

### 3.15.3.5 Summary

The Build Alternative would require temporary involvement with four Section 4(f) resources – a park and three bicycle paths. A temporary easement would be required from the Wood Dale Park District's Salt Creek Golf Club for regrading the entrance so that it blends with the profile of the improved Prospect Avenue. The Schaumburg Bicycle Paths along Springinsguth Road and Wright Boulevard, as well as the Salt Creek Greenway Trail along Mittel Road/Mittel Boulevard, might be rerouted temporarily during construction for safety and logistical reasons. Because the temporary involvement with these Section 4(f) resources meets the criteria contained in 23 CFR 774.13(d), the involvement does not constitute a use of the Section 4(f) resources.

## 3.16 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.<sup>103</sup> In Illinois, highway projects are screened and evaluated to determine a project's potential involvement with special waste and other regulated substances, such as hazardous substances and petroleum products.

### 3.16.1 Affected Environment

The project area is largely urbanized and consists of various land uses including aging industrial and railroad land uses; there is potential for the area to contain materials of concern. In accordance with IDOT environmental guidance, a Level I Screening of the project was completed, and it was determined that a Preliminary Environmental Site Assessment (PESA) was required for this project.

The PESA was completed following the guidelines of ISGS, "A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects"<sup>104</sup> and "ISGS red-line guidance document."<sup>105</sup> Since the project area is vast, the PESA divided the project corridor into six geographic sections and corresponding PESA Volumes (1, 2, 2A, 3, 4, and 5) (see Exhibit 3-23). The PESA reports performed by CH2M HILL were submitted to IDOT between June 10, 2010 and February 24, 2012 and included all PESA Volumes (1, 2, 2A, 3, 4, and 5) and five PESA Addendums (Volumes 1, 2, 2A, 3, and 4) (CH2M HILL, 2012). The eleven PESA reports were officially accepted and approved as "Final" by IDOT on March 8, 2012. The March 8, 2012 IDOT acceptance letter is included in Appendix B. According to IDOT policy, the PESA reports required an update or validation. Therefore, a PESA validation was conducted between September 5, 2012 and September 25, 2012. The PESA validation report was submitted to IDOT on September 25, 2012. IDOT reviewed the PESA validation report and officially accepted and approved the document as Final on October 9, 2012 (see Appendix B).

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<sup>103</sup> Refer to the Illinois Environmental Protection Act for exceptions.

<sup>104</sup> Erdmann, A.L., Bauer, R.A., Bannon, P.L., and Schneider, N.P. (1996, and draft PESA example [red text guidance]). A manual for conducting preliminary environmental site assessments for Illinois Department of Transportation highway projects. Illinois State Geological Survey Open File Series 1996-5.

<sup>105</sup> CH2M HILL and IDOT. PESA Kickoff Meeting. IDOT Springfield Central Office. Attending: Barbara Stevens, IDOT Chief Environment Section, Steve Gobelman, IDOT Geologic and Waste Assessment Specialist, Debbie Mehra, Special Waste Coordinator, Site Assessment Unit, Anne Erdmann, Director of the Center for Transportation and the Environment, Larry Martin, David Klatt, and Ed Walczak CH2M HILL. ISGS red-line guidance document. August 5, 2009.

Properties within and adjacent to the project corridor, consisting of 27 miles of new and improved expressway and 16 miles of supporting arterial, were evaluated. Properties were field-inspected, screened against Federal and State environmental databases, reviewed for historical information, and interviews<sup>106</sup> were completed if determined necessary during the evaluation process.

Database searches were conducted to identify known or potential contamination from regulated substances within or adjacent to the project corridor. In addition, field inspections were performed to verify locations from the databases, and a checklist describing site features was completed.

The following is a list of the principal databases searched to identify known special waste sites, spills, or enforcement actions.

- USEPA Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS):  
<http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
- USEPA Resource Conservation and Recovery Act (RCRA):  
[http://www.epa.gov/enviro/html/rcris/rcris\\_query\\_java.html](http://www.epa.gov/enviro/html/rcris/rcris_query_java.html)
- USEPA Toxic Release Inventory (TRI):  
[http://www.epa.gov/enviro/html/tris/tris\\_query.html](http://www.epa.gov/enviro/html/tris/tris_query.html)
- Illinois Emergency Management Agency (IEMA):  
<http://tier2.iema.state.il.us/FOIAHazmatSearch/>
- IEPA UST: <http://webapps.sfm.illinois.gov/ustsearch/>
- IEPA Bureau of Land (BOL): <http://epadata.epa.state.il.us/land/inventory/>
- IEPA Leaking Underground Storage Tank (LUST):  
<http://epadata.epa.state.il.us/land/ust/>
- IEPA Brownfields: <http://epadata.epa.state.il.us/land/brownfields/>
- IEPA Site Remediation Program (SRP): <http://epadata.epa.state.il.us/land/srp/>
- Emergency Response Notification System (ERNS):  
<http://www.nrc.uscg.mil/apex/f?p=109:1:409463279704121>

