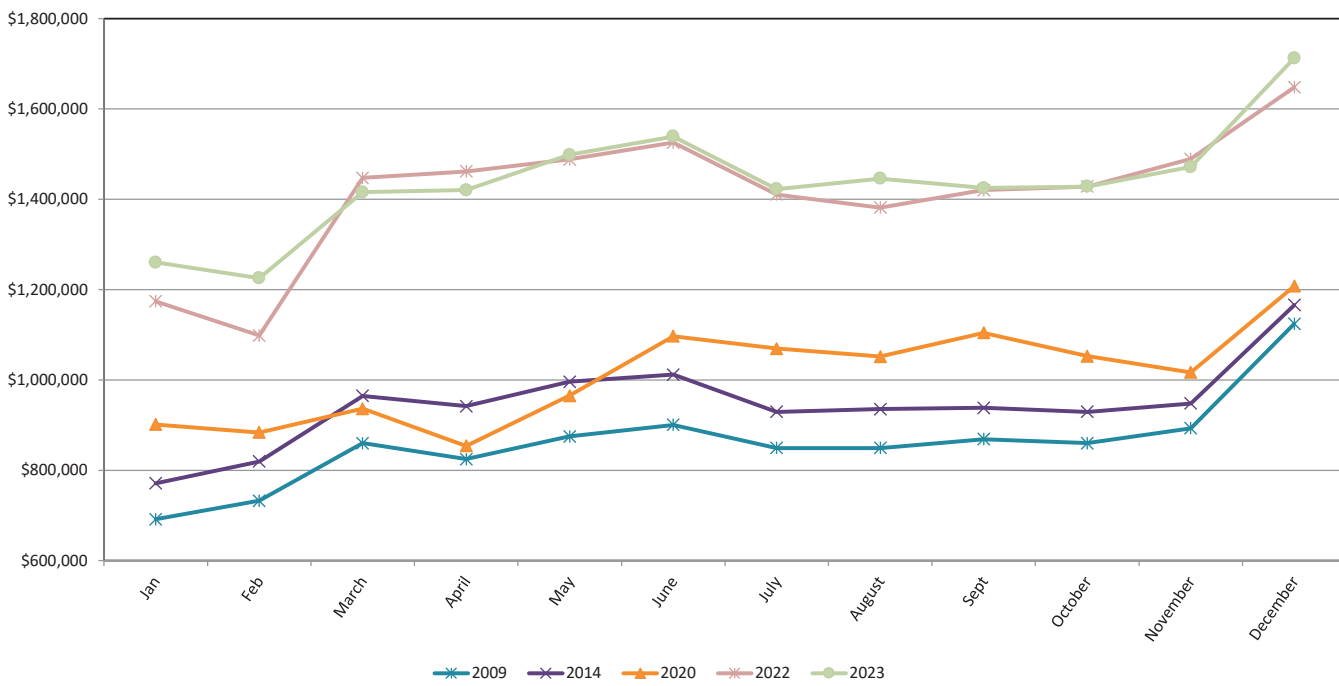
Table 2 provides additional information on the project expenditures for design, construction management, and construction.

Table 3 compares the Estimated Authorized Level Funding Needed for FY 2025 thru FY 2028, to the Estimated Available Authorized Level Funding FY 2025 thru FY 2028. As indicated, there should be sufficient funds to complete the projects by FY 2027, without the issuance of a third bond issue.

Figure 3

***Flood Prevention District Sales Tax Trends 2009-2023***

**Monthly Receipts 2009-2014-2020-2022-2023**



**Table 1**

**SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL  
STATEMENT OF REVENUES, EXPENDITURES. AND  
CHANGES IN FUND BALANCES - GOVERNMENTAL FUND  
FOR THE YEAR ENDED SEPTEMBER 30, 2023**

**REVENUES:**

District Sales Tax	\$ 17,212,730
Less: Return of Excess Sales Tax to Districts	(7,801,281)
Reimbursement – East St. Louis	76,890
Interest Income	<u>(1,017,040)</u>

**Total Revenues** \$ 10,505,379

**EXPENDITURES:**

Current:

General and Administrative	\$ 287,711
Design and Construction	9,578,715
Professional Services	40,888

Debt Service:

Principal	3,845,000
Interest	5,704,731

**Total Expenditures** \$ 19,457,045

**NET CHANGE IN FUND BALANCE** \$ (8,951,666)

**FUND BALANCE:**

Beginning of Year	<u>\$ 32,464,534</u>
End of Year	<u><u>\$ 23,512,868</u></u>

Table 1A

**SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL  
BUDGET  
OCTOBER 1, 2024 THRU SEPTEMBER 30, 2025  
DRAFT**

	ACTUAL EXPENDITURES OCTOBER 1, 2022 THRU SEPTEMBER 30, 2023	ADOPTED BUDGET OCTOBER 1, 2023 THRU SEPTEMBER 30, 2024	PROJECTED EXPENDITURES OCTOBER 1, 2023 THRU SEPTEMBER 30, 2024	PROPOSED BUDGET OCTOBER 1, 2024 THRU SEPTEMBER 30, 2025
<b>REVENUES</b>				
Sales Tax Proceeds From Districts	\$ 17,136,192	\$ 17,284,013	17,581,276	\$ 17,844,995
Interest Income	747,917	135,000	754,471	700,000
Other Contributions			-	-
Total Revenues	\$ 17,884,109	\$ 17,419,013	\$ 18,335,747	\$ 18,544,995
<b>EXPENDITURES</b>				
Design and Construction				
Engineering Design & Construction Management	4,131,454	5,567,539	2,655,133	4,959,275
Construction	3,854,465	22,492,464	7,443,607	16,358,918
USACE Authorized Level Costs	-	500,000	334,833	500,000
Total Design and Construction	7,985,919	28,560,003	10,433,573	21,818,193
Professional Services				
Legal & Legislative Consulting	13,108	175,000	85,261	175,000
Financial Advisor	11,850	65,000	17,150	65,000
Bond Trustee Fee	13,669	15,000	13,500	15,000
Total Professional Services	\$ 38,627	\$ 255,000	\$ 115,911	\$ 255,000
Refund of Surplus Funds to County FPD Accounts				
Total Refund of Surplus Funds to County	\$ 6,836,910	\$ 3,000,000	3,512,976	\$ 3,000,000
Debt Service				
Principal and Interest	9,549,731	9,623,731	9,623,731	9,707,081
Total Debt Service	\$ 9,549,731	\$ 9,623,731	\$ 9,623,731	\$ 9,707,081
Total Design & Construction Expenses	\$ 24,411,187	\$ 41,438,734	\$ 23,686,191	\$ 34,780,274
General and Administrative Costs				
Salaries, Benefits	213,657	246,000	265,032	280,000
Bank Service Charges	547	1,000	593	1,000
Equipment and Software	975	2,000	2,120	2,000
Fiscal Agency Services	36,532	40,000	38,582	42,000
Audit Services	18,500	21,000	19,950	22,000
Meeting Expenses	98	1,000	260	1,000
Postage/Delivery	344	1,000	294	1,000
Printing/Photocopies	1,775	2,000	1,884	2,000
Professional Services	1,711	12,000	5,770	12,000
Supplies	557	3,000	625	3,000
Telecommunications/Internet	3,565	3,000	2,295	3,000
Travel	202	5,000	343	5,000
Insurance	6,175	8,000	6,258	8,000
Total General & Administrative Costs	\$ 284,638	\$ 345,000	344,006	382,000
Total Expenditures	\$ 24,695,825	\$ 41,783,734	\$ 24,030,197	35,162,274
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	\$ (6,811,716)	\$ (24,364,721)	\$ (5,694,450)	\$ (16,617,279)
OTHER FINANCING SOURCES				
Proceeds From Borrowing	-	-	\$ -	\$ -
NET CHANGE IN FUND BALANCE	\$ (6,811,716)	\$ (24,364,721)	\$ (5,694,450)	\$ (16,617,279)

PROJECTED FUND BALANCE SEPTEMBER 30, 2024 \$63,393,037

PROJECTED FUND BALANCE SEPTEMBER 30, 2025 \$46,775,758



**Table 2**  
**Estimated Project Expenditures 10.1.2024 -9.30.2025**

<b>Design &amp; Construction Management</b>		<b>FY 2025</b>
<b>Engineering Design</b>		
<i>W. O. #1 Program Mgmt.</i>		\$180,000
<i>W. O. #3 Preconstruction Activities</i>		\$15,000
<i>W. O. #3 Flood Activities</i>		\$15,000
<b>Authorized Level Work Orders</b>		
<i>W.O. #13 Wood River Field &amp; Design BP #8, BP #9, &amp; BP #10</i>		\$451,693
<i>W.O. #14 MESD Field &amp; Design</i>		\$416,942
<i>W.O. #16 Prairie Du Pont/Fish Lake Field &amp; Design</i>		\$1,309,770
<i>W.O. #18 MESD Deep Cutoff Wall Utility/Easement Assistance</i>		\$88,280
<i>W.O. #19 Wood River LERRD's</i>		\$84,523
<i>PDP/FL LERRD'S</i>		\$50,000
<i>Illinois DNR Fees</i>		\$3,000
<b>Construction Management.</b>		
<i>W. O. #? Construction Management BP #9, BP #11, BP15 &amp; BP #18A</i>		\$2,345,067
<b>TOTAL ENGINEERING DESIGN &amp; CONSTRUCTION MGMT.</b>		<b>\$4,959,275</b>
<b>Construction</b>		
<i>Bid Package #9 - WOOD RIVER</i>		
<i>Bid Package #11 - MESD</i>		\$3,000,538
<i>Bid Package #18A- MESD</i>		
<i>Bid Package #15 - PDP/FL</i>		\$7,507,569
<i>Contingency (10% FPD Construction)</i>		\$1,050,811
<i>Utilities</i>		\$200,000
<i>Property Acquisition Authorized Level - Wood River</i>		\$200,000
<i>Property Acquisition Authorized Level - East St. Louis</i>		\$1,000,000
<i>Property Acquisition Authorized Level - Prairie Du Pont/Fish Lake</i>		\$1,000,000
<i>Wetland Mitigation</i>		\$600,000
<i>HazMat Mitigation</i>		\$1,500,000
<i>Legal</i>		\$300,000
<i>Corps of Engineers Authorized Level Costs</i>		\$500,000
<b>TOTAL CONSTRUCTION</b>		<b>\$16,858,918</b>
<b>TOTAL ENGINEERING DESIGN &amp; CONSTRUCTION</b>		<b>\$21,818,193</b>
<b>REFUND OF SURPLUS FUNDS TO COUNTY FPD ACCOUNTS</b>		<b>\$3,000,000</b>

<b>Operations &amp; Financing</b>	
<i>General &amp; Administrative</i>	\$382,000
<i>Debt Service</i>	\$9,707,081
<i>Professional Services</i>	
<i>Legal</i>	\$175,000
<i>Financial Advisor</i>	\$65,000
<i>Bond Trustee</i>	\$15,000
<b>TOTAL OPERATIONS</b>	<b>\$10,344,081</b>
<b>TOTAL EXPENSES</b>	<b>\$35,162,274</b>

**Table 3**

***Estimated Authorized Level Expenses FY 2025 to FY2028***

	<b>WITH ALL WSP 10%-20% CONTINGENCIES</b>
<i>Bid Package #11- MESD</i>	\$3,000,538
<i>Bid Package #18A- MESD</i>	\$5,500,000
<i>Bid Package # 9 - WOOD RIVER</i>	\$2,360,000
<i>Wood River WIK Cash</i>	\$3,000,000
<i>Bid Package #15 - PDP/FL</i>	\$12,800,000
<i>Bid Package #16 - PDP/FL</i>	\$12,700,000
<i>Bid Package #17 - PDP/FL</i>	\$14,800,000
<i>Engineering Design &amp; Construction Management</i>	\$10,530,201
<i>Construction Contingencies, Utilities, Property Acquisitions, Etc.</i>	\$13,016,054
<i>General &amp; Administrative and Professional Services</i>	\$2,478,000
<b>CURRENT ESTIMATED AUTHORIZED FUNDING NEEDED</b>	<b>\$80,184,793</b>

***Estimated Available Authorized Level Funding FY2025 to FY2028***

<i>Cash &amp; 2015 Bond Project Funds (9/30/2024)</i>	\$33,544,217
<i>County FPD Tax Funds (9/30/2024)</i>	\$29,468,840
<i>Additional Sales Tax Revenue After Debt Service</i>	\$33,695,552
<i>Interest</i>	\$1,345,000
<b>Available Funding</b>	<b>\$98,053,609</b>
<b>Current Estimated Balance on 9/30/2028</b>	<b>\$17,868,816</b>

