

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT
U. S. DEPARTMENT OF VETERANS AFFAIRS
Abraham Lincoln National Cemetery
Phase 2 Expansion and Phase 1 Improvements
Elwood, Illinois

The Department of Veterans Affairs (VA) announces the preparation and availability of a Draft Environmental Assessment (DEA) for the proposed construction associated with Phase 2 Expansion and Phase 1 Improvements at the Abraham Lincoln National Cemetery located in Elwood, Illinois. The proposed Phase 2 burial expansion will provide approximately 17,750 gravesites for full-casket and in-ground cremation burials, and columbarium niches on approximately 25 acres. The project includes construction of a modified entry road and a new access road to the Phase 2 area along with two new detention basins. Also included are improvements to the existing cemetery (Phase 1), such as infrastructure repairs and equipment upgrades. The DEA has been prepared in accordance with the regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA), (Public Law 91-190, 42 USC 4321-4347 January 1, 1970), amendments, and VA's Implementing Regulations (38 CFR Part 26). The VA intends to issue a "Finding of No Significant Impact" (FONSI) following a thirty day comment period in accordance with the Council on Environmental Quality Regulations for Implementing NEPA, Section 1508.13 providing there are no substantive comments which warrant further evaluation. The DEA can be found online at <http://www.cem.va.gov/cem/EA.asp> or at the following locations: Abraham Lincoln National Cemetery Administrative Office, 20953 W. Hoff Road, Elwood, IL 60421, (815) 423-9958 and the Manhattan-Elwood Public Library, 240 Whitson Street, Manhattan, IL 60442, (815) 478-3987.

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Abraham Lincoln National Cemetery Phase 2 Expansion and Phase 1 Improvements Draft Environmental Assessment

Project No. 915PC2003

Contract No. VA101CFM-P-0021

Prepared for:
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Executive Summary

The United States Department of Veterans Affairs (VA), National Cemetery Administration (NCA) operates the Abraham Lincoln National Cemetery (ALNC) in Elwood, Illinois, approximately 50 miles south of Chicago. The cemetery, located on the grounds of the former Joliet Army Ammunition Plant site, totals 982 acres and provides space to accommodate casketed and cremated remains. Currently, approximately 150 acres within the site are developed, which includes approximately 30,100 burial spaces, a Public Information Center (P.I.C.), four committal service shelters, a memorial walkway, a carillon, and a kiosk grave locator.

The purpose of this project is to continue the services provided by an established and existing national cemetery that provides burial facilities for eligible veterans in the Chicago area. The proposed Phase 2 burial expansion will provide approximately 17,750 gravesites for full-casket and in-ground cremation burials, and columbarium niches on approximately 25 acres. The project includes construction of a modified entry road and a new access road to the Phase 2 area along with two new detention basins. Also included are improvements to the existing cemetery (Phase 1), such as infrastructure repairs and equipment upgrades.

The National Environmental Policy Act (NEPA) requires by law that the VA evaluate any effect its actions might have on the environment. This Environmental Assessment (EA) of the proposed action serves the purpose of meeting that requirement.

The development is expected to result in minor and predominately short-term impacts which will be mitigated as noted in this document. Based on this Environmental Assessment and coordination with local, state and federal regulatory agencies, no findings of environmental significance were identified. A Finding of No Significant Impact (FONSI) is appropriate for the development of the Preferred Alternative and an Environmental Impact Statement (EIS) is not warranted.

**ABRAHAM LINCOLN NATIONAL CEMETERY
DRAFT ENVIRONMENTAL ASSESSMENT**

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Section 1.

Project Purpose and Description of Need

The National Cemetery Administration (NCA) within the U.S. Department of Veterans Affairs (VA) is responsible for establishing, constructing, and maintaining national cemeteries. The goal of the NCA is to provide eligible veterans reasonable access to VA burial options. Reasonable access implies that a national or state veteran cemetery is available within 75 miles of the veteran's place of residence.

1.1 PROJECT BACKGROUND

Abraham Lincoln National Cemetery (ALNC) is located in Elwood, Illinois, approximately 50 miles south of Chicago (Figure 1-1). The cemetery, located on the grounds of the former Joliet Army Ammunition Plant site, totals 982 acres and provides space to accommodate casketed and cremated remains. Currently, approximately 150 acres within the site are developed, which includes approximately 30,100 burial spaces (14,000 gravesites, 5,500 lawn crypts, 9,000 columbaria niches, and 1,600 garden niches), a Public Information Center (P.I.C.), four committal service shelters, a memorial walkway, a carillon, and a kiosk grave locator.

1.2 PURPOSE AND NEED FOR ACTION

The purpose of this project is to continue the services provided by an established and existing national cemetery that provides burial facilities for eligible veterans in the Chicago area. In 2008, it was estimated that there would be a population of 406,000 (fiscal year 2007) veterans that would be served by ALNC. By providing new burial sites, this will allow the cemetery to continue to meet the need for a national cemetery in northeastern Illinois. Past national cemetery use has demonstrated that few people will utilize cemeteries farther than 100 miles from their residence or that cross a state line.

The cemetery, dedicated in 1999, is the 117th national cemetery established under the NCA. It is intended that ALNC will ultimately provide 400,000 burial spaces. The proposed Phase 2 burial expansion will provide approximately 17,750 gravesites for full-casket and in-ground cremation burials, and columbarium niches. Also included in this development project are improvements to the existing cemetery (Phase 1), such as infrastructure repairs and equipment upgrades.

1.3 ENVIRONMENTAL ASSESSMENT

The National Environmental Policy Act (NEPA) requires federal agencies to evaluate and consider environmental impacts for all federal projects. The level of documentation required depends on the level of impacts. A categorical exclusion is for minor actions that have been

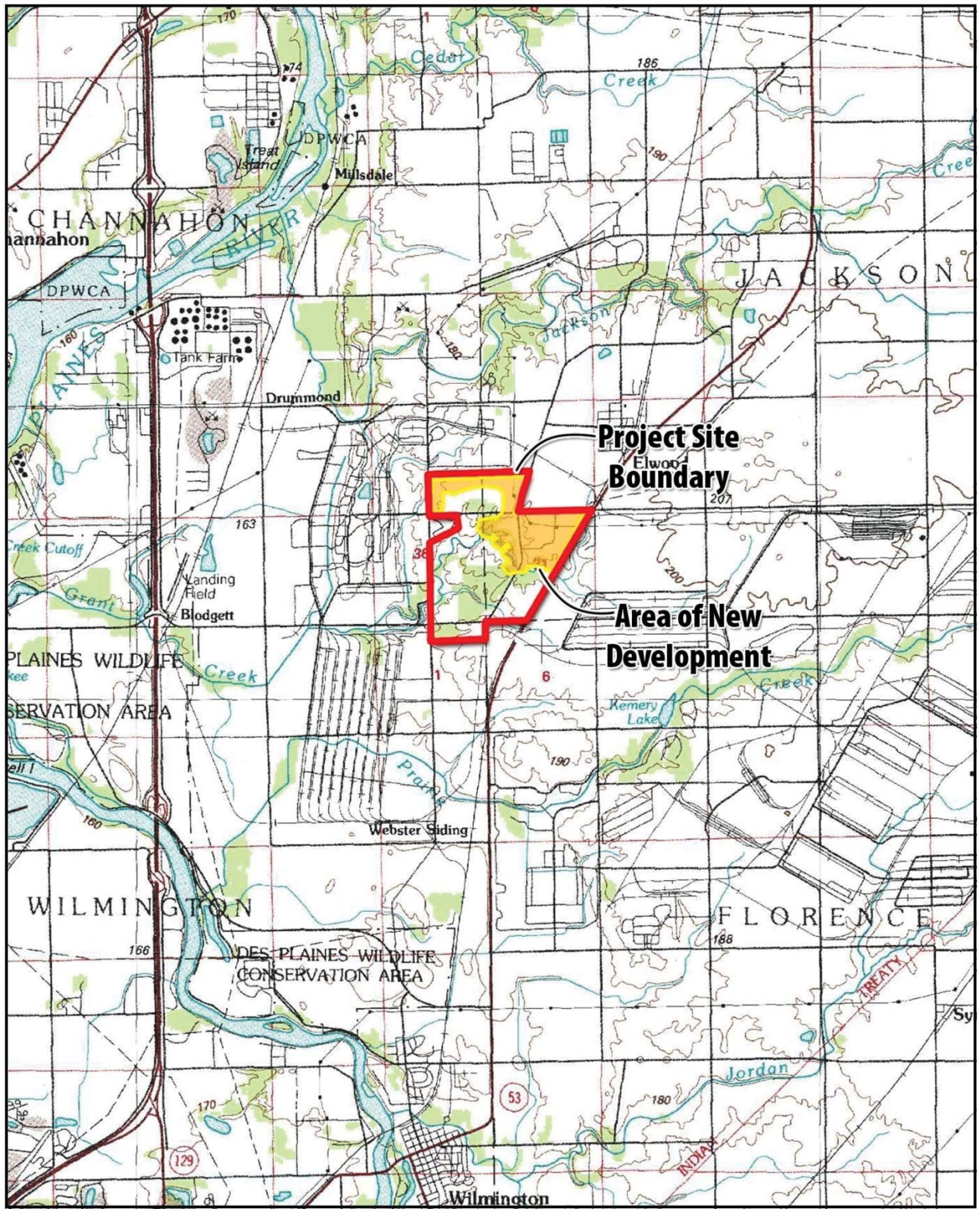


Figure 1.1
Location Map



previously determined to have no significant environmental impact. An Environmental Assessment (EA) is utilized to determine if a federal project would significantly affect the environment. An Environmental Impact Statement (EIS) is prepared for actions that are anticipated to significantly impact the environment.