There are approximately 2,414 first tier parcels and 2,273 second tier parcels that were evaluated as part of the PESA prepared for this project. For purposes of this Tier Two Final EIS, first tier sites are defined as contiguous parcels with a common function, regardless of land use, that intersect or adjoin the project corridor. Second tier sites are parcels that are located adjacent to first tier sites beyond the project boundaries. Part of the PESA screening process was to group the individual parcels into “sites” that are similar in terms of function (e.g., an area with two parcels occupied by a warehouse with one occupant is considered one “site”). This PESA process identified approximately 554 first tier sites that were subsequently addressed by the PESA site inspection, historical review, and reporting process. In addition, there were 1,571 second tier sites evaluated by searching environmental databases, but were not visually inspected or included in a detailed historical or regulatory record review evaluation. The PESA shows first tier sites that contain a recognized environmental condition (REC), *de minimis* condition, or if no sites in the project area are impacted by special waste. Second tier sites that are found in environmental

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<sup>106</sup> Limited interviews were conducted to verify site addresses and property information, as detailed in each PESA report.

databases are listed in the “other potential manmade hazards” section of the respective PESA, but are not included in the REC or *de minimis* condition evaluation process. The definitions of REC and *de minimis* condition are as follows:

- According to American Society for Testing Materials (ASTM) E1527-05, a REC is defined as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property” (ASTM, 2005). For the EO-WB PESA, the identification of RECs was based on verbal and written input from ISGS on Volume 1 of the EO-WB PESA, as well as examples of REC determinations found in other ISGS prepared PESA reports.
- *De minimis* conditions are defined in ASTM 1527-05 as conditions that “generally do not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies” (ASTM, 2005). ISGS and IDOT have further refined the definition of *de minimis* conditions to include “normal use of lead-based paint on exteriors and interiors of buildings and structures; use of asbestos-containing materials in building construction; transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use; and agricultural use of pesticides and herbicides” (CH2M HILL and IDOT, 2009). ISGS and IDOT consider any building, regardless of age or building type, to have the potential to contain asbestos-containing materials.

In addition, radon and biological hazards are not considered in a PESA, unless specifically noted, and other potential natural hazards and undermining are not considered RECs or *de minimis* conditions in a PESA. The project area was also screened for CERCLIS sites. The CERCLIS sites are evaluated by USEPA because of a release or potential release of a hazardous substance into the environment. The CERCLIS sites that are evaluated by USEPA and 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 (NPL). Based on USEPA data reviewed during the EO-WB PESA, a number of CERCLIS sites are located within the project area, but no NPL sites were identified within one mile of the project area (USEPA, 2011).

### 3.16.2 Environmental Consequences

The PESA results concluded that the project corridor was located on or adjacent to a number of sites that contained RECs and *de minimis* conditions. The PESA studied approximately 554 first tier sites. Of those sites, 448 sites were identified as having a REC or a combination of RECs and *de minimis* conditions (multiple RECs and *de minimis* conditions commonly occur on individual sites). There were 97 sites identified with only *de minimis* conditions, and nine sites were identified as having no REC or *de minimis* condition. Table 3-53 identifies the total number of PESA sites that have RECs, *de minimis* conditions, or no REC or *de minimis* condition.

**TABLE 3-53**  
**Summary of First Tier Sites with RECs and DMCs by PESA Volume**

	Volume 1	Volume 2	Volume 2A	Volume 3	Volume 4	Volume 5	Total
REC(s) and/or <i>De minimis</i> condition(s)	78	81	29	108	107	45	448
<i>De minimis</i> condition(s) only	7	3	1	28	35	23	97
No REC or <i>de minimis</i> condition	0	0	1	0	3	5	9
Total	85	84	31	136	145	73	554

Note: The project area is divided into six geographic areas called Volumes.

The PESA evaluation of 1,571 second tier sites resulted in the identification of 301 sites that were found on one or more environmental databases. Table 3-54 shows a summary of the environmental database search for second tier sites.

