

## **FINDING OF NO SIGNIFICANT IMPACT**

### **Environmental Assessment for the Addison Creek Channel Improvements Metropolitan Water Reclamation District of Greater Chicago, Cook County, Illinois Hazard Mitigation Grant Program Federal Emergency Management Agency, Department of Homeland Security Project # HMGP-4489-0019-IL (R) (1)**

The Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) proposes to provide funding to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) (subrecipient), to make improvements to the channel of Addison Creek to address flooding and inundation adjacent to the channel. MWRD applied to the Federal Emergency Management Agency (FEMA) for grant assistance under the Hazard Mitigation Grant Program (HMGP). The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5170c. The key purpose of FEMA's Hazard Mitigation Grant Program is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.

The proposed project is located along Addison Creek from Hirsch Street in Northlake, Illinois to Cermak Road in Broadview, Illinois.

The Proposed Action will reduce flood damages to approximately 2,200 properties and stabilize the channel to improve water quality along the defined stretch of Addison Creek. This will include several methods of channel improvement at various locations along the stretch including the installation of gabion basket walls, soldier pile walls, stream barbs, a concrete slope wall, concrete block revetments, gabion mattress bank stabilization and the construction of an open channel. The existing channel will be widened in some areas. Bridges will be removed at 30th, 31st, and 32nd Avenues just north of Harrison Street in Bellwood.

FEMA prepared the Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321 – 4370h, President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations [C.F.R.] Parts 1500 to 1508); U.S. Department of Homeland Security (DHS) Directive No. 023-01; rev. 1, *Implementation of the National Environmental Policy Act* (Oct. 31, 2014); DHS Instruction Manual 023-01-001-01, rev. 1, *Implementation of the National Environmental Policy Act* (Nov. 6, 2014); FEMA Directive 108-1, *Environmental Planning and Historic Preservation Responsibilities and Program Requirements* (Oct. 10, 2018), and FEMA Instruction 108-01-1, *Instruction on Implementation of the Environmental and Historic Preservation Responsibilities and Program Requirements* (Oct. 10, 2018). The purpose of the EA was to analyze the potential individual and cumulative environmental impacts of the construction of the proposed project and to determine whether to prepare an Environmental Impact Statement or this Finding of No Significant Impact.

The Proposed Action, as described in the EA, would not result in any significant adverse impacts on geology, soils, topography, water resources, floodplains, air quality, biological resources (i.e., terrestrial and aquatic environment, threatened and endangered species, migratory birds, invasive species), wetlands, hazardous materials, zoning and land use, noise, visual resources, public services and utilities, traffic and circulation, environmental justice populations, safety and security, historic structures, archaeological resources, or tribal and religious sites. Based on a preliminary screening of resources and the project's geographic location, the EA found that the following resources were not present in the project area and did not require a detailed assessment: coastal zones, coastal resources, seismic hazards, prime and unique farmland, wild and scenic rivers, essential fish habitat, and sole source aquifers.

During the construction period, temporary impacts on soils, water resources, floodplains, air quality, biological resources (i.e., terrestrial and aquatic environment, threatened and endangered species, migratory birds, invasive species), wetlands, hazardous materials, noise, public services and utilities, traffic and circulation are anticipated. All potential temporary impacts require conditions to avoid, minimize, and/or mitigate impacts. The project design will permanently impact 0.63 acres of low-quality wetland, and these wetland impacts were already mitigated through the purchase of 0.95 acres of uncertified wetland mitigation credits from the Gray Willows Wetland Mitigation Bank. With the implementation of these conditions, none of the potential impacts will be significant. In the long-term, the project will have beneficial effects on several resources.

FEMA coordinated with the Illinois Department of Natural Resources, Illinois Emergency Management Agency, Illinois Environmental Protection Agency, Illinois Department of Transportation, US Fish and Wildlife Service, US Army Corps of Engineers, US Environmental Protection Agency, US Department of Housing and Urban Development, Cook County Department of Emergency Management & Regional Security, Lower Des Plaines Watershed Planning Council, City of Northlake, Illinois, Village of Melrose Park, Illinois, Village of Stone Park, Illinois, Village of Bellwood, Illinois, Village of Westchester, Illinois, Village of Broadview, Illinois, and federally recognized Indian tribes with interests in the area. The public information process included a public notice with information about the Proposed Action. The Draft EA was available for agency and public review and comment for a period of 30 days. On June 7, 2023, FEMA received a letter with recommendations from the Environmental Protection Agency and incorporated those into the final EA. There were no other responses from the public and/or agency reviewers.

## **PROJECT CONDITIONS**

The subrecipient is responsible for compliance with federal, state, and local laws and regulations, including obtaining any necessary permits prior to beginning construction activities, and adhering to any conditions laid out in these permits. Any substantive change to the scope of work would require re-evaluation by FEMA for compliance with NEPA and any other laws or Executive Orders.

The subrecipient must adhere to the following conditions should the Proposed Action be implemented. Failure to comply with FEMA grant conditions may jeopardize federal funding. FEMA requires the following standard conditions for the Proposed Action:

### ***General Project Conditions***

1. The subrecipient is responsible for obtaining and complying with all required local, state, and federal permits and approvals.
2. If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or any other unanticipated changes to the physical environment, the subrecipient must contact FEMA so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.

### ***Water Resources, Water Quality, Wetlands, Coastal Zones, and Soils***

3. Prior to beginning work, the subrecipient will coordinate with the IEPA to determine permitting needs under the National Pollutant Discharge Elimination System (NPDES) permit program, and to develop a Stormwater Pollution Prevention Plan (SWPPP) identifying BMPs to be followed during construction.
4. The sub-recipient shall ensure that best management practices are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990.

### ***Floodplain Management (Executive Order 11988)***

5. The requirements in Section 9.11 will be fully implemented. In order to ensure compliance with the NFIP, local floodplain development permits and required mapping updates will be submitted.

### ***Air Quality***

6. To reduce the emission of criteria pollutants, construction equipment engine idling will be minimized to the extent practicable, and engines will be kept properly maintained. The Subrecipient will implement EPA recommendations for mitigation described in Appendix G to the extent practicable.
7. Open construction areas will be minimized and watered as needed to minimize particulates such as fugitive dust.
8. Hauling routes shall be established and designed to minimize the effect of short-term emissions on homes, schools, daycare centers, and playgrounds.

### ***Migratory Birds***

9. Vegetation removal should be avoided during the migratory bird nesting season (approximately May to October) to the extent practicable.

### ***Invasive Species***

10. Graded areas will be revegetated with native grasses and forbs, or native seed mixes, turf seed mixes, or non-invasive landscape plantings in accordance with the approved plans.
11. All equipment will be cleaned (including but not limited to vehicles, clothing, and gear) at a site prior to moving to another site. All soil, aggregate material, mulch, vegetation, seeds, animals, etc. need to be removed from equipment using a hand tool, brush, compressed air, pressure washer, or otherwise.
12. If equipment is not cleaned before arriving at the work site, then clean the equipment in the parking or staging area, ensuring no material is deposited at the new site. Material cleaned from equipment should be disposed of legally.

### ***Hazardous Materials***

13. Due to the presence of contaminants of concern at most locations and because it is impractical to delineate the limits of clean areas from a construction consideration point of view, all soil and sediment excavated during the Addison Creek Improvements project will be treated as contaminated and disposed of offsite at subtitle D landfills.
14. Soils excavated during construction will be managed on-site, within the same areas that they are excavated from.
15. Soils that cannot be managed onsite will be treated as “Non-Special Waste” and disposed at an approved Landfill (subtitle D).
16. A “Health and Safety Plan”, “Contamination Operation Plan” and an “Erosion Control Plan” will be developed by the subrecipient’s contractor for managing excavated soils and to prevent migration of contamination during excavation and construction.
17. IEPA will be notified if unanticipated contaminated material is encountered.

### ***Noise***

18. Construction activities will take place during the less noise-sensitive daylight hours.
19. Soldier pile walls will be used and installed by auguring rather than sheet pile walls being driven, which will reduce concussive construction noise.

### ***Safety and Security***

20. To minimize risks to safety and human health, construction activities will be performed using qualified personnel trained to use the required equipment properly.
21. The construction site will be secured from public access.
22. All construction activities will be conducted in accordance with the standards specified in the Occupational Safety and Health Administration (OSHA) regulations.
23. All conditions of the project Health and Safety Plan will be adhered to.

*Archeological, Tribal, and Religious Sites*

24. The subrecipient will monitor ground disturbance during the construction phase. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and the subrecipient will notify the coroner's office (in the case of human remains), the recipient (IEMA), and FEMA. FEMA will notify the SHPO and the Office of the State Archaeologist.
25. All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

## FINDINGS

Based upon the conditions and information contained in the EA and in accordance with FEMA Directive 108-1, *Environmental Planning and Historic Preservation Responsibilities and Program Requirements*, and Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands), and 12898 (Environmental Justice), FEMA has determined that the Proposed Action will not have any significant impacts on the quality of the natural and human environment. As a result of this FONSI, an Environmental Impact Statement will not be prepared.

## APPROVAL

**DUANE D CASTALDI** Digitally signed by DUANE D  
CASTALDI  
Date: 2023.06.12 13:37:10 -05'00'

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Duane Castaldi  
Regional Environmental Officer, FEMA Region 5

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Date

**MEGAN S HART** Digitally signed by MEGAN S HART  
Date: 2023.06.12 09:56:05 -05'00'

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Megan Hart  
Hazard Mitigation Assistance Branch Chief, FEMA Region 5

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Date



## **Final Environmental Assessment Addison Creek Channel Improvements**

*Metropolitan Water Reclamation District of Greater Chicago  
June 2023*

*Prepared by*

Hey and Associates, Inc.

8755 W. Higgins Road, Suite 835

Chicago, IL 60631

Hey Project 16-0005

*Prepared for*



# **FEMA**

FEMA Region 5

536 South Clark Street, Sixth Floor

Chicago, IL 60605

HMGP-4489-0019-IL (R) (1)

## List of Acronyms, Chemical Formulas, and Abbreviations

APE	Area of Potential Effect	MWRD	Metropolitan Water Reclamation District of Greater Chicago
BMP	Best Management Practice	NAAQS	National Ambient Air Quality Standards
CAA	Clean Air Act	NEPA	National Environmental Policy Act
CBRS	Coastal Barrier Resource System	NHPA	National Historic Preservation Act
CEQ	Council on Environmental Quality	NO <sub>2</sub>	Nitrogen Dioxide
C.F.R.	Code of Federal Regulations	NO <sub>x</sub>	Nitrogen Oxides
CWA	Clean Water Act	NPDES/SDS	National Pollution Discharge Elimination System/State Disposal System
DWP	Detailed Watershed Plan	NRCS	Natural Resources Conservation Service
EA	Environmental Assessment	NRHP	National Register of Historic Places
EFH	Essential Fish Habitat	NWI	National Wetland Inventory
EJ	Environmental Justice	OSHA	Occupational Safety and Health Administration
EMRS	Cook County Department of Emergency Management and Regional Security	O <sub>3</sub>	Ozone
EO	Executive Order	PA	FEMA's Public Assistance Program
EPA	Environmental Protection Agency	PM	Particulate Matter
ESA	Endangered Species Act	RCRA	Resource Conservation and Recovery Act
FEMA	Federal Emergency Management Agency	SHPO	Illinois State Historic Preservation Office
FIRM	Flood Insurance Rate Map	SO <sub>2</sub>	Sulfur Dioxide
FONSI	Finding of No Significant Impact	SWPPP	Stormwater Pollution Prevention Plan
IPaC	Information for Planning and Consultation	THPO	Tribal Historic Preservation Office
IDOT	Illinois Department of Transportation	TMDL	Total Daily Maximum Load
IEMA	Illinois Emergency Management Agency	USACE	U.S. Army Corp of Engineers
IEPA	Illinois Environmental Protection Agency	U.S.C.	United States Code
IOSHA	Illinois Occupational Safety and Health Administration	USDA	U.S. Department of Agriculture
IPCB	Illinois Pollution Control Board	USFWS	U.S. Fish and Wildlife Service
LDPR	Lower Des Plaines River	USGS	U.S. Geological Survey
LIDAR	Light Detection and Ranging	VOC	Volatile Organic Compound
MBTA	Migratory Bird Treaty Act	WCP	Watershed Planning Council

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# 1 Background

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## 1.1 Project Authority

In 1889, the Illinois General Assembly created the Sanitary District of Chicago, which it renamed as the Metropolitan Water Reclamation District of Greater Chicago (MWRD) in 1989. 70 Ill. Comp. Stat. 2605. MWRD is responsible for stormwater management in Cook County, which includes the management of floods and floodwaters. *Id.* at § 2605/7h(a). MWRD proposes improvements to the channel of Addison Creek to address flooding and inundation adjacent to the channel. MWRD applied to the Federal Emergency Management Agency (FEMA) through the Illinois Emergency Management Agency (IEMA) for grant assistance under the Hazard Mitigation Grant Program (HMGP). The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5170c. The key purpose of FEMA's HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster. The project reviewed here is related to Federal disaster declaration DR-4489-IL, COVID-19 Pandemic beginning January 20, 2020. The disaster was declared on March 26, 2020. The declaration made HMGP assistance available statewide to fund hazard mitigation measures.

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321 - 4370h; President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 Code of Federal Regulations [C.F.R.] Parts 1500 to 1508); U.S. Department of Homeland Security (DHS) Directive No. 023-01; rev. 1, *Implementation of the National Environmental Policy Act* (Oct. 31, 2014); DHS Instruction Manual No. 023-01-001-01, rev. 1, *Implementation of the National Environmental Policy Act* (Nov. 6, 2014); FEMA Directive No. 108-01, *Environmental Planning and Historic Preservation Responsibilities and Program Requirements* (Aug. 22, 2016); and FEMA Instruction 108-01-1, *Instruction on Implementation of the Environmental and Historic Preservation Responsibilities and Program Requirements* (Aug. 22, 2016). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to meet FEMA's responsibilities under NEPA and to analyze the potential environmental impacts of the proposed project. FEMA used the findings in this EA to issue a Finding of No Significant Impact (FONSI) for the proposed project.

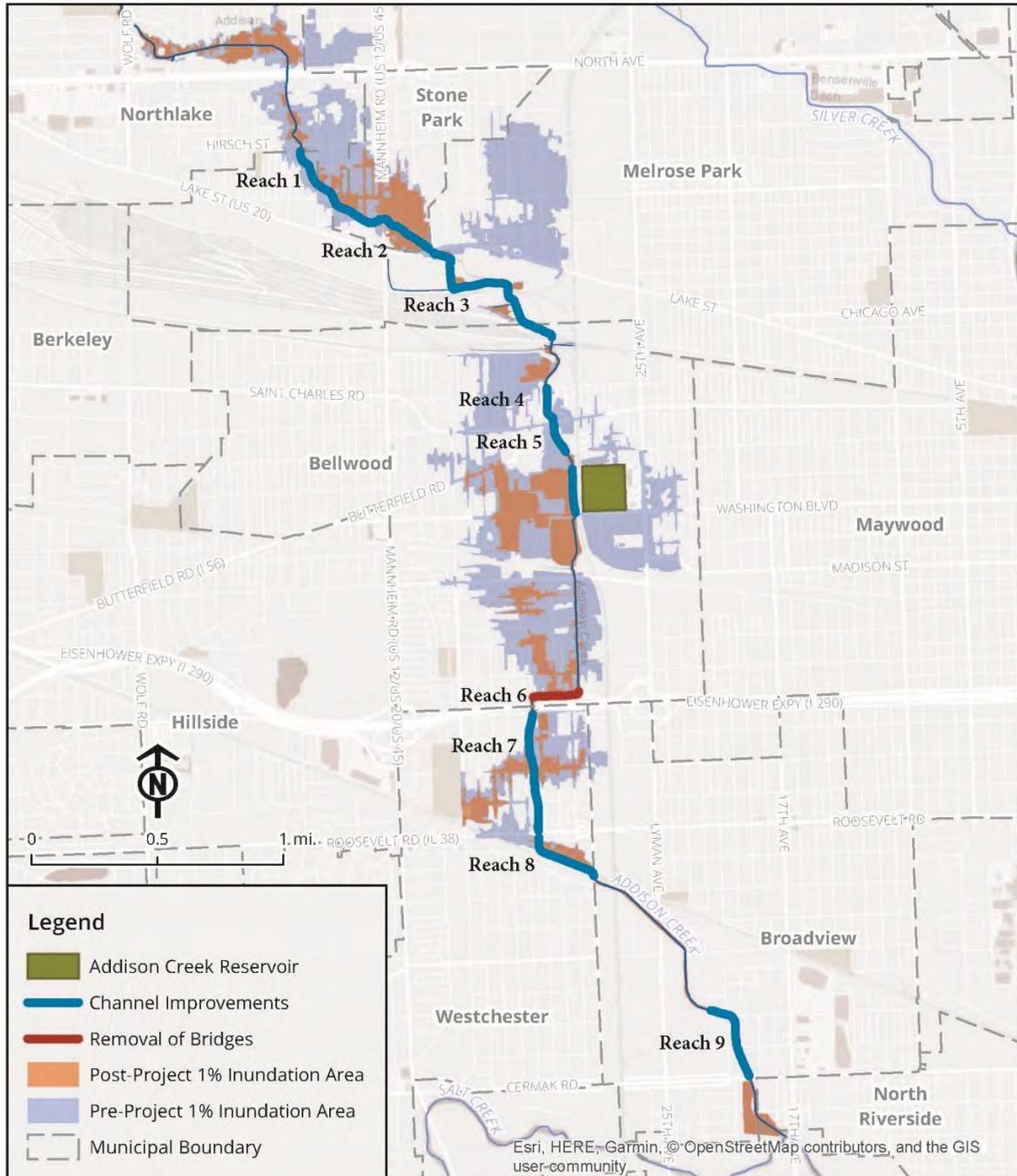
In accordance with federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of alternatives and a discussion of the potential environmental impacts. As part of this NEPA review, the requirements of other environmental laws and executive orders are addressed.

## 1.2 Project Location

MWRD is proposing improvements to the channel of Addison Creek in Cook County, Illinois. The project corridor extends from Hirsch Street in Northlake, Illinois and continues south and east down to Cermak Road in Broadview, Illinois. The project corridor is located in Sections 4, 5, 9, 16,

21, and 22, Township 39 North, Range 12 East near the G.P.S. coordinates of Latitude 41.888783 and Longitude -87.870963 (approximately in center of corridor in Reach 4) as shown in Figure 1-1. Flooding along Addison Creek includes significant overbank flooding leading to large areas of inundation adjacent to the channel which causes economic damages to both structures and transportation features and facilities. The communities experiencing flooding along Addison Creek include Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake.

**Figure 1-1: Project Location.**



The project area is generally limited to the undeveloped land adjacent to the creek channel, typically within 100-feet of the water's edge.

### **1.3 Purpose and Need**

The key purpose of FEMA HMGP is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.

As part of a Detailed Watershed Plan (DWP) for the Lower Des Plaines River (LDPR) Watershed, MWRD completed a hydrologic<sup>1</sup> and hydraulic<sup>2</sup> analysis of the Addison Creek in February 2011 to obtain an understanding of flood impacts throughout the watershed in Cook County. As part of the DWP, MWRD evaluated the damages and economic impacts of flooding along the Addison Creek watershed and developed recommended project alternatives to mitigate the impacts of flooding.

This project is needed because of the past flood damages that have been experienced within the Addison Creek watershed. Although this watershed includes several large flood control reservoirs, it is still a highly developed and urbanized area with minimal stormwater detention. The Addison Creek watershed drains an approximately 22 square mile area upstream of its confluence with Salt Creek. The watershed is mainly situated in Cook County with headwaters originating in northeastern DuPage County.

The purpose of the project is to reduce flood damages to approximately 2,200 properties by creating additional water conveyance and stabilizing the channel along Addison Creek within the defined project reach. The communities experiencing flooding along Addison Creek include Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. Based on the updated modeling and elevation data taken from newer Cook County LIDAR data, damages were recomputed during the final engineering design.

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<sup>1</sup> A study of rate of precipitation, the quantity of water, the rate of surface runoff, and the timing of its arrival.

<sup>2</sup> A study of how water flows from one point to the next.

## **2 Alternative Analysis**

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NEPA requires FEMA to evaluate alternatives to the Proposed Action and describe the environmental impacts of each alternative. NEPA also requires an evaluation of the No Action alternative, which is the future condition without the project. This section describes the No Action alternative, the Proposed Action, and alternatives considered but eliminated from further evaluation.

### **2.1 Alternative 1 – No Action**

Under the No Action alternative, the Addison Creek channel would not be improved or stabilized. Extensive overbank flooding would continue, and flood damages would likely increase over time. This is a reach with inadequate channel capacity in the existing condition with very degraded and unstable conditions in many reaches. Channel banks would continue to erode, contributing to water quality impairments.

### **2.2 Action Alternative 2 – Proposed Action**

The Proposed Action includes various channel treatments over the approximately 3.5 miles of the existing Addison Creek channel. The design of the proposed channel improvements for Addison Creek involved multiple components and considerations in all aspects of design. To prepare a design that not only meets the goals of the 2011 Detailed Watershed Plan but also provides an aesthetically pleasing channel, multiple iterations of channel design were developed, evaluated and value engineered with additional data collection along the way.

The Addison Creek watershed drains approximately 22 square miles upstream of its confluence with Salt Creek. The watershed is mainly situated in Cook County with headwaters originating in northeastern DuPage County. The goal of mitigating flood damages limits the scope alternatives to the reaches from Hirsch Street in Northlake to downstream of Cermak Road (22<sup>nd</sup> Street) near the confluence with Salt Creek in Broadview.

The proposed channel improvements plan and profile views can be viewed on pages 103-139 in the construction plans in Appendix I. The proposed channel improvement cross sections can be viewed on pages 163-270 in the construction plans in Appendix I. Existing stormwater drainage including storm sewers, outfalls and ditches will be maintained as part of the construction plans and are provided in Appendix I.

The Addison Creek channel was broken into segments for analysis and discussion as described below. These segments were identified and selected based on the nature of flood damages within or adjacent to a given area and the differing methods required to address them given the physical condition and constraints present in each reach. Figure 1-1, located on page 5 above, shows the channel reach segments, and Table 2-1 describes the locations and summarizes the proposed channel improvements for each. Table 2-2 provides links to drone video of the baseline conditions for each reach. These are provided as a more effective way to show the existing conditions for the entirety of each reach.

**Table 2-1. Addison Creek Stream Reaches with Proposed Improvement Types.**

Reach	Reach Segment	Communities	Proposed Improvement Approach
1	Hirsch Street to Manheim Road	Northlake, Stone Park, Melrose Park	Open channel <sup>3</sup> and soldier pile wall <sup>4</sup> .
2	Manheim Road to Lake Street	Stone Park, Melrose Park	Gabion basket <sup>5</sup> wall, soldier pile wall.
3	Lake Street to 2 <sup>nd</sup> UPRR bridge	Melrose Park and Bellwood	Gabion basket wall, soldier pile wall, stream barbs <sup>6</sup> , and concrete slope walls under railroad bridge.
4	Grant Avenue to St Charles Road	Bellwood	Gabion basket wall.
5	St Charles Road to Oak Street	Bellwood	Gabion basket wall, soldier pile wall.
6	Cernan Drive to Harrison Street	Bellwood	Articulated concrete block <sup>7</sup> slope wall, removal of three bridges.
7	Wedgewood Drive to Roosevelt Road	Westchester	Gabion mattress (traditional stone and vegetated) bank stabilization.
8	Roosevelt Road to Gardner Road	Westchester	Gabion basket wall, soldier pile wall, gabion mattress (traditional stone and vegetated) bank stabilization.
9	24th Street to Cermak Road	Broadview	Gabion mattress (traditional stone and vegetated) bank stabilization.

**Table 2-2. Existing Condition Drone Video of Each Reach.**

Reach	Reach Segment	Communities	Existing Condition Drone Video
1	Hirsch Street to Manheim Road	Northlake, Stone Park, Melrose Park	<a href="https://youtu.be/zMlukBGgZhs">https://youtu.be/zMlukBGgZhs</a>
2	Manheim Road to Lake Street	Stone Park, Melrose Park	<a href="https://youtu.be/CjygDxOvGls">https://youtu.be/CjygDxOvGls</a>
3	Lake Street to 2 <sup>nd</sup> UPRR bridge	Melrose Park and Bellwood	<a href="https://youtu.be/5SGogT-J5hU">https://youtu.be/5SGogT-J5hU</a>
4	Grant Avenue to St Charles Road	Bellwood	<a href="https://youtu.be/zXSVgXcgo9l">https://youtu.be/zXSVgXcgo9l</a>

<sup>3</sup> The channel is not fully enclosed, as in a pipe.

<sup>4</sup> Soldier pile walls consist of wide-flange steel beams drilled or driven vertically into the ground with concrete walls poured between them to help stabilize the sides of an excavated area. For this project, they will help prevent streambank erosion.

<sup>5</sup> A gabion basket or mattress consists of a wire basket or frame that is filled with rock and is installed along a channel bank to armor the bank and prevent erosion.

<sup>6</sup> Stream barbs are rock structures installed within the outer portion of a stream channel to direct flow away from streambanks to prevent erosion.

<sup>7</sup> Articulated concrete block wall consists of concrete blocks attached to each other with cable to help hold up a streambank and prevent erosion, while remaining somewhat flexible.

Reach	Reach Segment	Communities	Existing Condition Drone Video
5	St Charles Road to Oak Street	Bellwood	<a href="https://youtu.be/dYHO3TVKeTM">https://youtu.be/dYHO3TVKeTM</a>
6	Cernan Drive to Harrison Street	Bellwood	<a href="https://youtu.be/1HdXkzdBfIE">https://youtu.be/1HdXkzdBfIE</a>
7	Wedgewood Drive to Roosevelt Road	Westchester	<a href="https://youtu.be/65BOY9I3KYo">https://youtu.be/65BOY9I3KYo</a>
8	Roosevelt Road to Gardner Road	Westchester	<a href="https://youtu.be/dedJY-xvGOA">https://youtu.be/dedJY-xvGOA</a>
9	24th to Cermak Road	Broadview	<a href="https://youtu.be/3b9QgsxNsAM">https://youtu.be/3b9QgsxNsAM</a>

## Reaches 1 and 2

DWP recommendations for Reaches 1 and 2 included channel improvements to lower existing water surface elevations and provide additional conveyance capacity for flood flows to a proposed reservoir south of Lake Street. The increase in width in these reaches impacts private roads in a trailer park and some municipal streets along with John Paul Park. The roads are being cutback for the widening of the creek, and the restoration was coordinated with the trailer park and municipalities. John Paul Park will be restored per the construction plans, which nets an increase in green space. Despite the DWP recommendation, MWRD selected a Bellwood site located at 2795 Washington Boulevard as its designated reservoir site. While the two reaches are not close to the Bellwood reservoir, the design for these two reaches plan to lower the existing water surface elevations and provide additional conveyance capacity to decrease overbank flooding. In addition, MWRD coordinated with the Illinois Department of Transportation (IDOT) to design the Lake Street and Mannheim Road structures to accommodate the proposed channel improvements from the DWP. The Lake Street culverts were constructed in 2012 and the Mannheim Road culvert was constructed in 2018. Due to proposed widening and channel configuration, riffles and pools will be added where practicable to provide a simple stream benefit during low flows. These can be seen on the pages 103-108, and 153 of the construction plans. The design criteria for Reaches 1 and 2 are the following:

- Lower and widen the existing channel to provide increased channel conveyance volume.
- Minimize overbank flooding.
- Match the design inverts of Lake Street and Mannheim Road bridges based on the previous project coordination with IDOT.

## Reaches 3 and 4

DWP recommendations for Reaches 3 and 4 included channel improvements to lower existing water surface elevations to reduce the tailwater<sup>8</sup> on a diversion structure for the recently completed reservoir. Floodwaters from Addison Creek will be diverted into the reservoir via a

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<sup>8</sup> Tailwater refers to waters located immediately downstream from a hydraulic structure such as a dam, spillway, bridge, or culvert which water flows are affected by said structure.

diversion structure that will be constructed to transport water when the water surface reaches a set elevation.

Reach 3 is partially located in the UPRR Proviso Railroad Yard. Currently, four railroad bridges are located in the yard. The southernmost railroad bridge was recently reconstructed without incorporating recommendations from the DWP. The railroad bridge immediately to the north of the southernmost bridge is a flyover bridge that was also recently reconstructed. Although this flyover bridge is much higher than existing ground along the creek, it has two piers located near the existing top bank of Addison Creek. Since bridge work was previously completed without consideration for the DWP recommendations, the DWP project was modified to remove the proposed improvements to these recently reconstructed railroad bridges. Two small tributary (Tributary A and B) discharges are within Reach 3. No work within the tributaries is proposed other than stabilization at the downstream end in order to tie and match into the Proposed Action improvements.

Downstream of the UPRR Proviso Railroad Yard and upstream of St. Charles Road, the remaining DWP recommended improvements with Reaches 3 and 4 will lower flood elevations and alleviate flooding damage. The design criteria for Reaches 3 and 4 have been modified from the DWP due to site constraints, the change in the location of the reservoir, and additional coordination and data collection. The design criteria for Reaches 3 and 4 are the following:

- Lower the existing channel where feasible between and through the UPRR bridges without requiring a replacement bridge.
- Minimize overbank flooding in Reach 4.

### **Reach 5**

DWP recommendations for Reach 5 included channel improvements to lower existing water surface elevations and provide additional conveyance capacity to minimize flood damages. The updated reservoir location in Bellwood is situated at the downstream end of this reach at Washington Boulevard. Based on review of the hydraulics through this reach and a detailed site inspection of the area, the design criteria for Reach 5 are:

- Lower and widen the existing channel to provide increased channel conveyance area.
- Minimize overbank flooding.
- Water surface elevations throughout this reach cannot be improved significantly solely through work in this reach. Water surface elevations are typically dependent on downstream conditions. Lower water surface elevations will result from lower tail water due to the reservoir and proposed improvements downstream of Reach 5.

### **Reach 6**

This channel segment through Bellwood did not have any proposed improvements in the DWP. Based on additional analysis of this segment during the preliminary engineering phase, it was determined that eight of the culverts in this reach are inadequately sized to convey flood flows. These inadequately sized culverts cause significant headloss<sup>9</sup> through the reach. There is significant overbank flooding through this reach causing flood damages to the residential and industrial structures adjacent to the channel. A coordination meeting with the Village of Bellwood resulted in the discussion of proposed improvements such as bridge removals or replacements throughout this reach to reduce flood stages as bridge supports within the channel also impede flow. In addition, the existing concrete channel slopes are deteriorating and failing and could be a cause of debris deposits in the existing channel potentially blocking water from flowing freely. Design criteria for this reach are below:

- Remove bridges at 30<sup>th</sup>, 31<sup>st</sup>, and 32<sup>nd</sup> Avenue to provide additional conveyance.
- Maintain neighborhood connectivity based on coordination meeting with Bellwood.
- Repair and replacement of concrete channel slope walls.

### **Reaches 7 and 8**

DWP recommendations for Reaches 7 and 8 include channel improvements to lower existing water surface elevations. Based on review of the hydraulics and detailed site inspections, it is our understanding that the main causes of headloss through these reaches are the Gardner Road Bridge, the restricted channel width between Gardner Road and Roosevelt Road, the Roosevelt Road Bridge, and underground utility lines. Addison Creek flows beneath the Gardner Road Bridge and between the abutments of the CNRR Bridge that spans over the Gardner Road Bridge. The Creek makes two 90-degree bends as it passes through and under Gardner Road. During flood events, due to its restrictive opening area through the CNRR Bridge abutments, the Gardner Road Bridge has flood stages above the low chord<sup>10</sup> causing additional headloss through this structure which translates upstream through Reaches 7 and 8. The narrow channel between Gardner and Roosevelt Road leads to some additional headloss that could be alleviated. The Roosevelt Road Bridge also has flood stages above the low chord causing additional headloss translated upstream through Reach 7. Moreover, which limits any flood damage benefits through the Village of Westchester. Based on our understanding of these Reaches, the design criteria are below:

- Improve the Gardner Road and CNRR Bridges to improve the waterway opening through these structures.
- Improve the waterway opening through Roosevelt Road.
- Lower multiple utility lines in these areas.

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<sup>9</sup> Loss of energy or pressure in water flowing through a pipe caused by friction.

<sup>10</sup> Low chord refers to the lowest elevation of a bridge structure over water.

## **Reach 9**

Although this channel segment through Broadview did not have any proposed improvements in the DWP, conveyance improvements could provide additional benefits for Westchester and Broadview. Coordination with and approval from the Illinois Department of Natural Resources Office of Water Resources (IDNR-OWR) is necessary to allow conveyance improvements causing some minor flow increases at Addison Creek's confluence with Salt Creek. The proposed improvements would increase the peak flow but would reduce the duration of that peak flow and increase the separation of peak flows occurring on Addison Creek and the much larger watershed of Salt Creek. This separation will reduce the risk of flooding along Addison Creek when Salt Creek is at peak stage and flow. The design criteria are below:

- Improve conveyance to reduce flood stages through Westchester and Broadview.
- Improve conveyance to mitigate flood flow increases due to potential improvements in Reach 6.
- Obtain approval from IDNR-OWR for the proposed conveyance improvements and permitting strategy.

### **2.3 Alternatives Considered and Eliminated from Further Consideration**

To meet the basic purpose and need, alternative project locations are not viable alternatives. Projects must be located along this reach of Addison Creek to affect the flood damages in this locality. As part of the preliminary engineering, detailed evaluation of the DWP recommended treatments were completed to determine the extent and types of improvements for each reach throughout the Addison Creek project limits. To meet the recommended benefits set forth in the DWP, a detailed analysis of potential alternative treatments was conducted. Below, we have summarized Section 4.2 of the Preliminary Design Report for engineering contract 11-187-5C to provide a succinct summary of why alternatives were not chosen.

#### **Storage Alternatives**

For many of the reaches, either there was a minimal amount of potential storage that wouldn't be worth the cost to implement, significant property would have to be acquired to provide any benefit, storage was not preferred based on adjacent property constraints, or there were no viable options to purchase property for flood storage.

In Reach 5, available properties (commercial, residential, and industrial) were investigated during preliminary design to determine if there were viable options to purchase property and potentially provide additional flood storage. Based on this research and discussions with Village of Bellwood, a reservoir location was selected, designed, and constructed by MWRD under a separate contract. The location of the newly constructed reservoir is just north of Washington Boulevard and east of the railroad tracks.

#### **Hydraulic Structure Alternatives**

For most reaches, either no work was planned for hydraulic structures or proposals were eliminated due to revisions to the proposed channel improvements. For others, like Reach 4, there should be no detrimental effect of lowering a stream bed under a bridge.

In Reach 6, alternatives considered included either replacing existing culverts with larger bridges or removing the culvert crossings altogether. Three bridge options were considered; however, it was determined that removing several crossings without replacing them offered the most cost-effective option. With the high number of existing crossings in this neighborhood, the neighborhood impacts resulting from three bridge removals were considered minimal relative to the benefits of additional flood relief.

In Reach 7, channel lowering through Roosevelt Road was proposed. However, the Roosevelt Road bridge plans from IDOT show a 24-inch sanitary sewer going under the bridge that has the casing sticking out of the ground. If the ground under Roosevelt Road was lowered, then the sanitary sewer would also need to be lowered. The cost to lower the sanitary sewer was greater than the benefits that it would provide.

Three options were considered in Reach 8 to improve the hydraulic opening of the Gardner Road Bridge and CN Railroad Bridge. Each of these options was tested in the hydraulic model. The hydraulic benefits of modifying the structure were very minor compared to the cost of the improvements. The attention was then focused on improvements that could be implemented in Reach 9 that would further benefit Reach 8, rather than modifying Gardner Road.

### **Conveyance Alternatives**

Various conveyance alternatives were considered in almost all the reaches. Many of them involved widening channels and bank extension. These channel improvements were typically determined not feasible due to the property that would have to be acquired. Either due to required acquisitions, relocation of utilities, or from alternatives eliminated in other reaches, many alternatives did not provide enough benefit to justify the cost. Other conveyance alternatives were eliminated due to the safety issues and any possible impacts they would have on residential, industrial, or other private property.

When evaluating possible retaining walls in Reaches 1 and 2, a sheet pile wall was eliminated from further consideration due to the presence of fractured bedrock. It was determined that a soldier pile wall would be a more appropriate solution in these areas due to easier installation by avoiding the possibility of having to penetrate the fractured bedrock. The proposed soldier pile walls in the construction plans in Appendix I were selected and designed to reduce cost and reduce noise and vibration during installation due to the highly built-up urban nature of the project corridor. As in the case of Reach 4, for example, sheet pile walls were eliminated from further discussion as they are much more invasive compared to soldier pile walls.

### 3 Affected Environment and Consequences

The Proposed Action area is approximately 52 acres in size and would affect the Addison Creek channel and riparian zone through the communities of Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. The project area is highly urbanized, and the riparian corridor is degraded. Addison Creek has been fully channelized in the past for stormwater management purposes and has steep banks along most of its length. Some portions of the channel have stream banks that have been armored with concrete debris, cement, or other structural features. Other sections of streambank contain narrow wetland shelves that periodically flood and support a predominance of wetland vegetation. Much of the natural portion of the corridor consists of low-quality woodland, shrubland, old field, or degraded wet meadow. The channel bottom is quite variable with soft sediments present in some locations. It is considered a very low-quality stream biologically.

Table 3-1 provides a summary of the evaluation criteria for potential impacts under NEPA.

**Table 3-1. Evaluation Criteria for Potential Impacts.**

Impact Scale	Criteria
None/Negligible	The resource area would not be affected, or changes or benefits would be either nondetectable or, if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, although the changes would be small and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.
Moderate	Changes to the resource would be measurable and have either localized or regional scale impacts/benefits. Impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse effects.
Major	Changes would be readily measurable and would have substantial consequences on a local or regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, but long-term changes to the resource would be expected.

#### 3.1 Preliminary Screening of Assessment Categories

Based on a preliminary screening of resources and the project’s geographic location, the following resources do not require a detailed assessment.

- *Coastal Zones.* The Coastal Zone Management Act (CZMA), 16 U.S.C. §§ 1451-1464, Ch. 33, is not applicable because the project area is not within a coastal zone. The only coastal zone identified in Illinois is along the shore of Lake Michigan in Lake and Cook Counties and would not be affected by this project.

- *Coastal Barrier Resources System (CBRS)*. The Coastal Barrier Resources Act, 16 U.S.C. §§ 3501 - 3510, is not applicable because the project is not within or near a CBRS unit (U.S. Fish and Wildlife Service [USFWS] 2019).<sup>11</sup>
- *Seismic Risks*. Executive Order (EO) 13717 Establishing a Federal Earthquake Risk Management Standard does not apply because there is low seismic risk in the project area based on seismic hazard maps developed by the U.S. Geological Survey (USGS). This includes less than 1 percent chance of potentially minor damage ground shaking in the 2018 Short-Term Seismicity Model (2018a), and the lowest hazard in the 2018 Long-Term National Seismic Hazard Map (2018b).
- *Sole Source Aquifers*. There are no sole-source aquifers regulated by the Safe Drinking Water Act of 1974, 42 U.S.C. §§ 300f *et seq.*, in the vicinity of the project area (EPA, 2022a).
- *Essential Fish Habitat (EFH)*. The Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801 *et seq.*, does not apply because there are no Habitat Areas of Particular Concern and no EFH Areas identified at the project site according to the National Oceanic and Atmospheric Administration (NOAA) Essential Fish Habitat Mapper (NOAA, 2021).
- *Wild and Scenic Rivers*. The Wild and Scenic Rivers Act, 16 U.S.C. §§ 1271 *et seq.*, is not applicable because there are no federally designated wild and scenic rivers in the project areas based on a review of the National Wild and Scenic Rivers System website maintained by the National Park Service (NPS, 2021).
- *Prime and Unique Farmland*. The Farmland Protection Policy Act of 1981, 7 U.S.C. §§ 4201 *et seq.*, is not applicable because this project corridor is highly urbanized and prime or unique farmland is not present.

## 3.2 Physical Environment

### 3.2.1 Geology, Soils, and Topography

Surficial geology was characterized using the Illinois State Geological Survey's Chicago Areal Geologic Maps (Bulletin 65, 1939) of Elmhurst Quadrangle (Map 6), River Forest Quadrangle (Map 7), and Berwyn Quadrangle (Map 10). Surficial geology consists of Wisconsin-aged Pleistocene glacial deposits associated with the Tinley Moraine and glacial-aged lakebed deposits. Surficial geology in the area is described as glacial till composed of unstratified gravel, sand, silt, and clay with lenses of sand, gravel, and/or silt. Bedrock geology was characterized using the Illinois State Geological Survey's Bedrock Geology of Illinois (Illinois Map 14, 2005). The underlying bedrock in the project area consists entirely of Silurian-aged dolomite. The bedrock unit is relatively deep in this area with a notable absence of bedrock outcrops.

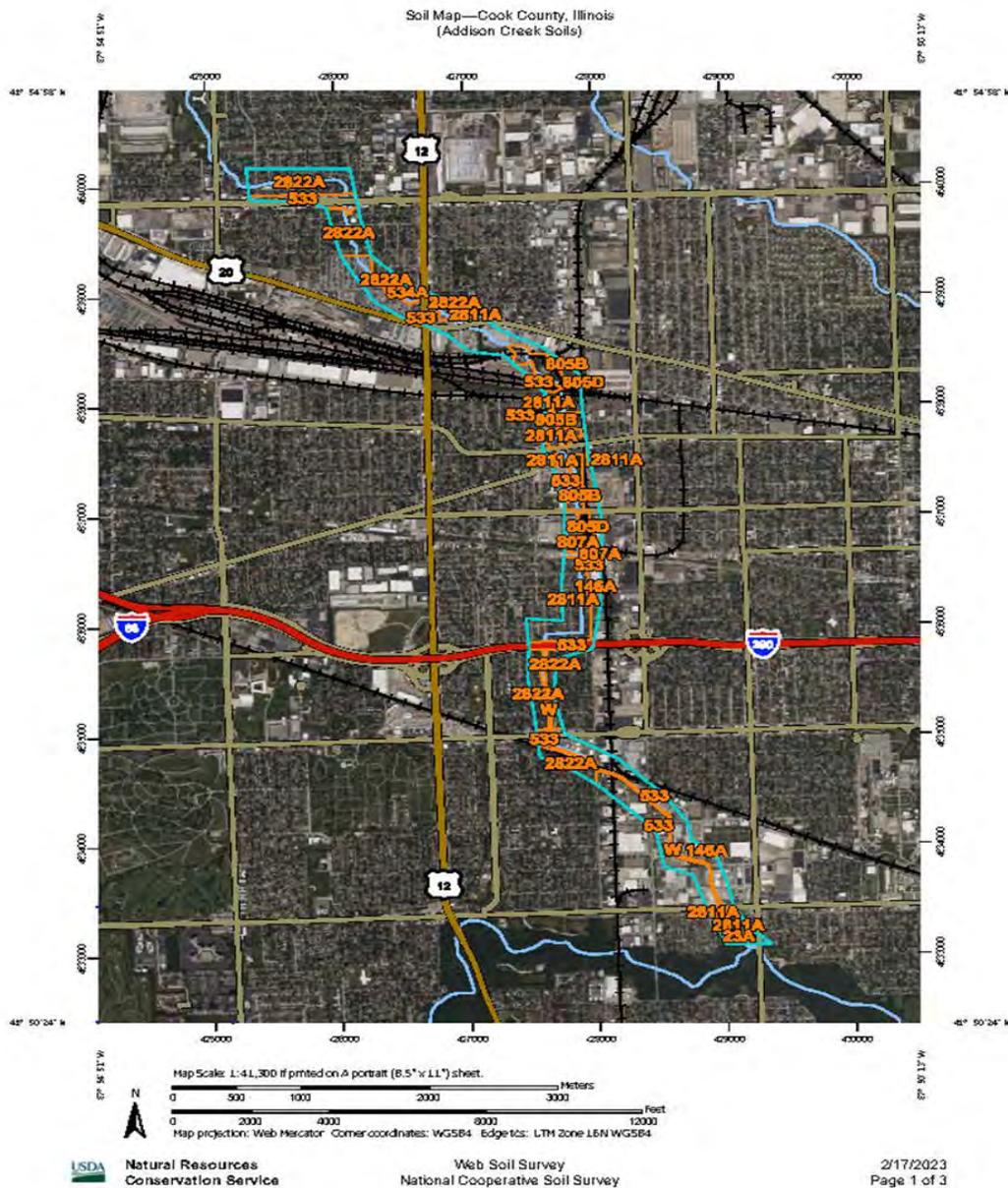
Soils in the project area were identified using the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey. The majority of the project corridor consists of Urban Land, followed by Anthropogenic Udorthents-Urban land-Elliott complex, 0 to 2

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<sup>11</sup> See Section 7.3 for references listed by author or agency and year of publication. For example, USFWS 2019 refers to the U.S. Fish and Wildlife Service's Official Coastal Barrier Resources System Maps, published in 2019.

percent slopes, Urban land-Anthropogenic Udorthents complex, 0 to 2 percent slopes, and Orthents, clayey, rolling to undulating with minor extents of Sawmill silty clay loam, undrained, cool, 0 to 2 percent slopes, frequently flooded, Urban land-Orthents, clayey, complex, nearly level, Orthents, loamy-skeletal, nearly level and Blount silt loam, Lake Michigan Lobe, 0 to 2 percent slopes. These soils generally consist of moderately well-drained silty clay loam over shallow bedrock (NRCS, 2023). These soils range from somewhat poorly drained silty clay loam in the anthropogenic urban land segments of the channel to moderately well drained silty clay found near less disturbed segments associated with ground moraine deposits. Soil types in the project area are identified in **Figure 3-1**.

**Figure 3-1: Soils.**



Topography in the project area was determined using the USGS topoView website and the Elmhurst Quadrangle, River Forest Quadrangle, and Berwyn Quadrangle (USGS, 2021). The existing alignment of Addison Creek at the northern extent of the project, northeast of the intersection of Wolf Road and North Avenue, lies at the elevation of roughly 650 feet mean sea level (MSL) (NAD83) with gradual downhill slopes to the southeast toward Salt Creek and the Des Plaines River. The downstream portion of the Addison Creek channel improvement project, just south of Cermak Avenue, lies at 610 feet MSL and joins Salt Creek just west of the Des Plaines River, where the elevation is 600 feet MSL.

### **Alternative 1 – No Action**

Under the No Action alternative, the Addison Creek channel would not be improved or stabilized. Extensive overbank flooding would continue, and flood damages would likely increase over time. This is a reach with inadequate channel capacity in the existing condition with very degraded and unstable conditions in many reaches. Soils would continue to erode and remain unstable and could result in local changes to topography but no changes to the soils themselves. This would result in negligible or no changes to soils, geology, or topography within the project area.

