

**FINDINGS OF FACT AND CONCLUSIONS
REGARDING DECISION ON NEED FOR AN ENVIRONMENTAL IMPACT
STATEMENT (EIS)**

**CITY OF MOORHEAD
SE MAIN AVENUE/20TH STREET/21ST STREET RAILROAD GRADE SEPARATION
SAFETY PROJECT**

SEPTEMBER 18, 2006

SE Main Avenue: from approximately 250 feet south of Oak Way to
3rd Avenue South/18½ Street;

20th Street: from approximately 200 feet south of 6th Avenue South to SE Main Avenue

21st Street: from SE Main Avenue to 1st Avenue South

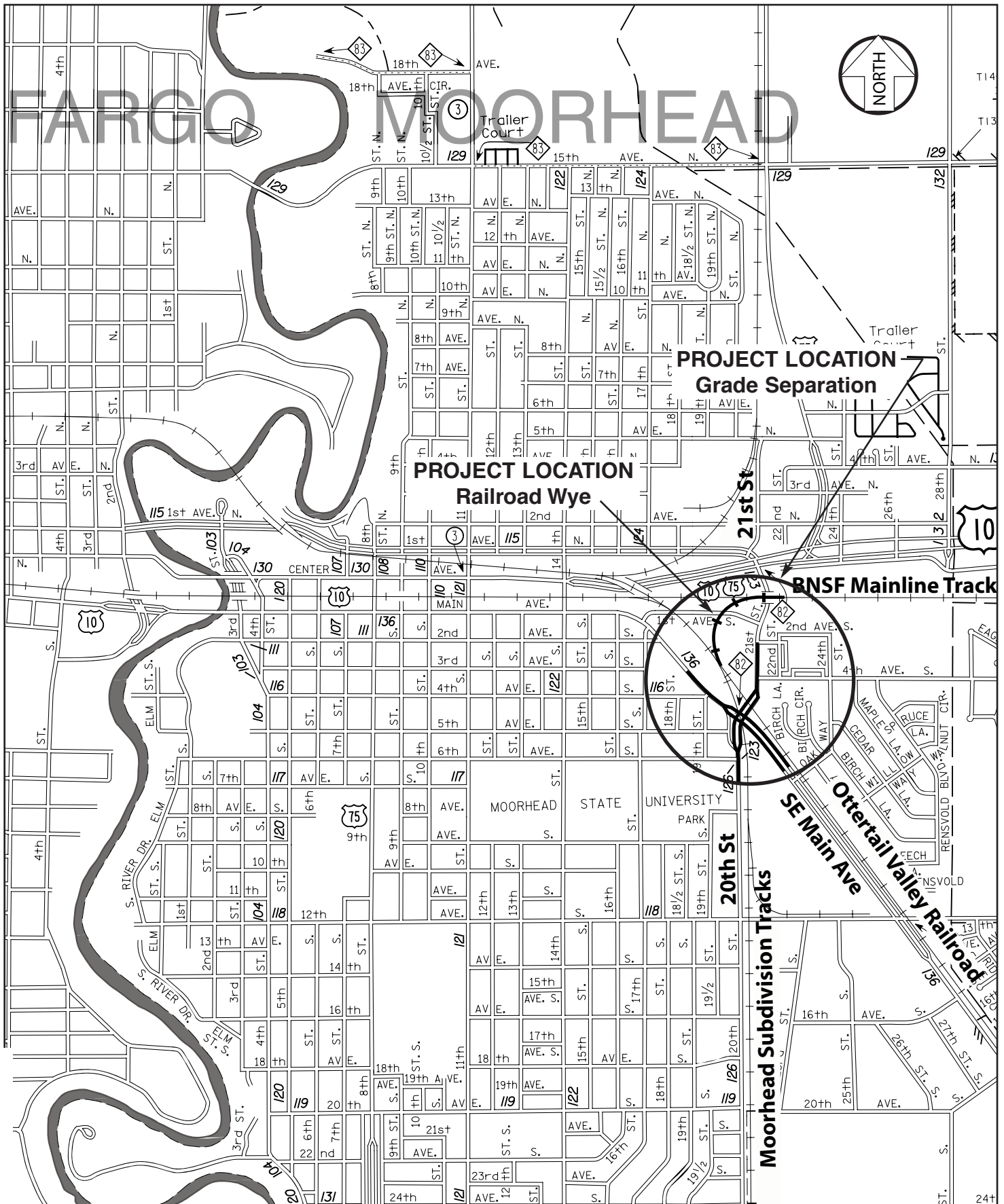
I. ADMINISTRATIVE BACKGROUND

The City of Moorhead proposes to reconstruct the SE Main Avenue/20th Street/21st Street intersection as a grade-separated facility from the Burlington Northern-Santa Fe (BNSF) Moorhead Subdivision railroad tracks and the Otter Tail Valley (OTV) railroad tracks. The project also includes construction of a railroad wye between the BNSF Moorhead Subdivision railroad tracks and the BNSF Mainline (see Project Location Map on Page 2).

An Environmental Assessment/Environmental Assessment Worksheet (EA/EAW) was prepared as a part of the National Environmental Policy Act (NEPA) process and the state environmental review process to fulfill the requirements of both 42 U.S.C. 4332 and M.S. 116D. At the federal level, the EA is used to provide sufficient environmental documentation to determine the need for an Environmental Impact Statement (EIS) or that a Finding of No Significant Impact (FONSI) is appropriate. At the state level, the EA is used to provide sufficient environmental documentation to determine the need for a state EIS or that a Negative Declaration is appropriate.

Minnesota Rule 4410.1300 allows the EA to take the place of the Environmental Assessment Worksheet (EAW) form, provided that the EA addresses each of the environmental effects identified in the EAW form. The EA included each of the environmental effects identified in the EAW form.

The City of Moorhead is the Responsible Government Unit (RGU) for this project.



PROJECT LOCATION

SE MAIN AVENUE/20th STREET/21st STREET RAILROAD GRADE SEPARATION PROJECT
 City of Moorhead - SP#144-116-07, SP#144-136-06, SP#144-123-11, Minn. Proj. HPP MN 58(102)

