

Mouse River Plan PROGRESS was developed by the Souris River Joint Board and its' partners to keep project stakeholders, constituents, and the region updated on the progress of the Mouse River Enhanced Flood Protection Project (MREFPP). The MREFPP is a basin-wide endeavor focusing on flood risk reduction along the Mouse River. The estimated \$1 billion project was initiated following the devastating 2011 flood and is anticipated to be completed in 15 years.

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## URBAN FLOOD CONTROL : CITY OF MINOT



Booster Pump Station Foundation (foreground), Storm Water Pump Station (middle ground), and Pump Discharge Chamber (background)

#### **MI-5 NORTHEAST TIEBACK LEVEE PROJECT CONTINUES**

Phase MI-5 NE Tieback Levee begins near 3rd Street NE at the eastern end of Phase MI-1. It runs east along the north property line of BNSF Railway's existing yard before tying into high ground east of 13th Street NE.

The project features of this system include concrete floodwalls, earthen levees, arterial roadway changes, a stormwater pump station, and a dry stormwater pond. The concrete floodwalls will be a similar height to the Phase MI-1 floodwalls, starting at Broadway and along the river on 4th Avenue NW, extending approximately 13 feet above the finished grade. Areas south of BNSF Railway's existing yard will be seeded after roadways are removed and this area will become a natural green space.



Construction on Phase MI-5 Northeast Tieback Levee started in the summer of 2022 with Wagner Construction as the general contractor. Work completed in 2023 includes municipal utility relocations, floodwall footing excavation and pouring, earthen embankment for levees installed, and finishing up structural foundations for the stormwater pump station, pump discharge gatewell, and various storm water structures. It is anticipated the majority of utility work will be completed this fall along Railway Avenue, as well as completing construction on the stormwater pump station building. Floodwall stem pours will start soon and is anticipated it will continue through the fall and winter. Portions of construction are anticipated to continue on the project until 2025.

Railway Avenue will remain closed to traffic from 4th Street NE to 27th Street NE through November 2023. Railway Avenue will be accessed via 13th Street NE to allow residents to travel east out of town over the winter of 2023-2024. Permanent paving will occur in the summer of 2024, which will require the closure of Railway Avenue from 13th Street NE with through traffic detouring south to Burdick Expressway. To access residential streets north of Railway Avenue the public will need to utilize 6th Avenue NE.

# URBAN FLOOD CONTROL : CITY OF MINOT

#### MI-2C WEST PETERSON COULEE

# MI 2<sub>c</sub>

Phase MI-2C, also referred to as the West Peterson Coulee Outlet, is a storm sewer project located near the West Hills Acres and West Ridge Estates

subdivisions, along Ward County Road 15 immediately west of Minot. Wagner Construction completed the installation of the 48-inch, 60inch, and 66-inch RCP storm sewer pipe in fall of 2022 despite delays in material procurement as a result of limited precast pipe suppliers in the region. The 9' x 6' precast box culvert beneath 41st Street NW and dual 60inch RCP culverts installed beneath Harmony Street were also installed last fall. Final restoration, seeding, and erosion control measures were completed in spring of 2023.

The newly installed storm sewer serves as a bypass, redirecting storm water runoff that would typically follow the ditch along the US Hwy 83 bypass around the Tierrecita Vallejo and Napa Valley levee system. The bypass allows for runoff to be directed around the City's levee system, minimizing the infrastructure required to provide interior drainage along the dry side of the levee.

### MI-7 ROOSEVELT PARK ZOO

The MI-7 Phase project is at 95% design and preparing to issue 100% design Documents. The project is currently undergoing a value engineering exercise to determine what cost-saving measures could be implemented. After all costsaving alternatives are evaluated, the design team will wrap up the design and begin the final agency approval process. мі 7

Concurrently, the architectural team is working hard on the completion of the zoo exhibit relocations. This portion of the project will see the modification to the giraffe exhibit and the relocation of several other exhibits including otters, wolves, goats and sheep, bison, and others.

Although the project will not go out to bid until this fall, we are anticipating construction activities may still begin this winter with tree clearing and the Teddy Roosevelt monument relocation. Full construction activities are expected to begin in the spring of 2024 and last for 3 years. The first year will see removal of the existing levees and construction of the northern levee. The second year will extend the floodwall through Roosevelt Park Zoo. The third year will be needed for site restoration, landscaping, and preparing the relocated portion of the zoo to be opened to the public.

#### WC-1A/B TIERRECITA VALLEJO

Construction of the two phases of the Mouse River Enhanced Flood Protection Project in the Tierrecita Vallejo neighborhood were substantially completed in fall of 2022 and final work items were wrapped up this spring with the completion of punch list items. This section of the flood control project stretches from the US Hwy 83 bypass around



the Tierrecita Vallejo neighborhood and north to Ward County Road 15. Phase WC-1A began in August of 2021, and Phase WC-1B began in the spring of 2022. Wagner Construction, Inc. secured the construction contracts for both phases.

The WC-1A phase included levee fill, seepage collection piping, storm sewer, gatewell, rip rap, and roadway restoration. The WC-1A also included the relocation of a single-family home within the Tierrecita Vallejo neighborhood. Phase WC-1B featured a seepage cutoff wall beneath the centerline of the earthen levee. The seepage cutoff wall was installed using the one pass trenching method that extended to a depth of 35'. The seepage cutoff wall was completed mid-summer 2022 and placement of levee fill was completed early in the fall of the same year. Levee fills up to 30' were required for certain sections of levee that were located in a former borrow site utilized by the NDDOT.

