NEBRASKA

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DEPT. OF ENVIRONMENT AND ENERGY

Pete Ricketts, Governor

DRINKING WATER STATE REVOLVING LOAN FUND PROGRAM

FINDING OF NO SIGNIFICANT IMPACT

TO: All Interested Citizens, Government Agencies and Public Groups

In accordance with the Nebraska Drinking Water State Revolving Fund environmental review process, which is based on the National Environmental Policy Act, an environmental review has been performed on the proposed agency action below.

This information reviews the environmental impact likely from a project. This project is planned to be federally funded through your tax dollars; therefore, you are entitled to take part in its review. If you have concerns about the environmental impact of this project, please provide them at this time. The Nebraska Department of Environment and Energy encourages public input in this decision-making process.

PROJECT NAME: Blending Well and Transmission Mains to Address High Nitrates in Existing Wells
Village of McCool Junction, Nebraska
DWSRF PROJECT NUMBER: D311653
TOTAL PROJECT AMOUNT: $848,500
PROPOSED DWSRF LOAN AMOUNT: $636,375
PROPOSED DWSRF FORGIVENESS AMOUNT: $212,125

The Village of McCool Junction has applied for funding for the above-referenced project through the Drinking Water State Revolving Fund (DWSRF) program jointly administered by the Nebraska Department of Health and Human Services (DHHS) and the Nebraska Department of Environment and Energy (NDEE). This project has McCool Junction ranked as a high priority and is included on the Planning List in the DWSRF State Fiscal Year 2020 Intended Use Plan. Funding can be provided to the Village in accordance with the Intended Use Plan's bypass criteria, as the January 1, 2020 bypass date has passed.

McCool Junction is located in York County in southcentral Nebraska, five miles south of the York/I80 Interchange. The community has a population of 409 according to the 2010 census. McCool Junction has been issued a permit to operate a public water system (PWS) under the provisions of the Nebraska Safe Drinking Water Act and the Regulations Governing Public Water Supply Systems, Title 179.

In March 2020, a Funding Project Report evaluating the proposed project was completed by the Village's Engineer. The PWS consists of two municipal supply wells, a 100,000 gallon capacity water tower and a distribution system.

Department of Environment and Energy
P.O. Box 98922
Lincoln, Nebraska 68509-8922

Jim Macy, Director
OFFICE 402-471-2186 FAX 402-471-2909
ndee.moreinfo@nebraska.gov

The purpose for the project is to address high nitrates in both of the existing municipal supply wells. Nitrate levels in each of the existing municipal supply wells currently exceeds 80% of the nitrate maximum contaminant level (MCL) of 10 mg/L. The proposed project will include construction of a new municipal water well completed in a deeper water bearing zone that is low in nitrates, new transmission mains from the existing wells to the new well, a blending manhole for mixing prior to the distribution system, and a new generator at new well site. New, lower capacity, well pumps will be installed in the existing wells to match the capacity of the new well. A 50/50 blend of water from existing wells with the new well will result in nitrate levels in blended water at or just below 50% of the nitrate MCL (i.e., 5 mg/L). The drinking water source will be able to meet the maximum day demand with the largest well out of service. The improvements will assure that the Village can provide an adequate supply of safe drinking water to McCool Junction's residents on a continuous basis, a requirement of DHHS regulations.

The proposed project was reviewed by numerous Federal and State agencies for environmental impacts. Nebraska Department of Natural Resources noted that no regulated floodplains are within the project area. The Nebraska Department of Environment and Energy advised that air, construction storm water and wastewater permits may be required for the project. The Nebraska Game and Parks Commission indicated the project is within the range of the state-listed endangered whooping crane and the state-listed threatened northern long-eared bat but there is no habitat for listed species within the project area and the project will have "no effect" on state-listed endangered or threatened species. The Nebraska State Fire Marshal Agency stated that at this time there are no facts known that would impact this project. The Nebraska Fish and Wildlife Service had no concerns regarding the project. The Nebraska State Historic Preservation Office indicated that project activities are unlikely to impact any prehistoric or historic cultural properties a determination of "no historic properties affected" is appropriate.

