DRAFT ENVIRONMENTAL ASSESSMENT FOR THE VILLAGE OF STEGER STORM SEWER IMPROVEMENT PROJECT STEGER, ILLINOIS SECTION 219, WRDA 1992, AS AMENDED

July 2025

U.S. Army Corps of Engineers
Chicago District, Planning Branch
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Chicago, Illinois 60604

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DRAFT FINDING OF NO SIGNIFICANT IMPACT
VILLAGE OF STEGER
STORM SEWER IMPROVEMENT PROJECT
STEGER, ILLINOIS

The U.S. Army Corps of Engineers (USACE), Chicago District has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The Draft Environmental Assessment (EA) dated_____, for the Village of Steger Storm Sewer Infrastructure project addresses the need to increase stormwater conveyance to reduce chronic flooding in Steger, Illinois. The final recommendation is contained in the letter report dated _____.

The EA, incorporated herein by reference, evaluated a "no action" alternative and two alternative plans that would reduce flood risk in the project area. The recommended plan is Alternative 1, which includes:

- Installation of approximately 55 linear feet (LF) of new dual 15-inch diameter storm sewer pipe and 165 LF of new 60-inch diameter storm sewer pipe and three 8-foot diameter and two 9-foot diameter drainage structures along Louis Sherman Drive, south of East 33rd Street. Construction would be conducted through an open-cut trench and includes roadway reconstruction in the public right-of-way (ROW).

The EA evaluated the no action alternative as well as two other alternatives. The alternatives include:

- **No Action Alternative** – Under this alternative, USACE would not provide funding for the project and the Village of Steger would not reduce the risk of chronic flooding in the Steger area. Without this proposed project, flooding would likely continue and result in property damage and safety hazards. The non-federal sponsor would need to find other sources of funding and technical expertise to complete the desired stormwater improvements, further prolonging the risk of adverse effects to public health and safety within the affected community.

- **Alternative 1 – Improved Enclosed Storm System** – This alternative would involve the installation of 55 LF of new dual 15-inch diameter storm sewer pipe and 165 LF of new 60-inch diameter storm sewer pipe, and three 8-foot diameter and two 9-foot diameter drainage structures along Louis Sherman Drive, south of East 33rd Street.

  The storm sewers would be constructed with open cut trench methods under the roadway with pavement and curb removal. Pavement patching and various restoration activities would be completed after placement of undergound storm sewer pipe and structures. All work would be conducted within the ROW.

- **Alternative 2 – Combination Open Ditch Design** – This alternative would include the diversion of the existing 48-inch diameter storm sewer pipe to the east side of Louis Sherman Drive with the construction of a large, open ditch to carry stormwater a short distance to 33rd Street, and connection with the underground existing storm sewer trunk main along 33rd Street. Various other existing underground utilities would have to be relocated, right-of-way acquisition would be required, and the new ditch would have to be maintained in the future. Note that during heavy rain events large volumes of water would inundate the ditch and may present a safety hazard.

For the No Action and two design alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in the below table:

Summary of Potential Effects of the Recommended Plan

	Insignificant effects	Insignificant effects as a result of mitigations	Resource unaffected by action
Aesthetics	☒	☐	☐
Air quality	☒	☐	☐
Aquatic resources/wetlands	☐	☐	☒
Terrestrial communities	☒	☐	☐
Invasive species	☐	☐	☒
Threatened/Endangered species/critical habitat	☐	☐	☒
Historic properties	☐	☐	☒
Other cultural resources	☐	☐	☒
Floodplains	☒	☐	☐
Hazardous, toxic & radioactive waste	☐	☐	☒
Hydrology	☐	☐	☒
Land use	☐	☐	☒
Navigation	☐	☐	☒
Noise levels	☒	☐	☐
Public infrastructure	☐	☐	☒
Socioeconomics	☐	☐	☒
Soils	☐	☐	☒
Tribal trust resources	☐	☐	☒
Water quality	☒	☐	☐
Climate	☐	☐	☒

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices, as detailed in the EA, would be implemented, if appropriate, to minimize impacts.

No compensatory mitigation is required as part of the recommended plan.

Public and agency review of the draft EA and Finding of No Significant Impact (FONSI) was completed on _____, 2025. ___ comments were received from the general public and resource agencies. Responses to comments from public and agency review may be found in Appendix B.

Pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended, USACE determined the recommended plan would have “no effect” on federally listed species or their designated critical habitat. This determination is based on the results of a search on April 28, 2025. This concludes USACE responsibilities for this action under ESA Section 7.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, USACE determined that no historic properties would be affected by the proposed undertaking. USACE sent a letter with its determination to the Illinois State Historic Preservation Office on June 25, 2025.

Coordination with the Illinois State Historic Preservation Office is ongoing. USACE has made a good faith effort to gather information from affected Tribes identified pursuant to 36 C.F.R.§ 800.3(f). USACE has consulted with Citizen Potawatomi of Oklahoma, the Forest County Potawatomi Community of Wisconsin, the Hannahville Indian Community of Michigan, the Kickapoo Tribe of Oklahoma, the Little Traverse Bay Bands of Odawa Indians of Michigan, Menominee Indian Tribe of Wisconsin, the Miami Tribe of Oklahoma, and the Prairie Band Potawatomi Nation for assistance in identifying properties which may be of religious and cultural significance. The Tribes have not commented on the undertaking to date.

Pursuant to Sections 401 and 404 of the Clean Water Act of 1972, as amended, does not apply to the proposed infrastructure project since the project does not involve any discharge or placement of fill into waters of the U.S.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of the alternatives. Based on this report, the reviews by other federal, state and local agencies, tribes, input of the public, and the review by my staff, it is my determination the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date: _____

_____

Kenneth P. Rockwell
Colonel, U.S. Army
Commanding

VILLAGE OF STEGER
STORM SEWER IMPROVEMENT PROJECT
STEGER, ILLINOIS

DRAFT ENVIRONMENTAL ASSESSMENT

July 2025

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APE	Area of Potential Effects
ASTM	American Society for Testing and Materials
CO_2	Carbon Dioxide
EA	Environmental Assessment
EcoCAT	Ecological Compliance Assessment Tool
ECOS	Environmental Conservation Online System
EO	Executive Order
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
GHG	Greenhouse Gas
HTRW	Hazardous, toxic, and radioactive waste
IDNR	Illinois Department of Natural Resources
IEPA	Illinois Environmental Protection Agency
IPaC	Information for Planning and Consultation
MRR	Mandatory Reporting Rule
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
PL	Public Law
PM	Particulate Matter
REC	Recognized Environmental Condition
ROW	Right-of-Way
SHPO	State Historic Preservation Office
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WIIN	Water Infrastructure Improvements for the Nation
WRDA	Water Resources Development Act

CHAPTER 1 – PURPOSE AND NEED

1.1 Purpose

The purpose of the proposed project is to provide improvements to a portion of the Village of Steger's storm sewer infrastructure to increase capacity along Louis Sherman Drive to aid in addressing the greater village-wide chronic flooding issue (Figure 1).