## V. FEMA Certification Construction Costs

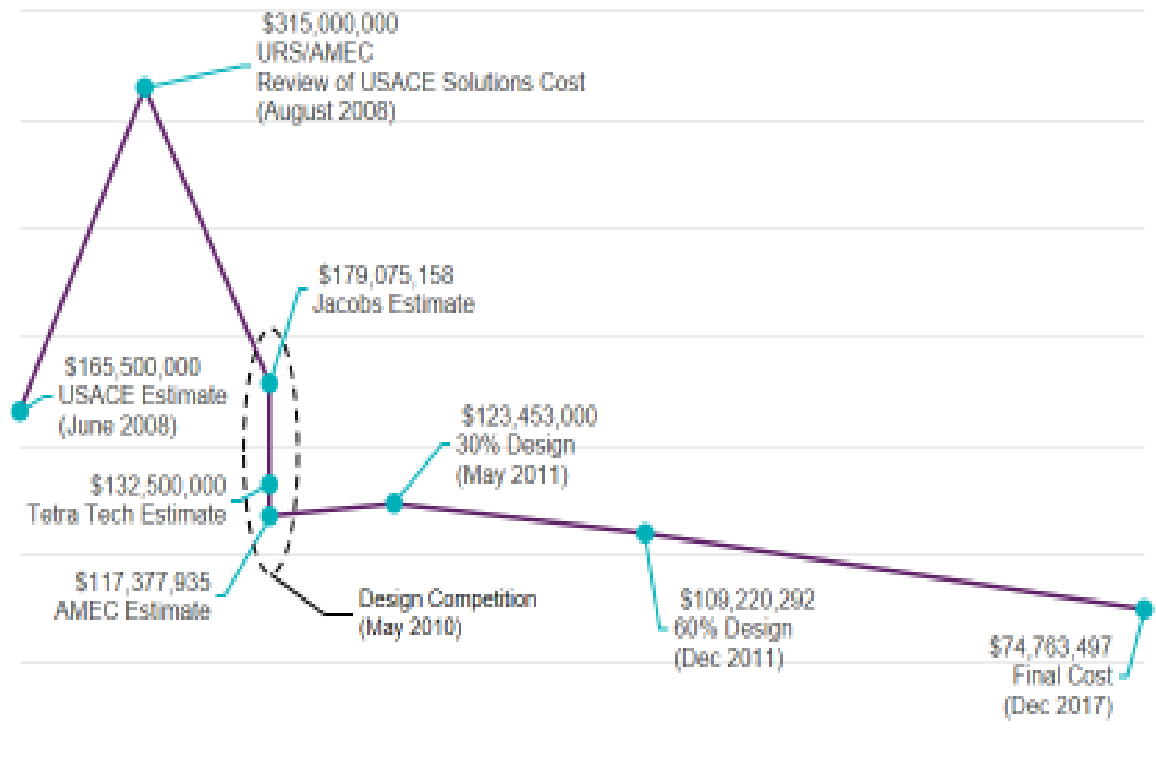
### Southwestern Illinois Flood Prevention District Council FEMA Certification Levee Improvement Projects

BID PACKAGE	LOCATION/PROJECT	CONTRACTOR	CONSTRUCTION COST
1	Gravity Drain & Toe Rehabilitation	Noeth Excavating	\$133,641.00
2A	Fish Lake 1 Pump Station	Korte & Luitjohan	\$797,599.53
2B	Prairie DuPont, MESD, and Wood River 5 Pump Stations	Korte & Luitjohan	\$5,346,710.92
2C	MESD Site 12 Force Mains	Haier Plumbing	\$311,692.00
3	Wood River Blanket Drains, Earth Fill, Relief Wells, Seepage Berms, Piping, Weirs	Keller Construction	\$12,922,903.94
4	MESD 1 Pump Station, Clay Cap, Piping, RWs	Haier Plumbing	\$6,398,834.40
5	MESD Clay Cap, Earth Fill, Piping, Relief Wells Rip Rap, Sluice Gate Rehabs	Keller Construction	\$14,420,883.71
6	Prairie DuPont & Fish Lake Clay Cap, Seepage Berms, Piping, Relief Wells, Sluice Gate Rehabs	Lane Construction	\$15,436,257.14
7A	Upper Wood River Shallow Cutoff Wall	Kamadulski Excavating	\$3,375,350.25
7B	Lower Wood River Deep Cutoff Wall	TREVIICOS	\$14,919,724.29
5A	East St. Louis 126 Inch Sewer Repair	SAK Construction	\$699,900.00
		<b>TOTAL</b>	<b>\$74,763,497.18</b>

# FEMA Certification



## History of Construction Cost Estimates



7

Exceptional design and construction management by WSP USA Environment & Infrastructure Inc. (formerly Amec Foster Wheeler Environment and Infrastructure Inc.) and excellent bids and construction by the contractors utilized has allowed the Council to complete the 100-Year Levee System Improvements underestimated costs and have significant funds available for the 500-Year Levee System Improvements.

## VI. Authorized Level Levee Improvement Projects

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The Board of Directors has approved the design of Authorized Level Projects in the Lower Wood River Levee System, the Metro East Sanitary District (MESD) Levee System, and the Prairie DuPont/Fish Lake Levee System. WSP is continuously working with the Corps of Engineers regarding the design and construction of the following Bid Packages.

### Wood River Levee System

**Bid Package 9:** When the initial plan for completing the Authorized Level Projects in the Lower Wood River Levee System was presented in June 2015, Bid Package 9 spanned from station 493+35 to 480+15 and included the design and construction of a new pump station and 18 relief wells. Some early pre-design activities were carried out by WSP under the proposed bid package number. Since the original plan in 2015, coordination among USACE and the FPD Council has resulted in the Corps completing all the improvements necessary between 493+35 and 480+15, rendering the FPD Council Bid Package number of “9” dormant/unused.

In spring 2020, as part of the FPD Council’s LERRDs work for the Corps’ Canal Road Pump Station Project and Relief Well Package No. 3, the Village of Roxanna was approached about obtaining easement for USACE-designed relief well/pump station solution to levee underseepage. Between 511+00 and 538+00. The Village of Roxanna was apprehensive about granting an easement, due to the presence of their water wells adjacent to the proposed relief wells. Throughout spring 2020 to fall of 2021, numerous meetings were held among the FPD Council, USACE, WSP, and the Wood River Drainage and Levee District. On September 17, 2021, the Village of Roxanna and the Wood River Drainage and Levee District executed an intergovernmental agreement stating that the Village would grant an easement to the Wood River Drainage and Levee District if a seepage berm and detention basin were used in lieu of the relief well/pump station. (Prior to this agreement, WSP and USACE had confirmed that a seepage berm—in lieu of relief wells—was feasible.)

On November 22, 2021, the FPD Council sent a letter to USACE requesting authorization to complete the design for the seepage berm and detention basin alternative and that future work on the seepage berm and detention basin alternative be eligible for Work-In-Kind (WIK) credit. After this report, the FPD Council (and USACE) began referring to this seepage berm and detention basin project as Bid Package 9—effectively re-defining the then dormant Bid Package number. On February 13, 2023, the Corps issued an

Engineering Determination Report (EDR) concurring that the seepage berm alternative was the “most economical means to advance the project to the required level of flood risk reduction.”

Since the 2016 Integral Determination Report (IDR) did not identify seepage berms between 511+00 and 538+00 as an aspect of work eligible for Work-In-Kind (WIK) credit for the FPD Council, a new IDR (or an amendment) is necessary before the FPD Council’s work on Bid Package 9 can be considered eligible for WIK. (The IDR is the document that defines specifically what work is eligible for WIK.) A new IDR was approved on February 13, 2024, and includes the scope of work necessary to complete Bid Package 9. Following approval of the IDR, an amendment to the Project Partnership Agreement (PPA) is now necessary, to reference the new/amended IDR. The Corps of Engineers has been in the process of amending the PPA since February 2024 and approval is expected in August 2024. The PPA is the final document needed before WSP can begin design of Bid Package 9.

Bid Package 9 is currently planned to span the Lower Wood River Levee from Station 511+00 to 538+00. This is near Canal Road and IL-111 in South Roxanna. This package is expected to include a seepage berm, detention area, and gravity drain extension.

Estimated Construction Cost \$2,360,000

**Bid Package 10:** When the initial plan for completing the Authorized Level Projects in the Lower Wood River Levee System was presented in June 2015, Bid Package 10 spanned from station 530+50 to 630+30 and included the design and construction of a new pump station, 36 relief wells, two seepage berms and some landside fill. Some early pre-design activities were carried out by WSP under the proposed bid package number. Since the original plan in 2015, coordination among USACE and the FPD Council has resulted in the Corps completing all the improvements necessary between 530+50 and 630+30 (with the recent exception of the Bid Package 9 reach of 511+00 to 538+00), rendering the FPD Council Bid Package number of “10” dormant/unused.

After a brief period wherein bid package number 10 was “revived” for a potential project to re-route Old Wood River Creek for conveyance of relief well discharge, the package is once again dormant/unused. The project to re-route Old Wood River Creek (aka Old Channel Wood River) is not going to be completed by the FPD Council and remains a part of the USACE Relief Well Package No. 2. (The package is listed here since it was listed in the prior annual report but will be eliminated from future Annual Reports.)

Estimated Construction Cost: N/A

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

Bid Package 18A: This project was initially proposed to the Corps in a report dated June 14, 2022, which outlined the relief well flow monitoring work performed (and results obtained) by the FPD Council. The report evaluated field measured relief well flows during the 2019 Mississippi River flood, which was a 100-year flood, and used said data to estimate discharges at the Authorized Level flood event. The report identified the need for increased capacity at the Phillips Reach #2 Pump Station (station 1225+20) and new collection system piping, both to accommodate the Authorized Level relief well discharge estimates. The report also identified other measures of lesser concern.

On May 9, 2023, the Corps of Engineers issued a letter to the FPD Council agreeing that certain improvements outlined in the June 2022 report were necessary for the Authorized Level project. No change to the approved IDR or PPA were necessary prior to beginning design work and WIK credit will be awarded for eligible work on the Bid Package 18A project.

This package includes improvements to Phillips Reach #2 Pump Station, 6 new relief wells, replacing old wood stave wells, and relief well pipe system conveyance system improvements in Cahokia Heights, Illinois between 1207+00 and 1352+00. The scope is being coordinated with the Corps of Engineers. Construction is currently scheduled for 2025.

Estimated Construction Cost \$ 5,500,000

## **Prairie DuPont/ Fish Lake Levee System**

Bid Packages 15: This package spans the Prairie DuPont Levee System from station 167+65 to 299+65 and includes the abandonment of existing relief wells and the construction of new seepage berms. Design is underway and construction is anticipated to begin in early 2025.

Estimated Construction Cost \$ 12,800,000

Bid Package 16: This package spans the Prairie DuPont Levee System from station 0+00 to 550+00 and tentatively includes the abandonment of existing wells, construction of new seepage berms, new relief wells and new pumping stations. Construction is anticipated to begin at the end of 2025 or early 2026.

Estimated Construction Cost \$ 12,700,000

Bid Package 17: This package spans the Fish Levee System from station 550+00 to 691+00 and tentatively includes the abandonment of relief wells, construction of new seepage berms, new relief wells and new pumping stations. Construction is anticipated to begin early 2026.

Estimated Construction Cost \$ 14,800,000



## VII. Authorized Level Construction

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### Southwestern Illinois Flood Prevention District Council

#### Authorized Level Construction Projects Projects Completed or Under Construction

BID PACKAGE	LOCATION/PROJECT	CONTRACTOR	CONSTRUCTION COST	COMPLETION STATUS

14A	MESD Underseepage Improvements – Cutoff Trench, Riverside Blankets/Berms, Piezometers, & Placement of Fill	Keller Construction	\$950,746.86	COMPLETE
18	MESD Relief Wells, Conveyance Systems, Sluice Gates, & Modifications to Cahokia Pump Station & Pump Station Forebay	Keller Construction	\$4,763,340.84	COMPLETE
11	MESD Relief Well Construction, Abandonment & Modifications Modifications to G.C.E.D. #1X Pump Station & Madison Pump Station	Keller Construction	12,464,729.16	58.2%
		<b>TOTAL</b>	<b>\$18,178,816.86</b>	



## VIII. FEMA Certification and Mapping

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Certification reports were submitted to FEMA as each levee system was completed. Wood prepared reports for Wood River East/West Fork, Prairie DuPont/Fish Lake, and Lower Wood River.

The USACE submitted a National Flood Insurance Program (NFIP) Levee System Evaluation Reports (LSER) for the Upper Wood River Levee System, which includes the Mel Price uncontrolled underseepage area and for East St. Louis (MESD) Levee System, including the Chain of Rocks Levee.

All levee improvements leading to certification were completed by February 8, 2018.

There was concern about the timeline for the Corps of Engineers making necessary improvements to a critical stretch of levee in the Wood River area in the vicinity of the Mel Price Lock and Dam. FEMA agreed to accept the Corps' certification of that portion of the system with the Corps utilizing an Interim Operations Plan (IOP) until funding and construction of the necessary improvements was completed. The Corps of Engineers has completed the installation of all relief wells in Reach 1 & Reach 2, and the IOP has been decommissioned. The project is anticipated to be closed out in FY 2025.

### **100-Year Certification Packages Status**

#### East & West Fork Levee Systems

Originally submitted by Wood on December 5, 2016

FEMA issued a letter of continued accreditation on March 25, 2021.

#### Prairie DuPont & Fish Lake Levee Systems

Originally submitted by Wood on July 6, 2017

FEMA issued a letter of continued accreditation on November 14, 2019.

#### Lower Wood River Levee System

Originally submitted by Wood on October 17, 2017

FEMA issued a letter of continued accreditation on March 25, 2021.

#### Upper Wood River Levee System

Originally submitted by Corps of Engineers on March 10, 2017

FEMA issued a letter of continued accreditation on March 29, 2021.

East St. Louis/MESD Levee System

Corps of Engineers submitted to FEMA on August 31, 2018

FEMA issued a letter of continued accreditation on April 26, 2022.

Copies of all accreditation letters are provided in Appendix II

With improvements and accreditations being completed and received, FEMA has begun the process of issuing new maps, reflecting the completed 100-Year Level of Protection levee improvements. It is currently anticipated that FEMA will be issuing new maps later this year or in early 2025.

## IX. Work In-Kind (WIK) Credit & Lands, Easements, Rights-of-Way, Relocation, Disposal Areas (LERRDs) Credit

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The Council continues to work with the Corps of Engineers to ensure the work the Council does on the 500-Year Authorized Level of Protection Projects is eligible for Work In-Kind Credit (WIK) and Lands, Easements, Rights-of-Way, Relocation, Disposal Areas (LERRDs) Credit.

These are elaborate and multi tasked processes that can take up to three years before a project is guaranteed to be eligible for WIK or LERRDs Credit. A project is only guaranteed to be eligible if there is a properly executed Project Partnership Agreement (PPA) for the Levee System.

The Council first operated under the Memorandums of Understanding, which allowed work to be considered prior to the execution of an amended Project Partnership Agreement. The credits are only good towards the non-Federal contribution of funds for a project and will not be considered for the five percent cash requirement.

Next, an Integral Determination Report (IDR) that identified the work the Council intended to perform as In-Kind contributions in a Levee System had to be approved.

Finally, the amendments to the PPAs had to be finalized and submitted to the Corps' Mississippi Valley Division (MVD). After approval by the MVD, they were forwarded to headquarters in Washington, D.C. for approval.

