ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS

Wisconsin Department of Transportation
1-24-2008 Version DT2094

Project ID	Funding Source	Federal Number
1020-09-03	☐ State Only ☒ Federal	

Project Name (Highway, Airport, Rail Line)	Project Termini
West Central Freeway IH 94 Reconstruction Study	USH 63 to 3200' E of STH128

Section	County
CTH BB – STH 128	St. Croix

Estimated Project Cost (Include R/W Acquisition)

Stage	Cost (2009)	Construction Cost (yr)
Pavement Rehabilitation	$7,557,000	$8,500,000 (2013)
Structure Construction	$6,270,000	$7,487,000 (2015)
Corridor Reconstruction	$42,940,000	$56,027,000 (2018)
ROW Acquisition	$100,000	$130,000 (2018)
Total Cost	$56.867,000	$72,144,000

National Highway System (NHS) Route
☒ Yes ☐ No

Functional Classification of Existing Route

- ☐ Urban Freeway/Expressway
- ☐ Urban Principal Arterial
- ☐ Urban Minor Arterial
- ☐ Urban Collector
- ☐ Urban Local
- ☐ Urban No Functional Class
- ☒ Rural Freeway/Expressway
- ☐ Rural Principal Arterial
- ☐ Rural Minor Arterial
- ☐ Rural Major Collector
- ☐ Rural Minor Collector
- ☐ Rural Local
- ☐ Rural No Functional Class

It is determined, after review of the comments from the public, and coordination with other agencies, that this action would not significantly affect the quality of the human environment. This document is a

☐ Finding of No Significant Impact (FONSI).

☒ Environmental Assessment (EA) No Significant Impacts Indicated by Initial Assessment

☐ Environmental Assessment (EA) EIS Required

☐ Environmental Report (2-ER)

(Signature) (Date)

(Title)

(Signature) (Date)

(Title)

(Signature) (Date)
(☐ District, ☐ Aeronautics, ☐ Rails & Harbors)

(Director, Bureau of Equity & Environmental Services) (Date)

(☐FHWA, ☐ FAA, ☐ FTA, ☐ FRA) (Date)

(Signature) (Date)

Project Manager
(Title)

(Signature) (Date)

WisDOT Project Manager
(Title)

(Signature) (Date)
(☐ District, ☐ Aeronautics, ☐ Rails & Harbors)

(Director, Bureau of Equity & Environmental Services) (Date)

(☒FHWA, ☐ FAA, ☐ FTA, ☐ FRA) (Date)

1. *Description of Proposed Action (Attach project location map and other appropriate graphics).*

In January 2005, a delegation of nine state legislators representing West Central Wisconsin, requested the Wisconsin Department of Transportation (WisDOT) to do a comprehensive study of the West Central Freeway system within their legislative area. The request specifically asked for capacity analysis on IH 94 and other highways in the region. The West Central Freeway (WCF) Study identified this project area within the Zone of Influence—areas in region impacted by record increases to the population and traffic growth rates over the past 10 years—from Baldwin to Eau Claire. Traffic projections indicate 4-lane capacity will be sufficient for the next 25 to 30 years. However, the underlying pavements are at least 50 years old and will require pavement replacement in the near future. Phased replacement of the existing pavement structure between Baldwin and Eau Claire are the identified improvements needed.

This document describes the necessary actions to implement staged improvements to an approximately seven mile section of the IH 94 corridor from CTH BB easterly to 3,200 feet (975 m) east of the interchange with STH 128 (See Exhibit 1: Project Location Map). IH 94 is an arterial roadway in the National Highway System and is categorized as a component of the Eisenhower Interstate System. WisDOT is currently conducting similar studies along IH 94 from the St. Croix River/Hudson to CTH BB and from STH 128 to Menomonie. This project will complete the WisDOT study of IH 94 in St. Croix County, and extends through the towns of Cady and Eau Galle in St. Croix County. The improvements will be constructed based on available funding and in the following stages:

- Stage 1: Pavement Rehabilitation
- Stage 2: Structure Construction
- Stage 3: Corridor Reconstruction

Stage 1: Pavement Rehabilitation

This initial stage of work is limited in the level of improvement. During this stage, the existing asphalt pavement will be milled off (removed) and any broken sections of the underlying concrete pavement will be replaced. After a solid base for paving is prepared, the roadway will be paved with a temporary overlay of asphalt pavement. The existing cross-section of the roadway will not change. The roadway will contain four 12-foot (3.7 m) lanes (two in each direction). The shoulders will also remain unchanged at 10-feet (3.0 m) wide on the outside and 6-feet (1.8 m) wide on the inside.

This stage of work is not expected to include other grading or structure improvements. The pavement rehabilitation is currently scheduled to occur in 2013.

Stage 2: Structure Construction

The second stage of work will include the replacement of only the structures within the corridor that pass over IH 94 (See Exhibit 9: Proposed Project Plans & Typical Sections). The project proposes to reconstruct the interchange overpass structures at CTH B and STH 128 and the overpass structure at CTH BB to prepare for the Stage 3 corridor reconstruction.

The overpass structures will be replaced in Stage 2 according to the following recommendations:

- The overpass structure on CTH BB will be constructed with a minimum clear roadway width of 36 feet (11.0 m) and the roadway approaches will be reconstructed with 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders.
- The overpass structure on CTH B will be constructed with a minimum clear roadway width of 36 feet (11.0 m) and the roadway approaches will be reconstructed with 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders.
- The overpass structure on STH 128 will be constructed with a minimum clear roadway width of 40 feet (12.2 m) and the roadway approaches will be constructed with a 12-foot (3.7 m) lanes and 8-foot (2.4 m) shoulders.

Interchanges ramps will include a 15-foot (4.6 m) lane, an 8-foot (2.4 m) outside shoulder and a 4-foot (1.2 m) inside shoulder.

Currently, the interchanges do not comply with modern design standards. A limited degree of reconstruction will occur during Stage 2 to ensure that the interchanges work with the new structures. The complete reconstruction of the interchange ramps will be integrated into the Stage Three Corridor Reconstruction.

The construction of additional structures in the corridor cannot occur during Stage 2. The proposed reconstruction of the corridor in Stage 3 widens the existing median and shifts the westbound roadway farther to the north. Because of this, westbound structures cannot be reconstructed until Stage 3 roadway improvements are made. Additionally, the eastbound roadway profile must be corrected. As such, the eastbound structures must be constructed in Stage 3 along with the roadway profile change.

The structure improvements in Stage 2 are scheduled to take place from 2015 to 2018.

Stage 3: Corridor Reconstruction

This Stage completes the reconstruction of the remaining corridor improvements (See Exhibit 9: Proposed Project Plans & Typical Sections). The reconstruction will provide shoulder, median, and structure widening along the existing alignment to accommodate future lane expansion. Improvements will bring the roadway and existing structures up to WisDOT's current design standards.

The existing facility demands meet the requirements for improvement to Design Class A3 accommodating a design speed of 70 mph. Long-range planned improvements for this section of IH 94 will include reconstruction to six lanes. Preliminary plans have been developed that permit initial reconstruction to four lanes and allow for future expansion to six lanes as traffic volumes increase. The preferred alternative meets or exceeds the desirable design standards as defined in the Facilities Development Manual (FDM). The preferred alternative will also correct existing roadway features that are substandard.

The proposed roadway will include four 12-foot (3.7 m) lanes (two per roadway) and meet current four-lane design standards. The roadways will have 12-foot (3.7 m) outside shoulders and 12-foot (3.7 m) median shoulders. The full width of each shoulder will be paved (See Exhibit 9: Proposed Project Plans & Typical Sections).

The reconstruction of IH 94 calls for the median width to be to be improved from its existing 50-foot width to a minimum of 84 feet (25.6 m). The maximum median width proposed is 114 feet (34.7m) in locations where the existing median width is currently 100 feet (30.5 m). The proposed median widths allow for the addition of a third lane along the median of each roadway when warranted by increases in traffic volumes without disrupting vehicular traffic. When the new lanes are added, the median width will be a minimum of 60 feet (18.3 m) and a maximum of 90 feet (27.4 m).

This improvement also proposes the flattening or shielding of substandard fill slopes within the roadside safety clear zone. This requires replacing or extending existing cross-pipes, box culverts, and cattle passes. Fill slopes throughout the project will be flattened to 6H:1V (H – horizontal, V – vertical) as required to meet current standards and a 34 feet (10.4 m) clear zone. Beyond the clear zone, a 3:1 or 4:1 slope will be constructed. In areas where it is not cost effective to construct the very high fill slopes, guard rails will be used with a 2.5:1 slope beyond.

The proposed mainline structures on IH 94 will be reconstructed to accommodate three 12-foot (3.7 m) travel lanes and 12-foot (3.7 m) shoulders on each side. The proposed mainline structures will provide a clear roadway width of 60 feet (18.3 m). This meets requirements for mainline interstate structures as outlined in the Wisconsin

Department of Transportation (WisDOT) FDM. Structures to be replaced include those IH 94 eastbound and westbound bridges over Cady Creek, the Eau Galle River, and CTH NN. Increasing the span of structures over Cady Creek and the Eau Galle River will provide a better opportunity for large mammals to cross the interstate. The CTH NN roadway under IH 94 will include minor reconstruction, including 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders. The corridor currently bisects 290th Street. This is a town road that "dead ends" at the north and south sides of the interstate. No improvements are proposed on 290th Street with this project.

Finally, a structure improvement and grading is proposed to the St. Croix County Wildwood Trail to better facilitate bicycle and pedestrian movement. Three alternatives for this structure improvement were presented to the St. Croix County Parks Department. The preferred alternative will replace the existing corrugated pipe arch structure that assists passing the Wildwood Trail under IH 94 with a reinforced concrete box culvert. St. Croix County concurrence with this alternative is expressed in their April 2, 2008 correspondence (Exhibit 7). The proposed structure will have a width of 14 feet (4.3 m), a height of 12 feet (3.7 m), and a length of 300 feet (91.5 m). The costs associated with the alternative that exceed extending the existing pipe facility may require a cost share with the St. Croix County Parks Department to fulfill this structure replacement.

2. *Purpose and need of proposed action. Include description of existing facilities, abutting facilities, and how the action links into the overall transportation system. When appropriate, show that commitment for future work is not being made without evaluation, and that viable alternatives in a larger framework are not being unduly foreclosed.*

Purpose

The overall purpose of this West Central Freeway IH 94 Study is to develop a transportation solution that preserves the viability of the interstate system as a safe, high traffic volume, high-speed facility that conforms to contemporary deign standards while avoiding or minimizing adverse environmental impacts. The project will reconstruct and upgrade the existing four-lane, seven-mile portion of IH 94 from CTH BB to STH 128 and preparing the corridor and structures for future expansion.

The immediate purpose of the proposed project is to reconstruct and upgrade the existing roadway and structures to address the identified substandard design and safety issues. Specifically, this project will bring this portion of IH 94 into conformance with WisDOT's roadway and structure design standards, address immediate roadway improvement needs, maintaining traffic flow during any reconstruction efforts, and allow for projected future six lane expansion needs while minimizing social, environmental, and economic impacts.

Need

The immediate need for the proposed project is to address the operational, physical, and safety concerns identified along this section of IH 94. Deteriorating pavement, narrow shoulders, steep medians, low or less than optimal clearances coupled with high traffic volumes and speeds present immediate operational, roadside safety, and fatal crash concerns for this section of IH 94.

Operational Needs

According to traffic counts and forecasts provided by WisDOT, in 2007 IH 94 from CTH B to CTH BB recorded 32,800 vehicles per day with 28 percent representing heavy trucks. The volume on this section is projected to increase by 41 percent to 46,200 vehicles per day by 2030. Automatic traffic recorder counts indicate weekend and holiday traffic adds an additional 9,300 to 13,000 vehicles per day to the section.

The future traffic volume projections for this section, as well as the overall corridor, have encouraged WisDOT to take be proactive and create long-range plans that call for the existing four-lane corridor to be prepared for expansion to six lanes when warranted in the future. Therefore, it is necessary, more cost effective, and environmentally sound to prepare the roadway embankment, aggregate base, geometrics, and structures for future expansion in conjunction with the reconstruction of the existing roadway and structures. The more immediate reconstruction that maintains four lanes will be designed to efficiently accommodate the future six-lane footprint anticipated in the corridor's long-term.

Physical Needs

Rapidly deteriorating pavement conditions and geometric deficiencies necessitate reconstruction of the corridor. This section of IH 94 was originally constructed of concrete pavement between 1957 and 1958 and was not designed for current traffic volumes and heavy trucks volumes. In 1998, this section was rehabilitated with an asphalt overlay. It is again scheduled for pavement rehabilitation in 2013; identified as Stage 1 in the Project Description earlier. The Federal Highway Administration (FHWA) has expressed that an Environmental Report (2-ER) will be required prior to the commencement of the Stage 1 project in five years. The rehabilitation proposed in 2013 is anticipated to be the last maintenance overlay that will provide an acceptable pavement structure. Additionally, maintenance costs are rapidly increasing and are becoming more difficult to safely perform without causing significant traffic delays and backups. The backups are compounded with increasing traffic volumes, which heightens roadside and work zone safety concerns.

- Several horizontal and vertical curves within this section of IH 94 do not meet the current minimum design standards; meaning the curves do not provide the recommended sight distance.
- Roadway shoulders do not meet the minimum width for four lane rural interstates.
- All but one mainline bridge structure fails to meet the four-lane clear roadway width standard.
- Many of the structures within the corridor do not meet minimum vertical clearance standards.
- See the Summary of Existing Facilities section below for more details.

Safety Needs

There are multiple safety concerns identified for the roadway and structures along this section of IH 94. Narrow shoulders combined with steep roadside slopes within this section increase the danger to the traveling public when roadside emergencies arise. State Patrol officers, tow truck operators, emergency vehicles, etc. do not have adequate space to attend to incidents, disabled vehicles, and routine traffic stops along this section of IH 94. The substandard shoulder width compromises the safety of law enforcement and maintenance employees by reducing their separation from the traveling public.

A fatal crash rate 1.5 times the state average is an immediate cause of concern for the traveling public. Crash patterns indicate the higher than average fatality rate is related to run-off-the-road and rollover crashes. These types of crashes can be related to the substandard roadway and right-of-way features and increases in traffic volumes. In addition, narrow medians within this section elevate the possibility of crossover-head on collisions or disabled vehicles blocking or disrupting traffic flow. Finally, limited sight distance, short interchange ramps, and low or less then optimal bridge clearances increase the likelihood of further incidents along this section of the system.

Transportation System Linkage

The West Central Freeway (WCF) is a set of inter-dependent highways connecting West Wisconsin and the Chippewa Valley metropolitan area with the Twin Cities metropolitan area. The backbone of the WCF is IH 94. The completed WCF Study is one component of the larger, overall analysis to improve safety, operations, and

capacity. In the WisDOT WCF Study, the IH 94 corridor was divided into two zones to evaluate demands: the first from the St. Croix River to Baldwin is identified as the *Intense Zone*, and the second, from Baldwin to Eau Claire, is identified as the *Zone of Influence*. The extensive growth along the corridor and resulting demand—combined with the age of the existing interstate—has only exacerbated the roadway's current deteriorated condition. WisDOT has determined that the system is suffering from operation, safety, and capacity concerns.

Immediate highway improvements are necessary to ensure corridor safety and operations, regardless of the long-range transportation alternatives/recommendations outlined in the WCF Study. The physical improvement of the pavement is a distinctly separate action from improving bridge widths and spans to ensure another 50-year life for the roadway. The concrete pavement was initially constructed in 1957 and has exhausted its useful like. Replacement will enable the corridor to withstand the daily rigors of high traffic volumes and heavy truck volumes.

To the west of this section of the WCF corridor, an Environmental Impact Statement (EIS) will be completed for the reconstruction and widening of IH 94. In addition, a separate Environmental Report (ER) is being developed east of the STH 128 interchange with similar goals of staging the corridor for future capacity expansion. These studies demonstrate WisDOT's proactive commitment to providing safe and efficient transportation systems by creating long-range comprehensive plans that address the future demands of users—and the corridors role as an economic development generator—in a fiscally responsible and environmentally sound manner.