1.2 Need for Action

The Village of Steger, located in Cook County, Illinois, experiences major flooding on average four times per year. The existing stormwater conveyance traverses and floods private properties to the south of 33rd Street. Significant storm flows in the existing condition come along Louis Sherman Drive via an existing storm sewer system that is insufficient, which can only accommodate less than a 10-year storm event. Chronic surficial flooding poses safety risks and results in property damage in the area.

1.3 Authority

The study is authorized under Section 219(f)(54) of the Water Resources Development Act (WRDA) of 1992, Public Law (PL) 102-580; as amended by Section 108(d) of the Consolidated Appropriations Act of 2001, PL 106-554; Section 142 of the Energy and Water Appropriations Act of 2004, PL 108-137; Section 1157 of the Water Infrastructure Improvements for the Nation Act of 2016, PL 114-322. These amended authorities allow the U.S. Army Corps of Engineers (USACE) to provide planning, design, and construction assistance for water-related environmental infrastructure projects.

1.4 Non-federal Sponsor

The project's non-federal sponsor is the Village of Steger in Steger, Illinois.

Figure 1: Location of the Steger, Illinois storm sewer improvement project area.

CHAPTER 2 – PROPOSED ACTION AND ALTERNATIVES

2.1 Action Alternatives

Alternative 1 – Improved Enclosed Storm System – This alternative would involve the installation of 55 linear feet (LF) of new, dual 15-inch diameter storm sewer pipe and 165 LF of new, 60-inch diameter storm sewer pipe, and three, 8-foot diameter and two, 9-foot diameter drainage structures along Louis Sherman Drive, south of East 33rd Street.

The storm sewers would be constructed with open cut methods under the roadway with pavement and curb removal. Pavement patching and various restoration activities would be completed after placement of undergound storm sewer pipe and structures. All work would be conducted within the roadway right-of-way (ROW).

Alternative 2 – Combination Open Ditch Design

This alternative would include the diversion of the existing 48-inch diameter storm sewer pipe to the east side of Louis Sherman Drive with the construction of a large open ditch to carry stormwater a short distance to 33rd Street, and connection with the underground existing storm sewer trunk main along 33rd Street. Various other existing underground utilities would have to be relocated, ROW acquisition would be required, and the new ditch would have to be maintained in the future. Note that during heavy rain events large volumes of water would inundate the ditch and may present a safety hazard.

2.2 No Action Alternative

Under this alternative, USACE would not provide funding for the project and the Village of Steger would not reduce the risk of chronic flooding in the Steger area. Without this proposed project, flooding would likely continue and result in property damage and safety hazards. The non-federal sponsor would need to find other sources of funding and technical expertise to complete the desired stormwater improvements, further prolonging the risk of adverse effects to public health and safety within the affected community.

2.3 Recommended Plan (Proposed Action)

The recommended plan is Alternative 1. The recommended plan includes the installation of new dual 15-inch diameter storm sewer pipe and 60-inch storm sewer pipe and three, 8-foot diameter and two, 9-foot diameter drainage structures along Louis Sherman Drive, south of East 33rd Street. Alternative 1 is the recommended plan because it is the most practical approach to implementing improved flood control measures as compared to alternative 2. Alternative 1 would fully address the storm sewer needs and is the most cost-effective solution.

CHAPTER 3 – ENVIRONMENTAL SETTING AND CONSEQUENCES

This section discusses the existing conditions by resource category and any potential environmental impacts associated with the no action alternative as well as with implementation of Alternative 1 (recommended plan) and Alternative 2.

USACE evaluated the potentially affected environment and the degree of the effects of the action, respectively, to consider whether the proposed action's effects are significant. In considering the potentially affected environment, USACE considered the affected area and its resources. USACE defined effects or impacts to mean changes to the human environment from the proposed action or alternatives that are reasonably foreseeable. In considering the degree of the effects, USACE considered short and long-term effects; beneficial and adverse effects; any effects to public health and safety; and whether the action threatens to violate federal, state, or local laws established for the protection of the human and natural environment. USACE considered the severity of an environmental impact as follows:

- None/negligible – No measurable impacts are expected to occur.
- Minor – A measurable and adverse effect to a resource. A slight impact that may not be readily obvious and is within accepted levels for permitting, continued resource sustainability, or human use. Impacts should be avoided and minimized if possible but should not result in a mitigation requirement.
- Significant – A measurable and adverse effect to a resource. A major impact that is readily obvious and is not within accepted levels for permitting, continued resource sustainability, or human use. Impacts likely result in the need for mitigation.
- Adverse – A measurable and negative effect to a resource. May be minor to major, resulting in reduced conditions, sustainability, or viability of the resource.
- Beneficial – A measurable and positive effect to a resource. May be minor to major, resulting in improved conditions, sustainability, or viability of the resource.
- Short-Term – Temporary in nature and does not result in a permanent long-term beneficial or adverse effect to a resource. For example, temporary construction-related effects (such as, an increase in dust, noise, traffic congestion) that no longer occur once construction is complete. May be minor, significant, adverse, or beneficial in nature.
- Long-Term – Permanent (or for most of the project life) beneficial or adverse effects to a resource. For example, permanent conversion of a wetland to a parking lot. May be minor, significant, adverse, or beneficial in nature.

USACE used quantitative and qualitative analyses, as appropriate, to determine the level of potential impact for all alternatives. USACE analyzed ecological, aesthetic, historic, cultural, economic, social, and health effects, as applicable. Based on the results of the analyses, this Environmental Assessment (EA) identifies whether a particular potential impact would be adverse or beneficial, and to what extent.

3.1 Project Area

The project area is within the Village of Steger, Cook County, Illinois. The storm sewer improvement project area is within the roadway ROW of Louis Sherman Drive and is bound by 33rd Street to the north and Steger Road to the south (Figure 1).

3.2 Physical Resources

3.2.1 Climate

Existing Condition

The climate of the study area is predominantly continental with some modifications by Lake Michigan. The National Oceanic and Atmospheric Administration's (NOAA) Online Weather Data was queried for the Chicago Midway station since that is the closest local climatology reporting location to the project area. Daily and monthly normals for temperature, precipitation, and snowfall between 1991 and 2020 were available (NOAA, 2025) (Figure 2). The mean winter high temperature is 32.8°F while the mean winter low temperature is 19.5°F (January). The mean summer high temperature is 85.2°F while the mean summer low temperature is 62.7°F (July). Annual total precipitation for the Chicago area is 40.88 inches. In winter, total snowfall is generally heavy with an annual total snowfall of 38.8 inches. The majority of snowfall occurs between December and February with total snowfall ranging from 7.9 inches (i.e., December) to 10.1 inches (i.e., February) during this timeframe.