On April 1, 2019, the amended Project Partnership Agreement between the Council, the Corps of Engineers, and the Metro East Sanitary District was executed. This made \$11,887,414 of work, the Council had completed, eligible for Work In-Kind Credit towards the Design Deficiency Corrections for East St. Louis, Illinois Flood Protection Project.

On July 26, 2019, the amended Project Partnership Agreement between the Council, the Corps of Engineers, and the Wood River Drainage and levee District was also executed. This made \$16,041,496 of work, the Council had completed, eligible for Work In-Kind Credit towards the Supplemental Design Deficiency Corrections for the Wood River Levee System.

The Council has submitted and received approval of \$27,985,946.76 of WIK Credit and LERRDs Credit for the Wood River Levee System. In the East St. Louis/MESD Levee System the Council has submitted and received approval of \$34,022,340.17 of WIK Credit and LERRDs Credit. Additional WIK Credit and LERRDs Credit will be submitted for both the Wood River and East St. Louis Levee Systems as work is completed.

In the Prairie DuPont/Fish Lake Levee System, the Council will operate under the Memorandum of Understanding signed in 2015 and under Section 408 authorization, which allows the Council to provide funds to the Corps of Engineers for design and construction oversight. A Project Partnership Agreement cannot be utilized, since the Corps of Engineers has determined the Prairies DuPont/Fish Lake Levee System Design Deficiency Project has a low benefit cost ratio, which prevents the Corps from obtaining funds.

The Corps of Engineers has completed a Risk Assessment Review, is trying to obtain funding for a risk informed design and continues to look for ways to improve the benefit cost ratio.

Even if a funding alternative allowing federal funding in conjunction with non-federal funding were determined, it would take years before funding would be available. Until federal funds become available, the Council will proceed with paying all project costs in the Prairie DuPont/Fish Lake Levee Systems to reduce flood risks.

The Council started the 500-Year Authorized Level design process prior to having the amended Project Partnership Agreements with the Work In-Kind Credit provision. This had a slight risk, but the risk was low, since the Council was working with the Corps and was designing and constructing projects the Corps had identified as part of the Authorized Level of Protection.

Starting the design, prior to having the Project Partnership Agreements, allowed project construction two years earlier and provided additional flood protection to the Metro-East area sooner. The first two Authorized Level Projects awarded have been completed and a third project will be completed in 2025.

The Council has satisfied the Corps' five percent cash requirement for the East St. Louis and Wood River Design Deficiency Corrections Projects. Funds continue to be budgeted for the Corps of Engineers' oversight of the Prairie Du Pont/Fish Lake design and construction, if needed.

## X. Conclusions, Issues and Next Steps

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Tremendous progress has been made in the fifteen years that the Council has been in existence towards the regional goal of maintaining an elevated level of flood protection for the American Bottom area. Doing so is a regional priority, and the Council has acted with a profound sense of urgency, commitment, and cooperation in providing major improvements to the flood protection system. That process reached two important milestones 1) in February 2018, the completion of all the 100-Year Level of Protection Projects and 2) in April 2022 total FEMA accreditation.

With the interim goal of achieving FEMA accreditations, the process of achieving the long-term goal of 500-Year Authorized Level of Protection is well on its way. The Council's intent has been expressed by resolution (Appendix III); action has been initiated by the authorization of the design of Authorized Level Projects in the Wood River Levee System, the Metro East Sanitary District (MESD) Levee System, and the Prairie DuPont/Fish Lake Levee System and a successful bond sale generating an additional \$77.5 million in construction funds.

There are a number of critical next steps as we continue to move forward:

- Continuing to work with levee districts to establish sufficient funding for ongoing maintenance of improvements, FEMA Level Improvements – WSP has prepared Life Cycle Costs for each of the Levee Systems.
- Continue to identify the most cost effective and high priority projects in the Wood River and MESD Levee Systems as the Corps of Engineers completes its Risk Assessment & Supplemental Report for Wood River and utilizes the Risk Informed Design Process for the East St. Louis Design Deficiency Project
- Prioritize the Authorized Level Projects in the Prairie Du Pont/Fish Lake Levee System
- Complete the design of the 500-Year Authorized Level of Protection Projects that can be built either by the FPD or the Corps of Engineers
- Construct as many cost effective and high priority Authorized Level of Protection Projects, which qualify for Work In-Kind Credit, as possible

Mississippi River flood stages in December 2015/January 2016 (fourth highest elevation recorded) and April/May 2017 (seventh highest elevation record) delayed construction completion and pushed accreditation back.

The May/June 100-Year flood event (the second highest event on record at 46.02 ft., and the longest flood event on record at 126 days), tested the seventy-five million dollars of flood protection improvements the Council has built. However, all improvements performed as designed and the Metro East American Bottom Levees managed the event much better than ever before.

Three record flood events, in a six-year period, confirm the need for the work the Council completed for the 100-Year accreditation and will complete for the 500-Year Authorized Level of Protection.

The COVID-19 Pandemic has not affected the Council's revenues as originally projected; instead, revenues are currently increasing and should allow the Council to achieve its ultimate goal of providing the Authorized Level of Protection to the Metro-East area in 2027, almost twenty years sooner than original projected.

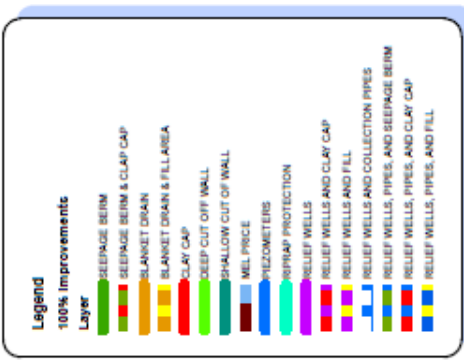
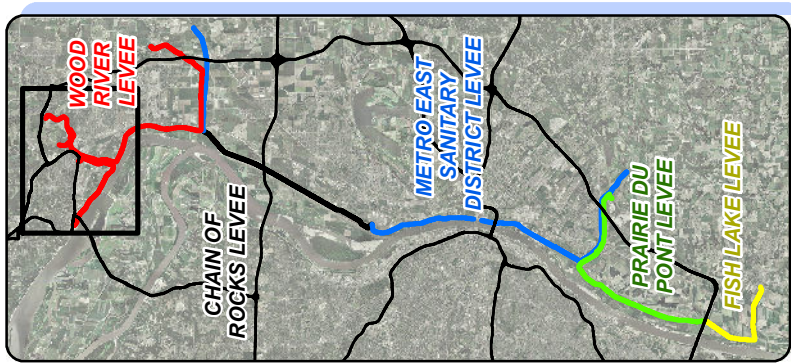
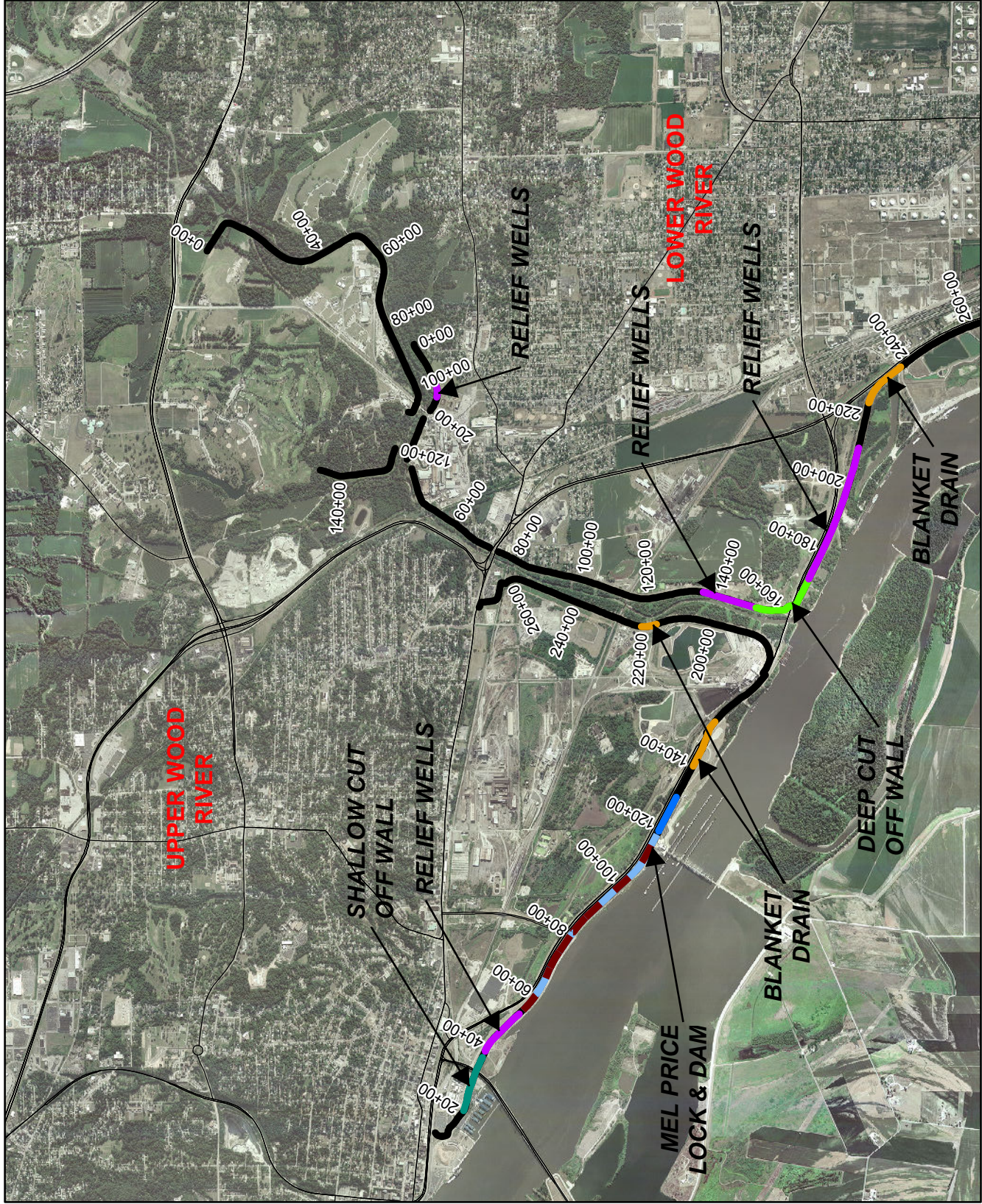


## **Appendix I**

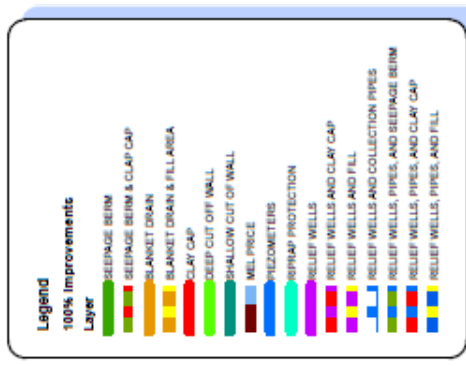
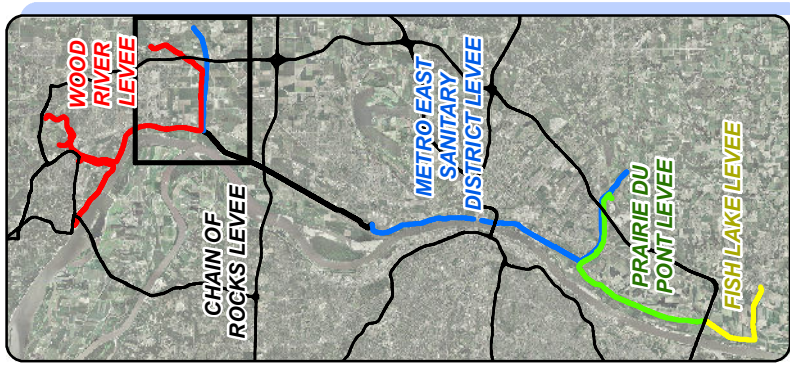
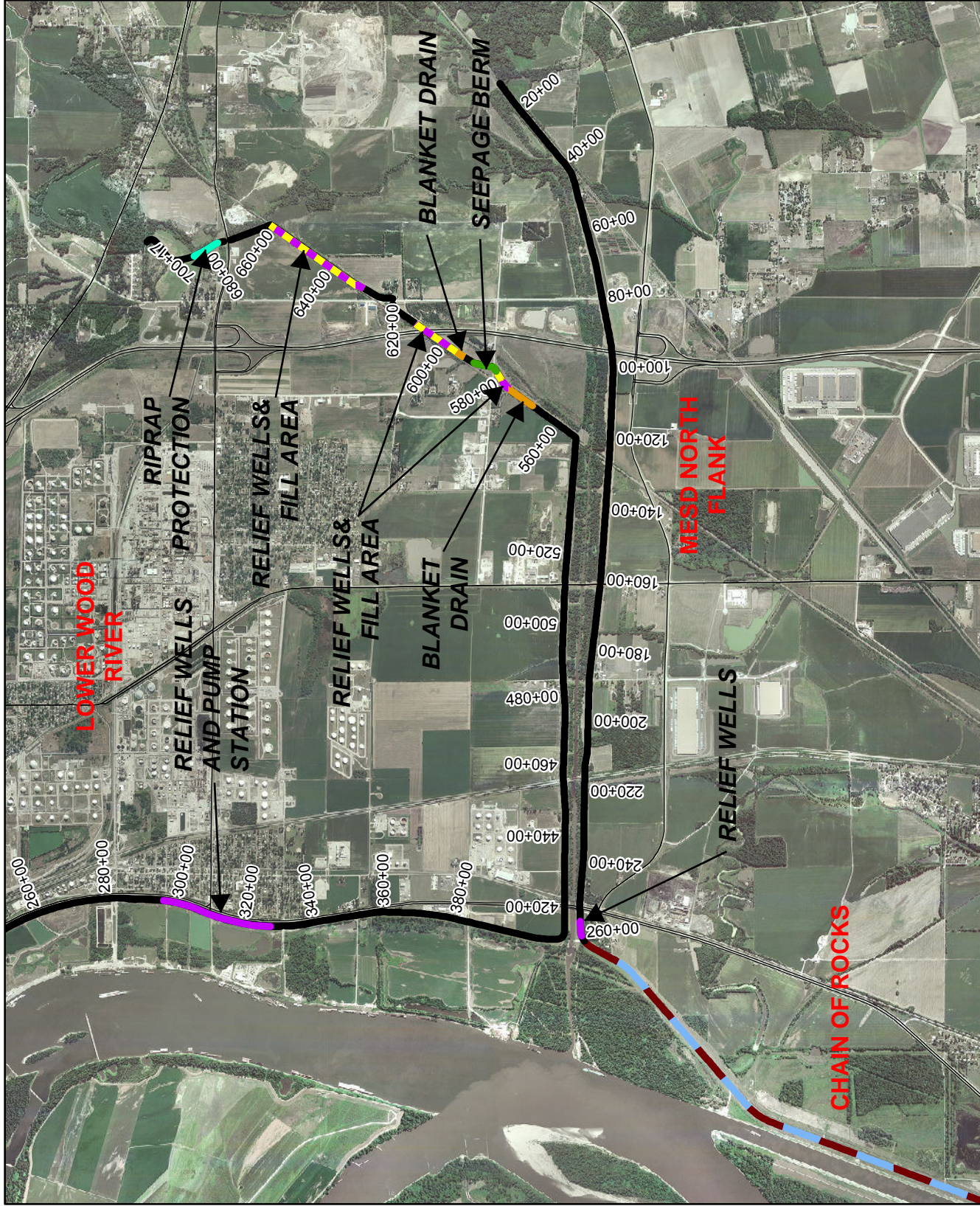
### **FEMA Certification Levee System Improvements**



