

Attachment 3
Eola Main Line Improvements Cultural Resources Technical Memorandum

Eola Main Line Improvements Cultural Resources

PROJECT DESCRIPTION

In September 2009 the Iowa and Illinois departments of transportation (Iowa DOT and Illinois DOT) developed a Tier 1 Service Level Environmental Assessment (EA) for the Intercity Passenger Rail project between Chicago, Illinois, and Iowa City, Iowa. This memo provides supplemental information to that EA documenting potential historic properties in and around the Eola Yard that could be adversely affected by the proposed Project. The EA and supplemental information will be submitted as part of the Iowa and Illinois DOTs' Office of Rail Transportation application for High Speed Intercity Passenger Rail (HSIPR) Program grant funds from the FRA FY2010 DOT Appropriations Act.

The purpose of this technical memo is to assist the Iowa and Illinois DOTs in preparing supplemental information on possible cultural impacts to the Eola Yard resulting from the proposed Project. Since the current NEPA analysis is at the service level, specific Project impacts are not known.

Eola Yard Cultural Resources Project Area - No federal agency has defined an Area of Potential Effects (APE) as yet. For the purposes of this memo, the project area includes railroad right of way (ROW) from about 500 feet west of the Farnsworth Avenue overpass on the west end of the yard to roughly 500 feet west of the EJ&E Railroad overpass (Figure 1).

The entirety of the archaeological resources review is within the existing Eola Yard, an active rail yard with dozens of trains passing through each day. Limits for the architectural structures review coincide with the incremental noise and vibration contours (Figure 2). Being an active yard, the soils in the area are mapped by the USDA Natural Resources Conservation Service Web Soil Survey as earthy fill (USDA 2010).