### **Action Alternative 2 – Proposed Action**

The proposed action includes various channel treatments over the approximately 3.5 miles of the existing Addison Creek channel. This action will not affect the geology of the area. To avoid penetrating the shallow weathered bedrock found within certain reaches of this project, MWRD designed the project without sheet pile walls. The lowering and widening of the Addison Creek channel to improve conveyance will alter the topography in the immediate project area within and along the channel. Drainage to the channel and the surrounding topography will not be altered. The soils information indicates that much of the stream corridor is already composed of altered and disturbed soils, with remnants of alluvial/riparian soil types remaining. The regrading of the channel in selected reaches will remove some soil material, but no other changes to the soils present are proposed. The proposed action will have a minor effect on the soils and topography, but no effect on the geology within the project area.

### **3.2.2 Water Resources and Water Quality**

Water resources include surface water, groundwater, and stormwater. Wetlands which are evaluated in **subsection 3.3.2**. Addison Creek is the water body that will be affected by the project. Addison Creek is a tributary to Salt Creek, which in turn flows into the Des Plaines River. The total Addison Creek watershed area is approximately 22 square miles, with 13.55 square miles located in Cook County and the additional area upstream in DuPage County. The Cook County portion of the watershed (study area) is heavily urbanized with extensive impervious surfaces and the stream itself has undergone extensive hydrologic modification for stormwater management and flood control. Approximately 96 percent of the watershed in Cook County is comprised of urban land uses. Like most streams in northeastern Illinois, Addison Creek is subject to high and low flows which tend to be seasonal but can also be very flashy in response to runoff events.

The Clean Water Act (CWA) of 1977, 33 U.S.C. §§ 1251 *et seq.*, regulates the discharge of pollutants into water, with various sections falling under the jurisdiction of U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) or as delegated to the state. Section 404 of the CWA establishes USACE permit requirements for discharge of dredged or fill materials into waters of the United States (WOUS). Section 401 of the CWA is administered by the Illinois Environmental Protection Agency (IEPA) and provides regulations for the protection of water quality on projects that involve dredge or fill in WOUS. Under the National Pollution Discharge Elimination System/SDS (NPDES/SDS) (Section 402 of the CWA), regulation of both point and nonpoint pollutant sources, including stormwater and stormwater runoff, has been delegated to the state and is administered by the IEPA. As part of the NPDES/SDS, a Stormwater Pollution Prevent Plan (SWPPP) is required. USACE regulation of activities within navigable waters is also authorized under the Rivers and Harbors Act of 1899, 33 U.S.C. §§ 403 *et seq.*, ch. 425 (Mar. 3, 1988, 30 Stat. 1151).

### **Flow Constraints**

Extremes of flow coupled with other physical habitat conditions constrain the potential of Addison Creek for fish and other aquatic life. There is one USGS gaging station on the stream (No. 05532000) at Washington Boulevard in Bellwood (River Mile 3.2). Peak annual streamflows over the period 2001-2010 ranged from a low of 343 cubic feet per second (cfs)(2006) to a high 1,040 cfs (2010). From 2010 to 2016, the low was 377 cfs and the high was 1,120 cfs showing an overall increase in peak flows. Over the period of record for this station (1950-current), the maximum peak discharge ever recorded was 1,120 cfs in August 1987 and April 2013 while the minimum recorded discharge was 0 cfs in September 1962.

One dam is located on Addison Creek: the Redmond Reservoir Dam (George Street Reservoir) in Bensenville. It is operated by the Village of Bensenville and was constructed in 1999.

### **Groundwater**

Groundwater underlying the project area is found in three primary stratigraphic locations: shallow groundwater contained in surficial glacial deposits to a maximum depth of 50 feet, shallow groundwater in Silurian dolomite bedrock to an average depth of 200 feet, and within deep bedrock of Cambrian-Ordovician deposits to an average depth of 1000 feet (Visocky, 1997; Suter, 1959). The project area is located within the Des Plaines watershed basin. Des Plaines River water elevation is an average of 616 feet above mean sea level (MSL).

### **Water Quality**

EPA defines water quality as “the condition of a water body as it relates to purposes such as recreation, scenic enjoyment, aquatic habitat, and human health.” Water quality is regulated by both the Clean Water Act and Illinois State Statutes.

Stormwater runoff affects water quality in surface waters, such as Salt Creek, the Des Plaines River, and the Illinois River. The Des Plaines-Illinois River watershed in which the project area is located

encompasses over 1,455 square miles (or 931,489 acres) in northeastern Illinois and southeastern Wisconsin, including commercial, urban, and rural residential properties. Contaminants, including eroded soils, fertilizers, herbicides, pesticides, and road chemicals, can be transported from lawns and roads to Illinois River via the Des Plaines River and tributary streams during storm events and flooding.

Addison Creek is classified as a General Use water and is subject to General Use water quality standards established by the Illinois Pollution Control Board. General Use standards apply to most waters of the State of Illinois and are intended to protect fish and other aquatic life, primary and secondary human contact (swimming, wading, boating, etc.), wildlife, and agricultural and industrial water uses. The General Use standards are also intended to protect the aesthetic quality of Illinois waters.

There are no MWRD ambient water quality monitoring stations on Addison Creek. The IEPA has two monitoring stations (Stations GLA 02 and GLA 04) as part of its Ambient Water Quality Monitoring Network on Addison Creek.

Addison Creek currently does not meet all the applicable water quality standards and not all the uses envisioned for the stream have been attained. Addison Creek is included on the current (2020/2022) 303(d) List of Impaired Waters compiled by the IEPA. The uses that are classified as impaired include Aquatic Life, Primary Contact Recreation, and Aesthetic Quality due to a range of use-impairing pollutants including Aldin, total Chromium, DDT, Hexachlorobenzene, total Phosphorus, Oil, Alpha-BHC, Copper, Polychlorinated Biphenyls (PCBs), sedimentation/siltation, total suspended solids (TSS), and bottom deposits.

Total Maximum Daily Loads (TMDLs) were established in 2004 for Addison Creek and have been approved by the EPA. A 41 percent reduction in chlorides in the Addison Creek watershed is called for in the TMDL report (*Total Maximum Daily Loads for Salt Creek, Illinois*, October 2004).

The only municipal-type wastewater treatment plant in the Addison Creek watershed is the Bensenville South wastewater treatment plant at river mile 10.4. This plant is permitted for a design average flow of 4.7 million gallons per day (MGD) with discharge limits of 10 mg/l CBOD and 12 mg/l suspended solids (NPDES IL 0021849). There also are private entities that have NPDES permits for point source discharges. There are 8 combined sewer overflows to Addison Creek in Bellwood (Total Maximum Daily Loads for Salt Creek, Illinois Final Report, CH2MHill, October 2004) as well as NPDES municipal stormwater discharges.

In November 2015 a *DuPage River/Salt Creek Watershed TMDL Report - Revised Stage 1 Report* was published by IEPA as prepared by Tetra Tech. Addison Creek as a tributary of Salt Creek was addressed in this report, but only for sampling station GLA-02. This update report addressed primarily nickel, fecal coliform, and total phosphorus for Addison Creek. Nickel and fecal coliform are no longer listed as sources of impairment, though they were historically.

The water quality target for total phosphorus is 0.110 mg/L based on unimpaired streams in the DuPage River/Salt Creek watershed.

## **Alternative 1 – No Action**

Under the No Action alternative, long-term impacts from sedimentation, soil erosion, and pollutants will continue to result from stormwater runoff in the project area. No construction activities will add to any surface water pollutants. The No Action alternative would not have an impact on groundwater.

## **Alternative 2 – Proposed Action**

Short-term impacts on water quality would occur during construction of the channel improvements. During construction, exposed soil is vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of habitat for aquatic species. Clearing and grading during construction would cause the temporary loss of vegetation and exposure of soil to the elements. To mitigate potential impacts from erosion during construction, the project sponsors would be responsible for preparing a Stormwater Prevention Plan (SWPPP) and obtaining a National Pollutant Discharge Elimination System (NPDES) Permit from the IEPA as well as all other applicable permits. A SWPPP will be required due to the area to be disturbed in the construction of the channel improvements. Minor, short-term impacts on water resources and water quality from construction runoff would be minimized with the implementation of Best Management Practices (BMPs), and mitigation measures specified in the NPDES/SDS permit.

Long term, there will be no improvement to water quality beyond the limited benefit from the stabilization of the streambanks throughout the project reach.

### **3.2.3 Floodplain Management (Executive Order 11988)**

Executive Order (EO) 11988, Floodplain Management, requires federal agencies to minimize occupancy and modification of the floodplain. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives. FEMA's regulations for complying with EO 11988 are promulgated in 44 C.F.R Part 9.

The purpose of the project is to reduce flood damages to approximately 2,200 properties by creating additional water conveyance and stabilizing the channel along Addison Creek within the defined project reach. The communities experiencing flooding along Addison Creek include Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. The project itself is a mitigating project within the floodplain to provide improvements which reduce the risk of flood damages associated with overbank flooding within the floodplain.

#### **3.2.3.1 FEMA FIRMS**

Addison Creek generally flows in a north to south direction, eventually discharging into Salt Creek. Per the FEMA Cook County and Incorporated Areas Flood Insurance Rate Map (FIRM) Numbers 17031C0388J, 17031C0369J, 17031C0457J, and 17031C0476J – effective August 19, 2008 – there is regulatory floodway (Zone AE) along Addison Creek within the project limits. Table 3-2 shows the FIRM map panels correlated to each reach.

**Table 3-2. Flood Insurance Rate Maps of Each Reach.**

Reach	Reach Segment	Communities	Flood Insurance Rate Map
1	Hirsch to Manheim	Northlake, Stone Park, Melrose Park	<a href="#">17031C0369J</a> <a href="#">17031C0388J</a>
2	Manheim to Lake	Stone Park, Melrose Park	<a href="#">17031C0369J</a> <a href="#">17031C0388J</a>
3	Lake Street to 2 <sup>nd</sup> UPRR bridge	Melrose Park and Bellwood	<a href="#">17031C0369J</a> <a href="#">17031C0388J</a>
4	Grant Ave to St Charles Road	Bellwood	<a href="#">17031C0369J</a> <a href="#">17031C0388J</a>
5	St Charles Road to Oak Street	Bellwood	<a href="#">17031C0369J</a> <a href="#">17031C0388J</a>
6	Cernan to Harrison Street	Bellwood	<a href="#">17031C0457J</a> <a href="#">17031C0476J</a>
7	Wedgewood Drive to Roosevelt Road	Westchester	<a href="#">17031C0457J</a> <a href="#">17031C0476J</a>
8	Roosevelt Road to Gardner Road	Westchester	<a href="#">17031C0457J</a> <a href="#">17031C0476J</a>
9	24th to Cermak Road	Broadview	<a href="#">17031C0457J</a> <a href="#">17031C0476J</a>

**3.2.3.2 Hydrologic and Hydraulic Modeling Background**

The FEMA effective hydrologic and hydraulic models for Addison Creek were prepared in support of a 2005 Addison Creek Physical Map Revision submitted by IDNR-OWR. The FEMA effective HEC-2 hydraulic model for Addison Creek begins at the confluence with Salt Creek and extends upstream to the upstream face of County Line Road. IDNR-OWR performed or contracted field crews to survey Addison Creek to develop the data in the HEC-2 hydraulic model for the channel geometry and bridges. The HEC-1 hydrologic model and the HEC-2 hydraulic model from the study correspond with the effective FEMA FIS information and were in turn used for the development of updated modeling as part of the DWP in 2011.

The Baseline Conditions modeling for Addison Creek was originally developed for the DWP in 2011 and utilized the effective hydraulic and hydrologic models as a starting point for model development. The DWP modeling consisted of hydrologic modeling performed in the Hydrologic Engineering Center – Hydrologic Modeling System program (HEC-HMS) and unsteady-state hydraulic modeling performed in the Hydrologic Engineering Center – River Analysis System program (HEC-RAS). The unsteady-state HEC-RAS model accounts for both flood reach and storage routing directly in the hydraulic model and allows for the analysis of both upstream and downstream impacts of alternative conditions. The effective hydrologic and hydraulic models were updated as appropriate based on updated topography, as-built drawings, survey, and other relevant stormwater work completed since 2005. Additional information can be found in the DWP. In 2013, the models were recalibrated to the April 2013 Addison Creek flood of record.

Since the alternative conditions are input directly into the HEC-RAS unsteady-state hydraulic model, the Baseline Conditions HEC-HMS hydrologic model is the same for both Baseline and alternative conditions modeling.

Minor changes were made to the Baseline Conditions HEC-RAS model by Hey and Associates based on additional data including survey data and as-built drawings that were acquired during the project design stage. The downstream limits of the channel improvements are near the confluence of Addison Creek and Salt Creek.

The proposed project conditions HEC-RAS model was created from the Baseline Conditions HEC-RAS model which was modified to include the proposed work outlined by reach in Section 2.2.

The proposed project conditions HEC-RAS model also includes the previously permitted and currently constructed flood control reservoir for Addison Creek in Reach 5.

Because the project consists of proposed actions within regulatory mapped floodway, state floodway permitting was triggered. An IDNR-OWR Part 3708 Floodway Construction Permit under the Rivers Lakes and Streams Act 615 ILCS 5 application was submitted in June 2018 and was subsequently approved as Permit No. NE2019056 on October 16, 2019. A permit extension from IDNR-OWR was received on September 20, 2022.

### **Alternative 1 – No Action**

Under the No Action alternative, there would be no construction, and therefore, no direct modification of any potential floodplain. There would be long-term impacts from continued erosion of the Addison Creek channel and increasing flood damages within the floodplain which was largely developed prior to such regulation of building in the floodplain.

### **Action Alternative 2 – Proposed Action**

The proposed project will include structural elements such as soldier pile retaining walls and gabion buckets and mattresses to stabilize the Addison Creek channel and reduce overbank flooding. These measures are to provide better protection of structures already within the floodplain that cannot be realistically relocated or modified. The proposed activities will have long-term beneficial impacts on the Addison Creek flood zone by reducing channel erosion and overbank flooding. There are minor short-term impacts to the floodplain as a result of this project but no long-term adverse impacts.

Documentation of the project and its impacts was provided in the 2017 Preliminary Design Report for engineering contract 11-187-5C and is briefly summarized below.

The communities experiencing flooding along Addison Creek include Broadview, Westchester, Bellwood, Melrose Park, Stone Park and Northlake. Based on the updated modeling and elevation data taken from newer Cook County LIDAR data, damages were recomputed during the preliminary engineering design. Based on the 2017 report, the calculated present value of structures and content damages due to flooding over a 50-year period was estimated as

\$104,785,000 to approximately 2,200 structures. Economic damages were defined following the protocol defined in Chapter 6.6 of the Cook County Stormwater Management Plan published in 2007.

In December 2021, MWRD used the FEMA Benefit-Cost Analysis Toolkit V.6.0 to conduct an updated benefit-cost analysis for pre- and post-project conditions. Damages are calculated based on the buildings First Floor Elevation, flood elevations calculated from the hydraulic model, Depth Damage Function based on building characteristics from the Cook County Assessor database, various building characteristics, and a building replacement value. Calculations were done using Excel and custom Excel functions.

A summary of the damages and benefits based on the updated 2021 FEMA Benefit-Cost Calculator are provided below.

**Annualized Damages Before Mitigation:**

Total Damages and Losses .....	\$151,705,368
Annualized Damages and Losses (50-year period) .....	\$5,953,077

**Professional Expected Damages After Mitigation:**

Total Damages and Losses .....	\$45,860,071
Annualized Damages and Losses (50-year project useful life).....	\$2,159,208

<b>Benefits.....</b>	<b>\$93,125,730</b>
<b>Costs .....</b>	<b>\$60,976,301</b>
<b>Benefit Cost Ratio (BCR or B/C).....</b>	<b>1.53</b>

Per the IDNR-OWR Part 3708 Floodway Construction Permit submitted in June 2018 and subsequently approved as Permit No. NE2019056 on October 16, 2019, with a permit extension received on September 20, 2022, flood elevation changes were documented throughout the project corridor along Addison Creek. The flood water surface elevations for proposed project conditions are either the same or lower than Baseline Conditions, except at two cross sections. These two cross sections (river station 21025.66 and 20834.3) are located in the UPRR railroad yard, and despite the slightly higher proposed water surface elevation, the flow is still contained within the banks of the creek, is within the limits of the permanent easement and does not cause flood damages. Thereby throughout the project corridor, flood reduction benefits are realized and provide benefits as noted above.

The maximum and average decreases in flood elevation for the 10-year flood event are 3.16-feet and 1.12-feet respectively.

The maximum and average decreases in flood elevation for the 100-year flood event are 2.49-feet and 0.90-feet respectively.

As a result of the modeling and the proposed project, in combination with discussions with IDNR-OWR and the Illinois State Water Survey, a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) will be submitted. MWRD is currently working on preparing a CLOMR for submission and is working with the Illinois State Water Survey which acts as the authorized reviewer in Illinois for FEMA as part of FEMA's LOMR Delegation Program. This coordination is helping finalize the appropriate mechanism for submitting the CLOMR / LOMR for this scale of a project.

The Proposed Action is a project within the floodplain to mitigate flood damages associated with overbank floodplain flooding. The work itself creates flood storage and conveyance to reduce the risk of flood damages and therefore avoid short and long-term adverse impacts. The work itself is generally within the floodplain but no occupancy of the floodplain is planned. Due to permanent easements being placed over the proposed flood reduction work zones, no floodplain development will be permitted over the project improvements within the floodplain channel to adversely impact the flood risk. Both structural and non-structural solutions were considered, and the project combines both types of solutions to provide a flood reduction risk in accordance with the primary goals of this project. This project will reduce the impacts of floods related to human health, safety, and welfare. Where possible within the project corridor, in-channel improvements including native vegetation, riffles, pools, stream barbs and erosion protection were added to restore the natural and beneficial values served by floodplains.

### **3.2.4 Air Quality**

The Clean Air Act (CAA), 42 U.S.C. §§ 7401 *et seq.*, requires EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Current criteria pollutants are carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ground-level ozone (O<sub>3</sub>), lead (Pb), particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>).

Federally funded actions in nonattainment and maintenance areas are subject to EPA conformity regulations, 40 C.F.R. Parts 51 and 93. The air conformity analysis process ensures that emissions of air pollutants from planned federally funded activities would not affect the state's ability to achieve the CAA goal of meeting the NAAQS. Section 176I of the CAA requires that federally funded projects must not cause any violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone. Activities that would cause emissions to exceed the NAAQS or cause an area to fall out of attainment status would be considered a significant impact. The emissions from construction activities are subject to air conformity review.

Under the general conformity regulations, a determination for federal actions is required for each criteria pollutant or precursor in nonattainment or maintenance areas where the action's direct

and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the prescribed *de minimis* rates for that pollutant. The prescribed annual rates are 50 tons of volatile organic compounds (VOCs) and 100 tons of nitrogen oxides (NO<sub>x</sub>) (O<sub>3</sub> precursors) and 100 tons of PM<sub>2.5</sub>, SO<sub>2</sub>, or NO<sub>x</sub> (PM<sub>2.5</sub> and precursors).

An area is classified as nonattainment when it does not meet NAAQS standards. According to EPA's NAAQS County attainment record, Cook County, Illinois is a non-attainment zone for 8-hour ozone (2015)(EPA, 2022).

### **Alternative 1 – No Action**

Construction activities would not occur under the No Action alternative. Therefore, there would be no impacts on air quality due to the project.

### **Action Alternative 2 – Proposed Action**

The Proposed Action would have minor short-term impacts on air quality owing to the use of construction equipment with diesel and gasoline engines. During the construction phase, exposed soil could temporarily increase airborne particulate matter into the project area. Emissions from construction equipment could have minor temporary effects on the levels of some pollutants, including CO, VOCs, NO<sub>2</sub>, O<sub>3</sub>, and PM. Emissions would be temporary and localized, and only minor impacts to air quality in the project area would occur. BMPs and mitigation measures for air quality impacts are provided in **Subsection 6.2.3**.

Once construction is completed, there would be no impacts to air quality due to the project.

## **3.3 Biological Environment**

### **3.3.1 Terrestrial and Aquatic Environment**

The Addison Creek project corridor is located within Cook County, Illinois. Cook County is the most populous county in Illinois and includes the City of Chicago. Cook County is also one of the most populous and developed counties in the nation. The Addison Creek watershed was assessed and included as a part of the Lower Salt Creek Watershed Based Plan completed in 2018 by the DuPage River Salt Creek Work Group and the Chicago Metropolitan Agency for Planning (CMAP). The Addison Creek watershed was divided into an upper, central, and lower section for the analyses in this watershed-based plan. The project corridor is largely within the central section of the Addison Creek watershed as defined in the plan.

Land use was classified using CMAP's 2013 Land Use Inventory Classification Scheme. The land-use scheme employs a new methodology and results in 57 categories of land use that are aggregated under five general categories: urbanized, agriculture, open space, vacant or under construction, and water. For purposes of the watershed plan, land use within the planning area

was organized among eleven categories: residential, commercial, institutional, industrial, open space, agricultural, T/C/U<sup>12</sup>, vacant, under construction, unclassifiable/other, and water.

This central section of the Addison Creek watershed that includes the project corridor is reported as 32% residential, 6% commercial, 7% institutional, 16% industrial, 4% open space, 35% transportation/communications/utilities, 1% vacant, and less than 1% for under construction, unclassifiable, and water. Data analysis in the watershed-based plan revealed that nearly 95 percent of the planning area was covered with varying degrees of imperviousness, 43.7 percent of which is completely impervious. This is representative of the central section of the Addison Creek watershed as well.

Since the Addison Creek central section that includes the project corridor is less than 4% open space, there is minimal habitat present for wildlife, other than urban-adapted species. Most of the area is dominated by impervious surfaces and the majority of the watershed is residential development and transportation and utility corridors. The project corridor itself is similarly built-out with residential, commercial, and industrial developments that predate floodplain protections. Terrestrial wildlife present would primarily include urban-adapted species such as cottontail rabbit, grey squirrel, skunk, opossum, raccoon, and white-tailed deer. Migratory birds are addressed under section **3.3.4 Migratory Birds**.

Addison Creek is not classified as a biologically significant water body (*i.e.*, “A” or “B” Stream) in the 2008 Illinois Department of Natural Resources publication Integrating Multiple Taxa in a Biological Stream Rating System and in the associated data found on the web-based Illinois Biological Stream Ratings Tool mapping system. In the last assessment of Addison Creek, it received an “E” score (the lowest of 5 ratings categories) for both biological diversity and biological integrity under the streams rating system for its entire length in Cook County. Biological diversity refers to the variety of taxa within a stream and biological integrity refers to a system’s wholeness and its ability to support organisms and processes comparable to natural habitats. Data on fish, mussels, macroinvertebrates, crayfish, and threatened and endangered species richness data were components evaluated to calculate ratings in this IDNR study.

A 2010 Biological and Water Quality Study of the Salt Creek Watershed was conducted by the Midwest Biodiversity Institute, Center for Applied Bioassessment & Biocriteria. Addison Creek is a part of that watershed, and they reported fish Index of Biotic Integrity (IBI) scores throughout the Salt Creek watershed sampling in 2010 were similar to 2007, with no statistical difference between years. Scores in tributaries throughout the watershed, including Addison Creek, were typically in the poor to fair range, with the exception of the headwaters of Addison Creek where scores were very poor. Addison Creek is the most modified tributary in the Salt Creek watershed, with one or more highly modified attributes found at each sampling site (Midwest Biodiversity Institute 2010).

The fish community in the upstream reaches of Addison Creek at River Miles 10.5 and 8 was described as being “the most rudimentary possible short of finding no fish altogether.” The few

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<sup>12</sup> T/C/U = transportation, communications, and utilities.

fish collected in the upstream reaches exhibited a high percentage of external deformities, eroded fins or barbells, and lesions or tumors. Further downstream, conditions improved with greater fish numbers, although the communities present were found to be dominated by species tolerant of pollution and habitat degradation. Virtually all IBI scores recorded for Addison Creek were below 20, indicating a “restricted” (very low quality) fish assemblage.

Additional data collected on Addison Creek in 2013 found 20 species of fish, ranging from 0 to 13 species in a given sample location. The revised Illinois Index of Biotic Integrity (IBI) for fish ranged from 16 to 3 for the mainstem of Addison Creek.

The Addison Creek macroinvertebrate community quality as measured by 2010 Macroinvertebrate IBI (MIBI) were all very low (<11) and poor (11-21) and are indicative of very degraded conditions. Only the MIBI at the confluence with the main channel of Salt Creek received a Fair rating (21-41).

### **Alternative 1 – No Action**

Under the No Action alternative, there would be minor, long-term adverse impacts on the terrestrial and aquatic environment resulting from the continued erosion of the streambanks. Within the existing highly urbanized context, the aquatic community would not be expected to improve without significant effort.

### **Alternative 2 – Proposed Action**

The proposed action would widen and lower the Addison Creek channel in several of the project reaches. It would also stabilize the streambanks with various treatments. The quality of the aquatic community and the habitat present is already poor. In an effort to avoid degrading these resources further, trees, shrubs, and native prairie grasses will be planted/seeded in the riparian environment in selected reaches along the creek. Much of the vegetation to be removed consists of non-native invasive species that provide minimal habitat value. The project ultimately will result in negligible changes to the terrestrial and aquatic environment.

### **3.3.2 Wetlands (Executive Order 11990)**

Executive Order (EO) 11990, Protection of Wetlands, requires federal agencies to take action to minimize the loss of wetlands. FEMA regulation 44 C.F.R. Part 9, *Floodplain Management and Protection of Wetlands*, sets forth the policy, procedures, and responsibilities to implement and enforce EO 11990. EO 11990 prohibits FEMA from funding activities in a wetland unless no practicable alternatives are available. The NEPA compliance process requires federal agencies to consider direct and indirect impacts on wetlands which may result from federally funded actions.

USACE and EPA define wetlands as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (40 C.F.R. § 122.2).

Hey and Associates, Inc. (Hey) performed a wetland delineation of most of the project area in 2012 that included approximately a 5-mile section of Addison Creek. For this delineation, the study was limited to the undeveloped land adjacent to the creek channel, typically within 100-feet of the water's edge. The 2012 study corridor extended from Hirsch Street in Northlake, Illinois continuing to the south and east down to Gardner Road in Westchester, Illinois, with the reach down to Cermak Road in Broadview added at a later time. The creek corridor in this reach has been fully channelized in the past for stormwater management purposes and has steep banks along most of its length. Some portions of the channel also have stream banks that have been armored with concrete debris, cement, or other structural features.

One WOUS (7.25 acres) and eight wetlands totaling 1.2 acres were delineated within the Hey delineation study corridor. The WOUS is an approximately 5-mile length of Addison Creek which consisted predominantly of an excavated creek channel with steep banks. What is now classified as Reach 9 was later added to the project area after the initial delineation. Reach 9 was delineated separately by Hey on July 5, 2017. No wetlands were identified in Reach 9, only the limits of the channel as defined by the Ordinary High Water Mark (OHWM). Most of the study corridor consists of a highly modified stream channel with bed and banks that are lined with rip-rap, concrete and stone or consist of steep un-vegetated slopes. The wetland areas consist predominantly of floodplain shelves that are either low quality woodland or degraded wet meadow.

Ward Environmental Services Inc. (WESI), in conjunction with Christopher B. Burke Engineering Ltd (CBBEL), conducted a wetland delineation in an unstudied area southeast of the Lake Street and Manheim Road intersection on April 6, and May 17, 2012. This entire project area is industrialized, with a number of truck yards and storage areas, and a rail yard. Most of the Addison Creek channel that flows through this parcel is also channelized. The banks are steep and eroded or contain narrow shelves. Chain link fencing is installed along most of the upper slopes along the channel. Additionally, a vertical-walled concrete channel runs along the western border and the west portion of the southern border of this parcel before its confluence with the main channel of Addison Creek.

### **Alternative 1 – No Action**

Under the No Action alternative, there would be no impacts to the wetland areas associated with Addison Creek other than that caused by continued erosion of the streambanks.

### **Alternative 2 – Proposed Action**

The project design will impact 0.63 acres of low-quality wetland with the placement of riprap, clean topsoil, gabions, and other measures for bank stabilization. USACE permit LRC-2014-00674 was issued in January 2020 (See Appendix B) authorizing these impacts with compensatory mitigation provided through the purchase of 0.95 acres of uncertified wetland mitigation credits at the Gray Willows Wetland Mitigation Bank. A Management and Monitoring Plan for Streambank Stabilization areas was also prepared for the project as part of the Clean Water Act Section 404 permitting process.

**Table 3-3. Summary of Wetland Impacts by Stream Reach.**

Wetland ID	Reach	Scope of Work	Total Wetland Acres in Reach	Wetland Impacts in Reach (ac)
1	1	Open channel	0.17	0.01
2	1	Open channel	0.23	0.07
3	3	Gabion channel	0.51	0.43
4	3	No impacts	0.12	0.00
5	4	Gabion channel	0.10	0.10
6	5	Soldier Pile Wall No. 10	0.02	0.02
7	5	No impacts	0.02	0.00
8	5	No impacts	0.03	0.00

**3.3.3 Threatened and Endangered Species**

The Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 15–1 - 1544, provides a framework for the conservation of endangered and threatened species and their habitats. Federal agencies are required to ensure that actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of any listed species (including plant species) or result in the destruction or adverse modification of designated critical habitats for such species.

The following federally-listed species were identified using the IPAC online system in February 2023.

**Northern Long-Eared Bat (*Myotis septentrionalis*)**

The northern long-eared bat ranges across much of the eastern and north central United States and across much of Canada. Historically this species has been patchily distributed across its range, but generally more common in the northern and eastern portions of its range. It was considered a common bat species until recent precipitous population declines due primarily to white-nose syndrome. It was listed as federally threatened when the initial assessment for this project was completed. However, it is now considered federally endangered.

Northern long-eared bats are known to make use of tree roosts during the summer, especially near water sources. Loose bark, broken tree limbs, cavities, and cracks in a tree can all be used by bats as summer roosting sites. Additionally, this species can take up residence in structures such as abandoned buildings, culverts, and bridges.

There are no known bat hibernacula within many miles of the project site. The project site does not contain any remnant upland forests or woods. There are trees located along Addison Creek that are weedy growth in a narrow riparian zone where structures do not come up to the creek banks.

NLEB is known to occur in Cook County, and within the Des Plaines River watershed. Since no bat surveys have been conducted within the project corridor, the NLEB presence or absence is not definitively known. However, given the very urbanized setting and degraded riparian corridor, and our current understanding of habitat used by the NLEB, it seems very unlikely that there is suitable summer roosting habitat present within the project area. Therefore, this project will have no effect on this species.

**Piping plover (*Charadrius melodus*)**

Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands. The project corridor is approximately 13 miles inland from Lake Michigan beaches. Therefore, this project will have no effect on this species. There is final Critical Habitat designated for this species, however, the project location does not overlap with the critical habitat.

**Rufa Red Knot (*Calidris canutus rufa*)**

For this species, only actions that occur along coastal areas or large wetland complexes during migratory window of May 1 - September 30 need to be considered. The project site is approximately 13 miles inland from Lake Michigan beaches. Therefore, this project will have no effect on this species. There is proposed Critical Habitat designated for this species, however, the project location does not overlap with the critical habitat.

**Eastern massasauga rattlesnake (*Sistrurus catenatus*)**

Massasaugas live in wet areas including wet prairies, marshes and low areas along rivers and lakes. In many areas Massasaugas also use adjacent uplands during part of the year. They often hibernate in crayfish burrows, but they may also be found under logs and tree roots or in small mammal burrows. Unlike other rattlesnakes, Massasaugas hibernate alone. The project area does not contain suitable habitat for the snake. Therefore, this project will have no effect on this species. No Critical Habitat has been designated for this species.

**Hine's emerald dragonfly (*Somatochlora hineana*)**

The Hine's emerald dragonfly lives in calcareous (high in calcium carbonate) spring-fed marshes and sedge meadows overlaying dolomite bedrock. The project area does not contain suitable habitat for the Hine's Emerald Dragonfly and is not located near designated critical habitat. This project will have no effect on this species.

**Eastern prairie fringed orchid (*Platanthaera leucophaea*)**

The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established. This fungus helps the seeds assimilate nutrients in the soil. The project site does not contain suitable habitat for the eastern prairie fringed orchid. The project will have no effect on this species.

### **Leafy Prairie-Clover (*Dalea foliosa*)**

The leafy Prairie-Clover is found in prairie remnants along the Des Plaines River in Illinois, in thin soils over limestone substrate. It is especially vulnerable to commercial and residential development and to road construction. Fire suppression practices have eliminated the wildfires which once regularly cleared prairie grasslands of the encroaching woodlands. Often the expansion of shrubs and trees threaten this clover, which needs hot, sunny sites to survive. The project site does not contain any prairie remnants and will have no effect on this species.

In summary, the vast majority of the study corridor occurs on highly urbanized land that has been heavily modified and degraded. The creek corridor has been channelized in the past for stormwater management purposes. The wetland areas consist predominantly of floodplain shelves that are either wooded or degraded wet meadow. The rest of the channel is bordered by dense shrubs or wood, gabion-like structures, concrete rip-rap or cement, or old field. No remnant prairie was observed within the study corridor. The project will have no effect on any federally listed species.

### **State Listed Species**

Consultation for state-listed species was completed using the Illinois Department of Natural Resources online EcoCAT system. A signoff letter was obtained in 2017 for the project. In 2020 the project was re-entered into the EcoCAT system in two segments to receive an updated assessment. The EcoCAT system generated two notices indicating that consultation was terminated because the Illinois Natural Heritage Database contained no record of state-listed threatened or endangered species, Illinois Natural Area Inventory Sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project. The EcoCAT documentation is provided in Appendix C.

### **Alternative 1 – No Action**

The No Action alternative would not directly impact federally listed threatened or endangered species because there would be no construction.

### **Alternative 2 – Proposed Action**

The channel improvements including streambank stabilization would require the removal of three bridges and the clearing of approximately 9.2 acres of trees and brush. FEMA contacted the USFWS Chicago Ecological Services Field Office for technical assistance on the northern long-eared bat and whether a summer survey for bats would be required for this project. The field office reviewed the project area and noted that they do not have any concerns with this project moving forward. They stated that the areas of tree clearing do not meet the range-wide guidelines for habitat suitability and therefore can be assumed to not be occupied by the northern long-eared bat. No summer survey would be required, and the field office noted that this project could easily support a “no effect” determination for this species. This coordination is available in Appendix C. As a result of this coordination, it is determined that this project will have no effect on the northern long-eared bat.

The project will have no effect on any federally listed threatened or endangered species.

### **3.3.4 Migratory Birds**

A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. The Migratory Bird Treaty Act (MBTA) of 1918, as amended, 16 U.S.C. §§ 703–712, protects migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions. All native birds, including common species such as American robin (*Turdus migratorius*) and American crow (*Corvus brachyrhynchos*) are protected by the MBTA. The project area would support typical urban-adapted migratory bird species.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors.

The Bald and Golden Eagle Protection Act of 1940, 16 U.S.C. §§ 668 *et seq.*, prohibits the take, possession, sale, or other harmful action of any golden (*Aquila chrysaetos*) or bald eagle (*Haliaeetus leucocephalus*), alive or dead, including any part, nest, or egg (16 U.S.C. § 668(a)).

This project corridor is within a highly urbanized context. As such the migratory birds expected to occur within the project area include the typical urban-adapted species found throughout suburbia in northeastern Illinois. Some of these species may experience minor impacts due to the removal of trees and brush along the creek for work access and streambank stabilization purposes. This habitat, however, is not considered a limiting factor within the suburban context. Trees, shrubs, and native prairie species will be planted in selected appropriate locations as part of this project and will offset any minor impacts to migratory bird habitat.

#### **Alternative 1 – No Action**

The No Action alternative would not directly impact migratory birds because there would be no construction. The existing erosion of the streambanks and ongoing periodic flooding would be expected to continue and could affect other habitat areas of nearby upland vegetation.

#### **Alternative 2 – Proposed Action**

The proposed improvements to the Addison Creek channel would have minor, permanent impacts on migratory bird species habitat, through the removal of approximately 9.2 acres of trees and brush that could serve as habitat for migratory birds. However, trees, shrubs, and native prairie species will be planted in selected appropriate locations as part of this project and will offset any minor impacts to migratory bird habitat. There would also be minor, short-term impacts from construction activities disturbing bird activities in the project area during construction. A BMP to avoid and minimize impacts on migratory birds is provided in **Subsection 6.2.5**.

### **3.3.5 Invasive Species**

Executive Order 13112, Invasive Species, requires federal agencies to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health impacts caused by invasive species. The State of Illinois has also established laws to prevent and curb the spread of invasive species of aquatic plants and wild animals.

The project corridor includes widespread invasive species such as reed canary grass (*Phalaris arundinacea*), common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*), common buckthorn (*Rhamnus cathartica*), and garlic mustard (*Alliaria petiolata*) as noted within the wetland delineation report.

#### **Alternative 1 – No Action**

The No Action alternative would have minor long-term, adverse impacts on the area as invasive plant species would persist in open, disturbed areas affected by ongoing flooding and erosion.

#### **Action Alternative 2 – Proposed Action**

The improvements to the Addison Creek channel could have minor, short-term impacts from the potential spread of invasive weeds caused by construction activities via the movement of equipment, materials, and personnel. Construction activities on land could result in the transport of reed canary grass, purple loosestrife, or other invasive terrestrial weed species to or from the project area as cuttings or seeds attached to vehicles. However, many invasive plant species are already present in the project corridor and will remain so in the post-project condition. Trees, shrubs, and native prairie species will be planted in selected appropriate locations as part of this project and will discourage the establishment of invasive species.

BMPs to avoid and minimize the spread of invasive species are provided in **Subsection 6.2.6**.

## **3.4 Hazardous Materials**

Hazardous materials are any items or agents (biological, chemical, radiological, or physical) that have the potential to cause harm to humans, animals, or the environment either by itself or through interaction with other factors.

A complete Environmental Site Assessment (ESA) along with sampling and analytical testing was completed for the project area. The Phase I ESA identified the presence of Recognized Environmental Conditions (REC) within the study corridor from current and historical land uses. Overall, the ESA gives the environmental risk associated with the project area as high. Identified RECs included underground and above ground storage tanks in close proximity to the project site; records of past releases from tanks and subsequent cleanups; records of unregistered heating oil tanks; illegal dumps of waste materials along the Creek; and discharge of sewage contaminated rainwater into the Creek during periods of rainfall.

To further look at the level of contaminated soil within the study area, environmental sampling and testing was completed. Soil samples were taken from fifteen locations from the banks of the Creek or the bottom of the Creek. Twelve of the fifteen locations were selected for soil sampling and the remaining three locations were selected for sediment sampling. Out of the fifteen samples, ten samples had at least one contaminant of concern exceeding IEPA's Tiered Approach to Corrective Action Objectives (TACO) Tier 1 exposure rates.

The contaminants of concern included reactive hazardous wastes, ignitable hazardous waste, corrosive hazardous waste, pickle liquor used in steel finishing operations, spent halogenated solvents, spent non-halogenated solvents, barium, cadmium, chromium, selenium, silver, cyanides, selenious acid, and plating bath residues that use cyanides. Additionally, the railroad yard located between West Lake Street and Railroad Avenue could be a source of creosote and other contaminants. Also, it is understood that sewage contaminated rainwater is discharged into the creek during and after rain events.

After the ESA was completed, additional testing during final design further characterized the extent of contamination and covered areas that may not have been tested in the preliminary data gathering phase. The selected contractor will prepare and submit a Contamination Operation Plan and Erosion Control Plan for review and approval prior to commencing any work.

A comprehensive final report, Environmental Investigation Addison Creek Channel Improvements Reaches 1 to 9, Proviso Township, Cook County, Illinois dated October 18, 2021 was prepared by Interra for the project. This report summarized the results from all of the following investigations:

- Phase I Environmental Site Assessment, Addison Creek between Hirsch Street and Gardner Road by Interra, Inc. for Hey and Associates, Inc. – MWRDGC Contract No. 11-187-5C. Report dated 5/29/2012.
- Environmental Sampling and Analytical Testing, Addison Creek between Hirsch Street and Gardner Road by Interra, Inc. for Hey and Associates, Inc. – MWRDGC Contract No. 11-187-5C. Report dated 12/18/2012.
- Addendum to Environmental Sampling and Analytical Testing, Addison Creek between Hirsch Street and Gardner Road by Interra, Inc. For Hey and Associates, Inc. -- MWRDGC Contract No 11-187-5C. Report dated 9/23/2014.
- Environmental Sampling and Analytical Testing, Site #15 & Site #16, Addison Creek Channel Improvement Project, Stone Park, Illinois for Hey and Associates, Inc. Report Dated 10/18/2021. Includes Phase I Environmental Site Assessments performed by O'Brien and Associates for Christopher B. Burke Engineering Ltd.

This integrated environmental report presented the following conclusions and recommendations and noted that no soil or sediment samples exceeded the criteria for hazardous waste (Interra 2012).

- *Due to the presence of contaminants of concern at most locations and because it is impractical to delineate the limits of clean areas from a construction consideration point*

*of view, it is recommended that all soil and sediment excavated during the Addison Creek Improvements project be treated as contaminated.*

- *Due to the presence of contaminants, the excavated soil cannot be certified as “Uncontaminated Soil” for disposal at a “Clean Construction and Demolition Debris” (CCDD) facility.*
- *In so far as possible, soils excavated during construction should be managed on-site, within the same areas that they are excavated from.*
- *Any concrete, asphalt, or metal debris free of soil can be recycled or disposed of as construction waste.*
- *Any plastic parts, appliances, tires etc. should be separated and disposed of properly.*
- *Soils that cannot be managed onsite should be treated as “Non-Special Waste” and disposed of at an approved Landfill.*
- *A “Health and Safety Plan”, “Contamination Operation Plan” and an “Erosion Control Plan” should be developed for managing excavated soils and to prevent migration of contamination during excavation and construction.*
- *Soils that exceed the industrial-commercial limits should be disposed of as “Non-Special Waste”.*
- *No soil or sediment samples exceeded the criteria for Hazardous materials.*

### **Alternative 1 – No Action**

The No Action alternative would have no effect on hazardous materials or chemicals because there would be no construction and no contaminated sites would be disturbed.

### **Action Alternative 2 – Proposed Action**

The Proposed Action would introduce hazardous materials and chemicals to the site temporarily for construction purposes. Construction equipment used for the project would have small quantities of gasoline and fuel, but no releases are anticipated from these machines as they would be kept in good working order in accordance with state and local ordinances.

Contaminated materials are known to be present within the project area at concentrations that do not exceed hazardous material criteria. All materials will be handled in accordance with all of the recommendations in the Interra environmental reports as summarized above and in accordance with IEPA regulations. There would be no long-term impacts to hazardous materials due to the project. See **Subsection 6.2.6** for mitigation measures for hazardous waste.

## **3.5 Socioeconomics**

### **3.5.1 Zoning and Land Use**

The Project Area is located within the communities of Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. These municipalities are all within Cook County, Illinois.

The project spans multiple communities each with their own zoning map. A summary of zoning by municipality within the project corridor is provided in Table 3-4. MWRD coordinated with each community on corridor alternative options as discussed in Section 2. The communities were supportive of the flood damage reduction project and participated in the development of the Detailed Watershed Plan (DWP) that identified this project to move forward to design and construction. MWRD and the municipalities worked together to balance the need for acquisitions, easements, impacts and other project amenities with the understanding that the quality of life throughout the corridor would improve because of significant flood reduction.

As part of the design, MWRD also identified and obtained permanent easements on the proposed improvements to allow the municipalities and MWRD to maintain and repair the improvements.

**Table 3-4. Zoning Types by Municipality.**

Municipality	Zoning Types within the Addison Creek Project Limits
Northlake	Open Space R-1 – Single Family Residential
Melrose Park	MH – Mobile Home Park E – Commercial G - Industrial
Stone Park	R-1 – Single Family Residential R-2 – Two Family Residential B-1 – General Commercial B-2 – Entertainment District
Bellwood	R1 – Single Family Residential Unpaved ROW R3 – Limited General Residential I1 – Restricted Industrial
Westchester	R-1 – Single Family Residential B-2 – Restricted Business I – Industry
Broadview	M - Manufacturing O/I – Office and Industrial

**Alternative 1 – No Action**

The No Action alternative would have a negative effect on each municipality’s land adjacent to and within the Addison Creek project corridor because flood damages would continue to impact property and structures. Flood damages may lead to significant repair costs, inability to obtain insurance on structures, inability to transfer property ownership, or may lead to neglect and vacancy. This may lead to declining land values and tax base further impacting each community.

## **Action Alternative 2 – Proposed Action**

The Proposed Action would reduce the risk of flood damages to property and structures well beyond the limits of construction in the areas identified as flood hazards on FEMA FIRMs. Permanent easements on properties throughout the project limits place an encumbrance on the property. However, the benefits of flood reduction coupled with the ability for future maintenance and repair will provide a long-term benefit to land and property within the project corridor.

Each municipality participated in the design plan preparation through meetings, plan reviews, additional coordination, and assistance with acquisitions and easements.

### **3.5.2 Noise**

The Noise Control Act of 1972 defines “noise” as an undesirable sound. Noise is regulated at the federal level by the Noise Control Act of 1972, 42 U.S.C. §§ 4901, *et seq.* Noise standards developed by EPA (EPA, 1974) provide a basis for state and local governments’ judgments in setting local noise standards. The project area is located within the communities of Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. The project area is largely residential, with commercial and industrial areas as well.

### **Alternative 1 – No Action**

The No Action alternative would include no construction activity and therefore would cause no changes in ambient noise levels.

## **Action Alternative 2 – Proposed Action**

Under the Proposed Action, the construction phase of the project would cause short-term minor changes in the ambient noise levels in the project area associated with construction activities. Short-term impacts related to construction activities would include trucks hauling materials to and from the site and the operation of equipment for demolition, excavation, and fill activities. Minor traffic noise would also be expected from construction vehicles and haul trucks arriving and departing from the project area. It is anticipated that demolition and construction activities will take place during the less noise-sensitive daylight hours. Traffic is not anticipated to increase following construction activities, therefore there will be no long-term change in noise levels.

### **3.5.3 Public Services and Utilities**

Each municipality has emergency services, schools, and municipal facilities located within or adjacent to the project area. Although no hospital is directly within the project area, several hospitals are nearby including Kindred Hospital Chicago Northlake (0.24 miles north of Reach 1), Hines VA Hospital (0.9 miles east of Reach 9), Gottlieb Memorial Hospital (2.1 miles northeast of Reach 2), and Loyola University Medical Center (1.1 miles east of Reach 9).

The following public service facilities are located within the project limits:

- IDOT Pump Station No. 9 (Reach 2)
- Pace Bus Maintenance and Storage (Reach 3)
- Bellwood Public Works Storage Yard (Reach 4)

No police, fire, or public school facilities are located within the project area.

