



**US Army Corps
of Engineers®**
St. Paul District

Draft Environmental Assessment

City of Baudette Westwood Housing, Sewer and Watermain Improvements

NEPA ID: EAXX-202-00-B6P-1769756327

Lake of the Woods County, Minnesota
March 2026



Draft Environmental Assessment
City of Baudette
Westwood Housing, Sewer and Watermain Improvements
NEPA ID: EAXX-202-00-B6P-1769756327

Table of Contents

1	Introduction	1
1.1	Background	1
1.2	Purpose and Need	2
1.3	Authority	3
2	Alternatives	3
2.1	No Action Alternative	3
2.2	Proposed Alternative	3
3	Affected Environment and Environmental Consequences	5
3.1	Natural Resources	5
3.1.1	Air Quality	5
3.1.2	Water Quality	6
3.1.3	Geology and Soils	7
3.1.4	Wetlands and Aquatic Habitat	9
3.1.5	Floodplain	11
3.1.6	Terrestrial Habitat	12
3.1.7	Wildlife	12
3.1.8	Threatened and Endangered Species	13
3.1.9	Invasive Species	15
3.2	Socio-economic Resources	15
3.2.1	Recreation	15
3.2.2	Noise	16
3.2.3	Transportation	16
3.2.4	Health and Safety	17
3.3	Cultural Resources	17
3.4	Mitigation	18
4	Environmental Compliance	19

4.1	National Environmental Policy Act	19
4.2	Bald and Golden Eagle Protection Act	19
4.3	Clean Water Act.....	19
4.4	Endangered Species Act.....	19
4.5	Fish and Wildlife Coordination Act	19
4.6	National Historic Preservation Act.....	20
5	Distribution and Review of the Draft Environmental Assessment	21
6	References	21

Draft Environmental Assessment

City of Baudette Westwood Housing, Sewer and Watermain Improvements

1 Introduction

1.1 Background

The city of Baudette is in Lake of the Woods County, Minnesota, on the northern border of the state. Baudette is just south of Lake of the Woods on State Highways 11 and 172 and close to Zippel Bay State Park and Beltrami Island State Forest Figure 1.

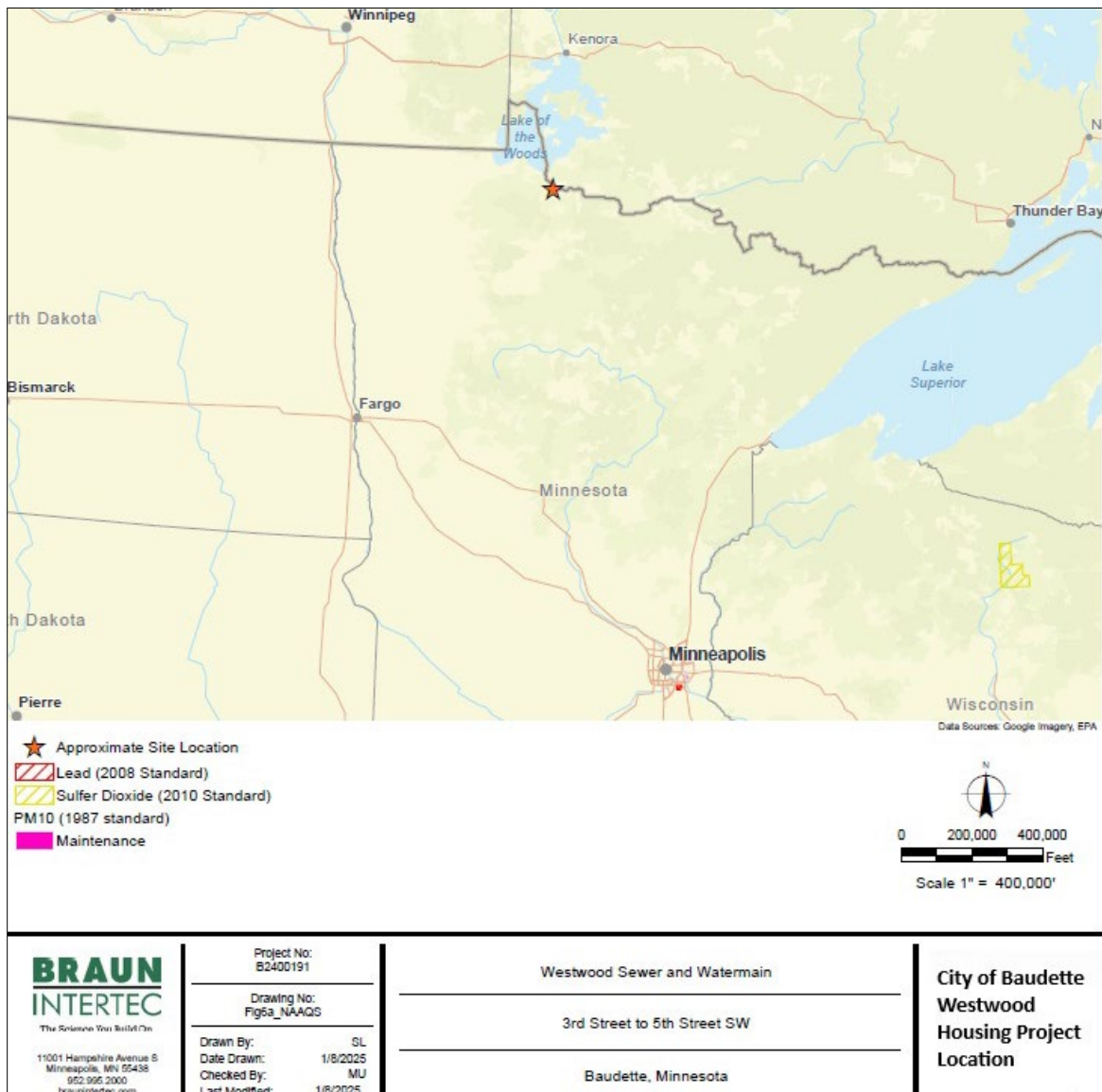


Figure 1. Project location.

The Baudette Housing and Redevelopment Authority (HRA) owns 20 units of housing originally constructed in 1960 as family housing for personnel stationed at the Baudette Air Force Radar Station. This housing area is now known as the Westwood Housing development (see Figure 2 below). The area is eligible for the National Register of Historic Places (NRHP) as part of the Baudette Air Force Radar Station and Family Housing discontinuous historic district.

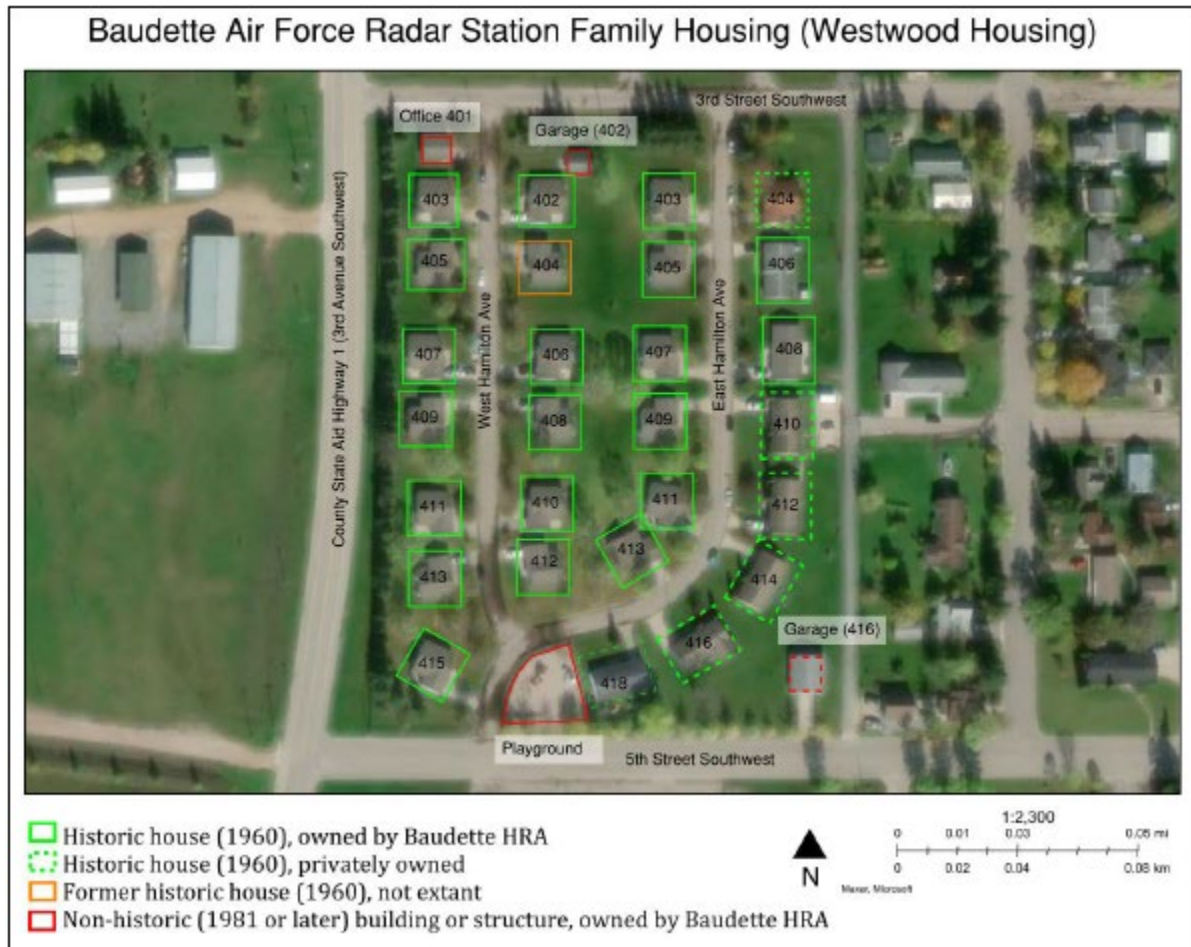


Figure 2. Historic Baudette Air Force Radar Station Family Housing (Westwood Housing). Aerial view courtesy of Lake of the Woods County.

1.2 Purpose and Need

The proposed federal action is to provide design and construction assistance to the City of Baudette and the Baudette HRA to replace the aging water and sewer infrastructure in and adjacent to the Westwood Housing public housing development. In recent years, existing sanitary piping composed of a mix of materials including polyvinyl chloride (PVC), clay tile and cast iron (which do not meet current code requirements) within the HRA owned houses has started to fail, causing displacement of residents. The associated water and sewer services and mains are also prone to freezing due to inadequate installation depth. Additionally, the residential development lacks a stormwater drainage system, resulting in localized flooding and deterioration of streets. Existing catch basins and manhole structures associated with the existing stormwater system beneath County State Aid Highway (CSAH) 1 have experienced displacement.

1.3 Authority

Section 569 of the Water Resources Development Act of 1999, Public Law 106-53, as amended, authorizes the Government to provide design and construction assistance for publicly owned, non-federal water-related environmental infrastructure and resource protection and development projects in Northeastern Minnesota, including projects for wastewater treatment and related facilities, water supply and related facilities, and surface water resource protection and development. Under this authority, subject to the terms of the relevant cost-sharing agreement, the City of Baudette and Baudette HRA are eligible for Corps reimbursement of 75 percent of the costs of the sponsors' eligible design and construction of the environmental infrastructure.

The cost sharing agreement between the Corps, the City, and HRA requires that the City and HRA afford USACE the opportunity to review and comment on all design work and contract solicitations and prohibits the issuance of construction contract solicitations and construction work prior to receipt of notification from the Corps that all environmental compliance is complete. The Corps will require the best management practices and other avoidance, minimization, and mitigation measures identified in this Environmental Assessment (EA) and attachments are incorporated into design work and contract solicitations, for compliance with the National Environmental Protection Act (NEPA) and other laws.

2 Alternatives

2.1 No Action Alternative

Under the No-Action Alternative, the Corps would not provide reimbursement under Section 569 for water and sewer system improvements. Under this alternative, the public sewer and water infrastructure would not be likely to be upgraded in the near term, and residents would continue to rely on a water and sewer system that is not reliable or safe. The No Action Alternative would not address any of the deficiencies identified in the water supply and wastewater infrastructure. The existing lines, which are located at shallow depths and built of materials that do not meet current code requirements would continue to deteriorate and would not be replaced without federal financial assistance. Service lines to the neighborhood homes which are in similar condition would also not be replaced and continue to deteriorate. Backups and service interruptions may occur in the absence of repairs or replacement.

2.2 Proposed Alternative

The Proposed Alternative action involves replacing and relocating the existing sanitary and water mains and connections within the housing development to address their deteriorated condition and inadequate installation depth (Figure 3). Currently composed of clay tile, cast iron, and PVC piping, these mains are located in the front yards of housing units behind the street curbs, an uncommon placement for utility lines. Their shallow depth of approximately four feet makes them prone to freezing, resulting in pipe damage and flooding within homes. Under the proposed alternative, the sanitary sewer and water mains would be abandoned in place and replaced with new mains installed within the roadways of East and West Hamilton Avenues at depths between seven and eleven feet to prevent freezing. Associated manholes would be removed and replaced,

and the relocation of the mains would improve accessibility for future maintenance and repairs.

Additionally, a new segment of sanitary sewer main with manholes would be installed beneath 5th Street Southwest and parallel to CSAH-1 to connect the sanitary sewer system to a new lift station and existing force mains. The lift station, located at the northwest corner of a parcel south of the Lake of the Woods Youth Hockey Arena, would accommodate the increased depth of the sanitary sewer system. Above-grade components of the lift station would include a concrete pad with access hatches, a control panel with an alarm light, steel bollards, and vents. The new water main would connect to the existing water main beneath 3rd Street Southwest, and water and sewer service lines running to HRA-owned houses would also be replaced along existing alignments, with their depth increased to prevent freezing.

The Proposed Alternative also includes the installation of a storm sewer system within the housing development to address flooding issues. This system would include a storm sewer main running east-west through the site and another running north-south beneath West Hamilton Avenue, connecting to existing storm sewer mains beneath CSAH-1 and 5th Street Southwest. Manholes and catch basins would be installed, and excavated residential yards would be backfilled and restored to their original state. Limited removal of walkways between driveways and front doors is anticipated, but these would be replaced in kind if necessary. At a segment of CSAH-1 west of the housing development, manholes and catch basins associated with the existing stormwater system would be replaced.

To conduct sewer/water utility installation, the road prisms at East and West Hamilton Avenues, consisting of concrete curb and gutter and bituminous surfacing, would be removed and replaced in the same alignments with similar materials, along with the addition of catch basins and manholes. At 5th Street Southwest, 3rd Street Southeast, and CSAH-1, the road prism would be removed only where necessary to install the new sanitary main and connect utility systems, with repairs made using in-kind materials. Five trees would need to be removed to facilitate project implementation, and they would be replaced in their current locations after project completion. These five trees are situated in the densely developed Westwood neighborhood and are classified as street trees, making them unsuitable habitat for Northern long-eared bats.

Four streetlights within the project area would need to be removed for construction access and the poles removed would not be in a reusable state. These four light poles would be anticipated to be replaced with new fixtures, subject to the terms of the cost sharing agreement.

During construction, an open gravel and dirt area at the Lake of the Woods County Fairgrounds would serve as temporary staging, storage, parking, and stockpile area, with an existing gravel drive used for construction vehicle access. Approximately four acres would be used for staging. No ground disturbance is proposed within the fairgrounds, and this area would be returned to its original condition after project completion. No site restoration or improvement activities are anticipated.