It was determined that an EA is the appropriate level of documentation for the proposed improvements at ALNC. An EA is intended to be a concise public document that analyzes the environmental impacts of a proposed action.

This EA was prepared in compliance with the National Environmental Policy Act of 1969, the President's Council on Environmental Quality (CEQ)'s regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and the Department of Veterans Affairs' NEPA regulations (38 CFR 26).

In carrying out its mission, the VA intends to:

- Ensure that all practical means and measures are used to protect, restore, and enhance the quality of the human environment;
- Avoid or minimize adverse environmental consequences;
- Preserve historical, cultural, and natural aspects of our national heritage; and,
- Achieve a balance between the use and development of resources within the sustained capacity of the ecological system involved.

Section 2.

Description of Project Alternatives

2.1 DESCRIPTION OF ALTERNATIVES

A range of alternatives were considered that would allow for implementation of improvements within ALNC. The alternatives were evaluated based on their ability to meet the goals of the cemetery and level of impact.

The existing facilities at the cemetery include over 30,000 burial spaces, a P.I.C., committal service shelters, a memorial walkway, a carillon, a kiosk grave locator, entrance drive, internal access roadways, and administration and maintenance buildings. See Figure 2-1 for an illustration of existing cemetery conditions.

The developed portion of the cemetery totals approximately 150 acres. The entire site totals 982 acres. Due to such a large portion of undeveloped land remaining within the parcel owned by the ALNC, all alternatives for expansion are located within this existing parcel (Figure 1-1).

One alternative considered included the No Build Alternative. Although the option of continuing with current management activities and maintaining the current level of development does not solve the need for additional gravesites or improvements at the cemetery, this alternative forms the basis from which all action alternatives are evaluated.

2.2 ALTERNATIVES CONSIDERED AND DISMISSED FROM DETAILED ANALYSIS

During the evaluation of ALNC and its future needs, several alternatives were evaluated. The following alternatives were not considered feasible and were dismissed from further consideration. All three of these sites are located entirely within the property owned by the ALNC.

2.2.1 Northern Development Area (Site 1)

The northern site is located north of the committal shelters and extends north to Walter Strawn Drive. This site is approximately 150 acres and consists of gentle to rolling terrain with some abrupt drop-offs (Figure 2-2). This site is open and covered with native volunteer vegetation. Mature oak woodlands exist along the southern boundary of this site. Although close to committal shelters A-C and proximal to the maintenance facility, electric and irrigation utilities would need to be extended into this area.

Excess soil from the construction of the CenterPoint Intermodal Facility was placed in this area of the existing cemetery property. Up to two thirds of this area was filled with 13- to 20- feet of dark gray clay fill with trace sand, roots, and stems. In addition, all of the topsoil stripped from



Figure 2.1
Existing Conditions





Figure 2.2
Development Area Location Map



the construction area was stockpiled east of the ComEd power transmission lines that cross through this area of the site. Since construction of the CenterPoint Intermodal Facility, many large warehouse buildings and heavy tractor-trailer activity has created a near-term deterrent for expansion of the cemetery in this area. Views to the nearby facilities and the truck noise make this site currently incompatible with a cemetery use. Significant berming and the maturation of proposed screen plantings would be required to block unsightly views and make this area suitable for burial expansion.

This north site was not considered a viable option for expansion due to open views to adjacent trucking activity and the number and degree of unknown conditions, including stability and content of approximately 15-feet of fill spread over the site and the abandoned Joliet Army Ammunition Plant utilities that lie beneath.

2.2.2 Southern Development Area (Site 2)

The southern site is located in the southeast corner of the site, south of the existing facilities and the existing bridge over Grant Creek (Figure 2-2). A former agricultural field with rolling topography and good external visibility from IL-53, this 48-acre potential development area is nicely situated south of Grant Creek. The mature oak forest to the west and along the creek provides a pleasing sense of enclosure. Selective screening and landscape buffering would be required along the IL-53 and railroad rights-of-way to minimize traffic noise while still permitting visibility. The primary limitation for selecting this site is the need for a replacement bridge across Grant Creek to be designed and constructed prior to excavation of the new crypt areas. The floodplain of Grant Creek has only been approximated by Federal Emergency Management Agency (FEMA) in this area of Will County. A complete hydraulic and hydrologic study is needed to determine the existing floodplain elevation and to correctly size the bridge to withstand flooding and not increase upstream flood elevations. In addition to the bridge, utilities (electric and irrigation) would also need to be extended to this zone. The long distance between the committal shelters, the maintenance facility, and this southern site will likely require construction of a satellite equipment storage facility.

The south site was dismissed from further consideration for cemetery expansion due to lack of access from within the cemetery. The existing bridge is unsafe for vehicular traffic and needs to be replaced before further development could occur. Additional topographic survey and hydrologic-hydraulic modeling would be required before the bridge could be designed, which would impact the construction timing in this southern site.

2.2.3 Western Development Area (Site 3)

The western site is located west of the existing memorial walk and Assembly Area, west of Grant Creek (Figure 2-2). Surrounded on all sides by mature oak forest and situated in the center of the property away from vehicular activity, the western site offers the most appropriate character for a cemetery expansion. It comprises 36 acres of rolling terrain formerly used for agricultural crop production. Similar to Site 2, a limiting factor to expansion

in this area is the need for bridge replacement prior to excavation for crypt installation. Irrigation and electric lines would need to be extended to this area as well. The primary concern is that the fringe between the woods and agricultural operations (short grasses) is prime habitat for the upland sandpiper (*Bartramia longicauda*), which is listed as endangered in the State of Illinois.

The western development area, Site 3, was dismissed from further expansion consideration as it is prime habitat for an Illinois-listed endangered bird species - the upland sandpiper (*Bartramia longicauda*).

2.3 ALTERNATIVES RETAINED FOR DETAILED ANALYSIS

The following alternatives were considered feasible and were carried forward for further evaluation.

2.3.1 No Build Alternative

The No Build Alternative assumes that no development would occur at the cemetery other than to maintain the existing facilities. Stormwater improvements would not be implemented, no new parking or new burial areas would be added, thus discontinuing interments at the cemetery.

2.3.2 Eastern Development Area (Preferred Alternative)

The east site would be primarily located between the main access drive and IL-53 (Figure 2-2). The approximately 25 acres of eastern development area consists of flat to gently rolling terrain that drains toward Grant Creek and its tributaries. This area was previously graded for future burial use when the cemetery was constructed, and its turf cover has been maintained by the cemetery since 1999.

Under this alternative, three types of improvements would occur: reuse of existing maintained area, improvements to existing cemetery, and development or new use in non-maintained natural area. These improvements would provide for new burial areas and improve and expand on the existing facilities.

The reuse of existing maintained areas includes the new burial area. The crypt burial area would be located southeast of the existing access drive (Figure 2-3). This would create 12,400 new pre-placed double-depth lawn crypts. A new road would be created to access the new crypt burial sections. This area was previously intended for traditional in-ground burials; however, groundwater conditions have precluded burial in this area. The area has no current use, but has been maintained due to proximity to the entry boulevard. A new detention basin would be constructed south of the new crypt section to collect and detain stormwater runoff from the impervious surfaces. The new burial area would continue to the west, south of the existing access drive. This would include 2,500 in-ground cremation gravesites.