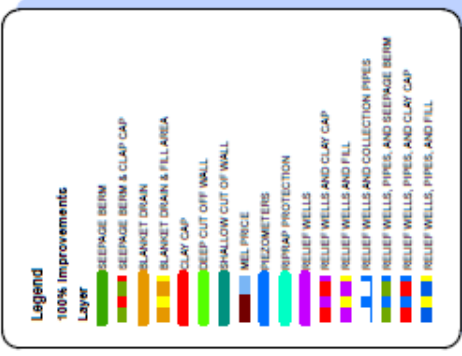
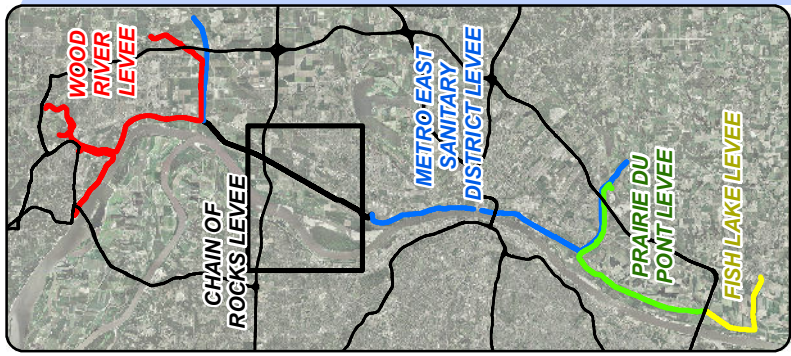
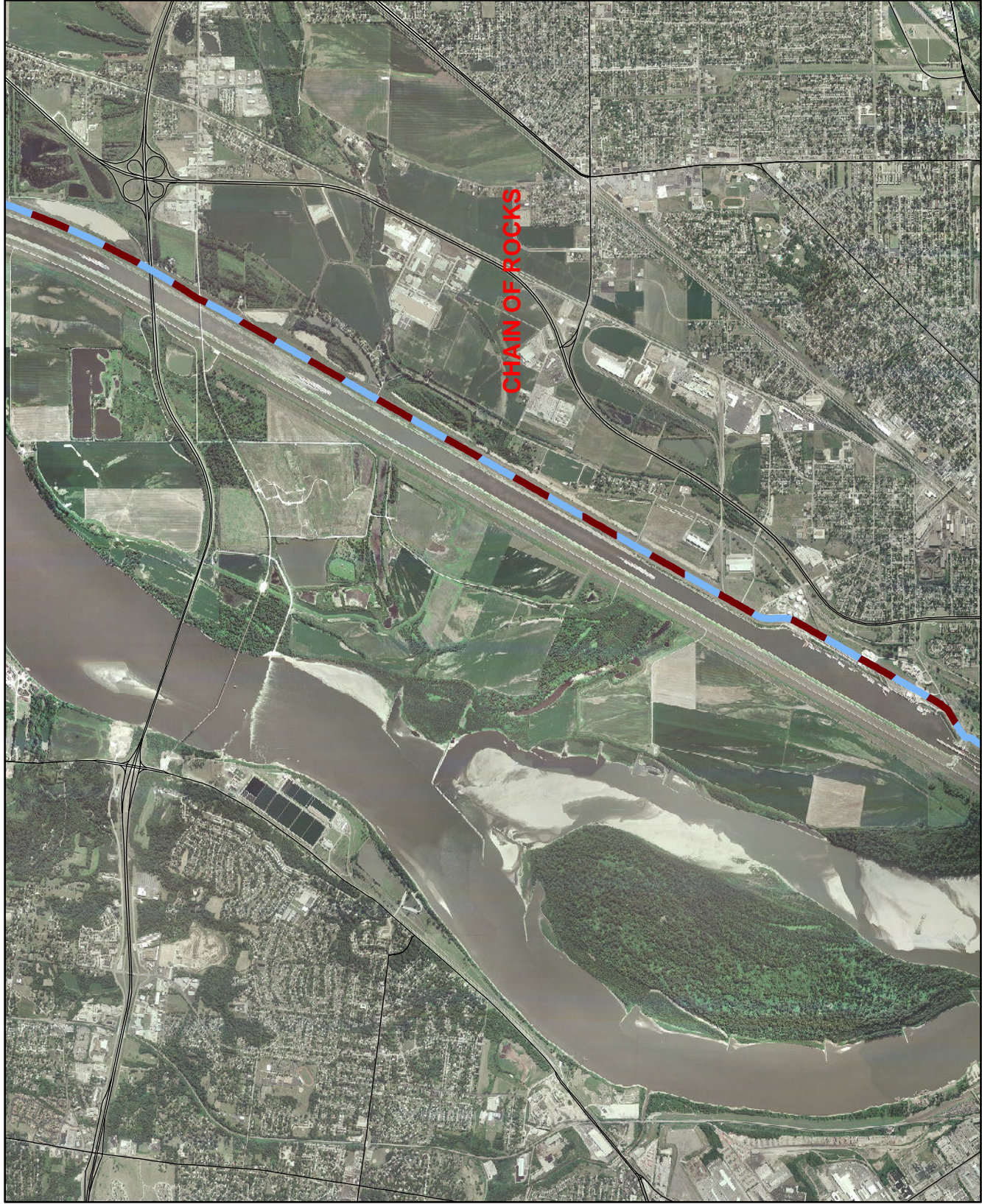




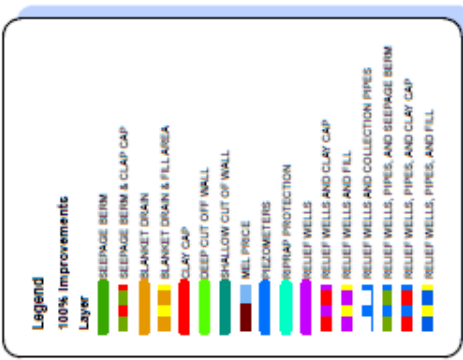
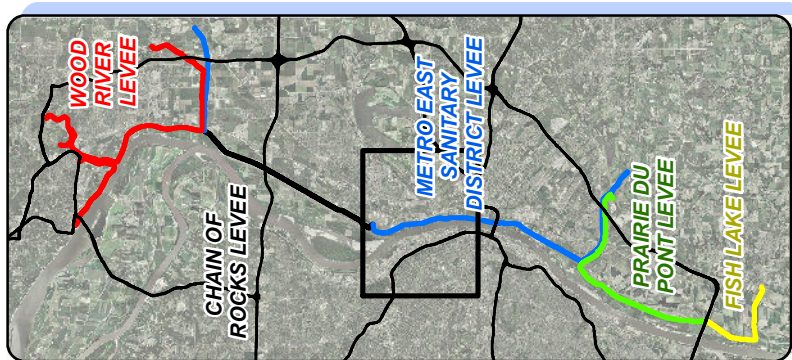
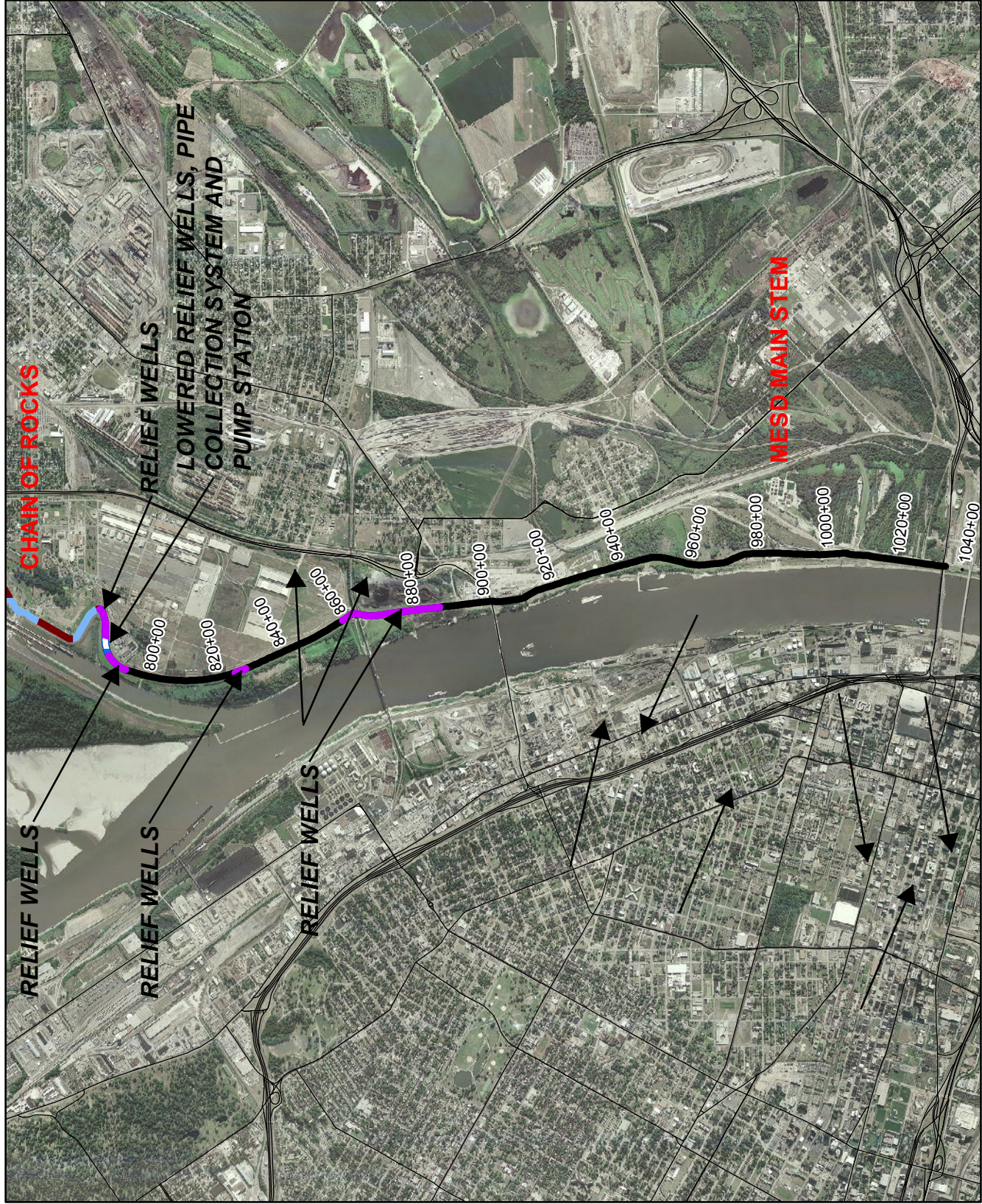