Summary of Existing Facilities

The *June 2007 Standards Evaluation Report* completed by Mead & Hunt detailed a review of the existing corridor infrastructure as compared to the FDM. The existing roadway data was obtained from as-built plans acquired from the WisDOT Northwest Region. The original construction plans were dated July 12, 1957 and November 5, 1957 and construction occurred during 1957 and 1958 respectively. In 1988 the corridor was rehabilitated per a construction plan dated December 2, 1987. Best-fit alignments were created using the topographic information supplied by WisDOT. In order to match the as-built plans as closely as possible, the alignments were made to match that of the original construction as-built plans. These alignments were used to identify the location of substandard features relative to the original construction.

The existing roadway is classified as an A3 arterial four-lane interstate with a design speed of 70 mph. Pavement is approximately 50 years old and conditions overall are considered poor. In general, many aspects of the IH 94 roadway meet current design standards for a four lane rural interstate. However, several deficiencies do exist and are discussed in detail in the *June 2007 Standards Evaluation Report.* The following is a brief summary of the existing IH 94 deficiencies.

Horizontal Alignment

The minimum radius for a 70 mph design speed is 2,050 feet (624.8 m) with full super elevation (6 percent). The shortest curve radius within the corridor is 5,655 feet (1723.6 m) (located on IH 94 WB). The horizontal curves within this section of IH 94 do not meet the current standards for the combination of superelevation and curve radius as defined in Figure 9 (page 3 of 6) of Procedure 11-10-05 of the FDM. The superelevation is not uniform across both lanes, and generally does not meet the required minimum superelevation rate.

The existing entrance and exit ramps at the interchanges with CTH BB and STH 128 are substandard for acceleration and deceleration length, respectively. Current design standards require longer ramps. The entrance ramps are currently constructed as a tapered entrance. The ramps should be reconstructed with a parallel entrance to provide better merging opportunities.

Vertical Alignment

Each of the sag vertical curves within the corridor meets or exceeds the current design standards. Two crest vertical curves (one located on the eastbound roadway and one located on the westbound roadway) do not meet the minimum stopping sight distance.

All of the mainline roadway grades along the corridor meet or exceed the current design standards and are less than the 4 percent maximum grade for rolling terrain.

Cross Section Widths

All existing lane widths are 12 feet (3.7 m) and meet current four-lane design standards. The existing roadways have 10 foot (3.0 m) outside and 6 foot (1.8 m) median shoulders. The outside shoulder is paved to 7 feet (2.1 m) with the median shoulder paved to 3 feet (1.0 m). Current design standards for four-lane sections with high truck volumes require a 12 foot (3.7 m) paved outside shoulder and a 6 foot median shoulder (paved at 4 feet (1.2 m) wide). The existing outside shoulder does not meet the four-lane design criteria.

Existing median widths within the corridor range from 50 feet (15.2 m) to 100 feet (30.5 m). The median width is defined as the distance between the edges of the travel lanes. The median width for a four-lane roadway section is a minimum of 60 feet (18.3 m). Approximately 67 percent of the median width within this corridor section is less than 60 feet (18.3 m).

Horizontal and Vertical Clearances

Existing roadway conditions indicate that hazards are present within the clear zone. Above grade obstructions were not observed to be present; however, many culvert openings and slopes exceeding standards are present throughout the corridor. The original construction utilized 4H:1V slopes within the clear zone; however, the existing slopes are often steeper. Current standards direct roadside slopes not to exceed to 6H:1V.

The beam guard terminals appear to have been upgraded to current standards through the installation of energy absorbing terminals. Unprotected culvert ends do exist within the clear zone.

Structures

Current design standards define the clear roadway width for interstate mainline structures to be 60 feet (18.3 m) to allow for future expansion and staging of traffic when needed for reconstruction and rehabilitation projects. The minimum clear roadway width for existing structures is 40 feet (12.2 m). Structure widths within the project area range from 39 feet (11.9 m) to 54.3 feet (16.6 m). All but one structure fail to meet the four-lane clear roadway width standard. All structures would need to be reconstructed to accommodate a six-lane facility.

The FDM requires a minimum vertical clearance of 16.25 feet (5.0 m) and recommends a vertical clearance of 16.75 feet (5.2 m) under structures that overpass interstate highways. Structure B-55-21, which carries STH 128 over IH 94, has a vertical clearance for eastbound IH 94 of 16.63 feet (5.1 m). This clearance meets minimum vertical standards, but not desirable standards. The vertical clearance over IH 94 westbound is 16.17 feet (4.9 m), which does not meet minimum standards. Structure B-55-48, which carries CTH BB over IH 94, does not conform to the desirable vertical clearance standards. The vertical clearance over eastbound IH 94 is 16.33 feet (5.0 m); over westbound IH 94 is 16.57 feet (5.1 m). Both conform to minimum standards.

For grade separation of structures over highways that underpass an interstate highway the FDM requires a minimum vertical clearance of 14.75 feet (4.5 m) and recommends a desirable vertical clearance of 15 feet 3 inches (4.7 m). Structure B-55-17, which carries eastbound IH 94 over CTH NN, has a vertical clearance of 15.00 feet (4.6 m). This conforms to minimum clearance standards, but does not conform to the desirable vertical

clearance standards. Structure B-55-18, which carries westbound IH 94 over CTH NN, does not conform to the desirable vertical clearance standards, but conforms to minimum clearance standards. The vertical clearance over CTH NN is 15.17 feet (4.6 m).

3. *Summary of the alternatives considered and whether they meet the purpose and need. If they are not proposed for adoption, specify why not. Identify which, if any, of the alternatives is the preferred alternative. Provide the proposed LOS and the Acceptable LOS on the traffic summary page. If the design year proposed LOS is worse than the acceptable LOS, include a statement indicating why the proposed LOS is the best achievable. Include a list of probable effects associated with obtaining an acceptable LOS, or indicate if and when a study to determine how to achieve the acceptable LOS is planned.*

   The alternatives that are described below include staged improvements that reach toward the common goal of overall corridor reconstruction.

   1) **No build**. This alternative would not address the deteriorated pavement, preserve the existing facility from increasing volumes of traffic, or address existing structures which present non-conforming clearances. This alternative is not recommended due to the lack of safety improvements. While the No-Build Alternative does not meet the purpose and need for the project, it does serve as a baseline for comparison.

   2) **Reconstruct to maintain existing median width; accommodate future expansion**. Alternative 2 does not meet the purpose and need. Maintaining the existing median widths would provide too narrow a median for design safety standards. This alternative would improve and preserve the existing facility and structures, improve the safety and efficiency of existing section, and provides for efficient expansion to a six-lane facility.

   This alternative proposes to upgrade IH 94 from CTH BB to STH 128 through staged rehabilitation and reconstruction, the highway will remain a four lane roadway to meet traffic needs. The improvements will be constructed based on available funding and in the following stages:

   Stage 1: Pavement Rehabilitation

   During this stage, the existing asphalt pavement will be milled off (removed) and any broken sections of the underlying concrete pavement will be removed. The roadway will be paved with a temporary overlay of asphalt pavement. The existing layout of the roadway will remain as-is with four 12-foot (3.7 m) lanes (two per roadway). The shoulders will also remain as-is, 10-foot (3.0 m) wide on the outside and 6-foot (1.8 m) wide on the inside. This stage of work is not expected to include other grading or structure improvements.

   Stage 2: Structure Construction

   The second stage of work includes the replacement of structures within the corridor that pass over IH 94. The project proposes to reconstruct the interchange overpass structures at CTH B and STH 128 and the overpass structure at CTH BB. At the interchanges, the existing roadways will be reconstructed to meet modern design standards as they currently do not. The interchange ramps will be constructed in a later stage. The overpass structures will be replaced per the following recommendations:

   - The overpass structure on CTH BB will be constructed with a minimum clear roadway width of 36 feet (11.0 m) and the roadway approaches will be reconstructed with 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders.
   - The structure on CTH B will be constructed with a minimum clear roadway width of 36 feet (11.0 m) and the roadway approaches will be reconstructed with 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders.
   - The structure on STH 128 will be constructed with a minimum clear roadway width of 40 feet (12.2 m) and the

roadway approaches will be constructed with a 12-foot (3.7 m) lanes and 8-foot (2.4 m) shoulders. Interchanges ramps will include a 15-foot (4.6 m) lane, an 8-foot (2.4 m) outside shoulder and a 4-foot (1.2 m) inside shoulder.

Stage 3: Corridor Reconstruction

The proposed roadway reconstruction will include four 12-foot (3.7 m) lanes (two per roadway) and 12-foot (3.7 m) shoulders. The full width of each shoulder will be paved to provide added room for roadside emergencies and match future roadway expansion when warranted. The reconstruction will maintain the existing median width of 50 feet (15.2 m). This median width requires that future roadway expansion must occur to the outside of the roadway. Constructing the future lane additions at the outside of the roadway requires more costly and complicate construction efforts. Extensive additional grading and ramp reconstruction would be required to provide for roadway expansion.

This alternative also provides for reconstruction of the interchanges, overpasses and underpasses through this section of the corridor. Entrance and exit ramps will be constructed meeting current design standards to provide adequate acceleration and deceleration length. Entrance ramps will be constructed as parallel type to provide improved merging opportunities.

All bridge and box culverts within the project limits will be reconstructed.

- Structures on IH 94 will be reconstructed to accommodate a three lane roadway by providing a 60 foot (18.3 m) clear roadway width.
- Box culverts for drainage will be sized to accommodate required drainage.
- The Wildwood Trail underpass structure will be replaced with a 12-foot (3.7 m) high by 14-foot (4.3 m) wide concrete box culvert. The new structure is larger than existing as required to meet trail design requirements and allow for service vehicle access. (A cost share with the St. Croix County Parks Department may be required to fulfill this structure replacement above the cost of extending the existing facility.)

This alternative is not the most cost effective level of improvement. This alternative has a more complex and costly construction staging operation and requires the need to provide an alternate route to maintain traffic flow. This alternative also requires extensive amounts of temporary roadway construction. The substandard median width does not meet the safety aspects of the purpose and need and requires the installation of a median barrier to prevent severe median crossover crashes.

3) **Preferred Alternative: Reconstruct to improve median width; accommodate future expansion**. This alternative does meet the purpose and need by improving and preserving the existing facility and structures. The alternative fulfills operational, physical, and safety needs. The operational concerns are addressed through roadway reconstruction that allows for future expansion to six lanes when warranted, and by widening the existing shoulders to accommodate emergency situations. Physical roadway concerns are addressed through reconstruction of the aging pavements, and by reconstructing the roadways to meet current design standards. Safety concerns are addressed by providing wider shoulders and medians, flatter roadside safety areas, and better highway visibility.

This alternative proposes to upgrade IH 94 from CTH BB to STH 128 through staged rehabilitation and reconstruction; the highway will remain a four lane roadway to meet traffic needs. To accomplish this, some roadway and median construction improvements will be made outside of the project termini (end of project limits) to allow for lane shifting, construction staging, and better transition from new to old pavement (Illustrated in Exhibit 9: Proposed Project Plans & Typical Sections). It is important to note that the improvements will be constructed based on available funding. As the construction years for the preferred alternative is years off, it is anticipated that separate environmental reports will be required prior to the commencement of each of the following stages:

Stage 1: Pavement Rehabilitation

During this stage, the existing asphalt pavement will be milled off (removed) and any broken sections of the underlying concrete pavement will be removed. The roadway will be paved with a temporary overlay of asphalt pavement. The existing layout of the roadway will remain as-is with four 12-foot (3.7 m) lanes (two per roadway). The shoulders will also remain as-is, 10-foot (3.0 m) wide on the outside and 6-foot (1.8 m) wide on the inside. This stage of work is not expected to include other grading or structure improvements.

Stage 2: Structure Reconstruction

The second stage of work includes the replacement of structures within the corridor that pass over IH 94 (See Exhibit 9: Proposed Project Plans & Typical Sections). The project proposes to reconstruct the interchange overpass structures at CTH B and STH 128 and the overpass structure at CTH BB. At the interchanges, the existing roadways will be reconstructed to meet modern design standards as they currently do not. The interchange ramps will be constructed in a later stage. The overpass structures will be replaced per the following recommendations:

- The overpass structure on CTH BB will be constructed with a minimum clear roadway width of 36 feet (11.0 m) and the roadway approaches will be reconstructed with 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders.
- The structure on CTH B will be constructed with a minimum clear roadway width of 36 feet (11.0 m) and the roadway approaches will be reconstructed with 12-foot (3.7 m) lanes and 6-foot (1.8 m) shoulders.
- The structure on STH 128 will be constructed with a minimum clear roadway width of 40 feet (12.2 m) and the roadway approaches will be constructed with a 12-foot (3.7 m) lanes and 8-foot (2.4 m) shoulders. Interchanges ramps will include a 15-foot (4.6 m) lane, an 8-foot (2.4 m) outside shoulder and a 4-foot (1.2 m) inside shoulder.

Stage 3: Corridor Reconstruction

The proposed roadway reconstruction will include four 12-foot (3.7 m) lanes (two per roadway) and 12-foot (3.7 m) shoulders. The full width of each shoulder will be paved to provide added room for roadside emergencies and match future roadway expansion when warranted (See Exhibit 9: Proposed Project Plans & Typical Sections). The reconstruction will widen the median to a minimum of 84 feet (25.6 m). A median of this width allows for construction of two additional 12-foot (3.7 m) lanes along the median when warranted with minimal disruptions to traffic. Constructing future lane additions within the median also eliminates future construction impacts to entrance and exit ramps.

This alternative also provides for reconstruction of the interchanges, overpasses and underpasses through the roadway corridor. Entrance and exit ramps will be constructed meeting current design standards to provide adequate acceleration and deceleration length. Entrance ramps will be constructed as parallel type to provide improved merging opportunities.

All bridge and box culverts within the project limits will be reconstructed.

- Structures on IH 94 will be reconstructed to accommodate a three lane roadway by providing a 60-foot (18.3 m) clear roadway width.
- Box culverts for drainage will be sized to accommodate required drainage.
- The Wildwood Trail underpass structure will be replaced with a 12-foot (3.7 m) high by 14-foot (4.3 m) wide concrete box culvert. The new structure is larger than existing as required to meet trail design requirements and allow service/maintenance vehicles access. A cost share with the St. Croix County Parks Department may be required to fulfill this structure replacement above the cost of extending the existing facility.

4. *In general terms, briefly discuss the construction and operational energy requirements and conservation potential of the various alternatives under consideration. Indicate whether the savings in operational energy are greater than the energy required to construct the facility.*

   Immediate energy requirements for construction of the Preferred Alternative would be greater than the No-Build Alternative. However, the No-Build Alternative would perpetuate the use of an inefficient transportation system and deteriorated pavement structure. Unimproved geometrics and clearances would potentially increase crash and safety problems as well. Over the design life of the facility, savings in operational energy would likely be greater than the energy required to construct the facility and, in the long-term, would result in net savings in energy usage.

   Dispatching the equipment required for reconstruction is the same as needed for the earthwork to modify the existing footprint during the reconstruction phase of this project. Performing the earthwork during the reconstruction phase would save energy as opposed to the additional energy consumed by re-dispatching the equipment for a future expansion after the reconstruction was completed.

   Maintenance costs would also be greater for the No-Build Alternative. The existing pavement structure will continue to deteriorate and utilize greater amounts of maintenance funds not to mention the energy consumption associated with delays to the motoring public.

5. *Describe existing land use (Attach land use maps if available).*

   a. Land use in immediate area.

      Land use adjacent to IH 94 is predominantly agricultural with occasional rural residential or other structures for mixed farming. There is light commercial development located at or near the existing interchanges including gas stations, a motel, and a cheese factory. There is a bicycle and pedestrian trail (Wildwood Trail) that has been converted from an inactive rail line that passes under the IH 94 roadway. The trail is owned by St. Croix County and maintained for year round use. The Town of Eau Galle and the County expect this trail to become part of a regional system in the coming years.

   b. Land use in area surrounding project area.

      The IH 94 corridor is characterized by a mix of agricultural land, woodland, wetlands, single-family rural residences, commercial, light industrial and residential subdivisions in and near the Village of Woodville.

6. *Briefly identify adopted plans for the area and discuss whether the proposed action is compatible with the plan. (For example, the following may be considered: Regional Planning Commission Plans, Transportation Improvement Program, State Transportation Improvement Plan, Local zoning and land use plans, DOT Storm Water Management Plans, others.)*

   <u>Federal</u>

   The proposed project is consistent with SAFETEA (Safe, Accountable, Flexible, Efficient Transportation Equity Act) August 2005 and USC Title 23 in that the project maintains and preserves a vital corridor in the National Highway and Interstate system.