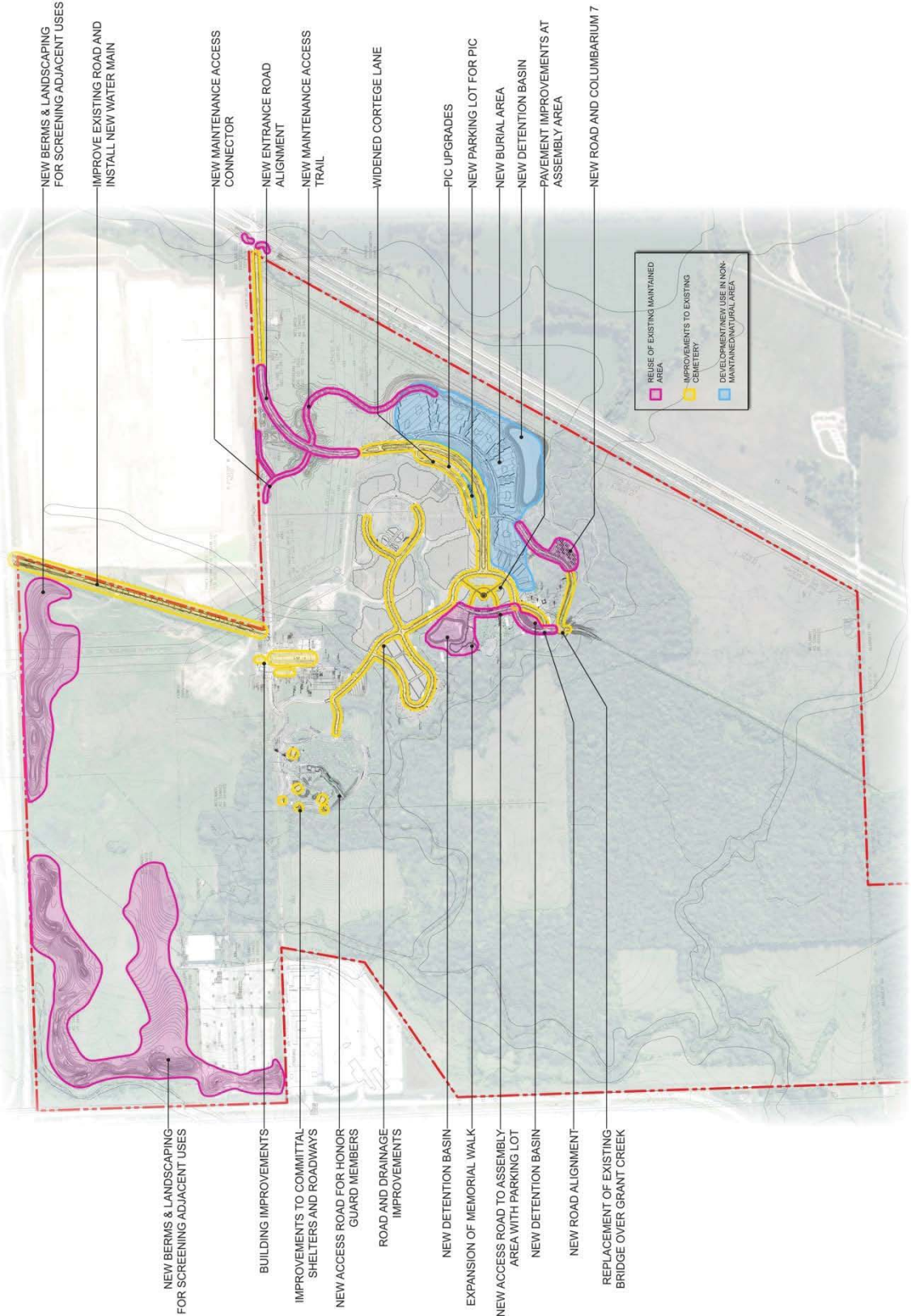


Figure 2.3 Preferred Alternative



Development or new use in non-maintained natural areas includes the construction of the new entrance road, which would be on a new alignment from West Hoff Road. This new alignment provides direct access to the cemetery avoiding user arrival at the administration and maintenance buildings. A new maintenance access connector would also be constructed from West Hoff Road. An existing maintenance access drive is non-existent. This new connector would allow for improved maintenance access without interrupting the visitor experience.

A new road and new columbarium (No. 7) would be constructed south of the new burial areas and north of Grant Creek. The columbarium would provide 6,500 new cremation niches. The new access road would connect the new burial areas and the columbarium. A parking lot would be constructed for the P.I.C., which houses the gravesite locator and public restrooms. Currently there is only a drop-off zone adjacent to Abraham Lincoln Boulevard that can accommodate approximately three vehicles.

Two additional detention basins would be constructed west of the Assembly Area to collect stormwater runoff from impervious surfaces in that area. A new access road would be constructed along with a new parking lot for the Assembly Area and memorial walk. The parking area and new sidewalks improve accessibility under the requirements of the Americans with Disabilities Act (ADA) to the Assembly Area. The memorial walk, which contains donated monuments, is near capacity and would be expanded in this area as well.

A new access road for the honor guard members would be constructed in the northwest corner of the developed areas near the committal shelters.

Extensive landscaped berms approximately 8-feet high would be located along Walter Strawn Drive and Baseline Road. The berms and landscaping would provide screening from the adjacent uses to the north and west for future cemetery development phases.

Improvements to the existing cemetery include:

- Demolition of the former Joliet Arsenal Administration building and parking lot on the northern portion of the property;
- South Diagonal Road and West Hoff Road improvements;
- Installation of a new water main connected to the Elwood domestic water supply;
- Upgrades to the irrigation system;
- Improvements to the administration and maintenance buildings;
- Improvements to the Honor Guard facility;
- Improvements to committal shelters and associated roadways;
- Improvements to Columbaria 1-3 caps and pavement;
- Internal roadway and drainage improvements;
- Assembly Area improvements;
- Replacement of bridge over Grant Creek;
- Widened cortege lane;
- P.I.C. building upgrades; and,

- Improvements to the existing entry sign.

2.4 PREFERRED ALTERNATIVE

The eastern development site was selected as the preferred site. Minimal site preparation for crypt installation would be required; however, extensive earthwork would be required to provide proper orientation and slope for new crypt sections. This site is adjacent to existing burial areas and other cemetery uses and utilities are easily accessible. The adjacency to IL-53 provides external exposure, but some segments would need additional screening to minimize motor vehicle and train visibility and noise.

Section 3.

Affected Environment

This section describes existing conditions within the project site and the immediate surrounding areas. The project site is located within the currently developed areas of the cemetery and on the northern part of the property, just south of Walter Strawn Drive. This description serves as a basis for the subsequent assessment of the potential impacts (present in Section 4 of this EA). The work was completed in accordance with the guidelines of the Department of Veterans Affairs's Environmental Compliance Manual (VA, 1998).

3.1 AESTHETICS AND NOISE

Most of the cemetery remains in a natural state. The site totals 982 acres and approximately 150 acres is developed. The portions of the site that are developed have been created to reflect a natural park-like setting.

The cemetery is bordered to the west and north by industrial land use, including the future site of the CenterPoint Intermodal Facility. Land use to the east and south is predominantly open space and agricultural land.

Noise at the site primarily consists of vehicular noise from the adjacent roadways and rail noise from the adjacent tracks. Periodic noise is generated by ground maintenance activities and gun salutes.

3.2 AIR QUALITY

Air pollutants are contaminants in the atmosphere. Many man-made pollutants are a direct result of the incomplete combustion of fuels including coal, oil, natural gas, and gasoline.

The Clean Air Act of 1970 (CAA), the 1977 Clean Air Act Amendments, and the 1990 Clean Air Act Amendments (CAAA) are the applicable regulations that govern air quality for the project area. Under the CAAA, the U. S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to the CAA requirements. The air quality provisions of the CAA, as amended, are intended to ensure the integration of air quality planning in all transportation-related projects.

The establishment of the National Ambient Air Quality Standards (NAAQS) by the Environmental Protection Agency (EPA) was directed in the CAA, and their attainment and maintenance was reinforced in later amendments. The goal of air quality monitoring and actions is to ensure that the air quality levels of the various pollutants do not exceed the set standards. These standards are summarized in Table 1.

Table 1: National Ambient Air Quality Standards (NAAQS)

| Criteria Pollutant | Primary (Health Related) | | Secondary (Welfare Related) | |
|---------------------------------------|--|------------------------------------|-----------------------------|-----------------------------------|
| | Type of Average | Standard Level Concentration | Type of Average | Standard Level Concentration |
| Carbon Monoxide, CO | 8-hour | 9 ppm (10 mg/m ³) | No Secondary Standard | |
| | 1-hour | 35 ppm (40 mg/m ³) | | |
| Lead, Pb | Maximum Quarterly Average | 1.5 µg/m ³ | Same as Primary Standard | |
| Nitrogen Dioxide, NO ₂ | Annual Arithmetic Mean | 0.053 ppm (100 µg/m ³) | Same as Primary Standard | |
| Ozone, O ₃ | 4 th Highest 8-Hour Daily Maximum | 0.085 ppm (157 µg/m ³) | Same as Primary Standard | |
| Particulate Matter, PM ₁₀ | 24-Hour | 150 µg/m ³ | Same as Primary Standard | |
| Particulate Matter, PM _{2.5} | Annual Arithmetic Mean | 15 µg/m ³ | Same as Primary Standard | |
| | 98 th percentile 24-hour | 35 µg/m ³ | | |
| Sulfur Dioxide, SO ₂ | Annual Arithmetic Mean | 0.03 ppm (80 µg/m ³) | 3-Hour | 0.5 ppm (1300 µg/m ³) |

The Air Quality Division of the Illinois Environmental Protection Agency (IL EPA) produces an Annual Air Quality Report, which outlines the attainment status of the state. According to the 2007 Air Quality Report, the project area is in attainment with the NAAQS for ambient concentrations of carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and coarse particulate matter (PM₁₀).

As of July 31, 2009 (EPA 2009), Will County is in non-attainment for 8-hour ozone and particulate matter (PM_{2.5}). A non-attainment area is an area that does not meet the national primary or secondary ambient air quality standard. The CAA requires additional air pollution controls in these areas.