The Illinois Department of Transportation manages Mannheim Road (US 20), Lake Street, St. Charles Road, Roosevelt Road, and Cermak Road (22<sup>nd</sup> Street). The Cook County Department of Transportation and Highways manages Gardner Road. MWRD manages interceptor sewers, pump stations and combined sewer outfalls within or adjacent to the project area. Each municipality provides street repair services to local roads, along with water, sanitary sewer, and storm sewer to areas within and bordering the project area.

Both public and private utilities within the project area have been identified and coordinated with their respective owners for protection, removal, replacement and/or relocation as necessary to complete the project. Permitting has been completed as necessary for this utility work.

### **Alternative 1 – No Action**

The No Action alternative would impact public services and utilities in the project area during flood events.

Public services may be impacted in the following ways during flood events:

- Roadway flooding making routes inaccessible for emergency service response.
- Roadway flooding making routes inaccessible causing traffic jams in neighborhoods that are not designed to handle the traffic volume.
- Roadway flooding causing loss of vehicles and property due to flood damages to the vehicles while driving.
- Public transit impacted due to the Pace Bus service unable to have bus ingress / egress out of their facility due to roadway flooding.
- School facilities impacted due to flooded roadways and lack of access from homes to schools.

Utilities may be impacted in the following ways during flood events:

- Inaccessible utility poles due to flooding may delay the ability to provide repairs during flood and storm events.
- High flood waters may infiltrate sanitary sewer systems which can cause overflows or basement backups.
- Inability to provide repairs to utilities (*i.e.*, sewers or water) due to site and roadway flooding.

## **Action Alternative 2 – Proposed Action**

The Proposed Action would have minor, short-term impacts on public services during the construction phase. However, MWRD and the selected contractor will be coordinating any temporary public service or utility impacts with each municipality. Water services may require short-term (*i.e.*, time measured in hours) shutdowns to connect and test new watermain piping. Private utilities (*i.e.*, electric, natural gas, etc.) that are to be relocated may require extremely short-term (*i.e.*, time measured in hours) shutdowns to connect relocated lines. Any temporary shutdowns during construction will follow local requirements regarding shut down procedures and notifications.

The Proposed Action would provide long-term benefits to public services and utilities by reducing the risk of flooding roadways and property which will enable better response from emergency services and utility companies, allow for better traffic movement during extreme weather events, and reduce the risk of sanitary sewer backups and overflows.

### **3.5.4 Traffic and Circulation**

Roadway data was obtained from the various municipalities and agencies within the project corridor. Roadway jurisdiction includes local municipalities, Cook County Department of Transportation and Highways, and the Illinois Department of Transportation. The Illinois Department of Transportation manages Mannheim Road (US 20), Lake Street, St. Charles Road, Roosevelt Road and Cermak Road (22<sup>nd</sup> Street). Highway Permits will be obtained from the Illinois Department of Transportation for the project. The Cook County Department of Transportation and Highways manages Gardner Road. There are currently no dedicated multi-use paths or trails within the project area other than sidewalks used for circulation on roadways and properties.

Many roadways throughout the project area have been subject to flood inundation which can lead to closures and degradation of the roadway pavement structure.

Roadways with historical flooding in or adjacent to the project area include:

- IDOT:
  - Mannheim Road
  - Lake Street
  - I-290 (Eisenhower Expressway)
  - Roosevelt Road
- Cook County Department of Transportation and Highways:
  - Gardner Road
- Northlake:
  - Hirsch Street
  - 46<sup>th</sup> Avenue
  - 45<sup>th</sup> Avenue
  - 44<sup>th</sup> Avenue
- Melrose Park

- Division Street
- Lake Street
- 37<sup>th</sup> Avenue
- Stone Park
  - Lake Street
  - Division Street
  - Hirsch Street
  - Soffel Avenue
  - 44<sup>th</sup> Avenue
  - 43<sup>rd</sup> Avenue
  - 40<sup>th</sup> Avenue
  - 39<sup>th</sup> Avenue
  - 38<sup>th</sup> Avenue
  - 37<sup>th</sup> Avenue
- Bellwood
  - 32<sup>nd</sup> Avenue
  - Zuelke Drive
  - 30<sup>th</sup> Avenue
  - Madison Street
  - Monroe Street
  - Wilcox Avenue
  - Adams Street
  - Jackson Street
  - Van Buren Street
  - Harrison Street
  - Linden Avenue
  - Rice Avenue
  - Eastern Avenue
  - 32<sup>nd</sup> Avenue
  - 31<sup>st</sup> Avenue
  - 30<sup>th</sup> Avenue
  - Cernan Drive
- Westchester
  - Newcastle Avenue
  - Portsmouth Avenue
  - Suffolk Avenue
  - Norfolk Avenue
  - Manchester Avenue
  - Bristol Avenue
  - Wedgwood Drive
  - Kitchner Street
  - Gladstone Street

- Roosevelt Road
- Derby Lane
- Drury Lane
- Broadview
  - 21<sup>st</sup> Avenue
  - 19<sup>th</sup> Avenue
  - 18<sup>th</sup> Avenue
  - 19<sup>th</sup> Street
  - 21<sup>st</sup> Street
  - 22<sup>nd</sup> Street
  - Terry Lane
  - Erika Drive
  - Elizabeth Drive
  - Summerdale Avenue

There are 11 bridge/culvert crossings in Reach 6 beginning at Madison Street and ending at I-290. From Madison Street to 32<sup>nd</sup> Avenue, the crossings are all dual cell box-culvert style structures of similar opening sizes. Based on the hydraulic modeling for this reach, these culverts are undersized to handle high flood flows and cause significant head loss. The crossings were investigated in detail to determine a range of options to improve their conveyance capacity. This included replacing the existing culverts with larger bridges or removing the culvert crossings altogether.

While the replacement of existing culvert crossings with the various larger bridges was reviewed and evaluated, it was determined that removing several road crossings without replacing them offered the most cost-effective option. With the high number of existing crossings in this neighborhood, the neighborhood impacts resulting from three bridge removals were considered minimal relative to the benefits of additional flood relief. Hey and MWRD staff met with the Village of Bellwood on December 18, 2012 to discuss potential improvements to this reach of Addison Creek. In discussing the option of culvert crossing removal, the Village of Bellwood recommended that three structures (30<sup>th</sup> Avenue, 31<sup>st</sup> Avenue, and 32<sup>nd</sup> Avenue) could be removed with the least impact to the neighborhood.

In addition, Hey and MWRD staff met with IDOT on November 7, 2013 to discuss the Addison Creek improvements. IDOT is currently in the planning stages for I-290 improvements from Wolf Road to Des Plaines Avenue including the bridge over Addison Creek. Specifically, for the Addison Creek portion of the improvements, IDOT is planning on widening I-290 by one lane in each direction, which would most likely require a new bridge over Addison Creek. Continued coordination is planned to exchange data and design requirement criteria for the improvements.

### **Alternative 1 – No Action**

Under the No Action alternative, there would be impacts to traffic and circulation during flood events due to roadway closures throughout the entire project area.

## **Action Alternative 2 – Proposed Action**

The Proposed Action would result in minor, short-term increases in traffic on surrounding roadways resulting from the operation of construction vehicles and equipment through the project corridor. Detour plans have been developed and reviewed and approved by each municipality and agency. The Proposed Action would also have minor, long-term impacts on local traffic circulation within the neighborhood in Reach 6 due to the planned removal of 3 culvert crossings of Addison Creek to improve floodwater conveyance. The Proposed Action would provide long-term benefits to public services and utilities by reducing the risk of flooding roadways and property which will enable better response from emergency services and utility companies and allow for better traffic movement during extreme weather events.

### **3.5.5 Environmental Justice (Executive Order 12898)**

The purpose of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations. Minorities are defined as anyone who identifies as black or African American, American Indian or Alaska Native, Asian American, Native Hawaiian or Pacific Islander, Hispanic, or multiracial. Low-income populations are those with incomes at or below the federal poverty level.

The Environmental Protection Agency's (EPA) Environmental Justice Screening and Mapping tool (EJScreen) was used to investigate the presence of readily identifiable low income or minority populations within a 0.50-mile buffer of the project improvements. This 0.50-mile buffer is considered the "affected area" for the environmental justice analysis as it extends across areas that will experience reductions in flood inundation limits due to the channel improvements. Low-income or minority populations in an affected area can be identified by meeting either one or both of the following criteria:

- The census block group contains 50 percent or more minority or low-income persons compared to the statewide average.
- One or more of the Environmental Justice (EJ) Indexes for the census block group equals or exceeds the 80<sup>th</sup> percentile compared to the statewide average.

The affected area exceeds an average of 50 percent versus the state average for both minority population and low-income population. Additionally, the project area exceeds the 80<sup>th</sup> percentile for ten out of the twelve environmental justice indexes. Socioeconomic Indicators (minority and low-income population) for the affected area are summarized in Table 3-5, and Environmental Justice Indexes are summarized in Table 3-6.

#### **Table 3-5. Socioeconomic Indicators**

*Source: EJScreen*

Socioeconomic Indicator	Percentile in State
Minority Population	84
Low-Income Population	63

**Table 3-6. Environmental Justice Indexes**

Source: EJScreen

Environmental Justice Index	Percentile in State
Particulate Matter 2.5 EJ Index	92
Ozone EJ Index	55
Diesel Particulate Matter EJ Index*	87
Air Toxics Cancer Risk EJ Index*	83
Air Toxics Respiratory HI EJ Index*	87
Traffic Proximity EJ Index	90
Lead Paint EJ Index	83
Superfund Proximity EJ Index	77
RMP Facility Proximity EJ Index	88
Hazardous Waste Proximity EJ Index	92
Underground Storage Tanks EJ Index	89
Wastewater Discharge EJ Index	84

### **Alternative 1 – No Action**

Under the No Action alternative, no improvements to Addison Creek would likely cause flooding to the people residing in the surrounding area. EJ populations exist within the vicinity of Addison Creek. EJ populations will continue to experience the negative effects associated with flooding, including road damages and closures.

### **Action Alternative 2 – Proposed Action**

The Proposed Action would not have any disproportionately high and adverse effects on EJ populations. EJ populations exist within the vicinity of Addison Creek. Minor, short-term construction-related effects would include noise, traffic, and air quality impacts. No residential relocation is proposed, and no long-term impacts from traffic, noise, or air quality due to the Proposed Action are anticipated. The project will result in significant long-term beneficial impacts for EJ populations due to a reduction in flood damages.

#### **3.5.6 Safety and Security**

The Occupational Safety and Health Act, 29 U.S.C. §§ 651 – 678, requires safe and healthful conditions for working men and women by setting and enforcing standards; and providing training, outreach, and education and compliance assistance. The act created the Occupational Safety and Health Administration (OSHA) which established construction standards under 29

C.F.R. Part 1926. The Illinois Department of Labor has within it a Division of Safety and Health (IL OSHA) that works to ensure the safe and healthy working conditions for workers in Illinois by setting and enforcing standards and providing training, outreach, education, and assistance to employers and employees throughout Illinois. MWRD and its contract language require compliance with all federal and IL OSHA regulations and standards.

### **Alternative 1 – No Action**

Under the No Action alternative, no construction would occur avoiding any construction-related safety issues. However, the continued overbank flooding would cause risks to human safety both from physical effects of flood waters and from potential contamination from flooding.

### **Action Alternative 2 – Proposed Action**

Minor short-term construction-related safety risks would occur for construction workers at the project site. During construction, site safety from the equipment would be ensured by the contractors performing the work following standard industry safety practices and those stated in IL OSHA rules. Post-construction, the project would reduce natural hazard impacts from flooding.

## **3.6 Historic and Cultural Resources**

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, 54 U.S.C. §§ 3001–1 - 307108, requires that federal agencies consider the potential effects on cultural resources of actions it proposes. Cultural resources are defined as prehistoric or historic archaeology sites, historic standing structures, historic districts, objects, artifacts, cultural properties of historic or traditional significance—referred to as Traditional Cultural Properties—that may have religious or cultural significance to federally-recognized Indian Tribes (Tribes), or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons.

Cultural resources listed, eligible for listing, or potentially eligible for listing on the National Register of Historic Places (NRHP) are subject to protection from adverse impacts resulting from a federally funded undertaking.

Pursuant to 36 C.F.R. § 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect cultural resources. Within the APE, impacts on cultural resources are evaluated for both historic structures (aboveground cultural resources) and archaeology (belowground cultural resources).

In addition to the NHPA, FEMA must also comply with other federal laws that relate to historic and cultural resources:

- The Archaeological and Historic Preservation Act of 1974, 16 U.S.C. §§ 4–9 - 469c-2, provides for the survey, recovery, and preservation of significant scientific, prehistoric,

archeological, or paleontological data when such data may be destroyed or irreparably lost due to a federal, federally licensed, federally funded (in part or whole) project.

- American Indian Religious Freedom Act of 1978, 42 U.S.C. § 1996, which provides for the protection and preservation of American Indian sites, possessions, and ceremonial and traditional rites.
- Archaeological Resources Protection Act of 1979, 16 U.S.C. §§ 470aa–470 mm, which provides for the protection of archaeological resources on public lands and Indian lands.
- Native American Graves Protection and Repatriation Act, 25 U.S.C. §§ 3001–3013, in cases where Native American cultural Items are found on federal and tribal lands.

To comply with the NHPA, a Phase I Archaeological Reconnaissance Survey and Architectural Assessment in Advance of the Addison Creek Channel Improvements, Proviso Township, Cook County, Illinois investigation and report was completed by Midwest Archaeological Research Services dated April 12, 2017. The investigation defined an APE along Addison Creek. Following the 2017 investigation, Hey and Associates, Inc. initiated consultation with the SHPO on behalf of MWRD to confirm the finding that no historic properties would be affected if the project were implemented. The SHPO concurred with the finding of No Historic Properties Affected on May 25, 2017 (see correspondence in Appendix D). MWRD continued consultation with the SHPO because the original clearance had expired, and obtained SHPO concurrence on July 8, 2020, and March 7, 2022. FEMA continued consultation on February 9, 2023. In a letter of March 9, 2023, the SHPO concurred with FEMA’s finding of No Historic Properties Affected.

### **3.6.1 Historic Structures**

An architectural assessment was included in the report titled Phase I Archaeological Reconnaissance Survey and Architectural Assessment in Advance of the Addison Creek Channel Improvements, Proviso Township, Cook County, Illinois (April 2017), prepared by Midwest Archaeological Research Services. Three (3) box culverts over Addison Creek at 30th Avenue, 31st Avenue, and 32nd Avenue in Bellwood over 50 years old were identified within the Project APE. The assessment describes the culverts as cast-in-place concrete structures that are well-represented in Cook County and determines them to be ineligible for listing in the NRHP.

#### **Alternative 1 – No Action**

The No Action alternative would have no effect on historic structures listed or eligible for listing in the NRHP because no work would be conducted.

#### **Action Alternative 2 – Proposed Action**

FEMA found and SHPO concurred that the Proposed Action would have no effect on historic structures listed or eligible for listing in the NRHP. Consultation documentation is included in Appendix D.

### **3.6.2 Archaeological Resources**

A Phase I archaeological survey report titled Phase I Archaeological Reconnaissance Survey and Architectural Assessment in Advance of the Addison Creek Channel Improvements, Proviso Township, Cook County, Illinois (April 2017), prepared by Midwest Archaeological Research Services. No archaeological resources were identified within the Project APE as a result of the field investigations. FEMA found and SHPO concurred that no further archaeological work is warranted for the project as it is currently defined.

#### **Alternative 1 – No Action**

The No Action alternative would have no effect on archaeological resources as no construction or ground disturbance activities would occur.

#### **Action Alternative 2 – Proposed Action**

The Proposed Action would have no effect on any known archaeological sites or resources. Consultation documentation is included in Appendix D. The following project conditions, also included in **Subsection 6.2.9**, would provide additional protection to unknown archaeological sites:

- The contactor will monitor ground disturbance during the construction phase. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and MWRD will notify the coroner's office (in the case of human remains), the recipient (Illinois EMA), and FEMA. FEMA will notify the SHPO and the Office of the State Archaeologist.
- All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

### **3.6.3 Tribal Coordination and Religious Sites**

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, directs federal agencies, "to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes...."

Requests for information on the presence or absence of known archaeological sites and sites of cultural or religious interest within the proposed project area were respectfully submitted to federally recognized tribal nations with potential interests in the project. On February 9, 2023, FEMA notified the following tribal nations regarding the scope of this undertaking:

- Citizen Potawatomi Nation
- Delaware Tribe of Indians

- Forest County Potawatomi Community of Wisconsin
- Hannahville Indian Community
- Ho–Chunk Nation
- Miami Tribe of Oklahoma
- Pokagon Band of Potawatomi Indians
- Lac Vieux Desert Band of Lake Superior Chippewa Indians
- Prairie Band Potawatomi Nation
- Shawnee Tribe

The letter sent to each tribe provided details about the project location and proposed activity and requested comments from each tribal government within 30 days of the date of the letter. FEMA received three responses from tribal nations. Two responses stated no objection to the undertaking. The second tribal response required FEMA to respond and provide additional information on March 10, 2023. No response was received. Correspondence with tribal nations is provided in Appendix E.

### **Alternative 1 – No Action**

The No Action alternative would have no effect on known archaeological or Indian religious sites as no construction or ground disturbance activities would occur.

### **Action Alternative 2 – Proposed Action**

The Proposed Action would have no effect on known archaeological or Indian religious sites. If any human or archaeological remains are encountered during project construction, work will stop immediately and FEMA and SHPO will be notified.

### 3.7 Comparison of Alternatives

Table 3-7 presents the comparison of alternatives for the proposed project. Please see **Section 6** for mitigation measures and permits.

**Table 3-7. Comparison of Alternatives.**

#### **Geology, Soils, and Topography**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• Long-term impacts from continued streambank erosion.</li> <li>• Negligible impacts to topography.</li> <li>• No impacts to geology.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term negative impacts from channel improvements and streambank stabilization.</li> <li>• Minor short-term impacts on soil topography during construction.</li> <li>• Topography of the channel will be altered to improve conveyance.</li> <li>• No impact on bedrock.</li> <li>• Long-term reduction in erosion</li> </ul>	<ul style="list-style-type: none"> <li>• See Subsection 6.2.1.</li> </ul>

#### **Water Resources and Water Quality**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• Minor long-term impacts from sedimentation, soil erosion, and pollutants from stormwater runoff.</li> <li>• No impact on groundwater.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term impact on water quality during construction caused by excavators and other heavy equipment for fill and excavation.</li> <li>• Long term reduction in soil erosion after streambank stabilization measures are completed.</li> </ul>	<ul style="list-style-type: none"> <li>• See Subsection 2.</li> </ul>

**Floodplain Management**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• Long-term impacts from continued erosion and overbank flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term impacts from construction of channel improvements, including channel lowering, bank stabilization, culvert removal, and armoring.</li> <li>• Significant long-term benefits from the reduction in flood damages.</li> </ul>	<ul style="list-style-type: none"> <li>• None.</li> </ul>

**Air Quality**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• No changes or impacts to air quality without any construction activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor short-term impacts from construction equipment emissions and exposed soils.</li> <li>• Negligible long-term impact.</li> </ul>	<ul style="list-style-type: none"> <li>• See Subsection 3</li> </ul>

**Terrestrial and Aquatic Environment**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• Minor long-term adverse impacts from continued streambank erosion and overbank flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• Short-term impacts to very low-quality aquatic habitat during channel improvement construction.</li> <li>• Minor long-term impacts from the removal of trees and brush along the streambanks.</li> <li>• Minor long-term benefits from the reseeding and replanting in selected areas along the creek.</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>

**Wetlands**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• No project-related short or long-term impacts to wetlands.</li> </ul>	<ul style="list-style-type: none"> <li>• Permanent adverse impacts to 0.63 acres of low-quality wetlands from placement of riprap, clean topsoil, gabions, and other measures for bank stabilization.</li> </ul>	<ul style="list-style-type: none"> <li>• 0.95 acres of mitigation credit purchased through wetland mitigation bank.</li> </ul>

**Threatened and Endangered Species**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>• No project-related impacts. Existing erosion and overbank flooding would continue.</li> </ul>	<ul style="list-style-type: none"> <li>• No effect determination for NLEB, Piping Plover, Rufa Red Knot, Eastern Massasauga, Hines Emerald Dragonfly, Eastern Prairie Fringed Orchid, and Leafy Prairie Clover.</li> </ul>	<ul style="list-style-type: none"> <li>• None.</li> </ul>

***Migratory Birds***

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>No direct short- or long-term impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impacts from construction activities.</li> <li>Minor long-term impacts on trees and vegetation that may serve as migratory bird habitat. Not all trees removed would be replaced.</li> </ul>	<ul style="list-style-type: none"> <li>See Subsection 4</li> </ul>

***Invasive Species***

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>Minor long-term adverse impacts as invasive plant species would persist in open, disturbed areas in the urbanized context.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impact from the potential spread of invasive plant species to or from the project area as both cuttings and attached to construction equipment and vehicles.</li> <li>Minor short-term impact of potential for invasive plant species becoming established in disturbed areas.</li> <li>Minor benefit from removal of invasive trees and shrubs during clearing for construction.</li> </ul>	<ul style="list-style-type: none"> <li>See Subsection 5</li> </ul>

***Hazardous Materials***

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>No impact.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impact from construction equipment used for the project will have small quantities of gasoline and fuel, but no releases are anticipated.</li> <li>Minor impacts during removal of contaminated soil and sediments for offsite disposal.</li> </ul>	<ul style="list-style-type: none"> <li>See Subsection 6</li> </ul>

***Zoning and Land Use***

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>No improvement to resiliency.</li> </ul>	<ul style="list-style-type: none"> <li>Improves resiliency to increased flooding.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

***Noise***

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>No impact.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impacts associated with construction.</li> <li>No long-term impacts.</li> </ul>	<ul style="list-style-type: none"> <li>See Subsection 6.2.8.</li> </ul>

**Public Services and Utilities**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>Increasing minor short-term impacts to public services and utilities due to continued flooding.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impact on public services during the construction.</li> <li>Major long-term benefits from the removal of the threat of flooding that could impact services.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

**Traffic and Circulation**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>Long-term impacts on traffic and circulation with continued flooding onto roadways.</li> </ul>	<ul style="list-style-type: none"> <li>Minor short-term impact from the operation of construction vehicles and equipment to and from the site.</li> <li>Major long-term benefits from the reduction in road closures due to flooding.</li> <li>Minor Long-term impacts due to bridge removals.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

**Environmental Justice**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>Negligible effect.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible effect, not disproportionate or adverse.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

**Safety and Security**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>Continued, minor and major long-term impacts from flood hazards and damages.</li> </ul>	<ul style="list-style-type: none"> <li>Negligible short-term impact as long as all construction safety measures are followed.</li> <li>Long-term beneficial impacts due to the reduction of flood hazards.</li> </ul>	<ul style="list-style-type: none"> <li>See Subsection 6.2.9.</li> </ul>

**Historic Structures**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"> <li>No effect.</li> </ul>	<ul style="list-style-type: none"> <li>No effect.</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

**Archaeological Resources**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"><li>• No effect.</li></ul>	<ul style="list-style-type: none"><li>• No effect.</li></ul>	<ul style="list-style-type: none"><li>• See Subsection 9.</li></ul>

**Tribal and Religious Sites**

No Action Impacts	Addison Creek Channel Improvements	Mitigation
<ul style="list-style-type: none"><li>• No Effect</li></ul>	<ul style="list-style-type: none"><li>• No Effect</li></ul>	<ul style="list-style-type: none"><li>• None</li></ul>

## 4 Cumulative Impacts

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This section evaluates the potential cumulative impacts associated with the implementation of the Proposed Action. Cumulative impacts are defined in CEQ regulations for implementing NEPA (40 C.F.R. § 1508.7) as:

“The impacts of a proposed action when combined with impacts of past, present, or reasonably foreseeable future actions undertaken by any agency or person.”

CEQ regulations require an assessment of cumulative effects during the decision-making process for federal projects. Cumulative impacts can result from individually minor but collectively significant actions.

A series of work tasks were undertaken before seeking funding from FEMA. On July 9, 2021, MWRD entered a contract to demolish 13 mobile-home trailers in Melrose Park, one residential building in Northlake, 12 residential buildings in Stone Park, and three residential buildings in Bellwood. MWRD worked with these municipalities and property owners to acquire permanent and temporary easements through the project corridor to enable construction and provide the ability for future maintenance of the improvements. This work was completed on April 12, 2022. The construction of a reservoir for storm water detention in an old commercial area in the vicinity of 2795 Washington Blvd, Bellwood was also accomplished. Separately, the local communities and IDOT have replaced several bridges along Addison Creek that included King Arthur Court, Prater Avenue, Roy Avenue, Le Moyne, Mannheim Road, and Lake Street.

IDOT is currently replacing the bridge at Cermak, and Westchester recently completed replacing the bridge at Gladstone.

Future work involving transportation facilities is anticipated. The local communities have plans to replace the bridges at Palmer Avenue, Parkview Drive, Hirsch Street, Wedgewood Drive, and 21st Street. IDOT is also planning to reconstruct I-290 when funding becomes available. In addition, it is anticipated that there may be additional roadway and bridge improvements made by local governmental jurisdictions that MWRD is not specifically aware of.

Private property improvements (businesses and residences) along the project reach may occur due to the reduction in flood damages. These improvements are difficult to quantify but would be reasonably foreseeable along the project reach.

Cumulative impacts would be mostly temporary and localized during the construction of each project. Bridge projects will likely provide increased flood damage reduction benefits. The previously completed projects described above, and the anticipated future projects will all be completed in full compliance with appropriate environmental regulations. Most of these projects involve bridge replacements that will be constructed to minimize impacts while maximizing the benefits. They are all aging structures that can be replaced using modern construction methods that will have minimal impacts on this highly degraded and urbanized creek system.

## 5 Public Participation

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The draft EA was available for agency and public review and comment for a period of 30 days from May 8 to June 7, 2023. The public information process included a public notice with information about the Proposed Action in the Chicago Tribune newspaper on May 8, 2023. The draft EA was made available on FEMA's website at <https://www.fema.gov/emergency-managers/practitioners/environmental-historic/region/5>. The draft EA was also available on the MWRD website at <https://mwrdd.org/public-notices>.

A hard copy of the draft EA was available for review at:

Metropolitan Water Reclamation District of Greater Chicago  
Public Affairs  
100 East Erie Street, 1<sup>st</sup> Floor  
Chicago, IL 60611

The public was invited to submit written comments by emailing [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov) or via mail to:

Duane Castaldi, Regional Environmental Officer  
Attn: Addison Creek Channel Improvements Project EA Comments  
FEMA Region 5  
536 South Clark Street, 6th Floor  
Chicago, IL 60605

On June 7, 2023, FEMA received a letter with recommendations from the Environmental Protection Agency and incorporated those into the final EA. There were no other responses from the public and/or agency reviewers. The final EA reflects the evaluation and assessment of the federal government, the decision maker for the federal action. FEMA has issued a FONSI for the proposed project.

### 5.1 Subrecipient Outreach

MWRD completed the Lower Des Plaines River Detailed Watershed Plan (DWP) on February 28, 2011. The data collection and evaluation phase (Phase A) of the DWP focused on obtaining data regarding the watershed and evaluation of the material's acceptability for use. MWRD contacted all Watershed Planning Council (WPC) members as well as federal and state agencies and other stakeholders requesting relevant data for the DWP. Coordination with WPC members to support the DWP took place throughout development of the DWP. Existing and newly developed data was evaluated according to use criteria defined in Chapter 6 of the Cook County Stormwater Management Plan. Where data was unavailable or insufficient to complete the DWP, additional data was collected. The DWP included information on all the data collected and evaluated as a part of the preparation of the Lower Des Plaines River DWP. Table 5-1 lists key dates of coordination activities including meeting with WPC members prior to and throughout development of the DWP.

**Table 5-1. Lower Des Plaines River DWP WPC Coordination Activities.**

Activities	Dates
07-856-5C Lower Des Plaines River Detailed Watershed Plan - Phase A - Contract start date	January 15, 2008
08-864-5C Lower Des Plaines River Detailed Watershed Plan - Phase B - Contract start date	October 6, 2008
<p>Information Gathering</p> <p>Data Request (Forms A and B) sent out as part of Phase A</p> <p>Watershed field visit and meetings with various municipalities</p> <p>Open meetings with Watershed representatives during Phase A to discuss Forms A and B</p> <p>District phone calls to communities after the September 13th and 14th, 2008 storm event</p> <p>Data provided by various communities following the July 23-24, 2010 storm event</p>	<p>November 24, 2006</p> <p>January 23, 2007</p> <p>February 14, 2007</p> <p>September 15, 2008</p> <p>July – August 2010</p>
Lower Des Plaines River Watershed Planning Council Meetings (12)	<p>January 30, 2008</p> <p>April 23, 2008</p> <p>July 30, 2008</p> <p>October 20, 2008</p> <p>February 4, 2009</p> <p>May 6, 2009</p> <p>August 5, 2009</p> <p>November 4, 2009</p> <p>February 17, 2010</p> <p>May 19, 2010</p> <p>August 19, 2010</p> <p>November 17, 2010</p>
<p>Modeling Results and Alternatives Review Meetings</p> <p>Initial Model Review Workshop</p> <p>Preliminary Alternatives Review Workshop</p> <p>Final Alternatives Presentation Workshop</p>	<p>December 2, 2009, January 20, January 27, February 10, February 18, and February 25, 2010</p> <p>April 22, April 29, May 6, May 13, May 20, and May 22, 2010</p> <p>August 18, August 25, September 9, and September 30, 2010</p>
MWRD Board of Commissioners' Study Sessions	<p>January 10, 2006</p> <p>April 27, 2006</p> <p>October 2, 2008</p>

Upon completion of the Lower Des Plaines River DWP, the MWRD Board of Commissioners approved to move forward with the preliminary design of the Addison Creek Channel Improvements on August 11, 2011, and the final design of the Addison Creek Channel Improvements on April 7, 2016. During preliminary and final design, MWRD continued to reach out to the six municipalities to receive input on the project. The six municipalities executed intergovernmental agreements (IGAs) with MWRD for design construction and maintenance for Addison Creek Channel Improvement project. The six municipalities also provided review comments during the 60% and 98% design phases of the Addison Creek Channel Improvements. Table 5-2 provides key dates for IGAs, 60%, and 98% reviews of the design.

**Table 5-2. IGA and Reviews of Design Activities.**

Activities	Dates
Intergovernmental Agreement for Addison Creek Channel Improvements	
Meeting with six municipalities to review and discuss draft IGA language	January 26, 2018
MWRD Board providing authority to enter into IGAs with the six municipalities.	August 24, 2018
Village of Melrose Park executed final IGA	October 23, 2018
Village of Stone Park execute final IGA	October 11, 2018
Village of Bellwood execute final IGA	October 11, 2018
Village of Westchester executed final IGA	January 1, 2019
Village of Broadview executed final IGA	December 12, 2018
City Northlake executed final IGA	October 11, 2018
60% review meeting with six municipalities	January 26, 2018
98% review comments from six municipalities	
Village of Melrose	January 25, 2022
Village of Stone Park	January 3, 2022
Village of Bellwood	January 25, 2022
Village of Westchester	March 16, 2022
Village of Broadview	April 5, 2022
City Northlake	June 25, 2021 and April 20, 2022

During preliminary and final design, MWRD worked to get permits from various agencies for the Addison Creek Channel Improvement project. A copy of the permits for the project are provided in Appendix G. The USACE required a public notice on the Addison Creek Channel Improvement project as part of the section 404 permit process. Table 5-3 provides key dates for the U.S Army Corps of Engineer required public review. The USACE public notice process includes mailing post cards to surrounding property owners, emailing the notice to a list of interested parties, and posting the Notice to the USACE web page.

**Table 5-3. U.S. Army Corps of Engineer Public Review.**

Activities	Dates
Public Notice Application for Permit LRC-2014-00674	February 13, 2019 to March 15, 2019
Public Notice Application for Permit LRC-2014-00674	May 6, 2019 to June 5 2019
MWRD responses to Public Review Comments submitted to U.S. Army Corps of Engineers	August 2, 2019

## 6 Mitigation Measures and Permits

### 6.1 Permits

The IEPA requires an NPDES permit for construction projects that disturb more than one acre of soil. The proposed project is anticipated to exceed this threshold. A USACE Clean Water Act permit is also required.

Table 6-1 summarizes the necessary permits to implement the Proposed Action and their status.

**Table 6-1. Permit Summary.**

Issuing Agency	Resource	Permit Title	Applicable Regulation / Law	Status
IEPA	Soils (Erosion)	NPDES	IL Environmental Protection Act	Not complete. To be obtained by construction contractor following project award and prior to commencing construction.
USACE	Wetlands/ waters	Section 404	Federal Clean Water Act	Permit LRC-2014-00674 received November 2019, valid for 5 years.
INDR-OWR	Floodway	Floodway	Rivers Lakes and Streams Act 615 ILCS 5	Permit NE2019056 received October 16, 2019 Extension received on September 20, 2022.
IDOT	Highways	Highway	Highway Permit	Conditional Approval. Upon contract award, contractor shall provide IDOT with appropriate bonding.
IEPA	Water Quality	401 Water Quality Certification	Federal Clean Water Act	Waived.
IEPA	Sanitary Sewer	Sanitary Sewer	IL Environmental Protection Act	Received for various communities
IEPA	Water	Water	IL Environmental Protection Act	Received for various communities
NFIP Participating Community	Floodplain	Local Floodplain Development Permit	National Flood Insurance Program	Not Complete. To be obtained before work begins.

### 6.2 Project Conditions

The subrecipient is responsible for compliance with federal, state, and local laws and regulations, including obtaining any necessary permits prior to beginning construction activities, and adhering to any conditions laid out in these permits. Any substantive change to the scope of work will require re-evaluation by FEMA for compliance with NEPA and any other laws or EOs. Failure to comply with FEMA grant conditions may jeopardize federal funding.

### **6.2.1 General Project Conditions**

1. The subrecipient is responsible for obtaining and complying with all required local, state, and federal permits and approvals.
2. If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or any other unanticipated changes to the physical environment, the subrecipient must contact FEMA so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.

### **6.2.2 Water Resources, Water Quality, Wetlands, Coastal Zones, and Soils**

3. Prior to beginning work, the subrecipient will coordinate with the IEPA to determine permitting needs under the National Pollutant Discharge Elimination System (NPDES) permit program, and to develop a Stormwater Pollution Prevention Plan (SWPPP) identifying BMPs to be followed during construction.
4. The sub-recipient shall ensure that best management practices are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990.

### **6.2.3 Floodplain Management (Executive Order 11988)**

5. The requirements in Section 9.11 will be fully implemented. In order to ensure compliance with the NFIP, local floodplain development permits and required mapping updates will be submitted.

### **6.2.4 Air Quality**

6. To reduce the emission of criteria pollutants, construction equipment engine idling will be minimized to the extent practicable, and engines will be kept properly maintained. The Subrecipient will implement EPA recommendations for mitigation described in Appendix H to the extent practicable.
7. Open construction areas will be minimized and watered as needed to minimize particulates such as fugitive dust.
8. Hauling routes shall be established and designed to minimize the effect of short-term emissions on homes, schools, daycare centers, and playgrounds.

### **6.2.5 Migratory Birds**

9. Vegetation removal should be avoided during the migratory bird nesting season (approximately May to October) to the extent practicable.

### **6.2.6 Invasive Species**

10. Graded areas will be revegetated with native grasses and forbs, or native seed mixes, turf seed mixes, or non-invasive landscape plantings in accordance with the approved plans.
11. All equipment will be cleaned (including but not limited to vehicles, clothing, and gear) at a site prior to moving to another site. All soil, aggregate material, mulch, vegetation, seeds, animals, etc. need to be removed using a hand tool, brush, compressed air, pressure washer, or otherwise.
12. If equipment is not cleaned before arriving at the work site, then clean the equipment in the parking or staging area, ensuring no material is deposited at the new site. Material cleaned from equipment should be disposed of legally.

### **6.2.7 Hazardous Materials**

13. Due to the presence of contaminants of concern at most locations and because it is impractical to delineate the limits of clean areas from a construction consideration point of view, all soil and sediment excavated during the Addison Creek Improvements project will be treated as contaminated and disposed of offsite at subtitle D landfills.
14. Soils excavated during construction will be managed on-site, within the same areas that they are excavated from.
15. Soils that cannot be managed onsite will be treated as “Non-Special Waste” and disposed at an approved Landfill (subtitle D).
16. A “Health and Safety Plan”, “Contamination Operation Plan” and an “Erosion Control Plan” will be developed by the subrecipient’s contractor for managing excavated soils and to prevent migration of contamination during excavation and construction.
17. IEPA will be notified if unanticipated contaminated material is encountered.

### **6.2.8 Noise**

18. Construction activities will take place during the less noise-sensitive daylight hours.
19. Soldier pile walls will be used and installed by auguring rather than sheet pile walls being driven, which will reduce concussive construction noise.

### **6.2.9 Safety and Security**

20. To minimize risks to safety and human health, construction activities will be performed using qualified personnel trained to use the required equipment properly.
21. The construction site will be secured from public access.
22. All construction activities will be conducted in accordance with the standards specified in the Occupational Safety and Health Administration (OSHA) regulations.
23. All conditions of the project Health and Safety Plan will be adhered to.

### **6.2.10 Archeological, Tribal, and Religious Sites**

24. The subrecipient will monitor ground disturbance during the construction phase. Should human skeletal remains or historic or archaeological materials be discovered during

construction, all ground-disturbing activities on the project site shall cease and the subrecipient will notify the coroner's office (in the case of human remains), the recipient (IEMA), and FEMA. FEMA will notify the SHPO and the Office of the State Archaeologist.

25. All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

## 7 Consultations and References

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The following agencies were consulted during the preparation of this EA:

### 7.1 Federal, State, and Local Agencies

- City of Northlake, Illinois
- Village of Melrose Park, Illinois
- Village of Bellwood, Illinois
- Village of Westchester, Illinois
- Village of Stone Park, Illinois
- Village of Broadview, Illinois
- Illinois Department of Transportation
- Lower Des Plaines Watershed Planning Council
- Cook County Department of Emergency Management & Regional Security
- Illinois Department of Natural Resources Office of Resource Conservation
- Illinois Department of Natural Resources Office of Water Resources
- Illinois Department of Natural Resources Historic Preservation Division
- Illinois Emergency Management Agency
- Illinois Environmental Protection Agency
- US Army Corps of Engineers, Chicago District
- US Environmental Protection Agency, Region 5
- US Fish and Wildlife Services, Chicago Ecological Services Field Office
- US Housing and Urban Development, Regional Environmental Officer

### 7.2 Tribal Nations

- Citizen Potawatomi Nation
- Delaware Tribe of Indians
- Forest County Potawatomi Community of Wisconsin
- Hannahville Indian Community
- Ho–Chunk Nation
- Miami Tribe of Oklahoma
- Pokagon Band of Potawatomi Indians
- Lac Vieux Desert Band of Lake Superior Chippewa Indians
- Prairie Band Potawatomi Nation
- Shawnee Tribe

### 7.3 References

Bretz, J. Harlen. 1939. Geology of the Chicago Region. Illinois State Geological Survey, Bulletin 65. Champaign, Illinois.

- Chicago Metropolitan Agency for Planning (CMAP). 2018. Lower Salt Creek Watershed Based Plan. Chicago, Illinois.
- Christopher B. Burke Engineering Ltd. 2011. Detailed Watershed Plan for the Lower Des Plaines River Watershed: Volume 1.
- Federal Emergency Management Agency (FEMA). 1982. Flood Insurance Rate Map, City of Chicago, Illinois, Cook County. Accessed March 2023. <https://map1.msc.fema.gov/firm?id=17031CIND3J>
- Hey and Associates, Inc. 2018. Application for Section 404 Permit Authorization, Addison Creek Channel Improvements LRC-2014-674.
- Hey and Associates, Inc. 2017. Preliminary Design Report Addison Creek Channel Improvements Contract 11-187-5C.
- Illinois Environmental Protection Agency, Bureau of Water. 2022. Illinois Integrated Water Quality Report and Section 303(d) list, 2020/2022.
- Illinois Environmental Protection Agency. 2004. Total Maximum Daily Loads for Salt Creek, Illinois. Springfield, Illinois. Report prepared by CH2M Hill, Inc.
- Illinois Environmental Protection Agency. 2015. DuPage River/Salt Creek Watershed TMDL Revised Stage 1 Report. Springfield, Illinois. Report prepared by Tetra Tech.
- Illinois Department of Natural Resources. 2008. Integrating Multiple Taxa in a Biological Stream Rating System and online database found at <https://idnr.maps.arcgis.com/apps/webappviewer/index.html?id=07ebc42e53e04e3e8c31d961fff58e35> accessed March 2023.
- Interra, Inc. 2012a. Phase I Environmental Site Assessment, Addison Creek between Hirsch Street and Gardner Road by Interra, Inc. for Hey and Associates, Inc. – MWRDGC Contract No. 11-187-5C. Report dated 5/29/2012.
- Interra, Inc. 2012b. Environmental Sampling and Analytical Testing, Addison Creek between Hirsch Street and Gardner Road by Interra, Inc. for Hey and Associates, Inc. – MWRDGC Contract No. 11-187-5C. Report dated 12/18/2012.
- Interra, Inc. 2014. Addendum to Environmental Sampling and Analytical Testing, Addison Creek between Hirsch Street and Gardner Road by Interra, Inc. For Hey and Associates, Inc. -- MWRDGC Contract No 11-187-5C. Report dated 9/23/2014.
- Interra, Inc. 2021a. Environmental Sampling and Analytical Testing, Site #15 & Site #16, Addison Creek Channel Improvement Project, Stone Park, Illinois for Hey and Associates, Inc. Report Dated 10/18/2021. Includes Phase I Environmental Site Assessments performed by O'Brien and Associates for Christopher B. Burke Engineering Ltd.

- Interra, Inc. 2021b. Environmental Investigation Addison Creek Channel Improvements Reaches 1 to 9, Proviso Township, Cook County, Illinois. For Hey and Associates, Inc. Report dated October 18, 2021.
- Kolata, D.R. 2005. Bedrock Geology of Illinois. Illinois State Geological Survey, Map 14. Champaign, Illinois.
- Metropolitan Water Reclamation District of Greater Chicago. 2022. Addison Creek Channel Improvements, SSA: Volume 3 of 3; Book 1 of 2.
- Metropolitan Water Reclamation District of Greater Chicago. 2022. Addison Creek Channel Improvements, SSA: Volume 3 of 3; Book 2 of 2.
- Midwest Biodiversity Institute. 2010. Biological and Water Quality Study of the Salt Creek Watershed. Columbus, Ohio.
- National Oceanic and Atmospheric Administration (NOAA). 2022. Essential Fish Habitat Mapper. <https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper>
- National Wild and Scenic Rivers (NPS, USFWS, USFS, BLM). 2022. National Wild and Scenic Rivers Map. <https://www.rivers.gov/illinois.php>
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: <http://websoilsurvey.sc.egov.usda.gov/>. Accessed [03/06/2023].
- Suter, Max, et al. 1959. Preliminary Report on Ground-Water Resources of the Chicago Region, Illinois, Report 1. Illinois State Water Survey, Champaign, Illinois.
- U.S. Environmental Protection Agency (EPA). 2022a. Map of Sole Source Aquifer Locations. <https://www.epa.gov/dwssa/map-sole-source-aquifer-locations>
- U.S. Environmental Protection Agency (EPA) Green Book. 2022b. Counties Designated Nonattainment. Accessed July 2022. <https://www3.epa.gov/airquality/greenbook/mapnpoll.html>
- U.S. Fish and Wildlife Service (USFWS). 2023. IPaC - Information for Planning and Consultation. Accessed February 2023. <https://ecos.fws.gov/ipac/>
- U.S. Fish and Wildlife Service (USFWS). 2019. Official Coastal Barrier Resources System Maps. <https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps>
- U.S. Geological Survey (USGS). 2022. Topoview. <https://ngmdb.usgs.gov/topoview/>
- U.S. Geological Survey (USGS). 2021. Berwyn Quadrangle. Illinois – Cook County. 7.5-Minute Series.

U.S. Geological Survey (USGS). 2021. Elmhurst Quadrangle. Illinois – Cook County. 7.5-Minute Series.

U.S. Geological Survey (USGS). 2021. River Forest Quadrangle. Illinois – Cook County. 7.5-Minute Series.

U.S. Geological Survey (USGS). 2018a. Short-term Seismicity Model 2018. <https://www.usgs.gov/media/images/short-term-seismicity-model-2018>

U.S. Geological Survey (USGS). 2018b. 2018 Long-term National Seismic Hazard Map. <https://www.usgs.gov/media/images/2018-long-term-national-seismic-hazard-map>

Visocky, Adrian P. 1997. Water-Level Trends and Pumpage in the Deep Bedrock Aquifers in the Chicago Region, Circular 182, 1991-1995. Illinois State Water Survey, Champaign, Illinois.

## 8 List of Preparers

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***Table 8-1. Federal Emergency Management Agency Preparers.***

HMA Project Lead: Karen D'Angelo, Grants Management Specialist

Project Monitor: Duane Castaldi, Regional Environmental Officer (REO)

Technical Monitor: Jack Grafton, Environmental Protection Specialist

Technical Editor: Nicholas Dorochoff, Environmental Protection Specialist

Cultural Resource Editor: Donna Nagle, Environmental Protection Specialist

Technical Editor: Leslie Schroeder, Environmental Protection Specialist

***Table 8-2. Hey and Associates, Inc. Preparers.***

NEPA Documentation/Environmental Lead: Jeffrey Mengler, Senior Project Scientist

NEPA Documentation: Will Overbeck, Environmental Scientist

Project Manager / NEPA Documentation: Patrick Lach, Principal Civil Engineer

***Table 8-3. Metropolitan Water Reclamation District of Greater Chicago Preparers.***

NEPA Documentation/Review: Michael Cosme, Senior Civil Engineer

NEPA Documentation/Review: Justin Kirk, Principal Civil Engineer

## 9 Appendices

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FEMA has worked to ensure that this EA document is accessible to persons with disabilities, in compliance with Section 508 of the Rehabilitation Act of 1973. Regarding the EA's Appendices, which are provided in a separate document, this EA has reported what was done and how those results affect the decision that has been made based on the totality of the EA findings. In case any of these appendices poses a challenge to be read electronically by persons with disabilities, each appendix is briefly described and summarized below, rather than being simply listed.

### **Appendix A: Floodplain Management**

Appendix A provides the Floodplain Management Checklist (44 C.F.R. Part 9) completed for this project.

### **Appendix B: Wetlands**

The USACE permit authorizing minor impacts to wetlands along Addison Creek, and authorizing the work in Addison Creek (Water of the U.S.) is provided in Appendix B.

### **Appendix C: Threatened and Endangered Species**

This appendix contains the correspondence between FEMA and the U.S. Fish and Wildlife Service regarding potential impacts to the federally endangered northern long-eared bat. It also contains the species list generated from the IPAC system via the Chicago Ecological Services Office.