Figure 1: Existing Eola Rail Yard

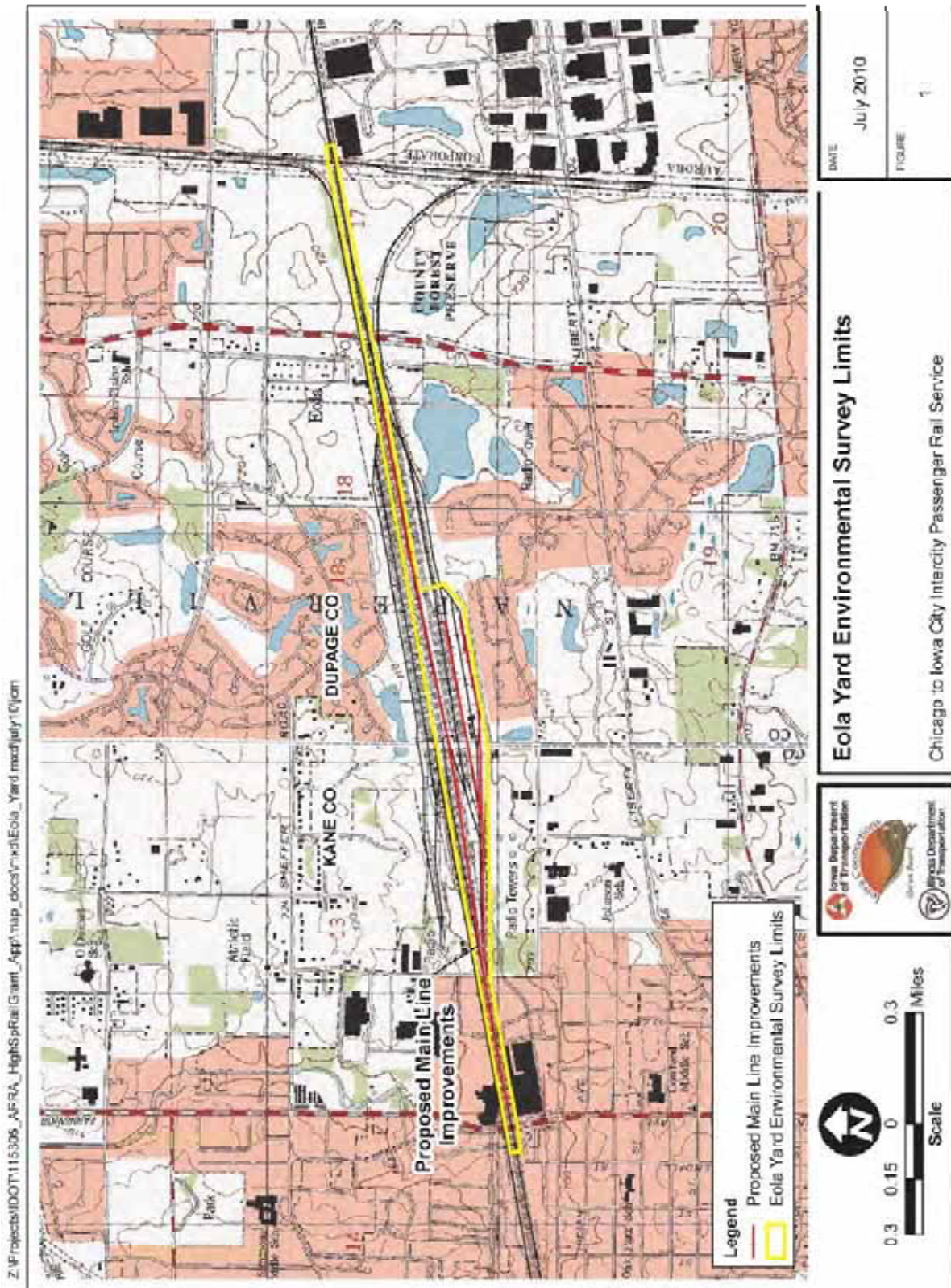
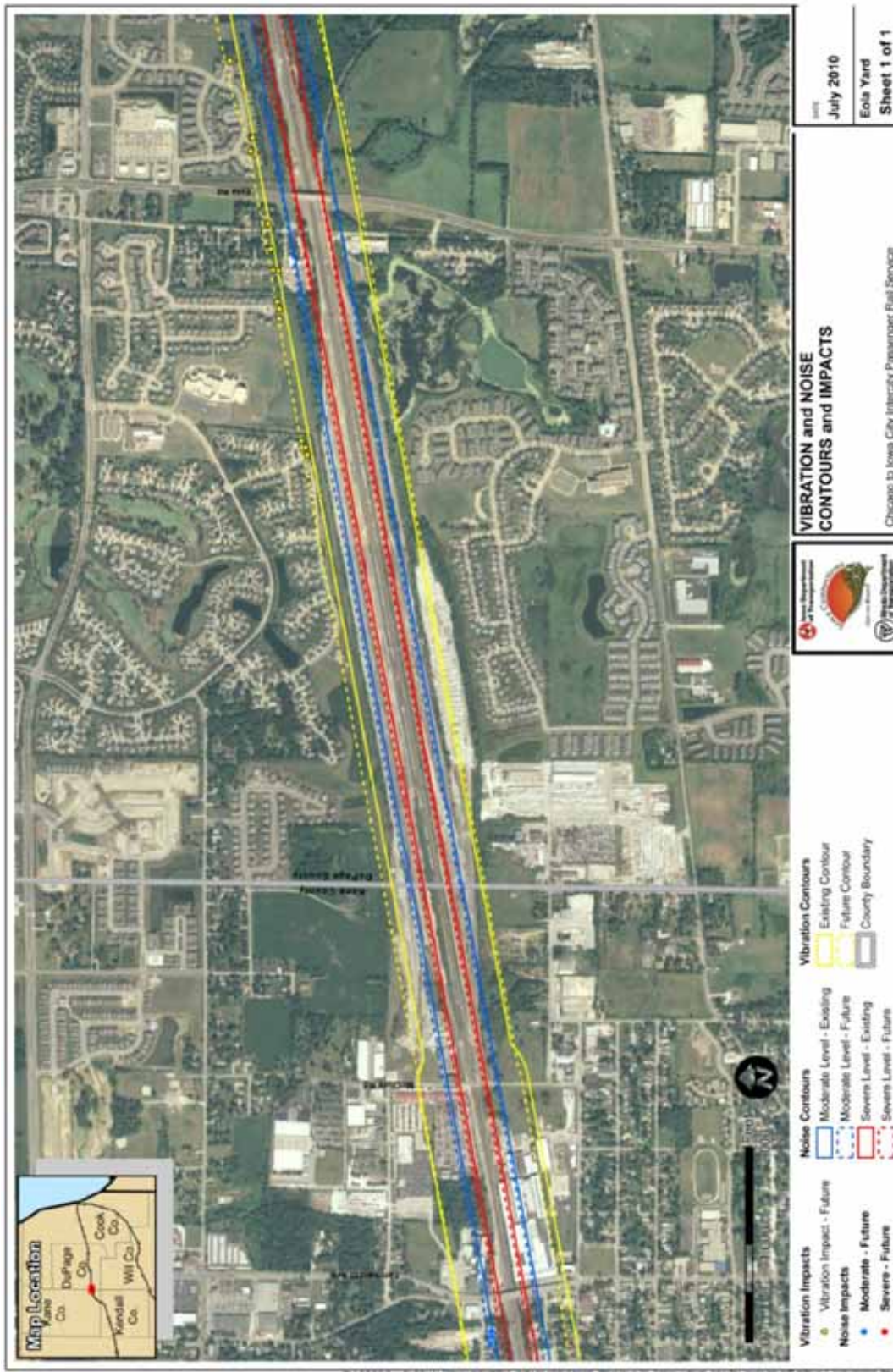