**TABLE 3-54**  
**Summary of Second Tier Sites Identified on Environmental Databases by PESA Volume**

	Volume 1	Volume 2	Volume 2A	Volume 3	Volume 4	Volume 5	Total
Total Second Tier sites evaluated	203	72	49	312	355	580	1,571
Second Tier Sites found on environmental databases	23	68	11	88	73	38	301
<b>Environmental Database</b>							
USEPA CERCLIS	1	3	0	2	0	2	8
USEPA RCRA	17	44	7	59	44	25	196
USEPA TRI	3	3	0	8	4	3	21
IEMA	9	32	7	33	30	8	119
IEPA UST	13	21	5	34	18	7	98
IEPA BOL	22	65	10	84	64	36	281
IEPA LUST	10	18	4	26	17	4	79
IEPA Brownfields	0	0	0	0	0	0	0
IEPA SRP	1	3	1	1	2	0	8
ERNS	3	5	3	1	5	1	18

Note: Multiple environmental database numbers may be associated with the same site and are reflected in the table.

An assessment of risk was conducted on the project corridor based upon the types of RECs that were identified on the first tier sites. The ranking guidelines were based primarily on the environmental database and subsequent records review, but were supplemented with

site visit information, where appropriate. This ranking system includes “High Risk,” “Medium Risk,” and “Low Risk” sites. For purposes of this document, the term “risk” is generally defined as the degree to which a site presents a potential environmental hazard that may require special consideration (e.g., avoidance, additional studies, or additional costs for monitoring or disposal) during the roadway design and construction process. The relative risks are assessed based on the available information collected during the PESA process, and are subject to modification based on new information. These risk designations are strictly for general screening and comparison purposes within this document, and should not be considered conclusive, or taken out of the context of this document.

The three individual risk categories are further defined as follows:

- **High Risk:** Sites where petroleum constituents or other hazardous substances *are documented to have been released into the environment (generally in soil or groundwater), or where petroleum constituents or other hazardous substances are likely present in soil or groundwater as a result of a regulatory listing or other condition.* A High Risk site would be expected to be considered for one or more of the following: site avoidance, design modifications, risk management determination, and additional studies (i.e., Preliminary Site Investigation [PSI] or Phase II Environmental Site Assessment sampling) in order to evaluate the impact of potential contaminated media. The site would likely involve a Special Waste Provision to cover environmental monitoring and potential disposal if subsequent evaluation did not indicate that the affected site area was considered clear of special waste considerations.
- **Medium Risk:** Sites where petroleum constituents or other hazardous substances have the potential to be present in the environment (generally in soil or groundwater) based upon PESA documentation that petroleum constituents or other hazardous substances *were used or stored on the site, or that site features suggest conditions or activities that are potentially associated with petroleum constituent or other hazardous substance storage or disposal.* Generally, Medium Risk sites do not have specific indication that petroleum constituents or other hazardous substances were actually released into the environment. A Medium Risk site would be expected to be considered for risk management determination and additional studies (i.e., PSI or Phase II Environmental Site Assessment sampling) in order to evaluate the impact of potential contaminated media. The outcome of the additional studies would determine whether avoidance, design modifications, or Special Waste Provisions would be necessary considerations.
- **Low Risk:** Sites where petroleum constituents or other hazardous substances have a reduced potential to be present in the environment as a result of the site activities based upon available PESA documentation. Per ISGS guidance, potential asbestos-containing material, potential lead-based paint, electrical transformers, natural gas pipelines, sewer facilities, discarded tires, and general trash debris are generally considered *de minimis* conditions related to surface structures and features. These items have a reduced potential to adversely impact soil and groundwater resources and can more readily be addressed by conventional surface demolition, removal, or relocation activities. These items may still involve significant evaluation and associated costs, but for purposes of the PESA and this Tier Two Final EIS, they do not represent conditions that fall under the category of a REC. A Low Risk site would generally not be expected to require additional studies (i.e., PSI soil and groundwater or Phase II Environmental Site

Assessment sampling) in order to evaluate the impact of potential contaminated media. However, conventional surface demolition, removal, or relocation activities, and evaluation of soil for clean fill characterization would be expected, as with all sites in any risk category.

Table 3-55 shows a summary of the High Risk RECs by PESA volume.