### **Appendix D: Historic Structures & Archaeological Resources**

This appendix includes one 11-page letter from FEMA continuing and concluding consultation and one one-page letter from the Illinois Deputy State Historic Preservation Officer concurring with FEMA's No Historic Properties Affected determination.

### **Appendix E: Tribal Coordination**

This appendix includes one example of FEMA's tribal notification letter and two letters from the Miami Tribe of Oklahoma and the Pokagon Band of Potawatomi expressing no objection to the project. The appendix also includes FEMA's response to an email from Forest County Potawatomi Community of Wisconsin requesting to remain a consulting party for this project.

### **Appendix F: Public Notice**

This appendix contains the public notice and affidavit of publication for the draft EA as well as the EPA response.

### **Appendix G: Permits**

This appendix contains copies of the permits received for the project.

**Appendix H: Air Quality**

This appendix contains the EPA air quality recommendations.

**Appendix I: Construction Plans**

This appendix contains selected sheets from the engineering construction plan set. These sheets show the overall construction plans within each reach of the project corridor. The plans provide general construction notes, earthwork quantities, and typical sections for channel improvements.

**Appendix A:  
Floodplain Management**



**FEMA**

April 6, 2023

**Executive Order 11988**  
**Floodplain Management Checklist**  
**(44 CFR Part 9)**

**BACKGROUND**

**Project Information**

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**Title:** Addison Creek Channel Improvements

**Proposed Action:** Various channel treatments over approximately 3.5 miles of the existing Addison Creek channel to reduce frequency of overbank flooding and reduce flood damages to approximately 2,200 properties.

**Applicability**

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This review is applicable to actions which have the potential to affect floodplains or their occupants, or which are subject to potential harm by location in floodplains.

Could the proposed action potentially adversely affect the floodplain or support floodplain development? **YES**

Could the proposed action potentially be adversely affected by the floodplain? **NO.**

**Critical Action**

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Determine whether the proposed action is an action for which even a slight chance of flooding is too great. Critical actions must be reviewed against the 500-year floodplain.

Is the action a critical action? **NO.**

Critical actions are to be reviewed against the 500-year floodplain, others against the 100-year floodplain.

Review will be conducted against the **100-year** floodplain.

**Scope of Work:** The Proposed Action includes various channel treatments (open channel, gabion basket walls, soldier pile walls, stream barbs, pools, riffles, articulated concrete blocks, bridge removals, gabion mattress bank stabilization) over the approximately 3.5 miles of the existing Addison Creek channel. Design of the proposed channel improvements for Addison Creek involved multiple components and considerations in all aspects of design.

**The following review steps are required:** All 8.

**STEP 1: DETERMINE PROPOSED ACTION LOCATION**

Determine whether the proposed action is in the 100-year floodplain (500-year floodplain for critical actions); and whether it has the potential to affect or be affected by a floodplain or wetland (44 CFR Section 9.7).

## Floodplain Determination

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### **Flood Hazard Data**

Is the project located in a **100 year** floodplain as mapped by a FEMA FIRM? **YES.**

17031C0369J – Zones AE and X

17031C0388J – Zones AE and X

17031C0457J – Zones AE and X

17031C0476J – Zones AE and X

## Wetland Determination

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Is the proposed action located in a wetland as mapped by the U.S. Fish and Wildlife Service's National Wetlands Inventory? **NO**

Might the proposed action be in a wetland based on evaluation from soil surveys, aerial photographs, site visit or other data? **YES**

Is the proposed action is outside of a designated wetland but has potential to affect the wetland, including support or encouragement of wetland development? **NO**

## STEP 2: EARLY PUBLIC NOTICE

Notify the public at the earliest possible time of the intent to carry out an action in a floodplain and involve the affected and interested public in the decision-making process (44 CFR Section 9.8).

Project-specific Public Notice provided via Direct Mail from USACE Permit No. LRC-2014-00674, May 6, 2019.

## STEP 3: ANALYSIS OF PRACTICABLE ALTERNATIVES

Identify and evaluate practicable alternatives to locating the proposed action in a floodplain (including the "no action" alternative). If a practicable alternative exists outside the floodplain, FEMA must locate the proposed action at the alternative site (44 CFR Section 9.9).

See Section 2 of the EA, which describes the no action alternative, the proposed action, and alternatives considered and dismissed.

### Alternatives

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Is there a practicable alternative site location outside the 100-year floodplain (or 500-year floodplain for critical actions?) **NO.** Analysis of additional alternatives and locations were evaluated for improvements that provide the same benefits but due to the urban nature of the watershed and stream corridor, no practicable alternative site locations worked.

Is there a practicable alternative action outside of the floodplain / wetland that will not affect the floodplain / wetland? **NO.** Analysis of other alternative actions were evaluated for improvements that provide the same benefits but due to the urban nature of the watershed and stream corridor, no practicable alternative site locations worked.

Is the "no action" alternative the most practicable alternative? **NO.** The No Action Alternative would still result in significant flood damages throughout the watershed.

## STEP 4: IDENTIFY IMPACTS

Identify the potential direct and indirect impacts associated with the occupancy or modification of the floodplains and the potential direct and indirect support of floodplain development that could result from the proposed action (44 CFR Section 9.10).

Is the proposed action based on incomplete information? **NO.**

Is the proposed action in compliance with the NFIP? **YES.**

Does the proposed action increase the risk of flood loss? **NO.**

Will the proposed action result in an increased base discharge or increase the flood hazard potential to other properties or structures? **NO.**

Does the proposed action minimize the impact of floods on human health, safety, or welfare? **YES.**

Will the proposed action induce future growth and development, which will potentially adversely affect the floodplain? **NO.**

Does the proposed action involve dredging and/or filling of a floodplain? **NO.**

Will the proposed action result in the discharge of pollutants into the floodplain? **NO.**

Does the proposed action avoid the long- and short-term impacts associate with the occupancy and modification of floodplains? **YES.**

Will the proposed action result in any indirect impacts that will affect the natural values and functions of floodplains or wetlands? **NO.**

Will the proposed action forego an opportunity to restore the natural and beneficial values served by floodplains? **NO.**

Does the proposed action restore and/or preserve the natural and beneficial values served by floodplains? **YES.**

Will the proposed action result in an increase to the useful life of a structure or facility? **YES.**

Work within the floodplain is increasing flood storage and conveyance to lower flood elevations and reduce flood damages. Temporary and permanent impacts to wetlands are permitted by the USACE and a permit has been obtained. Compensatory mitigation for impacts has already been purchased. Both structural and non-structural solutions were considered for the channel improvements to reduce flood damages. A combination of both measures was used to achieve the primary goals of the project. The flood reduction benefits shall provide improvements to human health, safety and welfare.

The project is providing improvements to the floodplains including native vegetation, riffles, pools, stream barbs and erosion protection to the extent practicable while providing for the primary goal of flood reduction. Where feasible, improvements have been designed to improve water quality and provide native vegetation along the channel. Waters have been maintained throughout the project. The public has been part of the project development process. The flood water surface elevations for proposed project conditions are either the same or lower than Baseline Conditions, except at two cross sections. These two cross sections (river station 21025.66 and 20834.3) are located in the UPRR railroad yard, and despite the slightly higher proposed water surface elevation, the flow is still contained within the banks of the creek, is within the limits of the permanent easement and does not cause flood damages.

## STEP 5: MINIMIZE IMPACTS

Minimize the potential adverse impacts and support to or within floodplains as identified under Step 4; restore and preserve the natural and beneficial values served by floodplains (44 CFR Section 9.11).

For sites in the 100-Year floodplain, were flood hazard reduction techniques applied to the proposed action to minimize the flood impacts? **YES.**

Were avoidance and minimization measures applied to the proposed action to minimize the short and long-term impacts on the 100-Year floodplain? **YES.**

Were measures implemented to restore and preserve the natural and beneficial values of the floodplain? **YES.**

The project has a primary goal of reducing damages associated with the floodplain by reducing floodplain elevations. Therefore, the project does not adversely impact the floodplain or the project is not adversely impacted by floodplain. Work occurs within the floodplain to implement flood storage and conveyance improvements to provide benefits and damage reductions. There will be no adverse impacts to the floodplain. Hydraulic modeling was completed to analyze the proposed project. The project is providing improvements to the floodplains including native vegetation, riffles, pools, stream barbs and erosion protection to the extent practicable while providing for the primary goal of flood reduction. Where feasible, improvements have been designed to improve water quality and provide native vegetation along the channel.

## STEP 6: REEVALUATE PRACTICABLE ALTERNATIVES

Reevaluate the proposed action to first determine if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain values. Second, evaluate if alternatives preliminarily rejected at Step 3 are practicable in light of the information gained in Steps 4 and 5. FEMA shall not act in a floodplain unless it is the only practicable location (44 CFR Section 9.9)

Is the action still practicable at a floodplain site considering the exposure to flood risk and ensuing disruption of natural values? **YES.**

Is the floodplain site the only practicable alternative? **YES.**

Is there any potential to limit the action to increase the practicability of previously- rejected non-floodplain sites or alternative actions? **YES.**

Can minimization of harm to or within the floodplain be achieved using all practicable means? **YES.**

Does the need for action in a floodplain clearly outweigh the requirements of Executive Order 11988? **YES.**

Based on detailed watershed planning, hydraulic modeling, concept planning and design, there are no practicable alternative locations other than conducting this work within the floodplain.

## STEP 7: FINAL PUBLIC NOTICE

Prepare and provide the public with a finding and public explanation of any final decision that the floodplain is the only practicable alternative (44 CFR Section 9.12).

Project-specific notice provided.

**Publication:** *Chicago Tribune*

**Date:** The Final Notice will be provided as the notice of Draft Environmental Assessment availability in the *Chicago Tribune*. A link to the document will be provided as well as a location to view the hard copy in person.

After providing the final notice, FEMA shall, without good cause shown, wait at least 15 days before carrying out the proposed action.

## **STEP 8: IMPLEMENTATION**

Review the implementation and post-implementation phases of the proposed action to ensure that the requirements stated in 44 CFR Section 9.11 are fully implemented. Oversight responsibility shall be integrated into existing processes (44 CFR §9.11).

This grant was conditioned on review of implementation and post-implementation phases to ensure compliance of Executive Order 11988.

The requirements in Section 9.11 will be fully implemented. In order to ensure compliance with the NFIP, local floodplain development permits and required mapping updates will be submitted.

**Appendix B**  
**Wetlands**



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
CHICAGO DISTRICT, CORPS OF ENGINEERS  
231 SOUTH LA SALLE STREET  
CHICAGO, ILLINOIS 60604-1437

November 20, 2019

Technical Services Division  
Regulatory Branch  
LRC-2014-00674

SUBJECT: Initial Favorable Determination for the Addison Creek Channel Improvement Project from Hirsch Street in Northlake to Cermak Road in Broadview, Cook County, Illinois (Latitude 41.8959600277989, Longitude -87.8789049237684)

Catherine O'Connor  
Metropolitan Water Reclamation District of Greater Chicago  
111 East Erie Street  
Chicago, Illinois 60611

Dear Ms. O'Connor:

The U.S. Army Corps of Engineers has made a favorable determination on your application for a Department of the Army individual permit. Two copies of your permit for the above-referenced project are enclosed. Please review the conditions before signing the permit

You are hereby advised that the following options are available to you in your evaluation of the enclosed permit:

- 1) You may sign the permit, and return it to this office for final authorization. Your signature on the permit means that you accept the permit in its entirety, and waive all rights to appeal the permit, or its terms and conditions. If the terms and conditions of the permit are acceptable, please sign both copies on the line above the word "PERMITTEE" and return them to this office for counter-signature. Upon receipt, this office will sign both copies and return one to you for your records. You are not authorized to do work until you receive your copy of the permit that has been countersigned by the Corps.
- 2) You may decline to sign the permit because you object to certain terms and conditions therein, and you may request that the permit be modified accordingly. You must outline your objections to the terms and conditions of the permit in a letter to the District Commander. Your objections must be received by the District Commander within 60 days of the date of this letter, or you will forfeit your right to request changes to the terms and conditions of the permit. Upon receipt of your letter, the District Commander will evaluate your objections, and may: (a) modify the permit to address all of your concerns, or (b) modify the permit to address some of your objections, or (c) not modify the permit, having determined that the permit should be issued as previously written. In any of these three cases, the District Commander will send you a final permit for your reconsideration, as well a notification of appeal (NAP) form and a request for

appeal (RFA) form. Should you decline the final proffered permit, you can appeal the declined permit under the Corps of Engineers Administrative Appeal Process by submitting the completed RFA form to the Division Engineer. The RFA must be received by the Division Commander within 60 days of the date of the NAP that was transmitted with the second proffered permit.

Under Federal regulations, no fee is required for permits issued to agencies or instrumentalities of Federal, state or local governments.

Please review the conditions before signing the permit. Your signature constitutes your specific agreement to the enclosed permit. Failure to meet any of the conditions may result in revocation of your permit. If the copies of the permit with your signature are not returned to this office within thirty (30) days of the date of this letter, your authorization will no longer be valid and the application will be considered withdrawn. If you wish to reinstate your permit request after the thirty (30) day time period, this office reserves the right to reevaluate your project, which may include the reissuance of a public notice.

This permit does not obviate your responsibility to obtain any required state or local approvals for this project. If you have any questions, please contact Stasi Brown of my staff by telephone at (312) 846-5544, or email at stasi.f.brown@usace.army.mil.

Sincerely,

CHERNICH.K  
ATHLEEN.G.  
1230365616  
For

Keith L. Wozniak  
Chief, Regulatory Branch

Digitally signed by  
CHERNICH.KATHLEE  
NG 1230365616  
Date: 2019.11.20  
11:25:21 -06'00'

Enclosures

Copy Furnished:

Cook County Building and Zoning (Michael Fazio)  
Metropolitan Water Reclamation District of Greater Chicago (Dan Feltes)  
North Cook SWCD (Rick McAndless)  
Hey & Associates (Jeff Mengler)



**NOTIFICATION OF APPLICANT OPTIONS (NAO)  
FOR PARTIES ISSUED  
A DEPARTMENT OF THE ARMY INDIVIDUAL PERMIT**

**U.S. Army Corps of Engineers - Chicago District**

**Date:** November 20, 2019

**File Number:** LRC-2014-00674

You are hereby advised that the following options are available to you in your evaluation of the enclosed permit:

- 1) You may sign the permit, and return it to the District Commander for final authorization. Your signature on the permit means that you accept the permit in its entirety, and waive all rights to appeal the permit, or its terms and conditions.
  
- 2) You may decline to sign the permit because you object to certain terms and conditions therein, and you may request that the permit be modified accordingly. You must outline your objections to the terms and conditions of the permit in a letter to the District Commander. Your objections must be received by the District Commander within 60 days of the date of this NAO, or you will forfeit your right to request changes to the terms and conditions of the permit. Upon receipt of your letter, the District Commander will evaluate your objections, and may: (a) modify the permit to address all of your concerns, or (b) modify the permit to address some of your objections, or (c) not modify the permit, having determined that the permit should be issued as previously written. In any of these three cases, the District Commander will send you a final permit for your reconsideration, as well a notification of appeal (NAP) form and a request for appeal (RFA) form. Should you decline the final proffered permit, you can appeal the declined permit under the Corps of Engineers Administrative Appeal Process by submitting the completed RFA form to the Division Commander. The RFA must be received by the Division Engineer within 60 days of the date of the NAP that was transmitted with the second proffered permit.



**DEPARTMENT OF THE ARMY**

**PERMIT**

**PERMITTEE:** Catherine O'Connor  
Metropolitan Water Reclamation District of Greater Chicago

**APPLICATION:** LRC-2014-00674

**ISSUING OFFICE:** U.S. Army Corps of Engineers, Chicago District

**DATE:** January 14, 2020

You are hereby authorized to perform work in accordance with the terms and conditions specified below.

Note: The term "you" and its derivatives, as used in this authorization, means the permittee or any future transferee. The term "this office" refers to the U.S. Army Corps of Engineers, Chicago District.

**PROJECT DESCRIPTION:** Flood control measures along Addison Creek through grading and various bank stabilization treatments and improvements from Hirsch Street in Northlake to Cermak Road in Broadview, Cook County, Illinois, as described in your notification and as shown on the plans titled, "Addison Creek Channel Improvements Northlake, Stone park, Melrose Park, Westchester, Bellwood, and Broadview, Illinois, dated July 2017 and prepared by Metropolitan Water Reclamation District of Greater Chicago (MWRD).

Management and monitoring of the stream bank treatments will be conducted by the affected municipality under a MOU between MWRD and the municipality. The MOU includes a 1-year establishment requirement for the completed work.

To offset project impacts, approximately 0.63 certified credits, or 0.95 acres uncertified credits shall be purchased from a wetland mitigation bank prior to final permit issuance.

**PROJECT LOCATION:** Hirsch Street in Northlake to Cermak Road in Broadview, Cook County, Illinois (Quarter of Section 4, Township 39 N, Range 12 E Latitude 41.8959600277989, Longitude -87.8789049237684).

**GENERAL CONDITIONS:**

1. The time limit for completing the authorized work ends five (5) years from when the Federal official, designated to act for the Secretary of the Army, has signed below. If you find that you need more time to complete the authorized activity(s), submit your request for a time extension to this office for consideration at least 60 days before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. Please note that this site is within the aboriginal homelands of several American Indian Tribes. If any cultural, archaeological or historical resources are unearthed during activities authorized by this permit, work in that area must be stopped immediately and the Corps, State Historic Preservation Office and/or Tribal Historic Preservation Office must be contacted for further instruction. The Corps will initiate the coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing on the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. You shall comply with the water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency for the project. Conditions of the certification are conditions of this authorization. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being accomplished in accordance with the terms and conditions of your permit.

The following special conditions are a requirement of your authorization:

1. This authorization is based on the materials submitted as part of application number LRC-2014-00674. Failure to comply with the terms and conditions of this authorization may result in suspension and revocation of your authorization.
2. Proof of mitigation credit purchase (0.63 acres certified credits, or 0.95 acres uncertified credits) from the selected contractor must be provided to this office prior to the start of construction. No earth moving activities shall commence before documentation of the

mitigation purchase has been provided to this office.

3. You shall fully implement the intergovernmental agreements (ICAs) between MWRD and the individual municipalities within the first year of project construction within each municipality's jurisdiction. All reseeded areas shall meet performance criteria in accordance with the approved stream restoration document. Your responsibility to complete the required work will not be considered fulfilled until you have demonstrated success and have received written verification of that success from the U.S. Army Corps of Engineers.
4. This site is within the aboriginal homelands of several American Indian Tribes. If any human remains, Native American cultural items or archaeological evidence are discovered during any phase of this project, interested Tribes request immediate consultation with the entity of jurisdiction for the location of discovery. In such case, please contact Stasi Brown by telephone at (312) 846-5544, or email at [stasi.f.brown@usace.army.mil](mailto:stasi.f.brown@usace.army.mil).
5. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the North Cook Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices on-site.
  - a. You shall schedule a preconstruction meeting with SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
  - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
  - c. Prior to commencement of any in-stream work, you shall submit construction plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
6. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
7. A copy of this authorization must be present at the project site during all phases of construction.
8. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is

performed.

9. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.
10. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
11. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
12. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
13. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
14. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
15. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or pre-construction conditions and fully stabilized prior to accepting flows.

**Further Information:**

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

( ) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this Authorization.

a. This permit does not obviate the need to obtain other federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. The Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on the behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modifications, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in the reliance on the information you provided.

5. Reevaluation of Permit Decision. The office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 established a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this authorization.

Catherine A. O'Connor  
PERMITTEE  
Catherine O'Connor  
Metropolitan Water Reclamation District of Greater Chicago

11/27/19  
DATE

LRC-2014-00674

\_\_\_\_\_  
Corps Authorization Number

This authorization becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

**CHERNICH.KA** Digitally signed by  
**THLEEN.G.123** CHERNICH.KATHLEEN.G.  
**0365616** 1230365616  
Date: 2020.01.14  
14:06:31 -06'00'

For and on behalf of  
Colonel Aaron W. Reisinger  
Commander, Chicago District

\_\_\_\_\_  
DATE

If the structures or work authorized by this authorization are still in existence at the time the property is transferred, the terms and conditions of this authorization will continue to be binding on the new owner(s) of the property. To validate the transfer of this authorization and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below. The document shall be attached to a copy of the permit and submitted to the Corps.

LRC-2014-674

\_\_\_\_\_  
CORPS PROJECT NUMBER

\_\_\_\_\_  
TRANSFEEEE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
TELEPHONE

**Appendix C**  
**Threatened and Endangered Species**

## Grafton, Jack

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**From:** McPeek, Kraig <kraig\_mcpeek@fws.gov>  
**Sent:** Friday, March 10, 2023 1:33 PM  
**To:** Castaldi, Duane  
**Cc:** Lah, Kristopher; Grafton, Jack  
**Subject:** Re: [EXTERNAL] FEMA - Addison Creek Channel Improvements -- FWS IPAC No.: 2023-0016247

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**CAUTION:** This email originated from outside of DHS. DO NOT click links or open attachments unless you recognize and/or trust the sender. Please select the Phish Alert Report button on the top right of your screen to report this email if it is unsolicited or suspicious in nature.

Thanks Duane - yes, we are all learning a bit as we go here with NLEB and the Dkey as it relates to areas that are highly urbanized. No, I don't think that we have or would provide a definition for what 'highly urbanized' is. Obviously a sliding scale depending on ones perspective. I have reviewed the project area and do not have any concerns with this project moving forward. The areas of tree clearing do not meet the range-wide guidelines for habitat suitability and therefore can be assumed to not be occupied by NLEB. No summer survey would be required. If you determine an area to no contain suitable habitat, there would be no need to contact the field office and can continue with project planning. Bridge and culvert assessments are always a good idea to inform potential nesting birds and/or roosting bats but also would not, in itself, necessitate a contact to the field office.

For this project specifically, I think you could easily justify a 'no effect' determination based on the landscape context and lack of suitable habitat being impacted. No effect determination do not require coordination with FWS field offices and should merely be noted and memorialized in the project folder.

I hope I have answered your questions. Please feel free to respond if you need additional clarity or other questions come up.

Thank you

Kraig McPeek  
Field Office Supervisor

US Fish and Wildlife Service  
Illinois & Iowa ES Field Office  
1511 47th Avenue  
Moline, IL 61265

office - 309-757-5800 x202  
cell - 309-429-0362

*Do the best you can until you know better. Then when you know better, do better - Maya Angelou*  
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**From:** Castaldi, Duane <Duane.Castaldi@fema.dhs.gov>  
**Sent:** Friday, March 10, 2023 12:23 PM  
**To:** McPeck, Kraig <kraig\_mcpeck@fws.gov>  
**Cc:** Lah, Kristopher <kristopher\_lah@fws.gov>; Grafton, Jack <jack.grafton@fema.dhs.gov>  
**Subject:** RE: [EXTERNAL] FEMA - Addison Creek Channel Improvements -- FWS IPAC No.: 2023-0016247

Hi Kraig,

Thank you for your offer of assistance.

We have questions regarding a channel improvement project that is occurring along Addison Creek in Cook County, Illinois. These improvements will involve the removal of three bridges and over 1500 trees 3" dbh or greater along the creek. The full project details can be seen in the Scoping Document attached.

In particular, our inquiry is based upon the new northern long-eared bat determination key. The key references the Interim Consultation Framework containing a "Standing Analysis and Implementation Plan" document. After reviewing, here are our questions - it should be noted that the applicant for this project plans to take down trees during the active season:

- Would this project, which is located within a highly urban suburb of Chicago, require a bridge investigation for the removal of the three bridges over the creek?
- The new Implementation Plan partly defines suitable habitat for the NLEB as trees that are not within highly developed urban areas. However, the definition of what is "urban" can be highly relative. What might be the minimum standard of classifying something as unsuitable habitat due to being in an urban area? Does this project area contain suitable habitat in this case?
- Is a summer bat survey required for this project?
- The language between the Implementation Plan and the D-Key letter has some contradiction, therefore can you clarify:
  - Should we always send the field office an informal consultation for their recommendation before suggesting a summer survey?
  - Should we always send the field office an informal consultation before doing any bridge or culvert investigation?

We appreciate any insight you can provide to give us a better understanding of how to define suitable habitat and how to handle our correspondence in the future.

If a phone call is preferred Jack Grafton and I can be available to discuss. Below I have included both Jack and my contact information as Jack is our Section 7 POC here in FEMA Region 5.

**Jack Grafton**  
Mobile: (256) 343-5917  
[jack.grafton@fema.dhs.gov](mailto:jack.grafton@fema.dhs.gov)

Duane Castaldi  
Regional Environmental Officer | FEMA Region 5  
Office: 312-408-5549 | Mobile: 312-576-0067

# *Hey and Associates, Inc.*

Engineering, Ecology and Landscape Architecture

*26575 W. COMMERCE DRIVE, SUITE 601  
VOLO, ILLINOIS 60073  
PHONE (847) 740-0888  
FAX (847) 740-2888*

## **MEMORANDUM**

**TO:** Mr. Jack Grafton, FEMA Region 5  
Mr. Michael Cosme, MWRD

**CC:** Mr. Patrick Lach, PE

**FROM:** Mr. Jeffrey Mengler

**DATE:** February 20, 2023

**RE:** Federally Listed Threatened and Endangered Species and Critical Habitat Review  
Addison Creek Channel Improvements, Cook County, Illinois

**PROJECT NO.** Hey #16-0005, FEMA Project ID HMGP-4489-0019-IL (R) (1)

This is an update from our January 26, 2017 memorandum on this topic used in the permitting process. This information has been updated with the latest data on the U.S. Fish and Wildlife Service IPAC web page, the change in status of the northern long-eared bat, and updated information on trees proposed for removal.

On behalf of our client, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) we have completed a review of the referenced project corridor for federally listed threatened and endangered species and habitat. The stream corridor consists of an approximately 5-mile section of Addison Creek that is being modified for flood reduction benefits. The project corridor extends from Hirsch Road in Melrose Park, Illinois continuing to the south and east down to Cermak Road in Westchester, Illinois. The study corridor is a modified creek channel that has steep eroded banks along most of its length. Some areas also have stream banks that have been armored with concrete debris, cement, or gabion-like structures. Other sections of streambank contain narrow wetland shelves that periodically flood. Much of the corridor consists of low-quality woodland or degraded wet meadow.

The following federally-listed species were identified using the IPAC online system and as indicated in the attached letter from the Chicago Ecological Service Field Office.

The northern long-eared bat (*Myotis septentrionalis*) ranges across much of the eastern and north central United States and across much of Canada. Historically this species has been patchily distributed across its range, but generally more common in the northern and eastern portions of its range. It was considered a common bat species until recent precipitous declines due primarily to white-nose syndrome. It was listed as federally threatened when the initial assessment for this project was completed. However, it is now considered federally endangered.

When listed as threatened, the USFWS published a "Key to the Final 4(d) Rule" effective January 2016 to assist in determining potential impacts to the northern long-eared bat (NLEB). This key was used to assess potential

impacts in our 2017 memorandum, and the federal permit from the USACE was based on this assessment and the rule in place at that time. As of the writing of this memorandum, the USFWS has indicated that rule is no longer in effect, but has not issued new guidance or a new rule for this species.

There are no known bat hibernacula within many miles of the project site or vicinity. The project site does not contain any remnant upland forests or woods. There are trees located along Addison Creek that are in general weedy growth in a narrow riparian zone where structures do not come up to the creek banks.

NLEB is known to occur in Cook County, and within the Des Plaines watershed. Since no bat surveys have been conducted within the project corridor, the NLEB presence or absence is not definitively known. However, given the very urbanized setting and degraded riparian corridor and our current understanding of habitat used by the NLEB, it seems very unlikely that there is suitable summer roosting habitat present within the project area, however, it cannot be ruled out. Therefore, in accordance with the guidance provided within the Key to the Final 4(d) Rule for the NLEB, the project will not:

- Remove a known occupied maternity roost tree;
- Conduct any tree removal activities within 150 feet of a known occupied maternity roost tree;
- Conduct any tree removal activities from June 1 through July 31;
- Conduct any tree removal activities within 0.25 mile of a bat hibernaculum at any time.

The timing restriction for tree removal may or may not prove practicable in the construction schedule once the contractor begins construction. The following table provides an estimate of the trees that will be removed and their size classes. If any of the tree removal in a particular reach ends up being scheduled during the restricted time period (June 1 through July 31), surveys for suitable roosting trees will be conducted prior to the commencement of tree removal by the contractor. Any trees deemed to be suitable roosting trees for NLEB will be protected until after July 31.

Table 1. Estimate of tree removal quantities.

	Conifers		Deciduous			
	<8"	<12"	<6"	8" - 12"	14" - 24"	26" - 36"
Reach 1 - Open Channel	7		74	94	57	17
Reach 1 - Walls			6	6	6	
Reach 2 - Walls				8	1	2
Reach 2 - Gabion				1	4	1
Reach 2 - Walls				6	9	2
Reach 3 - Walls			3	2	1	
Reach 3 - Gabion	4	2	482	327	68	8
Reach 3 - Walls			4	7	1	
Reach 4 - Gabion			18	33	9	2
Reach 5 - Walls			32	33	3	4
Reach 5 - Gabion			32	21	4	
Reach 6			5	5	4	5
Reach 7 - Channel	5		308	101	69	11
Reach 8 - Walls	9		4	11	4	3
Reach 8 - Channel			5	12	2	3
Reach 9 - Channel			138	62	35	5
Totals:	25	2	1111	729	277	63
Adjustment for <3"	12.5		555.5			
Subtotals	12	2	555	729	277	63
Approx Trees removed / felled post-survey			22.2	28.2	17.1	5.1
Overall total	12	2	533	701	260	58
Conifer Total	14					
Deciduous total			1552			
Over approximately 52 acres						

**Piping plover (*Charadrius melodus*)**

Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands. The project corridor is several miles inland from Lake Michigan beaches. Therefore, this project will have no effect on this species. There is final Critical Habitat designated for this species, however, the project location does not overlap with the critical habitat as indicated in the attached USFWS correspondence.

**Rufa Red Knot (*Calidris canutus rufa*)**

Only actions that occur along coastal areas or large wetland complexes during migratory window of May 1 - September 30. The project site is several miles inland from Lake Michigan beaches. Therefore, this project will have no effect on this species. There is proposed Critical Habitat designated for this species, however, the project location does not overlap with the critical habitat.

**Eastern massasauga rattlesnake (*Sistrurus catenatus*)**

Massasaugas live in wet areas including wet prairies, marshes and low areas along rivers and lakes. In many areas Massasaugas also use adjacent uplands during part of the year. They often hibernate in crayfish burrows but they may also be found under logs and tree roots or in small mammal burrows. Unlike other rattlesnakes, Massasaugas hibernate alone. The project area does not contain suitable habitat for the snake. Therefore, this project will have no effect on this species. No Critical Habitat has been designated for this species.

**Hine's emerald dragonfly (*Somatochlora hineana*)**

The Hine's emerald dragonfly lives in calcareous (high in calcium carbonate) spring-fed marshes and sedge meadows overlaying dolomite bedrock. The project area does not contain suitable habitat for the Hine's Emerald Dragonfly and is not located near designated critical habitat. This project will have no effect on this species.

**Eastern prairie fringed orchid (*Platanthaera leucophaea*)**

The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established. This fungus helps the seeds assimilate nutrients in the soil. The project site does not contain suitable habitat for the eastern prairie fringed orchid. The project will have no effect on this species.

**Leafy Prairie-Clover (*Dalea foliosa*)**

The leafy Prairie-Clover is found in prairie remnants along the Des Plaines River in Illinois, in thin soils over limestone substrate. It is especially vulnerable to commercial and residential development and to road construction. Fire suppression practices have eliminated the wildfires which once regularly cleared prairie grasslands of the encroaching woods. Often the expansion of shrubs and trees threaten this clover, which needs hot, sunny sites to survive. The project site does not contain any prairie remnants and will have no effect on this species.

In summary, the vast majority of the study corridor occurs on highly urbanized land that has been heavily modified and degraded. The creek corridor has been channelized in the past for stormwater management purposes. The wetland areas consist predominantly of floodplain shelves that are either wooded or degraded wet meadow. The

rest of the channel is bordered by dense shrubs or wood, gabion-like structures, concrete rip-rap or cement, or old field. No remnant prairie was observed within the study corridor.

No suitable habitat for the listed species is present in the study corridor and the project will not result in any increase to the risk of impacts to listed species we conclude that the proposed project will have “no effect” on federally listed species or their habitats.

*Applicant:* Metropolitan Water Reclamation District of Greater Chicago      *IDNR Project Number:* 2011029  
*Contact:* Jeffrey Mengler      *Date:* 06/26/2020  
*Address:* c/o Hey and Associates, Inc.  
26575 W. Commerce Drive, Suite 601      *Alternate Number:* 16-0005, 1706320  
Volo, IL 60073  
  
*Project:* Addison Creek Channel Improvements  
*Address:* Western Cook County, Broadview, Bellwood, Stone Park, Northlake, Broadview,  
Bellwood, Stone Park, Northlake  
  
*Description:* Stabilizations of Addison Creek urban channels with various treatments.

### Natural Resource Review Results

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

**Consultation is terminated.** This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

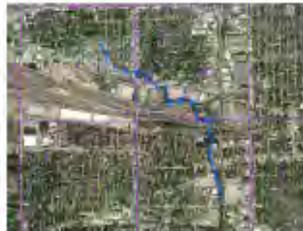
#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Cook

*Township, Range, Section:*

39N, 12E, 4  
39N, 12E, 4  
39N, 12E, 5  
39N, 12E, 9



**IL Department of Natural Resources**  
**Contact**  
Bradley Hayes  
217-785-5500  
Division of Ecosystems & Environment

**Government Jurisdiction**  
U.S. Army Corps of Engineers

#### Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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*Applicant:* Metropolitan Water Reclamation District of Greater Chicago  
*Contact:* Jeffrey Mengler  
*Address:* c/o Hey and Associates, Inc.  
26575 W. Commerce Drive, Suite 601  
Volo, IL 60073

*IDNR Project Number:* 2011032  
*Date:* 06/26/2020  
*Alternate Number:* 16-0005, 1706325

*Project:* Addison Creek Channel Improvements - 2nd Reach  
*Address:* Broadview, Bellwood, Stone Park, Northlake, Broadview, Bellwood, Stone Park, Northlake

*Description:* Channel improvements and stabilization using various techniques.

### Natural Resource Review Results

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

**Consultation is terminated.** This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

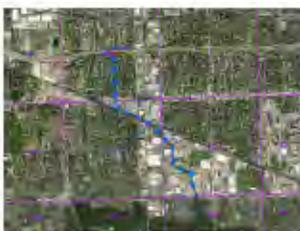
*County:* Cook

*Township, Range, Section:*

39N, 12E, 16

39N, 12E, 21

39N, 12E, 22



#### **IL Department of Natural Resources**

##### **Contact**

Bradley Hayes

217-785-5500

Division of Ecosystems & Environment

#### **Government Jurisdiction**

U.S. Army Corps of Engineers

#### **Disclaimer**

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## **Privacy**

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**From:** [Jeff Mengler](#)  
**To:** [Hayes, Bradley](#)  
**Subject:** MWRD Addison Creek  
**Date:** Friday, June 26, 2020 10:34:00 AM  
**Attachments:** [image007.png](#)  
[image008.png](#)  
[image009.png](#)

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Brad:

This is to give you the heads up that we have just resubmitted this project (prior IDNR numbers 1706320, 1706325) since the signoffs have expired. It is submitted in two chunks again to facilitate drawing the project reaches in the online EcoCAT mapper. Please note that I have connected sections in your online mapper that are not connected in the actual project scope – see the attached project location map for an overall view of the project. If you need additional details, I can provide an aerial based map of each project reach. Detailed engineering plans are also available if needed, but be careful what you ask for as they are hundreds of plan sheets.

Overall, the project scope has not changed since our 2017 signoff. MWRD is still working on engineering details and obtaining the necessary easements. They hope construction will finally begin in 2021.

Thanks,

Jeff

Jeffrey L. Mengler, PWS  
Senior Project Scientist

*Hey and Associates, Inc.*

26575 W. Commerce Drive, Suite 601  
Volo, Illinois 60073  
847-740-8228 (direct)  
847.740.0888 Ext. 123  
815.451.8352 (Mobile)  
[heyassoc.com](http://heyassoc.com)



**Appendix D**  
**Historic Structures & Archaeological Resources**



**Cook County**

**Northlake to Broadview**

**New Construction of Open Channel, Installation of Soldier Pile Walls and Gabion Basket Walls, Bridge Removal, Gabion Mattress, Addison Creek Channel Improvements - Addendum**

**Reach 1: Hirsch St., Northlake to Mannheim Road, Melrose Park; Reach 2: Mannheim Road, Stone Park to Lake St., Melrose Park; Reach 3: Lake St. to UPRR tracks, Melrose Park and Bellwood; Reach 4: Grant Ave. to St. Charles Road, Bellwood; Reach 5: St. Charles Road to Oak St., Bellwood; Reach 6: Cernan to Harrison St., Bellwood; Reach 7: Wedgewood Dr. to Roosevelt Road, Westchester; Reach 8: Roosevelt Road to Gardner Road, Westchester; Reach 9: 24th to Cermak Road, Broadview; From Hirsch St. in Northlake to South and East to Cermak Road in Broadview; 1128 S. 30th Ave., Bellwood; 30th Ave. over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison Creek, 2795 Washington Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave., Bellwood  
SHPO Log #008051117**

**March 9, 2023**

**Donna Nagle**

**U.S. Department of Homeland Security  
Federal Emergency Management Agency Region 5  
536 S. Clark St., 6th Floor  
Chicago, IL 60605-1521**

**Dear Ms. Nagle:**

**We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.**

**Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).**

**If you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at [Rita.E.Baker@illinois.gov](mailto:Rita.E.Baker@illinois.gov).**

**Sincerely,**

**Carey L. Mayer, AIA  
Deputy State Historic  
Preservation Officer**



**FEMA**

February 9, 2023

***Documentation Continuing and Concluding Section 106 Consultation  
for a FEMA-Funded Undertaking***

**Project Information:**

---

**Project ID:** HMGP 4489.19 / SHPO# 008051117  
**Title:** MWRD Addison Creek Channel Improvements—Addendum  
**Address:** Broadview, Northlake, Stone Park, Melrose Park, Bellwood, and Westchester  
**Location:** Cook County, Illinois  
**GPS:** Approximately 41.899152, -87.885647 to 41.849464, -87.855787  
**PLSS:** T39N R12E Sections 4, 5, 9, 16, 21, 22, and 27

**Description of Undertaking and APE:**

---

Metropolitan Water Reclamation District (MWRD) of Greater Chicago has proposed a large stormwater improvement project within and around Addison Creek, Cook County. The scope includes several components: removing building and structures from the floodplain, creating a reservoir, and improvements within the Addison Creek channel itself.

Since FEMA has determined that this project constitutes a federal undertaking and the MWRD is not an authorized delegate pursuant to Stipulation I.B(1)(b) and Section IV of Appendix D of the Programmatic Agreement among FEMA, SHPO, Illinois Emergency Management Agency, and Participating Tribes, FEMA is continuing consultation.

***Work Previously Reviewed***

The project was first submitted to the Illinois SHPO on April 27, 2017, by Hey and Associates, Inc., on behalf of MWRD. A Phase I archaeology survey conducted by Midwest Archaeological Research Services (MARS) was completed for the project and submitted to the SHPO for review. The survey concluded that no historic properties eligible for listing in the National Register of Historic Places (NRHP) were encountered. On May 25, 2017, the SHPO responded and concurred that no historic properties are affected (SHPO# 008051117, attached).

On October 29, 2019, the MWRD resubmitted the project with the same scope to obtain an extension to the original concurrence. The SHPO responded on July 8, 2020, affirming no historic properties are affected (attached).

On March 7, 2022, the SHPO again extended its clearance of the project in a letter to MWRD (attached).

The part of the project involving the creek channel improvements was submitted to FEMA for HMGP funding on December 13, 2022. The work to demolish three houses at 1128 S 30<sup>th</sup> Avenue, 1128 S 31<sup>st</sup> Avenue, and 1131 S 32<sup>nd</sup> Avenue in Bellwood and construction

of the reservoir at 2795 Washington Boulevard, Bellwood has been completed. MWRD is proposing channel improvements designed to improve conveyance within nine reaches of approximately 3.5 miles of the existing Addison Creek channel. The improvements include:

- Reach 1: constructing an open channel and installing two soldier pile walls (Hirsch Street, Northlake to Mannheim Road, Melrose Park)
- Reach 2: installing four soldier pile walls and gabion basket walls, and restoring staging areas in parks and open space (Mannheim Road, Stone Park to Lake Street, Melrose Park)
- Reach 3: installing two soldier pile walls, gabion basket wall, stream barbs, and a concrete slope wall at the Union Pacific Railroad Bridge (W. Lake Street to UPRR tracks, Melrose Park and Bellwood)
- Reach 4: installing a gabion basket wall (Grant Avenue to St. Charles Road, Bellwood)
- Reach 5: installing two soldier pile walls and gabion basket walls (St. Charles Road to Oak Street, Bellwood)
- Reach 6: removing bridges at 30<sup>th</sup>, 31<sup>st</sup>, and 32<sup>nd</sup> Avenues, and installing concrete block revetments (Cernan to Harrison Street, Bellwood)
- Reach 7: clearing and installing gabion mattress (traditional stone and vegetation) bank stabilization (Wedgewood Drive to Roosevelt Road, Westchester)
- Reach 8: installing two soldier pile walls and gabion basket wall, and clearing and installing gabion mattress (traditional stone and vegetation) bank stabilization (Roosevelt Road to Gardner Road, Westchester)
- Reach 9: clearing and installing gabion mattress (traditional stone and vegetation) bank stabilization (24<sup>th</sup> to Cermak Road, Broadview)

Scope also includes roadway restoration and utility modifications.

The Area of Potential Effects (APE) includes the immediate area around the nine reaches measuring approximately 3.5 miles in length in addition to staging and access areas previously reviewed by the SHPO. The APE is noted on Figures 2 through 6.

## Steps Taken to Identify Historic Properties and the Description of Historic Properties:

---

### ***Archaeology***

A Phase I survey was conducted on February 20 and 21 and March 29, 2017 and submitted to the SHPO.<sup>1</sup> The survey report indicates that a search of the Illinois SHPO database found no archaeological sites within the APE. Fieldwork included shovel testing in areas not disturbed by development and amenable to testing. No archaeological resources were encountered. The survey report noted that a large part of the project area

---

<sup>1</sup> Martinez, Jay, Steven Katz and Kelsey Reinker. April 12, 2017. *Phase I Archaeological Reconnaissance Survey and Architectural Assessment in Advance of the Addison Creek Channel Improvements, Proviso Township, Cook County, Illinois*. Midwest Archaeological Research Services, Crystal Lake, IL.

had been previously surveyed and concludes that the APE has been previously disturbed by residential and commercial development and recommends that project proceed.

Given the previous disturbance, the results of the surveys, including the most recent one which failed to encounter archaeological resources, and the SHPO's previous review and concurrence, FEMA finds that the project is unlikely to encounter intact archaeological sites or feature in their original depositional contexts eligible for listing on the NRHP.

#### ***Standing Structures***

The undertaking includes demolition of three culverts over Addison Creek on 30<sup>th</sup>, 31<sup>st</sup>, and 32<sup>nd</sup> Avenues. These culverts were found to be well represented in Cook County and ineligible for listing in the NRHP.

The undertaking will involve improvements to an existing channel. This limits the APE to work at and below grade. No visual effects are anticipated.

#### **Determination of Eligibility:**

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Based on the information provided above, FEMA has determined that ***no resources within the APE are eligible for listing on the National Register of Historic Places.***

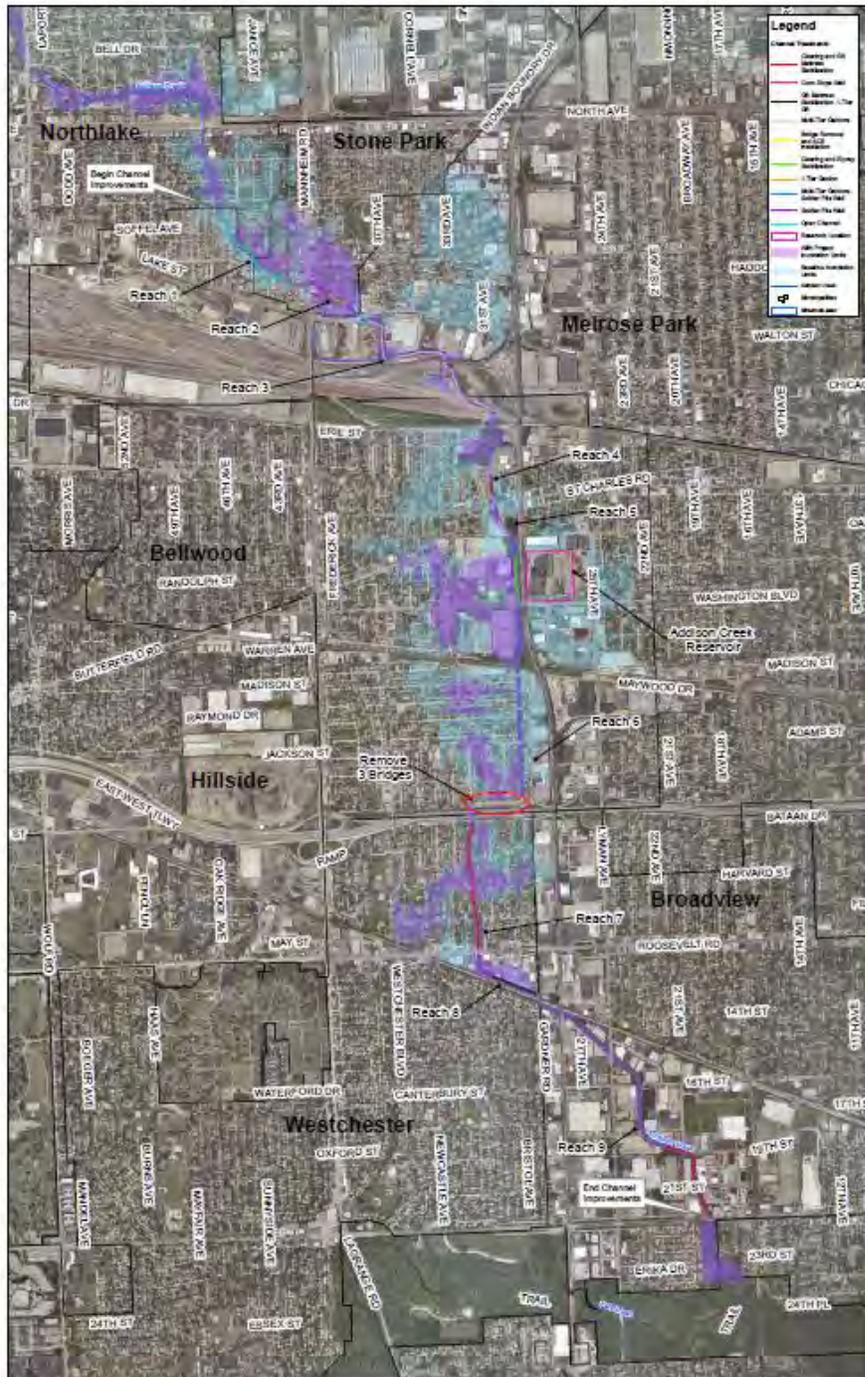
#### **Finding:**

---

FEMA finds that this undertaking will result in ***no historic properties affected.***

**Figures:**

Figure 1: Project scope and locations. Note: Work to construct Addison Creek Reservoir has been completed.  
*Applicant document.*



Prepared by:  
**Hey and Associates, Inc.**  
Engineering, Planning and Construction Solutions



Project Name:  
**Addison Creek**

Prepared for:  
**Metropolitan Water Reclamation  
District of Greater Chicago**

Scale: 1" = 100'



Figure 2: Undertaking in Reaches 1 and 2 with APE marked in yellow.  
Applicant document.