State of Wisconsin - Corridor 2020 - FDM 11-35-10

The proposed project is consistent with the State of Wisconsin's Corridors 2020 plan. This plan is a part of WisDOT's long-range highway improvement plan designed to provide essential links to key employment and population centers throughout the state. The proposed project also is within the Connection 2030 plan scope for the Chippewa Valley connection from Minnesota to Eau Claire, Wisconsin.

Corridors 2020 supports economic development as the highway system assists the state in meeting its intercity mobility needs. These connections are important for the movement of goods and services within the state and other market areas outside the state of Wisconsin. Corridors 2020 helps create a positive and safe traveling environment that allows business, industry, agriculture, and tourism to expand in the state.

The proposed project is consistent with WisDOT Facility Development Manual Section 11-35-10 in that the proposed wider bridges will help maintain four travel lanes at all times and provided for future capacity expansion when traffic volumes warrant which is projected to occur with in the first construction cycle of the new structures useable life.

St. Croix County Conditions and Trends Report for Comprehensive Planning

The West Central Wisconsin Regional Planning Commission received a Wisconsin Department of Administration Planning (DOA) Grant to create a regional Comprehensive Plan the will comply with the state's "Smart Growth" legislation. The 2008 Report specifies that the County has experienced a 26-percent growth rate since 2000, and this number could be high as 33-percent by the end of the decade. By 2030, the DOA projections predict a 118-percent increase in the St. Croix County population (about 58,000 more residents), with both the Towns of Eau Galle and Cady population expected to increase by 50- to 75-percent.

The Land Use recommendations of the Report are not completed, as of the writing of this Environmental Assessment. Future land uses adjacent to IH 94 in the Towns of Cady and Eau Galle are expected to be consistent with the existing land uses. Agricultural operation and farmstead/rural residential land uses will continue to dominate lands adjacent to IH 94. The lands adjacent to the CTH B and STH 128 interchanges—where access is available—are expected to contain a mix of land uses such as commercial, industrial, and low-density residential.

This project will be consistent with this future plan as it relates to land uses, economic development, and non-motorized linkages that create or preserve connections on either side of the IH 94 corridor.

St. Croix County Economic Development Corporation-West Central Wisconsin Freeway System

The proposed project is within the "I-94 High Technology Zone" that was designated by the State of Wisconsin in 2002. The proposed preservation and expansion of the corridor will compliment efforts to attract new and expanding high technology firms and accommodate the exponential growth that is projected along this corridor for 2030.

St. Croix County Development Management Plan

The proposed project is consistent with the needs and conclusions indentified for "Highways" in this plan. This is directly related to the project exponential increases in population and development that is directly associated with the urban expansion of the Twin Cities in Minnesota and the Western Counties of Wisconsin particularly St. Croix County.

St. Croix County Bicycle and Pedestrian and Outdoor Recreation Plan

The proposed project preserves the Wildwood Trail that currently intersects IH 94 between CTH BB and 250th Street which is consistent with the St. Croix County Bicycle and Pedestrian Plan and Outdoor Recreation Plan. The plan also stresses that when any overpasses currently crossing the IH 94 corridor are replaced that dedicated lanes or sidewalks are considered before construction phase begins for these bridges.

7. Early coordination with Agencies.

a. Intra-Agency Coordination

i) Bureau of Aeronautics

☒ No - Coordination is not required. Project is not located within 2 miles (3.22 kilometers) of a public or military use airport, nor would the project change the horizontal or vertical alignment of a transportation facility located within 6.44 kilometers (4 miles) of a public use or military airport.

☐ Yes - Coordination has been completed and project effects have been addressed. Explain.

ii) District Office Real Estate Section

☒ No - Coordination is not required because no inhabited houses or active businesses will be acquired.

☐ Yes - Coordination has been completed. Project effects and relocation assistance have been addressed. Conceptual Stage Relocation Plan attached as Exhibit _____.

b. Interagency Coordination

STATE AGENCY	COORDINATION	COMMENTS
	Correspondence Attached Y/N	Explain or give results. If no correspondence is attached to this document, indicate when coordination with the agency was initiated and, if available, when coordination was completed.
Agriculture (DATCP)	Yes	**April 4, 2008** – Coordination letter to DATCP providing background information on the IH 94 West Central Freeway Corridor study and the recommended alternative. The correspondence noted the minimal impact on farm operations and expected project ROW needs. **April 8, 2008** – Letter from DATCP indicating no AIS will be required, absent no changes to recommended alternative. Any changes require additional review. (See Exhibit 2)
Natural Resources (DNR)	Yes	**November 4, 2007** – Initial coordination letter to the WDNR providing background on the IH 94 West Central Freeway Corridor study requesting input from WDNR regarding the proposed study. **November 8, 2007** – Letter from the WDNR that provided pertinent environmental considerations for the project. (See Exhibit 3) **February, 2008** – Informal coordination with WDNR Eau Claire Water Resource officer, Tom Lovejoy, and Fish manager, Marty Angle, to collect information for Factor sheets regarding wetlands, erosion, stormwater, and rivers & streams. Water resource officer was updated about the bridge work he had requested in the Novermber 8, 2008 letter. Officer expressed concern about wetland fill and the need for proper banking if impacts were unavoidable.
State Historical Society (SHS)	Yes	**September 24, 2007** – Initial coordination letter as apart of Section 106 process asking if the society had any concerns relating to architectural or archaeological resources within the project area. **November 7, 2007** – Letter to 12 Native American tribes notifying them about the IH 94 West Central Freeway Corridor Study and providing an opportunity to comment. **November 26, 2007** – The Ho Chuck Nation in response to the November 7, 2007 letter asked to be a consulting party through the Section 106 process and receive a copy of the ASFR. **January 17, 2008** – Consultant submitted Section 106 to WisDOT. **February 11, 2008** – Project manager (PM) sent signed packet to WisDOT BEES unit. **February 26, 2008** – WisDOT Historic Preservation signed Section 106 and forwarded packet onto SHPO. **March 10, 2008** – State Historic Preservation Office signed Section 106 Review confirming that there are no historic properties or archaeological sites identified. (See Exhibit 4)
Others:	No	

FEDERAL AGENCY		
Advisory Council on Historic Preservation (ACHP)	No	Coordination not required.
Corps of Engineers (COE)	Yes	**April 4, 2008** – Coordination letter to COE providing detailed background information on the IH 94 West Central Freeway Corridor study and requesting input on any issues or concerns the COE may have regarding the recommended alternative. (See Exhibit 5) **June 4, 2008** – E-mail from COE stating that they concur with WDNR's November 8, 2007 and require concurrence with current guidelines.
Environmental Protection Agency (EPA)	No	Coordination not required.
National Park Service (NPS)	No	Coordination not required.
Natural Resource Conservation Service (NRCS)	No	Coordination not required.
US Coast Guard (USCG)	No	Coordination not required.
US Fish & Wildlife Service (USFWL)	Yes	**April 4, 2008** – Initial coordination letter to USFWL providing background information on the IH 94 West Central Freeway Corridor study and the recommended alternative and requesting input regarding the project. **April 10, 2008** – Letter from USFWL indicating that reduced staff does not allow for requested review and comment. Guidelines and links to Section 7 requirements were provided instead. (See Exhibit 6)
Native American Tribes	Yes	See State Historical Society (SHS) above.

c. Local Government Coordination

LOCAL UNIT OF GOVERNMENT	COORDINATION	COMMENTS
	Correspondence Attached Y/N	Explain or give results. If no correspondence is attached to this document, indicate when coordination with the agency was initiated and, if available, when coordination was completed.
St. Croix County Parks Department	Yes	**March 27, 2008** – Four alternatives regarding the Wildwood Trail were proposed on this date at a public involvement meeting **April 2, 2008** – Letter stating support for Alternative 1, which is a box culvert. (Exhibit 7)

Other Local Agencies

St. Croix County Officials including the highway commission, planning staff, and parks and recreation representatives; elected officials from the towns of Cady and Eau Galle, the villages of Woodville and Baldwin; as well as state, congressional, and tribal representatives were all invited to both public involvement meetings.

Utility companies potentially impacted by this project were sent letters on November 20, 2007 and March 17, 2008.

ENVIRONMENTAL FACTORS	EFFECTS				
	Adverse	Benefit	None	*N/A	Comments
SOCIO-ECONOMIC FACTORS					
General Economics	☒	☒	☐		The Proposed Action would: Require capital investment by WisDOT and local governments that would not be able to be expended elsewhere. Cause minor temporary detouring of services and access to local commerce during construction. Assist in ensuring economic viability of the area by promoting safe and efficient travel and access to and through the project area. Accommodate current and planned economic growth for the area. Reduce the cost of maintaining the new roadway compared to maintaining the existing roadway. See attached General Economics Impact Evaluation Factor Sheet.
Community & Residential	☐	☒	☐	☐	The Proposed Action would: Require temporary traffic detouring on adjacent corridors during construction. Maintain, but negligibly impact access to properties in the village of Woodville during construction. Assist in ensuring economic viability of the area by promoting safe and efficient travel along the roadway. Not require residential acquisitions. Improve safety to local motorists while traveling on the corridor. Factor Sheet not required.
Economic Development and Business	☐	☒	☐	☐	The Proposed Action would: Impact access to local businesses on a short-term basis during the construction of the improvements. Assist in ensuring economic viability of the project area by promoting safe and efficient travel and access for expected heavy truck traffic and additional local, regional, and national traffic. Benefit commercial and industrial establishments by increasing level of service, safety, and access for employees and shipment of goods and services in the project area. Not require any commercial or industrial acquisition or relocation. Factor Sheet not required.

Agriculture	☒	☒	☐	☐	The Proposed Action would: Not require the acquisition of a farming related structure. Require minor strips of right-of-way acquisition. Provide wider paved shoulders for agricultural traffic on crossroads. See attached Agricultural Impact Evaluation Factor Sheet.
Environmental Justice	☐	☐	☒	☐	The proposed project would not affect any population protected by Executive Order 12898 on Environmental Justice. See page 19 for more information.
NATURAL ENVIRONMENT FACTORS					
Wetlands	☒	☐	☐	☐	The Proposed Action would: Require filling areas of three wetlands to improve steep roadside slopes. Require wetland banking. See attached Wetlands Impact Evaluation Factor Sheet.
Streams & Floodplains	☒	☐	☐	☐	The Proposed Action would: Require replacement of two structures over Cady Creek. Require the construction of two new structures over Cady Creek for the CTH B entrance and exit ramps. Require replacement of two structures over the Eau Galle River. Require the replacement of the box culvert at Carr Creek. Require existing structures be evaluated for swallow nests during the final design phase. See attached Streams and Floodplains Impact Evaluation Factor Sheets. Factor Sheets are included for each stream crossing.
Lakes or Other Open Water	☐	☐	☐	☒	No lakes or other open water will be affected by the proposed project. Factor Sheet not required.
Upland Habitat	☐	☐	☒	☐	The proposed project calls for a wider footprint along existing alignment which requires additional ROW along the corridor. This area has not been identified as unique habitat; however it serves as habitat for several forms of wildlife. No threatened or endangered species have been identified in this project area, however this will be verified closer to construction. Factor Sheet not required.
Erosion Control	☐	☒	☐	☐	Erosion and sediment transport would be controlled through the use of the methods shown in the latest edition of the WisDOT's Standard Specifications for Highway and Structure Construction through consultation with the Wisconsin Department of Natural Resources pursuant to the DOT/DNR Cooperative Agreement. This would be made part of the construction contract to be administered by the WisDOT project engineer. See attached Erosion Control Impact Evaluation Factor Sheet.

Storm Water Management	☐	☒	☐	☐	Stormwater impacts could occur during and after construction. Implementing sound stormwater management measures will minimize potential adverse effects. Existing cross drains would be extended and outfall energy reduced to minimize sediment transport and future erosion. See Erosion Control above. See attached Stormwater Impact Evaluation Factor Sheet.
PHYSICAL ENVIRONMENT FACTORS					
Air Quality	☐	☐	☒		The project is exempt from permitting requirements under Wisconsin Administrative Code Chapter NR 411. There will be no air quality impacts as a result of the proposed action. Factor Sheet not required.
Construction Stage Sound Quality	☐	☐	☒		To reduce the potential impact of construction noise, the special provisions for this project would require that motorized equipment shall be operated in compliance with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. All motorized construction equipment would be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It would also be required that mufflers and exhaust system be maintained tin good operating condition, free from leaks and holes. See attached Construction Stage Sound Quality Factor Sheet & Exhibit 8.
Traffic Noise	☐	☐	☒		The recommended alternative will not have noise impacts on any sensitive noise receptors. Factor Sheet not required.
CULTURAL ENVIRONMENTAL FACTORS					
Section 4(f) and 6(f)	☐	☐	☒	☒	The Wildwood Trail passes under IH 94 and was reviewed for Section 4(f) or 6(f) concerns. The design includes features requested by the county and the requested improvements to the existing tunnel enhance its overall function and not create a constructive use issue at this time. The Wildwood trail was originally purchased with county funds in 1970 and not funds specified within Section 6(f) guidelines. See Section 4(f) Unique Area Factor Sheet.
Historic Resources	☐	☐	☒	☐	The results of the historic structure survey indicated there are no historic structures in the area of potential effect for the recommended alternative. The Wisconsin Historical Society concurred in this finding (see signed Section 106 Forms in Exhibit 4). Factor Sheet not required.
Archaeological Resources	☐	☐	☒	☐	The results of the archaelogical survey indicated there are no archaelogical resources in the area of potential effect for the recommneded alternative. The Wisconsin Historical Society concurred in this finding (see signed Section 106 Forms in Exhibit 4). Factor Sheet not required.
Hazardous Substances or	☐	☐	☒	☐	The Phase 1 Hazardous Materials Assessment did identify eight

USTs					existing sites adjacent to the study area. The area of potential affect for the recommended alternative will not disturb these sites or create additional sites. Factor Sheet not required.
Aesthetics	☐	☐	☒		The visual appearance will be impacted during construction activities, however, the project would eliminate the deteriorated appearance of the existing roadway and provide maintainable and more uniform roadside slopes. Upon completion, development of the Preferred Alternative will not result in any changes to the visual character of the existing landscape or viewshed along the corridor. No aesthetic treatments are planned. Factor Sheet not required.
Coastal Zone	☐	☐	☒	☒	St. Croix County is not a Coastal Zone Management County.
Other	☐	☐	☒	☒	N/A

* N/A – Blacked out cells in this column require a check in at least one of the other columns.

ENVIRONMENTAL COST MATRIX

Transportation Improvements

ENVIRONMENTAL ISSUE	UNIT MEASURE	ALTERNATIVES/SECTIONS					
		No Build	2	3			
Project Length	Mi (Km)	0.00	7.05	7.05			
Cost $							
Construction Stage (Year)	Million $	0.00					
Pavement Rehabilitation ($2013)			8.50	8.50			
Structure Construction ($2015)			7.49	7.49			
Corridor Reconstruction($2018)			59.45	56.03			
Real Estate ($2018)	Million $	0.00	0.13	0.13			
Total	Million $	0.00	75.57	72.15			
Land Conversions							
Total Area Converted to R/W	Acres (Hectares)	0	9.81 3.97	9.42 3.81			
Wetland Area Converted to R/W	Acres (Hectares)	0	2.73 1.10	2.04 0.83			
Upland Area Converted to R/W	Acres (Hectares)	0	0	0			
Other Area Converted to R/W	Acres (Hectares)	0	7.08 2.87	7.38 2.98			
Real Estate							
Number of Farms Affected	Number	0	23	23			
Total Area From Farm Operations Required	Acres (Hectares)	0	9.25 3.74	9.42 3.81			
AIS Required	Yes/No	No	No	No			
Farmland Rating	Score	0	81	81			
Total Buildings Required	Number	0	0	0			
Housing Units Required	Number	0	0	0			
Commercial Units Required	Number	0	0	0			
Other Buildings or Structures Required	Number (Type)	0	0	0			
Environmental Issues							
Flood Plain	Yes/No	No	No	No			
Stream Crossings	Number	3	3	3			
Endangered Species	Yes/No	No	No	No			
Historic Properties	Number	0	0	0			
Archeological Sites	Number	0	0	0			
106 MOA Required	Yes/No	No	No	No			
4(f) Evaluation Required	Yes/No	No	No	No			
Environ Justice At Issue	Yes/No	No	No	No			
Air Quality Permit	Yes/No	No	No	No			
Design Year Noise Sensitive Receptors No Impact Impacted Exceed dBA Levels	 Number Number Number	0 0 0 0	N/A	N/A			
Contaminated Sites	Number	8	8	8			

8) *Describe how the project development process complied with Executive Order 12898 on Environmental Justice. (EO 12898 requires agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental effects on minority populations and low-income populations, including the interrelated social and economic effects. Include those covered by the Americans with Disabilities Act and the Age Discrimination Act.)*

The proposed improvements to IH 94 from CTH BB to STH 128 do not have the potential for adversely affecting human health and environmental effects on minority populations, low-income populations, or elderly or handicapped persons. The proposed improvements will not necessitate any residential or business displacements. Minor land acquisition of farm properties is needed along the existing corridor. Through the project's public involvement activities, the study team has had an opportunity to meet and discuss the proposed improvements with abutting landowners and we do not find there to be environmental justice concerns.

a) Identify sources of data used to determine presence of minority populations and low-income populations.

