



MOUSE RIVER PLAN

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 20 years.

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PROGRESS

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ACTIVE PROJECT PHASES



PHASE MI-1 CONSTRUCTION UPDATE

MI-1 4TH AVENUE PROJECT READY FOR FLOOD PROTECTION

2021 was a busy construction season for crews working on Phase MI-1 4th Avenue bringing nearly all of this phase of the flood protection project to substantial completion. Phase MI-1 of the Mouse River Enhanced Flood Protection Plan (MREFPP) is ready for the 2022 flood fight if needed. The project is scheduled for completion in 2022 and a ribbon cutting to mark this milestone is on the horizon.

A portion of the Mouse River Enhanced Flood Protection Plan, Phase MI-1 4th Avenue, includes over 2,250 feet of floodwalls located between just west of Broadway and just west of Third Street NE. The project also includes earthen levees on both sides of where the Broadway Bridge connects on the north side of the river and two removable closure structures in the flood wall.

Highlights from this construction season include:

- Successful testing of the Broadway Pump Station, a stormwater pump station at Broadway and Fourth Ave. NW. In June, successful tests of all seven pumps (4-40,000+ gpm and 3-7,000 gpm) were completed, with crews monitoring all operations of the equipment and the station.
- New sidewalks and curbs on the east side of Broadway allow for safer access to pedestrians and easier maintenance of sidewalks for businesses along 4th Ave.
- Landscaping completed on the north side of the floodwall which brings in the finishing touch to highlight the flood wall and main intersection of Broadway and 4th Ave. NW.
- Privacy fences were installed for homeowners along 4th Ave NW.

PHASE MI-4 CONSTRUCTION UPDATE

MI-4 MAPLE DIVERSION SOUTH UTILITY RELOCATION PROJECT REACHES SUBSTANTIAL COMPLETION

Phase MI-4A utility relocation in front of the larger MI-4 Maple Diversion project is substantially complete. 2021 marked year two of construction on this phase where all utilities have been installed and the sanitary pump station is now operational.

Thank you for the cooperation from the City of Minot and other impacted by the closure on a portion of Western Avenue SW and 2nd Avenue SW.

Phase MI-4A of the Mouse River Enhanced Flood Protection Project (MREFPP) started construction at the end of August 2020. The purpose of MI-4A (Maple Diversion South Utility Relocations) is to relocate municipal utilities in advance of the flood protection features proposed as part of the Phase MI-4A Maple Diversion Project. Construction on this phase is scheduled to be fully completed in 2022.

Highlights from this construction season include:

- Installation of new underground water main pipe.
- Installation of a new sanitary sewer lift station and associated underground piping.
- New permanent barriers completed at the railway crossing connecting Burdick Expressway to 4th Avenue SW which comply with quiet zone requirements.
- New asphalt pavement and curb and gutters along Western Avenue SW and 2nd Avenue SW.



THROUGHOUT THE CITY OF MINOT

PHASE MI-5 CONSTRUCTION UPDATE

MI-5 NORTHEAST TIEBACK LEVEE PROJECT TO START CONSTRUCTION IN 2022

The Souris River Joint Board (SRJB) held a public information meeting to present the final designed plans for the Phase MI-5 Northeast Tieback Levee, a flood protection project within Minot which is part of the Mouse River Enhanced Flood Protection Plan (MREFPP). Plans and specifications are complete and bidding on this phase of the MREFPP plan will happen in January with a mid-February bid opening.

This phase would start on the east end of the Phase MI-1 Fourth Avenue project by Third Street NE and continues to the east, tying back to high ground east of 13th Street NE. Phase MI-5 includes earthen levees, arterial road changes, a dry storm water pond, floodwalls, a city greenway feature, and a storm water pump station.

The Phase MI-5 NE Tieback Levee segment of the project begins near 3rd street NE (the eastern end of Phase MI-1) and 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 storm water pump station, as well as a dry storm water pond. The concrete floodwalls will be similar height to the Phase MI-1 floodwalls, extending approximately 13 feet above the finished grade. Areas south of BNSF Railway's existing yard will be seeded after roadway, and are removed and will become a natural green space.