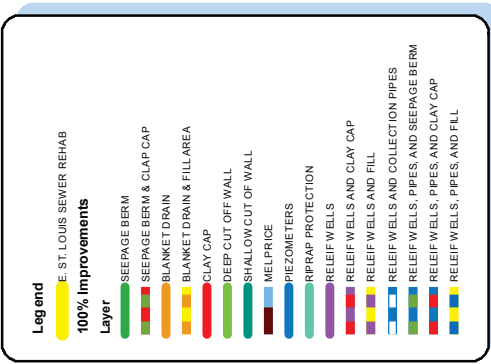
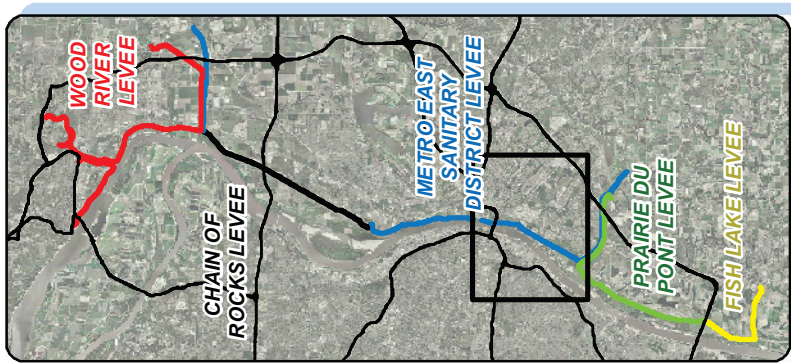
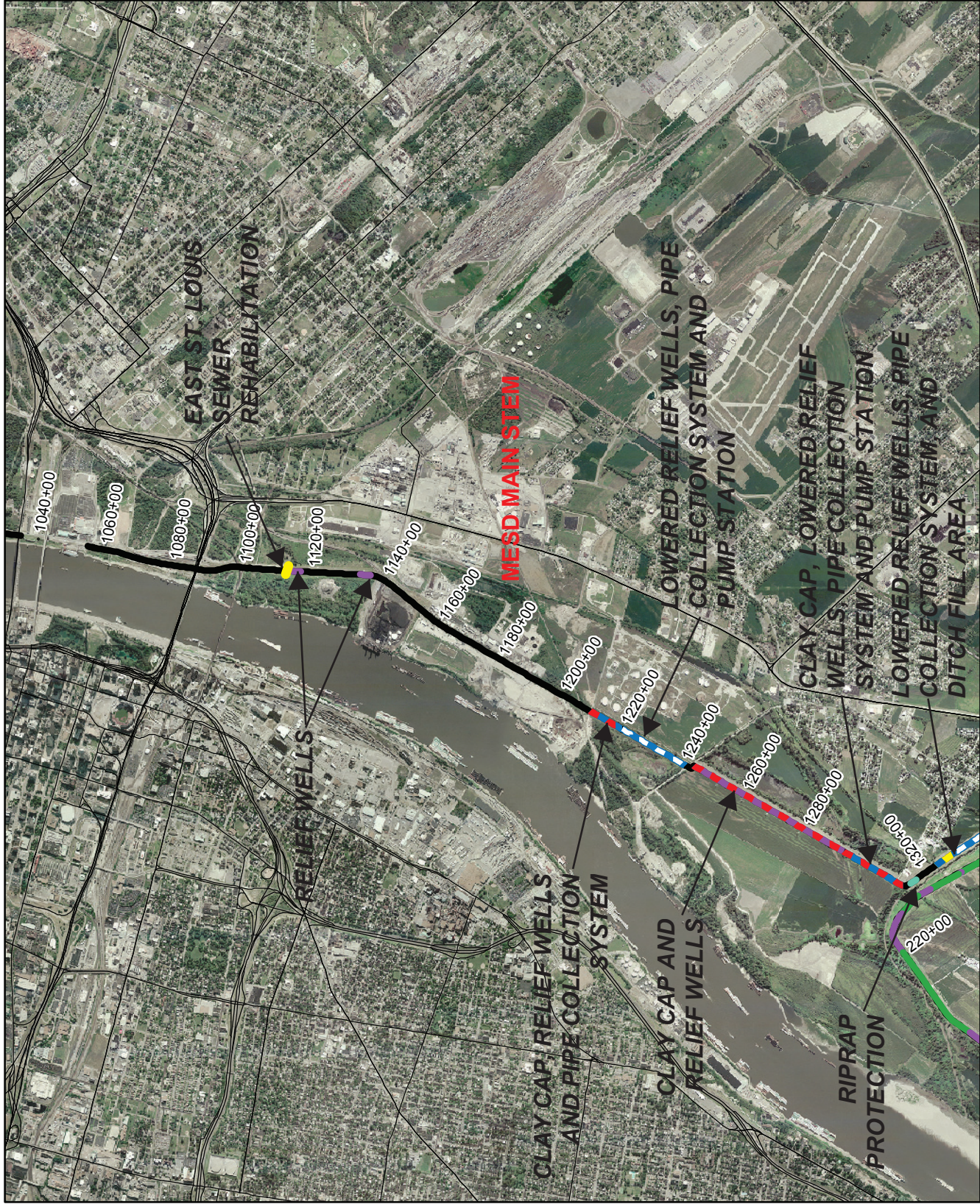




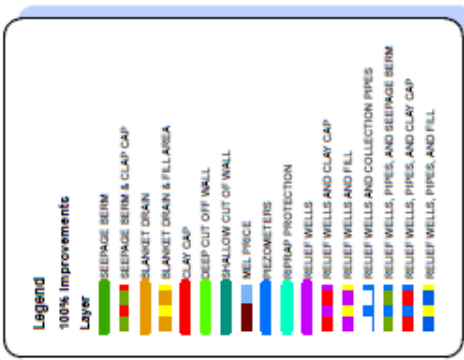
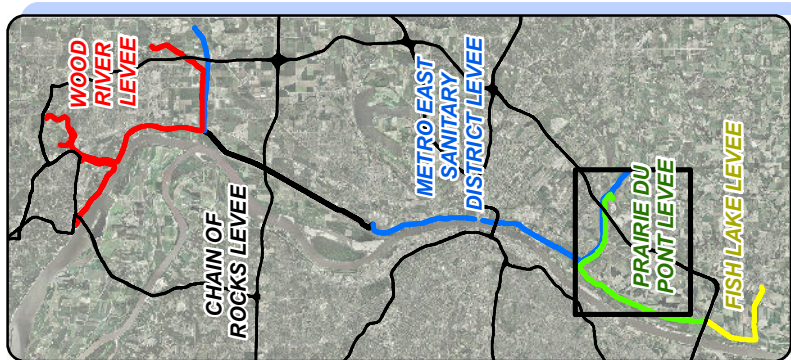
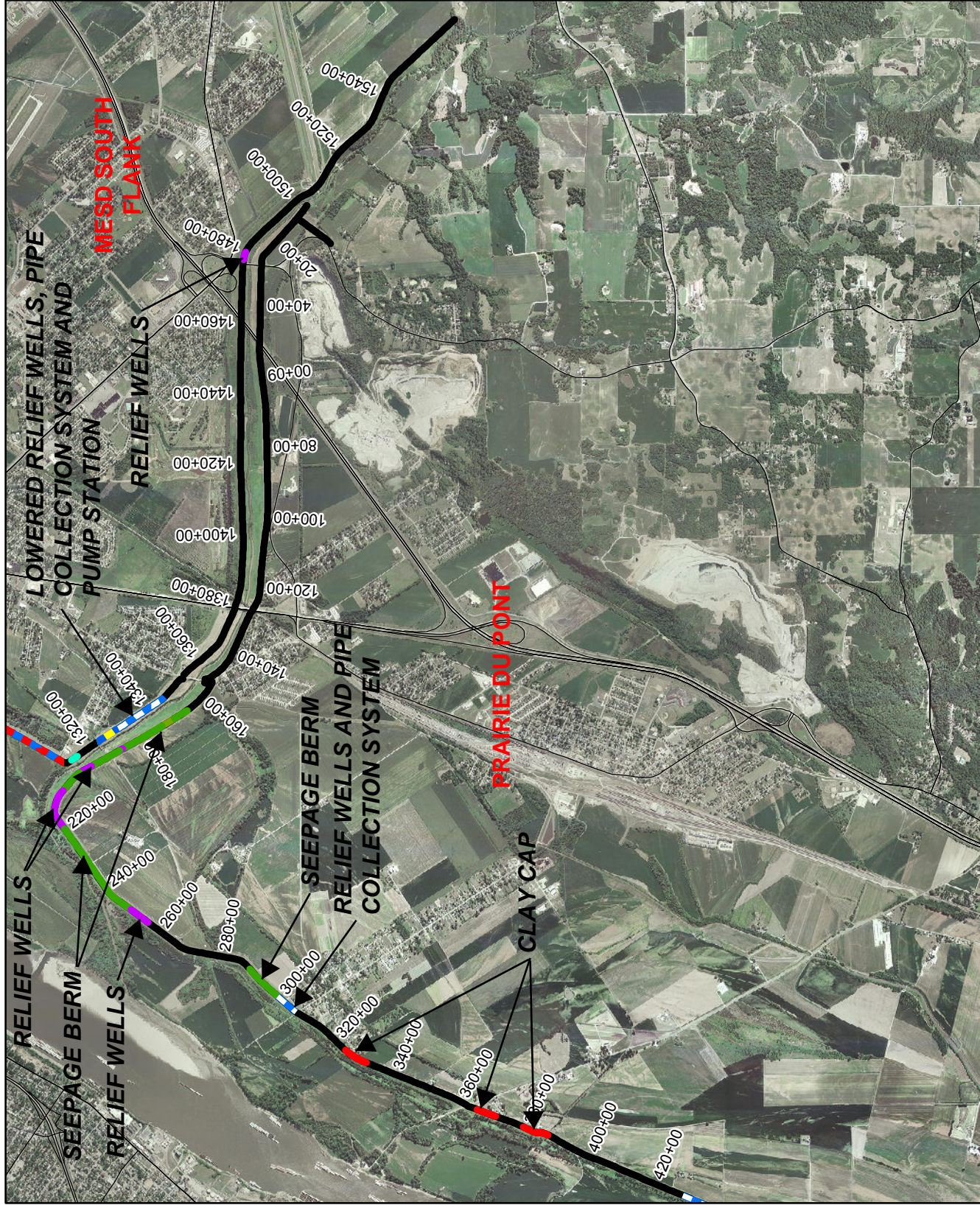




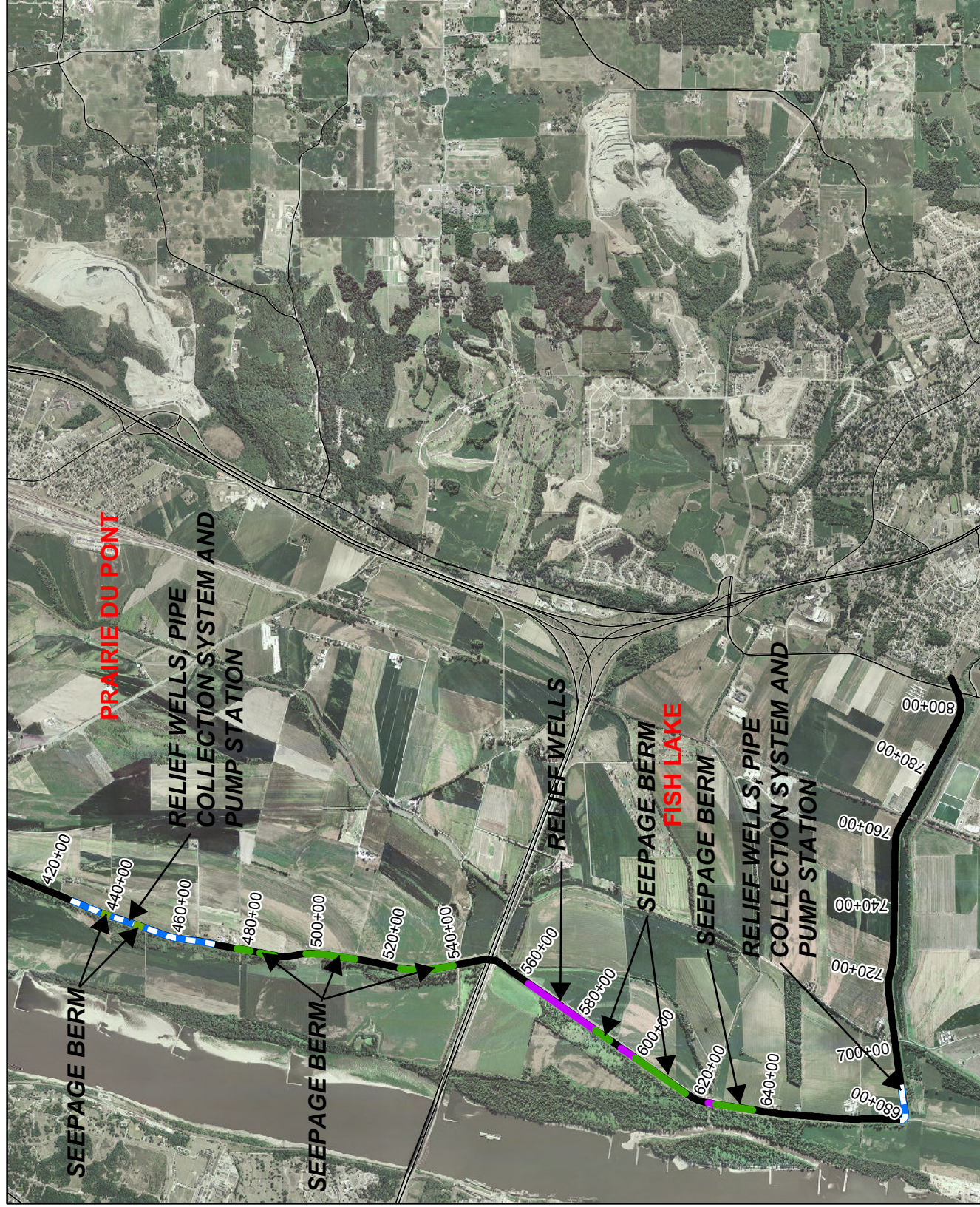
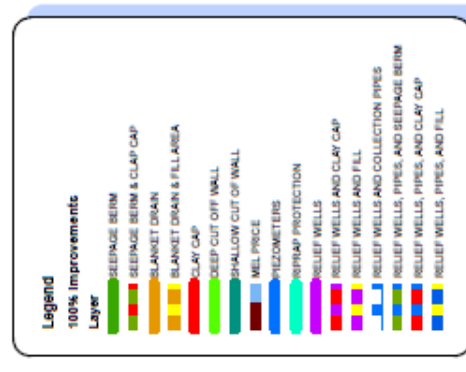
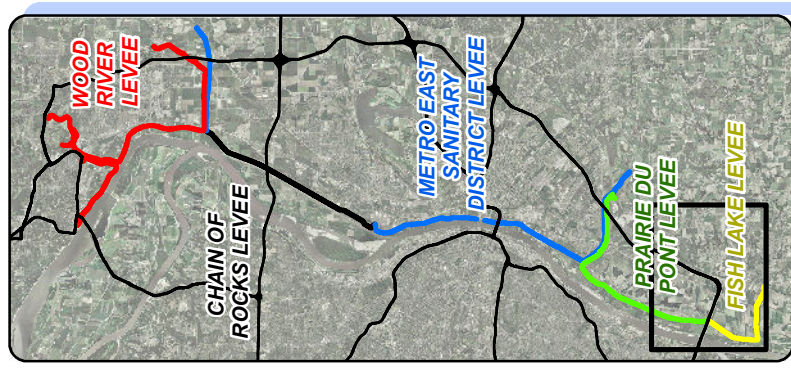
















## **Appendix II**

### **Southwestern Illinois Flood Prevention District Council**

#### **FEMA Letters of Accreditation**



U.S. Department of Homeland Security  
FEMA Region V  
536 South Clark Street, 6th Floor  
Chicago, IL 60605



**FEMA**

November 14, 2019

Michael L. Sullivan  
President, Prairie Du Pont Levee and Sanitary District  
1327 Davis St Ferry Road  
East Carondelet, IL 62240

Gary A. Stumpf  
Chief Executive Officer, Fish Lake Drainage and Levee District  
10702 Levee Road  
Columbia, IL 62236

RE: St. Clair and Monroe County, Illinois, Prairie du Pont and Fish Lake,  
Illinois Flood Protection Project Certification Documents

Dear Mr. Sullivan and Mr. Stumpf:

This letter is in reference to documents and certifications submitted to the Federal Emergency Management Agency (FEMA) by Wood Environment & Infrastructure Solutions, Inc. (Wood) to demonstrate that the Prairie du Pont and Fish Lake Flood Protection Project complies with minimum requirements of the National Flood Insurance Program (NFIP) for purposes of showing flood protection against Base (one-percent annual chance) Flood Elevations of the Mississippi River and relevant tributaries. Applicable regulations are found at Title 44 of the Code of Federal Regulations (CFR), Section 65.10 (44 CFR Section 65.10). The documents and certifications were submitted by Wood under various cover dated July 6, 2017, June 29, 2018, July 5, 2018, April 16, 2019, and July 24, 2019. This letter serves to provide notice that the submitted documentation and data have been reviewed for completeness and have been determined to meet the minimum certification criteria outlined in 44 CFR Section 65.10

Documentation and certifications from Wood per the above-referenced dates were submitted on behalf of the Prairie du Pont Levee and Sanitary District and Fish Lake Drainage and Levee District, agencies created by Illinois state law for oversight of operations and maintenance of the Prairie Du Pont Levee and Sanitary District & Fish Lake Drainage and Levee District (PDP-FL) levee system. Materials submitted by Wood substantiate that operations and maintenance plans have been adopted by the Prairie du Pont Levee and Sanitary District and Fish Lake Drainage and Levee District as required to support levee accreditation under provisions of 44 CFR Section 65.10.