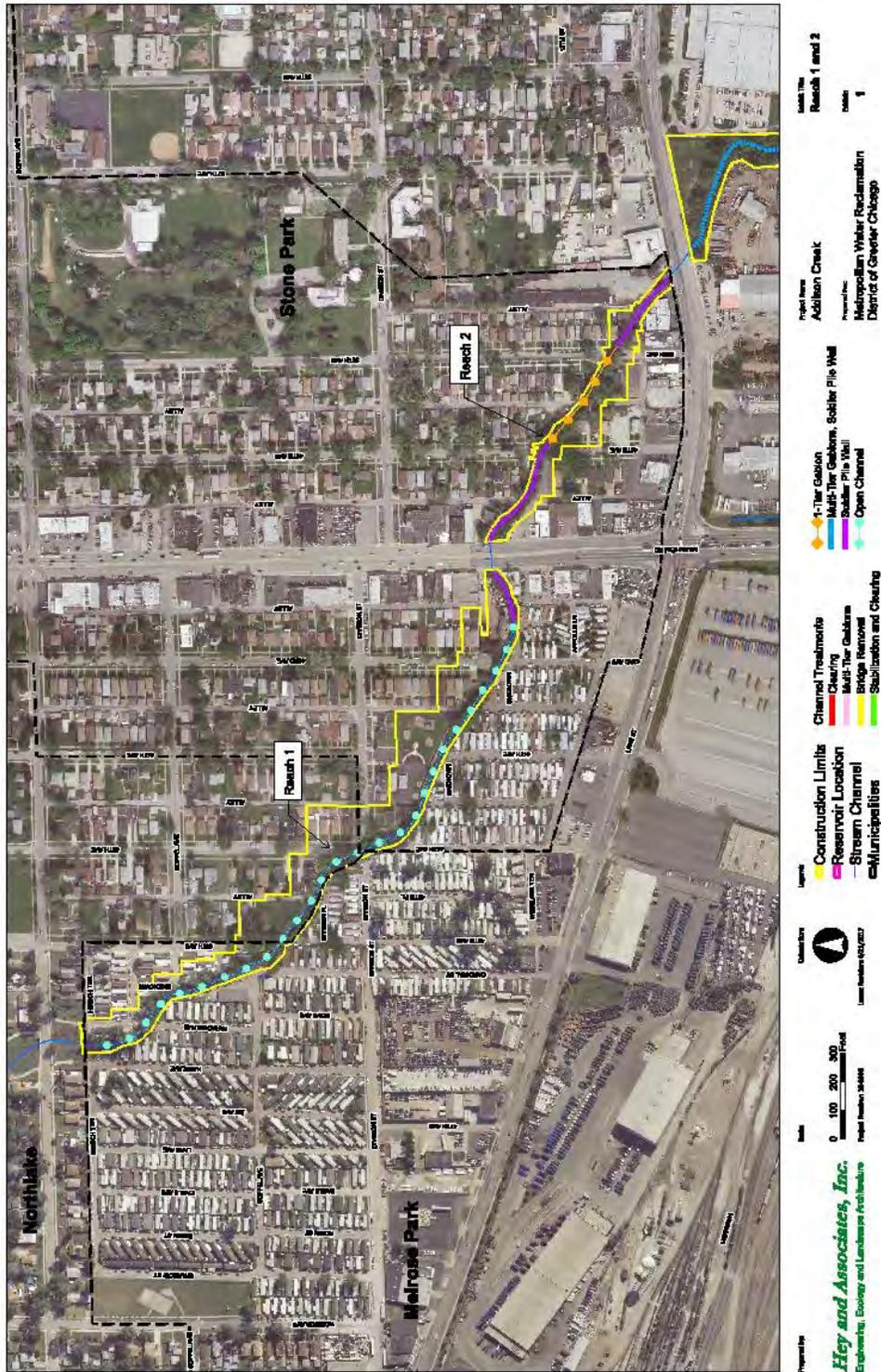


Figure 3: Undertaking in Reach 3 with APE marked in yellow.  
Applicant document.

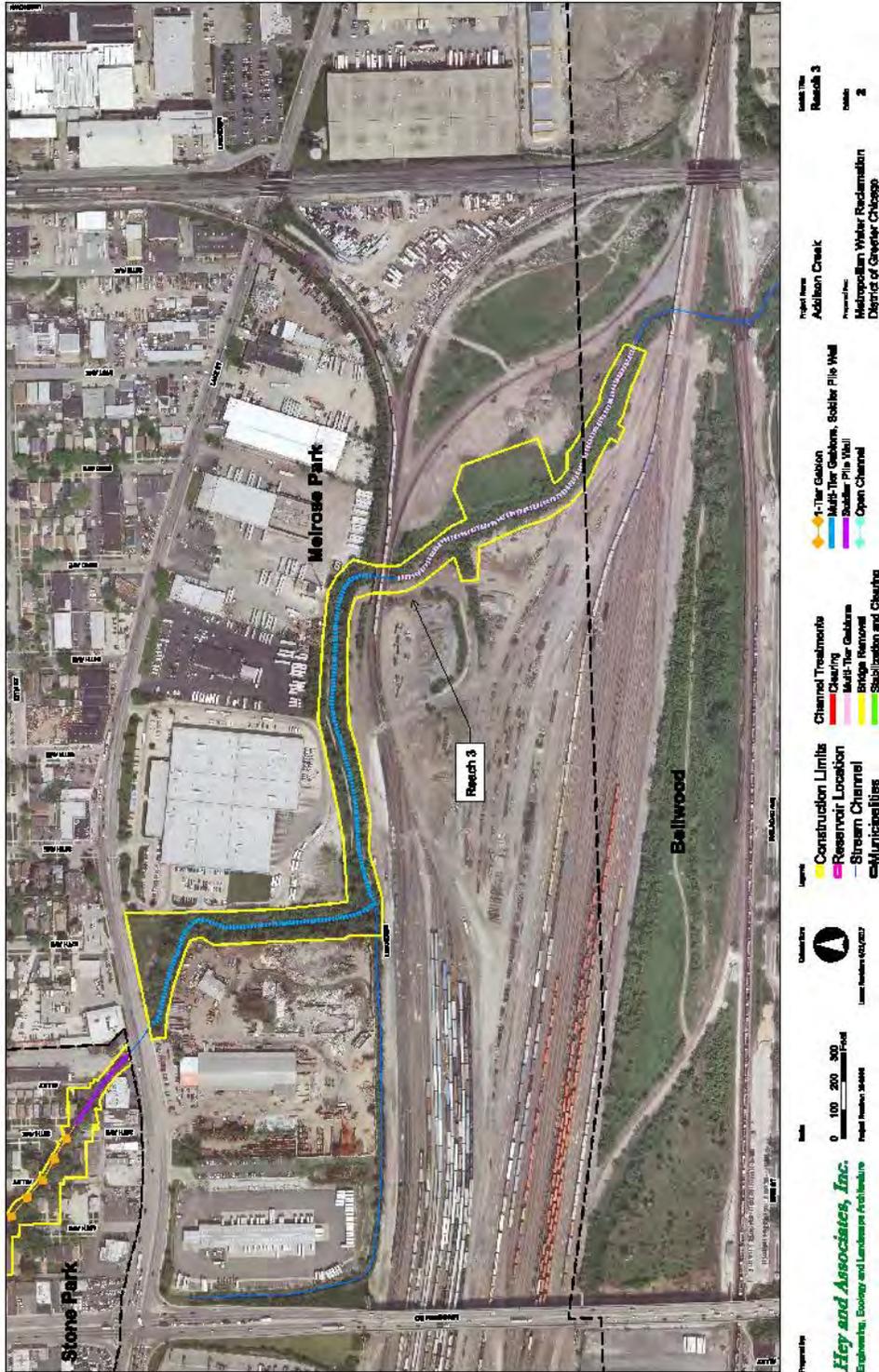




Figure 5: Undertaking in Reaches 6, 7, and 8 with APE marked in yellow.  
Applicant document.

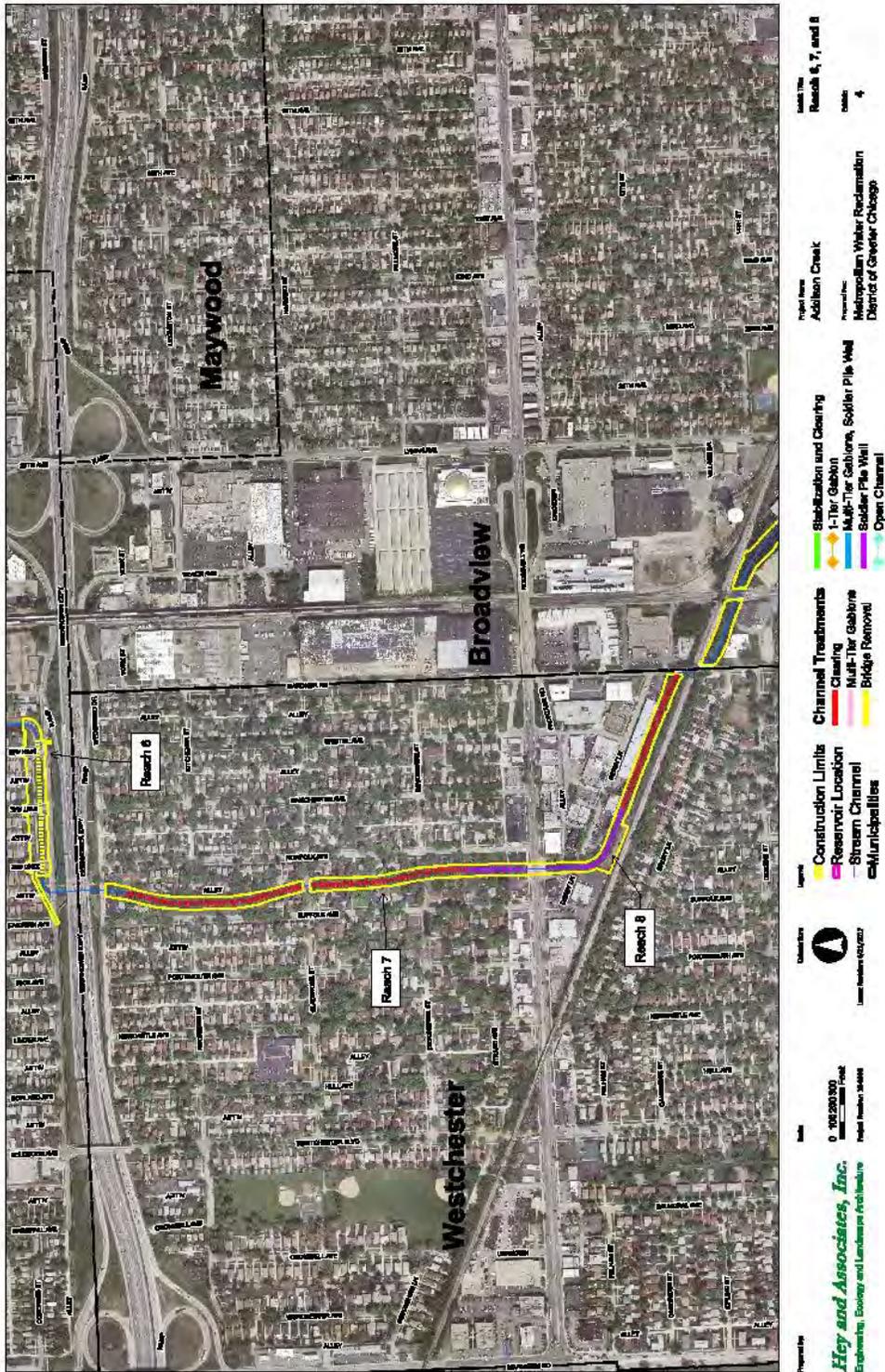
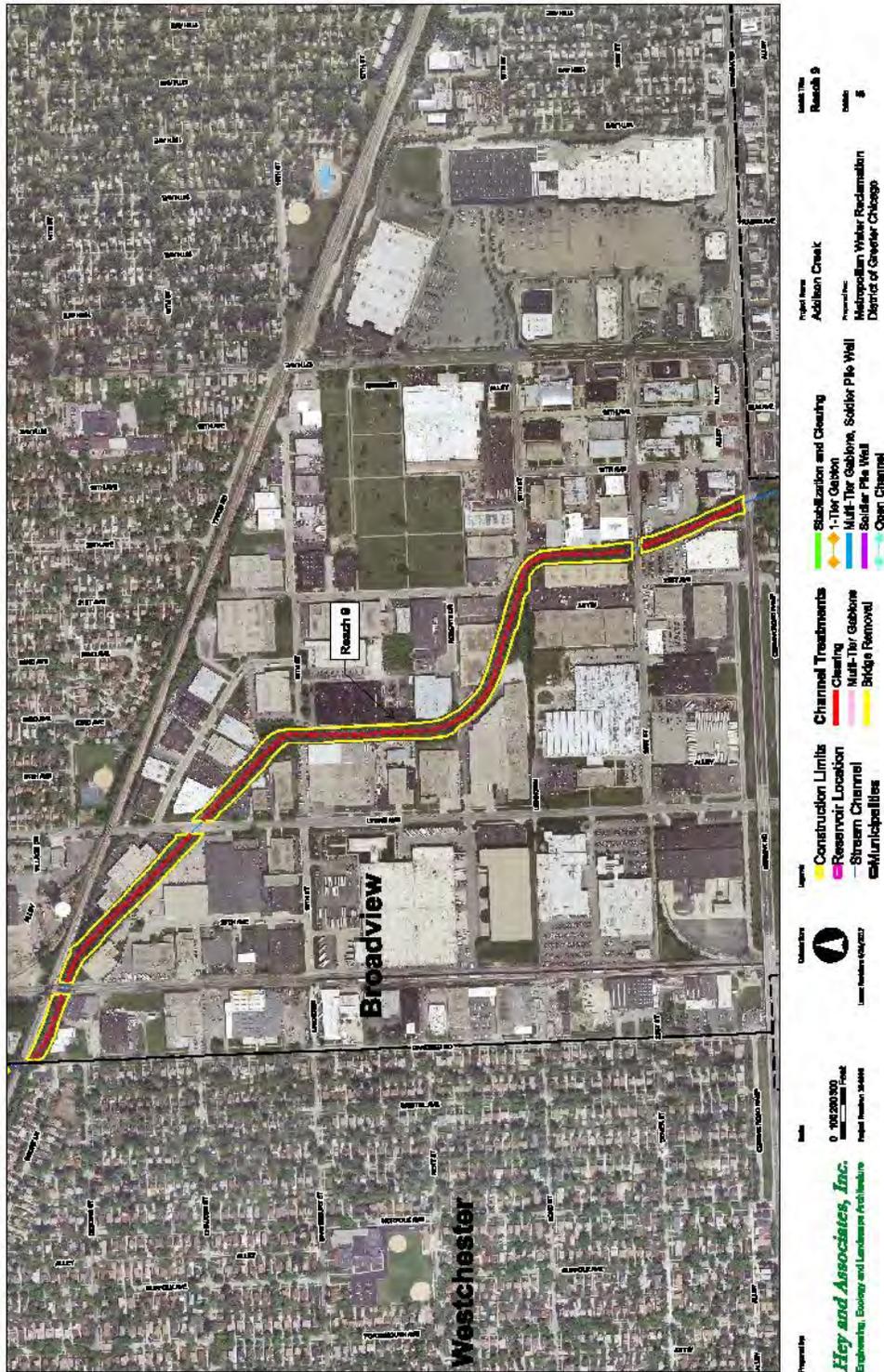


Figure 6: Undertaking in Reach 9 with APE marked in yellow.  
Applicant document.





**Illinois Historic  
Preservation Agency**

1 Old State Capitol Plaza, Springfield, IL 62701-1512

FAX (217) 524-7525

[www.illinoishistory.gov](http://www.illinoishistory.gov)

Cook County

Northlake to Broadview

Demolition of Structures and Bridges, New Construction of Reservoir and Channel Improvements –  
Addison Creek

From Hirsch St. in Northlake to South and East to Cermak Road in Broadview

1128 S. 30th Ave., 30th Ave. over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison  
Creek, 2795 Washington Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave.

H&A#I-16-0005, MARS-1788

IHPA Log #008051117

May 25, 2017

Jeffrey Mengler

Hey and Associates, Inc.

26575 W. Commerce Dr., Suite 601

Volo, IL 60073

Dear Mr. Mengler:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact David Halpin, Cultural Resources Manager, at 217/785-4998.

Sincerely,

Rachel Leibowitz, Ph.D.

Deputy State Historic

Preservation Officer



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271

[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor  
Colleen Callahan, Director

FAX (217) 524-7525

Cook County

Northlake to Broadview

Demolition of Structures and Bridges, New Construction of Reservoir and Channel Improvements –  
Addison Creek

From Hirsch St. in Northlake to South and East to Cermak Road in Broadview

1128 S. 30th Ave., 30th Ave. over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison  
Creek, 2795 Washington Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave., Bellwood

SHPO Log #008051117

July 8, 2020

Michael Cosme

Metropolitan Water Recl. Dist. of Greater Chicago

100 E. Erie St.

Chicago, IL 60611-3154

Dear Mr. Cosme:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please call 217/782-4836.

Sincerely,

Robert F. Appleman  
Deputy State Historic  
Preservation Officer



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

## Cook County

### Northlake to Broadview

Demolition of Structures and Bridges, New Construction of Reservoir and Channel Improvements -  
Addison Creek

From Hirsch St. in Northlake to South and East to Cermak Road in Broadview; 1128 S. 30th Ave., 30th Ave.  
over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison Creek, 2795 Washington  
Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave., Bellwood  
SHPO Log #008051117

March 7, 2022

Michael Cosme  
Metropolitan Water Recl. Dist. of Greater Chicago  
100 E. Erie St.  
Chicago, IL 60611-3154

Dear Mr. Cosme:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at Rita.E.Baker@illinois.gov.

Sincerely,

Carey L. Mayer, AIA  
Deputy State Historic  
Preservation Officer

**Appendix E**  
**Tribal Coordination**



**FEMA**

February 9, 2023

Dr. Kelli Mosteller, Tribal Historic Preservation Officer  
Citizen Potawatomi Nation  
1601 S. Gordon Cooper Drive  
Shawnee, Oklahoma 74801

Re: MWRD Addison Creek Channel Improvement, Cook County, Illinois  
From Hirsch Street, Stone Park (approximately 41.899152, -87.885647) to Cermak Road,  
Broadview (approximately 41.849464, -87.855787) / FEMA Project # 4489.19  
T39N R12E Sections 4, 5, 9, 16, 21, 22, and 27

Dear Dr. Mosteller:

The Federal Emergency Management Agency (FEMA) recognizes the special and unique legal relationship that exists between the federal government and federally recognized American Indian Tribes (Tribes). FEMA also recognizes that Tribes may attach religious and cultural significance to historic properties located on aboriginal, ancestral, or ceded lands that are not contiguous with reservation lands. For this reason, FEMA consults with Tribes regarding the possible effects of FEMA-funded undertakings on cultural properties of historic or traditional significance, sometimes referred to as Traditional Cultural Properties (TCPs). The purpose of this communication is to provide information regarding the captioned FEMA-funded project and to invite comment on whether the Citizen Potawatomi Nation or other Tribes have interests in the areas potentially affected by this undertaking.

The Metropolitan Water Reclamation District (MWRD) of Greater Chicago has proposed a large stormwater improvement project within and around Addison Creek in the Villages of Bellwood, Broadview, Melrose Park, Stone Park, and Westchester and the City of Northlake. The project includes several components: removing building and structures from the floodplain, creating a reservoir, and improving the Addison Creek channel itself. The project has been implemented in phases and the removal of buildings and construction of the reservoir portions of the project are completed.

The Cook County Department of Planning and Development considered federal funding from the U.S. Department of Housing and Urban Development (HUD) for this project. Under 24 CFR 58.4, Cook County assumed the environmental review responsibilities of HUD and notified the following tribes of the project on July 27, 2018.

- Citizen Potawatomi Nation
- Forest County Potawatomi Community
- Hannahville Indian Community
- Kickapoo Tribe of Oklahoma
- Little Traverse Bay Bands of Odawa Indians
- Menominee Indian Tribe of Wisconsin
- Miami Tribe of Oklahoma
- Prairie Band of Potawatomi Nation

One response was received stating no objection to the project.

The last phase of the project involving the creek channel improvements was submitted to FEMA for Hazard Mitigation Grant Program (HMGP) funding on December 13, 2022. The Addison Creek channel improvements will affect approximately 3.5 miles of the Addison Creek (from approximately 41.899152, -87.885647 to 41.849464, -87.855787). The scope is broken down into nine smaller units or reaches:

- Reach 1: construction of an open channel and two soldier pile walls (Hirsch Street, Northlake to Mannheim Road, Melrose Park)
- Reach 2: installing four soldier pile walls and gabion basket walls, and restoring staging areas in parks and open space (Mannheim Road, Stone Park to Lake Street, Melrose Park)
- Reach 3: installing two soldier pile walls, gabion basket walls, stream barbs, and a concrete slope wall at the Union Pacific Railroad Bridge (W. Lake Street to UPRR tracks, Melrose Park and Bellwood)
- Reach 4: installing a gabion basket wall (Grant Avenue to St. Charles Road, Bellwood)
- Reach 5: installing two soldier pile walls and gabion basket walls (St. Charles Road to Oak Street, Bellwood)
- Reach 6: removing bridges at 30th, 31st, and 32nd Avenues, and installing concrete block revetments (Cernan to Harrison Street, Bellwood)
- Reach 7: clearing and installing gabion mattress (traditional stone and vegetation) bank stabilization (Wedgewood Drive to Roosevelt Road, Westchester)
- Reach 8: installing two soldier pile walls and a gabion basket wall, and clearing and installing gabion mattress (traditional stone and vegetation) bank stabilization (Roosevelt Road to Gardner Road, Westchester)
- Reach 9: clearing and installing gabion mattress (traditional stone and vegetation) bank stabilization (24th to Cermak Road, Broadview)

Scope also includes roadway restoration and modifications to existing utilities. The project location is noted on the enclosed map.

In accordance with the National Historic Preservation Act and other legislation, FEMA determined that this project constitutes a federally assisted undertaking requiring review under Section 106 of the National Historic Preservation Act of 1966, as amended. In accord with 36 CFR 800.2(c)(2)(ii), FEMA is providing this opportunity for the Citizen Potawatomi Nation to identify concerns about historic properties that may be affected by this undertaking. Consultation has been initiated with SHPO regarding the potential of this project to affect historic properties. In a letter dated May 25, 2017, and subsequent extension letters dated July 8, 2020, and March 7, 2020, SHPO noted that available information suggests that no historic properties will be affected.

A Phase I archaeological survey was conducted by Midwest Archaeological Research Services on February 20 and 21 and March 29, 2017. Areas within the individual reaches along the banks of the Addison Creek amenable to shovel testing were investigated and no archaeological material was encountered. The survey report concludes that the APE has been disturbed by residential and industrial activities. The survey report recommended project clearance.

We invite your comments on the potential impacts this undertaking may have on lands traditionally used by or sacred to the Citizen Potawatomi Nation or other Native American groups. We understand the sensitive nature of much of the information regarding TCPs and assure you in advance that any information you provide will be considered privileged and confidential. In order to safeguard TCPs of

interest to Native Americans, we are contacting the following Tribes to request information regarding their interest in this undertaking.

- Citizen Potawatomi Nation
- Delaware Tribe of Indians
- Forest County Potawatomi Community of Wisconsin
- Hannahville Indian Community
- Ho-Chunk Nation
- Miami Tribe of Oklahoma
- Pokagon Band of Potawatomi Indians
- Prairie Band Potawatomi Nation
- Shawnee Tribe

Receiving notice of your interest to join the consultation regarding this undertaking or notice of Tribes other than those listed above that may have an interest in this undertaking would improve FEMA's efforts to protect resources that may exist in the areas noted on the enclosures. A response form has been provided for your convenience.

We would appreciate a response by email from your office within thirty (30) days of your receipt of this documentation. If FEMA receives no response from your office within thirty (30) days, we will move forward with the project without comment from the Citizen Potawatomi Nation. If you have any questions or comments, please do not hesitate to contact me at [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov) or at 312-408-5549.

Sincerely,



Duane Castaldi  
Regional Environmental Officer  
FEMA Region 5

Sent by email to [cpnthpo@potawatomi.org](mailto:cpnthpo@potawatomi.org)

+++++++You may email this page to [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov) +++++++

Re: MWRD Addison Creek Channel Improvement, Cook County, Illinois  
From Hirsch Street, Stone Park (approximately 41.899152, -87.885647) to Cermak Road,  
Broadview (approximately 41.849464, -87.855787) / FEMA Project # 4489.19  
T39N R12E Sections 4, 5, 9, 16,

- The Citizen Potawatomi Nation has no interest in the area potentially affected by the captioned undertaking.
- The Citizen Potawatomi Nation has an interest in the area potentially affected by the captioned undertaking. Contact information is provided below.
- The Tribal Nations noted below may have an interest in the area potentially affected by this undertaking.

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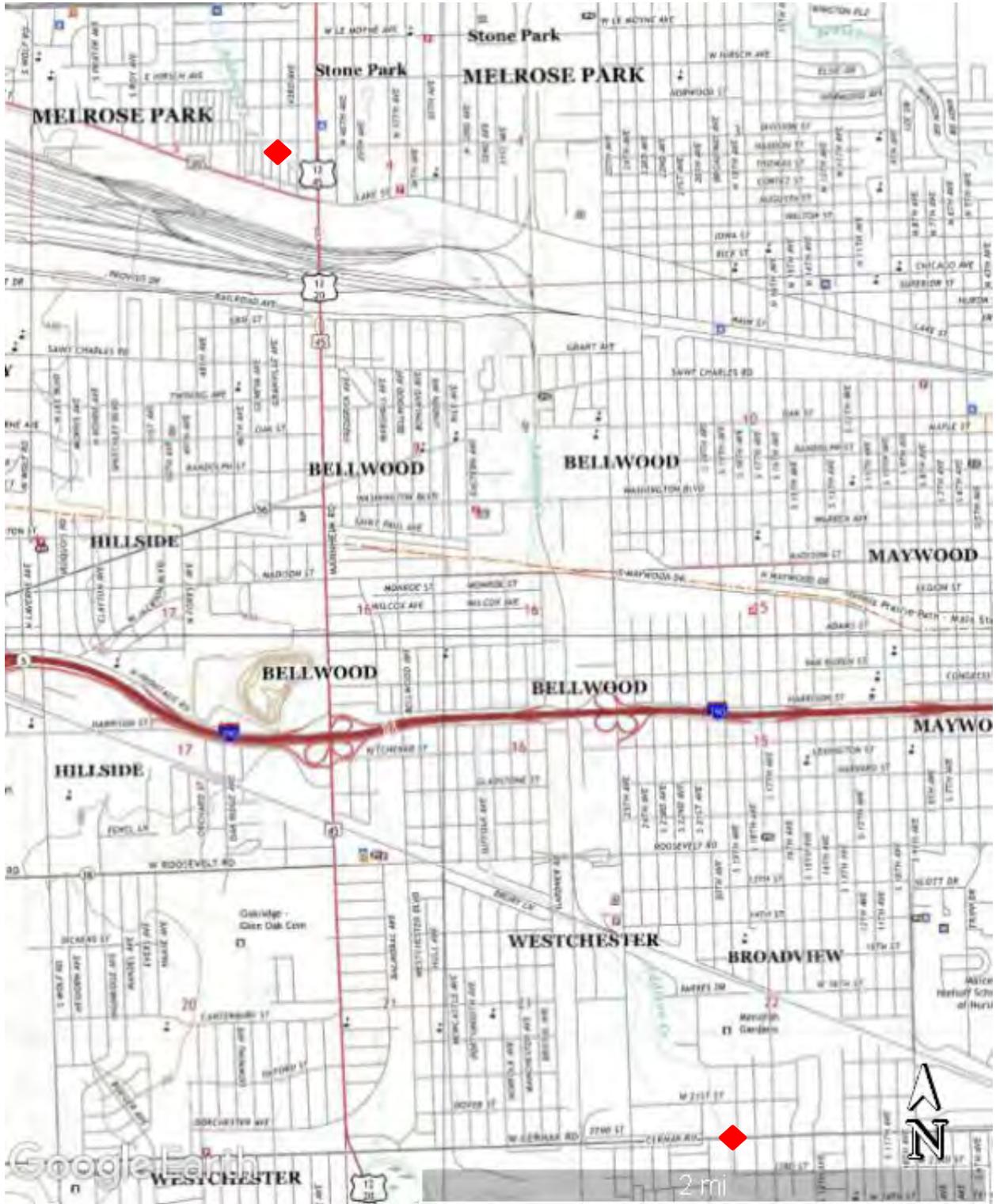
Citizen Potawatomi Nation

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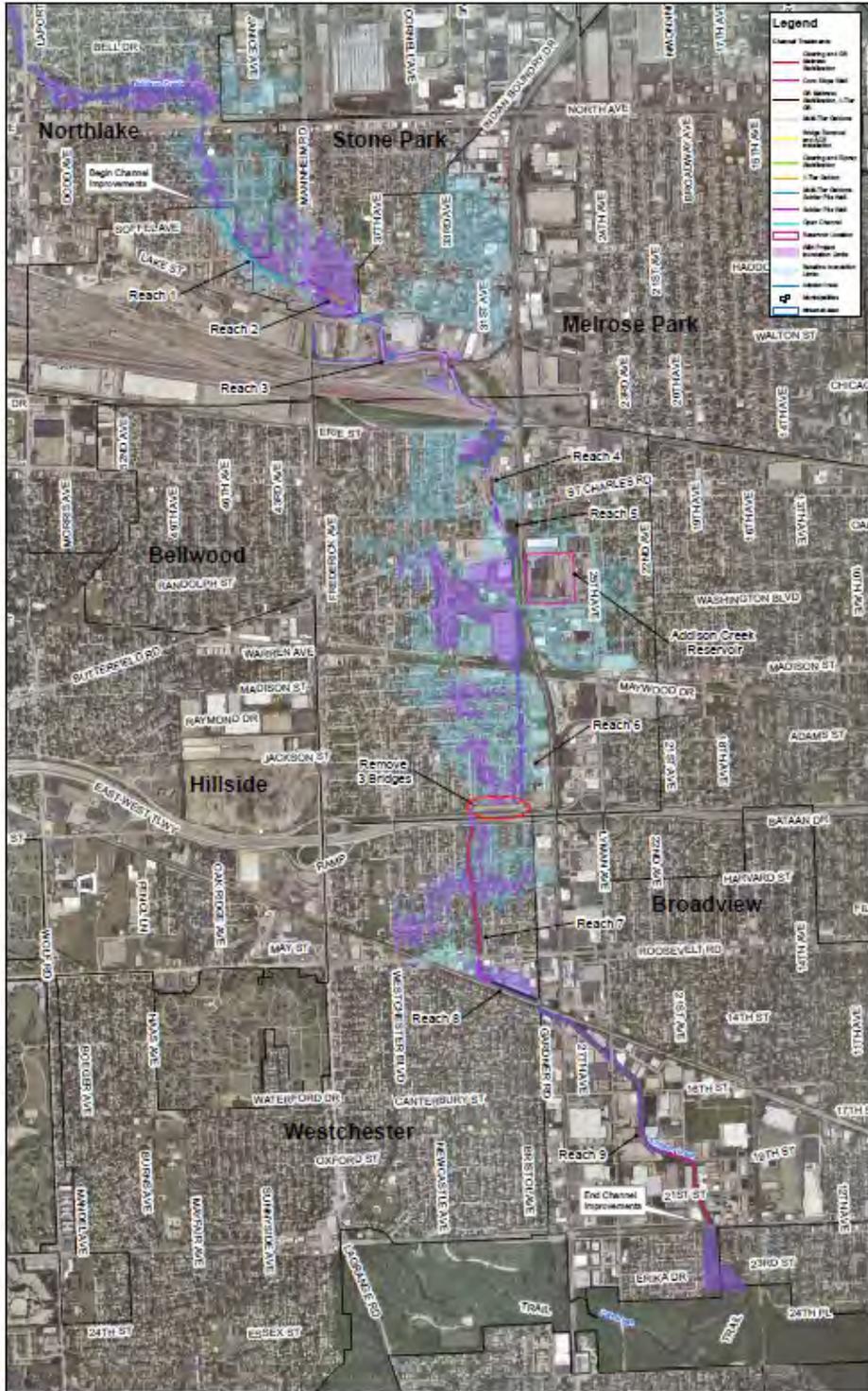
Date

Undertaking location and start and end marked in red.

“Elmhurst, IL 2021,” “River Forest, IL 2021,” and “Berwyn, IL 2021,” 1:24000, enlarged to show detail.



Undertaking locations. Note: The Addison Creek Reservoir has been constructed as part of an earlier phase of the project.  
*Applicant document.*



Prepared by:  
**Hey and Associates, Inc.**  
Engineering, Planning and Landscape Architecture



Project Name:  
**Addison Creek**

Prepared For:  
Metropolitan Water Reclamation  
District of Greater Chicago



## Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355  
Ph: (918) 541-1300 • Fax: (918) 542-7260  
www.miamination.com



Via email: [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov)

January 21, 2023

Duane D. Castaldi  
Regional Environmental Officer  
U.S. Department of Homeland Security  
FEMA Region V  
536 South Clark Street, 6th Floor  
Chicago, IL 60605

Re: Addison Creek Channel Improvements, Cook County, Illinois – Comments of the Miami Tribe of Oklahoma

Dear Mr. Castaldi:

Aya, kweehsitoolaani– I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding Addison Creek Channel Improvements in Cook County, Illinois.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Illinois, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at [THPO@miamination.com](mailto:THPO@miamination.com) to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter  
Tribal Historic Preservation Officer



## Pokégnek Bodéwadmik

POKAGON BAND OF POTAWATOMI  
HISTORY & CULTURE CENTER

3/8/2023

Duane Castaldi  
Regional Environmental Officer  
FEMA Region 5

FEMA - Addison Creek Channel Improvement – Cook County, IL

Dear Responsible Party:

Migwéth for contacting me regarding this project. As THPO, I am responsible for handling Section 106 Consultations on behalf of the tribe. I am writing to inform you that I have reviewed the details for the project referenced above. The proposed work is occurring within a mile of known archaeological sites, historic sites or features that are considered sensitive or recorded in the Pokagon Band Historic Inventory Database. I have made the determination that the project will have **No Adverse Effect** on any historic, religious, or culturally significant resources to the Pokagon Band of Potawatomi Indians.

If any cultural or archaeological resources are uncovered during construction, please stop work, and contact me immediately. Should you have any other questions, please don't hesitate to contact me at your earliest convenience.

Sincerely,

Matthew J.N. Bussler  
Tribal Historic Preservation Officer  
Pokagon Band of Potawatomi Indians  
Office: (269) 462-4316  
Cell: (269) 519-0838  
Matthew.Bussler@Pokagonband-nsn.gov

**From:** [Castaldi, Duane](#)  
**To:** [Nagle, Donna](#); [Grafton, Jack](#)  
**Subject:** Fwd: FEMA - Addison Creek Channel Improvements - Cook County, Illinois  
**Date:** Thursday, February 9, 2023 5:10:06 PM

---

Get [Outlook for iOS](#)

---

**From:** Benjamin Rhodd <Benjamin.Rhodd@fcp-nsn.gov>  
**Sent:** Thursday, February 9, 2023 4:56 PM  
**To:** FEMA-R5-Environmental <fema-r5-environmental@fema.dhs.gov>  
**Cc:** Castaldi, Duane <Duane.Castaldi@fema.dhs.gov>  
**Subject:** RE: FEMA - Addison Creek Channel Improvements - Cook County, Illinois

CAUTION: This email originated from outside of DHS. DO NOT click links or open attachments unless you recognize and/or trust the sender. Please select the Phish Alert Report button on the top right of your screen to report this email if it is unsolicited or suspicious in nature.

Mr. Castaldi,

Pursuant to consultation under Section 106 of the National Historic Preservation Act (1966 as amended) the Forest County Potawatomi Community (FCPC), a Federally Recognized Native American Tribe, reserves the right to comment on Federal undertakings, as defined under the act.

The Tribal Historic Preservation Office (THPO) staff has reviewed the information you provided for this project. Upon review of site data and supplemental cultural history within our Office, the FCPC THPO is concerned for deeper deposits of culturally attributable material(s) below the levels of disturbance noted from the shovel testing notes accompanying this proposal. Given that, we suggest and request that an archaeologist be funded by the proponent (with stop work authority) to monitor the excavation of those areas particularly that are in proximity to the water source. Shovel testing is a notoriously inefficient methodology to discern the presence or absence of culturally defined materials on projects where the disturbance will go beyond a 30cm or 50cm dug test hole. The FCPC concern is that a deeper deposit of culturally identifiable remains or a site of significance may be below the surface area of this area.

We request to remain as a consulting party for this project.

As a standard caveat sent with each proposed project reviewed by the FCPC THPO, the following applies. In the event an Inadvertent Discovery (ID) occurs at any phase of a project or undertaking as defined, and human remains or archaeologically significant materials are exposed as a result of project activities, work should cease immediately. The Tribe(s) must be included with the SHPO in any consultation regarding treatment and disposition of an ID find.

Thank you for protecting cultural and historic properties and if you have any questions or concerns, please contact me at the email or number listed below.

Respectfully,

Ben Rhodd, MS, RPA, Tribal Historic Preservation Officer

Forest County Potawatomi  
Historic Preservation Office  
8130 Mish ko Swen Drive, P.O. Box 340, Crandon, Wisconsin 54520  
P: 715-478-7354 C: 715-889-0202 Main: 715-478-7474  
Email: Benjamin.Rhodd@fcp-nsn.gov  
[www.fcpotawatomi.com](http://www.fcpotawatomi.com)

-----Original Message-----

From: FEMA-R5-Environmental <fema-r5-environmental@fema.dhs.gov>  
Sent: Thursday, February 9, 2023 4:04 PM  
To: Benjamin Rhodd <Benjamin.Rhodd@fcp-nsn.gov>  
Subject: FEMA - Addison Creek Channel Improvements - Cook County, Illinois

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Find attached a notice regarding the captioned FEMA undertaking from Regional Environmental Officer Duane Castaldi.



**FEMA**

March 10, 2023

Benjamin Rhodd, Tribal Historic Preservation Officer  
Forest County Potawatomi Community of Wisconsin  
Forest County Potawatomi Historic Preservation Office  
8130 Mish ko Swen Drive, P.O. Box 340  
Crandon, Wisconsin 54520

Re: MWRD Addison Creek Channel Improvement, Cook County, Illinois  
From Hirsch Street, Stone Park (approximately 41.899152, -87.885647) to Cermak Road,  
Broadview (approximately 41.849464, -87.855787) / FEMA Project # 4489.19  
T39N R12E Sections 4, 5, 9, 16, 21, 22, and 27

Dear Mr. Rhodd:

Thank you for your reply to our February 9, 2023, project notification. This letter provides a response to your concerns for deeper deposits of culturally attributable material below the levels of disturbance noted in the shovel tests and your request for archaeological monitoring with stop work authority.

The Metropolitan Water Reclamation District (MWRD) of Greater Chicago has proposed improvements along approximately 3.5 miles of Addison Creek channel (approximately from 41.899152, -87.885647 to 41.849464, -87.855787) through the communities of Bellwood, Broadview, Melrose Park, Stone Park, and Westchester.

The scoping document for this project is attached and provides more details about the scope and project location. In an attempt to notify Tribes as early as possible in the process, FEMA's initial Tribal Notification was sent prior to the development of this scoping document. This scoping document will also be sent to resource and regulatory agencies with an interest in the project. As this project will require an Environmental Assessment under the National Environmental Policy Act; Tribes, Agencies, and interested parties will receive a copy of the draft EA when it is available later this Spring. FEMA will review all comments submitted and incorporate and feedback as appropriate,

As stated in the project notification letter, the project area was surveyed in 2017. The attached survey report indicates several significant factors considered in FEMA's determination:

- In addition to the (2019) survey, much of the project area was also surveyed in 1991, as part of another Addison Creek Flood Control Project, and no archaeological sites were identified
- Both surveys concluded the project area has been previously disturbed by urban development and construction activities
- The creek channel embankments are steep and eroded
- Apart from soils classified as urban land, soils in the APE are composed of orthents, formed on steep, eroded slopes that are typically shallow

In addition, as the Illinois State Historic Preservation Office Guidelines for Archaeological Reconnaissance Surveys and Reports indicates, there is a concern for buried deposits within the

floodplain of major rivers. The Addison Creek, now channelized, is itself a tributary of the Salt Creek, suggesting a low probability of encountering buried soils and deposits.

FEMA's finding of no historic properties was submitted to the SHPO on February 9, 2023. In a letter of March 9, 2023, SHPO noted that available information suggests no historic properties will be affected. SHPO's concurrence letter as well as the responses to the original Section 106 submission and the two subsequent submissions to extend the project clearance are attached.

The following project conditions would provide additional protection to unknown archaeological sites:

- The contactor will monitor ground disturbance during the construction phase. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and the City will notify the coroner's office (in the case of human remains), the recipient (Illinois EMA), and FEMA. FEMA will notify the SHPO and the Office of the State Archaeologist.
- All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

If you have any questions or comments, please do not hesitate to contact me at 312-408-5549 or at [FEMA-R5-Environmental@fema.dhs.gov](mailto:FEMA-R5-Environmental@fema.dhs.gov).

Sincerely,



Duane Castaldi  
Regional Environmental Officer  
FEMA Region 5

Enclosures

Sent by email to Benjamin.Rhodd@fcp-nsn.gov



**FEMA**

March 3, 2023

## ***Environmental Assessment Scoping Document***

### **SECTION ONE: BACKGROUND**

#### **1.1 Project Information:**

---

**Project ID:** HMGP-4489-0019-IL (R) (1)  
**Recipient:** Illinois Emergency Management Agency  
**Subrecipient:** Metropolitan Water Reclamation District of Greater Chicago  
**Title:** Addison Creek Channel Improvements  
**Address:** Hirsch Street in Northlake, Illinois and continues south and east along Addison Creek to Cermak Road in Broadview, Illinois  
**Locality:** Cook County, Illinois  
**GPS:** 42.883810, -87.869138  
**PLSS:** Sections 4, 5, 9, 16, 21 and 22, T39 North, R12 East

#### **1.2 Purpose and Need**

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The key purpose of the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) is to ensure that the opportunity to take critical mitigation measures to reduce the risk of loss of life and property from future disasters is not lost during the reconstruction process following a disaster.

As part of a Detailed Watershed Plan (DWP) for the Lower Des Plaines River (LDPR) Watershed completed in February 2011, a hydrologic<sup>1</sup> and hydraulic<sup>2</sup> analysis of the Addison Creek watershed was completed to provide an understanding of flood impacts throughout the watershed in Cook County. In addition, the DWP evaluated economic damages due to flooding and developed alternatives to mitigate flood damages.

This project is needed because of the past flood damages that have been experienced within the Addison Creek watershed. Although this watershed includes several large flood control reservoirs, it is still a highly developed and urbanized area with minimal stormwater detention. The Addison Creek watershed drains an approximately 22 square mile area upstream of its confluence with Salt Creek. The watershed is mainly situated in Cook County with headwaters originating in northeastern DuPage County.

The purpose of the project is to reduce flood damages to approximately 2,200 properties and stabilize the channel to improve water quality along Addison Creek within the defined

---

<sup>1</sup> A study of rate of precipitation, the quantity of water, the rate of surface runoff, and the timing of its arrival.

<sup>2</sup> A study of how water flows from one point to the next.

project reach. The communities experiencing flooding along Addison Creek include Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. Based on the updated modeling and elevation data taken from newer Cook County LIDAR data, damages were recomputed during the final engineering design.

## **SECTION TWO: ALTERNATIVE ANALYSIS**

The National Environmental Policy Act (NEPA) requires FEMA to evaluate alternatives to the Proposed Action and describe the environmental impacts of each alternative. NEPA also requires an evaluation of the No Action alternative, which is the future condition without the project. This section describes the No Action alternative, the Proposed Action, and alternatives considered but eliminated from further evaluation.

### **2.1 Alternative 1—No Action**

---

Under the No Action alternative, the Addison Creek channel would not be improved or stabilized. Extensive overbank flooding would continue, and flood damages would likely increase over time. This is a reach with inadequate channel capacity in the existing condition with very degraded and unstable conditions in many reaches. Channel banks would continue to erode, contributing to water quality impairments.