☒ Windshield Survey
☐ Survey Questionnaire
☒ Meetings with abutting land owners
☐ WisDOT Real Estate
☒ US Census Data
☐ Official Plan
☐ Real Estate Company
Identify Real Estate Company
☐ Human Resource Agency
Identify Agency

Identify Plan, Approval Authority, and Date of Approval

b) Indicate whether a minority population or a low-income population, including the elderly and the disabled, is in the project's area of influence.

i) The requirements of EO 12898 are met if both "No" boxes are checked below.

☒ No minority population is in the project's area of influence.

☒ No low-income population is in the project's area of influence.

ii) If either or both of the "Yes" boxes are checked, item c) below must be completed.

☐ Yes, a minority population is within the project's area of influence.

☐ Yes, a low-income population is within project's area of influence.

c) How was information on the proposed action communicated to the minority and/or low- income population(s)? Check all that apply.

After reviewing available demographic data, conducting a windshield survey of the project area, and meetings with owners of land abutting the corridor, we found there to be no minority or low income populations located in the project's area of influence. Comments received during public input opportunities were generally concerned with the timeline of the project, and possible adverse drainage issues.

d) Identify how input from the minority population and/or low-income population was obtained. Check all that apply.

After reviewing available demographic data, conducting a windshield survey of the project area, and meetings with owners of land abutting the corridor, we found there to be no minority or low income populations located in the project's area of influence. Comments received during public input opportunities were generally concerned with the timeline of the project, and possible adverse drainage issues.

e) Indicate any special provisions which were made to encourage participation from the minority population and/or low-income population(s)

After reviewing available demographic data, conducting a windshield survey of the project area, and meetings with owners of land abutting the corridor, we found there to be no minority or low income populations located in the project's area of influence. Comments received during public input opportunities were generally concerned with the timeline of the project, and possible adverse drainage issues.

9) Briefly summarize the status and results of public involvement. Briefly describe how the public involvement process complied with EO 12898 on Environmental Justice.

Key Public involvement activities during preparation of the Environmental Report are summarized as follows:

- **November 2007** – The WisDOT sent a press release to the following news organizations: River Falls Journal, Pierce County Herald, New Richmond News and Hudson Star Observer, Baldwin Bulletin, Central St. Croix News, Glenwood City Tribune-Press-Recorder, Woodville Leader and WIXK Radio in New Richmond
- **November 30, 2007** – Article in Twin Cities.com announcing upcoming public involvement meeting and an overview of the purpose of the study.
- **November 29, 2007** – Postcard announcing first public information meeting mailed to local residents, local units of government, tribes, county, state, & federal elected officials.
- **December 13, 2007** – First public information meeting was held in the Village of Woodville with an open house format. Twenty-one people signed in, and approximately 30 people attended the session. The purpose was to introduce the project team, review the study purpose and scope, and review project schedule and upcoming activities. This information was also included in a handout that was available at the meeting for all attendees to pick up. The handout included a mail in comment sheet. In general, attendees were concerned with the overall timeline and wanted the proposed improvements sooner. Some wanted specific improvements including, a park & ride at STH 128 and IH 94, preserving the Wildwood Trail, wider overpasses and shoulders, and improved entrance and exit ramps. One adjacent property owner was concerned about the proximity of his house to proposed overpass improvements.
- **March 17, 2008** – Letter announcing second public information meeting mailed to local residents, local units of government, tribes, county, state, & federal elected officials.
- **March 27, 2008** – Second public information meeting was held in the Village of Woodville with an open house format. Thirteen people signed in and approximately 20 people attended the session. The purpose was to introduce the project team, review the study purpose and scope, review project schedule and upcoming activities, review conceptual construction staging, and present four alternative improvements to the Wildwood Trail. This information was also included in a handout that was available at the meeting for all attendees to pick up. Handout included a mail in comment sheet. In general, attendees were concerned with the overall timeline and wanted the proposed improvements sooner. The adjacent property owner voicing concerns at December 13, 2007 meeting reiterated his concerns about proximity of his house to proposed overpass while another expressed concern about redirecting drainage away from his already low lying property.

a) Identify groups (e.g., elderly, handicapped), minority populations and low-income populations that participated in the public involvement process. This would include any organizations and special interest groups.

After reviewing available demographic data, conducting a windshield survey of the project area, and meetings with owners of land abutting the corridor, we found there to be no minority or low income populations located in the project's area of influence. Interested property owners and business owners participated in the public input opportunities scheduled for the project.

b) Describe, briefly, the issues, if any, identified by any groups, minority populations and/or low-income populations during the public involvement process.

After reviewing available demographic data, conducting a windshield survey of the project area, and meetings with owners of land abutting the corridor, we found there to be no minority or low income populations located in

the project's area of influence. Comments received during public input opportunities were generally concerned with the timeline of the project, and possible adverse drainage issues.

c) Briefly describe how the issues identified above were addressed. Include a discussion of those that were avoided as well as those that were minimized and those that are to be mitigated. Include a brief discussion of proposed mitigation, if any.

After reviewing available demographic data, conducting a windshield survey of the project area, and meetings with owners of land abutting the corridor, we found there to be no minority or low income populations located in the project's area of influence. Comments received from stakeholders during public input opportunities were answered directly by WisDOT and Mead & Hunt project managers. It was explained that a month-by-month project construction timeline was not available at this time, and that the project would not exacerbate any drainage issues along the corridor.

Traffic Summary

Acceptable Levels of Service

See: FDM Procedure 11-5-3

STH Sub-System	Rural & Small Urban Areas	Urbanized Areas with Population > 50,000	Indicate The Acceptable Level Of Service Established For This Project
C2020 Backbone Routes	LOS C (< = 4.0)	LOS C (< = 4.0)	C
C2020 Connector Routes and NHS Routes (not including NHS Backbone Routes)	LOS C (< = 4.0)	Mid LOS D (< = 4.5)	-
Other Principal Arterials	LOS D (< = 5.0)	Mid LOS E (< = 5.5)	-
Minor Arterials	LOS D (< = 5.0)	Mid LOS E (<= 5.5)	-
Collectors & Local Function Roads	LOS D (< = 5.0)	Mid LOS E (<= 5.5)	-

Traffic Analysis Summary

Alternative Preferred

Segment Termini		CTH BB to CTH B A to B	CTH B to STH 128 B to C	East of STH 128 C to D	D to E
Traffic Volumes					
Existing AADT	Year 2007	32,800	34,900	31,500	
Construction Year AADT	Year 2018	39,100	40,200	37,300	
Const. Year + 10 Years AADT	Year 2028	44,900	45,100	42,800	
Design Year AADT	Year 2030	46,200	46,100	44,000	
Design Year DHV	Year 2030	4,530	4,520	4,320	
Traffic Factors in Design Year					
K (%)	Design Hour 30th	9.8	9.8	9.8	
D (%)		58	58	58	
Truck (% of AADT)		28	28	28	
Truck (% of DHV)		15	15	15	
Peak Hour Factor		1.00	1.00	1.00	
Level of Service in Design Year					
LOS Letter Value (A - F)		C	C	C	
LOS Numeric Values (1.0 – 6.01)		3.01	3.01	3.01	
LOS analysis methodology (e.g., HCS, Synchro, Paramics, other)		HCS	HCS	HCS	
Posted Speeds and Facility Type					
Existing Facility Type (e.g., Freeway, Expressway, Rural Two-Lane, Urban Arterial)		Freeway	Freeway	Freeway	
Design Year Facility Type		Freeway	Freeway	Freeway	
Existing Year Posted Speed		65 MPH	65 mph	65 mph	
Design Year Posted Speed		65 MPH	65 mph	65 mph	

AADT = Average Annual Daily Traffic in Both Directions

DHV = Design Hourly Volume

K = The percent of AADT in the Design Hour (30th, 200th, or other)

K8 = % of AADT occurring in the average of the 8 highest consecutive hours of traffic on an average day. (Only required when a carbon monoxide analysis must be performed per Wisconsin Administrative Code - Chapter NR 411.)

D = % of DHV occurring in the predominate direction of travel.

ENVIRONMENTAL ISSUES

Indicate whether the issue listed below is a concern for the proposed action or alternative. If the issue is a concern, explain how it is to be addressed or where it is addressed in this environmental document.

1)Would the proposed action stimulate substantial secondary environmental effects?

☒ No

It is the finding of this Environmental Assessment that the development of the Preferred Alternative will not stimulate any substantial secondary environmental effects as this is a reconstruction of an existing corridor. According to the FHWA report "A Guidebook for Evaluating the Indirect Land Use and Growth Impacts of Highway Improvements," the primary study area for indirect impacts should be a function of travel time savings and travel volumes. In evaluating the indirect effects of development of the Preferred Alternative, a generally accepted study area of ½-mile around the corridor is the primary area of potential effect.

The initial construction of the Eisenhower Interstate System during the 1950s resulted in substantial secondary environmental effects to the primary area. Since that time, no considerable improvements to this section of the system have occurred. Subsequent improvements have been maintenance related or negligible widening of pavement and shoulders to improve safety. The proposed action continues in that same vein. The infrastructure has simply "worn out" because of 60 years of use. The proposed action is a reconstruction of the corridor to address existing design deficiencies and improve failing infrastructure. While capacity deficiencies associated with a growing population are anticipated, this project will not result in the construction of additional travel lanes.

The existing presence of the roadway and the spatial relationship of the corridor to the primary employment and retail centers of the region—specifically, St. Paul, Hudson, and Menomonie—are important in determining that the proposed action will not stimulate substantial secondary environmental effects. Again, the Federal policy and programs to develop the interstate system resulted in accelerated growth and development of this area by providing a fast, efficient, high-speed transportation network to jobs and shopping. The interstate resulted in an "easy commute" for people to move out of higher density urban environments to rural areas; St. Paul is only 35 minutes away, Hudson 25-minutes, and Menomonie 15-minutes. While the reconstruction of this section of the corridor (and related structures) will enable future capacity expansion, there will be no capacity expansion at this time. This proposed action will enable safer travelling for the public, but it will not result in travel time savings. Land development pressure along the corridor will not increase as a result, and substantial secondary environmental effects will not occur.

Coupling with the spatial relationship of the project area to the region is the existing demographic conditions along the corridor. The 2008 St. Croix County "Smart Growth" Plan specifies that the County has experienced a 26-percent growth rate since 2000, and this number could be high as 33-percent by the end of the decade. Further, by 2030, DOA projections predict a 118-percent increase in the St. Croix County population (about 58,000 more residents), with both the Towns of Eau Galle and Cady population expected to increase by 50- to 75-percent. Again, this is a result of individual attitudes toward commuting to employment and other services and their personal desire for rural living and the increasing trend of tele-commuting and flexible work schedules. The presence of the interstate itself made this possible, and the proposed action does not exacerbate this trend.

Existing land uses along the corridor are typical to sparsely populated areas bisected by an interstate highway. The roadway is predominantly abutted by agricultural lands and rural residential properties, with a mix of land uses such as commercial, industrial, and low-density residential located at the interchanges. And while the land use recommendations of the St. Croix "Smart Growth" Plan are not completed as of the writing of this Environmental Assessment, future land uses adjacent to IH 94 in the Towns of Cady and Eau Galle are expected to be consistent

with the existing land uses. Moreover, limited sewer service is available along the corridor, with municipal services not available to most properties. Without additional transportation capacity improvements or availability for public sewer, an increase in development interest is not supported,

Finally, the proposed action will not modify or increase existing access to IH 94. Although interchange ramp improvements would occur with this project, access would remain unchanged. Improvements to STH 128 and CTH B beyond the interchanges are not proposed within the scope of this project. Roadway and access improvements at interchanges are often seen as an opportunity to develop properties near the ramp terminals. Interchange development of this nature can have a significant impact on the transportation system as well as public services provided by municipalities.

Through analysis using WisDOT's pre-screening for indirect effects procedure and FDM guidance on indirect effects, it is concluded that the factors of the project, its location and other conditions do not warrant further detailed analysis of the potential for indirect effects. The project does not have the likelihood to result in *significant* indirect effects as defined by NEPA. This conclusion was based on the evaluation of ten pre-screening factors including project design concepts and scope; project purpose and need; project type; facility function (current and planned); project location; improved travel times to an area; local land use and planning considerations; population and demographic considerations; rate of urbanization; and public/agency concerns. The data and evaluation supporting this conclusion are attached. Therefore, further evaluation of indirect effects in a detailed analysis is not warranted. If changes are made to the project design and alternatives, this screening will be re-examined for sufficiency.

☐ Yes - Explain or indicate where addressed.

2) Would the creation of a new environmental effect result from this proposed action?

☒ No

☐ Yes - Explain or indicate where addressed.

3) Would the proposed action impact geographically scarce resources?

☒ No

☐ Yes - Explain or indicate where addressed.

4) Would the proposed action have a precedent-setting nature?

☒ No

☐ Yes - Explain or indicate where addressed.

5) Is the degree of controversy associated with the proposed action high?

☒ No

☐ Yes - Explain or indicate where addressed.

6) Would the proposed action have any conflicts with official agency plans or local, state, or national policies, including conflicts resulting from potential effects of transportation on land use and land use on transportation demand?

☒ No

☐ Yes - Explain or indicate where addressed.

7) Would the proposed action contribute to cumulative environmental impacts of repeated actions?

☒ No

According to Council on Environmental Quality (CEQ) regulations, a cumulative effects analysis is required whenever an Environmental Assessment is prepared AND the following two related criteria apply: (1) The proposed action under review must have a direct and/or indirect effect on a specific natural, historic, cultural resource or population for the proposal or alternative to exert a cumulative influence, and (2) If no direct and/or indirect effect to a specific resource is suspected, there is no need to consider cumulative effects to that resource. The mere presence of the transportation system will contribute to cumulative environmental impacts of repeated actions. Be it the No Build or Preferred Alternative, any man-made presence will have cumulative impacts over time. Only the outright removal of the infrastructure will mitigate any cumulative effects.

With that said, in the instance of this proposed action, any cumulative impacts are tied to the existence of IH 94 itself and not related to the actions within the scope of the proposed project. As expressed in the discussion of indirect impacts earlier, the proposed action is a reconstruction of the corridor to address existing design deficiencies and improve failing infrastructure. While capacity deficiencies associated with a growing population are anticipated, this project will not result in the construction of additional travel lanes.

This project does make the accommodation for two additional travel lanes—one EB and one WB—to aid future capacity expansion. The 12-foot lanes are intended to be located in the median, reducing the overall median width. At this time there is not an identified timeframe for this improvement. It is very likely that the community of Woodville, Wisconsin located 2 miles north of the IH 94 corridor will experience an increase in growth when IH 94 is expanded from four to six lanes. However, as discussed with indirect impacts earlier, there has been a trend of increasing housing growth, non-residential development, and population in the area. Again, this is a result of individual attitudes toward commuting to employment and other services and their personal desire for rural living and the increasing trend of tele-commuting and flexible work schedules. The presence of the interstate itself made this possible, and the proposed action does not exacerbate this trend. Cumulative effects should be studied further when expansion of the corridor is warranted to six lanes.