When completed and connected to the first four phases of the MREFPP, the MI-5 phase will help remove approximately 60 percent of Minot residents 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.

PHASE WC-1A CONSTRUCTION UPDATE

WC-1A TIERRACITA VALLEJO LEVEES

Construction on another phase of the Mouse River Enhanced Flood Protection Project began in August 2021 in the Tierracita Vallejo neighborhood, immediately west of Minot. WC-1A will construct earthen levees from Ward County Road 15 south through the neighborhood, and up to the existing abandoned oxbow. A seepage collection trench, storm sewer piping, and gatewell structure are also included in this phase to control interior drainage.

The Contractor, Wagner Construction, completed clearing and grubbing and removal of the existing levee in August. Levee placement began in September and is approximately two-thirds complete. Seepage collection piping and filter aggregate for the seepage collection trench is approximately two-thirds complete as well.

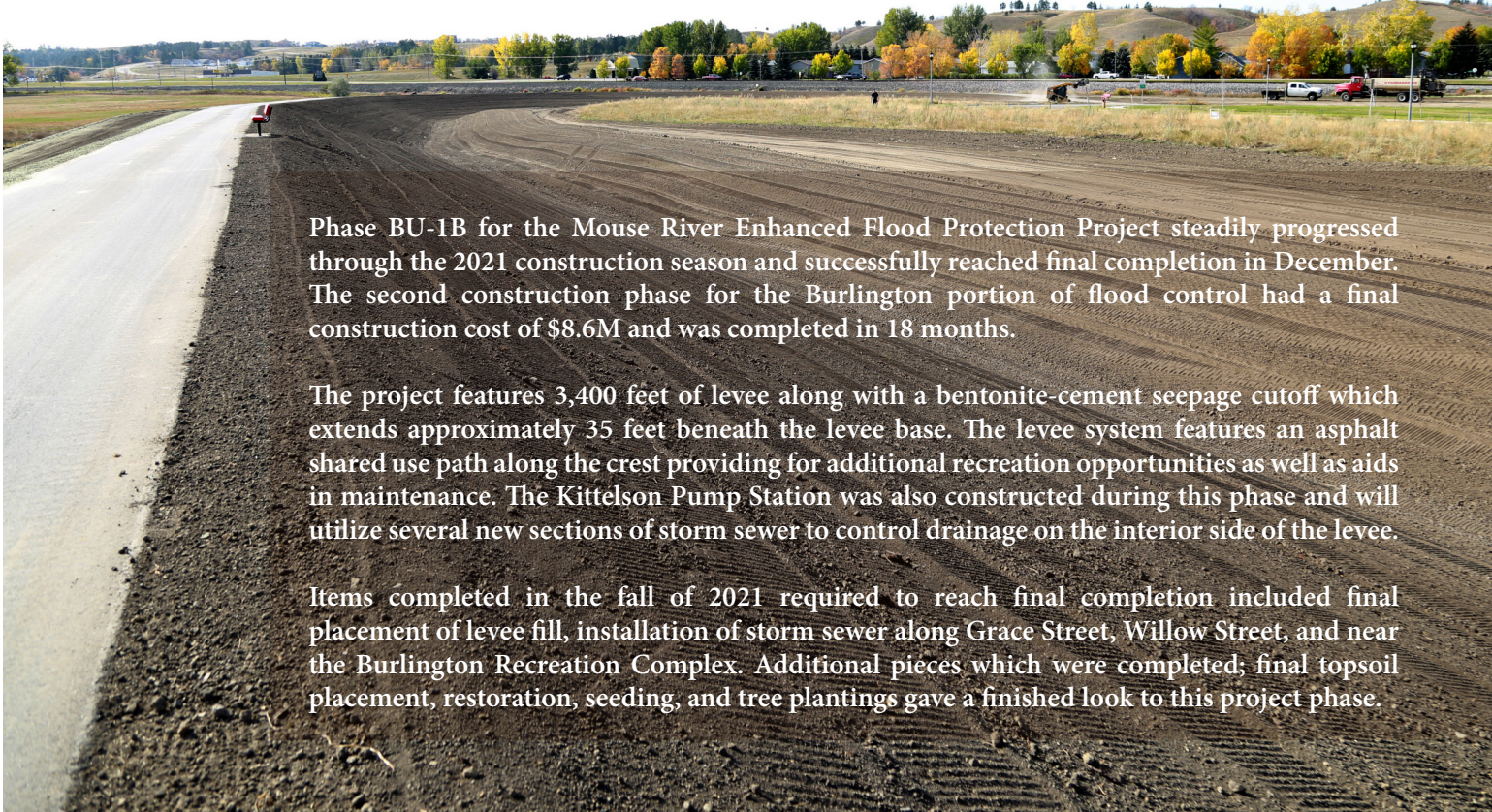
Excavation for the gatewell structure along with intake and outfall piping are scheduled to be constructed during the winter months. Rip rap placement along wet side of the levee is also anticipated to occur over the winter.

