Draft Environmental Assessment

Scott County Road 60 Reconstruction

Scott County, Minnesota
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Prepared by
Scott County, Program Delivery
600 Country Trail East
Jordan, MN 55352

Prepared for
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536 South Clark Street, Sixth Floor
Chicago, IL 60605

FEMA

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List of Acronyms, Chemical Formulas, and Abbreviations

AaB–Alluvial

AADT–Annual Average Daily Traffic

AHAP–Archaeological and Historic Preservation Act of 1974

AIRFA–American Indian Religious Freedom Act

APE–Area of Potential Effect

BMP–Best Management Practice

CAA–Clean Air Act

CaB2–Clarion Loam

CSAH—County State-Aid Highway

CEQ–Council on Environmental Quality

C.F.R.–Code of Federal Regulations

CO–Carbon monoxide

CR–County Road

dB–Decibels

Df–Dundas Silt Loam

EA–Environmental Assessment

EIS–Environmental Impact Statement

EO–Executive Order

EPA–Environmental Protection Agency

ESA–Endangered Species Act

FEMA–Federal Emergency Management Agency

FIRM–Flood Insurance Rate Map

FONSI–Finding of No Significant Impact

FPPA–Farmland Protection Policy Act

Ga–Glencoe Silty Clay Loam

HaB–Hayden Loam

HaB2–Hayden Loam Moderately Eroded

LcB–Lester Loam

LcB2–Lester Loam Moderately Eroded

Ldn–Day-Night Average Sound Level

Lf–Le Sueur-Lester

MBS–Minnesota Biological Survey

MDA—Minnesota Department of Agriculture

MnDNR–Minnesota Department of Natural Resources

MPCA–Minnesota Pollution Control Agency

NAAQS–National Ambient Air Quality Standards

NEPA–National Environmental Policy Act

NHIS–Natural Heritage Information System

NHPA–National Historic Preservation Act

NOI–Notice of Intent

NO2–Nitrogen Oxide

NPDES–National Pollutant Discharge Elimination System

NRCS–Natural Resources Conservation Service

NRHP–National Register of Historic Places

NWI–National Wetlands Inventory

O3–Ozone

OSHA–Occupational Safety and Health Administration

Pb–Lead

PCBs–Polychlorinated Biphenyls

P.L. –Public Law

PM10 Particulate matter

ROW–Right-of-way

Sb–Land, Hayden-Lester

SHPO–State Historical Preservation Office

SO2–Sulfur Dioxide

Ta–Terrace Escarpments

THPO–Tribal Historic Preservation Office

Wb–Webster-Glencoe Silty Clay Loams

Wc–Webster-Le Sueur Silty Clay Loams

WCA–Minnesota Wetland Conservation Act

USACE–United States Army Corps of Engineers

USFWS–United States Department of the Interior Fish and Wildlife Service

SECTION ONE: BACKGROUND/INTRODUCTION

1.1 PROJECT AUTHORITY

Between June 11 and July 11, 2014, high winds and heavy rains resulted in flooding and mudslides throughout the State of Minnesota. Effects of the storm in and near the hamlet of Blakeley, a small unincorporated community located in Blakeley Township, located in Scott County (the County), included significant damage to County Road (CR) 60. President Obama issued a major disaster declaration for the State of Minnesota on July 21, 2014, initially authorizing FEMA to provide Public Assistance (PA) to public entities located in 8 counties. This major disaster declaration was amended on July 31, 2014 adding twenty-four counties, including Scott County, and two tribal nations. With this amendment, disaster recovery assistance was made available through the Federal Emergency Management Agency (FEMA) to the County, and it applied for funding from FEMA's Public Assistance (PA) Program to underwrite the reconstruction of CR 60.

In accordance with the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4332, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [C.F.R.] Parts 1500 through 1508), and FEMA regulations for NEPA compliance (44 C.F.R. Part 10), FEMA is required to consider potential environmental impacts of actions it proposes to fund. The purpose of this Environmental Assessment (EA) is to analyze the potential environmental impacts of the reconstruction of CR 60. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or issue a Finding of No Significant Impact (FONSI).

1.2 PROJECT LOCATION

The segment of CR 60 proposed for reconstruction is located in Blakeley Township, Scott County, Minnesota (44.60 N, 93.85W). Located on the Minnesota River approximately half way between Minneapolis/St. Paul and Mankato (see regional and site location maps in Appendix A), Blakeley Township has a population of approximately 418, according to the 2010 U.S. Census. An unincorporated village, also named Blakeley, is located near the Minnesota River at the junction of CR 60, County State-Aid Highway (CSAH) 1, CSAH 6, and CSAH 5. These are all two-lane paved roadways. CSAH 1 (Union Trail) heads south of Blakeley, eventually connecting with U.S. 169. CSAH 5 (Elm Way) heads northwest, crossing the Minnesota River into Sibley County. CSAH 6 heads northeast along the Minnesota River to the City of Belle Plaine (2010 U.S. Census population of approximately 6,661), where it becomes State Street on the northern edge of town. CR 60, before being closed due to damage from the 2014 flood, provided a shorter route than CSAH 1 southeast to U.S. 169, the only four-lane divided roadway in the area. From the junction of CR 60, northbound U.S. 169 leads approximately 3 miles northeast to the south side of Belle Plaine and approximately 16 miles south to the City of Le Sueur (2010 U.S. Census population of approximately 4,058) in Le Sueur County. Belle Plaine and Le Sueur have the nearest medical facilities serving the residents of Blakeley, with the nearest in-patient facilities in Le Sueur. In summary, CR 60 provides the most direct access through Blakeley Township to U.S. 169, a divided roadway providing the most direct access to nearby jobs, schools, healthcare and emergency services for township residents, as well as for those living nearby in Sibley County across the Minnesota River in Blakeley.

In Blakeley, the junction of CR 60, CSAH 1, and CSAH 6, a quarter-mile southeast of the Minnesota River, marks the western extent of the project. The proposed reconstruction of CR 60 extends east from that point to the junction of CR 60 with U.S. 169. The first quarter mile or so of the roadway will be

relocated, and the remaining stretch of CR 60 traverses a wooded area of bluffs and ravines adjacent to the Minnesota River Valley, winding through farmland, past farmsteads, and rural residences.

1.3 PURPOSE AND NEED

FEMA's PA Grant Program provides disaster recovery funds to repair damage caused by natural or man-made disasters and to help prevent similar future damages. The high winds and heavy rains affecting CR 60 during the incident period caused slope failures and erosion, resulting in shoulder and embankment failures, as well as damage to the roadbed, shoulders and electrical infrastructure. CR 60 was closed due to these damages as the Scott County engineers were concerned about road instability, and electrical service was disrupted due to inaccessible downed lines along CR 60. Blakeley residents were unable to reach their homes for days and weeks not only due to the CR 60 closure but also due to the closure of CSAH 1, CSAH 5 and CSAH 6. According to the National Center for Environmental Information (NCEI)[1] mudslides and flood waters cut off all access to the town of Blakeley. The Multi-Hazard Mitigation Plan for Scott County specifically uses the Blakeley Township mudslides and flood waters as a need of addressing hazard mitigation in Blakeley[2]. Due to the disaster, CR 60 remains closed and without this project will continue to be a 2.5 mile cul-de-sac rather than the main thoroughfare in Blakeley Township.

As stated in the location section, Blakeley is situated near the Minnesota River at the intersection of CR 60 and CSAH 1 and CSAH 6 (Appendix A, Aerial Map). CR 60 is the main two-lane road running through Blakeley Township to U.S. 169, the principal arterial highway in Blakeley Township according to the Metropolitan Council[3]. U.S. 169 leads approximately 3 miles northeast to the City of Belle Plaine, 16 miles southwest to Le Sueur and is a direct route, approximately 46 miles, northeast to St. Paul and Minneapolis. The City of Belle Plaine serves as the School District for Blakeley Township[4]. Both the City of Belle Plaine and Le Sueur have the nearest medical facilities with Le Sueur the nearest in-patient facility.

Principally this project addresses the need for prompt emergency services response times to local residents, provides access to schools in Belle Plaine, to hospitals in Belle Plaine and to Le Sueur, which has the nearest in-patient facility. Without this project, CR 60 would be a 2.5 mile cul-de-sac, requiring all emergency response calls to get served from U.S. 169. As previously noted, CSAH 1 and CSAH 6 along the Minnesota River are unreliable routes during flood events. Restoring CR 60 not only reduces reliance on these routes, but will also improve current response time for emergency services for the 22 households in Blakeley, and restore the efficient route between Blakeley and U.S. 169.