These submissions, provided under the direction of the Southwestern Illinois Flood Protection District Council, were received in response to FEMA's ongoing actions to update Flood Insurance Rate Maps (FIRMs) for communities in the Counties of St. Clair and Monroe. FEMA retains the right to have conversations with the levee owner about the status of the system as an accredited levee. We also ask that you advise this office should new or updated information become available regarding loading conditions or other design or operational considerations.

While levees can help reduce the risk of flooding, it is important to remember that they do not eliminate the risk. For those living or working near levees, it is important to understand the risk, learn the facts, and be aware of steps that can be taken to reduce the risk to their families, businesses, and communities from the threat of flooding. For these reasons, FEMA encourages community leaders to continue their risk communications to help everyone understand their risk. The NFIP was created to reduce flood damages by identifying flood risks, encouraging sound community floodplain management practices, and providing flood insurance to lessen the financial impact of flood damage. Through the NFIP, property owners in participating communities are able to insure against flood losses.

The FEMA lead for this project is Ken Hinterlong. Mr. Hinterlong may be contacted by phone at (312) 408-5529, or by email at [ken.hinterlong@fema.dhs.gov](mailto:ken.hinterlong@fema.dhs.gov). Please do not hesitate to contact the Region V office if you have any questions.

Sincerely,



Mary Beth Caruso  
Director, Mitigation Division  
FEMA Region V

cc: Mr. Curtis McCall Jr., Mayor, Village of Cahokia  
Mr. Kevin Hutchinson, Mayor, City of Columbia  
Mr. Jerald Wilson, President, Village of Dupu  
Mr. Herbert Simmons, President, Village of East Carondelet  
Mr. Mike Fausz, Floodplain Coordinator, Monroe County  
Ms. Anne Markezich, NFIP Coordinator, St. Clair County  
Mr. Charles Etwert, Chief Supervisor, Southwestern Illinois Flood Prevention District Council  
Mr. Randy Cook Jr., Senior Civil Engineer, Wood Environment & Infrastructure Solutions, Inc.  
Mr. David Busse, Levee Safety Officer, Chief, Eng. and Construction Division, USACE, St. Louis District  
Ms. Rachel Lopez, Levee Safety Program Manager, USACE, St. Louis District  
Mr. Paul Osman, NFIP State Coordinator, Illinois Department of Natural Resources  
Mr. Dan Shulman, External Affairs, FEMA Region V



**FEMA**

March 25, 2021

Kevin Williams  
Executive Director, Wood River Drainage & Levee District  
543 West Madison Street  
Wood River, IL 62095

Dear Mr. Williams:

This letter is written pursuant to the compliance review performed by U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) of various levee certification documents received for the Wood River Flood Protection Project, East and West Fork Levee System in the Madison County, Illinois. These documents were prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood) and include submissions dated December 5, 2016, June 29, 2018, and December 15, 2020.

Documents submitted to FEMA included data and certifications to support accreditation of the Wood River Flood Protection Project, East and West Fork Levee System.

FEMA performed a compliance review of all data and certifications submitted and a final Certification Submission Comments sheet is enclosed. Based on FEMA's compliance review, all applicable requirements to reflect full accreditation have been met for the Wood River Flood Protection Project, East and West Fork Levee System. In response, FEMA plans to recognize the Wood River Flood Protection Project, East and West Fork Levee System as accredited on the future *Preliminary* FIRM. The flood hazard areas landward of this system will be mapped as shaded Zone X and Special Flood Hazard Area for interior drainage areas. An updated levee system accreditation note will be placed in that area of the FIRM panel. FEMA accreditation of a levee system does not guarantee that the levee will provide flood hazard reduction to properties from flooding; therefore, FEMA has included a note on related FIRM panels that overtopping, or failure of an accredited levee system is possible.

FEMA retains the right to revise these designations upon indication of changing condition of the flood hazard or the infrastructure itself. Future map updates will require the levee system to be evaluated at such time; design, construction, operation, and/or maintenance documents may be requested at any time; and deviations from this documentation could result in the levee system no longer being mapped as accredited on a future FIRM.

It is important to note that levee systems are only designed to provide a specific level of flood risk reduction. They can be overtopped or fail in larger flood events. When levee systems do fail, the consequence of failure can be catastrophic. Also, levee systems require regular maintenance and periodic upgrades to retain their level of flood risk reduction. For these reasons, FEMA

Wood River Flood Protection Project  
East and West Fork Levee System  
March 25, 2021

encourages communities that rely on levee infrastructure to be especially proactive in making property owners aware of residual risk and steps available for mitigation.

The NFIP was created to reduce flood damages by identifying flood risks, encouraging sound community floodplain management practices, and providing flood insurance to lessen the financial impact of flood damage. Through the NFIP, property owners in participating communities are able to insure against flood losses.

The FEMA lead for this Madison County map update is John Wethington. Mr. Wethington may be contacted by phone at (312) 485-5485, or by email at [john.wethington@fema.dhs.gov](mailto:john.wethington@fema.dhs.gov). Please do not hesitate to contact the Region V office if you have any questions.

Sincerely,



Mary Beth Caruso  
Director, Mitigation Division  
FEMA Region V

Enclosure

All "cc" communications delivered by electronic correspondence.

cc: Mr. Joe Silkwood, Mayor, Village of East Alton  
Mr. Brant Walker, Mayor, City of Alton  
Mr. Gary Cranmer, Director of Building and Zoning, Village of East Alton  
Mr. Vince Warlick, Director of Building and Zoning, City of Alton  
Mr. Steve Brendel, Stormwater Coordinator, Madison County  
Mr. Charles Etwert, Chief Supervisor, Southwestern Illinois Flood Prevention District Council  
Mr. Randy Cook Jr., Senior Civil Engineer, Wood Environment & Infrastructure Solutions, Inc.  
Mr. David Busse, Levee Safety Officer, Chief, Eng. and Construction Division, USACE, St. Louis District  
Ms. Rachel Lopez, Levee Safety Program Manager, USACE, St. Louis District  
Mr. Jeremy Eck, Acting Levee Safety Program Manager, USACE, St. Louis District  
Mr. Hal Graef, Project Manager, USACE, St. Louis District  
Ms. Marilyn Sucoe, Acting NFIP State Coordinator, Illinois Department of Natural Resources  
Mr. Dan Shulman, External Affairs, FEMA Region V





**FEMA**

March 25, 2021

Kevin Williams  
Executive Director, Wood River Drainage & Levee District  
543 West Madison Street  
Wood River, IL 62095

Dear Mr. Williams:

This letter is written pursuant to the compliance review performed by U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) of various levee certification documents received for the Wood River Flood Protection Project, Lower Wood River Levee System in the Madison County, Illinois. These documents were prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood) and include submissions dated October 17, 2017, July 13, 2018, and December 15, 2020.

Documents submitted to FEMA included data and certifications to support accreditation of the Wood River Flood Protection Project, Lower Wood River Levee System.

FEMA performed a compliance review of all data and certifications submitted and a final Certification Submission Comments sheet is enclosed. Based on FEMA's compliance review, all applicable requirements to reflect full accreditation have been met for the Wood River Flood Protection Project, Lower Wood River Levee System. In response, FEMA plans to recognize the Wood River Flood Protection Project, Lower Wood River Levee System as accredited on the future *Preliminary* FIRM. The flood hazard areas landward of this system will be mapped as shaded Zone X and Special Flood Hazard Area for interior drainage areas. An updated levee system accreditation note will be placed in that area of the FIRM panel. FEMA accreditation of a levee system does not guarantee that the levee will provide flood hazard reduction to properties from flooding; therefore, FEMA has included a note on related FIRM panels that overtopping, or failure of an accredited levee system is possible.

FEMA retains the right to revise these designations upon indication of changing condition of the flood hazard or the infrastructure itself. Future map updates will require the levee system to be evaluated at such time; design, construction, operation, and/or maintenance documents may be requested at any time; and deviations from this documentation could result in the levee system no longer being mapped as accredited on a future FIRM.

It is important to note that levee systems are only designed to provide a specific level of flood risk reduction. They can be overtopped or fail in larger flood events. When levee systems do fail, the consequence of failure can be catastrophic. Also, levee systems require regular maintenance and periodic upgrades to retain their level of flood risk reduction. For these reasons, FEMA

Wood River Flood Protection Project  
Lower Wood River Levee System  
March 25, 2021

encourages communities that rely on levee infrastructure to be especially proactive in making property owners aware of residual risk and steps available for mitigation.

The NFIP was created to reduce flood damages by identifying flood risks, encouraging sound community floodplain management practices, and providing flood insurance to lessen the financial impact of flood damage. Through the NFIP, property owners in participating communities are able to insure against flood losses.

The FEMA lead for this Madison County map update is John Wethington. Mr. Wethington may be contacted by phone at (312) 485-5485, or by email at [john.wethington@fema.dhs.gov](mailto:john.wethington@fema.dhs.gov). Please do not hesitate to contact the Region V office if you have any questions.

Sincerely,



Mary Beth Caruso  
Director, Mitigation Division  
FEMA Region V

Enclosure

All "cc" communications delivered by electronic correspondence.

cc: Ms. Cheryl Maguire, Mayor, City of Wood River  
Mr. Joe Silkwood, Mayor, Village of East Alton  
Mr. James Hickerson, Mayor, Village of Hartford  
Mr. Marty Reynolds, President, Village of Roxana  
Ms. Barbara Overton, Mayor, Village of South Roxana  
Mr. Steve Brendel, Stormwater Coordinator, Madison County  
Mr. Charles Etwert, Chief Supervisor, Southwestern Illinois Flood Prevention District Council  
Mr. Randy Cook Jr., Senior Civil Engineer, Wood Environment & Infrastructure Solutions, Inc.  
Mr. David Busse, Levee Safety Officer, Chief, Eng. and Construction Division, USACE, St. Louis District  
Ms. Rachel Lopez, Levee Safety Program Manager, USACE, St. Louis District  
Mr. Jeremy Eck, Acting Levee Safety Program Manager, USACE, St. Louis District  
Mr. Hal Graef, Project Manager, USACE, St. Louis District  
Ms. Marilyn Sucoe, Acting NFIP State Coordinator, Illinois Department of Natural Resources  
Mr. Dan Shulman, External Affairs, FEMA Region V



**FEMA**

March 29, 2021

David Busse  
Levee Safety Officer, Chief, Engineering and Construction Division  
U.S. Army Corps of Engineers, St. Louis District  
1222 Spruce Street  
St. Louis, MO 63103

RE: Wood River Flood Protection Project  
Upper Wood River Levee System  
Madison County, Illinois

Dear Mr. Busse:

This letter is written pursuant to the compliance review performed by U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) of the National Flood Insurance Program (NFIP) Levee System Evaluation Report (LSER) for the Wood River Flood Protection Project, Upper Levee System in the Madison County, Illinois. These documents were submitted by the St. Louis District of U.S. Army Corps of Engineers (USACE) and include submissions dated March 10, 2017 June 18, 2018, November 18, 2018, and February 9, 2021.

Documents submitted to FEMA included data and documentation to support accreditation of the Wood River Flood Protection Project, Upper Levee System.

FEMA performed a compliance review of all data and certifications submitted. Based on FEMA's compliance review, all applicable requirements to reflect full accreditation have been met for the Wood River Flood Protection Project, Upper Levee System. In response, FEMA plans to recognize the Wood River Flood Protection Project, Upper Levee System as accredited on the future *Preliminary* FIRM. The flood hazard areas landward of this system will be mapped as shaded Zone X and Special Flood Hazard Area for interior drainage areas. An updated levee system accreditation note will be placed in that area of the FIRM panel. FEMA accreditation of a levee system does not guarantee that the levee will provide flood hazard reduction to properties from flooding; therefore, FEMA has included a note on related FIRM panels that overtopping, or failure of an accredited levee system is possible.

FEMA recognizes the dedication of USACE and other levee stakeholders to address, understand, and effectively communicate the risks associated with living and working landward of the Wood River Flood Protection Project and looks forward to our continued partnership. Please be advised that if the risk associated with this levee system changes or is updated, FEMA should be notified and may update the hazard associated with this levee system.