Figure 2: Vibration and Noise Contours and Impacts



BACKGROUND RESEARCH

The following resources were reviewed in order to discover the likelihood of historic properties existing within the Eola Yard.

- Historic aerial photographs from 1939 (Illinois Natural Resources Geospatial Data Clearinghouse 2010)
- 1874 atlas (Historic Map Works. 2010a)
- Government Land Office (GLO) plats (Illinois State Archives 2010)
- SHPO/IAS surveys and data (Illinois Archaeological Survey 2010)
- History of DuPage County, Illinois (Blanchard 1892)
- Map of Naperville Township, DuPage County, 1904 (Shows Chicago, Burlington, and Quincy Railroad running through property still owned by E.G. Crane. No rail yard shown.) (Historic Map Works. 2010b)
- Historic topographic maps (EDR 2010)
- Naperville Township, DuPage County, Aurora Township; Kane County Assessors Offices online records

Results from the reviews are discussed below.

SHPO/IAS SURVEYS AND DATA

On June 23, 2010, HDR requested a site file search from the Illinois Archaeological Survey (IAS) and the Illinois State Museum Society for information on previously recorded archaeological sites within a 1-mile radius of the yard. Information was received June 30, 2010. The online database for the National Register of Historic Places (NRHP 2010) was checked for listed properties within or near the yard. There are no listed properties within the area, and the nearest listed property is more than a mile away at the intersection of Spring and Broadway streets in Aurora. A search for locally listed properties has not been conducted. Below are summaries of the information received from the Illinois State Museum Society for archaeological properties near the project area.

Summary of Kane County

There have been no previous surveys and no recorded archaeological sites within the Eola Yard. Most of the surveys conducted within 1 mile of the yard were related to residential and commercial development (Table 1). Of the 12 sites recorded within 1 mile of the project, six are low density lithic scatters or isolated finds associated with undetermined prehistoric cultural affiliation (Table 2). The remaining six sites are historic, and none predate the Early Industrial period (1871-1900). The compliance status of all sites is “Not Eligible for the National Register of Historic Places.”

Table 1: Recorded Historic Properties within 1 Mile of Eola Yard

Site Number	Associated Survey Doc #	Context	National Register Eligibility Status
11-K-724	12351	Historic – post 1871	Not eligible
11-K-725	12351	Historic – post 1871	Not eligible
11-K-726	12351	Historic – post 1871	Not eligible
11-K-727	12351	Prehistoric unknown	Not eligible
11-K-912	14364	Prehistoric unknown	Not eligible
11-K-913	14364	Prehistoric unknown	Not eligible
11-K-914	14364	Historic – post 1871	Not eligible
11-K-915	14364	Prehistoric unknown	Not eligible
11-K-916	14364	Post-War	Not eligible
11-K-917	14364	Prehistoric unknown	Not eligible
11-K-918	14364	Historic – post 1871	Not eligible
11-K-919	14364	Prehistoric unknown	Not eligible

Table 2: Recorded Surveys within 1 Mile of Eola Yard

Surveys w/in 1 mi (Doc #)	Preparer	Year survey completed
13214	n/a	n/a
13335	Midwest Archaeological Research Services, Inc.	2003
12351	Archaeology and Geomorphology Services	2002
14364	Archaeology and Geomorphology Services	2004
3475	Northern Ill University	1990
15308	Northern Ill University	2005
178	Mid-American Research Center	n/a
7940	Ill Transportation Archaeological Research Program	1996

Summary of DuPage County

Within the DuPage County portion of the survey area, there have been no previous surveys and no recorded archaeological sites. Most of the surveys conducted within 1 mile of the project have been related to development (Table 3). Of the 16 sites recorded within 1 mile of the yard, seven are low density artifact scatters associated with undetermined prehistoric cultural affiliation, and two are isolated finds (Table 4). One is a multicomponent Late Archaic/historic site. The remaining six sites are from historic periods. The compliance status of nine sites is “Not Eligible for the National Register of Historic Places,” with the remaining sites’ status undetermined or not available at the time of report preparation.