☐ Yes - Explain or indicate where addressed.

ENVIRONMENTAL COMMITMENTS

Identify and describe any commitments made to protect the environment. Indicate when the commitment should be implemented and who in WisDOT would have jurisdiction to assure fulfillment for each commitment.

ATTACH THIS PAGE TO THE DESIGN STUDY REPORT

A. General Economics	See attached General Economic Impact Factor Sheet.	Project Manager
B. Community & Residential	No Commitments Needed	
C. Commercial & Industrial	No Commitments Needed	
D. Agriculture	ROW Acquisition	WisDOT Real Estate/Project Manager
E. Environmental Justice	No Commitments Needed	
F. Wetlands	The construction of the roadway would require a wetland impact of 2.04 acres. The loss of these wetlands would be charged against a regional wetland bank at an appropriate ratio and be coordinated as part of a WisDOT program.	Project Manager
G. Streams & Floodplains	Erosion and sediment transport into waterways during construction will be controlled by methods shown in the latest edition of the WisDOT's Facilities Development Manual and through consultation with the Wisconsin Department of Natural Resources pursuant to the DOT/DNR Cooperative Agreement. Commitments to avoid seasonal work in streambeds will be made at a later stage of the project.	Project Manager
H. Lakes or Other Open Water	No Commitments Needed	
I. Upland Habitat	Re-evaluate with USFWS during pre-construction.	Project Manager
J. Erosion Control	WisDOT will follow TRANS 401 and the WisDOT/DNR Cooperative Agreement Amendment regarding erosion control.	Project Manager
K. Storm Water Management	WisDOT will follow TRANS 401 and the WisDOT/DNR Cooperative Agreement Amendment regarding storm water management.	Project Manager

L. Air Quality

- ☒ The project is exempt from permit requirements per Wisconsin Administrative Code – Chapter NR 411 criteria.
- ☐ A construction permit is required for this project and an application has been submitted to the Department of Natural Resources – Bureau of Air Management. Construction on the project will not begin until the Construction Permit has been issued. See the Air Quality Factor Sheet.
- ☐ A construction permit is required for this project and has been issued by the Department of Natural Resources – Bureau of Air Management. The Construction Permit Number is . See the Air Quality Factor Sheet.

M. Construction Stage Sound Quality

- ☐ No receptors are located in the project area. No impacts are anticipated from construction noise.

☒ To reduce the potential impact of Construction Noise, the special provisions for this project will require that motorized equipment shall be operated in compliance with all applicable local, state and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. At a minimum, the special provisions will require that motorized construction equipment shall not be operated between 10 PM and 7 AM without prior written approval of the project engineer. All motorized construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It will also be required that mufflers and exhaust systems be maintained in good working order, free from leaks or holes. See Construction Stage Sound Quality Factor Sheet.

N.	Traffic Noise	No Commitments Needed	
O.	Section 4(f) and 6(f)	The proposed action crosses over an abandoned rail right-of-way, and falls under the guidance of Section 4(f). St. Croix County purchased the ROW, without use of LAWCON funds, and converted the ROW to a multi-purpose recreation trail for bicycles, pedestrians, and snowmobile use. Replacement of the existing culvert is planned as part of the project. See Unique Area Impact Evaluation Factor Sheet.	Project Manager
P.	Historic Resources	No Commitments Needed	
Q.	Archaeological Resources	No Commitments Needed	
R.	Hazardous Substances or USTs	No Commitments Needed	
S.	Aesthetics	No Commitments Needed	
T.	Coastal Zone	No Commitments Needed	
U.	Other	No Commitments Needed	

Alternative	Preferred
Reconstruct to improve median width	☒ Yes ☐ No
Portion of Project This Sheet is Evaluating	
7.00 miles CTH BB to 3200' E of STH 128	

1) Describe, briefly, the existing economic characteristics of the area around the project. This could include type(s) of farming, retail or wholesale businesses, manufacturing, tourism, or other elements contributing to the area's economy and potentially affected by the project.

The proposed project limits are within a rural south eastern portion of St. Croix County. The lands adjacent to the corridor are agricultural for crop production or are dairy farming. Two of the ten largest employers in St. Croix County, based upon total number of employees, are located 2-miles north of the roadway in the Village of Woodville. Limited retail at the interchanges is within the Village.

The proposed project is part of the West Central Freeway system. The IH 94 Corridor between Eau Claire and Hudson is one of the most heavily traveled corridors in Wisconsin.

- Near Hudson (west of the proposed project), 70,000 vehicles per day use IH 94—the highest Interstate traffic volumes outside of southeast Wisconsin.
- Near Roberts (just west of the proposed project), 40,000 vehicles per day use IH 94—approximately equal to the number that use IH 94 in Dane County between Madison and Milwaukee.
- Near Menomonie and Eau Claire, which is a section east of the proposed project, about 30,000 vehicles per day use IH 94.

The rapid growth in west central Wisconsin is leading to increased pressures on the West Central Freeway System, including the IH 94 corridor.

The corridor was also designated as a “High Tech Industrial Corridor” in June of 2002 by the State of Wisconsin.

- $5 million in income tax credits has been allocated to the Wisconsin IH 94 Corridor Zone.
- Zones are in effect for 10 years.
- Tax credits are made available to high-technology businesses expanding, location or commencing operations in the Technology Zone.

The following high-technology clusters have been identified in the Wisconsin I-94 Corridor Technology Zone: Computers & Electronic Technologies, Medical Technology & Devices, Materials Technologies, Information Technologies, Telecommunications & Utilities, Machinery, Equipment & Electrical, Automation & Precision Fabrication and Biotechnology.

2) Discuss the economic advantages and disadvantages of the proposed action. Indicate how the project would affect the characteristics described in item 1 above.

As growth in St. Croix County continues to migrate east of Roberts and Baldwin, combined with the High Technology initiative, development pressures may cause an increase in economic development within the project limits of the corridor within the next 20 years. Through corridor planning, conceptual capacity expansion studies, and staging, WisDOT is helping local governments prepare for construction activities, make land use decisions that will benefit their communities, and preserve the highway as an economic development generator. Moreover, by being proactive,

WisDOT will save construction and real estate costs in the future.

3) In general, will the proposed action increase or decrease the potential for economic development in the area influenced by the project?

The proposed action will not increase or decrease the potential for economic development as capacity improvements will not be made until traffic volumes warrant such construction. At this point the proposed project will be helping to sustain the projected grow rather than create or diminish the growth. Quality transportation infrastructure will meet the growing demands created by economic prosperity and provide the services necessary to sustain future growth. Further, the project will minimize future economic development impacts by preparing the corridor for additional capacity expansion.

Alternative Reconstruct to Improve Median Width	Length of Center line and termini this sheet is evaluating if different from Sheet 1. mi.
Preferred Yes	

Type of Land Acquired From Farm Operations	Type of Acquisition		Total Area Acquired
	Area Acquired In Fee Simple	Area Acquired By Easement	
Crop land and pasture	4.53 Acres	0 Acres	4.53 Acres
Woodland	1.96 Acres	0 Acres	1.96 Acres
Land of undetermined or other use (e.g., wetlands, yards, roads, etc.)	2.93 Acres	0 Acres	2.93 Acres
TOTAL	9.42 Acres	0 Acres	9.42 Acres

1. Indicate the number of farm operations from which land will be acquired.

   Total Number of Farm Operations from which land will be acquired 23

   a) 22 Number of Farm Operations from which 1 acre or less will be acquired.

   b) 1 Number of Farm Operations from which more than 1 acre but less than 5 acres will be acquired.

   c) 0 Number of Farm Operations from which more than 5 acres will be acquired.

2. Identify and describe the effects to farm operations because of land lost due to the project.

   ☐ Does Not Apply

   The primary purpose of the proposed project is not to increase traffic capacity, but to upgrade and maintain the existing corridor. Although the Preferred Alternative will require right-of-way acquisition, only 9.42 acres of farmland will be directly converted to non-farming land. A direct effect to existing farmland will include the acquisition of strip right-of-way adjacent to sections of the existing right-of-way. Areas where right-of-way will be acquired consist of agricultural land, pasture, wooded areas, and non-significant use land. Farm operations in the project area are not expected to be indirectly effected.

   A majority of the agricultural land acquired for the project will be one acre or less. Overall, the farm land acquired for the project is anticipated to be less than 1% of the agricultural land adjacent to the project area. No farm related structures or objects will be acquired.

3. Describe changes in access to farm operations caused by proposed action.

   ☒ Does Not Apply

   Changes are not expected. The right-of-way parcels to be acquired are all narrow strips and do not impact farming operations.

4. Indicate whether a farm operation will be severed because of the project and describe the severance (include area of original farm and the size of any remnant parcels).

☒ Does Not Apply

5. Identify and describe effects generated by the acquisition or relocation of farm operation buildings, structures or improvements, e.g., barns, silos, stock watering ponds, irrigation wells, etc. As appropriate, address the location, type, condition and importance to the farm operation.

   ☒ Does Not Apply

6. Describe effects caused by the elimination or relocation of a cattle/equipment pass or crossing. Attach plans, sketches, or other graphics as needed to clearly illustrate existing and proposed location of any cattle/equipment pass or crossing.

   ☒ Does Not Apply

   ☐ Replacement of an existing cattle/equipment pass or crossing is not planned. Explain.

   ☐ Cattle/equipment pass or crossing will be replaced.

   ☐ Replacement will occur at same location.

   ☐ Cattle/equipment pass or crossing will be relocated. Describe.

7. Describe the effects generated by the obliteration of the old roadway.

   ☒ Does Not Apply

8. Identify and describe any proposed changes in the land use or secondary development that will affect farm operations and is related to the development of this project.

   ☒ Does Not Apply

9. Describe any other project-related effects identified by a farm operator or owner which may be adverse, beneficial or controversial.

   ☒ No effects indicated by farm operator or owner.

10. Indicate whether minority population or low-income population farm owners, operators, or workers will be affected by the proposal. (Include migrant workers if appropriate.)

    ☒ No effects will accrue to farm owners, operators or workers from minority populations or low-income populations

    ☐ Yes – Discuss.

11. Describe measures to minimize adverse effects or enhance benefits.

    The proposed roadway has been designed in accordance with WisDOT and FHWA guidelines using criteria that balances the safety of the traveling public with the need for roadway improvements. Acquisition of land is limited to the existing right-of-way, which will accommodate both safety and capacity improvements.

Alternative	Preferred
Reconstruct to improve median width (preferred alternative)	☒ Yes ☐ No

Length of Center Line and Termini This Sheet is Evaluating
7.047 miles CTH BB to 3200' E of STH128

1) Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, other.

Wetlands in the area of potential effect for the recommended alternative are present in three areas along the project corridor. Wetland locations were determined based on WDNR's wetland inventory maps and visually verified through subsequent site visits. The first is adjacent to the Wildwood Trail (STA 1186+00). The second traverses the Carr Creek (STA 1245+00). The third wetland area is located adjacent to the banks of the Cady Creek (STA 1430+00). The proposed action would require fill to be placed in the wetlands in order to construct slope improvements, realign entrance/exit ramps, and culvert extensions. On site opportunities for wetland mitigation will be evaluated at final design.

2) Describe the location of wetland(s) affected by the proposal. Include wetland name(s), if available. (Use maps, sketches, or other graphic aids.)

The proposed action will specifically put permanent fill into a portion of the existing wetlands at Carr Creek just west of CTH B along IH 94. At Cady Creek and near Wildwood Trail fill will be added along the existing alignment in a linear fashion to accommodate the proposed wider footprint and reduced slopes.

There are three wetlands that would be directly affected. Their conditions will need to be assessed and determined when the project is scheduled and approved for construction. This is vital to insure the appropriate ratios and credits are applied to the banking site.

<u>Wetland 1 – north side of IH 94 northeast of Wildwood Trail (Station 1186+00)</u>

Wetland 1 is located on the north and south sides of IH 94. This wetland abuts the slope intercept of westbound IH 94 and receives storm water run-off.

Wetland 1 Classification:
- WisDOT – This wetland appears on DOT maps
- WDNR – This wetland is not listed on the Wisconsin Wetland Inventory

The area of this wetland that will be impacted by construction is approximately 20,038 square feet (1,862 square meters).

<u>Wetland 2 – north and south side of IH 94 on the west end of CTH B (Station 1245+00)</u>

Wetland 2 is situated west of the CTH B interchange with IH 94 along the Carr Creek on the north and south side of the roadway. The south side is within existing ROW. The north side is also within existing ROW and is associated with Carr Creek.

Wetland 2 Classification:

North side of IH 94
- WisDOT – RPE(D) (Degraded emergent riparian wetland)
- WDNR – E1Kg (Persistent emergent wet meadow, wet soil, grazed)

South side of IH 94
- WisDOT – RPE (Emergent riparian wetland)
- WDNR – E1K (Persistent emergent wet meadow, wet soil)

The wetland area that will be impacted by construction is approximately 26,136 square feet (2,428 square meters).

Wetland 3 – north and south side of IH 94 STH 128 (Station 1430+00)

Wetland 3 is along IH 94 on both the north and south side west of STH 128. A box culvert connects the north and south sides of IH 94 and acts as a water conveyance structure for Cady Creek. The wetland is associated with Cady Creek and the culvert between the north and south sides of IH 94.

Wetland 3 Classification:
- WisDOT – RPE(D) (Degraded emergent riparian wetland)
- WDNR – E1Kg (Persistent emergent wet meadow, wet soil, grazed)

The area of this wetland that will be impacted by construction is approximately 43,081 square feet (4,002 square meters).

See Exhibit 9: Proposed Project Plans & Typical Sections

3) This wetland is:

☒ Isolated from stream, lake or other surface water body.

☐ Not contiguous, but within 5-year floodplain.

☒ Contiguous (in contact) with a stream, lake, or other water body.

Identify corresponding stream, lake, or other water body by name or town-range location:
Wetland 1: Is isolated from a stream, lake, or other water body (Near old railroad/trail)
Wetland 2: Carr Creek, T29N, R16W. Section 31 NE 1/4 of the SE 1/4 & SE 1/4 of the SE 1/4
Wetland 3: Cady Creek, T29N, R15W. Section 4 NE 1/4 of the SE 1/4 & SE 1/4 of the SW 1/4

4) List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland. (List should include both permanent and seasonal residents).

According to the DNR, wildlife within the affected wetlands is considered low due to mowing practices and lack of cover.

5) Are there any known endangered or threatened species affected by the project?
☒ No

☐ Yes - Identify the species and indicate whether it is on Federal or State lists.

☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.

☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

6) FHWA Wetland Policy

☐ Not Applicable - Explain

☐ Individual Wetland Finding Required - Summarize why there are no practicable alternatives to the use of the wetland.

☒ Statewide Wetland Finding. **NOTE: All must be checked for the Statewide Wetland Finding to apply.**

☒ Project is either a bridge replacement or other reconstruction within 0.5 km (0.3 mile) of the existing location.

☒ The project requires the use of 3 hectares (7.4 acres) or less of wetlands.

☒ The project has been coordinated with the DNR and there have been no significant concerns expressed over the proposed use of the wetlands.

7) Erosion control or storm water management measures, which will be used to protect the wetland, are shown on form (either or both):

☒ DT2080, Erosion Control Impact Evaluation

☒ DT2076, Storm water Impact Evaluation

☐ Neither form - Briefly describe measures to be used

8) Section 404 Permit

☐ Not Applicable - No fill to be placed in wetlands

☒ Applicable - Fill will be placed in wetlands.
Indicate area of wetlands filled 2.04 Acres (0.83 Hectares)

☐ Individual Section 404 Permit required

☒ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404 Compliance.
Indicate which GP or LOP required.

☐ Non-Reporting GP ☐ Provisional GP
☐ Provisional LOP ☒ Programmatic GP

9) Section 10 Waters. For navigable waters of the United States (Section 10) indicate which Nationwide Permit is required.

The project does not involve building a structure to cross a river or other body of water considered to be navigable.

Indicate whether Pre-Construction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:

☐ Required
☐ Submitted on (Date)

Status of PCN
USACE has made the following determination on (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

10) Identify wetland type(s) that will be filled or converted to another use. Use the DOT Wetland Bank System. (See FDM Procedure 24-5-10, Figure 2.) If the National Wetlands Inventory (NWI) or Wisconsin Wetlands Inventory (WWI) are used to identify the types of wetlands, translate them to the DOT Wetland Bank System, wetland types.

a) Approximate areas of wetlands filled or converted by type.