3.3 COMMUNITY SERVICES

ALNC is located adjacent to the Village of Elwood (Village). The Village is in the process of annexing the cemetery. The site is serviced by the Village of Elwood police and fire departments. The closest community services are located within the heart of the Village, which is approximately 2 miles northeast of the cemetery. These services include, the police station, fire station, Elwood school (K-8), two community parks, and one church.

The nearest high school is located 11 miles to the north and the nearest hospital is located 13 miles to the north, both in Joliet. The Midewin National Tallgrass Prairie is administered by the U.S. Department of Agriculture Forest Service and is located approximately 5 miles south of the cemetery.

3.4 ECONOMIC ACTIVITY

The Village had a total population of 1,620 in 2000 (U.S. Bureau of Census, 2009). The top employers in the area include Provena Saint Joseph Medical Center (2,500 employees), Silver Cross Hospital (1,800 employees), Empress Casino (1,756), Caterpillar, Inc (1,500), and Harrah's Joliet Casino and Hotel (1,100) (Will County Center for Economic Development, 2009). ALNC employs 17 people and attracts approximately 70,500 visitors per year.

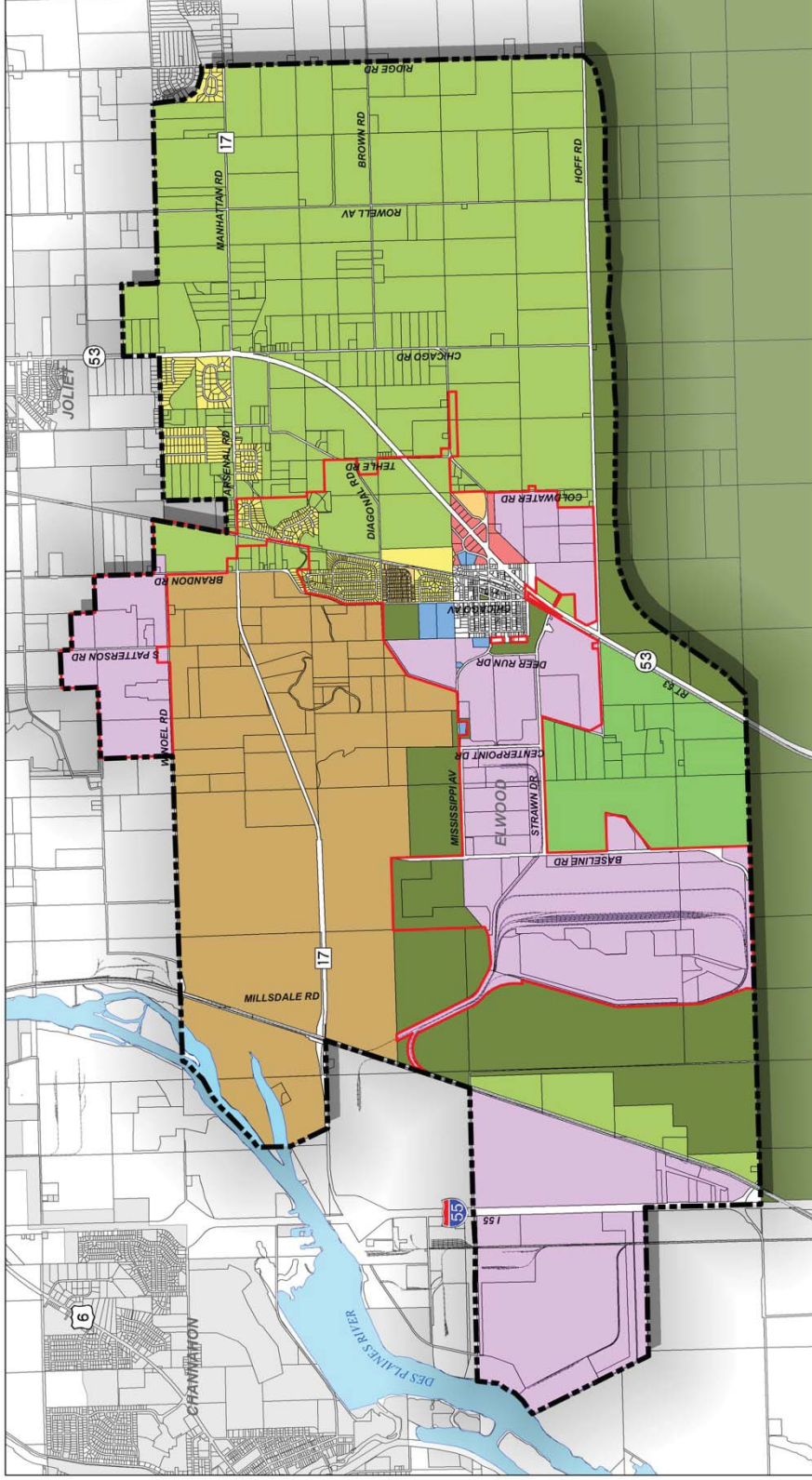
3.5 RESIDENT POPULATION

In 2000, the Village had a total population of 1,620 (U.S. Bureau of Census, 2009). There are a total of 637 households with an average household size of 2.54 persons. There are 675 housing units, of which 637 are occupied (94 percent). Of the occupied housing, 530 are owner occupied (83 percent).

The existing cemetery property is 982 acres and is entirely owned by the VA. There are no residences located within the cemetery.

3.6 LAND USE

The cemetery is located in Will County in both Channahon and Jackson Townships. The Village is in the process of annexing the cemetery. The cemetery is located within the Village's planning area as shown on both the Existing Land Use Map (Figure 3-1) and Proposed Land Use Map (Figure 3-2) (Village of Elwood, 2008). On both maps the cemetery is indicated as the Abraham Lincoln National Cemetery and the land surrounding the cemetery to the north of Walter Strawn Drive and west of Baseline Road is indicated as industrial. West Hoff Road and South Diagonal Road are owned by the cemetery. Land to the east and south is predominately either open space or agricultural land.



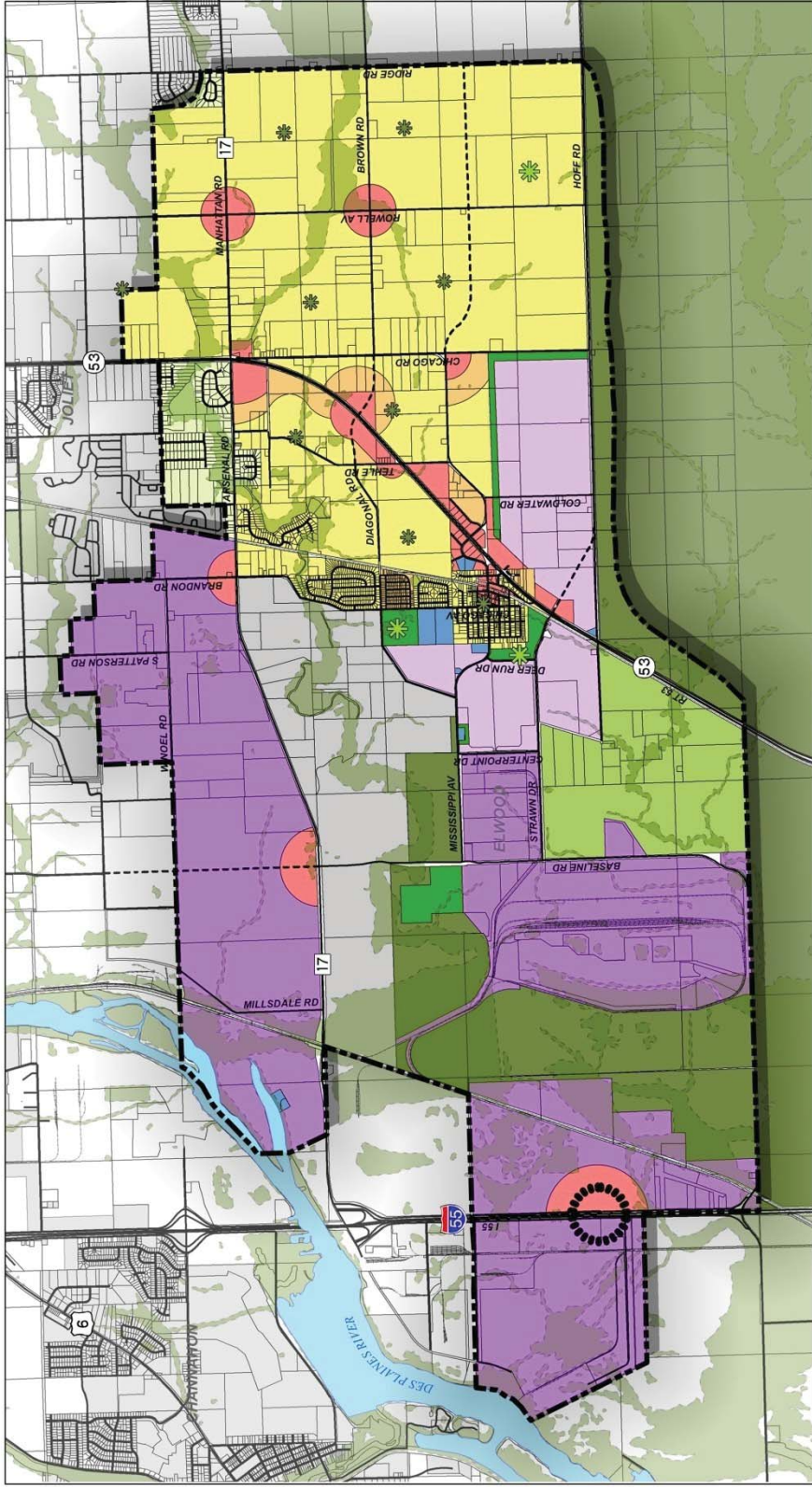
Source: Village of Elwood

Legend

- Planning Area
- Elwood Corporate Limits
- Agricultural/Rural Residential
- Industrial
- Single-Family Residential
- Government/Institution
- Multi-Family Residential
- Utility
- Open Space
- Abraham Lincoln National Cemetery
- Joliet Army Training Area
- Utility
- Nearby Municipalities

