The Need for Improvement



Project Area



Properties in the 56th & Morton area are at risk of experiencing a flood, even during small rain events.

• A 2011 stormwater drainage study verified that the existing drainage channel in the project area is too small to accommodate the amount of stormwater that flows through this area.

Removing only the existing trees and debris in the channel would simply be a marginal improvement and not provide significant benefit to reduce flood risks.

- The banks of most of this drainage channel are too steep for the city to safely and properly maintain.
- Some property owners and tenants have also placed obstructions within the easement, which makes access unavailable, impractical, or unsafe.

The inadequate capacity of this drainage channel has been a known issue since before 2011, but a lack of available funding has prevented improvements from being made.

- This project was originally included in the city's 2012 stormwater bond, but was not completed due to federal funds being unavailable.
- Upon receiving a federal grant for this project, the project was included in the city's 2016 stormwater bond, with contingency funds earmarked in the event the bond failed, which it did not.







Left: Looking north at flooding around the existing Fletcher Ave. bridge Middle: Floodwater encroaching on project area businesses Right: Flooding around the box culvert at Johanna Road



Project Schedule

The purpose of this project is to rehabilitate the existing drainage channel to reduce future flood risk and make the channel safer and easier to maintain.

- The project is 75% funded by a Federal Emergency Management Agency (FEMA) hazard mitigation grant.
- The City of Lincoln and Lower Platte South NRD are cost-sharing 25% of the project, with the city's funds coming from the 2016 stormwater bond.

The design of the drainage improvements began in June 2016, and public input was collected to help inform the design process.

- Property owners in the project area were involved early and throughout the design.
- The public was invited to provide input on the improvements during public meetings in October 2016 and February 2017.



Construction of the drainage improvements is scheduled to begin March 2018.

- The bridge replacement on Fletcher Avenue is anticipated to begin in late September 2018 and be finished by February 2019.
- The resurfacing of Fletcher Avenue will start after the bridge replacement and completed in June 2019.
- Access to properties in the project area is a key consideration of the construction plan.

Visit www.56thMorton.com for project updates and the current construction schedule.

For questions or information about the construction plan, contact Jeff Webert of K2 Construction at 402-467-2355.



Community-Informed Design

Stakeholder engagement and public input helped ensure the final design meets the future needs of project area stakeholders and the community.

- Property owners in the project area were directly involved throughout the design process.
- The public had an opportunity to provide input at several stages in the design process.

BENEFITS OF THE PROJECT Reduced flood risk for the entire project area Better emergency access to properties during large storm events Channel can be properly maintained by city

This project will widen portions of the channel, replace the box culvert (bridge) at Fletcher Avenue, add in access points for maintenance, and rehabilitate portions to prevent future erosion.

- A private bridge will be removed and an access road established on the east side of the channel, north of Fletcher Avenue, to provide access to the affected property.
- Additional work will include resurfacing Fletcher Avenue between N 56th and N 70th streets.

It is expected that the improvements made will lower the water surface elevation in the channel between two to four feet during a heavy rainfall event.

- The increased capacity of the channel will reduce flood risk and potential property damage in the area.
- The drainage channel will also be accessible and safe for the city to maintain.

Flood Inundation Depth for a 10-Year Storm Event

Design of Planned Improvements



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Frequently Asked Questions



Will this project remove properties from the floodplain?

This project will provide flood risk reduction benefits for properties adjacent to the channel by improving the channel capacity to reduce water levels during storm events. However, the project will not remove any properties from the current Federal Emergency Management Agency (FEMA) floodplain map. The current floodplain map developed by FEMA is largely due to backwater flooding from Salt Creek and will not be affected by this project. The current FEMA floodplain also doesn't extend south past Fletcher Avenue and is primarily within the drainage channel.

What are the exact improvements that you are going to make for drainage (tree removal and what else)?