Wetland Type	Area of Wetland Type	Acres	Hectares
Wetland 1 Unknown	Unknown/Unclassified	0.46	0.19
Wetland 2 Riparian-Emergent	4.27 Acres	0.60	0.24
Wetland 3 Riparian-Emergent	North 13.25/ South 9.02	0.99	0.40

11) Wetland Mitigation

(NOTE: Avoidance and minimization mitigation are required.)

a) Wetland Avoidance

i) Describe methods used to avoid the use of wetlands, such as using a lower level of improvement or placing the roadway on new location, etc.

Wetland avoidance was evaluated but not found to be possible.

ii) Indicate the total area of wetlands avoided

0.0 acres (0.0 hectares)

b) Minimize the amount of wetlands affected

i) Describe methods used to minimize the use of wetlands, such as a steepening of side slopes or use of retaining walls, equalizer pipes, upland disposal of hydric soils, etc.

Existing slopes along the alignment at Wildwood Trail and Cady Creek in the proposed impact areas are already considered too steep and current design standards call for reduced grades along slopes for safety purposes. The proposed slopes will be constructed as steep as standards allow minimizing impacts to wetlands. At Carr Creek design standards for the construction of entrance and exit ramps define the level of impact by roadway encroachment. Roadside slopes at this location will be as steep as standards allow to minimize impacts.

ii) Indicate the total area of wetlands saved through minimization

Approximately 0.1 Acres
0 (Hectares)

c) Compensation for unavoidable loss

Is compensation of unavoidable wetland loss required?

☒ Yes
☐ No. Explain.

d) Type and amount of compensation

☐ On-Site Replacement- Wetland replacement located in the general proximity of the project site within the same local watershed. These replacements are often contiguous to the project.

Wetland type of on-site replacement

Total area of on-site replacement
Acres
(Hectares)

☐ Near-Site or Off-site Replacement - Replacement opportunity for wetland compensation within a 8.05 kilometers (5 mile) corridor centered over the highway alignment or a wetland replacement located away from the project site, generally outside the project's local watershed.

Wetland type of off-site replacement

Total area of off-site replacement

Acres
(Hectares)

☐ No near or off-site replacement - Describe reasons no near or off-site opportunities were found.

☒ Wetland Mitigation Bank Site - A wetland compensation site containing wetland credit areas and wetland types from bank developed wetland restoration/creation projects or surplus areas from the wetland compensation projects of specific DOT facility development projects.

Indicate name or location of wetland mitigation bank site to be used for the replacement of unavoidable wetland loss.

On site mitigation will be explored further during final design. WDNR recommends that unavoidable losses be made up with the use of the nearest banking site.

The construction of the roadway will require a wetland impact of 2.04 acres (0.83 hectares). The loss of these wetlands will be charged against a local wetland bank at a ratio to be determined when the project is approved for construction.

Wetland type of bank-site replacement
Wet Meadow - Knights Creek in Dunn County if credits are available when the project is constructed.

Total area of bank-site replacement
2.04 Acres
0.83 (Hectares)

Describe decision process used to determine the use of the bank-site and provide any coordination documentation with regulatory or resource agencies.

Alternative	Preferred
Reconstruct to improve median width (preferred alternative)	☒ Yes ☐ No
Length of Project This Sheet is Evaluating 7.00 miles CTH BB to 3200' E of STH 128	
1) Stream Name Eau Galle River	2) Stream Location Intersects IH 94 just west of underpass at CTH NN
3) Stream Type ☐ Unknown ☐ Warm water ☒ Trout-Class ☐ Wild and Scenic River Stream Class (If known) Class 3	4) Size of Upstream Watershed Area ☐ Permanent Flow (year-round) ☒ Temporary Flow (dry part of year)
5) Stream Characteristics a) Substrate ☐ Sand ☐ Silt ☐ Clay ☒ Cobbles ☐ Other-Describe:	
b) Average Water Depth 0' base flow accept during spring thaw and heavy rains	c) Vegetation in Stream ☒ Absent ☐ Present - If known describe:
d) Identify Fish Species Present Brook Stickle Backs	e) If water quality data is available, include this information (e.g., DNR or local discharger might have such records). Water quality is "impaired" for the Eau Galle River

6) Are there any known endangered or threatened species affected by the project?

☒ No

☐ Yes - Identify the species and indicate whether it is on Federal or State lists.

☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.

☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

7) If bridge replacement, are migratory bird nests present?

☐ No

☐ Yes – Identify Bird Species present

Estimated number of nests is: _

Migratory birds may nest in vegetation or on bridge structures affected by the proposed construction. The primary season for most migratory bird nesting activity in Wisconsin is between the dates of May 1 to August 30 of a given year. However, some migratory birds are known to nest outside of the primary nesting season period.

Structure replacement under this proposed action is not expected to occur before 2015. Future Environmental Reports (ERs) are anticipated to precede detailed roadway and structure design phases. This document specifies that a survey will be conducted to document the presence/absence of active nests (i.e., occupied by eggs or young birds) as a component of those respective ERs. The results of a field survey for nesting birds, along with the information regarding the qualification of person(s) performing the survey, will be documented and maintained.

Clearing of vegetation and bridge demolition activities will be scheduled outside of the primary nesting season

dates to avoid or minimize adverse impact to nesting migratory birds. If construction must be scheduled during the migratory bird nesting season, bridges shall be maintained to preclude nesting activity (e.g. netting and/or clearing of inactive nests from the structure prior to nesting activity).

Should active nests be observed and the contractor and project manager determine that they cannot be avoided until after the birds have fledged (left the nest), and if no practicable or reasonable avoidance alternatives are identified then the contractor will complete a Federal Fish and Wildlife License/Permit Application Form 37 and submit it to the USFWS Migratory Bird Program Office. The contractor may proceed with work on the affected project activities following receipt of the approved permit the USFWS.

8) Is a U.S. Fish & Wildlife Depredation Permit required to remove swallow nests?

☒ Not Applicable

☐ No - Describe mitigative measures.

☐ Yes

9) Describe land adjacent to stream. If wetland, give type.

Agriculture, wooded, and unimproved open green space

10) Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site.

Not identified during preliminary review

11) Section 404 Permit

☐ Not Applicable - No fill to be placed in wetlands.

☐ Applicable - Fill will be placed in wetlands.
Indicate area of wetlands filled. Acres (Hectares)

☐ Individual Section 404 Permit required

☒ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404.
Indicate which GP or LOP is required.

☐ Non-Reporting GP ☐ Provisional GP
☐ Provisional LOP ☒ Programmatic GP

12) Section 10 Waters
For navigable waters of the United States (Section 10) indicate whether the U.S. Coast Guard has been notified?

☒ No

☐ Yes - Describe results of Notification.

Identify which Nationwide Section 10/404 Permit is required.

Indicate whether Pre-Construction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:

☐ Required

☐ Submitted on (Date)

Status of PCN
USACE has made the following determination on (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

13) Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment. (Note: U.S. Coast Guard must be notified when Section 10 waters are affected by a proposal.)

The work consists of replacing the existing triple span concrete structures with single span concrete structures. Moderate amounts of fill would be placed adjacent to the existing road fill. The existing structures would be replaced with wider structures that would not affect the hydraulic performance. If migratory bird nests are at the time of construction, measures will be taken to avoid affecting nesting site.

14) Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be consistent with NR 116, the National Flood Insurance Program, and Governor's Executive Order #73.

Because only a replacement of the existing bridge is proposed, no effects to the backwater are anticipated.

15) Describe and provide the results of coordination with any floodplain zoning authority.

N/A

16) Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

☒ No impacts would occur.

☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.

☐ Significant flooding with a potential for property loss and a hazard to life.

☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

17) Discuss existing or planned floodplain use and briefly summarize the project's effects on that use.

Existing floodplain use are that of woodland to the north and unimproved vacant lands. The project has no effect on either use.

18) Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream.

During construction, water quality and vegetation at the extension location would be impacted slightly because of required excavation. The intermittent river does not reportedly contain fish and animals would not be affected by the limited work zone.

19) Describe proposed measures to minimize adverse effects or to enhance beneficial effects.

The construction window would be minimized to reduce the impact to dependent fish and other animals. The disturbed areas would be seeded and stabilized upon the completion of the work. All efforts and measures will be made in accordance with WEPA and section 22.30.12 of WisDOT's FDM to ensure no deposits or debris will enter these rivers and streams.

20) Erosion control or storm water management measures which will be used to protect the stream are shown on form DT2080, Erosion Control Impact Evaluation and form DT2076, Stormwater Impact Evaluation.

☒ Yes

☐ No - Briefly describe measures to be used such as sheet piling, cofferdam, turbidity barrier, barges, construction blackout window, etc.

Alternative	Preferred
Reconstruct to improve median width (preferred alternative)	☒ Yes ☐ No
Length of Project This Sheet is Evaluating 7.00 miles CTH BB to 3200' E of STH128	
1) Stream Name Cady Creek	2) Stream Location Intersects IH 94 just west of interchange with STH 128
3) Stream Type ☐ Unknown ☐ Warm water ☒ Trout-Class ☐ Wild and Scenic River Stream Class (If known) Class 1	4) Size of Upstream Watershed Area ☐ Permanent Flow (year-round) ☒ Temporary Flow (dry part of year)
5) Stream Characteristics a) Substrate ☐ Sand ☒ Silt ☒ Clay ☐ Cobbles ☐ Other-Describe:	
b) Average Water Depth 0' base flow accept during spring thaw and heavy rains	c) Vegetation in Stream ☒ Absent ☐ Present - If known describe:
d) Identify Fish Species Present Brook Stickle Backs	e) If water quality data is available, include this information (e.g., DNR or local discharger might have such records). Water quality is "good" for Cady Creek

6) Are there any known endangered or threatened species affected by the project?

☒ No

☐ Yes - Identify the species and indicate whether it is on Federal or State lists.

☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.

☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

7) If bridge replacement, are migratory bird nests present?

☒ No

☐ Yes – Identify Bird Species present
Estimated number of nests is: _

Migratory birds may nest in vegetation or on bridge structures affected by the proposed construction. The primary season for most migratory bird nesting activity in Wisconsin is between the dates of May 1 to August 30 of a given year. However, some migratory birds are known to nest outside of the primary nesting season period.

Structure replacement under this proposed action is not expected to occur before 2015. Future Environmental Reports (ERs) are anticipated to precede detailed roadway and structure design phases. This document specifies that a survey will be conducted to document the presence/absence of active nests (i.e., occupied by eggs or young birds) as a component of those respective ERs. The results of a field survey for nesting birds, along with the information regarding the qualification of person(s) performing the survey, will be documented and maintained.

Clearing of vegetation and bridge demolition activities will be scheduled outside of the primary nesting season dates to avoid or minimize adverse impact to nesting migratory birds. If construction must be scheduled during the

migratory bird nesting season, bridges shall be maintained to preclude nesting activity (e.g. netting and/or clearing of inactive nests from the structure prior to nesting activity).

Should active nests be observed and the contractor and project manager determine that they cannot be avoided until after the birds have fledged (left the nest), and if no practicable or reasonable avoidance alternatives are identified then the contractor will complete a Federal Fish and Wildlife License/Permit Application Form 37 and submit it to the USFWS Migratory Bird Program Office. The contractor may proceed with work on the affected project activities following receipt of the approved permit the USFWS.

8) Is a U.S. Fish & Wildlife Depredation Permit required to remove swallow nests?

☒ Not Applicable

☐ No - Describe mitigative measures.

☐ Yes

9) Describe land adjacent to stream. If wetland, give type.

Adjacent land is wetland defined as a large wet meadow wetland complex.

10) Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site.

Not identified during preliminary review

11) Section 404 Permit

☐ Not Applicable - No fill to be placed in wetlands.

☒ Applicable - Fill will be placed in wetlands.
Indicate area of wetlands filled. 1.07 Acres (0.43 Hectares)

☐ Individual Section 404 Permit required

☒ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404.
Indicate which GP or LOP is required.

☐ Non-Reporting GP ☐ Provisional GP
☐ Provisional LOP ☒ Programmatic GP

12) Section 10 Waters
For navigable waters of the United States (Section 10) indicate whether the U.S. Coast Guard has been notified?

☒ No

☐ Yes - Describe results of Notification.

Identify which Nationwide Section 10/404 Permit is required.

Indicate whether Pre-Construction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:

☐ Required

☐ Submitted on (Date)

Status of PCN
USACE has made the following determination on (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

13) Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment. (Note: U.S. Coast Guard must be notified when Section 10 waters are affected by a proposal.)

The work consists of extending the existing reinforced concrete box culvert structure. A portion of this work would take place within the stream and in the floodplain. Minor amounts of fill would be placed adjacent to the existing road fill. The extension of the structure would not affect the hydraulic performance. If migratory bird nests are at the time of construction, measures will be taken to avoid affecting nesting sites.

14) Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be consistent with NR 116, the National Flood Insurance Program, and Governor's Executive Order #73.

No back water will be created as a result of this project.

15) Describe and provide the results of coordination with any floodplain zoning authority.

N/A

16) Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

☒ No impacts would occur.

☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.

☐ Significant flooding with a potential for property loss and a hazard to life.

☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

17) Discuss existing or planned floodplain use and briefly summarize the project's effects on that use.

Existing floodplain use are that of wetlands to the north and south of the project area. The project will have no effect on these uses.

18) Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream.

During construction, water quality and vegetation at the extension location would be impacted slightly because of required excavation. The intermittent river does not reportedly contain fish and animals would not be affected by the limited work zone.

19) Describe proposed measures to minimize adverse effects or to enhance beneficial effects.

The construction window would be minimized to reduce the impact to dependent fish and other animals. The disturbed areas would be seeded and stabilized upon the completion of the work. All efforts and measures wiill be made in accordance with WEPA and section 22.30.12 of WisDOT's FDM to ensure no deposits or debris will enter

these rivers and streams.

20) Erosion control or storm water management measures which will be used to protect the stream are shown on form DT2080, Erosion Control Impact Evaluation and form DT2076, Stormwater Impact Evaluation.

☒ Yes

☐ No - Briefly describe measures to be used such as sheet piling, cofferdam, turbidity barrier, barges, construction blackout window, etc.

Alternative	Preferred
Reconstruct to improve median width (preferred alternative)	☒ Yes ☐ No
Length of Project This Sheet is Evaluating 7.00 miles CTH BB to 3200' E of STH128	
1) Stream Name Carr Creek	2) Stream Location Intersects IH 94 just west of interchange with CTH B
3) Stream Type ☐ Unknown ☐ Warm water ☒ Trout-Class ☐ Wild and Scenic River Stream Class (If known) Class 1	4) Size of Upstream Watershed Area ☐ Permanent Flow (year-round) ☒ Temporary Flow (dry part of year)
5) Stream Characteristics a) Substrate ☐ Sand ☐ Silt ☒ Clay ☒ Cobbles ☐ Other-Describe:	
b) Average Water Depth 0' base flow accept during spring thaw and heavy rains	c) Vegetation in Stream ☒ Absent ☐ Present - If known describe:
d) Identify Fish Species Present Forge Minnow	e) If water quality data is available, include this information (e.g., DNR or local discharger might have such records). Water quality was not assessed for Carr Creek

6) Are there any known endangered or threatened species affected by the project?

☒ No

☐ Yes - Identify the species and indicate whether it is on Federal or State lists.

☐ Section 7 coordination has been completed with the U.S. Fish & Wildlife Service. Describe mitigation required to protect the federally listed endangered species.

☐ Coordination with DNR has been completed. Describe mitigation required to protect the State listed species.

7) If bridge replacement, are migratory bird nests present?

☒ No

☐ Yes – Identify Bird Species present
Estimated number of nests is: _

Migratory birds may nest in vegetation or on bridge structures affected by the proposed construction. The primary season for most migratory bird nesting activity in Wisconsin is between the dates of May 1 to August 30 of a given year. However, some migratory birds are known to nest outside of the primary nesting season period.

Structure replacement under this proposed action is not expected to occur before 2015. Future Environmental Reports (ERs) are anticipated to precede detailed roadway and structure design phases. This document specifies that a survey will be conducted to document the presence/absence of active nests (i.e., occupied by eggs or young birds) as a component of those respective ERs. The results of a field survey for nesting birds, along with the information regarding the qualification of person(s) performing the survey, will be documented and maintained.