Figure 3.1
Existing Land Use





Source: Village of Elwood

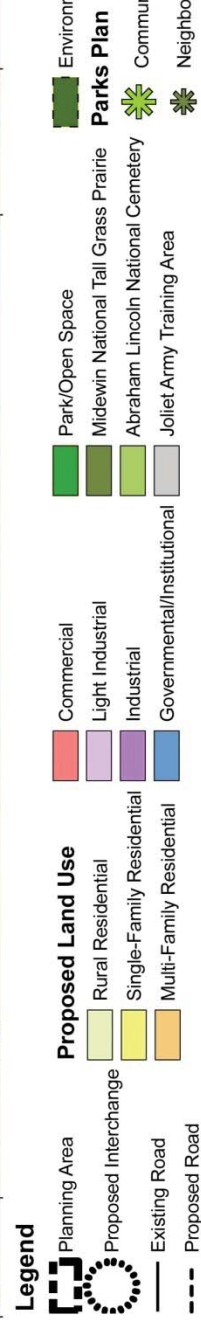


Figure 3.2
Proposed Land Use



3.7 REAL PROPERTY

The existing cemetery is 982 acres, of which 150 acres are currently developed. The NCA owns the entire site. No additional property would be acquired for the expansion.

3.8 CULTURAL AND HISTORIC RESOURCES

A Phase I archaeological survey was conducted during March and April of 2009 for the proposed expansion. The survey was conducted to determine whether the project area contains previously recorded or unrecorded archaeological sites that may be eligible for listing on the National Register of Historic Places (NRHP). A literature review and site reconnaissance was conducted. The literature review indicated that during previous studies, five archaeological sites and isolated finds were previously recorded. A grid of shovel tests was used in the high probability areas, including any known sites. All finds and sites are either not eligible for the NRHP or were previously disturbed (The 106 Group, Ltd., 2009). No further testing for archaeological resources is needed. A complete copy of the survey report can be found in Appendix A.

Phase I and Phase II architectural history surveys were also conducted during the same timeframe as the archaeological survey (Appendix B). The purpose of the architectural history surveys was to determine whether the project area contains previously recorded or unrecorded buildings, structures, or other architectural properties that may be eligible for listing on the NRHP.

A total of eight properties were identified: four previously identified properties and four newly identified (The 106 Group, Ltd., 2010). Of the properties identified, Alternate Route 66 is the only one currently listed on the NRHP. The developed burial sections of ALNC are eligible per clarification by the Keeper of the National Register in 1981. Two of the properties are recommended as eligible: the Chicago and Mississippi Railroad and the Reed's Grove Cemetery. One site is no longer in existence. Three properties are recommended as not eligible: the existing Grant Creek Bridge, a farmstead and the Joliet Army Ammunition Plant. The eligibility status for these sites is summarized in Table 2.

In addition to the cultural resources investigation conducted by The 106 Group, Ltd., Native American tribes with historical or cultural connections to the region were consulted in accordance with Section 106 requirements (Appendix E).

Table 2: Summary of Architectural Properties

| Name | City/Township | NRHP Status |
|--|---|--------------|
| Alternate Route 66, Wilmington to Joliet | IL-53, Jackson Township | Listed |
| Abraham Lincoln National Cemetery | Jackson Township | Eligible |
| Chicago and Mississippi Railroad | Jackson Township | Eligible |
| Reed's Grove Cemetery | Jackson Township | Eligible |
| Farmstead, 26935 IL-53 | Jackson Township | Not eligible |
| Grant Creek Bridge | Jackson Township | Not eligible |
| Joliet Army Ammunition Plant | Channahon, Florence, Jackson, Manhattan, Wilmington, and Wilton Townships | Not Eligible |

Source: The 106 Group, Ltd., 2010

3.9 FLOODPLAINS, WETLANDS, COASTAL ZONES

Executive Order 11988, *Floodplain Management*, states that federal agencies, “shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains.” This requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternative exists. Certain construction within a 100-year floodplain requires preparation of a statement of findings.

Grant Creek and its tributaries cross through the cemetery. FEMA flood insurance rate maps (FIRM) (Map #17197C0270 and #17197C0290E) estimate that the areas along Grant Creek and

its tributaries are within the 100-year flood hazard areas with no base flood elevations determined (Zone A) (FEMA, 1995).

Federal laws, regulations, and policies that regulate activities in wetlands include: Section 404 of the Clean Water Act and Executive Order 11990, Protection of Wetlands. Executive Order 11990, Protection of Wetlands, requires federal agencies to avoid, where possible, adversely impacting wetlands. A field inspection was conducted on June 30 and July 1 of 2009 to identify the extent and character of wetlands within the project area. A complete copy of the wetland determination report can be found in Appendix C. During the field inspection, three wetlands were identified (Figure 3-3) within the project area.

Wetland A is an approximately 6.4 acre emergent/wet meadow wetland that runs along Walter Strawn Drive in an undeveloped portion north of the cemetery property. It is adjacent to the drainage ditch along the road, but is separated by a slight berm that is likely spoil piles from ditch cleanouts.

The center (and majority) of Wetland A was dominated by giant reed (*Phragmites australis*) ringed by a population of reed canary grass (*Phalaris arundinacea*), with an outer fringe of more diverse wetland species. These species include common water plantain (*Alisma subcordatum*), foxtail sedge (*Carex vulpinoidea*), Bebb's sedge (*Carex bebbii*), Torrey's sedge (*Juncus torreyi*), dark green bulrush (*Scirpus atrovirens*), common beggar's ticks (*Bidens frondosa*), germander (*Teucrium canadense*), and rice cut grass (*Leersia oryzoides*). On the northern boundary of this wetland was an area slightly lower in elevation that had populations of giant reed, cattail (*Typha angustifolia*), red bulrush (*Scirpus pendulus*), and common water plantain.

Wetland B is a 0.5-acre forested wetland that is part of a wooded area at the southwest corner of the intersection of Hoff Road and IL-53. Railroad tracks run parallel to the west side of IL-53 between the wetland and IL-53. A drainage ditch, which runs parallel to the tracks and drains into Grant Creek to the south, is part of this wetland. The adjacent ditch had approximately 12 inches of slowly moving water in it during the field visit.

The wetter southern portion of Wetland B was dominated by elderberry (*Sambucus canadensis*), willow species (*Salix* sp.), box elder (*Acer negundo*), reed canary grass, marsh blue grass (*Poa palustris*), silver maple (*Acer saccharinum*), cottonwood (*Populus deltoides*), hog peanut (*Amphicarpus bracteata*), and riverbank grape (*Vitis riparia*). The northern area left out of the flagged boundary was dominated by white mulberry (*Morus alba*), tatarian honeysuckle (*Lonicera tatarica*), starry solomon's seal (*Smilacina stellata*), white snakeroot (*Eupatorium rugosum*), and hog peanut. The area between the ditch and the railroad tracks was dominated almost entirely by reed canary grass, which is occasionally mowed within the easement, according to photographs taken at various times of the year.