Wood River Flood Protection Project  
Upper Levee System  
March 29, 2021

The FEMA lead for this Madison County map update is John Wethington. Mr. Wethington may be contacted by phone at (312) 408-5485, or by email at [john.wethington@fema.dhs.gov](mailto:john.wethington@fema.dhs.gov). Please do not hesitate to contact the Region V office if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Mary Beth Caruso". The signature is fluid and cursive, with the first name "Mary" and last name "Caruso" being clearly legible.

Mary Beth Caruso  
Director, Mitigation Division  
FEMA Region V

All "cc" communications delivered by electronic correspondence.

cc: Mr. Kevin Williams, Wood River Drainage & Levee District  
Mr. Joe Silkwood, Mayor, Village of East Alton  
Mr. Brant Walker, Mayor, City of Alton  
Mr. Gary Cranmer, Director of Building and Zoning, Village of East Alton  
Mr. Vince Warlick, Director of Building and Zoning, City of Alton  
Mr. Steve Brendel, Stormwater Coordinator, Madison County  
Mr. Charles Etwert, Chief Supervisor, Southwestern Illinois Flood Prevention District Council  
Mr. David Busse, Levee Safety Officer, Chief, Eng. and Construction Division, USACE, St. Louis District  
Ms. Rachel Lopez, Levee Safety Program Manager, USACE, St. Louis District  
Mr. Jeremy Eck, Acting Levee Safety Program Manager, USACE, St. Louis District  
Mr. Hal Graef, Project Manager, USACE, St. Louis District  
Ms. Tracey Kelsey, Project Manager, USACE, St. Louis District  
Ms. Marilyn Sucoe, Acting NFIP State Coordinator, Illinois Department of Natural Resources  
Mr. Dan Shulman, External Affairs, FEMA Region V



**FEMA**

April 26, 2022

Rick Fancher  
Executive Director, Metro East Sanitary District  
1800 Edison Avenue P.O. Box 1366  
Granite City, IL 62040

Dear Mr. Fancher:

This letter is written pursuant to the compliance review performed by the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) of various levee compliance documents received for the East St. Louis and Vicinity Flood Protection Project Levee System in Madison and St. Clair Counties, Illinois. The East St. Louis and Vicinity Flood Protection Project Levee System (National Levee Database System ID: 5605300001) is comprised of two segments: the Chain of Rocks East Levee segment operated and maintained by the U.S. Army Corps of Engineers (USACE), St. Louis District and the Metro East Sanitary District (MESD) segment operated and maintained by the MESD.

In April 2019, FEMA Region 5 sent a letter to the USACE, St. Louis District addressing the receipt of the Quantitative Risk Assessment and as-built plans for the East St. Louis and Vicinity Flood Protection Project Levee System submitted by the USACE, St. Louis District under 44 CFR Subsection 65.10(e). USACE recommended accreditation of the East St. Louis and Vicinity Flood Protection Project Levee System and this recommendation was accepted by FEMA.

The FEMA letter also noted that additional coordination with levee stakeholders was needed to obtain documentation to clarify 44 CFR Section 65.10(b)(6) Interior drainage and address 44 CFR Section 65.10(c) Operation plans and criteria, and 44 CFR Section 65.10(d) Maintenance plans and criteria for the East St. Louis and Vicinity Flood Protection Project Levee System.

Through additional coordination among FEMA, USACE and MESD, clarification of the interior drainage submittal was obtained during a call on December 7, 2021. MESD also submitted information to address maintenance, operation, emergency preparedness plan adoption, and certification requirements for the MESD levee segment under 44 CFR 65.10 (c) and (d) on January 14, 2022 and March 16, 2022.

FEMA performed a compliance review of all data submitted. Based on FEMA's compliance review, all applicable requirements to reflect accreditation have been met for the East St. Louis and Vicinity Flood Protection Project Levee System.

In response, FEMA plans to recognize the East St. Louis and Vicinity Flood Protection Project Levee System as accredited on the future *Preliminary* Flood Insurance Rate Map (FIRM) for Madison and St. Clair Counties, Illinois. Flood hazard areas landward of this system will be

mapped as areas of moderate flood hazard, or Zone X (shaded). Interior drainage areas will be mapped as Special Flood Hazard Area (Zone A, AO, AE, AH). An updated levee system accreditation note will be placed to designate areas of reduced flood risk due to levee on the FIRM panel(s). FEMA accreditation of a levee system does not guarantee that the levee will provide flood hazard reduction to properties from flooding; therefore, FEMA has included a note on related FIRM panels that overtopping or failure of an accredited levee system is possible.

FEMA retains the right to revise these designations upon indication of changing condition of the flood hazard or the levee infrastructure. Future map updates will require the levee system to be evaluated at such time; design, construction, operation, and/or maintenance documents may be requested at any time; and deviations from this documentation could result in the levee system no longer being mapped as accredited on a future FIRM.

It is important to note that levee systems are only designed to provide a specific level of flood risk reduction. They can be overtopped or fail in larger flood events. When levee systems do fail, the consequence of failure can be catastrophic. Also, levee systems require regular maintenance and periodic upgrades to retain their level of flood risk reduction. For these reasons, FEMA encourages communities that rely on levee infrastructure to be especially proactive in making property owners aware of residual flood risk and steps available for mitigation.

The NFIP was created to reduce flood damages by identifying flood risks, encouraging sound community floodplain management practices, and providing flood insurance to lessen the financial impact of flood damage. Through the NFIP, property owners in participating communities are able to insure against flood losses.

FEMA recognizes the dedication of MESD, USACE and other levee stakeholders to identify, communicate, and address the risks associated with living and working landward of the East St. Louis and Vicinity Flood Protection Project Levee System, and we look forward to our continued partnership. FEMA will engage with communities on next steps as *Preliminary* FIRMs are issued later this summer, and we will provide resources to better understand the relationship between levees and flood risk. The FEMA lead for the Madison and St. Clair County map updates is John Wethington. Mr. Wethington may be contacted by phone at (312) 485-5485, or by email at [john.wethington@fema.dhs.gov](mailto:john.wethington@fema.dhs.gov). Please do not hesitate to contact the Region 5 office if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Mary Beth Caruso". The signature is fluid and cursive, with a small circle at the end of the last name.

Mary Beth Caruso  
Director, Mitigation Division  
FEMA Region 5

All “cc” communications delivered by electronic correspondence.

cc:

Mr. Curtis McCall Sr, Mayor, City of Cahokia Heights  
Mr. Mitch Bair, City Manager, City of Collinsville  
Mr. Robert Eastern III, Mayor, City of East St. Louis  
Mr. Kevin Head, City Administrator, City of Edwardsville  
Mr. Mike Parkinson, Mayor, City of Granite City  
Mr. John W. Hamm III, Mayor, City of Madison  
Mr. Tyrone Echols, Mayor, City of Venice  
Ms. Vera Glasper Banks, Mayor, Village of Brooklyn  
Mr. G.W. Scott Sr, Mayor, Village of Caseyville  
Mr. Mike Suarez, Village of Fairmont City  
Mr. Jamie Bowden, Village Administrator, Village of Glen Carbon  
Mr. Bill Robertson, Mayor, Village of Harford  
Mr. Mike Pagano, Mayor, Village of Pontoon Beach  
Mr. Richard Sauget Jr, Mayor, Village of Sauget  
Ms. Barbara Overton, Mayor, Village of South Roxana  
Mr. Leonard Moore, Village of Washington Park  
Ms. Anne Markezich, St. Clair County, NFIP Coordinator  
Mr. Steve Brendel, Madison County, NFIP Coordinator  
Mr. Charles Etwert, Chief Supervisor, Southwestern Illinois Flood Prevention District Council  
Mr. Randy Cook Jr., Senior Civil Engineer, Wood Environment & Infrastructure Solutions, Inc.  
Mr. David Busse, Levee Safety Officer, Chief, Eng. and Construction Division, USACE, St. Louis District  
Ms. Tracey Kelsey, Project Manager, USACE, St. Louis District  
Ms. Amanda Goltz, Levee Safety Program Manager, USACE, St. Louis District  
Ms. Marilyn Sucoe, Acting NFIP State Coordinator, Illinois Department of Natural Resources  
Ms. Suzanne Vermeer, FEMA Headquarters  
Mr. Dan Shulman, External Affairs, FEMA Region 5





## **Appendix III**

### **Southwestern Illinois Flood Prevention District Council**

#### **Resolution Expressing the Official Intent To Restore the Federally Authorized Level of Mississippi Flood River Protection in the Metro-East**



## **Southwestern Illinois Flood Prevention District Council**

### **RESOLUTION Expressing the Official Intent To Restore the Federally Authorized Level of Mississippi Flood River Protection in the Metro-East**

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 by the end of 2015; and,

WHEREAS, the threat from the Federal Emergency Management Agency to classify the area as prone to flooding will be averted, along with the terrible economic consequences of the action; and

WHEREAS, the Council has demonstrated that the most expeditious and cost-effective approach to improve flood protection over the last several years is to use local funds to undertake critical flood protection projects; and

WHEREAS, the Council cannot continue to delay needed improvements to flood protection because of the lengthy, unpredictable, and costly design and construction process conducted by the U.S. Army Corps of Engineers; and

WHEREAS, the Corps of Engineers is unwilling to comply with local workforce policies; and

WHEREAS, dramatic progress can be made when the pace and cost of construction is determined locally; and

WHEREAS, the design and construction of projects by the FPD can move ahead rapidly and at a far lower cost than by delegating this work to the Corps of Engineers; and

WHEREAS, the FPD has available funds and availability of future federal funding is unknown; and

WHEREAS, the design and construction of projects built by the FPD using local funds may be considered for future Work In-Kind Credit by the Corps of Engineers as allowed by the use of Memoranda of Understanding, the inclusion in Integral Determination Reports, and the amendment of Project Partnership Agreements; and

WHEREAS, economic growth can be expected if the authorized level of protection is being pursued; and

WHEREAS, now is the time to initiate the restoration of the federally authorized level of flood protection in the Metro-East providing the region with a higher level of flood protection, while simultaneously completing the 100-year level projects; and

WHEREAS, the long-term goal of the FPD is to fully restore the federally authorized level of flood protection (Mississippi River elevation of 54 feet on the St. Louis gauge -- also known as the 500-Year flood).

NOW, THEREFORE, It Is Hereby Resolved by the Board of Directors of the Southwestern Illinois Flood Prevention District Council that it is the intent to restore the federally authorized 500-year level of Mississippi River flood protection through the following actions:

1. *Design.* Immediately begin the design of the most critical and cost-effective projects to restore the federally authorized level of flood protection; and

2. *Funding Strategy.* Take immediate steps to implement a funding strategy with the FPD being totally responsible for the design and the construction of flood protection (authorized level) projects. This includes using current surplus funds and judicious borrowing to maximize the available funding for capital expenditures on flood protection through the year 2020 (\$94,500,000 is currently estimated to be available), building the most cost effective and highest priority projects throughout the Counties of Madison, Monroe, and St. Clair, Illinois; and

3. *Workforce Policies.* Comply with all current FPD workforce policies to ensure fair wages and working conditions for project workers, encourage the use of local workers, and avoid any work stoppages that could delay projection completion; and

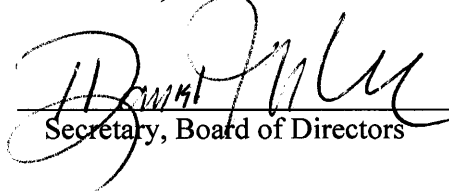
4. *Levee Districts Participation.* Seek the financial participation of each Levee District to generate additional funds to supplement FPD funding and enable additional construction; and

5. *Corps of Engineers Participation.* Notify the Corps of Engineers of the FPD's strategy and request that the Corps expedite projects that are 100% federally funded, such as the emergency design deficiency correction at the Melvin Price Locks and Dam, a project-that was identified as an emergency need six years ago, but still lacks a federally sanctioned permanent design solution and any funding for construction..

If any section, paragraph or provision of this Resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this Resolution.

This resolution was approved February 18, 2015.

