

Environmental Evaluation Matrix

Environmental Factors	Comments
Socioeconomic	
<i>General Economics</i>	The proposed project would benefit the general economics of the area by reducing overall transportation-related costs (accidents, delays). In addition, the project would increase the efficiency of the interchange ramps and local road network and its ability to serve existing and planned residential and commercial development in and beyond the project area. See the General Economics Impact Evaluation , page 30.
<i>Land Use Planning and Zoning</i>	SEWRPC's land use plan for the project area, <i>A Land Use and Transportation System Development Plan for the IH-94 South Freeway Corridor</i> , which was developed in cooperation with local units of government in the project area, recommends "unbraiding" the interchange and frontage road ramps in the project area. The proposed interchange improvements are compatible with SEWRPC's recommendations. See the Land Use Planning and Zoning Impact Evaluation, page 33.
<i>Community or Residential</i>	A total of 13 residences would be acquired as a result of the proposed interchange improvements. The relocations are distributed among the interchanges and would not change the residential character in the project corridor. Relocation potential within project-area communities is high. Existing residential access on project crossroads would be maintained under the proposed improvements. Plans to widen the crossroads and install median barriers would limit residents living between the interchange ramps and the relocated frontage roads to right turns into and out of their driveways. At several interchanges, median breaks will be installed between the ramps and relocated frontage roads to allow residents to travel east and west without traveling beyond the relocated frontage roads. The proposed project would improve interchange access and safety for project-area residents and residents in communities served by the interchanges. See the Community or Residential Impact Evaluation, page 37.
<i>Commercial and Industrial</i>	Seven businesses would be acquired at the CTH C, STH 50, STH 142, CTH K, and 7 Mile Road interchanges. No industrial use would be acquired by the proposed improvements. The interchange improvements would eliminate commercial and industrial access on crossroads, and relocate it to frontage roads. The effects of the proposed change in commercial access are discussed in the Commercial and Industrial Impact Evaluation, page 41.

<i>Agricultural</i>	Approximately 32 hectares (80 acres) of farmland would be acquired from 38 farm operations as a result of the proposed improvements. The conversion of farmland at project-area interchanges to other uses has been occurring for a number of years and is projected to continue in the near future. See the Agricultural Impact Evaluation, page 44.
Natural Environment	
<i>Wetlands</i>	Approximately 6.5 hectares (16.1 acres) of wetland would be affected by the proposed improvements. Large wetland complexes are found at the CTH C, STH 50, 7 Mile Road, and 27th Street/USH 41 interchanges. Other interchanges contained smaller isolated wetland. The function and value of wetlands varies among the interchanges. See the Wetland Impact Evaluation page 47.
<i>Streams and Floodplains</i>	<p>The proposed improvements would not cross the Root River. An existing structure over the Des Plaines River would be widened. Stream crossings are generally limited to tributaries of these rivers, unnamed creeks, and drainage ditches. Floodplain impacts are expected at the 7 Mile Road, CTH E, STH 158, STH 50, and CTH C interchanges. See the Streams and Floodplain Impact Evaluation, page 59.</p> <p>Construction in or near waterways and wetlands will be performed in accordance with the <i>Standard Specifications</i> or special provisions to minimize erosion and sedimentation. State-of-the-art erosion control devices will be installed before erosion prone construction begins. Temporary and permanent erosion control methods may include silt fences, retention/detention facilities, interceptor ditches, seeding and sodding, riprap of exposed embankments, erosion mats, and mulching (see page 62).</p>
<i>Upland Habitat</i>	Upland habitat (other than agricultural land) in the project corridor includes fallow fields (old fields) and scattered wooded areas. The amount and quality of upland habitat varies by project interchange. The proposed improvements would require the acquisition of about 11 hectares (28 acres) of upland habitat. See the Upland Habitat Impact Evaluation, page 64.
<i>Threatened-Endangered Species</i>	The U.S. Fish and Wildlife Service indicated that the proposed improvements would not affect federally listed threatened or endangered species in the project area. No impacts are expected to state listed threatened and endangered species as a result of the proposed improvements. See the Threatened/Endangered Resources Impact Evaluation, page 67.

<p>Physical Environment</p> <p><i>Air Quality</i></p> <p><i>Construction Noise</i></p> <p><i>Traffic Noise</i></p> <p><i>Hazardous Substances</i></p> <p><i>Energy</i></p>	<p>This project is exempt from permit requirements under Wisconsin Administrative Code Chapter NR 411. No substantial impacts to air quality are expected. See the Air Quality Impact Evaluation, page 69.</p> <p>Construction noise impacts would be minimized to the extent practicable. See the Construction Stage Sound Quality Impact Evaluation, page 70.</p> <p>A noise analysis was performed. Some impacts are anticipated per Wisconsin Administrative Code—Chapter TRANS 405. See the General Sound Quality Impact Evaluation, page 71.</p> <p>A Phase I investigation was conducted at 49 parcels in the project area. Several Phase II investigations will be conducted during the project’s design phase. A Phase II investigation is being conducted at one site at 7 Mile Road as part of this study. See the Hazardous Substances/Underground Storage Tanks Impact Evaluation, page 76.</p> <p>Energy will be expended during construction of the proposed improvements. Operational energy use, the energy consumed by vehicles as they operate on the improved roadways, would decrease slightly. See the Energy Impact Evaluation, page 78.</p>
<p>Cultural Environment</p> <p><i>Unique Area (Historic Properties, Archaeological Sites, Public Use Lands)</i></p> <p><i>Aesthetics</i></p>	<p>Historical and archaeological investigations were conducted in the project area. The archaeological survey did not locate any historic or prehistoric archaeological sites that warranted a Phase II investigation. The historical survey indicates that no properties in the Area of Potential Effect (APE) for each interchange are currently listed on the National Register of Historic Places. Based on the historic survey and its coordination with the State Historic Preservation Office (SHPO), the proposed project will not affect any properties or structures that are eligible to the national register. See the Unique Area Impact Evaluation, page 79.</p> <p>No public use land would be affected by the proposed project. See the Unique Area Impact Evaluation, page 79.</p> <p>Relocating the east and west frontage roads would remove existing vegetation, change the view of the interchange for some interchange residents, and increase the visual scale of the interchanges. See the Aesthetic Impact Evaluation, page 80.</p>