CSAH 6 parallels the Minnesota River, is partially in the 100 year floodplain and is subject to intermittent spring flooding. Inaccessibility to CSAH 6 leaves CR 60 or CSAH 1 the only access points to Blakeley or to cross the Minnesota River via CSAH 5. River crossings are a significant component of the highway system for Scott County[5]. River crossings are very limited and the CSAH 5 river crossing is critical to mining and farming industries. Three gravel mining operations are located across the Minnesota River in Sibley County, and CR 60 provides their most direct route to U.S. 169. Several of the large farm operations have land either side of the Minnesota River and have a need to transport husbandry

[1] http://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=523523
[2] Ibid, Page 55.
[3] Metropolitan Council 2015 System Statement for Blakeley Township, September 17, 2015. http://www.metrocouncil.org/Communities/Planning/Local-Planning-Assistance/System-Statements/System-Statements/00663612_BlakeleyTwp_2015SS.aspx
[4] Minnesota Department of Education. Map created November 2014. http://www.mngeo.state.mn.us/maps/SchoolDistricts2016/sd0716.pdf
[5] Ibid., Page 28.

implements or agricultural commodities north to the Savage Port barge and rail facilities via the river crossing.

The Minnesota River crossing from Blakeley to CSAH 5 is additionally significant as it not only helps preserve the unique and aesthetic views important to Blakeley Township[6] but it also gives access to the Scenic Byway Highway from Scott County. The Scenic Byway Highway is an area that attracts visitors from St. Paul and Minneapolis to view fall colors and visit apple orchards and wineries that are along the Minnesota River Valley.

Maintaining access to Blakeley and restoring the efficient route between Blakeley and U.S. 169 will help the local economy. New businesses opened in Sibley County across the Minnesota River, a tap room opened in downtown Blakeley, and a new trailhead park is proposed, all which would be economic drivers for tourism with CR 60 as a direct route.

In addition to restoring the emergency response time and efficient travel, this project provides an opportunity for thoughtful redesign of the roadway to improve road safety and reduce the risk of future damage caused by flooding and mudslides. The existing horizontal curve is sharp, does not meet the 30 mile per hour speed requirement, and is located at the bottom of a maximum 12% grade roadway. The existing CR 60 has a climbing distance of approximately 3,100 feet and within the climb the roadway reaches grades as steep as 8.5% while winding through steep, horizontal curves. The preferred alternative incorporates geometrics and design features to a 55 mile per hour horizontal speed, is a maximum vertical slope of 7.84% with a climbing distance of approximately 2,600 feet that will be more resilient in heavy and extended rainfall conditions, thus reducing the community's risk of future loss of emergency services, electricity, and personal property. The preferred alternative reduces climbing distance, making the slope safer for moving heavy equipment.

The purpose and need of the proposed project is to reconstruct, armor, and realign CR 60 to satisfy the County's need for resilient ingress and egress to Blakeley, while mitigating future damage by addressing roadway configuration to improve safety and minimizing ongoing erosion. The relocation of CR 60 will maintain the direct access to the Minnesota River crossing and mitigate against the unreliable access to CSAH 1 and CSAH 6 during flooding events. The relocation of CR 60 will also restore access to U.S. 169, thereby maintaining prompt response times for emergency services, access to schools and hospitals, commercial routes for the gravel and farming industries, and tourism. Safety would be improved by the relocation of CR 60, noted as a hazard mitigation need against future damages in the Scott County Multi-Hazard Mitigation Plan.

SECTION TWO: ALTERNATIVES ANALYSIS

NEPA requires review of all reasonable alternatives to the proposed action. Reasonable alternatives are those that are technically feasible and will fulfill the project's purpose and need while avoiding significant negative effects that may result from the implementation of various alternatives. The analysis clearly demonstrates each alternative's effects, both positive and negative, while illustrating the extent to which each alternative addresses the purpose and need for the project. This section includes a No Action Alternative, a proposed action alternative and alternatives considered and eliminated.

[6] Multi-Hazard Mitigation Plan, Scott County, Minnesota 2016. Page 17.
http://www.scottcountymn.gov/DocumentCenter/View/5290

2.1 ALTERNATIVE 1 – NO ACTION ALTERNATIVE

Under the No Action Alternative, CR 60 would remain closed with unstable slopes at risk for future failure. The unstable slopes would continue to erode, sending sediment into the ravine system. From there, sediment would discharge into an existing channel, which is prone to sedimentation buildup and flow stoppage, prior to discharge into the Minnesota River. There would be no environmental impacts associated with the No Action Alternative, but CR 60 would not be functionally operational. This alternative does not address the needs identified in Section 1.3 above.

2.2 ALTERNATIVE 2 – PROPOSED ACTION: Scott County Road 60 Reconstruction

The Proposed Action alternative will provide for and restore current needs on a local and regional scale. The Proposed Action alternative maintains the most direct connection between Sibley County, via the CSAH 1 river crossing, and U.S. 169, a critical route for emergency services and the gravel mining and farming industries. Emergency services are located in Belle Plaine and Le Sueur with gravel mining and farming industries located across the Minnesota River crossing. This alternative minimizes risk of future slope failure, improves roadway alignment and profile by straightening a hairpin curve, provides storm retention ponds for erosion control, minimizes future maintenance costs, and reduces discharge of sediment and debris to a storm sewer, thereby minimizing potential for flooding homes in Blakeley. Blakeley residents support this alternative.

The Scott County Highway Department (Highway Department) proposes the rehabilitation, reclamation, reconstruction, and relocation of CR 60. The construction plan for the Proposed Action is included in Appendix C. The scope of work defined for rehabilitation extends from the eastern boundary of the proposed relocation of CR 60 to U.S. 169 and includes restoring the base course and aggregate, replacing the asphalt road surface, and repairing the road shoulders to bring the roadway to pre-disaster condition within the existing right-of-way. The scope of work for the reconstruction effort affects approximately 2,100 feet of roadway between the intersection of CSAH 1, CSAH 6, and CR 60 and the eastern extent of the road relocation area. Reconstruction of CR 60 in this area will include laying a storm sewer up to 25 feet deep below the reconstructed road, which will maintain the same width and elevation as the current roadway. The scope of work for the relocation of CR 60 includes:

- Relocate CR 60 to create a two lane rural design with 12-foot travel lanes and 4-foot shoulders for a total roadway width of 32 feet. The relocation will move CR 60 from the top of the bluff into the ravine to minimize the risk of future slope failures.
- Acquire and demolish three residences and six associated buildings. Scott County acquired the residences and buildings, which became subject to numerous unauthorized entries, vandalism, and removal of materials. This created security and safety issues that resulted in an imminent threat to life, health, and property. Scott County therefore submitted a request to FEMA for emergency demolition of the residences and associated buildings prior to the completion of the EA. FEMA authorized the demolitions with the following conditions:
    - Acquire all necessary permits prior to demolition.
    - Implement best practices for demolition, asbestos and lead abatement.
    - Render properties safe and secure after demolition.
- Construct two new dry retention ponds with berms and storm sewer to connect to existing pipe that flows from an existing dry retention pond.
- Install vegetation and mats for permanent erosion control at the two dry retention ponds along with the use of the storm sewer to convey highly erosive flows.
- Construct storm sewer on the western limits of CR 60 to divert approximately 100 cfs in a 100-year storm event to a ravine with a 10 feet x 10 feet box culvert crossing to discharge into the Minnesota River.

- Remove approximately 6 acres of trees, brush and understory growth required to construct the new roadway in the ravine.
- Excavate up to 30 feet of material along the bluff and the addition of up to 30 feet of additional material as it moves into the ravine.
- Flatten slopes from the roadway into the ravine from approximately 1-foot vertical/1 foot horizontal slope to a 1-foot vertical/4 foot horizontal to meet Minnesota Department of Transportation State Aid clear zone requirements. Reduce maximum profile grades from approximately 10 vertical foot of fall per 100 horizontal feet (10%) to 7.84 vertical feet of fall per 100 horizontal feet (7.84%).
- Import approximately 3,500 cubic yards of topsoil and 30,000 cubic yards embankment as additional fill.
- Utilize best management practices (BMPs) for erosion control, including rock construction entrances, silt fences, bio logs, erosion control blankets and mats.

The construction plan for the Proposed Action as described above and provided in Appendix C will provide for the needs as described in Section 1.3.

2.3 ALTERNATIVES CONSIDERED AND ELIMINATED FROM FURTHER CONSIDERATION

Scott County evaluated and eliminated three alternatives, which did not meet the need as described in 1.3. These alternatives did not improve ravine instability, minimize the risk of bluff erosion, effectively handle storm water discharge and sedimentation, nor maintain connectivity for emergency services response, and for daily commerce.