### **2.2 Alternative 2—Proposed Action**

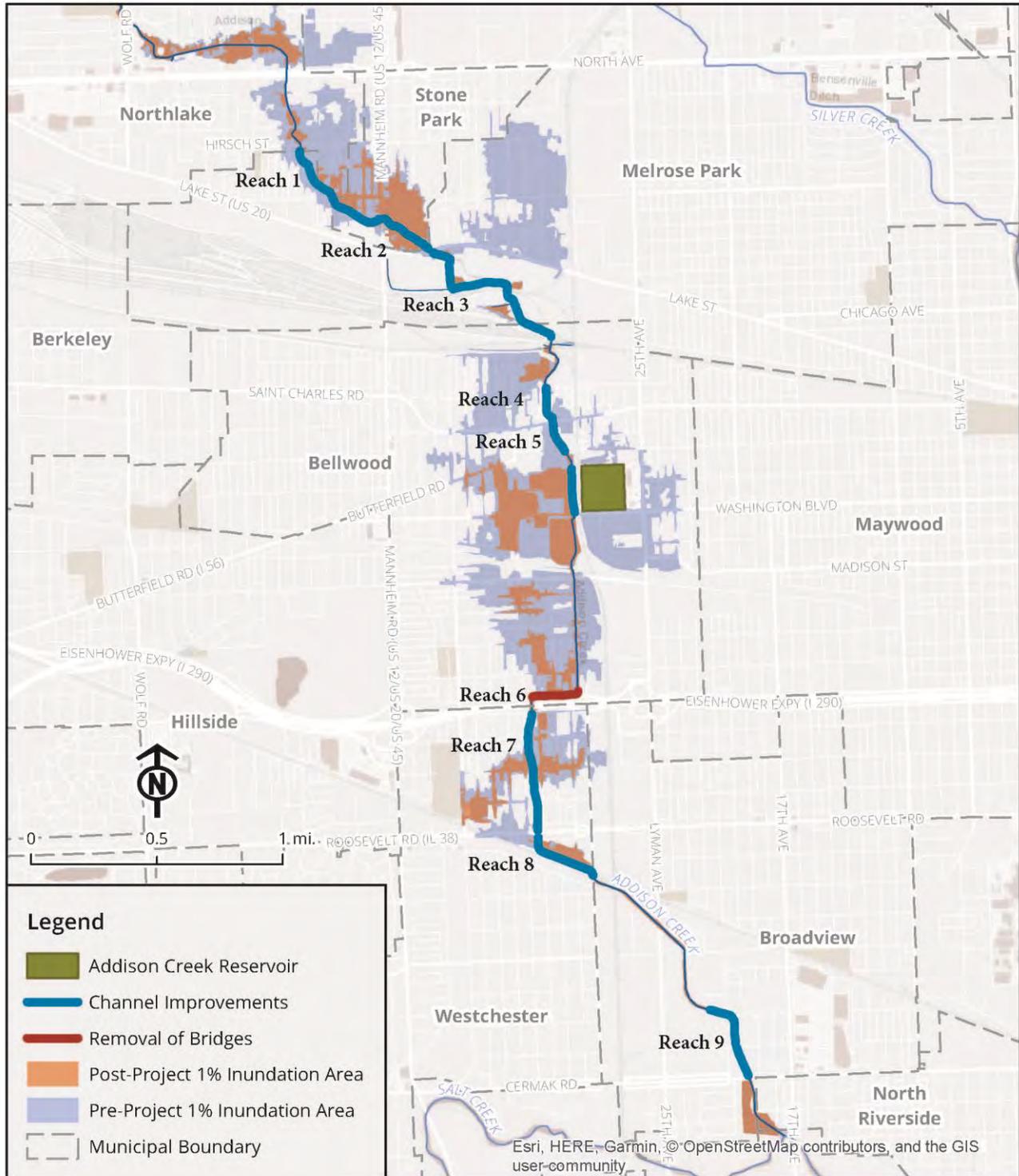
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The Proposed Action includes various channel treatments over the approximately 3.5 miles of the existing Addison Creek channel. Design of the proposed channel improvements for Addison Creek involved multiple components and considerations in all aspects of design. To prepare a design that not only meets the goals of the Detailed Watershed Plan (DWP) but also provides an aesthetically pleasing channel, multiple iterations of channel design were developed, evaluated and value engineered with collection of additional data along the way.

The Addison Creek watershed drains approximately 22 square miles upstream of its confluence with Salt Creek. The watershed is mainly situated in Cook County with headwaters originating in northeastern DuPage County. The goal of mitigating flood damages limits the scope alternatives to the reaches from Hirsch Street in Northlake to downstream of Cermak Road (22<sup>nd</sup> Street) near the confluence with Salt Creek in Broadview.

The Addison Creek channel was broken into segments for analysis and discussion as described below. Figure 1 shows the channel reach segments, and Table 1 summarizes the proposed channel improvements for each.

Figure 1. Addison Creek Channel Improvement Stream Reaches



**Table 1. Addison Creek Stream Reaches with Proposed Improvement Types**

Reach	Reach Segment	Communities	Proposed Improvement Approach
1	Hirsch to Manheim	Northlake, Stone Park, Melrose Park	Open channel <sup>3</sup> and soldier pile wall <sup>4</sup> .
2	Manheim to Lake	Stone Park, Melrose Park	Gabion basket <sup>5</sup> wall, soldier pile wall.
3	Lake Street to 2 <sup>nd</sup> UPRR bridge	Melrose Park and Bellwood	Gabion basket wall, soldier pile wall, stream barbs <sup>6</sup> , and concrete slope walls under railroad bridge.
4	Grant Ave to St Charles Road	Bellwood	Gabion basket wall.
5	St Charles Road to Oak Street	Bellwood	Gabion basket wall, soldier pile wall.
6	Cernan to Harrison Street	Bellwood	Articulated concrete block <sup>7</sup> slope wall, removal of three bridges.
7	Wedgewood Drive to Roosevelt Road	Westchester	Gabion mattress (traditional stone and vegetated) bank stabilization.
8	Roosevelt Road to Gardner Road	Westchester	Gabion basket wall, soldier pile wall, gabion mattress (traditional stone and vegetated) bank stabilization.
9	24th to Cermak Road	Broadview	Gabion mattress (traditional stone and vegetated) bank stabilization.

**Reaches 1 and 2**

DWP recommendations for Reaches 1 and 2 included channel improvements to lower existing water surface elevations and provide additional conveyance capacity for flood flows to the proposed reservoir south of Lake Street. However, the Bellwood site at 2795 Washington Boulevard was selected in preliminary design for the reservoir instead of the

<sup>3</sup> The channel is not fully enclosed, as in a pipe.

<sup>4</sup> Soldier pile walls consist of wide-flange steel beams drilled or driven vertically into the ground with concrete walls poured between them to help stabilize the sides of an excavated area. For this project, they will help prevent streambank erosion.

<sup>5</sup> A gabion basket or mattress consists of a wire basket or frame that is filled with rock and is installed along a channel bank to armor the bank and prevent erosion.

<sup>6</sup> Stream barbs are rock structures installed within the outer portion of a stream channel to direct flow away from streambanks to prevent erosion.

<sup>7</sup> Articulated concrete block wall consists of concrete blocks attached to each other with cable to help hold up a streambank and prevent erosion, while remaining somewhat flexible.

site located south of Lake Street in Melrose Park that was part of the DWP recommendation. It is still important to lower the existing water surface elevations and provide additional conveyance capacity to decrease overbank flooding, but these two reaches are no longer in close proximity to the reservoir. In addition, coordination has been completed with the Illinois Department of Transportation (IDOT) to design the Lake Street and Mannheim Road structures to accommodate the proposed channel improvements from the DWP. The Lake Street culverts were constructed in 2012 and the Mannheim Road culvert was constructed in 2018. The design criteria for Reaches 1 and 2 are the following:

- Lower and widen the existing channel to provide increased channel conveyance area.
- Minimize overbank flooding.
- Match the design inverts of Lake Street and Mannheim Road bridges based on the previous project coordination with IDOT.

#### **Reaches 3 and 4**

DWP recommendations for Reaches 3 and 4 included channel improvements to lower existing water surface elevations to reduce the tail water<sup>8</sup> on the diversion structure for the proposed reservoir. Floodwaters from Addison Creek will be diverted into the reservoir via this diversion structure when the water surface reaches a set elevation. Reach 3 is partially located in the UPRR Proviso Railroad Yard and there are currently four railroad bridges in the yard. The southernmost bridge has been recently reconstructed without incorporating recommendations from the DWP. The next bridge to the north is a flyover bridge that was also recently reconstructed. Although the bridge is much higher than existing ground along the creek, the flyover bridge has two piers located near the existing top of bank of Addison Creek. Based on the DWP, there are minimal to no damages in the UPRR reaches since there are no structures impacted by flooding. Since bridge work was recently completed without consideration for the DWP recommendations, the DWP project was modified to remove the proposed improvements to the recently reconstructed railroad bridges. Downstream of the UPRR and upstream of St. Charles Road, there are some flood damages that receive benefits from the lower flood elevations in the DWP recommended improvements. The design criteria for Reaches 3 and 4 have been modified from the DWP due to site constraints, the change in the location of the reservoir, and additional coordination and data collection. The design criteria for Reaches 3 and 4 are the following:

- Lower the existing channel where feasible between and through the UPRR bridges without requiring a replacement bridge.
- Minimize overbank flooding in Reach 4.

#### **Reach 5**

DWP recommendations for Reach 5 included channel improvements to lower existing water surface elevations and provide additional conveyance capacity to minimize flood damages. The updated reservoir location in Bellwood is situated at the downstream end of this reach at Washington Boulevard. Based on review of the hydraulics through this reach and a detailed site inspection of the area, the design criteria for Reach 5 are:

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<sup>8</sup> Tailwater refers to waters located immediately downstream from a hydraulic structure such as a dam, spillway, bridge, or culvert which water flows are affected by said structure.

- Lower and widen the existing channel to provide increased channel conveyance area.
- Minimize overbank flooding.
- Water surface elevations throughout this reach cannot be improved significantly solely through work in this reach. Water surface elevations are typically dependent on downstream conditions. Lower water surface elevations will result from lower tail water due to the reservoir and proposed improvements downstream of Reach 5.

### **Reach 6**

This channel segment through Bellwood did not have any proposed improvements in the DWP. Based on additional analysis of this segment during the preliminary engineering phase, it was determined that eight of the culverts in this reach are inadequately sized to convey flood flows and cause significant headloss<sup>9</sup> through the reach. There is significant overbank flooding through this reach causing flood damages to the residential and industrial structures adjacent to the channel. A coordination meeting with the Village of Bellwood resulted in the discussion of proposed improvements such as bridge removals or replacements throughout this reach to reduce flood stages as bridge supports within the channel also impede flow. In addition, the existing concrete channel slopes are deteriorating and failing and could be a cause of debris deposition in the existing channel potentially blocking water from flowing freely. Design criteria for this reach are below:

- Investigate bridge removals (or replacements with larger structures) to provide additional conveyance.
- Maintain neighborhood connectivity based on coordination meeting with Bellwood.
- Investigate repair and replacement of concrete channel slope walls.

### **Reaches 7 and 8**

DWP recommendations for Reaches 7 and 8 include channel improvements to lower existing water surface elevations. Based on review of the hydraulics and detailed site inspections, it is our understanding that the main causes of head loss through these reaches are the Gardner Road Bridge, the restricted channel width between Gardner and Roosevelt Road, the Roosevelt Road Bridge, and underground utility lines. Addison Creek flows beneath the Gardner Road Bridge and between the abutments of the CNRR Bridge that spans over the Gardner Road Bridge. The Creek makes two 90-degree bends as it passes through and under Gardner Road. During flood events, due to its restrictive opening area through the CNRR Bridge abutments, the Gardner Road Bridge has flood stages above the low chord<sup>10</sup> causing additional headloss through this structure which translates upstream through Reaches 7 and 8. The narrow channel between Gardner and Roosevelt Road leads to some additional headloss that could be alleviated. Finally, the Roosevelt Road Bridge also has flood stages above the low chord causing additional headloss translated upstream through Reach 7. In addition, the DWP recommendations have the proposed water surface elevations tying into the existing water surface elevations at Gardner Road which limits any flood damage benefits through the Village of Westchester. Based on our understanding of these Reaches, the design criteria are below:

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<sup>9</sup> Loss of energy or pressure in water flowing through a pipe caused by friction.

<sup>10</sup> Low chord refers to the lowest elevation of a bridge structure over water.

- Investigate improving the Gardner Road and CNRR Bridges to improve the waterway opening through these structures.
- Investigate improving the waterway opening through Roosevelt Road.
- Investigate lowering (deepening) multiple utility lines in these areas.
- Investigate additional alternatives beyond the scope of the DWP recommendations to provide additional flood damage benefits through the Village of Westchester.

### **Reach 9**

This channel segment through Broadview did not have any proposed improvements in the DWP. Improvements in this reach would lower stages and facilitate upstream improvements. Based on a review of the hydraulics and detailed site inspections, it is our understanding that conveyance improvements could provide additional benefits for Westchester and Broadview. Coordination with and approval from the Illinois Department of Natural Resources Office of Water Resources (IDNR-OWR) is necessary to allow conveyance improvements causing some minor flow increases at Addison Creek's confluence with Salt Creek. The proposed improvements would increase the peak flow but would reduce the duration of that peak flow and increase the separation of peak flows occurring on Addison Creek and the much larger watershed of Salt Creek. This separation will reduce the risk of flooding along Addison Creek when Salt Creek is at peak stage and flow. The design criteria are below:

- Investigate conveyance improvements to reduce flood stages through Westchester and Broadview.
- Investigate conveyance improvements to mitigate flood flow increases due to potential improvements in Reach 6.
- Obtain approval from IDNR-OWR for the proposed conveyance improvements and permitting strategy.

## **2.3 Alternatives Considered and Eliminated from Further Analysis**

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To meet the basic purpose and need, alternative project locations are not viable alternatives. Projects must be located along this reach of Addison Creek to affect the flood damages in this locality. So, as part of the preliminary engineering, detailed evaluation of the DWP recommended treatments was completed to determine the extent and types of improvements for each reach throughout the Addison Creek project limits. To meet the recommended benefits set forth in the DWP, a detailed analysis of potential alternative treatments was conducted. Below, we have summarized Section 4.2 of the Preliminary Design Report for engineering contract 11-187-5C to provide a succinct summary of why alternatives were not utilized.

### **Storage Alternatives**

For many of the reaches, either there was a minimal amount of potential storage that wouldn't be worth the cost to implement, significant property would have to be acquired to provide any benefit, storage was not preferred based on adjacent property constraints, or there were no viable options to purchase property for flood storage.

In Reach 5, available properties (commercial, residential, and industrial) were investigated in preliminary design to determine if there were viable options to purchase property and potentially provide additional flood storage. Based on this research and discussions with

Village of Bellwood, a reservoir location was selected, designed, and constructed by MWRD under a separate contract. The location of the newly constructed reservoir is just north of Washington Boulevard and east of the railroad tracks.

### **Hydraulic Structure Alternatives**

For most reaches, either no work was planned for hydraulic structures or proposals were eliminated due to revisions to the proposed channel improvements. For others, like Reach 4, there should be no detrimental effect of lowering a stream bed under a bridge,

In Reach 6, alternatives considered included either replacing existing culverts with larger bridges or removing the culvert crossings altogether. Three bridge options were considered; however, it was determined that removing several crossings without replacing them offered the most cost-effective option. With the high number of existing crossings in this neighborhood, the neighborhood impacts resulting from three bridge removals were considered minimal relative to the benefits of additional flood relief.

In Reach 7, channel lowering through Roosevelt Road was proposed. However, the Roosevelt Road bridge plans from IDOT show a 24-inch sanitary sewer going under the bridge that has the casing sticking out of the ground. If the ground under Roosevelt Road was lowered, then the sanitary sewer would also need to be lowered. The cost to lower the sanitary sewer was greater than the benefits that it would provide.

Three options were considered in Reach 8 to improve the hydraulic opening of the Gardner Road Bridge and CN Railroad Bridge. Each of these options was tested in the hydraulic model. The hydraulic benefits of modifying the structure were very minor compared to the cost of the improvements. The attention was then focused on improvements that could be implemented in Reach 9 that would further benefit Reach 8, rather than modifying Gardner Road.

### **Conveyance Alternatives**

Various conveyance alternatives were considered in almost all the reaches. Many of them involved widening channels and bank extension. These channel improvements were typically determined not feasible due to the property that would have to be acquired. Either due to required acquisitions, relocation of utilities, or from alternatives eliminated in other reaches, many alternatives did not provide enough benefit to justify the cost. Other conveyance alternatives were eliminated due to the safety issues and any possible impacts they would have to residential, industrial, or other private property.

When evaluating possible retaining walls in Reaches 1 and 2, a sheet pile wall was eliminated from further consideration due to the presence of fractured bedrock. It was determined that a soldier pile wall would be a more appropriate solution in these areas due to easier installation by avoiding the possibility of having to penetrate the fractured bedrock. As in the case of Reach 4, for example, sheet pile walls were often eliminated from further discussion as they are much more invasive compared to soldier pile walls.

## **SECTION THREE: AFFECTED ENVIRONMENT**

The Proposed Action area is approximately 52 acres in size and would affect the Addison Creek channel and riparian zone through the communities of Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake. The project area is highly urbanized, and the riparian corridor is degraded. Addison Creek has been fully channelized in the past for stormwater management purposes and has steep and eroded banks along most of its

length. Some portions of the channel also have stream banks that have been armored with concrete debris, cement, or other structural features. Other sections of streambank contain narrow wetland shelves that periodically flood and support a predominance of wetland vegetation. Much of the natural portion of the corridor consists of low-quality woodland, shrubland, old field, or degraded wet meadow. The channel bottom is quite variable with soft sediments present in some locations. It is considered a very low-quality stream biologically.

### **3.1 Preliminary Screening of Assessment Categories:**

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The alternatives listed above are likely to result in impacts governed by the federal laws and executive orders listed below. The following items will require closer coordination with the appropriate agencies to identify and mitigate potentially significant impacts.

- Clean Water Act (CWA)
- Clean Air Act (CAA)
- Endangered Species Act (ESA)
- Executive Order 11988 – Floodplains
- Executive Order 11990 – Wetlands
- Executive Order 12898 – Environmental Justice for Low Income & Minority Populations
- Executive Order 13175 – Consultation and Coordination with Indian Tribal Governments
- National Historic Preservation Act (NHPA)

### **3.2 Reasonably Foreseeable Future Actions**

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Reasonably foreseeable future actions are actions that may affect projected impacts of a proposal and are not remote or speculative. An action may be reasonably foreseeable even in the absence of a specific proposal.

In conversations with the communities within the project reach, MWRD has become aware of the following projects that may occur in the foreseeable future as a result of this project. These are primarily other improvements to the local infrastructure that may be more feasible with the reduced flood damages and frequency of flooding that will result from this project.

During design of the Addison Creek Channel Improvements, the local communities and IDOT have replaced several bridges along Addison Creek that included King Arthur Court, Prater Avenue, Roy Avenue, Le Moyne, Mannheim Road, and Lake Street. IDOT is currently replacing the bridge at Cermak, and Westchester is currently replacing the bridge at Gladstone. The local communities also have plans to replace the bridges at Palmer Avenue, Parkview Drive, Hirsch Street, Wedgewood Drive, and 21st Street. IDOT is also planning to reconstruct I-290 when funding becomes available.

In addition, it is anticipated that there may be additional roadway and bridge improvements made by local governmental jurisdictions that MWRD is not specifically aware of. Private property improvements (businesses and residences) along the project reach may occur due to the reduction in flood damages. These improvements are difficult to quantify but would be reasonably foreseeable along the project reach.

## **SECTION FOUR: REFERENCES**

- Christopher B. Burke Engineering Ltd. 2011. Detailed Watershed Plan for the Lower Des Plaines River Watershed: Volume 1.
- Hey and Associates, Inc. 2018. Application for Section 404 Permit Authorization, Addison Creek Channel Improvements LRC-2014-674.
- Hey and Associates, Inc. 2017. Preliminary Design Report Addison Creek Channel Improvements Contract 11-187-5C.
- Metropolitan Water Reclamation District of Greater Chicago. 2022. Addison Creek Channel Improvements, SSA: Volume 3 of 3; Book 1 of 2.
- Metropolitan Water Reclamation District of Greater Chicago. 2022. Addison Creek Channel Improvements, SSA: Volume 3 of 3; Book 2 of 2.

## **SECTION FIVE: AGENCY CONSULTATION**

The Tribal Nations and agencies listed below have been provided a copy of this document or will be notified of this project through FEMA Region 5 standard consultation procedures as directed under individual environmental laws and Executive Orders.

City of Northlake, Illinois  
Village of Melrose Park, Illinois  
Village of Stone Park, Illinois  
Village of Bellwood, Illinois  
Village of Westchester, Illinois  
Village of Broadview, Illinois  
Illinois Department of Transportation  
Lower Des Plaines River Watershed Planning Council  
Cook County Department of Emergency Management & Regional Security  
Illinois Department of Natural Resources Office of Resource Conservation  
Illinois Department of Natural Resources Office of Water Resources  
Illinois Department of Natural Resources Historic Preservation Division  
Illinois Emergency Management Agency  
Illinois Environmental Protection Agency  
US Army Corps of Engineers, Chicago District  
US Environmental Protection Agency, Region 5  
US Fish and Wildlife Service, Chicago Ecological Services Field Office  
US Housing and Urban Development, Regional Environmental Officer  
Citizen Potawatomi Nation  
Delaware Tribe of Indians  
Forest County Potawatomi Community of Wisconsin  
Hannahville Indian Community  
Ho-Chunk Nation  
Miami Tribe of Oklahoma  
Pokagon Band of Potawatomi Indians

Prairie Band Potawatomi Nation  
Shawnee Tribe

## **SECTION SIX: FEMA CONTACT INFORMATION**

Anyone interested in providing comments on this document may respond as noted below before April 3, 2023. Be sure to provide your name and contact information along with your comments.

### **Respond by Mail:**

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Federal Emergency Management Agency, Region 5  
c/o Duane Castaldi, Regional Environmental Officer  
536 South Clark Street, 6th Floor  
Chicago, IL 60605-1521

### **Respond by Email:**

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Send comments to [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov), ATTENTION: Addison Creek Channel Improvements.

The archaeological survey report included with the tribal coordination materials  
is available at  
**<https://mwrdd.org/public-notice>**

**Appendix F**  
**Public Notice**

# Chicago Tribune

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Certificate of Publication:

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**Chicago Tribune Media Group** does hereby certify that it is the publisher of the Chicago Tribune. The Chicago Tribune is a secular newspaper, has been continuously published Daily for more than fifty (50) weeks prior to the first publication of the attached notice, is published in the City of Chicago, State of Illinois, is of general circulation throughout that county and surrounding area, and is a newspaper as defined by 715 IL CS 5/5.

This is to certify that a notice, a true copy of which is attached, was published 1 time(s) in the Chicago Tribune, namely one time per week or on 1 successive weeks. The first publication of the notice was made in the newspaper, dated and published on 5/08/2023, and the last publication of the notice was made in the newspaper dated and published on 5/08/2023.

This notice was also placed on a statewide public notice website as required by 715 ILCS 5/2. 1.

On the following days, to-wit: **May 08, 2023**.

Executed at Chicago, Illinois on this

9th Day of May, 2023, by

**Chicago Tribune Company**



---

Jeremy Gates

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**BUYING RECORD ALBUMS!** Rock, Jazz & Blues. Also vintage baseball cards! 847-343-1628

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St Charles 800.00 both  
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**Labrador Retriever 630-710-4373**  
Elburn IL 850 M/F  
Family raised AKC Registered Labrador Puppies. Ready 5/5/23. Vet checked & UTD on shots. For pictures & info visit WWW.hvlabradors.com or call/text Melissa @ 630-710-4373

**ASSUMED NAMES**

Notice is hereby given, Pursuant to "An Act in relation to the use of an Assumed Business Name in the conduct or transaction of Business in the State" as amended, that a Certification was filed by the Undersigned with the County Clerk of Cook County File No. Y23010470 on the Date: **April 19, 2023**  
Under the Assumed Name of: **SOUL DUST STUDIO**  
with the business located at: **4845 N. SPAULDING AVE CHICAGO, IL 60625**  
The true name and residence address of the owner is: **KRISTY VUONG 4845 N. SPAULDING AVE CHICAGO, IL 60625**  
**April 24, May 1, & 8, 2023 - 7621679**

**LEGAL NOTICES GOVERNMENT/EDUCATION**

**LEGAL ADVERTISEMENT**  
May 8, 2023  
CITY OF CHICAGO  
DEPARTMENT OF PROCUREMENT SERVICES

The Bidder must complete and submit an Electronic Bid prior to the bid due date. An electronic bid must be submitted through the City of Chicago's website at [www.cityofchicago.org/eprocurement](http://www.cityofchicago.org/eprocurement), on or before the due date and time stated below. The City's system will not accept electronic bids after the due date and time. Bidders must register for a log-in account to submit an electronic bid. Please allow up to three business days for creation of your log-in account. Paper bids will not be accepted. All Bids will be opened and publicly read aloud for the following:  
**DESCRIPTION: Roll Off Box Services - Zone 2**  
**DEPARTMENT: Department of Streets and Sanitation**  
**TYPE: Work Service**  
**ELECTRONIC BID DOCUMENTS CAN BE DOWNLOADED AND PRINTED FROM URL ADDRESS: www.cityofchicago.org/eprocurement**

**NOTICE OF ADDENDUM: Addendum # 1 will be e-mailed to all bidders on the Bid Opportunity Take-Out List**  
SPECIFICATION NO: 1244455  
RFQ NO: 9416.1  
ORIGINAL BID OPENING DATE: **Thursday, May 18, 2023**  
REVISED BID OPENING DATE: **Thursday, June 1, 2023, Per Addendum #1 TIME: 11:00 a.m., Central Time**

CONTACT: Maria Christman, Senior Procurement Specialist  
EMAIL: maria.christman@cityofchicago.org  
Pub: 5/8/2023 7429139

**LEGAL ADVERTISEMENT**  
May 8, 2023  
CITY OF CHICAGO  
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**DESCRIPTION: Roll Off Box Services - Zone 4**  
**DEPARTMENT: Department of Streets and Sanitation**  
**TYPE: Work Service**  
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**NOTICE OF ADDENDUM: Addendum # 1 will be e-mailed to all bidders on the Bid Opportunity Take-Out List**  
SPECIFICATION NO: 1244457  
RFQ NO: 9466.1  
ORIGINAL BID OPENING DATE: **Thursday, May 18, 2023**  
REVISED BID OPENING DATE: **Thursday, June 1, 2023, Per Addendum #1 TIME: 11:00 a.m., Central Time**

CONTACT: Maria Christman, Senior Procurement Specialist  
EMAIL: maria.christman@cityofchicago.org  
Pub: 5/8/2023 7429145

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**DESCRIPTION: Roll Off Box Services - Zone 1**  
**DEPARTMENT: Department of Streets and Sanitation**  
**TYPE: Work Service**  
**ELECTRONIC BID DOCUMENTS CAN BE DOWNLOADED AND PRINTED FROM URL ADDRESS: www.cityofchicago.org/eprocurement**

**NOTICE OF ADDENDUM: Addendum # 1 will be e-mailed to all bidders on the Bid Opportunity Take-Out List**  
SPECIFICATION NO: 1244454  
RFQ NO: 9464.1  
ORIGINAL BID OPENING DATE: **Thursday, May 18, 2023**  
REVISED BID OPENING DATE: **Thursday, June 1, 2023, Per Addendum #1 TIME: 11:00 a.m., Central Time**

CONTACT: Maria Christman, Senior Procurement Specialist  
EMAIL: maria.christman@cityofchicago.org  
Pub: 5/8/2023 7429141

**LEGAL NOTICES GOVERNMENT/EDUCATION**

**LEGAL ADVERTISEMENT**  
May 8, 2023  
CITY OF CHICAGO  
DEPARTMENT OF PROCUREMENT SERVICES

The Bidder must complete and submit an Electronic Bid prior to the bid due date. An electronic bid must be submitted through the City of Chicago's website at [www.cityofchicago.org/eprocurement](http://www.cityofchicago.org/eprocurement), on or before the due date and time stated below. The City's system will not accept electronic bids after the due date and time. Bidders must register for a log-in account to submit an electronic bid. Please allow up to three business days for creation of your log-in account. Paper bids will not be accepted. All Bids will be opened and publicly read aloud for the following:  
**DESCRIPTION: Roll Off Box Services - Zone 3**  
**DEPARTMENT: Department of Streets and Sanitation**  
**TYPE: Work Service**  
**ELECTRONIC BID DOCUMENTS CAN BE DOWNLOADED AND PRINTED FROM URL ADDRESS: www.cityofchicago.org/eprocurement**

**NOTICE OF ADDENDUM: Addendum # 1 will be e-mailed to all bidders on the Bid Opportunity Take-Out List**  
SPECIFICATION NO: 1244456  
RFQ NO: 9465.1  
ORIGINAL BID OPENING DATE: **Thursday, May 18, 2023**  
REVISED BID OPENING DATE: **Thursday, June 1, 2023, Per Addendum #1 TIME: 11:00 a.m., Central Time**

CONTACT: Maria Christman, Senior Procurement Specialist  
EMAIL: maria.christman@cityofchicago.org  
Pub: 5/8/2023 7429142

**LEGAL ADVERTISEMENT**  
May 8, 2023  
CITY OF CHICAGO  
DEPARTMENT OF PROCUREMENT SERVICES

The Bidder must complete and submit an Electronic Bid prior to the bid due date. An electronic bid must be submitted through the City of Chicago's website at [www.cityofchicago.org/eprocurement](http://www.cityofchicago.org/eprocurement), on or before the due date and time stated below. The City's system will not accept electronic bids after the due date and time. Bidders must register for a log-in account to submit an electronic bid. Please allow up to three business days for creation of your log-in account. Paper bids will not be accepted. All Bids will be opened and publicly read aloud for the following:  
**DESCRIPTION: Roll Off Box Services - Zone 2**  
**DEPARTMENT: Department of Streets and Sanitation**  
**TYPE: Work Service**  
**ELECTRONIC BID DOCUMENTS CAN BE DOWNLOADED AND PRINTED FROM URL ADDRESS: www.cityofchicago.org/eprocurement**

**NOTICE OF ADDENDUM: Addendum # 1 will be e-mailed to all bidders on the Bid Opportunity Take-Out List**  
SPECIFICATION NO: 1244455  
RFQ NO: 9416.1  
ORIGINAL BID OPENING DATE: **Thursday, May 18, 2023**  
REVISED BID OPENING DATE: **Thursday, June 1, 2023, Per Addendum #1 TIME: 11:00 a.m., Central Time**

CONTACT: Maria Christman, Senior Procurement Specialist  
EMAIL: maria.christman@cityofchicago.org  
Pub: 5/8/2023 7429139

**LEGAL ADVERTISEMENT**  
May 8, 2023  
CITY OF CHICAGO  
DEPARTMENT OF PROCUREMENT SERVICES

The Bidder must complete and submit an Electronic Bid prior to the bid due date. An electronic bid must be submitted through the City of Chicago's website at [www.cityofchicago.org/eprocurement](http://www.cityofchicago.org/eprocurement), on or before the due date and time stated below. The City's system will not accept electronic proposals or responses after the due date and time. Respondents must register for a log-in account to submit an electronic proposal or response. Please allow up to three business days for creation of your log-in account. Paper proposals and responses will not be accepted. All Proposals or Responses will be received for the following:  
**DESCRIPTION: Request for Qualifications (RFQ) Roofing Maintenance and Repair Services**  
**DEPARTMENT: AVIATION**  
**TYPE: QUALIFICATIONS**

**NOTICE OF ADDENDUM: Addendum #1 will be sent to all proposers on the Bid Opportunity Take-Out List in eProcurement**

**DESCRIPTION: Request for Qualifications (RFQ) Roofing Maintenance and Repair Services**  
**DEPARTMENT: AVIATION**  
**TYPE: QUALIFICATIONS**

**ELECTRONIC BID DOCUMENTS CAN BE DOWNLOADED AND RESPONDED TO FROM URL ADDRESS: www.cityofchicago.org/eprocurement**

**SPECIFICATION NO: 789819, RFQ: 8559.1**  
ORIGINAL BID/PROPOSAL OPENING DATE: **May 9, 2023**  
TIME: **4:00 p.m., Central Time**

**REVISED BID/PROPOSAL OPENING DATE: July 17, 2023**  
TIME: **4:00 p.m., Central Time**

CONTACT: Thomas Magno, Senior Procurement Specialist  
Email: thomas.magno@cityofchicago.org  
Pub: 5/8/2023 7429676

The Metropolitan Water Reclamation District of Greater Chicago will be accepting applications for the following classification(s):  
**Associate Process Control Engineer (Original)**  
**Application Filing Period:** April 28, 2023 through May 12, 2023. **Examination Date:** June 10, 2023. **Location:** Chicago High School for Agricultural Sciences (CHAS), 3857 West 111th Street, Chicago, IL. **Scope of Examination:** Knowledge of Associate Process Control Engineer practices, Nature of Position and Duties: Under general supervision, provides engineering services for the design, construction, improvement, modernization and maintenance for process instrumentation and computer control systems for water reclamation plants, pumping stations, and flood control reservoirs. **Salary:** \$88,148.32 per year  
Applications can be submitted online only at [www.districtjobs.org](http://www.districtjobs.org)  
Additional information may be found at [www.districtjobs.org](http://www.districtjobs.org) or call 312-751-5100.  
**Mailed, E-mailed, Hand delivered or Faxed Applications Will Not Be Accepted. Resumes Will Not Be Accepted In Place of Application Forms.**  
**An Equal Opportunity Employer - M/F/D**  
Pub: 4/28 thru 5/12/2023 7423648  
5/8/23 7430163

**LEGAL NOTICES GOVERNMENT/EDUCATION**

**CHICAGO TRANSIT AUTHORITY ADVERTISEMENT FOR BIDS NOTICE OF TIME EXTENSION AND ADDENDUM NO.1**

Notice is hereby given that the opening date heretofore advertised as Wednesday, May 24, 2023 has been extended to Thursday, June 1, 2023 no later than 2:00 P.M. for the following items  
Req No.: C23F1102850510, Invitation for Bids (IFB) for Construction Services for All Station Accessibility Program (ASAP) Lake Line - Austin Station. For additional information, please contact Joyce Connors, Procurement Administrator, jconnors@transitchicago.com.  
Any contract resulting from this advertisement will be awarded to the lowest responsive and responsible bidder. The contractor will be required to furnish certified copies of any and all insurance Policies required in relation to this contract prior to CTA's execution.  
Chicago Transit Authority hereby notifies all bidders that it will affirmatively ensure that in regard to any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.  
PLEASE NOTE: The right is reserved to accept any bid or any part or parts thereof or to reject any and all bids.  
CHICAGO TRANSIT AUTHORITY  
By: Ellen G. McCormack  
Vice President  
Purchasing & Supply Chain  
May 8, 2023  
5/8/2023 7430085

**CHICAGO TRANSIT AUTHORITY REQUEST FOR INFORMATION**

Responses will be received for the following by Chicago Transit Authority through Electronic Submission to the Bid Office's E-Procurement Platform no later than 3:30 P.M. on Thursday, June 15, 2023 to the link below:  
<https://transitchicago.bonfirehub.com/portal/?tab=openOpportunities>  
Req.: C230P102926542, Request for Information (RFI) for Mobile Fare Management and Trip Planning App. Questions regarding this Bid must be submitted via Bonfire no later than 4:30 p.m. (CST) Thursday, May 18, 2023. Questions will not be accepted after this date and time. For additional information, please contact Patrick McKenna, Senior Procurement Administrator, pmckenna@transitchicago.com.  
Chicago Transit Authority hereby gives notice that it will affirmatively ensure that in regard to any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit responses to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.  
PLEASE NOTE: The right is reserved to accept any proposal or to reject any and all proposals.  
CHICAGO TRANSIT AUTHORITY  
By: Ellen G. McCormack  
Vice President  
Purchasing & Supply Chain  
May 8, 2023  
5/8/2023 7429982

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**Cherish Franklin Charisma Franklin**  
MINOR(S) CHILD(REN) OF **Megan Franklin (Mother)**  
JUVENILE NO.: 18JA00648 18JA00649

**NOTICE OF PUBLICATION**

NOTICE IS GIVEN YOU, **Unknown (Father)**, respondents, and to **All Whom It May Concern**, that on **April 24, 2023**, a petition was filed under the Juvenile Court Act by **KIM FOXX** in this court and that in the courtroom of Judge **Kimberly D. Lewis** in the Cook County Juvenile Court Building, 1100 So. Hamilton Avenue, Chicago, Illinois, on **June 20, 2023, at 9:00 AM** in CALENDAR 8 COURTROOM H, or as soon thereafter as this case may be heard, a hearing will be held upon the petition to terminate your parental rights and appoint a guardian with power to consent to adoption.

THE COURT HAS AUTHORITY IN THIS CASE TO TAKE FROM YOU THE CUSTODY AND GUARDIANSHIP OF THE MINOR, TO TERMINATE YOUR PARENTAL RIGHTS AND TO APPOINT A GUARDIAN WITH POWER TO CONSENT TO ADOPTION. YOU MAY LOSE ALL PARENTAL RIGHTS TO YOUR CHILD. IF THE PETITION REQUESTS THE TERMINATION OF YOUR PARENTAL RIGHTS AND APPOINTMENT OF A GUARDIAN WITH POWER TO CONSENT TO ADOPTION, YOU MAY LOSE ALL PARENTAL RIGHTS TO THE CHILD.

**UNLESS YOU** appear, you will not be entitled to further written notices or publication notices of the proceedings in this case, including the filing of an amended petition or a motion to terminate parental rights.

**UNLESS YOU** appear at the hearing and show cause against the petition, the allegations of the petition may stand admitted as against you and each of you, and an order of judgment entered.  
Iris Y. Martinez, CLERK OF THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
May 8, 2023 7429875

**Federal Emergency Management Agency PUBLIC NOTICE**  
Notice of Availability of the Draft Environmental Assessment for the Addison Creek Channel Improvement Project in Cook County, Illinois

Environmental Assessment (EA) for the Addison Creek Channel Improvement Project (HMG-P-4489-0019-IL (R) (1)).  
Interested persons are hereby notified that the Federal Emergency Management Agency (FEMA)/Department of Homeland Security (DHS) is proposing to assist in the funding of a project located in the communities of Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake, Cook County, Illinois. In accordance with the National Environmental Policy Act (NEPA) of 1969 and the implementing regulations of FEMA, an EA is being prepared to assess the potential impacts of each of the proposed alternatives on the human and natural environment. This also provides public notice to invite public comments on the proposed project in accordance with Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands. In addition, this notice and the draft EA provide information to the public on potential impacts to historic and cultural resources from the proposed undertaking, as outlined in the National Historic Preservation Act (NHPA) of 1966.

This EA is available for agency and public review and comment for a period of 30 days. The EA is available on FEMA's website at <https://www.fema.gov/emergency-managers/practitioners/environmental-notice-region-2>. The EA is also available on the Metropolitan Water Reclamation District of Greater Chicago (MWRD) website at <https://mwrdd.org/public-notice>. Interested parties may review an electronic copy of the EA from either of those websites.

A hard copy of this EA is available for review at:  
Metropolitan Water Reclamation District of Greater Chicago  
Public Affairs  
100 East Erie Street, 1st Floor  
Chicago, IL 60611

Written comments regarding this environmental action should be received no later than 5 p.m. on **Wednesday, June 7, 2023**, by mail to Duane Castaldi, Regional Environmental Officer, FEMA Region 5, 536 South Clark Street, 6th Floor, Chicago, IL 60605-1521; by email at [FEMA-R5-Environmental@fema.dhs.gov](mailto:FEMA-R5-Environmental@fema.dhs.gov); or by phone at 312-408-5549. If no substantive comments are received by the above deadline, the draft EA and associated Finding of No Significant Impact (FONSI) will become final and be published by FEMA. Substantive comments will be addressed as appropriate in the final documents.

The public may request a copy of the final environmental documents from Duane Castaldi at the address listed above.  
Pub: 5/8/2023 7429818

**NOTICE OF PUBLIC MEETING**  
On Monday, May 29, 2023 at 9:00 AM, a virtual meeting will be conducted by Proviso Township High School (PTHS) District 209. The purpose of the meeting will be to discuss the district's plans for providing special education services to students with disabilities who attend private schools and students homeschooled within the district for the 2023-2024 school year. As a parent of a home-schooled student who has been or may be identified with a disability and who resides within the boundaries of PTHS District 209, you are urged to attend. This meeting is in compliance with the Illinois State Board of Education regulations. Please email [rflaming@pths209.org](mailto:rflaming@pths209.org) to obtain the Microsoft TEAMS invitation to attend the meeting. For questions, please contact Ms. Ramonda Fleming, District Coordinator at (708) 834-8266.  
5/8/23 7430163

**LEGAL NOTICES GOVERNMENT/EDUCATION**

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**Jashia Jones**  
MINOR(S) CHILD(REN) OF **Janeli Jones (Mother)**  
JUVENILE NO.: 19JA01346

**NOTICE OF PUBLICATION**

NOTICE IS GIVEN YOU, **Maurice Major Robinson (Father) & Any & All Unknowns (Fathers)**, respondents, and to **All Whom It May Concern**, that on **December 13, 2022**, a petition was filed under the Juvenile Court Act by **KIM FOXX** in this court and that in the courtroom of Judge **Diane Pezanoski** in the Cook County Juvenile Court Building, 1100 So. Hamilton Avenue, Chicago, Illinois, on **June 13, 2023, at 9:00 AM** in CALENDAR 17 COURTROOM K, or as soon thereafter as this case may be heard, a hearing will be held upon the petition to terminate your parental rights and appoint a guardian with power to consent to adoption.

THE COURT HAS AUTHORITY IN THIS CASE TO TAKE FROM YOU THE CUSTODY AND GUARDIANSHIP OF THE MINOR, TO TERMINATE YOUR PARENTAL RIGHTS AND TO APPOINT A GUARDIAN WITH POWER TO CONSENT TO ADOPTION. YOU MAY LOSE ALL PARENTAL RIGHTS TO YOUR CHILD. IF THE PETITION REQUESTS THE TERMINATION OF YOUR PARENTAL RIGHTS AND APPOINTMENT OF A GUARDIAN WITH POWER TO CONSENT TO ADOPTION, YOU MAY LOSE ALL PARENTAL RIGHTS TO THE CHILD.

**UNLESS YOU** appear, you will not be entitled to further written notices or publication notices of the proceedings in this case, including the filing of an amended petition or a motion to terminate parental rights.

**UNLESS YOU** appear at the hearing and show cause against the petition, the allegations of the petition may stand admitted as against you and each of you, and an order of judgment entered.  
Iris Y. Martinez, CLERK OF THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
May 8, 2023 7429856

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**Jaylin Smith**  
MINOR(S) CHILD(REN) OF **Bernice Baker (Mother)**  
JUVENILE NO.: 23JA00056

**NOTICE OF PUBLICATION**

NOTICE IS GIVEN YOU, **Vincent Smith (Father) & Unknowns (Fathers)**, respondents, and to **All Whom It May Concern**, that on **January 23, 2023**, a petition was filed under the Juvenile Court Act by **KIM FOXX** in this court and that in the courtroom of Judge **Diane Pezanoski** in the Cook County Juvenile Court Building, 1100 So. Hamilton Avenue, Chicago, Illinois, on **June 27, 2023, at 3:00 PM** in CALENDAR 17 COURTROOM K, or as soon thereafter as this case may be heard, an adjudicatory hearing will be held upon the petition to have the minor declared to be a ward of the court and for other relief under the Act.

THE COURT HAS AUTHORITY IN THIS CASE TO TAKE FROM YOU THE CUSTODY AND GUARDIANSHIP OF THE MINOR, TO TERMINATE YOUR PARENTAL RIGHTS AND TO APPOINT A GUARDIAN WITH POWER TO CONSENT TO ADOPTION. YOU MAY LOSE ALL PARENTAL RIGHTS TO YOUR CHILD. IF THE PETITION REQUESTS THE TERMINATION OF YOUR PARENTAL RIGHTS AND APPOINTMENT OF A GUARDIAN WITH POWER TO CONSENT TO ADOPTION, YOU MAY LOSE ALL PARENTAL RIGHTS TO THE CHILD.

**UNLESS YOU** appear, you will not be entitled to further written notices or publication notices of the proceedings in this case, including the filing of an amended petition or a motion to terminate parental rights.

**UNLESS YOU** appear at the hearing and show cause against the petition, the allegations of the petition may stand admitted as against you and each of you, and an order of judgment entered.  
Iris Y. Martinez, CLERK OF THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
May 8, 2023 7429853

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**Jessa Michelle Robinson**  
MINOR(S) CHILD(REN) OF **China Robinson (Mother)**  
JUVENILE NO.: 18JA00997

**NOTICE OF PUBLICATION**

NOTICE IS GIVEN YOU, **James Last Name Unknown (Father)**, respondents, and to **All Whom It May Concern**, that on **April 28, 2023**, a petition was filed under the Juvenile Court Act by **KIM FOXX** in this court and that in the courtroom of Judge **Levander Smith** in the Cook County Juvenile Court Building, 1100 So. Hamilton Avenue, Chicago, Illinois, on **July 28, 2023, at 9:00 AM** in CALENDAR 10 COURTROOM A, or as soon thereafter as this case may be heard, a hearing will be held upon the petition to terminate your parental rights and appoint a guardian with power to consent to adoption.

THE COURT HAS AUTHORITY IN THIS CASE TO TAKE FROM YOU THE CUSTODY AND GUARDIANSHIP OF THE MINOR, TO TERMINATE YOUR PARENTAL RIGHTS AND TO APPOINT A GUARDIAN WITH POWER TO CONSENT TO ADOPTION. YOU MAY LOSE ALL PARENTAL RIGHTS TO YOUR CHILD. IF THE PETITION REQUESTS THE TERMINATION OF YOUR PARENTAL RIGHTS AND APPOINTMENT OF A GUARDIAN WITH POWER TO CONSENT TO ADOPTION, YOU MAY LOSE ALL PARENTAL RIGHTS TO THE CHILD.

**UNLESS YOU** appear, you will not be entitled to further written notices or publication notices of the proceedings in this case, including the filing of an amended petition or a motion to terminate parental rights.

**UNLESS YOU** appear at the hearing and show cause against the petition, the allegations of the petition may stand admitted as against you and each of you, and an order of judgment entered.  
Iris Y. Martinez, CLERK OF THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
May 8, 2023 7429850

**LEGAL ADVERTISEMENT - MAY 8, 2023**  
REQUEST FOR QUALIFICATIONS FOR ENVIRONMENTAL CONTRACTING SERVICES  
"DUE: June 6, 2023 At 2:00 p.m."  
See: [www.cps.edu/purchasing](http://www.cps.edu/purchasing)  
May 8, 2023 - 7430298

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**Marilyn Lopez**  
MINOR(S) CHILD(REN) OF **Rocio Rojas (Mother)**  
JUVENILE NO.: 17JA00416

**NOTICE OF PUBLICATION**

NOTICE IS GIVEN YOU, **Rocio Rojas (Mother)**, respondents, and to **All Whom It May Concern**, that on **March 30, 2023**, a petition was filed under the Juvenile Court Act by **KIM FOXX** in this court and that in the courtroom of Judge **Demetrios Kottaras** in the Cook County Juvenile Court Building, 1100 So. Hamilton Avenue, Chicago, Illinois, on **July 13, 2023, at 10:30 AM** in CALENDAR 7 COURTROOM G, or as soon thereafter as this case may be heard, a hearing will be held upon the petition to terminate your parental rights and appoint a guardian with power to consent to adoption.