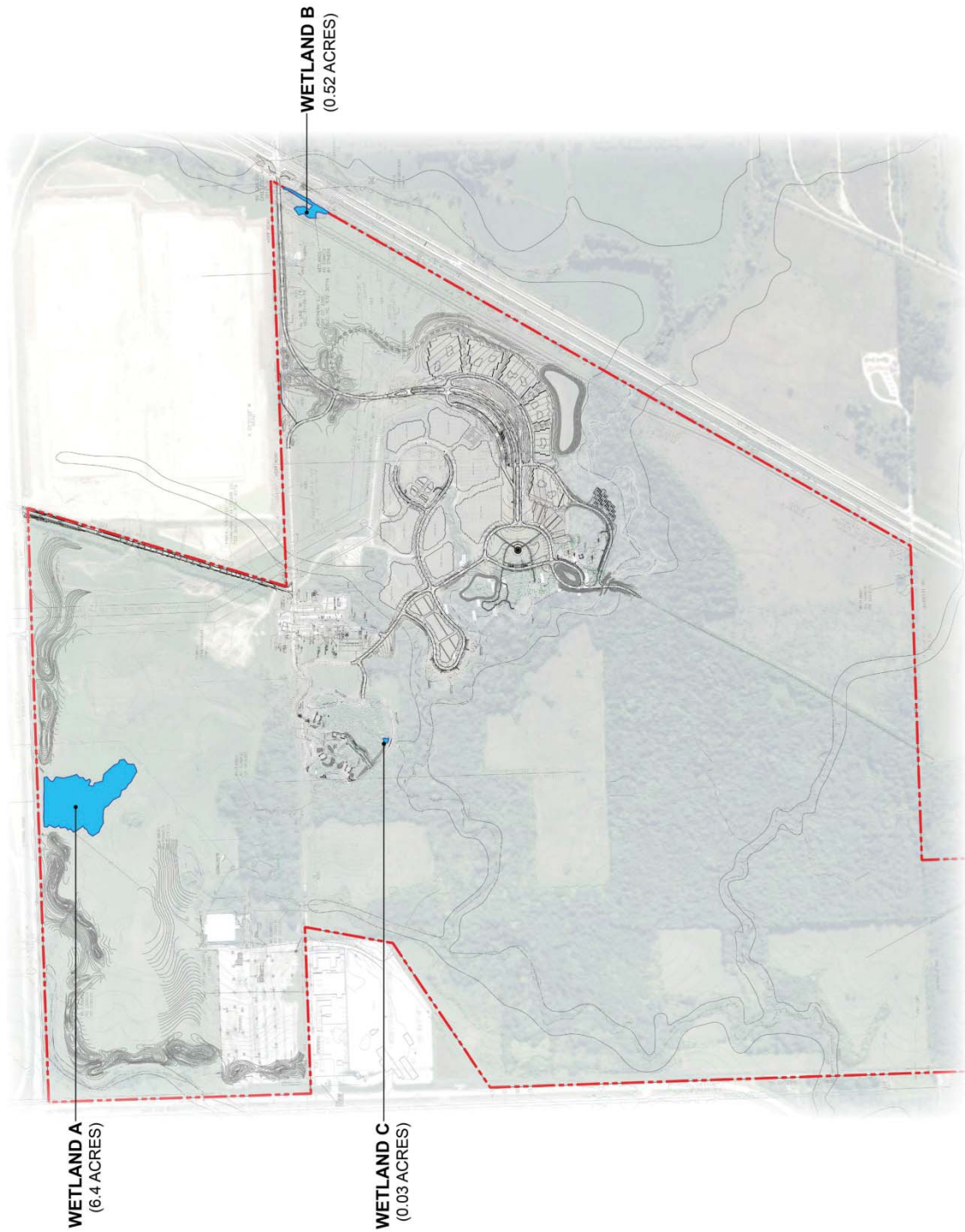


Figure 3.3
Wetland Resources

Wetland C is a very small 0.03-acre emergent/scrub shrub wetland that includes a small stream that carries runoff down to Grant Creek. The wetland has apparently formed due to restriction at a culvert running under the committal shelter loop road. A puddle of standing water is what is left of the original stream channel.

This wetland was dominated by reed canary grass, fowl manna grass (*Glyceria striata*), germander, wingstem (*Verbesina alternifolia*), common beggar's ticks, lady's thumb (*Polygonum persicum*), curly dock (*Rumex crispus*), dark green bulrush, smooth gooseberry (*Ribes subhirtellum*), willow species, paw paw (*Asimina triloba*), and American sycamore (*Platanus occidentalis*).

3.10 GEOLOGY AND SOILS

The prior Final Supplemental Environmental Impact Statement for the cemetery (VA, 1994) indicated that bedrock or boulders are not located within 10-feet of the ground surface. The Geotechnical Investigation Report from Pioneer Engineering and Environmental Services (2009a) observed the following:

The soils generally consisted of one to four feet of topsoil and clay fill overlying tough to hard clay with interbedded lenses of silt, sand, and gravel, extending to a depth of about 44 feet below existing grade where bedrock was inferred. Groundwater levels vary from surface grade to approximately 20 feet below existing grade. Groundwater is generally encountered within a perched aquifer(s) within the more permeable sandy clay, silt, sand, and gravel lenses within the clay till, as well as within the fractured zone within the upper clay till unit. Groundwater generally flows towards Grant Creek.

Nine soils series and 14 different soil mapping units were identified within the cemetery (NRCS, 2009). The soils series include: Blount, Camden, Elliot, Varna, Ashkum, Beecher, Ozaukee, Markham, and Lawson. All of these soils are silt loams, except for Ashkum, which is a silty clay loam).

3.11 HYDROLOGY AND WATER RESOURCES

Grant Creek is a perennial stream that crosses through the middle of the site. Three tributaries to Grant Creek traverse the site. The upstream portion of the watershed drains approximately 4.2-square miles. The IL EPA evaluated and ranked bodies of water throughout Illinois. Grant Creek was listed as impaired for aquatic life with an unknown cause (IL EPA, 2008).

There is a total of 14.6 acres of impervious surface within the developed area of the cemetery contributing runoff to an existing traditional stormwater management system. This includes sheet flow directed to swales, curb gutters, and storm sewers that is discharged to a mowed detention basin sized for the 50-year storm event.

3.12 SOLID/HAZARDOUS WASTE

A review of federal and state records was completed to identify known properties listed by state and/or federal agencies as either contaminated or sites of environmental concern (EDR, 2009). The review did not constitute an ASTM International (ASTM) (Standard E1527-94) Phase I Environmental Site Assessment. Several mapped sites were found within the cemetery or within the immediate area (within a 1-mile radius of the cemetery).

The listed sites include the Joliet Army Ammunition Plant, Uniroyal Chemical Company, and the ALNC. Prior studies indicated that the Joliet Army Ammunition Plant was listed on the National Priority List; however, the land within the cemetery is not contaminated with hazardous wastes. The cemetery is listed as a RCRA-CESQG. These are sites that:

Generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).
Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than one kg of acutely hazardous waste per month.

The Joliet Arsenal Administration building and parking lot on the northern portion of the property was identified as having asbestos and lead-based paint (Pioneer, 2009b). Asbestos was detected in both types of floor tiles, pipe elbows, spray-on fireproofing insulation, and exterior black and white caulk. Lead-based paint was detected in the building's exterior paint (roof and boiler room vents) and paint around the north window in the kitchen/storage structure.

3.13 TRANSPORTATION AND PARKING

Vehicular access to the cemetery is from either Hoff Road or South Diagonal Road. Hoff Road is the primary public entrance and exit to the cemetery. Hoff Road is accessed via IL-53. The maintenance and delivery entrance is off South Diagonal Road, which is owned by the cemetery. South Diagonal Road intersects with Walter Strawn Drive (a public road).

There are a total of 160 parking spaces at ALNC. There are 92 spaces for administration and maintenance, five for the P.I.C., 58 for the committal shelters, and five for the honor guard. Parking for gravesite visitation in crypt sections is not designated on minor roadways, but allowed along the road edge.

3.14 UTILITIES

The existing cemetery water is supplied by a well system. The majority of the pumped well water is used for site irrigation, while some is purified for building uses by a chlorination system that is located in the pump station.

The cemetery is serviced by a septic system, not by municipal sanitary sewer. The administration building, maintenance building, and the P.I.C. each have a leach field.

The administration and maintenance buildings are supplied natural gas via the 3-inch main in Hoff Road. The heating for the administration and maintenance buildings is provided by an oil-fired boiler. Electrical service originates from the distribution lines along the western side of IL-53. This electrical service feed splits at the sectionalizing cubicle near burial section 6B to service the Administration/Maintenance complex and the P.I.C.

3.15 VEGETATION AND WILDLIFE

The National Environmental Policy Act of 1969 calls for an examination of the impacts on all components of affected ecosystems. The cemetery consists of gentle rolling hills of traditional lawn in burial areas surrounded by unmown meadows with both weedy and native species, and forested areas. Grant Creek, which traverses the southern portion of the cemetery, typically has steep eroded banks, with banks that are virtually vertical in some areas.

Prior studies (VA, 1994) noted the presence of birds, hawks, pheasant, woodcock, ducks, quail, deer, rabbit, and squirrel. These are all species typical of old field habitat.

3.16 THREATENED AND ENDANGERED SPECIES

The Federal Endangered Species Act (1973) and the Illinois Endangered Species Protection Act (1986) require an examination of impacts on listed threatened or endangered species. The Illinois Ecological Compliance Assessment Tool (EcoCAT) report indicated that the following species were known to occur within the vicinity of the cemetery:

| | | |
|-------------------|-----------------------------|-------------------|
| Loggerhead shrike | <i>Lanius ludovicianus</i> | Listed Threatened |
| Northern harrier | <i>Circus cyaneus</i> | Listed Endangered |
| Upland sandpiper | <i>Bartramia longicauda</i> | Listed Endangered |

Habitat for loggerhead shrike and upland sandpiper does occur on the project site as does potential forage habitat for Northern harrier.