Figure 1

The EA/EAW was filed with the Minnesota Environmental Quality Board (EQB) and circulated for review and comments to the required EA/EAW distribution list. A “Notice of Availability” was published in the EQB Monitor on July 3, 2006. An Opportunity for Public Hearing/Notice of Availability was sent to the Fargo Forum and published on July 3, 2006 and July 13, 2006. This notice provided a brief description of the project, information where copies of the EA/EAW was made available, and invited the public to provide comments that would be used in determining the need for an Environmental Impact Statement (EIS) on the proposed project.

The EA/EAW was made available for public review at the City of Moorhead offices, Moorhead Public Library, Fargo Public Library, and the Fergus Falls Regional Library. The EA/EAW was also available in electronic format on the City of Moorhead Website.

A public information meeting and public hearing was held on July 19, 2006 at Moorhead Senior High School. Written agency comments received during the EA comment period are included in Appendix A. Public comments received during the EA/EAW comment period and at the public hearing, as well as the public hearing transcript, are also included in Appendix A. Responses to agency comments are included in Appendix B. Responses to public comments are included in Appendix C. Requests for the project layout at the public hearing were responded to and provided by mail or email following the public hearing.

II. PROJECT DESCRIPTION

A. SE Main Avenue/20th Street/21st Street Grade Separation

The proposed project includes the grade separation of the SE Main Avenue/20th Street/21st Street intersection from the BNSF Moorhead Subdivision railroad tracks and the OTV railroad tracks. The proposed project also includes the construction of a new railroad wye connection between the BNSF Moorhead Subdivision tracks and the BNSF Mainline tracks. The alignment of the SE Main Avenue/20th Street/21st Street intersection will be shifted to the northwest of the existing alignment with the grade separation to minimize impacts along the project corridor.