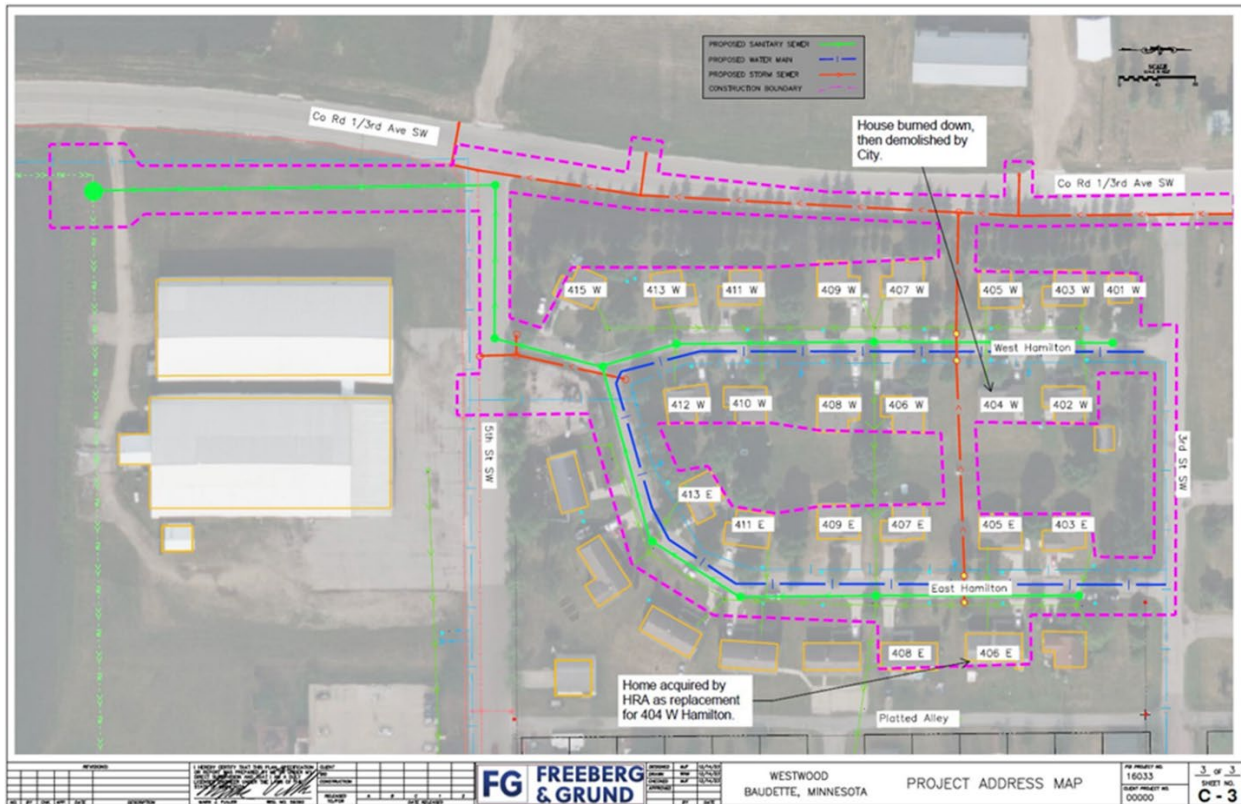


Figure 3. Project layout.

3 Affected Environment and Environmental Consequences

Current land use in the project area, which lies entirely within the City of Baudette, consists of residential properties and residential streets and a fairgrounds area. All the habitat in the project area has been disturbed by past and present activities. The Proposed Alternative would occur over the 2026 and 2027 construction seasons, May through November (approximately 12 months) with likely shutdown during the winter months. A variety of heavy construction equipment would be used to complete the project such as backhoe/excavator, front-end loader, dozer, dump trucks, asphalt paver and smooth drum roller.

3.1 Natural Resources

3.1.1 Air Quality

The U.S. Environmental Protection Agency (EPA) is required by the Clean Air Act to establish air quality standards that primarily protect human health. These National Ambient Air Quality Standards (NAAQS) regulate six criteria pollutants across the United States. When an area meets the standard for each of the six pollutants; it is called an “attainment area” for that contaminant. Areas that do not meet the standards are called “nonattainment areas”. Lake of the Woods County, Minnesota is classified as an attainment area for each of the six criteria pollutants and is therefore not considered an area of impaired ambient air quality (EPA, 2025).

No Action Alternative – The No Action Alternative would have no direct effect on air quality. Spot repairs in the event of breakage and maintenance would have short term impacts to air quality during repair and maintenance activities.

Proposed Alternative – The operation of heavy equipment during construction would temporarily increase vehicle emissions and slightly degrade air quality in the immediate vicinity of the project area. However, impacts would be short-term and negligible due to the short construction timeframe (approximately 12 months over the 2026 and 2027 construction seasons).

To minimize air emissions, the USACE requires contractors to meet or exceed all federal, state, and local air resource requirements.

3.1.2 Water Quality

The City of Baudette is located within the Baudette River Watershed, which was assessed for waters designated as 303(d) impaired status according to the EPA website (EPA, n.d.). A 2.55-mile segment of the Baudette River that flows through the City of Baudette is classified as impaired due to insufficient levels of Dissolved Oxygen (Figure 4). No other bodies of water within the Baudette River Watershed have been identified as impaired.

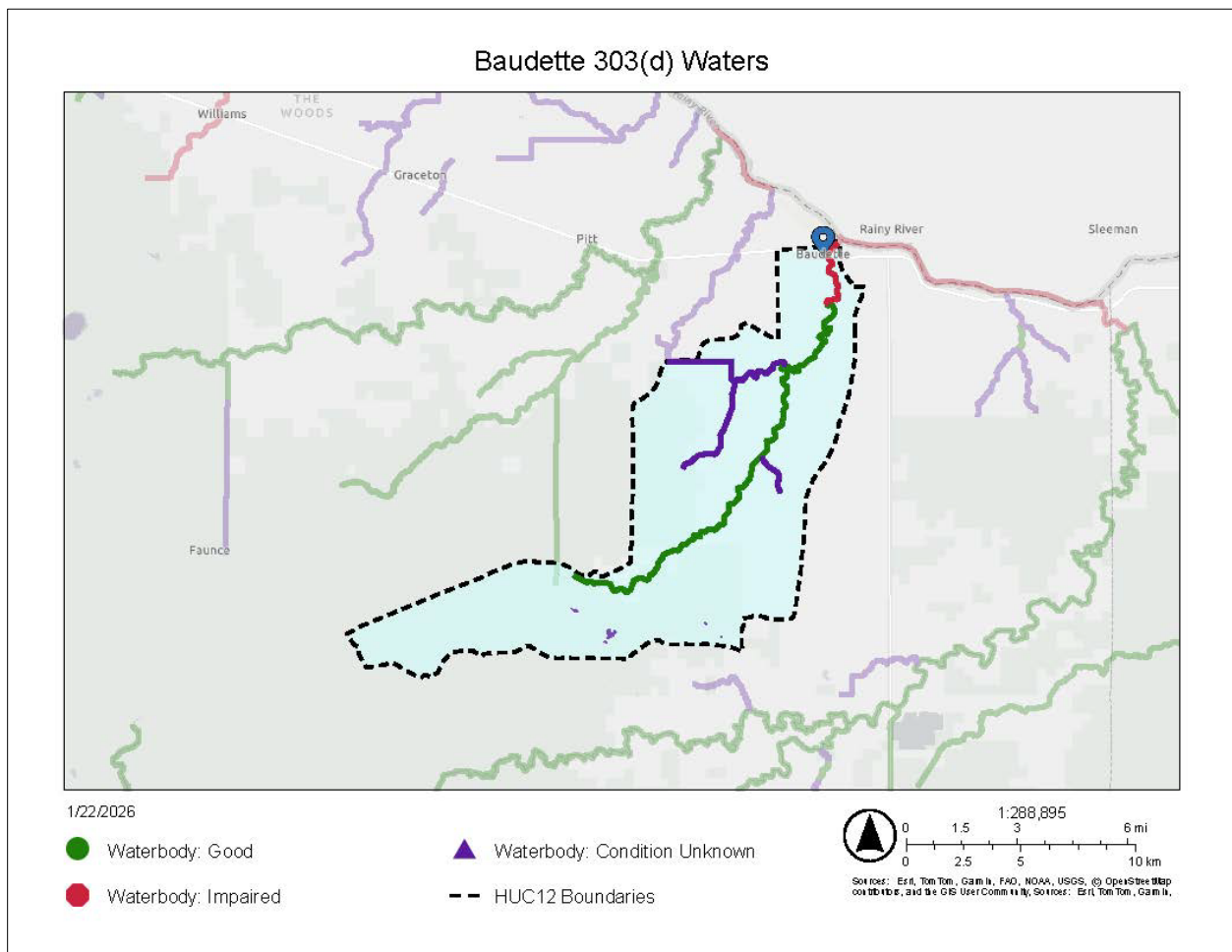


Figure 4. EPA identified 303(d) Impaired Waterways.

No Action Alternative – Under the No Action Alternative, failing sewer mains would remain in-place with the risk of further deterioration and pipe collapse. Deterioration of the sewer mains could result in sewage to back up into the mains, possibly homes and businesses as well as flowing into nearby waters, but timing and duration of such backups or service interruptions are





not predictable. Therefore, the No Action Alternative could have a negative temporary but potentially recurring effect on water quality.

Proposed Alternative –There are no plans for the discharge of dredged or fill material into Waters of the U.S., and no authorization under Section 404 of the Clean Water Act or for 401 water quality certification would be required. However, since the project would disturb more than one acre, the contractor would be required to develop/obtain a Stormwater Pollution Prevention Plan (SWPPP). This SWPPP would comply with the National Pollutant Discharge Elimination System (NPDES) requirements as well as local regulations and would be implemented using best management practices (BMPs) during construction to manage stormwater runoff and prevent erosion.

3.1.3 Geology and Soils

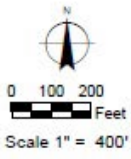
Soils survey data indicates that the area surrounding the City of Baudette contains a mix of soils considered prime farmland, prime farmland if drained and not prime farmland (NRCS, 2019). The majority of the project area is mapped as prime farmland if drained (Figure 5).



 Approximate Site Boundary
Farmland Classification
 All areas are prime farmland
 Prime farmland if drained
 Not prime farmland

Map Unit Symbol	Map Unit Name	Farmland Classification
644	Boash clay loam	Prime farmland if drained
582	Roliss clay loam	Prime farmland if drained
B5B	Alango-Taylor complex, 1 to 8 percent slopes	All areas are prime farmland
B630A	Wildwood-Dora-Indus complex, 0 to 1 percent slopes, frequently	Not prime farmland
B172A	Indus-Indus, frequently ponded-Alango complex, 0 to 2 percent	Prime farmland if drained

Data Sources: USGS, Google Imagery




 The Precision You Build For 11001 Hampshire Avenue S Minneapolis, MN 55438 952.995.2000 braunintertec.com	Project No: B2400191 Drawing No: Fig7_Soils	Westwood Sewer and Watermain 3rd Street to 5th Street SW Baudette, Minnesota	Soils Map
	Drawn By: SL Date Drawn: 1/16/2024 Checked By: MU Last Modified: 5/31/2024		

Figure 5. Soils and Prime Farmland.

No Action Alternative – The No Action Alternative would have no effect to the geology and soils within the project area unless emergency repairs are needed. Emergency repairs would result in a temporary, minor disturbance to soils.

Proposed Alternative – The Proposed Alternative would result in minor temporary disturbance to soils during construction. There would be no loss or conversion of prime farmland to non-agricultural uses. Since the project area has already been converted to urban land, and no new farmland is proposed to be converted, the proposed project would comply with the Farmland Policy Protection Act.

3.1.4 Wetlands and Aquatic Habitat

Review of the USFWS National Wetlands Inventory (NWI) indicates no wetlands within the City limits (USFWS, n.d.) (Figure 6). Additionally, no wetlands were observed during an onsite visit which occurred in April 2024.

One wetland complex is mapped adjacent to the project staging area (Lake of the Woods County Fairgrounds), west of County Road 1. However, project implementation would not result in any impacts to this complex.

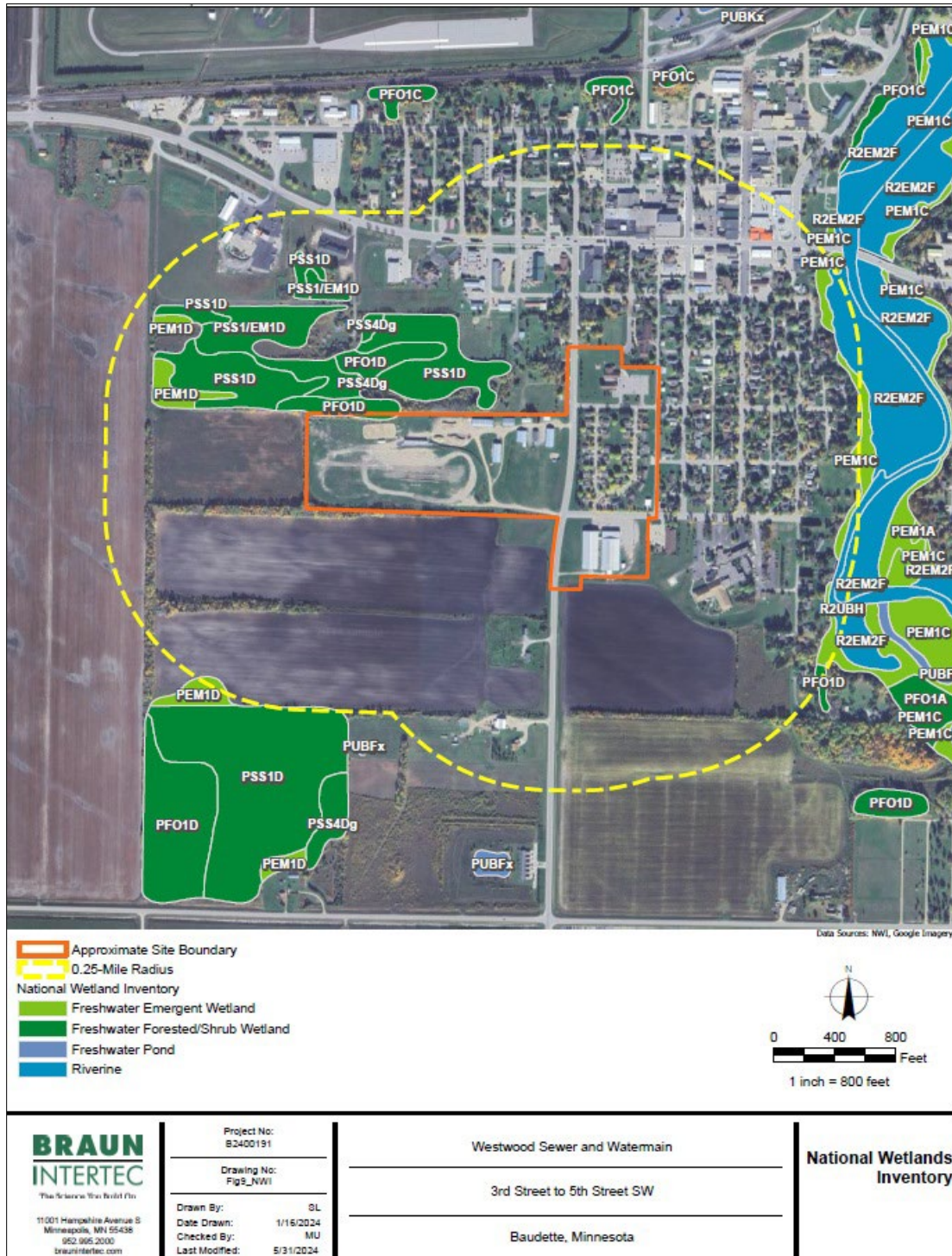


Figure 6. Project area reflecting the National Wetland Inventory.

No Action Alternative – The No Action Alternative would have no effect on wetland or aquatic habitat.

Proposed Alternative – The proposed project would not result in any impacts to Section 404 regulated wetlands. No discharge of dredged or fill in Waters of the US is proposed, therefore no authorization under Section 404 of the Clean Water Act or 401 water quality certification is required.

3.1.5 Floodplain

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer indicates that the City of Baudette is not in a flood zone or regulatory floodway (FEMA, n.d.) (Figure 7). Therefore, the No Action and Proposed Alternatives would have no effect on floodplains.



Figure 7. FEMA National Flood Hazard layer.

3.1.6 Terrestrial Habitat

The project area consists of the portion of the city of Baudette including East and West Hamilton Avenue, a segment of CSAH 1, Westwood Housing, and the fairgrounds. The project area primarily contains residential yards, commercial properties, and residential streets. All project activities would occur within City streets and other developed or previously disturbed areas, both impervious and vegetated. The predominant vegetation within this area is manicured grasses (residential lawns) with moderate cover of deciduous and coniferous trees.