The Village is eligible for a 30-year loan at an interest rate of 1.5 %, and 25% forgiveness. In addition to principal and interest payments, an administrative fee of 0.75 % of the loan balance will be assessed each year. The revenues from McCool Junction's water utility will be dedicated to repay the loan. The projected annual DWSRF Debt Service (including 10% coverage) is $34,277. Average monthly household rates may need to be raised to $50.98 per month for the projected debt repayment. Following construction, the Village will make a final assessment of revenues and cost to determine what rate adjustments are necessary

A Public Hearing was held on June 1, 2020 by the Village on the proposed project, with 32 days advanced posted notice. A presentation was made by the Engineer's project manager on the scope of the project, likely impact to water rates and results of the environmental consultation process. There were no Village residents in attendance and no other input was received from the public.

The proposed project is determined by DHHS to help the Village maintain compliance with the Nebraska Safe Drinking Water Act. No significant environmental impacts have been identified that would result from the proposed action. All necessary permits for construction will be obtained from the appropriate agencies (i.e., NDEE, etc.). Consequently, a preliminary decision has been made that an Environmental Impact Statement will not be prepared.

The system last underwent a routine sanitary survey by DHHS in August of 2018, wherein no deficiencies were noted. That completed survey is the first step of the Technical, Financial, and Managerial (TFM) program policy. The Village will still be required to undergo an initial, and if necessary, a Final TFM Assessment by the DHHS, to ensure that their capabilities meet the requirements of the Safe Drinking Water Act. Also, their current Environmental Tracking Tool score is 10 due solely to an acute nitrate violation in the fourth quarter 2019, but still below the allowable 11 per issued U.S. Environmental Protection Agency guidance.

This action is taken on the basis of a careful review of the Environmental Assessment, the Funding Project Report and other supporting data that are on file with NDEE. The latter are available for public review upon request and the Environmental Assessment is attached. The NDEE will not take any administrative action for at least 30 calendar days from the date shown below. Persons having a comment on this determination are encouraged to submit directly to Cyril Martinmaas at 402 471-0513 or email cyril.martinmaas@nebraska.gov of DHHS, or Burton Pflueger at 402 471-1883 or email burton.pflueger@nebraska.gov of the Water Permits Division of NDEE.

Signed this 12th day of June, 2020.

Sincerely,

Jim Macy
Director

Attachments: Environmental Assessment
Distribution List
Map

ENVIRONMENTAL ASSESSMENT DOCUMENT

A. Project Identification:

Applicant: Village of McCool Junction
Project No.: D311653
Village: McCool Junction **County:** York **State:** NE
Total Project and DWSRF Loan Amount: $848,500

B. Community Description:

Location and Population: McCool Junction is located in York County in southcentral Nebraska, five miles south of the York/I80 Interchange. The community has a population of 409 according to the 2010 census.

Current Water System Facilities: In March 2020, a Funding Project Report evaluating the proposed project was completed by the Village's Engineer. The PWS consists of two municipal supply wells, a 100,000 gallon capacity water tower and a distribution system.

C. Project Description: The purpose for the project is to address high nitrates in both of the existing municipal supply wells. Nitrate levels in each of the existing municipal supply wells currently exceeds 80% of the nitrate maximum contaminant level (MCL) of 10 mg/L. The proposed project will include construction of a new municipal water well completed in a deeper water bearing zone that is low in nitrates, new transmission mains from the existing wells to the new well, a blending manhole for mixing prior to the distribution system, and a new generator a the new well site. New, lower capacity, well pumps will be installed in the existing wells to match the capacity of the new well. A 50/50 blend of water from existing wells with the new well will result in nitrate levels in blended water at or just below 50% of the nitrate MCL (i.e., 5 mg/L). The new well configuration will be able to meet the maximum day demand with the largest well out of service. The improvements will assure that the Village can provide an adequate supply of safe drinking water to McCool Junction's residents on a continuous basis, a requirement of DHHS regulations.