Cul-De-Sac Alternative

Scott County evaluated the alternative to close both the east and westbound approaches of CR 60 and to turn CR 60 into two cul-de-sacs. This alternative would provide no improvements to CR 60 to reduce bluff erosion or improve storm water discharge and sedimentation into the Minnesota River, thereby increasing the likelihood of flooding in the area. This alternative would also eliminate the current direct route between U.S. 169 and the Minnesota River Crossing, which allows emergency services response and daily commerce. Scott County removed this alternative from consideration, as it does not meet the need as defined in 1.3.

Maintain Roadway within Existing Alignment and Right-of-Way Alternative

This alternative would maintain the roadway within the existing alignment and right-of-way, providing continued connectivity between the river crossing and U.S. 169. Sheet pile and tiebacks as per the USACE design manual would be placed to prevent erosion in the disaster areas of failure. There would be some improvement in water quality discharging from the right-of-way, but the potential for sediment erosion toward the Minnesota River would remain because of erosion from the unstable slopes.

In addition to concerns regarding erosion, this alternative presented a number of other issues. This alternative would not provide for mitigation of other unstable slopes both within and outside of the existing right-of-way. Significant maintenance issues would continue as roadbed and slope failure would be ongoing in the unstable slope areas. Most important, the existing alignment does not meet state design standards, and maintaining the existing alignment and roadway profile with sharp curves is a safety concern. Finally, this alternative would provide no permanent solution for the risk of future slope failures, would require increased maintenance, and does not meet the need as described in 1.3. For these reasons, Scott County eliminated this alternative from consideration.

Existing Alignment Embankment Alternative
This alternative involves the reconstruction of eroded embankments within the existing alignment along the bluffs. The current alignment does not meet state design standards and does not reduce the likelihood of slope failure or the continued erosion of the roadway slopes. This alternative would require removal of over seven acres of trees, importing approximately 215,000 cu. yd. of fill, and removing approximately 12,000 cu. yd. of sediment to construct the embankments on the north side of existing roadway.

Scott County evaluated and eliminated this alternative as the current alignment does not meet state design standards and the alternative does not reduce the likelihood of slope failure or continued erosion of roadway slopes.

SECTION THREE: AFFECTED ENVIRONMENT AND CONSEQUENCES

3.1 PHYSICAL ENVIRONMENT

3.1.1 Soils and Geology

Geology
The County Geologic Atlas Program, through the Minnesota Geological Survey (Runkel and Mossler, 2006), has mapped the geology of Scott County. The atlas indicates that the site lies in a stable geologic terrain underlain by glacial till which covers Paleozoic sedimentary rock. The bedrock geology in this area is St. Lawrence Formation -Upper Cambrian (approximately 500 million years old). The St. Lawrence Formation is described in the Atlas as dolomite-cemented, very fine-grained sandstone and siltstone. Formation is generally 55 – 80 feet deep.

Soils
Table 1 identifies the Natural Resources Conservation Service (NRCS) web soil survey maps soils in the project area.

Table 1: NRCS Soils

Map Unit Symbol	Map Unit Name	Project Area	Farmlands
AaB	Alluvial land, 2 to 6 percent slopes	Soil within Road Realignment	Prime Farmland if protected from flooding or not frequently flooded
CaB2	Clarion loam, 2 to 6 percent slopes, moderately eroded	Soil within Pavement Rehabilitation Area	Prime Farmland
Df	Dundas silt loam, 0 to 2 percent slopes	Soil within Pavement Rehabilitation Area	Prime Farmland if drained
Ga	Glencoe silty clay loam	Soil within Pavement Rehabilitation Area	Prime Farmland if drained
HaB	Hayden loam, 0 to 6 percent slopes	Soil within Road Realignment	Prime Farmlands
HaB2	Hayden loam, 2 to 6 percent slopes, moderately eroded	Soil within Road Realignment	Prime Farmlands
LcB	Lester loam, 2 to 6 percent slopes	Soil within Pavement Rehabilitation Area	Prime Farmlands

Map Unit Symbol	Map Unit Name	Project Area	Farmlands
LcB2	Lester loam, 2 to 6 percent slopes, moderately eroded	Soil within Pavement Rehabilitation Area	Prime Farmlands
Lf	Le Sueur-Lester complex	Soil within Pavement Rehabilitation Area	Prime Farmlands
Sb	Steep land, Hayden-Lester materials	Soil within Road Realignment	Not Prime Farmlands
Ta	Terrace escarpments	Soil within Road Realignment	Not Prime Farmlands
Wb	Webster-Glencoe silty clay loams	Soil within Pavement Rehabilitation Area	Prime Farmland if drained
Wc	Webster-Le Sueur silty clay loams	Soil within Pavement Rehabilitation Area	Prime Farmlands if drained

The majority of soil groups in the proposed project area can be characterized as prime farmlands as seen in the chart above. The Farmland Protection Policy Act (FPPA) (P.L. 97-98, Sec. 1539-1549; 7 U.S.C. § 4201, et seq.) requires federal agencies to "minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses," often through coordination with the Natural Resources Conservation Service (NRCS).

Alternative 1—No Action: Under the No Action Alternative, adverse impacts to soils would be anticipated due to the continued erosion of the stream banks/roadway. Active ravine erosion and episodic slope failures would continue as an issue. No impacts to geologic features are anticipated.

Alternative 2—Proposed Action: Under the Proposed Action, construction activities are not deep enough to affect underlying bedrock or geologic resources. NRCS correspondence dated September 18, 2015 indicates a total of 0.25 acres of "prime and unique farmland" that will be impacted by the project, with the relative value of the farmland to be converted evaluated at 85 points. Mitigation measures are not likely to be required, as the target for modification or mitigation required by the NRCS is set at 160 points. See Appendix B for the NRCS AD–1006 Form and letter. Short-term impacts to soils may occur during the construction period. Scott County grading permit will be obtained prior to construction. Implementing appropriate BMPs during the project lifecycle will reduce potential soil erosion impacts.

3.1.2 Water Resources and Water Quality

The Clean Water Act (CWA), 33 U.S.C. § 1251 et seq., as amended in 1977, establishes the basic framework for regulating discharges of pollutants into waters of the United States. Existing site topography is shown on the topography map of Appendix A. The proposed project area is dominated by large ravine systems dropping approximately 190 feet to the Minnesota River Valley. The proposed CR 60 project will direct storm water into two ravine systems that discharge into the Minnesota River less than one half mile to the northwest.

An existing dry pond, approximately 150' by 200', at the top of the bluff adjacent to the existing CR 60, intercepts runoff from the land on the north side of CR 60, prior to discharging to the ravine via a restricted pipe outlet. The Scott Watershed Management Organization constructed the pond in the spring of 2014 to reduce the rate of surface water discharge to the ravine system on the north side of CR 60. The pond is not regulated by the Minnesota Wetland Conservation Act (WCA), the Minnesota Department of Natural Resources (MnDNR), or the United States Army Corps of Engineers (USACE), and is dry the majority of the time.

The Impaired Waters Mapper provided by the Minnesota Pollution Control Agency (MPCA) lists several impairments for the Minnesota River in this area, including mercury in fish tissue, fecal coliform, and polychlorinated biphenyl (PCB) in fish tissue (http://pca-gis02.pca.state.mn.us/CSW/index.html). None of these impairments is considered a construction-related impairment. However, the river is listed for turbidity impairment 16.5 river miles downstream from the proposed project area, near the City of Jordan. One cause of increased turbidity in this location is erosion of soil into the Minnesota River. No public drinking water sources are located within the proposed project area.

Alternative 1—No Action: Under this alternative, adverse impacts to water resources and water quality would continue. Continuing erosion in the ravine system would send substantial amounts of sediment uncontrolled downstream to the Minnesota River. This will exacerbate existing turbidity impairment downstream. The No Action Alternative is not expected to cause any other impacts to water quality.

Alternative 2—Proposed Action: Under the Proposed Action, permanent impacts to surface or ground waters would not be anticipated. The County will construct two dry detention ponds within the ravine bottom to the north of the proposed road realignment. The ponds will provide a place for sediment to be captured for removal and disposal prior to water discharging downstream to the Minnesota River. The ponds will be constructed by installing two berms, each approximately 110 feet long across the ravine bottom. The approximate dimensions for both ponds are 100 feet by 210 feet, with some variation to match the existing contours in the bottom of the ravine. No grading outside of the berms is proposed to construct the dry ponds. Another impact involves stormwater runoff, which is presently routed through a narrow manmade channel in the back yards of the residential area south of the proposed project area. As a result of the Proposed Action, this runoff will be diverted through a storm sewer to the ravine via an existing 10' x 10' box culvert crossing to discharge to the Minnesota River.

Because the Proposed Action involves more than an acre of disturbance, the County will acquire a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit from the MPCA. Permanent infiltration or other volume control will not be required as the net new impervious surfaces will be less than 1 acre in size. A county grading permit will also be required prior to construction. No WCA, MnDNR or USACE permits are required for this project as there are no wetlands or waters of the U.S. located within the project limits.