The U.S. Fish and Wildlife Service (USFWS) Endangered Species Program database indicates that the following candidate, endangered, proposed as endangered or threatened species are present in Will County:

| | | |
|--------------------------------|------------------------------|---------------------|
| Hines' emerald dragonfly | <i>Somatochlora hineana</i> | Endangered |
| Eastern massasauga | <i>Sistrurus catenatus</i> | Candidate |
| Sheepnose mussel | <i>Plethobasus cyphus</i> | Proposed Endangered |
| Snuffbox | <i>Epioblasma triquetra</i> | Proposed Endangered |
| Eastern prairie fringed orchid | <i>Planthaera leucophaea</i> | Threatened |

| | | |
|----------------------|--|------------|
| Lakeside daisy | <i>Hymenopsis herbacea/ Tetraneuris herbacea</i> | Threatened |
| Leafy-prairie clover | <i>Dalea foliosa</i> | Endangered |
| Mead's milkweed | <i>Asclepias meadii</i> | Threatened |

With the exception of Eastern massasauga, habitat for the federally-listed species does not occur on the project site. There is potential for Eastern massasauga habitat along the Grant Creek corridor although the closest record of this species is 26 miles to the east. A field inventory confirmed that Eastern massasauga habitat does not exist within the limits of the proposed project and specifically the Grant Creek bridge replacement.

3.17 EXOTIC AND INVASIVE SPECIES

The northwest portion of the project area (north of the committal shelters) contains sizeable areas of reed canary grass (*Phalaris arundinacea*). This species was also found in the wetland identified along the northern property line at Walter Strawn Drive and along the railroad tracks that parallel IL-53. This plant was found in other scattered low-lying areas across the site.

An extensive population of giant reed (*Phragmites australis*) was found in the wetland along Walter Strawn Drive, and lined the ditch that runs along this road. Scattered patches of this plant were found in various other low-lying areas at the project site.

Grant Creek and its tributaries within the project site are bordered by several non-native honeysuckle species (*Lonicera* spp.). This genus is the dominant plant in many areas of the Grant Creek floodplain, as well as some of the forested and scrub-shrub wetland areas that were investigated. The creek floodplain also contained small populations of garlic mustard (*Alliaria petiolata*).

Other miscellaneous invasive species that were encountered in smaller populations at several locations across the project site include multiflora rose (*Rosa multiflora*) and Canada thistle (*Cirsium arvense*).

3.18 ENVIRONMENTAL JUSTICE

The federal government's policy on nondiscrimination in all federally funded activities formally began with Title VI of the 1964 Civil Rights Act. Title VI requires all federal agencies to ensure that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

Further guidance was provided in 1994 with *Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The intent of the Executive Order is to identify and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations.

Minority Populations

Race data from the 2000 U.S. Census (U.S. Census Bureau, 2009) was used to determine the presence of minority populations within Will County and the Village of Elwood area, near the cemetery. According to the Council on Environmental Quality (CEQ), minorities are defined as individuals who are members of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic (1997).

An analysis of the U.S. Census data indicates that minority populations are present near the cemetery, totaling 21 percent of the total population within the Will County and 5 percent in the Village of Elwood.

Low-Income Populations

U.S. Census economic data from the 2000 U.S. Census was used to determine the presence of low-income populations in the project area. The economic data identifies the income required to be below the poverty level and the number of people that are below that level. The U.S. Census Bureau measures poverty according to poverty thresholds, which is most simply defined as a measure of income inadequacy. This method of defining poverty thresholds was developed based on the income level that would cause a family to cut back on food expenditures sharply, assuming food expenses and non-food expenses would be cut at the same rate (Fisher, 1997).

According to the 2000 economic data, there is a percentage of the population below the poverty level near the cemetery, accounting for 5 percent of the total population in Will County and 5 percent in the Village of Elwood.

Section 4.

Environmental Impacts

Potential environmental impacts associated with the Preferred Alternative are presented and described in this section. The work was completed in accordance with the guidelines of the Department of Veterans Affairs' Environmental Compliance Manual (VA, 1998).

4.1 NOISE AND OTHER AESTHETIC CONCERNS

During construction, construction vehicles and equipment would generate noise. This would result in temporary minimal adverse impacts to the surrounding areas.

Once the construction is complete, there would not be an increase in noise levels as a result of the expansion. The annual burial rate is not expected to increase significantly; therefore, the frequency of funerals would remain relatively consistent. The ground maintenance activities would continue, as well as gun salutes during ceremonies. The gun salutes consist of short bursts of noise that would generally occur only during weekdays between the hours of 9:30 a.m. and 2:30 p.m. Overall, the noise impacts from the expansion would result in minimal adverse impacts.

The developed portions of the site are maintained in a natural, park-like setting. These areas are landscaped and maintained. The expanded facilities would be developed and landscaped to remain consistent with the existing facilities. New berms and landscaping would be added on Walter Strawn Drive and Baseline Road to provide screening from the adjacent uses. This would create a moderate beneficial long-term impact to aesthetics at the cemetery.

4.2 AIR QUALITY

Construction for the cemetery expansion would create dust, smoke, and engine emissions. These releases would be controlled by implementing the VA Standard Specifications. Will County is currently in non-attainment for 8-hour ozone and particulate matter; however, the impact on air quality from the operation of the cemetery would be relatively insignificant. Vehicular traffic would increase slightly as the new burial locations are added. Overall, the proposed expansion would result in minimal long-term adverse impacts to air quality.

4.3 COMMUNITY SERVICES

The expansion would not impact community services. All of the surrounding public roads would remain open during and after construction. Vehicular circulation would not change with the exception of temporary on-site traffic shifts related to construction logistics. There would be no impacts to the local schools or emergency services.

4.4 ECONOMIC ACTIVITY

Temporary jobs would be created for the construction of the expanded and improved cemetery. No new permanent employees would be added at the cemetery after the expansion. Under the proposed alternative, minimal short-term impacts to economic activity would be expected.

4.5 RESIDENT POPULATION

There would be no displacements as a result of the proposed alternative; therefore, no impact to the local area population or number of households is anticipated.

4.6 LAND USE

Local zoning and land use designate the cemetery as the Abraham Lincoln National Cemetery. This designation would not change once the cemetery is annexed by the Village. As a result, there would be minimal long-term impacts to zoning or land use as a result of the improvements at the cemetery.

The proposed improvements are on government-owned land and do not impact agricultural land.

4.7 REAL PROPERTY

There would be no property acquisition for the proposed alternative; therefore, there would be no impacts to real property.

4.8 CULTURAL AND HISTORIC RESOURCES

The Illinois Historic Preservation Agency (IHPA) reviewed the Phase I Archaeological Survey (Appendix A) and Phase I and Phase II Architectural History Survey (Appendix B) in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36, CFR 800: "Protection of Historic Properties". As indicated in the concurrence letter (Appendix D) dated December 22, 2010, IHPA determined that no significant historic, architectural, or archaeological resources are located in the project area.

Responses from two tribes, the Citizen Potawatomi Nation and the Kickapoo Tribe of Oklahoma, were received (Appendix E). Both responses stated no objection to the project.

4.9 FLOODPLAINS, WETLANDS, COASTAL ZONES

As part of the Preferred Alternative infrastructure, a bridge replacement is proposed at George Washington Avenue's crossing of Grant Creek. The George Washington Avenue Bridge

replacement will result in impacts to the Grant Creek and its floodplain due to the following activities:

1. Removal of the existing George Washington Avenue Bridge and associated channel regrading.
2. Construction of a new 42-foot span precast concrete arch bridge 40-feet in length.
3. Placement of fill in the Grant Creek floodplain to facilitate construction of the George Washington Avenue/Jackson Lane intersection.

The area of waters of the U.S. to be impacted by the above activities is 0.041 acres. This is under the 0.10 acre limit requiring compensatory mitigation, however, compensatory storage will be provided according to county regulations. The area below the 100-year floodplain (including the acreage listed above) is 0.861 acres. The proposed grading plans show fill placed in waters of the U.S. to be 75.5 cubic yards. The volume of fill placed in 100-year floodplain (including that volume listed above) is 736.1 cubic yards.

These creek and floodplain impacts will require permits in accordance with Part 3700 (Construction in Floodways of Rivers, Lakes and Streams) of the Indiana Department of Natural Resources (IDNR) regulations and Regional Permit 1 (Residential, Commercial, and Institutional Developments) of the US Army Corp of Engineering (USACE) Chicago District regulations. These agencies, along with the Illinois Environmental Protection Agency (IEPA) have developed a joint application form. This process includes coordination with Will County.

Measures will be taken during design and construction to avoid and/or minimize impacts to aquatic resources on the project site. A three-sided culvert was selected for the bridge instead of a box culvert to allow for preservation of a natural stream bottom, and no piers will be installed in the streambed. Riprap is proposed at the base of the bridge to prevent streambed erosion.