One of the most visible aspects of the WC-1 project is the newly constructed rock riffle which replaced the former water control structure in the Mouse River. The rock riffle was constructed in 2022 and features a series of cascading steps created with boulders that provide grade control of the river in a more natural manner.



## **MI-6 DOWNTOWN MINOT**

Phase MI-6 spans from Main Street North in the Minot downtown area and continues to the east along the railroad tracks and river past 8th Street SE. The phase ultimately ends in Roosevelt Park, where it will tie into Phase MI-7, which is also currently under design.

The project features of this phase include concrete floodwalls, earthen levees, roadway changes, utilities, a gatewell, and a stormwater pump station with gatewell. The concrete floodwalls will be similar in height to the Phase MI-1 floodwalls, located along the river on 4th Avenue NW, extending an average of 13 feet above the finished grade. Earthen levees will be seeded and become a natural green space when completed.

When completed and connected to the other phases of Milestone 2 of the MREFPP, the MI-6 phase will help remove downtown Minot from the proposed FEMA floodplain and, most importantly, provide long-term flood protection to the record flood of 2011. All the enhanced flood protection projects currently under construction and those under design provide a level of protection equal to the 2011 flood, plus three feet of freeboard.

This phase is still in the design phase, with anticipated 100% design completion the end of the year.



## RURAL FLOOD CONTROL : RURAL REACHES



SAWYER BRIDGE RIBBON CUTTING CEREMONY

#### SAWYER BRIDGE

The construction activities have been complete at the Sawyer Bridge site. Most spring construction consisted of mostly off bridge activities including road ditch grading and placement of topsoil and seeding. Channel work, within the river, was also completed with the placement of riprap for scour protection. There was a ribbon cutting at the bridge on Monday, July 10 to officially open the bridge. Present at the ribbon cutting were Chairman Ashley, Director Jonasson and Director Klein of the SRJB, several local Sawyer residents, Patrick Fridgen of the ND Department of Water Resources, Minot Chamber Ambassadors, the HDR Engineering design team and Swingen Construction who was the bridge contractor. There was coverage from two local news outlets on the ribbon cutting and project



**ORIGINAL BRIDGE** 



#### **BU-1D CONSTRUCTION UPDATE**

The final phase of the Mouse River Enhanced Flood Protection Project for the City of Burlington will be wrapped up at the end of this construction season. Phase BU-1D is primarily located along Park Road and connects back to the BU-1C levee system at the Burlington Recreation Facility. This phase features approximately 2,500 LF of earthen levee. A seepage cutoff wall extends 30-50 feet beneath the centerline of the levee and was installed using a one-pass trencher that mixed cement, slag, and bentonite, with native soils to create the necessary hydraulic barrier to control ground water seepage beneath the levee.

Prior to construction of the seepage cutoff wall and levee, several critical utility relocations were required. Municipal utility work included rerouting of water, sanitary sewer, sanitary sewer forcemain, and storm sewer. Franchise utility work included rerouting of electrical, natural gas, and communication lines.

Bluestone Construction, Inc. served as a contractor, and work began on this phase in the spring of 2022. Seepage cutoff wall installation, earthwork activities for the levee, utility relocates, and installation of asphalt pavement were completed in fall of 2022. In the 2023 construction season, work has been focused on restoration items such as topsoil placement, seeding, parking lots, fencing, and site finishes. Work on BU-1D is scheduled to be completed by September 2023 and signifies the completion of the flood control project in Burlington which is now fully protected from a 2011 flood type event. This fall there will be a celebration held to commemorate the historical achievement of full protection to Burlington.

**NEW BRIDGE** 

#### **MOUSE RIVER PARK BRIDGE**

This project was advertised for bidding in December 2022. Due to a variety of factors, such as remoteness of the construction site, a large number of bridge projects advertised for bid, and the limited number of bridge contractors in the area this project received no bids. Additional discussion was held with the SRJB Administration and engineering to determine how we could deliver a safe & well-functioning bridge and make it more attractive project to contractors. The decision was made to alter the bridge deck to help reduce the labor force required to construct the project. The redesign plans for this project are 90% complete, final internal reviews and cost estimate preparation are currently being completed with an anticipated project bidding in October 2023. Construction could still begin this fall with final completion date in the fall of 2024. The USACE permitting documents have all been approved, along with the environmental and sovereign lands permits. The updated zero rise and flood plain construction permit have been submitted and we are waiting on state approvals for those documents.

### **VELVA BRIDGE**

The design and coordination between NDDOT, the City of Velva, and the SRJB continue on this project. A construction phasing plan was submitted to the NDDOT for review and comment. We are still waiting on NDDOT approval on the phasing plan we have laid out. The goal of the phasing plan is to allow for one lane of traffic at all times during construction, providing fewer detours and more convenience for the community of Velva. The roadway alignment would be shifted to the east to accommodate building the bridge in two halves. It is estimated the construction will extend over two construction seasons. During the first phase of construction a 12-foot-wide lane will be maintained on the exiting, or west, portion of the bridge with the east half of the new bridge being constructed first. This first half of the new bridge will have a wide enough deck to accommodate a single 16-foot-wide lane throughout the winter allowing adequate width for snow removal. During the winter the remaining portion of the existing bridge can be removed, and substructure work can be started prior to spring suspension to allow for spawning season in the Mouse River. With the final geometry of the bridge and roadway determined, the permitting documents will be finalized and submitted to the appropriate agencies. Once the project is completed and an initial bridge inspection takes place, NDDOT will become the owner of the bridge with responsibilities for operations and maintenance.

## www.mouseriverplan.com

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To keep up with the latest project updates, be sure and watch the Mouse River Plan YouTube channel. Aerial drone footage of active construction phases is posted monthly.