To minimize erosion, crews will employ BMPs during construction. These BMPs and controls include rock construction entrances, silt fences, bio logs, and erosion control blankets and mats.

3.1.3 Floodplain Management (Executive Order 11988)

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

This project is not within the 100-year mapped floodplain, per Floodplain Insurance Rate Map (FIRM) panels 2704280055C and 2704280065C, both dated February 19, 1987.

Alternative 1—No Action: Under the No Action Alternative, no impacts to mapped floodplains are anticipated.

Alternative 2—Proposed Action: Under this Alternative, no impacts to mapped floodplains are anticipated. However, the spirit of EO 11988 requires federal agencies to consider effects to the facility

as well. Site topography shows a pattern of damage related to heavy rainfall events in the terrain. This realignment avoids some of the more steep topography, thereby minimizing, to the extent practicable, effects to the structure (the road) from recurring flood events. No downstream impacts to any mapped floodplains will result from this project as the project is not located in a mapped floodplain and no diversions or changes to mapped floodplains are anticipated.

3.1.4 Air Quality

The Clean Air Act, 42 U.S.C. § 7401 et seq., requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards:

1. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.
2. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings.

Current criteria pollutants are: Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), Ozone (O_3), Lead (Pb), Particulate Matter (PM_{10}), and Sulfur Dioxide (SO_2).

Based on the information obtained from the EPA website, Scott County, Minnesota is considered within maintenance attainment status for SO_2 and CO pollutants and in an attainment zone for all other pollutants (EPA website, see Section 7.0).

Alternative 1—No Action: The No Action Alternative includes no construction activities, and therefore no anticipated impacts to air quality.

Alternative 2—Proposed Action: Under the Proposed Action Alternative, no long-term impacts to air quality are anticipated. Temporary, short-term impacts to air quality may occur during construction of the roadway. Minimal impacts may result from the operation of diesel and gasoline engines associated with excavation, grading, and construction. Exposed soil may temporarily increase airborne particulate matter in the local area.

During construction, mitigation measures will be set up to reduce temporary impacts to air quality. To reduce the emission of pollutants, fuel-burning equipment running times will be limited and engines will be appropriately maintained. Potential impacts may occur only during construction and will be limited to the project area, not resulting in any long-term impacts.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 Terrestrial and Aquatic Environment

The MnDNR Natural Heritage and Nongame Research Program reviewed the study area for the presence of rare plant species and other significant ecological resources within approximately one-mile of the project site through the Natural Heritage Information System (NHIS) (see review letter dated October 28, 2015 in Appendix B). The Minnesota Biological Survey (MBS) identified two Sites of Moderate Biodiversity Significance adjacent to the project. Common plant species in the immediate vicinity include Sugar Maple – Basswood – (Bitternut Hickory) Forest and Red Oak – Sugar Maple– Basswood (Bitternut Hickory) Forest (see Appendix B for Sites of Biodiversity Significance and MnDNR Native Plant Communities). There are no protected Minnesota trout streams within close proximity to the proposed project location (http://dnr.state.mn.us/fishing/trout_streams/index.html).

Alternative 1—No Action: Under the No Action Alternative, adverse impacts to terrestrial and aquatic environments are anticipated. With no improvements, the slopes would continue to erode creating the loss of plant species identified in the area. The uncontrolled release of sediment resulting from this alternative may also affect aquatic species in the Minnesota River.

Alternative 2—Proposed Action: Under the Proposed Action, impacts to native plant communities could occur. Proposed project includes the clearing of 6 acres of trees, brush and understory growth. Erosion control measures will be in place during construction to minimize disturbance. Permanent impacts to surface or ground waters would not be anticipated because the nearest waterway, the Minnesota River, is approximately one half mile away from the proposed project location. The MnDNR has offered the following mitigation measures to reduce impacts to the terrestrial environment, which will be followed as possible:

- Minimize vehicular disturbance in the area.
- Locate staging areas for parking equipment and stockpiling supplies outside of erosion-prone areas.
- Store spoil only within the existing ROW.
- Inspect and clean all equipment prior to bringing it to the site.
- Implement effective erosion prevention and sediment control measures.
- Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible.
- Use only weed-free mulches, topsoils, and seed mixes.
- Do not bring in topsoil to this site to avoid spread of invasive species.
- Follow other best practices outlined in MnDNR best practices manual for transportation projects (http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_manual.html).

3.2.2 Protection of Wetlands (Executive Order 11990)

EO 11990, Protection of Wetlands, requires federal agencies to take action to minimize the loss of wetlands. FEMA and Scott County consulted the USFWS National Wetland Inventory (NWI) to determine whether any identified wetlands are on site (NWI map attached in Appendix A). The map identified no wetlands within close proximity to the proposed project site. The nearest identified wetland is located approximately 750 feet to the north along the Minnesota River. To confirm that there were no wetland areas or hydric soils on site, wetland consultant Kimley-Horn and Associates, Inc. visited the project site on September 23, 2015 to complete Routine Level 1 Wetland Delineation (see Appendix A). The site visit identified no wetlands or surface waters regulated by the MnDNR, MPCA, or the USACE within the road relocation study area.

Alternative 1—No Action: Under the No Action Alternative, no impacts to wetlands are anticipated.

Alternative 2—Proposed Action: Under the Proposed Action, no impacts to wetlands are anticipated.

3.2.3 Threatened and Endangered Species

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, 16 U.S.C. § 1531, the project area was evaluated for the potential occurrences of federally listed threatened and endangered species. The following federally listed species are known to occur in Scott County: Northern long eared bat, as identified on the USFWS website (http://www.fws.gov/midwest/endangered/lists/minnesot-cty.html) last updated on October 8, 2015. The Minnesota Department of Natural Resources queried the Minnesota Natural Heritage Information System (NHIS) to determine if any rare species are known to occur within one mile of the proposed project site. The western foxsnake (state species in greatest

conservation need) was identified being documented within one mile of the proposed project location (letter dated October 28, 2015 – Appendix B).

Alternative 1—No Action: No impacts to threatened or endangered species are anticipated as a result of the No Action Alternative.

Alternative 2—Proposed Action: The Proposed Action includes the relocation of existing roadway. Project includes limited excavation of areas and tree cutting/clearing, which may result in impacts to federally and state listed species in Scott County. Approximately 6 acres of trees, brush and understory growth will be cleared during implementation of this action. USFWS published a final 4(d) rule identifying protections for the Northern long eared bat on January 14, 2016. Under this 4(d) rule, restrictions to tree cutting are only required for activities within 0.25 miles of known hibernacula. MnDNR NHIS records indicate no known occurrences of Northern long eared bat roosts within one-mile of the proposed project area. As a result, FEMA has determined that no adverse impacts to the Northern long eared bat are anticipated and project actions are consistent with the USFWS 4(d) rule (Appendix B). If a federal agency makes a no adverse impact determination, no formal consultations with the USFWS are required.

MnDNR NHIS report indicates that western foxsnake is known to occur within the vicinity of the proposed project. MnDNR recommends that the use of erosion control mesh be limited to wildlife-friendly materials. Western foxsnakes should be avoided and, if encountered, left undisturbed during project implementation.

3.3 HAZARDOUS MATERIALS

The proposed project includes ground disturbance in previously undisturbed areas, which may result in the discovery of unknown hazardous materials. As previously noted, the acquisition of three residences and six associated buildings has occurred. The proposed project includes the emergency demolition of these residential structures and associated buildings, which may contain household hazardous materials, lead based paints, and/or asbestos containing materials. The Minnesota Pollution Control Agency's (MPCA's) What's in My Neighborhood and Minnesota Department of Agriculture's (MDA's) What's in My Neighborhood databases were reviewed for known hazardous materials incidents, and for potential contamination areas. The MPCA database lists the following hazardous leaks located outside the project but within 400' of the project.

Table 2: MPCA Hazardous Leaks

Site Name	Address	Leak	Discovery Date	Remediation	Close Date
Wendt Labs	23436 Union Trail, Blakeley Township	Tank Leak	8/16/1993	Soil Correction and Treatment	6/26/1996
Wendt Professional Labs	23436 Union Trail, Blakeley Township	Tank Leak		Remove Tank	8/31/1993

In addition, the MDA database identified the following potential contamination area within in the road improvement corridor. The feedlot on this property is approximately 2080' (0.40 miles) from the roadway.

Table 3: Low Potential Sites

Site Name	Address	Generator Type
Linda Olson Farm	23665 Sage Ave, Blakeley Township	Feedlot

Alternative 1—No Action: Under the No Action Alternative, no hazardous materials impacts are anticipated.