Currently, SE Main Avenue, 20th Street and 21st Street are four-lane urban roadways within the project area.¹ The existing SE Main Avenue/20th Street/21st Street intersection is a signalized intersection with dedicated right and left-turn lanes for certain turning movements (i.e., westbound SE Main Avenue to northbound 21st Street; northbound 20th Street to westbound SE Main Avenue). A separated right turn access connects eastbound SE Main Avenue to southbound 20th Street.

The proposed SE Main Avenue/20th Street/21st Street intersection will be shifted to the northwest from the existing intersection location and SE Main Avenue, 20th Street and 21st Street will be reconstructed as four-lane divided urban section roadways. Retaining walls will be

¹ 20th Street is a four-lane urban roadway south of SE Main Avenue and transitions to a three-lane urban roadway south of 6th Avenue South.

constructed to protect the railroad tracks and adjacent properties. Dedicated right and left-turn lanes will be provided for all legs of the SE Main Avenue/20th Street/21st Street intersection.

The roadways and intersection will be depressed to a maximum of approximately 25 feet to accommodate the railroad overpasses. Approximately 16 feet, 4 inches of clearance will be provided between the roadway surface and the bottom of the railroad overpasses. Minnesota State Aid Rules (Minnesota Rule 8820.9956 – Vertical Clearances for Underpasses) require 14 feet, 6 inches as the minimum vertical clearance for an urban roadway under a railroad bridge.

Three overpass bridge structures will be constructed in place of the existing at-grade railroad crossings. Two bridges, one over SE Main Avenue and one over 21st Street, will be constructed for the BNSF Moorhead Subdivision tracks. One bridge over 21st Street will be constructed for the OTV tracks. The BNSF Moorhead Subdivision and OTV overpass bridges will be deck girder-type structures and will be constructed at the existing elevation of the tracks. Bridge wing walls will also be constructed to accommodate the structures and approximately 1,100 feet of the BNSF Moorhead Subdivision tracks will be relocated adjacent to the existing tracks to accommodate the proposed overpasses and relocated intersection.

Paved trails and walks, ranging in width from 8 feet to 10 feet, will be provided throughout the SE Main Avenue/20th Street/21st Street intersection area. A trail connection will be provided from the existing trail parallel to the OTV tracks to a proposed trail along the east side of 21st Street and the south side of 4th Avenue. Trail and sidewalk construction will meet the requirements of the Americans with Disabilities Act (ADA). In addition, the trails and sidewalks will provide pedestrian and bicycle access to Moorhead Senior High School, Romkey Park, Morningside Park, and the Moorhead Municipal Pool.

Drainage

Stormwater from the intersection area will be pumped and routed east through a 30-inch diameter storm sewer pipe to Clay County Ditch Number 47. It is anticipated that this storm sewer pipe will be located under 4th Avenue South (4th Avenue), although this storm sewer pipe alignment may be revised to the north during final design. If located under 4th Avenue, it is anticipated that the construction of the storm sewer will be timed with City-proposed resurfacing of 4th Avenue.

Local Access Changes

The proposed improvements will necessitate reconfiguration of the local access road and driveway system. The intersections with major cross streets (1st Avenue South; 2nd Avenue South; 4th Avenue South; 6th Avenue South) will not be relocated or reconfigured. The selected alternative includes the following local access changes:

- Closing the direct access to SE Main Avenue for commercial and residential properties at the southwest quadrant of the SE Main Avenue/20th Street/21st Street intersection. Access to these properties from SE Main Avenue and 20th Street will be from a connection between 19th Street and 18½ Street and at 6th Avenue, respectively;