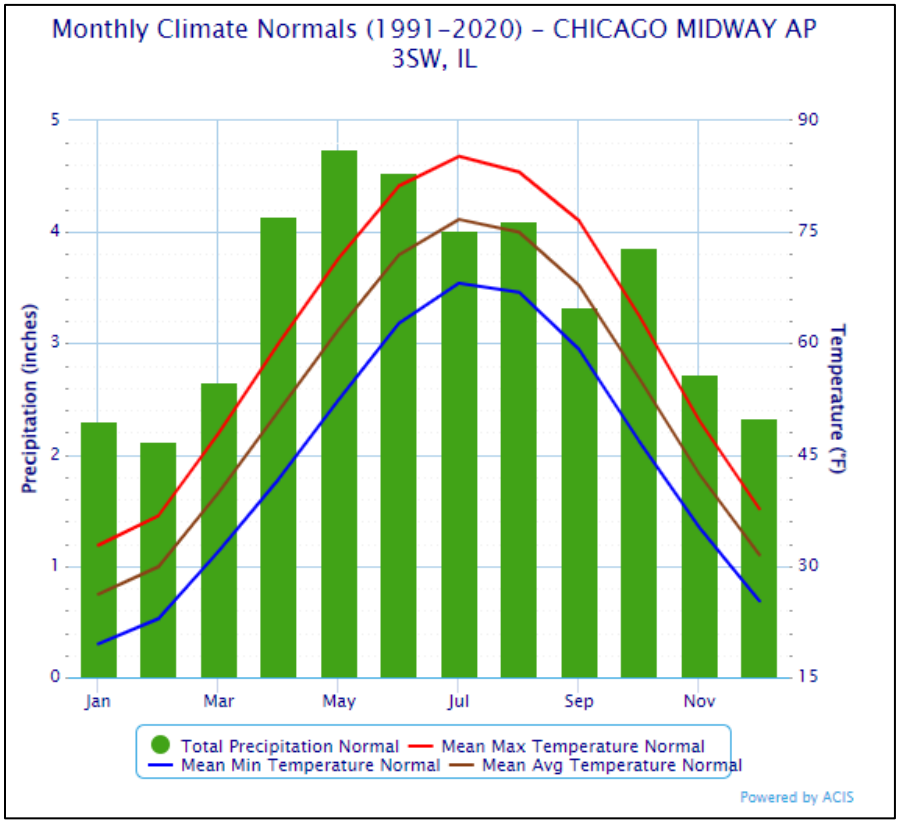

Figure 2: Normal precipitation and temperature for the general project area between 1991 and 2020 (NOAA, 2024).

Alternative Impact

Only short duration, minor discharges of carbon-based pollutants would occur during construction activities that could contribute to greenhouse gases. Long-term climate trends indicate that the Chicago area will continue to see increased flooding in urban areas due to more intense precipitation events. Alternatives 1 and 2 would not adversely impact climate and would help to offset the impacts of changing climate conditions within the project area by

reducing the risk of flooding. Therefore, implementation would have no short-term or long-term adverse effect on climate.

No Action Impact

The no action alternative would not adversely impact climate.

3.2.2 Geology & Soils

Existing Condition

Geology – Glaciation within the Chicago region ended about 13,000 years ago when the glaciers receded from the area for the last time. In the Chicago region, the most common type of bedrock is a magnesium-rich limestone called dolomite that was originally deposited on reefs set in shallow seas during the Silurian period about 400 million years ago. The youngest bedrock in the Chicago region dates from the Pennsylvania period about 300 million years ago. Surface features in the region are all made of material deposited by the glaciers or by the lakes that appeared as the glaciers melted. In some places, these deposits are nearly 400 feet thick.

Soils – The U.S. Department of Agriculture Natural Resource Conservation Service's web soil survey was queried for soils present within the project area. According to the web soil survey for the project area, there are two types of soil comprising the project area: Milford silty clay loam (91.9% of mapped area; map unit 69A) and Markham silt loam (8.1% of mapped area; map unit 531B) (Figure 3). The Milford soils are poorly drained soils formed from depressions on lake plains. The farmland classification is designated as prime farmland if drained. The Markham soils are moderately well drained soils that were formed on ground moraines or end moraines. They are classified as prime farmland. Soils in this area have previously been disturbed as a road system and businesses exist in the project area.

Alternative Impact

Implementation of either Alternative 1 (recommended plan) or Alternative 2 would include excavation and ground disturbing activities; however, these activities would not impact any unique local geologic features as none are present within the area. Both Alternative 1 (recommended plan) and Alternative 2 include the installation of new storm sewers, but the areas where excavation and construction would occur are within roadway ROWs and have been previously disturbed. Therefore, neither Alternative 1 (recommended plan) nor Alternative 2 would have any short-term or long-term adverse impacts to local geological features or soils.

No Action Impact

No impacts to geologic features or soils are anticipated as part of the no action alternative.