Table 3: Recorded Surveys within 1 Mile of Eola Yard

Surveys w/in 1 mi (Doc #)	Preparer	Year Survey Completed
2488	The Benham Group, Inc	1988
4020	n/a	n/a
4876	University of Ill. Resource Investigation Program	1992
6048	Archaeological Research Inc.	1994
6138	Midwest Archaeological Research Services, Inc.	1994
6387	Northern Illinois University	1995
7294	Archaeological Research Inc.	1996
7940	n/a	n/a
9434	Midwest Archaeological Research Services, Inc.	1999
9620	The C.A.V.E. Group, Inc.	1999
9953	The C.A.V.E. Group, Inc.	1999
13036	Public Service Archaeology Program	2003
14063	Archaeological Research Inc.	2003
16099	Public Service Archaeology Program	2007
18017	Ill Transportation Archaeological Research Program	2009
18213	Midwest Archaeological Research Services, Inc.	2008

Table 4: Recorded Historic Properties within 1 Mile of Eola Yard

Site Number	Associated Survey Doc #	Context	National Register Eligibility Status
11-Du-311	n/a	Prehistoric unknown	Not eligible
11-Du-111	n/a	Prehistoric unknown	n/a
11-Du-213	4876	Multicomponent Late Archaic/historic	n/a
11-Du-214	4876	Prehistoric unknown	n/a
11-Du-312	n/a	Prehistoric unknown	Not eligible
11-Du-313	n/a	Historic -Modern	Not eligible
11-Du-323	6138	Historic EuroAmerican	undetermined
11-Du-338	6387	Historic – post 1871	Not eligible
11-Du-339	6387	Historic – post 1871	Not eligible
11-Du-340	6387	Historic – post 1901	Not eligible
11-Du-4	n/a	Prehistoric woodland	n/a
11-Du-440	9434	Prehistoric unknown	Not eligible
11-Du-441	9434	Prehistoric unknown	Not eligible
11-Du-472	13036	Historic – post 1841	Not eligible
11-Du-90030	n/a	Isolated find	n/a
11-Du-90031	n/a	Isolated find	n/a

EOLA HISTORIC MAP REVIEW

The main railroad line appears to be of historic age. The Chicago, Burlington & Quincy Railroad was originally the Aurora Branch Railroad that extended 13 miles from Aurora into Kane County, and to Turner Junction (now West Chicago) in 1852. The name changed in 1852 to the Chicago & Aurora Railroad, and then changed again in 1853 to Chicago, Burlington, and Quincy Railroad Co. The line was completed to Chicago by 1864, thereby creating a link west to the Mississippi River (Blanchard 1882).

Government Land Office Maps (Illinois State Archives. 2010)

DuPage County 1842. The land survey map of DuPage County indicates the Eola Yard area and its surroundings were composed of farmland and marsh.

Kane County 1840. The land survey map of Kane County shows a road to Chicago about one mile south of the yard area, and a stream (Indian Creek) running north-south through and along the section lines between Sections 13 & 14.

Other Atlases

The DuPage County Atlas 1874, Naperville Township (Historic Map Works 2010a) shows the railroad traversing the yard area, but no yard. Property on either side of the railroad is shown as owned by Edgar G. Crane. The map also shows two structures very near the northern boundary of the area. These are a cheese factory and the Eola Post Office.

DuPage County 1904, Naperville Township. (Historic Map Works. 2010b) This map depicts the Chicago Burlington Quincy RR running through property still owned by E.G. Crane. No rail yard is shown.

Historic Topographic Maps

The 1993 topographic map of Naperville (7.5 ft series, Scale: 1:24000) shows Eola Road continuing in a straight line crossing over the rail yard. The 1998 quad map of the same area shows the crossing is removed, and a new bypass constructed over the yard, east of the previous crossing. The Vaughn Road overpass is visible on the 1980 topographic map, but by 1993 it has been removed. The topographic maps from 1949 to 1993 indicate several structures existed within the yard, primarily in the central part near the southern tracks, which were probably used for off-loading and product storage. (EDR 2010)

As no Sanborn fire insurance maps exist, details of the structures are not available. Today, this area is used as a lumberyard, and a standing brick structure holds the BNSF electrical department.