THIS
PAGE
LEFT
INTENTIONALLY
BLANK

Environmental Issues Summary

Indicate whether the issues listed below are concerns for the proposed action. If an issue is of concern, explain how that concern has been addressed in this environmental document.

1. Stimulation of secondary environmental effects

- Substantial secondary environmental effects will not be stimulated
- Substantial secondary environmental effects will occur. Explain.

Development is occurring at project-area interchanges and will continue with or without the proposed interchange improvements. Development would occur between the relocated frontage roads and the I-94 interchange ramps. SEWRPC's land use plan for the project area accounts for this development. See the Land Use and Zoning Impact Evaluation, page 33.

2. Creation of a new environmental effect

- New environmental effect will not be created
- Project will create new environmental effect. Explain.

The interchange improvements would affect wetlands, uplands, and agricultural land. A discussion of each impact area is presented in this document.

3. Impacts on geographically scarce resources

- Geographically scarce resources will not be impacted.
- Impacts to geographically scarce resources will occur. Explain.

4. Precedent-setting nature of proposed action

- Project does not have precedent-setting nature.
- Project has precedent-setting nature. Explain.

5. Degree of controversy associated with proposed action

- No controversy or low level of controversy.
- High degree of controversy. Explain.

The project may be controversial to several property owners at project interchanges who oppose a change in access or acquisition of property. Overall, project-area residents and local units of government agree the project is needed and support the proposed improvements.

6. Conflicts with local agency plans, local, state, or national policies, including conflicts between transportation and land use plans

- No conflicts with plans, policies, or land use will result.
- Conflicts with plans, policies, or land use will result. Explain.

7. Cumulative environmental impacts

- Project will not contribute to cumulative environmental impacts.
- Project will contribute to cumulative impacts. Explain.

8. Foreclosure of future options

- Project will not foreclose future options.
- Project will foreclose future options. Explain.

The proposed improvements do not preclude the option of widening the I-94 mainline to 8 lanes or constructing an interchange at CTH K in Kenosha County or Kraut Road in Racine County.

9. Direct or indirect impacts on environmental justice groups

- Project will not disproportionately affect environmental justice groups.
- Project will disproportionately affect environmental justice groups. Explain.

Environmental Commitment Summary

Identify and describe any commitments made to protect the environment. Indicate when the commitment should be implemented, and who is responsible to ensure fulfillment of the commitment.

1. General Economics

None.

2. Land Use Planning and Zoning

None.

3. Community or Residential

During the project design phase WisDOT will provide relocation assistance to residents whose homes would be acquired by the project, in accordance with state and federal relocation laws. See page 37.

4. Commercial and Industrial

During the project design phase, WisDOT will provide relocation assistance to business owners whose businesses would be acquired by the project, in accordance with state and federal relocation laws. See page 41.

5. Agricultural

None.

6. Wetlands

The project's wetland impacts will be mitigated in accordance with the Cooperative Agreement between the Wisconsin DNR and WisDOT on Compensatory Wetland Mitigation. The project team identified three potential wetland restoration sites in the project corridor. WisDOT would be responsible for acquiring and developing a restoration site(s). The wetland restoration would likely begin concurrent with construction activities that affect project-area wetlands. See page 47.

7. Environmental Corridors

None.

8. Streams and Floodplain

All stream crossings would be single-span structures, box culverts, or pipes. The details of mitigating floodplain impacts would be evaluated during the project's engineering phase. Retention basins would be provided at interchanges to adequately address stormwater runoff from both a water quality and quantity standpoint. WisDOT would be responsible for designing and constructing these facilities. Permanent and temporary erosion control measures would be implemented during construction to minimize erosion and sedimentation in floodplain and streams. See page 59.

9. Upland Habitat

None.

10. Threatened/Endangered Species

None.

11. Air Quality

None.

12. Construction Noise

To reduce the potential impact of construction noise, the special provisions for this project will require that motorized equipment 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 not be operated between 10:00 p.m. and 6:00 a.m. without the 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 operating condition, free from leaks and holes. See page 70.

13. Traffic Noise

None.

14. Hazardous Materials

One Phase II hazardous materials investigation is being conducted at the 7 Mile Road interchange as part of this study. The remaining Phase II hazardous materials investigations would be conducted during the project's design phase. If hazardous material contamination is found at any site proposed for acquisition, remediation of contaminated areas would be undertaken in accordance with WisDOT and Wisconsin DNR guidelines. See page 76.

15. Energy Resources

None.

16. Unique Area (Historic Properties, Archaeological Sites, Public Use Lands)

The proposed project will not affect any unique resources subject to the provisions of Section 4(f) of the US DOT Act. See the Unique Area Impact Evaluation on page 79.

17. Aesthetic Resources

None.