The Lake of the Woods County Fairgrounds which is proposed to be used for temporary construction staging, parking and construction material storage includes areas of open dirt and gravel and residential grasses.

Land use beyond the residential portions of the City is a mix of agricultural and industrial with a natural river corridor establishing the eastern extent. The entire landscape within the project area is developed or previously disturbed.

No Action Alternative – The No Action Alternative could have a temporary impacts to terrestrial habitat during emergency repairs. Minor vegetation disturbance could occur but would be restored post construction, consistent with regular practices and stormwater/erosion requirements.

Proposed Alternative – The Proposed Alternative would be completed within previously disturbed land and streets within the Baudette city limits. There is the potential for minor vegetation disturbance along residential lawns and road rights of way. To the extent feasible, these effects would be minimized, and impacts would be restored post construction. With the removal of grass cover, some erosion from wind or water may occur during construction. Implementing temporary erosion control measures and reseedling the disturbed areas would minimize these effects. The contractor would be required to implement a temporary erosion control plan throughout the duration of the project and re-seed after construction.

3.1.7 Wildlife

Due to the rural residential land use and human presence within the area, the wildlife species present are likely those typically found in rural cities and agricultural land, including deer, squirrels, songbirds, and waterfowl. Table 1 identifies potential migratory birds which could occur within the project area.

Table 1. Potential Migratory Bird Species within the Project Area (IPaC).

Common Name	Species Name	Breeding Season
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Dec. 1 – Aug. 31
Chimney Swift	<i>Chaetura pelagica</i>	May 1 – Aug. 31
Common Tern	<i>Sterna hirundo</i>	May 1 – Aug. 31
Connecticut Warbler	<i>Oporornis agilis</i>	Jun. 15 – Aug. 10
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	May 15 – Aug. 10
Le Conte's Sparrow	<i>Ammospiza leconteii</i>	Jun. 1 – Aug. 15

Lesser Yellowlegs	Tringa flavipes	Breeds elsewhere
Olive-sided Flycatcher	Contopus cooperi	May 20 – Aug. 31
Pectoral Sandpiper	Calidris melanotos	Breeds elsewhere
Veery	Catharus fuscescens fuscescens	May 15 15 – Jul. 15

The project area in northern Minnesota serves as a migratory route for several bird species, though it lacks suitable breeding and wintering habitats for most. The Lesser Yellowlegs and Pectoral Sandpiper are common migrants that utilize flooded fields, wet meadows, dry prairies, and plowed fields during their spring and fall migrations, but they breed and winter elsewhere. Bald Eagles typically nest in forested areas near large bodies of water and may be observed soaring above the project area due to its proximity to the Rainy River; however, they are unlikely to inhabit or be disturbed by project activities. Chimney Swifts breed in urban and suburban environments, favoring locations with numerous chimneys, and may find some habitat within the project area. Although the presence of Common Terns is indicated, the Minnesota DNR Rare Species Guide suggests that they are not expected to occur in this region. The Connecticut Warbler relies on lowland habitats found in wet coniferous forests, particularly in bogs with black spruce and tamarack, but no suitable habitat exists for them in the project area. Evening Grosbeaks breed in various forest types in northern North America, including spruce-fir and pine-oak forests. Le Conte’s Sparrow prefers wet marshes with abundant grasses and sedges, as well as wet pastures and bogs; however, such habitats are absent in the project area. Olive-sided Flycatchers are considered uncommon to rare breeders in northern Minnesota, typically found in coniferous forests, especially in bogs and along lake edges. Lastly, Veery’s are common in northern and north-central Minnesota, inhabiting forests with dense undergrowth. Overall, the project area, which primarily consists of city streets and existing infrastructure, provides little to no suitable habitat for these species within the Project Area.

No Action Alternative – The No Action Alternative could result in emergency repairs which would cause wildlife to temporarily avoid the impacted area due to construction noise and the presence of equipment; however, wildlife would return to the area once construction ceases.

Proposed Alternative – Wildlife would avoid areas where construction is occurring due to construction noise and equipment but return once construction is complete. Nesting of birds may also be discouraged within the project area. Impacts to wildlife would be minor and temporary as the construction timeframe is short (approximately 12 months in 2026 and 2027) and work would occur along roadways in residential areas. Bird species protected under the Migratory Bird Treaty Act would not be affected by the Proposed Alternative. Tree clearing would follow standard protocols. Work would take place within existing City infrastructure, resulting in no effects for migratory bird species.

3.1.8 Threatened and Endangered Species

3.1.8.1 Federally Listed Species

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) website was consulted on January 27, 2026, to identify the potential presence of

federally listed threatened and endangered species within the action area (Project Area). Two threatened listed species and two proposed species were identified, the Canada lynx (*Lynx canadensis*) and the gray wolf (*Canis lupus*). The proposed species identified are the monarch butterfly (*Danaus plexippus*) which is proposed threatened and Suckley's cuckoo bumble bee (*Bombus suckleyi*) which is Proposed Endangered. Both of these species have the potential to occur within the Project Area however no critical habitat occurs within the action area (USFWS, n.d.).

In December 2024, the USFWS proposed listing the monarch butterfly as a threatened species with protective regulations under section 4(d) of the Act and proposed the designation of critical habitat for the species. Also in December 2024, the USFWS published a proposed rule to list the Suckley's cuckoo bumble bee as an endangered species (89 FR 102074). The proposed rule opened a 60-day comment period, which ended February 18, 2025. No final listing determination has been posted for either proposed species.

The monarch butterfly inhabits areas where native flowering plants and milkweed, which is required for larval rearing, are common. While breeding habitat of variable quality is present throughout North America, it is sporadic and often may not contain suitable nectar sources for adult monarchs. While larvae are reared on host milkweed plants, adults may inhabit many types of habitat, including wetlands, grasslands, forests, woodlands, and urban areas (USFWS, 2024).

Suckley's cuckoo bumble bee is a parasitic species that requires a host bee species for reproduction. While the western bumble bee (*Bombus occidentalis*) is a confirmed host species there are believed to be additional suitable hosts. Host bumble bee nests may be found on the surface or underground, depending on host species. For confirmed host *B. occidentalis*, known nest sites occur in underground cavities (e.g., animal burrows) more often than in aboveground structures (e.g., woody debris, human-made structures, etc.). The transition zone between forest and grassland can be particularly valuable bumble bee nesting habitat, as well as field boundaries, meadow margins, and forest edges due to the presence of abandoned rodent nests and undisturbed habitat with diverse floral resources (USFWS, 2024)

No Action Alternative – The No Action Alternative would have no effect on federally listed threatened and endangered species.

Proposed Alternative – This project would occur entirely within the developed urban area which does not provide suitable habitat for the threatened species therefore there would be no effect to these species. There is no monarch butterfly or Suckley's cuckoo bumble bee habitat within the footprint of the Proposed Alternative. Individuals of this species could migrate through the Project Area; however, it is unlikely this would happen during construction due to the lack of suitable nesting or foraging habitat. While these species may utilize habitat within the general vicinity of the City, such as forest transition zone areas or field edges, the Project would primarily impact existing City streets and infrastructure and does not propose to impact natural communities within the project area. Therefore, the Proposed Alternative would not jeopardize the continued existence of the monarch butterfly or Suckley's cuckoo bumble bee.

3.1.8.2 State Listed Species

The Minnesota Department of Natural Resources (DNR) Rare Species Guide website was consulted on January 28, 2026, to identify potential presence of state listed threatened and endangered species within the action area. Two threatened species and one endangered state listed species were identified. The listed threatened species are the common tern (*Sterna hirundo*) and Wilson's phalarope (*Phalaropus tricolor*), and the listed endangered species identified is the piping plover (*Charadrius melodus*) (MN DNR, n.d.). This project would occur entirely within the developed urban area which does not provide suitable habitat for these species therefore there would be no effect to these species.

No Action Alternative – The No Action Alternative would have no effect on state listed threatened and endangered species.

Proposed Alternative – This project would occur entirely within the developed urban area which does not provide suitable habitat for these species; therefore, there would be no effect to these species.

3.1.9 Invasive Species

The project area mostly consists of manicured vegetation or impermeable surfaces. Invasive species common to this region that are commonly found in developed areas include: common burdock (*Arctium minus*), Canada thistle (*Cirsium arvense*), reed canary grass (*Phalaris arundinacea*), sow thistles (*Sonchus spp.*), dandelions (*Taraxacum officinale*), smooth brome (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*), purple loosestrife (*Lythrum salicaria*), common/glossy buckthorn (*Rhamnus cathartica*)/(*Rhamnus frangula*), and European common reed (*Phragmites spp.*).

No Action Alternative – The No Action Alternative would have no effect to invasive species beyond existing conditions.

Proposed Alternative – The Proposed Alternative is not anticipated to result in the spread of invasive species not currently present within the project area.

3.2 Socio-economic Resources

3.2.1 Recreation

Baudette offers several local parks for recreation including Timber Mill Park, Willie Walleye Park and Peace Park, as well as a community swimming pool, Lake of the Woods Youth Hockey facilities and the Lake of the Woods County Fair grounds.

No Action Alternative – The No Action Alternative would have no direct effect on recreation. Emergency repairs have the potential to temporarily disturb recreational activities in the impacted area until repairs are complete.

Proposed Alternative – The proposed project is not expected to have more than minimal impacts to parks, open space, and recreation areas. Project-related road closures of County Road 1 and 5th Street SW would temporarily cut off access to Lake of the Woods Youth Hockey facilities. However, the proposed project work (and subsequent road closures) is planned for the spring and summer months, which are outside the youth hockey season. If work were to continue into the hockey season access to the facilities would be maintained via a signed detour route. Therefore, impacts to hockey arenas access and/or facility operations are expected to be minimal. The proposed project would temporarily utilize the Lake of the Woods County

Fairgrounds (located west of County Road 1) for construction materials storage and equipment staging. Since no ground disturbance within the fairgrounds is proposed, no impacts are anticipated from the proposed project to the fairground facilities. During the staging, the staging area would be unavailable for fair activities. Scheduling of the proposed project would be planned to minimize disruptions of any planned events at the fairgrounds.

3.2.2 Noise

Noise levels in and around the vicinity of the project area are commensurate with that of other small towns in northern Minnesota.

No Action Alternative – The No Action Alternative would have no direct noise effects. Emergency repairs could disrupt residents and neighbors due to increased noise from the use of heavy equipment. Emergency repairs could occur outside of daylight hours but would likely be repaired quickly to restore services. Noise levels would return to normal following emergency repairs.

Proposed Alternative – The use of heavy equipment for construction would generate a temporary increase in noise levels which could disturb wildlife and citizens. The use of heavy equipment on the site would only be for a short period of time, resulting in a temporary and minor adverse effect. Construction is expected to occur from the spring season through fall in 2026 and 2027. Work is expected to occur during daylight hours only and people within the residences would be notified in advance of the work. Construction noise would have a minor short-term effect on residents and businesses in the area as the construction timeframe is approximately 12 months over a 2-year timeframe. Noise levels would return to normal following construction. Noise associated with construction of the project would lead to temporary displacement of some wildlife species. Nesting of birds may also be discouraged within the project area. However, birds and other wildlife species are expected to return to the area following construction. No long-term impacts would be expected to occur once construction is complete.

3.2.3 Transportation

The City of Baudette is situated on Minnesota's northern border, which coincides with the international boundary between the United States and Canada. The primary highways serving Baudette are Minnesota State Highway 11 (MN 11) and Minnesota State Highway 72 (MN 72). These routes are essential for accessing the area, including the Baudette–Rainy River International Bridge to Canada, and are important for travel throughout the Lake of the Woods region. Additionally, County Road 172 is recognized as a significant local route.

No Action Alternative – Under the No Action Alternative, no direct effects to transportation would occur. Emergency repairs may become necessary which could disrupt traffic in the affected area. These repairs would likely be needed immediately without advanced notice to motorists regarding road closures and detours. Emergency repairs would generally be expected to be completed quickly, and traffic would return to normal.

Proposed Alternative – There would be disruption to local traffic and detours as streets are temporarily closed to complete the work for approximately 12 months during 2026 and 2027. A four-block detour (expected to be via 1st Avenue SW) would be in place during the construction on County Road 1. Minor delays may result from the detour route compared to the existing pace of thru traffic on County Road 1 or 5th Street SW. If work were to continue into the hockey season access to the Lake of the Woods Youth Hockey facilities would be maintained via a signed detour route. No significant long-term impacts are expected from this detour. Post

construction, no changes in transportation and accessibility are anticipated from the proposed project.

3.2.4 Health and Safety

In recent years, the Westwood Housing Development has experienced multiple utility issues, particularly involving sewer backups. These incidents have necessitated the temporary relocation of residents while the housing authority addressed the problems through essential repairs. The Westwood Housing complex serves as a crucial low-income housing option for the City of Baudette and the surrounding areas, where there is an urgent demand for additional affordable housing.

Currently, the sewer and watermain infrastructures are beyond their intended functional lifespan. Instead of repair, it is imperative to replace these systems with modern infrastructure designed to withstand present-day conditions, ensuring the health and safety of residents while enhancing the overall resilience of the community.

No Action Alternative – Under the No Action Alternative, the current sewer and watermain systems would remain unchanged, leading to ongoing deterioration. With such deterioration, backups and failures may occur. Such failures could result in unexpected costs for emergency repairs and necessitate the temporary relocation of tenants. Such circumstances could pose substantial health risks and lead to financial losses for both the City and residents of the Westwood Housing Development.

Proposed Alternative – This Proposed Alternative would have a beneficial effect to health and safety by providing the residents of the Westwood Housing neighborhood with a reliable water and sewer system for many years to come.

3.3 Cultural Resources

The National Historic Preservation Act (NHPA) accounts for the potential impacts on historic and cultural resources. A search prepared by the proponents identified two possible historic properties within the undertaking's Area of Potential Effect (APE): the Lake of the Woods County Fairgrounds (LW-BDC-00028) and the Baudette Air Force Radar Station and Family Housing Historic District (LW-XXX-00001).

No archaeological resources were identified in the APE. Because HUD is providing some funding through the MN DEED grant, HUD previously consulted with the MN SHPO regarding its provision of funds to the project. In that consultation, LW-BDC-00028 was determined not eligible for the National Register of Historic Places (NRHP) in August 2024. LW-XXX-00001 was determined eligible for listing in the NRHP under Criterion A in the areas of military and community planning and development with its period of significance ranging from 1959-1979. As stated in Section 1.1, the Westwood Housing development now owned and operated by the Baudette HRA was originally constructed in 1960 as family housing for personnel stationed at the Baudette Air Force Radar Station. The Westwood Housing development is part of the Baudette Air Force Radar Station and Family Housing discontinuous historic district determined eligible for listing. Minimization measures have been addressed within the HUD consultation and included in the proposed project.

No Action Alternative – The No Action Alternative would not have immediate impacts to historic properties as no work would be conducted. However future emergency repairs may be

required which may not be repaired with historic considerations or may have a larger impacted area within the historic district.

Proposed Alternative – The Proposed Alternative would assist in maintaining the Baudette Air Force Radar Station and Family Housing Historic District and increase the longevity of residences present to continue to the use of the housing units. The proposed alternative would not result in changes to LW-XXX-00001 that would compromise the characteristics that make it eligible for listing. The proposed alternative requires Section 106 consultation with the Minnesota State Historic Preservation Office (SHPO) and Tribes. Consultation was initiated on January 27th, 2026, with a determination of No Adverse Effect to Historic Properties.

3.4 Mitigation

The proposed project would temporarily increase man-made hazards and noise during construction. To mitigate hazards during construction, fencing or signage would be erected around the site to secure the area and protect the public from physical hazards. Designated entrance and exit points would be used to control traffic and enter public roads at safe locations.

There would be disruption to local traffic and detours as streets are temporarily closed to complete the work for approximately 12 months during 2026 and 2027. A four-block detour (expected to be via 1st Avenue SW) would be in place during the construction on County Road 1. Minor delays may result from the detour route compared to the existing pace of thru traffic on County Road 1 or 5th Street SW. If work were to continue into the hockey season access to the Lake of the Woods Youth Hockey facilities would be maintained via a signed detour route. No significant long-term impacts are expected from this detour. Post construction, no changes in transportation and accessibility are anticipated from the proposed project.