D. Alternatives Considered:

Three alternatives were considered, including:

1. Install one new higher production well at test well location and extend transmission mains for blending; or
2. Install two new lower volume production wells near existing wells and utilize existing building and infrastructure to deliver water to the distribution system, or
3. Drill two new high production wells to replace existing wells.

Evaluation and Selection of the Alternative: Alternative 1, installation of one new higher production well at the test well location and extending transmission mains to the existing wells for blending has the advantages of a new well capable of providing low nitrate blending water, known water quality and aquifer conditions from test well, a well that may replace an existing production well, and a well hydraulically independent of the high nitrate wells. Alternative 1 disadvantages include higher operation costs with new well and building, and higher cost construct with the construction of transmission mains for blending. Alternative 1 cost is less than Alternative 3 but more than Alternative 2. Alternative 2, two new lower volume production wells near the existing wells and utilizing existing buildings and piping has the advantage of operational cost similar to current cost, no requirement for new well house and transmission mains construction, and lower impact from construction. Alternative 2 has the disadvantages of unknown aquifer conditions and water quality, additional cost of investigating the aquifer conditions and water quality, thinner water bearing zones, and no capability to replace one of the existing production wells. Alternative 2 is the least costly of the three alternatives. Alternative 3, two new production wells, one at the test well location and one near the east well, has the advantages of replacing existing aging production wells, operation cost similar to existing system and minimal impacts during construction. Alternative 3 has the disadvantages of unknown aquifer conditions and water quality at east well, water bearing zone at east well is limited, and additional costs to determine aquifer conditions and water quality. Alternative 3 has the highest cost of the three alternatives. The Village has selected Alternative 1 for the proposed project. The project includes construction of a municipal water well, well house, SCADA modifications for blending, generator, electrical service, replacement of pumps and motor on existing wells and construction of transmission mains from the new well site to the existing wells.

E. Environmental Impact Summary:

Primary

Construction: Temporary impacts caused by construction include noise and dust, a limited potential for soil erosion, and fuel/oil spills. The Village will make application to the Upper Big Blue Natural Resources District for well construction permits. The new well will be registered with the Nebraska Department of Natural Resources. A well site inspection and well site approval is required from DHHS prior to construction of the well. Review and approval for a construction permit will be required from the Engineering Services Program of the DHHS.

Environmental: The construction contracts will require that the contractors return the area to its original or better condition. The new well house and well will occupy a very small area of land (<2,000 square feet) and will have little, if any effect on area species as all infrastructure improvements are within the jurisdictional limits of McCool Junction or adjacent to Village limits, or on areas presently farmed. Based on a review of the

available mapping, the well and well house location and the transmission main improvements lie outside the 100-year flood plain.

The proposed project was reviewed by numerous Federal and State agencies for environmental impacts. Nebraska Department of Natural Resources (NDNR) noted that no regulated floodplains are within the project area. The Nebraska Department of Environment and Energy advised that air, construction storm water and wastewater permits may be required for the project. The Nebraska Game and Parks Commission indicated the project is within the range of the state-listed endangered whooping crane and the state-listed threatened northern long-eared bat but there is no habitat for listed species within the project area and the project will have "no effect" on state-listed endangered or threatened species. The Nebraska State Fire Marshal Agency stated that at this time there are no facts known that would impact this project. The Nebraska Fish and Wildlife Service had no concerns regarding the project. The Nebraska State Historic Preservation Office indicated that project activities are unlikely to impact any prehistoric or historic cultural properties and a determination of "no historic properties affected" is appropriate.