- Closing the existing 4th Avenue/19th Street intersection with SE Main Avenue and providing a new access to 4th Avenue from SE Main Avenue between 18 ½ Street and 19th Street;
- Closing the southernmost access to the Greenwood Mobile Home Community from SE Main Avenue. A new access to the Greenwood Mobile Home Community from SE Main Avenue will be evaluated during final design;
- Closing the access to 5th Avenue South from 20th Street and constructing a cul-de-sac;
- Two residences with driveway access to 20th Street will be restricted to right-in/right-out access;
- Closing the 21st Street driveway accesses to businesses at the northeast quadrant of the SE Main Avenue/20th Street/21st Street intersection. Access to these commercial properties will be provided from 4th Avenue. A public easement will connect the 4th Avenue access to a new frontage road along 21st Street;
- Reconstructing the Moorhead Senior High School 2nd Avenue access from 21st Street to a ¾ access (outbound left turns to southbound 21st Street will be prohibited); and
- Closing the existing driveway access to businesses along the west side of 21st Street across from Moorhead Senior High School. Full access to these businesses will be provided across from the Senior High School entrance. A new driveway access will be constructed to the south that provides right-in/right-out access to southbound 21st Street.

B. Railroad Wye

A railroad wye will be constructed between the BNSF Moorhead Subdivision tracks and the BNSF Main line tracks, north of the SE Main Avenue/20th Street/21st Street intersection. The construction of the proposed railroad wye is new construction. The tracks for the railroad wye would diverge from the BNSF Moorhead Subdivision tracks approximately 600 feet northwest of the existing 21st Street alignment and merge with the BNSF Main line tracks at the 21st Street overpass. The length of the proposed railroad wye is approximately 1,400 feet.

The railroad wye will bisect 1st Avenue South approximately 550 feet west of 21st Street. Two options are feasible for this new railroad crossing:

1. Keep 1st Avenue South open, maintaining the existing movements and constructing a new at-grade railroad crossing.
2. Construct two new cul-de-sacs on 1st Avenue South adjacent to the railroad wye, restricting traffic movements on 1st Avenue South between SE Main Street and 21st Street.

The decision regarding construction of a new at-grade railroad crossing or construction of two new cul-de-sacs will be made during final design.

III. DECISION REGARDING THE NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT

An Environmental Impact Statement (EIS) is not necessary for the proposed project based on the following criteria:

A. Type, extent, and reversibility of impacts

The EA/EAW described the type and extent of impacts to the natural environment anticipated to result from the proposed project. The proposed design for the project includes features to mitigate the identified impacts. The impacts and the mitigation are also summarized below.

Following are the findings regarding potential environmental impacts of the proposed project and the design features included to avoid, minimize, and mitigate these impacts:

Erosion and Sediment Control

Erosion and sedimentation of all exposed soils within the project corridor will be minimized by utilizing the appropriate Best Management Practices (BMPs) during construction. Erosion control practices will be identified in the final site grading and construction plans as required by the National Pollutant Discharge Elimination System (NPDES) permitting for construction sites and in accordance with Minnesota Pollution Control Agency (MPCA), City of Moorhead and the Buffalo-Red River Watershed District's (BRRWD) erosion/sediment control standards.

Potential Environmental Hazards

A Phase I Environmental Site Assessment (ESA) was completed to evaluate the project area for indications of recognized environmental conditions as defined by the American Society for Testing and Materials (ASTM) Practice E 1527-00. The Phase I ESA identified 10 sites within the project area with recognized environmental conditions. Any properties with a potential to be impacted by the project will be investigated, if necessary, to determine the presence, extent, and magnitude of contaminated soil or groundwater in the areas of concern. If necessary, a plan will be developed for properly handling and treating contaminated soil and/or groundwater during construction. If any potential contamination is disturbed during construction, it will be managed and treated in accordance with applicable state and federal guidelines and regulations.

Environmental Justice

Based on available data and information, low-income and minority populations are located within the project area. Low-income households are disproportionately represented among households that will be acquired and residents relocated to accommodate the proposed project. Design measures were identified to avoid adverse impacts to low income households associated with the grade separation construction. Alternatives were also evaluated to avoid or reduce relocation of mobile home park residents associated with the railroad wye construction. These

alternatives were determined to be not practicable; therefore, this mobile home park property will be acquired and residents relocated with the proposed project.

