

APPENDIX A

SUPPORTING DOCUMENTS

- **Table A-1: EAW – EA Reference**
- **Minnesota Environmental Assessment Worksheet (EAW) Form**
- **Table A-2: Township, Range, and Sections**
- **Level 1, 2 and 3 Studies Description**

Table A.1. Minnesota EAW – FRA EA Reference

Minnesota EAW Form Item	EA Section
1. Project Title	Cover
2. Proposer	Cover, 1.0
3. RGU	Cover, 1.0
4. Reason for EAW preparation	1.0
5. Project location	2.1, Appendix A
6. Description	2.2, 3.2
7. Project magnitude data	3.2
8. Permits and approvals required	2.6
9. Land Use	4.1
10. Cover types	4.3
11. Fish, wildlife and ecologically sensitive resources	4.3
12. Physical impacts on water resources	4.4, 4.5
13. Water use	4.5
14. Water-related land use management district	4.5
15. Water surface use	4.5
16. Erosion and sedimentation	4.5
17. Water quality: surface water runoff	4.5
18. Water quality: wastewater	4.5
19. Geological hazards and soil conditions	4.10
20. Solid wastes, hazardous wastes, storage tanks	4.8
21. Traffic	4.2
22. Vehicle-related air emissions.	4.6
23. Stationary source air emissions.	NA
24. Odors, noise and dust.	4.7
25a. Archeological, historical or architectural resources	4.9
25b. Prime or unique farmlands	4.10
25c. Designated parks, recreation areas or trails	4.11
25d. Scenic views and vistas	4.12
25e. Other unique resources	NA
26. Visual impacts	4.12
27. Compatibility with plans and land use regulations.	4.1
28. Impact on infrastructure and public service.	4.2, 4.13
29. Cumulative potential effects.	4.16
30. Other potential environmental impacts.	NA
31. Summary of issues	Executive Summary

ENVIRONMENTAL ASSESSMENT WORKSHEET

Note to preparers: This form and EAW Guidelines are available at the Environmental Quality Board's website at: <http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm>. The Environmental Assessment Worksheet provides information about a project that may have the potential for significant environmental effects. The EAW is prepared by the Responsible Governmental Unit or its agents to determine whether an Environmental Impact Statement should be prepared. The project proposer must supply any reasonably accessible data for — but should not complete — the final worksheet. If a complete answer does not fit in the space allotted, attach additional sheets as necessary.

The complete question as well as the answer must be included if the EAW is prepared electronically.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. **Project title**

2. **Proposer**

Contact person
Title
Address
City, state, ZIP
Phone
Fax
E-mail

3. **RGU**

Contact person
Title
Address
City, state, ZIP
Phone
Fax
E-mail

4. **Reason for EAW preparation** (check one)

EIS scoping Mandatory EAW Citizen petition RGU discretion Proposer volunteered

If EAW or EIS is mandatory give EQB rule category subpart number and subpart name:

5. **Project location** County

City/Township

¼

¼

Section

Township

Range

GPS Coordinates N

W

Tax Parcel Number

Attach each of the following to the EAW:

- County map showing the general location of the project;
- U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable);
- Site plan showing all significant project and natural features.

6. **Description**

a. Provide a project summary of 50 words or less to be published in the *EQB Monitor*.

b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or

9. **Land use.** Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

10. **Cover types.** Estimate the acreage of the site with each of the following cover types before and after development:

	Before	After		Before	After
Types 1-8 wetlands			Lawn/landscaping		
Wooded/forest			Impervious surfaces		
Brush/Grassland			Stormwater Pond		
Cropland			Other (describe)		
TOTAL					

If **Before** and **After** totals are not equal, explain why:

11. **Fish, wildlife and ecologically sensitive resources**

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources on or near the site? Yes No
 If yes, describe the resource and how it would be affected by the project. Describe any measures that will be taken to minimize or avoid adverse impacts. Provide the license agreement number (LA-_____) and/or Division of Ecological Resources contact number (ERDB _____) from which the data were obtained and attach the response letter from the DNR Division of Ecological Resources. Indicate if any additional survey work has been conducted within the site and describe the results.

12. **Physical impacts on water resources.** Will the project involve the physical or hydrologic alteration — dredging, filling, stream diversion, outfall structure, diking, and impoundment — of any surface waters such as a lake, pond, wetland, stream or drainage ditch? Yes No
 If yes, identify water resource affected and give the DNR Public Waters Inventory number(s) if the water resources affected are on the PWI: Describe alternatives considered and proposed mitigation measures to minimize impacts.
13. **Water use.** Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? Yes No
 If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.
14. **Water-related land use management district.** Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? Yes No
 If yes, identify the district and discuss project compatibility with district land use restrictions.
15. **Water surface use.** Will the project change the number or type of watercraft on any water body?
 Yes No
 If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.
16. **Erosion and sedimentation.** Give the acreage to be graded or excavated and the cubic yards of soil to be moved: acres ; cubic yards. Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.
17. **Water quality: surface water runoff**
 a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any stormwater pollution prevention plans.

b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission.

c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.

21. **Traffic.** Parking spaces added:

Existing spaces (if project involves expansion):

Estimated total average daily traffic generated:

Estimated maximum peak hour traffic generated and time of occurrence:

Indicate source of trip generation rates used in the estimates.