Financial: An application for a DWSRF loan has been received for $848,500 to fund the system improvements. The Village is eligible for a 30-year loan with an interest rate of 1.5% plus an administrative fee of 0.75% on the outstanding principal balance assessed annually. Therefore, the projected annual DWSRF Debt Service (including 10% coverage) is estimated at $34,277. The revenues from Village's water utility will be dedicated to repay the loan. From a review of estimated project costs, it is anticipated that average water rates will be raised to $50.13 per month. Following construction, McCool Junction will make a final assessment of revenues and cost to determine what rate adjustments are necessary.

Secondary:

Population Impacts: The purpose of the project is to address high nitrate concentrations in the Village's drinking water. The new well provide the Village with sufficient groundwater source capacity to meet maximum day demand with its largest well out of service in the event one of the existing aging wells is taken out of service due to high nitrates or becomes unserviceable due to age. The capacity will meet the needs of the existing population of 409 residents and any reasonable growth in population.

Land Use and Trends: The new well, well house, blending pit and transmission mains will be located on the north edge of McCool Junction, on or just outside of Village limits. The well site has not been inspected or approved by the DHHS. Funding of construction of the new well is contingent on approval of the well site by DHHS. All new water mains will be placed below ground at depths that will not interrupt any planned practices. The

Natural Resources Conservation Service was contacted via mailing and no response was received.

Environmental: The project will have no effect on the availability of water quantity in the area, as the new well is being sited to meet NDNR and DHHS setback criteria. The minimal amount of solid waste generated by the project will be disposed in a licensed landfill. No safety, vibration, noise or aesthetic considerations were identified other than the normal noise and disruptions associated with well, building and water main construction.

Environmental Justice: The project will not produce any environmental justice concerns. All structures will be placed in areas previously disturbed through farming or now on Village owned property, and the services provided by the project will be available to everyone in McCool Junction, equally. No segment of the community's population is impacted disproportionately from related effects.

Mitigation measures necessary to eliminate adverse environmental effect:
Proper construction techniques will be utilized to minimize soil erosion and other potential impacts of construction. Traffic flow may be affected by construction when water main construction is being done along the Village road right-of-ways; however, safety control measures (i.e., signs, etc.), if needed, will be implemented. A National Pollutant Discharge Elimination (NPDES) Construction Stormwater permit for runoff associated with construction activity and a Stormwater Pollution Prevention Plan will be required by NDEE for this project if more than one acre of land is disturbed. The Village can designate the General Contractor as the authorized representative on the stormwater permit notice of intent submitted to the NDEE. Authorization of stormwater runoff from the construction activity must be in place prior to commencing construction.

Irreversible and irretrievable commitment of resources: The resources committed to the project include the equipment, materials and energy used in construction.

F. Measures Taken to Insure Environmental Soundness:

Public Involvement: A Public Hearing was held on June 1, 2020 by the Village Council on the proposed project, with 32 days advanced posted notice. A presentation was made by the Engineer's project manager on the scope of the project, likely impact to water rates and results of the environmental consultation process.

Public Opposition or Opinions: There were no Village residents in attendance and no other input was received from the public.

Coordination and Documentation with Other Agencies and Special Interest Groups:

Facility Planning: Funding Project Report, Municipal Water Well, Village of McCool Junction, NE, Miller & Associates, Consulting Engineers, March, 2020

Federal: U.S. Department of the Army, Corps of Engineers, March 16, 2020, letter
U.S. Fish & Wildlife Service, March 16, 2020, letter

Tribal: Apache Tribe of Oklahoma, March 16, 2020, letter
Cheyenne and Arapaho Tribes, March 16, 2020, letter
Pawnee Tribe of Oklahoma, March 16, 2020, letter

State: Nebraska Department of Aeronautics, March 16, 2020, letter
Nebraska Department of Health and Human Services, March 16, 2020, letter
Nebraska Department of Natural Resources, March 16, 2020, letter
Nebraska Game and Parks Commission, March 16, 2020, letter
Nebraska State Historical Society, March 16, 2020, letter
Nebraska Natural Resources Conservation Service, March 16, 2020, letter
Nebraska Department of Environment and Energy, March 16, 2020, letter
Nebraska State Fire Marshal, March 16, 2020, letter