The City of Moorhead is required to provide decent, safe, and sanitary replacement housing within the financial means of the household. The acquisition and relocation of property due to the railroad grade separation and railroad wye will be conducted in accordance with the Uniform Relocation and Real Property Acquisition Act of 1970, as amended by the Surface Transportation and Uniform Relocation Assistance Act of 1987 and 49 Code of Federal Regulations, Part, 24, and effective April 1989 (revised January 2005). Thus, all populations affected by the project will receive equal protection as a result of acquisition and relocation impacts.

Right of Way Acquisition and Relocation

The proposed project will result in the acquisition of seven commercial properties and one residential property (mobile home community with 18 residents as of January 2005). Partial acquisition of one commercial property (Moorhead Self Storage) will also be required to accommodate the railroad wye. The railroad wye easement is anticipated to require 28 storage units within one storage building adjacent to the wye and BNSF Moorhead Subdivision tracks.

The total size of the properties to be acquired to accommodate the grade-separated intersection is approximately 3.8 acres. The total size of the properties to be acquired for the railroad wye is approximately 3.2 acres. Approximately 1.4 acres will be required for railroad right of way.

Other partial acquisitions will also be required along the project corridor to accommodate the proposed improvements and will be identified more specifically in final plans. The partial acquisitions will not affect the use of the properties. Temporary construction easements will also be needed for some construction-related activities such as grading.

All right of way acquisition will be in accordance with the Uniform Relocation and Real Property Acquisition Act of 1970, as amended by the Surface Transportation and Uniform Relocation Assistance Act of 1987 and 49 Code of Federal Regulations, Part, 24, and effective April 1989 (revised January 2005).

Noise

Sensitive receptors (i.e., residences) are located within the project area adjacent to SE Main Avenue and 20th Street. The setting of the project area includes noise sources such as an active train line to the north (up to 60 trains per day), infrequent trains (8 to 10 trains per day; 4 of which stop and back onto the BNSF Main Line²) that run on tracks directly through the project area, and traffic noise typical of an urban street intersection. Potential noise impacts to these receptors was analyzed using computer modeling to predict existing and future noise levels.

² Study of 34th Street/I-94 Interchange and Railroad Relocation Alternatives. November 2000.

The results of the noise analysis indicate that traffic noise levels, for both year 2030 No Build and year 2030 Build conditions, are not projected to increase by more than one decibel (daytime L₁₀) when compared to existing noise levels. An increase of three decibels is barely perceptible to the human ear. Both year 2030 No Build and Build conditions would be below Federal noise abatement criteria for residential land uses. Because State noise standards do not apply to this project, and because predicted noise levels do not approach or exceed the Federal noise abatement criteria, mitigation measures will not be considered for the project.

Train noise will be intermittent and predominantly coming from the BNSF Main Line to the north of the project area. The project will not have any impact on noise from trains on the BNSF Main Line. Infrequent train noise is also generated by trains on the BNSF Moorhead Subdivision tracks and the OTV tracks. The new wye connection may cause some wheel squeal due to its tight radius but this change in noise character would likely be offset by removing noise caused by the current need for trains to stop and reverse direction near the project area.

Section 4(f)

The proposed project will result in the partial acquisition of property from Moorhead Area Public Schools – Independent School District 152. The property to be acquired for the project is approximately 0.17 acres of a soccer practice field along 21st Street and 4th Avenue at Moorhead Senior High School. The soccer practice field was determined to be a Section 4(f) resource, subject to the provisions of Section 4(f) legislation established under the Department of Transportation Act of 1966 (49 USC 303, 23 USC 138). A Programmatic Section 4(f) Evaluation was completed and included with the EA/EAW.