Increased noise during construction would be expected. To mitigate this nuisance, construction would be limited to normal daytime working hours, and proper mufflers would be used on heavy machinery, as necessary. Additionally, people within the residences would be notified in advance of the work.

The proposed project would temporarily utilize the Lake of the Woods County Fairgrounds for storage of construction materials and equipment staging. Scheduling of the proposed project would be planned to minimize disruptions of any planned events at the fairgrounds.

Five trees would need to be removed to facilitate project implementation, however they would be replaced in their current locations after project completion.

Due to the ground disturbance needed for project implementation, some erosion from wind or water may occur during construction. Implementing temporary erosion control measures and re-seeding the disturbed areas would minimize these effects. The contractor would be required to implement a temporary erosion control plan throughout the duration of the project and re-seed after construction.

Since the proposed project would disturb more than one acre, a Stormwater Pollution Prevention Plan (SWPPP) would be required. A SWPPP compatible with the National Pollutant Discharge Elimination System (NPDES) and local requirements would be prepared and implemented through the use of best management practices (BMPs) during construction to control stormwater run-off and erosion.

4 Environmental Compliance

4.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA; 42 USC § 4321 *et seq.*) establishes the broad national framework for protecting our environment. NEPA's basic policy is to ensure proper consideration to the environment prior to undertaking any major federal action. Two alternatives have been presented, and the significance of the project's impacts have been evaluated. The document will be distributed to agencies, the public and other interested parties to gather any comments or concerns. If no significant impacts to the environment are found, a Finding of No Significant Impact (FONSI) will be signed.

4.2 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone from taking, possessing, or transporting an eagle, or the parts, nests, or eggs of such birds without prior authorization. Disturbing an eagle to a degree that causes, or is likely to cause injury to an eagle, decrease productivity or cause nest abandonment are considered forms of take. Activities that directly or indirectly lead to take are prohibited without a permit. There are no eagle nests within or adjacent to the project area.

4.3 Clean Water Act

The Clean Water Act (CWA; 33 USC §1251 *et seq.*) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the United States and is administered by USACE. The Corps does not issue permits to itself but complies with the provisions of the Act. The Minnesota Pollution Control Agency is responsible for issuing Clean Water Act Section 401 water quality certification. The proposed project is not anticipated to result in any permanent or temporary impacts to waters of the U.S.; however, if changes to construction methods occur, the City of Baudette would be required to obtain a Clean Water Act Section 404 permit as well as 401 water quality certification.

Clean Water Act section 402 will be complied with.

4.4 Endangered Species Act

The Endangered Species Act (16 USC § 1531 *et seq.*) provides for the conservation of threatened and endangered plants and animals and the habitats in which they are found. There are two federally listed species and two proposed species that are listed for the action area. The Corps has determined that the proposed project would have no effect on Canada lynx, gray wolf, monarch butterfly or Suckley's cuckoo bumble bee.

4.5 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA; 16 USC 661–667e) requires federal agencies to coordinate with the U.S. Fish and Wildlife Service and applicable state agencies when a stream or body of water is proposed to be modified. No streams or

other bodies of water are proposed to be modified; therefore, no FWCA coordination is required, however, this environmental assessment will be provided to the FWS and state agencies for review and comment.

4.6 National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, as amended by Public Law 96-515 (94 Stat. 2987), established national policy for historic preservation, authorized the Secretary of the Interior to expand and maintain a National Register of Historic Places, and created the Advisory Council on Historic Preservation. Section 106 specifies that federal agencies must consider the effect of the action on any property included in or eligible for the National Register of Historic Places. The Corps has made a determination of No Adverse Effect to Historic Properties. Concurrence with this determination will be obtained prior to signing a FONSI.

Table 2. Compliance with Environmental Protection Statutes and Other Environmental Requirements

Environmental Requirement	Compliance¹
<i>Federal Statutes</i>	
Bald and Golden Eagle Protection Act of 1940, as amended	Full
Clean Air Act, as amended	Full
Clean Water Act, as amended	Full
Endangered Species Act of 1973, as amended	Full
Farmland Protection Policy Act of 1981	Full
Federal Water Project Recreation Act, as amended	NA
Fish and Wildlife Coordination Act, as amended	Full
Land and Water Conservation Fund Act of 1965, as amended	Full
Migratory Bird Treaty Act of 1918, as amended	Full
National Environmental Policy Act of 1969, as amended	Partial
National Historic Preservation Act of 1966, as amended	Partial
National Wildlife Refuge Administration Act of 1966	NA
Noise Pollution and Abatement Act of 1972	Full
Watershed Protection and Flood Prevention Act	Full
Wild and Scenic Rivers Act of 1968, as amended	NA
<i>Executive Orders, Memoranda</i>	
Floodplain Management (E.O. 11988)	Full
Safeguarding the Nation from the Impacts of Invasive Species (E.O. 13112)	Full
Protection and Enhancement of Environmental Quality (E.O. 11514)	Full
Protection of Wetlands (E.O. 11990)	Full
Analysis of Impacts on Prime and Unique Farmland (CEQ Memorandum, 30 August 1976)	Full

¹ The compliance categories used in this table were assigned according to the following definitions:

- a. Full – All requirements of the statute, EO, or other policy and related regulations have been met for the current stage of planning.
- b. Partial – Some requirements of the statute, EO, or other policy and related regulations remain to be met for the current stage of planning.
- c. Noncompliance (NC) – Violation of a requirement of the statute, EO, or other policy and related regulations.

d. Not Applicable (N/A) – Statute, EO, or other policy and related regulations not applicable for the current stage of planning.

5 Distribution and Review of the Draft Environmental Assessment

This draft environmental assessment is being made available for a 30-day public review and comment period. The document can be viewed at:

<https://www.mvp.usace.army.mil/Home/Public-Notices/>.

Questions on the project or comments on the Environmental Assessment can be directed to Carrie Nelson at (651) 290-5567 or at CEMVP_Planning@usace.army.mil. Please address all formal written correspondence on this project to District Engineer, St. Paul District, Corps of Engineers, ATTN: Regional Planning and Environment Division North, 332 Minnesota Street, Suite E1500, St. Paul, Minnesota 55101.

6 References

- EPA. (2025, December 31). *Green Book*. Retrieved January 2026, from EPA Home: https://www3.epa.gov/airquality/greenbook/anayo_mn.html
- EPA. (n.d.). *United States Environmental Protection Agency*. Retrieved January 2026, from How's My Waterway: <https://mywaterway.epa.gov/community/Baudette,%20MN,%20USA/overview>
- FEMA. (n.d.). *Flood Data Viewers and Geospatial Data*. Retrieved January 2026, from FEMA: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>
- MN DNR. (n.d.). *Rare Species Guide*. Retrieved from MN Department of Natural Resources: https://www.dnr.state.mn.us/rsg/filter_search.html
- NRCS. (2019, July 31). *Web Soil Survey*. Retrieved January 2026, from United States Department of Agriculture Natural Resource Conservation Service: <https://websoilsurvey.nrcs.usda.gov/app/>
- USFWS. (2024). *Monarch Butterfly (Danaus plexippus) Species Status Assessment Report, Version 2.3*. Midwest Regional Office. Retrieved 2026
- USFWS. (2024). *Species status assessment report for the Suckley's Cuckoo Bumble Bee (Bombus suckleyi), Version 1.0*. Alaska Region. Retrieved 2026
- USFWS. (n.d.). *IPaC Information for Planning and Consultation*. Retrieved from U.S. Fish & Wildlife Service: <https://ipac.ecosphere.fws.gov/>
- USFWS. (n.d.). *National Wetlands Inventory*. Retrieved January 2026, from U.S. Fish & Wildlife Service: <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>

APPENDIX A
CORRESPONDENCE



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To:

01/27/2026 18:48:01 UTC

Project Code: 2026-0041561

Project Name: Baudette MN, Westwood Housing Sewer and Watermain Improvements

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance

Please refer to our [Section 7 website](#) for guidance and technical assistance, including [step-by-step instructions](#) for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A [demonstration video](#) showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of "no effect" or "may affect, not likely to adversely affect." In each case, the Service has compiled and analyzed the best available information on the species' biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a "Not Likely to Adversely Affect" (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a "May Affect" determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for "May Affect" determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of "There are no listed species found within the vicinity of the project," then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain [Life History Information for Listed and Candidate Species](#) on our office website.

Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. [Electronic submission is preferred.](#)

Northern Long-Eared Bats

Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the [Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines.](#)

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys help to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's [northern long-eared bat website](#).

Whooping Crane

Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "[Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States](#)."

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination

While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota

[Minnesota Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: Review.NHIS@state.mn.us

Wisconsin

[Wisconsin Department of Natural Resources - Endangered Resources Review Homepage](#)

Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and 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".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office

3815 American Blvd East

Bloomington, MN 55425-1659

(952) 858-0793

PROJECT SUMMARY

Project Code: 2026-0041561
Project Name: Baudette MN, Westwood Housing Sewer and Watermain Improvements
Project Type: Wastewater Pipeline - Maintenance / Modification - Below Ground
Project Description: The proposed project will replace the aging water, sewer and street infrastructure in and adjacent to the Westwood Housing development. In recent years, cast iron sanitary piping (which no longer meets current code requirements) within the HRA owned houses has started to fail, causing displacement of residents. The associated water and sewer services and mains are also prone to freezing due to inadequate installation depth. Additionally, the residential development lacks a stormwater drainage system, resulting in localized flooding and deterioration of streets. Existing catch basins and manhole structures associated with the existing stormwater system beneath County State Aid Highway (CSAH) 1 have experienced displacement and are also in need of replacement.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@48.70836575,-94.60718956711304,14z>



Counties: Lake of the Woods County, Minnesota

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Canada Lynx <i>Lynx canadensis</i> Population: Wherever Found in Contiguous U.S. There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
Gray Wolf <i>Canis lupus</i> Population: MN There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4488	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow

appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

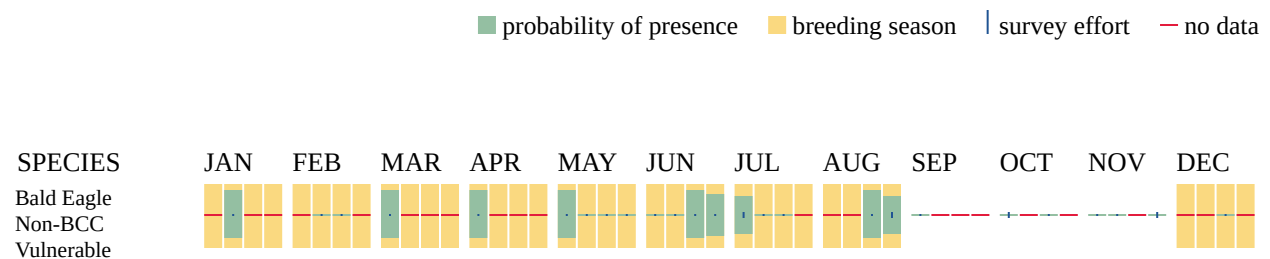
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (-)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Common Tern <i>Sterna hirundo</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4963	Breeds May 1 to Aug 31
Connecticut Warbler <i>Oporornis agilis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9442	Breeds Jun 15 to Aug 10
Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Le Conte's Sparrow <i>Ammospiza leconteii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9469	Breeds Jun 1 to Aug 15

NAME	BREEDING SEASON
<p>Lesser Yellowlegs <i>Tringa flavipes</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Olive-sided Flycatcher <i>Contopus cooperi</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3914</p>	Breeds May 20 to Aug 31
<p>Pectoral Sandpiper <i>Calidris melanotos</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9561</p>	Breeds elsewhere
<p>Veery <i>Catharus fuscescens fuscescens</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p>https://ecos.fws.gov/ecp/species/11987</p>	Breeds May 15 to Jul 15

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers





United States Department of the Interior



FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To:

01/27/2026 18:53:01 UTC

Project code: 2026-0041561

Project Name: Baudette MN, Westwood Housing Sewer and Watermain Improvements

Subject: Technical Assistance letter for 'Baudette MN, Westwood Housing Sewer and Watermain Improvements' for specified threatened and endangered species that may occur in your proposed project location consistent with the Minnesota-Wisconsin Endangered Species Determination Key (Minnesota-Wisconsin DKey).

Dear Carrie Nelson:

The U.S. Fish and Wildlife Service (Service) received on **January 27, 2026** your effect determination(s) for the 'Baudette MN, Westwood Housing Sewer and Watermain Improvements' (Action) using the Minnesota-Wisconsin DKey within the Service's Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 et seq.).

Based on your responses to the Service's Minnesota-Wisconsin DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Canada Lynx (<i>Lynx canadensis</i>)	Threatened	No effect
Gray Wolf (<i>Canis lupus</i>)	Threatened	No effect
Monarch Butterfly (<i>Danaus plexippus</i>)	Proposed	No effect
	Threatened	

Determination Information

Thank you for informing the Service of your "No Effect" determination(s).

Additional Information

Sufficient project details: Please provide sufficient project details on your project homepage in IPaC (Define Project, Project Description) to support your conclusions. Failure to disclose important aspects of your project that would influence the outcome of your effects determinations may negate your determinations and invalidate this letter. If you have site-specific information that leads you to believe a different determination is more appropriate for your

project than what the Dkey concludes, you can and should proceed based on the best available information.

Future project changes: The Service recommends that you contact the Minnesota-Wisconsin Ecological Services Field Office or re-evaluate the project in IPaC if: 1) the scope or location of the proposed Action is changed; 2) new information reveals that the action may affect federally listed species or federally designated critical habitat in a manner or to an extent not previously considered; 3) the Action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project changes are final or resources committed.

Species-specific information

Bald and Golden Eagles: Bald eagles, golden eagles, and their nests are protected under the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended, 16 U.S.C. 668a-d) (Eagle Act). The Eagle Act prohibits, except when authorized by an Eagle Act permit, the “taking” of bald and golden eagles and defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” The Eagle Act’s implementing regulations define disturb as “... to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

If you observe a bald eagle nest in the vicinity of your proposed project, you should follow the [National Bald Eagle Management Guidelines \(May 2007\)](#). For more information on eagles and conducting activities in the vicinity of an eagle nest, please visit our [regional eagle website](#) or contact Margaret at Margaret.Martin@fws.gov. If the Action may affect bald or golden eagles, additional coordination with the Service under the Eagle Act may be required.

Additional Species Requiring Review

In addition to the species described above, the following species or critical habitats may also occur in your project area and are not covered by this conclusion:

- Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Proposed Endangered

Coordination with the Service is not complete if additional coordination is advised above for any species.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Baudette MN, Westwood Housing Sewer and Watermain Improvements

2. Description

The following description was provided for the project 'Baudette MN, Westwood Housing Sewer and Watermain Improvements':

The proposed project will replace the aging water, sewer and street infrastructure in and adjacent to the Westwood Housing development. In recent years, cast iron sanitary piping (which no longer meets current code requirements) within the HRA owned houses has started to fail, causing displacement of residents. The associated water and sewer services and mains are also prone to freezing due to inadequate installation depth. Additionally, the residential development lacks a stormwater drainage system, resulting in localized flooding and deterioration of streets. Existing catch basins and manhole structures associated with the existing stormwater system beneath County State Aid Highway (CSAH) 1 have experienced displacement and are also in need of replacement.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@48.70836575,-94.60718956711304,14z>



QUALIFICATION INTERVIEW

1. This determination key is intended to assist the user in evaluating the effects of their actions on Federally listed species in Minnesota and Wisconsin. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes. Additionally, this key DOES NOT cover wind development, purposeful take (e.g., for research or surveys), communication towers that have guy wires or are over 450 feet in height, aerial or other large-scale application of any chemical (such as insecticide or herbicide), and approval of long-term permits or plans (e.g., FERC licenses, HCP's).

Click **YES** to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

Yes

2. Is the action being funded, authorized, or carried out by a Federal agency?

Yes

3. Are you the Federal agency or designated non-federal representative?

Yes

4. Does the action involve the installation or operation of wind turbines?

No

5. Does the action involve purposeful take of a listed animal?

No

6. Does the action involve a new communications tower?

No

7. Does the activity involve aerial or other large-scale application of ANY chemical, including pesticides (insecticide, herbicide, fungicide, rodenticide, etc)?