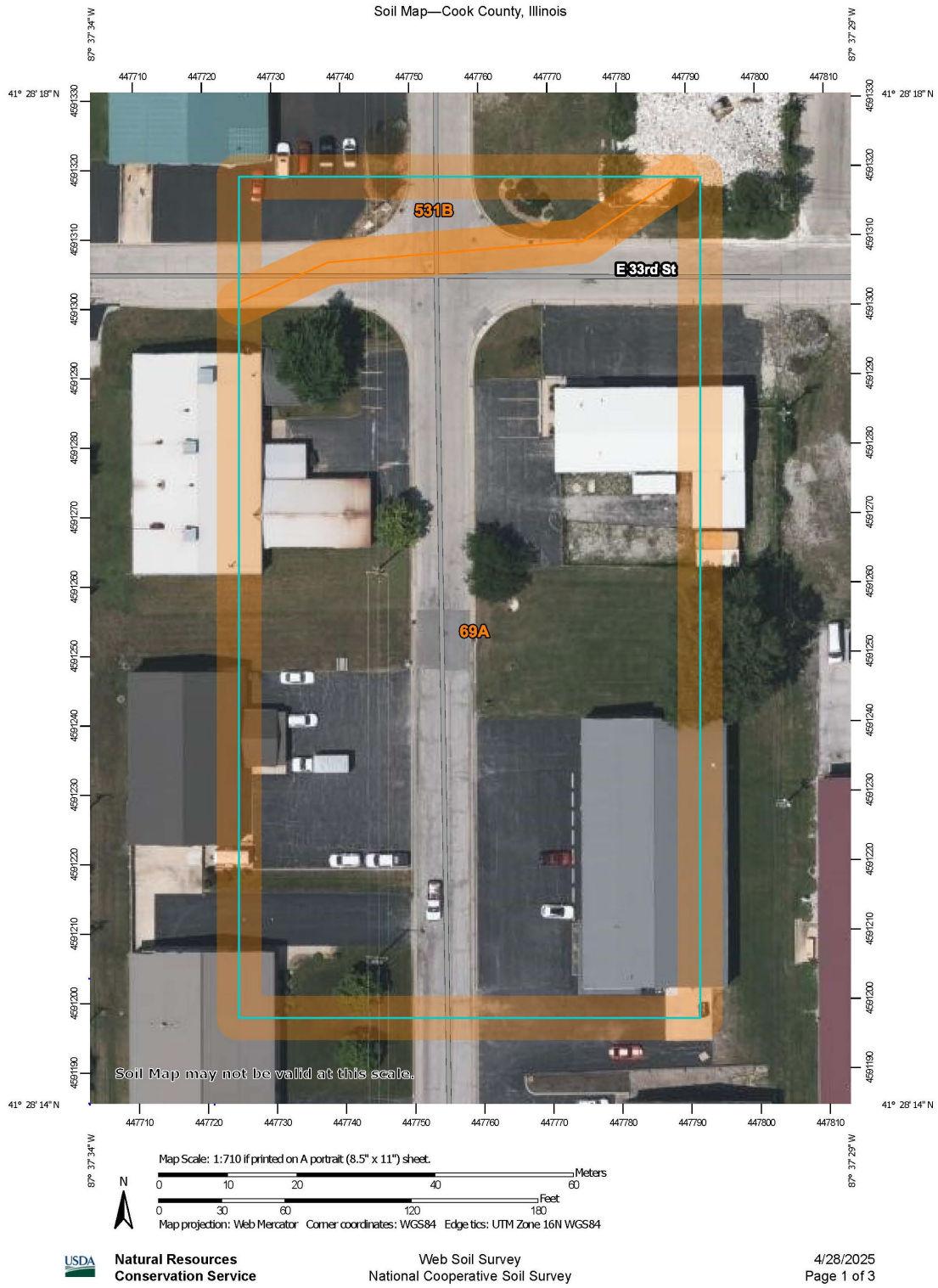

Figure 3: Natural Resources Conservation Service (NRCS) Map of Soils Within the Steger Storm Sewer Improvements Project Area (NRCS, 2025).

3.2.4 Water Quality

Existing Condition

The nearest water resource is an unnamed creek which is located approximately 850 feet east of the project area. The creek is approximately two miles long and appears to flow north toward an undeveloped municipal property owned by Chicago Heights. The unnamed creek is not connected through surficial means to the nearby Deer Creek. Heavy storm flows and stormwater conveyance from the 33rd Street stormwater infrastructure directly output into this existing creek. The National Wetlands Inventory classified the creek as an intermittent seasonally flooded riverine streambed.

Alternative Impact

Temporary construction-related impacts are not expected under both Alternatives 1 and 2. Implementation of either Alternative 1 (recommended plan) or Alternative 2 would increase conveyance into the creek but would not result in significant adverse short or long-term environmental impacts to aquatic habitat and water quality.

No Action Impact

Under the no action alternative, water quality in the project area would remain unchanged.

3.2.5 Air Quality

Existing Condition

The Chicago Metropolitan area, including the study area, is a non-attainment area for ozone. Existing air quality data are available for Cook, DuPage, and Will counties from the U.S. Environmental Protection Agency (USEPA) Air Data database (USEPA, 2025). Although the trends show overall improvement over the last 10 years, individual measurements and monitoring stations still have measurements that exceed the national standards. The existing air quality should be considered marginal but improving over time.

Table 1: Chicago Area Status for the National Ambient Air Quality Standards (NAAQS) Six Criteria Pollutants (USEPA, 2025).

NAAQS	Area Name	Most Recent Year of Nonattainment	Current Status	Classification
8-Hour Ozone (2015)	Chicago, IL-IN-WI	2025	Nonattainment	Serious
8-Hour Ozone (2008)	Chicago-Naperville, IL-IN-WI	2021	Maintenance (Since 2022)	Serious
Particulate Matter (PM)-10 (1987)	Southeast Chicago	2004	Maintenance (since 2005)	Moderate
PM-2.5 (1997)	Chicago-Gary-Lake County, IL-IN	2012	Maintenance (since 2013)	Former Subpart 1
Lead	Chicago, IL	2017	Maintenance (since 2018)	---

The USEPA's Mandatory Reporting Rule of Greenhouse Gases (MRR-GHG) applies to direct GHG emitters, fossil fuel suppliers, industrial gas suppliers, and facilities that inject carbon dioxide (CO_2) underground for sequestration (containment) or other reasons. The State of Illinois aims to reduce GHG emissions to net zero by 2050.

Alternative Impact

During project implementation of either Alternative 1 (recommended plan) or Alternative 2, construction equipment would cause negligible, temporary air quality impacts as described below with the discussion of GHG emissions. All equipment used would be in compliance with current air quality control requirements for diesel exhaust, fuels, and similar requirements. Long-term, once constructed, the project would be neutral in terms of air quality, with no features that either emit or sequester air pollutants to a large degree.

Regarding GHG emissions, construction of Alternative 1 (recommended plan) would take approximately 30 working days, or approximately 55 calendar days. Whereas construction of Alternative 2 would take approximately 35 working days, or approximately 64 calendar days, and the average working day is anticipated to be 8 hours for both alternatives. For both alternatives, the majority of GHG emissions would occur through the operation of construction equipment (i.e. excavators, skid steers, small wheels, rollers, etc.)(Appendix A), and through semi-trucks transporting materials on and off site. Due to the less equipment operation hours, Alternative 1 would have lower GHG emissions compared to Alternative 2.

Neither Alternative 1 or Alternative 2 would sequester carbon or impact the ability of the State of Illinois to meet its emissions goals. Implementation of the recommended plan would not result in significant short-term or long-term impacts related to GHG emissions or air quality more generally within Cook County.

No Action Impact

Under the No Action Alternative, the storm sewer infrastructure within the project area would remain in place and continue to be insufficient in terms of capacity. Surficial flooding on roads may require vehicle detours. These impacts would be insignificant. Regarding GHG emissions, the No Action would not include any repairs; therefore, there would be no equipment operation hours. Any emissions would occur from vehicle detours or debris cleanup during and after flooding events, however emissions for the No Action Alternative would still be lower than for the action alternatives. Therefore, the no action alternative would have lower GHG emissions compared to both Alternative 1 and Alternative 2.

The no action alternative would not sequester carbon nor impact the ability of the State of Illinois from meeting their emissions goals. The no action alternative would not result in significant short-term or long-term impacts on air quality or GHG emissions.

3.2.6 Land Use

Existing Condition

Existing land use in the project area is comprised of the following categories: business and manufacturing. The new storm sewer installation project would occur within the roadway ROW. The Village of Steger zoning map designates the areas adjacent to the project area as B-3 Service Wholesale to the west and M-1 Limited Manufacturing to the east.

Alternative Impact

Implementation of Alternative 1 (recommended plan) or Alternative 2 would not be in conflict with the Village of Steger's designation as a roadway ROW or the adjacent land use. Neither alternative 1 nor 2 would change the designation of the area to another land use category.