If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Using the format and procedures described in the Minnesota Department of Transportation's Traffic Impact Study Guidance (available at:

<http://www.oim.dot.state.mn.us/access/pdfs/Chapter%205.pdf>) or a similar local guidance, provide an estimate of the impact on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system.

22. **Vehicle-related air emissions.** Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts.

23. **Stationary source air emissions.** Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing) and any greenhouse gases (such as carbon dioxide, methane, nitrous oxide) and ozone-depleting chemicals (chloro-fluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.

24. **Odors, noise and dust.** Will the project generate odors, noise or dust during construction or during operation? Yes No
If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

25. **Nearby resources.** Are any of the following resources on or in proximity to the site?
 Archaeological, historical or architectural resources? Yes No
 Prime or unique farmlands or land within an agricultural preserve? Yes No
 Designated parks, recreation areas or trails? Yes No
 Scenic views and vistas? Yes No
 Other unique resources? Yes No
 If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.
26. **Visual impacts.** Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks? Yes No
 If yes, explain.
27. **Compatibility with plans and land use regulations.** Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency? Yes No.
 If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.
28. **Impact on infrastructure and public services.** Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? Yes No.
 If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)
29. **Cumulative potential effects.** Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement.
 Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative potential effects. (Such future projects would be those that are actually planned or for which a basis of expectation has been laid.)
 Describe the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects (*or discuss each cumulative potential effect under appropriate item(s) elsewhere on this form*).

30. **Other potential environmental impacts.** If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

31. **Summary of issues.** *Do not complete this section if the EAW is being done for EIS scoping; instead, address relevant issues in the draft Scoping Decision document, which must accompany the EAW.* List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

RGU CERTIFICATION. *(The Environmental Quality Board will only accept SIGNED Environmental Assessment Worksheets for public notice in the EQB Monitor.)*

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9b and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature

Date

Title

Environmental Assessment Worksheet was prepared by the staff of the Environmental Quality Board at the Minnesota Department of Administration, Office of Geographic and Demographic Analysis. For additional information, worksheets or for *EAW Guidelines*, contact: Environmental Quality Board, 658 Cedar St., St. Paul, MN 55155, 651-757-2873, or <http://www.eqb.state.mn.us>.

Table A.2. Township, Range, Sections within the NLX Corridor

Minnesota	
Township (N), Range (W)	Sections
29,24	02, 03, 11, 13, 14, 22, 23
30, 24	03, 10, 15, 22, 27, 34
31, 24	02, 11, 14, 23, 26, 35, 36
32, 24	02, 11, 14, 23, 26, 35
33, 24	01, 12, 13, 23, 24, 26, 35
34, 23	06, 07, 18, 19, 30
34, 24	25, 36
35, 23	05, 08, 17, 20, 29, 30, 31
36, 23	03, 10, 15, 16, 21, 28, 32, 33
37, 23	02, 11, 14, 22, 23, 27, 34
38, 22	06, 07
38, 23	12, 13, 24, 25, 26, 35
39, 22	05, 08, 17, 19, 20, 30, 31
40, 21	06,
40, 22	01, 11, 12, 14, 15, 21, 22, 28, 32, 33
41, 20	05, 06, 07, 18
41, 21	13, 24, 25, 26, 27, 32, 33, 34
42, 20	01, 02, 09, 10, 11, 16, 20, 21, 29, 32
43, 19	02, 03, 09, 10, 16, 17, 19, 20, 30, 31
43, 20	36,
44, 18	03, 09, 10, 16, 17, 19, 20, 30
44, 19	25, 35, 36
45, 17	04, 05, 08,17, 18,19
45, 18	24, 25, 26, 34, 35
46, 15	06,
46, 16	10, 11, 12, 15, 16, 17, 18, 19
46, 17	24, 25, 26, 27, 33, 34
49, 14	04, 05, 07, 08, 17, 18, 27, 33, 34
Wisconsin	
Township (N), Range (W)	Sections
46, 15	4, 6
47, 14	4, 8 ,9, 17, 19, 20
47, 15	23, 24, 26, 27, 32, 33, 34
48, 14	03, 10, 15, 22, 27, 28, 33
49, 14	08, 15, 16, 17, 22, 27, 34

NLX: Alternative Development Studies

- *Northern Lights Express High Speed Rail Corridor Assessment Report, Level 1 Screening Report (Steps 1, 2 and 3)*, dated December 29, 2009, Revised June 2010. Level 1 is an initial screening of rail alternatives, addressing operational characteristics, investment requirements, and environmental constraints at a broad conceptual level.
- *Northern Lights Express Technical Memorandum: Functional Analysis of Routes 9, 11 and 11A (Level 2 Analysis)*, dated December 2010. Level 2 assesses the functional characteristics (capital improvements, travel time, ridership, revenue and benefit-cost) to determine if alternatives still under consideration following the Level 1 screen could be further narrowed before proceeding into detailed environmental analysis for the Environmental Assessment.
- *Northern Lights Express Passenger Rail Project Concept-Level Engineering Report, Level 3 Analysis, Routes 9, 11 and 11a*, dated April 2011, revised June 2011. Level 3 analysis includes development of conceptual engineering of Routes 9, 11 and 11a and includes a more detailed capital cost estimate based on this concept engineering.