No

8. Will your action permanently affect local hydrology?

No

9. Will your action temporarily affect local hydrology?

No

10. Will your project have any direct impacts to a stream or river (e.g., Horizontal Directional Drilling (HDD), hydrostatic testing, stream/road crossings, new stormwater outfall discharge, dams, other in-stream work, etc.)?

No

11. Does your project have the potential to impact the riparian zone or indirectly impact a stream/river (e.g., cut and fill; horizontal directional drilling; construction; vegetation removal; pesticide or fertilizer application; discharge; runoff of sediment or pollutants; increase in erosion, etc.)?

Note: Consider all potential effects of the action, including those that may happen later in time and outside and downstream of the immediate area involved in the action.

Endangered Species Act regulation defines "effects of the action" to include all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (50 CFR 402.02).

No

12. Will your action disturb the ground or existing vegetation?

Note: This includes any off-road vehicle access, soil compaction (enough to collapse a rodent burrow), digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application (herbicide, fungicide), vegetation management (including removal or maintenance using equipment or prescribed fire), cultivation, development, etc.

Yes

13. Will your action include spraying insecticides?

No

14. Does your action area occur entirely within an already developed area?

Note: Already developed areas are already paved, covered by existing structures, manicured lawns, industrial sites, or cultivated cropland, AND do not contain trees that could be roosting habitat. Be aware that listed species may occur in areas with natural, or semi-natural, vegetation immediately adjacent to existing utilities (e.g. roadways, railways) or within utility rights-of-way such as overhead transmission line corridors, and can utilize suitable trees, bridges, or culverts for roosting even in urban dominated landscapes (so these are not considered "already developed areas" for the purposes of this question). If unsure, select NO..

Yes

15. Does the action have potential indirect effects to listed species or the habitats they depend on (e.g., water discharge into adjacent habitat or waterbody, changes in groundwater elevation, introduction of an exotic plant species)?

No

16. [Hidden Semantic] Does the action area intersect the Threatened gray wolf AOI?

Automatically answered

Yes

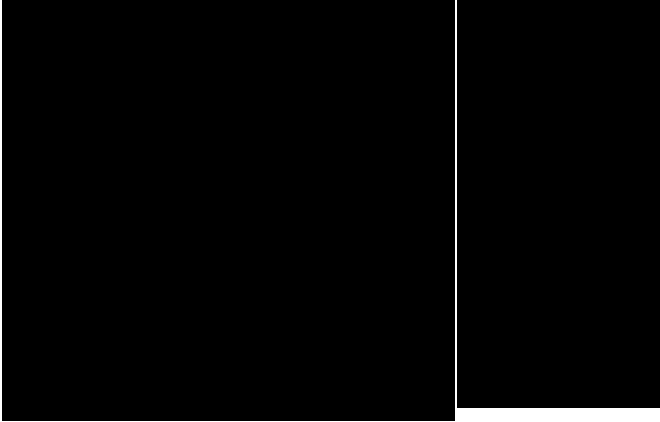
17. [Hidden Semantic] Does the action area intersect the monarch butterfly species list area?

Automatically answered

Yes

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers



**Combined Notice
Finding of No Significant Impact and
Notice of Intent to Request Release of Funds
State of Minnesota**

Tuesday, January 28th, 2025

City of Baudette
PO Box 548
106 Main Street West
Baudette, MN 56623

TO ALL INTERESTED PARTIES, GROUPS AND PERSONS:

The purpose of this notice is to identify two separate but related actions to be taken by the city of Baudette (*hereinafter referred to as the Grantee*).

One, the Grantee has made a Finding of No Significant Impact on project activities (see the Finding of No Significant Impact, below) and two, they propose to request the Business and Community Development Division, Small Cities Development Program, Minnesota Department of Employment and Economic Development (DEED BCD), to release Federal funds (see Notice of Intent to request Release of Funds, below) under Title I of the Housing and Community Development Act of 1974, as amended (PL 98-181) for the following project:

Project Name: Westwood Housing Sewer and Watermain

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The proposed project includes three actions within the Westwood Housing neighborhood, which contains homes primarily owned by the Baudette Housing and Redevelopment Authority (HRA). The three project actions include city infrastructure improvements, residential plumbing rehabilitation and county road storm sewer replacement. The three actions are not currently scheduled and may be completed in a different order than presented.

The project area also includes use of the Lake of the Woods County Fairgrounds (to the west across County Road 1) as a construction staging and materials storage area. No ground disturbance is proposed within the fairgrounds, and this area would be returned to its original condition after project completion.

The city infrastructure improvements would include the replacement of municipal sanitary sewer and water main lines beneath West and East Hamilton (neighborhood streets), replacement of the residential tie-ins from the new water main, storm sewer construction (as the streets do not currently contain these services), construction of a new sanitary sewer main and lift station, and full reconstruction of the streets and driveways.

Residential plumbing rehabilitation work would include replacement of the plumbing within the HRA homes included in the project area. The plumbing underneath the flooring would be replaced, therefore the demolition and subsequent restoration of floors, walls, and related surface coverings would also be included. Additionally, replacement fixtures would be installed to accommodate the new replacement plumbing.

The county road storm sewer replacement work would involve the replacement of the storm sewer infrastructure along County Road 1, including mains, leads, catch basins and manholes. In addition, removal, and replacement of the road (aggregate base, bituminous surface, curb & gutter etc.) associated with the storm sewer replacements would also occur.

SCDP Funds are requested for the infrastructure improvements, in the amount of \$1,200,000.

Fed. Obj.	Activity Code	Activity Title	Unit Goal	Number of households /persons served	Number of LMI households /persons served	SCDP Funds	Other Funds	Total
LMH	14B	Rental Rehab - Single Family	22	22	22	\$550,000.00	\$185,000.00	\$735,000.00
LMA	03J	Wastewater Improvement	1	463	463	\$580,000.00	\$1,715,237.00	\$2,295,237.00
	21A	Administration				\$70,000.00		\$70,000.00
		Totals				\$1,200,000.00	\$1,900,237.00	\$3,100,237.00

Finding of No Significant Impact

It has been determined such request for release of funds will not constitute an action significantly affecting the quality of the human environment and the Grantee has decided not to prepare an Environmental Impact Statement under the National Environmental Policy Act of 1969 (PL 91-190).

The reasons not to prepare an Environmental Impact Statement are as follows:

*See attached Statutory Compliance Checklist for each category's justification.

An Environmental Review Record respecting this project has been made by the Grantee that documents the environmental review of the project and fully sets forth the reasons why such statement is not required. The Environmental Review Record is on file and is available for public examination and copying, upon request, at Baudette City Hall between the hours of 8:00 AM and 4:00 PM, Monday through Friday.

Notice of Intent to Request Release of Funds

On or about, February 13, 2025, the Grantee will request the Business and Community Development Division, Small Cities Development Program, Minnesota Department of Employment and Economic Development (DEED BCD), to release Federal funds under Title I of the Housing and Community Development Act of 1974, as amended (PL 98-181) for the project described above.

Public Comments

All interested agencies, groups and persons disagreeing with this decision are invited to submit written comments for consideration by the Grantee to the offices of Freeberg & Grund Consulting Engineers, 321 Beltrami Avenue NW, Bemidji, MN 56601 on or before February 12, 2025. All comments received will be considered and the Grantee will not request the release of federal funds or take any administrative action on this project before the date specified in the preceding sentence.

In addition, pursuant to the National Historic Preservation Act, comments on the identification and treatment of historic properties in the project area are welcome.

Environmental Certification

The Grantee will undertake the project described above with Block Grant funds from DEED under Title I of the Housing and Community Development Act of 1974. The Grantee is certifying to DEED that Dylan Hancharyk, in his official capacity as Mayor, consent to accept the jurisdiction of the Federal courts if an action is brought to enforce responsibilities in relation to environmental reviews, decision making and action; and that these responsibilities have been satisfied. The legal effect of the certification is that upon its approval, the Grantee may use Block Grant funds and DEED and the U.S. Department of Housing and Urban Development will have satisfied their responsibilities under the National Environmental Policy Act of 1969.

Objections to State Release of Funds

DEED BCD will accept objections to its approval of the release of funds and acceptance of the certification for a period of fifteen following the anticipated submission date or its actual receipt of the request, whichever is later, only for one of the following reasons: (a) that the certification was not in fact executed by the Chief Executive Officer or other officer of the Grantee approved by BCD; (b) that the Grantee's ERR for the project indicates omission of a required decision, finding or step applicable to the project in the environmental review process; (c) the Grantee or its agents have incurred costs not authorized at 24 CFR Part 58.22 before approval of a release of funds by BCD; or (d) another Federal agency acting pursuant to 24 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedure (24 CFR Part 58.76) and may be addressed to Manager, Small Cities Development Program, Business and Community Development Division, Minnesota Department of Employment and Economic Development, Great Northern Building, 180 East 5th Street, Suite 1200, St. Paul, Minnesota 55101-1351. Potential objectors should contact DEED BCD at [REDACTED] to verify the actual last day of the objection period.

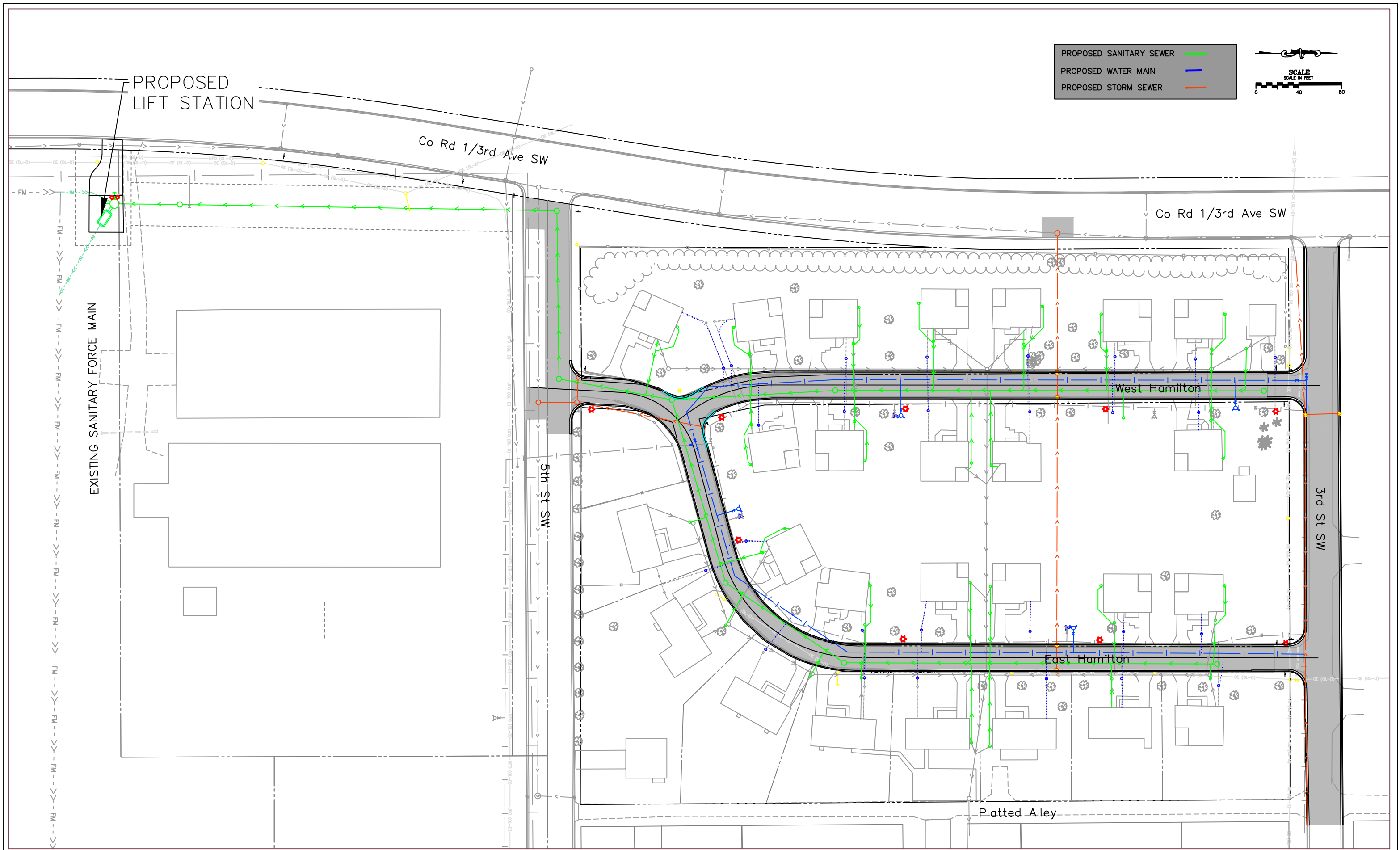
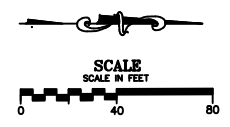
Dylan Hancharyk, Mayor, City of Baudette

(10/2024)

PROPOSED SANITARY SEWER —

PROPOSED WATER MAIN —

PROPOSED STORM SEWER —



REVISIONS:				
NO.	BY	CHK.	APP.	DATE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

BRIAN V. GRUND REG. NO. 24051

CLIENT			
BID			
CONSTRUCTION	A	B	C
RELEASED TO/FOR	1	2	3
DATE RELEASED			

DESIGNED	M.F.
DRAWN	W.A.M.
CHECKED	M.F.
APPROVED	
BY	DATE

WESTWOOD
BAUDETTE, MINNESOTA

WESTWOOD HOUSING
OVERVIEW

FGI PROJECT NO.
22019

CLIENT PROJECT NO.
00000

1 OF 1
SHEET NO.
C-1



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
332 MINNESOTA STREET, SUITE E1500
ST. PAUL, MN 55101-1678

January 27, 2025

Regional Planning and Environment Division North

SUBJECT: City of Baudette, Northeastern Minnesota Environmental Infrastructure and Resource Protection and Development Program

Minnesota Department of Administration
State Historic Preservation Office
50 Sherburne Avenue, Suite 203
St. Paul, Minnesota, 55155

Dear Amy Spong,

The U.S. Army Corps of Engineers, St. Paul District (Corps) is reviewing proposed sanitary sewer improvements within the City of Baudette, Minnesota (City) under Section 569 of the Water Resources Development Act (WRDA) of 1999. Section 569 authorizes the Secretary of the Army to provide assistance in the form of design and construction assistance for water related environmental infrastructure and resource protection and development projects in Minnesota. Non-Federal Sponsors include the City and the Baudette Housing and Redevelopment Authority ("Baudette HRA"). The City has also secured funding through a Housing and Urban Development (HUD) grant and consultation under Section 106 of the National Historic Preservation Act of 1966, as amended has been completed (SHPO # 2022-1202). However, as the Corps was not involved in previous review and HUD was not designated lead agency under Section 106, the Corps is consulting pursuant to Section 106 for the Section 569 authorization of the Project. The Section 569 project includes the design and construction of all proposed improvements on the Baudette Westwood Housing Sewer and Watermain Project.

The City of Baudette is in Lake of the Woods County, Minnesota, 20 miles southeast of Lake of the Woods (Figure 1). The proposed Undertaking would replace and improve water, sanitary sewer, and storm sewer infrastructure serving the Westwood Housing neighborhood and in adjacent public roadway within the City of Baudette (Figures 2-3). The existing sewer and water lines in the project area were installed at shallow depths that are continuously impacted by cold weather. The lines, installed in the 1950s, are of materials that no longer meet current code requirements and have experienced age-related deterioration. Service lines from the mains to the public housing, within HRA property are in similar condition and require replacement. Neighborhood streets currently lack storm sewers, and segments of the existing storm sewer infrastructure along County Road 1 have shown surface failures that necessitate replacement to provide adequate drainage for the road.