Therefore, there would be no short-term or long-term, adverse impacts on land use within the project area.

No Action Impact

No impacts to land use would occur as part of the no action alternative.

3.2.7 Floodplains

Existing Condition

Executive Order 11988 (*Floodplain Management*), as amended, requires federal agencies to consider the potential effects of their proposed actions on floodplains. In order to determine the alternatives' potential floodplain impact, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were queried to determine if the proposed project area is located within a Special Flood Hazard Zone Area or Other Area of Flood Hazard. According to the Village of Steger Flood Map (Area Number 17031C0807J and 17031C0826J), the proposed project is not located within the floodplain and the area has been designated as a Minimal Flood Hazard Area (Figure 4) (FEMA, 2025). The existing storm sewer infrastructure conveyance from 33rd Street directly output into the unnamed creek approximately 850 feet east of the project location.

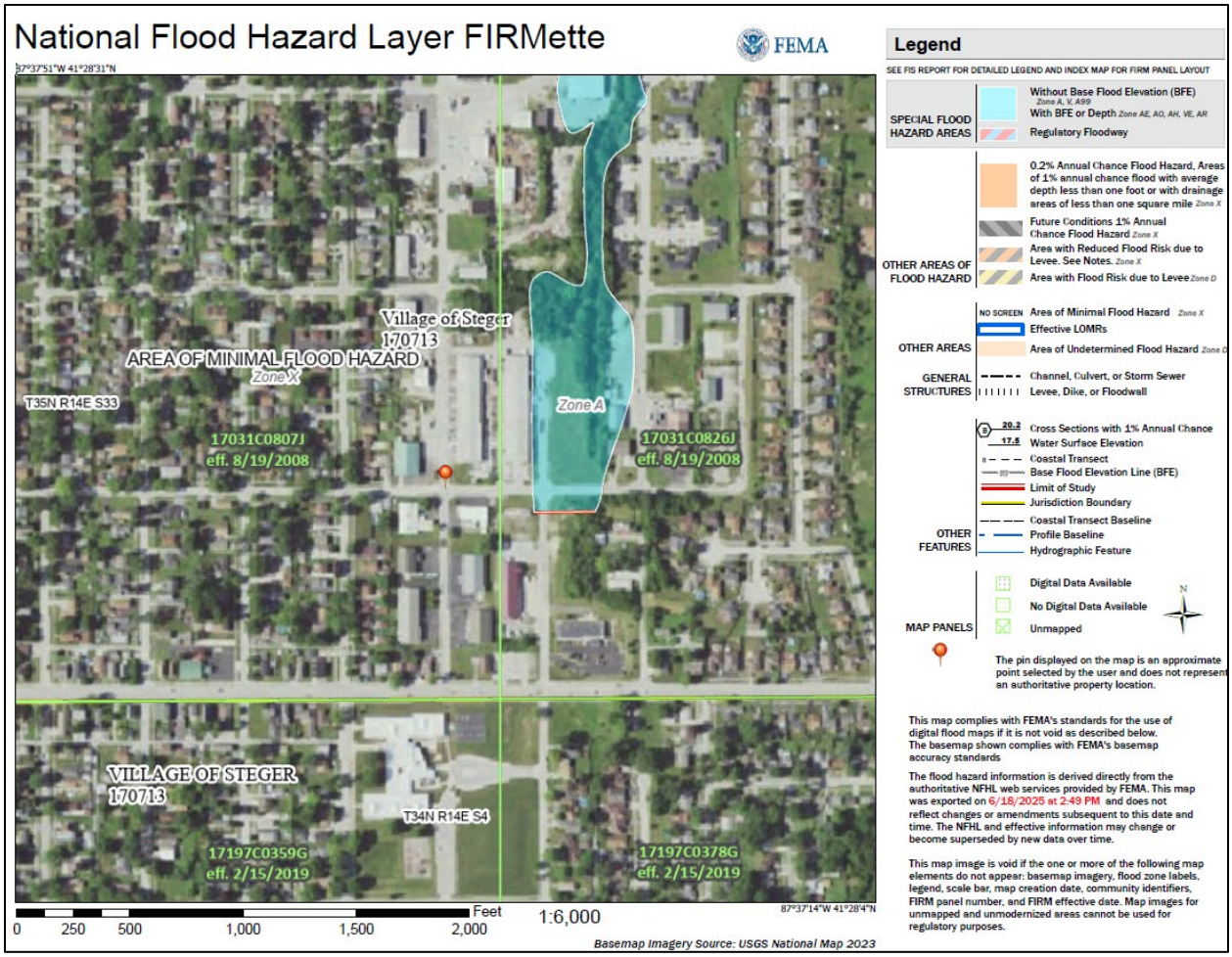

Figure 4: Floodplain map for the Steger storm sewer improvement project area.

Alternative Impact

The construction of underground infrastructure would include the connection to the existing storm sewer infrastructure conveyance along 33rd street. This would increase the stormwater conveyance into the unnamed creek during storm events. While the increased conveyance would be a beneficial impact for flood risk management for the area, it also has the potential to slightly expand the floodplain for the unnamed creek. This would be a long-term minor adverse impact to the floodplain with the area immediately surrounding the existing outlet into the unnamed creek is zoned as manufacturing. There is a general residential zoned area downstream of the existing outlet that is adjacent to the unnamed creek and currently outside of the floodplain, it is unlikely that impacts to the floodplain would occur at that location due to the distance and topography.

No Action Impact

As no construction related activities would be implemented, no impacts to floodplains are anticipated to occur from the no action alternative.

3.2.8 Wetlands

Existing Condition

National Wetland Inventory (NWI) maps were reviewed for the proposed project area and are included in Appendix B. NWI mapping did not identify any wetlands within or adjacent to the project area (USFWS, 2024). However, the nearby unnamed creek is identified as R4SBC, (riverine, intermittent, streambed, seasonally flooded).

Alternative Impact

No impacts to wetlands are anticipated because no wetlands are within or adjacent to the project area.

No Action Impact

No impacts to wetlands are anticipated for the no action alternative.

3.3 Biological Resources

3.3.1 Aquatic Communities

Existing Condition

Fish

The closest water resource to the project area is the unnamed creek which is located approximately 850 feet east of the project area. The creek's surface waters are not connected to other flowing rivers or streams that would promote fish movement. The creek does appear to be hydraulically connected to a small freshwater pond on an undeveloped municipal property. However, as this pond is not part of a natural preserve and is on fenced property, it is unlikely to be stocked with fish. According to known databases, there appears to be no fish that reside within the unnamed creek.