HISTORIC AERIAL PHOTOGRAPHS

Several structures appear on the 1938 aerial photograph that are no longer standing today (Illinois Natural Resources Geospatial Data Clearinghouse 2010). One is the bridge that carried Vaughn Road over the railroad yard and tracks. Other structures include the cheese factory buildings that were indicated on the 1874 atlas, and various structures associated with the rail yard (Historic Map Works. 2010a). The areas adjacent to the rail yard are primarily agricultural.

FIELD VISIT

On July 6, 2010, HDR representatives were escorted through the site by BNSF personnel to assess the area for potential archaeological properties and historic standing structures. The visit was limited to areas within the active rail yard where allowed by BNSF, and was conducted by personnel in vehicles with stops at key areas within the rail yard. Photographs were taken of items of interest, including culverts, bridges and other structures, and building foundations. The photographs serve to document overall rail yard conditions, and evidence of disturbance.

SUMMARY OF RESEARCH

Prehistoric Archaeological Properties

Although there are no properties or surveys previously recorded within the ROW, within 1 mile records show that there are several previous inventory studies and recorded properties (Illinois Archaeological Survey 2010). There may have been prehistoric sites within the rail yard at one time; however, it is highly likely that all traces have been removed by previous agricultural tilling associated with the Crane farm, and the later incremental development of the rail yard. HDR's environmental assessment revealed that a train collision in the 1990s spilled fuel oil requiring soil removal from the yard as remediation (HDR 2010). It is very doubtful that any intact soils remain within the yard that could contain cultural remains from the precontact period.

Historic Archaeological Properties

Several structures appear on the 1938 aerial photograph, and on the historic topographic maps, that are no longer standing today. (Illinois Natural Resources Geospatial Data Clearinghouse 2010, EDR 2010) One is a bridge that carried Eola Road over the railroad tracks. The piers for the bridge are still standing. Other potential archaeological remains may be associated with structures associated with railroad use, off-loading, and storage of materials among the southern tracks. Two concrete slabs and/or foundations from structures of unknown age are visible on either side of the new Eola Road overpass (Photos 1 & 2).

Historic Standing Structures

From the 1874 atlas, two structures stand out: a cheese factory and the Eola post office (Historic Map Works. 2010a). Records from the Naperville township assessor indicate that the post office was built in 1874. No information is available on the cheese factory. Neither of these structures is within the rail yard; both are adjacent to the yard, on the north side.



Photo 1: Concrete Slab Foundation



Photo 2: Concrete Foundation

IMPACTS TO HISTORIC STRUCTURES

The previous noise and vibration study (Completed in September 2009) identified 16 structures within or adjacent to the current rail yard that could be incrementally affected by noise or vibration if the proposed Project is built (Table 5). Most of these structures are elements of modern, recently built residential subdivisions and as such, do not meet the requirements of a historic property based on age (photo 3). There are an unknown number of residences that could be affected within one recently built structure on Stamford Court, and in two additional structures on Bromley Lane.

**Table 5: Properties within the Eola Yard
Potentially Affected by Noise and/or Vibration**

Address	Description	Year built
DuPage County		
1060-1080 Stamford Court	Condos	2002
3100 Block, Bromley Lane	Condos	2002
1041 Oakhill Dr., Aurora	House	2001
1047 Oakhill Dr., Aurora	House	2001
1066 Oakhill Dr., Aurora		
2531 Sutton Lane, Aurora	House/condo	1996
2533 Sutton Lane, Aurora	House/condo	1998
2535 Sutton Lane, Aurora	House/Condo	1998
1064 E 4 th St., Eola	House	2001
6s381 4 th St., Eola	House	1900
6s375 Eola Rd., Eola	House	1924
Kane County		
1305 Rural St., Aurora	House	n/a
1307 Rural St., Aurora	Single story House	1948
1313 Rural St., Aurora	Single story House	1955



Photo 3. Example of modern house on Oakhill Drive
Photo from Naperville Township Assessor's office

Two structures that could be affected are potentially historic. These include 6S381 4th Street, and 6S375 Old Eola Road, in the unincorporated village of Eola, in Naperville Township, DuPage County. These structures are of sufficient age to meet eligibility requirements of the NRHP (photos 4 & 5). Additional investigation into their historical significance may be warranted.