Local: Upper Big Blue Natural Resources District, March 16, 2020, letter

Consulting Engineers: Miller & Associates, Consulting Engineers, Kearney, NE

Public Groups: Village of McCool Junction Residents

G. **Positive Effects to be Realized from the Proposed Project:** The project will allow McCool Junction to maintain compliance with the Nebraska Safe Drinking Water Act and ensure future water availability. Test well geological logs and analytical results indicate that the new well should meet all drinking water standards per Title 179, Regulations Governing Public Water Supply Systems. As such, the project is considered reasonable, not contrary to conservation or the public welfare and is a beneficial use of resources by the Village of McCool Junction.

H. **Reasons for Concluding there will be no Significant Impacts:** Review of the design summaries and supporting information indicates that the project will result in no significant impact on the environment. Federal and State agencies reported no impact will result to threatened and endangered species, historical, farming or groundwater resources. All necessary permits for construction will be obtained from the appropriate agencies (i.e., NDEE, etc.), if necessary.

Reviewing Engineer

June 12, 2020
Date

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MCCOOL JUNCTION, NEBRASKA

DEPARTMENT OF ENVIRONMENT AND ENERGY
Office of Public Affairs
P.O. Box 98922
Lincoln, NE 68509-8922

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
Steve McNulty
P.O. Box 95026
Lincoln, NE 68509-5026

DEPARTMENT OF NATURAL RESOURCES
Mitch Paine
P.O. Box 94676
Lincoln, NE 68509-4676

NEBRASKA GAME & PARKS COMMISSION
Schuyler Sampson/Carey Grell
P.O. Box 30370
Lincoln, NE 68503-0370

DIRECTOR, NEBRASKA STATE
HISTORICAL SOCIETY
P.O. Box 82554
Lincoln, NE 68508-2554

STATE OFFICE OF POLICY RESEARCH
Policy Advisor
Rm. 1319, State Capitol
P.O. Box 94601
Lincoln, NE 68509-4601

DEPARTMENT OF ECONOMIC DEVELOPMENT
Aaron Boucher
P.O. Box 94666
Lincoln, NE 68509

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Jeff Runge
9325 South Alda Road
Wood River, NE 68883

NATIONAL PARK SERVICE
Christine Gabriel
Environmental Coordinator
Midwest Regional Office
601 Riverfront Drive
Omaha, NE 68102-4226

USDA RURAL DEVELOPMENT
Marty Norton
Room 308, Federal Building
100 Centennial Mall North
Lincoln, NE 68508

ENVIRONMENTAL PROTECTION AGENCY
Chris Simmons and Kelly Beard-Tittone
11201 Renner Blvd
Mail Code: WWPDWIMB
Lenexa, KS 66219

STATE CONSERVATIONIST
Natural Resources Conservation Service
Federal Building, Room 152
100 Centennial Mall North
Lincoln, NE 68508-3866