The sewer and water infrastructure improvements would consist of replacement of municipal sanitary sewer and water main lines beneath West and East Hamilton (neighborhood streets), replacement of residential tie-ins from the new water main, storm sewer construction on the residential streets, and construction of a new sanitary sewer main and lift station. The project is expected to include replacement of approximately 2,900 feet

of water mains and service pipes and 5,000 feet of sanitary sewer mains and services. An additional 600 feet of new pipe will be added to connect the neighborhood to the new lift station. Sewer and water main and service line construction will include replacement/construction of approximately 4,200 feet of concrete curb and gutter. Streets and public housing driveways impacted by construction will be otherwise restored to their pre-project condition in accordance with the project agreement. Roads that will be impacted include County Road 1, West Hamilton, East Hamilton and 3rd Street SW. Public lighting impacted by construction that cannot be avoided would be addressed in accordance with the project agreement.

The county road storm sewer replacement work would involve the replacement of the storm sewer infrastructure along County Road 1, including approximately 1,000 feet of mains, leads, catch basins and manholes. In addition, removal, and restoration to the pre-project condition of the road (aggregate base, bituminous surface, curb & gutter etc.) associated with the storm sewer replacements will also occur.

The Lake of the Woods County Fairgrounds (to the west across County Road 1) would be used as a construction staging and materials storage area. Approximately four acres would be used for staging. No ground disturbance is proposed within the fairgrounds, and this area would be returned to its original condition after project completion.

The area of potential effects (APE) for Section 569 is defined as the geographic area(s) within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if present, and is influenced by the scale and nature of the undertaking. The Corps has determined the APE for the undertaking to be based on the components of the project that fall under the Section 569 authorization and include the physical direct impacts of the project including work limits and staging areas (Figure 4).

The Corps conducted background research which consisted of reviewing the National Register of Historic Places (NRHP) and the Minnesota OSA and MnSHIP portals, as well as reviewing previously completed NHPA consultation between your office and HUD. Documentation completed in 2024 included a reconnaissance and intensive history survey of Westwood Housing (New History, May 2024) and a Phase IA literature review for the project (In Situ Archaeological Consulting, LLC, May 17, 2024). The Corps considers identification efforts sufficient for purposes of this Undertaking and agrees with the findings.

Two historic properties were identified within the APE, the Lake of the Woods County Fairgrounds (LW-BDC-00028) and Baudette Air Force Radar Station and Family Housing Historic District (LW-XXX-00001). No archaeological resources have been identified within the APE. LW-BDC-00028 was determined not eligible to the NRHP in August 2024. LW-XXX-00001 was determined eligible for listing in the NRHP under Criterion A in the areas of military and community planning and development with its period of significance ranging from 1959-1979. LW-XXX-00001 has a local level of significance.

Based on the Corps review of submitted plans and specs, the Corps has made the determination of no adverse effect to historic properties. The Project was designed to be consistent with the Secretary of Interior's *Standards for the Treatment of Historic Properties*

(Standards). Your office previously concurred with the determination of no adverse effect because proposed work was designed in accordance with the Standards.

The Corps has identified the Boise Forte and Grand Portage Tribes as potentially attaching religious and cultural significance to properties within the APE and has invited them to be consulting parties as outlined in 36 CFR 800.2(c)(2).

The Corps respectfully requests your concurrence with the agency's finding of no adverse effect no later than 30 days from receipt of this letter. If you have any questions, please call Rosaura Ramos Santos at [REDACTED],

[REDACTED] or Vanessa Alberto, at [REDACTED],
[REDACTED].

Sincerely,

**Jonathan
Sobiech**

Digitally signed by
Jonathan Sobiech
Date: 2026.01.27
15:14:25 -06'00'

Jonathan J. Sobiech
Deputy Chief, Regional Planning and
Environment Division North

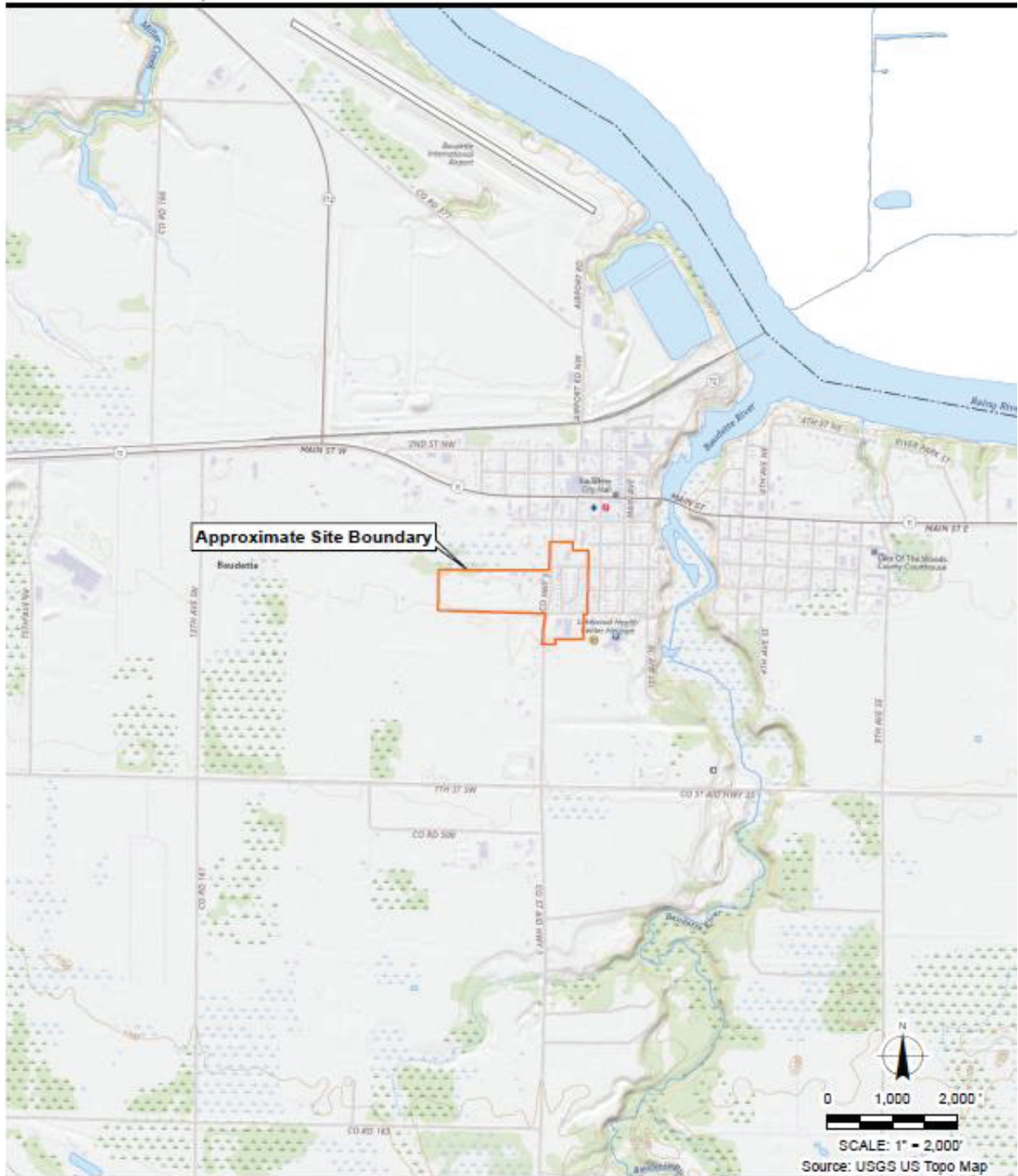


Figure 1 Site Boundary



Figure 2 Site & Construction Boundaries



Figure 4 Area of Potential Effects (APE)



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
332 MINNESOTA STREET, SUITE E1500
ST. PAUL, MN 55101-1678

January 27, 2025

Regional Planning and Environment Division North

SUBJECT: City of Baudette, Northeastern Minnesota Environmental Infrastructure and Resource Protection and Development Program

Dear Tribal Representative,

The U.S. Army Corps of Engineers, St. Paul District (Corps) is reviewing proposed sanitary sewer improvements within the City of Baudette, Minnesota (City) under Section 569 of the Water Resources Development Act (WRDA) of 1999. Section 569 authorizes the Secretary of the Army to provide assistance in the form of design and construction assistance for water related environmental infrastructure and resource protection and development projects in Minnesota. Non-Federal Sponsors include the City and the Baudette Housing and Redevelopment Authority ("Baudette HRA"). The City has also secured funding through a Housing and Urban Development (HUD) grant and consultation under Section 106 of the National Historic Preservation Act of 1966, as amended was completed. However, as the Corps was not involved in previous review and HUD was not designated lead agency under Section 106, the Corps is consulting pursuant to Section 106 for the Section 569 authorization of the Project. The Section 569 project includes the design and construction of all proposed improvements on the Baudette Westwood Housing Sewer and Watermain Project.

The Corps conducted background research which consisted of reviewing the National Register of Historic Places (NRHP) and the Minnesota OSA and MnSHIP portals, as well as reviewing previously completed NHPA consultation between your office and HUD. Documentation completed in 2024 included a reconnaissance and intensive history survey of Westwood Housing (New History, May 2024) and a Phase IA literature review for the project (In Situ Archaeological Consulting, LLC, May 17, 2024). The Corps considers identification efforts sufficient for purposes of this Undertaking and agrees with the findings. No archaeological resources are located within the project area.

The City of Baudette is in Lake of the Woods County, Minnesota, 20 miles southeast of Lake of the Woods (Figure 1). The proposed Undertaking would replace and improve water, sanitary sewer, and storm sewer infrastructure serving the Westwood Housing neighborhood and in adjacent public roadway within the City of Baudette (Figures 2-3). The existing sewer and water lines in the project area were installed at shallow depths that are continuously impacted by cold weather. The lines, installed in the 1950s, are of materials that no longer meet current code requirements and have experienced age-related deterioration. Service lines from the mains to the public housing, within HRA property are in similar condition and require replacement. Neighborhood streets currently lack storm sewers, and segments of the existing storm sewer infrastructure along County Road 1 have shown surface failures that necessitate replacement to provide adequate drainage for the road.

The sewer and water infrastructure improvements would consist of replacement of municipal sanitary sewer and water main lines beneath West and East Hamilton (neighborhood streets), replacement of residential tie-ins from the new water main, storm sewer construction on the residential streets, and construction of a new sanitary sewer main and lift station. The project is expected to include replacement of approximately 2,900 feet of water mains and service pipes and 5,000 feet of sanitary sewer mains and services. An additional 600 feet of new pipe will be added to connect the neighborhood to the new lift station. Sewer and water main and service line construction will include replacement/construction of approximately 4,200 feet of concrete curb and gutter. Streets and public housing driveways impacted by construction will be otherwise restored to their pre-project condition in accordance with the project agreement. Roads that will be impacted include County Road 1, West Hamilton, East Hamilton and 3rd Street SW. Public lighting impacted by construction that cannot be avoided would be addressed in accordance with the project agreement.

The county road storm sewer replacement work would involve the replacement of the storm sewer infrastructure along County Road 1, including approximately 1,000 feet of mains, leads, catch basins and manholes. In addition, removal, and restoration to the pre-project condition of the road (aggregate base, bituminous surface, curb & gutter etc.) associated with the storm sewer replacements will also occur.

The Lake of the Woods County Fairgrounds (to the west across County Road 1) would be used as a construction staging and materials storage area. Approximately four acres would be used for staging. No ground disturbance is proposed within the fairgrounds, and this area would be returned to its original condition after project completion.

The area of potential effects (APE) for Section 569 is defined as the geographic area(s) within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if present, and is influenced by the scale and nature of the undertaking. The Corps has determined the APE for the undertaking to be based on the components of the project that fall under the Section 569 authorization and include the physical direct impacts of the project including work limits and staging areas (Figure 4).

Two historic properties were identified within the APE, the Lake of the Woods County Fairgrounds (LW-BDC-00028) and Baudette Air Force Radar Station and Family Housing Historic District (LW-XXX-00001). No archaeological resources have been identified within the APE. LW-BDC-00028 was determined not eligible to the NRHP in August 2024. LW-XXX-00001 was determined eligible for listing in the NRHP under Criterion A in the areas of military and community planning and development with its period of significance ranging from 1959-1979. LW-XXX-00001 has a local level of significance.

Based on the Corps review of submitted plans and specs, the Corps has made the determination of no adverse effect to historic properties. The Project was designed to be consistent with the Secretary of Interior's *Standards for the Treatment of Historic Properties* (Standards).

The Corps respectfully requests your concurrence with the agency's finding of no adverse effect no later than 30 days from receipt of this letter. If you have any questions, please call Rosaura Ramos Santos at [REDACTED],

[REDACTED] or Vanessa Alberto, at [REDACTED],

Sincerely,

**Jonathan
Sobiech**

Digitally signed by Jonathan
Sobiech
Date: 2026.01.27 15:15:54
-06'00'

Jonathan J. Sobiech
Deputy Chief, Regional Planning and
Environment Division North

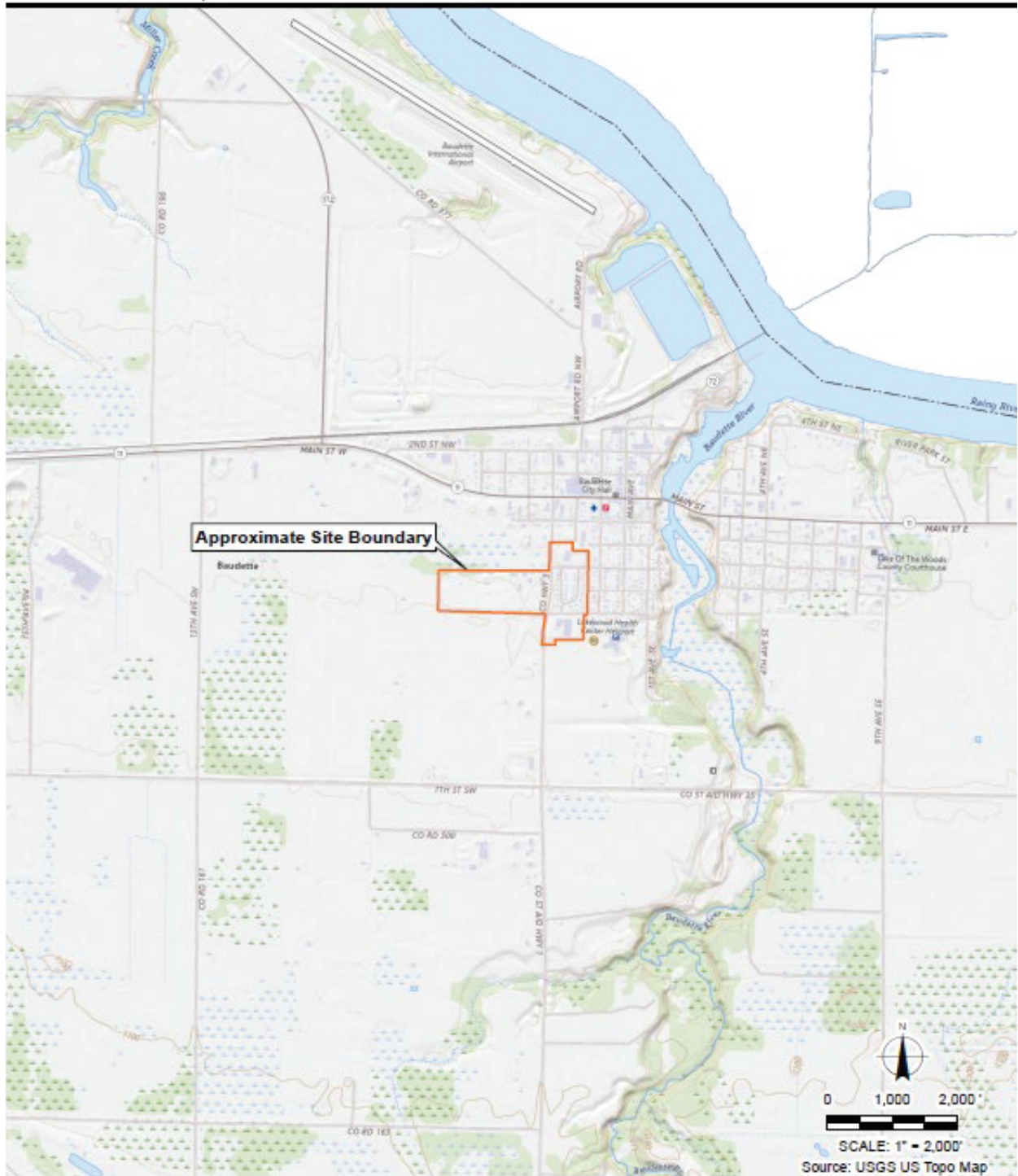


Figure 1 Site Boundary



Figure 2 Site & Construction Boundaries



Figure 4 Area of Potential Effects (APE)

APPENDIX B
DRAFT FONSI



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
332 MINNESOTA STREET, SUITE E1500
ST. PAUL, MN 55101-1323

Type or select a date.