Design modifications have been incorporated into the project to minimize impacts to the soccer field. These modifications include:

- Adjusting the roadway alignment to minimize impacts to the school property and commercial properties along 21st Street;
- Adjusting the high school access alignment along 4th Avenue South to minimize impacts to the southeast corner of the soccer practice field;
- Incorporating retaining walls along 21st Street and 4th Avenue South; and
- Minimizing boulevard width and width between the pedestrian/bicycle trails and retaining walls.

The school district will be compensated for the property acquisition in accordance with applicable Federal and State law.

School officials, in discussions during the preparation of this Section 4(f) evaluation, indicated that they were interested in replacing the existing fencing along 21st Street with taller fencing to prevent soccer balls from being kicked off the soccer field onto the adjacent roadways. Existing fencing along 21st Street will be replaced as part of the project construction. Replacement of existing fencing with taller fencing will be considered in discussions with school officials during final design.

B. Cumulative potential effects of related or anticipated future projects

The project is being developed to address safety and traffic operations at the SE Main Avenue/20th Street/21st Street intersection, as well as address traffic congestion caused by train operations in Moorhead. As discussed in the EA/EAW, the cumulative potential effect of related or anticipated future development has been considered and the proposed project has low potential for cumulative impacts to the resources directly or indirectly affected by the project.

C. Extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority

The mitigation of environmental impacts will be designed and implemented in coordination with regulatory agencies and will be subject to the plan approval and permitting processes. Permits and approvals that have been obtained or may be required prior to project construction are identified in Table 1.

**TABLE 1
PERMITS AND APPROVALS**

Permit	Agency	Action Required
Federal		
Environmental Assessment	FHWA	Approval (completed)
FONSI	FHWA	Approval
Programmatic Section 4(f) determination	FHWA	Approval
State		
Construction Plans	Mn/DOT	Approval
National Pollutant Discharge Elimination System (NPDES) – State Disposal System (SDS) Permit	Minnesota Pollution Control Agency (MPCA)	Permit
Section 106 (Historic / Archaeological)	Mn/DOT Cultural Resources Unit	Determination (completed)
Section 106 (Historic / Archeological)	Minnesota State Historic Preservation Officer (SHPO)	Concurrence (completed)
County		
Roadway Design Approval	Clay County	Approval
Roadway Construction Plan Approval	Clay County	Approval

**TABLE 1 continued
PERMITS AND APPROVALS**

Local		
Watershed District Permit	Buffalo-Red River Watershed District (BRRWD)	Permit
EA/EAW	City of Moorhead	Approval (completed)
EIS Need Decision	City of Moorhead	Approval
FONSI Request	City of Moorhead	Approval
EA Update	City of Moorhead	Approval
Stormwater Permit	City of Moorhead	Permit

D. Extent to which environmental effects can be anticipated and controlled as a result of other environmental studies

The City of Moorhead Engineering Department has extensive experience in roadway design and construction in the project area. Many similar projects have been designed and constructed throughout the area by the City of Moorhead Engineering Department. No problems are anticipated which the City staff has not encountered and successfully solved many times in similar work in the area. The City staff finds that the environmental effects of the project can be anticipated and controlled as a result of environmental review and experience gained on similar projects.

IV. CONCLUSIONS

1. All requirements for environmental review of the proposed project have been met.
2. The EA and the permit development processes related to the project have generated information which is adequate to determine whether the project has the potential for significant environmental effects.
3. Areas where potential environmental effects have been identified are being addressed during the detail design of the project. Mitigation will be provided where impacts are expected to result from project construction, operation, or maintenance. Mitigative measures are incorporated into project design, and have been or will be coordinated with the appropriate agencies during the permit process.
4. Based on the criteria in Minnesota Rules part 4410.1700, the project does not have the potential for significant environmental effects.
5. The EA/EAW for the SE Main Avenue/20th Street/21st Street Railroad Grade Separation Safety Project was adequate and an Environmental Impact Statement is not required for the proposed project.