Alternative 2—Proposed Action: Under the Proposed Action Alternative, no hazardous materials impacts are anticipated. If hazardous materials are discovered during excavation or construction, appropriate measures will be taken to identify, remove, and dispose of them in a licensed facility according to local, state and federal regulations. The three residential structures and six associated buildings planned for emergency demolition will be inspected for hazardous materials including lead and asbestos. A certified asbestos abatement contractor will remove any asbestos-containing material identified and dispose of it in accordance with state statutes. Any green-treated materials will be documented and disposed of in an MPCA-approved Mixed Municipal Solid Waste landfill or Industrial Waste Landfill. Any hazardous materials discovered will be treated as hazardous waste and disposed of in a licensed facility in accordance with applicable local, state, and federal regulations.

3.4 SOCIOECONOMICS

3.4.1 Zoning and Land Use

The site, CR 60, is located within Blakeley Township. The current zoning in the area is mostly A-1, Agricultural Preservation with some A-2, Agricultural Woodlands, and A-3 Agricultural Preservation Density districts. The current and past uses of the roadway project area consist of residential with limited other uses due to the bluffs and woodlands in the area. Roadway improvements are consistent with current zoning requirements. An aerial map of the project site and adjacent properties is provided in Appendix A.

Alternative 1—No Action: Under the No Action Alternative, no impacts to zoning or land use are anticipated.

Alternative 2—Proposed Action: Under the Proposed Action Alternative, three homes and six associated buildings are slated for emergency demolition and land will be converted to road ROW. The acquisition of these properties has occurred and owners were paid just compensation, based on the required regulations: The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (“Uniform Act”), as amended by the Surface Transportation, Uniform Relocation Assistance Act of 1987, and Minnesota Statutes, Chapter 117. The project is consistent with the current zoning in the area.

3.4.2 Visual Resources

The landscape surrounding the project site is primarily a deciduous and coniferous heavily wooded area on steep slopes above the Minnesota River. Tree canopy along the bluff of the site blocks views of the area from the current roadway.

Alternative 1—No Action: No impacts to visual resources are anticipated as a result of the No Action Alternative.

Alternative 2—Proposed Action: Under the Proposed Action Alternative, minimal impacts to visual resources are anticipated. Three homes and six associated buildings are slated for emergency

demolition and approximately 6 acres of trees, brush and understory growth will be cleared for the roadway. While minimal impacts are anticipated, the area is heavily forested so adverse impacts to visual resources are not anticipated.

3.4.3 Noise

Noise can be considered unwanted sound, and sound is typically measured in decibels (dB). An average measure of sound is known as the day-night average sound level (Ldn), and is used by agencies for estimating sound impacts and establishing guidelines for compatible land uses. An EPA document, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA 1974) provides a basis for state and local governments' judgments in setting standards. The document identifies a 24-hour exposure level of 70 dB as the level of environmental noise that will prevent any measurable hearing loss over a lifetime. In addition, levels of 55 dB outdoors and 45 dB indoors are identified as preventing activity interference and annoyance. These levels are considered to permit spoken conversation and other activities such as sleeping, working and recreation. The levels are not single event, or "peak" levels, but rather, they represent averages over long periods. Occasional higher noise levels would be consistent with a 24-hour average of 70 dB, as long as a sufficient amount of relative quiet is experienced.

Alternative 1—No Action: Under the No Action Alternative, no noise-related impacts are anticipated.

Alternative 2—Proposed Action: With the Proposed Action, only temporary short-term increases in noise levels are anticipated during construction. Construction work hours and equipment and machinery utilized at the site would meet all local, state, and federal noise regulations.

3.4.4 Public Services and Utilities

There are no current public services located within project area relating to police, fire, and rescue. The public service providers in the project area include the Scott County Sheriff, Belle Plaine Fire Department, and Belle Plaine Ambulance (managed by Ridgeview Medical Center). The nearest school is Oak Crest Elementary in the City of Belle Plaine located approximately five miles away. There are overhead electric and telecommunications utilities in the project area. CR 60 is currently closed as a through street to the traveling public and emergency services, since the road was damaged as a result of the flooding and continues to be at risk for further slope failures.

Alternative 1—No Action: Under the No Action Alternative, CR 60 will remain closed and become a 2.5 mile cul-du-sac because of the potential for future slope failures. CSAH 1 and CSAH 6 remain unreliable access routes to Blakeley due to closures during flooding events. This prevents police, fire, and rescue from serving the area without increases in response times. Unchecked sediment deposition in culverts and channels from upstream erosion will likely increase the threat of future flooding in the area, and flooding events will potentially interrupt the delivery of services in the area.

Alternative 2—Proposed Action: The Proposed Action would provide a connection between U.S. 169 to Blakeley, allowing emergency services to utilize the connection, resulting in improved response time for any police, fire, and emergency medical response. Storm water improvements, including the construction of two ponds, will provide for sediment capture and control before discharging into the Minnesota River, thereby reducing sediment load into the Minnesota River. Stabilization of slopes and the roadway will reduce potential losses of services for overhead electric and telecommunication utilities. Electric connections are to be removed from demolished properties, and utilities are to be relocated outside of relocated road near CSAH 1/CSAH6/CR 60 intersection within existing right of way.

Relocation of CR 60 will provide an opportunity to install fiber optic cable on the new poles along CR 60 to support the county's emergency management communications.

3.4.5 Traffic and Circulation

The county roads within the area are CSAH 1, CSAH 6 and CR 60; all are two lane rural roads. The county boundary between Scott County and Sibley County is located in the approximate middle of the riverbed of the Minnesota River. To the north of Blakeley, CSAH 1crosses the Minnesota River from Sibley County into Scott County and through Blakeley. Where CSAH 1 intersects with CR 60, it allows for direct access to CR 60, which connects with U.S. 169. At this intersection, CSAH 1 also continues on a separate path that provides a connection to U.S. 169. (See Appendix A.) The Annual Average Daily Traffic (AADT) for CSAH 1 is 295. CSAH 6 connects Blakeley to the City of Belle Plaine; AADT figures for 2013 (520) and 2015 (480) show a 7.7% decrease in traffic. CR 60, before closure due to flood damages, connected Blakeley to U.S. 169 with an AADT of 320[7].

Alternative 1—No Action: Under the No Action Alternative, CR 60 will remain closed. The transportation link between Blakeley, the Minnesota River Crossing, and U.S. 169, which also allowed access to emergency services, would not be re-established.

Alternative 2—Proposed Action: Under the Proposed Action, a direct connection would be established between Sibley County (via the CSAH 1 river crossing) and U.S. 169, providing shorter travel times for the public, emergency vehicles, gravel mining industries, and farming equipment.

3.4.6 Environmental Justice (Executive Order 12898)

On February 11, 1994, President Clinton signed Executive Order (EO) 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The EO directs federal agencies "to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States."

The proposed project is located within Blakeley Township, which as a 2010 total population of 418 individuals. Of that population 98.3% is white, 0.2% is black or African American, 0.5% is Asian, and 1.0% is Hispanic (2010 U.S. Census). The median household income in Blakeley Township is $70,000 (2009-2013 American Community Survey 5-Year Estimates) and 16.7% of the population lived below the poverty level.

Blakeley residents were unable to access their homes for days and weeks not only due to the CR 60 closure but also due to the closure of CSAH 1, CSAH 5 and CSAH 6. Electrical service was disrupted by downed lines and inaccessibility. A new business opened in Sibley County across the Minnesota River, a tap room opened in downtown Blakeley and a new trailhead park is proposed, all which would be economic drivers for tourism with CR 60 as a direct route, which could potentially provide new employment opportunities for residents. Additionally, three gravel mining operations are located across the Minnesota River in Sibley County would again use CR 60 as the most direct route to U.S. 169.

Socioeconomic and demographic data for the project area was analyzed to determine if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

[7] Minnesota Department of Transportation Average Annual Daily Traffic Count, 2013. Current counts not available.

Alternative 1—No Action: Under the No Action Alternative, there would be no disproportionately high and adverse effects on minority or low-income populations.

Alternative 2—Proposed Action: The Proposed Action will reduce the impacts of erosion and flooding benefiting the people living within Blakeley. There would be an anticipated reduction in the damage caused to private property and a reduction in the amount and length of travel disruptions caused by flooding. County staff reviewed the information from the U.S. Census described above and determined there would not be a disproportionately high or adverse effects on minority or low-income population.

3.4.7 Safety and Security

Safety and security issues considered in this analysis include the health and safety of area residents and the protection of construction personnel. All construction activities will be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Additionally, all activities will be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Act (OSHA) regulations. The emergency demolition of the three residences and six associated buildings will be completed in accordance with best practices for demolition, asbestos and lead abatement. The properties will be rendered safe and secure after demolition.