Aquatic Macroinvertebrates

While the nearby unnamed creek appears to be devoid of fish, there is the likelihood that aquatic macroinvertebrates reside in the intermittent creek. While a survey was not readily available, it would be appropriate to assume that known pollutant tolerant and common species within the region would likely be found residing within the creek due to the creek primarily

receiving stormwater flows. The following aquatic macroinvertebrates are likely to occur within the unnamed creek: Flat worm, Oligochaeta, Leech, Isopod, Crayfish, Dragonfly, Damselfly, Caddisfly, Non-biting Midge (Chironomids), Black Fly, Crane Fly, and Mosquito.

Alternative Impact

Construction would not include any in-water work. While, implementation of either Alternative 1 (recommended plan) or Alternative 2 would increase conveyance into the creek this would not result in significant adverse short or long-term environmental impacts to aquatic habitat and water quality. Overall, since no in-water work would occur, the alternatives are not expected to have any short-term or long-term adverse impacts to aquatic resources.

No Action Impact

As no construction related activities would be implemented, no impacts to aquatic communities are anticipated to occur from the no action alternative.

3.3.2 Terrestrial Communities

Existing Condition

Reptiles and Amphibians

Due to the relative urban nature of the project areas, only common species of reptiles and amphibians would be expected to be present. Common species that may be in the general area of the project area could include common garter snake (*Thamnophis sirtalis*), northern watersnake (*Nerodia sipedon*), eastern racer (*Coluber constictor*), American bullfrog (*Lithobates catesbeianus*), and snapping turtle (*Chelydra serpentina*).

Birds

The western shoreline of Lake Michigan is recognized as “one of the most important flyways for migrant songbirds in the United States by many ornithologists and birdwatchers worldwide” (Shilling and Williamson, BCN), and is considered globally significant. An estimated 5 million songbirds use the north-south shoreline of Lake Michigan as their migratory sight line every year. Although the project area is within the vicinity of Lake Michigan, there is no significant bird habitat present within the project area. The project area is located within the vicinity of business, manufacturing, residential, and open space land use types. Due to the relative urban nature of the area, birds that may be present within the area would primarily be common species that are fairly habituated to human disturbance. Common species that may be observed include: European starling (*Sturnus vulgaris*), American robin (*Turdus migratorius*), mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), Canada goose (*Branta canadensis*), and blue jay (*Cyanocitta cristata*).

Mammals

A list of mammals that have potential to occur within the project areas was assembled utilizing publications and available data. Large mammal habitat is degraded or non-extant within the project area; however, coyote (*Canis latrans*), red fox (*Vulpes vulpes*) and white-tailed deer (*Odocoileus virginianus*) make up the large mammal potential for the area. Small mammals that have the potential to occur within the project area include common urban species such as eastern gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), eastern cottontail (*Sylvagius floridanus*), and raccoon (*Procyon lotor*).

Alternative Impact

Construction of both Alternative 1 (recommended plan) and Alternative 2 would occur in a

business and manufacturing area adjacent to a residential area. Therefore, only common species are anticipated to be present. The presence of construction equipment and construction activities is likely to disturb common terrestrial species and cause them to avoid the area in the short-term. However, this would be a temporary negligible impact, and the species would be expected to return to the area as soon as construction is complete.

No Action Impact

No impacts to terrestrial communities are anticipated to occur from the no action alternative.

3.3.3 Threatened and Endangered Species

Existing Condition

Federal

A query of USFWS's Environmental Conservation Online System Information for Planning and Consultation (ECOS-IPaC) (Consultation Code 2025-0089219) on April 28, 2025, resulted in an official species list of federally listed species that may be present within the project area. Obtaining the official species list from ECOS-IPaC fulfills the requirement for federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." Eight federally listed threatened, endangered, proposed endangered, and experimental population species were identified as potentially occurring within the project area (Table 2). Critical habitat has been designated for the Hine's emerald dragonfly and proposed for the rufa red knot; however, the project location is outside the critical habitat and proposed critical habitat area for both of these species.

Table 2: Federally listed Species with the Potential of Occurring within the Project Area.

Species Name	Federal Status	Habitat	Potential to Occur
Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered	Hibernates in caves and mines – swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods during the summer.	**Not expected to occur**; lack of suitable habitat.
Eastern Massasaugua (*Sistrurus catenatus)*	Threatened	Wet areas including wet prairies, marshes, and low areas along rivers and lakes. Use adjacent upland areas.	**Not expected to occur**; lack of suitable habitat.
Red Knot (*Calidris canutus rufa*)	Threatened	Sandy beaches, saltmarshes lagoons, mudflats, mangrove swamps, and shorelines of large lakes.	**Not expected to occur**; lack of suitable habitat.
Whooping Crane (*Grus americana*)	Experimental Population, Non-essential	Found in wetlands, marshes, mudflats, wet prairies, and fields.	**Not expected to occur;** lack of suitable habitat

Species Name	Federal Status	Habitat	Potential to Occur
Hine's Emerald Dragonfly (*Somatochlora hineana*)	Endangered	Calcareous spring-fed marshes and sedge meadows overlaying dolomite bedrock	**Not expected to occur**; lack of suitable habitat.
Monarch Butterfly (*Danaus plexippus)*	Candidate	Prefer grassland ecosystems with native milkweed and nectar plants.	**Not expected to occur**; lack of suitable habitat.
Eastern Prairie Fringed Orchid *(Platanthera praeclara)*	Threatened	Mesic to wet unplowed tallgrass prairies and meadows.	**Not expected to occur**; lack of suitable habitat.
Leafy Prairie-Clover (*Dalea foliosa*)	Endangered	Prairie remnants along the Des Plaines River, IL in soils over limestone substrate	**Not expected to occur**; lack of suitable habitat.

State

The IDNR Ecological Compliance Assessment Tool (EcoCAT) was queried on October 9, 2024, for state-listed species that may be present within the vicinity of the project area (IDNR Project Number 2512421). The review resulted in no record of state-listed threatened or endangered species, Illinois Natural Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water reserves in the vicinity of the project location.

Alternative Impact

USACE determined that the implementation would have 'no effect' on all of the federal-listed species listed in Table 2 because these species are not expected to occur within the vicinity of the project area due to lack of suitable habitat, or because there are no records of the listed species in the project area. Additionally, there are no plans for tree removal as part of the project scope.

The Natural Resource Review Results letter generated from EcoCAT states that consultation is terminated and is valid for two years unless new information becomes available that was not previously considered.

No Action Impact

No impacts to federal-listed species are anticipated under the no action alternative.

3.4 Cultural & Social Resources

3.4.1 Cultural Resources

Existing Condition

USACE coordinated its environmental review of impacts on cultural resources for NEPA with its responsibilities to take into account effects on historic properties as required by Section 106 of the National Historic Preservation Act. USACE determined and documented the area of potential effect (APE), as required at 36 C.F.R § 800.4 of the regulations implementing Section

106. The undertaking is in Section 33, Township 35 North, Range 14 East in Cook County, Illinois (Figure 1). The APE for the undertaking encompasses the project area, including staging and access routes, and totals approximately 0.5 acres. USACE believes that the APE is sufficient to identify and consider potential effects of the proposed project.