Regional Planning and Environment Division North

DRAFT FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act, the U.S. Army Corps of Engineers (USACE), St. Paul District, has assessed the environmental impacts of the following project:

CITY OF BAUDETTE, WESTWOOD HOUSING, SEWER AND WATERMAIN
IMPROVEMENTS
LAKE OF THE WOODS, MN

The purpose of the proposed action is to update the water and sewer systems in the Westwood Housing development. The project, to be undertaken by the City of Baudette and the Baudette Housing and Redevelopment Authority, includes replacement of approximately 2,900 feet of water mains and service pipes, 5,000 feet of sanitary sewer mains and services, 4,200 ft of concrete curb and gutter, 1,000 ft of additional storm sewer capacity, installation of a new lift station and an additional 600 feet of new pipe to connect the neighborhood to the new lift station. Streets (aggregate base, bituminous surface, curb & gutter etc.) and public housing driveways impacted by construction will be otherwise restored to their pre-project condition in accordance with the project agreement. The Environmental Assessment (EA) and its attachments are incorporated in this Finding of No Significant Impact (FONSI) by reference.

This FONSI is based on the following factors: the proposed project would have temporary minor adverse impacts to noise, air, wildlife, herbaceous vegetation and soils. Affected resources would be expected to recover from any adverse effects shortly after conclusion of the project. The project would have no adverse effect to historic properties. Overall, the project would have a long-term beneficial effect to the residents of the Westwood Housing development from increased dependability of the water and sewer system.

Best management practices (BMPs) and other avoidance and minimization measures will be implemented as detailed in Section 3.4 of the EA. No compensatory mitigation is required as part of the project. As part of its notification to the City and HRA that environmental compliance is complete, USACE will require the measures included in the EA and attachments to be followed by the City, HRA and their contractors.

Public review of the draft EA and FONSI is currently in process. This section will be updated once the review period has ended, and comments have been addressed. All applicable environmental laws have been considered, and coordination with appropriate

agencies and officials has been completed. Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, USACE determined that the project will have no effect on federally listed species or their designated critical habitat. Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, USACE determined that the project would have No Adverse Effect to Historic Properties, and consultation was initiated with the Minnesota State Historic Preservation Office and Tribes on January 27th, 2026. Pursuant to the Clean Water Act of 1972, as amended, The proposed project would not result in any impacts to Section 404 regulated wetlands. No discharge of dredged or fill in Waters of the US is proposed, therefore no authorization under Section 404 of the Clean Water Act or 401 water quality certification is required.

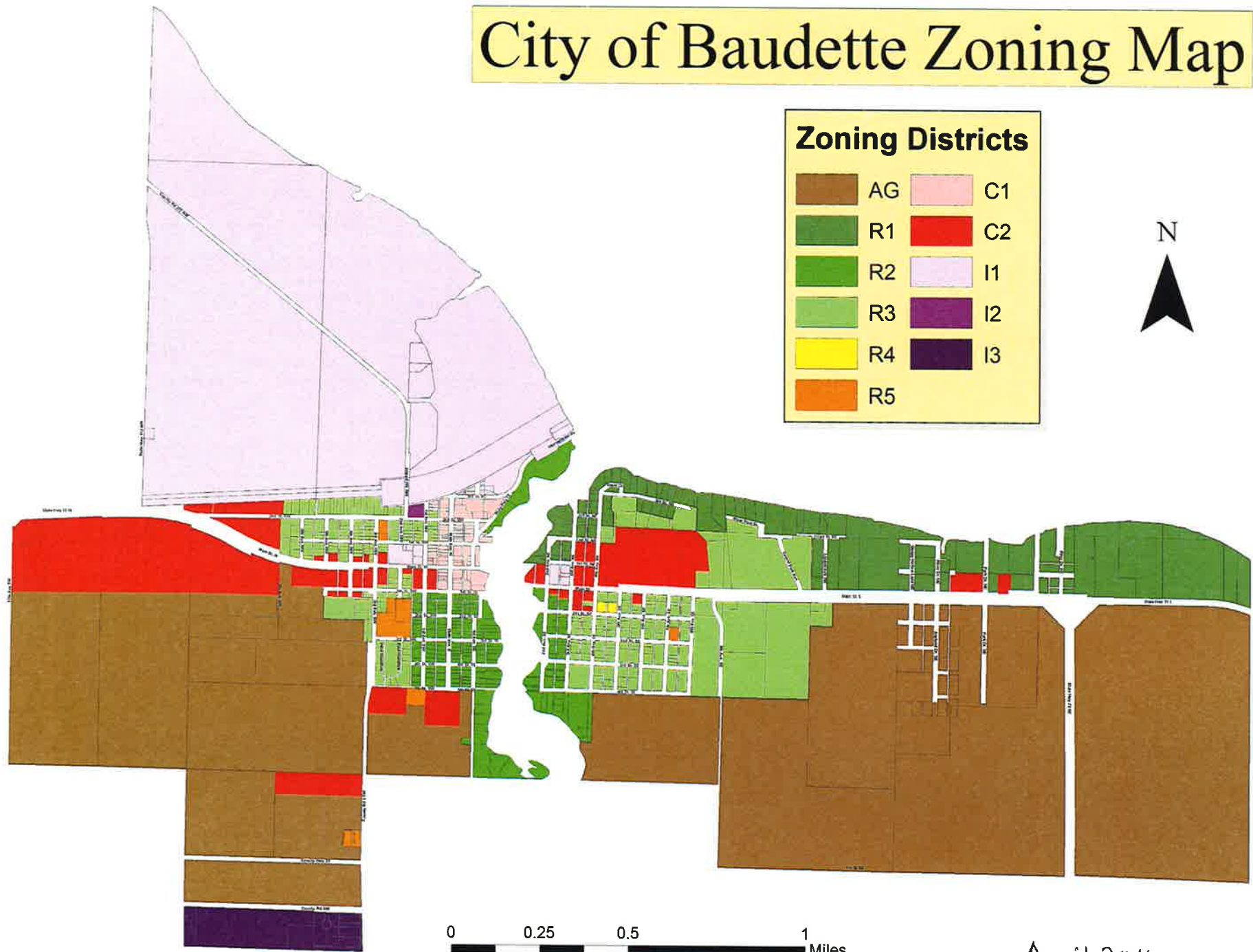
For the reasons above, the proposed action does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an Environmental Impact Statement will not be prepared.

Jonathan J. Sobiech
Deputy Chief, Regional Planning and
Environment Division North

APPENDIX C

Exhibits

City of Baudette Zoning Map

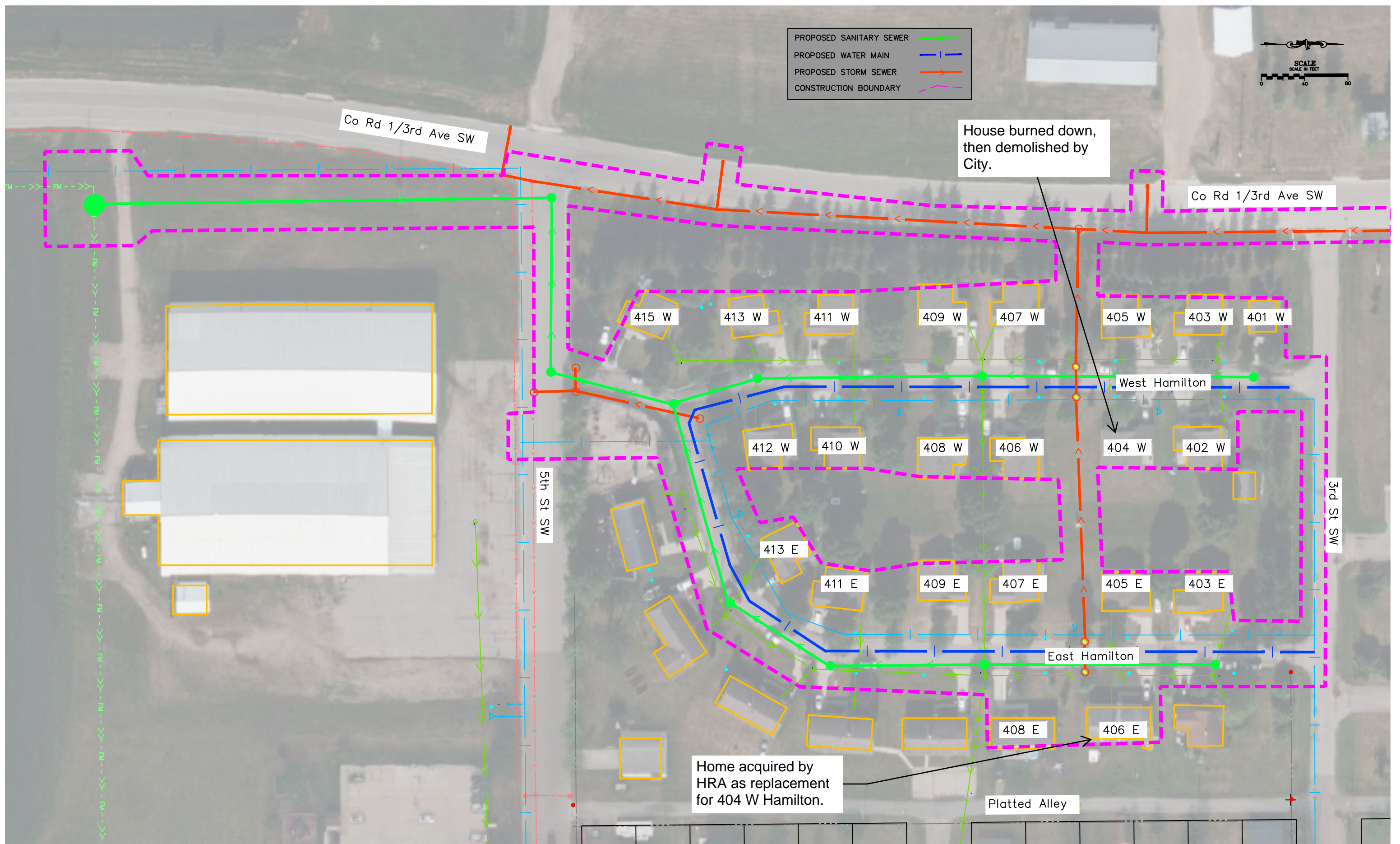


Zoning Districts	
AG	C1
R1	C2
R2	I1
R3	I2
R4	I3
R5	



0 0.25 0.5 1 Miles

April 2016



- PROPOSED SANITARY SEWER →
- PROPOSED WATER MAIN —|—
- PROPOSED STORM SEWER →
- CONSTRUCTION BOUNDARY - - -



REVISIONS:				
NO.	BY	CHK.	APP.	DATE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Mark J. Fuller
 MARK J. FULLER REG. NO. 59392

CLIENT					



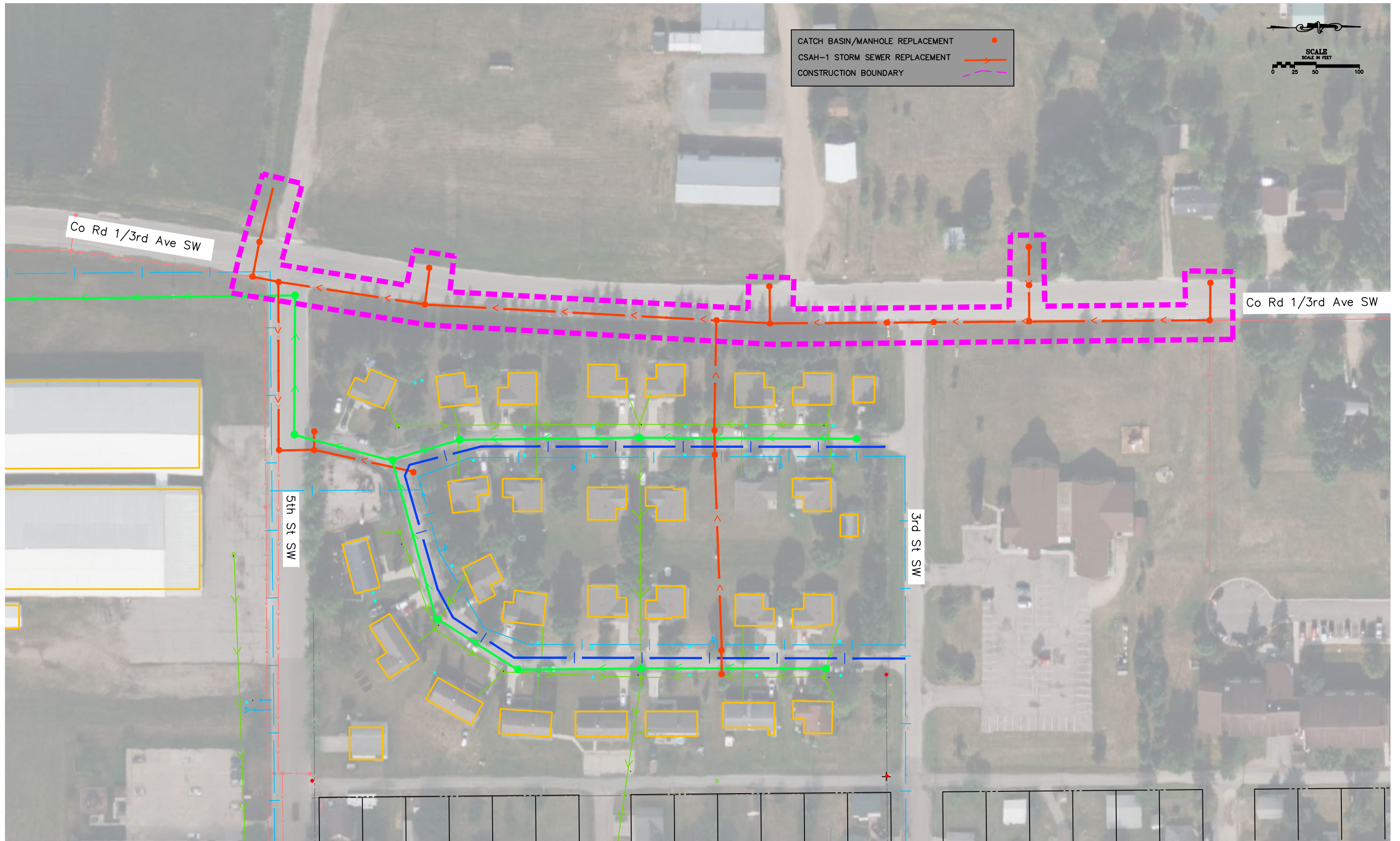
DESIGNED	M.F.	12/14/23
DRAWN	WAM	12/14/23
CHECKED	M.F.	12/14/23
APPROVED		
	BY	DATE

WESTWOOD
 BAUDETTE, MINNESOTA

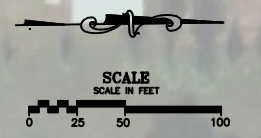
PROJECT ADDRESS MAP

FGI PROJECT NO.
 16033
 CLIENT PROJECT NO.
 00000

3 OF 3
 SHEET NO.
C-3



CATCH BASIN/MANHOLE REPLACEMENT ●
 CSAH-1 STORM SEWER REPLACEMENT →
 CONSTRUCTION BOUNDARY - - -



REVISIONS:				
NO.	BY	CHK.	APP.	DATE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 MARK J. FULLER REG. NO. 59392

CLIENT	CONSTRUCTION	RELEASED TO/FOR	A	B	C	1	2



DESIGNED	M.F.	05/24/24
DRAWN	WAM	05/24/24
CHECKED	M.F.	05/24/24
APPROVED		
BY	DATE	

WESTWOOD
 BAUDETTE, MINNESOTA

CSAH-1 STORM OVERVIEW

FGI PROJECT NO.	16033
CLIENT PROJECT NO.	00000

1 OF 1
 SHEET NO.
C-1

Dec 8, 2023

Freeberg & Grund Consulting Eng.
Attn: Mark Fuller
321 Beltrami Ave NW
Bemidji, MN 56601

Subject: Baudette Westwood Manor
City Proj. No.: 8
Re: Sanitary Sewer – Sewer Scope
EAPC No.: 20237080

Dear Mr. Fuller,

EAPC has conducted a site visit of the Westwood Manor Housing Development in Baudette, MN and performed a sewer scope with camera for residences 407W, 412W, 406E, and 413E. Mason Haga and Dean Narlock, both with EAPC, were on site Wednesday Nov. 29th.