<b>TABLE 3-55 Summary of High Risk RECs by PESA Volume</b>							
	<b>Volume 1</b>	<b>Volume 2</b>	<b>Volume 2A</b>	<b>Volume 3</b>	<b>Volume 4</b>	<b>Volume 5</b>	<b>Total</b>
Total Number of Sites with High Risk RECs	37	31	12	56	38	12	186
<b>High Risk Category</b>							
Documented release associated with UST/LUST	24	12	7	32	14	6	95
Documented release associated with aboveground storage tank	2	0	0	0	0	1	3
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/CERCLIS removal action	1	0	0	4	1	0	6
Highway Authority Agreement	0	0	0	2	0	0	2
Landfill	1	2	0	0	1	0	4
Contaminated fill/past legal or open dumping	2	4	2	7	10	4	29
Electrical substation	0	1	0	0	0	0	1
Former/Current gas station	1	2	0	3	0	0	6
Documented or potential petroleum or hazardous substance contamination in soil, groundwater, or subsurface	14	18	10	27	24	5	98
Total <sup>a</sup>	45	39	19	75	50	16	244
<sup>a</sup> Some sites may appear in multiple high risk categories.							

Where possible, High Risk sites that intersected the initial project corridor were avoided when the project corridor was refined. In cases where a site cannot be avoided, further evaluation and investigation will need to be conducted in order to determine the impact of potential contaminated media on the project. As described above, High Risk sites are generally anticipated to require additional evaluation, including the potential for environmental sampling through the completion of a PSI or Phase II Environmental Site Assessment. Even though some sites cannot be avoided, some sites can be designated by IDOT as a Risk Managed Project (RMP) and addressed during construction, whereby the potential risks of the site are evaluated against the proposed work on the site and are not determined to require avoidance, additional investigation in the form of a PSI, or other action unless specific criteria (e.g., depth stipulations) are exceeded. However, if sites are not eligible as a RMP, further studies would likely be required (e.g., PSI, Remedial

Investigation/Feasibility Study, Risk Assessment). In subsequent phases, the sites would be programmed and tasked by IDOT for PSI, if the site is within IDOT jurisdiction.

If the investigations by the Illinois Tollway indicate the presence of impacts that would require environmental monitoring or special waste soil disposal, it is expected that a Special Waste Provision would be prepared by IDOT or the Illinois Tollway, as appropriate, and executed as part of the construction project. The Illinois Tollway will conduct further studies of sites identified in the PESA as high risk, if the site is within Illinois Tollway jurisdiction. The PSI or Phase II Environmental Site Assessment will be scaled to the degree of risk (e.g., sites with multiple RECs and sites with larger proposed excavation areas), and investigated in greater detail than those high-risk sites with only one REC or minimal proposed excavations. Similar to IDOT, the presence of special wastes, as determined by detailed investigations, would likely require Special Waste Provisions that are included as part of the construction project. The Illinois Tollway will manage contaminated sites with the use of site investigations and on a risk-managed basis. The PESA and Phase II Environmental Site Assessments work will be used to characterize the nature and extent of contamination for specific properties, and preferred methods of removal will be identified. This information will be compiled for inclusion in bid documents to guide perspective bidders. Secondly, the risk-managed approach will develop a protocol for the discovery of contamination during construction. Under these conditions, contamination will be managed to avoid unintended migration of contaminants and protect against potential worker exposures. Impacted material would be screened and characterized on a case-by-case basis and further investigations and remediation determined.

### 3.16.3 Measures to Minimize Harm and Mitigation

The implementation of a Special Waste Provision, for work let by IDOT, would provide planned mitigation procedures during construction. If contaminated soils or water are encountered during construction, the Special Waste Provision will be implemented, and contaminated materials would be removed in compliance with federal and state policies and procedures for their safe removal, handling, and disposal. If contaminated soils, water, or other abnormal conditions indicate the presence of a regulated substance and are encountered during construction at any other site for which a Special Waste Provision does not exist, the contractor will follow the notification procedures outlined in Section 107.19 of the IDOT Standard Specifications for Road and Bridge Construction. Removal and disposal procedures shall follow Section 669 outlined in the Standard Specifications for Road and Bridge Construction. The Illinois Tollway would follow similar procedures as IDOT, particularly for known contamination and the provisions to be included in construction documents. In the case of contaminant discovery during construction, the contractor would follow appropriate procedures for notification, protection of potential worker exposures, and removal and disposal.

## 3.17 Visual Resources

Visual character and quality of the landscape were considered for the project corridor. Visual quality is inherently subjective; therefore, this analysis is qualitative as opposed to quantitative. Assessing visual quality impacts depends in equal parts on what is seen and who is seeing it. Thus, considering the viewers who may see the project is an important part of assessing its impacts. The viewer might be a motorist using the roadway and looking