USACE has conducted a records search and literature review of the project APE on the Illinois Inventory of Archaeological Sites and the National Register of Historic Places (NRHP). The literature review and records search revealed that there are no previously known archaeological sites or historic properties listed in the NRHP within the project APE. USACE has made a good faith effort to gather information from affected Tribes identified pursuant to 36 C.F.R.§ 800.3(f). USACE has consulted with Citizen Potawatomi of Oklahoma, the Forest County Potawatomi Community of Wisconsin, the Hannahville Indian Community of Michigan, the Kickapoo Tribe of Oklahoma, the Little Traverse Bay Bands of Odawa Indians of Michigan, Menominee Indian Tribe of Wisconsin, the Miami Tribe of Oklahoma, and the Prairie Band Potawatomi Nation for assistance in identifying properties which may be of religious and cultural significance. The Tribes have not commented on the undertaking to date.

Alternative Impact

USACE made a reasonable and good faith effort to identify historic properties that may be affected by this undertaking. As the project APE is entirely within the existing disturbed soil of the road right-of-way, this precludes the presence of any intact archaeological deposits. For this reason and based on the results of the archival research, USACE has determined that there would be no historic properties affected by the proposed undertaking. A finding of No Historic Properties Affected was submitted to the IL SHPO on June 25, 2025. Coordination is ongoing and USACE anticipates concurrence.

No Action Impact

No impacts to Cultural Resources are anticipated under the no action alternative.

3.4.2 Recreation

Existing Condition

The Village of Steger offers recreational opportunities at the Veterans Memorial Park overseen by the Steger Recreation Board and maintained by the Steger Public Works. Additional nearby recreation opportunities include Lincoln Oaks Golf Course, nature parks, and preserves, such as Sauk Trail Woods and Lake.

Alternative Impact

Since the project area is confined to the roadway and parkway, implementation would have no direct or indirect short-term or long-term impacts to recreation within the project area.

No Action Impact

No impacts to recreation are anticipated under the no action alternative.

3.4.3 Social Setting and Other Social Effects

Existing Condition

The project area is located within the village limits of Steger, Illinois. The U.S. Census Bureau's Quick Facts (U.S. Census Bureau, 2025) for Steger, Cook County, and Illinois were reviewed for demographic information presented in Table 3.

Table 3: Vintage Year 2024 U.S. Census Data for Steger, Cook County, Illinois.

Category	Steger	Cook County	Illinois
Total Population	9,376	5,182,617	12,710,158
Under 18 years	22.2%	20.7%	21.6%
Under 5 years	4.8%	5.2%	5.3%
White	59.6%	65.2%	76.0%
Black or African American	17.9%	23.3%	14.6%
American Indian and Alaska Native	0.1%	0.8%	0.6%
Asian	1.2%	8.3%	6.3%
Native Hawaiian and Other Pacific Islander	0.0%	0.1%	0.1%
Hispanic of Latino	22.2%	27.0%	19.0%
Two or more races	10.8	2.3%	2.3%
High School Graduate or Higher	88.4%	88.3%	90.3%
Bachelor's Degree or Higher	16.8%	41.9%	37.2%
Median Household Income	$59,691	$81,797	$81,702
Below Poverty Level	15.0%	13.2%	11.6%

Alternative Impact

When evaluating potential impacts to economically disadvantaged or other historically vulnerable populations, USACE analyzed whether construction of the recommended plan would have a disproportionate impact to minorities, low-income households, or children (i.e., under the age of 18). To evaluate potential disproportional impacts to minority populations or to low-income households, USACE compared socioeconomic data from Cook County and the State of Illinois to socioeconomic data for the Village of Steger.

Minorities comprise approximately 40.4% of the total population in the Village of Steger. The minority population of the Village of Steger is relatively comparable to that of the rest of Cook County (34.8%) and the State of Illinois (24%). The alternatives are expected to have a beneficial impact on all at risk sectors of the Steger community by reducing the risk of flooding due to installation of the new storm sewer line, and no adverse impacts.

15.0% of households in the Village of Steger are below the poverty line, while greater than the poverty rates in Cook County (13.2%) and the State of Illinois (11.6%), the percentages are still relatively comparable. Implementation is expected to have an overall beneficial impact on all at risk sectors of the Steger community by reducing flood risk. Therefore, implementation is not expected to have a disproportionate adverse impact on low-income populations.

Lastly, approximately 22.2% of the total population in the Village of Steger is comprised of children under the age of 18. In comparison, approximately 20.7% of the total population in Cook County and 21.6% of the total population in Illinois is comprised of children under the age

of 18. These percentages are within range of each other and do not indicate that there is a significantly higher percentage of children under age 18 within the project area as compared to the County and State. The project is expected to have an overall beneficial impact on all at risk sectors of the Steger community by reducing flood risk. Therefore, implementation would have no disproportionate, adverse impact on children.

Implementation of either Alternative 1 (recommended plan) or Alternative 2 would have no short-term or long-term adverse impacts to the social setting within the area. Beneficial impacts are anticipated as implementation of the new storm sewer infrastructure is expected to reduce flood risk in adjacent residential areas.

Potential impacts to other social effects such as security of life, health, and safety were also considered for the impact analysis. A proposed action could have a beneficial or adverse impact depending on if the proposed action 1) reduces/increases/does not change risk of flood, drought, or other disaster affecting the security of life, health, and safety; 2) reduces/increases/does not change the number of disease-carrying insects and related pathological factors; 3) reduces/increases/does not change the concentration and exposure to water and air pollution; and 4) reduces/increases/does not change to providing a year-round consumer choice of food that contributes to the improvement of national nutrition. Implementation would potentially have a beneficial impact to life, health, and safety, by reducing the risk of flooding on adjacent residential properties.

No Action Impact

The no action alternative could have a long-term adverse impact to the social setting within the project area due to continued flooding and the resulting property damage and safety concerns.

3.5 Hazardous, Toxic, and Radioactive Waste (HTRW)

Existing Condition

A Phase I HTRW Environmental Site Assessment (ESA) was completed for the project area in accordance with American Society for Testing and Materials (ASTM) Practice E 1527-21 and USACE Engineer Regulation 1165-2-132. The investigation relied on site reconnaissance and a review of reasonably ascertainable environmental records, including regulatory database information and historic information, to determine the likelihood that the project area contains a recognized environmental condition (REC) or HTRW. The Phase I ESA was conducted in general accordance with ASTM Standard Practice E-1527-21 and constitutes “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice,” as defined at 42 USC §9601(35)(B). The Phase 1 ESA did not identify RECs or HTRW in the project area or adjoining properties.