In addition, removal of the existing bridge and construction of the proposed bridge will utilize techniques that reduce potential impacts. Bridge demolition will entail removal of loose or unstable bridge components then connection of the remaining bridge assembly to a hoist via chains. The bridge will then be torch-cut and lifted out of the creek area and properly disposed and recycled. Sheet piling will be utilized around the piers of the existing bridge to protect the creek during demolition and removal. Construction of the new bridge foundation will occur during low-flow periods and in the dry with the use of sheet piling to block bankside water flow for footing and foundation work. Dewatering will be used only when necessary. If dewatering is necessary, pumps will be available on stand-by with appropriate filters to direct water to a temporary sediment basin.

Federal laws, regulations, and policies that regulate activities in wetlands include: Section 404 of the Clean Water Act and Executive Order 11990, Protection of Wetlands. A field inspection was conducted on June 30 and July 1 of 2009 to identify the extent and character of wetlands

within the project area. During the field inspection, three wetlands were identified. No impacts would occur to the existing wetlands as a result of the Preferred Alternative.

4.10 GEOLOGY AND SOILS

Excavation for the crypts would result in excess soil. This excess soil would be used in the construction of berms along Walter Strawn Drive and Baseline Road. No additional soil would be needed or required to be removed from the site. The perched high water table would require the installation of an under drainage system within the site.

Surface and subsurface geologic conditions do not represent a significant impact or constraint to implementation of the Preferred Alternative. Implementation of the Preferred Alternative would result in minor short-term impacts to geology and soils.

4.11 HYDROLOGY AND WATER RESOURCES

The design of the proposed stormwater management system includes improving sheet flow into curb gutters and storm sewer systems and eliminating the predominately inefficient existing swales. Portions of Thomas Jefferson Circle and John Adams Drive are proposed to be reconstructed at lower elevations, up to approximately 18 inches, with mountable curb and gutter, in order to eliminate swales between the existing road and the crypt fields and allow sheet flow into the curb gutters.

There is an increase in impervious surface from 14.9 acres to 16.5 acres (1.6 acre total increase) resulting from the proposed improvements. The stormwater management system will meet the requirements of Will County Stormwater Management Ordinance. The detention basins have been designed to detain the volume of a 100-year storm event with a release rate of 0.15 cfs/acre for the on-site disturbed tributary areas, as well as provide sediment control for the 2-year storm event. The existing mowed detention basin, which is only sized for a 50-year storm event, will be replaced with a new, larger basin capable of detaining a 100-year storm event for all existing impervious surfaces at the release rate noted above.

4.12 SOLID/HAZARDOUS WASTE

The Preferred Alternative is not anticipated to have an impact on known properties listed by state and/or federal agencies as either contaminated or sites of environmental concern. If contaminated soil is encountered during construction, proper disposal methods and construction procedures that minimize disturbance of contaminated soils would be utilized.

As reported in the prior Final Supplemental Environmental Impact Statement (VA, 1994):

- The predominately clay overburden that separates the burial area from the ground water usable supply provides more than an adequate buffer to prevent any potential burial pollutants from entering the water supply zone.

- Formaldehyde and other chemicals used in embalming fluids combine with body proteins to form complex compounds that are stable. It is inconceivable that embalming fluids could pose a threat to ground water quality.

Asbestos and lead-based paint were detected in the Joliet Arsenal Administration building. Considering the size of the building, these levels were relatively low. The building would be demolished by personnel that are certified in the removal and handling of asbestos and lead-based paint.

The Preferred Alternative would result in minimal long-term impacts to solid/hazardous waste.

4.13 TRANSPORTATION AND PARKING

Under the Preferred Alternative, traffic is not expected to increase on the adjacent roadways. A minor increase in the number of annual interments is expected from the current rate of 80 to 100 burials per month to 100 to 120 burials per month. The overall traffic in the area is not anticipated to significantly change.

The parking spaces would increase a total of 42 spaces from 160 spaces to 202 spaces. There would be 14 new spaces at the P.I.C., 13 new spaces at the honor guard, and 15 new spaces for the new Assembly Area. The new parking would accommodate the expanded facilities.

The Preferred Alternative would result in minimal long-term impacts to transportation and parking.

4.14 UTILITIES

Under the Preferred Alternative, a new water main would be installed on the west side of Diagonal Road. This water main would connect to the Village public water supply and would replace the use of the existing wells for potable water. The existing wells would be maintained and used for irrigation. There would be no changes to the remaining utilities. These improvements would improve the water service at the cemetery, resulting in minor beneficial long-term impacts to utilities.

4.15 VEGETATION AND WILDLIFE

Most of the site would remain in a natural state. Development in the non-maintained/natural areas would be minimal. The site has been developed as a cemetery since 1999. Wildlife species would still have ample room to migrate within and through the site. The Preferred Alternative would result in minimal short-term impacts to vegetation and wildlife.

4.16 THREATENED AND ENDANGERED SPECIES

Habitat exists on the project site for two of the listed species identified by the Illinois Natural Heritage Database. As noted in Section 2.2, the alternative that potentially impacted upland sandpiper habitat was dismissed. Tree clearing will only be allowed between the months of August and February to provide protection during the March to July nesting season of loggerhead shrike. The Illinois Department of Natural Resources concurs with this approach and has indicated that adverse effects are unlikely (Appendix D).

Records for Northern harrier indicate it occurs within 1-mile of the boundary of the project site. Although this species has not been observed locally, forage habitat does potentially exist. The capacity of this area to serve as forage habitat for Northern harrier will remain intact.

The project would have no effect on the remainder of the listed species identified as potentially occurring in this area due to the fact that no habitat for these species is present.

4.17 EXOTIC AND INVASIVE SPECIES

There is no soil from areas with exotic or invasive species that is anticipated to be used. None of the activities proposed as part of the prepared alternative would promote the spread of exotic or invasive species.

4.18 ENVIRONMENTAL JUSTICE

This project would not have a disproportionately high or adverse effect on either minority or low-income populations. There would be no residential displacements as a result of this project.

While there are not any environmental justice issues associated with the proposed improvements at this time, a continuing effort would be made to identify disproportionately high and adverse impacts to minority and low-income populations during subsequent phases of this project. If such impacts are identified, every effort would be made to involve impacted groups in the project development process and to avoid or mitigate these impacts. The Preferred Alternative would result in minimal long-term impacts to either minority or low-income populations.

4.19 INDIRECT AND CUMULATIVE EFFECTS

The Preferred Alternative is not anticipated to have an impact on vehicular traffic on the adjacent roadways. The rate of interments is not anticipated to increase significantly; however, the overall lifespan of the cemetery would be increased. This would allow for more interments over a longer period of time.

The development at the cemetery would result in an increase in burial sites and impervious surface. The Preferred Alternative would incorporate stormwater improvements to improve water quality at the site.

The cemetery is adjacent to industrial areas along Baseline Road. The cemetery would be expanding within property currently owned and operated by the VA. As such, the secondary impacts resulting directly from the improvements would be minimal.

Section 5. Summary and Conclusions

Based on the information in this EA and coordination with local, state, and federal regulatory agencies and the public, it is anticipated that this project will have no significant impact on the natural or human environment. A summary of the effects is provided in Table 3.

If review and commentary by the public and interested agencies support this determination, this EA will be forwarded to the Department of Veterans Affairs with a request that a Finding of No Significant Impact (FONSI) be prepared and location/design approval be granted.

Table 3: Summary of Effects

| Attributes | None | Minimal | Moderate | Severe |
|--------------------------------------|------|---------|----------|--------|
| Aesthetics and Noise | | X | | |
| Air Quality | | X | | |
| Community Services | X | | | |
| Economic Activity | | X | | |
| Resident Population | X | | | |
| Land Use | | X | | |
| Real Property | X | | | |
| Cultural and Historic Resources | X | | | |
| Floodplains, Wetlands, Coastal Zones | | X | | |
| Geology and Soils | | X | | |
| Hydrology and Water Resources | | X | | |
| Solid/Hazardous Waste | | X | | |
| Transportation and Parking | | X | | |
| Utilities | | X | | |
| Vegetation and Wildlife | | X | | |
| Threatened and Endangered Species | | X | | |
| Exotic and Invasive Species | | | | |
| Environmental Justice | | X | | |
| Indirect and Cumulative Effects | | X | | |

Severe: Complete destruction, disruption, violation of standards, incompatibility, disturbance, or surpassing capability of the attribute under consideration.

Moderate: Considerable destruction, disruption, violation of standards, incompatibility, disturbance, or surpassing capability of the attribute under consideration. However, the effect can be minimized through further study and mitigation.

Minimal: Temporary or minor destruction, disruption, violation of standards, incompatibility, disturbance, or surpassing capability of the attribute under consideration. However, the effect can be mitigated through standard design, construction, or operational procedures.

None: No significant effect.

Section 6.

Agency Coordination

Agency coordination was initiated in 2009. Input and feedback from the local, state and federal regulatory and resource agencies listed below was solicited via letters and direct communication with agency representatives (Appendix D).

Ms. Anne E. Haaker
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Ms. Tara Kieninger
Illinois Natural Heritage Database
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ORC – Division of Habitat Resources
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Mr. William J. Gradle
State Conservationist
United States Department of Agriculture
Natural Resources Conservation Service
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Section 7.

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Section 8.
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Appendices

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