This project will widen portions of the channel, replace the box culvert (bridge) at Fletcher Avenue, add in access points for maintenance, and rehabilitate portions to prevent future erosion. A private bridge within the channel will be removed and an access road established on the east side of the channel, north of Fletcher Avenue, to provide access to the affected property. Additional work will include resurfacing Fletcher Avenue between N 56th and N 70th streets.

How will long-term maintenance be handled in the channel?

The improvements to the channel will enable it to be maintained safely with current city equipment. Mowing and other maintenance work within the channel is planned to occur at least once per year.

Why did the drainage area become overgrown with trees and filled with debris?

The existing banks of most of this drainage area were too steep for routine maintenance. Some property owners and tenants also placed obstructions within the easement, which made access unavailable, impractical or unsafe.

If the city simply removed all the trees and debris from the channel, would that eliminate flooding?

No. Simply removing the trees and debris would not provide a significant benefit to reduce flood risks. Tree and debris removal would only be a short-term improvement. The improvement project creates a comprehensive approach for long-term reduction of flood risks.

How many alternatives were considered in reaching this preliminary design?

A study of the area conducted in 2012 considered up to seven alternatives that showed the potential for some flood risk reduction and safety improvements. Several more alternatives were examined that provided no actual flood risk reduction.

Would it be more cost-effective for the city to buy the properties that flood and level the buildings in those parcels?

This could be an option, but also be cost prohibitive for the completion of the entire project. The majority of the funding for this project is from federal funding, which requires a favorable cost/benefit ratio. Also, simply buying a couple of properties and removing the buildings will not reduce flooding or improve the safety of the area.

Will the city remove buildings or force owners to reduce portions of their buildings built into the easement?

One unoccupied storage structure is planned for removal; otherwise, it is not anticipated that additional buildings will need to be removed or altered. There are several areas where fencing and pavement will be removed in order to restore the channel. There are some temporary type structures in the easement areas will need to be removed by the owner/tenant for the project. The project is removing one loading dock in the permanent easement area.

Why would the city require the removal of paved areas, but not also require the removal or remodeling of buildings within or abutting the stormwater easement?

There is only one building that is just within the stormwater easement among the 29 properties that adjoin the drainage channel. The city desires to treat all properties fairly and take a common sense approach with respect to improving the channel and safety for the area.

How could the city have allowed property owners to build their buildings or have paved areas in the stormwater easement?

It is up to the property owner to ensure they do not build on any easements and any easements are supposed to be shown on submitted plans. The city does not systematically check easements as part of the building permit process unless they are shown on the plans. It is possible that some of the paved areas constructed in the easement were constructed without permits. Fences typically do not require permits. Bollards are being placed as part of the project along the permanent easement boundary at most property lines. No fences, structures, pavement, fill, etc. should be placed within the existing and recently acquired permanent easement areas.

My property has experienced little to no flooding. Will this project increase the risk of flooding on my property?

It is planned that flood depths will be reduced anywhere from two to four feet throughout the channel in the project area. North of Holland Road, the existing channel has adequate capacity. Flood depths and flood risk will not be increased for any properties.

How will this project affect the flooding I have seen on N. 56th Frontage Road or N. 57th Circle?

By increasing the capacity of the channel, these street drainage elements will be allowed to function much better during minor storm events. Flood depths will also be decreased two to four feet in the channel itself, which will help reduce the frequency of water overtopping the channel banks.

How much is this project going to cost and how will it be paid for?

The bid for construction was \$3.7 million. The project received Hazard Mitigation Grant (HMG) funds from the Federal Emergency Management Agency (FEMA) for 75% of the project. The City of Lincoln and Lower Platte South NRD are cost-sharing the remaining 25% of the project, with the city's funds coming from the 2016 stormwater bond.

Will there be any restrictions on our land once this project is complete?

The same easement requirements that are in place now will remain in effect once the project is completed. The city is allowed and permitted to conduct whatever work they deem necessary to maintain the drainage easement. The city requires that property owners do not place any improvements on any easement at the risk of incurring the personal expense of removing such improvements that impede or prevent future maintenance.