Alternative Impact

In accordance with ER 1165-2-132, Hazardous Toxic, and Radioactive Waste for USACE Civil Works projects, construction of civil works projects in HTRW contaminated areas should be avoided where practicable. Where HTRW contaminated areas or impacts cannot be avoided, response actions must be acceptable to the USEPA and applicable state regulatory agencies. All HTRW response actions, including off-site disposal of materials containing Comprehensive Environmental Response Cleanup and Liability Act (CERCLA) regulated substances, are 100% non-Federal project sponsor responsibility. Results of the Phase I ESA suggests that there is low risk that HTRW will be encountered during construction. Excess soil management and

waste disposal will be conducted in accordance with federal, state, and local laws and regulations.

No Action Impact

The No Action Alternative would have no short-term or long-term impacts to HTRW contaminated areas.

3.7 Irreversible and Irretrievable Commitment of Resources

The recommended plan would not entail significant irretrievable or irreversible commitments of resources. Long-term sustainability actions were included for the benefit of environmental resources.

3.8 Short-term Use of Man's Environment and Maintenance of Long-term Productivity

NEPA, Section 102(2)(C)(iv) calls for a discussion of the relationship between local short-term uses of man's environment and maintenance and enhancement of long-term productivity in an environmental document. The short-term use of man's environment would consist of disturbances including construction noise, minor traffic disruptions, and visual impacts.

The negative short-term effects resulting from the recommended plan are of minor concern when compared with the positive long-term benefits that would enhance and maintain long-term productivity. Long-term reduction of flooding would create a less hazardous place for residents.

Under the no action alternative, no project would be implemented. Therefore, the risk of chronic flooding would not be reduced.

3.9 Probable Adverse Effects Which Cannot be Avoided

There are no probable effects which cannot be avoided from the implementation of the proposed action.

3.10 Summary of Potential Effects

For all alternatives, the potential effects were evaluated, as appropriate. A summary of the potential effects of the recommended plan is presented in Table 4.

Table 4: Environmental Impact Summary

	Insignificant effects	Insignificant effects as a result of mitigations	Resource unaffected by action
Aesthetics	☒	☐	☐
Air quality	☒	☐	☐
Aquatic resources/wetlands	☐	☐	☒
Terrestrial communities	☒	☐	☐
Invasive species	☐	☐	☒
Threatened/Endangered species/critical habitat	☐	☐	☒
Historic properties	☐	☐	☒
Other cultural resources	☐	☐	☒
Floodplains	☒	☐	☐
Hazardous, toxic & radioactive waste	☐	☐	☒
Hydrology	☐	☐	☒
Land use	☐	☐	☒
Navigation	☐	☐	☒
Noise levels	☒	☐	☐
Public infrastructure	☐	☐	☒
Socioeconomics	☐	☐	☒
Soils	☒	☐	☐
Tribal trust resources	☐	☐	☒
Water quality	☐	☐	☒
Climate	☐	☐	☒

CHAPTER 4 – COORDINATION AND COMPLIANCE

4.1 Regulatory Requirements

The proposed action is in full compliance with appropriate statutes, executive orders and regulations, including but not limited to, the National Historic Preservation Act, as amended, Fish and Wildlife Coordination Act, as amended, Endangered Species Act of 1973, as amended, Section 10 of Rivers and Harbors Act of 1899, Clean Air Act, as amended, National Environmental Policy Act of 1969, as amended, EO 11990 (Protection of Wetlands), EO 11988 (Floodplain Management), and the Clean Water Act, as amended.

4.1.1 National Historic Preservation Act

Section 106 of the National Historic Preservation Act (54 U.S.C. § 300101, et seq.) requires federal agencies to consider the effects of proposed federal undertakings on historic properties included on or eligible for the National Register of Historic Places. The implementing regulations for Section 106 (36 C.F.R. § 800) require federal agencies to consult with various parties, including the SHPO and Indian tribes, to identify and evaluate historic properties, and to assess and resolve effects to historic properties. The USACE is in ongoing consultation with the Illinois SHPO to identify and evaluate historic properties, and to assess and resolve effects to historic properties pursuant to regulations for Section 106 (36 CFR § 800) of the NRHP (16 USC 470). A finding of No Historic Properties Affected was submitted to the IL SHPO on June 25, 2025.

Pursuant to regulations for Section 106 (36 CFR § 800) of the NHPA (54 U.S.C. § 306108), USACE has consulted with Citizen Potawatomi of Oklahoma, the Forest County Potawatomi Community of Wisconsin, the Hannahville Indian Community of Michigan, the Kickapoo Tribe of Oklahoma, the Little Traverse Bay Bands of Odawa Indians of Michigan, Menominee Indian Tribe of Wisconsin, the Miami Tribe of Oklahoma, and the Prairie Band Potawatomi Nation for assistance in identifying properties which may be of religious and cultural significance.

4.1.2 Endangered Species Act

Section 7 of the Endangered Species Act requires USACE to ensure its activities are not likely to jeopardize the continued existence of federally listed species or destroy or adversely modify designated critical habit. USACE accessed the USFWS IPaC website on April 28, 2025, to determine whether endangered, threatened, proposed, or candidate species could potentially be present in the action area, and if the action area overlapped with any designated or proposed critical habitat (Project Code 2025-0089216; Appendix B). The results of the IPaC search are shown in Section 3.3.3. USACE used best available information to evaluate whether the species on the IPaC list would be potentially affected by the action. Due to the project occurring in an area where there is no suitable habitat present for the identified species, USACE determined the action would have “no effect” to federally listed species or their critical habitat.

4.1.3 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation with the state and USFWS for recommendations to minimize impacts on fish and wildlife resources. Because the project will

not affect or modify surface waters, including wetlands, consultation under the Fish and Wildlife Coordination Act (FWCA), 16 USC 661 et seq., is not required.

4.2 Public Review and Agency Coordination

Coordination with federal and state agencies, tribal organizations, and other stakeholders was conducted as set forth in policy. The following describes coordination, including scoping and public and agency review, that has occurred. The NEPA scoping process extended from July 26, 2024, through August 27, 2024. In total, one response was received from agencies and stakeholders. Public and agency review occurred from ___, 2025 through ___, 2025. __comments were received during this review. All comments from public and agency review received during public review were considered, incorporated into the final EA, as appropriate, and are maintained in Appendix B.

4.2.1 U.S. Fish and Wildlife Service

See Section 4.1.3 above.

4.2.2 Illinois State Historic Preservation Office

See Section 4.1.1 above.

4.2.3 Tribal Coordination

See Section 4.1.1 above.

4.2.4 Illinois Department of Natural Resources

IDNR was consulted and provided a response to USACE's NEPA scoping process via a letter dated August 23, 2024. The letter stated that IDNR does not have any objections to the proposed project.

4.2.5 Illinois Environmental Protection Agency

The Illinois Environmental Protection Agency was consulted during the scoping period.

CHAPTER 5 - BIBLIOGRAPHY

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Appendix A: Vehicle and Equipment Usage for Design Alternatives

Appendix B: Coordination