Clearing of vegetation and bridge demolition activities will be scheduled outside of the primary nesting season dates to avoid or minimize adverse impact to nesting migratory birds. If construction must be scheduled during the

migratory bird nesting season, bridges shall be maintained to preclude nesting activity (e.g. netting and/or clearing of inactive nests from the structure prior to nesting activity).

Should active nests be observed and the contractor and project manager determine that they cannot be avoided until after the birds have fledged (left the nest), and if no practicable or reasonable avoidance alternatives are identified then the contractor will complete a Federal Fish and Wildlife License/Permit Application Form 37 and submit it to the USFWS Migratory Bird Program Office. The contractor may proceed with work on the affected project activities following receipt of the approved permit the USFWS.

8) Is a U.S. Fish & Wildlife Depredation Permit required to remove swallow nests?

☒ Not Applicable

☐ No - Describe mitigative measures.

☐ Yes

9) Describe land adjacent to stream. If wetland, give type.

Agriculture, wooded, and unimproved open green space with wetland wet meadow complexes

10) Identify upstream or downstream dischargers or receivers (if any) within 0.8 kilometers (1/2 mile) of the project site.

City of Woodville non sewage storm water run off. Sewage plant does not discharge has seepage cells.

11) Section 404 Permit

☐ Not Applicable - No fill to be placed in wetlands.

☒ Applicable - Fill will be placed in wetlands.
Indicate area of wetlands filled. 0.6 Acres (0.24 Hectares)

☐ Individual Section 404 Permit required

☒ General Permit (GP) or Letter Of Permission (LOP) required to satisfy Section 404.
Indicate which GP or LOP is required.

☐ Non-Reporting GP ☐ Provisional GP
☐ Provisional LOP ☒ Programmatic GP

12) Section 10 Waters
For navigable waters of the United States (Section 10) indicate whether the U.S. Coast Guard has been notified?

☒ No

☐ Yes - Describe results of Notification.

Identify which Nationwide Section 10/404 Permit is required.

Indicate whether Pre-Construction Notification (PCN) to the U.S. Corps of Engineers(USACE) is:

☐ Required

☐ Submitted on (Date)

Status of PCN
USACE has made the following determination on (Date)

USACE is in the process of review, anticipated date of determination is: (Date)

13) Describe proposed work in, over, or adjacent to stream. Indicate whether the work is within the 100-year floodplain and whether it is a crossing or a longitudinal encroachment. (Note: U.S. Coast Guard must be notified when Section 10 waters are affected by a proposal.)

The work consists of replacing the existing triple span concrete structures with single span concrete structures. Two additional single span structures will be added for the eastbound exit ramp and westbound entrance ramp. Moderate amounts of fill would be placed adjacent to the existing road fill. The existing structures would be replaced with wider structures that would not affect the hydraulic performance. New fill will be placed for the proposed entrance and exit ramps. The addition of the new structures would not affect the hydraulic performance. If migratory bird nests are at the time of construction, measures will be taken to avoid affecting nesting sites.

14) Discuss the effects of any backwater which would be created by the proposed action. Indicate whether the proposed activities would be consistent with NR 116, the National Flood Insurance Program, and Governor's Executive Order #73.

No back water will be created as a result of this project.

15) Describe and provide the results of coordination with any floodplain zoning authority.

N/A

16) Would the proposal or any changes in the design flood, or backwater cause any of the following impacts?

☒ No impacts would occur.

☐ Significant interruption or termination of emergency vehicle service or a community's only evacuation route.

☐ Significant flooding with a potential for property loss and a hazard to life.

☐ Significant impacts on natural floodplain values such as flood storage, fish or wildlife habitat, open space, aesthetics, etc.

17) Discuss existing or planned floodplain use and briefly summarize the project's effects on that use.

Existing floodplain use are that of woodland to the south and agriculture and unimproved vacant lands on the north side. The project has no effect on any of these uses.

18) Discuss probable direct impacts to water quality within the floodplain, both during and after construction. Include the probable effects on plants, animals, and fish inhabiting or dependent upon the stream.

During construction, water quality and vegetation at the extension location would be impacted slightly because of required excavation. The intermittent river does not reportedly contain fish and animals would not be affected by the limited work zone.

19) Describe proposed measures to minimize adverse effects or to enhance beneficial effects.

The construction window would be minimized to reduce the impact to dependent fish and other animals. The disturbed areas would be seeded and stabilized upon the completion of the work. All efforts and measures will be made in accordance with WEPA and section 22.30.12 of WisDOT's FDM to ensure no deposits or debris will enter these rivers and streams.

20) Erosion control or storm water management measures which will be used to protect the stream are shown on form DT2080, Erosion Control Impact Evaluation and form DT2076, Stormwater Impact Evaluation.

☒ Yes

☐ No - Briefly describe measures to be used such as sheet piling, cofferdam, turbidity barrier, barges, construction blackout window, etc.

Alternative	Preferred
Reconstruct to improve median width (preferred alternative)	☒ Yes ☐ No

Length of Center Line and Termini This Sheet is Evaluating
7.00 miles CTH BB to 3200' E of STH 128

1. Give a brief description of existing and proposed slopes in the project area, both perpendicular and longitudinal to the project. Include both existing and proposed slope length, percent slope and soil types.

   The existing longitudinal slopes in the project area range from 0 – 3.5% at lengths in excess of 1,000 feet (305 m). The existing perpendicular slopes range from 0 – 40% with a length up to approximately 70 feet (21 m).

   The proposed longitudinal slopes range from 0 – 3.06% at lengths in excess of 1,000 feet (305 m). The proposed perpendicular slopes range from 0 – 33% with lengths up to approximately 80 feet (24 m).

   The project traverses the following moderate to very rapid permeability soil types: Sattre-Pillot-Antigo. The project traverses the following moderate to slow permeabilty soil types: Santiago-Jewett-Magnor and Vlasaty-Skyberg.

2. Indicate all natural resources to be affected by the proposal that are sensitive to erosion, sedimentation, or waters of the state quality degradation and provide specific recommendations on the level of protection needed.

   ☐ No - There are no sensitive resources affected by the proposal.

   ☒ Yes - Sensitive resources exist in or adjacent to the area affected by the project.

   ☒ River/stream ☒ Wetland ☐ Lake ☐ Endangered species habitat
   ☐ Other – Describe

3. Are there circumstances requiring additional or special consideration?

   ☐ No additional or special circumstances are present.

   ☒ Yes - Additional or special circumstances exist. Indicate all that are present.

   ☐ Areas of groundwater discharge ☒ Areas of groundwater recharge (fractured bedrock, wetlands, streams)
   ☒ Long or steep cut or fill slopes ☐ Overland flow/runoff
   ☒ Other – Describe any unique or atypical erosion control measures to be used to manage additional or special circumstances.
   Cady Creek
   Carr Creek
   Eau Galle River

   Box culvert replacements are required at four locations. The new box culvert can be constructed adjacent to the existing structure to accommodate drainage during the construction staging. Minor channel realignment will occur after the new culvert is completed. The proposed channel can be stabilized prior to conveying drainage to minimize erosion within the channel.

   Excavation adjacent to each stream would be lined with silt fence and turbidity barrier to prevent transport of sediments. The special provisions would dictate that the areas be re-vegetated as quickly as possible. Erosion mat would be used to help stabilize slopes until seed has taken.

4. Describe overall Erosion Control strategy to minimize adverse effects and/or enhance beneficial effects.

Guidelines and regulations for minimizing erosion potential for WisDOT projects include the WisDOT Facilities Development Manual, Chapter 10, Erosion Control and Storm Water Quality; Wisconsin Administrative Code Chapter TRANS 401, Construction Site Erosion Control and Storm Water Management Procedures for Department Actions; and the WisDOT/DNR Cooperative Agreement Amendment-Memorandum of Understanding on Erosion Control and Storm water Management. Key concepts are summarized as follows:

Basic Principles and Best Management Practices

- The proposed improvements will be planned to fit topography, soils, drainage patterns, and natural vegetation to the extent practicable.
- The size of exposed areas at any one time and the duration of exposure will be minimized.
- Control measures will be used to prevent erosion in sensitive areas (proper design of drainage channels with respect to width, depth, gradient, side slopes, and energy dissipation); protective ground cover (vegetation, mulch, erosion mat, or riprap); diversion dikes and intercepting embankments to diver sheet flow away from disturbed areas; and sediment control devices (retention/detention basins, ditch checks, erosion bales, and silt fence).
- Disturbed areas will be protected from offsite runoff and sediment will be prevented from leaving the construction site.
- Runoff velocities will be kept low by maintaining short slope lengths, low gradients, and vegetative cover.
- Disturbed areas will be stabilized as soon as practical (temporary vegetation, mulch, stabilizing emulsions).

Geometric Design Features and Erosion Control Facilities

- Smooth grade lines with gradual changes will be used.
- Natural and existing drainage patterns will be preserved to the extent possible.
- Stabilization slopes, soil, and stream banks will be left undisturbed where possible.
- Trees and shrubs will be preserved, and over-clearing will be minimized.
- Culverts will be located and aligned to avoid erosion at the outlet and inlet.
- An undisturbed buffer will be left between disturbed soil and sensitive areas where possible.
- The soil surface will be protected by using permanent and temporary erosion control measures such as seeding and sodding, mulch, erosion mat, and riprap.
- Sediment will be removed and velocities reduced by using erosion bales, silt fence, stone or rock ditch checks, sediment traps, and basins.

Erosion Design Features and Erosion Control Facilities

- Smooth grade lines with gradual changes will be used.
- Natural and existing drainage patterns will be preserved to the extent possible.
- Stabilized slopes, soil, and stream banks will be left undisturbed where possible.
- Trees and shrubs will be preserved, and over clearing will be minimized.
- Culverts will be located and aligned to avoid erosion at the outlet and inlet.
- An undisturbed buffer will be left between disturbed soil and sensitive areas where possible.
- The soil surface will be protected by using permanent and temporary erosion control measures such as seeding and sodding, mulch, erosion mat, and riprap.
- Sediment will be removed and velocities reduced by using erosion bales, silt face, stone or rock ditch checks, sediment traps, and basins.

Erosion Control Implementation Plan

The construction contractor is required to prepare an Erosion Control Implementation Plan that includes all erosion control commitments made during a future engineering phase. The construction plans and contract special provisions must include the specific erosion control measures agreed on by the WisDOT in consultation with WDNR who reviews the Erosion Control Implementation Plan.

Standard WisDOT erosion control methods would be used during construction as per WisDOT Standard Specifications for highway and structure construction. Temporary and permanent erosion control methods would include minimizing the

amount of land exposed at one-time, temporary ditch checks, temporary seeding, silt fencing, erosion mats, rip-rap (river and channel banks), seeding and mulching, dust abatement, and grass-lined conveyance (parallel to flow). Additionally, WDNR would be coordinated with in order to ensure adequate vegetative cover is maintained on the approach slopes.

Improving the steep slopes would reduce the erosion from the currently sloughing (failing) slopes by reducing the steepness.

5. Erosion control measures reached consensus with the appropriate authorities as indicated below.

WDNR County Land Conservation Department Native American Tribe
Army Corp of Engineers

Please read, then delete the following paragraph as necessary.

All Erosion Control measures (i.e., the Erosion Control Plan) shall be coordinated through the DOT-DNR liaison process and TRANS 401. WDNR's concurrence is not forthcoming without an Erosion Control Plan. In addition, TRANS 401 requires the contractor prepare an Erosion Control Implementation Plan (ECIP), which identifies timing and staging of the project's erosion control measures. The ECIP should be submitted to the WDNR and to WisDOT 14 days prior to the preconstruction conference (Trans 401.08(1)) and must be approved by WisDOT before implementation.

6. On Tribal lands, coordination for 402 (erosion) concerns are either to be coordinated with the tribe affected or with the U.S. Environmental Protection Agency (EPA). EPA or the Tribes have the 401 water quality responsibility on Trust lands. Describe how the Erosion Control/Storm Water Management plan can be compatible.

Not applicable

7. Identify the temporary and permanent erosion control measures to be utilized on the project. Consult the FDM Chapter 10 and the Products Acceptability List (PAL).

- ☒ Minimize the amount of land exposed at one time
- ☒ Temporary seeding
- ☒ Silt fence
- ☒ Ditch checks
- ☒ Erosion or turf reinforcement mat
- ☒ Ditch or slope sodding
- ☒ Soil stabilizer
- ☒ Inlet protection
- ☒ Turbidity barriers
- ☐ Temporary settling basin
- ☒ Mulching
- ☐ Detention basin
- ☒ Vegetative swales
- ☐ Pave haul roads
- ☒ Dust abatement
- ☒ Rip rap
- ☒ Buffer strips
- ☐ Dewatering – Describe method
- ☐ Silt screen
- ☐ Temporary diversion channel
- ☒ Permanent seeding
- ☒ Other - Describe A Box culvert extension will be required at Cady Creek. The drainage would be carried through the existing structure by using a temporary culvert located within the larger structure. The ends of the temporary culvert would be sandbagged beyond the limits of the excavation and structure apron endwall removal. Plastic lining and washed stone would be used to prevent sediment from being disturbed and transported from the excavation.

Alternative	Length of Centerline and Termini This Sheet is Evaluating
Reconstruct to improve median width (preferred alternative)	7.00 miles CTH BB to 3200' E of STH 128

Surrounding land use and a discussion of adopted plans are described on DT2094, Environmental Evaluation of Facilities Development Actions.

1. Indicate whether the affected area may cause a discharge or will discharge to the waters of the state (Trans 401.03). Special consideration should be given to areas that are sensitive to water quality degradation. Provide specific recommendations on the level of protection needed.

   ☐ No water special natural resources are affected by the proposal.

   ☒ Yes – Water special natural resources exist in the project area.

   ☒ River/stream ☒ Wetland ☐ Lake ☐ Endangered species habitat
   ☐ Other - Describe

2. Indicate whether circumstances exist in the project vicinity that require additional or special consideration, such as an increase in peak flow, total suspended solids (TSS), or water volume.

   ☐ No additional or special circumstances are present.

   ☒ Yes - Additional or special circumstances exist. Indicate all that are present.

   ☐ Areas of groundwater discharge ☐ Areas of groundwater recharge ☐ Stream relocations
   ☒ Overland flow/runoff ☒ Long or steep cut or fill slopes ☒ High velocity flows
   ☐ Cold water stream ☐ Impaired waterway ☒ Large quantity flows
   ☐ Exceptional/outstanding resource waters ☐ Increased backwater
   ☐ Other – Describe any unique, innovative, or atypical stormwater management measures to be used to manage additional or special circumstances.

3. Describe the overall storm water management strategy to minimize adverse effects and enhance beneficial effects.

   Guidelines and regulations for WisDOT project storm water management include the *WisDOT Facilities Development Manual*, Chapter 10, Erosion Control and Storm Water Quality; Wisconsin Administrative Code Chapter TRANS 401, Construction site Erosion Control and Storm Water Management Procedures for Department Actions; and the WisDOT/DNR Cooperative Agreement Amendment-*Memorandum of Understanding on Erosion Control and Storm water Management*. The overall storm water management strategy for the proposed improvements would include the following:

   Basic Principles and Best Management Practices

   - Limit disturbance of natural drainage features and vegetation.
   - Prepare and implement an approved erosion control plan before land disturbance begins.
   - Protect areas that provide important water quality benefits or that are susceptible to erosion.
   - Reduce direct discharge into streams and wetlands by having it flow through a filter strip or vegetated swale.
   - Reduce runoff velocities by running storm water in shallow, flat-bottom swales.

   Geometric Design Features/Storm Water Facilities
   - Vegetated grass strips or grass swales could remove about 65 percent of suspended sediments.
   - Infiltration trenches that consist of shallow ditches backfilled with stone could remove about 75 percent of suspended sediments.

4. Indicate how the stormwater management plan will be compatible with fulfilling Trans 401 requirements.

   The types of storm water management strategies listed in item 3, previous page, and in item 5 below are identified in and/or consistent with TRANS 401 *Construction Site Erosion Control and Storm Water Management Procedures for Department Actions*; and the WisDOT/DNR Cooperative Agreement Amendment—*Memorandum of Understanding on Erosion Control and Storm Water Management*.