On the western end of the yard there are three structures that may be affected by incremental noise impacts. These include structures located at 1305, 1307, and 1313 Rural Street, Aurora. The year-built information for the structure at 1305 Rural St. was not available. The two other structures are mid-twentieth century residences that may meet age requirements for the NRHP. Photographs of these structures are not available. Additional investigation on these properties may be warranted.

CONCLUSION

There are no previously recorded archaeological sites within the Eola Yard. The two foundations noted during field review are poured concrete and date to the early to mid twentieth century. While the original structures may have been important to the operation of the rail line, there is little chance that they could currently contain important archaeological information. The yard itself has been heavily altered throughout its existence, such that it is unlikely that there are any

current areas within the yard that would contain significant and undisturbed buried cultural materials.

There are three structures on the west end of the yard that are within the noise impact contour that may fall outside the Eola Yard Improvement limits, but are close enough to warrant attention. The structures appear to date to the mid twentieth century, and may be old enough to warrant further inventory, assuming they actually fall within the yard improvement limits. Two structures within the incremental vibration contours within the unincorporated village of Eola have sufficient age to require additional inventory at the Tier 2 level. The field visit noted that there are additional vintage structures within the rail yard or adjacent to it. The scope of this assessment was to document those structures that would be incrementally affected by noise or vibration should the project be constructed, not those already within the existing contours. If construction will require removal or alteration of existing structures within the rail yard, additional inventory may be necessary.



Photo 4: Eola Road
Photo from Naperville Township Assessor's office.



Photo 5: 6351 4th Street
Photo from Naperville Township Assessor's office

REFERENCES/SOURCES

- Aurora Township Assessor's Office Website. Accessed July 2010 at <http://auroratownshipassessor.com/Assessor/assessor.html>
- Blanchard, Rufus. 1882. History of Du Page County. Chicago: O.L. Baskin & Co., Historical Publishers. Accessed from Illinois Digital Archives in July 2010 at <http://www.idaillinois.org/u/?npl,1186>
- Du Page County Assessor's Office Website. Accessed July 2010 at <http://www.co.dupage.il.us/soa/>
- Historic Map Works. 2010a. Naperville Township Map from the 1874 Du Page County Atlas. Originally published by Thompson Bros. and Burr, Chicago. Accessed in July 2010 at <http://www.historicmapworks.com/Map/US/27736/Naperville+Township/>
- Historic Map Works. 2010b. Naperville Township Map from the 1904 Du Page County Atlas. Originally published by Middle-West Publishing Co., Chicago. Accessed in July 2010 at <http://www.historicmapworks.com/Map/US/214213/Naperville+Township++Eola++Copenhagen/DuPage+County+1904/Illinois/>
- Environmental Data Resources, Inc. (EDR). *Eola Yard Improvements Project Level EA*. Report prepared for HDR Engineering, Inc., June 23, 2010.
- HDR Engineering, Inc. (HDR). 2010. *Preliminary Environmental Site Assessment Chicago to Iowa City Intercity Passenger Rail Service Eola Mainline Improvements*. Report prepared for the Illinois and Iowa Departments of Transportation, July 2010.
- Illinois Archaeological Survey/Illinois State Museum Society. Project Area Sites and Surveys Record Search. June 2010.
- Illinois Natural Resources Geospatial Data Clearinghouse, University of Illinois at Urbana-Champaign. Historic aerial photographs from 1938 (Dupage Co.) and 1939 (Kane Co.). Accessed in July 2010 at: <http://www.isgs.uiuc.edu/nsdihome/>
- Illinois State Archives. 2010. Federal Township Plats of Illinois (1804-1891). Accessed in July 2010 at http://landplats.ilsos.net/FTP_Illinois.html
- Kane County Assessors Office. Accessed July 2010 at <http://www.co.kane.il.us/soa/>
- Naperville Township Website. Accessed July 2010 at <http://www.napervilletownship.com/SD/Naperville/content/default.aspx>
- National Register of Historic Places (NRHP). Database searched in July 2010 at <http://www.nps.gov/nr/>
- USDA. 2010. Natural Resources Conservation Service Web Soil Survey Soil Survey. Accessed from: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>