  
\_\_\_\_\_  
President, Board of Directors

  
\_\_\_\_\_  
Secretary, Board of Directors

## **Appendix IV**

### **Proposed 500-Year Authorized Level Levee System Improvements**

#### **Wood River Levee System**

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

#### **Prairie DuPont/Fish Lake Levee System**



KEY MAP

LEGEND

FEATURE	LAYER
RELIEF WELLS	<span style="color: purple;">—</span>
PUMP STATION/ PUMP STATION UPGRADES	<span style="color: cyan;">□</span>
SEEPAGE BERM	<span style="color: green;">—</span>
FILL	<span style="color: orange;">—</span>
DETENTION BASIN	<span style="color: red;">—</span>
LEVEE CENTERLINE	<span style="color: black;">—</span>

SCALE	SHEET NUMBER
1"=5,000'	01
PLOT DATE	
07/24/2024	ANNUAL REPORT YEAR
2023-2024	



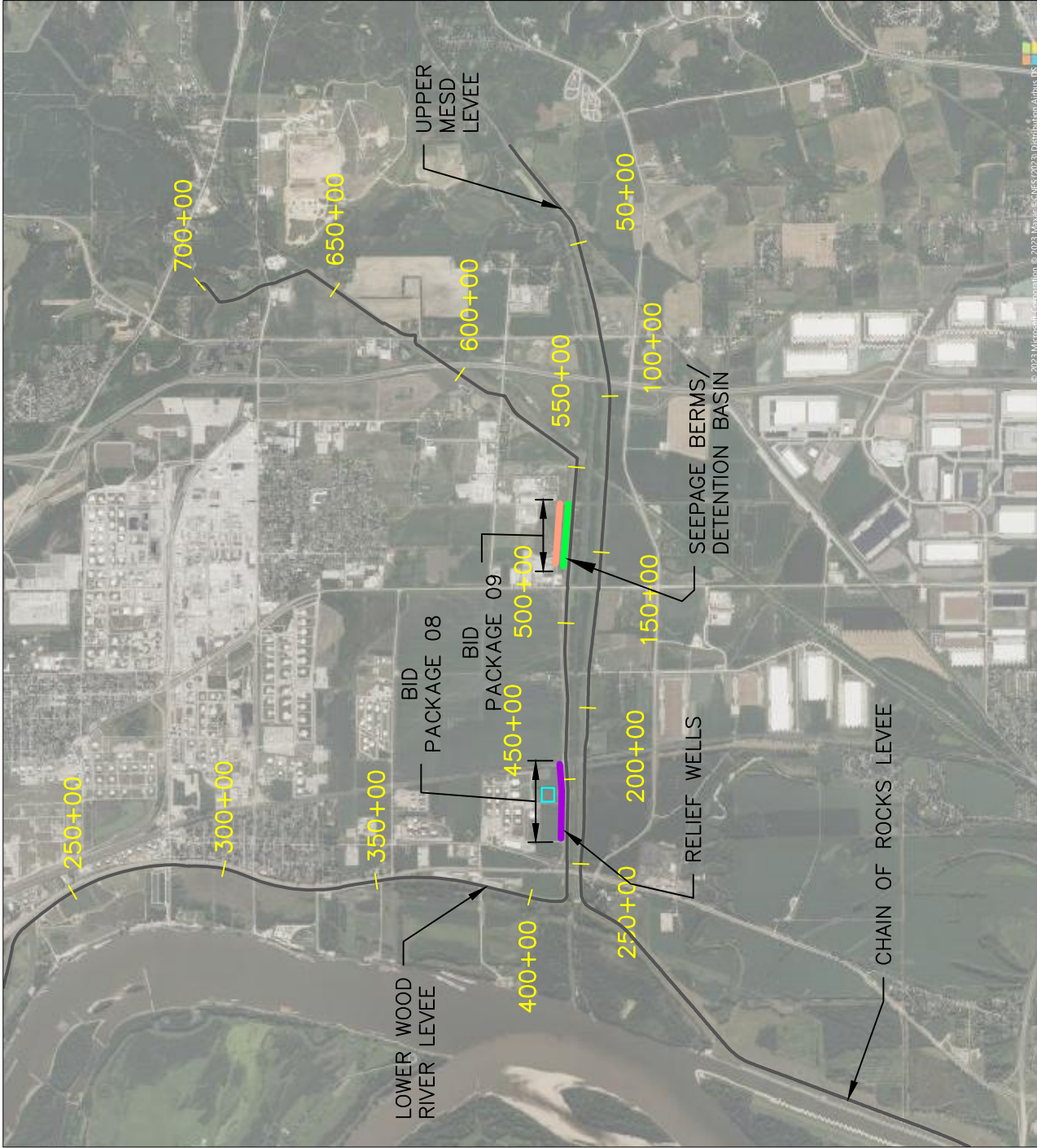


KEY MAP

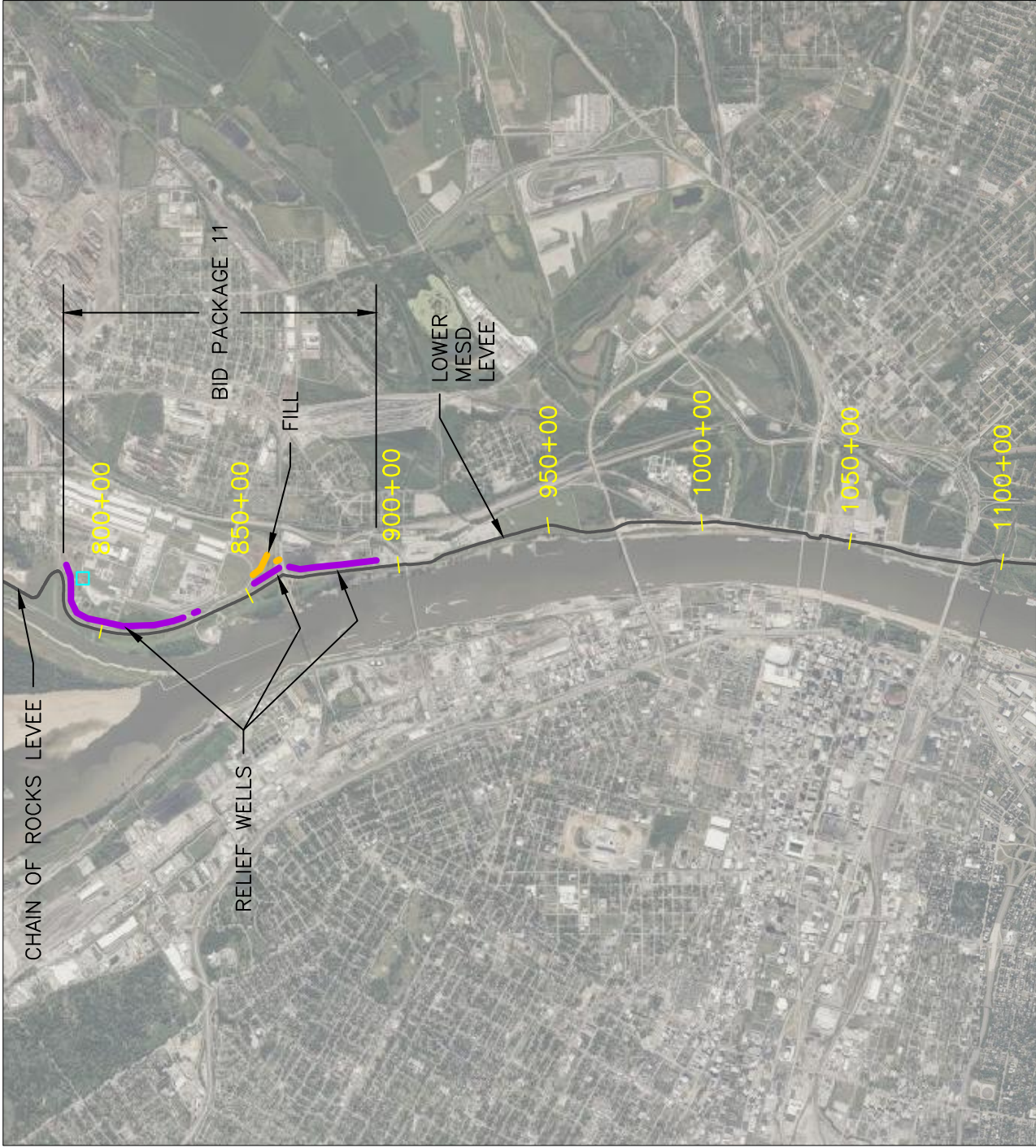
LEGEND

FEATURE	LAYER
RELIEF WELLS	
PUMP STATION/ PUMP STATION UPGRADES	
SEEPAGE BERM	
FILL	
DETENTION BASIN	
LEVEE CENTERLINE	

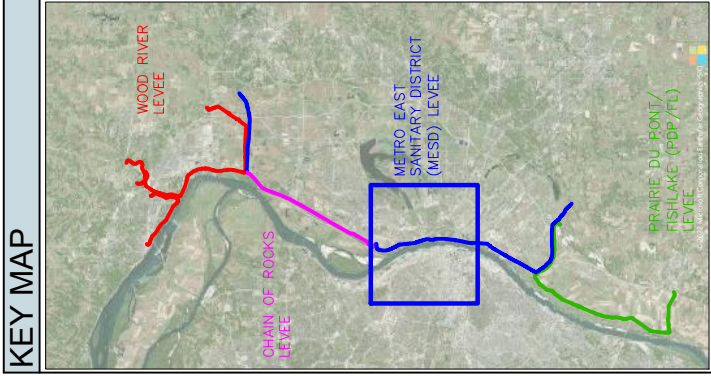
SCALE	SHEET NUMBER
1"=5,000'	02
PLOT DATE	
07/24/2024	ANNUAL REPORT YEAR
	2023-2024







# AUTHORIZED LEVEL DESIGN MESD LEVEE



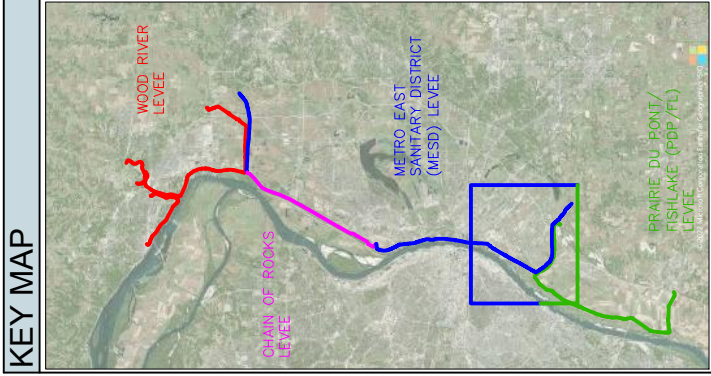
## LEGEND

FEATURE	LAYER
RELIEF WELLS	
PUMP STATION/ PUMP STATION UPGRADES	
SEEPAGE BERM	
FILL	
DETENTION BASIN	
LEVEE CENTERLINE	



SCALE	SHEET NUMBER
1"=5,000'	03
PLOT DATE	07/24/2024
ANNUAL REPORT YEAR	2023-2024





## LEGEND

### FEATURE

RELIEF WELLS

PUMP STATION/  
PUMP STATION  
UPGRADES

SEEPAGE BERM

FILL

DETENTION BASIN

LEVEE CENTERLINE

### LAYER

RELIEF WELLS

PUMP STATION/  
PUMP STATION  
UPGRADES

SEEPAGE BERM

FILL

DETENTION BASIN

LEVEE CENTERLINE



SCALE

1"=5,000'

PLOT DATE

07/24/2024

SHEET NUMBER

04

ANNUAL REPORT YEAR

2023-2024



# AUTHORIZED LEVEL DESIGN MESD LEVEE & PDP/FL LEVEE



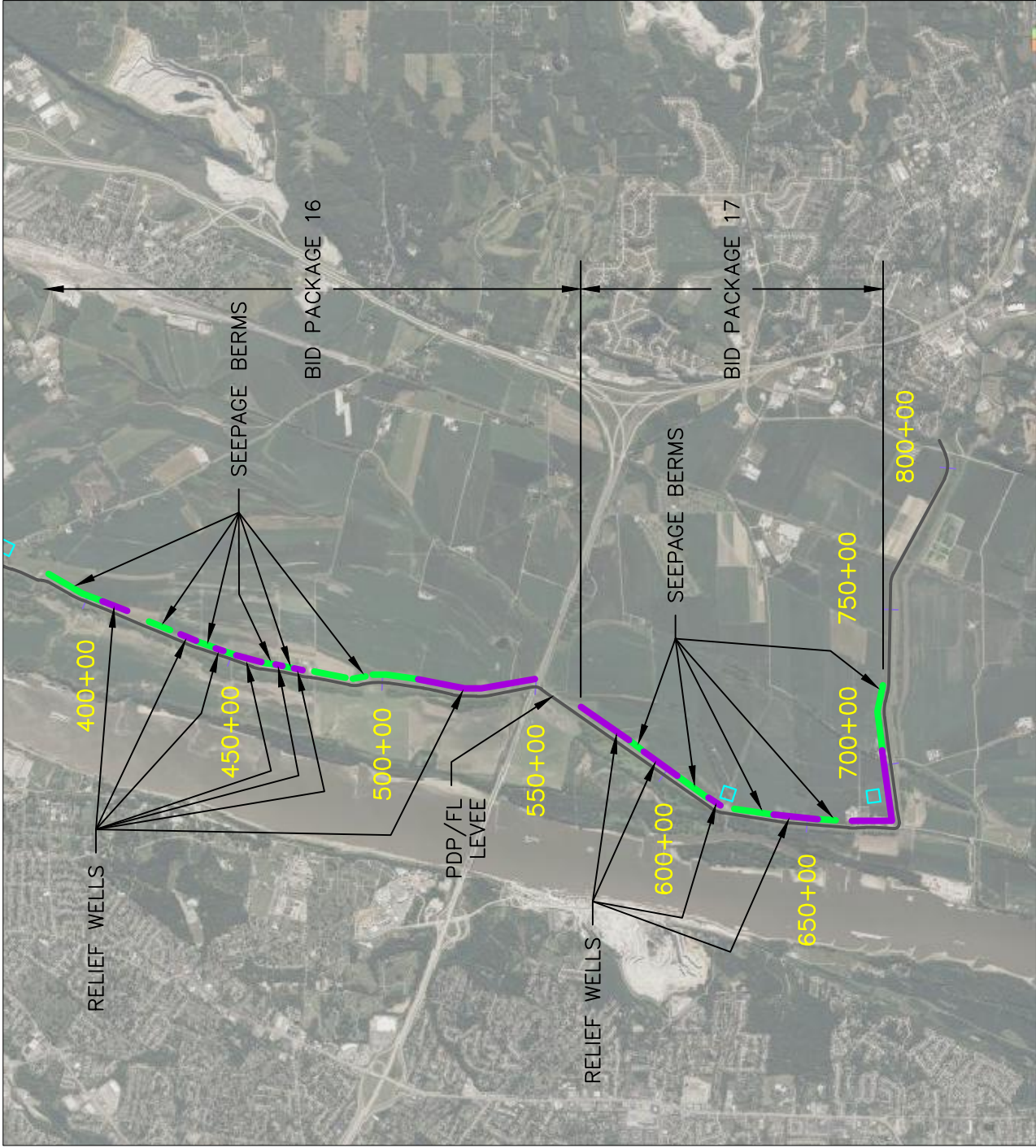


KEY MAP

LEGEND

FEATURE	LAYER
RELIEF WELLS	<span style="color: purple;">—</span>
PUMP STATION/ PUMP STATION UPGRADES	<span style="color: cyan;">□</span>
SEEPAGE BERM	<span style="color: green;">—</span>
FILL	<span style="color: orange;">—</span>
DETENTION BASIN	<span style="color: red;">—</span>
LEVEE CENTERLINE	<span style="color: black;">—</span>

SCALE	SHEET NUMBER
1"=5,000'	05
PLOT DATE	
07/24/2024	
ANNUAL REPORT YEAR	
2023-2024	



# AUTHORIZED LEVEL DESIGN

## PDP/FL LEVEE