5. Identify the storm water management measures to be utilized on the project.

   ☒ Swale treatment (parallel to flow) Trans 401.106(10)
   ☒ Vegetated filter strips (perpendicular to flow)
   ☒ Distancing outfalls from waterway edge
   ☐ Constructed storm water wetlands
   ☐ In-line storm sewer treatment, such as catch basins, non-mechanical treatment systems
   ☐ Detention/retention basins - Trans 401.106(6)(3)
   ☐ Buffer areas - Trans 401.106(6) - Describe
   ☐ Infiltration - Trans 401.106(5)
   ☐ Other

6. Indicate whether any Drainage District may be affected by the project.

   ☒ No – There will be no effects to a recognized drainage district.

   ☐ Yes - Identify the affected drainage district.

      Has initial coordination with drainage board been completed?

      ☐ No

      ☐ Yes - Discuss results.

      Has initial coordination with Department of Agriculture, Trade and Consumer Protection (DATCP) been completed?

      ☐ No

      ☒ Yes - Discuss results.

      On April 8, 2008 DATCP determined an Agricultural Impact Statement (AIS) was not needed for this project. See Exhibit 2.

7. Indicate whether the project is within DOT's Phase I or Phase II storm water management area. (NOTE: See Procedure 20-30-1, Figure 1, Attachment A4 the Cooperative Agreement between the Wisconsin Departments of Transportation and Natural Resources. Contact Bureau of Equity and Environmental Services Stormwater Engineer or the Regional Environmental Coordinator for more details on the following areas.)

   ☒ No - The project is outside of WisDOT's stormwater management area.

   ☐ Yes - The project affects one of the following regulated by a WPDES storm water discharge permit issued by the DNR.

      ☐ *WisDOT storm sewer system located within municipalities with populations > 100,000.*

      ☐ *WisDOT storm sewer system located within a notified owner of municipal separate storm sewer systems.*

      ☐ *Urbanized areas as defined by the U.S. Census Bureau, NR216.02(3).*

      ☐ Municipal separate storm sewer systems serving > 10,000.

8. Has the affect of downstream properties been considered?

☒ No

☐ Yes – Coordination is in process.

9. Are there any property acquisitions for storm water management purposes?

☒ No - There are no property acquisitions acquired for stormwater management purposes.

☐ Yes - Complete the following.

☐ Safety measures, such as fencing, flooding, are not needed for potential conflicts with existing and expected surrounding land use.

☐ Safety measures are needed for potential conflicts with existing and expected surrounding land use.

Describe proposed safety measures.

CONSTRUCTION STAGE SOUND QUALITY IMPACT EVALUATION

Wisconsin Department of Transportation
DT2074 12/2005

Alternative	Preferred
Reconstruct to improve median width (preffered alternative)	☒ Yes ☐ No

Length of Center Line and Termini This Sheet is Evaluating
7.00 miles CTH BB to 3200' E of STH 128

1) Identify and describe residences, schools, libraries, or other noise sensitive areas near the proposed action and which will be in use during construction of the proposed action. Include the number of persons potentially affected.

   There are no schools, hospitals or libraries located adjacent to the project. Approximately 14 homes are located within ¼ mile of the project corridor. Less than 50 people will be potentially affected by construction stage sound.

2) Describe the types of construction equipment to be used on the project. Discuss the expected severity of noise levels including the frequency and duration of any anticipated high noise levels.

   The noise generated by construction equipment will vary greatly, depending on equipment type/model/make, duration of operation and specific type of work effort. However, typical noise levels may occur in the 67 to 107 dBA range at a distance of 50 feet (15.2 meters).

   Figure (Exhibit 8) shows typical noise levels for a variety of construction equipment. Adverse effects related to construction noise are anticipated to be of a localized, temporary, and transient nature.

3) Describe the construction stage noise abatement measures to minimize identified adverse noise effects.

   To reduce the potential impact of construction noise, the special provisions for this project will require that motorized equipment shall be operated in compliance with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. All motorized construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It will also be required that mufflers and exhaust systems be maintained in good working condition, free from leaks and holes.

Alternative	Length of Centerline and Termini This Sheet is Evaluating
Preferred Alternative	7.00 miles; CTH BB to 3,200' E of STH 128

1) Property Name	2) Location
Wildwood Trail	Trail intersects IH 94 approx. 0.75 miles E of CTH BB
3) Ownership or Administration	4) Use
St. Croix County	Recreation Trail

5) Type
☐ Public Park ☒ Recreational lands ☐ Wildlife Refuge ☐ Waterfowl Refuge ☐ Historic Site
☐ Other – Identify

6) Indicate how the land or improvements on the property were funded.

☒ No funds from any acts were used for this property.

☐ s.6(f) LAWCON (LWCF)

☐ Dingell-Johnson (D/J funds)

☐ Pittman-Robertson (P/R funds)

(Lands purchased with D/J or P/R funds are treated similarly to those using s.6(f) LAWCON funds.)

7) Do FHWA requirements for section 4(f) apply to the project's use of the unique property?

☐ No - Project is not federally funded

☐ No - Property is not on or eligible for the National Register of Historic Places.

☐ No - Other - Explain: _____

☒ Yes - Indicate which of the Programmatic 4(f) Evaluation applies. Separate 4(f) evaluation attached or approved on _____.

☐ Historic Bridge ☒ Park minor involvement ☐ Historic site minor involvement
☐ Independent bikeway or walkway ☐ Great River Road

8) Describe the significance of the unique property. For historic and archeological sites, quote or summarize the statement of significance from the Determination of Eligibility. For national landmarks, natural or scientific areas, etc., state registry listing. For other unique areas, include or attach statements of significance of officials having jurisdiction.

Property in question is an abandoned rail ROW that crosses under IH 94. The ROW was purchased by the County—without the use of federal funds—and converted to a recreational trail for bicyclists, pedestrians, and snowmobiles. The trail is maintained year-round by County Parks Department personnel.

In consultation with County Officials, the preferred alternative was determined to minimize harm related to reconstruction of the roadway. Moreover, County Officials concurred that the preferred alternative incorporated satisfactory mitigation measures into the project that results in an overall enhancement of the Section 4(f) property. The proposed alternative will enhance the 4(f) by increasing its year-round usability for users, increasing the ability for County personnel to maintain the facility and 4(f) lands, and add economic value to the property.

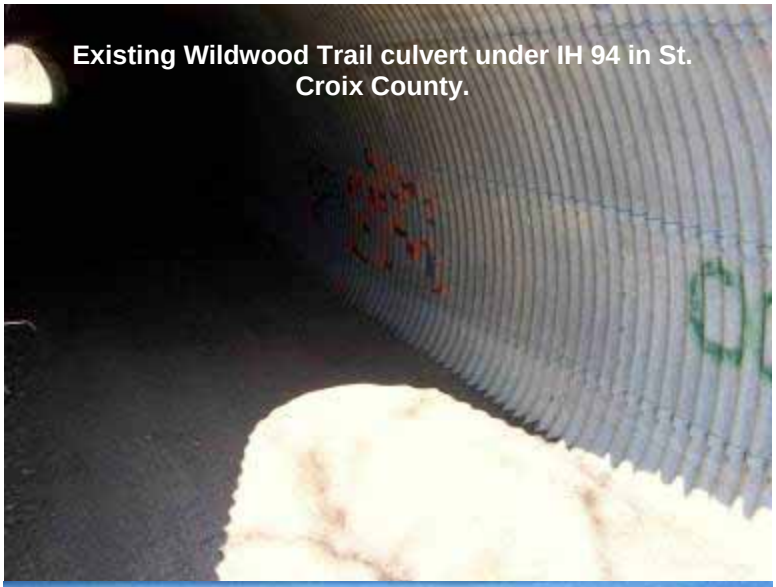
A letter has been provided (attached as Exhibit 7) by the St. Croix County Land and Water Conservation Department and Parks Department agreeing with the assessment of the impacts on their lands; the proposed measures to

minimize harm; and the mitigation necessary to preserve, rehabilitate and enhance those features and values of the Section 4(f) property; and that such measures will result in a net benefit to the Section 4(f) property.

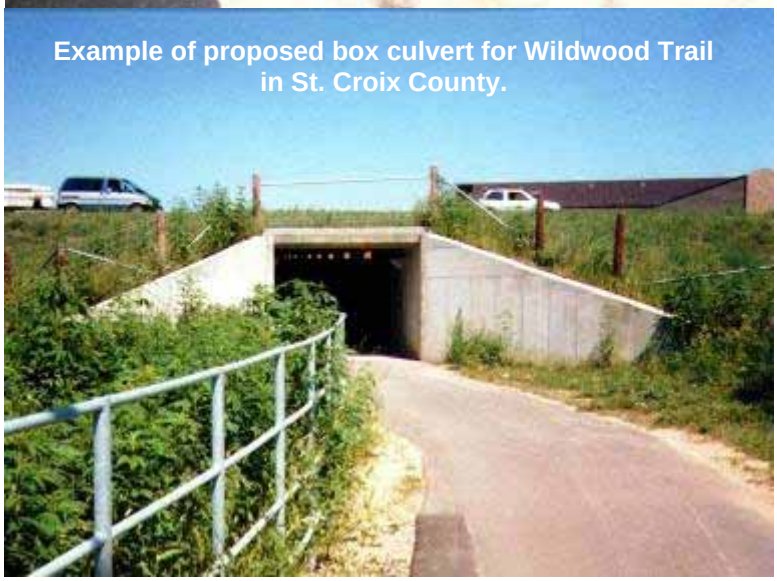
9) Describe the proposed project's effects on this unique property.

a) Describe any effects on or uses of land from the property. "Use of land from" includes actual use (right of way acquisition, easements, etc.) or constructive use ("substantially impairs any of the site's vital functions"). For historic and archeological sites, give the results or status of Section 106 coordination. For other unique areas, include or attach statements from officials having jurisdiction over the property which discusses the project effects on the property. **(A map, sketch, plan, or other graphic which clearly illustrates use of the property and the project's use and effects on the property must be included.)**

Currently the trail passes through an approximately 96-inch corrugated metal culvert (see photo below), beneath IH 94. Replacement of the deteriorating culvert with a 12' by 14' box culvert (a representational photo is provided below) is planned as part of the preferred alternative, at the request of the St. Croix County Parks Department. The County has submitted a letter (attached as Exhibit 7) expressing concurrence with the preferred alternative to better accommodate maintenance equipment. The costs associated with the alternative that exceed extending the existing pipe facility may require a cost share with the St. Croix County Parks Department to fulfill this structure replacement.



Existing Wildwood Trail culvert under IH 94 in St. Croix County.



Example of proposed box culvert for Wildwood Trail in St. Croix County.

Disruption of the normal use of the recreation trail will occur during the replacement of the culvert structure. Construction would occur as a part of the Stage 3 improvements outlined in the preferred alternative. Construction is expected to take approximately two months during summer, and would not commence until around 2018.

b) Discuss the following alternatives and describe whether they are feasible and prudent.

i) Do nothing alternative.

The Do-Nothing Alternative is not feasible and prudent because it would neither address nor correct the transportation need cited in the EA purpose and need, which necessitated the proposed project. The existing metal culvert is deteriorating and will need to be replaced. The prudent decision is to replace the culvert with an improved structure to preserve the recreation trail's viability for years to come.

ii) Improvement without using the 4(f) lands.

Meeting the proposed actions purpose and need AND avoiding the 4(f) lands is not possible. The 4(f) lands and IH 94 cross nearly perpendicular to one another. As such, it is not feasible and prudent to avoid the 4(f) property by using engineering design or transportation system management techniques, such as minor location shifts. The impacts, costs or problems associated with avoiding the 4(f) lands would be truly unusual, unique of an extraordinary magnitude when compared with the proposed use of Section 4(f) property after taking into account measures to minimize harm and mitigate for adverse uses, and enhance the functions and value of the Section 4(f) property. Moreover, the proposed action provides a substantial opportunity to benefit a Section 4(f) property.

iii) Alternatives on new location.

Relocating IH 94 or the 4(f) lands are not feasible alternatives. The new location would result in substantial adverse social, economic or environmental impacts (including such impacts as extensive severing of productive farmlands, displacement of a substantial number of families or businesses, serious disruption of community cohesion, jeopardize the continued existence of any endangered or threatened species or resulting in the destruction or adverse modification of their designated critical habitat, substantial damage to wetlands or other sensitive natural areas, or greater impacts to other Section 4(f) properties).

Such problems, impacts, costs, or difficulties would be truly unusual or unique or of extraordinary magnitude when compared with the proposed use of the Section 4(f) property after taking into account proposed measures to minimize harm, mitigation for adverse use, and the enhancement of the Section 4(f) property's functions and value.

10) Indicate which measures would minimize adverse effects or enhance beneficial effects.

☐ Replacement of lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value.

☒ Replacement of facilities impacted by the project including sidewalks, paths, lights, trees, and other facilities.

☒ Restoration and landscaping of disturbed areas.

☒ Incorporation of design features and habitat features where necessary to reduce or minimize impacts to the section 4(f) property.

☐ Payment of the fair market value of the land and improvement taken or improvements to the remaining 4(f) site

equal to the fair market value of the land and improvements taken.

☐ Such additional or alternative mitigation measures as may be determined necessary based on consultation with officials having jurisdiction over the 4(f) property – Explain.

☐ Property is a historic property or an archeological site. The conditions or mitigation stipulations are listed or summarized below.

☐ Other – Describe.

11) Briefly summarize the results of coordination with other agencies which were consulted about the project and its effects on the unique property. (For historic and archeological sites, include the signed Memorandum of Agreement and letter from the Advisory Council on Historic Preservation. For other unique areas, attach correspondence from officials having jurisdiction over the 4(f) land which illustrates concurrence with impacts and mitigation measures.)

Accommodating the Wildwood Trail crossing was found to be a concern based on public comment from the first public meeting. The primary concerns from the public meeting were the inadequate height and width within the existing pipe arch, and the presence of low weight fill over the pipe arch. Trail maintenance equipment has increased in size making passage through the pipe arch difficult. When the pipe arch was constructed (mid to late 1980s) sawdust was used as a low weight fill. Settlement has been occurring and it is unknown what additional settlement may occur.

Developed alternatives were presented by Mead & Hunt to St. Croix County Officials for the Wildwood Trail crossing of IH 94. The four alternatives included:

Alternative 1: Replace the existing corrugated pipe “tunnel” with a 12’ x 14’ reinforced concrete box culvert on the existing trail alignment. The box culvert alternative cost is approximately 30-percent more than the cost for the twin overpass alternative. The box culvert is more costly to construct given the needed depth of the excavation compared to the twin overpasses. This Alternative meet the character desired by the County and was selected at the preferred trail crossing alternative.

Alternative 2: Lengthen the existing corrugated pipe “tunnel” to accommodate the expanded width of the roadway. This alternative would have the least disruption to the lands, but was dismissed because it did not meet the identified purpose and need.

Alternative 3: Remove the corrugated pipe “tunnel” and construct two new IH 94 overpasses with 60’ clear width and approximately 100’ span for the EB and WB travel lanes. Alternative 3 has a higher construction cost for the actual overpasses, but have a much lower cost for temporary shoring, structure backfill, and structure excavation. This alternative was dismissed by the County as it did not preserve the desired “tunnel” character.

Alternative 4: Replace the existing corrugated pipe “tunnel” with a 12’ x 14’ reinforced concrete box culvert and realign the trail to be perpendicular to IH 94. Again, the cost of this alternative is more than the cost for the twin overpass alternative and would result in a significant construction disruption to the land. The need to construct new trail approaches to the box culvert resulted in a higher cost that Alternative 1. As such, this alternative was not selected by the County.

One concern raised was whether the trail might revert back to a rail line in the future. St. Croix County purchased this line in 1970 and it is not listed as a “Rails-to-Trails” route. There were also concerns about the overall cost of the improvement and if cost sharing with the County would be a possibility. Future maintenance of the twin overpasses was a concern compared with relatively little maintenance for the box culvert. The box culvert was anecdotally thought to be less accommodating to the public users and wildlife versus the twin overpasses.

Correspondence dated April 2, 2008 (attached as Exhibit 7) from the St. Croix County Land and Water Conservation

Department and Parks Department expressed the County's preferred alternative; which has been included in this proposed action. Their selection was based upon the best long-tern, cost-effective solution for tax payers and usability/needs of the St. Croix County Trail System.