identify traffic noise impacts, and consideration of abatement measures where a traffic noise impact is identified will be undertaken, as necessary.

As the study area is moderately to highly urbanized and the population density is high, many noise-producing human activities are present. Noise sources include road, railroad, aircraft, and other human activity. Major roadway and interstate facilities are located in the study area as are passenger and freight railroads. One notable noise source is O'Hare Airport on the eastern side of the study area. The study area is beneath the flight paths.

2.10.2 Potentially Noise-Sensitive Resources

Locations of potentially noise-sensitive residential areas and non-residential receptors were identified in the study area. Forty-nine noise-sensitive residential areas representing concentrations of residential noise receptors and 30 noise-sensitive non-residential receptors, including 24 parks, three schools, and three churches, are spread throughout the study area. The largest concentrations of properties potentially affected by noise are along Thorndale Avenue and west of IL 83, along I-90, and along County Line Road (see Exhibit 2-11).

Other potential noise-sensitive resources in the study area could include wildlife species, such as migratory birds. As a result of the highly urbanized nature of the study area, wildlife species that are less tolerant of development may prefer to use protected habitats within special lands, such as forest preserves. The locations of the special lands within the study area are shown on Exhibit 2-10. Proposed improvements near special lands could potentially affect noise sensitive wildlife species, such as migratory birds. However, the special lands located proximate to the proposed improvements are already near existing noise generators (i.e., interstates/roadways, industrial/developed areas with truck traffic, rail yards and railroads, and/or airports). Habitat located adjacent and/or in close proximity to noise generators is generally used by wildlife species that may be more tolerant of disturbance and human activities and/or may have adapted to urban noise levels. See Section 4.5.2 for further discussion on this topic.

2.11 Cultural Resources

Cultural resources include archeological and architectural items, places, or events considered important to a culture, community, tradition, religion, or science. Archeological resources are locations where human activity measurably altered the earth or left deposits of physical or biological remains. Prehistoric artifacts include arrowheads, rock chips from tool creation, and village remains. Architectural resources represent properties or districts that are notable in American history and culture. The National Historic Preservation Act and its implementing regulations require federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings.

2.11.1 Archaeological Resources

University of Illinois personnel conducted a Phase I archaeological survey on behalf of the Illinois State Archaeological Survey (ISAS) to identify any archaeological resources within 6,673 acres of the study area proximate to the proposed improvements. Areas within the survey limits with good ground surface visibility (greater than 75 percent visibility) were

visually inspected. Areas with less than 25 percent visibility and not obviously disturbed were shovel-tested in 50-foot intervals, and sediments were screened through ¼-inch hardware cloth. Areas clearly indicating previous ground disturbance were not evaluated.

Eighteen previously recorded sites are located within the survey area and were revisited. One new site and two findspots were found during the survey. Temporal affiliations of the surveyed sites appear to include Prehistoric Unknown, Paleoindian, Archaic, Early Archaic, Late Archaic, Early Woodland, Historic, Frontier (1841-1870), Early Industrial (1871-1900), Urban Industrial, and Post-War (1964-present). Artifacts were found at only one site. None of the sites or findspots is eligible for listing on the National Register of Historic Places (NRHP). The Illinois State Historic Preservation Officer (SHPO) concurred with this finding on September 14, 2009 (see Appendix D). Therefore, no further archaeological work is recommended for any of the locations and are not discussed further in this document.

2.11.2 Architectural Resources

The customary data sources were reviewed to identify potentially historic structures in the study area. A review of recorded information on historic resources resulted in the finding that no known historic structures would be affected by the proposed action. A photo log of all structures affected by the build alternatives that are at least 50 years old was submitted to IDOT's Cultural Resources Unit for review. IDOT's Cultural Resources Unit, in turn, provided the photo log to the Illinois SHPO with a finding of No Architectural Resources Affected. The Illinois SHPO concurred with this finding on July 22, 2009. Architectural resources are not discussed further in this document.

2.12 Special Waste

"Special waste," as defined in the Illinois Environmental Protection Act (415 ILCS 5/3.475), includes hazardous waste, potentially infectious medical waste, and industrial process waste or pollution control waste.³³ In Illinois, highway projects are evaluated to determine a project's potential involvement with special waste and other regulated substances, such as hazardous substances and petroleum products.

Sites reported to USEPA because of a release or potential release of a hazardous substance into the environment are listed in the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS). CERCLIS sites that rank high enough to be eligible for USEPA to expend funds for cleanup because the sites pose a risk to human health or the environment are placed on the National Priorities List. Based on USEPA data, no sites on the National Priorities List are within the study area (USEPA, 2008c).

Table 2-26 summarizes the special waste sites located within the greater study area and those located specifically near the proposed improvements. More detailed special waste assessment will be completed, as necessary, in the area of the improvements as part of any Tier Two studies. Most special waste sites are within industrial areas or along major arterial roadways within the study area (see Exhibit 2-12).

³³ Refer to the Illinois Environmental Protection Act for exceptions.