Alternative 1—No Action: Under the No Action Alternative, minor adverse impacts to safety and security are anticipated. Deteriorating road conditions and erosion would continue to occur because of future flash flooding. Without the transportation link CR 60 provides between Blakeley at the Minnesota River Crossing and U.S. 169 there would be increased response time for emergency vehicles.

Alternative 2—Proposed Action: The Proposed Action would reduce the frequency and intensity with which erosion and flood damages would occur. This action would reduce the potential impacts from erosion and flood damages to the safety and security of the surrounding area. Road construction signage will be posted providing safety information to the traveling public and area residents. Several improved long-term safety factors (improved slopes, sightlines, and clear zone, as well as storm water improvements and erosion control measures) are incorporated into the design of the project. Access to the site during construction would be restricted to protect the public and minimize risks to safety.

Acquisition and demolition of three residences and six associated buildings was planned. Acquisition of the residences and buildings proceeded and finalized. Scott County subsequently submitted a request to FEMA for emergency demolition of the residences and associated buildings prior to the completion of the EA. The emergency demolition request was due to numerous unauthorized entries, vandalism, and removal of materials from buildings after the residences and associated buildings were vacated. This created security and safety issues that resulted in an imminent threat to life, health, and property. FEMA authorized with conditions the emergency demolition request to prevent immediate threats to life, health and property. The authorization conditions are as follows:

- Acquire all necessary permits prior to demolition.
- Implement best practices for demolition, asbestos and lead abatement.
- Render properties safe and secure after demolition.

3.5 HISTORIC AND CULTURAL RESOURCES

The National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, requires that FEMA, as the Lead Federal agency, consult with the State Historic Preservation Office (SHPO) and any other interested consulting parties, including members of the public or federally-recognized Native American Tribes (Tribes). As

such, FEMA initiated consultation with the SHPO on January 13, 2016 to inform them of the scope of the undertaking and to provide ongoing opportunities for informal and formal review of the project's potential effects on historic resources.

3.5.1 Historic Structures

Twelve potentially historic properties 45 years of age or older were surveyed (see Architecture Report in Appendix B prepared by The 106 Group, Ltd.). Of these 12 properties, two were previously inventoried (SC-BLK-008 and SC-BLK-009), and 10 newly identified. None of the 12 properties surveyed as part of this project were previously listed or determined eligible for listing on the National Register of Historic Places. Only 3 of the 12 properties surveyed are within the Area of Potential Effects (APE) as part of the relocation of CR 60.

The remaining 9 properties were surveyed as part of the Architecture Report survey prepared by The 106 Group, Ltd. for Scott County. This report was prepared prior to the County formulating engineering plans and CR 60 relocation limits. Subsequent to formulating engineering plans and CR 60 relocation limits, these 9 were determined to be outside of the APE and were not assessed for eligibility for listing on the National Register of Historic Places.

Three properties (SC-BLK-014 (Parcel 020020010) 16250 Elm Way, SC-BLK-015 (Parcel 020010379) 16296 Elm Way and SC-BLK-022 (Parcel 0200220020) 16206 Elm Way, Blakeley, Minnesota were slated for acquisition and demolition for the relocation of CR 60. The 106 Group developed historic and thematic contexts for Scott County and Blakeley Township and assessed these three properties for National Register of Historic Places (NRHP) eligibility under those contexts. The 106 Group assessed and recommended that the buildings on these parcels do not appear to be significant in the development of Scott County or Blakeley Township, nor are they affiliated with individuals significant in the development of the area. Therefore, these three properties do not appear to have significance under NRHP Criteria A or B. The 106 Group assessed and recommended that the buildings on these parcels are not designed in any recognized architectural styles and, as representations of vernacular architecture, their integrity is poor. Therefore, these three properties do not appear to have significance under NRHP Criterion C. Finally, the 106 Group assessed and recommended that these properties have not yielded and are not likely to yield, information important in prehistory or history, and it concluded that these three properties are therefore lacking significance under NHRP Criterion D.

FEMA found these three parcels were not individually eligible for listing on the National Register of Historic Places due to a lack of significance and/or a loss of integrity. Finally, FEMA found as a group the three parcels did not appear to be significant within the identified historic contexts, nor did they retain the integrity to convey the feeling of a district.

FEMA initiated consultation with the SHPO on January 13, 2016 and submitted an amended consultation with a finding of no historic properties affected on May 13, 2016. On June 15, 2016, the SHPO concurred with FEMA's finding of no historic properties affected (See Appendix B).

Alternative 1—No Action: Under the No Action Alternative, there would be no impacts to historic properties.

Alternative 2—Proposed Action: Under the Proposed Action, there would be no impacts to historic properties.

3.5.2 Archaeological Resources

Information concerning the nature and location of archaeological resources, traditional cultural properties, and detailed information regarding archaeological and cultural resources, is treated as "security information" under the Minnesota Government Data Practices Act, Minn. Stat., Chpt. 13). The Minnesota Government Data Practices Act defines "security information" as "government data the disclosure of which . . . would be likely to substantially jeopardize the security of . . . property against theft, tampering, improper use, . . . trespass, or physical injury." Minn. Stat. §13.37 (1)(a). Because the disclosure of probable locations of archaeological sites is likely to substantially jeopardize the security of these resources due to theft, tampering, improper use, or physical injury, and in accordance with the Minnesota Government Data Practices Act, the SHPO limits access to some information about the location of archeological resources and traditional cultural properties. In addition, burial sites locational and related data maintained by the Office of the State Archaeologist (OSA) is considered security information to which access is limited pursuant to the Private Cemeteries Act (Minn. Stat. § 307.08 (11)), and in accordance with the Minnesota Government Data Practices Act. The Private Cemeteries Act prohibits the intentional disturbance of human burials. (For full language, see: https://www.revisor.mn.gov/statutes/?id=307.08).

Due to the APE's location within an archaeological high probability area with a total of eight archaeological sites including earthworks within one mile, a Phase I Archaeological Survey was requested by FEMA. The subsequent Phase I Archaeological Survey and Light Detection and Ranging (LiDAR) research was inconclusive in determining the presence or absence of archaeological sites. Due to the inconclusive archaeological research, a plan of avoidance and monitoring during construction was developed as the potential to encounter human remains exists. The avoidance and monitoring plan was developed in consultation with the OSA and SHPO.

FEMA submitted a finding of no historic properties affected with conditions to SHPO and OSA on May 13, 2016. SHPO concurred with FEMA's finding of no historic properties affected with conditions on June 15, 2016. (See Appendix B).

Alternative 1—No Action: Under the No Action Alternative, there would be no impacts to historic properties.

Alternative 2—Proposed Action: Under the Proposed Action, there would be no historic properties affected. Given that the archaeological survey was inconclusive, FEMA in consultation with OSA and SHPO will require that the following project conditions be met. Specifically, the following project conditions will be required for this undertaking to avoid effects on any cultural resources or human remains that may be present in the APE.

- Contractor is expected to use fill from a commercial source or regularly-maintained stockpile. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed prior to beginning ground disturbing activities.
- Fulfill all requirements of the Monitoring Plan for Site 21SC0015, County Road 60 Project, Scott County, Minnesota, May 2016.
- The licensed archaeological monitor must be a *Qualified Professional Archaeologist* as specified in Minn. Stat. § 138.31, subd. 10, meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology. The archaeological monitor must also have demonstrated experience or training in dealing with human remains and with assessing soil conditions and features commonly associated with human burials.

- If there is a discovery of possible human remains during construction, including unidentified bone or mortuary features, work shall immediately cease in the area. The archaeological and Tribal monitors will take appropriate steps to secure the site, including fencing off the discovery area and carefully covering from view any possible remains. The archaeological monitor shall notify local law enforcement, OSA and the Recipient. The Recipient will then notify FEMA, and FEMA will notify the SHPO and appropriate Tribes within 24 hours via email, fax or telephone. If the remains are thought to be Indian in accordance with Minnesota Statute 307.08, the OSA will coordinate with the Minnesota Indian Affairs Council (MIAC).
    - The parties will confer in a timely manner, if reasonably convenient and appropriate at the site, to assess the site's condition and archaeological manifestation, determine the likely project impacts if left in place, and determine the most appropriate avoidance, minimization, or mitigation measures for dealing with the discovery.
    - If it is determined that the identified bones are human remains covered under Minn. Stat. § 307.08, the OSA shall have jurisdiction to ensure that the appropriate procedures in accordance with Minnesota statutes are fulfilled. Authentication of burial sites on nonfederal lands is conducted under the sole auspices of the OSA per this statute. OSA shall work in consultation with FEMA to ensure compliance with all applicable federal and state regulations regarding human remains.

A comprehensive archaeological monitoring report must be submitted to FEMA for submission to the SHPO and OSA within 30 days of completion of fieldwork. This report should meet the general reporting standards specified in the *SHPO Manual for Archaeological Projects in Minnesota*. The report must include a fully completed official state site form if a burial or any other type of archaeological site is located.