THE COURT HAS AUTHORITY IN THIS CASE TO TAKE FROM YOU THE CUSTODY AND GUARDIANSHIP OF THE MINOR, TO TERMINATE YOUR PARENTAL RIGHTS AND TO APPOINT A GUARDIAN WITH POWER TO CONSENT TO ADOPTION. YOU MAY LOSE ALL PARENTAL RIGHTS TO YOUR CHILD. IF THE PETITION REQUESTS THE TERMINATION OF YOUR PARENTAL RIGHTS AND APPOINTMENT OF A GUARDIAN WITH POWER TO CONSENT TO ADOPTION, YOU MAY LOSE ALL PARENTAL RIGHTS TO THE CHILD.

**UNLESS YOU** appear, you will not be entitled to further written notices or publication notices of the proceedings in this case, including the filing of an amended petition or a motion to terminate parental rights.

**UNLESS YOU** appear at the hearing and show cause against the petition, the allegations of the petition may stand admitted as against you and each of you, and an order of judgment entered.  
Iris Y. Martinez, CLERK OF THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
May 8, 2023 7429867

**LEGAL NOTICES GOVERNMENT/EDUCATION**

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**Shanikha McAlister**  
MINOR(S) CHILD(REN) OF **Chamika McAlister (Mother)**  
JUVENILE NO.: 22JA00646

**NOTICE OF PUBLICATION**

NOTICE IS GIVEN YOU, **Unknown (Father)**, respondents, and to **All Whom It May Concern**, that on **September 7, 2022**, a petition was filed under the Juvenile Court Act by **KIM FOXX** in this court and that in the courtroom of Judge **Levander Smith** in the Cook County Juvenile Court Building, 1100 So. Hamilton Avenue, Chicago, Illinois, on **June 2, 2023, at 9:00 AM** in CALENDAR 10 COURTROOM A, or as soon thereafter as this case may be heard, an adjudicatory hearing will be held upon the petition to have the minor declared to be a ward of the court and for other relief under the Act.

THE COURT HAS AUTHORITY IN THIS CASE TO TAKE FROM YOU THE CUSTODY AND GUARDIANSHIP OF THE MINOR, TO TERMINATE YOUR PARENTAL RIGHTS AND TO APPOINT A GUARDIAN WITH POWER TO CONSENT TO ADOPTION. YOU MAY LOSE ALL PARENTAL RIGHTS TO YOUR CHILD. IF THE PETITION REQUESTS THE TERMINATION OF YOUR PARENTAL RIGHTS AND APPOINTMENT OF A GUARDIAN WITH POWER TO CONSENT TO ADOPTION, YOU MAY LOSE ALL PARENTAL RIGHTS TO THE CHILD.

**UNLESS YOU** appear, you will not be entitled to further written notices or publication notices of the proceedings in this case, including the filing of an amended petition or a motion to terminate parental rights.

**UNLESS YOU** appear at the hearing and show cause against the petition, the allegations of the petition may stand admitted as against you and each of you, and an order of judgment entered.  
Iris Y. Martinez, CLERK OF THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS  
May 8, 2023 7429872

**IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS JUVENILE JUSTICE AND CHILD PROTECTION DEPARTMENT CHILD PROTECTION DIVISION**

IN THE INTEREST OF  
**SHERRICK J JACKSON**  
A MINOR  
NO. 2023JD00431



**FEMA**

May 5, 2023

Kathy Triantafillous, Acting NEPA Section Supervisor  
US EPA Region 5  
77 W. Jackson Blvd  
Chicago, IL 60604

Re: Addison Creek Channel Improvements  
Cook County, Illinois  
FEMA Project ID: HMGP-4489-0019-IL (R) (1)

Dear Ms. Triantafillous,

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has requested funding from the Federal Emergency Management Agency (FEMA) to support the captioned Hazard Mitigation Grant Program (HMGP) project. The draft Environmental Assessment is now available for review and comment. Please see the information below:

***Draft Environmental Assessment for the  
Addison Creek Channel Improvement Project  
Cook County, Illinois  
FEMA Project HMGP-4489-0019-IL (R) (1)***

Read the draft Environmental Assessment for the Addison Creek Channel Improvement Project on FEMA's website [Draft EA – Addison Creek Channel Improvements – May 2023 \(fema.gov\)](https://www.fema.gov/draft-environmental-assessment-addison-creek-channel-improvements-may-2023), or on MWRD's website (<https://mwrdd.org/public-notice>). A notice of draft availability will run in the Chicago Tribune on Monday May 8, 2023, to notify the public of the public comment period.

Comments may be submitted by email or U.S. mail as indicated below to be received no later than 5PM Central Time on June 7, 2023. Email is preferred.

By email: [FEMA-R5-Environmental@fema.dhs.gov](mailto:FEMA-R5-Environmental@fema.dhs.gov)

By mail: Duane D. Castaldi, Regional Environmental Officer  
U.S. Department of Homeland Security, FEMA Region 5  
536 South Clark Street, 6th Floor  
Chicago, IL 60605

U.S. Department of Homeland Security  
536 South Clark Street, 6th Floor  
Chicago, Illinois 60605-1521



**FEMA**

Thank you to those Agencies, Tribes, Organizations, and individuals that responded to our March 2023 scoping document. If we have adequately incorporated your feedback, no further comment is necessary. Please contact Duane Castaldi at the address above if you have trouble accessing the linked document or have questions.

Sincerely,

A handwritten signature in blue ink that reads "Duane Castaldi".

Duane Castaldi  
Regional Environmental Officer  
FEMA Region 5

Enclosure

Sent by email to: R5NEPA@epa.gov



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

June 6, 2023

**VIA ELECTRONIC MAIL ONLY**  
**[FEMA-R5-Environmental@fema.dhs.gov](mailto:FEMA-R5-Environmental@fema.dhs.gov)**

Duane D. Castaldi  
U.S. Department of Homeland Security, FEMA Region 5  
536 South Clark Street, 6th Floor  
Chicago, Illinois 60605

RE: EPA Comments – Draft Environmental Assessment for the Proposed Addison Creek Channel Modifications Project; Cook County, Illinois

Dear Mr. Castaldi:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Assessment (Draft EA) prepared for the proposed channel modifications to Addison Creek in Cook County, Illinois. This letter provides EPA's comments and recommendations for FEMA to consider before completing the Final EA and NEPA decision document on the Draft EA. Our comments focus on document and project clarification, water quality, environmental justice, and climate change. They are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

Addison Creek has been fully channelized in the past for stormwater management purposes and has steep banks along most of its length. Some portions of the channel have stream banks that have historically been armored with concrete debris, cement, or other structural features. Other sections of streambank contain narrow wetland shelves that periodically flood. Much of the remaining naturalized portions of the corridor consists of low-quality woodland, shrubland, old field, or degraded wet meadow. Currently, high water in Addison Creek results in overbank flooding, leading to large areas of inundation adjacent to the channel. This has resulted in damage to both structures and transportation facilities. The communities experiencing flooding along Addison Creek include Broadview, Westchester, Bellwood, Melrose Park, Stone Park, and Northlake.

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is responsible for stormwater management in Cook County. This includes the management of floods and floodwaters. MWRD is the agency proposing modifications to Addison Creek to address flooding and inundation adjacent to the channel. MWRD applied to the Federal Emergency Management Agency (FEMA) for grant assistance under the Hazard Mitigation Grant Program to assist in funding the proposed project. As the lead federal agency, FEMA is required to consider potential environmental impacts before funding or approving actions and projects.

The purpose of the proposed project is to reduce flood damages to approximately 2,200 properties and stabilize the channel to improve water quality along Addison Creek within the defined project reach (approximately 3.5 miles of Addison Creek) in the six aforementioned towns. Proposed work within the channel includes stream barb installation, channel deepening and widening, and installation of soldier pile walls, gabion baskets, concrete slope walls, and articulated concrete block slope walls. In the Draft EA, Addison Creek was separated into nine discrete reaches for analysis and discussion.

The Draft EA identified two alternatives: the No Action Alternative (Alternative 1) and one Action Alternative (Alternative 2, the Proposed Action.) The Draft EA indicates that potential alternative treatments for Addison Creek were identified but not selected, including floodwater storage alternatives, hydraulic structure alternatives, and conveyance alternatives.

We appreciate the opportunity to review this Draft EA. The National Archives and Records Administration and the Office of Management and Budget have mandated that Federal agencies transition business processes and recordkeeping to fully electronic environments. Please help achieve this goal by providing EPA with an electronic copy of future NEPA documents, including the decision document, for this project. **NEPA documents can be sent to our team mailbox at [R5NEPA@epa.gov](mailto:R5NEPA@epa.gov).**

If you have any questions or comments regarding the contents of this letter or would like to discuss our comments in more detail, please contact the lead NEPA reviewer, Liz Pelloso, PWS, at 312-886-7425 or via email at [pelloso.liz@epa.gov](mailto:pelloso.liz@epa.gov).

Sincerely,

Alan Walts, Director  
Tribal and Multimedia Programs Office  
Office of the Regional Administrator

cc:

Shawn Cirton, USFWS ([shawn\\_cirton@fws.gov](mailto:shawn_cirton@fws.gov))

Stasi Brown, USACE ([stasi.f.brown@usace.army.mil](mailto:stasi.f.brown@usace.army.mil))

Heather McGowan, IDNR-OWR ([heather.mcgowan@illinois.gov](mailto:heather.mcgowan@illinois.gov))

## EPA Detailed Comments

Draft EA - Proposed Addison Creek modifications, Cook County, Illinois  
June 6, 2023

### **PROJECT PURPOSE, NEED, AND RANGE OF ALTERNATIVES**

- The Draft EA states that the project purpose is to reduce flood damages and to improve water quality along Addison Creek by stabilizing the channel. The Draft EA does not demonstrate how the proposed in-channel work will improve water quality. The work proposed in Addison Creek includes vegetation removal, filling wetlands adjacent to the stream, and hardening of natural stream banks along the majority of the proposed project reaches. If the project purpose was to improve water quality, the Draft EA should have included baseline water quality analyses, proposed improvements to be met from the implementation of the project as proposed and included measurable and attainable monitoring goals to ensure the improvement of water quality.

**Recommendations:** The project purpose should be revised to remove references to improving water quality. The project purpose should also be revised to state that its purpose is to reduce flood damages, create flood storage, and create additional water conveyance, as these are noted as project goals in the Draft EA.

### **DOCUMENT AND PROJECT CLARIFICATION**

- The Draft EA does not clearly describe all project work proposed to be undertaken, particularly as it pertains to proposed channel deepening, channel widening, and moving of the existing channel thalweg. The Draft EA focused only on the in-channel hardening work proposed.

**Recommendations:** Project descriptions should be revised to account for the full explanation of proposed in-stream work, including figures showing example existing and proposed cross-sections of depth and thalweg modifications.

- The Draft EA did not describe how the nine project reaches were selected or for what reasons they were specifically selected.

**Recommendations:** Provide additional information and clarification in the Final EA on how these reaches were selected and why specifically they were chosen.

- The Draft EA states that MWRD completed a hydraulic and hydrologic analysis of Addison Creek in February 2011 as part of a detailed watershed plan (DWP) undertaken for the Lower Des Plaines River watershed. As part of the DWP, MWRD evaluated the damages and economic impacts of flooding along the Addison Creek watershed and developed project alternatives to mitigate the impacts of flooding. Both the DWP and MWRD 's recommended project alternatives are over 10 years old at this point. The Draft EA did not include a summary of the DWP analyses and evaluations, or a summary of the recommended project alternatives developed at that time by MWRD.

**Recommendations:** Provide additional information on the DWP, including information on the analyses undertaken. The final EA should acknowledge and discuss how project conditions have changed since the 2011 analyses and how that has affected current project alternatives development.

- Page 17 of the Draft EA states that MWRD designed the project without sheet pile walls to avoid penetrating the shallow weathered bedrock found within certain reaches of this project. The Draft EA did not explain where bedrock is present or why penetration of existing bedrock would be an issue.

**Recommendations:** Provide additional information and context on where bedrock is present and why penetrating bedrock would be of concern. Additionally, provide additional information on how the proposed treatments in reaches where bedrock is present will not detrimentally affect or penetrate bedrock.

- Page 27 of the document states that in selected reaches, trees, shrubs, and native prairie grasses will be planted. The document did not include figures, maps, or plans showing the locations, widths, acreages, or species to be installed.

**Recommendations:** Provide additional information, including maps and figures of proposed plantings, in the Final EA.

- The Draft EA appendices included a link to the MWRD website to view the full set of project construction plans. There was a great deal of information in the project construction plans that was not included in the Draft EA.

**Recommendations:** Modify the Final EA as follows:

- Tributary A and Tributary B were noted in project plans but were not discussed in the EA, including how they may be impacted. Add this information.
- Delineated wetlands were shown on construction plans, but the EA did not include any figures of wetland locations, acreages, extents, and acreages of impacts. Add this information.
- The project plans showed demolition of a park, portions of roadways, existing trailer parks, etc. They were not mentioned in the Draft EA. At a minimum, they are connected actions, and are likely part of the proposed project. Ensure the Final EA describes and accounts for these actions as part of the Proposed Action, including relevant impacts associated with this work.
- The project plans show installation of riffles and pools, but these were mentioned only once in the Draft EA (and only a few times in appendices). They were not included within the scope of actions to be undertaken in the Proposed Action. Account for them in all project and proposed impact descriptions in the Final EA.
- The project plans show changes to the stream slopes that are likely to grade them to a less steep slope. This was not explained or clearly laid out in the Draft EA. Include this information in the Final EA.
- The Draft EA did not include plan and profile drawings or other “example” figures of the proposed work, including but not limited to stream barbs, gabion baskets, soldier pile walls, pools, and riffles. This information should be added.

- The project construction plans show the stream being widened and the stream thalweg being moved (due to widening). This was not discussed in the Draft EA. Include information and figures on the modifications to the existing channel thalweg in the Final EA.

## **ENVIRONMENTAL JUSTICE AND COMMUNITY ENGAGEMENT**

- To promote environmental justice, EO 12898: *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires Federal agencies to identify and address disproportionately high and adverse impacts of all programs, policies, and activities on low income and/or minority populations. EPA encourages the use of EJSCREEN<sup>1</sup> as a useful first step in highlighting locations that may be candidates for further analysis. The tool can help identify potential community vulnerabilities by calculating EJ Indexes and displaying other environmental and socioeconomic information in color-coded maps and standard data reports (e.g., pollution sources, health disparities, critical service gaps, climate change data). EJSCREEN can also help focus environmental justice outreach efforts by identifying potential language barriers, meeting locations, tribal lands and indigenous areas, and lack of broadband access. For purposes of NEPA review, EPA considers a project to be in an area of potential EJ concern when the area shows one or more of the twelve EJ Indexes at or above the 80th percentile in the nation and/or state. However, scores under the 80th percentile should not be interpreted to mean there are definitively no EJ concerns present.

While EJSCREEN provides access to high-resolution environmental and demographic data, it does not provide information on every potential community vulnerability that may be relevant. The tool's standard data report should not be considered a substitute for conducting a full EJ analysis, and scoping efforts using the tool should be supplemented with additional data and local knowledge. Also, recognizing the inherent uncertainties with screening level data, and to help address instances when the presence of EJ populations may be diluted (e.g., in large project areas or in rural locations), EPA recommends assessing each block group within the project area individually and adding an appropriate buffer around the project area. Please see the EJSCREEN Technical Documentation<sup>2</sup> for a discussion of these and other issues.

### **Recommendations:**

- Identify the presence of low-income and/or minority communities within the project areas that could experience environmental impacts from the proposed project(s). Disclose demographic information. For initial screening, use EPA's EJSCREEN mapping tool. Use census-tract-level information to initially help locate communities with EJ concerns.
- Describe past activities and future plans to engage minority populations, low-income populations, and the surrounding community in the environmental review and planning phase, and, if the project commences, during construction.

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<sup>1</sup> <https://www.epa.gov/ejscreen>

<sup>2</sup> <https://www.epa.gov/ejscreen/technical-information-about-ejscreen>

- Evaluate the impacts (adverse and beneficial) of project proposals on low-income and/or minority communities and sensitive receptors (e.g., children, people with asthma, etc.).
- Compare project impacts on low-income and minority populations with an appropriate reference community to determine whether there may be disproportionate impacts. Consider risk of exposure to hazardous/toxic materials associated with the project construction, and noise impacts.
- In conducting the EJ analysis, utilize resources such as the *Promising Practices Report*<sup>3</sup> and the *Community Guide to EJ and NEPA Methods*<sup>4</sup> to appropriately engage in meaningful, targeted, community outreach, analyze impacts, and advance environmental justice through NEPA implementation.
- Identify measures to: (1) ensure meaningful community engagement; (2) minimize adverse community impacts; and (3) avoid disproportionate impacts to communities with EJ concerns. The Final EA document should describe how individuals and communities were provided a meaningful voice in the project’s development. Document how you have ensured full and fair public participation.
- Consider cumulative environmental impacts to minority populations, low-income populations, and indigenous peoples in the project area within the environmental justice analysis and disclose conclusions.
- Include FEMA’s analysis and conclusion regarding whether the Proposed Action may have disproportionately high and adverse impacts on low income or minority communities, as specified in CEQ’s Environmental Justice Guidance.<sup>5</sup>
- Describe measures that FEMA will take to avoid, minimize, or mitigate impacts any disproportionate impacts to communities with EJ concerns and impacts to other sensitive populations.
- If there will be impacts to communities with EJ concerns, the cumulative impacts from climate change on public health and communities with EJ concerns should be discussed. Studies have shown that communities with EJ concerns may have less adaptive capacity and are thus more prone to disproportional impacts from climate change. See EPA’s report *Analyses of the Effects of Global Change on Human Health and Welfare and Human Systems* at <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=197244>.

## **GREENHOUSE GAS REDUCTION AND CLIMATE CHANGE**

- Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* states, states “The United States and the world face a profound climate crisis. We have a narrow moment to pursue action...to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents.” The U.S. Global Change Research

<sup>3</sup> [https://www.epa.gov/sites/default/files/2016-08/documents/nepa\\_promising\\_practices\\_document\\_2016.pdf](https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf)

<sup>4</sup> <https://www.energy.gov/sites/prod/files/2019/05/f63/NEPA%20Community%20Guide%202019.pdf>

<sup>5</sup> CEQ’s Environmental Justice Guidance Under the National Environmental Policy Act. See Section III, Part C-4. [https://www.epa.gov/sites/default/files/2015-02/documents/ej\\_guidance\\_nepa\\_ceq1297.pdf?VersionId=78iNGtdwSTz5E2x.H0aHq.E96\\_Tphbgd](https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf?VersionId=78iNGtdwSTz5E2x.H0aHq.E96_Tphbgd)

Program's National Climate Assessment provides data and scenarios that may be helpful in assessing trends in temperature, precipitation, and frequency and severity of storm events.<sup>6</sup>

Federal courts consistently have held that NEPA requires agencies to disclose and consider climate impacts in their reviews, including impacts from greenhouse gas (GHG) emissions. On January 9, 2023, CEQ's *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*,<sup>7</sup> was published in the Federal Register. CEQ issued this interim guidance to assist Federal agencies in assessing and disclosing climate impacts during environmental reviews. The guidance responds to Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, which directed CEQ to review, revise, and update CEQ's 2016 emissions guidance. The 2023 interim guidance is effective immediately and should be used to inform the reviews of new proposed actions.

In addition, estimates of the social cost of greenhouse gases (SC-GHG<sup>8</sup>) are informative for assessing the impacts of GHG emissions. SC-GHG estimates monetize the societal value of changes in GHG emissions from actions that have small, or marginal, impacts on cumulative global emissions. Estimates of the social cost of carbon (SC-CO<sub>2</sub>) and other greenhouse gases (e.g., social cost of methane (SC-CH<sub>4</sub>)) have been used for over a decade in Federal government analyses. Quantification of anticipated GHG releases and associated SC-GHG comparisons among all alternatives (including the No Action Alternative) within the Draft EA could inform project decision-making and provide support for implementing all practicable measures to minimize GHG emissions.

**Recommendations:** We recommend that FEMA implement the January 2023 CEQ GHG Guidance and the recommendations below for the proposed project.

*Emissions & SC-GHG Disclosure and Analysis*

- Quantify reasonably foreseeable direct (e.g., construction) and indirect (off-site material hauling and disposal) GHG emissions.
- Use SC-GHG estimates to consider the climate damages from net changes in direct and indirect emissions of CO<sub>2</sub> and other GHGs from the proposed project. To do so, EPA recommends a breakdown of estimated net GHG emission changes by individual gas, rather than relying on CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) estimates, and then monetize the climate impacts associated with each GHG using the corresponding social cost estimate (i.e., monetize CH<sub>4</sub> emissions changes expected to occur with the social cost of methane (SC-CH<sub>4</sub>) estimate for emissions).<sup>9</sup> When applying SC-GHG

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<sup>6</sup> Information on changing climate conditions is available through the National Climate Assessment at:

<http://nca2018.globalchange.gov>

<sup>7</sup> <https://www.federalregister.gov/d/2023-00158>

<sup>8</sup> EPA uses the general term, "social cost of greenhouse gases" (SC-GHG), where possible because analysis of GHGs other than CO<sub>2</sub> are also relevant when assessing the climate damages resulting from GHG emissions. The social cost of carbon (SC-CO<sub>2</sub>), social cost of methane (SC-CH<sub>4</sub>), and social cost of nitrous oxide (SC-N<sub>2</sub>O) can collectively be referenced as the SC-GHG.

<sup>9</sup> Transforming gases into CO<sub>2</sub>e using Global Warming Potential (GWP) metrics, and then multiplying the CO<sub>2</sub>e tons by the SC-CO<sub>2</sub>, is not as accurate as a direct calculation of the social costs of non-CO<sub>2</sub> GHGs. This is because GHGs differ not just in their potential to absorb infrared radiation over a given time frame, but also in the temporal

estimates, just as with tools to quantify emissions, disclose the assumptions (e.g., discount rates) and uncertainties associated with such analysis and the need for updates over time to reflect evolving science and economics of climate impacts.

- Compare GHG emissions and SC-GHG across alternatives to inform project decision-making. Such information may help to justify the upfront costs associated with GHG reduction measures.

#### Resilience and Adaptation

- Describe changing climate conditions (i.e., temperatures and frequency and severity of storm events) and assess how such changes could impact the proposed project and the environmental impacts of the proposed project and alternatives. Consider increases in frequency and severity of storm events, flooding, drought, and periods of high heat. This may assist in identifying resilience-related changes to project proposals that should be considered.
- Describe climate resilience and adaptation considerations for (1) construction plans; (2) emergency planning; and (3) monitoring and adaptive maintenance at each individual project location.

#### Reduction and Mitigation

- Identify practices FEMA could take to reduce and mitigate GHG emissions and include commitments in the Final EA.

### WATER QUALITY AND QUANTITY

- Addison Creek is listed as impaired on the Clean Water Act section 303(d) list of impaired water bodies. The uses that are classified as impaired include Aquatic Life, Primary Contact Recreation, and Aesthetic Quality due to a range of use-impairing pollutants including Aldin, total Chromium, DDT, Hexachlorobenzene, total Phosphorus, Oil, Alpha-BHC, Copper, Polychlorinated Biphenyls (PCBs), sedimentation/siltation, total suspended solids (TSS), and bottom deposits. The Draft EA stated that one of the project's purposes is to improve water quality. The Draft EA failed to document or discuss how the proposed work within Addison Creek would improve water quality and or affect the current 303(d) list impairments.

**Recommendations:** In the Final EA, discuss existing water quality issues and how the proposed project may affect water quality in Addison Creek. The Final EA should also discuss how implementation of the proposed project will provide for or assist with delisting of existing beneficial use impairments.

- The Draft EA does not discuss the presence of existing stormwater outlets into Addison Creek. It is unknown if the project proponent mapped existing stormwater outlets. The Draft

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pathway of their impact on radiative forcing and in their impacts on physical endpoints other than temperature change, both of which are relevant for estimating their social cost but not reflected in the GWP. See the Interagency Working Group on Social Cost of Greenhouse Gases' February 2021 *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* for more discussion and the range of annual SC-CO<sub>2</sub>, SC-CH<sub>4</sub>, and SC-N<sub>2</sub>O estimates currently used in Federal benefit-costs analyses.

DA did not discuss how the proposed bank modifications and channel deepening and widening would affect these stormwater outlets.

**Recommendations:** In the Final EA, provide additional information on existing conditions relating to stormwater outlets into Addison Creek in the project reaches, including how they will, or will not, be affected by the proposed project.

- Page 20 of the document states that long term, there will be beneficial impacts to water quality due to the stabilization of the stream banks throughout the project reach. There was no information provided to support or otherwise back up this assertion. Much of the project proposal involves removing existing vegetation, which provides filtration. Adding hard armoring to the existing stream banks as is proposed in project reaches will remove existing vegetative filtration and may contribute to lower water quality than currently exists. The Draft EA did not discuss any water quality improvement mitigation commitments with tangible goals or provide a monitoring and adaptive maintenance plan to support meeting commitments. Without goals and monitoring, EPA is unable to determine how FEMA supports the assertion that there will be long term beneficial impacts to water quality due to project implementation.

Additionally, page 27 of the Draft EA states that the proposed action would widen and lower the Addison Creek channel and several of the project reaches along with hard stabilization of stream banks throughout the project reaches. The Draft EA also states that given the already poor quality of the aquatic community and habitat present, it is not anticipated that the project could degrade these resources any further. Considering that much of the existing vegetation will be removed during project implementation, it could be reasonably asserted that the proposed vegetation removal could contribute to reduced filtration and thus lower water quality.

**Recommendations:** Remove references to water quality improvements, or provide mitigation and monitoring commitments to ensure water quality improvements.

- Page 20 of the document states that the project is a self-mitigating project within the floodplain as it will “provide improvements which reduce the risk of flood damages associated with overbank flooding within the floodplain.” The Draft EA did not provide information or evidence on how the proposed modifications will reduce the risk of overbank flooding and additional flood damage. The project proposes stream deepening and widening, and removal of adjacent vegetation and floodplain wetlands.

**Recommendations:** Provide additional information and evidence to support statements that project implementation will reduce flooding.

- The Draft EA on page 49 states that there are no project related short- or long-term impacts to wetlands. That is incorrect. There is a permanent impact to 0.63 acre of wetlands. Filling and impacting wetlands with placement of rip rap gabions and other bank stabilization measures is not a “beneficial” project outcome as FEMA asserts in the Draft EA.

**Recommendations:** Remove statements that wetland filling is a beneficial project impact and ensure the Final EA correctly references permanent wetland acreage impacts.

## **CUMULATIVE IMPACTS**

- Section 4 (Cumulative Impacts) did not discuss previous work and channel modifications to Addison Creek that were undertaken by MWRD. The project construction plans included plans for work previously undertaken in the 1970s (plans were dated 1973).

**Recommendations:** Ensure that the Final EA includes an analysis of all direct, indirect, and cumulative impacts of the proposed action and alternatives. Effects can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health related.

- i. Direct impacts are caused by the action and occur at the same time and place.
- ii. Indirect impacts are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. “Reasonably foreseeable future” actions are those that are currently proposed and not speculative. They can result from individually minor but collectively significant actions taking place over a period of time. This analysis is best done on an areawide, watershed, or larger-area level to put the proposal into perspective.
- iii. Cumulative impacts are those that result from the proposed action’s incremental impacts when these impacts are added to the impacts of other past, present, and reasonably foreseeable similar future actions, including those under the control of other entities.



**FEMA**

June 13, 2023

Alan Walts  
Director, Tribal and Multimedia Programs Office  
Office of the Regional Administrator  
United States Environmental Protection Agency, Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

Re: FEMA Response to EPA Comments on Draft Environmental Assessment  
Addison Creek Channel Improvements Project  
Cook County, Illinois  
HMGP-4489-0019-IL (R) (1)

Dear Mr. Walts:

Thank you for providing comments regarding the Draft Environmental Assessment (EA) for the Addison Creek Channel Improvements project. Responses to the recommendations from your June 6, 2023, submission follow.

1. *The project purpose should be revised to remove references to improving water quality. The project purpose should also be revised to state that its purpose is to reduce flood damages, create flood storage, and create additional water conveyance, as these are noted as project goals in the Draft EA.*

**Response:** FEMA has accepted this recommendation and the project purpose will be revised in the Final EA to convey the main purpose, which is to address flooding, and will not include improvement to water quality.

2. *Project descriptions should be revised to account for the full explanation of proposed in-stream work, including figures showing example existing and proposed cross-sections of depth and thalweg modifications.*

**Response:** FEMA has accepted this recommendation and additional information will be included in the Final EA regarding in-stream work. FEMA will also include more specific references to the construction drawings so readers can refer to the specific pages being discussed.

3. *Provide additional information and clarification in the Final EA on how these reaches were selected and why specifically they were chosen.*

**Response:** FEMA has accepted this recommendation and additional information and clarification on how and why the reaches were selected will be included in the Final EA.

4. *Provide additional information on the DWP, including information on the analyses undertaken. The final EA should acknowledge and discuss how project conditions have changed since the 2011 analyses and how that has affected current project alternatives development.*

**Response:** Addison Creek is an urban environment, and the creek has not significantly changed since the DWP in 2011. Since the DWP, MWRD has performed survey in preliminary and final design work to complete the construction plans that are provided in Appendix I. On page 56, the EA indicates that MWRD engaged in preliminary and final design work after the DWP was completed, and the construction plans are based on that design work. For the type of planning document and utility of that planning document; FEMA and MWRD find the material both relevant and beneficial in its existing form.

5. *Provide additional information and context on where bedrock is present and why penetrating bedrock would be of concern. Additionally, provide additional information on how the proposed treatments in reaches where bedrock is present will not detrimentally affect or penetrate bedrock.*

**Response:** FEMA has accepted this recommendation and additional information concerning the avoidance of bedrock will be included in the alternatives section of the Final EA.

6. *Provide additional information [for the planting of trees, shrubs, and native prairie grasses], including maps and figures of proposed plantings, in the Final EA.*

**Response:** The plantings of trees, shrubs, and native prairie grasses does not play a primary role in flood mitigation, which is the purpose of the project. Therefore, this is not significant enough to justify inclusion, as it would further distract the reader from the main scope of work.

7. *Modify the Final EA as follows:*

- *Tributary A and Tributary B were noted in project plans but were not discussed in the EA, including how they may be impacted. Add this information.*
- *Delineated wetlands were shown on construction plans, but the EA did not include any figures of wetland locations, acreages, extents, and acreages of impacts. Add this information.*
- *The project plans showed demolition of a park, portions of roadways, existing trailer parks, etc. They were not mentioned in the Draft EA. At a minimum, they are connected actions, and are likely part of the proposed project. Ensure the Final EA describes and accounts for these actions as part of the Proposed Action, including relevant impacts associated with this work.*
- *The project plans show installation of riffles and pools, but these were mentioned only once in the Draft EA (and only a few times in appendices). They were not included within the scope of actions to be undertaken in the Proposed Action. Account for them in all project and proposed impact descriptions in the Final EA.*
- *The project plans show changes to the stream slopes that are likely to grade them to a less steep slope. This was not explained or clearly laid out in the Draft EA. Include this information in the Final EA.*
- *The Draft EA did not include plan and profile drawings or other “example” figures of the proposed work, including but not limited to stream barbs, gabion baskets, soldier pile walls, pools, and riffles. This information should be added.*

- *The project construction plans show the stream being widened and the stream thalweg being moved (due to widening). This was not discussed in the Draft EA. Include information on the existing channel thalweg in the Final EA.*

**Response:** In order to assist the reader, better understand the project, FEMA will add information addressing these individual bullets where appropriate into the Final EA. In some cases, a more direct reference has been made to the construction drawings.

8. *Environmental Justice and Community Engagement Recommendation*

**Response:** EJ population exists within most of the project area, and all of that population will receive equal benefit from the flood reduction that will result from the project. No adverse impacts from this are expected. Therefore, this section will remain unchanged in the Final EA.

9. *Greenhouse Gas Reduction and Climate Change Recommendations*

**Response:** This project will not involve a significant amount of emissions, and only involves short-term emissions pertaining to construction vehicles and traffic in an urban area. Specific GHG calculations are not necessary. Additionally, the EA was already under development before the new CEQ's new guidance for consideration of greenhouse gas emissions and climate change. FEMA finds that introducing new procedures that may delay the NEPA process is not in the best interest of the public in this case. In the future, FEMA will reach out to the EPA for additional training on the new guidance.

10. *In the Final EA, discuss existing water quality issues and how the proposed project may affect water quality in Addison Creek. The Final EA should also discuss how implementation of the proposed project will provide for or assist with delisting of existing beneficial use impairments.*

**Response:** The EA already discusses existing water quality issues in Addison Creek. Additionally, improvement to water quality will not be a part of the project purpose in the Final EA, so it is not necessary to assert a claim of any benefit to water quality.

11. *In the Final EA, provide additional information on existing conditions relating to stormwater outlets into Addison Creek in the project reaches, including how they will, or will not, be affected by the proposed project.*

**Response:** FEMA has accepted this recommendation and will include additional information on stormwater outlets in the final EA.

12. *Remove references to water quality improvements, or provide mitigation and monitoring commitments to ensure water quality improvements.*

**Response:** FEMA has accepted this recommendation and references to water quality improvements will be changed or removed in the Final EA.

13. *Provide additional information and evidence to support statements that project implementation will reduce flooding.*

**Response:** In the Floodplain Management section of the EA, this information is already available and provides a satisfactory description of the hydraulic modeling for pre- and post-project implementation, so no changes will be made to the Final EA in this regard.

14. *Remove statements that wetland filling is a beneficial project impact and ensure the Final EA correctly references permanent wetland acreage impacts.*

**Response:** FEMA has accepted this recommendation, and the word “beneficial” on page 49 will be changed to “adverse” in the Final EA. The acreages of wetland area impacted for each reach is already described in the Wetlands section of the document.

15. *Ensure that the Final EA includes an analysis of all direct, indirect, and cumulative impacts of the proposed action and alternatives. Effects can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health related.*

**Response:** FEMA has accepted this recommendation and more analysis on cumulative effects will be included in the Final EA.

Thanks again for your assistance in helping FEMA meet its responsibilities under NEPA and related laws and executive orders. Please feel free to contact me at 312-408-5549 or at [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov) if you have any other comments or concerns.

Sincerely,



Duane Castaldi  
Regional Environmental Officer  
FEMA Region V

## FEMA-R5-Environmental

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**From:** Brown, Anastasia F CIV USARMY CELRC (USA) <stasi.f.brown@usace.army.mil>  
**Sent:** Monday, June 12, 2023 11:09 AM  
**To:** Pelloso, Liz; FEMA-R5-Environmental  
**Cc:** Shawn Cirton; heather.mcgowan@illinois.gov  
**Subject:** RE: EPA NEPA comments - Draft EA for Addison Creek modifications, Cook Co, IL

**Categories:** Resolved

**CAUTION:** This email originated from outside of DHS. DO NOT click links or open attachments unless you recognize and/or trust the sender. Please select the Phish Alert Report button on the top right of your screen to report this email if it is unsolicited or suspicious in nature.

Hi Liz,

Our office reviewed and approved this project in January 2018 under LRC-2017-00743, if you'd like to see any of those review documents or approvals, let me know.

If you have any questions or concerns, please do not hesitate to call or email me.

Thanks,

Stasi Brown (she/her/hers)  
Project Manager  
Regulatory Branch - U.S. Army Corps of Engineers

231 S. LaSalle St, Suite 1500  
Chicago, Illinois 60604  
(312) 846-5544

SHARP Victim Advocate  
USACE SHARP 24/7 Helpline: 1-800-281-6224  
DOD Safe Helpline 24/7 - 1-877-995-5247  
Website and Online Chat: <http://www.safehelpline.org>

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**From:** Pelloso, Liz <Pelloso.Liz@epa.gov>  
**Sent:** Wednesday, June 7, 2023 9:58 AM  
**To:** FEMA-R5-Environmental@fema.dhs.gov  
**Cc:** Shawn Cirton <shawn\_cirton@fws.gov>; Brown, Anastasia F CIV USARMY CELRC (USA) <stasi.f.brown@usace.army.mil>; heather.mcgowan@illinois.gov  
**Subject:** [Non-DoD Source] EPA NEPA comments - Draft EA for Addison Creek modifications, Cook Co, IL

Greetings,

Attached to this email are EPA's comments regarding the Draft EA release for the proposed Addison Creek modifications in Cook County, IL.

EPA no longer sends hard copies of NEPA correspondence via US Mail so this is the only copy you'll receive.

Please do not hesitate to contact me if you have questions or comments regarding our correspondence.

Regards,  
Liz Pelloso

*Liz Pelloso, PWS*

Wetland/Environmental Scientist  
National Environmental Policy Act (NEPA) Team  
U.S. Environmental Protection Agency - Region 5  
77 W. Jackson Blvd.  
Chicago, IL 60604  
Phone: 312-886-7425  
Email: [pelloso.liz@epa.gov](mailto:pelloso.liz@epa.gov)

**\*\*\* Please direct general NEPA correspondence, including EA submittals for EPA's review, to our team mailbox at [R5NEPA@epa.gov](mailto:R5NEPA@epa.gov) \*\*\***

**Appendix G**  
**Permits**

**METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO**  
**ADDISON CREEK CHANNEL IMPROVEMENTS PROJECT; CONTRACT 11-187-3F**  
**NORTHLAKE, STONE PARK, MELROSE PARK**  
**BELLWOOD, WESTCHESTER, AND BROADVIEW, ILLINOIS**  
**APPENDIX F – TABLE OF CONTENTS**  
**April 17, 2023**

<u>Page Nos.</u>	<u>File No.</u>	<u>Grantor</u>	<u>Authorization</u>
F1-1 to F1-7	F1	Department of the Army Chicago District, Corps of Engineers Regulatory Branch 231 S. La Salle St., Suite 1500 Chicago, IL 60604 P: (312) 846-5530 F: (312) 353-4110	LRC-2014-00674
F2-1 to F2-7	F2	Illinois Department of Natural Resources Office of Water Resources 2050 West Stearns Road Bartlett, IL 60103 P: (847) 608-3116	Permit No. NE2019056 Application No. N20180106
F3-1 to F3-6	F3	Illinois Department of Natural Resources Division of Ecosystems and Environment One Natural Resources Way Springfield, IL 62702 P: (217) 785-5500	EcoCAT Termination Letters Project No. 2011029, 2011032, & 2209459
F4-1 to F4-3	F4	Illinois Department of Natural Resources State Historic Preservation Office One Natural Resources Way Springfield, IL 62702 P: (217) 785-4998	Letter of No Objection IHPA Log #008051117
F5-1	F5	North Cook County Soil & Water Conservation District 640 Cosman Road Elk Grove Village, IL 60007 P: (224) 875-7580	Soil Erosion & Sediment Control Plan Conditional Approval LRC-2017-00743
F6-1 to F6-6	F6	Illinois Department of Transportation Divisions of Highways Region One/District One 201 W. Center Court Schaumburg, IL 60196 P: (847) 705-4149 F: (847) 705-5498	Highway Permit Reference No. 016-90846
F7-1 to F7-5	F7	Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794 P: (217) 782-3397	Watermain Construction Permit No. 0342-FY2023 0343-FY2023 0344-FY2023 0345-1-FY2023

**METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO  
 ADDISON CREEK CHANNEL IMPROVEMENTS PROJECT; CONTRACT 11-187-3F  
 NORTHLAKE, STONE PARK, MELROSE PARK  
 BELLWOOD, WESTCHESTER, AND BROADVIEW, ILLINOIS  
 APPENDIX P – TABLE OF CONTENTS  
 April 17, 2023**

<u>Page Nos.</u>	<u>File No.</u>	<u>Grantor</u>	<u>Authorization</u>
F8-1 to F8-3	F8	Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794 P: (217) 782-3397	Water Pollution Control Permit No.  2022-HB-67577  2022-IA-67576  2022-IA-67579



**DEPARTMENT OF THE ARMY**

**PERMIT**

**PERMITTEE:** Catherine O'Connor  
Metropolitan Water Reclamation District of Greater Chicago

**APPLICATION:** LRC-2014-00674

**ISSUING OFFICE:** U.S. Army Corps of Engineers, Chicago District

**DATE:** January 14, 2020

You are hereby authorized to perform work in accordance with the terms and conditions specified below.

Note: The term "you" and its derivatives, as used in this authorization, means the permittee or any future transferee. The term "this office" refers to the U.S. Army Corps of Engineers, Chicago District.

**PROJECT DESCRIPTION:** Flood control measures along Addison Creek through grading and various bank stabilization treatments and improvements from Hirsch Street in Northlake to Cermak Road in Broadview, Cook County, Illinois, as described in your notification and as shown on the plans titled, "Addison Creek Channel Improvements Northlake, Stone park, Melrose Park, Westchester, Bellwood, and Broadview, Illinois, dated July 2017 and prepared by Metropolitan Water Reclamation District of Greater Chicago (MWRD).

Management and monitoring of the stream bank treatments will be conducted by the affected municipality under a MOU between MWRD and the municipality. The MOU includes a 1-year establishment requirement for the completed work.

To offset project impacts, approximately 0.63 certified credits, or 0.95 acres uncertified credits shall be purchased from a wetland mitigation bank prior to final permit issuance.

**PROJECT LOCATION:** Hirsch Street in Northlake to Cermak Road in Broadview, Cook County, Illinois (Quarter of Section 4, Township 39 N, Range 12 E Latitude 41.8959600277989, Longitude -87.8789049237684).

**GENERAL CONDITIONS:**

1. The time limit for completing the authorized work ends five (5) years from when the Federal official, designated to act for the Secretary of the Army, has signed below. If you find that you need more time to complete the authorized activity(s), submit your request for a time extension to this office for consideration at least 60 days before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. Please note that this site is within the aboriginal homelands of several American Indian Tribes. If any cultural, archaeological or historical resources are unearthed during activities authorized by this permit, work in that area must be stopped immediately and the Corps, State Historic Preservation Office and/or Tribal Historic Preservation Office must be contacted for further instruction. The Corps will initiate the coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing on the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. You shall comply with the water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency for the project. Conditions of the certification are conditions of this authorization. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being accomplished in accordance with the terms and conditions of your permit.

The following special conditions are a requirement of your authorization:

1. This authorization is based on the materials submitted as part of application number LRC-2014-00674. Failure to comply with the terms and conditions of this authorization may result in suspension and revocation of your authorization.
2. Proof of mitigation credit purchase (0.63 acres certified credits, or 0.95 acres uncertified credits) from the selected contractor must be provided to this office prior to the start of construction. No earth moving activities shall commence before documentation of the

mitigation purchase has been provided to this office.

3. You shall fully implement the intergovernmental agreements (ICAs) between MWRD and the individual municipalities within the first year of project construction within each municipality's jurisdiction. All reseeded areas shall meet performance criteria in accordance with the approved stream restoration document. Your responsibility to complete the required work will not be considered fulfilled until you have demonstrated success and have received written verification of that success from the U.S. Army Corps of Engineers.
4. This site is within the aboriginal homelands of several American Indian Tribes. If any human remains, Native American cultural items or archaeological evidence are discovered during any phase of this project, interested Tribes request immediate consultation with the entity of jurisdiction for the location of discovery. In such case, please contact Stasi Brown by telephone at (312) 846-5544, or email at [stasi.f.brown@usace.army.mil](mailto:stasi.f.brown@usace.army.mil).
5. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the North Cook Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices on-site.
  - a. You shall schedule a preconstruction meeting with SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
  - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
  - c. Prior to commencement of any in-stream work, you shall submit construction plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
6. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
7. A copy of this authorization must be present at the project site during all phases of construction.
8. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is

performed.

9. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.
10. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
11. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
12. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
13. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
14. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
15. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or pre-construction conditions and fully stabilized prior to accepting flows.

**Further Information:**

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

( ) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this Authorization.

a. This permit does not obviate the need to obtain other federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. The Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on the behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modifications, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in the reliance on the information you provided.

5. Reevaluation of Permit Decision. The office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 established a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this authorization.

Catherine A. O'Connor  
PERMITTEE  
Catherine O'Connor  
Metropolitan Water Reclamation District of Greater Chicago

11/27/19  
DATE

LRC-2014-00674

\_\_\_\_\_  
Corps Authorization Number

This authorization becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

**CHERNICH.KA** Digitally signed by  
**THLEEN.G.123** CHERNICH.KATHLEEN.G.  
1230365616  
**0365616** Date: 2020.01.14  
14:06:31 -06'00'

For and on behalf of  
Colonel Aaron W. Reisinger  
Commander, Chicago District

\_\_\_\_\_  
DATE

If the structures or work authorized by this authorization are still in existence at the time the property is transferred, the terms and conditions of this authorization will continue to be binding on the new owner(s) of the property. To validate the transfer of this authorization and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below. The document shall be attached to a copy of the permit and submitted to the Corps.

LRC-2014-674

\_\_\_\_\_  
CORPS PROJECT NUMBER

\_\_\_\_\_  
TRANSFEEEE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
TELEPHONE



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271 www.dnr.illinois.gov

JB Pritzker, Governor Colleen Callahan, Director

September 30, 2022

Catherine O'Connor, P.E. Director of Engineering Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, Illinois 60611

SUBJECT: Permit No. NE2019056 Addison Creek Channel Improvements Addison Creek Cook County

Dear Ms. O'Connor:

As requested in a February 15, 2022 letter from Kevin Fitzpatrick, Assistant Director of Engineering, condition (13) of the subject permit is hereby revised to read as follows:

- (13) If the construction activity permitted is not completed on or before December 31, 2025, this permit shall cease and be null and void.

This permit remains subject to Special Conditions a), b), and c). Also, your consultation under the Illinois Endangered Species Protection Act and the Illinois Natural Areas Preservation Act more than 2 years old. An updated consultation with the Department's Division of Ecosystems and Environment is needed.

RECOMMENDED:

Signature of William T. Boyd, Chief, Northeastern Illinois Regulatory Program Section

APPROVAL RECOMMENDED:

Signature of Loren A. Wobig, Director, Office of Water Resources

APPROVED:

Signature of Colleen Callahan, Director, Department of Natural Resources

CC: LAW:WTB

- Chicago District, U.S. Army Corps of Engineers
Jeffrey Wickenkamp, Hey and Associates, Inc.
City of Northlake Engineering Dept.
Village of Stone Park Engineering Dept.
Village of Melrose Park Engineering Dept.
Village of Bellwood Engineering Dept.
Village of Westchester Engineering Dept.
Village of Broadview Engineering Dept.



## Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103

October 16, 2019

SUBJECT: Permit No. NE2019056  
Addison Creek Channel Improvements  
Addison Creek  
Cook County, Application No. N20180106

Catherine O'Connor, P.E.  
Director of Engineering  
Metropolitan Water Reclamation District of Greater Chicago  
100 East Erie Street  
Chicago, Illinois 60611

Dear Ms. O'Connor:

Enclosed is Illinois Department of Natural Resources, Office of Water Resources Permit No. NE2019056 authorizing the subject project. This permit does not supersede any other federal, state or local authorizations that may be required for the project. Upon receipt and review of this permit and all conditions included therein, please properly execute and return the attached acceptance slip within sixty (60) days from the date of this permit.