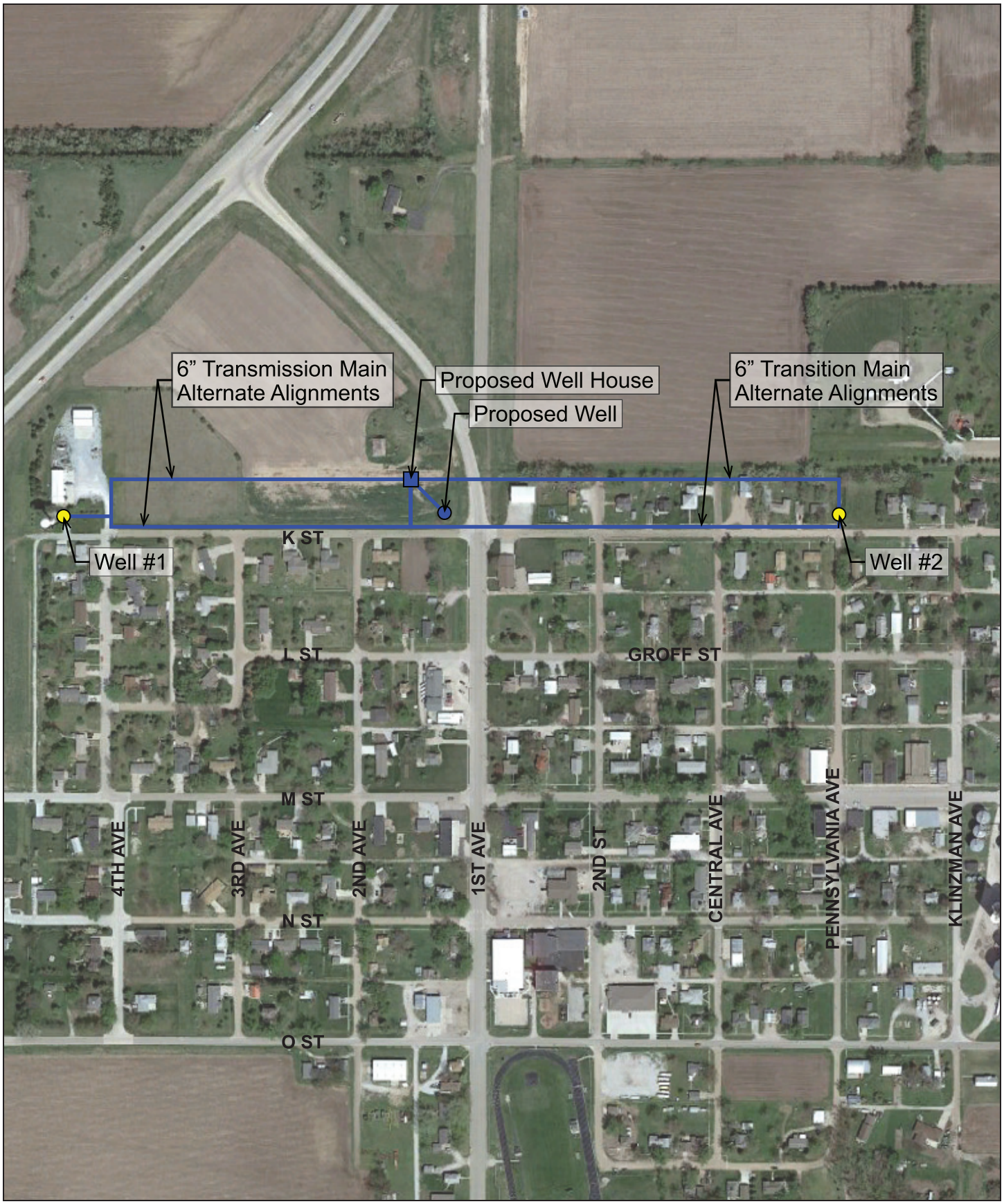
DEPARTMENT OF THE ARMY
John Moeschen
State Program Manager
US Army corps of Engineers
Nebraska State Office, Suite 1
8901 South 154th Street
Omaha, NE 68138-3621

APPLICANT:
Darci McCarter, Clerk
Village of McCool Junction
323 East M Street
McCool Junction, NE 69401

CONSULTING ENGINEER:
Gary Steele, P.E.
Miller & Associates, Consulting Engineers
1111 Central Avenue
Kearney, NE 68847

LOCAL NEWSPAPER
(Public Information Only not for Public Notice)
York News-Times
327 N Platte Ave
York, NE 68467

UPPER BIG BLUE NATURAL RESOURCES DISTRICT
Dave Eigenberg, Manager
319 E 25th Street
York, NE 68467-1216



Prepared by:

Miller & Associates
CONSULTING ENGINEERS, P.C.
www.miller-engineers.com

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Project Location Map
Water Improvement Project
McCool Junction, Nebraska