Findings from our site investigations and review of the sewer camera video recordings are as follows:

Unit 407W (Occupied)

The first unit visited was unit 407W. We were informed that the occupant of this unit has been having constant issues with sewer piping backing up in the building. Aside from occasional snaking of the lines, no permanent repairs have been done to the plumbing within the building.

All the underground piping within the residence appears to be extensively corroded cast iron piping. See *Figure 1*. This piping is approximately 60 years old and is well past its useful life. Although the corrosion and interior roughness of this piping is likely impeding drainage flow, we didn't see any major issues with this piping that would result in the sewer completely backing up.

At approximately the 27' mark, the cast iron piping appears to reach the building's foundation wall and transitions into clay tile piping. See *Figure 2*. This piping appears to be in much better condition than the interior cast iron piping. However, there is standing water visible in much of this piping. The sewer camera was underwater for most of this run, so we could not determine if the blockage was caused by articles being flushed down the waste line, improperly sloped piping, damaged piping, or some other factor. This piping runs to a city manhole approximately 50' from the toilet stool. It is unclear if the blockage is originating from the manhole or somewhere in the clay tile pipe.

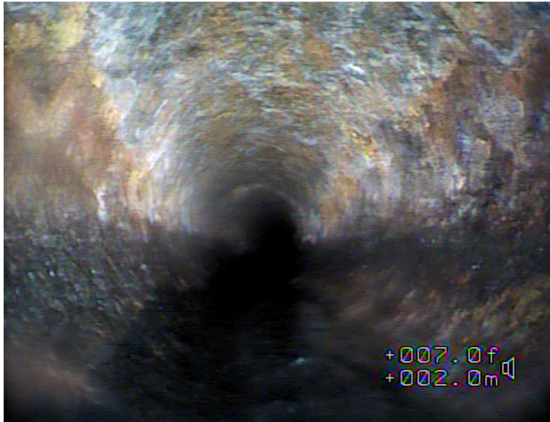


Figure 1: Corroded Cast Iron Piping within the Building – Unit 407W



Figure 2: Transition from Cast Iron Piping to Clay Tile Piping – Unit 407W

Recommendations:

- Snake the entire sewer line back to the city main/manhole.
- Replace all the cast iron piping within the residence as this piping is past its useful life.
- Ensure all piping outside the residence is sloped and installed properly.

Unit 412W (Unoccupied)

The second unit visited was unit 412W. This unit was unoccupied at the time of our site visit. This unit has the same interior layout as the previous, however some of the underground cast iron piping in the laundry room has recently been replaced. Due to the piping's smaller diameter, we were not able to send the sewer camera through the newly-replaced piping.

Like in the first unit, all the underground piping within the residence is extensively corroded cast iron piping. This piping is past its useful life and the amount of corrosion and surface roughness could be impeding drainage flow. Standing water was observed in some of this piping, especially at fittings or seams between pipe sections. See *Figure 3*. However, no major issues or blockages were found in this piping.

At approximately 30' from the toilet stool, the cast iron piping transitions to what appears to be ASTM D 2665 Sch 40 PVC (PVC). See *Figure 4*. This likely occurs at the residence foundation. The condition of this PVC pipe seems adequate, but it appears to be improperly sloped. This results in standing water and poor drainage of the entire pipe section. At approximately 37' from the toilet stool, the PVC pipe transitions into what appears to be lightweight ASTM D3034 PVC piping (3034). See *Figure 5*. Again, the condition of this pipe seems adequate, but it appears to be improperly sloped. It was also observed that the seams between pipe sections are slightly offset, resulting in small amounts of trapped water at these seams. At approximately 42', the 3034 pipe transitions into clay tile piping. See *Figure 6*. It then heads across the street and connects to the sewer main. The sewer camera made it approximately 62' down the line before it became completely submerged underwater. We believe this point is just across the street before the piping connects to the main.

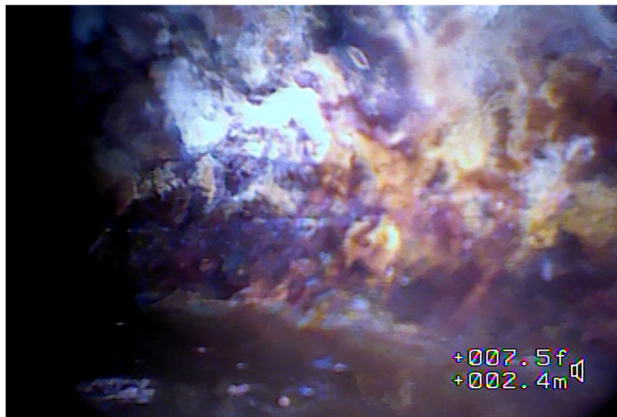


Figure 3: Corroded Cast Iron Piping with Standing Water within the Building – Unit 412W



Figure 4: Transition from Cast Iron to PVC Piping – Unit 412W



Figure 5: Transition from PVC to 3034 with Standing Water – Unit 412W

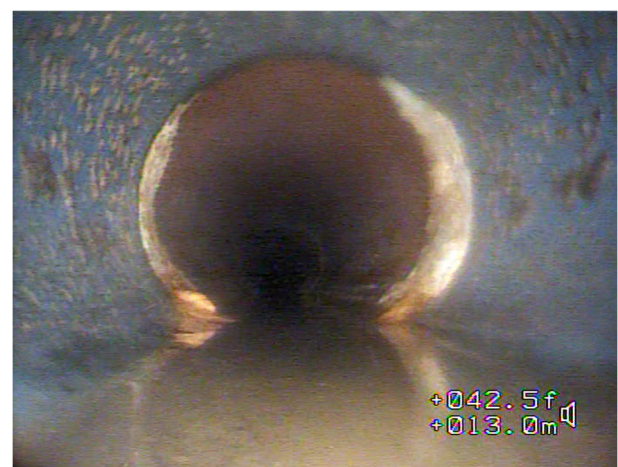


Figure 6: Transition from 3034 to Clay Tile Piping with Standing Water – Unit 412W

Recommendations:

- Replace all the cast iron piping within the residence as this piping is past its useful life.
- Ensure all piping outside the residence is sloped and installed properly.



Unit 405E (Unoccupied)

The third unit visited was unit 405E. This unit was also unoccupied. This unit was recently purchased and has a different interior layout than the other units. We were informed that there are no known issues with this unit, but that a section of pipe outside the foundation had recently been replaced.

All the underground piping within the residence is extensively corroded cast iron. This piping is well past its useful life and the amount of corrosion and surface roughness may be impeding drainage flow. See *Figure 7*. However, no major issues or blockages were found in this piping.

At approximately 23' from the toilet stool, the cast iron piping appears to leave the foundation and transition into the newly replaced PVC piping. See *Figure 8*. This PVC piping seems to be in great condition and appears to drain properly. In our opinion this is how all the piping, inside and out, should look. See *Figure 9*.

At approximately 40', the new PVC piping transitions back into an older clay tile wye fitting and drops into the sewer main. See *Figure 10*. No issues were found with any of the piping outside of this unit.



Figure 7: Corroded Cast Iron Piping within the Building – Unit 405E



Figure 8: Transition from Cast Iron to New PVC – Unit 405E

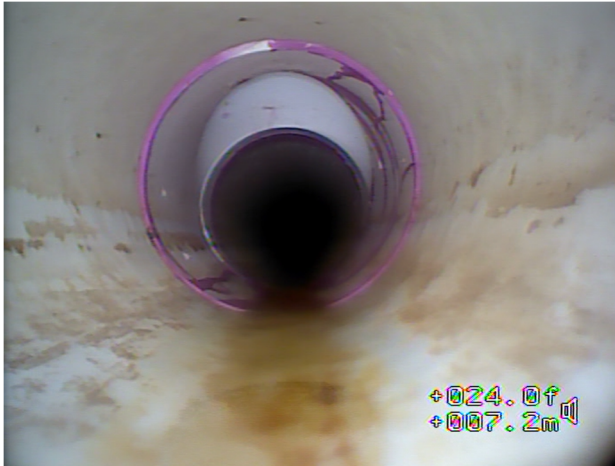


Figure 9: New PVC Piping – Unit 405E

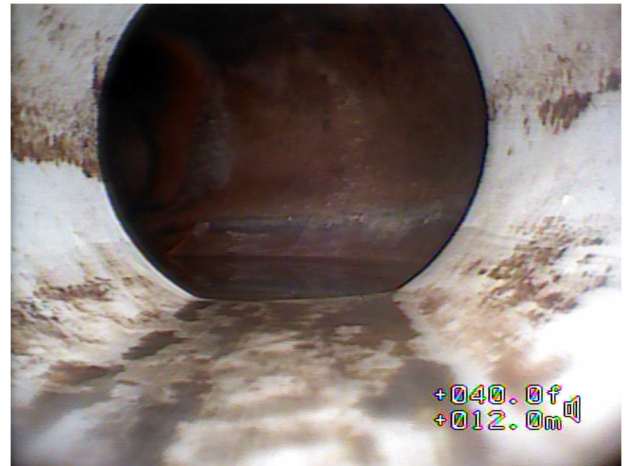


Figure 10: Transition from PVC to Clay Tile Wye into Sewer Main – Unit 405E

Recommendations:

- Replace all the cast iron piping within the residence as this piping is past its useful life.

Unit 413E (Occupied)

The fourth and final unit visited was unit 413E. We were informed that the occupant of this unit has had recent issues with the toilet backing up. This unit has the same interior layout as units 407W and 412W. It has also had the same plumbing repair that was done in unit 412W.

Like the other units, all the underground piping within the residence appears to be extensively corroded cast iron piping. This piping is well past its useful life and the amount of corrosion and surface roughness may be impeding drainage flow. There was an obstruction noticed approximately 17' from the toilet stool, possibly a disposable wipe or bubble wrap. See *Figure 11*. There was a pool of trapped wastewater approximately 18' from the toilet stool. See *Figure 12*. Standing water can also be seen approximately 23' from the stool, which is still underneath the residence. See *Figure 13*.

At approximately 26', the cast iron piping appears to leave the foundation wall and transition to clay tile piping. Some tree roots begin to appear in the pipe at this point. More instances of tree roots can be seen at 31.5', 35', 37', and possibly at 50'. See *Figures 14-18*. Several other obstructions and possible sections of improper sloping were noticed at various points in this line. At approximately 61' from the toilet stool, we reached a fitting and more standing water. We believe this is where the line connects to the sanitary main across the street. See *Figure 19*.

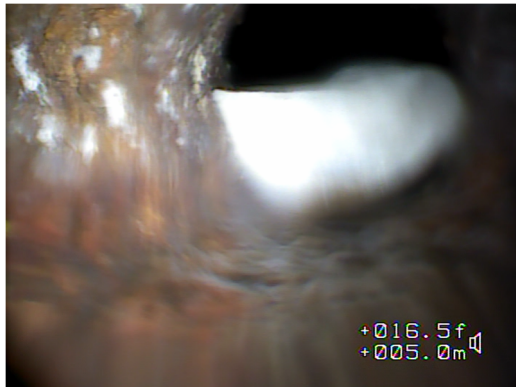


Figure 11: Corroded Cast Iron Piping and Possible Wipe within the Residence – Unit 413E

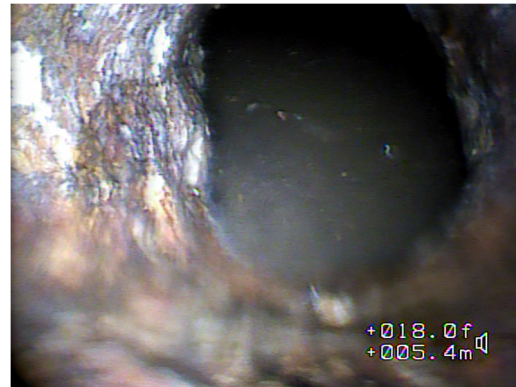


Figure 12: Corroded Cast Iron Piping and Pool of Water within the Residence – Unit 413E



Figure 13: Corroded Cast Iron Piping and Standing Water within the Residence – Unit 413E

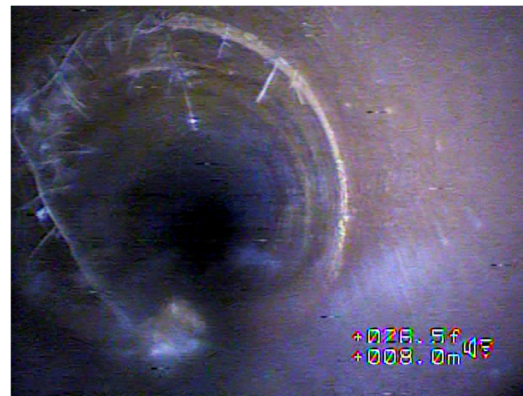


Figure 14: Transition from Cast Iron to Clay Tile, First Sign of Tree Roots – Unit 413E



Figure 15: Instance of Tree Roots, Another Object – Unit 413E



Figure 16: Instance of Tree Roots, Same Object as Fig.15 – Unit 413E

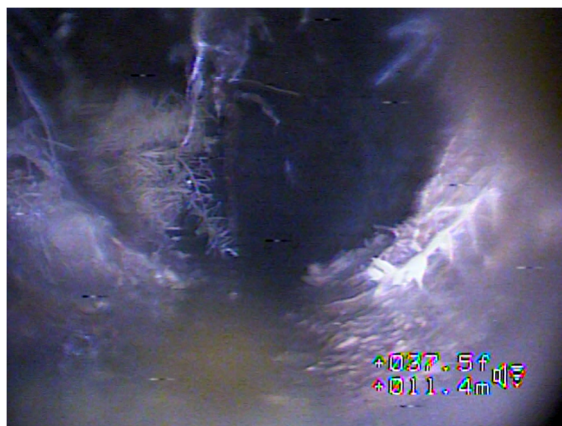


Figure 17: Extensive Tree Roots – Unit 413E

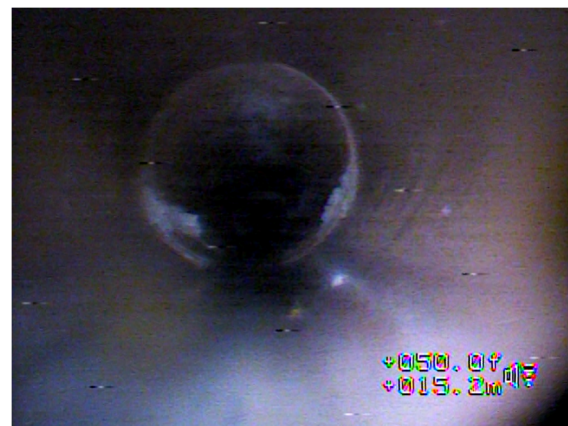


Figure 18: Possible Tree Roots Coming into Seam of Pipe – Unit 413E



Figure 19: Standing Water and Fitting into Sewer Main – Unit 413E

Recommendations:

- Snake the entire sewer line back to the city main/manhole.
- Replace all the cast iron piping within the residence as this piping is past its useful life.
- Ensure all piping outside the residence is sloped and installed properly.

Summary

All the existing cast iron piping under these units is approximately 60 years old and is well past its expected useful life. Even if it is not the main culprit, the buildup of corrosion and waste in these pipes is very likely contributing to the multiple issues encountered by residents. Under the assumption that the rest of the sewer lines are being replaced in the near future, it is highly recommended that all piping under the units and up to 5' from the foundation be removed and replaced with new ASTM D2665 Schedule 40 PVC piping. Care should be taken to ensure proper slope and installation of all new piping.

Respectfully submitted by:

Dean Narlock
Mechanical Designer

Respectfully submitted by:

Mason Haga, EIT
Mechanical Designer