3.5.3 Tribal Coordination and Religious Sites

In accordance with 36 C.F.R. § 800.8(a)(2), the Advisory Council on Historic Preservation indicates that consultation with Tribes begin early in the NEPA process regarding the possible effects of disaster recovery efforts on cultural properties of religious or traditional significance, or cultural properties formally designated as Traditional Cultural Properties. Amendments to Section 101 of the NHPA in 1992 strengthened the interface between the NHPA and the American Indian Religious Freedom Act of 1978 (AIRFA), 42 U.S.C. § 1996. AIRFA requires consultation with Native American groups concerning proposed actions on sacred sites on federal land or affecting access to sacred sites. It establishes federal policy to protect and preserve for American Indians, Eskimos, Aleuts, and Native Hawaiians their right to free exercise of their religion in the form of site access, use and possession of sacred objects, and freedom to worship through ceremonial and traditional rites. AIRFA requires federal agencies to consider the impact of their actions on religious sites and objects important to these peoples, regardless of eligibility for listing on the NRHP.

Tribal consultation was also undertaken per EO 13175, titled *Consultation and Coordination with Indian Tribal Governments* signed by President Clinton on November 6, 2000. The EO directs federal agencies, "to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes…."

FEMA submitted requests for evaluation of the presence or absence of known cultural properties of religious or traditional significance, or of cultural properties formally designated as Traditional Cultural Properties, within the proposed project areas on January 13, 2016, to the Assiniboine and Sioux Tribes

of the Fort Peck Indian Reservation; Flandreau Santee Sioux Tribe of South Dakota; Prairie Island Indian Community; Santee Sioux Tribe; Shakopee Mdewakanton Sioux Community of Minnesota; Lower Sioux Community of Minnesota; Upper Sioux Community of Minnesota; Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota; and the Spirit Lake Tribe, North Dakota to determine if they may have an interest in the CR 60 project located in Scott County, Minnesota. The Upper Sioux Community requested Tribal Monitoring in a letter dated January 19, 2016, and no other responses have been received on the proposed project. Details of the consultation are included in Appendix D**.**

Alternative 1—No Action: Under the No Action Alternative, there would be no impacts to religious or cultural properties.

Alternative 2—Proposed Action: Under the Proposed Action, the presence of a Tribal Monitor will assure that there will be no impacts to religious or cultural properties. The Tribal Monitor will be notified via Certified Mail 45 days prior to ground disturbing activities or mobilization. Scott County will provide to FEMA a copy of the Certified Mail return receipt.

3.6 COMPARISON OF ALTERNATIVES

Table 4 summarizes the information discussed in the previous sections of the EA, listing the anticipated environmental impacts of each alternative.

Table 4 Summary of Environmental Impacts

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation
Soils and Geology	• Impacts to geology or soils would occur due to continued erosion of the stream banks/roadway. • Active ravine erosion and episodic slope failures would remain an issue.	• Short-term impacts during construction.	• National Pollutant Discharge Elimination System (NPDES) General Permit will be obtained and maintained during construction.
Water Resources and Water Quality	• Existing erosion will continue to send sediment uncontrolled downstream.	• More than 1 acre of ground disturbance, but less than 1 acre of new impervious surfaces.	• NPDES Permit. • County Grading Permit. • Employ best management practices. • Permanent vegetation and erosion control mats.
Floodplain Management	• No impact.	• No impact.	• None.
Air Quality	• No impact	• No long-term impacts. • Temporary impacts during construction limited to project area.	• Fuel-burning equipment running times minimized and engines properly maintained.

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation
Terrestrial and Aquatic Environment	• Slopes would continue to erode creating impacts to terrestrial and aquatic environments.	• Impacts could occur.	• Erosion control measures will be in place to protect natural resources. • Mitigation measures could include minimizing vehicular disturbance in the area, restricting parking or stockpiling in erosion-prone areas, storing spoil within ROW, inspecting and cleaning equipment, replanting with native species as soon as possible.
Wetlands	• No impact.	• No impact.	• None.
Threatened and Endangered Species	• Could happen as the erosion in the area continues.	• Long-term impacts are not anticipated. • Short-term impacts will involve the clearing of wooded habitat within the project area.	• Wild-life friendly erosion control mesh will be used.
Hazardous Materials	• No impact.	• No impacts to known identified hazardous material sites. • Three residences and six associated buildings emergency demolition with potentially hazardous materials.	• Three residences and six associated buildings slated for emergency demolition will be handled in accordance with regulations and any necessary permits will be obtained. • If other hazardous materials encountered handling and removal according to local, state and federal regulations will occur. • Properties will be rendered safe and secure after demolition.
Zoning and Land Use	• No change.	• Three residences and six associated buildings will be converted to ROW and tree cover removed.	• None.

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation
Visual Resources	• No impact.	• Three residences and six associated buildings will be converted to ROW and tree cover removed.	• None.
Noise	• No additional noise generated.	• Temporary short-term increase in noise during construction.	• Equipment & machinery will meet noise regulations.
Public Service and Utilities	• No change.	• Electric will be removed or relocated and emergency management telecommunications will be relocated.	• Electric will be removed from the homes that will be demolished with the project. • Near the CSAH 1/CSAH 6/CR 60 intersection utilities will be relocated to be out of the new roadway.
Traffic and Circulation	• No change to the lost roadway connection that once provided access to emergency services.	• Temporary short-term increase in construction equipment.	• None.
Environmental Justice	• No change.	• No Impacts.	None.
Safety and Security	• Risk of erosion and flood damage remains. • Increased response time for emergency vehicles.	• No Long-term impacts associated with the project are anticipated. • Short-term impacts will be temporary during construction activities. • Short-term impacts due to unauthorized entries, vandalism, and removal of materials of vacated homes and associated buildings are occurring.	• Acquire all necessary permits prior to emergency demolition. • All activities will be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Act (OSHA) regulations with best practices for demolition, asbestos and lead abatement. • Properties will be rendered safe and secure after emergency demolition.
Historic Structures	• No Impact.	• No Historic Properties affected.	• None.

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation
Archaeological Resources	• No Impact.	• No historic properties affected.	• Fulfill all requirements of the Monitoring Plan for Site 21SC0015 County Road 60 Project dated May 2016. • Fulfill all other conditions as outlined in archaeological resources section. Minn. Stat. § 307.08 will be followed if identified human remains are encountered.
Tribal and Religious Sites	• No Impact.	• No anticipated impacts.	• Tribal monitor required. • Tribal monitor will be notified via Certified Mail 45 days prior to ground disturbing activities or mobilization. • FEMA will be copied in the Tribal monitor notification letter. • FEMA will be provided a copy of the Certified Mail return receipt.

SECTION FOUR: CUMULATIVE IMPACTS

Cumulative impacts are the effects on the environment resulting from the Proposed Action considered along with the effects of past, present, and reasonably foreseeable future actions. Cumulative impacts may result when individually minor actions, taken together, result in greater impacts over a period of time.

No cumulative impacts are expected as a result of this project. The proposed project will reduce flooding of roads and buildings in developed areas downstream of the project.

Past Projects Near the Project Area Include:

- CSAH 1 River Crossing Bridge in 2004
- CSAH 6 Bridge in 2012
- 2014 Blakeley Trail Ravine Stabilization Project on CR 60 in proposed project area
- Emergency Flood Repairs 2014
  - CSAH 6 Temporary Pavement Repairs
  - CSAH 1 Slope and Roadway Repairs
  - CR 60 remove a portion of the road, stabilized the mudslides that were blocking drainage

Current Projects Near the Project Area Include:

- CSAH 6 Pavement Reclamation
- CSAH 6 Erosion Control Implementation

- CSAH 1 Pavement Reclamation
- Quarry Creek Ravine Stabilization Project

The only potential project in the project area would be an erosion control project, which would include the purchase of the property at 15801 Blakeley Trail as the residence on the property is in imminent danger of total loss due to the erosion that took place after the June 2014 rain events. There are no future roadway projects planned in or near Blakeley.

SECTION FIVE: PUBLIC PARTICIPATION

The National Environmental Policy Act requires both a planning process and a disclosure process. The complexity of the project, and likewise its environmental consequences, determines the level of public involvement that may be required in the process.

On June 23, 2014, a few days after the historic rainfalls, Scott County officials held an emergency meeting, which included the Emergency Management Director, County Engineer, and Chief Deputy Sheriff, Xcel Energy representatives, and the public. The purpose of the meeting was to provide updates on emergency response needs of the area (such as access and power to homes). In addition to this meeting, County staff attended several Blakeley Township meetings on the flooding impacts in the area.

