



Memo to: Board of Directors
From: Chuck Etwert
Subject: Program Status Report for September 2025
Date: September 17, 2025

500-Year Authorized Level Status

Wood River Levee System

Bid Package 8: This USACE construction project is complete. WSP reviewed an initial set of as-built drawings from the contractor and is currently awaiting a revised set before further review. WSP is preparing a work-in-kind (WIK) request for costs incurred for engineering services during the USACE construction of this project.

Bid Package 9: WSP is finalizing the 95% design package, which will be submitted to USACE at the end of September. A notice-to-proceed (NTP) with land acquisition and utility relocation was received from USACE on September 5. An offer for easements will be made to the Village of Roxana. As a reminder, there is a memorandum of understanding (MOU) between the Wood River Drainage and Levee District and the Village of Roxana to provide lands in support of this seepage berm project. The Village of Roxana owns and operates a buried force main that will be relocated as part of this project. Approval for that utility relocation will be sought at the FPD Council's November meeting. Lastly, tree clearing is required for this project, and the levee district has previously offered to clear the trees ahead of construction during the appropriate season (October through March). This is beneficial to the FPD Council because there is a possibility that the contractor will not mobilize prior to March, which effectively pauses the contractor until October 2026. WSP is discussing the matter with the levee district and will bring an agenda item to the November meeting if necessary.

Relief Well Package 2: Contact has been made with the potential new owner of the City of Wood River parcel at the intersection of IL-3 and IL-143. The broker's initial contact went well, but a meeting has been requested at the end of September where the project and easement request will be discussed in detail.

LERRDs: . On September 15, WSP submitted a revised LERRDs claim for credit (#2) in the amount of \$906,124.57 to USACE. Original claim was \$899,765.37.

Work In-Kind credit of \$17,739,418.51 and LERRD's credit of \$693,274.23 has been approved to date for the Wood River Levee System.

MESD Levee System

Bid Package 11: Pipe construction continues. The contractor has completed all of the pump station force main construction. A change order request for additional time is being evaluated.

Bid Package 18A: WSP is working towards the 95% complete design submittal, and the pump station is currently undergoing a re-design to accommodate the additional relief well flow discussed over the past few months.

LERRDs: Updates to the FPD Councils' LERRDs submittals to the Corps are still underway.

Work In-Kind credit of \$24,599,173.61 and LERRDs credit of \$1,607,516.56 has been approved to date for the MESD Levee System.

Prairie Du Pont/Fish Lake Levee Systems

Bid Packages 15, 16 & 17:

Over the past 5 months, WSP and USACE have been discussing various review comments and responses.

One of the most substantial comments is regarding how relief well efficiency is addressed at the design stage.

As you are aware, relief wells are 8-inch or 10-inch stainless steel pipes that penetrate deep into the ground, down to the sandy aquifer. The portion of the pipe that is in the aquifer is very finely screened and draws in the groundwater to relieve pressure buildup.

Relief wells are designed in two stages. First, well spacing is determined based, often on a single soil boring for given 330-foot reach of levee. Second, a pilot hole (boring) is drilled at the proposed location of each relief well. With that pilot hole data, the well spacing can be verified and each individual well can be designed. The individual well design determines the size of the screen and the depth into the aquifer which the well must penetrate to relieve enough pressure.

WSP has always designed individual relief wells for the FPD Council assuming that the well screen (in the aquifer) is 50% clogged. WSP has always designed the aquifer screen twice as long as it needed be when the well is brand new, since the screens slowly become clogged as the years pass.

In April 2024, during the Corps' review of the 65% Bid Package 15 design documents, the Corps commented that loss of relief well efficiency over time should be factored into the relief well analyses. In May 2024, WSP responded that loss of efficiency is accounted for by assuming 50% of the well screen is clogged, as has been the practice in all preceding projects reviewed and approved by USACE. WSP did not receive further backcheck/response to this comment in the 6 months prior to the 95% submittal in November 2024, and assumed the matter resolved.

Typically, USACE is scheduled to review FPD Council submittals and provide any comments within 30-45 days. Given that WSP's November 2024 submittal was just prior to the holidays, it was not unusual to exceed that norm; however, it was unusual to wait 5 months for comments. The first review comments to the 95% submittal were not received until April 2025.

One major comment was the resurgence of the relief well efficiency comment. The new comment was entered a few weeks after a well-known USACE engineering manual had been revised. Additionally, the Corps responded once more to the 65% comment—after nearly a year—citing the engineering manual which had just been updated in March 2025.

The March 2025 revision now includes a requirement that loss of efficiency be accounted for in the first step of the relief well design process—when spacing is being estimated (prior to pilot hole drilling). This is a new requirement that was not in the earlier version of the manual.

The manual now provides three methods for accounting for loss of well efficiency. To address the new comment, WSP revised the Bid Package 15 relief well calculations using one of the three methods, but the result was not similar to the results the other two methods would have yielded, had they been used instead; therefore, USACE is unwilling to accept the revised design.

WSP has explained that reduced well efficiency is now being calculated in both steps of the well design process, and that the revised USACE engineering manual plainly states that “it is overly conservative” to assume reduced well performance in both steps of the design process. USACE has stated that they are unwilling to close the comments related to relief well efficiency unless the well efficiency in the first step is done in a manner that they agree with. The Corps is also requiring consideration for reduced screen efficiency in the second stage of relief well design, as had always been done.

The practical implications of this change in relief well design guidance are minimal in Bid Package 15; however, Bid Packages 16 and 17 have substantially more relief wells and the design of those will require WSP to use the revised approach. WSP has long been completed with the first stage of relief well design for Bid Packages 16 and 17, and all of the pilot holes have been drilled. If the revised approach results in different relief well spacing, new pilot holes may need to be drilled. If more relief wells are deemed necessary using the new design methodology, then pump station upgrades may be required to accommodate the additional flow. WSP is working to estimate the impact of this change, but the full impact will not be known until each relief well reach is re-designed, which will delay completion of Bid Packages 16 and 17.

WSP has elevated the issue within the Corps but has been told that the Corps will not close the comments—and in turn will not issue Section 408 permission—until the well designs are revised in a manner acceptable to the reviewers at the St. Louis District.

Attached is WSP's Monthly Construction Progress Report.