WC-1B, the second and final construction contract for this phase was bid in late December. Wagner Construction was the apparent low bidder and will likely began work in early 2022. WC-1B main features are earthen levee along with a rock riffle which will replace the existing dam structure located on the Mouse River.



PROGRESS IN BURLINGTON, ND

PHASEBU-1B CONSTRUCTION UPDATE



Phase BU-1B for the Mouse River Enhanced Flood Protection Project steadily progressed through the 2021 construction season and successfully reached final completion in December. The second construction phase for the Burlington portion of flood control had a final construction cost of \$8.6M and was completed in 18 months.

The project features 3,400 feet of levee along with a bentonite-cement seepage cutoff which extends approximately 35 feet beneath the levee base. The levee system features an asphalt shared use path along the crest providing for additional recreation opportunities as well as aids in maintenance. The Kittelson Pump Station was also constructed during this phase and will utilize several new sections of storm sewer to control drainage on the interior side of the levee.

Items completed in the fall of 2021 required to reach final completion included final placement of levee fill, installation of storm sewer along Grace Street, Willow Street, and near the Burlington Recreation Complex. Additional pieces which were completed; final topsoil placement, restoration, seeding, and tree plantings gave a finished look to this project phase.

PHASEBU-1C CONSTRUCTION UPDATE

Construction of Phase BU-1C for the Mouse River Enhanced Flood Protection Project was in full swing through the summer and fall in Burlington. The contractor, Bluestone Construction, has been focused on several key project components. Earthwork operations began with the construction of the levee base, which was also used as the working pad for the slurry cut off wall. The slurry cut off wall was installed utilizing a one-pass trencher which mixed the components of the slurry cut off wall in place without removing material from the trench. Similar to the wall constructed for the BU-1B phase, the slurry cutoff wall was located along the center-

line of the new levee and extends from the base of the levee prism to depths that exceed 35 feet. The slurry cut off wall was completed in October. The upper portion of the levee section was completed shortly after the slurry cut off wall and topsoil placement was also completed prior to winter freeze.

Utility construction, that was required within the flood protection project, was also completed prior to the onset of winter. Utility work included rerouting of a raw water line, installation of two storm sewer portions, replacement and upgrading the sizing of culverts beneath Park Road, and the installation of a new box culvert.

Other project features in the BU-1C phase completed in 2021 included subgrade and gravelling for the realignment of the roadway around the Burlington Recreation Facility and a new parking lot along the north side of the complex. Rip rap placement along the Mouse and Des Lacs Rivers was also finalized.

Items scheduled for the 2022 construction include final restoration, seeding, site furnishing, and asphalt placement for the new parking lot, recreation roadway and shared use path atop the levee. Construction for the BU-1C Phase is on schedule to be completed by mid-summer 2022.