Please be advised that the Illinois Department of Natural Resources, Division of Ecosystems and Environment (DEE) participates in the regulatory programs of the U.S. Army, Corps of Engineers (USACE) and may review this project if a USACE Section 10 or 404 permit is required. Issuance of a permit by the Office of Water Resources does not preclude DEE's provision of comments and/or recommendations, primarily related to biological effects of the proposed action, to the USACE and other federal agencies concerning your project.

This permit is subject to special conditions a, b and c listed on the attachment to the permit.

If any changes of the permitted work are found necessary, revised plans should be submitted promptly to this office for review and approval. Also, this permit expires on the date indicated in Condition (13). If unable to complete the work by that date, the permittee may make a written request for a time extension.





PERMIT NO. NE2019056

DATE: October 16, 2019

**State of Illinois**  
 Department of Natural Resources, Office of Water Resources

Permission is hereby granted to:

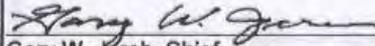
Metropolitan Water Reclamation District of Greater Chicago  
 100 East Erie Street  
 Chicago, Illinois 60611

to construct channel improvements as part of a public flood control project in the floodway of Addison Creek in the Northeast Quarter of Section 5, the South Half of Section 4, the East Half of Section 9, the East Half of Section 16, the Northeast Quarter of Section 21, and the Southwest Quarter of Section 22, Township 39 North, Range 12 East of the Third Principal Meridian in Cook County,

in accordance with an application dated June 7, 2018, and the plans and specifications entitled:

ADDISON CREEK CHANNEL IMPROVEMENTS, NORTHLAKE, STONE PARK, MELROSE PARK,  
 WESTCHESTER, BELLWOOD, AND BROADVIEW, ILLINOIS, TITLE SHEET, DATED JULY 2017,  
 RECEIVED JUNE 7, 2018, CHANNEL TYPICAL SECTIONS, SHEETS CG-301 AND CG-302, DATED JULY  
 2017, RECEIVED JUNE 7, 2018, CHANNEL CROSS SECTION - REACH 1 TO REACH 5, SHEETS CG-701  
 TO CG-770, DATED JULY 2017, RECEIVED JUNE 7, 2018, CHANNEL CROSS SECTION - REACH 6 TO  
 REACH 9, SHEETS CG-771 TO CG-809, DATED JANUARY 2019, RECEIVED FEBRUARY 11, 2019, PLAN  
 & PROFILE - REACH 1 TO REACH 9, SHEETS CG-201 TO CG-236, DATED JULY 2017,  
 RECEIVED JUNE 7, 2018.

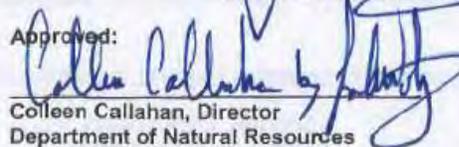
Examined and Recommended:

  
 Gary W. Jereb, Chief  
 Northeastern IL Regulatory  
 Programs Section

Approval Recommended:

  
 Loren A. Wobig, Director  
 Office of Water Resources

Approved:

  
 Colleen Callahan, Director  
 Department of Natural Resources

This PERMIT is subject to the terms and special conditions contained herein.

## PERMIT NO. NE2019056

## THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

- 1) This permit is granted in accordance with the Rivers, Lakes and Streams Act "615 ILCS 5."
- 2) This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.
- 3) This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any injury to private property or invasion of private rights.
- 4) This permit does not relieve the permittee of the responsibility to obtain other federal, state or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or state agency to do the work, this permit is not effective until the federal and state approvals are obtained. If construction does not begin within two years of the date of this permit, the permittee must submit the project to EcoCat (<http://dnr.illinois.gov/EcoPublic/>) for an updated consultation under the Illinois Endangered Species Protection Act and the Illinois Natural Areas Preservation Act.
- 5) The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.
- 6) In public waters, if future need for public navigation or other public interest by the state or federal government necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or the permittee's successors as required by the Department or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.
- 7) The execution and details of the work authorized shall be subject to the review and approval of the Department. Department personnel shall have the right of access to accomplish this purpose.
- 8) Starting work on the activity authorized will be considered full acceptance by the permittee of the terms and conditions of the permit.
- 9) The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.
- 10) In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.
- 11) In issuing this permit, the Department does not ensure the adequacy of the design or structural strength of the structure or improvement.
- 12) Noncompliance with the conditions of this permit will be considered grounds for revocation.
- 13) If the construction activity permitted is not completed on or before December 31, 2022 this permit shall cease and be null and void.

## THIS PERMIT IS SUBJECT TO THE FOLLOWING SPECIAL CONDITIONS:

SPECIAL CONDITIONS  
PERMIT NO. NE20190056  
Metropolitan Water Reclamation District of Greater Chicago  
Addison Creek Channel Improvements

SPECIAL CONDITIONS  
PERMIT NO. NE2019056  
Metropolitan Water Reclamation District of Greater Chicago  
Addison Creek Channel Improvements

- a) Upon completion of the work herein authorized, the Permittee shall submit as-built drawings to the Illinois Department of Natural Resources, Office of Water Resources Bartlett office for review and approval.
- b) Within one year of the completion of the work herein authorized, the Permittee must submit to the Illinois Department of Natural Resources, Office of Water Resources Bartlett office and the Federal Emergency Management Agency all analyses, drawings, documents and other information needed to process a floodway map and flood profile revision.
- c) The Permittee must not construct the channel improvements herein authorized in the downstream portion of Reach 3 (downstream of station 236+80) and in Reaches 4, 5, 6 and 8 until the Addison Creek Flood Control Reservoir is operational.

PERMIT NO. NE2019056  
Metropolitan Water Reclamation District of Greater Chicago

PERMIT ACCEPTANCE

This Acceptance must be signed and returned to the address below to validate this permit. See Condition No. 8.

ILLINOIS DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF WATER RESOURCES  
2050 WEST STEARNS ROAD  
BARTLETT, ILLINOIS 60103

The undersigned permittee, personally, or if a corporation by its duly authorized officers, hereby accepts the permit bearing the above permit number subject to all conditions named therein, on this 8th day of January, 2020.

Catherine A. O'Connor

By Catherine A. O'Connor

By Director of Engineering

If a corporation  
affix seal here.

*Applicant:* Metropolitan Water Reclamation District of Greater Chicago  
*Contact:* Jeffrey Mengler  
*Address:* c/o Hey and Associates, Inc.  
 26575 W. Commerce Drive, Suite 601  
 Volo, IL 60073

*IDNR Project Number:* 2011029  
*Date:* 06/26/2020  
*Alternate Number:* 16-0005, 1706320

*Project:* Addison Creek Channel Improvements  
*Address:* Western Cook County, Broadview, Bellwood, Stone Park, Northlake, Broadview, Bellwood, Stone Park, Northlake

*Description:* Stabilizations of Addison Creek urban channels with various treatments.

### Natural Resource Review Results

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

**Consultation is terminated.** This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

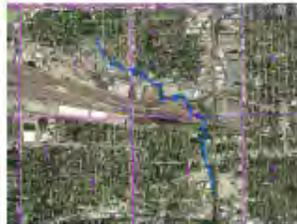
#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Cook

*Township, Range, Section:*

39N, 12E, 4  
 39N, 12E, 4  
 39N, 12E, 5  
 39N, 12E, 9



**IL Department of Natural Resources**  
**Contact**  
 Bradley Hayes  
 217-785-5500  
 Division of Ecosystems & Environment

**Government Jurisdiction**  
 U.S. Army Corps of Engineers

#### Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

**Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

**Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

**Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

*Applicant:* Metropolitan Water Reclamation District of Greater Chicago  
*Contact:* Jeffrey Mengler  
*Address:* c/o Hey and Associates, Inc.  
 26575 W. Commerce Drive, Suite 601  
 Volo, IL 60073

*IDNR Project Number:* 2011032  
*Date:* 06/26/2020  
*Alternate Number:* 16-0005, 1706325

*Project:* Addison Creek Channel Improvements - 2nd Reach  
*Address:* Broadview, Bellwood, Stone Park, Northlake, Broadview, Bellwood, Stone Park, Northlake

*Description:* Channel improvements and stabilization using various techniques.

### Natural Resource Review Results

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

**Consultation is terminated.** This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

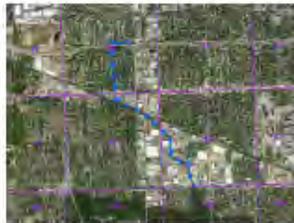
*County:* Cook

*Township, Range, Section:*

39N, 12E, 16

39N, 12E, 21

39N, 12E, 22



#### **IL Department of Natural Resources**

##### **Contact**

Bradley Hayes

217-785-5500

Division of Ecosystems & Environment

#### **Government Jurisdiction**

U.S. Army Corps of Engineers

#### **Disclaimer**

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

**Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

**Security**

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Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

**Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

*Applicant:* Metropolitan Water Reclamation District of Greater Chicago      *IDNR Project Number:* 2209459  
*Contact:* Michael Cosme      *Date:* 02/08/2022  
*Address:* 100 E Erie      *Alternate Number:* 11-187-3F,  
 Chicago, IL 60611      2011032 and  
 2011029

*Project:* Addison Creek Channel Improvements  
*Address:* Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview, Illinois

*Description:* Channel improvements and stabilization using various techniques.

### Natural Resource Review Results

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

**Consultation is terminated.** This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Cook

*Township, Range, Section:*

39N, 12E, 4  
 39N, 12E, 4  
 39N, 12E, 5  
 39N, 12E, 9  
 39N, 12E, 16  
 39N, 12E, 21  
 39N, 12E, 22



**IL Department of Natural Resources**  
**Contact**  
 Bradley Hayes  
 217-785-5500  
 Division of Ecosystems & Environment

**Government Jurisdiction**  
 IL Department of Natural Resources  
 Michael Cosme  
 111 East Erie  
 Chicago, Illinois 60611 -2893

**Disclaimer**

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271

[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor  
Colleen Callahan, Director

FAX (217) 524-7525

Cook County

Northlake to Broadview

Demolition of Structures and Bridges, New Construction of Reservoir and Channel Improvements –  
Addison Creek

From Hirsch St. in Northlake to South and East to Cermak Road in Broadview

1128 S. 30th Ave., 30th Ave. over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison  
Creek, 2795 Washington Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave., Bellwood

SHPO Log #008051117

July 8, 2020

Michael Cosme

Metropolitan Water Recl. Dist. of Greater Chicago

100 E. Erie St.

Chicago, IL 60611-3154

Dear Mr. Cosme:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please call 217/782-4836.

Sincerely,

Robert F. Appleman  
Deputy State Historic  
Preservation Officer



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

## Cook County

### Northlake to Broadview

Demolition of Structures and Bridges, New Construction of Reservoir and Channel Improvements -  
Addison Creek

From Hirsch St. in Northlake to South and East to Cermak Road in Broadview; 1128 S. 30th Ave., 30th Ave.  
over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison Creek, 2795 Washington  
Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave., Bellwood  
SHPO Log #008051117

March 7, 2022

Michael Cosme  
Metropolitan Water Recl. Dist. of Greater Chicago  
100 E. Erie St.  
Chicago, IL 60611-3154

Dear Mr. Cosme:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at Rita.E.Baker@illinois.gov.

Sincerely,

Carey L. Mayer, AIA  
Deputy State Historic  
Preservation Officer



**Illinois Historic  
Preservation Agency**

1 Old State Capitol Plaza, Springfield, IL 62701-1512

FAX (217) 524-7525

[www.illinoishistory.gov](http://www.illinoishistory.gov)

Cook County

Northlake to Broadview

Demolition of Structures and Bridges, New Construction of Reservoir and Channel Improvements –  
Addison Creek

From Hirsch St. in Northlake to South and East to Cermak Road in Broadview

1128 S. 30th Ave., 30th Ave. over Addison Creek, 31st Ave. over Addison Creek, 32nd Ave. over Addison  
Creek, 2795 Washington Blvd., 1128 S. 31st Ave., 1131 S. 32nd Ave.

H&A#I-16-0005, MARS-1788

IHPA Log #008051117

May 25, 2017

Jeffrey Mengler  
Hey and Associates, Inc.  
26575 W. Commerce Dr., Suite 601  
Volo, IL 60073

Dear Mr. Mengler:

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact David Halpin, Cultural Resources Manager, at 217/785-4998.

Sincerely,

Rachel Leibowitz, Ph.D.  
Deputy State Historic  
Preservation Officer

**North Cook County  
Soil & Water Conservation District**

640 Cosman Road, Elk Grove Village, Illinois 60007  
Phone: 224-875-780, email: [r.mcandless@northcookswcd.org](mailto:r.mcandless@northcookswcd.org)

January 7, 2019

Mr. Patrick Lach, PE, CFM  
Hey and Associates, Inc.  
8755 W. Higgins Road  
Suite 835  
Chicago, IL 60631

Re: Soil Erosion & Sediment Control (SE/SC) Plan Review- Addison Creek  
Channel Improvements, LRC-2014-0674.

Dear Mr. Lach,

I have completed my review of the Soil Erosion & Sediment Control (SE/SC) Plan for the proposed Addison Creek Channel Improvements, LRC-2014-0674. Pending the submittal to this office for review and approval of the "means & methods" associated with an In-Stream Work Plan and Construction Site Dewatering Plan by the Contractor selected for this project, this letter is to be considered a **Conditional Approval** of the Soil Erosion & Sediment Control Plan for the project. A letter of **Final SE/SC Plan Approval** will be issued after I have completed my review of, and approved, the In-Stream Work and Dewatering Plans.

Regards,



Rick McAndless, CPESC

Cc: Stasi Brown, Project Manager, U.S. Army Corps of Engineers



## Illinois Department of Transportation

Office of Highways Project Implementation / Region 1 / District 1  
201 West Center Court / Schaumburg, Illinois 60196-1096

### PERMITS

Location: Mannheim Rd., St. Charles Rd. and Roosevelt Rd. Bridges over Addison Creek

Reference No: 016 - 90846

November 18, 2022

Mr. Mick Cosme P.E., CFM  
Metropolitan Water Reclamation District of Greater  
100 East Erie Street  
Chicago, IL 60611

Dear Mr. Cosme P.E., CFM:

The following items must be completed and returned to our office before the referenced file can be processed.

1. Owner's signature, address and telephone number required on Permit Forms as Applicant.
2. Contractor's signature, address and telephone number required on Permit Forms as Witness.
3. Individual Highway Permit Bond Form requires execution in the amount of \$250,000.00
4. Individual Highway Permit Bond Form requires signature.
5. Send five sets of 11"x17" final engineering plans sealed by a P.E.
6. The attached "Municipality Review of Permit Application" form requires execution for each Municipality impacted by this project.
7. Provide the information required on the attached BT 725 for impacts on IDOT roadways

If you have any questions regarding this matter, please contact Mr. William Weitzel at (847) 705-4132.

Very truly yours,

Jose Rios, P.E.  
Region One Engineer

A handwritten signature in black ink, appearing to read 'Kalpana Kannan-Hosadurga'.

By:  
Kalpana Kannan-Hosadurga, P.E.  
Traffic Arterial Operations Engineer



Highway Permit

District Serial No. \_\_\_\_\_

Whereas, I (We) \_\_\_\_\_  
(Name of Applicant) (Mailing Address)

\_\_\_\_\_ hereinafter termed the Applicant,  
(City) (State)  
request permission and authority to do certain work herein described on the right-of-way of the State Highway  
known as \_\_\_\_\_ Route \_\_\_\_\_, Section \_\_\_\_\_,  
from Station \_\_\_\_\_ to Station \_\_\_\_\_  
\_\_\_\_\_ County. The work is described in detail on the attached plan or sketch and/or as follows:

All work authorized by this permit shall be completed \_\_\_\_\_ after the date this permit is approved,  
otherwise the permit becomes null and void.

**This permit is subject to the conditions and restrictions printed on the reverse side of this sheet.**

This permit is hereby accepted and its provisions agreed to this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

Witness \_\_\_\_\_ Signed \_\_\_\_\_  
Applicant

\_\_\_\_\_ Mailing Address \_\_\_\_\_ Mailing Address  
City State City State

SIGN AND RETURN TO: Regional Engineer \_\_\_\_\_

Approved this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

Department of Transportation

BY: \_\_\_\_\_  
Deputy Director of Highways, Regional Engineer

**First:** The Applicant represents and warrants that he/she is the party in interest respecting this Permit and that he/she is the agent in fact with authority to bind all parties in interest to the obligations and undertakings agreed to in this Permit. The Applicant represents and warrants that the property lines shown on the attached plan sheet(s) or sketch are true and correct, and that all proposed work is accurately depicted thereon.

**Second:** The proposed work shall be located and constructed to the satisfaction of the Regional Engineer or his/her duly authorized representative. No revisions or additions shall be made to the proposed work on the right-of-way without the written permission of the Regional Engineer. The Applicant agrees to complete all work to the standards and specifications identified by the Regional Engineer or his/her authorized representative as a condition of granting this Permit. The Applicant agrees to furnish all labor, equipment and material, and do all work and pay all costs associated with the work authorized by this Permit. The Applicant agrees to restore any and all damaged portions of the highway right-of-way to the condition satisfactory to the Regional Engineer or his/her authorized representative including, but not limited to, all landscape restoration. The Applicant shall not trim, cut or in any way disturb any trees or shrubbery along the highway without the approval of the Regional Engineer or his/her duly authorized representative. Any and all documents, writings and notes reflecting or identifying the standards, specifications, understandings and conditions applicable to the performance of the permitted work required by the Regional Engineer or his/her authorized representative are hereby incorporated into this Permit by reference as though fully set forth herein.

**Third:** The Applicant shall at all times conduct the work in such a manner as to minimize hazards to vehicular and pedestrian traffic. Traffic controls and work site protection shall be in accordance with the applicable requirements of Part 6 (Temporary Traffic Control) of the Illinois Manual on Uniform Traffic Control Devices and with the traffic control plan if one is required elsewhere in the permit. All signs, barricades, flaggers, etc., required for traffic control shall be furnished by the Applicant. The work may be done on any day except Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Work shall be done only during daylight hours.

**Fourth:** The work performed by the Applicant is for the bona fide purpose expressed and not for the purpose of, nor will it result in, the parking or servicing of vehicles on the highway right-of-way. Signs located on or overhanging the right-of-way shall be prohibited.

**Fifth:** The Applicant shall engage in only the proposed work approved herein, and subject to the hazards incident to such activities, assumes all risks associated therewith. The Applicant assumes full and strict liability for the actions of itself, all parties in interest, its agents and employees, contractors, subcontractors and consultants. The Applicant and all parties in interest shall save, defend, hold harmless and indemnify the State of Illinois and each of its officers, agents, employees, invitees and others associated with it from and against any and all suits, claims, actions, losses, injuries, damages, judgments and expenses that are based on, or that arise or are alleged to have arisen out of the performance of the work approved herein, including, but not limited to, any act, willful or intended, or negligence of the Applicant and any party in interest, its agents and employees, contractors, subcontractors and consultants whether at law, in equity or common law. In the event the Applicant or any party in interest fails, neglects, or refuses to comply with any provision of this indemnity, the State of Illinois may take any action necessary to protect itself from liability, including any action to pay, settle, compromise and procure the discharge thereof, in which case the Applicant or any party in interest, jointly and severally, shall be liable and bound unto the State of Illinois for any and all expenses related thereto, including attorney's fees.

**Sixth:** The State reserves the right to make such changes, additions, repairs and relocations within its statutory limits to the facilities constructed under this permit or their appurtenances on the right-of-way as may at any time be considered necessary to permit the relocation, reconstruction, widening or maintaining of the highway and/or provide proper protection to life and property on or adjacent to the State right-of-way. However, in the event this permit is granted to construct, locate, operate and maintain utility facilities on the State right-of-way, the Applicant, upon written request by the Regional Engineer, shall perform such alterations or change of location of the facilities, without expense to the State, and should the Applicant fail to make satisfactory arrangements to comply with this request within a reasonable time, the State reserves the right to make such alterations or change of location or remove the work, and the Applicant agrees to pay for the cost incurred.

**Seventh:** This permit is effective only insofar as the Department has jurisdiction and does not presume to release the Applicant from compliance with the provisions of any existing statutes or local regulations relating to the construction of such work.

**Eighth:** The Construction of access driveways is subject to the regulations listed in the "Policy on Permits for Access Driveways to State Highways." If, in the future, the land use of property served by an access driveway described and constructed in accordance with this permit changes so as to require a higher driveway type as defined in that policy, the owner shall apply for a new permit and bear the costs for such revisions as may be required to conform to the regulations listed in the policy. Utility installations shall be subject to the "Policy on the Accommodation of Utilities on Right-of-Way of the Illinois State Highway System."

**Ninth:** If the work covered by this permit includes construction of additional lanes, turn lanes, median cross-overs or traffic signals on, along or adjacent to a highway under Department jurisdiction, the permittee shall use only contractor(s) approved by the Department of Transportation for the performance of said work on the State highway. A contractor currently prequalified by the Department in the work rating governing the said work shall be approved. Prior to the commencement of the said work on the State highway, the applicant shall furnish the Regional Engineer a copy of the contractor's current Certificate of Eligibility, or, if the permittee proposes to use a contractor not currently prequalified by the Department, information satisfactory to the Department evidencing the contractor's qualification and ability to perform the said work. No work on the State highway shall be performed until the Department issues an approval of the proposed contractor.



**Illinois Department of Transportation**

**Individual Highway Permit Bond**

Address \_\_\_\_\_ District \_\_\_\_\_

City / State \_\_\_\_\_ Bond No. \_\_\_\_\_

KNOWN ALL MEN BY THE PRESENTS, That I (We) \_\_\_\_\_ ,  
(Name of Applicant)

(Mailing Address)

as Principal, and \_\_\_\_\_ ,  
(Surety Company)

a corporation organized and existing under the laws of the State of \_\_\_\_\_  
and licensed to do business in the State of Illinois, are held firmly bound unto the people of the State of Illinois in the penal  
sum of \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_ ) lawful money of the United States well and truly to be paid unto said people of the State  
of Illinois, for payment of which we bind ourselves, our successors and assigns, jointly, severally, and firmly by these  
presents.

WHEREAS, Highway Permit No. \_\_\_\_\_ Issued by the Department of Transportation

of the State of Illinois grants to \_\_\_\_\_ permission and  
authority to construct, locate, operate, and maintain the work described in said Permit, upon or adjacent to  
\_\_\_\_\_ Route \_\_\_\_\_ in \_\_\_\_\_ County as more fully  
described in said Permit and Sketch, which by this reference are made a part hereof as if written herein at length, in and by  
which Permit and Sketch the said Principal has promised and agreed to perform said described operation and related  
activities in accordance with the terms and conditions of and description in said Permit and Sketch.

NOW, THEREFORE, if the said Principal shall well and truly perform said operations in accordance with the terms  
and conditions of and description in said Permit and Sketch to the satisfaction of said Department, and shall perform no  
other work or construction at said location without first applying for and receiving another permit from said Department, then  
no claim or demand will be made against the above obligation. Otherwise, this bond or so much thereof as may be  
necessary shall insure to the said Department as cost and expense to change and correct, during a period of five years  
from the date of approval of this bond by the Department, said construction to conform to the terms and conditions of and  
description in said Permit and Sketch.

IN WITNESS WHEREOF, WE HAVE DULY EXECUTED THE FOREGOING

This \_\_\_\_\_ Day of \_\_\_\_\_ , \_\_\_\_\_ Principal \_\_\_\_\_

Surety \_\_\_\_\_ Address \_\_\_\_\_

Address \_\_\_\_\_ City / State \_\_\_\_\_

City / State \_\_\_\_\_ Telephone ( ) \_\_\_\_\_

By \_\_\_\_\_ By \_\_\_\_\_

( Seal ) Attorney in Fact ( Seal )

Agent for Surety \_\_\_\_\_ Department of Transportation

Address \_\_\_\_\_ By \_\_\_\_\_

City / State \_\_\_\_\_ Deputy Director of Highways, Regional Engineer

By \_\_\_\_\_



# Illinois Department of Transportation

Division of Highways/District 1  
201 West Center Court/Schaumburg, Illinois 60196-1096

## MUNICIPALITY REVIEW OF PERMIT APPLICATION

To assure that municipality officials are aware of State highway permit work requested within their municipality limits, we require acknowledgement of State Highway Permit Applications by a municipal official. The following statement must be completed and returned to the address above before a State Highway Permit will be issued.

The undersigned acknowledges that the municipality is aware that a State Highway Permit has been requested by

\_\_\_\_\_ (company or individual)  
for construction at \_\_\_\_\_ (address of permit work)  
\_\_\_\_\_ in the municipality of \_\_\_\_\_.

Signed \_\_\_\_\_ (Municipality Representative)  
\_\_\_\_\_ (Title)

\_\_\_\_\_ (Date)



Traffic Control Authorization Request

District 1
Project N/A
Marked Route

County Cook
Contract Number N/A
Section N/A

Location

Inclusive Dates of Work to Work Hours 09:00 AM PM to 3:00 AM PM

Work Type Maintenance Construction Traffic Other

Describe Work

Contractor or Agency Performing Work

Responsible Engineer: (Construction Foreman/Superintendent, Maintenance/Traffic Field Engineer)

Name Telephone No. Office Home

(If traffic control is to be employed between 5:00 p.m. and 8:30 a.m. or on Saturday, Sunday or holidays give additional names and numbers)

Name Telephone No.

Name Telephone No.

Name Telephone No.

Controls: (Describe specific controls to be used, including reference to appropriate Highway Standards or sections of manuals, and set forth any special controls proposed).

IDOT Highway Standards:

Distribution: District Operations/Traffic Engineer
Project Implementation Engineer
Field Engineer
Resident Engineer
ISP District

Submitted by:

Approved by: (District Operations/Traffic Engineer)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY F7-1  
1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

**PUBLIC WATER SUPPLY CONSTRUCTION PERMIT**

SUBJECT: STONE PARK (IL0313030)

Permit Issued to:  
Village of Stone Park  
1825 North 32<sup>nd</sup> Avenue  
Stone Park, IL 60165

PERMIT NUMBER: 0342-FY2023

DATE ISSUED: November 18, 2022  
PERMIT TYPE: Water Main Extension

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated, and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Hey and Associates, Inc.  
NUMBER OF PLAN SHEETS: 19  
TITLE OF PLANS: "Addison Creek Channel Improvements"  
APPLICATION RECEIVED DATE: September 27, 2022

PROPOSED IMPROVEMENTS:

\*\*\*Install approximately 367 feet of 8-inch and 115 feet of 6-inch water main.\*\*\*

ADDITIONAL CONDITIONS:

1. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service.
2. The permit approval is for the Application, Schedule B, and 19 plan sheets received on September 27, 2022.

DCC:GAZ

cc: Hey and Associates, Inc.  
Elgin Regional Office  
Cook County Health Department



David C. Cook, P.E.  
Manager Permit Section  
Division of Public Water Supplies

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

## PUBLIC WATER SUPPLY CONSTRUCTION PERMIT

SUBJECT: NORTHLAKE (IL0314710)

Permit Issued to:  
City of Northlake  
100 West Palmer  
Northlake, IL 60164

PERMIT NUMBER: 0343-FY2023

DATE ISSUED: November 18, 2022

PERMIT TYPE: Water Main Extension

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated, and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Hey and Associates, Inc.  
NUMBER OF PLAN SHEETS: 18  
TITLE OF PLANS: "Addison Creek Channel Improvements"  
APPLICATION RECEIVED DATE: September 27, 2022

## PROPOSED IMPROVEMENTS:

\*\*\*Install approximately 532 feet of 8-inch and 206 feet of 6-inch water main.\*\*\*

## ADDITIONAL CONDITIONS:

1. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service.
2. The permit approval is for the Application, Schedule B, and 18 plan sheets received on September 27, 2022.

DCC:GAZ

cc: Hey and Associates, Inc.  
Elgin Regional Office  
Cook County Health Department

  
\_\_\_\_\_  
David C. Cook, P.E.  
Manager Permit Section  
Division of Public Water Supplies

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

## PUBLIC WATER SUPPLY CONSTRUCTION PERMIT

SUBJECT: WESTCHESTER (IL0313150)

Permit Issued to:  
Village of Westchester  
10300 West Roosevelt Road  
Westchester, IL 60154

PERMIT NUMBER: 0344-FY2023

DATE ISSUED: November 18, 2022  
PERMIT TYPE: Water Main Extension

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated, and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Hey and Associates, Inc.  
NUMBER OF PLAN SHEETS: 16  
TITLE OF PLANS: "Addison Creek Channel Improvements"  
APPLICATION RECEIVED DATE: September 27, 2022

## PROPOSED IMPROVEMENTS:

\*\*\*Install approximately 105 feet of 8-inch and 7 feet of 6-inch water main.\*\*\*

## ADDITIONAL CONDITIONS:

1. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service.
2. The permit approval is for the Application, Schedule B, and 16 plan sheets received on September 27, 2022.

DCC:GAZ

cc: Hey and Associates, Inc.  
Elgin Regional Office  
Cook County Health Department



David C. Cook, P.E.  
Manager Permit Section  
Division of Public Water Supplies



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-1724

February 14, 2023

Marty Walker, Director of Public Works  
Village of Bellwood  
3200 Washington Boulevard  
Bellwood, IL 60104

Re: Village of Bellwood (Cook County - 0310150) Supplemental Approval for Water Main  
Extension Construction Permit **No. 1-0345-FY2023**

Dear Mr. Walker:

Supplemental approval is hereby given of the changes in the plans for the proposed waterworks improvements, in which a creek crossing was eliminated and another street was added to get the water main replaced. The changes added 49feet of 12-inch water main and reduced the 8-inch water main by 1,009 feet. These revised plans, consisting of 27 sheet1s, were prepared and submitted by your engineers, Hey and Associates, acting as your agents and are designated as, "Addison Creek Channel Improvements".

The original permit of the plans and specifications was given November 18, 2022.

This permit is void after February 13, 2024, unless construction on this project has started on or prior to that date.

David C. Cook, P.E.  
Manager, Permit Section  
Division of Public Water Supplies

DCC:GAZ

cc: Hey and Associates, Inc.  
Elgin Regional Office

2125 S. First Street, Champaign, IL 61820 (217) 278-5800  
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120  
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000  
595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200  
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022  
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

PLEASE PRINT ON RECYCLED PAPER

## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue, East; Post Office Box 19276; Springfield, IL 62794-9276

Division of Public Water Supplies

Telephone 217/782-1724

**PUBLIC WATER SUPPLY CONSTRUCTION PERMIT**

SUBJECT: BELLWOOD (IL0310150)

Permit Issued to:  
Village of Bellwood  
3200 Washington Boulevard  
Bellwood, IL 60104

PERMIT NUMBER: 0345-FY2023

DATE ISSUED: November 18, 2022  
PERMIT TYPE: Water Main Extension

The issuance of this permit is based on plans and specifications prepared by the engineers/architects indicated, and are identified as follows. This permit is issued for the construction and/or installation of the public water supply improvements described in this document, in accordance with the provisions of the "Environmental Protection Act", Title IV, Sections 14 through 17, and Title X, Sections 39 and 40, and is subject to the conditions printed on the last page of this permit and the ADDITIONAL CONDITIONS listed below.

FIRM: Hey and Associates, Inc.  
NUMBER OF PLAN SHEETS: 27  
TITLE OF PLANS: "Addison Creek Channel Improvements"  
APPLICATION RECEIVED DATE: September 27, 2022

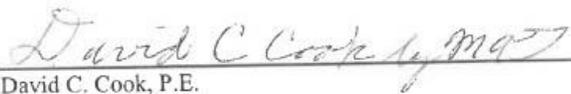
## PROPOSED IMPROVEMENTS:

\*\*\*Install approximately 116 feet of 10-inch, 2,083 feet of 8-inch and 90 feet of 6-inch water main.\*\*\*

## ADDITIONAL CONDITIONS:

1. All water mains shall be satisfactorily disinfected prior to use pursuant to Ill. Adm. Code, Title 35, Subtitle F, Section 602.310. Two consecutive sets of samples collected at least 24 hours apart must show the absence of coliform bacteria. The samples must be collected from every 1,200 feet of new water main along each branch and from the end of the line. An operating permit must be obtained before the project is placed in service.
2. The permit approval is for the Application, Schedule B, and 27 plan sheets received on September 27, 2022.

DCC:GAZ

cc: Hey and Associates, Inc.  
Elgin Regional Office  
Cook County Health Department  
\_\_\_\_\_  
David C. Cook, P.E.  
Manager Permit Section  
Division of Public Water Supplies

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
WATER POLLUTION CONTROL PERMIT

F8-1

LOG NUMBERS: 2022-67577

PERMIT NO.: 2022-HB-67577

BUREAU ID: W0318170044

FINAL PLANS, SPECIFICATIONS, APPLICATION  
AND SUPPORTING DOCUMENTS

DATE ISSUED: September 22, 2022

PREPARED BY: Hey and Associates, Inc.

**SUBJECT:** METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO-Northlake-Addison Creek Channel Improvements (MWRDGC-Stickney WRP Sewage Treatment Plant) - Sanitary Sewer Permit

PERMITTEE TO CONSTRUCT, OWN AND OPERATE

MWRDGC  
111 East Erie Street  
Chicago, IL 60611

Permit is hereby granted to the above designated permittee(s) to construct and/or operate water pollution control facilities described as follows (quantities are approximate):

196 feet of 8 inch sanitary sewer and 2 manholes to relocate the existing sewer in order to help Addison Creek channel widening project and to serve the existing mobile home park with no additional flow (0 PE, 0 GPD, DAF) located south of Soffel Avenue with discharge to the existing 10 inch sanitary sewer tributary to the above indicated sewage treatment plant.

This Permit is issued subject to the following Special Condition(s). If such Special Condition(s) require(s) additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval for issuance of a Supplemental Permit.

**SPECIAL CONDITION 1:** Any connections to this sanitary sewer extension must be in accordance with the latest Revisions of Title 35, Subtitle C, Chapter 1. Permits must be obtained if required by said regulations.

**SPECIAL CONDITION 2:** The Permittee to Construct shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activities associated with this project will result in the disturbance of one (1) or more acres total land area. Additional information is provided on the following webpage: <https://www2.illinois.gov/epa/topics/forms/water-permits/storm-water/Pages/construction.aspx>

**SPECIAL CONDITION 3:** Please contact the Illinois Department of Natural Resources (IDNR), Office of Water Resources. IDNR may require a permit pursuant to the Rivers, Lakes, and Streams Act for construction of that portion of the project located in the floodplain. The U.S. Army Corps of Engineers may also require a permit pursuant to Section 404 of the Clean Water Act. Application forms received from IDNR will specify which Corps District you should contact.

THE STANDARD CONDITIONS OF ISSUANCE INDICATED ON THE REVERSE SIDE MUST BE COMPLIED WITH IN FULL. READ ALL CONDITIONS CAREFULLY.

BDF:SKT:\n\bow\permits\wpdocs\docs\permits\statecon  
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DIVISION OF WATER POLLUTION CONTROL

cc: EPA-Des Plaines FOS  
City of Northlake  
Hey and Associates, Inc.  
Records - Municipal

  
Brant D. Fleming, P.E.  
Manager, Municipal Unit, Permit Section

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
WATER POLLUTION CONTROL PERMIT

F8-2

LOG NUMBERS: 2022-67578

PERMIT NO.: 2022-IA-67578

BUREAU ID: W0318170048

FINAL PLANS, SPECIFICATIONS, APPLICATION  
AND SUPPORTING DOCUMENTS

DATE ISSUED: September 7, 2022

PREPARED BY: Hey and Associates, Inc.

SUBJECT: METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO - Addison Creek Channel  
(MWRDGC - Stickney Sewage Treatment Plant) - Sanitary Sewer Permit

PERMITTEE TO CONSTRUCT

MWRDGC  
111 East Erie Street  
Chicago, IL 60611

PERMITTEE TO OWN AND OPERATE

Village of Stone Park  
1825 N. 32nd Ave.  
Stone Park, IL 60165

Permit is hereby granted to the above designated permittee(s) to construct and/or operate water pollution control facilities described as follows (quantities are approximate):

A lift station having 2 pumps with a rated capacity of 136 gpm at 11.73 feet of TDH, 145 feet of 4 inch force main, 42 feet of 12 inch sanitary sewer and 4 manholes to serve existing flows (0 P.E., 0 GPD, DAF) located on 40th Ave and Addison Creek with discharge to an existing 12 inch sanitary sewer tributary to the above indicated sewage treatment plant.

This Permit is issued subject to the following Special Condition(s). If such Special Condition(s) require(s) additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval for issuance of a Supplemental Permit.

**SPECIAL CONDITION 1:** Any connections to this sanitary sewer extension must be in accordance with the latest Revisions of Title 35, Subtitle C, Chapter 1. Permits must be obtained if required by said regulations.

**SPECIAL CONDITION 2:** Please contact the Illinois Department of Natural Resources (IDNR), Office of Water Resources. IDNR may require a permit pursuant to the Rivers, Lakes, and Streams Act for construction of that portion of the project located in the floodplain. The U.S. Army Corps of Engineers may also require a permit pursuant to Section 404 of the Clean Water Act. Application forms received from IDNR will specify which Corps District you should contact.

**SPECIAL CONDITION 3:** The Permittee to Construct shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activities associated with this project will result in the disturbance of one (1) or more acres total land area. Additional information is provided on the following webpage: <https://www2.illinois.gov/epa/topics/forms/water-permits/storm-water/Pages/construction.aspx>.

**SPECIAL CONDITION 4:** Horizontal and/or vertical separation between any sanitary sewers and water mains must be in conformance with Section 370.350 of the Illinois Recommended Standards for Sewage Works.

THE STANDARD CONDITIONS OF ISSUANCE INDICATED ON THE REVERSE SIDE MUST BE COMPLIED WITH IN FULL. READ ALL CONDITIONS CAREFULLY.

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DIVISION OF WATER POLLUTION CONTROL

cc: EPA-Des Plaines FCS  
Hey and Associates, Inc.  
Records - Municipal



Brant D. Fleming, P.E.  
Manager, Municipal Unit, Permit Section

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
WATER POLLUTION CONTROL PERMIT**

LOG NUMBERS: 2022-67579  
BOW ID W0318170046

PERMIT NO.: 2022-IA-67579

**FINAL PLANS, SPECIFICATIONS, APPLICATION  
AND SUPPORTING DOCUMENTS**

DATE ISSUED: August 26, 2022

PREPARED BY: Hey and Associates, Inc.

**SUBJECT:** MWRDGC – Addison Creek Channel Improvements Bellwood Lift Station  
(MWRDGC Stickney Water Reclamation Plant) – Sanitary Sewer Permit

**PERMITTEE TO CONSTRUCT**

Metropolitan Water Reclamation District of Greater Chicago  
111 East Erie Street  
Chicago, Illinois 60611

**PERMITTEE TO OWN AND OPERATE**

Village of Bellwood  
3200 Washington Boulevard  
Bellwood, Illinois 60104

Permit is hereby granted to the above designated permittee(s) to construct and operate water pollution control facilities described as follows:

1095 feet of 30 inch sanitary sewer, 5 manholes, 150 feet of 8 inch forcemain, 2 pumps rated at 851 gpm at 31 feet of TDH, a 8 foot diameter wet well, and a 8 foot diameter valve vault to serve existing flows (0 P.E., 0 GPD, DAF) located at Harrison Street and 30<sup>th</sup> Avenue in the Village of Bellwood with discharge to an existing 30 inch sanitary sewer tributary to the above indicated sewage treatment plant.

Unless the construction for which this permit is issued has been completed, this permit will expire on August 25, 2024.

This Permit is issued subject to the following Special Condition(s). If such Special Condition(s) require(s) additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval for issuance of a Supplemental Permit.

**SPECIAL CONDITION 1:** The Permittee to Construct shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activities associated with this project will result in the disturbance of one (1) or more acres total land area. Additional information is provided on the following webpage: <https://www2.illinois.gov/epa/topics/forms/water-permits/storm-water/Pages/construction.aspx>.

**SPECIAL CONDITION 2:** If this project is located within a wetlands, the U.S. Army Corps of Engineers may require a permit for construction pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

**SPECIAL CONDITION 3:** Sewage pumping stations shall be supplied with a complete set of operational instructions, including emergency procedures, maintenance schedules, tools and such spare parts as may be necessary pursuant to 35 Ill. Adm. Code 370.460. Submit all documents required by this special condition electronically to [EPA.PrmSpecCondtns@illinois.gov](mailto:EPA.PrmSpecCondtns@illinois.gov) with "2022IA67579 Special Condition 3" as the subject of the email.

**THE STANDARD CONDITIONS OF ISSUANCE INDICATED ON THE REVERSE SIDE MUST BE COMPLIED WITH IN FULL. READ ALL CONDITIONS CAREFULLY.**

BDF:JAR:2022-67579

**DIVISION OF WATER POLLUTION CONTROL**

cc: EPA-Des Plaines FOS  
Hey and Associates, Inc.  
Records - Municipal

*Brant D. Fleming/JAR*  
Brant D. Fleming, P.E.  
Manager, Municipal Unit, Permit Section

**Appendix H**  
**Air Quality**

**U.S. Environmental Protection Agency**  
**Construction Emission Control Checklist**

Consider measures that apply to the proposed project from the following list.

**Mobile and Stationary Source Diesel Controls**

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment in order to meet the following standards.

- On-Highway Vehicles: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).<sup>6</sup>
- Non-road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).<sup>7</sup>
- Locomotives: Locomotives servicing infrastructure sites should meet, or exceed, the U.S. EPA Tier 4 exhaust emissions standards for line-haul and switch locomotive engines where possible.<sup>8</sup>
- Marine Vessels: Marine vessels hauling materials for infrastructure projects should meet, or exceed, the latest U.S. EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).<sup>9</sup>
- Low Emission Equipment Exemptions: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.

Consider requiring the following best practices through the construction contracting or oversight process:

- Establish and enforce a clear anti-idling policy for the construction site.
- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.

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<sup>6</sup> <http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>

<sup>7</sup> <http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm>

<sup>8</sup> <http://www.epa.gov/otaq/standards/nonroad/locomotives.htm>

<sup>9</sup> <http://www.epa.gov/otaq/standards/nonroad/marineci.htm>

- Repower older vehicles and/or equipment with diesel- or alternatively fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.).

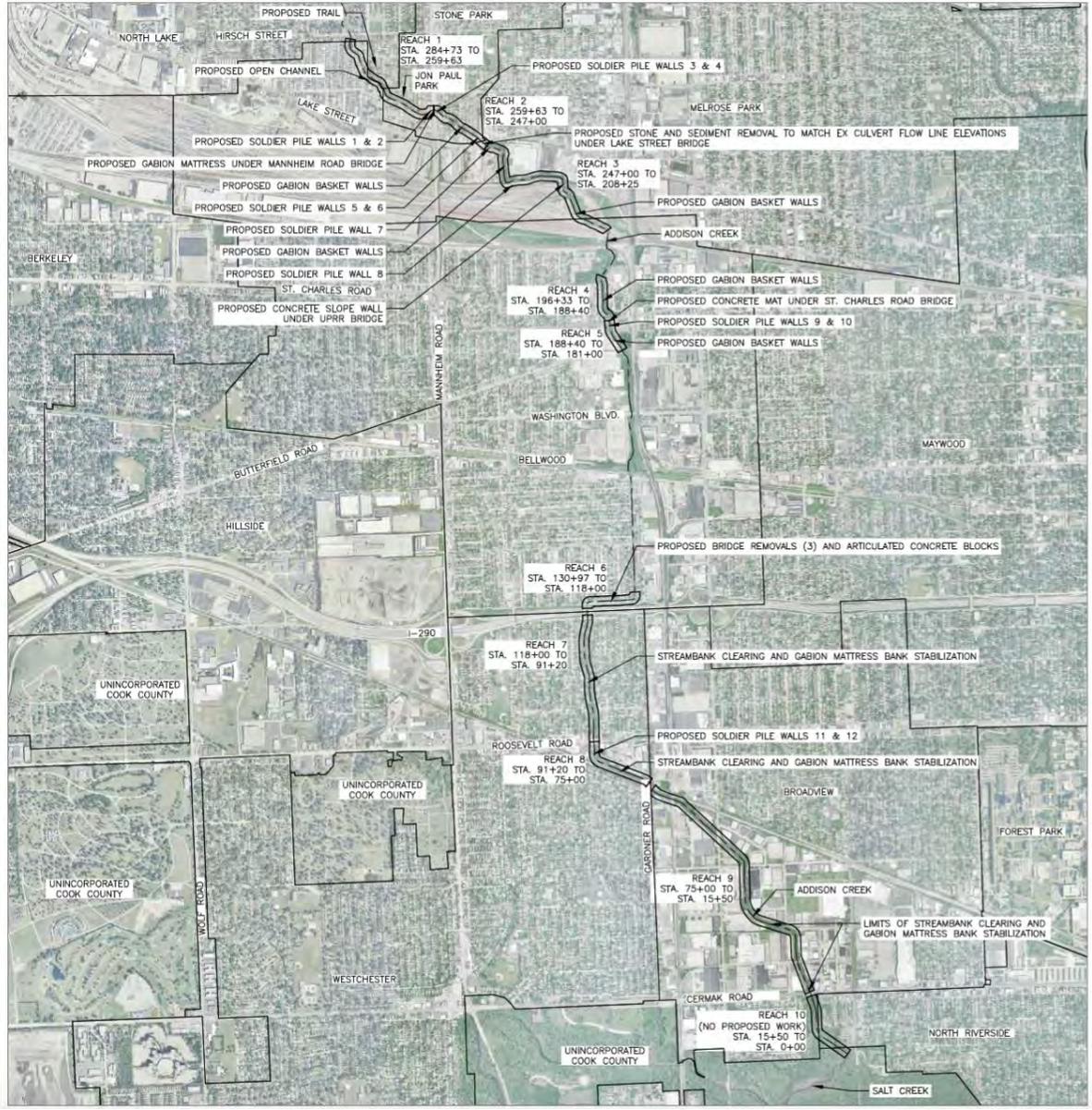
#### **Fugitive Dust Source Controls**

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

#### **Occupational Health**

- Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.

**Appendix I**  
**Construction Plans**



Rev.	Description	Appr.	Date

**METROPOLITAN WATER RECLAMATION DISTRICT  
OF GREATER CHICAGO**

Designed by: PML  
Checked by: PML  
Drawn by: ASS  
Reviewed by: JAW

Scale: AS SHOWN  
Date: 2022

Correct:

*Hoy and Associates, Inc.*  
Professional Engineer  
8758 West Jackson Road, Suite 800  
Chicago, IL 60620  
Phone: (773) 933-8889  
Fax: (773) 933-8899  
www.hoyand.com

**CONTRACT 11-187-3F  
ADDISON CREEK CHANNEL IMPROVEMENTS**

**LOCATION PLAN**



Sheet Number:  
**LP-001**

Page Number: **7**

A full set of construction drawings is available at  
**<https://mwrđ.org/public-notices>**