On August 25, 2014, Scott County hosted an open house about the flood damaged roadways (CSAHs 1 and 6, and CRs 51 and 60) in Blakeley Township. Approximately 150 newsletters for the open house were mailed out to the surrounding property owners. There were approximately 105 community members in attendance at the open house. The options for CR 60 were presented and a majority of the residents of the area supported the realignment of CR 60.

The Scott County Board held a workshop on January 6, 2015 on the CR 60 reconstruction options. At the public County Board meeting, on January 20, 2015, the Scott County Board added the CR 60 realignment project to the Transportation Improvement Program for 2016 construction. There were no comments provided from the public at this meeting.

On March 19, 2015, the County hosted an open house to review options for repairing or rebuilding CR 60. Approximately 140 newsletters for the open house were mailed out to the surrounding property owners, the local newspaper *Belle Plaine Herald* on March 18, 2015, provided notice on the open house, and the County website provided notice to those visiting. There were approximately 40 in attendance at the open house. All residents were unanimously in favor of the project.

Public review period for the draft environmental assessment will last 30 days. A public notice regarding the public comment period and the availability of the document was published on Wednesday, July 27, 2016 in the *Belle Plaine Herald*, which is the County's newspaper of record and the newspaper located closest to the project area. The draft EA will be available for review on the County Website, at the Scott County Public Works offices, and at the Belle Plaine Library. The draft EA will also be published on the Scott County web site (http://scottcountymn.gov/686/CH-60-Flood-Recovery) and on the FEMA web site under "Recent Environmental Documents & Public Notices in Region V" (http://www.fema.gov/recent-environmental-documents-public-notices-region-v). A copy of the published notice is included in Appendix E. The public was given the opportunity to comment on the project from July 27 to August 26, 2016.

SECTION SIX: MITIGATION MEASURES AND PERMITS

The following permits will be required for the implementation of the CR 60 Realignment Project:

1. MPCA NPDES Permit
2. County Grading Permit

Scott County will follow all local, state, and federal rules and regulations that pertain to the proposed project. The County will also obtain all applicable permits prior to commencing work for the roadway project. If permit conditions change the scope of work for the project, revised scope will be submitted to FEMA for additional review.

These mitigation measures will be implemented as part of the Proposed Action:

1. National Pollutant Discharge Elimination System (NPDES) General Permit will be obtained and maintained throughout construction activities.
2. Scott County Grading Permit will be obtained. Implement appropriate construction BMPs to minimize soil erosion. The measures will be implemented and maintained as required by the MPCA Permit. The measures may include, but are not limited to silt fences, bio logs, permanent erosion control blankets and mats, temporary seeding, and rock construction entrances.
3. Take measures to reduce the potential for temporary air quality impacts during construction, including keeping fuel-burning equipment running time to a minimum.
4. Take measures to minimize vehicular disturbance, no parking or stockpiling in erosion-prone area, store spoil within ROW, inspect and clean equipment, replant with native species as soon as possible.
5. Take measures to reduce potential impacts to the western foxsnake and other wildlife, including the use of wildlife-friendly erosion control methods.
6. If hazardous materials are encountered during construction, handle and dispose of materials in accordance with all applicable rules and regulations. Any building to be removed will be inspected for hazardous material prior to demolition and any such materials will be disposed of in accordance with applicable local, state, and federal regulations and properties will be rendered safe and secure after demolition.
7. Maintain equipment in good working order to minimize noise and pollution.
8. To minimize the risks to safety and human health, all construction activities will be performed using qualified personnel trained in the proper use of the appropriate equipment including all appropriate safety precautions. All activities will be conducted in a safe manner in accordance with the standards specified in the OSHA regulations.
9. Emergency demolition of three residences and six associated buildings will occur to prevent immediate threats to life and safety. All necessary permits will be obtained prior to demolition, best practices for demolition, asbestos and lead abatement will be implemented. Properties will be rendered safe and secure after demolition.
10. Electric is to be removed from demolished properties, utilities to be relocated outside of relocated road near CSAH 1/CSAH6/CR 60 intersection within existing right of way.
11. Contractor is expected to use fill from a commercial source or regularly-maintained stockpile. If this is not the case, the subrecipient shall inform FEMA of the fill source so agency consultations can be completed prior to beginning ground disturbing activities.

12. Fulfill all requirements of the Archaeological Monitoring Plan for Site 21SC0015, County Road 60 Project, Scott County, Minnesota, May 2016.
13. Scott County will notify via Certified Mail the Tribal Monitors the dates of construction 45 days prior to ground disturbing activities or mobilization. FEMA will be copied in the Tribal Monitor notification letter. FEMA will be provided a copy of the Certified Mail return receipt.
14. The licensed archaeological monitor must be a Qualified Archaeologist specified in Minn. Stat. § 138.31, subd. 10, meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology. The archaeological monitor must also have demonstrated experience or training in dealing with human remains and with assessing soil conditions and features commonly associated with human burials.
15. If there is a discovery of possible human remains during construction, including unidentified bone or mortuary features, work shall immediately cease in the area. The archaeological and Tribal monitors will take appropriate steps to secure the site, including fencing off the discovery area and carefully covering from view any possible remains. The archaeological monitor shall notify local law enforcement, OSA and the Recipient. The Recipient will then notify FEMA, and FEMA will notify the SHPO and appropriate Tribes within 24 hours via email, fax or telephone. If the remains are thought to be Indian, in accordance with Minn. Stat. § 307.08, the OSA will coordinate with the Minnesota Indian Affairs Council (MIAC).
    - The parties will confer in a timely manner, if reasonably convenient and appropriate at the site, to assess the site's condition and archaeological manifestation, determine the likely project impacts if left in place, and determine the most appropriate avoidance, minimization, or mitigation measure(s) for dealing with the discovery.
    - If it is determined that the identified bones are human remains covered under Minn. Stat. § 307.08, the OSA shall have jurisdiction to ensure that the appropriate procedures in accordance with Minnesota statutes are fulfilled. Authentication of burial sites on nonfederal lands is conducted under the sole auspices of the OSA per this statute. OSA shall work in consultation with FEMA to ensure compliance with all applicable federal and state regulations regarding human remains.
16. If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or in any other unanticipated changes to the physical environment, Scott County must contact FEMA, and an evaluation of the revised project scope under NEPA and other applicable environmental laws will be conducted by FEMA.

SECTION SEVEN: CONSULTATIONS AND REFERENCES

U.S. Department of Agriculture Natural Resources Conservation Services Web Soil Survey http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm Visited 9/17/2015.

Metropolitan Council website, for Population: http://stats.metc.state.mn.us/profile/detail.aspx?c=139 Visited 10/1/2015.

U.S. Environmental Protection Agency (EPA), Air Quality website: http://www3.epa.gov/airquality/urbanair/sipstatus/reports/mn_areabypoll.html. Visited 10/1/2015.

U.S. Census http://factfinder.census.gov/bkmk/cf/1.0/en/place/Blakeley township, Scott County, Minnesota/POPULATION/DECENNIAL_CNT. Visited 10/8/2015.

Runkel, Anthony J and Mossler, John H.; Bedrock Geology; 2006; County Atlas Series – Atlas C-17 – Plate 2; Geologic Atlas of Scott County; Minnesota Geological Survey.

National Flood Insurance Program Flood Insurance Rate Map Panel Number 270428 55 and 65 Map dated 2/19/1987.

U.S. Fish and Wildlife Service National Wetlands Inventory mapper http://www.fws.gov/wetlands/Data/Mapper.html. Visited 12/31/2015.

SECTION EIGHT: LIST OF PREPARERS

Lisa Freese, AICP, Transportation Planning & Program Director, Scott County

Lisa Schickedanz, Associate Planner, Scott County

Karen Poulson, Environmental Specialist, FEMA

Nicholas Dorochoff, Deputy Regional Environmental Officer, FEMA

Nicholas Mueller, Regional Environmental Officer, FEMA

APPENDICES

The Appendices are available on the Scott County Web site at http://scottcountymn.gov/686/CH-60-Flood-Recovery/. They are also linked to separately below, and are available by contacting Regional Environmental Officer Nicholas Mueller, FEMA Region V, 536 South Clark Street, Chicago, IL 60605.

Appendix A	**Figures and Reports**	http://scottcountymn.gov/DocumentCenter/View/5499
Appendix B	**Agency Correspondence**	http://scottcountymn.gov/DocumentCenter/View/5500
Appendix C	**Construction Plans**	http://scottcountymn.gov/DocumentCenter/View/5501
Appendix D	**Tribal Nation Consultation**	http://scottcountymn.gov/DocumentCenter/View/5502
Appendix E	**Public Notice**	http://scottcountymn.gov/DocumentCenter/View/5503
Appendix F	**Public Comments**	http://scottcountymn.gov/DocumentCenter/View/5504